EMERY COUNTY SCHOOL DISTRICT

COTTONWOOD ELEMENTARY MECHANICAL UPGRADE

55 EAST 200 SOUTH

ORANGEVILLE, UTAH 84537

PROJECT CONTACTS

OWNER
EMERY COUNTY SCHOOL DISTRICT
120 NORTH MAIN STREET
HUNTINGTON, UTAH 84528
(435) 687-9846

ARCHITECTURAL
KMA ARCHITECTS, INC.
170 NORTH MAIN STREET
SPANISH FORK, UTAH 84660
(801) 377-5062

STRUCTURAL
DYNAMIC STRUCTURES
744 SOUTH 400 EAST,
OREM, UTAH 84097
(801) 356-1140

MECHANICAL
OLSEN & PETERSON ENGINEERING
14 EAST 2700 SOUTH
SALT LAKE CITY, UTAH 84115
(801) 486-4646

ELECTRICAL
RESOLUT
181 EAST 5600 SOUTH, SUITE 200
MURRAY, UT 84107
(801) 530-3148

GRAPHIC SYMBOLS

- ENGINEERED FILL
- EARTH
- CONCRETE
- ASPHALT
- BRICK VENEER
- STONE VENEER
- WOOD STUDS
- PLYWOOD
- HARDWOOD
- RIGID INSULATION
- BATT INSULATION
- BLOCKING
- GYPSUM BOARD
- PROPERTY LINE
- WALLTYPE TAG (X)
- DOOR NUMBER (XX)
- WINDOW TYPE (X)
- CEILING HEIGHT (9'-0")
- SHEET NOTE (XX)
- BUILDING ELEVATION MARK
- ROOM NUMBER (XXX)
- DETAIL TAG (X / XXX)
- ELEVATION MARK (X / XXX)
- SECTION MARK (X / XXX)

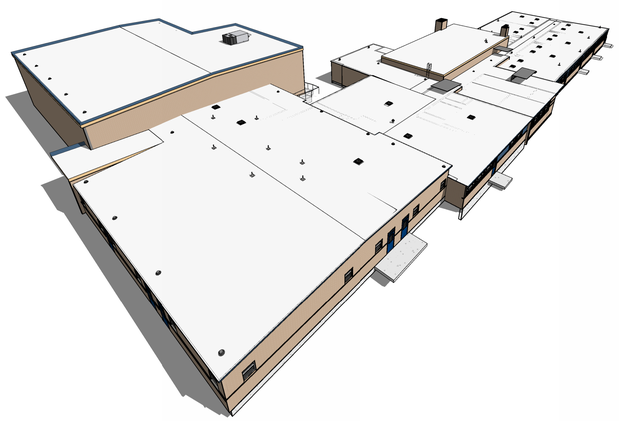
PROJECT DATA

TOTAL AREA: 36,466 SQ. FT.

PROJECT SCOPE

COTTONWOOD ELEMENTARY SCHOOL MECHANICAL UPGRADE CONSISTS OF INSTALLING NEW GAS FIRE/DX ROOF TOP UNITS ALONG WITH THE ASSOCIATED DUCT WORK, 1 NEW HEAT PUMP INDOOR UNIT, NEW AIR COOLED OUTDOOR UNIT, REPLACING A NEW MAKE-UP AIR UNIT, CABINET UNIT HEATER, AND REPLACING TWO EXISTING EXHAUST FANS. ELECTRICAL SYSTEMS WILL BE MODIFIED ACCORDINGLY TO MEET THE NEW MECHANICAL NEEDS. ROOF PATCHING IS REQUIRED FOR NEW PENETRATIONS AND STRUCTURAL BRACING AS NEEDED FOR THE NEW ROOF TOP UNITS. ARCHITECTURAL ITEMS WILL BE TO ADDRESS THE AFFECTED AREAS DUE TO CONSTRUCTION.

RENDERING



VICINITY MAP

INDEX OF DRAWINGS

ARCHITECTURAL

STRUCTURAL

PLUMBING

MECHANICAL

ELECTRICAL

1/14/2026 1:37:20 PM 12" = 1'-0"

170 NORTH MAIN STREET
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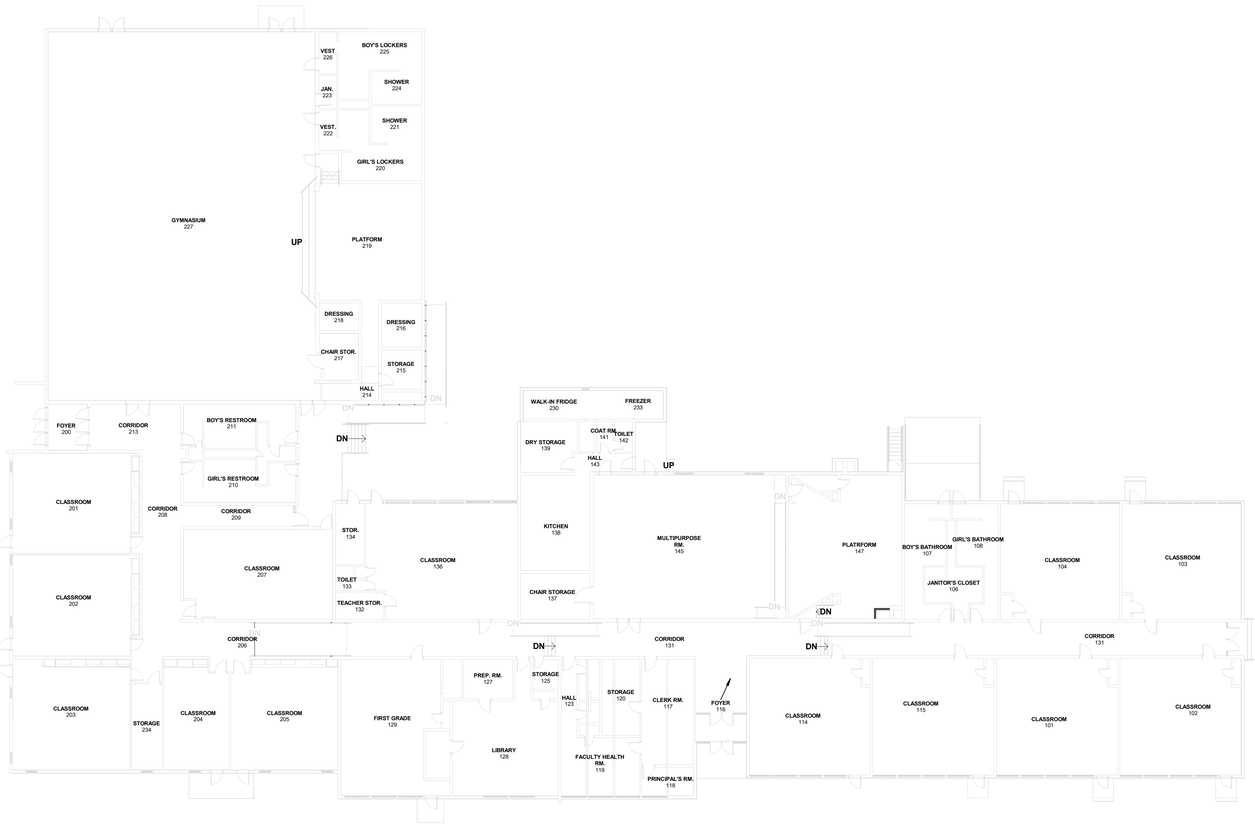
KMA ARCHITECTS

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
MECHANICAL UPGRADE
55 EAST 200 SOUTH ORANGEVILLE, UTAH

DRAWN BY: KMA
CHECKED BY: WC
DATE: JAN 2026
PROJECT #: 176525

TITLE



OVERALL MAIN FLOOR PLAN

1/16" = 1'-0"

NORTH

GENERAL NOTES

A - COORDINATE WITH MECHANICAL PLANS FOR ADDITIONAL DEMOTION OF MECHANICAL SYSTEMS

B - ADDITIONAL CEILINGS MAY NEED TO BE DEMOLISHED THAT MAY NOT BE NOTED, TO PROVIDE ADDITIONAL ACCESS FOR THE MECHANICAL SYSTEM AND CONTROLS. CONTRACTOR IS TO PLAN ON WORKING ABOVE AND AROUND THE CEILINGS AND TO BE CAREFUL TO PROTECT THE CEILING TILES, THE GRIDS, EXISTING LIGHTING, FIRE ALARM, AND ANY GYPSUM BOARD MATERIAL FROM ANY DAMAGE. THE CONTRACTOR SHALL REPLACE ANY DAMAGED MATERIALS.

KEY PLAN

170 NORTH MAIN STREET
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KMA ARCHITECTS

STATE OF UTAH
WILLIAM CHRISTENSEN
No. 9469958-0301
1-15-26
LICENSED ARCHITECT

REVISIONS:

PROJECT TITLE

EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
MECHANICAL UPGRADE
55 EAST 200 SOUTH
ORANGEVILLE, UTAH

DRAWN BY: KMA
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DATE: JAN 2026
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A1.0

1/14/2026 1:57:21 PM As indicated

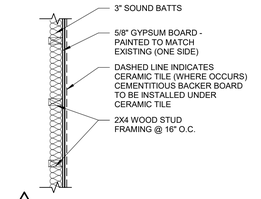
11/4/2025 1:27:22 PM As indicated

SHEET NOTES

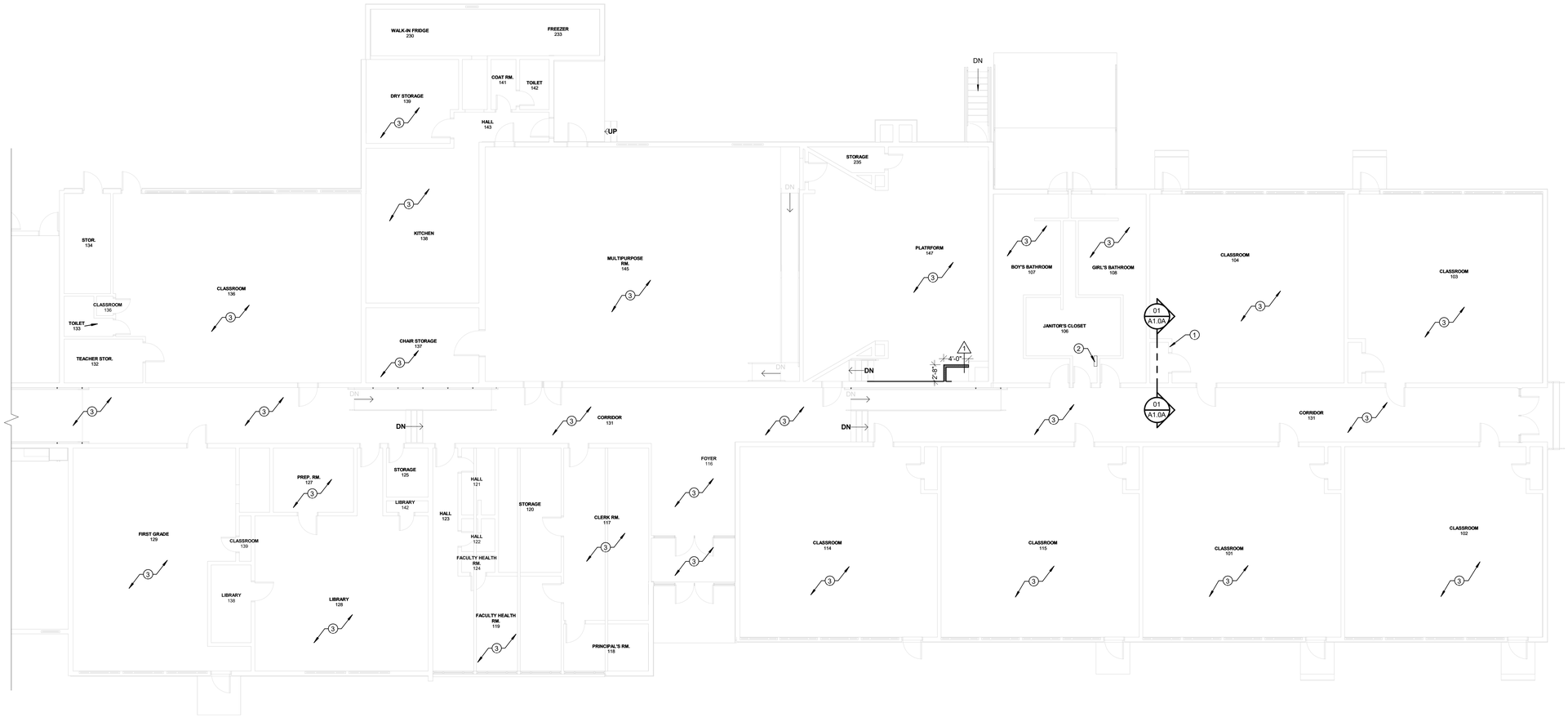
1 - CLOSET WALLS ARE TO BE CUT DOWN TO A 8'-6" AFF. ELEVATION TO PROVIDE ACCESS FOR THE INSTALLATION OF THE NEW MECHANICAL UNIT.

2 - PROPOSED NEW LOCATION OF THE ATC PANEL. COORDINATE IN FIELD WITH EXISTING CONDITIONS. PATCH AND REPAIR ALL EXISTING CONDITIONS DUE TO CONSTRUCTION.

3 - EXISTING CONSTRUCTION TO REMAIN. CONTRACTOR TO PATCH, REPAIR, AND CLEAN AS REQUIRED DUE TO DEMOLITION AND NEW CONSTRUCTION.

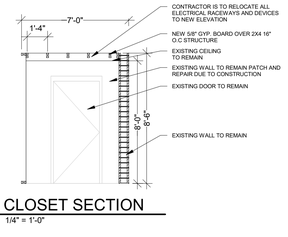


1. WALL TYPE 1
3/4" = 1'-0"



MAIN FLOOR PLAN AREA "A"
1/8" = 1'-0"

NORTH



01 CLOSET SECTION
1/4" = 1'-0"

GENERAL NOTES

A - COORDINATE WITH MECHANICAL PLANS FOR ADDITIONAL DEMOTION OF MECHANICAL SYSTEMS

B - ADDITIONAL CEILINGS MAY NEED TO BE DEMOLISHED THAT MAY NOT BE NOTED, TO PROVIDE ADDITIONAL ACCESS FOR THE MECHANICAL SYSTEM AND CONTROLS. CONTRACTOR IS TO PLAN ON WORKING ABOVE AND AROUND THE CEILINGS AND TO BE CAREFUL TO PROTECT THE CEILING TILES, THE GRIDS, EXISTING LIGHTING, FIRE ALARM, AND ANY GYPSUM BOARD MATERIAL FROM ANY DAMAGE. THE CONTRACTOR SHALL REPLACE ANY DAMAGED MATERIALS.

KEY PLAN

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KMA ARCHITECTS

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1-15-26
LICENSED ARCHITECT

REVISIONS:

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EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH ORANGEVILLE, UTAH
MECHANICAL UPGRADE

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A1.0A

11/14/2026 1:37:23 PM As indicated

MAIN FLOOR PLAN AREA "B"
1/8" = 1'-0"

NORTH

SHEET NOTES

1 - PROPOSED NEW LOCATION OF THE ATC PANEL. COORDINATE IN FIELD WITH EXISTING CONDITIONS. PATCH AND REPAIR ALL EXISTING CONDITIONS DUE TO CONSTRUCTION.

2 - EXISTING CONSTRUCTION TO REMAIN. CONTRACTOR TO PATCH, REPAIR, AND CLEAN AS REQUIRED DUE TO DEMOLITION AND NEW CONSTRUCTION.

GENERAL NOTES

A - COORDINATE WITH MECHANICAL PLANS FOR ADDITIONAL DEMOTION OF MECHANICAL SYSTEMS

B - ADDITIONAL CEILINGS MAY NEED TO BE DEMOLISHED THAT MAY NOT BE NOTED. TO PROVIDE ADDITIONAL ACCESS FOR THE MECHANICAL SYSTEM AND CONTROLS. CONTRACTOR IS TO PLAN ON WORKING ABOVE AND AROUND THE CEILINGS AND TO BE CAREFUL TO PROTECT THE CEILING TILES, THE GRIDS, EXISTING LIGHTING, FIRE ALARM, AND ANY GYPSUM BOARD MATERIAL FROM ANY DAMAGE. THE CONTRACTOR SHALL REPLACE ANY DAMAGED MATERIALS.

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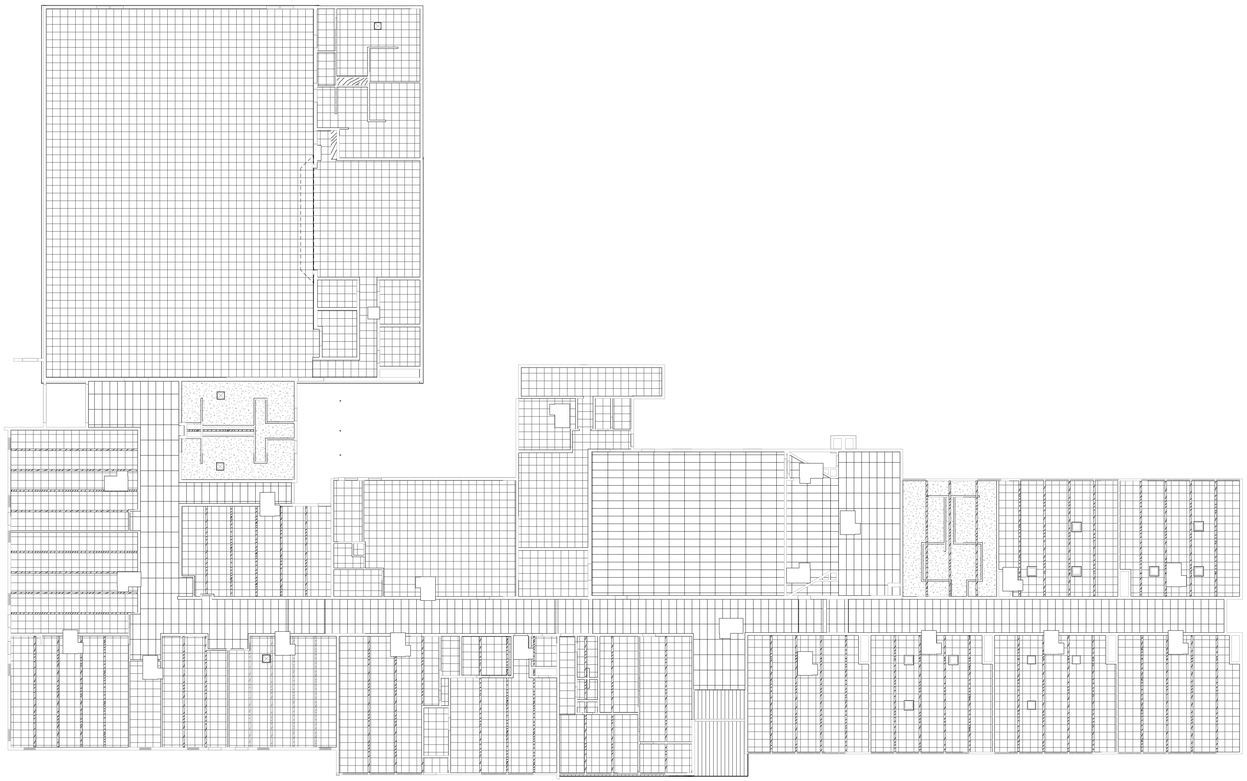
1/14/2026 1:57:24 PM As Indicated



OVERALL MAIN FLOOR REFLECTED
1/16" = 1'-0"

NORTH

GENERAL NOTES

A - COORDINATE WITH MECHANICAL PLANS FOR ADDITIONAL DEMOTION OF MECHANICAL SYSTEMS

B - ADDITIONAL CEILINGS MAY NEED TO BE DEMOLISHED THAT MAY NOT BE NOTED, TO PROVIDE ADDITIONAL ACCESS FOR THE MECHANICAL SYSTEM AND CONTROLS. CONTRACTOR IS TO PLAN ON WORKING ABOVE AND AROUND THE CEILINGS AND TO BE CAREFUL TO PROTECT THE CEILING TILES, THE GRIDS, EXISTING LIGHTING, FIRE ALARM, AND ANY GYPSUM BOARD MATERIAL FROM ANY DAMAGE. THE CONTRACTOR SHALL REPLACE ANY DAMAGED MATERIALS.

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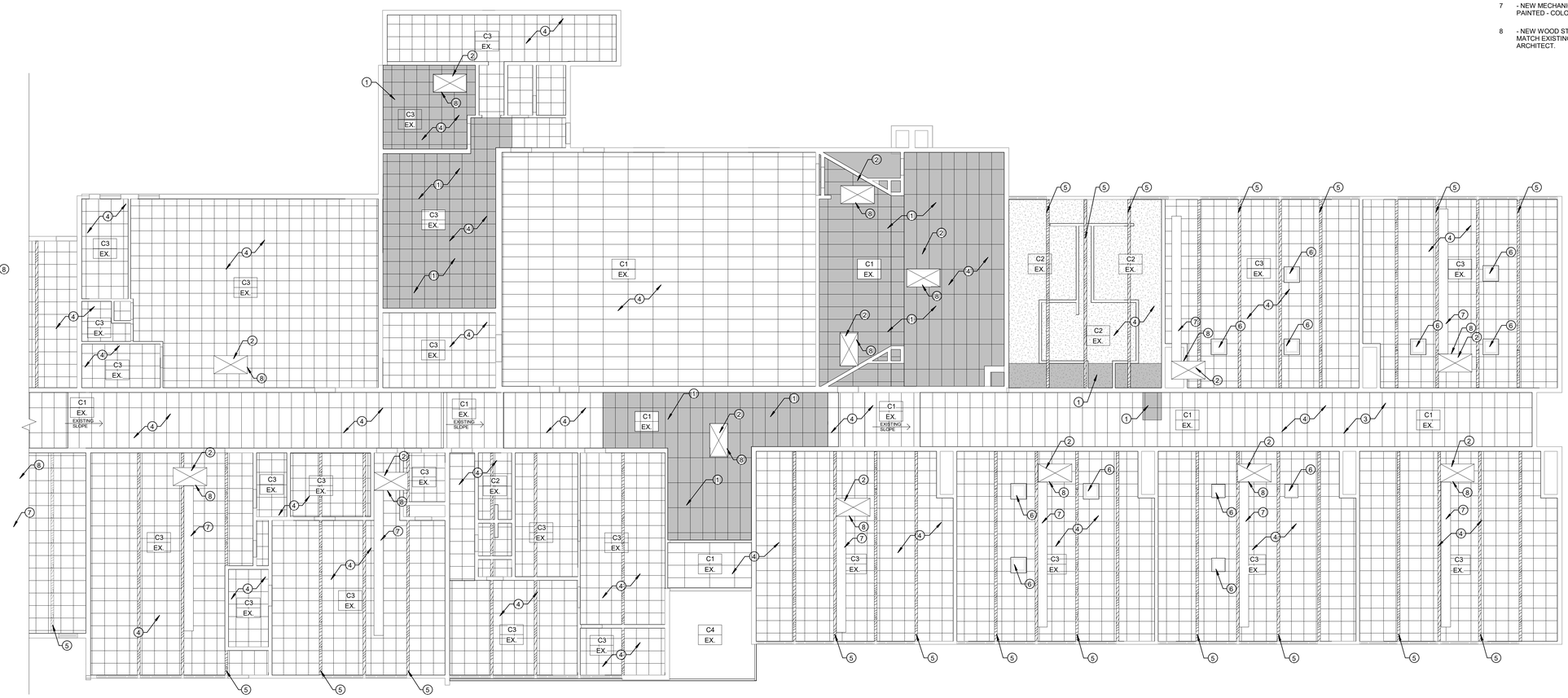
A2.1



MAIN FLOOR REFLECTED AREA "A"
1/8" = 1'-0"

NORTH

SHEET NOTES

1 - EXISTING CEILING TO BE REMOVED TO ALLOW ACCESS FOR DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR IS TO PRESERVE ALL CEILING ELEMENTS (LIGHT FIXTURES, CEILING TILE, CEILING GRID, ETC.) THAT IS REMOVED TO PROVIDE ACCESS WITHIN THE SHADED REGION. REINSTALL ALL ELEMENTS WHEN WORK ABOVE IS COMPLETED. CONTRACTOR IS TO REPLACE ANY DAMAGED COMPONENTS CAUSED BY CONSTRUCTION.

2 - APPROXIMATE LOCATION OF NEW MECHANICAL UNIT. COORDIANTE WITH MECHANICAL AND STRUCTURAL PLAN ON EXACT LOCATION AND BRACING - SEE STRCUTRAL DETAILS ON SHEET S2.0.

3 - CEILING TILE IS TO BE REMOVED AND REINSTALLED AS NEEDED TO ALLOW FOR ANY NEW CONTROL WIRES TO BE INSTALLED. CONTRACTOR IS TO FIX ANY GRID DAMAGED DUE TO CONSTRUCTION.

4 - EXISTING CONSTRUCTION TO REMAIN. CONTRACTOR TO PATCH, REPAIR, AND CLEAN AS REQUIRED DUE TO DEMOLITION AND NEW CONSTRUCTION.

5 - EXISTING STRUCTURE TO REMAIN.

6 - EXISTING SKY LIGHTS TO REMAIN.

7 - NEW MECHANICAL EQUIPMENT AND DUCT WORK TO BE PAINTED - COLOR SELECTED BY ARCHITECT.

8 - NEW WOOD STRUCTUTRAL SUPPORTS ARE TO BE STAINED TO MATCH EXISTING BEAMS. -STAIN COLOR TO BE APPROVED BY ARCHITECT.

CEILING LEGEND

C1	EXISTING 2X4 CEILING GRID.	
C2	EXISTING 5/8" GYP. BOARD (TEXTURED AND PAINTED)	
C3	EXISTING GLUE UP CEILING TILES	
C4	EXISTING SOFFIT	
	EXISTING CEILING HEIGHT (VERIFY ELEVATION)	C EX.
	LIGHT FIXTURES	
	MECHANICAL DIFFUSERS	

GENERAL NOTES

A - COORDINATE WITH MECHANICAL PLANS FOR ADDITIONAL DEMOTION OF MECHANICAL SYSTEMS

B - ADDITIONAL CEILINGS MAY NEED TO BE DEMOLISHED THAT MAY NOT BE NOTED, TO PROVIDE ADDITIONAL ACCESS FOR THE MECHANICAL SYSTEM AND CONTROLS. CONTRACTOR IS TO PLAN ON WORKING ABOVE AND AROUND THE CEILINGS AND TO BE CAREFUL TO PROTECT THE CEILING TILES, THE GRIDS, EXISTING LIGHTING, FIRE ALARM, AND ANY GYPSUM BOARD MATERIAL FROM ANY DAMAGE. THE CONTRACTOR SHALL REPLACE ANY DAMAGED MATERIALS.

KEY PLAN

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KMA ARCHITECTS

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LICENSED ARCHITECT

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ORANGEVILLE, UTAH

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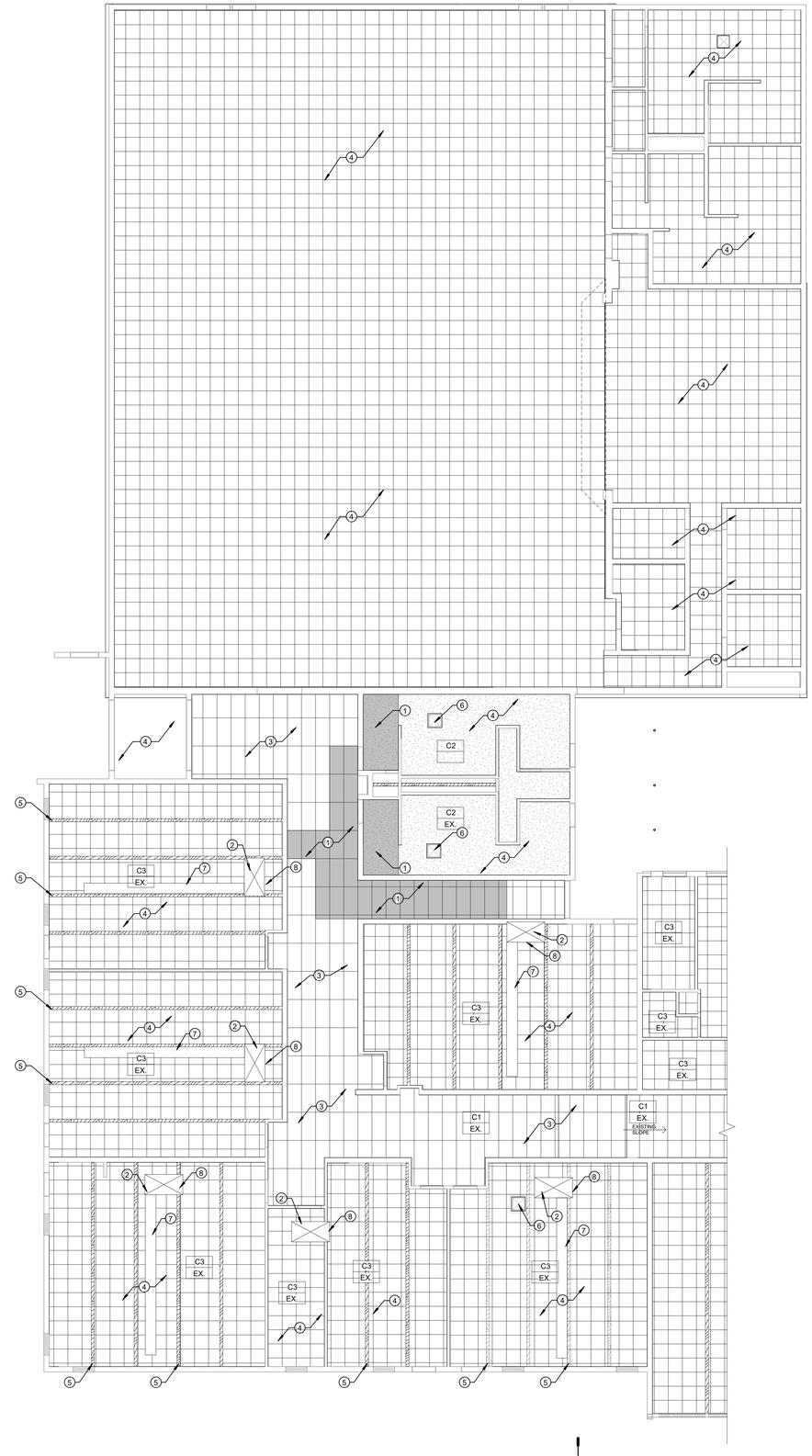

MAIN FLOOR REFLECTED AREA "B"
1/8" = 1'-0"

SHEET NOTES

1 - EXISTING CEILING TO BE REMOVED TO ALLOW ACCESS FOR DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR IS TO PRESERVE ALL CEILING ELEMENTS (LIGHT FIXTURES, CEILING TILE, CEILING GRID, ETC.) THAT IS REMOVED TO PROVIDE ACCESS WITHIN THE SHADED REGION, REINSTALL ALL ELEMENTS WHEN WORK ABOVE IS COMPLETED. CONTRACTOR IS TO REPLACE ANY DAMAGED COMPONENTS CAUSED BY CONSTRUCTION.

2 - APPROXIMATE LOCATION OF NEW MECHANICAL UNIT. COORDIANTE WITH MECHANICAL AND STRUCTURAL PLAN ON EXACT LOCATION AND BRACING - SEE STRCUTRAL DETAILS ON SHEET S2.0.

3 - CEILING TILE IS TO BE REMOVED AND REINSTALLED AS NEEDED TO ALLOW FOR ANY NEW CONTROL WIRES TO BE INSTALLED. CONTRACTOR IS TO FIX ANY GRID DAMAGED DUE TO CONSTRUCTION.

4 - EXISTING CONSTRUCTION TO REMAIN. CONTRACTOR TO PATCH, REPAIR, AND CLEAN AS REQUIRED DUE TO DEMOLITION AND NEW CONSTRUCTION.

5 - EXISTING STRUCTURE TO REMAIN.

6 - EXISTING SKY LIGHTS TO REMAIN.

7 - NEW MECHANICAL EQUIPMENT AND DUCT WORK TO BE PAINTED - COLOR SELECTED BY ARCHITECT.

8 - NEW WOOD STRUCTUTRAL SUPPORTS ARE TO BE STAINED TO MATCH EXISTING BEAMS. -STAIN COLOR TO BE APPROVED BY ARCHITECT.

CEILING LEGEND

C1	EXISTING 2X4 CEILING GRID.	
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C3	EXISTING GLUE UP CEILING TILES	
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	MECHANICAL DIFFUSERS	

GENERAL NOTES

A - COORDINATE WITH MECHANICAL PLANS FOR ADDITIONAL DEMOTION OF MECHANICAL SYSTEMS

B - ADDITIONAL CEILINGS MAY NEED TO BE DEMOLISHED THAT MAY NOT BE NOTED, TO PROVIDE ADDITIONAL ACCESS FOR THE MECHANICAL SYSTEM AND CONTROLS. CONTRACTOR IS TO PLAN ON WORKING ABOVE AND AROUND THE CEILINGS AND TO BE CAREFUL TO PROTECT THE CEILING TILES, THE GRIDS, EXISTING LIGHTING, FIRE ALARM, AND ANY GYPSUM BOARD MATERIAL FROM ANY DAMAGE. THE CONTRACTOR SHALL REPLACE ANY DAMAGED MATERIALS.

KEY PLAN

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STATE OF UTAH
WESLEY CHRISTENSEN
No. 9469958-0301
1-15-26
LICENSED ARCHITECT

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH MECHANICAL UPGRADE ORANGEVILLE, UTAH

DRAWN BY:	KMA
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DATE:	JAN 2026
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A2.1B

1/14/2026 1:07:25 PM As indicated

OVERALL ROOF PLAN
1/16" = 1'-0"

NORTH

GENERAL NOTES

A - ALL MECHANICAL UNITS AND ROOF PENETARIONS MAY NOT BE SHOWN. PROVIDE FLASHING, CRICKETS, AND REGLETS AT EACH UNIT SHOWN OR NOT. VERIFY ALL EXISTING PENETRATIONS

B - PROVIDE FLASHING AND ROOFING BOOTS FOR ALL ELECTRICAL, CONDUIT PENETRATIONS THROUGH ROOF - VERIFY ALL EXISTING ELECTRICAL PENETRATIONS

C - ALL ROOF CRICKETS TO BE SIZED AND SLOPED TO MATCH EXISTING

D - ALL MEMBRANE ROOFING AREAS TO MATCH EXISTING SLOPE.

E - ALL MECHANICAL, ROOF HATCH, SKYLIGHT, AND SOLATUBE CURBS TO BE 18" MINIMUM ABOVE ROOF DECK.

F- CONTRACTOR RESPONSIBLE FOR ANY INTERIOR DAMAGES DUE TO MECHANICAL UPGRADE

G- CONTRACTOR IS TO PRESERVE, PROTECT, REPLACE ALL EXISTING CONDITIONS THAT ARE AFFECTED DUE TO CONSTRUCTION

H- CONTRACTOR IS TO DOCUMENT EXISTING CONDITIONS BEFORE STARTING DEMOLITION.

GENERAL DEMOLITION NOTES

1 - CONTRACTOR TO PROVIDE PLYWOOD SHEATHING, INSULATION, AND MEMBRANE FOR WALLS & ROOF TO PROTECT INTERIOR FROM WEATHER DURING DEMOLITION AND CONSTRUCTION.

2 - ALL PLUMBING, HVAC, & ELECTRICAL WILL BE RE-ROUTED OR MODIFIED TO ALLOW COMPLETE CONTINUITY OF UTILITY SERVICE FOR SCHOOL OPERATION DURING CONSTRUCTION.

3 - STAGING TO BE DETERMINED BY GENERAL CONTRACTOR. (COSTS FOR TEMPORARY STAGING BY CONTRACTOR.)

4 - CONSTRUCTION FENCING SEPARATE NEW CONSTRUCTION AND DEMOLITION FROM ALL STUDENT ACTIVITY. (COSTS FOR TEMPORARY CONSTRUCTION FENCING BY CONTRACTOR.)

5 - CONSTRUCTION AND DEMOLITION ACCESS TO BE DETERMINED BY GENERAL CONTRACTOR AND OWNER.

ROOFING DEMOLITION NOTE

A - CONTRACTOR TO INCLUDE ANY NEW ROOF DECKING, 6" RIGID INSULATION, CURBING, AND SHEET MEMBRANE ROOFING AT ANY ROOF PENETRATION DUE TO CONSTRUCTION. COORDINATE ALL ROOF PENETRATIONS WITH STRUCTURAL, MECHANICAL, ELECTRICAL AND KITCHEN SHEETS FOR ROOF REPAIRS.

B - CONTRACTOR TO ADD NEW PLYWOOD DECKING, 6" RIGID INSULATION AND ROOF MEMBRANE OVER OPENING CREATED AT CURBS BY REMOVAL OF ANY EXISTING UNITS. REFER TO MECHANICAL DEMOLITION SHEET FOR LOCATIONS.

KEY PLAN

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KMA ARCHITECTS

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MECHANICAL UPGRADE

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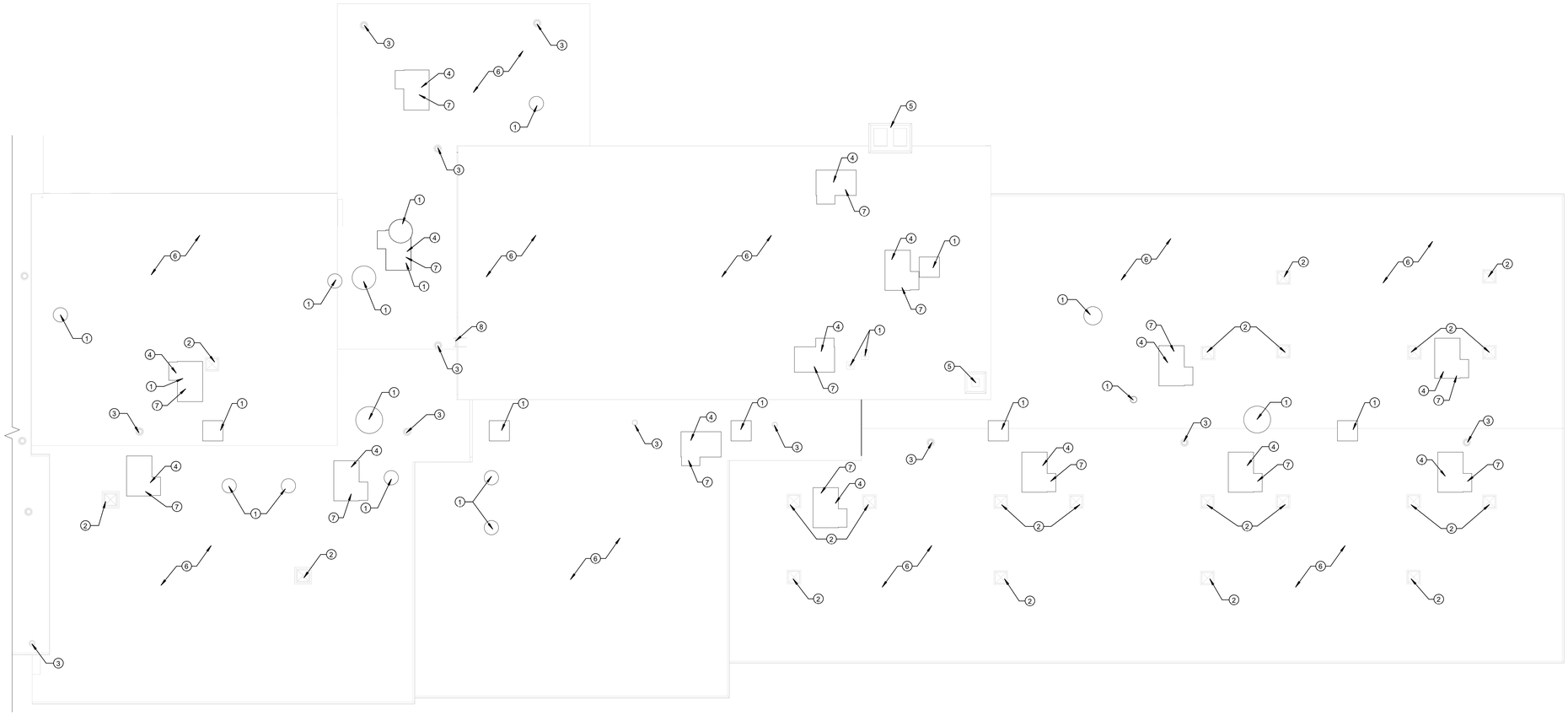

ROOF PLAN "AREA A"
1/8" = 1'-0"

NORTH

SHEET NOTES

1 - EXISTING MECHANICAL UNITS, VENTS, PIPING, ETC. COORDINATE WITH MECHANICAL DEMOLITION PLANS. IF COMPONENT IS TO BE REMOVED CONTRACTOR IS TO PATCH AND REPAIR THE ROOF AND DECKING. IF THE COMPONENT IS NOT TO BE REMOVED PRESERVE AND PROTECT DURING CONSTRUCTION.

2 - EXISTING SKYLIGHT TO REMAIN (TYP.)

3 - EXISTING ROOF DRAIN TO REMAIN (TYP.)

4 - APPROXIMATE LOCATION OF NEW MECHANICAL UNIT. REMOVE EXISTING ROOF FOR NEW MECHANICAL UNIT CURB, PATCH AND REPAIR ALL ADDITIONAL PENETRATIONS. COORDINATE WITH MECHANICAL PLANS.

5 - EXISTING CHIMNEY STACK TO REMAIN (TYP.)

6 - EXISTING ROOF MEMBRANE AND INSULATION TO REMAIN - PATCH AND REPAIR DUE TO CONSTRUCTION.

7 - NEW MECHANICAL CURBING AND FLASHING AT ALL NEW UNITS TO PROVIDE PROPER DRAINAGE SEE MECHANICAL DETAIL ON SHEET M6.1.

8 - EXISTING ACCESS LADDER TO REMAIN.

GENERAL NOTES

A - ALL MECHANICAL UNITS AND ROOF PENETARIONS MAY NOT BE SHOWN. PROVIDE FLASHING, CRICKETS, AND REGLETS AT EACH UNIT SHOWN OR NOT. VERIFY ALL EXISTING PENETRATIONS

B - PROVIDE FLASHING AND ROOFING BOOTS FOR ALL ELECTRICAL, CONDUIT PENETRATIONS THROUGH ROOF - VERIFY ALL EXISTING ELECTRICAL PENETRATIONS

C - ALL ROOF CRICKETS TO BE SIZED AND SLOPED TO MATCH EXISTING

D - ALL MEMBRANE ROOFING AREAS TO MATCH EXISTING SLOPE.

E - ALL MECHANICAL, ROOF HATCH, SKYLIGHT, AND SOLATUBE CURBS TO BE 18" MINIMUM ABOVE ROOF DECK.

F- CONTRACTOR RESPONSIBLE FOR ANY INTERIOR DAMAGES DUE TO MECHANICAL UPGRADE

G- CONTRACTOR IS TO PRESERVE, PROTECT, REPLACE ALL EXISTING CONDITIONS THAT ARE AFFECTED DUE TO CONSTRUCTION

H- CONTRACTOR IS TO DOCUMENT EXISTING CONDITIONS BEFORE STARTING DEMOLITION.

GENERAL DEMOLITION NOTES

1 - CONTRACTOR TO PROVIDE PLYWOOD SHEATHING, INSULATION, AND MEMBRANE FOR WALLS & ROOF TO PROTECT INTERIOR FROM WEATHER DURING DEMOLITION AND CONSTRUCTION.

2 - ALL PLUMBING, HVAC, & ELECTRICAL WILL BE RE-ROUTED OR MODIFIED TO ALLOW COMPLETE CONTINUITY OF UTILITY SERVICE FOR SCHOOL OPERATION DURING CONSTRUCTION.

3 - STAGING TO BE DETERMINED BY GENERAL CONTRACTOR. (COSTS FOR TEMPORARY STAGING BY CONTRACTOR.)

4 - CONSTRUCTION FENCING SEPARATE NEW CONSTRUCTION AND DEMOLITION FROM ALL STUDENT ACTIVITY. (COSTS FOR TEMPORARY CONSTRUCTION FENCING BY CONTRACTOR.)

5 - CONSTRUCTION AND DEMOLITION ACCESS TO BE DETERMINED BY GENERAL CONTRACTOR AND OWNER.

ROOFING DEMOLITION NOTE

A - CONTRACTOR TO INCLUDE ANY NEW ROOF DECKING, 6" RIGID INSULATION, CURBING, AND SHEET MEMBRANE ROOFING AT ANY ROOF PENETRATION DUE TO CONSTRUCTION. COORDINATE ALL ROOF PENETRATIONS WITH STRUCTURAL, MECHANICAL, ELECTRICAL AND KITCHEN SHEETS FOR ROOF REPAIRS.

B - CONTRACTOR TO ADD NEW PLYWOOD DECKING, 6" RIGID INSULATION AND ROOF MEMBRANE OVER OPENING CREATED AT CURBS BY REMOVAL OF ANY EXISTING UNITS. REFER TO MECHANICAL DEMOLITION SHEET FOR LOCATIONS.

KEY PLAN

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KMA ARCHITECTS

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No. 9499958-0301
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COTTONWOOD ELEMENTARY SCHOOL
MECHANICAL UPGRADE
55 EAST 200 SOUTH ORANGEVILLE, UTAH

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A2.2A

ROOF PLAN "AREA B"
1/8" = 1'-0"

NORTH

SHEET NOTES

1 - EXISTING MECHANICAL UNITS, VENTS, PIPING, ETC. COORDINATE WITH MECHANICAL DEMOLITION PLANS. IF COMPONENT IS TO BE REMOVED CONTRACTOR IS TO PATCH AND REPAIR THE ROOF AND DECKING. IF THE COMPONENT IS NOT TO BE REMOVED PRESERVE AND PROTECT DURING CONSTRUCTION.

2 - EXISTING SKYLIGHT TO REMAIN (TYP.)

3 - EXISTING ROOF DRAIN TO REMAIN (TYP.)

4 - APPROXIMATE LOCATION OF NEW MECHANICAL UNIT. REMOVE EXISTING ROOF FOR NEW MECHANICAL UNIT CURB. PATCH AND REPAIR ALL ADDITIONAL PENETRATIONS. COORDINATE WITH MECHANICAL PLANS.

5 - EXISTING ROOF MEMBRANE AND INSULATION TO REMAIN - PATCH AND REPAIR DUE TO CONSTRUCTION.

6 - NEW MECHANICAL CURBING AND FLASHING AT ALL NEW UNITS TO PROVIDE PROPER DRAINAGE SEE MECHANICAL DETAIL ON SHEET M6.1.

GENERAL NOTES

A - ALL MECHANICAL UNITS AND ROOF PENETARIONS MAY NOT BE SHOWN. PROVIDE FLASHING, CRICKETS, AND REGLETS AT EACH UNIT SHOWN OR NOT. VERIFY ALL EXISTING PENETRATIONS

B - PROVIDE FLASHING AND ROOFING BOOTS FOR ALL ELECTRICAL, CONDUIT PENETRATIONS THROUGH ROOF - VERIFY ALL EXISTING ELECTRICAL PENETRATIONS

C - ALL ROOF CRICKETS TO BE SIZED AND SLOPED TO MATCH EXISTING

D - ALL MEMBRANE ROOFING AREAS TO MATCH EXISTING SLOPE.

E - ALL MECHANICAL, ROOF HATCH, SKYLIGHT, AND SOLATUBE CURBS TO BE 18" MINIMUM ABOVE ROOF DECK.

F- CONTRACTOR RESPONSIBLE FOR ANY INTERIOR DAMAGES DUE TO MECHANICAL UPGRADE

G- CONTRACTOR IS TO PRESERVE, PROTECT, REPLACE ALL EXISTING CONDITIONS THAT ARE AFFECTED DUE TO CONSTRUCTION

H- CONTRACTOR IS TO DOCUMENT EXISTING CONDITIONS BEFORE STARTING DEMOLITION.

GENERAL DEMOLITION NOTES

1 - CONTRACTOR TO PROVIDE PLYWOOD SHEATHING, INSULATION, AND MEMBRANE FOR WALLS & ROOF TO PROTECT INTERIOR FROM WEATHER DURING DEMOLITION AND CONSTRUCTION.

2 - ALL PLUMBING, HVAC, & ELECTRICAL WILL BE RE-ROUTED OR MODIFIED TO ALLOW COMPLETE CONTINUITY OF UTILITY SERVICE FOR SCHOOL OPERATION DURING CONSTRUCTION.

3 - STAGING TO BE DETERMINED BY GENERAL CONTRACTOR. (COSTS FOR TEMPORARY STAGING BY CONTRACTOR.)

4 - CONSTRUCTION FENCING SEPARATE NEW CONSTRUCTION AND DEMOLITION FROM ALL STUDENT ACTIVITY. (COSTS FOR TEMPORARY CONSTRUCTION FENCING BY CONTRACTOR.)

5 - CONSTRUCTION AND DEMOLITION ACCESS TO BE DETERMINED BY GENERAL CONTRACTOR AND OWNER.

ROOFING DEMOLITION NOTE

A - CONTRACTOR TO INCLUDE ANY NEW ROOF DECKING, 6" RIGID INSULATION, CURBING, AND SHEET MEMBRANE ROOFING AT ANY ROOF PENETRATION DUE TO CONSTRUCTION. COORDINATE ALL ROOF PENETRATIONS WITH STRUCTURAL, MECHANICAL, ELECTRICAL AND KITCHEN SHEETS FOR ROOF REPAIRS.

B - CONTRACTOR TO ADD NEW PLYWOOD DECKING, 6" RIGID INSULATION AND ROOF MEMBRANE OVER OPENING CREATED AT CURBS BY REMOVAL OF ANY EXISTING UNITS. REFER TO MECHANICAL DEMOLITION SHEET FOR LOCATIONS.

KEY PLAN

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KMA ARCHITECTS

STATE OF UTAH
WILLIAM CHRISTENSEN
No. 9469958-0301
1-15-26
LICENSED ARCHITECT

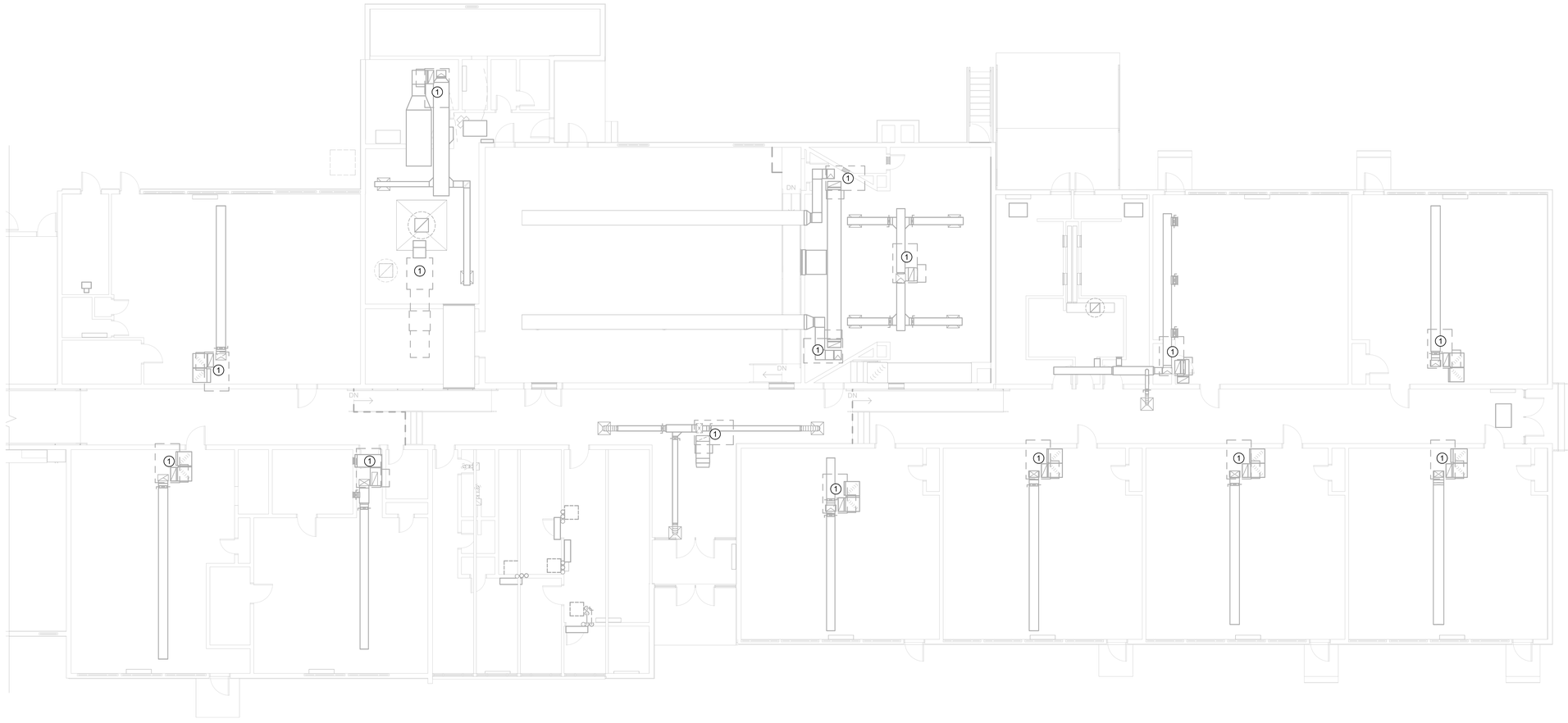
REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH MECHANICAL UPGRADE ORANGEVILLE, UTAH

DRAWN BY:	KMA
CHECKED BY:	WC
DATE:	JAN 2026
PROJECT #:	176525

A2.2B

1/14/2026 1:37:27 PM As indicated



1 FLOOR PLAN AREA 'A'
1/8" = 1'-0"

SHEET NOTES

1 SEE DETAILS ON S2.0 FOR REQUIRED FRAMING AROUND NEW DUCT OPENINGS THROUGH EXISTING ROOF. SEE MECHANICAL PLANS FOR EXACT NUMBER OF NEW UNITS AND REQUIRED DUCT CONFIGURATIONS

KEY PLAN

DYNAMIC STRUCTURES
744 S 460 E Orem, UT 84097 | 801.225.0020

170 NORTH MAIN STREET
SPANISH FORK, UTAH 84660
WWW.KMAARCHITECTS.COM

KMA ARCHITECTS

JAY D ADAMS
03/13/2026

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
MECHANICAL UPGRADE
55 EAST 200 SOUTH
ORANGEVILLE, UTAH

DRAWN BY: J.K.P.
CHECKED BY: J.D.A.
DATE: JAN. 15, 2026
PROJECT #: 7611125

S1.0A

1/13/2026 2:36:21 PM As indicated

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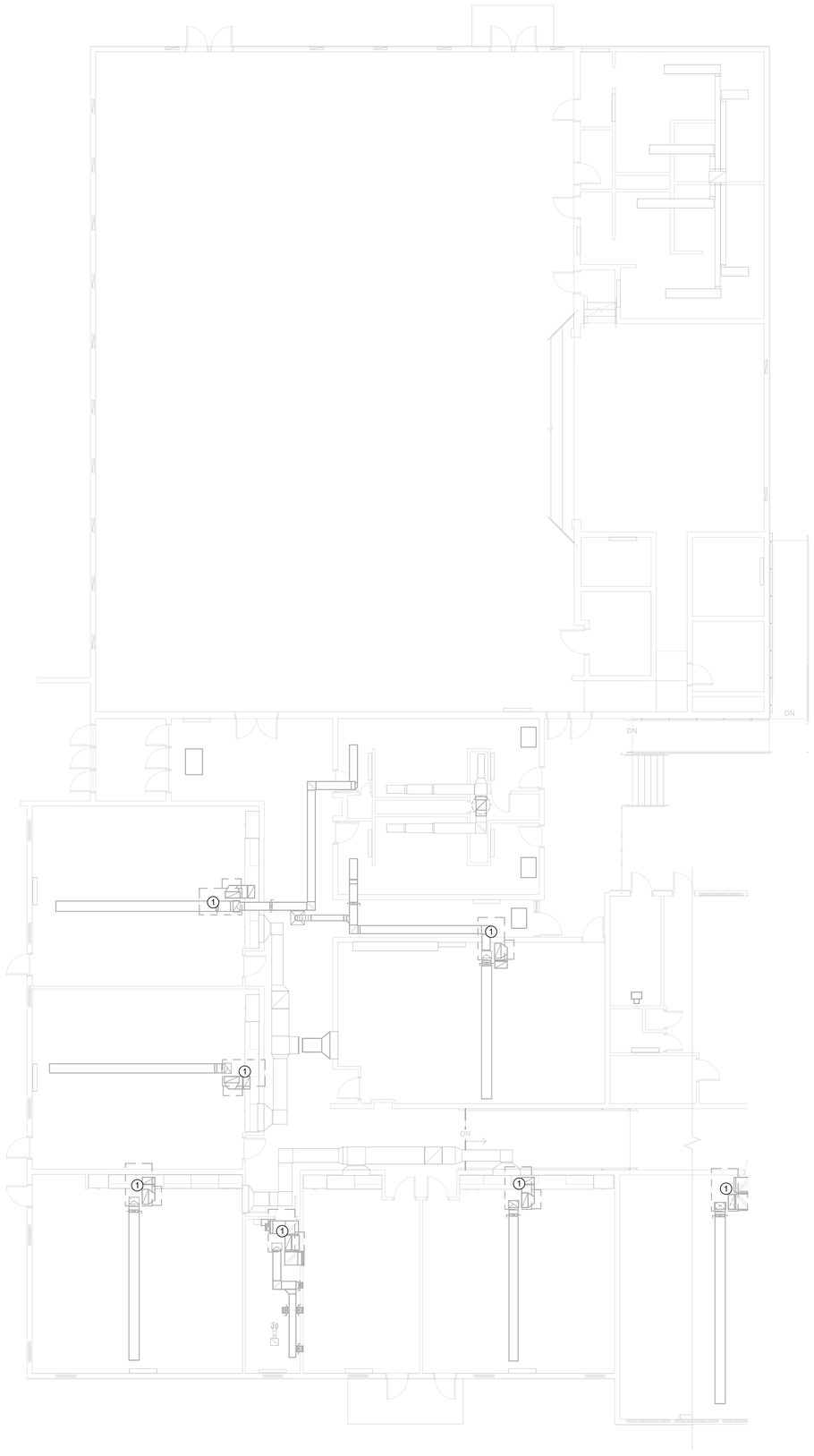
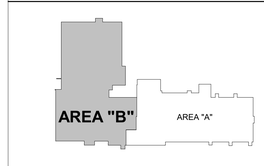


1 FLOOR PLAN AREA 'B'
1/8" = 1'-0"

SHEET NOTES

1 SEE DETAILS ON S2.0 FOR REQUIRED FRAMING AROUND NEW DUCT OPENINGS THROUGH EXISTING ROOF. SEE MECHANICAL PLANS FOR EXACT NUMBER OF NEW UNITS AND REQUIRED DUCT CONFIGURATIONS

KEY PLAN



DYNAMIC STRUCTURES
744 S 400 E Orem, UT 84097 | 801.225.0020

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170 NORTH MAIN STREET
SPANISH FORK, UTAH 84660
WWW.KMAARCHITECTS.COM

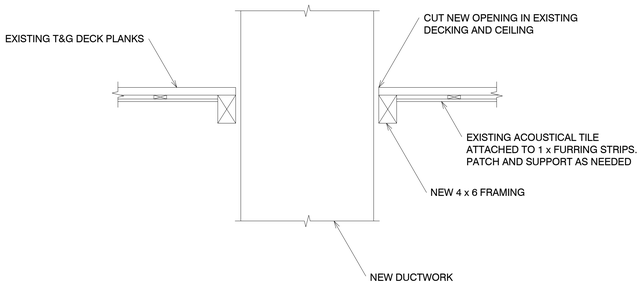
LICENSED PROFESSIONAL ENGINEER
JAY D ADAMS
01/13/2026

REVISIONS:

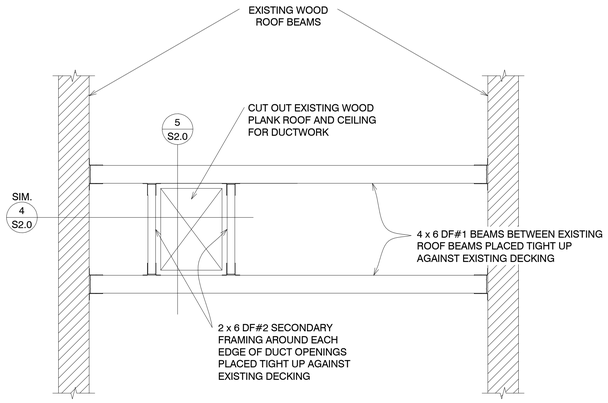
PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
MECHANICAL UPGRADE
55 EAST 200 SOUTH ORANGEVILLE, UTAH

DRAWN BY: J.K.P.
CHECKED BY: J.D.A.
DATE: JAN. 15, 2026
PROJECT #: 7611125

S1.0B

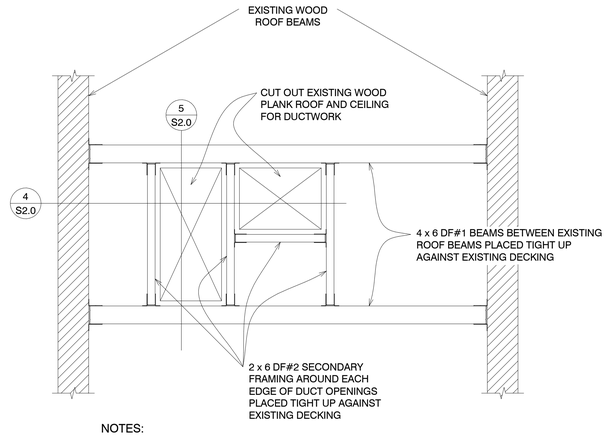


5 S2.0 CONSTRUCTION DETAIL
NO SCALE



NOTES:
1. PROVIDE SIMPSON HU46 EACH END OF EACH 4 x 6. PAINT BLACK.
2. PROVIDE SIMPSON HU26 EACH END OF EACH 2 x 6. PAINT BLACK.

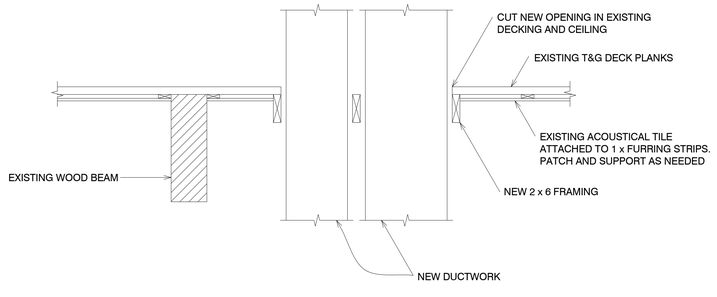
3 S2.0 CONSTRUCTION DETAIL
NO SCALE



NOTES:
1. PROVIDE SIMPSON HU46 EACH END OF EACH 4 x 6. PAINT BLACK.
2. PROVIDE SIMPSON HU26 EACH END OF EACH 2 x 6. PAINT BLACK.

1 S2.0 CONSTRUCTION DETAIL
NO SCALE

FOR NEW DUCT OPENINGS THROUGH AREAS WITH CONVENTIONAL RAFTER FRAMING, USE SAME DETAILS BUT REPLACE FRAMING MEMBERS WITH NEW 2 X DIMENSIONAL RAFTERS MATCHING EXISTING RAFTER DEPTH. PROVIDE SIMPSON LU210 EACH END OF EACH NEW MEMBER



4 S2.0 CONSTRUCTION DETAIL
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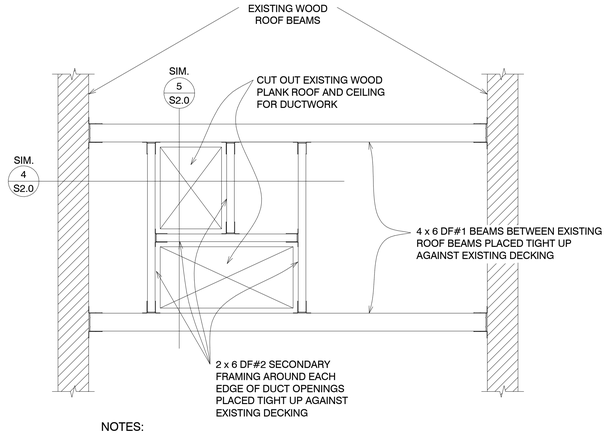

NOTES:
1. PROVIDE SIMPSON HU46 EACH END OF EACH 4 x 6. PAINT BLACK.
2. PROVIDE SIMPSON HU26 EACH END OF EACH 2 x 6. PAINT BLACK.

2 S2.0 CONSTRUCTION DETAIL
NO SCALE

"1/10/2026 2:39:22 PM" 1" = 1'-0"

DYNAMIC STRUCTURES
744 S. 400 E. Orem, UT 84097 | 801.225.0020
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KMA ARCHITECTS

LICENSED PROFESSIONAL ENGINEER
JAY D. ADAMS
STATE OF UTAH
01/13/2026

REVISIONS:
1 4-17-25

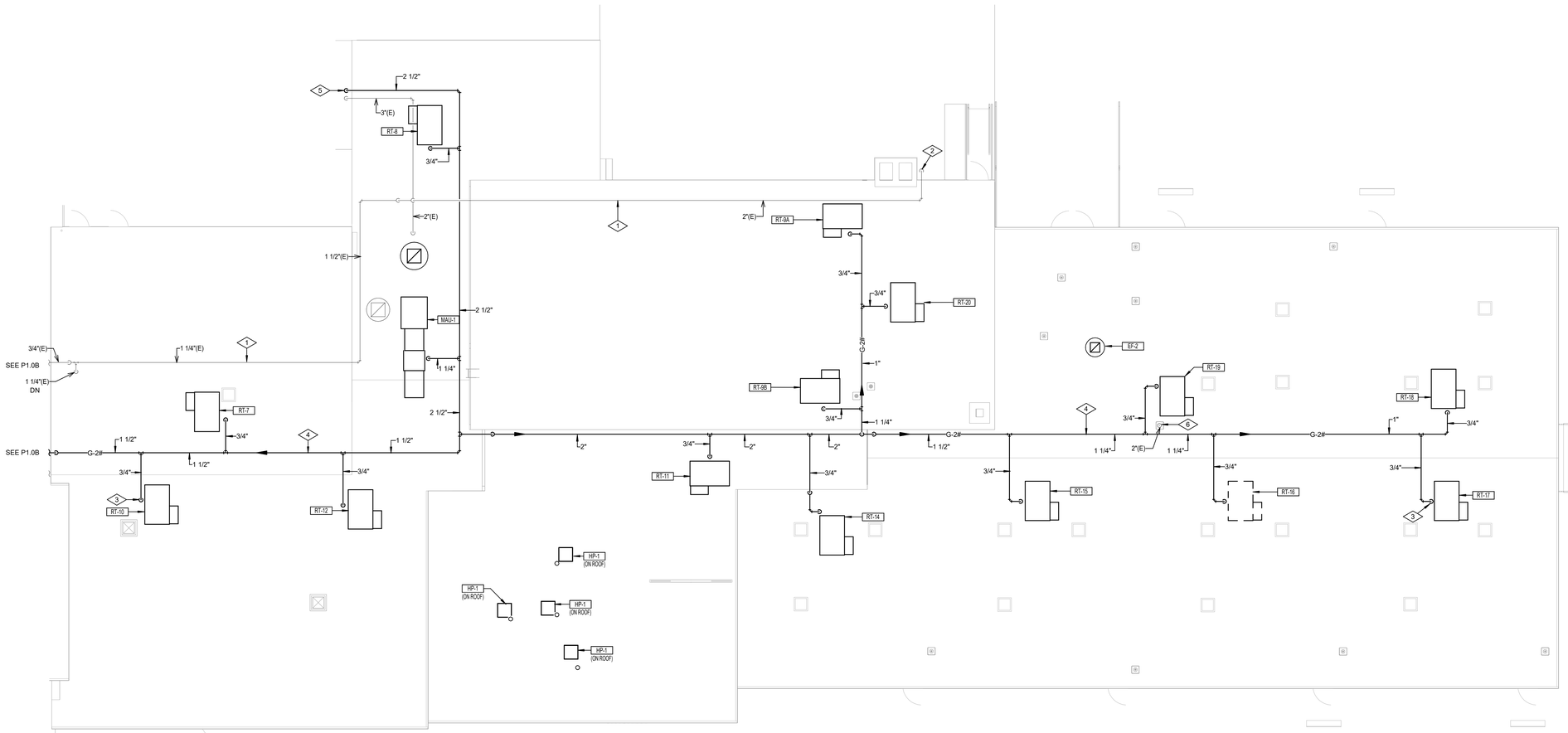
PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
MECHANICAL UPGRADE
55 EAST 200 SOUTH
ORANGEVILLE, UTAH

DRAWN BY: J.K.P.
CHECKED BY: J.D.A.
DATE: JAN. 15, 2026
PROJECT #: 7611125

S2.0

REFERENCE NOTES

1. EXISTING GAS PIPING ON ROOF TO REMAIN.
2. EXISTING GAS PIPING DROPS TO BOILER ROOM BELOW.
3. GAS TO EQUIPMENT. SEE DETAIL 2/P6.1 (TYPICAL).
4. SUPPORT PIPING ON ROOF. SEE DETAIL 3/P6.1. (TYPICAL).
5. MAKE NEW CONNECTION TO EXISTING GAS METER.
6. ADD AIR ADMITTANCE VALVE WITH UV RESISTANT CAP TO EXISTING PLUMBING VENT, FIELD VERIFY VENT SIZE.



PLUMBING ROOF PLAN - AREA A

0 4' - 0" 8' - 0" 16' - 0"

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

NORTH

KEY PLAN

OLSEN & PETERSON
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KMA ARCHITECTS

PROFESSIONAL ENGINEER
#255624-2202
JAMES AUSTIN BERSETT
UTAH

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY
MECHANICAL UPGRADE
55 EAST 200 SOUTH ORANGEVILLE, UTAH

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT #: 176525

P1.1A

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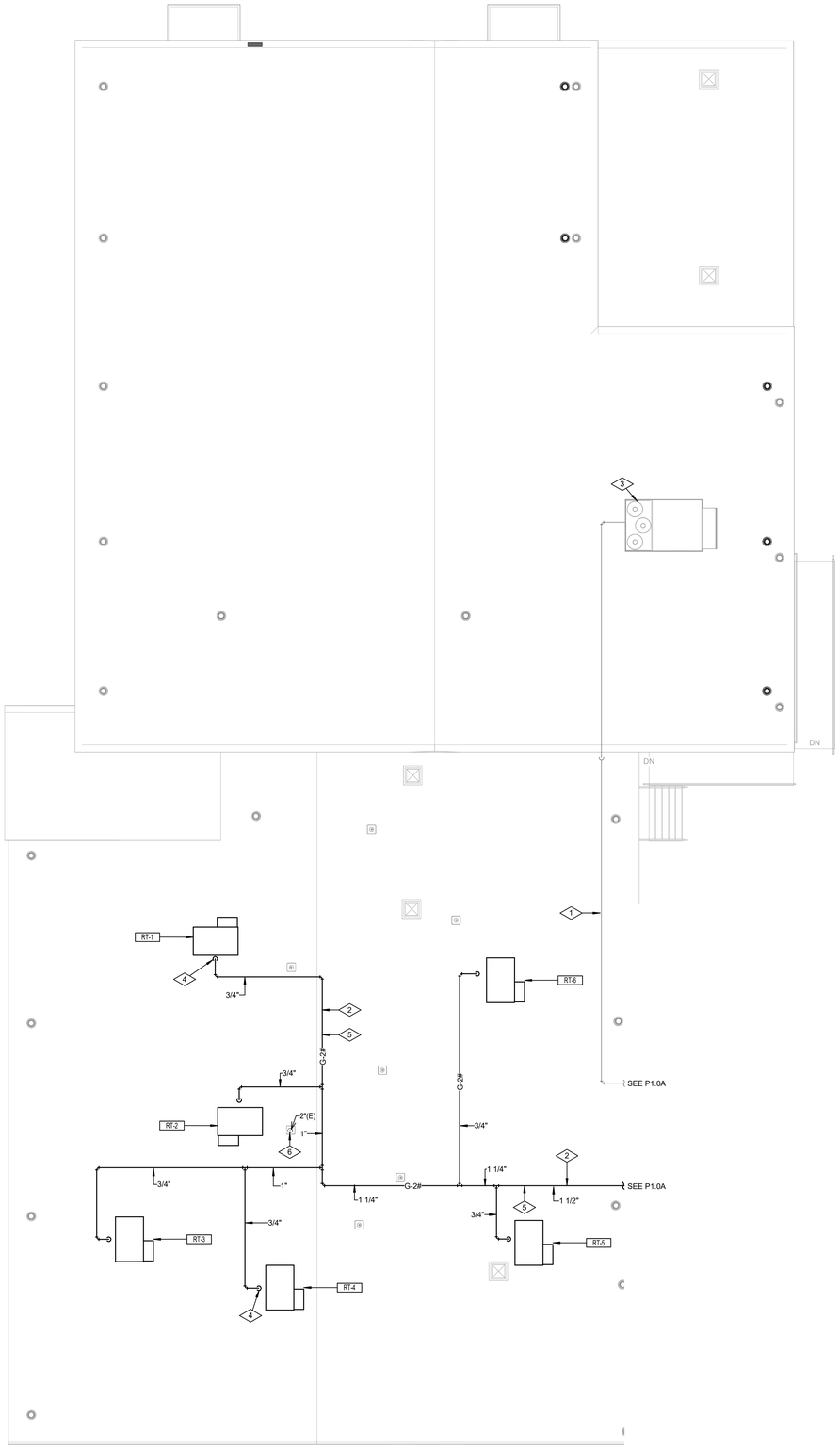

PLUMBING ROOF PLAN - AREA B

0 4' - 0" 8' - 0" 16' - 0"

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

NORTH

REFERENCE NOTES

1. EXISTING GAS PIPING ON ROOF TO REMAIN.
2. NEW GAS PIPING ON ROOF (TYP).
3. EXISTING ROOF TOP UNIT ON GYM ROOF TO REMAIN.
4. GAS TO EQUIPMENT. SEE DETAIL 2/P6.1 (TYPICAL).
5. SUPPORT PIPING ON ROOF. SEE DETAIL 3/P6.1. (TYPICAL).
6. ADD AIR ADMITTANCE VALVE WITH UV RESISTANT CAP TO EXISTING PLUMBING VENT, FIELD VERIFY VENT SIZE.

KEY PLAN

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REGISTERED PROFESSIONAL ENGINEER
#255624-2202
JAMES AUSTIN BERSETT
UTAH

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY
MECHANICAL UPGRADE
55 EAST 200 SOUTH ORANGEVILLE, UTAH

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT #: 176525

P1.1B

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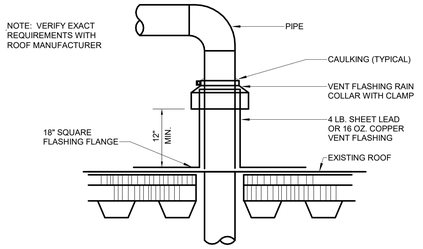
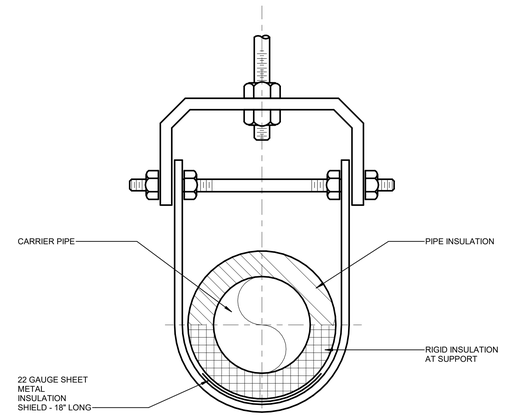


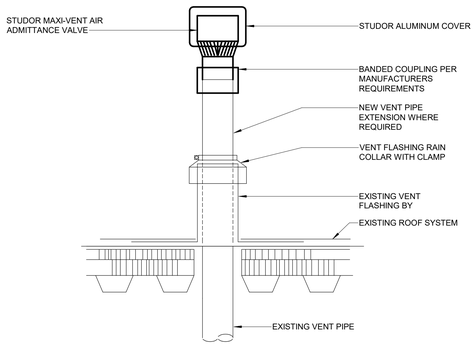
PIPE THRU ROOF PENETRATION DETAIL — 4 / P6.1

SCALE: NTS



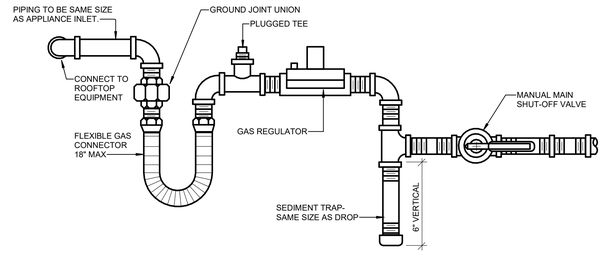
PIPE HANGER DETAIL — 1 / P6.1

SCALE: NTS



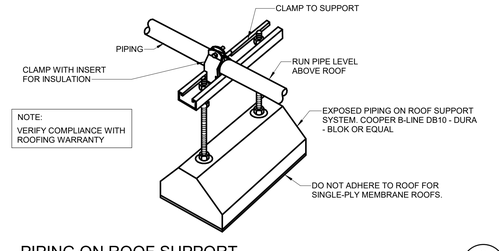
AIR ADMITTANCE VALVE DETAIL — 5 / P6.1

SCALE: NTS



ROOFTOP GAS LINE CONNECTION DETAIL — 2 / P6.1

SCALE: NTS



PIPING ON ROOF SUPPORT — 3 / P6.1

SCALE: NTS

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KMA ARCHITECTS

REVISIONS:

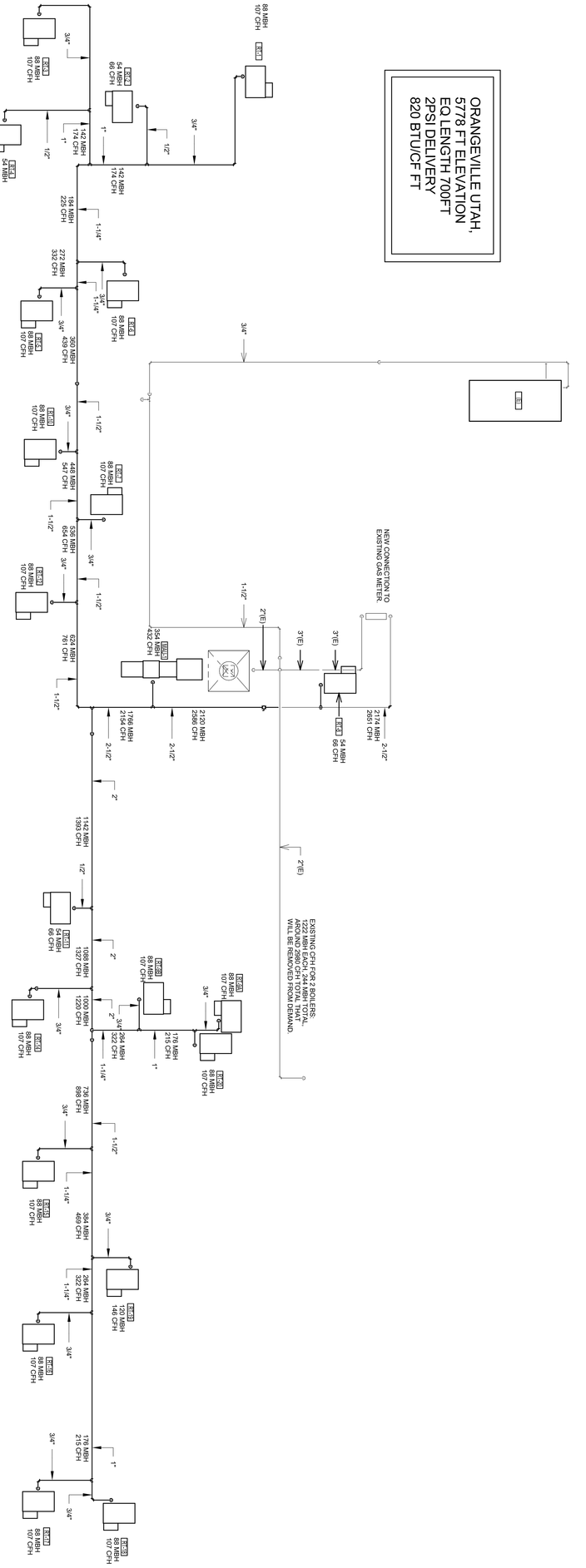
PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY
MECHANICAL UPGRADE
ORANGEVILLE, UTAH
55 EAST 200 SOUTH

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT #: 176525

P6.1

1150508 11:47:41 AM 12" = 1'-0"

ORANGEVILLE UTAH,
5778 FT ELEVATION
EQ LENGTH 700FT
2PSI DELIVERY
820 BTU/CF FT



GAS PIPING SCHEMATIC

1"=10'

1 / P6.2

P6.2

PROJECT TITLE

EMERY SCHOOL DISTRICT

COTTONWOOD ELEMENTARY

55 EAST 200 SOUTH — MECHANICAL UPGRADE — ORANGEVILLE, UTAH

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT # 176525

REVISIONS:

LICENSED PROFESSIONAL ENGINEER — JAMES BRYCE PERRETT — UTAH — 10/31/2026

KMA ARCHITECTS

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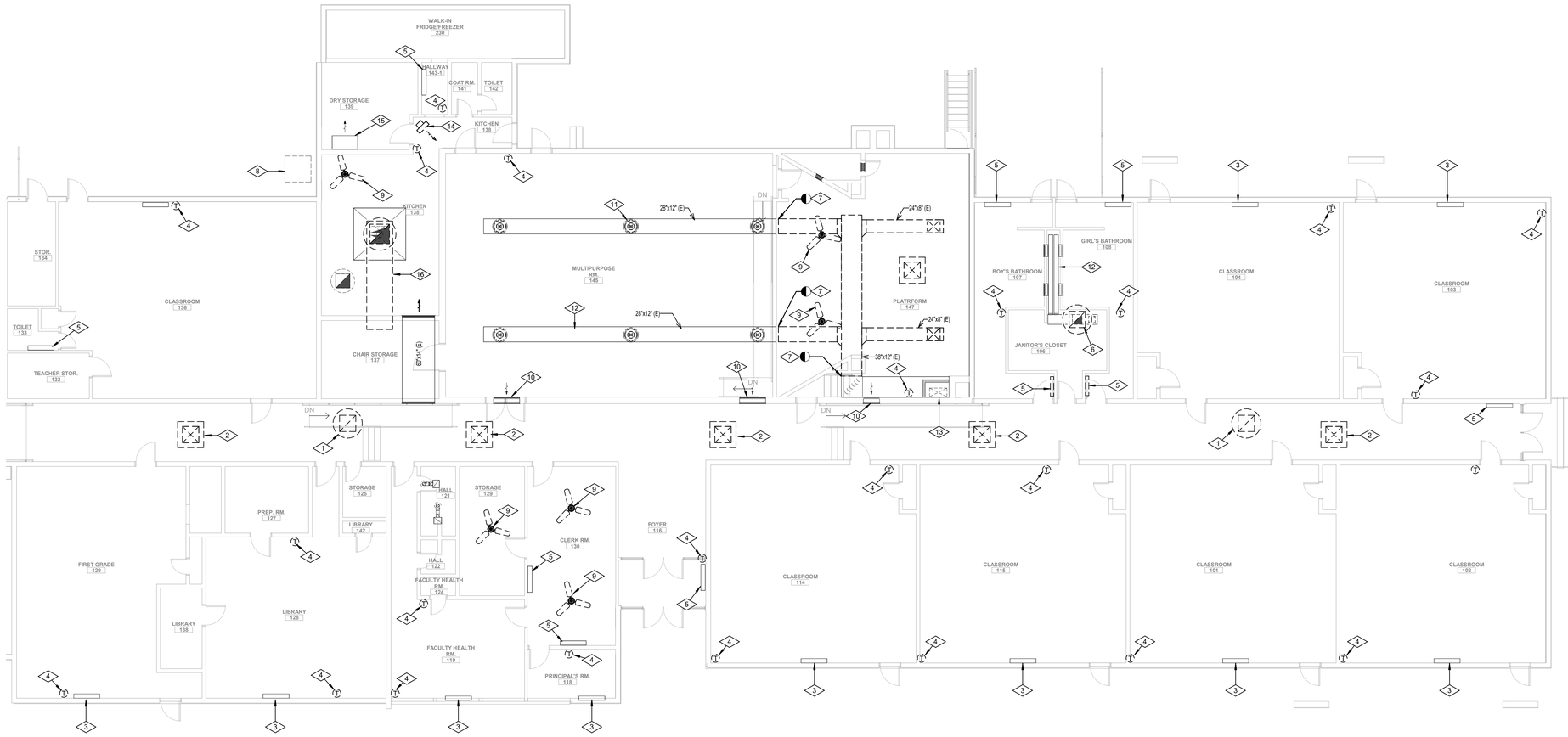

MECHANICAL DEMOLITION FLOOR PLAN AREA A

0 4' - 0" 8' - 0" 16' - 0"

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

NORTH

REFERENCE NOTES

1. REMOVE EXISTING RELIEF FAN COMPLETE, PATCH AND REPAIR ROOF.
2. REMOVE EXISTING EVAPORATIVE UNIT, DUCT AND DIFFUSER COMPLETE. PATCH AND REPAIR ROOF AND T-GRID CEILING.
3. EXISTING UNIT CONVECTORS TO BE ABANDONED IN PLACE.
4. REMOVE EXISTING THERMOSTAT COMPLETE. REMOVE ANY WIRE MOULDING (TYP).
5. EXISTING CONVECTOR TO BE ABANDONED IN PLACE.
6. REMOVE EXISTING EXHAUST FAN COMPLETE. SEE NEW WORK FOR REPLACEMENT.
7. REMOVE EXISTING DUCT WORK TO APPROXIMATELY THIS LOCATION. EXISTING LOCATIONS AND SIZES ARE APPROXIMATE.
8. EXISTING EVAPORATIVE UNIT TO BE ABANDONED IN PLACE.
9. REMOVE EXISTING CEILING FAN COMPLETE AND REPAIR CEILING, SCHOOL DISTRICT TO HAVE FIRST SALVAGE RIGHTS.
10. ABANDON RELIEF VENTS IN PLACE (TYP).
11. EXISTING DIFFUSERS TO REMAIN (TYP).
12. EXISTING DUCTWORK TO REMAIN (TYP).
13. EXISTING DUCTWORK DROPS TO BOILER ROOM BELOW. CAP DUCTWORK AND ABANDON IN PLACE.
14. REMOVE EXISTING UNIT HEATER AND PIPING. COORDINATE DEMOLITION WITH SCHOOL DISTRICT.
15. ABANDON EXISTING CABINET UNIT HEATER.
16. REMOVE EXISTING MAKE UP AIR UNIT AND KITCHEN EXHAUST FAN.

KEY PLAN

OLSEN & PETERSON
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KMA ARCHITECTS

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY
MECHANICAL UPGRADE
55 EAST 200 SOUTH
ORANGEVILLE, UTAH

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT #: 176525

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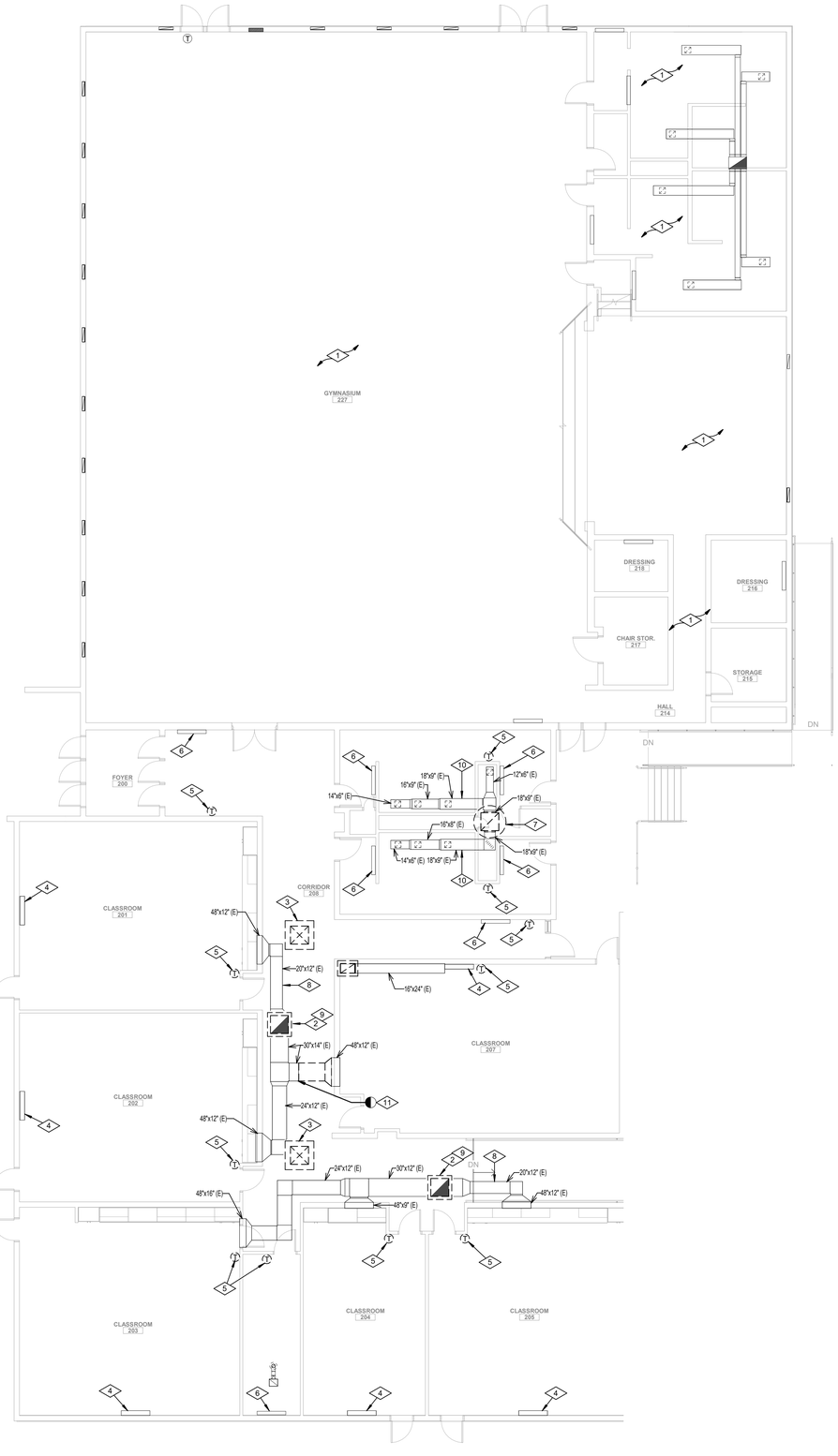

MECHANICAL DEMOLITION FLOOR PLAN AREA B

0 4' - 0" 8' - 0" 16' - 0"

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

NORTH

REFERENCE NOTES

#	
1	NO WORK IN THIS AREA (TYP).
2	REMOVE EXISTING RELIEF HOOD COMPLETE. PATCH AND REPAIR ROOF.
3	REMOVE EXISTING EVAPORATIVE UNIT, DUCT AND DIFFUSER COMPLETE. PATCH AND REPAIR ROOF AND T-GRID CEILING.
4	EXISTING UNIT CONVECTORS TO BE ABANDONED IN PLACE.
5	REMOVE EXISTING THERMOSTAT COMPLETE (TYPICAL).
6	EXISTING CONVECTOR TO BE ABANDONED IN PLACE.
7	REMOVE EXISTING EXHAUST FAN COMPLETE.
8	ABANDON EXISTING DUCTWORK IN PLACE (TYP).
9	CAP DUCTWORK BELOW ROOF.
10	EXISTING DUCTWORK TO REMAIN (TYPICAL).
11	REMOVE EXISTING DUCTWORK TO APPROXIMATELY THIS LOCATION.

KEY PLAN

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170 NORTH MAIN STREET
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KMA ARCHITECTS

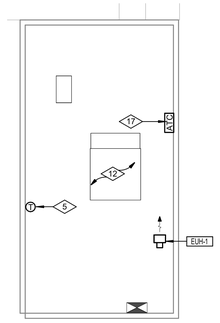
REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY
MECHANICAL UPGRADE
55 EAST 200 SOUTH
ORANGEVILLE, UTAH

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT #: 176525

M0.1B

1/15/2026 11:47:26 AM As indicated

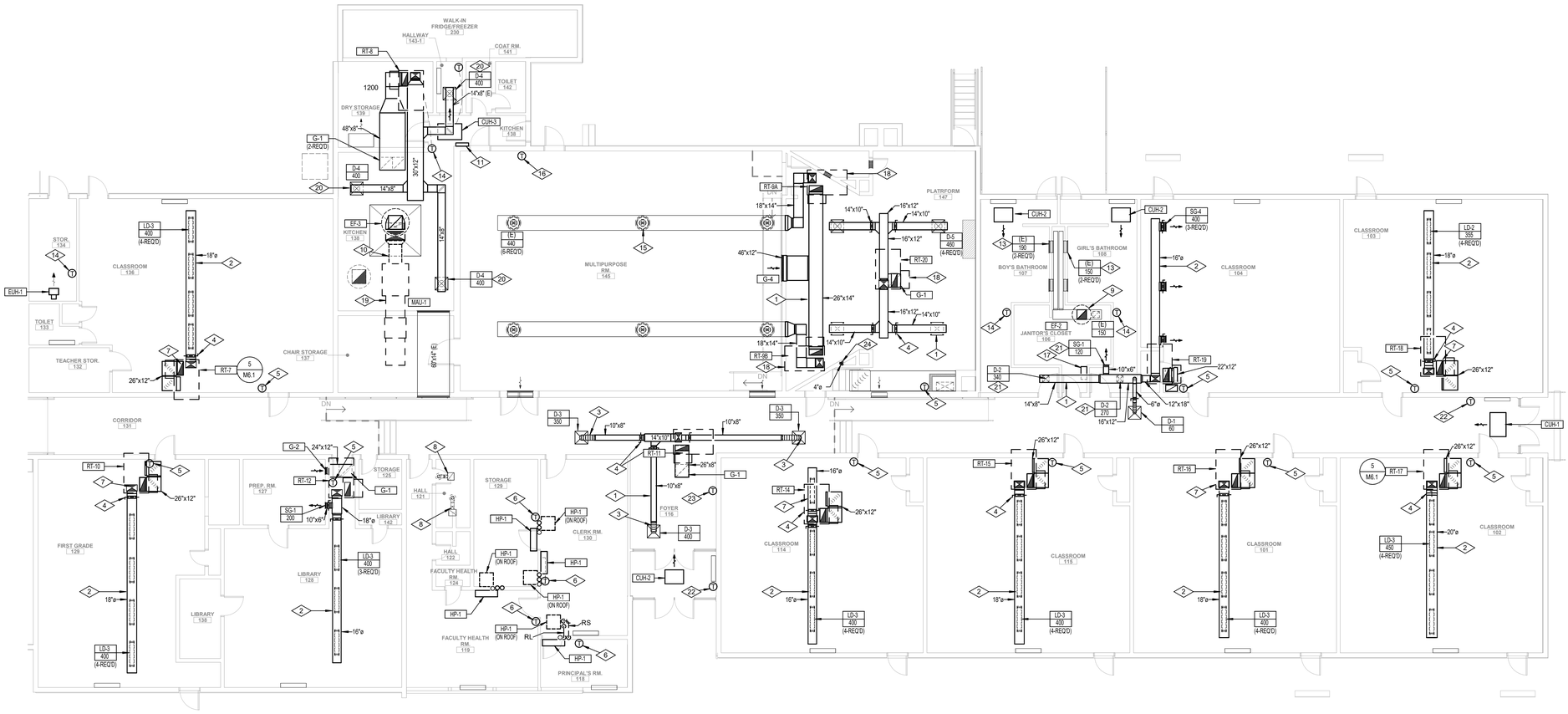


MECHANICAL BASEMENT PLAN

0 4' - 0" 8' - 0" 16' - 0"

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

NORTH



MECHANICAL FLOOR PLAN AREA A

0 4' - 0" 8' - 0" 16' - 0"

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

NORTH

REFERENCE NOTES

#	
1	DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDIANTE ROUTING WITH ALL TRADES (NOTE CEILING SPACE IS 12" OR LESS BELOW JOISTS) (TYPICAL)
2	DUCTWORK TO RUN EXPOSED BETWEEN BEAM AND OFFSET FOR LIGHTING. (TYPICAL)
3	FLEXIBLE DUCT WORK. MAXIMUM LENGTH 5'-0" (TYPICAL)
4	MANUAL VOLUME BALANCING DAMPER. (TYPICAL)
5	WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL)
6	WALL MOUNTED HARD WIRED, HEATING/COOLING THERMOSTAT TO CONTROL HP-1.
7	SUPPLY AND RETURN DUCT DOWN THRU ROOF FROM ROOFTOP UNIT. COORDINATE EXACT LOCATION WITH STRUCTURE AND UNIT PROVIDED.
8	EXISTING CEILING EXHAUST FAN TO SWITCH WITH LIGHTS.
9	CONNECT NEW EXHAUST FAN TO EXISTING CURB AND DUCTWORK WITH AN ADAPTOR CURB.
10	DUCTWORK TO RUN ON ROOF AND DROP TO EXISTING CURB AND HOOD BELOW. COORDINATE WITH EXISTING CONNECTIONS.
11	NEW MAU-1 CONTROLS.
12	NO DEMOLITION WORK IN THIS AREA. ABANDON EXISTING AIR HANDLER, DUCTWORK, BOILER, MECHANICAL PIPING, ETC IN PLACE.
13	REBALANCE EXISTING GRILLE TO CFM SHOWN (TYP).
14	NEW WALL MOUNTED HEATING THERMOSTAT.
15	REBALANCE EXISTING DIFFUSER TO CFM SHOWN (TYP).
16	NEW WALL MOUNTED HEATING/COOLING THERMOSTAT TO SERVE RT-9A AND RT-9B. RT-9B TO RUN ONLY WHEN RT-9A CANNOT MANAGE THE LOAD.
17	NEW ATC PANEL, PROVIDE 120/1/60 POWER.
18	KEEP ROOFTOP AIR INTAKES AT LEAST 10' AWAY FROM MECHANICAL EXHAUST.
19	CONNECT NEW MAU TO EXISTING WATER AND DRAIN FROM EXISTING UNIT.
20	BALANCING DAMPER TO BE ACCESSIBLE FROM FACE OF DIFFUSER. USE PRICE VCR 9 OR EQUIVALENT.
21	OPPOSED BLADE DAMPER TO BE ACCESSIBLE FROM FACE OF DIFFUSER OR GRILLE.
22	NEW WALL MOUNTED HEATING THERMOSTAT. PROVIDE WIREMOLD FOR CONTROL WIRE SERVING THERMOSTAT ON BLOCK WALL (TYP).
23	NEW WALL MOUNTED HEATING/COOLING THERMOSTAT. PROVIDE WIREMOLD FOR CONTROL WIRE SERVING THERMOSTAT ON BLOCK WALL (TYP).
24	EXTEND FLUE A MINIMUM OF 2'-0" ABOVE OUTSIDE AIR INTAKE ON RT-9B. PROVIDE WIRE SUPPORTS ANCHORED TO ROOF. FIELD VERIFY FLUE SIZE.

KEY PLAN

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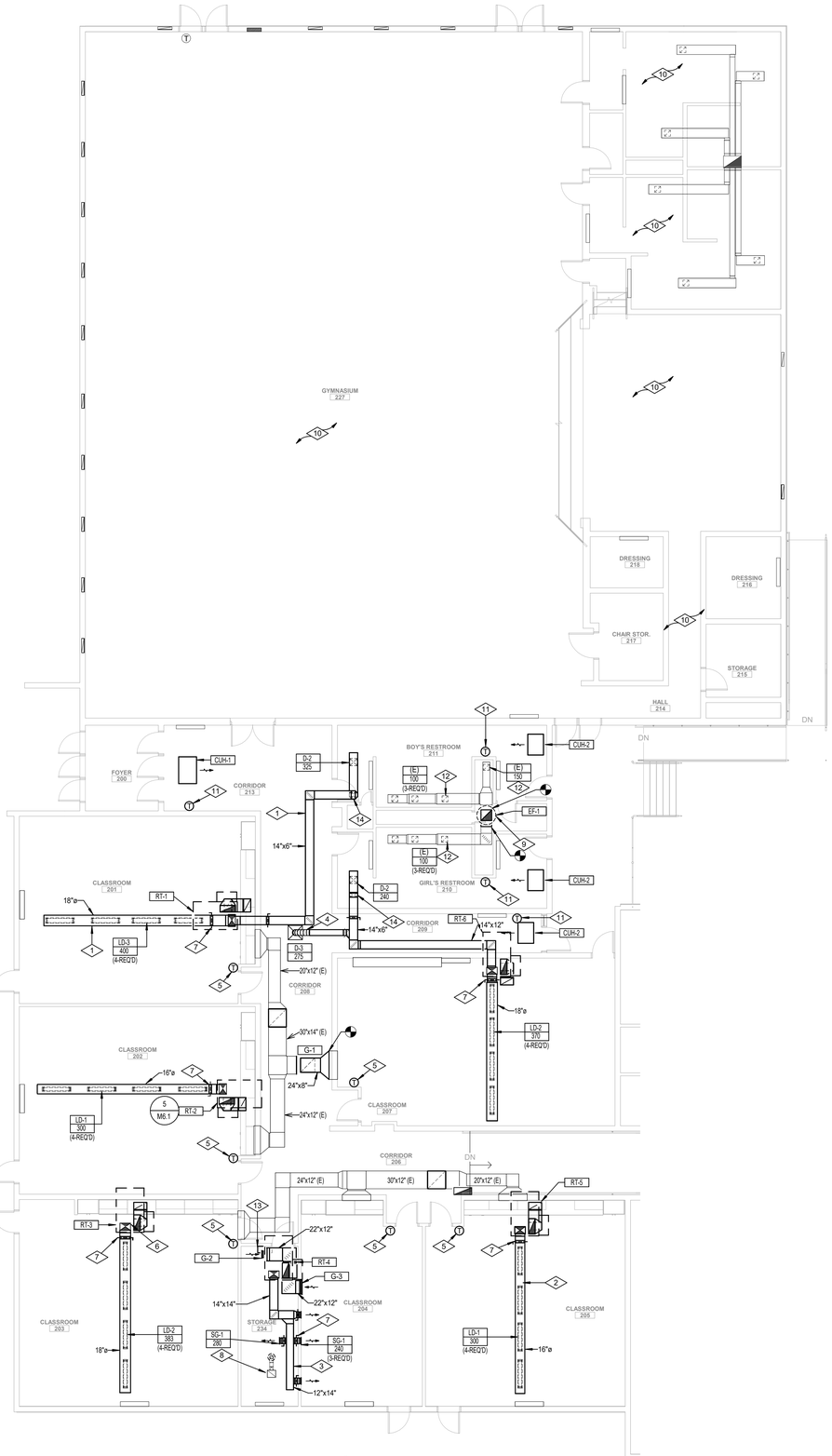
REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY
MECHANICAL UPGRADE
ORANGEVILLE, UTAH
55 EAST 200 SOUTH

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT #: 176525

M1.1A

1/15/2026 11:47:32 AM As indicated



MECHANICAL FLOOR PLAN AREA B

0 4' - 0" 8' - 0" 16' - 0"

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

NORTH

⟨#⟩ REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE WITH ALL TRADES.
2. DUCTWORK TO RUN EXPOSED BETWEEN BEAM AND OFFSET FOR LIGHTING. (TYPICAL)
3. DUCTWORK TO RUN BELOW BEAM.
4. FLEXIBLE DUCT WORK. MAXIMUM LENGTH 5'-0" (TYPICAL)
5. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL)
6. SUPPLY AND RETURN DUCT DOWN THRU ROOF FROM ROOFTOP UNIT. COORDINATE EXACT LOCATION WITH STRUCTURE AND UNIT PROVIDED.
7. MANUAL VOLUME BALANCING DAMPER. (TYPICAL)
8. EXISTING EXHAUST FAN TO REMAIN.
9. CONNECT NEW EXHAUST FAN TO EXISTING CURB AND DUCTWORK WITH AN ADAPTOR CURB.
10. NO WORK IN THIS AREA (TYP).
11. NEW WALL MOUNTED HEATING THERMOSTAT.
12. REBALANCE EXISTING GRILLE TO CFM SHOWN (TYP).
13. NEW ATC PANEL, PROVIDE 120/1/60 POWER.
14. DUCT TO DROP BELOW EXISTING BEAM, STAY AS HIGH AS POSSIBLE ABOVE THE CEILING.

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COTTONWOOD ELEMENTARY
MECHANICAL UPGRADE
55 EAST 200 SOUTH ORANGEVILLE, UTAH

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M1.1B

1/15/2026 11:47:52 AM As indicated

GAS FIRED / DX ROOF TOP UNIT SCHEDULE

SYMBOL	LOCATION	CFM	E.S.P	MIN. O.A. CFM	DX - COOLING CAPACITY			GAS - HEATING CAPACITY			POWER	MCA	MOCP	RT-SIZE	UNIT WTS. LBS	MAKE & MODEL	NOTES
					DX MBH	DX SENSIBLE MBH	DX EFFICIENCY	GAS MBH INPUT	GAS MBH OUTPUT	GAS EFFICIENCY							
RT-1	CLASSROOM 120 LL	1925	.5	750	53.9	41.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	31.0	45.0	74.4 L x46.6 W x 33.4 H	591	CARRIER 48FEEA06A2A5-8B0A0	
RT-2	CLASSROOM 120MM	1200	0.5	398	32.5	27.7	13.40 SEER 2	53.6	43.2	81.0	208/3/60	22.0	30.0	74.4 L x46.6 W x 33.4 H	517	CARRIER 48FEDA04A2A5-8B0A0	
RT-3	CLASSROOM 120NN	1535	0.5	401	47.0	37.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-4	CLASSROOM 120OO	1000	0.5	225	31.4	23.2	13.40 SEER 2	53.6	43.2	81.0	208/3/60	22.0	30.0	74.4 L x46.6 W x 33.4 H	517	CARRIER 48FEDA04A2A5-8B0A0	
RT-5	CLASSROOM 120PP	1200	0.5	389	32.6	37.6	13.40 SEER 2	88.0/65.6	70.4/52.0	80.0	208/3/60	22.0	30.0	74.4 L x46.6 W x 33.4 H	517	CARRIER 48FEEA04A2A5-8B0A0	
RT-6	CLASSROOOM 120XX	1990	0.5	715	53.9	41.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	31.0	45.0	74.4 L x46.6 W x 33.4 H	591	CARRIER 48FEEA06A2A5-8B0A0	
RT-7	KINDERGARTEN	1600	0.5	409	47.6	38.6	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-8	KITCHEN	1200	0.5	131	33.2	23.4	13.40 SEER 2	53.6	43.2	81.0	208/3/60	22.0	30.0	74.4 L x46.6 W x 33.4 H	517	CARRIER 48FEDA04A2A5-8B0A0	
RT-9A	CAFETERIA	1400	0.5	625	45.9	36.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-9B	CAFETERIA	1400	0.5	625	45.9	36.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-10	CLASSROOM 120YY	1600	0.5	413	47.6	38.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-11	CORRIDOR MAIN FLOOR	1100	0.5	192	32.3	23.5	13.40 SEER 2	53.6	43.2	81.0	208/3/60	22.0	30.0	74.4 L x46.6 W x 33.4 H	517	CARRIER 48FEDA04A2A5-8B0A0	
RT-12	LIBRARY	1400	0.5	421	45.9	36.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-14	CLASSROOM 1	1600	0.5	411	47.6	38.64	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-15	CLASSROOM 2	1600	0.5	413	53.9	41.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	31.0	45.0	74.4 L x46.6 W x 33.4 H	591	CARRIER 48FEEA06A2A5-8B0A0	
RT-16	CLASSROOM 120SS	1600	0.5	415	47.6	38.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-17	CLASSROOM 4	1800	0.5	414	47.6	38.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-18	CLASSROOM 6	1420	0.5	412	46.1	36.8	13.40 SEER 2	88.0	70.4	80.0	208/3/60	26.0	30.0	74.4 L x46.6 W x 33.4 H	578	CARRIER 48FEEA05A2A5-8B0A0	
RT-19	CORRIDOR AND RR LOWER LVL	1990	0.5	825	58.9	52.1	13.40 SEER 2	120.0/96.0	96.0/76.8	80.0	208/3/60	29.0	40.0	74.4 L x46.6 W x 33.4 H	630	CARRIER 48FEFA06B3A5-8B1C0	
RT-20	COMPUTER LAB	1850	0.5	421	53.9	41.7	13.40 SEER 2	88.0	70.4	80.0	208/3/60	31.0	45.0	74.4 L x46.6 W x 33.4 H	591	CARRIER 48FEEA06A2A5-8B0A0	

NOTES:
(1) ROOFTOP UNIT TO BE COMPLETE WITH HINGED ACCESS DOORS, 100% OUTDOOR AIR ECONOMIZER PACKAGE WITH BUILT-IN 100% RELIEF AIR, 18" HIGH FACTORY ROOF CURB OR AS REQUIRED FOR 12" MIN ABOVE FINISHED ROOF, UNPOWERED WEATHERPROOF GFI CONVENIENCE OUTLET AND ALL CONTROLS FOR AUTOMATIC OPERATION. UNIT SHALL BE U.L. LOSTED, ARI CERTIFIED AND AGA APPROVED. DOWN DISCHARGE.
(2) COOLING CAPACITY BASEDON 55°F COOLING SUPPLY TEMPERATURE, 75°F INDOOR AIR TEMPERATURE, 91°F DB AND 60°F WB OUTDOOR AIR TEMP, HEATING BASED ON 5°F.
(3) UNITS SHALL BE COMPLETE WITH 2" MERV 8 FILTERS, ABLE TO UPGRADE TO MERV 13 WITH NO CHANGES TO FILTER RACK.
(4) CAPACITIES BASED ON 5675 FT. ELEVATION.
(5) UNITS SHALL USE R-454B.
(6) ROOFTOP UNITS TO COME FROM THE FACTORY BACNET COMPATIBLE, UNITS TO CONNECT TO EXISTING DELTA CONTROLS SYSTEM, SEE SPECIFICATIONS.

MAKE-UP AIR UNIT SCHEDULE

SYMBOL	LOCATION	CFM	E.S.P	EVAP SECTION	FLOW CONFIG.	NATURAL GAS - HEATING CAPACITY			POWER	MCA	MOP	H.P.	MAKE & MODEL	NOTES
						GAS MBH INPUT	GAS MBH OUTPUT	GAS EFFICIENCY						
MAU-1	KITCHEN	5400	.5	YES	SIDE	353.3	325.0	92	208/3/60	27.6	45	7.5	ECON-AIR EA3-D.500-24D	(1)(2)

NOTES:
(1) SINGLE POINT POWER CONNECTION WITH STEP DOWN TRANSFORMER FOR EVAP. SECTION. WALL CONTROL PANEL, INLET HOOD, AND 18" FACTORY CURB.
(2) PROVIDE UNPOWERED CONVENIENCE OUTLET.
(3) CAPACITIES BASED ON 5675 FT. ELEVATION.

CABINET UNIT HEATER

SYMBOL	LOCATION	MOUNTING	CFM	HEATING M.B.H	AMPS	POWER	CUSTOM UNIT HEIGHT	CUSTOM UNIT LENGTH	CUSTOM UNIT WIDTH	MAKE & MODEL	NOTES
CUH-1	VESTIBULE	CEILING	1000	20.4	18	208/3/60	0' - 10"	3' - 9"	2' - 6"	QMARK CU945	(1)(2)(3)(4)
CUH-2	RR & CORR.	CEILING	250	6.8	6	208/3/60	0' - 9 3/4"	2' - 11"	2' - 3 3/8"	QMARK CU935	(1)(2)(3)(4)
CUH-3	KITCHEN	CEILING	1000	34.1	29	208/3/60	0' - 10"	3' - 9"	2' - 6"	QMARK CU945	(1)(2)(3)(4)

NOTES:
(1) PROVIDE FRAME FOR CEILING MOUNTING IN GYP BOARD CEILING OR T-BAR CEILING.
(2) PROVIDE SUPPORTS FROM STRUCTURE.
(3) CONTROLLED WITH DDC HEATING ONLY THERMOSTAT.
(4) UNITS SHALL HAVE BRIGHT-WHITE FINISH.

EXHAUST FAN SCHEDULE

SYMBOL	LOCATION	TYPE	CFM	E.S.P	MOTOR	DRIVE	UNIT WTS. LBS	MAKE & MODEL	NOTES
EF-1	BATHROOM	ROOF MOUNTED	750	0.5	.25 HP 115/1/60	BELT	30	COOK 100 ACEB	(1)(2)
EF-2	BATHROOM	ROOF MOUNTED	825	0.5	.25 HP 115/1/60	BELT	30	COOK 100 ACEB	(1)(2)
EF-3	KITCHEN	UPBLAST	5400	0.5	.75 HP 115/1/60	BELT	350	TWIN CITY BCRUR 300B	

NOTES:
(1) EXHAUST FAN TO BE ROOF-MOUNTED DOWN BLAST, COMPLETE WITH SPUN ALUMINUM HOOD, BIRDSCREEN, DISCONNECT SWITCH UNDER HOOD, FACTORY PREFAB CURB AND BACKDRAFT DAMPER. SEE DEATIL 10/M6.1.
(2) EXHAUST FAN SHALL BE COMPLETE WITH 18" HIGH FACTORY PRE-FAB ROOF CURB.
(3) PROVIDE GREASE CUP, HINGED BASE, AND FACTORY DISCONNECT. RE-USE EXISTING CURB IF POSSIBLE.

ELECTRIC UNIT HEATER

SYMBOL	LOCATION	MOUNTING	CFM	HEATING M.B.H	AMPS	POWER	MAKE & MODEL	NOTES
EUH-1	STOR. & MECH.	CEILING	700	19.2	16.2	208/3/60	MARKEL HF2B5107CA1L	(1)

NOTES:
(1) PROVIDE MOUNTING BRACKET, DISCONNECT, SUMMER FAN SWITCH AND DDC HEATING ONLY THERMOSTAT.

DIFFUSER SCHEDULE

SYMBOL	TYPE	SIZE	LOCATION	AIR PATTERN	MAKE & MODEL	NOTES (1)
D-1	SUPPLY	6"ø	CEILING	4-WAY	PRICE - SMD	(2)
D-2	SUPPLY	12"x12"	CEILING	3-WAY	PRICE - SMD	(3)
D-3	SUPPLY	10"ø	CEILING	4-WAY	PRICE - SMD	(2)
D-4	SUPPLY	12"ø	CEILING	4-WAY	PRICE - SMD	(2)
D-5	SUPPLY	14"ø	CEILING	4-WAY	PRICE - SMD	(2)

NOTES:
(1) DIFFUSER TO HAVE A BRIGHT-WHITE FINISH
(2) DIFFUSER SHALL BE A LOUVERED TYPE WITH A 24"X24" MODULE FOR T-BAR CEILING OR FRAME FOR GYP BOARD CEILING INSTALLATION. FACTORY PROVIDED SQUARE TO ROUND ADAPTOR.
(3) DIFFUSER SHALL BE A LOUVERED TYPE WITH A 12"X12" MODULE FOR T-BAR CEILING OR FRAME FOR GYP BOARD CEILING.

LINEAR DIFFUSER SCHEDULE

SYMBOL	TYPE	NUMBER OF SLOTS	SIZE	AIR PATTERN	MAKE & MODEL	NOTES
LD-1	SUPPLY	3	5"x46"	2-WAY	PRICE - SDS100	(1)(2)(3)(4)
LD-2	SUPPLY	3	5"x46"	2-WAY	PRICE - SDS100	(1)(2)(3)(4)
LD-3	SUPPLY	4	7"x46"	2-WAY	PRICE - SDS100	(1)(2)(3)(4)

NOTES:
(1) PROVIDE FRAME SPIRAL DUCT MOUNTED FRAM, PRICE TYP 16.
(2) INTEGRAL EQUALIZING GRID.
(3) ADJUST DIFFUSER AIR FLOW TO BE AS HORIZONTAL AS POSSIBLE WITHOUT CAUSING EXISTING LIGHT FIXTURES TO SWAY.
(4) ANODIZED ALUMINUM FINISH.

GRILLES SCHEDULE

SYMBOL	TYPE	SIZE	LOCATION	MAKE & MODEL	NOTES (1)
G-1	RETURN	24"x24"	CEILING	PRICE 535	(2)
G-2	RETURN	12"x6"	SIDEWALL	PRICE 535	
G-3	RETURN	24"x12"	SIDEWALL	PRICE 535	
G-4	RETURN	48"x14"	SIDEWALL	PRICE 535	
SG-1	SUPPLY	10"x6"	DUCT MOUNTED	PRICE 520	(3)
SG-4	SUPPLY	16"x6"	DUCT MOUNTED	PRICE 520	(3)

NOTES:
(1) GRILLE SHALL HAVE BRIGHT WHITE FINISH.
(2) PROVIDE FRAME FOR T-BAR CEILING OR GYP BOARD CEILING.
(3) PROVIDE INTEGRAL OPPOSED BLADE DAMPER.

MECHANICAL EQUIPMENT SCHEDULE

HP-1 (INDOOR) INDOOR UNIT: HEAT PUMP, HIGH WALL MOUNTED, HORIZONTAL DISCHARGE, 441 CFM, 11,730 BTUH TOTAL COOLING CAPACITY AT 95 DEG. F. O.A. TEMP, 80 DEG. F. D.B./67 DEG. F. W.B. INDOOR AIR, AND 10,428 BTUH HEATING CAPACITY AT 3 F. O.A.,70 F. INDOOR AIR. UNIT IS POWERED BY OUTDOOR UNIT. UNIT TO BE COMPLETE WITH CLEANABLE FILTER, CHECK & EXPANSION VALVE KIT, PRE-CHARGED LINE SET, DRIP PAN, INTEGRAL PUMP, AND DRAIN CONNECTION OUT BACK SIDE OF UNIT. PROVIDE WALL MOUNTED THEROMSTAT WITH NIGHT SET BACK. THERMOSTAT SHALL BE HARD WIRED TO UNIT

UNIT DIM: 8.86" L x 31.30" W x 11.61" H
WEIGHT: 43.65 LBS
MANUFACTURER: CARRIER
MODEL: 45MAHA012XA3

HP-1 (ON ROOF) OUTDOOR UNIT: AIR COOLED, HORIZONTAL DISCHARGE, INVERTER COMPRESSOR. UNIT TO BE MOUNTED ON HOUSEKEEPING PAD. 11,730 BTUH TOTAL COOLING CAPACITY AT 95 DEG. F. O.A. TEMP, 80 DEG. F. DB/67 DEG. F. WB, 10,428 BTUH TOTAL HEATING CAPACITY AT 5 DEG. F. O.A. TEMP. MCA=15, 208/1/60, MOTOR TO BE UL LISTED. UNIT TO BE COMPLETE WITH CRANKCASE HEATER, AMBIENT CONTROL KIT TO 0 DEG. F. , AND ALL CONTROLS FOR AUTOMATIC OPERATION. CONTRACTOR TO PROVIDE 4" HOUSE KEEPING PAD ABOVE GROND LEVEL.

UNIT DIM: 12.99" L x 31.69" W x 21.81" H
WEIGHT: 72.75 LBS
SEER/EER: 25.5/13.5
COP: 3.76
MANUFACTURER: CARRIER
MODEL: 37MAHAQ12AA3

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#9356472-2202
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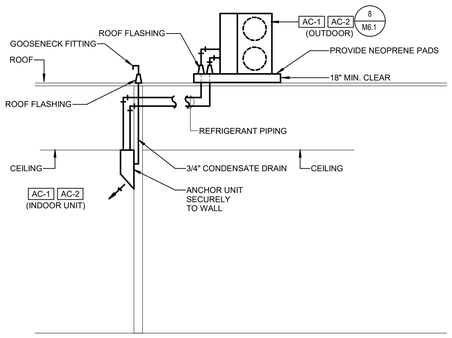
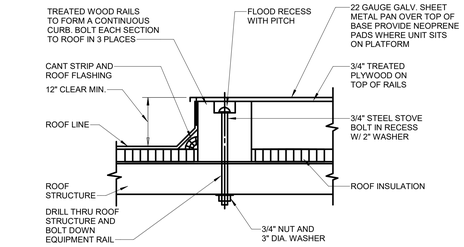
M5.1



ROOM AC UNIT DETAIL

SCALE: NTS

9 / M6.1

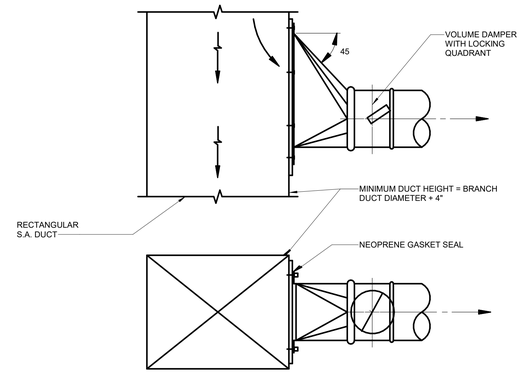


NOTE:
PROVIDE EQUIPMENT BASE AT MAKE-UP AIR UNITS IF REQUIRED. ANCHOR BASE SECURELY TO STRUCTURE AND EQUIPMENT TO BASE. BASE SHALL BE LARGE ENOUGH FOR ALL UTILITIES TO RISE THRU BASE. COVER OVER BASE SHALL BE ONE PIECE WATER TIGHT TURNED OVER EDGES, FLASH AT UTILITIES.

ROOFTOP EQUIPMENT BASE DETAIL

SCALE: NTS

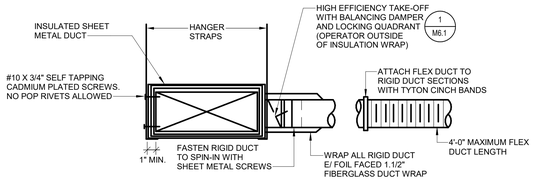
5 / M6.1



45 DEG. HIGH EFFICIENCY TAKE-OFF

SCALE: NTS

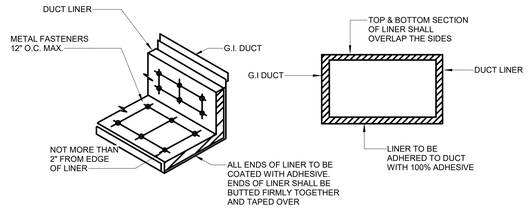
1 / M6.1



FLEX DUCT H.E.T. FITTING DETAIL

SCALE: NTS

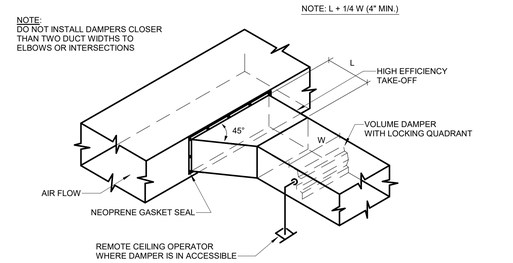
10 / M6.1



DUCT LINER DETAIL

SCALE: NTS

6 / M6.1



BRANCH DUCT TAKE-OFF DETAIL

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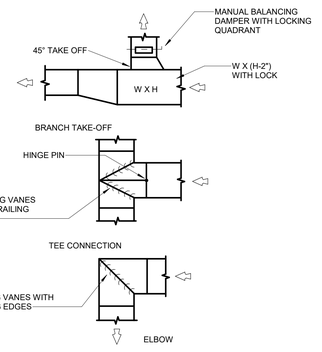
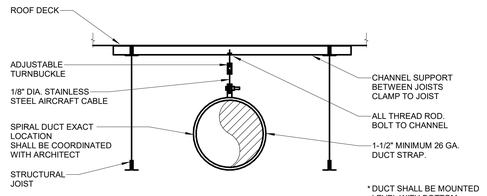
2 / M6.1



LOW PRESSURE DUCT DETAIL

SCALE: NTS

11 / M6.1

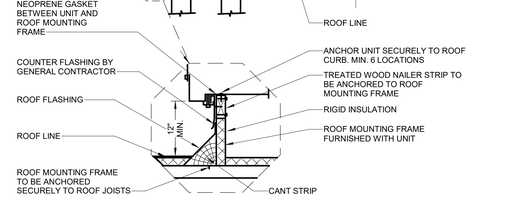


* DUCT SHALL BE MOUNTED LEVEL WITH BOTTOM CHORD OF JOIST, OR AS DIRECTED BY ARCHITECT.

EXPOSED SPIRAL DUCT HANGER DETAIL

SCALE: NTS

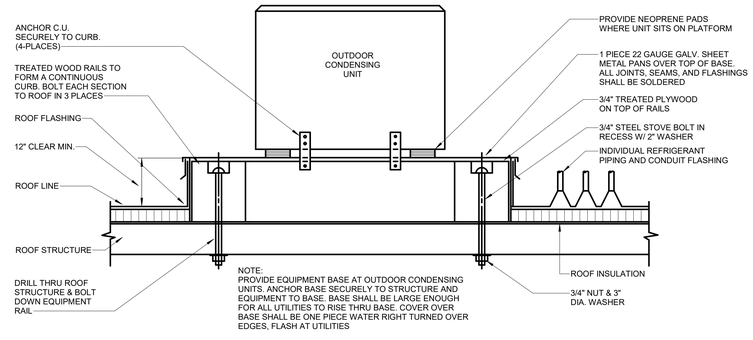
7 / M6.1



ROOF MOUNTED AIR CONDITIONING UNIT DETAIL

SCALE: NTS

3 / M6.1

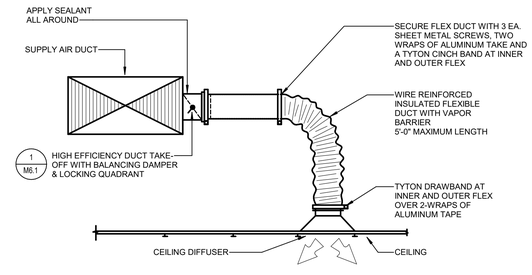


NOTE:
PROVIDE EQUIPMENT BASE AT OUTDOOR CONDENSING UNITS. ANCHOR BASE SECURELY TO STRUCTURE AND EQUIPMENT TO BASE. BASE SHALL BE LARGE ENOUGH FOR ALL UTILITIES TO RISE THRU BASE. COVER OVER BASE SHALL BE ONE PIECE WATER RIGHT TURNED OVER EDGES, FLASH AT UTILITIES

AC OUTDOOR UNIT DETAIL

SCALE: NTS

8 / M6.1



CEILING DIFFUSER DETAIL

SCALE: NTS

4 / M6.1

11/05/2026 11:47:37 AM 12" = 1'-0"

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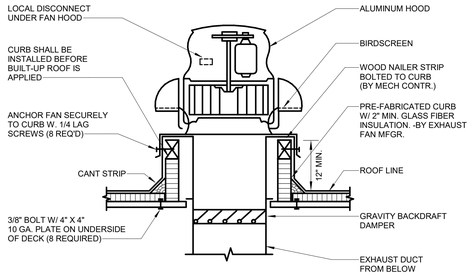
REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY
55 EAST 200 SOUTH
ORANGEVILLE, UTAH
MECHANICAL UPGRADE

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT #: 176525

M6.1

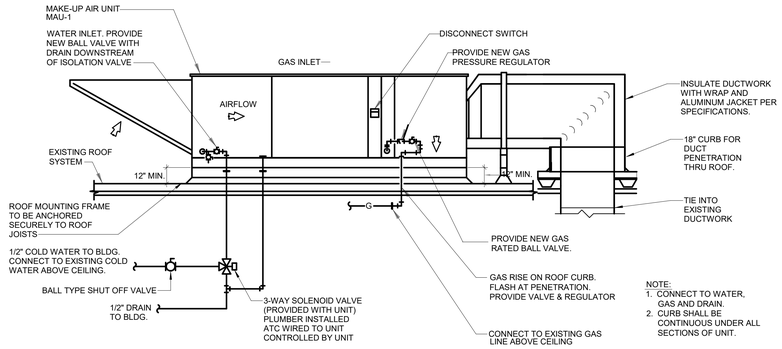
1/15/2026 11:47:37 AM As indicated



ROOF MOUNTED EXHAUST FAN DETAIL

SCALE: NTS

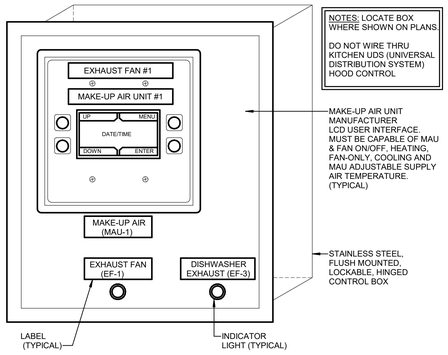
4 / M6.2



MAKE-UP AIR UNIT MAU-1 DETAIL

SCALE: NTS

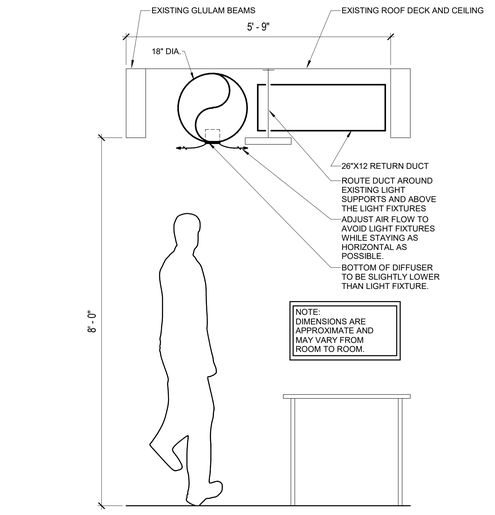
1 / M6.2



MAKE-UP AIR UNIT AND KITCHEN EXHAUST CONTROL PANEL DETAIL

SCALE: NTS

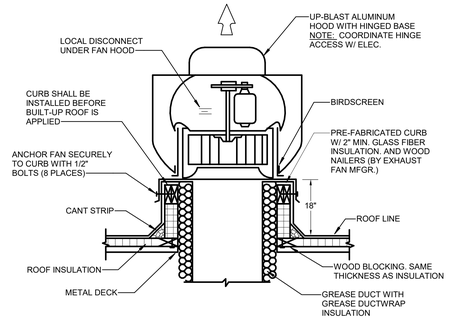
5 / M6.2



TYPICAL CLASSROOM DIFFUSER

SCALE: NTS

2 / M6.2



KITCHEN HOOD ROOF MOUNTED EXHAUST FAN

SCALE: NTS

3 / M6.2

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REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY
55 EAST 200 SOUTH MECHANICAL UPGRADE ORANGEVILLE, UTAH

DRAWN BY: STAFF
CHECKED BY: M.T.
DATE: JAN 2026
PROJECT #: 176525

M6.2

11/5/2026 9:30:29 AM 1/8" = 1'-0"

GENERAL NOTES

1. CONSULT ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
2. VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH IN. CONSULT ALL APPLICABLE CONTRACT DRAWINGS AND SHOP DRAWINGS TO INSURE NEC CODE CLEARANCES REQUIRED AROUND ALL ELECTRICAL EQUIPMENT.
3. CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS,ETC) OF ALL EQUIPMENT FURNISHED UNDER ALL DIVISIONS, INCLUDING ALL EXISTING EQUIPMENT TO BE RE-USED. REVIEW ALL SHOP DRAWINGS AND EXISTING EQUIPMENT BEFORE BEGINNING ROUGH-IN.
4. SEE SECTION 26 5100 OF THE SPECIFICATION FOR REQUIRED COORDINATION MEETINGS WITH MECHANICAL AND CEILING CONTRACTORS.
5. SEE APPLICABLE SHOP DRAWINGS FOR ROUGH IN LOCATION OF ALL EQUIPMENT, WIRING DEVICES, ETC. WHERE APPLICABLE MOUNT ALL WIRING DEVICES ABOVE BACK SPLASH EXCEPT THOSE SERVING UNDER COUNTER EQUIPMENT.
6. FINISHES OF ALL LIGHT FIXTURES SHALL BE AS SELECTED BY ARCHITECT.
7. THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE MECHANICAL CONTRACTOR SUCH THAT NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THRU ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.
8. ELECTRICAL BOXES SHALL NOT BE LOCATED IN MASONRY COLUMNS IN BRICK WALLS OR IN GROUTED CELLS ADJACENT TO OPENINGS. COORDINATE LOCATION OF BOXES WITH MASONRY CONTRACTOR.
9. ALL PENETRATIONS OF FIRE RATED FLOORS, WALLS, AND CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL TO MAINTAIN FIRE RATING OF SURFACE PENETRATED.
10. CONTRACTOR SHALL VERIFY FURNITURE LAYOUT PRIOR TO ANY FLOORBOX OR POKE-THRU INSTALLATION. COORDINATE EXACT LOCATION OF FLOOR BOX OR POKE-THRU WITH OWNER AND FURNITURE PROVIDER PRIOR TO ROUGH-IN.
11. CIRCUITS EXTENDING OVER 70' FOR 120 VOLT AND 115' FOR 277 VOLT 20 AMP CIRCUITS SHALL BE RUN WITH CONDUCTORS PER TABLE BELOW.

20 AMP MINIMUM BRANCH CIRCUIT CONDUCTOR SIZING		
MAXIMUM LENGTH	BRANCH CIRCUIT VOLTAGE	
CONDUCTOR LENGTH (FT)	120 VOLT	277 VOLT
<70	MIN. #12 AWG	MIN. #12 AWG
70-115	MIN. #10 AWG	MIN. #12 AWG
115-170	MIN. #8 AWG	MIN. #10 AWG
170 - 270	MIN. #6 AWG	MIN. #8 AWG
271-380	NOTE B	MIN. #8 AWG
>380	NOTE B	NOTE B

A. THESE ARE BASED ON MAXIMUM LENGTH OF CIRCUIT.

B. PERFORM VOLTAGE DROP CALCULATIONS AND PROVIDE CONDUCTOR SIZE TO KEEP BRANCH CIRCUIT VOLTAGE DROP LESS THAN 3% WITH A 15 AMP LOAD.

C. CONTRACTOR SHALL ENSURE THAT THE INSTALLATION OF EACH BRANCH CIRCUIT STAYS WITHIN 3% VOLTAGE DROP FOR A 15 AMP LOAD. IF NECESSARY,CONTRACTOR SHALL INCREASE WIRE AND CONDUIT SIZE TO MEET THE STANDARD AT NO ADDITIONAL COST TO OWNER.

12. ALL CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES PARALLEL TO, OR AT RIGHT ANGLES TO, THE STRUCTURE OR ADJACENT BUILDING ELEMENTS. SEPARATIONS BETWEEN CONDUITS AND FASTENINGS OF CONDUITS SHALL BE NEAT AND CONSISTENT. CONDUIT SHALL BE INSTALLED AS TIGHT TO THE BOTTOM OF STRUCTURAL ELEMENTS WHEN PARALLEL TO JOISTS AS CODE WILL ALLOW. OVERALL INSTALLATION SHALL BE ACCOMPLISHED IN AN AESTHETIC AND WORKMANLIKE MANNER. NO CONDUITS SHALL BE ALLOWED TO RUN PERPENDICULAR TO THE BOTTOM CHORD OF THE JOISTS.
13. DIVISION 26 SHALL VISIT SITE PRIOR TO BIDDING. BIDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS. FIELD VERIFY ALL ELECTRICAL EQUIPMENT.
14. BIDDERS SHALL EXAMINE THE SITE AND THE COMPLETE SET OF PLANS AND SPECIFICATIONS COVERING THE ENTIRE PROJECT. THEY SHALL BECOME FULLY CONVERSANT WITH THE TYPE OF GENERAL CONSTRUCTION AS WELL AS ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM.
15. ELECTRICAL CONTRACTOR SHALL COORDINATE PROJECT PHASING WITH GENERAL CONTRACTOR AND BID AND PERFORM RESPONSIBILITIES FOR THIS PROJECT TO GENERAL CONTRACTOR EXPECTATIONS.
16. COORDINATE ELECTRICAL DEMOLITION WITH ARCHITECTURAL DRAWINGS AND GENERAL CONTRACTOR.
17. CLOSELY COORDINATE ANY REQUIRED POWER SHUTDOWNS WITH HEAD CUSTODIAN AND OWNER.
18. WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OF INSTALLATION OR NATURE OF WORK REQUIRED, THE CONTRACTOR WILL MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES MAY BE MADE WITHOUT WRITTEN PERMISSION OF THE OWNER.
19. SEQUENCE, COORDINATE, AND INTEGRATE INSTALLATIONS OF ELECTRICAL MATERIALS AND EQUIPMENT FOR EFFICIENT FLOW OF THE WORK. GIVE PARTICULAR ATTENTION TO LARGE EQUIPMENT REQUIRING POSITIONING PRIOR TO CLOSING-IN THE BUILDING. COORDINATE THE CUTTING AND PATCHING OF BUILDING COMPONENTS TO ACCOMMODATE INSTALLATION OF ELECTRICAL EQUIPMENT AND MATERIALS.
20. DO NOT PENETRATE STRUCTURAL ELEMENTS OF FLOORS, WALLS, CEILINGS, ROOFS, ETC. DISCONNECT AND RECONNECT ANY/ALL FIXTURES, DEVICES, EQUIPMENT, ETC. REQURED FOR PROPER COMPLETION OF THE WORK.
21. CONTRACTOR MUST CONCEAL ALL RACEWAY THROUGHOUT THE PROJECT. SURFACE MOUNT RACEWAY IS UNACCEPTABLE EXCEPT WHERE THE USE OF PAINTED SURFACE METAL RACEWAYS (EMT) IS APPROVED SOLEY BY THE ARCHITECT. PAINT TO MATCH SURROUNDING SURFACE.
22. ALL CONCRETE CUT AND PATCH WORK REQUIRED FOR FLOOR BOXES INSTALLATION AND/OR RELOCATION OF ELECTRICAL DEVICES AND PANELS THAT REQUIRE WORK WITHIN THE FLOORS SHALL BE DONE BY ELECTRICAL CONTRACTOR. ALL CORE CUTTING FOR NEW SERVICE SHALL ALSO BE COVERED UNDER ELECTRICAL CONTRACTORS REQUIRED WORK.
23. ALL CONCRETE CUT AND PATCH WORK REQUIRED FOR FLOOR BOXES INSTALLATION AND/OR RELOCATION OF ELECTRICAL DEVICES AND PANELS THAT REQUIRE WORK WITHIN THE FLOORS SHALL BE DONE BY ELECTRICAL CONTRACTOR. ALL CORE CUTTING FOR NEW SERVICE SHALL ALSO BE COVERED UNDER ELECTRICAL CONTRACTORS REQUIRED WORK.
24. CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE OF ALL WASTE, SURPLUS MATERIALS, RUBBISH OR DEBRIS WHICH IS CAUSED BY HIS EMPLOYEES OR RESULTING FROM HIS WORK. AFTER ALL EQUIPMENT AND DEVICES HAVE BEEN INSTALLED, REMOVE ALL LABELS, STICKERS, STAINS, TEMPORARY COVERS, ETC. IDENTIFICATION PLATES ON ALL EQUIPMENT.
25. IT IS THE INTENT THAT THE FOREGOING WORK SHALL BE COMPLETE IN EVERY RESPECT AND THAT ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR.
26. PROVIDE GFCI CIRCUIT BREAKERS SERVING RECEPTACLES PROVIDING POWER TO DRINKING FOUNTAINS, REFRIGERATORS, VENDING MACHINES, DISPOSALS, AND WASHING MACHINES.
27. CAREFULLY REVIEW THE ENTIRE DRAWING PACKAGE PRIOR TO PROVIDING BID, INCLUDING THE ARCHITECTURAL AND MECHANICAL DRAWINGS. NOT REVIEWING THE ENTIRE SET IS NOT ACCEPTABLE.
28. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
29. PROVIDE WEATHERPROOF, NEMA 3R RATED EQUIPMENT FOR ALL EXTERIOR APPLICATIONS.

ELECTRICAL ABBREVIATIONS INDEX

ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION
A	AMPS	GRC	GALVANIZED RIGID CONDUIT	PVC	POLYVINYL CHLORIDE CONDUIT
AC	ALTERNATING CURRENT	GYP BD	GYPSUM BOARD	PWR	POWER
ACLG	ABOVE CEILING	HOA	HAND-OFF-AUTOMATIC SWITCH	QUAN	QUANTITY
ADC	ANALOG-TO-DIGITAL CONVERTER	HORIZ	HORIZONTAL	R	RESISTANCE
		HP	HORSE POWER	RECEP, RECPT	RECEPTACLE
AF	AMP FRAME	HPF	HIGH POWER FACTOR	REQ.REQD	REQUIRED
AFC	AVAILABLE FAULT CURRENT	HT	HEIGHT	REX	REQUEST TO EXIT
AFCI	ARC FAULT CIRCUIT INTERRUPTER	HTG	HEATING	RF	RADIO FREQUENCY
		HTR	HEATER	RFM	ROOF MOUNTED
AFF / A.F.F.	ABOVE FINISH FLOOR	HV	HIGH VOLTAGE	RL	LOAD RESISTANCE
AFG	ABOVE FINISHED GRADE	HVAC	HEATING, VENTILATING & AIR CONDITIONING	RLA	RATED LOAD AMPS
AHU	AIR HANDLING UNIT	INCAND	INCANDESCENT	RM	ROOM
AIC	AMPS INTERRUPTING CAPACITY	HZ	HERTZ	RMC	RIGID METALLIC CONDUIT
AL	ALUMINUM	I/W	INTERLOCK WITH	RMP	ROCKY MOUNTAIN POWER
ALT	ALTERNATE	IC	INTERRUPTING CAPACITY	RMS	ROOT MEAN SQUARE
AM	AMPS METER	IFC	INTERNATIONAL FIRE CODE	RNC	RIGID NON-METALLIC COND.
AMP	AMPERE	IG	ISOLATED GROUND	RPM	ROTATIONS-PER-MINUTE
AMPL	AMPLIFIER	IIR	INFINITE IMPULSE RESPONSE	RS	SOURCE RESISTANCE
ANN	ANNUNCIATOR	IL	FILTER	RT	TOTAL RESISTANCE
AOE	AUDIO-OVER-ETHERNET	IMC	INTERMEDIATE METALLIC CONDUIT	RTU	ROOF TOP UNIT
APPROX	APPROXIMATELY			RX	RECEIVER
AQ-STAT	AQUASTAT	INCAND	INCANDESCENT	S/N	SOLID/NEUTRAL
ARCH	ARCHITECT, ARCHITECTURAL	IR	INFRARED	S/S	STOP/START PUSHBUTTONS
AS	AMP SWITCH	IT	TOTAL CURRENT	SBB	SECONDARY BONDING BUSBAR
AT	AMP TRIP	J-BOX	JUNCTION BOX	SBG	SUPPLEMENTARY BONDING GRID
ATS	AUTOMATIC TRANSFER SWITCH	KCMIL	1000 CIRCULAR MILS (MCM)		
AUTO	AUTOMATIC	KHZ	THOUSANDS OF HZ	SBJ	SYSTEM BONDING JUMPER
AUX	AUXILIARY	KV	KILOVOLT	SC	SURFACE CONDUIT
AV	AUDIO/VISUAL	KVA	KILOVOLT AMPERES	SCA	SHORT CIRCUIT AMPERES
AWG	AMERICAN WIRE GAUGE	KVAR	KILOVARS	SDI	SERIAL DIGITAL INTERFACE
BATT	BATTERY	KW	KILOWATT	SE	SERVICE ENTRANCE
BC	BARE COPPER	KWH	KILOWATT HOUR	SEC	SECONDARY
BD	BOARD	LCS	C-WEIGHTED SLOW SOUND LEVEL	SES	SMOKE EVACUATION SYSTEM
BFC	BELOW FINISHED CEILING	LEQ	EQUIVALENT SOUND LEVEL	SHT	SHEET
BFG	BELOW FINISHED GRADE	LFMC	LIQUID-TIGHT FLEX. NON-METAL COND.	SIM	SIMILAR
BLDG	BUILDING			SLD	SINGLE-LINE DIAGRAM
BMS	BUILDING MANAGEMENT SYSTEM	LFNC	LIQUID-TIGHT FLEX. NON-METAL COND.	SNR	SIGNAL-TO-NOISE RATIO
BPM	BEATS-PER-MINUTE			SP	SPARE
C, CND	CONDUIT	LOC	LOCATE OR LOCATION	SPDIF	SONY PHILLIPS DIGITAL INTERFACE
C.O.	CONDUIT ONLY	LP, SPL	SOUND PRESSURE LEVEL	SPEC	SPECIFICATIONS
C/W	COMPLETE WITH	LRA	LOCKED ROTOR AMPS	SPKR	LOUDSPEAKER
CAB	CABINET	LT	LIGHT	SPL	SOUND PRESSURE LEVEL
CAT	CATEGORY CABLE	LTG	LIGHTING	SPP	SINGLE-POINT POWER
CAT#	CATALOG	LTNG	LIGHTNING	SR	SURFACE RACEWAY
CATB	COMMUNITY ANTENNA TELEVISION	LU	LOUDNESS UNIT METERING	SS	SELECTOR SWITCH
		LUFS	LOUDNESS UNIT FULL SCALE	SSW	SELECTOR SWITCH
CATV	CABLE TELEVISION	LV	LOW VOLTAGE	STA	STATION
CB	CIRCUIT BREAKER	M/C	MOMENTARY CONTACT	STD	STANDARD
CCTV	CLOSED CIRCUIT TELEVISION	MAC	MEDIA ACCESS CONTROL	STP	SHIELDED TWISTED PAIR
CF	CREST FACTOR	MAG.S	MAGNETIC STARTER	SURF	SURFACE MOUNTED
CKT	CIRCUIT	MAX	MAXIMUM	SW	SWITCH
CLG	CEILING	MB	MAIN BUS	SWBD	SWITCHBOARD
CMPR	COMPRESSOR	MC	MECHANICAL CONTRACTOR	SWGR	SWITCHGEAR
CNTR	CONTRACTOR	MCA	MINIMUM CIRCUIT AMPS	SYM	SYMMETRICAL
CO	CONDUIT ONLY	MCB	MAIN CIRCUIT BREAKER	SYS	SYSTEM
CODEC	CODER-DECORDER	MCC	MOTOR CONTROL CENTER	TBB	TELECOMMUNICATIONS BONDING BACKBONE
COMB	COMBINATION	MCM	1000 CIRCULAR MILLS		
CONN	CONNECTION	MDC	MAIN DISTRIBUTION CENTER	TBC	TELECOMMUNICATIONS BONDING CONDUCTOR
CONST	CONSTRUCTION	MDP	MAIN DISTRIBUTION PANEL		
CONT	CONTINUATION OR CONTINUOUS	MEP	MECHANICAL, ELECTRICAL, AND PLUMBING	TC	TEMP. CONTROL CONTR.
CONV	CONVECTOR			TEL	TELEPHONE
CP	CIRCULATING PUMP	MFR	MANUFACTURER	TERM	TERMINAL
CRT	COMPUTER TERMINAL	MFS	MAIN FUSED DISCONNECT SWITCH	TL	TWIST LOCK
CT	CURRENT TRANSFORMER			TR	TAMPER RESISTANT
CU	COPPER	MH	MANHOLE	T-STAT	THERMOSTAT
CV	CONSTANT VOLTAGE	MIC	MICROPHONE	TTB	TELEPHONE TERMINAL BOARD
DAC	DIGITAL-TO-ANALOG CONVERTER	MIN	MINIMUM	TTC	TELEPHONE TERMINAL CABINET
		MISC	MISCELLANEOUS	TV	TELEVISION
DB	DECIBEL	MLO	MAIN LUGS ONLY	TVTC	TELEVISION TERMINAL
DBFS	DB REF. FULL SCALE	MMS	MANUAL MOTOR STARTER	TX	TRANSMITTER
DBM	DB REF. 0.001 WATT	MNF	MANUFACTURER	TYP	TYPICAL
DBU	DB REF. 0.775 V	MOA	MULTI-OUTLET ASSEMBLY	UC	UNDER COUNTER
DBV	DB REF. 1 V	MSBD	MAIN SWITCHBOARD	UE	UNDERGROUND ELECTRICAL
DC	DIRECT CURRENT	MSP	MOTOR STARTER PANELBOARD	UG	UNDERGROUND
DCP	DOMESTIC CIRCULATING PUMP	MSS	MOTOR STARTER SWITCH	UH	UNIT HEATER
DED	DEDICATED	MTG	MOUNTING	UNO	UNLESS NOTED OTHERWISE
DEPT	DEPARTMENT	MTR	MOTOR	UPS	UNINTERRUPTED POWER SUPPLY
DET	DETAIL	MTS	MANUAL TRANSFER SWITCH		
DFA	DROP FROM ABOVE	N	NEW	UT	UNDERGROUND TELEPHONE
DIA	DIAMETER	N.I.C.	NOT IN CONTRACT	UTIL	UTILITY
DISC	DISCONNECT	N/A	NOT APPLICABLE	UTP	UNSHIELDED TWISTED PAIR
DIST	DISTRIBUTION	N1	NEMA 1	UV	ULTRAVIOLET
DN	DOWN	N3R	NEMA 3R	V	VOLT (KV-KILOVOLT)
DPR	DAMPER	NAC	NOTIFICATION APPLIANCE CIRCUIT PANEL	VA	VOLT/AMPS
DR	DYNAMIC RANGE			VAR, VAR	VOLT-AMPS/REACTIVE
DS	DISCONNECT SWITCH	NC	NORMALLY CLOSED	VAC	VOLTS ALTERNATING CURRENT
DT	DOUBLE THROW	NEC	NATIONAL ELECTRICAL CODE	VDC	VOLTS DC CURRENT
DWG	DRAWING	NEMA	NATIONAL ELECT. MANUFAC. ASSOC.	VDT	VIDEO DISPLAY TERMINAL
EC	ELECTRICAL CONTRACTOR			VERT	VERTICAL
EF	EXHAUST FAN	NFDS	NON-FUSED SAFETY DISCONNECT SWITCH	VFD	VARIABLE FREQUENCY DRIVE
EG	EMERGENCY GENERATOR			VI	VOLUME INDICATOR
ELEC	ELECTRIC, ELECTRICAL	NFPA	NATIONAL FIRE PROTECTION ASSOC.	VIF	VERIFY IN FIELD
ELEV	ELEVATOR			VM	VOLT METER
ELU	EMERGENCY LIGHTING UNIT	NL	NIGHT LIGHT, BYPASS LOCAL SWITCHING	VOL	VOLUME
EM	EMERGENCY/EGRESS BATTERY			VU	VOLUME UNIT
EMI	ELECTRO-MAGNETIC INTERFERENCE	NO	NORMALLY OPENED	W	WATTS
		NPF	NORMAL POWER FACTOR	W	WITH
EMS	ENERGY MANAGEMENT SYSTEM	NTS	NOT TO SCALE	W/O	WITHOUT
EMT	ELECTRICAL METALLIC TUBING	NVR	NETWORK VIDEO RECORDER	WG	WIRE GUARD
ENT	ELEC. NON-METAL. TUBING	OC	ON CENTER	WH	WATTHOUR METER
EP	ELECTRIC PNEUMATIC	OH	OVERHEAD	WP	WEATHERPROOF/NEMA 3R
EQUIP	EQUIPMENT	OL	OVERLOADS	XFMR	TRANSFORMER
ER	EXISTING TO BE RELOCATED	OS & Y	OUTSIDE SCREW & YOKE	XFMR SW	SW TRANSFER SWITCH
ES	SOURCE VOLTAGE	OSI	OPEN SYSTEM INTEGRATION	XFR	TRANSFER
EWC	ELECTRIC WATER COOLER	PA	PASCAL	XL	X-CONNECTOR LOCKING
FA	FIRE ALARM	PB	PUSHBUTTON	XLR	X-CONNECTOR LOCKING
FABP	FIRE ALARM BOOSTER PANEL	PBB	PRIMARY BONDING BUSBAR		RUBBERIZED
FACP	FIRE ALARM CONTROL PANEL	PC	PLUMBING CONTRACTOR	XP	EXPLOSION PROOF
FC	FOOT CANDLE	PCM	PULSE CODE MODULATION	XR	EXISTING TO BE REMOVED
FCU	FAN COIL UNIT	PDU	POWER DISTRIBUTION UNIT		
FIR	FINITE IMPULSE RESPONSE FILTER	PE	PNEUMATIC ELECTRIC		
		PED	PEDESTAL		
FIXT	FIXTURE	PF	POWER FACTOR		
FLR	FLOOR	PFR	PHASE FAILURE RELAY	1P	ONE-POLE
FLUOR	FLUORESCENT	PIV	POST INDICATING VALVE	2P	TWO-POLE
FMC	FLEXIBLE METAL CONDUIT	PLEN	PLENUM	3P	THREE-POLE
FU	FUSE	PNL	PANEL	4P	FOUR-POLE
FUDS	FUSE SAFETY DISCONNECT SWITCH	POC	POINT OF CONNECTION	∠	ANGLE
		POE	POWER OVER ETHERNET	&	AND
GA	GAUGE	POS	POINT OF SALE	@	AT
GAL	GALLON	PP	POWER POLE	°	DEGREE
GALV	GALVANIZED	PPM	PEAK PROGRAM METER	Δ	DELTA
GC	GENERAL CONTRACTOR	PR	PAIR	', FT	FOOT, FEET
GEC	GRND. ELEC. COND. AT SES	PRI	PRIMARY	", IN	INCH, INCHES
GEN	GENERATOR	PROJ	PROJECTION	#	NUMBER
GFCI	GROUND FAULT CURRENT INTERRUPTER	PRV	POWER ROOF VENTILATOR	Ω, OHM	UNIT OF ELECTRICAL RESISTANCE
		PSI	POUNDS-PER-SQUARE-INCH		
GFI	GROUND FAULT INTERRUPTER	PT	POTENTIAL TRANSFORMER	Ø, PH	PHASE
GFP	GROUND FAULT PROTECTOR	PTP	POINT TO POINT	℄, CTR	CENTER LINE, CENTER
GND	GROUND	PTZ	PAN, TILT, AND ZOOM	P	PLATE

SYMBOL LEGEND GENERAL NOTES

1. REFER TO LUMINAIRE SCHEDULE FOR FIXTURE TYPES, MOUNTING REQUIREMENTS, WATTAGE & DETAILS.
2. WIRE LIGHT FIXTURE FROM ADJACENT JUNCTION BOX.
3. CONNECT NEAREST UN-SWITCHED HOT CONDUCTOR TO EMERGENCY BALLAST.
4. LIGHT FIXTURES ARE SCALED WITHIN THE DRAWINGS BASED ON ACTUAL DIMENSIONS.
5. REFER TO DRAWINGS FOR DIRECTIONAL ARROWS.
6. SUBSCRIPT INDICATES FIXTURES TO BE CONTROLLED.
7. HEIGHT MEASURED TO CENTER LINE OF THE BOX FROM THE FINISHED FLOOR.
8. NOT USED.
9. NEMA TYPE 'ND' NON-FUSED UNLESS NOTED 'F' (FUSED). USE HEAVY DUTY (HD) DEVICE FOR 480 VOLT.
10. SIZE TO THE EQUIPMENT BEING CONTROLLED.
11. PROVIDE H.O.A. & S.S. PUSHBUTTONS AS REQUIRED.
12. DOUBLE ARROWS INDICATES A DOUBLE FACE UNIT.
13. FOR WATER COOLER LOCATION, REFER TO DIAGRAM R002. FOR ALL OTHER LOCATIONS, MOUNT AT +16" TO BOTTOM OF BOX FROM FINISHED FLOOR, OR AS NOTED.
14. ARROWS SHOWN ON DEVICE INDICATE AIMING DIRECTION.
15. COORDINATE WITH DOOR HARDWARE SUPPLIER.
16. MOUNT ON TRACK OF OVERHEAD DOOR, 6" FROM TOP OF DOOR, UNLESS OVERHEAD DOOR IS A ROLL UP DOOR, THEN MOUNT PER MANUFACTURER'S INSTRUCTIONS.
17. INSTALL DEVICES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
18. DASHED LINE INDICATES EQUIPMENT CLEARANCES. ARROW INDICATES FRONT OF RACK.
19. HEIGHT MEASURED TO BOTTOM OF THE DEVICE FROM FINISHED FLOOR.
20. PROVIDE MUD RING &/OR BOX COVER APPROPRIATE FOR DEVICE/FIXTURE SERVED.
21. REFER TO DIAGRAMS, ELEVATIONS, & SCHEDULES FOR CUSTOM ROUGH-IN REQUIREMENTS.
22. ROUGH-IN TO BE HORIZONTAL.
23. REFER TO MANUFACTURER'S RECOMMENDED CABLE REQUIREMENTS FOR EXACT CABLE REQUIRED.
24. FOLLOW BICSI STANDARDS FOR CABLE ROUTING & DISTANCES.
25. SUBSCRIPT INDICATES NEMA CONFIGURATION.
26. USE A 4" X 4" BOX WITH A MUD RING TO MATCH THE DEVICE & INSTALLATION.
27. USE WITH POWER PACK.
28. PROVIDE UL LISTED DEVICE COMPATIBLE WITH THE FIRE ALARM PANEL/SYSTEM.
29. CAMERA TYPES ARE INDICATED INSIDE THE CAMERA SYMBOL.
30. SOLID BOX AROUND DEVICE INDICATES INSTALLED IN FLOOR. DASHED BOX AROUND DEVICE INDICATES INSTALLED IN CEILING.
31. WALL DEVICES NOTED WITH A CHEVRON INDICATE THE PROPOSED INSTALLATION HEIGHT. COORDINATE WITH MILLWORK SHOP DRAWINGS & ELEVATIONS FOR HEIGHT.

GENERAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING	NOTES
	EXISTING	-	-
	DEMO	-	-
	TEMPORARY	-	-
	NEW	-	-
	NOT IN CONTRACT	-	-
	SOLID ARCHED LINES INDICATE UNSWITCHED POWER CIRCUITING	-	-
	DASHED ARCHED LINES INDICATE SWITCHED POWER CIRCUITING	-	-
	ONE CIRCUIT, HOME RUN TO PANEL	-	-
	TWO CIRCUITS, HOME RUN TO PANEL	-	-
	THREE CIRCUITS, HOME RUN TO PANEL	-	-
	CONDUIT RUN CONCEALED IN FLOOR OR GROUND	-	-
	CONDUIT RUN CONCEALED IN WALL OR CEILING	-	-
	CONDUIT UP	-	-
	CONDUIT DOWN	-	-
	CONDUIT STUB LOCATION	-	CAP CONDUIT
	CONDUIT / CIRCUIT CONTINUATION	-	-
XX	CONDUIT OHP: OVERHEAD POWER SERVICE UGP: UNDERGROUND POWER SERVICE UGF: UNDERGROUND FIBER SERVICE TEL: TELEPHONE SERVICE	-	-
	CABLE TRAY SOLID BOTTOM LADDER BASKET	AS NOTED	19
	GROUND BUS BAR	+18"	7
OR	EQUIPMENT CEILING RACK	CEILING	18, 25 SEE SPEC.
	EQUIPMENT CABINET/RACK	WALL / FLOOR	18, 25 SEE SPEC.
	EQUIPMENT 2-POST CABINET/RACK	FLOOR	18, 25 SEE SPEC.
	TELEPHONE DEMARCATION BOARD	+18"	25
TC	TIME CLOCK	+48"	25
	TV BACKBOX	FLAT PANEL HEIGHT +12"	7, 22
J	JUNCTION BOX	AS NOTED	20
FB FT	FLOOR BOX / POKE-THRU - SEE SCHEDULE FOR TYPE INFORMATION	FLOOR	
	EQUIPMENT SHELVES ACS: ACCESS CONTROL PANEL IDS: INTRUSION DETECTION PANEL PSP: POWER SUPPLY PANEL RP#: LIGHTING PANEL DAS: DISTRIBUTED ANTENNA SYSTEM ERCCS: FIRST RESPONDERS RADIO SYSTEM CATV: CABLE TV CONTENT EQUIPMENT	+60" TO TOP	

GENERAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING	NOTES
X	KEYNOTE		
Space 004	ROOM NAME & NUMBER		
Space 005 XX	ROOM NAME & NUMBER W/ ZONE I.D.		
	DIAGRAM TAG		
	MATCH LINE TAG		
XXX	DEVICES WITH A CHEVRON INDICATE TO COORDINATE WITH MILLWORK PRIOR TO ROUGH-IN.		31
	ELEVATION TAG. HATCHED AREA INDICATES WHICH WALL. NUMBER INDICATES VIEW, AND CENTER NUMBER INDICATES WHICH SHEET.		
	REVISION CLOUD DELTA. SHOWN WITH CLOUD AND INDICATES A CHANGE PER THE TITLE BLOCK.		
EF-XX	TAG FOR MECHANICAL, KITCHEN, AND SHOP DEVICES. REFER TO SCHEDULES FOR INFO.		

POWER DISTRIBUTION EQUIPMENT SYMBOLS

SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	NOTES
	TRANSFORMER; SEE SINGLE-LINE DIAGRAM FOR DESCRIPTION & REQUIREMENTS.	4" CONCRETE BASE	18
	POWER DISTRIBUTION PANEL	6'-6" TO TOP	18
	FLUSH PANELBOARD	6'-6" TO TOP	18
	SURFACE PANELBOARD	6'-6" TO TOP	18

POWER SYMBOLS LEGEND

SYMBOL					DEVICE/FIXTURE DESCRIPTION	MOUNTING	NOTES
S	D	Q	SP		S: SIMPLEX D: DUPLEX Q: FOURPLEX SP: SPECIAL PURPOSE		
					WALL MOUNTED RECEPTACLE	18"	7, 25, 30
					EMERGENCY RECEPTACLE	CEILING	25, 30
					SWITCHED RECEPTACLE	18"	7
					EMERGENCY RECEPTACLE	18"	7
					GROUND FAULT RECEPTACLE	18"	7
					ISOLATED GROUND RECEPTACLE	18"	7
					RECEPTACLE (SPECIFIC HEIGHT)		7, 31
					CONTROLLED RECEPTACLE	+18" OR AS NOTED	7, 31
				#	RECEPTACLE MODIFIERS: ##": HEIGHT AFF O.C. WP: WEATHERPROOF W/ IN-USE COVER T: TAMPER-PROOF U: RECEPTACLE WITH USB OUTLET G: GROUND FAULT PROTECTED @ BREAKER H: HOSPITAL GRADE		7, 13, 31
					TOMBSTONE RECEPTACLE	COUNTER TOP	
					SPD PROTECTED RECEPTACLE	+18" OR AS NOTED	7
					CORD REEL, DEVICE VARIES	CEILING	
					CORD DROP, DEVICE VARIES	CEILING	
					MULTI-OUTLET ASSEMBLY FILLED SQUARES INDICATE 120V OUTLET OPEN SQUARES INDICATE WITH USB	+48"OR AS NOTED	7, REFER TO SPEC
					SINGLE / DUAL PORT ELECTRICAL VEHICLE CHARGER	+46"	7
					POWER POLE		
					SWITCH MODIFIERS: K: KEYED T: TIMER M: MANUAL STARTER THERMAL OVERLOAD SWITCH	+46"	7
					EMERGENCY POWER OFF PUSH BUTTON	+46"	7
					DOOR OPENER PUSH PLATE	+46"	7
					ELECTRICAL POWER METER	+72" TO TOP	
					FUSED DISCONNECT SWITCH	+60" TO TOP	9, 10
					NON-FUSED DISCONNECT SWITCH	+60" TO TOP	9, 10
					MAGNETIC STARTER	+60" TO TOP	9, 10, 11
					MAGNETIC STARTER WITH FUSED DISCONNECT	+60" TO TOP	9, 10, 11
					MAGNETIC STARTER WITH BREAKER DISCONNECT	+60" TO TOP	9, 10, 11
VFD					VARIABLE FREQUENCY DRIVE	+60" TO TOP	9, 10, 11
					MOTOR		
					PUSHBUTTON	+46"	7

POWER TAGS LEGEND

NOTES:
1. HATCHED FILL INDICATES SWITCHBOARD OR POWER DISTRIBUTION PANEL.
2. SOLID FILL INDICATES BRANCH PANEL OR LOAD CENTER.
3. DASHED BOX INDICATES CODE-REQUIRED CLEARANCE (

MECHANICAL EQUIPMENT SCHEDULE

RESPONSIBILITY LEGEND:
EC - ELECTRICAL CONTRACTOR (DIVISION 26)
MC - MECHANICAL CONTRACTOR (DIVISION 23)
CC - CONTROL CONTRACTOR

NOTES:

1. NON-FUSED DISCONNECT SWITCH
2. FUSED DISCONNECT SWITCH
3. BREAKER IN ENCLOSURE
4. MANUAL STARTER WITH THERMAL OVERLOAD
5. MAGNETIC STARTER
6. MAGNETIC STARTER/NON-FUSED DISCONNECT COMBINATION
7. MAGNETIC STARTER/FUSED DISCONNECT COMBINATION
8. MAGNETIC STARTER/BREAKER COMBINATION
9. VARIABLE FREQUENCY DRIVE
10. REDUCED VOLTAGE STARTER
11. DIRECT CONNECTION
12. RECEPTACLE/SPECIAL PURPOSE OUTLET/ETC.
13. TWO-SPEED STARTER, COORDINATE WITH MOTOR TYPE
14. SOLID STATE SOFT-STARTER

A. FURNISHED, INSTALLED AND CONNECTED UNDER DIVISION 26(16)
B. FURNISHED AND INSTALLED UNDER ANOTHER DIVISION. REQUIRED CONNECTION UNDER DIVISION 26(16)
C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIVISION 26(18)
D. FURNISHED, INSTALLED AND CONNECTED UNDER ANOTHER DIVISION

CB = CIRCUIT BREAKER
CKW = CHILLER KILOWATTS

NOTE 1: PER 250.122(A), EQUIPMENT GROUND IS NOT REQUIRED TO BE LARGER THAN THE PHASE CONDUCTOR;
NOTE 2: OVERCURRENT PROTECTION DEVICE (OCPD) SHOWN IS LOCATED AT POWER PANEL. ALL FUSING TO BE SIZED IN ACCORDANCE WITH FUSE MFR RECOMENDATION FOR MOTOR NAME PLATE RATING.
NOTE 3: ALL EQUIPMENT TO BE RATED FOR THE ENVIRONMENT FOR WHICH IT IS INSTALLED.

GENERAL NOTES

1. PER NEC 250.122(A), EQUIPMENT GROUND IS NOT REQUIRED TO BE LARGER THAN THE PHASE CONDUCTOR
2. OVERCURRENT PROTECTION DEVICE (OCPD) SHOWN IS LOCATED AT POWER PANEL. ALL FUSING TO BE SIZED IN ACCORDANCE WITH FUSE MFR RECOMMENDATION FOR MOTO...
3. ALL EQUIPMENT TO BE RATED FOR THE ENVIRONMENT FOR WHICH IT IS INSTALLED.
4. OVERLOAD PROTECTION SHALL BE PROVIDED FOR ALL MOTOR BRANCH CIRCUITS IN COMPLIANCE WITH NEC SECTION 430. SIZE OVERLOAD UNITS BASED ON ACTUAL RUNNING...

IDENTITY INFORMATION				ELECTRICAL		LOAD INFORMATION								CIRCUIT INFORMATION										STARTER			CONTROL			DISCONNECT				
													PHASE CONDUCTORS				NEUTRAL CONDUCTOR			GROUND CONDUCTOR		CONDUIT SIZE												
TYPE ID		INSTANCE ID	DESCRIPTION	VOLTAGE	PHASE	MOTOR POWER	APPARENT POWER	REAL POWER	FLA	MCA	EM POWER	TYPE	OCPD	SETS	NO.	SIZE	TYPE	NEUTRAL	SIZE	TYPE	SIZE	TYPE		TYPE	FURNISH	INSTALL	TYPE	FURNISH	INSTALL	TYPE	FURNISH	INSTALL	INTERLOCK	NOTES
CUH	-	1	CABINET UNIT HEATER	**200 V**	**3**	0.00 hp	**6.5 kVA**	5.8 kW	**18 A**	**22.5 A**	No	(Motor) Inverse Time Breaker	**30 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
CUH	-	2	CABINET UNIT HEATER	**200 V**	**3**	0.00 hp	**2.2 kVA**	1.9 kW	**6 A**	**7.5 A**	No	(Motor) Inverse Time Breaker	**15 A**	1	3	12	Cu	No	None		12	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
CUH	-	3	CABINET UNIT HEATER	**200 V**	**3**	0.00 hp	**10.4 kVA**	9.4 kW	**29 A**	**36.3 A**	No	(Motor) Inverse Time Breaker	**45 A**	1	3	8	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
EUH	-	1	ELECTRIC UNIT HEATER	**200 V**	**3**	0.00 hp	**6.9 kVA**	6.2 kW	**19.2 A**	**24 A**	No	(Motor) Inverse Time Breaker	**30 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
EF	-	1	EXHAUST FAN	**120 V**	**1**	0.25 hp	**0.7 kVA**	0.6 kW	**5.8 A**	**7.3 A**	No	(Motor) Inverse Time Breaker	**15 A**	1	1	12	Cu	No	None		12	Cu	3/4"	4A	EC	EC	MC	MC	MC	4A	EC	EC		
EF	-	2	EXHAUST FAN	**120 V**	**1**	0.25 hp	**0.7 kVA**	0.6 kW	**5.8 A**	**7.3 A**	No	(Motor) Inverse Time Breaker	**15 A**	1	1	12	Cu	No	None		12	Cu	3/4"	4A	EC	EC	MC	MC	MC	4A	EC	EC		
EF	-	3	EXHAUST FAN	**120 V**	**1**	0.75 hp	**1.7 kVA**	1.5 kW	**13.8 A**	**17.3 A**	No	(Motor) Inverse Time Breaker	**25 A**	1	1	12	Cu	Yes	12	Cu	10	Cu	3/4"	7A	EC	EC	MC	MC	MC	7A	EC	EC		
HP	-	1	HEAT PUMP	**208 V**	**3**	0.00 hp	**4.3 kVA**	3.9 kW	**12 A**	**15 A**	No	(Motor) Inverse Time Breaker	**20 A**	1	3	12	Cu	No	None		12	Cu	3/4"	7A	EC	EC	MC	MC	MC	7A	EC	EC		
MAU	-	1	MAKE-UP AIR UNIT	**200 V**	**3**	0.00 hp	**8.0 kVA**	7.2 kW	**22.1 A**	**27.6 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	1	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**8.9 kVA**	8.0 kW	**24.8 A**	**31 A**	No	(Motor) Inverse Time Breaker	**40 A**	1	3	8	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	2	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**6.3 kVA**	5.7 kW	**17.6 A**	**22 A**	No	(Motor) Inverse Time Breaker	**30 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	3	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	4	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**6.3 kVA**	5.7 kW	**17.6 A**	**22 A**	No	(Motor) Inverse Time Breaker	**30 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	5	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**6.3 kVA**	5.7 kW	**17.6 A**	**22 A**	No	(Motor) Inverse Time Breaker	**30 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	6	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**8.9 kVA**	8.0 kW	**24.8 A**	**31 A**	No	(Motor) Inverse Time Breaker	**40 A**	1	3	8	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	7	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	8	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**6.3 kVA**	5.7 kW	**17.6 A**	**22 A**	No	(Motor) Inverse Time Breaker	**30 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	9A	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	9B	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	10	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	11	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**6.3 kVA**	5.7 kW	**17.6 A**	**22 A**	No	(Motor) Inverse Time Breaker	**30 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	12	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	14	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	15	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**8.9 kVA**	8.0 kW	**24.8 A**	**31 A**	No	(Motor) Inverse Time Breaker	**40 A**	1	3	8	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	16	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	17	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	18	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**7.5 kVA**	6.7 kW	**20.8 A**	**26 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	19	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**8.4 kVA**	7.5 kW	**23.2 A**	**29 A**	No	(Motor) Inverse Time Breaker	**35 A**	1	3	10	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		
RT	-	20	ROOFTOP UNIT	**200 V**	**3**	0.00 hp	**8.9 kVA**	8.0 kW	**24.8 A**	**31 A**	No	(Motor) Inverse Time Breaker	**40 A**	1	3	8	Cu	No	None		10	Cu	3/4"	2A	EC	EC	MC	MC	MC	2A	EC	EC		

11/5/2026 8:56:39 AM

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KMA ARCHITECTS

PROFESSIONAL ENGINEER
BRIAN HICKS
7700035
QUALIFIED
STATE OF UTAH

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH MECHANICAL UPGRADE ORANGEVILLE, UTAH

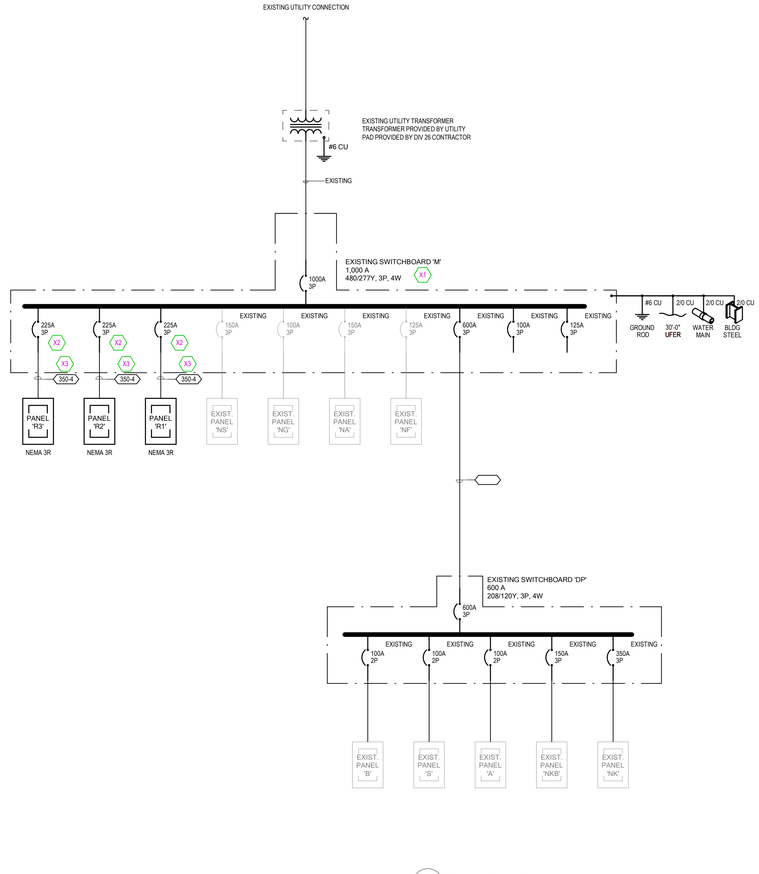
DRAWN BY: MK
CHECKED BY: ES
DATE: JAN. 2026
PROJECT #: 176525

EG002

11/5/2026 8:56:34 AM 12" = 1'-0"

ELECTRICAL ONE-LINE SYMBOL DIAGRAM

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	GENERATOR	PANEL 'XXX'	POWER PANEL
	DOCKING STATION		TRANSFER SWITCH
	PAD MOUNTED SWITCHGEAR		TRANSFORMER
	SECTIONALIZING CABINET		AC / DC INVERTER
	EQUIPMENT ENCLOSURE		FUSED DISCONNECT
#6 CU GROUND ROD; 2/0 CU 30'-0" UFER	GROUNDING ELECTRODES		MAGNETIC STARTER / DISCONNECT
2/0 CU WATER MAIN; 2/0 CU BLDG STEEL	GROUNDING ELECTRODES	SPD TYPE 'X'	SURGE PROTECTION
	SWITCHBOARD BUS		CURRENT TRANSFORMER
			FEED THRU METER
			CT METER
			CIRCUIT BREAKER
			FUSED SWITCH
			UNFUSED SWITCH
			MOTOR
			NEW LINE TYPE
			EXISTING LINE TYPE
			DEMOLITION LINE TYPE



1 Electrical One-Line Diagram
12" = 1'-0"

K13 RATED COPPER TRANSFORMER SCHEDULE

PRIMARY (LINE) SIDE 480D, 3P, 3W											SECONDARY (LOAD) SIDE 208/120Y, 3P, 5W, 200% NEUTRAL							
TRANS KVA	O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	GROUND COND.	CONDUIT SIZE	GEC (1)	MIN. Z%	O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	BONDING JUMPER (2)
15	30	P015	30	1	3	10	10	3/4"	10	3	60	S015-2	68	1	5	3	2"	8
30	50	P030	50	1	3	6	8	1"	6	3	100	S030-2	120	1	5	1/0	2"	6
45	70	P045	70	1	3	4	8	1-1/4"	2	3	175	S045-2	184	1	5	4/0	3"	2
75	125	P075	125	1	3	1/0	6	2"	2	3	225	S075-2	248	1	5	350	3"	2
112.5	175	P112	175	1	3	2/0	6	2"	1/0	4	400	S112-2	408	2	5	250	3"	1/0
150	300	P150	310	1	3	350	3	3"	2/0	4	600	S150-2	608	2	5	500	4"	2/0
225	400	P225	380	1	3	500	3	4"	3/0	4	800	S225-2	804	3	5	400	4"	3/0
300	600	P300	620	2	3	350	1	3"	3/0	5	1200	S300-2	1216	4	5	500	4"	250
500	800	P500	760	2	3	500	1/0	4"	3/0	5	1600	S500-2	1608	6	5	400	4"	300
750	1200	P750	1260	4	3	350	3/0	3"	3/0	5	3000	S750-2	3040	10	5	500	4"	750

NOTES:
(1) GROUNDING ELECTRODE CONDUCTOR. (NEC 250.66)
(2) SUPPLY SIDE BONDING JUMPER. (NEC 250.102 (C)(1))

KEYNOTES

X1 EXISTING WESTINGHOUSE ELECTRIC CORPORATION POW-R-LINE 1000A 208Y 3P SWITCHBOARD TO REMAIN AND BE PROTECTED IN PLACE. CONTRACTOR SHALL PROVIDE NEW BREAKERS WITHIN WESTINGHOUSE POW-R-LINE EQUIPMENT. COORDINATE REQUIREMENTS AND PART NUMBERS OF NEW/RETROFIT BREAKER KITS AND ALL NECESSARY EQUIPMENT WITH EATON REPRESENTATIVE.
X2 PROVIDE NEW BREAKERS. UTILIZE EXISTING SPACES WITHIN EQUIPMENT.
X3 FEEDER UPSIZED FOR VOLTAGE DROP. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC. AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (+10' FROM FINAL TERMINATION AT PANELBOARD) @ˆ SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS.

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.(AL)
100-5	100	96	1	5*	1/0	2"	4
125-3	125	120	1	3	1/0	2"	4
125-4	125	120	1	4	1/0	2"	4
125-5	125	124	1	5*	3/0	3"	4
150-3	150	135	1	3	2/0	2"	4
150-4	150	135	1	4	2/0	2"	4
150-5	150	144	1	5*	4/0	3"	2
175-3	175	155	1	3	3/0	2"	4
175-4	175	155	1	4	3/0	2"	4
175-5	175	164	1	5*	250	3"	2
200-3	200	180	1	3	4/0	2"	4
200-4	200	180	1	4	4/0	3"	4
200-5	200	184	1	5*	300	3"	2
225-3	225	205	1	3	250	2"	2
225-4	225	205	1	4	250	3"	2
225-5	225	216	1	5*	400	3"	2
250-3	250	230	1	3	300	3"	2
250-4	250	230	1	4	300	3"	2
250-5	250	248	1	5*	500	4"	1
300-3	300	270	1	3	400	3"	2
300-4	300	270	1	4	400	3"	2
300-5	300	270	1	5*	600	4"	2
350-3	350	310	1	3	500	4"	1
350-4	350	310	1	4	500	4"	1
350-5	350	308	1	5*	750	4"	1
400-3	400	410	2	3	250	2-1/2"	2/0
400-4	400	410	2	4	250	2-1/2"	2/0
400-5	400	400	2	5*	350	3"	2/0
600-3	600	620	2	3	500	3"	2/0
600-4	600	620	2	4	500	3"	2/0
600-5	600	600	3	5*	350	3"	2/0
800-3	800	810	3	3	400	2-1/2"	3/0
800-4	800	810	3	4	400	3"	3/0
800-5	800	800	4	5*	350	4"	3/0
1000-3	1000	1155	3	3	750	4"	4/0
1000-4	1000	1155	3	4	750	4"	4/0
1000-5	1000	1000	5	5*	350	4"	4/0
1200-3	1200	1240	4	3	500	4"	250
1200-4	1200	1240	4	4	500	4"	250
1200-5	1200	1240	5	5*	500	4"	250
1600-3	1600	1620	6	3	400	4"	350
1600-4	1600	1620	6	4	400	4"	350
1600-5	1600	1736	7	5*	500	4"	350
2000-4	2000	2310	6	4	750	4"	400
2500-4	2500	2695	7	4	750	5"	600
3000-4	3000	3080	8	4	750	5"	600
4000-4	4000	4235	11	4	750	5"	750

NOTES:
IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.

GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS

* 200% NEUTRAL. DERATED TO 80% BASED ON NEC 310.15.B(5)(C)

** COPPER CONDUCTOR (XHHW)

PROVIDE COMPACT STRANDED ALUMINUM ASSOCIATION 8000 SERIES ALLOY CONDUCTORS.

PROVIDE TERMINATION FOR ALUMINUM ALLOY CONDUCTORS OF HYDRAULIC COMPRESSION TYPE ONLY, LISTED UNDER UL 486-B, MARKED "ALTCU" FOR 75 DEGREE RATED CIRCUITS.

PROVIDE ALL ELECTRICAL EQUIPMENT WITH PROPER SIZING TO ACCOMMODATE ALUMINUM CONDUCTORS. COORDINATE WITH EQUIPMENT SUPPLIER.

COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.(CU)
30-2	30	30	1	2	10	3/4"	10
30-3	30	30	1	3	10	3/4"	10
30-4	30	30	1	4	10	3/4"	10
40-2	40	40	1	2	8	1"	10
40-3	40	40	1	3	8	1"	10
40-4	40	40	1	4	8	1"	10
60-2	60	55	1	2	6	1"	8
60-3	60	55	1	3	6	1"	8
60-4	60	55	1	4	6	1"	8
70-2	70	70	1	2	4	1"	8
70-3	70	70	1	3	4	1-1/4"	8
70-4	70	70	1	4	4	1-1/4"	8
90-2	90	85	1	2	3	1-1/4"	8
90-3	90	85	1	3	3	1-1/4"	8
90-4	90	85	1	4	3	1-1/2"	8
100-3	100	95	1	3	2	1-1/2"	6
100-4	100	95	1	4	2	1-1/2"	6

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BRIAN HICKS 7700150 LICENSED ARCHITECT STATE OF UTAH

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH
ORANGEVILLE, UTAH
MECHANICAL UPGRADE

DRAWN BY: MK
CHECKED BY: ES
DATE: JAN. 2026
PROJECT #: 176525

EG003

NOTES:

TMGB - TELECOMMUNICATIONS MAIN GROUNDING BUS.

IBT - INTERSYSTEM BONDING TERMINAL.

BC - BONDING CONDUCTOR.

MBJ - MAIN BONDING JUMPER.

EGB - EQUIPMENT GROUNDING BUS.

NOTES:

1. SIZE PER NEC 250.66.
2. PROVIDE GROUNDING/BONDING SYSTEM CONNECTIONS TO MAIN ELECTRICAL SERVICE AT THE LOCATION OF THE THE MAIN SERVICE DISCONNECT.

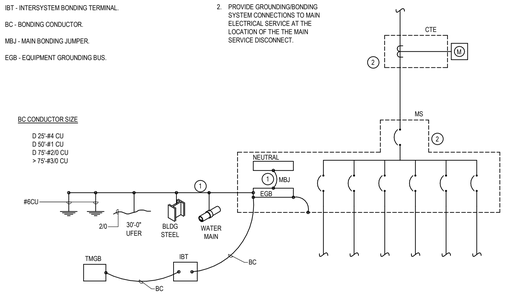


DIAGRAM H023 ELECTRICAL SERVICES GROUNDING/BONDING
NTS

NOTES:

1. PROVIDE PULL CORD IN ALL EMPTY RACEWAYS.
2. BOND ALL RACEWAYS (SIZED PER NEC REQUIREMENTS) TO ELECTRICAL SERVICE GROUND

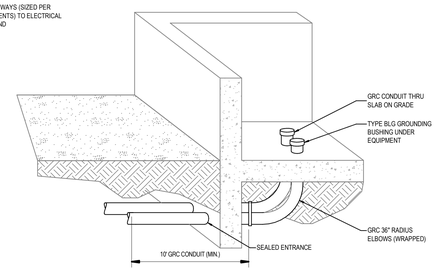


DIAGRAM F002 BUILDING ENTRANCE CONDUITS
NTS

TYPICAL INSTALLATION FOR ELECTRICAL SYSTEMS

NOTES:

1. FREE AIR CABLE SHALL BE CLASSIFIED PLENUM RATED 2 UNSHIELDED CABLE NEC TYPE CMP AND CEC TYPE CMP FT6.SPECIAL COLOR CODE SPECIFIC TO LOW VOLTAGE BALLAST/DRIVER 0-10V WIRING . PROTOCOL, PRODUCT SHALL BE MANUFACTURED TO BE IN COMPLIANT WITH THE REQUIREMENTS OF UL444 FOR INSTALLATIONS AND APPLICATIONS IN ACCORDANCE WITH NEC ARTICLES 725 AND 800.
2. FREE AIR CABLE SHALL BE INSTALLED IN A CLEAN AND CRAFTMANSHIP-LIKE MANNER. SUPPORT AT 5'-0" INTERVALS ALONG THE PATH OF THE ACCOMPANYING BRANCH CIRCUIT LIGHTING RACEWAY. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORTSEISMIC WIRES FOR SUPPORT IS NOT ALLOWED
3. UTILIZE 18 AWG GAUGE WIRE FOR DISTANCES UP TO 300' AND 16 AWG FOR DISTANCES UP TO 400'.
4. SUPPORT RACEWAYS RIGIDLY ATTACHED TO THE STRUCTURE AT INTERVALS NOT TO EXCEED 8' ON CENTER. PROVIDE A MINIMUM OF 2 SUPPORTS PER 10' OF RACEWAY. SUPPORT RACEWAY WITHIN 12" OF JUNCTION BOX, COUPLING, OUTLET, OR FITTING. PROVIDE RACEWAY SUPPORTS AT EACH 90 DEGREE BEND. REFER TO SPECIFICATION FOR MARE DETAILS.
5. LOCATE LIGHTING JUNCTION BOX WITHIN 3' OF LAY IN FIXTURE.
6. MAKE SPLICES OF 0-10V CABLES INSIDE OF JUNCTION BOXES

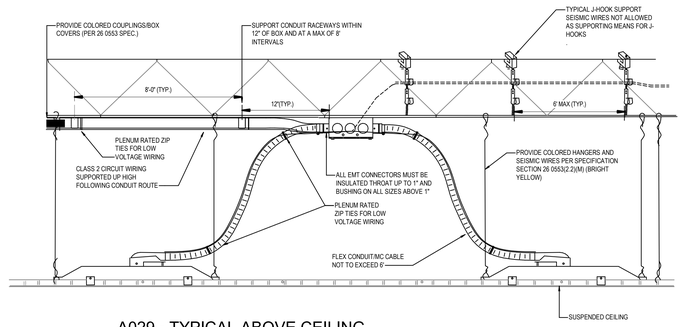
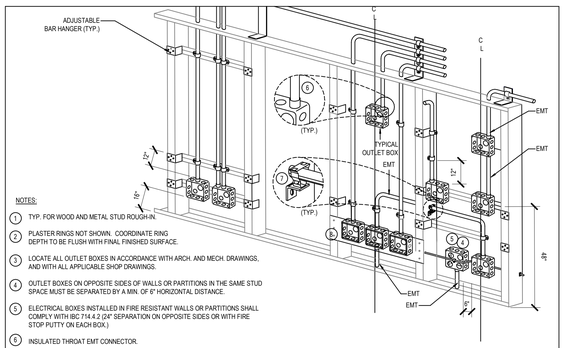


DIAGRAM A029 A029 - TYPICAL ABOVE CEILING ROUGH-IN
NTS



NOTES:

1. TYP. FOR WOOD AND METAL STUD ROUGH-IN
2. PLASTER RINGS NOT SHOWN. COORDINATE RING DEPTH TO BE FLUSH WITH FINAL FINISHED SURFACE.
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCH. AND MECH. DRAWINGS, AND WITH ALL APPLICABLE SHOP DRAWINGS.
4. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE MUST BE SEPARATED BY A MIN. OF 6" HORIZONTAL DISTANCE.
5. ELECTRICAL BOXES INSTALLED IN FIRE RESISTANT WALLS OR PARTITIONS SHALL COMPLY WITH IBC 714.4.2 (24" SEPARATION ON OPPOSITE SIDES OR WITH FIRE STOP PUTTY ON EACH BOX.)
6. INSULATED THROAT EMT CONNECTOR.
7. CADDY FASTENER, THROUGH STUD CABLE/CONDUIT SUPPORT .
8. CADDY BOX MOUNTING BRACKET .

DIAGRAM H004 TYPICAL ROUGH IN REQUIREMENTS - CONDUIT
NTS

NOTES:

1. PROVIDE PULL CORD IN ALL EMPTY RACEWAYS.
2. BOND ALL RACEWAYS (SIZED PER NEC REQUIREMENTS) TO ELECTRICAL SERVICE GROUND

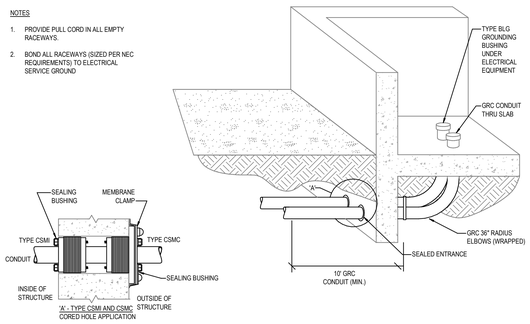
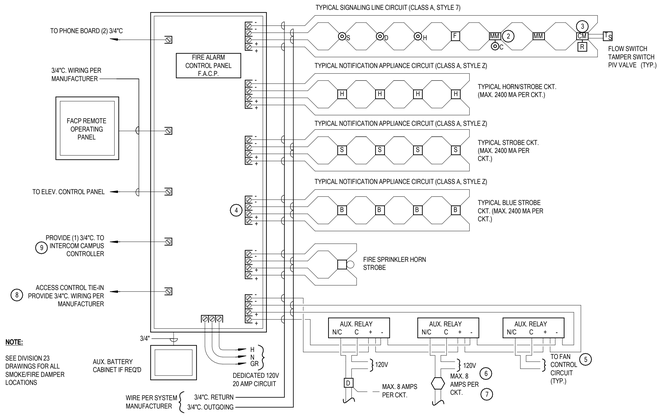


DIAGRAM F003 BUILDING ENTRANCE CONDUITS (CORE DRILLED WALL BELOW GRADE)
NTS

NOTE:

1. PROVIDE ADDRESSABLE INITIATION LOOP(S) AND POWER CIRCUIT FOR THE CARBON MONOXIDE DETECTORS.
2. PROVIDE CARBON MONOXIDE DETECTOR WITH ASSOCIATED MONITOR MODULE. SEE PLANS FOR QUANTITY AND LOCATION.
3. PROVIDE CONTROL MODULE WITH FAN SHUTDOWN RELAY TO SHUTDOWN MECHANICAL UNIT ON LOCAL CARBON MONOXIDE DETECTOR ACTIVATION.
4. PROVIDE FIRE ALARM BLUE STROBE(S). SEE PLANS FOR QUANTITY AND LOCATIONS.
5. PROVIDE DUCT SMOKE DETECTORS AND FAN RELAYS AT ALL FAN UNITS 2000 CFM AND OVER. SHUT DOWN ALL SUPPLY AND RETURN FANS UPON A GENERAL ALARM SIGNAL.
6. PROVIDE KEY OVERRIDE SWITCH FOR EVERY PAIR OF ELECTROMAGNETIC DOOR HOLDERS/RELEASES.
7. PROVIDE KEY OVERRIDE SWITCH IN MAIN ADMINISTRATION OFFICE THAT WILL RELEASE ALL ELECTROMAGNETIC DOOR HOLDER/RELEASES THROUGHOUT THE BUILDING.
8. COORDINATE WITH THE ACCESS CONTROL PROVIDER TO PROVIDE INPUT POINT THAT WILL ALLOW THE ACCESS CONTROL SYSTEM TO RELEASE ALL ELECTROMAGNETIC DOOR HOLDER/RELEASES THROUGHOUT THE BUILDING DURING A LOCK DOWN EVENT OR PER THE OWNERS REQUIREMENTS.
9. COORDINATE WITH THE INTERCOM PROVIDER TO PROVIDE INPUT POINT THAT WILL ALLOW THE INTERCOM SYSTEM TO RELEASE ALL ELECTROMAGNETIC DOOR HOLDER/RELEASES THROUGHOUT THE BUILDING DURING A LOCK DOWN EVENT OR PER THE OWNERS REQUIREMENTS.



NOTE:
SEE DIVISION 23 DRAWINGS FOR ALL SMOKE/FIRE DAMPER LOCATIONS

DIAGRAM D002 TYPICAL FIRE ALARM RISER
NTS

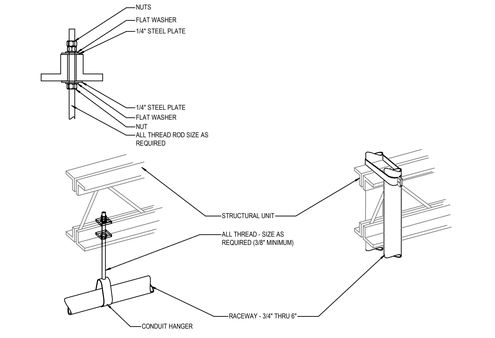
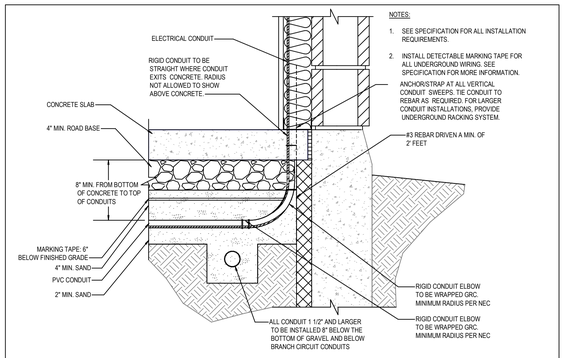


DIAGRAM H003 TYPICAL RACEWAY SUPPORT METHODS
NTS



NOTES:

1. SEE SPECIFICATION FOR ALL INSTALLATION REQUIREMENTS.
2. INSTALL DETECTABLE MARKING TAPE FOR ALL UNDERGROUND WIRING. SEE SPECIFICATION FOR MORE INFORMATION.

ANCHOR/STRAP AT ALL VERTICAL CONDUIT SWEEPS. TIE CONDUIT TO REBAR AS REQUIRED. FOR LARGER CONDUIT INSTALLATIONS, PROVIDE UNDERGROUND RACKING SYSTEM.

DIAGRAM F016 TYPICAL CONDUIT INSTALLATION
NTS

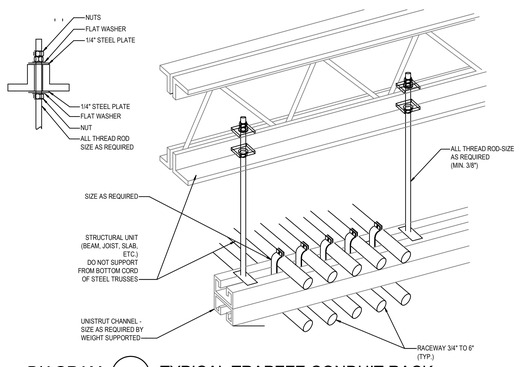
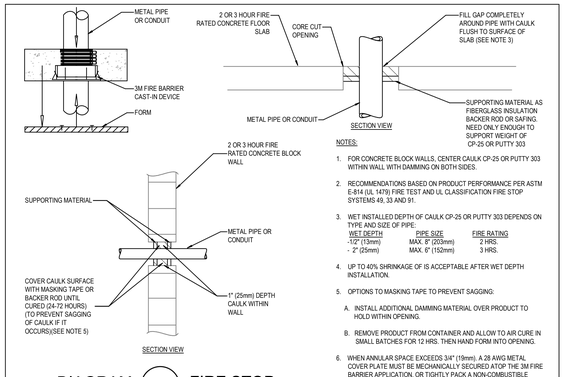


DIAGRAM H001 TYPICAL TRAPEZE CONDUIT RACK
NTS



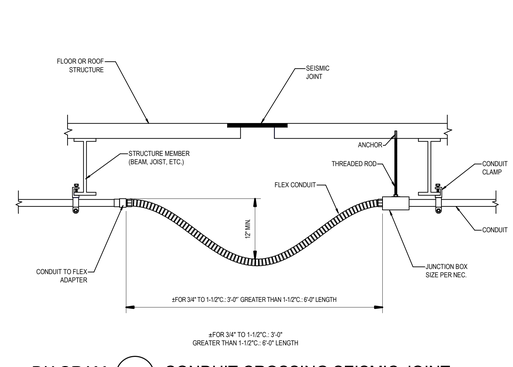
NOTES:

1. FOR CONCRETE BLOCK WALLS, CENTER CAULK CP-25 OR PUTTY 303 WITHIN WALL WITH DAMMING ON BOTH SIDES.
2. RECOMMENDATIONS BASED ON PRODUCT PERFORMANCE PER ASTM E-814 (UL 1479) FIRE TEST AND UL CLASSIFICATION FIRE STOP SYSTEMS 49, 33 AND 91.
3. WET INSTALLED DEPTH OF CAULK CP-25 OR PUTTY 303 DEPENDS ON TYPE AND SIZE OF PIPE.

WET DEPTH	PIPE SIZE	FIRE RATING
-1/2" (13mm)	MAX. 8" (203mm)	2 HRS.
- 2" (25mm)	MAX. 6" (152mm)	3 HRS.

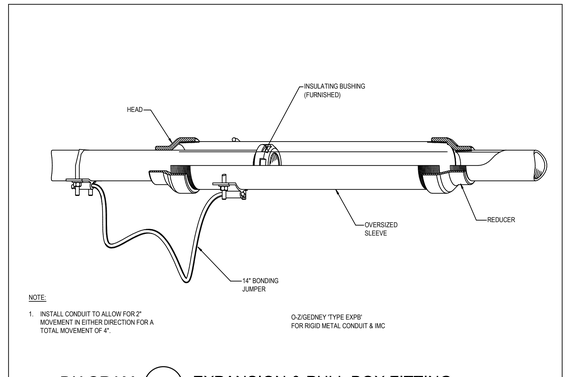
4. UP TO 40% SHRINKAGE OF IS ACCEPTABLE AFTER WET DEPTH INSTALLATION.
5. OPTIONS TO MASKING TAPE TO PREVENT SAGGING:
   A. INSTALL ADDITIONAL DAMMING MATERIAL OVER PRODUCT TO HOLD WITHIN OPENING.
   B. REMOVE PRODUCT FROM CONTAINER AND ALLOW TO AIR CURE IN SMALL BATCHES FOR 12 HRS. THEN HAND FORM INTO OPENING.
6. WHEN ANNULAR SPACE EXCEEDS 3/4" (19mm), A 28 AWG METAL COVER PLATE MUST BE MECHANICALLY SECURED ATOP THE 3M FIRE BARRIER APPLICATION, OR TIGHTLY PACK A NON-COMBUSTIBLE DAMMING MATERIAL ATOP INSTALLED CAULK OR PUTTY.

DIAGRAM H012 FIRE STOP
NTS



±FOR 3/4" TO 1-1/2"C. : 3'-0"
GREATER THAN 1-1/2"C.: 6'-0" LENGTH

DIAGRAM H010 CONDUIT CROSSING SEISMIC JOINT
NTS



NOTE:

1. INSTALL CONDUIT TO ALLOW FOR 2" MOVEMENT IN EITHER DIRECTION FOR A TOTAL MOVEMENT OF 4".

O-Z/GEDNEY 'TYPE EXPB' FOR RIGID METAL CONDUIT & IMC

DIAGRAM H009 EXPANSION & PULL BOX FITTING
NTS

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REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH
ORANGEVILLE, UTAH
MECHANICAL UPGRADE

DRAWN BY: MK
CHECKED BY: ES
DATE: JAN. 2026
PROJECT #: 176525

EG004

11/25/2026 9:00:36 AM As indicated

GENERAL NOTES

1. COORDINATE WITH THE ROOFING CONTRACTOR TO PROVIDE APPROPRIATE ROOF JACK. THE JACK SHALL BE SIZED TO FIT TIGHTLY TO RACEWAY FOR WEATHER-TIGHT SEAL. COORDINATE WORK AND REQUIREMENTS UNDER ROOFING SECTION OF SPECIFICATIONS.
2. CONTRACTOR SHALL NOT INSTALL ELECTRICAL CONDUIT(S) THROUGH THE NEW MECHANICAL CURB AND/OR DUCTWORK. LOCATE ELECTRICAL CONDUITS A MINIMUM OF 12" AWAY FROM MECHANICAL CURB ALONG WITH MAINTAINING A MINIMUM OF 12" BETWEEN ANY OTHER CONDUIT AND ANY OTHER ROOF PENETRATION.
3. NO ELECTRICAL WIRES OF EITHER HIGH OR LOW VOLTAGE TO RUN INSIDE ANY CURBS.

NOTES:

1. PROVIDE SERVICE RECEPTACLE WITHIN 25' OF MECHANICAL UNIT.PROVIDE WEATHER RESISTANT GFCI DUPLEX AND INTERMATIC 1010MXD WEATHERPROOF COVER.
2. PROVIDE NEMA 3R DISCONNECT/STARTER REQUIRED. REFER TO SPECIFICATIONS FOR COORDINATION REQUIREMENTS WITH MECHANICAL/SHOP DRAWINGS PRIOR TO RELEASING EQUIPMENT AND PERFORMING ROUGH-IN.

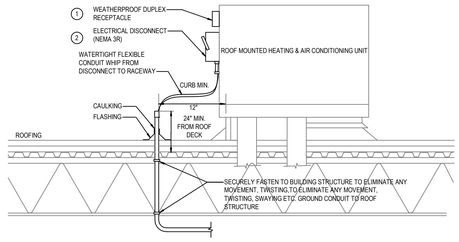

DIAGRAM G008 — G008 - ROOF MOUNTED MECHANICAL EQUIPMENT ROUGH-IN REQUIREMENTS

NTS

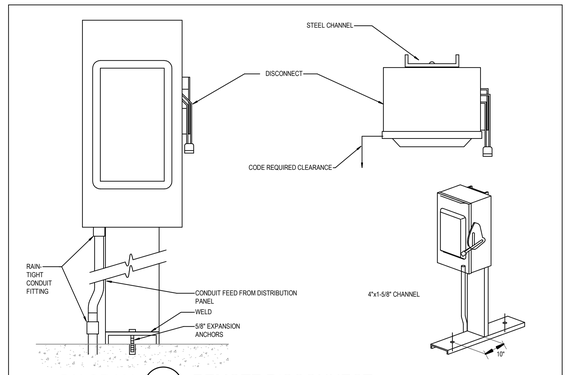

DIAGRAM M001 — REMOTE DISCONNECT

NTS

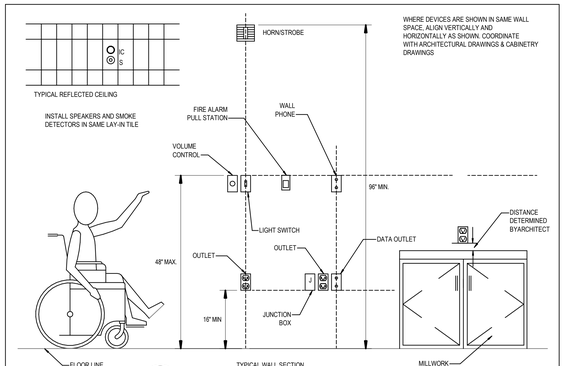

DIAGRAM R001 — DEVICE MOUNTING HEIGHTS

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11/5/2026 8:36:36 AM As indicated

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BRIAN HICKS 7700015 REGISTERED ARCHITECT STATE OF UTAH

REVISIONS:

PROJECT TITLE

EMERY SCHOOL DISTRICT

COTTONWOOD ELEMENTARY SCHOOL

55 EAST 200 SOUTH MECHANICAL UPGRADE ORANGEVILLE, UTAH

DRAWN BY: MK
CHECKED BY: ES
DATE: JAN. 2026
PROJECT #: 176525

EG005

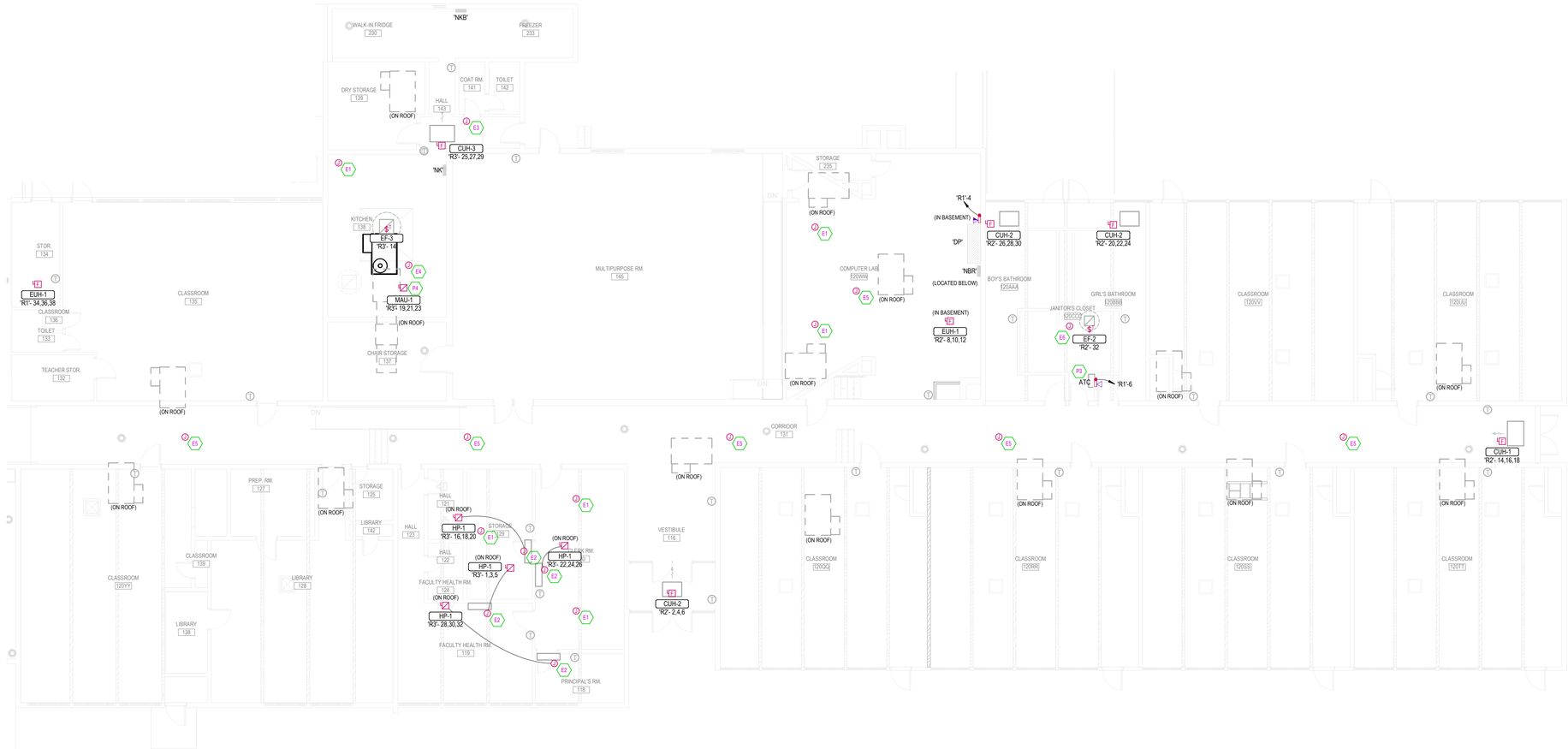
1/15/2026 9:50:59 AM As indicated

KEYNOTES

E1	EXISTING CEILING FAN TO BE DEMOLISHED. DISCONNECT POWER AND MAINTAIN CIRCUIT INTEGRITY.
E2	INDOOR UNIT FED BY OUTDOOR UNIT.
E3	EXISTING UNIT HEATER TO BE DEMOLISHED. DIV. 26 TO DISCONNECT AND REMOVE CONDUCTORS COMPLETELY.
E4	EXISTING MAKEUP AIR UNIT TO BE DEMOLISHED. DIV. 26 TO DISCONNECT AND REMOVE CONDUCTORS COMPLETELY BACK TO SOURCE. RELABEL BREAKER AS SPARE.
E5	EXISTING EVAP UNIT TO BE DEMOLISHED. DIV. 26 TO DISCONNECT AND REMOVE CONDUCTORS COMPLETELY BACK TO SOURCE. RELABEL BREAKER AS SPARE
E6	NEW EXHAUST FAN TO REPLACE EXISTING. PROVIDE NEW CIRCUIT AS INDICATED. DISCONNECT EXISTING UNIT AND REMOVE EXISTING CONDUCTORS BACK TO SOURCE.
P3	PROVIDE (1) CAT6 DROP TO NEAREST DATA ROOM/RACK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ROUTING AND DATA ROOM/RACK LOCATION.
P4	DIV. 26 TO EXTEND CONDUIT BETWEEN MAU AND MAU CONTROL PANEL. COORDINATE LOCATION WITH HVAC INSTALLER.

POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.



MAIN FLOOR POWER PLAN AREA A
SCALE = 1/8" = 1'-0"

KEY PLAN

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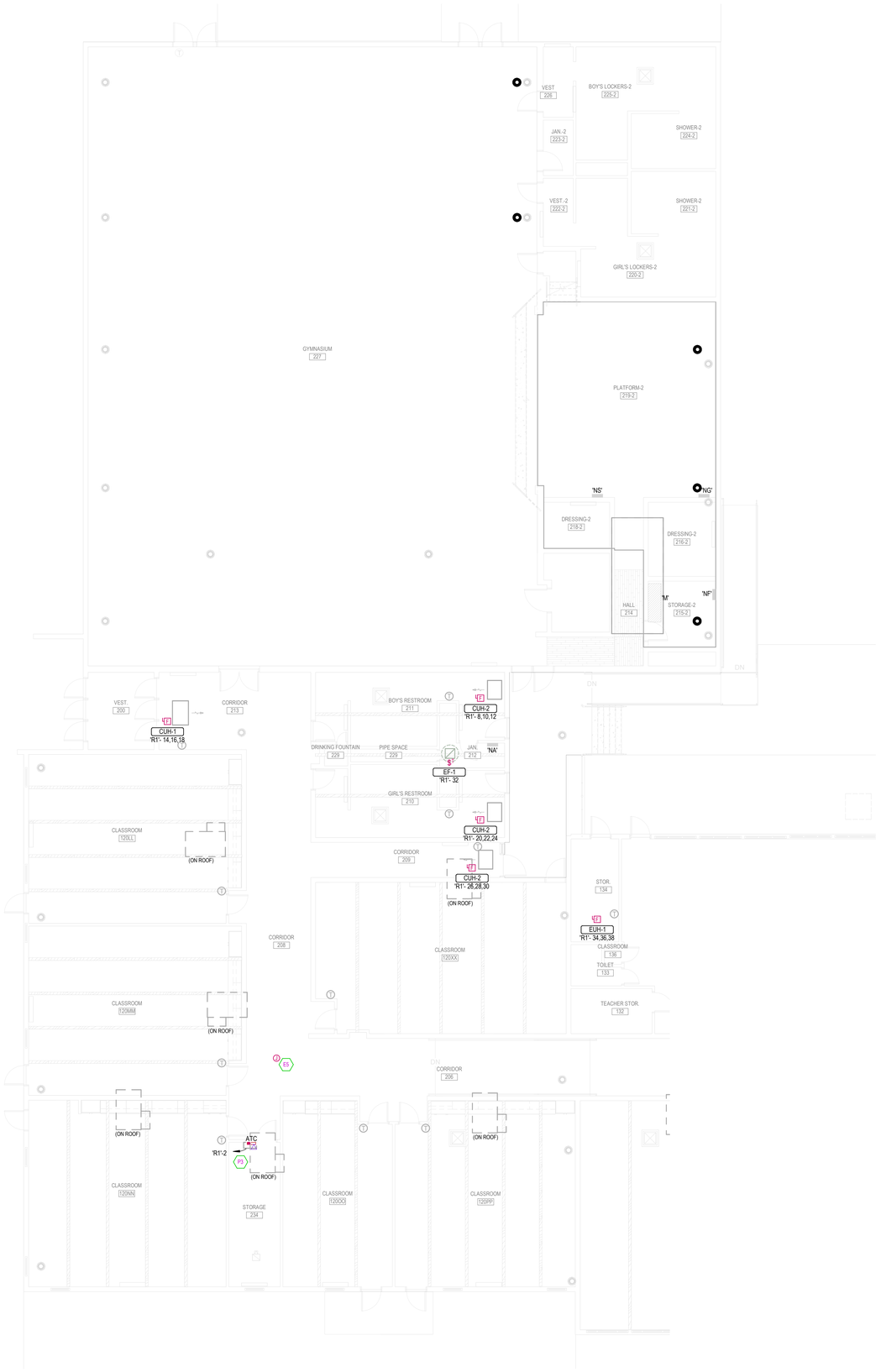
KMA ARCHITECTS

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH
ORANGEVILLE, UTAH
MECHANICAL UPGRADE

DRAWN BY:	MK
CHECKED BY:	ES
DATE:	JAN. 2026
PROJECT #:	176525

EP112



MAIN FLOOR POWER PLAN AREA B

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

KEYNOTES

E5	EXISTING EVAP UNIT TO BE DEMOLISHED. DIV. 26 TO DISCONNECT AND REMOVE CONDUCTORS COMPLETELY BACK TO SOURCE. RELABEL BREAKER AS SPARE
P3	PROVIDE (1) CAT6 DROP TO NEAREST DATA ROOM/RACK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ROUTING AND DATA ROOM/RACK LOCATION.

POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR, CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

KEY PLAN

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BRIAN HICKS
7770005-5301
ARCHITECT
STATE OF UTAH

REVISIONS:

PROJECT TITLE

EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH
MECHANICAL UPGRADE
ORANGEVILLE, UTAH

DRAWN BY:	MK
CHECKED BY:	ES
DATE:	JAN. 2026
PROJECT #:	176525

EP113

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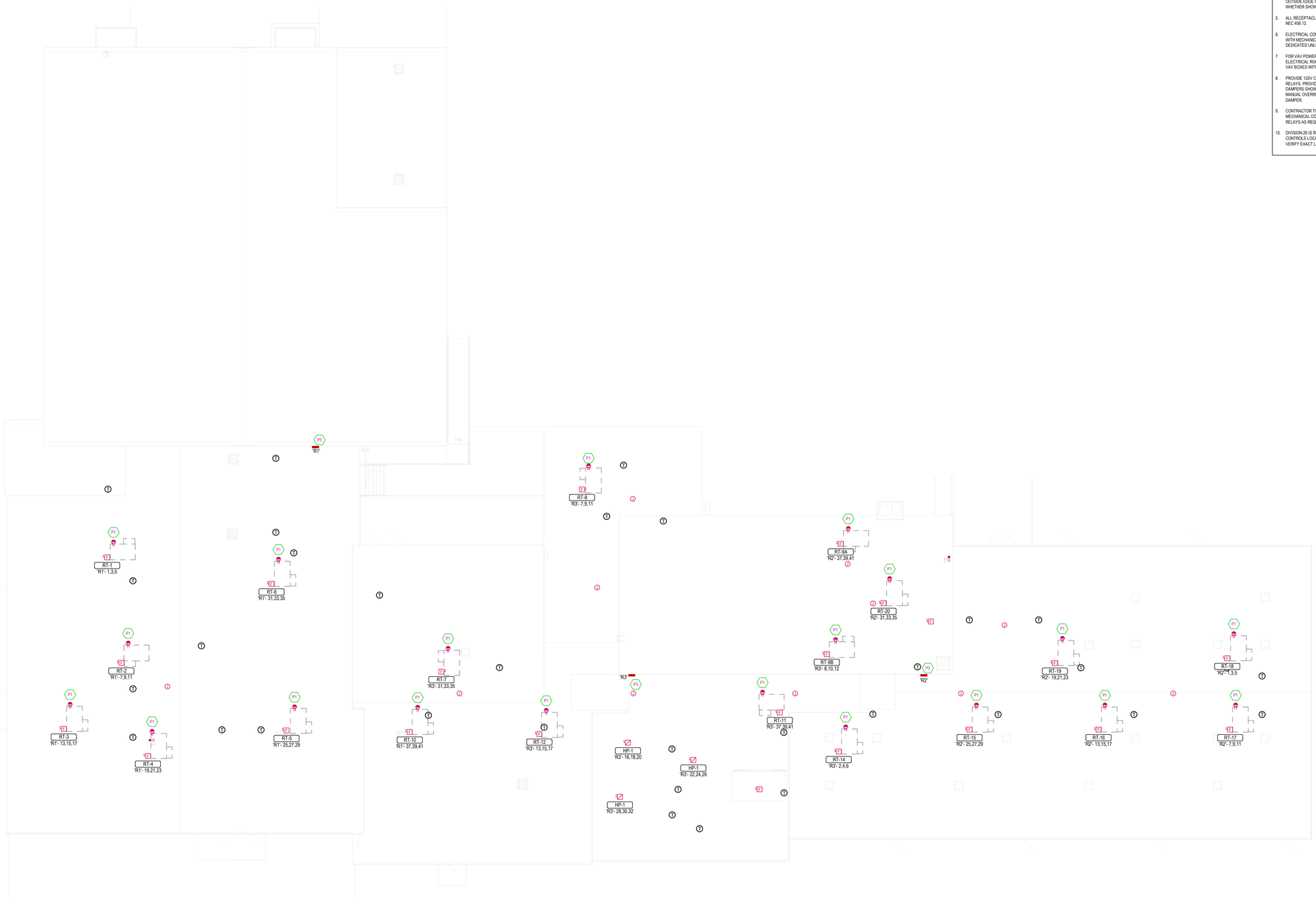

OVERALL ROOF POWER PLAN

SCALE = 1" = 10'-0"

KEYNOTES

P1	FACTORY PROVIDED OUTLET. CONTRACTOR TO EXTEND 120V POWER FROM NEAREST AVAILABLE CIRCUIT.
P3	PROVIDE (1) CAT6 DROP TO NEAREST DATA ROOM/RACK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ROUTING AND DATA ROOM/RACK LOCATION.

POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
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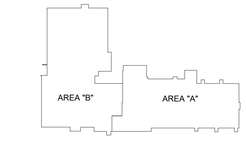
KEY PLAN



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KMA ARCHITECTS

REVISIONS:

PROJECT TITLE

EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH MECHANICAL UPGRADE ORANGEVILLE, UTAH

DRAWN BY:	MK
CHECKED BY:	ES
DATE:	JAN. 2026
PROJECT #:	176525

EP114

1/15/2026 9:00:44 AM As indicated

PANELBOARD SCHEDULE

PANEL: "R3" **TYPE:** Do Not Use; Use... **VOLTS:** 208Y/120, 3Ø, 4W **PHASE:** 3 **WIRES:** 4

LOCATION: NEMA 3R **FED FROM:** 'M' **MOUNTING:** **BUSSING:** Do Not Use; Use Current Rating

MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard; DOOR-IN-DOOR; 200% NEUTRAL; ISO GROUND; SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
				1	1,441 VA			2,498 VA			2				
HEAT PUMP OUTDOOR UNIT HP-1	20 A	3	#10	3		1,441 VA			2,498 VA		4	#6	3	35 A	ROOF TOP UNIT RTU-14
				5			1,441 VA			2,498 VA	6				
				7	2,114 VA			2,498 VA			8				
ROOF TOP UNIT RTU-8	30 A	3	#8	9		2,114 VA			2,498 VA		10	#6	3	35 A	ROOF TOP UNIT RTU-9B
				11			2,114 VA			2,498 VA	12				
				13	2,498 VA			1,656 VA			14	#8	1	20 A	EXHAUST FAN EF-3
ROOF TOP UNIT RTU-12	35 A	3	#6	15		2,498 VA			1,441 VA		16				
				17			2,498 VA			1,441 VA	18	#10	3	20 A	HEAT PUMP HP-1
				19	2,652 VA			1,441 VA			20				
AREA A MAKE-UP AIR UNIT MAU-1	35 A	3	#6	21		2,652 VA			1,441 VA		22	#10	3	20 A	HEAT PUMP HP-1
				23			2,652 VA			1,441 VA	24				
				25	3,483 VA			1,441 VA			26				
AREA A CABINET UNIT HEATER CUH-3	45 A	3	#4	27		3,483 VA			1,441 VA		28	#10	3	20 A	HEAT PUMP HP-1
				29			3,483 VA			1,441 VA	30				
				31	2,498 VA			1,441 VA			32				
ROOF TOP UNIT RTU-7	35 A	3	#6	33		2,498 VA					34				
				35			2,498 VA				36				
				37	2,114 VA						38				
ROOF TOP UNIT RTU-11	30 A	3	#8	39		2,114 VA					40				
				41			2,114 VA				42				
					27773	26117	26117	**TOTAL (VA)**							**CONNECTED LOAD TOTAL**
					231.4 A	217.6 A	217.6 A	**AMPS/PHASE**							80,007 VA

AIC RATING: 32,000 **AMPS RMS SYSM.**

NOTES:

PANELBOARD SCHEDULE

PANEL: "R1" **TYPE:** Do Not Use; Use... **VOLTS:** 208Y/120, 3Ø, 4W **PHASE:** 3 **WIRES:** 4

LOCATION: NEMA 3R **FED FROM:** 'M' **MOUNTING:** **BUSSING:** Do Not Use; Use Current Rating

MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard; DOOR-IN-DOOR; 200% NEUTRAL; ISO GROUND; SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
				1	2,978 VA			500 VA			2	#10	1	20 A	ATC STORAGE 234
ROOF TOP UNIT RTU-1	40 A	3	#6	3		2,978 VA			500 VA		4	#10	1	20 A	ATC COMPUTER LAB 120WW
				5			2,978 VA			500 VA	6	#10	1	20 A	ATC
				7	2,114 VA			721 VA			8				
ROOF TOP UNIT RTU-2	30 A	3	#8	9		2,114 VA			721 VA		10	#10	3	20 A	AREA B CABINET UNIT HEATER CUH-2
				11			2,114 VA			721 VA	12				
				13	2,498 VA			2,162 VA			14				
ROOF TOP UNIT RTU-3	35 A	3	#6	15		2,498 VA			2,162 VA		16	#8	3	30 A	AREA B CABINET UNIT HEATER CUH-1
				17			2,498 VA			2,162 VA	18				
				19	2,114 VA			721 VA			20				
ROOF TOP UNIT RTU-4	30 A	3	#8	21		2,114 VA			721 VA		22	#10	3	20 A	AREA B CABINET UNIT HEATER CUH-2
				23			2,114 VA			721 VA	24				
				25	2,114 VA			721 VA			26				
ROOF TOP UNIT RTU-5	30 A	3	#8	27		2,114 VA			721 VA		28	#10	3	20 A	AREA B CABINET UNIT HEATER CUH-2
				29			2,114 VA			721 VA	30				
				31	2,978 VA			696 VA			32	#10	1	20 A	AREA B EXHAUST FAN EF-1
ROOF TOP UNIT RTU-6	40 A	3	#6	33		2,978 VA			2,306 VA		34				
				35			2,978 VA			2,306 VA	36	#6	3	30 A	AREA B ELECTRIC UNIT HEATER EUH-2
				37	2,498 VA			2,306 VA			38				
ROOF TOP UNIT RTU-10	35 A	3	#6	39		2,498 VA					40				
				41			2,498 VA				42				
					25118	24422	24422	**TOTAL (VA)**							**CONNECTED LOAD TOTAL**
					209.3 A	203.5 A	203.5 A	**AMPS/PHASE**							73,961 VA

AIC RATING: 32,000 **AMPS RMS SYSM.**

NOTES:

PANELBOARD SCHEDULE

PANEL: "R2" **TYPE:** Do Not Use; Use... **VOLTS:** 208Y/120, 3Ø, 4W **PHASE:** 3 **WIRES:** 4

LOCATION: NEMA 3R **FED FROM:** 'M' **MOUNTING:** **BUSSING:** Do Not Use; Use Current Rating

MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard; DOOR-IN-DOOR; 200% NEUTRAL; ISO GROUND; SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
				1	2,498 VA			721 VA			2				
ROOF TOP UNIT RTU-18	35 A	3	#6	3		2,498 VA			721 VA		4	#10	3	20 A	CABINET UNIT HEATER CUH-2
				5			2,498 VA			721 VA	6				
				7	2,498 VA			2,306 VA			8				
ROOF TOP UNIT RTU-17	35 A	3	#6	9		2,498 VA			2,306 VA		10	#8	3	30 A	EUH-1 COMPUTER LAB 120WW
				11			2,498 VA			2,306 VA	12				
				13	2,498 VA			2,162 VA			14				
ROOF TOP UNIT RTU-16	35 A	3	#6	15		2,498 VA			2,162 VA		16	#8	3	30 A	AREA A CABINET UNIT HEATER CUH-1
				17			2,498 VA			2,162 VA	18				
				19	2,786 VA			721 VA			20				
ROOF TOP UNIT RTU-19	35 A	3	#6	21		2,786 VA			721 VA		22	#10	3	20 A	AREA A CABINET UNIT HEATER CUH-2
				23			2,786 VA			721 VA	24				
				25	2,978 VA			721 VA			26				
ROOF TOP UNIT RTU-15	40 A	3	#6	27		2,978 VA			721 VA		28	#10	3	20 A	AREA A CABINET UNIT HEATER CUH-2
				29			2,978 VA			721 VA	30				
				31	2,978 VA			696 VA			32	#12	1	20 A	AREA A EXHAUST FAN EF-2
ROOF TOP UNIT RTU-20	40 A	3	#6	33		2,978 VA					34				
				35			2,978 VA				36				
				37	2,498 VA						38				
ROOF TOP UNIT RTU-9A	35 A	3	#6	39		2,498 VA					40				
				41			2,498 VA				42				
					26059	25363	25363	**TOTAL (VA)**							**CONNECTED LOAD TOTAL**
					217.2 A	211.4 A	211.4 A	**AMPS/PHASE**							76,784 VA

AIC RATING: 32,000 **AMPS RMS SYSM.**

NOTES:

PANELBOARD GENERAL SHEET NOTES

1. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLY ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT ALL TERMINATION, CONNECTION AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX"ORIGINATES AT PANEL "XX"OR SWITCHBOARD "XX". TRANSFORMER "XX". SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
2. PROVIDE TYPED PANELBOARD INDEXES AS EACH PANELBOARD. FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. UTILIZE ACTUAL FINAL BUILDING ROOM NUMBERS, NOT ARCHITECTURAL NUMBERS USED ON DRAWINGS. IDENTIFY INDIVIDUAL LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM SERVED, AND INDIVIDUAL EQUIPMENT, ETC. LABEL CIRCUIT BREAKERS TO IDENTIFY LOCATION OF SUBPANEL OR EQUIPMENT SUPPLIED USING ROOM NUMBERS AND EQUIPMENT NAMES. INCLUDE ROOM NUMBER WITH EQUIPMENT CIRCUIT DESIGNATIONS. ALL DIRECTORIES TO BE TYPEWRITTEN.
3. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
4. ALL MECHANICAL AND KITCHEN EQUIPMENT BREAKERS TO BE SIZED PER THE MECHANICAL EQUIPMENT SCHEDULE AND KITCHEN EQUIPMENT SCHEDULE.
5. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC. AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (+10' FROM FINAL TERMINATION AT PANELBOARD). SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS WHERE CONDUCTORS HAVE BEEN UPSIZED FOR VOLTAGE DROP.

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KMA ARCHITECTS

INTERMOUNTAIN ENGINEERING
BRIAN HICKS
7708035
QUALIFIED
STATE OF UTAH

REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH MECHANICAL UPGRADE ORANGEVILLE, UTAH

DRAWN BY: MK
CHECKED BY: ES
DATE: JAN. 2026
PROJECT #: 176525

EP115

1/15/2026 9:55:47 AM As indicated

KEYNOTES

F1 PROVIDE CONTROL MODULE WITH FAN SHUT DOWN RELAY FOR LOCAL CARBON MONOXIDE DETECTOR ACTIVATION. TIE TO LOCAL INITIATION LOOP. LOCATE CARBON MONOXIDE DETECTOR WITHIN THE FIRST ROOM SERVED BY THE DUCT.

Y2 EXISTING SILENT KNIGHT 5808 FACP. EXPAND EXISTING CO DETECTION/INITIATION LOOPS TO INCLUDE NEW CO DETECTORS WITH MONITOR MODULES WITH FAN SHUT-DOWN AS REQUIRED

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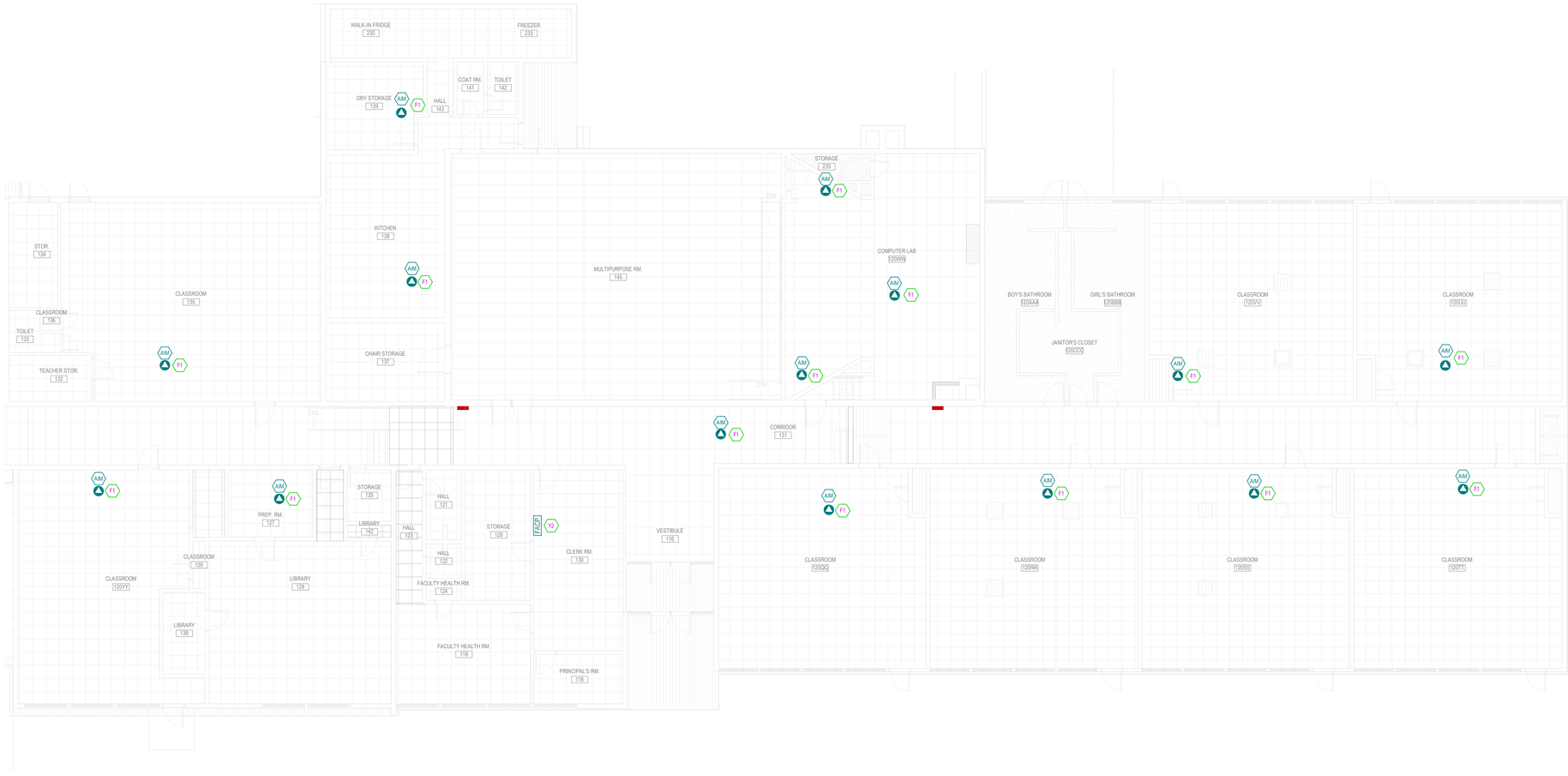
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR, CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

SYSTEMS SHEET NOTES

1. CONNECT ELEVATOR LOBBY SMOKE DETECTORS TO ELEVATOR CONTROLLER FOR ELEVATOR RECALL. PROVIDE SHUNT TRIP DEVICE AT DISCONNECT FOR ALL ELEVATOR CONTROLLERS. PROVIDE A HEAT DETECTOR AT THE TOP OF ELEVATOR SHAFT AND ADJACENT TO EACH SPRINKLER HEAD IN ALL ELEVATOR MACHINE ROOMS. ACTIVATION OF HEAT DETECTOR TO INITIATE SHUNT-TRIP.
2. PROVIDE #14 AWG MINIMUM WIRING FOR ALL SIGNAL AND INITIATION DEVICES.
3. ALL EXPOSED CONDUIT SHALL BE ROUTED PERPENDICULAR AND PARALLEL TO BUILDING LINES. ALL EXPOSED CONDUIT ROUTING SHALL BE COORDINATED WITH OWNER'S REP PRIOR TO INSTALLATION. NO ADDITIONAL COST TO THE OWNER WILL BE ALLOWED FOR RELOCATING CONDUIT DUE TO LACK OF COORDINATION WITH THE OWNER'S REP.
4. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRE-CAST CONCRETE, MASONRY AND GYP WALLS.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS, CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.
6. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.
7. PROVIDE SMOKE AND HEAT DETECTORS WITHIN ELEVATOR MACHINE ROOMS AND ELEVATOR HOST PITS.
8. PROVIDE CONNECTION OF FA SYSTEMS TO ALL MAGNETIC DOOR HOLD-OPEN DEVICES TO AUTOMATICALLY CLOSE DOORS DURING ALARM CONDITIONS.
9. DEVICES INDICATED ON FIRE ALARM ONE-LINE ARE FOR REFERENCE ONLY. REFER TO PLAN DRAWINGS AND SPECIFICATIONS FOR QUANTITIES. REFER TO ARCHITECTURAL DOOR SCHEDULE FOR MAGNETIC DOOR HOLDER AND BLOW OPEN DOOR REQUIREMENTS.
10. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.
11. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.
12. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.
13. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS.
14. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS, ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.
15. REFER TO ROOF ELECTRICAL SHEET AND MECHANICAL SHEETS FOR RTU/MECHANICAL EQUIPMENT DUCT DETECTOR LOCATIONS.
16. PROVIDE FIRE ALARM SYSTEM DUCT DETECTOR(S) AS REQUIRED. COORDINATE WITH DIVISION 23 CONTRACTOR FOR THE QUANTITY AND FOR MOUNTING IN MECHANICAL UNIT DUCT WORK.



MAIN FLOOR SYSTEM PLAN AREA A

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

KEY PLAN

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REVISIONS:

PROJECT TITLE
EMERY SCHOOL DISTRICT
COTTONWOOD ELEMENTARY SCHOOL
MECHANICAL UPGRADE
55 EAST 200 SOUTH ORANGEVILLE, UTAH

DRAWN BY: MK
CHECKED BY: ES
DATE: JAN. 2026
PROJECT #: 176525

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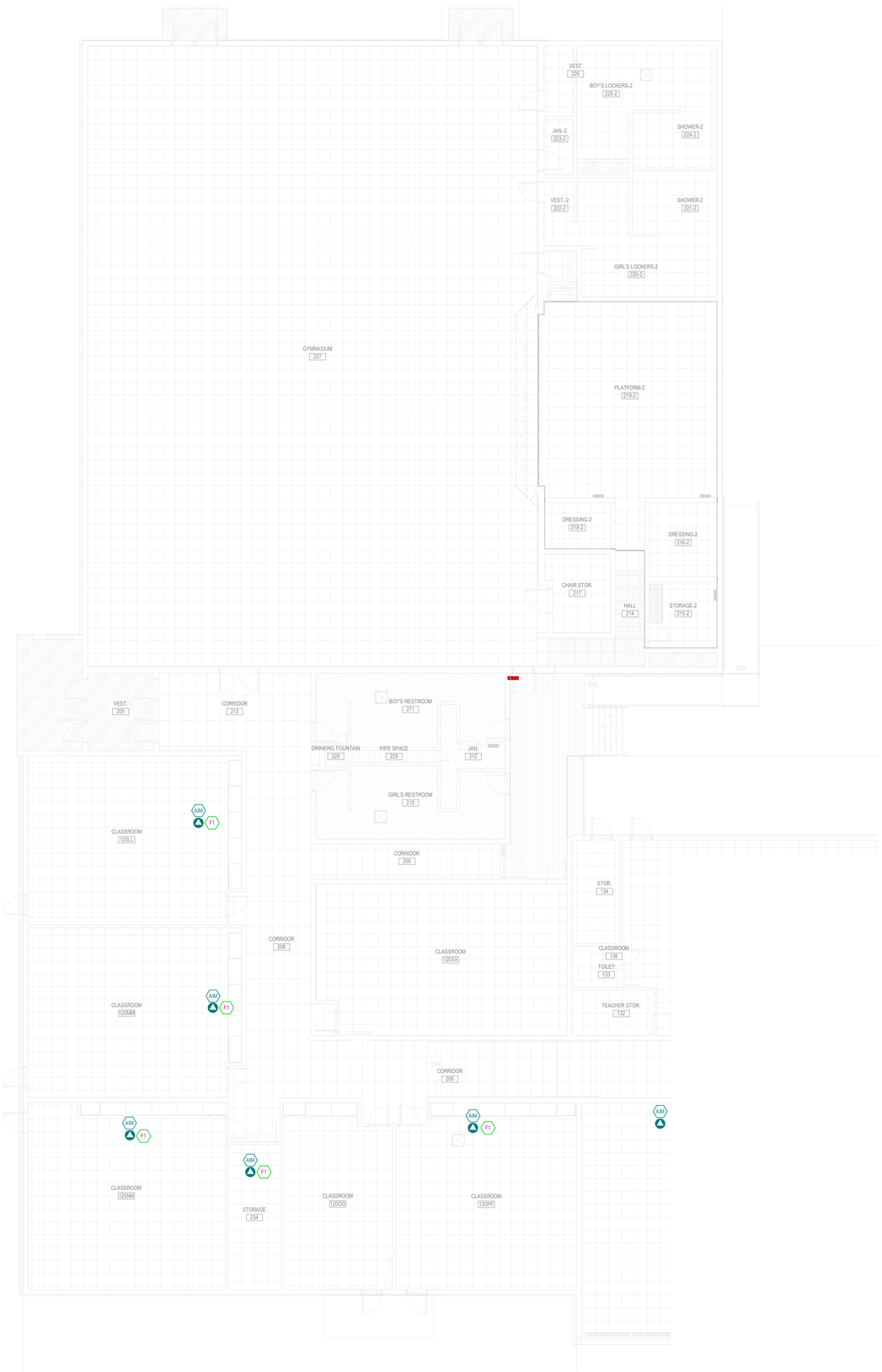

MAIN FLOOR SYSTEM PLAN AREA B

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

KEYNOTES

F1 PROVIDE CONTROL MODULE WITH FAN SHUT DOWN RELAY FOR LOCAL CARBON MONOXIDE DETECTOR ACTIVATION. TIE TO LOCAL INITIATION LOOP. LOCATE CARBON MONOXIDE DETECTOR WITHIN THE FIRST ROOM SERVED BY THE DUCT.

SYSTEMS SHEET NOTES

1. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL ITEMS SHOWN ON THE DRAWINGS, EXCEPT THOSE SPECIFICALLY LISTED ON SHEET E0.01, GENERAL ELECTRICAL NOTES.
2. SEE FIRE ALARM ZONE SCHEDULE FOR INITIATING ZONES AND SIGNAL CIRCUITS.
3. A MAXIMUM OF FOUR (4) INFORMATION OUTLET LOCATIONS PER CONDUIT HOME RUN TO MDF OR IDF IS PERMITTED. CONDUIT SHALL BE SIZED AS FOLLOWS:
   A. ONE (1) INFORMATION OUTLET LOCATION: 1" CONDUIT
   B. TWO (2) INFORMATION OUTLET LOCATIONS: 1 1/4" CONDUIT
   C. THREE (3) INFORMATION OUTLET LOCATIONS: 1 1/2" CONDUIT
4. (SELECT AS APPLICABLE PER PROJECT REQUIREMENT) ALL COMMUNICATION CABLES SHALL BE INSTALLED IN CONDUIT, CABLE TRAY, OR SUPPORTED BY CABLE HOOKS. PROVIDE BUSHINGS AT THE ENDS OF ALL CONDUITS WHERE STUBBED ABOVE ACCESSIBLE CEILINGS OR WHERE DROPPED INTO CABLE TRAYS. PROVIDE CABLE HOOKS ABOVE ACCESSIBLE CEILINGS FOR CABLE INSTALLATION WHERE NOT INSTALLED IN CONDUIT OR CABLE TRAY.
5. (ALTERNATE NOTE, IF APPLICABLE) ALL COMMUNICATIONS CABLES SHALL BE INSTALLED IN CONDUIT OR CABLE TRAY.

KEY PLAN

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COTTONWOOD ELEMENTARY SCHOOL
55 EAST 200 SOUTH ORANGEVILLE, UTAH
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