Community Safe Room
Billings R-IV School District
118 W. Mt. Vernon
Billings, Missouri 65610

ADDENDUM #2

Date: June 2, 2017

Prepared For: Billings R-IV School District

Project Number: 16008

Architect: Dickinson Hussman Architects
11 East Lockwood Avenue
Suite 200
St. Louis, Missouri 63119
314-727-8500

This addendum is hereby made part of the contract documents of the above referenced project. This addendum supplements and/or amends the originally issued documents and all related addenda.

ARCHITECTURAL SPECIFICATION ADDENDUM:

07542 – Fully Adhered TPO

1. Roof system membrane to be a .060 TPO roofing membrane. Delete any reference to a fleece-backed system.

09250 – Gypsum board

1. Section 09250-Gypsum Board to be inserted into the Division 9 - Finishes section of the project manual – **See attached specification section**

09646 – Wood Athletic Flooring

1. *In Part 1-General/1.03 Quality Assurance/A. Floor System Manufacture Qualifications/1 Basis of Design*, **ADD** subparagraph a. to read as follows
    a. Additional acceptable manufactures. (Subject to compliance with project manual)
        i. Action Floor Systems – GreenFlex Anchored System

11490 – **Gymnasium Equipment**

1. All backboards to have an electric height adjuster to allow adjustment from 8’-0” to 10’-0” – **See attached specification**

ARCHITECTURAL DRAWING ADDENDUM:

1. *Sheet A2.0* – Note "Logo to be determined by school district" only pertains to Alternate No. 3 scope. The final logo graphic will be supplied by the school district. This will be a multi-color graphic.
2. *Sheet A2*.0 – Delete key note 6 and key note 12. Floor drains indicated and called out on the Floor Plan per key note 13 – **See attached SDA-01**
3. *Sheet A3*.0 – Key note 19 to be re-labeled to key note 20 near the North scupper along Column line A. Gas piping location indicated on the Roof Plan – **See attached SDA-02**
4. *Sheet A4*.0 – Gas piping location indicated on the Exterior Elevation (West) – **See attached SDA-03**
5. *Sheet A6*.0 – Delete key note 6 and remove the roof hatch from the Reflected Ceiling Plan. Key note 4 to be re-labeled as key note 5 in both Room 104 and Room 105 on the Reflected Ceiling Plan. – **See attached SDA-04**
6. *Sheet A9*.1 – Revise the Room Finish Schedule / Room Finish Schedule (Alternate Bid) – **See attached SDA-05**
7. *Sheet A9*.1 – Revise Finish Specification List – **See attached SDA-06**

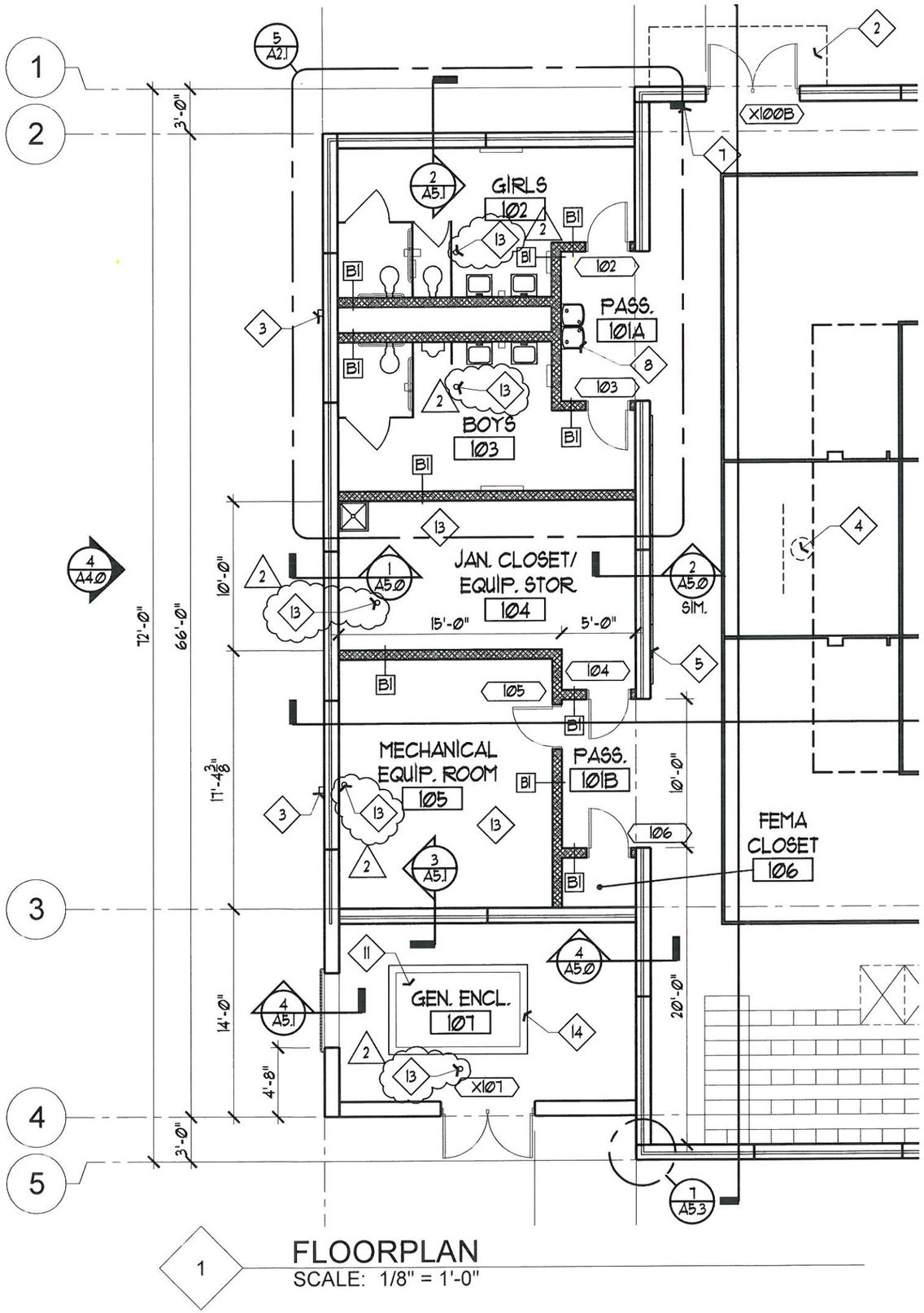
ELECTRICAL DRAWING ADDENDUM:

See attached from G&W Engineering Corporation dated 06/02/2017

ATTACHMENTS:

1. Supplemental Architectural Drawings (6 Pages)
2. Specification Section 09250 – Gypsum Board (8 Pages)
3. Alco Height Adjuster Specification (1 Page)
4. G&W Engineering Corporation Addendum No. 2 (3 Pages)

END OF ADDENDUM 2



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

FIRST FLOOR PLAN KEY NOTES

1. PRE-FINISHED, PRE-FABRICATED ALUMINUM CANOPY STRUCTURE, REFER TO EXTERIOR ELEVATIONS, WALL SECTIONS, ROOF PLAN AND SPECIFICATIONS FOR ADDITIONAL INFORMATION (ALTERNATE BID NO. 1)
2. PRE-FINISHED, PRE-FABRICATED ALUMINUM AWNING CANOPY SYSTEM. REFER TO EXTERIOR ELEVATIONS, WALL SECTIONS, ROOF PLAN AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. (ALTERNATE BID NO. 2)
3. PRE-FINISHED METAL DOWNSPOUT (4" X 6" RECTANGULAR) & CAST IRON DOWNSPOUT SHOE -PAINT. REFER TO ROOF PLAN, PLUMBING AND CIVIL FOR ADDITIONAL INFORMATION.
4. MOTORIZED, FORWARD-SWING BASKETBALL GOAL WITH ELECTRIC HEIGHT ADJUSTER SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. (ALTERNATE BID NO. 4)
5. CUSHIONED WALL SAFETY PADS - SEE ELEVATIONS, SECTIONS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. (ALTERNATE BID NO. 4)
6. NOT USED
7. RECESSED FIRE EXTINGUISHER CABINET - SEE DETAIL 7/A2Ø AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
8. TYPICAL HIGH/LOW DRINKING FOUNTAIN - SEE PLUMBING FOR ADDITIONAL INFORMATION.
9. GYMNASIUM EQUIPMENT CONTROL BOX. SEE ELECTRICAL. (ALTERNATE BID NO. 4)
10. GYMNASIUM LIGHTING & PROJECTION SCREEN CONTROLS. SEE ELECTRICAL.
11. EMERGENCY GENERATOR - SEE ELECTRICAL
12. NOT USED
13. FLOOR DRAIN. SLOPE FLOOR TO DRAIN. SEE PLUMBING DRAWINGS. BUILD UP CONCRETE AROUND HOUSEKEEPING PADS FOR POSITIVE DRAINAGE TO FLOOR DRAIN.
14. CONCRETE HOUSEKEEPING PADS, SEE MECH/ELECT DRAWINGS.

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DICKINSON HUSSMAN ARCHITECTS

Project For:

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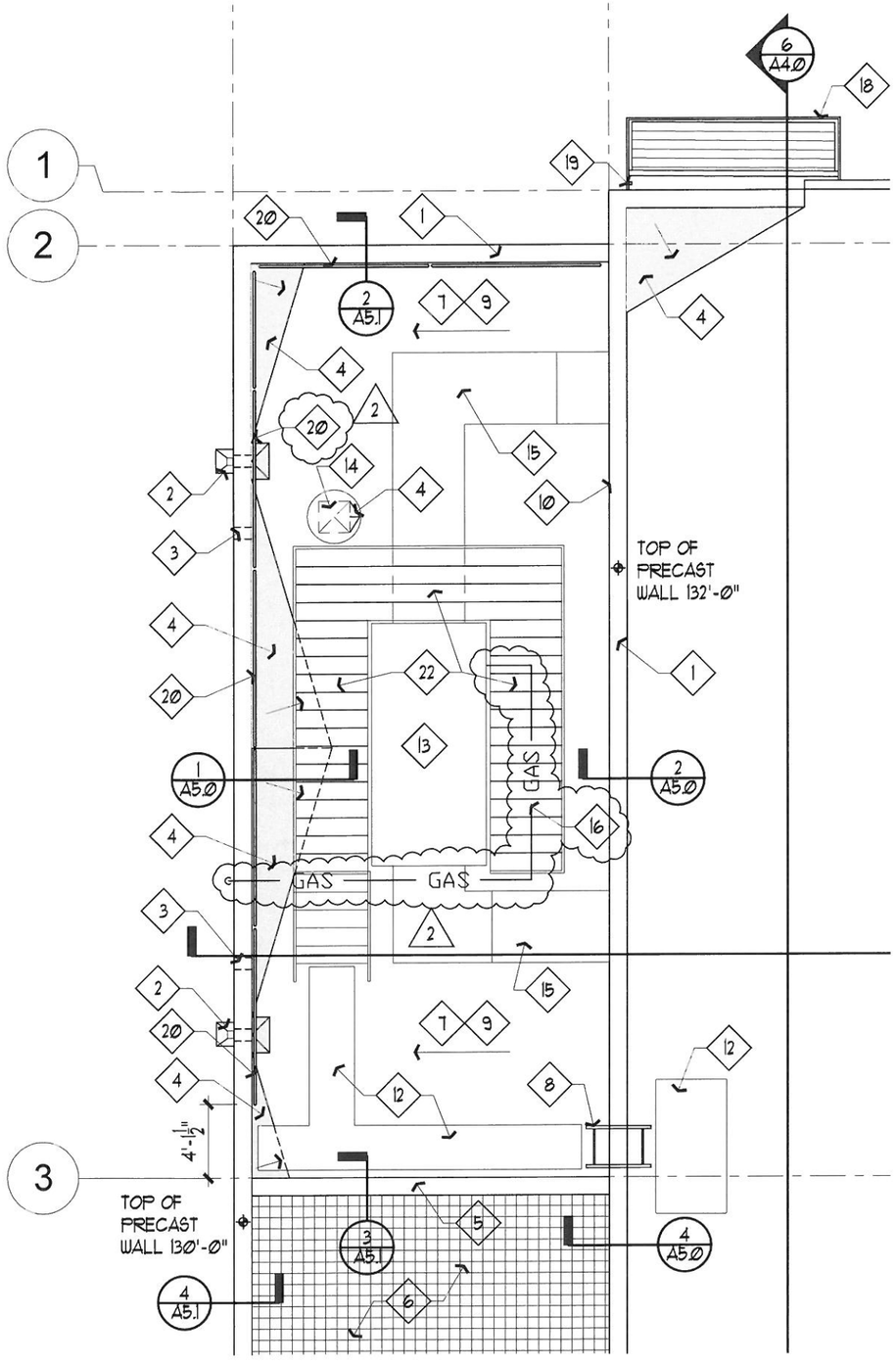
DATE June 2, 2017
PROJ. NO. 16008

ORIGINAL DRAWING A2.0
ORIGINAL DRAWING DATE May 18, 2017

SDA-01



1 **ROOF PLAN**
SCALE: 1/8" = 1'-0"

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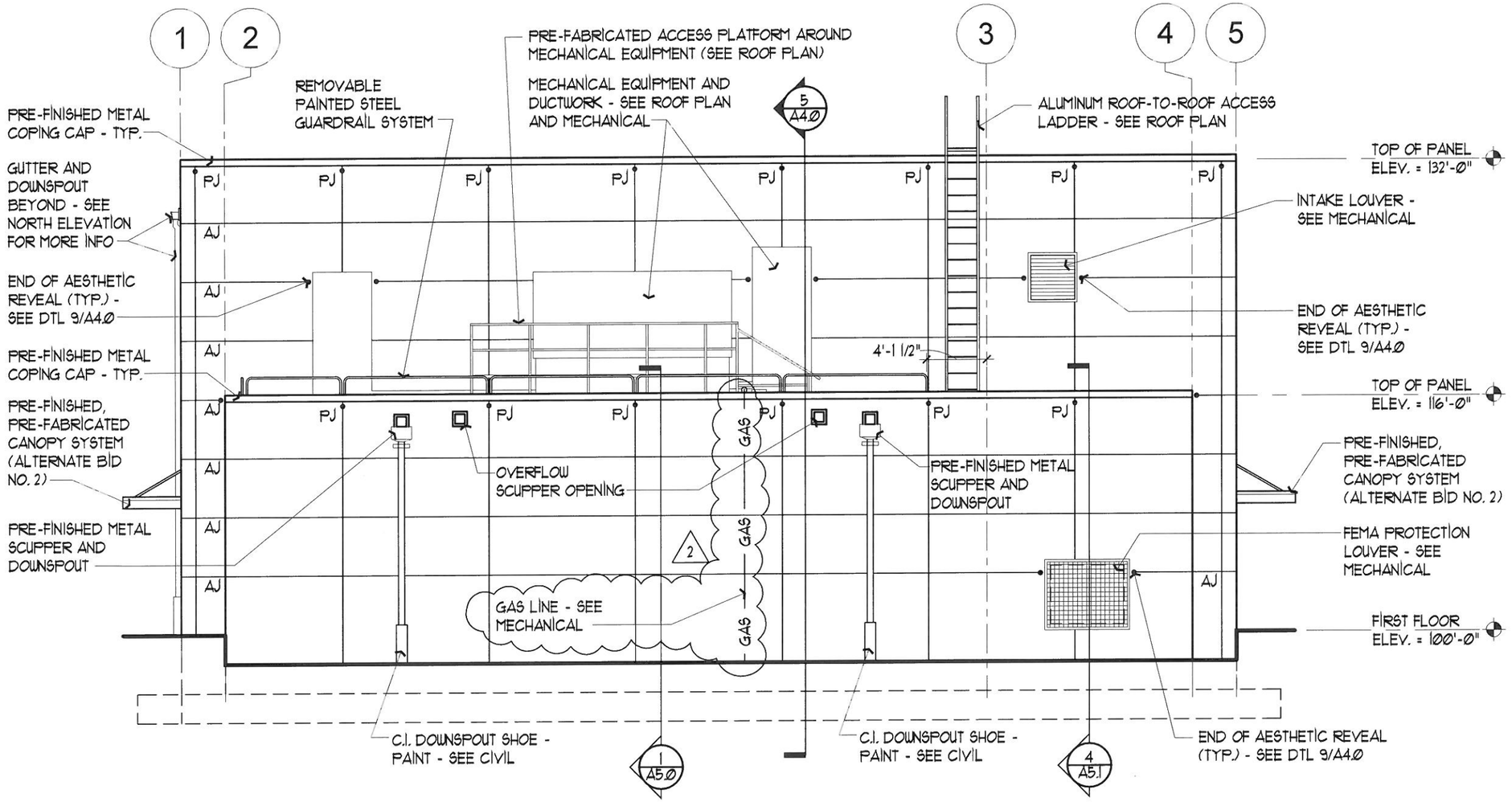
ORIGINAL DRAWING DATE May 18, 2017

SDA-02



4 EXTERIOR ELEVATION (WEST)

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

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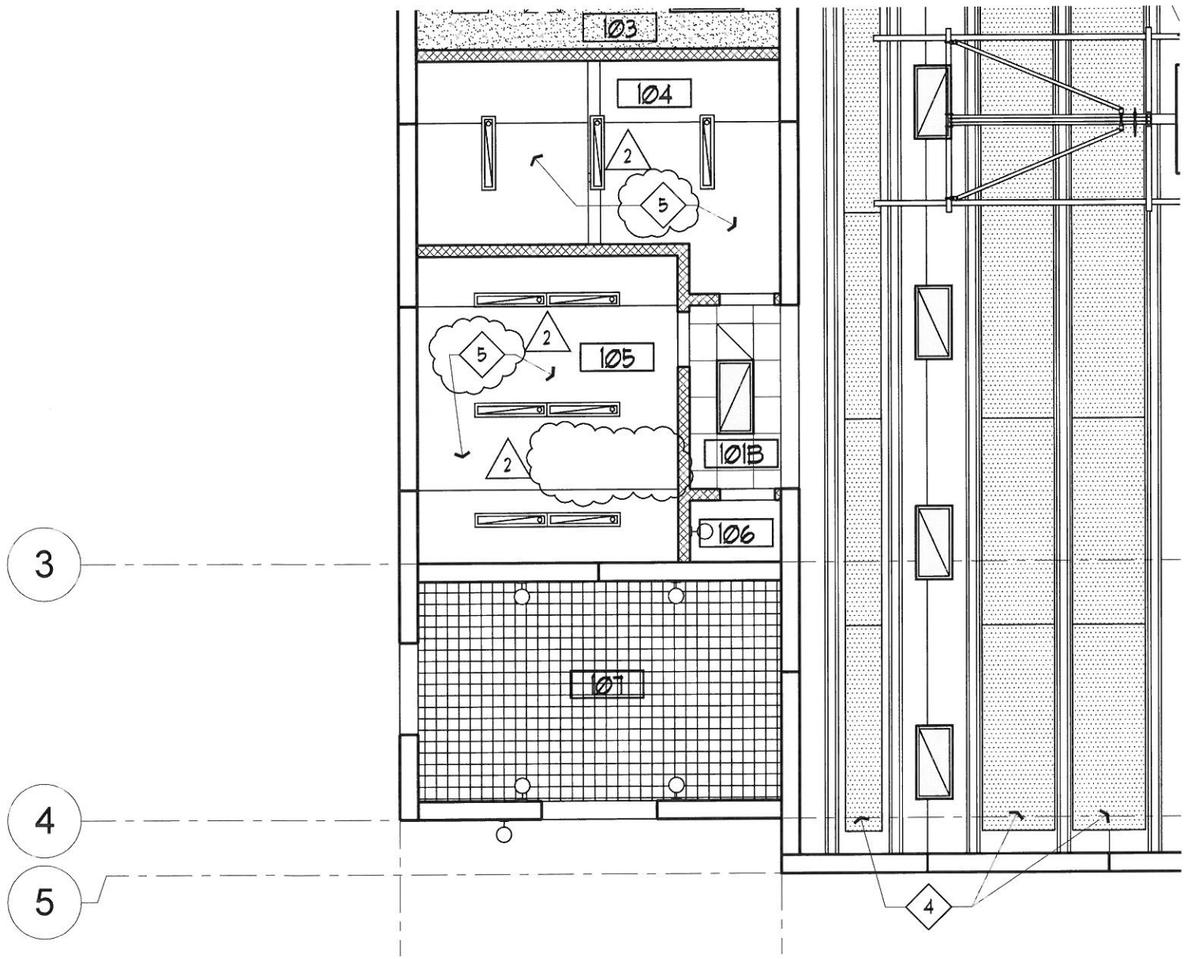
ORIGINAL DRAWING DATE May 18, 2017

SDA-03



1 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

REFLECTED CEILING PLAN KEY NOTES

1. PRE-FINISHED, PRE-FABRICATED ALUMINUM CANOPY STRUCTURE, REFER TO EXTERIOR ELEVATIONS, WALL SECTIONS, ROOF PLAN AND SPECIFICATIONS FOR ADDITIONAL INFORMATION (ALTERNATE BID NO. 1)
2. PRE-FINISHED, PRE-FABRICATED ALUMINUM AWNING CANOPY SYSTEM. REFER TO EXTERIOR ELEVATIONS, WALL SECTIONS, ROOF PLAN AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. (ALTERNATE BID NO. 2)
3. MOTORIZED, FORWARD-SWING BASKETBALL GOAL WITH ELECTRIC HEIGHT ADJUSTER. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. (ALTERNATE BID NO. 4)
4. ACOUSTICAL CEILING PANELS (AT-2) HUNG IN BAYS WITHOUT LIGHT FIXTURES ONLY (ALTERNATE BID NO. 5)
5. EXPOSED STRUCTURE (NO CEILING)
6. NOT USED

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ORIGINAL DRAWING A6.0
ORIGINAL DRAWING DATE May 18, 2017

SDA-04

ROOM FINISH SCHEDULE (BASE BID)

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS								CEILING			REMARKS
				NORTH		EAST		SOUTH		WEST					
				MATL.	FINISH	MATL.	FINISH	MATL.	FINISH	MATL.	FINISH	MATL.	FINISH	HEIGHT	
BASE BID															
100	GYMNASIUM	SCONC	--	PCONC	EPT-1	PCONC	EPT-1	PCONC	EPT-1	PCONC	EPT-1	PCONC	PT-5	VARIES	SEE ALT. SCHEDULE
101A	PASSAGE	SCONC	--	PCONC	EPT-1	PCONC	EPT-1	PCONC	EPT-1	PCONC	EPT-1	ACP-1	--	9'-0"	
101B	PASSAGE	SCONC	--	PCONC	EPT-1	PCONC	EPT-1	PCONC	EPT-1	PCONC	EPT-1	ACP-1	--	9'-0"	
102	GIRL'S RESTROOM	SCONC	--	CMU	EPT-1	CMU	EPT-1	CMU	EPT-1	CMU	EPT-1	GB	EPT-2	9'-0"	
103	BOY'S RESTROOM	SCONC	--	CMU	EPT-1	CMU	EPT-1	CMU	EPT-1	CMU	EPT-1	GB	EPT-2	9'-0"	
104	JAN. CLOSET/EQUIP. STORAGE	SCONC	--	CMU	EPT-1	CMU	EPT-1	CMU	EPT-1	CMU	EPT-1	PCONC	EPT-2	VARIES	
105	MECHANICAL EQUIPMENT ROOM	SCONC	--	PCONC	PT-1A	PCONC	PT-1A	PCONC	PT-1A	PCONC	PT-1A	PCONC	PT-2	VARIES	
106	FEMA CLOSET	SCONC	--	PCONC	PT-1A	PCONC	PT-1A	PCONC	PT-1A	CMU	PT-1A	PCONC	PT-2	VARIES	
107	GENERATOR ENCLOSURE	CONC	--	PCONC	--	PCONC	--	PCONC	--	PCONC	--	GRATE	--	--	

ROOM FINISH SCHEDULE (ALTERNATE BID)

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS								CEILING			REMARKS
				NORTH		EAST		SOUTH		WEST					
				MATL.	FINISH	MATL.	FINISH	MATL.	FINISH	MATL.	FINISH	MATL.	FINISH	HEIGHT	
ALTERNATE BID															
100	GYMNASIUM	WF-1	B-1	(SEE BASE BID SCHEDULE INFORMATION)											ALTERNATE BID NO. 3
101A	PASSAGE	(SEE BASE BID SCHEDULE INFORMATION)													
101B	PASSAGE	(SEE BASE BID SCHEDULE INFORMATION)													
102	GIRL'S RESTROOM	(SEE BASE BID SCHEDULE INFORMATION)													
103	BOY'S RESTROOM	(SEE BASE BID SCHEDULE INFORMATION)													
104	JAN. CLOSET/EQUIP. STORAGE	(SEE BASE BID SCHEDULE INFORMATION)													
105	MECHANICAL EQUIPMENT ROOM	(SEE BASE BID SCHEDULE INFORMATION)													
106	FEMA CLOSET	(SEE BASE BID SCHEDULE INFORMATION)													
107	GENERATOR ENCLOSURE	(SEE BASE BID SCHEDULE INFORMATION)													

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ORIGINAL DRAWING DATE May 18, 2017

SDA-05

ALTERNATE BID. NO 3
GYMNASIUM FLOOR

2

WF-1	WOOD FLOOR
MFR:	ROBBINS SPORTS SURFACES
STYLE:	ECLIPSE (ANCHORED) SEE PROJECT MANUAL
FLOORING:	MFMA NORTHERN HARD MAPLE UPGRADED 25/32" CONTINUOUS STRIP XL PLUS FINGER-JOINTED (FJ)
GRADE:	2ND AND BETTER
SIZE:	2 1/4" WIDE PLANKS
B-1:	VENTILATING BASE
MFR:	ROBBINS SPORTS SURFACES
SIZE:	3" WIDE x 4" HIGH
COLOR:	BLACK
PAINT:	BASKETBALL COURT
COLOR:	2" WIDE BLACK LINES
PAINT:	VOLLEYBALL COURT
COLOR:	2" WIDE WHITE LINES
PAINT:	MULTI-COLOR SCHOOL LOGO
ARTWORK:	PROVIDED BY THE SCHOOL DISTRICT
CONTACT:	MISSOURI FLOOR COMPANY ALEX VERSEMAN (314) 432-2260

PAINT

PT-1	WALL PAINT
MFR:	PORTER
TYPE:	SEE SPEC MANUAL
COLOR:	A: TBD
PT-2	CEILING / SOFFIT PAINT
	PORTER
TYPE:	SEE SPEC MANUAL
COLOR:	PPG1001-1 DELICATE WHITE
PT-3	INTERIOR H.M. DOORS AND FRAMES / INTERIOR LINTELS /
MFR:	PORTER
TYPE:	SEE SPEC MANUAL
COLOR:	A: TBD
PT-4	EXTERIOR LINTELS
MFR:	PORTER
TYPE:	SEE SPEC MANUAL
COLOR:	TBD
PT-5	DRYFALL CEILING PAINT
MFR:	PORTER
TYPE:	SEE SPEC MANUAL
COLOR:	TBD
PT-6	EXTERIOR FACE H.M. DOORS
MFR:	PORTER
TYPE:	SEE SPEC MANUAL
COLOR:	TBD
EPT-1	EPOXY WALL PAINT
MFR:	PORTER
TYPE:	SEE SPEC MANUAL
COLOR:	TBD
EPT-2	EPOXY CEILING PAINT
MFR:	PORTER
TYPE:	SEE SPEC MANUAL
COLOR:	PPG1001-1 DELICATE WHITE
CONTACT:	JANIE FARMER (502) 216-8997

ACOUSTICAL CEILING PANEL

ACP-1	ACOUSTICAL CEILING PANEL
MFR:	USG
STYLE:	RADAR CLIMAPLUS (HIGH NRC)
TYPE:	SQUARE EDGE
NUMBER:	22111
SIZE:	24" x 24"
GRID:	15/16" DONN DXT SQ
COLOR:	WHITE
REP:	CHRIS BECHT (636) 399-1853

TOILET PARTITIONS

MFR:	BOBRICK
STYLE:	SIERRA SERIES
TYPE:	SOLID COLOR REINFORCED COMPOSITE
COLOR:	SC02 DESERT BEIGE
REP:	MICHAEL HANLEY (800) 397-6622

ALTERNATE BID. NO 5
ACOUSTICAL TREATMENT @ GYMNASIUM

AT-1	ACOUSTICAL WALL PANELS
MFR:	GOLTERMAN & SABO
NUMBER:	AP2 (SQUARE EDGES & CORNERS)
THICKNESS:	2 INCH
NRC:	1.05
FABRIC:	XOREL
STYLE:	METEOR 6427
COLOR:	TBD
AT-2	ACOUSTICAL CEILING BANNERS
MFR:	GOLTERMAN & SABO
NUMBER:	BN2N
THICKNESS:	2" FIBERGLASS
NRC:	.95
FABRIC:	NYLON WRAPPED
COLOR:	TBD
MOUNTING:	PAINTED WASHERS, STIFFENERS
*NOTE:	REFER TO REFLECTED CEILING PLAN FOR LAYOUT
CONTACT:	GOLTERMAN & SABO CYNDI WALKER (800) 781-2036

2

6 FINISH SPECIFICATIONS LIST
SCALE: NONE

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ORIGINAL DRAWING DATE May 18, 2017

SDA-06

SECTION 09250 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Interior gypsum board.
2. Exterior gypsum board for ceilings and soffits.
3. Exterior aluminum vents for ceilings and soffits.
4. Metal suspension system for ceilings and soffits.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples: For the following products:

1. Trim Accessories: Full-size Sample in 12-inch- long length for each trim accessory indicated.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

1. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.
2. Interior suspended ceilings and soffits: Maximum deflection of l/360 of distance between supports.
3. Exterior soffits: Withstand minimum positive and negative pressure of 20 psf with maximum deflection of l/360 of distance between supports.
4. Nonstructural components that are permanently attached to structures and their support attachments, shall be designed and constructed to resist the effects of earthquake motions in accordance to local jurisdiction.

2.2 INTERIOR GYPSUM BOARD

A. General: Complying with ASTM C 36/C 36M or ASTM C 1396/C 1396M, as applicable to type of gypsum board indicated and whichever is more stringent.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. American Gypsum Co.

b. CertainTeed.
c. Georgia-Pacific Gypsum,LLC.
d. Lafarge North America Inc.
e. National Gypsum Company.
f. PABCO Gypsum.
g. Temple-Inland.
h. USG Corporation.

B. Regular Type: ASTM C 1396/C 1396M.

1. Thickness: As shown on Drawings.
2. Long Edges: Tapered.

C. Type X:

1. Thickness: As shown on Drawings.
2. Long Edges: Tapered.

D. Ceiling Type: Manufactured to have more sag resistance than regular-type gypsum board.

1. Thickness: As shown on Drawings.
2. Long Edges: Tapered.

E. Abuse-Resistant Type: ASTM C 1629/C 1629M. Manufactured to produce greater resistance to surface indentation and through-penetration (impact resistance) than standard, regular-type.

1. Core: As indicated on Drawings, equal to Fiberock by USG.
2. Long Edges: Tapered.

F. Moisture- and Mold-Resistant Type: With moisture- and mold-resistant core and surfaces and equal to Aqua-Tough by USG.

1. Core: As shown on Drawings.
2. Long Edges: Tapered.
3. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.

2.3 EXTERIOR GYPSUM BOARD FOR CEILINGS AND SOFFITS

A. Glass-Mat Gypsum Sheathing Board: ASTM C 1177/C 1177M.

1. Product: Subject to compliance with requirements, provide "Dens-Glass Gold" by Georgia-Pacific Gypsum.
2. Core: As indicated.

2.4 CEILING AND SOFFIT SUPPORT MATERIALS

A. Hanger Anchorage Devices: Screws, clips, bolts or other devices compatible with indicated structural anchorage for ceiling hangers and whose suitability has been proven through standard construction practices or by certified test data.

B. Powder-Actuated Fasteners in Concrete: Fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hangers [and with capability to sustain, without failure, a load equal to 10x calculated loads].

C. Hangers:

a. Steel wire or rods, sizes to comply with requirements of ASTM C754 for ceiling or soffit area and loads to be supported.

b. Wire: ASTM A 641, soft, Class 1 galvanized.

c. Rods and flats:

i. Mild steel components.

ii. Finish: Galvanized or painted with rust-inhibitive paint for interior work; galvanized for exterior work.

D. Framing System:

a. Main runners:

1. Cold-rolled, "C" shaped steel channels, 16 gauge minimum.

2. Finish: Galvanized with G40 hot-dip galvanized coating per ASTM A525 [for exterior work]; galvanized or painted with rust-inhibitive paint for other interior work.

3. Form to required radius at curved ceilings.

b. Cross furring: Hat-shaped steel furring channels, ASTM C645, 7/8 inch high, 25 gauge, galvanized.

c. Furring anchorages: 16 gauge galvanized wire ties, manufacturer's standard wire-type clips, bolts, nails or screws recommended by furring manufacturer and complying with ASTM C754.

d. Provide compression posts and other accessories as required to comply with seismic requirements.

E. Proprietary Framing System:

1. Framing system for gypsum board panels consisting of cold-rolled steel members conforming to ASTM C635, with exposed surfaces finished in manufacturer’s standard enamel paint finish.

2. Components: Main tees, furring cross channels, furring cross tees, and cross tees.

3. Accessories:
a. U-shaped channel molding.
b. Galvanized carbon steel (12 ga.) hanger wire.

4. Acceptable product: Equivalent to Drywall Suspension System by USG.

2.5 TRIM ACCESSORIES

A. Interior Trim: ASTM C 1047.

1. Material: Paper-faced galvanized steel sheet.
2. Shapes:

a. Cornerbead.
b. LC-Bead: J-shaped; exposed long flange receives joint compound.
c. L-Bead: L-shaped; exposed long flange receives joint compound.
d. Expansion (control) joint.

B. Exterior Trim: ASTM C 1047.

1. Material: Hot-dip galvanized steel sheet, plastic, or rolled zinc.
2. Shapes:

a. Cornerbead.
b. LC-Bead: J-shaped; exposed long flange receives joint compound.
c. Expansion (Control) Joint: One-piece, rolled zinc with V-shaped slot and removable strip covering slot opening.
3. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Fry Reglet Corp.
b. Gordon, Inc.
c. Pittcon Industries.

C. Exterior Vent Louvers for Ceilings and Soffits:

1. Aluminum Vent Louver: Equal to Model DCS-XX-V-300 (thickness as required) as manufactured by Fry Reglet Corporation. Aluminum shall be 6063 T5 extruded alloy.

a. Finish: Clear Anodized Aluminum

b. Accessories: Insect Screen

c. Reveal Width: 3”

2.6 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C 475/C 475M.

B. Joint Tape:

1. Interior Gypsum Wallboard: Paper.
2. Exterior Gypsum Soffit Board: Paper.
3. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.

C. Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Prefilling: At open joints**,** rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.

    a. Use setting-type compound for installing paper-faced metal trim accessories.

3. Fill Coat: For second coat, use setting-type, sandable topping compound.
4. Finish Coat: For third coat, use setting-type, sandable topping compound.

D. Joint Compound for Exterior Applications:

1. Glass-Mat Gypsum Sheathing Board: As recommended by sheathing board manufacturer.

2.7 AUXILIARY MATERIALS

A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.

B. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.

1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.

C. Sound Attenuation Blankets: ASTM C 665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from rock wool. Fiberglass batts will not be acceptable. Acceptable products are Therma Fiber, SAFB, Fibrex, and Roxul.

1. Density: 2.5pcf
2. Flame Spread: 0
3. Smoke Developed: 0

D. Acoustical Joint Sealant: As specified in Division 7 Section “Joint Sealants”.

E. Thermal Insulation: As specified in Division 7 Section "Building Insulation."

F. Vapor Retarder: As specified in Division 7 Section "Building Insulation."

PART 3 - EXECUTION

3.1 METAL SUPPORT INSTALLATION

A. Ceiling and Soffit Support Systems:

1. Secure hangers or rods to structural support by connecting directly to structure where possible; otherwise connect to inserts, clips or other anchorage devices or fasteners indicated.

2. Space main runners, hangers and furring according to requirements of ASTM C754, except as otherwise indicated.

3. Where spacing of structural members, or width of ducts or other equipment, prevents regular spacing of hangers, provide supplemental hangers and suspension members and reinforce nearest affected hangers to span extra distance.

4. Attach directly to structural elements only; do not attach to metal deck. Loop hangers and wire-tie directly or provide anchors or inserts.

5. Install compression posts, splay wires and other accessories as required to comply with seismic requirements.

6. Extend runners to within 6 inches of walls.

7. Wire-tie or clip furring members to main runners and to other structural supports indicated. In fire resistance rated assemblies, wire-tie furring members; do not clip.

8. Do not permit furring or runners to contact masonry or concrete walls.

9. Provide 1 inch clearance between furring or runners and abutting walls and partitions.

10. For proprietary framing system, comply with manufacturer's instructions.

3.2 APPLYING AND FINISHING PANELS, GENERAL

A. Comply with ASTM C 840.

B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.

C. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4- to 1/2-inch- wide spaces at these locations, and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

3.3 APPLYING INTERIOR GYPSUM BOARD

A. Install interior gypsum board in the following locations:

1. Regular Type: As indicated on Drawings.
2. Type X: As indicated on Drawings.
3. Ceiling Type: As indicated on Drawings.
4. Abuse-Resistant Type: As indicated on Drawings.
5. Moisture- and Mold-Resistant Type: As indicated on Drawings.

3.4 APPLYING EXTERIOR GYPSUM PANELS FOR CEILINGS AND SOFFITS

A. Apply panels perpendicular to supports, with end joints staggered and located over supports.

1. Install with 1/4-inch open space where panels abut other construction or structural penetrations.
2. Fasten with corrosion-resistant screws.

3.5 INSTALLING TRIM ACCESSORIES

A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

B. Control Joints: Install control joints at locations indicated on Drawings and according to ASTM C 840 and in specific locations approved by Architect for visual effect.

C. Interior Trim: Install in the following locations:

1. Cornerbead: Use at outside corners.
2. LC-Bead: Use at exposed panel edges.
3. L-Bead: Use where indicated.

D. Exterior Trim: Install in the following locations:

1. Cornerbead: Use at outside corners.
2. LC-Bead: Use at exposed panel edges.

3.6 FINISHING GYPSUM BOARD

A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.

B. Prefill open joints**,** rounded or beveled edges**,** and damaged surface areas.

C. Apply joint tape over gypsum board joints, except those with trim having flanges not intended for tape.

D. Gypsum Board Finish Levels: Finish panels to levels indicated below:

1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
2. Level 2: Panels that are substrate for tile.

3. Level 4: At panel surfaces that will be exposed to view, unless otherwise indicated.
    a. Primer and its application to surfaces are specified in other Division 9 Sections.

E. Glass-Mat Gypsum Sheathing Board: Finish according to manufacturer's written instructions for use as exposed soffit board.

3.7 PROTECTION

A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.

B. Remove and replace panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 09250

#BHA-E (Electric) Backboard Height Adjuster Specifications

Provide electric-powered backboard goal height adjustment mechanism equal to the BHA-E by AALCO Manufacturing Co. of St. Louis, MO. Mechanism shall provide infinite vertical adjustment of the backboard and goal over a 2' range (typically 8' to 10') by means of a telescoping tubular steel framework powered by a 120 VAC, 22.5 inch/minute linear actuator having automatic travel cutoff at the up and down limits.

The mechanism shall be configured to mount to most types of ceiling or wall mounted backstop supports and so constructed as to support goal in a rigid, vibration-free manner in all positions. Power and up/off/down control shall be supplied by one or more mechanisms in a gym by means of 50 ft. extension cord and 5 ft. long portable "wand" equipped with control switch and tipped with a single female receptacle. The electric actuator of each mechanism shall be equipped with a matching male three prong, 5-15P plug easily accessible from floor level to the hand-held wand that plugs into any 110 volt AC electric outlet.

Optional wiring to remote control key switch available upon request.

G&W
ENGINEERING CORPORATION

DYNAMIC PROCESSES
SUSTAINABLE RESULTS

ADDENDUM NO. 2

Date: June 2, 2017
Project Number: 2016-0529.00
Project Name: Billings – FEMA Shelter
From: Electrical: Kevin Brown

This addendum narrative forms a part of the Contract Documents and modifies the original Bid Documents dated 05/18/2017.

ELECTRICAL DRAWINGS

SHEET E0.1

A. **"Revise"** panel schedule for panel "P1" per attached sketch SDE-01.

SHEET E2.0

A. **"Revise"** drawing per attached sketch SDE-02.

END OF ADDENDUM NO. 2

PANELBOARD SCHEDULE

DESIGNATION/I.D:	P1	TYPE OF PANEL:	CIRCUIT BREAKER **	MOUNTING:	SURFACE
VOLTAGE:	120 / 208 /3PH-4W	BUS SIZE (AMPS):	400	MAIN SWITCH:	400A MCB — MAIN RATING AIC 22k
POLES:	3PSN — LUGS: STANDARD	TOTAL SPACE REQUIRED:	42	NOTES:	1 SERVICE ENTRANCE RATED
FEEDER:	SEE RISER DIAGRAM	POWER SOURCE:	UTILITY XFMR		

CKT #	C/B	LOAD (WATTS) AØ	LOAD (WATTS) BØ	LOAD (WATTS) CØ	CLASS	LOAD DESCRIPTION	LOAD DESCRIPTION	CLASS	LOAD (WATTS) AØ	LOAD (WATTS) BØ	LOAD (WATTS) CØ	C/B	CKT #
1	20/1	1500			M1	MOTORIZED BBALL GOAL	MOTORIZED BBALL GOAL	M1	1500			20/1	2
3	20/1		500		M1	MOTORIZED PROJ. SCREEN	REC - GYM PROJECTOR	R		500		20/1	4
5	20/1				R	SPARE	REC - GYM FLOOR NORTH	R			360	20/1	6
7	20/1	180			R	REC - RTU-1	REC - GYM FLOOR SOUTH	R	360			20/1	8
9	25/1		2300		R	GIRLS - HAND DRYER	REC - GYM FLOOR EAST	R		360		20/1	10
11	25/1			2300	R	BOYS - HAND DRYER	MOTORIZED BLEACHERS	M3			865	20/3	12
13	20/1				R	SPARE	--	M3	865			-	14
15	20/1				R	SPARE	--	M3		865		-	16
17	20/1				R	SPARE	SPARE	R				20/1	18
19	20/1				R	SPARE	SPARE	R				20/1	20
21	20/1				R	SPARE	SPARE	R				20/1	22
23	20/1				R	SPARE	SPARE	R				20/1	24
25	20/2	1150			H	UH-3	SPARE	R				20/1	26
27	-		1150		H	--	SPARE	R				20/1	28
29	30/2			2000	H	DWH-1	UH-4	H			2500	30/2	30
31	-	2000			H	--	--	H	2500			-	32
33	20/2		1500		H	UH-1	UH-2	H		1500		20/2	34
35	-			1500	H	--	--	H			1500	-	36
37	175/3	13630			A3	RTU-1	PANEL "EM"	XF	6700			100/3	38
39	-		13630		A3	--	--	XF		7150		-	40
41	-			13630	A3	--	--	XF			6480	-	42
TOTALS		18460	19080	19430					11925	10375	11705	TOTALS	

CONNECTED LOAD: (VOLT-AMPERE)	90,975VA	NOTES: * PROVIDE LOCK ON DEVICE ** 10,000 A.I.C. RATING UNLESS OTHERWISE SPECIFIED	CALC. DEMAND LOAD AMPERE: 231A

CLASS: M1=SINGLE PH MOTOR, M3=3PH MOTOR, M2=2PH MOTOR, L=LIGHTING, R=RECEPTACLE, A1=1PH A/C LOAD, A2=2PH A/C LOAD, A3=3PH A/C LOAD, H=HEATING, K=KITCHEN; XF=TRANSFORMER-PANEL; SF=SUB-FEED

Project For:

FEMA Shelter Community Safe Room
Billings R-IV School District
118 West Mount Vernon
Billings, Missouri 65610

DATE June 02, 2017
PROJ. NO. 16008

ARCHITECT
11 East Lockwood Avenue, Ste. 200
St. Louis, MO 63119
T 314 727 8500 F 314 727 4040
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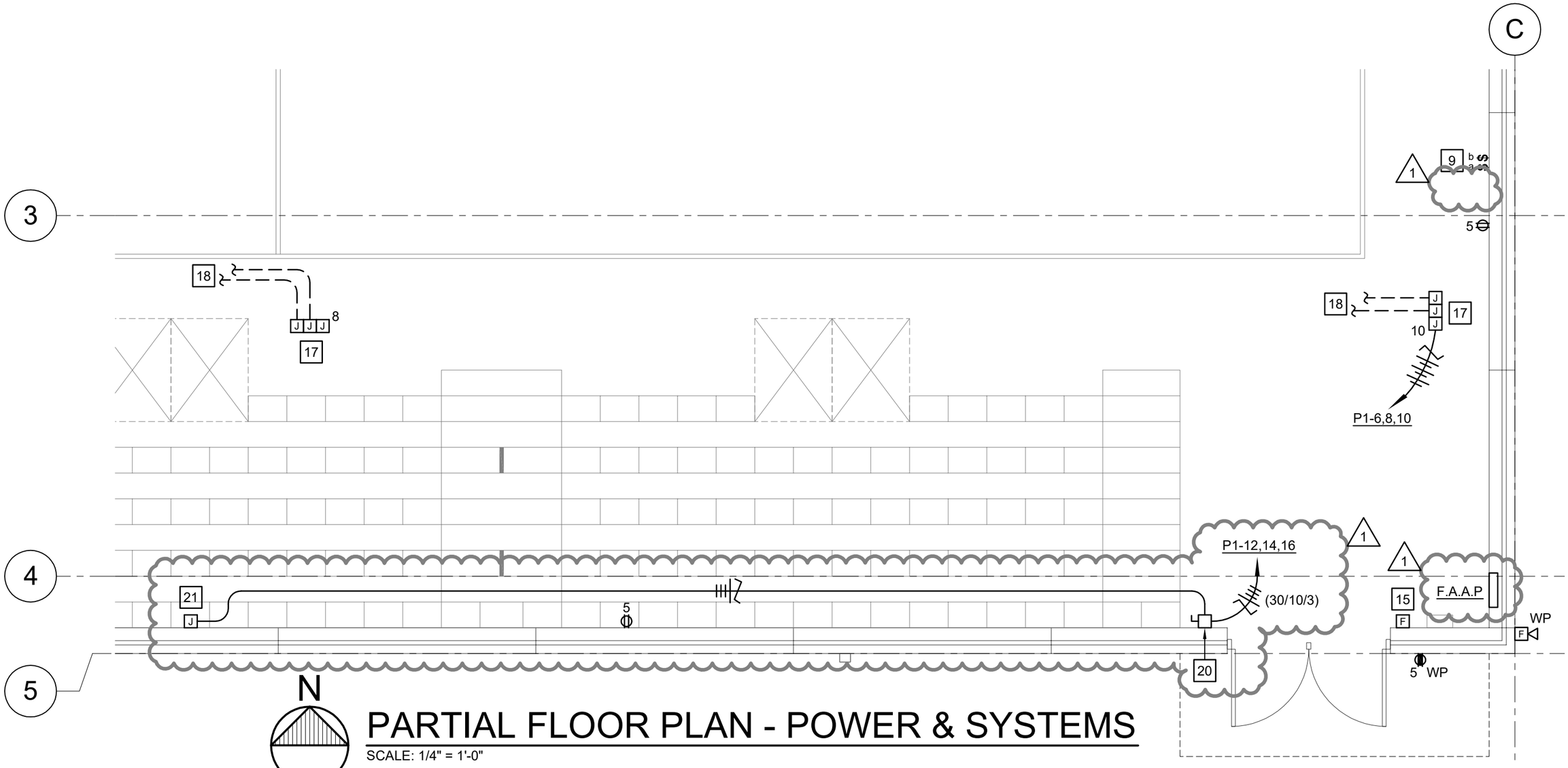
DICKINSON HUSSMAN ARCHITECTS

ORIGINAL DRAWING E0.1
ORIGINAL DRAWING DATE May 18, 2017

SDE-01



PARTIAL FLOOR PLAN - POWER & SYSTEMS

SCALE: 1/4" = 1'-0"

PLAN NOTES - POWER & SYSTEMS

1

20. PROVIDE DISCONNECT SWITCH ON WALL FOR MOTORIZED BLEACHERS. MAKE FINAL CONNECTIONS VIA LOCAL DISCONNECT SWITCH. EXTEND WIRING TO JUNCTION BOX AS SHOWN. COORDINATE EXACT LOCATION, MOUNTING HEIGHT, AND REQUIREMENTS WITH EQUIPMENT INSTALLER.

21. PROVIDE JUNCTION BOX MOUNTED AT 60" A.F.F. FOR MOTORIZED BLEACHERS. COORDINATE EXACT LOCATION, MOUNTING HEIGHT, AND REQUIREMENTS WITH EQUIPMENT INSTALLER.

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ORIGINAL DRAWING E2.0
ORIGINAL DRAWING DATE May 18, 2017

SDE-02