

ENERGY DESIGN CRITERIA:

NOTE: UNLESS OTHERWISE NOTED, ALL CODE REFERENCES BELOW ARE FROM THE 2009 IECC

CLIMATE ZONES: 4B AS SHOWN IN TABLE 301.1
FOR BUILDINGS WITH OVERALL WINDOWS AND GLAZED DOOR OPENINGS
TOTALING 10% OR LESS OF THE GROSS ABOVE-GRADE WALL AREA.

HEATING DEGREE DAYS: 5000 COOLING DEGREE DAYS: 1580

R-VALUES BETWEEN FRAMING MEMBERS ARE FROM TABLE 502.2(1)
ROOF: ALL WOOD JOIST / TRUSS: R-30
WALL: WOOD FRAMED: R-21
FLOOR: ALL WOOD JOIST / TRUSS: R-22

U-FACTOR FOR WINDOWS: DUAL PANE/ LOW-E GLASS = 0.49
SHGC FOR WINDOWS: DUAL PANE/ LOW-E GLASS = 0.25
U-FACTOR FOR DOORS: STEEL DOOR = 0.20

LIGHTING CONTROLS: BI-LEVEL SWITCHING FOR OFFICE AND / OR CLASSROOM LIGHTING.
PHOTOCELL CONTROLS FOR EXTERIOR LIGHTING.

GENERAL LIGHTING: FLUORESCENT LIGHT WITH T-8 LAMPS & ELECTRONIC BALLAST
EXTERIOR LIGHTING: WALL MOUNTED TWIN TUBE FLUORESCENT LIGHT ON PHOTOCELL

HVAC EFFICIENCY: WALL HUNG ELECTRIC HVAC UNITS: MIN. 9.2 EER

SYSTEM CONTROLS: PROGRAMMABLE THERMOSTAT WITH OCCUPANT OVERRIDE PER 503.2.4

OUTDOOR AIR VENTILATION RATE OF: 676.48 CFM PER EQUATION 4-1 AND TABLE 403.3 OF THE 2009 IMC

DUCT INSULATION: WHERE DUCTING IS USED, DUCTS SHALL BE SEPARATED FROM THE
BUILDING EXTERIOR BY A MINIMUM OF R-8 INSULATION.
(NOTE: DUCTING USED BY PALOMAR HAS A MINIMUM R-VALUE OF 5.6, AND
IS CONTAINED WITHIN THE BUILDING ENVELOPE.)

DUCT SEALING: DUCTS ARE TO BE SEALED IN ACCORDANCE WITH 503.2.7

NOTES:

DATA PLATE(S) TO BE INSTALLED ON THE COVER OF THE ELECTRICAL DISTRIBUTION PANEL AS NOTED ON SHEET A-2.
DECALS TO BE INSTALLED ON THE REAR END, ON THE LOWER LEFT-HAND CORNER OF MODULES WITH METAL SIDING.
BUILDINGS WITH SIDINGS WHICH ARE TO BE PAINTED AS A PART OF ROUTINE MAINTENANCE, THE DECALS ARE TO BE
LOCATED ON THE REAR END WALL OF THE MODULE, NEAR THE MATELINE, ABOVE THE SUSPENDED CEILING TILE.



SPECIAL CONDITIONS AND / OR LIMITATIONS:

NOTE: MATERIALS WHICH EQUAL OR EXCEED THOSE SPECIFIED MAY BE SUBSTITUTED.

NOTE: BUILDING IS TO BE LOCATED A MINIMUM OF 10 FT. FROM PROPERTY LINE OR ASSUMED PROPERTY LINE.

PORTABLE FIRE EXINGUISHERS TO BE PROVIDED AND INSTALLED BY OWNER

NOTE: FIRE ALARM TO BE INSTALLED BY OTHERS.

NOTE: ACCESSIBLE DRINKING FOUNTAIN WILL BE PROVIDED ON SITE BY OWNER.

NOTE: SERVICE SINK TO BE PROVIDED IN ADJACENT BLDG.

NOTE: BUILDING MUST BE LOCATED WITH IN 500 FT. OF AN EXISTING BUILDING PROVIDING TOILET FACILITIES CAPABLE OF SERVICING THE COMBINED OCCUPANT LOAD OF THE EXISTING BUILDING(S) IN ADDITION TO THIS BUILDING.

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ACCESSIBILITY REQUIREMENTS:

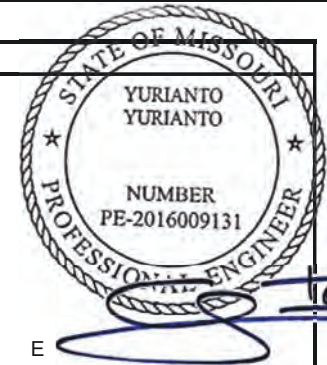
NOTE: HANDICAP ACCESSIBLE RAMP TO BE INSTALLED BY OTHERS IN ACCORDANCE WITH THE A.D.A. GUIDELINES.

DESIGN CRITERIA:

CODES: 2009 IBC
2009 IPC
2009 IMC
2008 NEC

2009 IECC
ANSI A 117.1 - 2003

OCCUPANCY CLASSIFICATION: E
OCCUPANCY CATEGORY: II
CONSTRUCTION TYPE: V-B
APPLIANCE FUEL TYPE: NONE



06/23/17

DESIGN LOADS:

ROOF LIVE LOAD: 20 PSF
FLOOR LIVE LOAD: 40 PSF
CONCENTRATED FLOOR LOAD: 1000 LBS

GROUND SNOW LOAD: 20 PSF
ROOF SNOW LOAD: 20 PSF
3 SECOND GUST WIND SPEED: 90 MPH
EXPOSURE: B

SEISMIC DESIGN CATEGORY: B
BUILDING AREA: 1913 S.F.
OCCUPANT LOAD: 90
OCCUPANT AGE GROUP: MIDDLE SCH. 12-14 YEARS

DRAWING INDEX:

SHEET

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CLASSROOM BUILDING

S/N: 1730-32

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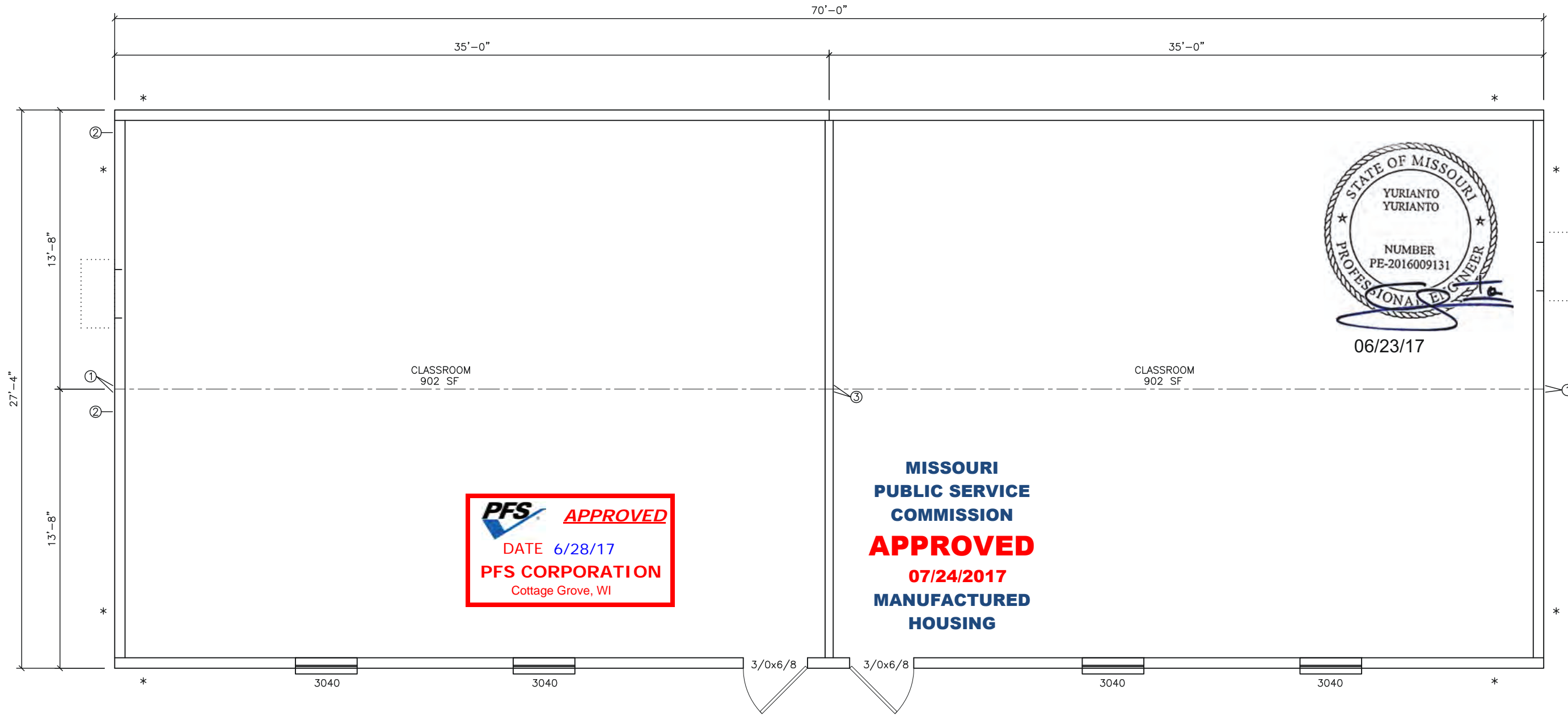
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| CHECK BY: | | | | |

COVER SHEET / SPECIFICATIONS
CLASSROOM BUILDING
LEES SUMMIT, MO
Dwg No. 2870 LEES SUMMIT
S/N: 1730-32

SHEET No.

A-1



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| DOOR LEGEND | | | | | |
|--|---------------|------------------|---------------|---------|--------------------------------|
| CALLOUT | NOMINAL SIZE | MATERIAL | HARDWARE | GLAZING | NOTES |
| 3/0x6/8 | 3'-0" x 6'-8" | 18ga. STEEL DOOR | LEVER / PANIC | 6x27 | CLOSER, WEATHERSTRIP, DRIP CAP |
| THRESHOLDS AT DOORS NOT TO EXCEED 1/2", AND ARE TO BE BEVELED IF IN EXCESS OF 1/4" | | | | | |

| WINDOW LEGEND | | | | | | | |
|---------------|--------------|-------|------|----------|--------|-------------|----------------------|
| CALLOUT | NOMINAL SIZE | LIGHT | VENT | MATERIAL | FINISH | STYLE | GLAZING |
| 3040 | 36" x 48" | 10.51 | 5.25 | ALUMINUM | BRONZE | SINGLE HUNG | DUAL / CLEAR / LOW-E |

- * - DENOTES SHEAR WALL LOCATION
- ① - DENOTES 3 EACH 2x4s AND 1 EACH 3" WIDE x 26ga. STRAP AT MATE LINE FASTENED WITH 11 - 1 1/2" x 0.148" NAILS EACH END OF EACH STRAP
- ② - DENOTES TDLR LABEL LOCATION
- ③ - DENOTES 4 EACH 2x4s AND 1 EACH 3" WIDE x 26ga. STRAP AT MATE LINE FASTENED WITH 11 - 1 1/2" x 0.148" NAILS EACH END OF EACH STRAP

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DATE: 06/15/2017
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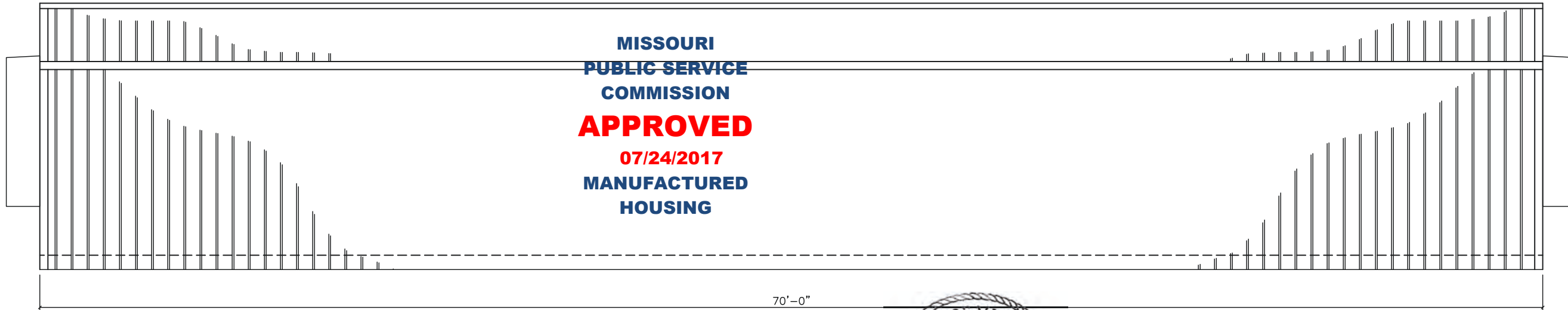
CLASSROOM BUILDING
 LEE'S SUMMIT, MISSOURI
 FLOOR PLAN
 FILE: 2870 Lees Summit ISD
 SERIAL #: 1730-52

SHEET No.
A-2

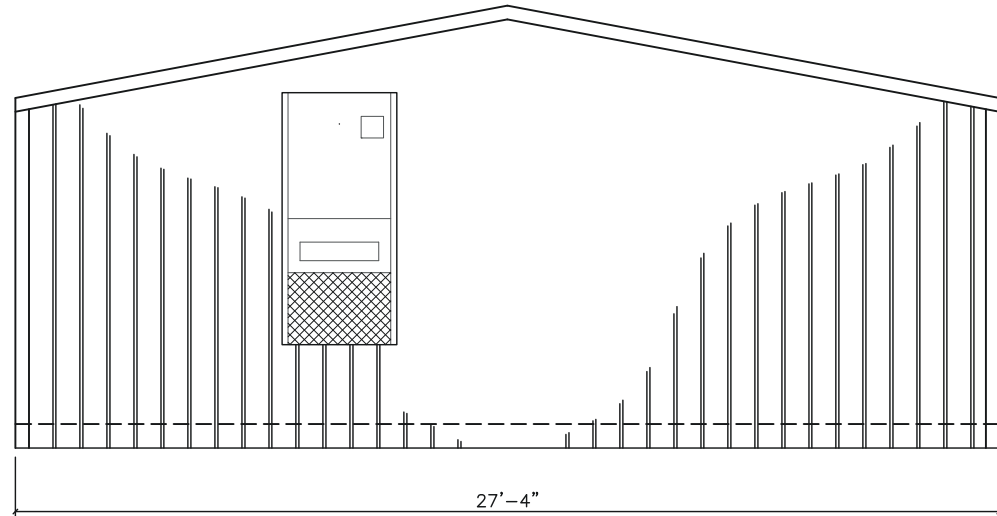
① **FLOOR PLAN**
 scale: 1/8" = 1'-0"

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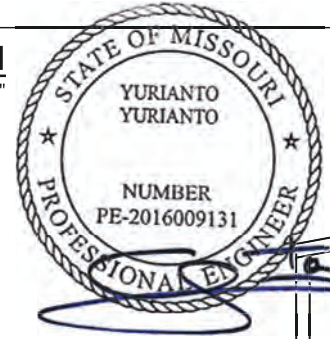
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④ SOUTH ELEVATION
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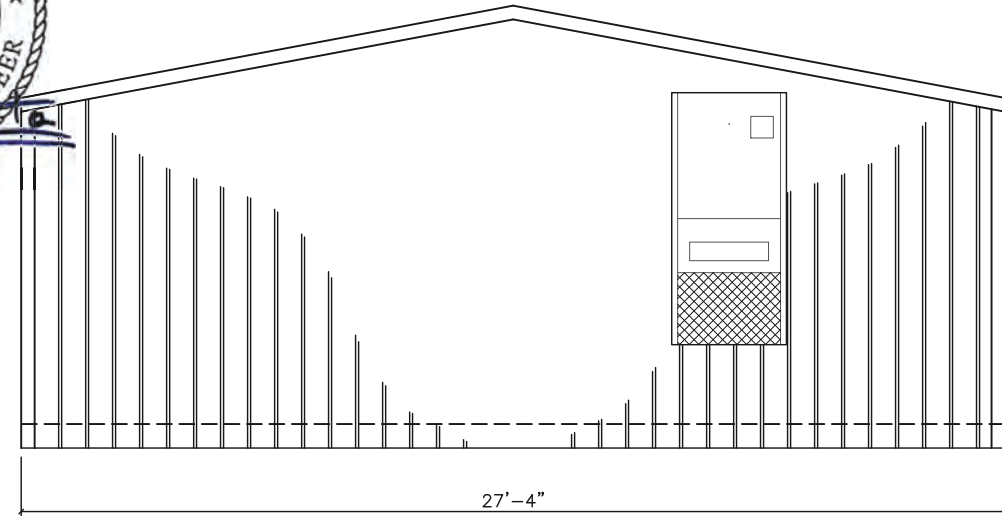
③ EAST ELEVATION
scale: 3/16" = 1'-0"



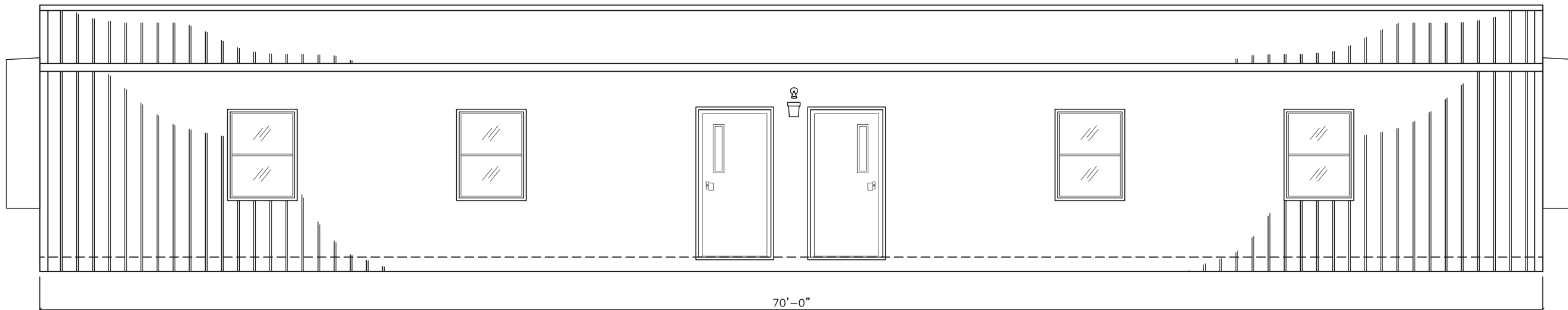
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NOTES:

- 1) STEEL SIDING PANELS ARE MIN. 0.0150" THICK BASE METAL CONFORMING TO TABLE 1405.2 OF THE 2009 IBC.
- 2) GALVALUME ROOFING PANELS CONFORM TO THE REQUIREMENTS OF ASTM A 792 AZ 50 PER TABLE 1507.4.3(1) AND 1507.4.3(2) OF THE 2009 IBC. APPLY LAP SEALANT TO LAPPED SEAMS OF ROOF PANELS.



② WEST ELEVATION
scale: 3/16" = 1'-0"



① NORTH ELEVATION
scale: 3/16" = 1'-0"

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CLASSROOM BUILDING
LEE'S SUMMIT, MISSOURI
EXTERIOR ELEVATIONS
FILE: 2870 Lees Summit ISD
SERIAL #: 1730-52

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A-3

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- ① STANDARD PAD ON GRADE, ABS BASE WITH CMU BLOCK
- ② M12x11.8 FRAME RAILS CONFORMING TO ASTM A529-50
- ③ WOVEN POLYETHYLENE BOTTOM BOARD
- ④ SKIRTING INSTALLED ON SITE AFTER UNIT ASSEMBLY
- ⑤ 2-2x8 #3 SYP MIN. FLOOR RIM JOISTS
- ⑥ 2x8 # 2 SYP MIN. FLOOR JOISTS AT 16"o.c.
- ⑦ R-22 INSULATION IN FLOOR CAVITY
- ⑧ 3/4" T&G ADVANTECH DECKING
- ⑨ VINYL COMPOSITION FLOOR TILE
- ⑩ SIDEWALL STRAPPED TO FLOOR WITH 1 1/2" x 30ga GALV. STRAPS AT 48"o.c. FASTENED WITH 6-16ga STAPLES EACH END OF EACH STRAP
- ⑪ 2x6 #3 SYP MIN. BOTTOM PLATE
- ⑫ R-21 INSULATION IN EXTERIOR WALLS

- ⑬ 7/16" RATED SHEATHING OSB UNDER A WEATHER-RESISTIVE BARRIER CONFORMING TO 1404.2 OF THE 2009 IBC, FASTENED WITH 8d NAILS AT 6"o.c. AT EDGES AND 12"o.c. IN THE FIELD
- ⑭ 2x6 #2 SYP MIN. STUDS AT 16"o.c.
- ⑮ STEEL SIDING PANELS CONFORMING TO TABLE 1405.2 OF THE 2009 IBC
- ⑯ R-11 INSULATION IN INTERIOR WALLS
- ⑰ 2x4 #2 SYP MIN. AT 16"o.c. INTERIOR WALLS
- ⑱ 2-2x6 #3 SYP MIN. EXTERIOR WALL TOP PLATES
- ⑲ VINYL CLAD 5/8" TYPE "X" GYPSUM WALLBOARD.
- ⑳ SUSPENDED GRID ACOUSTIC CEILING
- ㉑ POLY NETTING ON BOTTOM OF RAFTERS
- ㉒ 2-2x4 #3 SYP MIN. INTERIOR WALL TOP PLATES
- ㉓ ROOF STRAPPED TO SIDEWALL WITH 1 1/2" x 30ga GALV. STRAPS AT 48"o.c. FASTENED WITH 6-16ga STAPLES EACH END OF EACH STRAP

- ㉔ 2x10 #2 SYP MIN. ROOF RIM JOIST
- ㉕ R-30 INSULATION IN RAFTER CAVITY
- ㉖ 2x10 #2 SYP MIN RAFTERS AT 24"o.c.
- ㉗ FOUR LAYER SOLID PLYWOOD RIDGE BEAM, EACH LAYER OF 3/4", 5-LAYER, 5-PLY GROUP 1 SPECIES PLYWOOD. BEAM IS CONSTRUCTED PER THE APA "DESIGN AND FABRICATION OF ALL-PLYWOOD BEAMS" SUPPLEMENT 5
- ㉘ RAFTERS STRAPPED TO RIDGE BEAM WITH 1 1/2" x 30ga STRAP FASTENED WITH 6-16ga STAPLES EACH END OF EACH STRAP.
- ㉙ 7/16" SHEATHING RATED OSB WITH H-CLIPS, FASTENED W/ 8d NAILS AT 4"o.c. EDGES AND 8"o.c. FIELD, OVER 15# FELT PAPER
- ㉚ 29 Ga. GALVALUME ROOFING PANELS CONFORMING TO ASTM A 792 AZ50 PER TABLES 1507.4.3(1)
- ㉛ 2x4 LEDGER FASTENED TO RIDGE BEAM W/3-16d NAILS EACH RAFTER LOCATION OR SIMPSON MMLU-26 JOIST HANGER FASTENED WITH 4-1 1/2" x 8d NAILS TO BEAM AND 2-1 1/2" x 8d NAILS TO RAFTER
- ㉜ UNITS FASTENED TOGETHER AT FLOOR AND RIDGE BEAM WITH 6/8" x 6" LAG BOLTS AT 32"o.c. STAGGERED

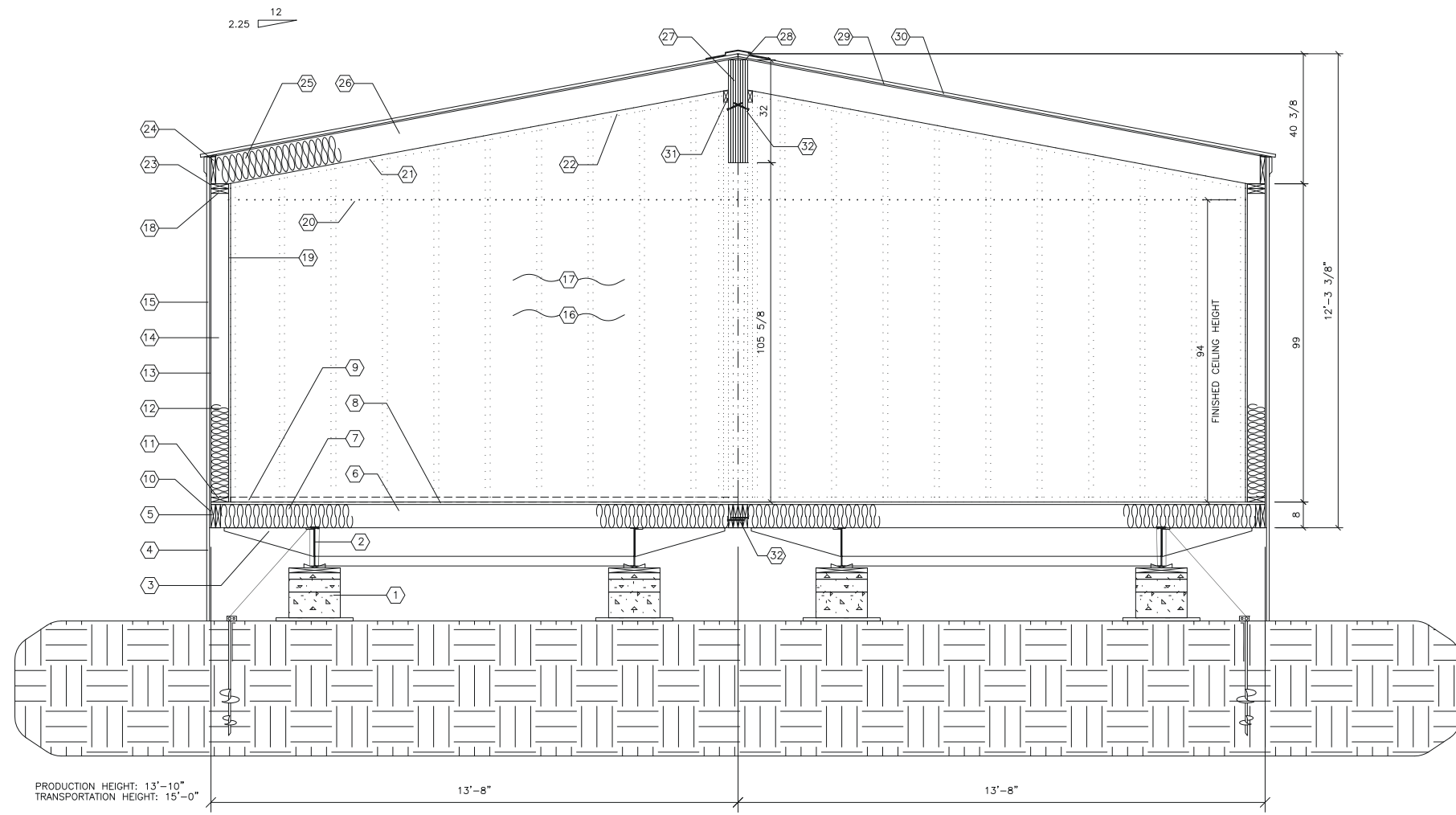
NOTES:

- CRAWL SPACE TO BE VENTILATED IN ACCORDANCE WITH 2009 INTERNATIONAL BUILDING CODE SECT. 1203.3.2. INSTALL SO AS TO PROVIDE CROSS-VENTILATION OF CRAWL SPACE. INSTALL MINIMUM 18" x 24" ACCESS PANEL IN SKIRTING.
- BLOCK HEIGHTS SHOWN ARE TYPICAL, ANY BLOCK STACKS, OTHER THAN AT MATELINES, REQUIRING MORE THAN THREE 8" x 8" x 16" BLOCKS MUST BE DOUBLED. THIS DOES NOT CHANGE ANCHORING LOCATIONS OR QUANTITIES.
- FRONT CROSS-MEMBER IS FULL DEPTH I-BEAM (SAME AS CHASSIS), HITCH / COUPLER IS VENTURE OR EQUIVALENT 30,000# MIN. RATED. TIRES ARE 8 x 14.5, 8-PLY OR BETTER, 2805# MIN LOAD RATING. FRAME PAINT IS EMULSION BASE PAINT. OUTRIGGERS AND U-CHANNEL CROSS-MEMBERS ARE 14ga MINIMUM. OUTRIGGER SIZE IS 9" x 28".
- METAL ROOF AND WALL PANELS TO BE FASTENED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR THE APPROPRIATE WIND SPEED FOR THE BUILDING INSTALLATION LOCATION.



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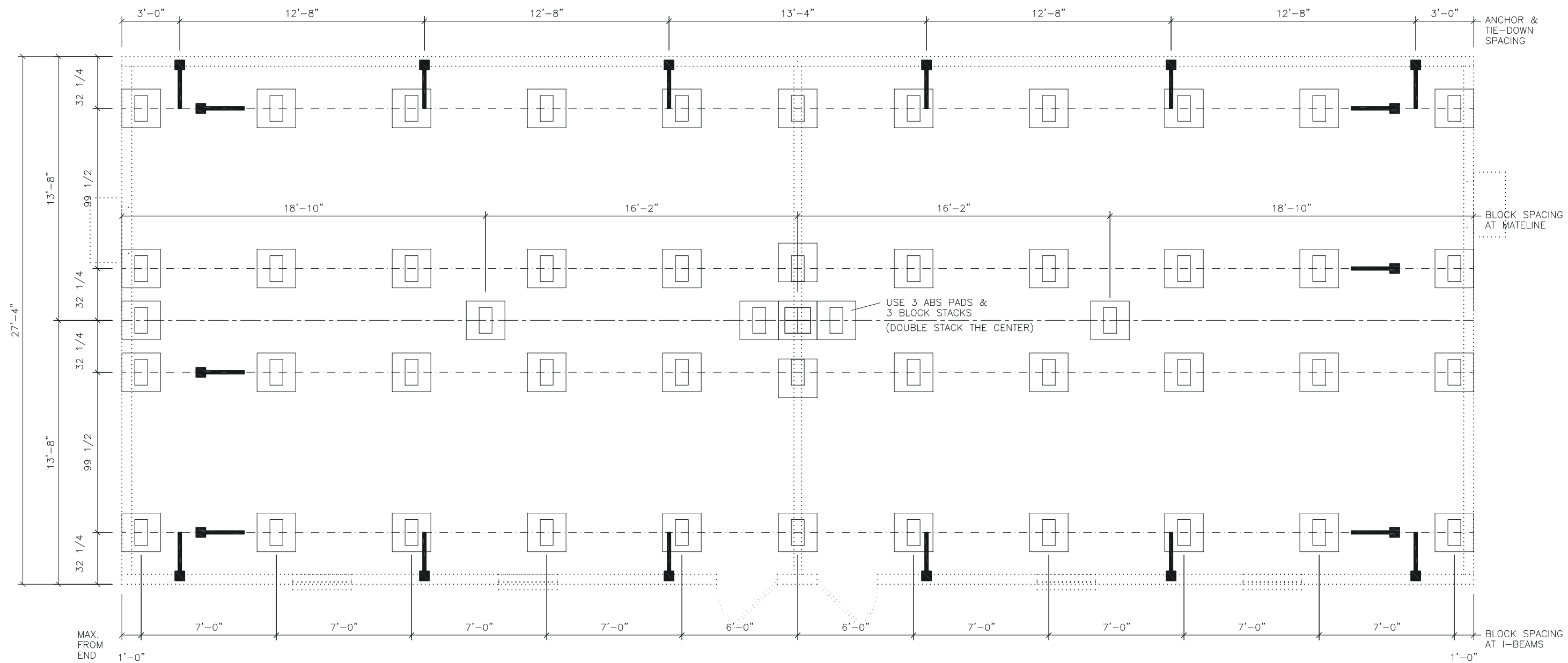
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LEE'S SUMMIT, MISSOURI
CROSS SECTION
FILE: 2870 Lees Summit ISD
SERIAL #: 1730-32

1 **CROSS SECTION**
scale: 1/4" = 1'-0"

SHEET No.
A-4

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- NOTES:
- BLOCK SPACING MAY VARY DUE TO AXLE HANGERS OR OTHER STRUCTURAL OBSTRUCTIONS.
 - BASE PADS ARE TO BE 24" x 24" ABS PADS. 16" x 18" ABS BASE PADS MAY BE USED AT EXTERIOR DOOR LOCATIONS FOR DOOR ADJUSTMENT WHERE NECESSARY.
 - SINGLE BLOCK STACKS ARE LIMITED TO THREE BLOCKS HIGH. ANY BLOCK STACK REQUIRING MORE THAN THREE 8" x 8" x 16" BLOCKS MUST BE DOUBLED AND CROSS-STACKED. THIS DOES NOT CHANGE ANCHORING LOCATIONS OR QUANTITIES.
 - ASSUMED SOIL BEARING CAPACITY IS 2000 PSF. SITE SPECIFIC SOIL CONDITIONS ARE TO BE VERIFIED BY OWNER, OR OWNER'S AGENT.



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1 BLOCKING & TIE-DOWN LAYOUT
scale: 1/8" = 1'-0"

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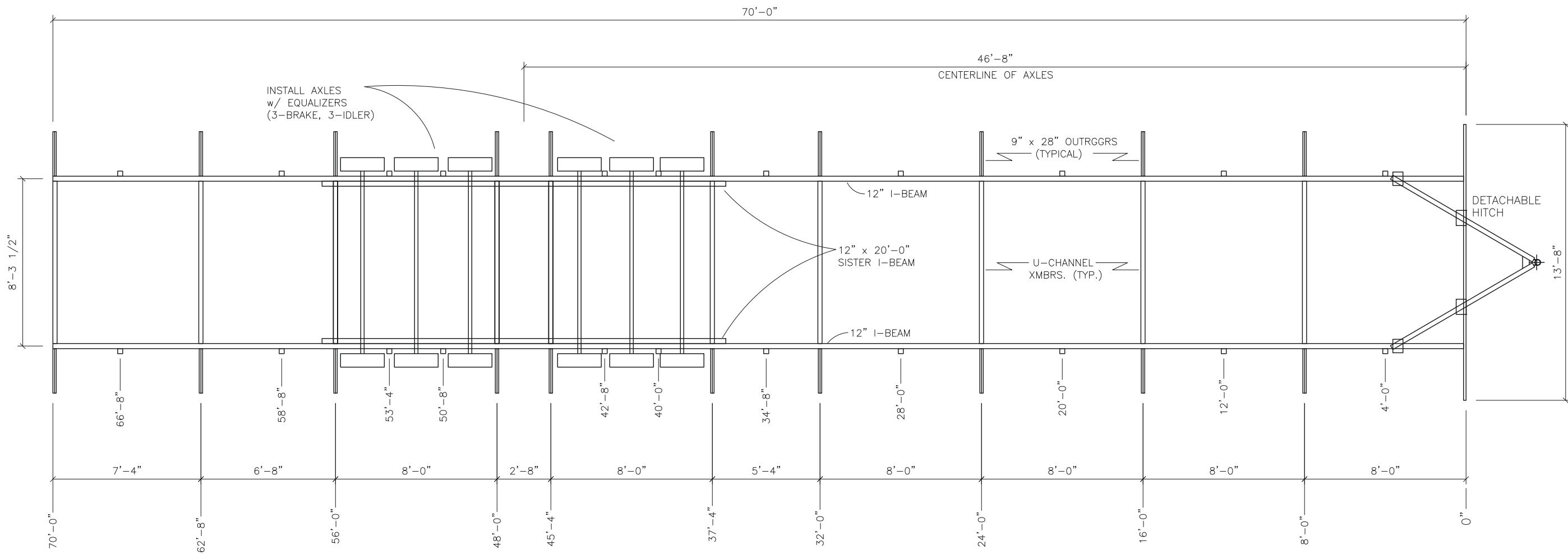
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| CLASSROOM BUILDING LEE'S SUMMIT, MISSOURI BLOCKING & TIE-DOWN LAYOUT FILE: 2870 Lees Summit ISD SERIAL #: 1730-52 |
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SHEET No.
S-1

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NOTES:
 FRONT CROSS-MEMBER IS FULL DEPTH I-BEAM (SAME AS CHASSIS)
 HITCH / COUPLER IS VENTURE OR EQUIVALENT 30,000# MIN. RATED
 TIRES ARE 8 x 14.5, 8-ply, 2805# MIN LOAD RATING
 FRAME PAINT IS ZINC CHROMATE OR ASPHALTIC BASE
 OUTRIGGERS AND U-CHANNEL CROSS-MEMBERS ARE 14 ga. MIN.



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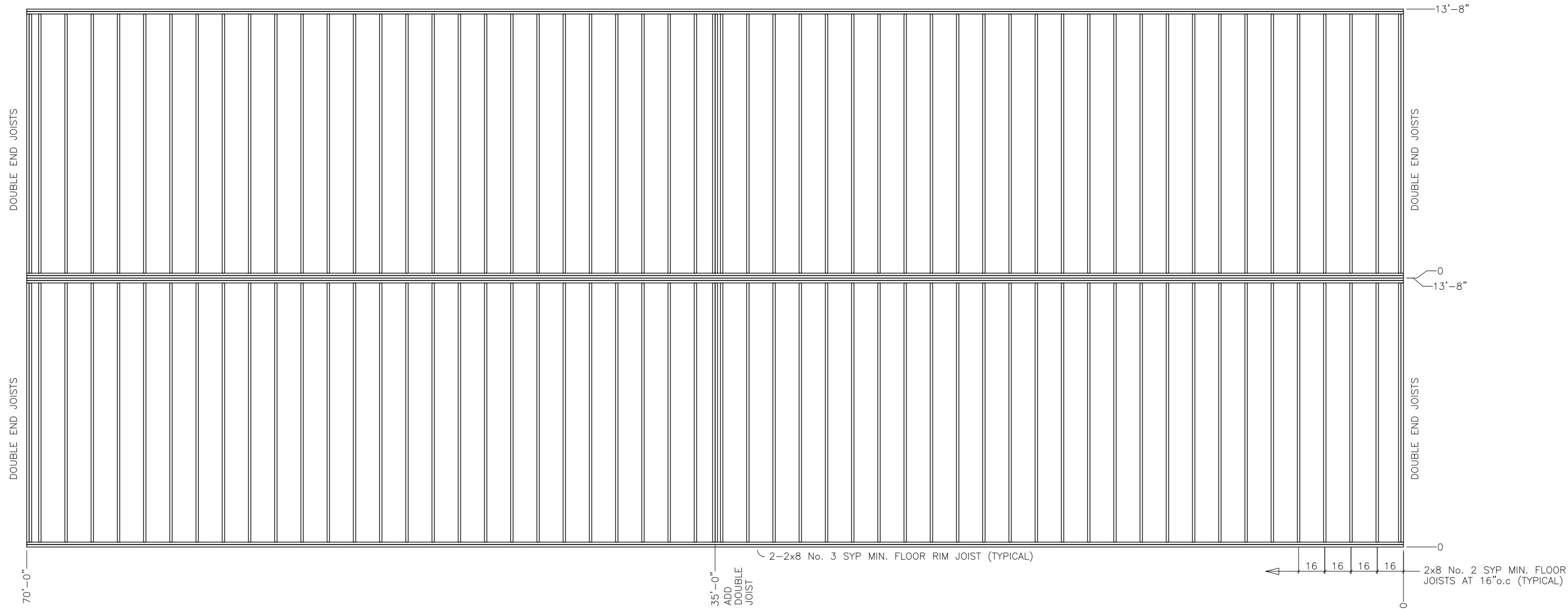
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| CLASSROOM BUILDING |
| LEE'S SUMMIT, MISSOURI |
| CHASSIS LAYOUT |
| FILE: 2870 Lees Summit ISD |
| SERIAL #: 1730-32 |

1 CHASSIS LAYOUT
 scale: 3/16" = 1'-0"

SHEET No.
S-2

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1 **FLOOR FRAMING LAYOUT**
scale: 3/16" = 1'-0"

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S-3

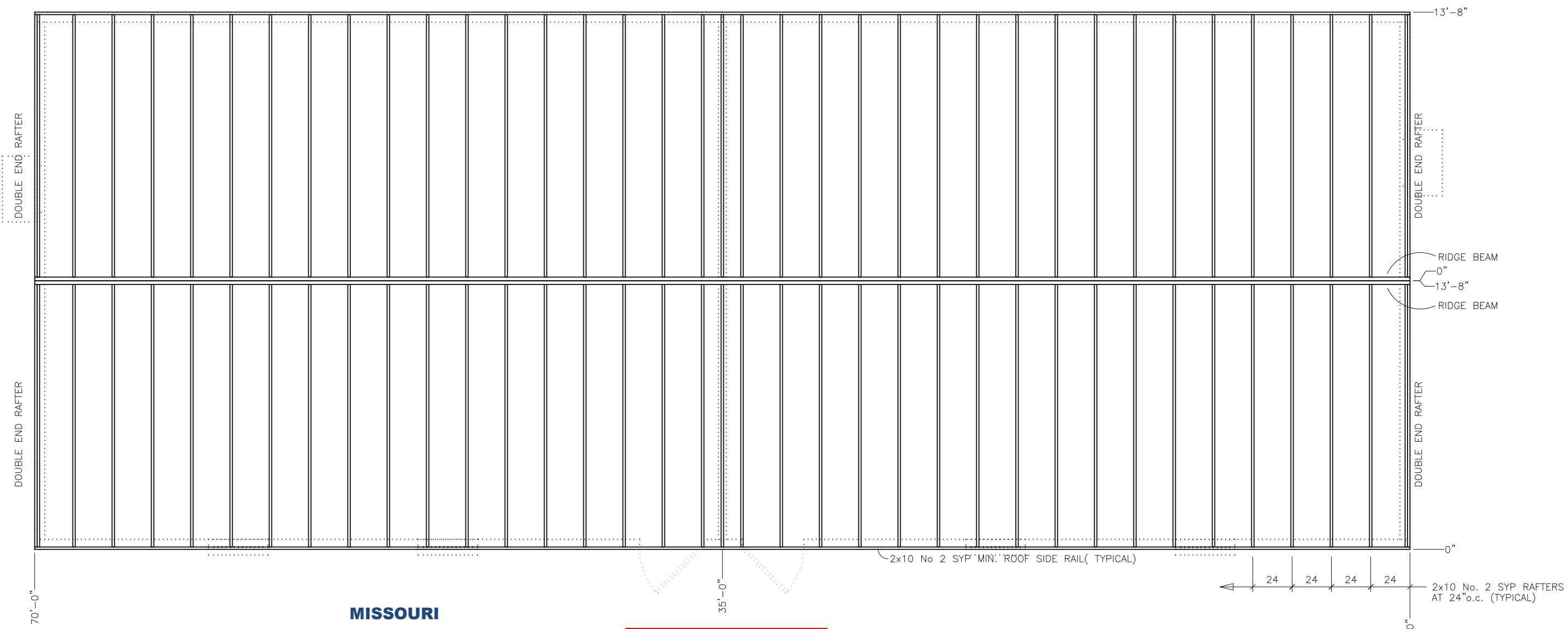
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1 **ROOF FRAMING LAYOUT**
scale: 3/16" = 1'-0"

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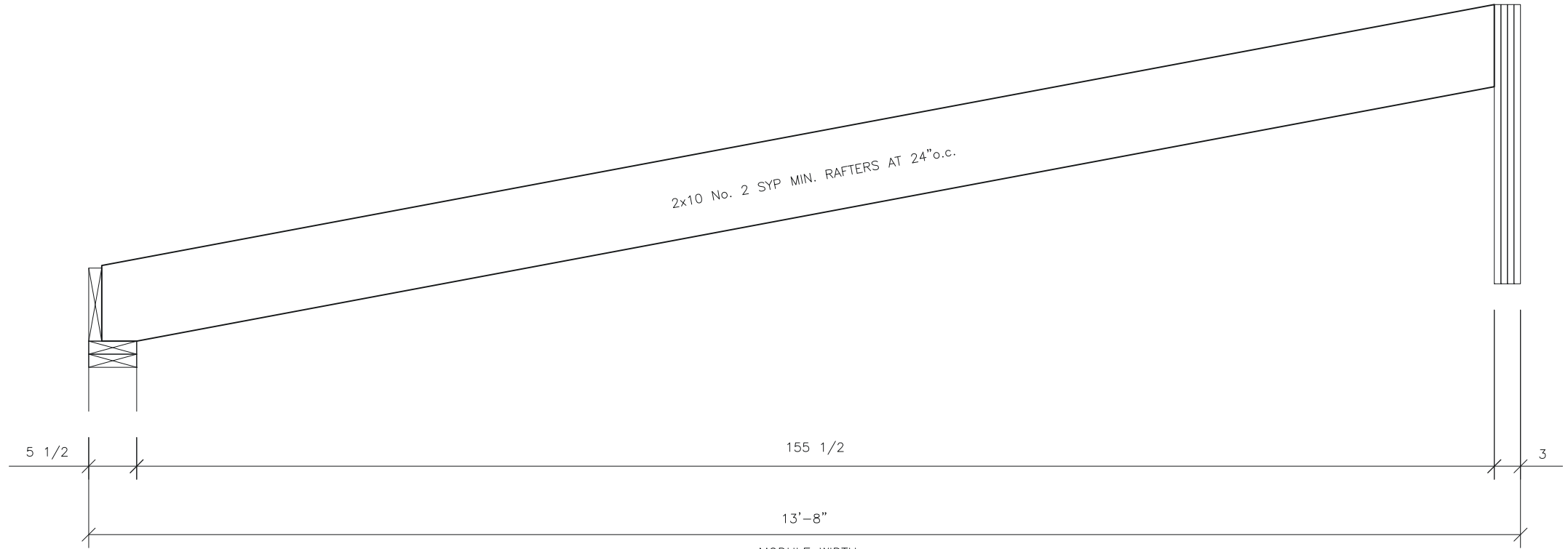
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| DATE: | 06/16/2017 |
| SCALE: | 3/16" = 1'-0" |
| PLOT SCALE: | 1:1 |
| DRAWN BY: | SGD |
| CHECKED BY: | |

CLASSROOM BUILDING
LEE'S SUMMIT, MISSOURI
ROOF FRAMING LAYOUT
FILE: 2870 Lees Summit ISD
SERIAL #: 1730-32

SHEET No.
S-4

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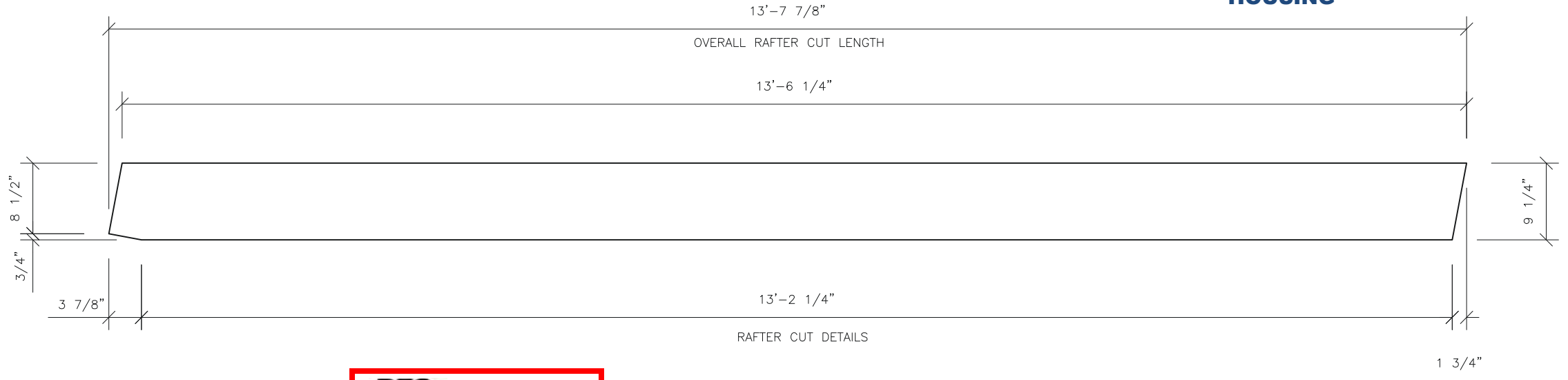
06/23/17

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07/24/2017

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DATE 6/28/17

PFS CORPORATION

Cottage Grove, WI

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| DATE: | 06/16/2017 |
| SCALE: | 3/4" = 1'-0" |
| PLOT SCALE: | 1:1 |
| DRAWN BY: | SGD |
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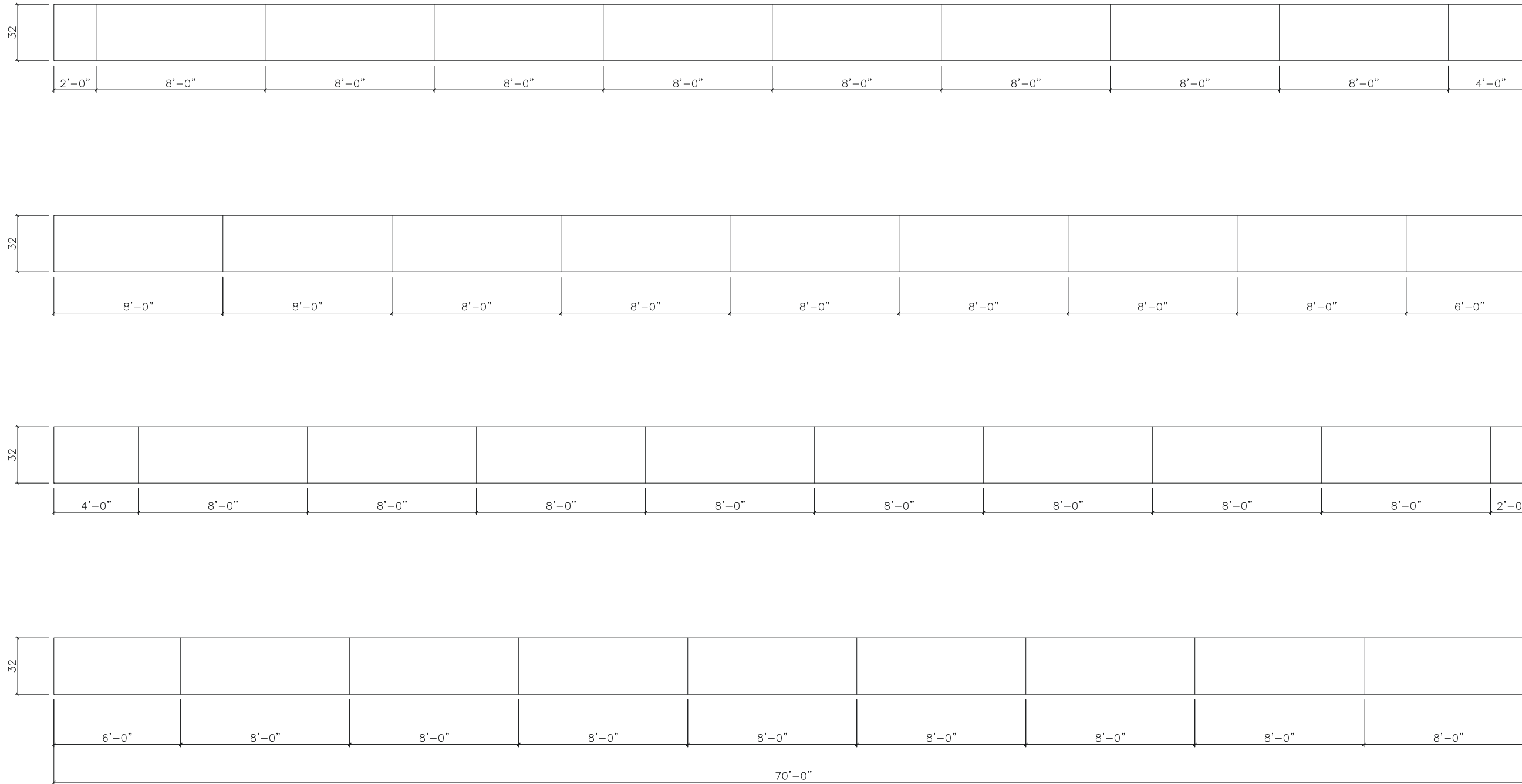
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| CLASSROOM BUILDING |
| LEE'S SUMMIT, MISSOURI |
| RAFTER DETAILS |
| FILE: 2870 Lees Summit ISD |
| SERIAL #: 1730-52 |

SHEET No.
S-5

1 RAFTER DETAILS
scale: 3/4" = 1'-0"

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NOTES:

1. RIDGE BEAM CONSTRUCTION IS SAME FOR BOTH HALVES (MIRRORED)
2. RIDGE BEAM CONSTRUCTION SHALL BE IN ACCORDANCE WITH APA PLYWOOD DESIGN SPECIFICATION, SUPPLEMENT 5, AND SECTION 9 OF THE DESIGN MANUAL.
3. RIDGE BEAM IS CONSTRUCTED WITH 3/4", 5-PLY, 5-LAYER GROUP 1 SPECIES PLYWOOD.



06/23/17

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1 RIDGE BEAM CONSTRUCTION
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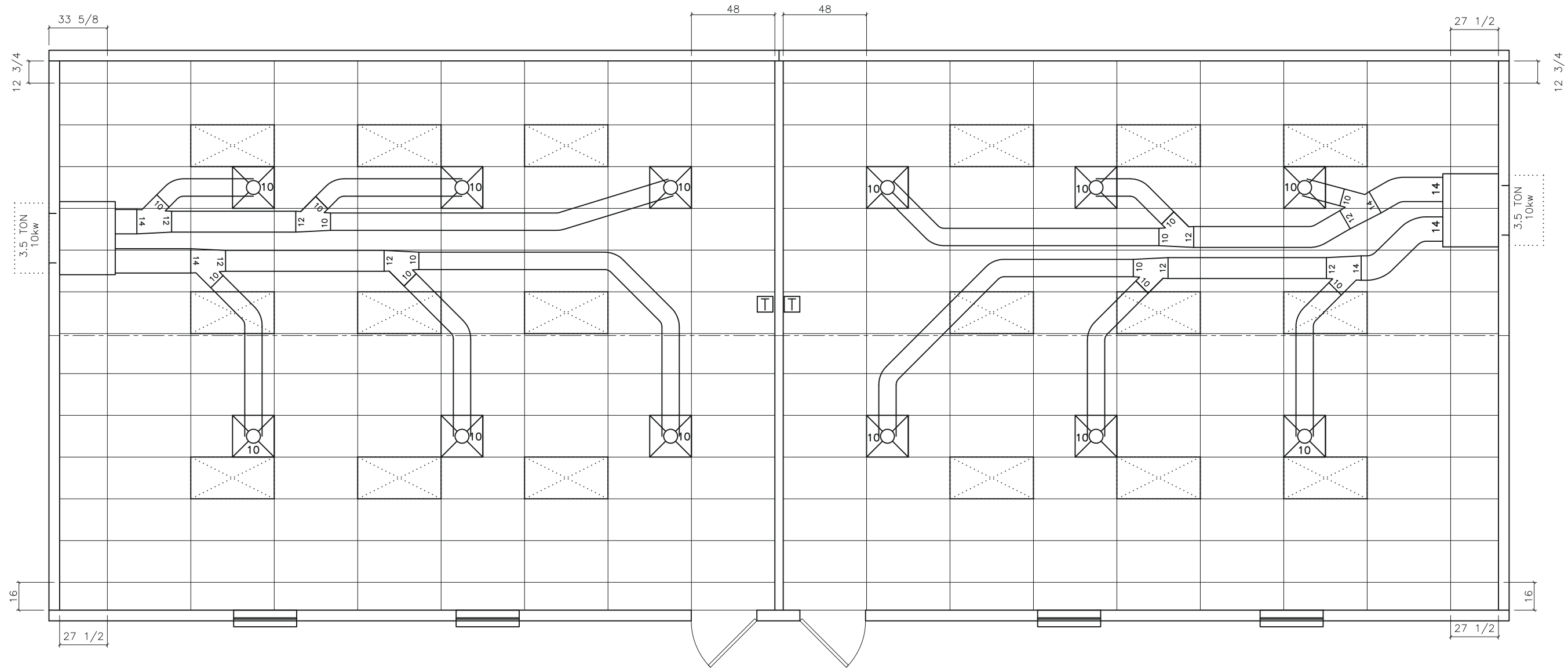
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| DATE: | 06/16/2017 |
| SCALE: | 3/16" = 1'-0" |
| PLOT SCALE: | 1:1 |
| DRAWN BY: | SGD |
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CLASSROOM BUILDING
LEE'S SUMMIT, MISSOURI
RIDGE BEAM CONSTRUCTION
FILE: 2870 Lees Summit ISD
SERIAL #: 1730-32

SHEET No.
S-6



| SYMBOL LEGEND | |
|---------------|--|
| | 2' x 4' FLUORESCENT LIGHT WITH 4 x 32 WATT LAMPS & ELECTONIC BALLAST (112 WATTS) |
| | 24"x 24" SUPPLY DIFFUSER |
| | PROGAMMABLE THERMOSTAT |

NOTE: DUCTING IS CLASS 1, U.L. 181 LISTED FLEXIBLE FIBERGLASS DUCTING.



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1 **CEILING GRID / HVAC LAYOUT**
scale: 3/16" = 1'-0"

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| DATE: | 06/19/2017 |
| SCALE: | 3/16" = 1'-0" |
| PLOT SCALE: | 1:1 |
| DRAWN BY: | SGD |
| CHECKED BY: | |

CLASSROOM BUILDING
LEE'S SUMMIT, MISSOURI
CEILING GRID / HVAC LAYOUT
FILE: 2870 Lees Summit ISD
SERIAL #: 1730-32

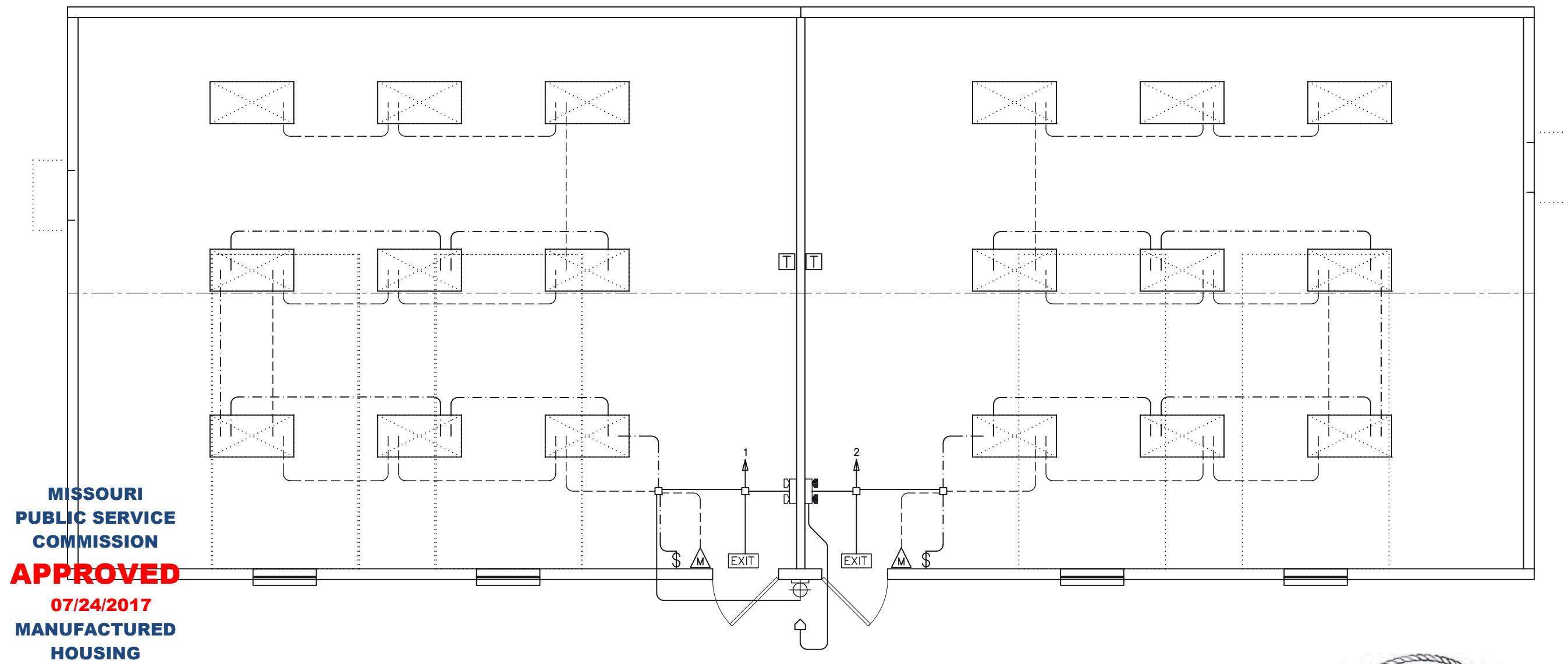
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| DATE: | 06/19/2017 |
| SCALE: | 3/16" = 1'-0" |
| PLOT SCALE: | 1:1 |
| DRAWN BY: | SGD |
| CHECKED BY: | |

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| CLASSROOM BUILDING | LEE'S SUMMIT, MISSOURI |
| LIGHTING SCHEMATIC | FILE: 2870 Lees Summit ISD |
| SERIAL #: | 1730-52 |



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| ELECTRICAL SYMBOL LEGEND | | | |
|--------------------------|---|--|--|
| | 48" x 24" FLUORESCENT LIGHT w/ T-8 LAMPS & ELECTRONIC BALLAST (112w) | | RECEPTACLE |
| | VANDAL-PROOF EXTERIOR COMPACT FLUORESCENT LIGHT ON PHOTOCELL (26w) | | WEATHER-PROOF GFI RECEPTACLE |
| | SWITCH | | PHONE / DATA STUB-IN |
| | OCCUPANCY SENSOR | | 7-DAY PROGRAMMABLE THERMOSTAT w/ OCCUPANT OVERRIDE |
| | JUNCTION BOX | | LED EXIT LIGHT w/ BATTERY BACK-UP |
| | ELECTRICAL DIST. PANEL | | EMERGENCY LIGHT w/ BATTERY BACK-UP & REMOTE HEAD |
| | DENOTES DAYLIGHTING ZONE. LIGHTS WITHIN THE DAYLIGHTING ZONE TO BE INDEPENDENTLY CONTROLLED SEPARATE FROM NORMAL CLASSROOM LIGHTS | | EMERGENCY LIGHT w/ BATTERY BACK-UP |
| | | | EMERGENCY LIGHT REMOTE HEAD |

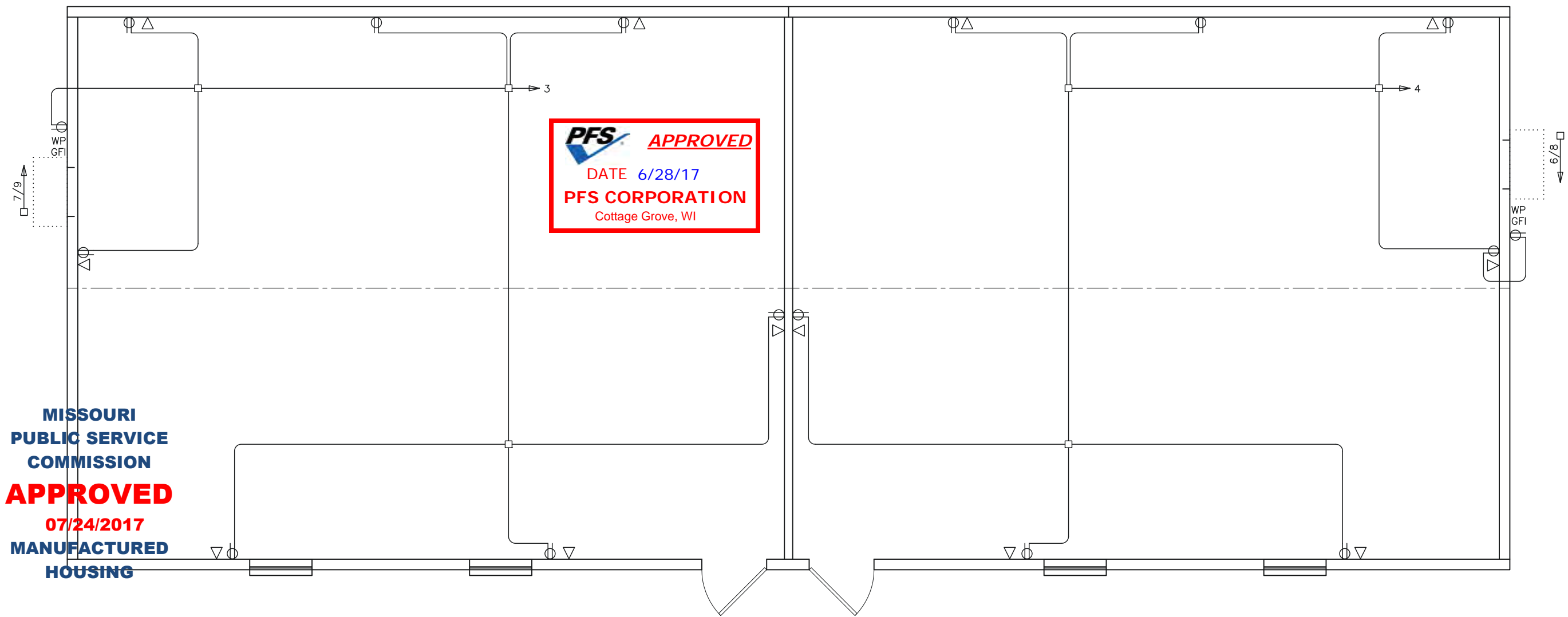
GENERAL NOTES:
 BUILDING IS: 120/240v 3-WIRE SINGLE PHASE
 ELECTRICAL CONDUIT: ELECTRICAL NON-METALLIC TUBING
 ELECTRICAL WIRING: MIN. #12 THHN COPPER WITH GROUND
 GROUNDING ON SITE: PER 2011 NEC ARTICLE 250-50



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PFS CORPORATION
Cottage Grove, WI

| ELECTRICAL SYMBOL LEGEND | | | |
|--------------------------|--|--|---|
| | 48" x 24" FLUORESCENT LIGHT w/ T-8 LAMPS & ELECTRONIC BALLAST (112w) | | RECEPTACLE |
| | VANDAL-PROOF EXTERIOR COMPACT FLUORESCENT LIGHT ON PHOTOCELL (26w) | | WEATHER-PROOF GFI RECEPTACLE |
| | SWITCH | | PHONE / DATA STUB-IN |
| | OCCUPANCY SENSOR | | 7-DAY PROGRAMMABLE THERMOSTAT w/ OCCUPANT OVERRIDE |
| | | | JUNCTION BOX |
| | | | ELECTRICAL DIST. PANEL |
| | | | LED EXIT LIGHT w/ BATTERY BACK-UP |
| | | | EMERGENCY LIGHT w/ BATTERY BACK-UP & REMOTE HEAD |
| | | | EMERGENCY LIGHT w/ BATTERY BACK-UP |
| | | | EMERGENCY LIGHT REMOTE HEAD |
| | | | DENOTES DAYLIGHTING ZONE. LIGHTS WITHIN THE DAYLIGHTING ZONE TO BE INDEPENDENTLY CONTROLLED SEPARATE FROM NORMAL CLASSROOM LIGHTS |
| | | GENERAL NOTES: BUILDING IS: 120/240v 3-WIRE SINGLE PHASE ELECTRICAL CONDUIT: ELECTRICAL NON-METALLIC TUBING ELECTRICAL WIRING: MIN. #12 THHN COPPER WITH GROUND GROUNDING ON SITE: PER 2011 NEC ARTICLE 250-50 | |



06/23/17
(Structural Aspects Only)

1 POWER DISTRIBUTION SCHEMATIC
scale: 3/16" = 1'-0"

MODULAR STRUCTURAL CONSULTANTS LLC
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|-------------|---------------|
| DATE: | 06/19/2017 |
| SCALE: | 3/16" = 1'-0" |
| PLOT SCALE: | 1:1 |
| DRAWN BY: | SGD |
| CHECKED BY: | |

CLASSROOM BUILDING
LEE'S SUMMIT, MISSOURI
POWER DISTRIBUTION SCHEMATIC
FILE: 2870 Lees Summit ISD
SERIAL #: 1730-32

SHEET No.
E-2

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06/23/17

(Structural Aspects Only)

| MIN WIRE SIZE | 200 AMP 240v SINGLE PHASE MAIN BREAKER | PANEL 'A' | MIN WIRE SIZE |
|---------------|---|------------------------|--|
| 12 | LIGHTS: LEFT CLASSROOM | 20 1 2 20 | LIGHTS: RIGHT CLASSROOM |
| 12 | RECEPTS: LEFT CLASSROOM | 20 3 4 20 | RECEPTS: RIGHT CLASSROOM |
| 6 | HVAC UNIT: LEFT CLASSROOM 3.5 TON / 10kw | 60 5 6 60 2P 7 8 2P | HVAC UNIT: RIGHT CLASSROOM 3.5 ton / 10kw |
| | | 9 10 | |
| | | 11 12 | |
| | | 13 14 | |
| | | 15 16 | |
| | | 17 18 | |
| | | 19 20 | |
| | | 21 22 | |
| | | 23 24 | |

GROUND BAR

NEUTRAL

WIRE SIZE OF:
Service Conductors: 3/0
Service Ground: 4

TOTAL PANEL LOAD:
Total Watts: 33861 watts
Voltage: 240 v
Total Amps: 141.09 amps

Service Conduit Size

IMC 2
PVC 2
RMC 2



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240 v

| LOAD CALC: | | 200 AMP | |
|------------|---------------------------------|---------------------|---------------|
| QTY | ITEM | WATTS | TOTAL |
| 18 | Fluorescent T-8's | x 112 | 2520 watts |
| | Compact Fluorescent | x 26 | 0 watts |
| | Fluorescent 17w 2 Lamp | x 31 | 0 watts |
| 1 | Ext. CFL Light | x 84 | 105 watts |
| | Exhaust Fan 80 cfm | x 84 | 0 watts |
| | Appliance circuit | x 1920 | 0 watts |
| 16 | Receipt Duplex | x 180 | 2880 watts |
| | Receipt Dedicated | x 1920 | 0 watts |
| | Water Heater (240v) | x 6000 | 0 watts |
| | Water Cooler | x 410 | 0 watts |
| | Res. Refrigerator | x 840 | 0 watts |
| | Duct Defector | x 1 | 0 watts |
| 2 | Emergency Light | x 14.4 | 29 watts |
| 2 | Exit Sign | x 2.8 | 7 watts |
| 2 | Bard 3.5Ton / 10kw (240v) | x 14160 | 28320 watts |
| 0 | Air Handler 3 Ton / 10kw (240v) | x 12420 | 0 watts |
| | | Total Watts: | 33861 |
| | | Total Amps: | 141.09 |

BUILDING TOTAL LOAD:

Panel "A" Load: 33861 watts
Total: 33861 watts
Voltage: 240 v
Total Amps: 141.08667 Amps

YURI YURIANTO
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 CONSULTANTS LLC
 TX. REG. #: F-15892
 9720 COIT RD. STE. 220-150
 PLANO, TX. 75025-5833

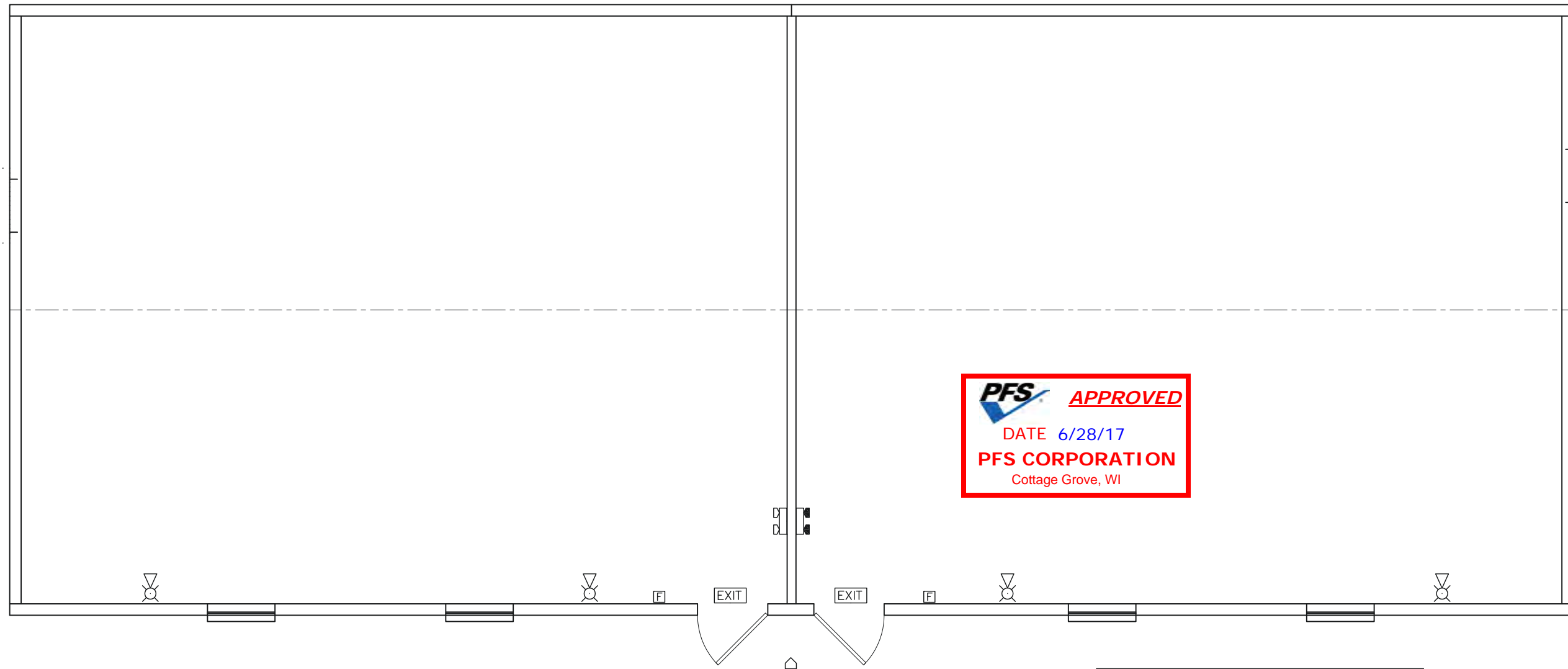
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DATE: 6/17/2005
 SCALE: N.T.S.
 PLOT SCALE: N.T.S.
 DRAWN BY: SGD
 CHECK BY:

ELECTRICAL CALCULATIONS
JAMES McHUGH CONST. CO.
 ODESSA, TEXAS
 Dwg. No. 1244JMCC-UPRR
 S/N:

SHEET No.
E-3



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(Structural Aspects Only)

| SYMBOL LEGEND | |
|---------------|---|
| | LIGHTED EXIT SIGN WITH BATTERY BACK-UP |
| | EMERGENCY LIGHT WITH BATTERY BACK-UP |
| | EMERGENCY LIGHT WITH BATTERY BACK-UP REMOTE HEAD |
| | EMERGENCY LIGHT REMOTE HEAD |
| | ALARM PULL STATION AT 48" AFF |
| | ALARM HORN/STROBE AT 86" AFF |

NOTE: DEVICES SHOWN HERE ARE PROVIDED WITH BOX AND CONDUIT AT THESE LOCATIONS ONLY TO FACILITATE THE INSTALLATION OF THE FIRE ALARM SYSTEM WHICH IS TO BE INSTALLED BY A LICENSED ALARM SYSTEM INSTALLER ON SITE

1 ALARM SYSTEM LAYOUT
 scale: 3/16" = 1'-0"

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|-------------|---------------|
| DATE: | 06/19/2017 |
| SCALE: | 3/16" = 1'-0" |
| PLOT SCALE: | 1:1 |
| DRAWN BY: | SGD |
| CHECKED BY: | |

CLASSROOM BUILDING
 LEE'S SUMMIT, MISSOURI
 ALARM SYSTEM LAYOUT
 FILE: 2870 Lees Summit ISD
 SERIAL #: 1730-32

SHEET No.
E-4