

Addendum No. 2

City of Kerrville Athletic Complex Field House

City of Kerrville

Kerrville, Texas

November 28, 2016



PETER LEWIS
ARCHITECT + ASSOCIATES



Addendum 2

Addendum No. 2 Narrative

November 28, 2016

Project: City of Kerrville Athletic Complex Field House
Project No.: 20-1605

To: City of Kerrville / Bidders

From: Peter W. Lewis Architect + Associates

This addendum shall be included in and be considered part of the plans and specifications for the above named project. The Contractor shall be required to sign and acknowledge of the receipt of this addendum at the time she/he receives it.

This addendum contains changes to the requirements of the Contract Drawings and Specifications. Such changes shall be incorporated in the Contract Documents and shall apply to the work with the same meaning and force as if they had been included in the original Documents. Whenever this Addendum modifies a portion of a paragraph of the Specifications, or any portion of any Drawing, the remainder of the paragraph or drawings affected shall remain in force.

The conditions and terms of the basic specifications shall govern work described in this Addendum. Whenever performance and the quality or quantity of materials, or workmanship are not fully described in this Addendum, the PERFORMANCE REQUIREMENTS of the Specifications shall apply to the work described in this Addendum.

If no similar items of work are included in the basic specifications, the best quality of material and workmanship standards shall apply and all work shall be subject to the written approval of the Architect.

QUESTIONS

- Item No. A1:** **QUESTION:** Sheet MEP1.1 show (4) light poles at the outside ball field to be relocated are they in the electrical scope? And are we to move them?
RESPONSE: Yes, they are in the electrical scope, and the General Contractor is to include the relocation within this contract.
- Item No. A2:** **QUESTION:** 10750 specifications call for external halyard (2.2D and 2.2E, 2.4E and 2.4F), internal cam cleat (2.3G) and internal winch (2.3F). We will quote all three options if clarification is not given. Also noted will be that finish needs to be confirmed as anodized or powder coated as both are called out.
RESPONSE: Provide external halyard, with external cleat. Provide powder coat dark bronze, number 313 finish.
- Item No. A3:** **QUESTION:** Where is lighting control panel (Ball Field) to be located?
RESPONSE: Switch is to be located in Office 103. Refer to detail 7/E3.1.
- Item No. A4:** **QUESTION:** E2.1, keyed note #2, mentions 'receptacles' at batting cages. Is there a drawing available showing locations / quantities?
RESPONSE: No. In "Batting Cage 107", receptacles as described above are to be provided "by others." Provide conduit with pull wire as described within Contract Documents from "MEP 115" and stub out to "Batting Cage 107." Lighting for "Batting Cage 107" to be provided under this contract, as described within these Contract Documents.
- Item No. A5:** **QUESTION:** Can the MBCI Artisan L12 24 gauge panel be utilized as the interior metal liner panel in lieu of the specified MBCI IL-240-0 24"X 1 1/2", 24 Gauge.

RESPONSE: Yes, the MBCI Artisan L12, 24 gauge can be utilized as an alternative interior liner panel.

- Item No. A6:** **QUESTION:** Can the pre-engineered “Metallic Products” canopies described within the Construction Documents, be shop-fabricated?
RESPONSE: Yes; however, the Structural Engineer and Architect must review and approve detailed shop drawings prior to fabrication.
- Item No. A7:** **QUESTION:** Sheet C11 Shows a proposed contractor access road. Is this road existing? Or are we to include a temporary road in our base bid? If so how is it to be constructed?
RESPONSE: Yes, the road is existing and will be accessible to contractors. Access must be coordinated with other contractors working on the Kerrville Sports Complex Project.
- Item No. A8:** **QUESTION:** Are you accepting Materials Testing estimates for this project, Kerrville Athletic Complex Field House.
RESPONSE: No – The City will hire this consultant.
- Item No. A9:** **QUESTION:** Please advise as to what is required for the 6” stabilized decomposed granite as well as what the 6” stabilized subgrade entails, per detail 8/C8?
RESPONSE: Apply Stabilizer Solutions, Inc. stabilizer binder or approved equivalent to crushed granite path surface in order to provide stable surface in compliance with the latest edition of the Americans and Disabilities Act (ADA) standards for accessible design. Stabilizer binder shall be applied in accordance with manufacturer’s recommendations and environmental limitations. Revise 6-inch stabilized subgrade call out on detail 8/C8 to 6-inches of imported select fill. Imported select fill material used at this site should have a maximum liquid limit of 40- percent and a plasticity index (PI) between 5 and 18. The select fill should be placed in no greater than 8-inch thick loose lifts and shall be compacted to a minimum density of 95-percent of the maximum dry density as determined by the standard Proctor (ASTM D698) and within -1 to +3-percent of the optimum moisture content. The Geotechnical Engineer shall approve select fill utilized at this site.
- Item No. A10:** **QUESTION:** The specification calls for a screw down roof over thermal blocks, but thermal blocks tend to shrink which will cause the screws to leak. The only application that will work with thermal blocks is to use a standing seam roof. Please advise if the design intent is to provide a standing seam roof in lieu of the MBCI PBR panel system.
RESPONSE: Revise Metal Building Systems Specification Section 13340, Section 2.4, Item A. Provide MBCI SuperLok 16 in lieu of PBR Roof Panel. Revise Exterior Finish Schedule on Sheet A3.1, item E7 as indicated within this addendum.
- Item No. A11:** **QUESTION:** In reference to detail 5 on A4.3, and the HSS framing at the awning, please advise if this material is to be galvanized, as it’s outside the building envelope, or if it is to receive a standard shop-coat of red-oxide primer.
RESPONSE: The awning will not be galvanized. Provide primer and final finish as described within the Contract Documents.
- Item No. A12:** **QUESTION:** The bidding requirements indicate we are to turn in 2 copies of the bid form (contract), 2 copies of AIA-305 Qualification Statement, and items S3 and 4 of the instructions to bidders (which is redundant information contained in the AIA 305) with our proposal. That is a lot of information that must be prepared and assembled, and will render the bid packages quite large. In order to concentrate on the cost and estimate preparation to present you with the best possible price proposal, would you consider having the successful low bidder submit information other than the bid form and bid bonds the next day with the list of subcontractors?
RESPONSE: We only need two copies of the contract. All other items needing to be included can be one copy.
- Item No. A13:** **QUESTION:** Per the Pre-Bid meeting, please confirm that utility tap fees will not need to be included in the bid. If they do need to be included who would have this cost? Can an allowance be used for these if this cost is not available?
RESPONSE: No – Contractor will be connecting to existing taps under this contract.
- Item No. A14:** **QUESTION:** Section 070, Construction Contract, Pg. 2, Para. 4 states that this job will have a 10% retainage without liability for interest. It is my understanding that by statute that any job with a value of

over \$400,000.00 should have a 5% retainage and if more than 5% will be withheld that the retainage will be held in an interest bearing account. Please confirm that this project will have a 10% retainage.

RESPONSE: 10% - Building projects have 10% retainage.

Item No. A15: **QUESTION:** Section 070, Construction Contract has an area for the three MEP subcontractors. The Instruction to Bidders, Pg. 3, Para. Z, however, states that the subcontractors list should be e-mail within 24 hrs. of submitting the bid. Are the three trades noted in the Construction Contract the only subs that will be required at this time. If not, can these be submitted after the bid per the ITB as they keep changing up until the deadline?

RESPONSE: The list of required sub-contractors can be provided during contract execution.

Item No. A16: **QUESTION:** Please confirm that only the inside of the restrooms, concession, pantry and umpire locker room will be completed finished out. All other areas will only be tape & floated.

RESPONSE: Refer to sheet A9.1, Finishes Plan and Schedule for all required finishes.

Item No. A17: **QUESTION:** Addendum #1, Pg. 4, Item A42.c states that it is clarifying the additional sidewalk on East side of the project and to refer to Civil for additional information. In comparing the addendum sheet with the original sheet I see no difference in the East side sidewalk. Please expand on this and clarify.

RESPONSE: Addendum #1, Pg. 4, Item A42, C, is to be revised to read "the west side of project."

Item No. A18: **QUESTION:** Can a detail for the mezzanine access ladder be provided?

RESPONSE: Basis of design for the access ladder is Bilco Type BL – Aluminum Fixed Vertical Ladder.

Item No. A19: **QUESTION:** Can the sign in sheet from the pre-bid meeting be provided?

RESPONSE: See attached sign in sheet.

Item No. A20: **QUESTION:** I just have a question concerning the Overhead sprinklers in the batting cages. In the specifications, it states to keep pipe hidden does that apply in this instance, since there will be no ceiling? WE have to run supply Main pipe on both sides of the area that is open to the deck (batting cages), with branch lines approx 8 of them gridded from one side and tying the two mains together. In essence we will hang as high as the National Fire Protection Association, (nfpa 13), Factory Mutual, will allow for the sprinklers designed in this application. The supply mains will be 3'-6" from center of the I-beam to center of the sprinkler main on both sides.

Item No. A21: **RESPONSE:** We take no exception to what is being proposed for the batting cages since there is no ceiling in the batting cages area. We expect the fire sprinkler piping to be exposed. The intent of the specification statement about keeping piping hidden is for areas where there are ceilings, the sprinkler piping shall be hidden from view.

Item No. A22: **QUESTION:** Section 02890 Synthetic Turf System, indicates that there should be maintenance equipment provided but it does not provide any detail. Please provide details.

RESPONSE: Delete Section 3.8 Equipment, within Specification Section 02890.

Item No. A23: **QUESTION:** Is Astromound turf to be placed within the building as shown on Sheet C6?

RESPONSE: No, disregard hatch pattern within building limits. Astromound turf will not be required on project.

SPECIFICATIONS

Item No. A24: **SECTION 13340 – METAL BUILDING SYSTEMS:** Revise Section 2.4.A, Metal Roof Panels. Provide MBCI SuperLok 16 as described.

DRAWINGS

Item No. A25: **SHEET G1.1:** Revise Sheet Index as indicated.

Item No. A26: **SHEET A3.1:** Revise Exterior Finish Schedule, Item E7 as shown.

Item No. A27: **SHEET E2.1:** Add maintenance receptacles and circuit to AHU platforms.

Item No. A28: **SHEET E4.1:** Revise Panel HFH1 to eliminate 400A main circuit breaker and change panel to main lug only.

Item No. A29: **SHEET E4.2:**

a. Add circuit for AHU platform maintenance receptacles to Panel LFH2.

b. Revise Panel LFH2 to eliminate 225A main circuit breaker and change panel to main lug only

- c. Revise Panel LFH3 to eliminate 100A main circuit breaker and change panel to main lug only.

LIST OF ATTACHMENTS

Narrative (8 ½"x11")
Section 13340 – Metal Building Systems (8 ½"x11")
Pre-Bid Meeting Sign-In Sheet (8 ½"x11")

G1.1 – Cover Sheet (24x36)
A3.1 – Exterior Elevations (24x36)
E2.1 – Power and Signal Plan (24x36)
E4.1 – Electrical Schedules (24x36)
E4.2 – Electrical Schedules (24x36)

END OF Addendum No. 2

SECTION 13340 – METAL BUILDING SYSTEMS**PART 1 - GENERAL**

1.1 SECTION INCLUDES

- A. Metal Building System as indicated on the drawings and specified herein.
- B. Include components and parts of the building consisting of primary structural steel framing, purlins, girts, necessary bracing, struts and connecting members, gutters and downspouts, canopies and necessary closures and fasteners.
- C. Section 07210 Insulation

1.2 GENERAL REQUIREMENTS

- A. Cooperation and coordination with other trades is mandatory, so that each phase of work will be properly coordinated without delays or damage to any parts of any work.

1.3 RELATED SECTIONS

- A. Structural Drawings – Cast-In-Place Concrete: Foundations and anchor bolts.
- B. Section 055000 - Metal Fabrications
- C. Section 081100 - Metal Doors and Frames
- D. Section 083600 – Sectional Overhead Doors
- E. Section 099000 - Painting

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer and member of MBMA,
 - 1. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified Professional Engineer licensed to practice in the state having jurisdiction.
- B. Erector Qualifications: An experienced erector who specializes in erecting and installing work similar in material, design, and extent to that indicated for this project and who is acceptable to the manufacturer.
- C. Welding Qualifications: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1/D1.1M, “Structural Welding Code – Steel.”
 - 2. AWS D1.3, “Structural Welding Code – Sheet Steel.”
- D. Structural Steel: Comply with AISC 360, “Specification for Structural Steel Buildings,” for design requirements and allowable stresses.
- E. Cold-Formed Steel: Comply with AISI’s “North American Specification for the Design of Cold-Formed Steel Structural Members” for design requirements and allowable stresses.

1.5 DEFINITIONS

- A. Terminology Standard: See MBMA's "Metal Building Systems Manual" for definitions of terms for metal building system construction not otherwise defined in this Section or in referenced standards.

1.6 BUILDING NOMENCLATURE

- A. The building "Width" and "Length" shall be measured from inside to inside face of wall covering.
- B. The building "Eave Height" shall be measured from main building finish floor elevation to the intersection of lines representing the inside of the wall covering and the inside of the roof covering.
- C. The "Roof Slope" shall be as indicated on the drawings.
- D. The "Bay Spacing" between frame center lines shall be as shown on drawings.
- E. The "Wind Bracing" locations shall be as indicated

1.7 DESIGN AND LOADS

- A. Structural steel sections and welded plate members shall be designed in accordance with the latest edition of AISC, "Specifications for Design, Fabrication, and erection of Steel for Buildings" previous to the year of the building code as indicated on the drawings.
- B. Cold formed structural members and exterior covering shall be designed in accordance with the AISI, "Specification for the Design of Cold-Formed Steel Structural Members".
- C. Design Loads shall be in accordance with IBC or ASCE 7. The relevant year of the code shall be as indicated on the drawings. Loads shall include:
 - 1. Basic design loads, as well as collateral loads shall be as specified.
 - a. Basic design loads in addition to dead load; include live load, wind load, snow load, and seismic load.
 - b. Collateral loads include dead loads over and above weight of the metal building system, such as mechanical systems, ceiling systems, and sprinklers. Insulation weight is considered part of the metal building system. Collateral loads shall be as specified in the drawings.
 - c. Design each member to withstand stresses resulting from combinations of loads that produce maximum stresses in that member. Load combinations shall be based on ASCE 7.
 - 2. Roof Live Load: (20) PSF basic live load, reducible per the building code specified on the drawings.
 - 3. Dead Load: Withstand weight of metal building system as determined by actual weight of all roofing materials.
 - 4. Collateral Load: As specified on the drawings.
 - 5. Thermal Load: Withstand movement caused by ambient temperature range of 100 degrees F and surface temperature range of 120 degrees F.
 - 6. Special Loads: Concentrated Loads less than 250 pounds need not be considered in the design of the structure. Investigate structure for all loadings above 250 pounds and provide support beams where purlins or joists cannot support the load.

- a. Concentrated loads on purlins shall be hung from the purlin web. Connections shall be screwed or bolted, bolts shall be set in drilled holes; torch cutting of bolt holes shall not be allowed. Field welding to the purlins shall not be allowed unless approved by the metal building system manufacturer. Attachments to the purlin bottom flange shall not be allowed unless specifically approved by the metal building system manufacturer. Reference MBMA Manual section A6 Hanging Loads on Purlins.
7. Wind Load: For design of primary members, secondary members, and cladding, calculate wind pressures in accordance with ASCE 7. Use wind speed, exposure, and importance factor as indicated on the drawings. Wind pressures for deflection calculations shall be based on recurrence interval called for in the building code indicated on the drawings.
8. Seismic Load: Design primary and bracing members for seismic loads in accordance with ASCE 7. Use importance factor, spectral response accelerations, and soil site class as indicated on the drawings. In the absence of listed spectral accelerations, determine in accordance with USGS. In the absence of a listed site class, assume site class D.
9. Crane Loads: Not necessary for this project.
10. Drift and Deflection Criteria: As indicated on drawings.

1.8 ROOF PANEL SYSTEM PERFORMANCE

- A. Panel system shall have a UL 2218, Class 4 Impact Resistance Rating.
- B. Metal roof system must be tested in accordance with UL Test Method 580, Tests for Uplift Resistance of Roof Assemblies. UL Class 90 uplift rating.
- C. Resist the roof design pressures calculated in accordance with ASCE 7 for the year as indicated on the drawings. Determine panel bending and clip-to-clip strength by testing in accordance with ASTM E1592. Capacity for gauge, span or loading other than those tested may be determined by interpolating test results.
- D. Metal roof system must meet the air infiltration requirements of ASTM E1680 when tested with a 6.24 PSF pressure differential with resulting air infiltration of 0.0071 cfm/sq. ft.
- E. Metal roof system must meet the water penetration requirements of ASTM E1646 when tested with a 12.00 PSF pressure differential with no uncontrollable water leakage when five (5) gallons per hour of water is sprayed per square foot of roof area.

1.9 SUBMITTALS

- A. Delegated-Design Submittal: For metal building systems indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by a qualified Professional Engineer licensed to practice in the state having jurisdiction.
- B. Certification: Letter of Design Certification: Signed and Sealed by a qualified Professional Engineer licensed to practice in the state having jurisdiction. Include the following:
 1. Name and location of project.
 2. Order Number
 3. Name of Manufacturer
 4. Name of Contractor
 5. Building dimensions including width, length, height, and roof slope

6. Indicate compliance with AISC standards for hot-rolled and plate steel and NAUS standards for cold-rolled steel, including editions of each standard.
 7. Governing building code and year of edition
 8. Design Loads: Include dead load, roof live load, floor live loads, collateral loads, roof snow load, deflection criteria, wind loads/speeds and exposure, seismic design category, importance factors, and any auxiliary loads (i.e. cranes)
- C. Shop Drawings: Show building layout, primary and secondary framing member sizes and locations, cross-sections, and product and connection details.
1. Show Roof, fascia, gutter, downspouts, siding and soffit panel layout and connection details.
 2. Show Stair plans, sections and details where applicable.
- D. Product Data: Information on manufactured products to be incorporated into the project.
- E. Color Charts: For selection of colors.
- F. Anchor Bolt Installation Drawings: Layouts with bolt diameters.
- G. Anchor Bolt Setting Templates: To assist with setting of anchor bolts.

1.10 WARRANTY

- A. Warrant the work specified herein against becoming unserviceable or causing an objectionable appearance resulting from either defective or non-conforming materials or workmanship. Warranty shall be a "Weather tightness" Warranty. Field Reports are required throughout Project and are to be supplied by a Manufacturer's Approved Technical Inspector.
1. Roof Panels and Finish: Section 07400 – Preformed Metal Roofing
 2. Weathertightness (optional, only applies to standing seam roofs):
 - a. The roof system including roof panels, flashings, curbs, interior gutters, etc. shall be warranted by the manufacturer against leaks for a period of 20 years.
 - b. The warranty shall be issued to the Owner by the Manufacturer at time of Project Substantial Completion.
 - c. The warranty shall guarantee the entire roof system and associated work against defective materials and workmanship of installation.
 - d. The roof system shall include roof insulation, flashing, metal work, labor, and material shall be guaranteed against failure of workmanship and materials. Repair of the system by the manufacturer, including materials and labor, shall be done at no cost to the Owner.
 - e. Curbs shall be approved by roofing manufacturer.
 3. Roofing Contractor: Jointly with any subcontractors employed by him, shall guarantee the work required and performed under this contract will be free from defects in workmanship and materials, and that the building will be and remain waterproof for a five (5) year warranty period, after the Architect accepts the work as substantially complete. The warranty shall be in approved notarized written form, to obligate the Contractor, and subcontractors, to make good the requirements of the warranty.

PART 2 - PRODUCTS

2.1 APPROVED MANUFACTURERS

- A. Specifications are based on products listed below as “Basis of Specification”, except where specified otherwise. Manufacturers named below whose product meets or exceeds the specifications are approved for use on the Project. Other manufacturers must have a minimum of five (5) years experience manufacturing products meeting or exceeding the specifications and comply with Division 1 requirements regarding substitutions to be considered.
1. Metal Building System:
 - a. Red Dot Building Systems, Athens, TX (800) 657-2234
 - b. Alliance Steel, Oklahoma City, OK (800) 624-1579
 - c. Mueller Inc. Ballinger, TX; (800) 527-1087
 - d. United Structures of America, Houston, TX; (281) 442-8247
 - e. Horizon Structural Systems, New Braunfels, TX; (830) 629-8000
 - f. Architect approved equal.
 2. Metal Roof, Wall, and Roof Liner Panels:
 - a. MBCI, Houston, TX; (281) 847-8044 (Basis of Specification)
 - b. Architect approved equal from Metal Building Manufacturer

2.2 METAL MATERIALS

- A. Select materials and material yield strengths based on building design requirements; use the following unless required otherwise.
1. Structural Steel Plate, Bar, Sheet, and Strip for Use in Bolted and Welded Constructions: ASTM A572, A570, A529, or A36, with minimum yield strength of 50,000 psi.
 2. Structural Steel Material for Use in Roll Formed or Press Broken Secondary Structural Members: ASTM A570, or A607 with minimum yield strength of 55,000 psi.
 3. Galvanized Steel Sheet for Roll Formed or Press Broken Roof and Wall Coverings, Trim and Flashing: ASTM A653, with minimum yield strength of 50,000 psi.
 4. Galvalume Steel Sheet Used in Roll Formed or Press Broken Roof Covering: Aluminum-zinc alloy-coated steel sheet, ASTM A792, with minimum yield strength of 50,000 psi; nominal coating weight of 0.5 oz. per sq. ft. both sides, equivalent to an approximate coating thickness of 0.0018 inch both sides.
 5. Hot Rolled Steel Shapes: W, M and S shapes, angles, rods, channels and other shapes; ASTM A572, or ASTM A3 as applicable; with minimum yield strengths required for the design.
 6. Structural Bolts and Nuts Used with Primary Framing: High strength, ASTM A325.
 7. Bolts and Nuts Used with Secondary Framing Members: ASTM A307.
 8. Anchor Bolts: ASTM A307 or A325.
- B. Finish:
1. Primary and secondary Structural Members: if no finish is noted on drawings, use manufacturer's standard GREY rust-inhibitive primer paint in manufacturer's standard color.
 - a. If drawings call for galvanized primary or secondary members: hot-dip galvanize, G-60.
 2. Prefinished Materials: Thermoset Silicone Polyester Coating System (25 year warranty) as selected by Architect from manufacturer's full line.

2.3 FRAMING COMPONENTS

- A. Primary Framing: Rigid Frame (RF Series) solid web framing consisting of tapered depth rafters rigidly connected to tapered depth columns. Provide interior column spacing's as indicated on drawings.
- B. Endwall Framing: Corner posts, endposts and rake beams.
- C. Purlins: Zee-shaped; depth as required; with minimum yield strength of 55,000 psi; simple span or continuous span as required for design.
- D. Girts: Zee- or Cee-shaped; depth as required, with minimum yield strength of 55,000 psi; simple span or continuous span as required for design.
- E. Transbay Members: Open web, parallel chord, secondary joists; simple span, utilizing materials, sizes and yield strength as required.
- F. Wind Bracing: Portal, torsional, diagonal bracing or diaphragm in accordance with manufacturer's standard design practices; utilizing rods, angles, and other members, with minimum yield strengths as required for design.
- G. Primary Frame Flange Bracing: Attached from purlins or girts to the primary framing, minimum yield strength as required for design.
- H. Base Angles: 2 inch by 4 inch by 0.059 inch steel angles, with minimum yield strength of 55,000 psi, anchored to the floor slab or grade beam with power driven fasteners or equivalent at a maximum spacing of 2 feet on center and not more than six (6) inches from the end of any angle member.
- I. Sag Strapping and Bridging: 22 gauge strapping and/or steel angles, with minimum yield strength of 36,000 psi. as required by design.
- J. Fabrication: Fabricate according to manufacturer's standard practice.
 - 1. Fabricate structural members made of welded plate sections by jointing the flanges and webs by continuous automatic submerged arc welding process.
 - 2. All welding operators and processes shall be qualified in accordance with AWS D1.1.
 - 3. Field connections. Prepare members for bolted field connections by making punched, drilled, or reamed holes in the shop.
- K. Component Identification: Mark all fabricated parts, either individually or by lot or group, using an identification marking corresponding to the marking shown on the shop drawings, using a method that remains visible after shop painting.
- L. Shop Coating: Finish enclosed structural steel members using one (1) coat of manufacturer's standard shop coat, after cleaning of oil, dirt, loose scale and foreign matter.
- M. Anchor Bolts: Hooked or Headed anchor bolts in quantities and spacing's as required by the metal building system design. Anchor bolts to be provided by metal building manufacturer.

2.4 ROOF AND WALL PANEL COMPONENTS

- A. Metal Roof Panels: MBCI SuperLok 16
 - 1. Panel Profile: 16" wide x 2" high
 - 2. Panel attachment: Mechanically Seamed.

3. Gauge: Minimum 24 gauge (UL 90 rated)
 4. Exterior Finish: Exposed Galvalume Plus Coating
 5. Ridge Vent: Manufacturer's standard to match roof panel in color and finish
- B. Gutters, downspouts, fascias, soffits, and flashings:
1. All exposed gutters, downspouts, fascias, soffits and flashings shall be provided by roof panel manufacturer and shall match roof panel finish and color. Soffit to be MBCI FlexLoc system.
- C. Metal Wall Panels: MBCI PBC Panel
1. Panel Profile: 32" wide x 7/8" inch high, with 2.67" on center rib spacing.
 2. Panel attachment: exposed fastening system.
 3. Gauge: Minimum 26 gauge (UL 90 rated).
 4. Finish: Prefinished per ASTM 792-86 with Thermoset Silicone Polyester Coating System (25 year warranty) in color selected by Architect from manufacturer's available colors.
- D. Interior Metal Liner Panel (Where indicated on plans): MCBI IL-240-0 24" x 1 1/2", 24 GA.
- E. Panel Fasteners: Carbon steel zinc-aluminum hex head complete with integrated metal and neoprene sealing washer. Color of exposed fastener heads to match the panel finish. Fastener type shall not void warranty of panel finish.
1. "Long Life" fasteners for attachment of roof panels to secondary framing members, attachment to adjoining panels, and attachment of trim to the panels: Self-drilling type, of size required by the manufacturer.
 2. Standard fasteners for attachment of wall panels to secondary framing members, attachment to adjoining panels, and attachment of trim to the panels: Self-drilling type, of size required by the manufacturer.
 3. Provide fasteners in quantities and location as required by the manufacturer.
 4. Fasteners for trim splices: 1/8 inch by 3/16 inch stainless steel blind rivet. Head shall be color coated to match trim colors.
- F. Flashing and Trim: Match material and color of adjacent components. Provide trim at rakes, including peak and corner assemblies, high and low eaves, corners, bases, framed openings and as required or specified to provide weathertightness and a finished appearance.
- G. Sealants, Mastics and Closures: Manufacturer's standard type.
1. Provide at roof panel endlaps, sidelaps, rake, eave, transitions and accessories as required to provide a weather resistant roof system; use tape mastic or gunnable sealant at sidelaps and endlaps.
 2. Provide at wall panel rakes, eaves, transitions and accessories.
 3. Closures: Formed to match panel profiles; closed cell elastic material, manufacturer's standard color.

4. Tape Mastic: Pre-formed butyl rubber-based, non-hardening, non-corrosive to metal; white or light gray.
5. Gunnable Sealant: Non-skinning synthetic elastomer based material; gray or bronze.

2.5 ROOF ACCESSORIES

- A. Eave Gutters: Press-broke 26 gauge steel sheet in 20 foot or longest practical length, with gutter straps, fasteners and joint sealant. Gutter shall screen the eave ends of roof sheets from view. Color shall be as selected by Architect from manufacturer's full line.
- B. Downspouts: Shall be 26 gauge steel sheet in 10 foot or longest practical length, rectangular shaped. Downspouts shall be supported by attachment to the wall covering at 10 feet maximum spacing to 4" above grade. Color shall be as selected by Architect from manufacturer's full line.

2.6 INSULATION SYSTEM – REFER TO SECTION 072100 INSULATION

- A. Insulation:
 1. Fiberglass shall be as outlined in the North American Insulation Manufacturers Association (NAIMA 202-96) and ASTM C 991-03 Type 1, or equal with an R-value AS INDICATED when not compressed.
 2. The fiberglass shall be Polypropylene-Scrim-Kraft faced blankets.
 3. The composite of fiberglass and facing shall have surface burning characteristics not to exceed 25 flame spread and 50 smoke developed when tested in accordance with ASTM E 84 or Underwriters Laboratories 723 test method.
- B. Facing:
 1. Facing shall be composed of Polypropylene/ Scrim/ Core/ Metalized Polyester.
 2. The resulting facing shall have:
 - a. A water vapor transmission rate of .02 US Perm (ASTM E 96 Procedure A)
 - b. A mullen burst of 120 psi.
 3. Tensile strength shall be:
 - a. 65 lbs in the machine direction.
 - b. 60 lbs in the cross-machine direction.
 4. Vinyl Color white – refer to architectural plans
 5. Installation:
 - a. To be draped over purlins.
 - b. Should be in lengths that will cover the distance from eave to eave plus an extra 12" on each end to overhang each side of the building.
 - i. If more than one roll is required to span the roof, a ridge pan will be utilized.
 - c. The width of the first run of insulation to be 1'-0" wider than the width of the roofing panel. Succeeding runs to be either the same width or twice the width of the

roof panels.

- d. Tab fastening to utilize two (2) 3" tabs
6. Approved Manufacturers:
- a. Bay Insulation of South Texas
 - b. PBI Supply
 - c. Therm-All

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Assist in placement of anchor bolts using robotic total station device. Verify that anchor bolts are installed as indicated on anchor bolt shop drawings.
- B. Following erection, PEMB manufacturer shall inspect (and reinspect following corrective work, as needed) the building and provide engineer with documentation that the building has been erected in accordance with the construction documents and PEMB manufacturer's recommendations.

3.2 ERECTION

- A. Provide temporary bracing, shoring, blocking, bridging and securing of components as required during the erection process.
- B. Erection must be performed by an erector acceptable to the metal building system manufacturer.
- C. Erect building system in accordance manufacturer's instructions, erection drawings, and other erection documents.
- D. Install roof panels, wall panels, and roof liner panels straight and true, free from defects in accordance manufacturer's instructions.
- E. Paint burns, scars, welds, and damaged and rusted surfaces with cold galvanizing paint in accordance with ASTM A780.
- F. Isolate dissimilar metal contact with proper taping and/or coatings.
- G. Install flashings and accessories to provide a watertight system.
- H. Cut and install insulation at in accordance with manufacturer's printed instructions and sealed to ensure continuity of building envelope, whether indicated or not.
- I. Provide accessories recommended by manufacturer for a complete installation.

END OF SECTION 033400

Date: November 22, 2016

Sign in Sheet
Athletic Complex Field House
(Public Works No. PW16-001)

1. MIKE PICKARD
Name
(830) 379-0235
Phone Number

City of KEEVILLE
Organization
mike.pickard@kennilletx.gov
E-mail Address

CONSTRUCTION Inspector / City Rep
Title
Mike Pickard
Signature

2. Robin Kiper
Name
830 315 9033
Phone Number

Kendrel Kasper Const
Organization
robin@kasperconstruction.com
E-mail Address

Estimating
Title
Robin Dupre
Signature

3. Ben Bennett
Name
830 315 9033
Phone Number

Kendrel Kasper Const
Organization
benbe.kasperconstruction.com
E-mail Address

VP-OPERATIONS
Title
[Signature]
Signature

4. Shelly Garcia
Name
210.269.8050
Phone Number

HMC
Organization
shellyg@hmc-texas.com
E-mail Address

PM
Title
[Signature]
Signature

5. Kenny Mantor
Name
830 816.5477
Phone Number

HMC
Organization
Kenny@hmc-texas.com
E-mail Address

Owner
Title
[Signature]
Signature

6. JERRY GONZALEZ
Name
512-409-0502
Phone Number

SWANX SPORTS
Organization
jerryg@swanxsports.com
E-mail Address

SALES MANAGER
Title

Signature

7. BILL HENDERSON
Name
210-740-2705
Phone Number

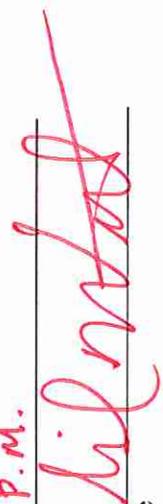
ALBRITE CONSTRUCTION
Organization
BILL@ALBRITECONSTRUCTION.COM
E-mail Address

SR. ESTIMATOR
Title

Signature

8. GREG WINTERS
Name
830.500.0472
Phone Number

P. WILSON CONSTRUCTION
Organization
gregw@wilsonconstruction.com
E-mail Address

P.M.
Title

Signature

9. Greg Dorman
Name
210-590-2889
Phone Number

O'Haver Contractors
Organization
bids@ohcltd.net
E-mail Address

Sr. PM/Estimator
Title

Signature

10. ANDREA FRAZIER
Name
210 224 5887
Phone Number

DAVILA CONSTRUCTION
Organization
BIDS@DAVILA.CONSTRUCTION.COM
E-mail Address

MARKETING MANAGER
Title

Signature

11. PAUL HARRISON
Name
830-992-0606
Phone Number

UNITED STRUCTURES of America
Organization
PAUL.HARRISON@USAPLD6.COM
E-mail Address

DISTRICT SALES
Title

Signature

12. MARTY DRESSEN
Name
830. 257. 8588
Phone Number

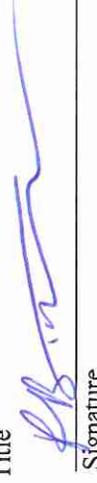
HUBER CONSTRUCTION
Organization
MDRESSEN@HUSERCO.COM
E-mail Address

P.M.
Title

Signature

13. ROB BROOTH
Name
830/257-8588
Phone Number

HUBER CONSTRUCTION
Organization
RBROOTH@HUSERCO.COM
E-mail Address

SR. ESTIMATOR
Title

Signature

14. Romaine Ronde
Name
210-649-3150
Phone Number

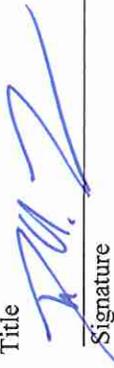
RL Ronde Gen Contr Inc
Organization
estimating@rlronde.com
E-mail Address

President
Title

Signature

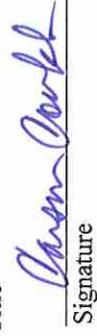
15. RUSTIN ZUBER
Name
830. 895. 2829
Phone Number

ZUBER CONSTRUCTION, INC.
Organization
rzuber@zuberconstruction.com
E-mail Address

PRESIDENT
Title

Signature

16. Carson Conklin
Name
830. 895. 5202
Phone Number

JM Lowe & Company General Contractors
Organization
cconklin@jmlowecompany.com
E-mail Address

Estimator/PM
Title

Signature

17. BOB VERETTE
Name
210.685.9660
Phone Number

VERTEX CORP.
Organization
BOB@VERTEX.US.COM
E-mail Address

V.P.
Title

Signature

18. PATRICIA BRYANT VERTEX CORP. Pres
Name Organization Title
830-446-6601 PBRYANT@GUTC.COM
Phone Number E-mail Address
Signature

19. JOHN HEWITT HEWITT ENG Eng. mgr
Name Organization Title
830-315-8800 jhewitt@hewitt-inc.com
Phone Number E-mail Address
Signature

20. _____
Name Organization Title
Phone Number E-mail Address Signature

21. _____
Name Organization Title
Phone Number E-mail Address Signature

22. _____
Name Organization Title
Phone Number E-mail Address Signature

23. _____
Name Organization Title
Phone Number E-mail Address Signature

Standard Abbreviations

@	AT	LAM	LAMINATE(D)
ABV	ABOVE	LAV	LAVATORY
AFF	ABOVE FINISHED FLOOR	LH	LEFT HAND
ACoust	ACOUSTICAL	L	LENGTH
ACT	ACOUSTICAL TILE	LT	LIGHT
ADA	AMERICANS WITH DISABILITIES	LF	LINEAR FEET
ADJ	ADJUSTABLE	LL	LINE LOAD
AGG	AGGREGATE	MH	MANHOLE
AC	AIR CONDITIONING	MFR	MANUFACTURE(R)
ALT	ALTERNATE	MRE	MARBLE
ALUM	ALUMINUM	MRS	MASONRY
AB	ANCHOR BOLT	MOS	MASONRY OPENING
ANOD	ANODIZED	MATL	MATERIAL(S)
APX	APPROXIMATE	MAX	MAXIMUM
ARCH	ARCHITECTURAL	MECH	MECHANICAL
ASPH	ASPHALT	MC	MEDICINE CABINET
AUTO	AUTOMATIC	MED	MEDIUM
		MTL	METAL
		MIN	MINIMUM
BMT	BASEMENT	MIR	MIRROR
BRG	BEARING	MIS	MISCELLANEOUS
BM	BENCH MARK	MOLD	MOLDING, MOULDING
BTWN	BETWEEN	MT(ED)	MOUNT(ED), MOUNTING
BVL	BEVELED	MULL	MULLION
BLK	BLOCK		
BLKG	BLOCKING	NAT	NATURAL
BD	BOARD	NIC	NOT IN CONTRACT
BW	BOTH WAYS	NOM	NOMINAL
BOTT	BOTTOM	NR	NOISE REDUCTION
BRK	BRICK	NTS	NOT TO SCALE
BRZ	BRONZE	OC	ON CENTER(S)
BLDG	BUILDING	OD	OUTSIDE DIAMETER
BL	BUILDING LINE	OH	OVERHEAD
BUR	BUILT UP ROOF	OPG	OPENING
		OPP	OPPOSITE
		OPP HND	OPPOSITE HAND
CAB	CABINET(S)		
CO	CASED OPENING	PCF	POUNDS / CUBIC FOOT
CSMT	CASEMENT	PE	PEDESTAL
CL	CENTER LINE	PED	PRE-ENGINEERED METAL
CLG	CEILING	PEMB	CERAMIC
CEM	CEMENT	PH	PHONE
CER	CERAMIC	P	PROPERTY LINE
CT	CERAMIC TILE	PL	PLATE
CIRCLE	CIRCLE	PLAM	PLASTIC LAMINATE
CLR	CLEAR(ANCE)	PLAS	PLASTER
CR	COLD ROLLED	PLF	POUNDS / LINEAL FOOT
COL	COLUMN	PSF	POUNDS / SQUARE FOOT
COMP	COMPOSITE, COMPOSITION	PSI	POUNDS / SQUARE INCH
CNC	CONCRETE	PT	POINT
CMU	CONCRETE MASONRY UNIT	PT. GD.	PAINT GRADE
CONST	CONSTRUCTION	PTC	POST-TENSIONED CONC.
CONT	CONTINUOUS, CONTINUE	PTD	PAINTED
CJ	CONTROL JOINT	PUE	PUBLIC UTILITY EASEMENT
CG	CORNER GUARD	PVC	POLYVINYL CHLORIDE
CTR	COUNTER	QTM	QUARRY TILE
CRS	COURSE(S)		
CF	CUBIC FOOT PER MINUTE	RA	RETURN AIR
CFM	CUBIC FOOT PER MINUTE	RAD	RADIUS
CY	CUBIC YARD	RE	REFER
		REF	REFRIGERATOR
D	DEPTH, DEEP	REG	REGISTER
DEM	DEMOLISH, DEMOLITION	REIN	REINFORCE(D)
DTL	DETAIL	REM	REMOVE
DNAG	DIAGONAL	REOD	REQUIRED
DIA	DIAMETER	RES	RESILIENT
DIM	DIMENSION	REV	REVISION(S)
DISP	DISPOSAL	RFG	REVISOR'S MARK
DV	DIVISION	RH	RIGHT HAND
DR	DOOR	RM	ROOM
DH	DOUBLE HUNG	RO	ROUGH OPENING
DS	DOWNSPOUT	ROW	RIGHT OF WAY
DWR	DRAWER	RSC	ROUGH SAW CEDAR
DWG	DRAWING	RZ	RISER
DF	DRINKING FOUNTAIN		
DW	DISHWASHER		
		SCHED	SCHEDULE
EA	EACH	SCWD	SOLID CORE WOOD DOOR
EW	EACH WAY	SD	SMOKE DETECTOR
EF	EACH FACE	SECT	SECTION
ELEC	ELECTRIC(AL)	SF	SQUARE FEET
EW	ELECTRIC WATER COOLER	SH	SHELF
EL	ELEVATION	SHT	SHELVES, SHELVING
ELEV	ELEVATOR	SH	SHEET
EMER	EMERGENCY	SHT	SHEET
ENG	ENGINEERING	SIM	SIMILAR
EQ	EQUAL	SK. LT.	SKYLIGHT
EQPT	EQUIPMENT	SPEC	SPECIFICATION(S)
EST	ESTIMATE(D)	SQ	SQUARE
EST	ESTIMATED	SS	STAINLESS STEEL
EXIST	EXISTING	STD	STANDARD
EJ	EXPANSION JOINT	STG.	STORAGE
EXP	EXPOSED	ST. GD.	STAIN GRADE
EXT	EXTERIOR	STL	STEEL
		STRCT	STRUCTURAL
FW	FACE OF WALL	STSM	STANDING SEAM
FOS	FACE OF STUD(S)	SUSP.	SUSPENDED
FR	FIBERGLASS REINFORCED	SY	SYMMETRY, SYMMETRICAL
FN	FINISH(D)	SYP	SOUTHERN YELLOW PINE
FF	FINISHED FLOOR		
FE	FIRE EXTINGUISHER	TR	TREAD
FLR	FLOORING	T&G	TONGUE & GROOVE
FD	FLOOR DRAIN	TAS	TEXAS ACCESSIBILITY STANDARDS
FLUOR	FLUORESCENT	TEL	TELEPHONE
FTG	FOOTING	THK	THICKNESS
FDN	FOUNDATION	THR	THRESHOLD
		TMP.	TEMPERED
GA	GAGE, GAUGE	TOB	TOP OF BEAM
GALV	GALVANIZED	TOS	TOP OF STEEL
GI	GALVANIZED IRON	TOW	TOP OF WALL
GC	GENERAL CONTRACTOR	TSI	TOP OF SLAB
GL	GLASS, GLAZING	TV	TELEVISION
GD	GRADE(ING)	TYP	TYPICAL
GYP BD	GYP(SUM) BOARD		
HC	HANDICAPPED	UNF	UNFINISHED
HDW	HARDWARE	UNO	UNLESS NOTED OTHERWISE
HTG	HEATING	UR	URNAL
HVAC	HEATING/VENTILATING AIR CONDITIONING		
HT	HEIGHT, HIGH	VB	VAPOR BARRIER
HC	HOLLOW CORE	VC	VINYL COMPOSITION
HCWD	HOLLOW CORE WOOD DOOR	VERT	VERTICAL
HDF	HIGH DENSITY FIBER BOARD	VT	VINYL TILE
HM	HOLLOW METAL	VTR	VENT THROUGH ROOF
HORIZ	HORIZONTAL		
HOSE BIB	HOSE BIB	W	WIDTH, WIDE
		W	WITH
INCAND	INCANDESCENT	WC	WATER CLOSET
INCL	INCLUDE(D), INCLUDING	WD	WOOD
INSUL	INSULATE(D), INSULATION	WH	WATER HEATER
INT	INTERIOR	WI	WROUGHT IRON
INT	INTERIOR	WIN	WINDOW
INV	INVERT	W/O	WITHOUT
		WOLM	WOLMANIZED
JT	JOINT	WP	WATER PROOF(ING)
JST	JOIST	WWF	WELDED WIRE FABRIC

Project General Notes

A. THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO ANY WORK AND SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIAL INCLUDING THOSE FURNISHED BY SUBCONTRACTORS.

B. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE BUILDING CODES AND ALL LOCAL CODES.

C. THE CONTRACTOR SHALL REPORT TO THE ARCHITECT ANY ERROR, INCONSISTENCIES OR OMISSION HE/SHE MAY DISCOVER. THE CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY ERROR AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE ARCHITECT. THE MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY THE ARCHITECT.

D. THE ARCHITECT WILL REVIEW AND APPROVE SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT. THE ARCHITECT'S APPROVAL OF A SEPARATE ITEM SHALL NOT INDICATE APPROVAL OF AN ASSEMBLY IN WHICH THE ITEM FUNCTIONS.

E. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF WORK.

F. EXISTING ELEVATIONS AND LOCATIONS TO BE JOINED SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION. IF THEY DIFFER FROM THOSE SHOWN ON THE DRAWINGS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT SO THAT MODIFICATIONS CAN BE MADE BEFORE PROCEEDING WITH WORK.

G. CONTRACTOR SHALL PROVIDE TEMPORARY WATER, POWER, AND TOILET FACILITIES AS REQUIRED BY THE CITY OR GOVERNING AGENCIES.

H. CITY APPROVED PLANS SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN, IN GOOD CONDITION, A COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA AND CHANGE ORDERS, ON THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT.

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE JOB IS IN PROGRESS AND UNTIL JOB IS COMPLETED.

J. ALL DEBRIS SHALL BE REMOVED FROM PREMISES AND ALL AREAS BE LEFT IN A CLEAN BROOM CONDITION AT ALL TIMES.

K. FIRE EXTINGUISHERS, VERIFY REQUIREMENTS AND LOCATIONS WITH FIRE MARSHALL.

L. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE OR REMEDY ANY FAULTY, IMPROPER OR INFERIOR MATERIAL OR WORKMANSHIP OR ANY DAMAGE WHICH SHALL APPEAR WITHIN ONE (1) YEAR AFTER COMPLETION AND ACCEPTANCE OF THE WORK UNDER THIS CONTRACT. EXCEPTION: THE ROOFING SUBCONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT COSIGNED BY THE GENERAL CONTRACTOR TO MAINTAIN THE ROOFING IN A WATERTIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER DATE OF SUBSTANTIAL COMPLETION, UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS.

M. CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODE REGULATIONS AND STATE DEPARTMENT OF INDUSTRIAL REGULATIONS, DIVISION OF INDUSTRIAL SAFETY (O.S.H.A.) REGULATIONS.

N. REFERENCES OF DRAWINGS IS FOR CONVENIENCE ONLY AND DOES NOT LIMIT APPLICATION OF ANY DRAWINGS OR DETAIL.

O. CONTRACTOR SHALL REFER TO AND CROSS-CHECK DETAILS, DIMENSIONS, NOTES, AND ALL REQUIREMENTS ON THE ARCHITECTURAL DRAWINGS WITH RELATED REQUIREMENTS ON THE STRUCTURAL, MECHANICAL, ELECTRICAL, AND/OR CIVIL DRAWINGS.

P. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE SAFETY OF THE OWNER'S EMPLOYEES, WORKMEN, AND ALL OTHERS, AT LEAST DURING PROJECT CONSTRUCTION.

Q. THE CONTRACTOR SHALL SAFEGUARD THE OWNER'S PROPERTY DURING CONSTRUCTION AND SHALL REPAIR ANY DAMAGES TO PROPERTY OF THE OWNER TO ORIGINAL CONDITION OR BETTER.

R. THE STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENTS ARE IN PLACE. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY BRACING/SHORING AS REQUIRED OR PORTION THEREOF DURING CONSTRUCTION.

S. PROVIDE ALL NECESSARY BLOCKING, BACKING, SLEEVES, AND FRAMING FOR LIGHT FIXTURES, ELECTRICAL UNITS, A/C EQUIPMENT, COUNTERS, HANDRAILS, RAILS, AND ALL OTHER ITEMS REQUIRING SAME.

T. THE ARCHITECT MAKES NO GUARANTEE FOR PRODUCTS NAMED BY TRADE OR MANUFACTURER.

U. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE BUILDING LINES AND LEVELS. THE CONTRACTOR SHALL COMPARE CAREFULLY THE LINES AND LEVELS SHOWN ON THE DRAWING WITH THE EXISTING LEVELS FOR THE LOCATION AND CONSTRUCTION OF THE WORK AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

V. ALL TRADES SHALL DO THEIR OWN CUTTING, FITTING, PATCHING, ETC., TO MAKE THE SEVERAL COME TOGETHER PROPERLY AND FIT AND TO BE RECEIVED BY THE WORK OF THE OTHER TRADES.

W. NOT USED.

X. DO NOT SCALE DRAWINGS. NOTIFY ARCHITECT OF ANY DIMENSIONAL DISCREPANCIES FOR CLARIFICATION.

Y. DIMENSIONS, UNLESS OTHERWISE NOTED: TO FACE OF CONCRETE OR MASONRY WORK; TO CENTERLINE OF COLUMNS OR OTHER GRID POINTS; TO FACE OF STUDS AND FRAMED WINDOW OR DOOR OPENINGS; TO FINISH FACE OF CLEAR WIDTHS.

100% Construction Documents

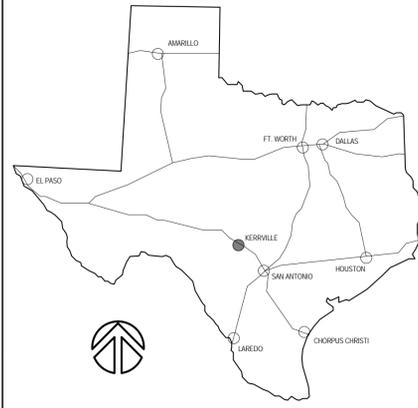
City of Kerrville

Athletic Complex Field House

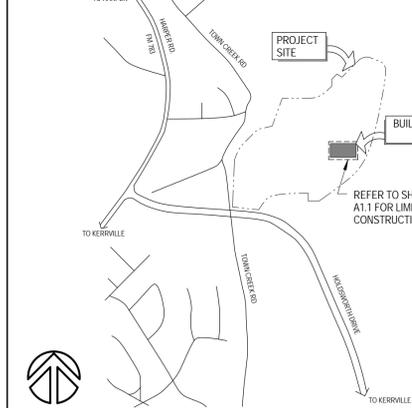
PW16-001 - October 21, 2016



Location Map



Vicinity Map



Contact Information

Owner/Client
City of Kerrville
701 Main St.
Kerrville, TX 78028
Phone: 830-257-8000

Electric
Kerrville Public Utility Board
2250 Memorial Blvd.
Kerrville, TX 78028
Phone: 830-257-3550

Telephone
Hill Country Telephone Cooperative
220 Carolyn St. W.
Ingram, TX 78025
Phone: 830-367-5333

Water/Waste Water
City of Kerrville
701 Main St.
Kerrville, TX 78028
Phone: 830-792-8336

Architect
Peter W. Lewis Architect + Associates
334 West Water Street
Kerrville, TX 78028
Phone: 830-896-4220, Fax: 830-896-4226

Structural Engineer
Maxwell Engineering, PLLC
911 Panorama Dr.
Kerrville, TX 78028
Phone: 830-895-0032, Fax: 830-895-0033

MEP Engineer
ESA Mechanical & Electrical Engineering, Inc.
1100 NW Loop 410, Ste. 460
San Antonio, TX 78213
Phone: 210-342-3483, Fax: 210-342-3641

Civil Engineer
Howitt Engineering, Inc.
716 Barnett Street
Kerrville, TX 78028
Phone: 830-315-8800

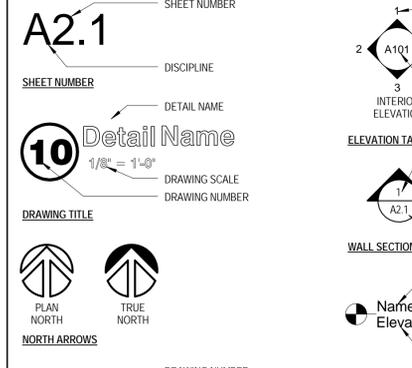
Applicable Codes

2006 INTERNATIONAL BUILDING CODE
2008 NATIONAL ELECTRIC CODE
2006 INTERNATIONAL PLUMBING CODE
2006 INTERNATIONAL MECHANICAL CODE
2006 INTERNATIONAL ENERGY CONSERVATION CODE
2006 INTERNATIONAL FIRE CODE

TEXAS ACCESSIBILITY STANDARDS, CURRENT EDITION AMERICANS WITH DISABILITIES ACT

REFER TO SHEET G1.3 FOR ADDITIONAL INFORMATION

Symbol Legend



!!NOTE TO BIDDERS!!

THE "CITY OF KERRVILLE ATHLETIC COMPLEX FIELD HOUSE" IS BEING DESIGNED AND CONSTRUCTED WITHIN AN EXISTING AND ONGOING CONSTRUCTION PROJECT. THE "KERRVILLE SPORTS COMPLEX", WITH LIMITED ACCESS POINTS AND CONSTRUCTION LIMITS. THE AWARDED GENERAL CONTRACTOR FOR THE "CITY OF KERRVILLE ATHLETIC COMPLEX FIELD HOUSE" WILL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH OWNER (CITY OF KERRVILLE), PRIOR TO AND DURING THE CONSTRUCTION OF THIS FACILITY. ANY DAMAGE DONE TO ANY COMPLETED AREAS OF CONSTRUCTION ON THE "KERRVILLE SPORTS COMPLEX" WILL BE BROUGHT TO THE OWNERS ATTENTION IMMEDIATELY, AND THE AWARDED GENERAL CONTRACTOR FOR THE "CITY OF KERRVILLE ATHLETIC COMPLEX FIELD HOUSE" WILL BE RESPONSIBLE FOR ALL REPAIRS AT THEIR OWN COST. THE "KERRVILLE SPORTS COMPLEX" CONTRACTOR WILL REQUIRE ACCESS TO FIELDS 1-4 THROUGH THIS PROJECT CONSTRUCTION SITE FOR DELIVERY OF MATERIALS SUCH AS SOG AND INFELD MIX.

AREA OF REVISION
REVISION TAG
CENTER LINE
DEMOLISHED
HIDDEN
OVERHEAD

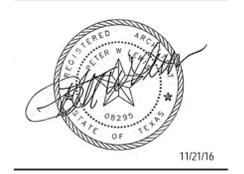
Sheet Index

01 - General	Cover Sheet	11/28/16
G1.1	Cover Sheet	11/28/16
G1.2	ADATAS Details	11/28/16
G1.3	Code Compliance	11/28/16
02 - Architecture		
A1.1	Site Plan	11/21/16
A1.2	Field Plans	11/21/16
A1.3	Site Details	11/21/16
A2.1	Foundation Dimensional Control Plan	11/21/16
A2.2	Floor Plan	11/21/16
A2.3	Enlarged Plan	11/21/16
A2.4	Enlarged Plans & Plan Details	11/21/16
A3.1	Exterior Elevations	11/21/16
A4.1	Building Sections	11/21/16
A4.2	Wall Sections	11/21/16
A4.3	Wall Sections	11/21/16
A5.1	Roof Plan	11/21/16
A6.1	Reflected Ceiling Plan	11/21/16
A7.1	Door and Window Schedules	11/21/16
A7.2	Door & Window Details	11/21/16
A8.1	Interior Elevations	11/21/16
A8.2	Interior Elevations	11/21/16
A9.1	Finishes Plan & Schedule	11/21/16
03 - Structural		
S1.1	Foundation Plan - Field House	11/21/16
S2.1	Framing Plan - Field House	11/21/16
S3.1	Details	11/21/16
S4.1	General Structural Notes	11/21/16
04.1 - MEP Site		
MEP1.1	Mech., Elec. and Plumbing Site Plan	11/21/16
04.2 - Mechanical		
M1.1	Mechanical Plan	11/21/16
M2.1	Mechanical Schedules and Details	11/21/16
M3.1	Mechanical Details	11/21/16
04.3 - Electrical		
E1.1	Lighting Plan	11/21/16
E2.1	Power and Signal Plan	11/21/16
E3.1	Electrical One-Line Diagram	11/21/16
E3.2	General Electrical Notes	11/21/16
E4.1	Electrical Schedules	11/21/16
E4.2	Electrical Schedules	11/21/16
04.4 - Plumbing		
P1.1	Plumbing Plan	11/21/16
P2.1	Enlarged Plumbing Plans	11/21/16
P3.1	Plumbing Legend & Schedules	11/21/16
P3.2	Plumbing Details and Riser	11/21/16
04.5 - Fire Sprinkler		
FS1.1	Fire Sprinkler Plan	11/21/16
05 - Civil		
C1	Cover Sheet, Sheet Index, and Vicinity Map	11/21/16
C2	General Notes	11/21/16
C3	Dimensional Control Plan	11/21/16
C4	Grading, Drainage, and Paving Plan	11/21/16
C5	Utility Plan	11/21/16
C6	Field Layout	11/21/16
C7	Fences Details	11/21/16
C8	Paving Details	11/21/16
C9	Utility Details Sheet 1 of 2	11/21/16
C10	Utility Details Sheet 2 of 2	11/21/16
C11	Contractor Staging Area Map	11/21/16
C12	Survey Horizontal and Vertical Control Plan	11/21/16

Base Bid & Alternate Description

BASE BID: EXECUTION OF ALL CIVIL, STRUCTURAL, MEP AND ARCHITECTURAL ITEMS WITHIN THIS SET OF CONTRACT, AS IT PERTAINS TO THE BUILDING AND ADJACENT PAVING. PROVIDE SEED HYDROMULCH IN LIEU OF ADD ALTERNATE NO. 1, "EXTERIOR BASEBALL FIELD" LOCATION. COORDINATE SEED MIX WITH OWNER PRIOR TO INSTALLATION. FINAL GRADING AND SURFACE DRAINAGE OF ADD ALTERNATE NO. 1, "EXTERIOR BASEBALL FIELD," TO MATCH CIVIL DRAWINGS AS SHOWN. PROVIDE EMPTY CONDUIT FOR ADD ALTERNATE NO. 1, "EXTERIOR BASEBALL FIELD," UTILITIES TO INCLUDE, BUT NOT LIMITED TO POWER AND LIGHTING. REFER TO SHEET A1.1 FOR DELINEATION OF BASE BID, VERSUS ADD ALTERNATE.

ADD ALTERNATE NO. 1: EXTERIOR BASEBALL FIELD
DESCRIPTION: EXECUTION OF ALL CIVIL, STRUCTURAL, MEP AND ARCHITECTURAL ITEMS AS DESCRIBED WITHIN THIS SET OF CONSTRUCTION DOCUMENTS AS IT PERTAINS TO THE EXTERIOR BASEBALL FIELD. THIS IS TO INCLUDE, BUT IS NOT LIMITED TO PAVING, UTILITIES, FOUNDATIONS, ARTIFICIAL TURF, SUBGRADE AND FIELD DRAINAGE, FENCING, DUGOUTS, BASEBALL EQUIPMENT AND FIELD LIGHTING. REFER TO SHEET A1.1 FOR DELINEATION OF BASE BID, VERSUS ADD ALTERNATE.



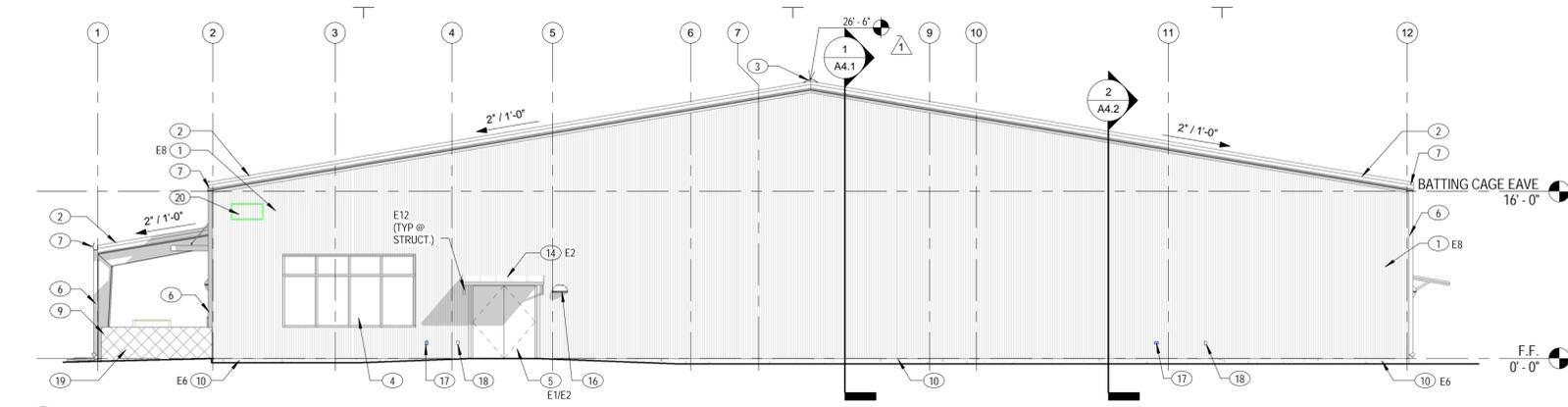
City of Kerrville Athletic Complex Field House

Kerrville, Texas

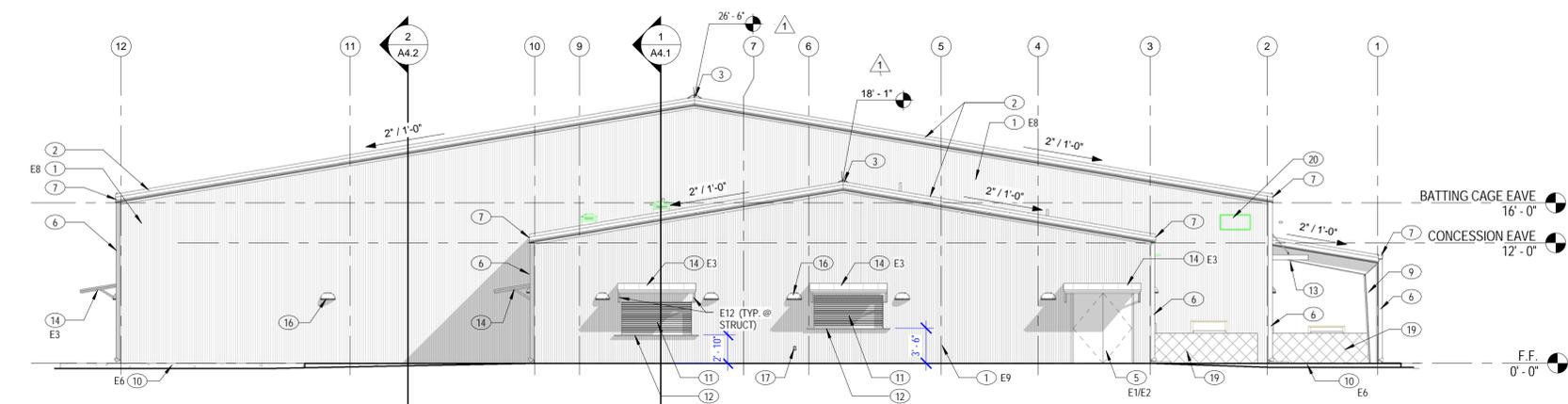
PROJECT NO. 20-1605
DATE 11/28/16

Cover Sheet

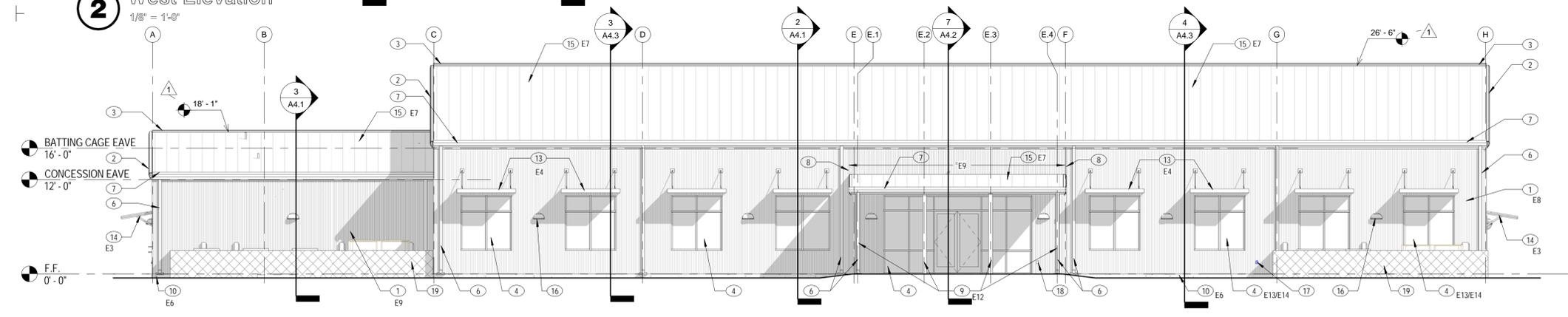
SHEET NUMBER
G1.1



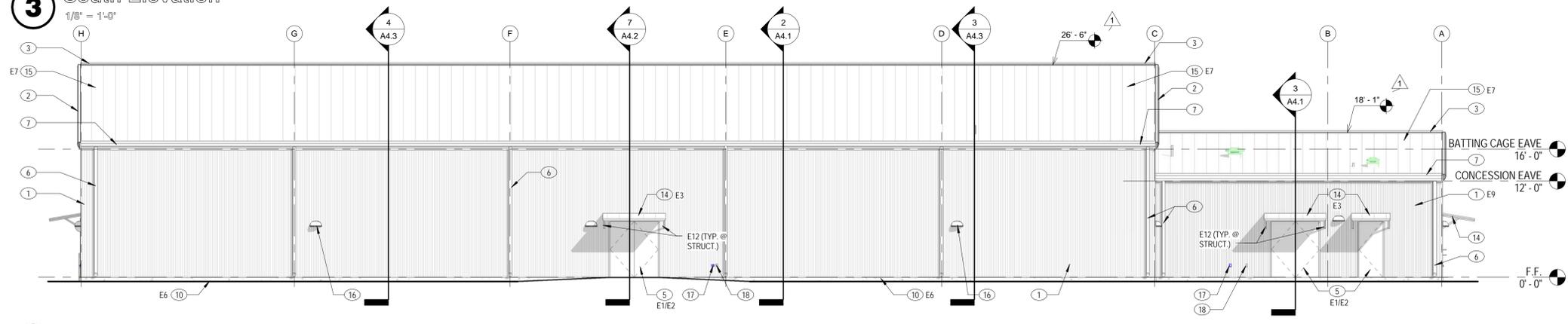
1 East Elevation
1/8" = 1'-0"



2 West Elevation
1/8" = 1'-0"



3 South Elevation
1/8" = 1'-0"

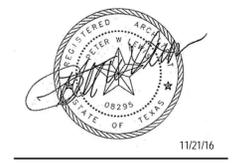


4 North Elevation
1/8" = 1'-0"

EXTERIOR FINISH SCHEDULE				
NOTES: 1. FINAL SELECTION SHALL BE SELECTED BY ARCHITECT FROM FIELD MOCK-UPS AND MATERIAL SUBMITTALS. 2. TBD = COLORS AND TEXTURES TO BE DETERMINED BY ARCHITECT FROM FIELD MOCK-UP. 3. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.				
MARK	DESCRIPTION	MATERIAL	FINISH / COLOR	COMMENTS
E1	HOLLOW METAL FRAMES	METAL (PRE-PRIMED)	SHERWIN WILLIAMS "SW 6677" GOLDENROD	-
E2	HOLLOW METAL DOORS	METAL (PRE-PRIMED)	SHERWIN WILLIAMS "SW 6677" GOLDENROD	-
E3	STEEL AWNING FRAMING (OVER DOORS)	METAL (PRE-PRIMED)	SHERWIN WILLIAMS "SW 6635" DETERMINED ORANGE	-
E4	STEEL CANOPY (OVER WINDOWS)	METAL	POWDER COAT SHERWIN WILLIAMS "SW 6677" GOLDENROD	-
E5	CONCRETE FLOOR (AT ALL EXTERIOR CONDITIONS)	CONCRETE	LIGHT BROOM FINISH	-
E6	CONCRETE FOUNDATION (VERTICAL SURFACE)	CONCRETE	PROVIDE RUBBED FINISH WHERE EXPOSED TO VIEW. CONTRACTOR OPTION: PROVIDE SMOOTH SKIM COAT FINISH.	-
E7	PRE-FINISHED METAL ROOF	24 GA. PRE-FINISHED METAL	MBCI GALVALUME PLUS OR APPROVED EQUAL	BASIS OF DESIGN, MBCI SUPERLOK 16 ROOF PANEL
E8	PRE-FINISHED METAL WALL PANEL & TRIM	26 GA. PRE-FINISHED METAL	MBCI GALVALUME PLUS OR APPROVED EQUAL	BASIS OF DESIGN, MBCI PBC WALL PANEL
E9	PRE-FINISHED METAL WALL PANEL & WALL TRIM	26 GA. PRE-FINISHED METAL	MBCI EVERGLADE OR APPROVED EQUAL	BASIS OF DESIGN, MBCI PBC WALL PANEL
E10	ROOF METAL FLASHING	26 GA. PRE-FINISHED METAL	MBCI GALVALUME PLUS OR APPROVED EQUAL	-
E11	ROOF METAL FLASHING - NOT EXPOSED TO VIEW	METAL	GALVANIZED	-
E12	EXPOSED STRUCTURE	PAINT	SHERWIN WILLIAMS "SW 6635" DETERMINED ORANGE	-
E13	STOREFRONT FRAMING	ALUMINUM	CLEAR ANODIZED	-
E14	GLAZING 1	1" INSULATED GLASS	MANUF: PPG COLOR: ATLANTICA	-

- KEY NOTES:**
- PRE-FINISHED METAL WALL PANEL.
 - PRE-FINISHED METAL FASCIA. MATCH ROOF COLOR.
 - CONTINUOUS PRE-FINISHED METAL RIDGE CAP. MATCH ROOF COLOR.
 - ALUM. STOREFRONT SYSTEM W/ 1" INSULATED GLAZING (TYP.)
 - HOLLOW METAL DOOR & FRAME. (PTD.)
 - PRE-FINISHED METAL DOWNSPOUT. MATCH ROOF COLOR.
 - PRE-FINISHED METAL GUTTER. MATCH ROOF COLOR.
 - METAL PANEL COLOR TRANSITION JOINT.
 - PRE-ENGINEERED METAL BUILDING FRAME (PTD.)
 - EXPOSED CONCRETE FOUNDATION: PROVIDE RUBBED FINISH (TYP.) RE: STRUCTURAL
 - OVERHEAD COILING COUNTER DOOR. RE: DOOR SCHEDULE.
 - S.S. COUNTER TOP.
 - STEEL SHADE AWNING (PTD.) RE: STRUCTURAL.
 - STEEL FRAMED AWNING W/ PRE-FINISHED METAL ROOF (PTD.) RE: STRUCTURAL
 - PRE-FINISHED METAL ROOF.
 - LIGHT FIXTURE. RE: ELEC. (TYP.)
 - HOSE BIBB. RE: PLUMBING
 - EXTERIOR GFCI ELECTRICAL OUTLET. RE: ELEC.
 - 4' HIGH CHAIN LINK FENCE W/ WIND SCREEN TO MATCH DUGOUT.
 - MECHANICAL LOUVER. RE: MEP

REVISIONS		
NO.	DESCRIPTION	DATE
1	Addendum 1	11/21/2016
2	Addendum 2	11/28/2016



11/21/16



City of Kerrville Athletic Complex Field House
Kerrville, Texas

NOT PUBLISHED: ALL RIGHTS RESERVED BY THE ARCHITECT. DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE ARCHITECT. THEY SHALL NOT BE USED ON OTHER PROJECTS OR EXTENSIONS TO THE PROJECT WITHOUT THE WRITTEN AND APPROPRIATE COMPENSATION TO THE ARCHITECT. CONTRACTOR IS RESPONSIBLE FOR THE CORRECTING AND VERIFYING THE ACCURACY OF ALL DATA. THE ARCHITECT WILL NOT BE RESPONSIBLE FOR CONSTRUCTION AND/OR MATERIALS. THE ARCHITECT'S LIABILITY IS LIMITED TO THE CONTRACT AND SPECIFICATIONS AND SHALL BE LIMITED TO THE PROJECT.

PROJECT NO. 20-1605 DATE 11/28/16

Exterior Elevations

SHEET NUMBER A3.1

11/28/2016 11:16:51 AM

LIGHT FIXTURE SCHEDULE										
MARK	FIXTURE DESCRIPTION	LIGHT SOURCE	LAMP MODEL	NO. LAMPS	WATTS	VOLTS	MOUNTING	MANUFACTURER	MODEL	NOTES
A	LED LENSED STRIP	LED LM79 & LM80 TESTED	5000Lm, 50kHr 3500K, +80 CRI	-	66.6	277	SURFACE	LITHONIA	ZL2N-L48-5000LM-MDD-MVOLT-35K-80CRI	4
B	2X4 LENSED TROFFER	LED LM79 & LM80 TESTED	4800Lm, 50kHr 3500K, +80 CRI	-	45	277	RECESSED	LITHONIA	2BLT4-48L-SDSMT-MVOLT-LP835	
C	2X4 LENSED TROFFER	LED LM79 & LM80 TESTED	7200Lm, 50kHr 3500K, +80 CRI	-	71	277	RECESSED	LITHONIA	2GTL-4-72L-MVOLT-LP835	
D	HIGH BAY FIXTURE	LED LM79 & LM80 TESTED	26400Lm, 50kHr 3500K, +80 CRI	-	150.2	277	STRUCTURE	LITHONIA	IBG-24000LM-SEF-GND-AFL-MVOLT-35K-80CRI	3
X1	EXIT SIGN SINGLE FACE	LED	GREEN	-	-	277	SURFACE	LITHONIA	LQM-S-W-3-G-120/277-EL N	
W1	EXTERIOR WALL PACK	LED LM79 & LM80 TESTED	4028Lm, 50kHr 3000K, +80 CRI	-	47	277	SURFACE	LITHONIA	WSQ-LED-2-10A700/30K-SR3-MVOLT-DOBXD	1, 2
F1	FLAG POLE FIXTURE	LED LM79 & LM80 TESTED	5775Lm, 100kHr 5000k,+70 CRI	-	74	277	AT GRADE	LITHONIA	DSXF2-4-A530/50K-MSP-MVOLT-THK-VG	2,5

LIGHT FIXTURE SCHEDULE GENERAL NOTES:

- SUFFIX "E" INDICATES 1400 LUMEN BATTERY PACK. PROVIDE HOT LEAD TO INSURE LAMP IS CONTROLLED WITH WALL SWITCH.
- PAY SPECIAL ATTENTION TO LAMP COLOR LISTED IN THE LIGHT FIXTURE SCHEDULE.
- THE FIXTURE DESIGNATIONS ON THIS SCHEDULE ARE TYPICAL AND NOT INTENDED TO BE RESTRICTIVE BUT ARE INDICATIVE OF A PARTICULAR QUALITY AND CLASS OF FIXTURE UON.

LIGHT FIXTURE SCHEDULE NUMBERED NOTES:

- WALL PACKS SHALL BE INSTALLED AT 13'-0" AFF ALONG BATTING CAGE WALLS AND 10'-0" AFF FOR CONCESSION/OFFICE/PRO SHOP WALLS. COORDINATE FINISH COLOR WITH ARCHITECT.
- BOTTOM OF FIXTURE INSTALLED AT 16'-0" AFF.
- BOTTOM OF FIXTURE INSTALLED AT 12'-0" AFF IN BATTING CAGES.
- PROVIDE ALL FITTINGS, ADAPTERS, ETC. TO INSTALL FIXTURE AS DIRECTED BY ARCHITECT.

PANEL	HFH1	COMMENTS:	A/C CIRCUITS																				
LOCATION:	MEP 115																						
277/ 480	VOLTS, 3 PHASE, 4 WIRE	400 AMP	35 KAIC																				
CIRCUIT DATA																							
NR	WIRE	QND	C	CKT NR	LOAD	CR POLE NR	CR TRIP A	CR LOAD VA	PHASE A	PHASE B	PHASE C	CR LOAD VA	CR TRIP A	CR POLE NR	LOAD	CKT NR	NR	WIRE	QND	C			
3	12	12	1/2"	1	CU-1	3	15	1688	3376			1688	15	3	CU-2	2	3	12	12	1/2"			
					30A3PWF NEMA 3R DISC. SWITCH			1688		3376	3376	1688			30A3PWF NEMA 3R DISC. SWITCH								
5								1688				1688											
7	12	12	1/2"	7	CU-3	3	15	1637	3874			1637	15	3	CU-4	8	3	12	12	1/2"			
					30A3PWF NEMA 3R DISC. SWITCH			1637		3874	3874	1637			30A3PWF NEMA 3R DISC. SWITCH								
9								1637				1637											
11								1637				1637											
13	12	12	1/2"	13	CU-5	3	15	2302	10657			2302	15	3	CU-6	14	3	8	10	3/4"			
					30A3PWF NEMA 3R DISC. SWITCH			2302		10657	10657	2302			30A3PWF NEMA 3R DISC. SWITCH								
15								2302				2302											
17								2302				2302											
19	8	10	3/4"	19	CU-7	3	40	8355	16849			8494	40	3	ANL-6	20	3	8	10	3/4"			
					30A3PWF NEMA 3R DISC. SWITCH			8355	16849			8494			30A3PWF NEMA 1 DISC. SWITCH								
21								8355				8494											
23								8355				8494											
25					SEE RISER	3	175	30010	38504			31525	40	3	ANL-7	26	3	8	10	3/4"			
								30010	38504			31525			30A3PWF NEMA 1 DISC. SWITCH								
27								30010				31525											
29					SEE RISER	3	150	13979	17979			14601	30	3	WATER HEATER WH-1	32	3	10	10	1/2"			
								13979	17979			14601			30A3PWF NEMA 1 DISC. SWITCH								
33								14735				14601											
								14735				14601											
35								10601															
37																							
39																							
41																							
PANEL TYPE: NEMA 1				PHASE CONN. 91239				85016				81098				VA				0 % SPARE CAPACITY			
MOUNTING: FLUSH				TOTAL CONNECTED LOAD				257				KVA				95 % DEMAND FACTOR							
FED FROM: SEE RISER				CONNECTED + SPARE LOAD				257				KVA				310 AMPS CONNECTED							
				TOTAL DEMAND				244				KVA											
				TOTAL DEMAND, AMPS				294				Amps				AT 480 VOLTS							

1. COORDINATE EXACT CIRCUIT BREAKER, WIRE, AND CONDUIT SIZE WITH EQUIPMENT MANUFACTURER.

PANEL	HFH2	COMMENTS:	LIGHTING CIRCUITS																				
LOCATION:	MEP 115																						
277/ 480	VOLTS, 3 PHASE, 4 WIRE	250 AMP	35 KAIC																				
CIRCUIT DATA																							
NR	WIRE	QND	C	CKT NR	LOAD	CR POLE NR	CR TRIP A	CR LOAD VA	PHASE A	PHASE B	PHASE C	CR LOAD VA	CR TRIP A	CR POLE NR	LOAD	CKT NR	NR	WIRE	QND	C			
2	12	12	1/2"	1	LIGHTS-CONCESSION/RR/JAN/TOILET/PANTRY/IMPRES	1	20	1555	3957			1502	20	1	LIGHTS-RATING CAGES	2	2	12	12	1/2"			
					MECH			2109	3912			1603	20	1	LIGHTS-RATING CAGES	4	2	12	12	1/2"			
3	12	12	1/2"	3	LIGHTS-PRO SHOP/PARKING/STOR/OFFICES	1	20	411				1513	20	1	LIGHTS-RATING CAGES	6	2	12	12	1/2"			
					EXTERIOR WALL PACKS-FRONT			411				1603	20	1	LIGHTS-RATING CAGES	8	2	12	12	1/2"			
5	12	12	1/2"	5	EXTERIOR WALL PACKS-BATTING CAGES	1	20	235	2038			733	20	1	LIGHTS-RATING CAGE ASSES	10	2	12	12	1/2"			
								1502				4294	20	3	BALL FIELD LIGHTS	12	3	10	12	1"			
7	12	12	1/2"	7	LIGHTS-BATTING CAGES	1	20	1502				4294											
					EXTERIOR SIGN			500				4294											
9	12	12	1/2"	9	FLAG POLE LIGHTS	1	20	296	4590			4294											
					SPARE							4294											
13												4294											
					SPARE							4294											
15												4294											
					SPARE							4294											
17												4294											
					SPARE							4294											
19												4294											
					SPARE							4294											
21												4294											
					SPARE							4294											
23												4294											
					SPARE							4294											
25												4294											
					SPARE							4294											
27												4294											
					SPARE							4294											
29												4294											
					SPARE							4294											
31												4294											
					SPARE							4294											
33												4294											
					SPARE							4294											
35												4294											
					SPARE							4294											
37												4294											
					SPARE							4294											
39												4294											
					SPARE							4294											
41												4294											
					SPARE							4294											
PANEL TYPE: NEMA 1				PHASE CONN. 13979				14735				10601				VA				0 % SPARE CAPACITY			
MOUNTING: FLUSH				TOTAL CONNECTED LOAD				39				KVA				95 % DEMAND FACTOR							
FED FROM: SEE RISER				CONNECTED + SPARE LOAD				39				KVA				47 AMPS CONNECTED							
				TOTAL DEMAND				37				KVA											
				TOTAL DEMAND, AMPS				45				Amps				AT 480 VOLTS							

SEE NOTE BENEATH PANEL SCHEDULE (TYPICAL)

- CONTROL LIGHTS THROUGH TIMELOCK.
- LIGHT FIXTURES RELOCATED FROM OCCUR FIELD. COORDINATE EXACT CIRCUIT BREAKER REQUIREMENTS WITH LIGHT FIXTURE MANUFACTURER.

ELECTRICAL LEGEND	
MARK	DESCRIPTION
	FLUORESCENT FIXTURE
	FLUORESCENT FIXTURE WITH BATTERY PACK

