22019
100% CONSTRUCTION DOCUMENTS
01/31/2025

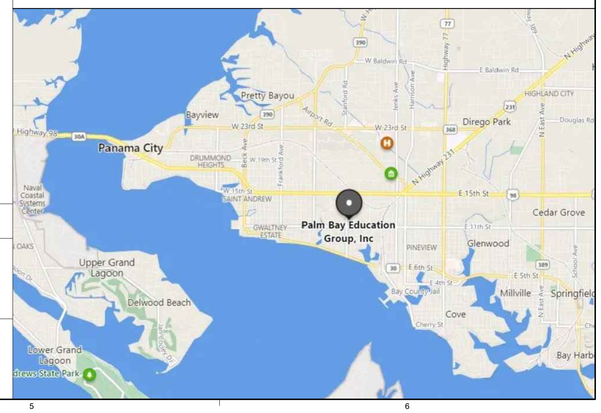
CONSTRUCTION DOCUMENTS

PALM BAY PREP ACADEMY
PALM BAY GYMATORIUM

1104 BALBOA AVENUE,
PANAMA CITY, FL, 32401

SHEET INDEX

PROJECT LOCATION



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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

COVER SHEET

PROJECT NUMBER	22019
DATED	01/31/2025

A000

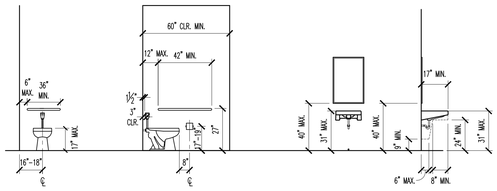
0" DENOTES FINISH FLOOR
-10" DENOTES DISTANCE BELOW FINISH FLOOR
27.8' FINISH FLOOR ELEVATION
27.8' SPOT ELEVATION
CONCRETE WALL THICKNESS SEE FLOOR PLAN FOR THICKNESS
CONCRETE MASONRY UNIT WALL, 8" (UNLESS NOTED OTHERWISE)
W1 WALL TYPE CODE
1 HOUR FIRE RATED WALL ASSEMBLY
2 HOUR FIRE RATED WALL ASSEMBLY

GRID KEY A1 / SHEET APPEARS ON A500 — DETAIL KEY
GRID KEY A1 / SHEET APPEARS ON A300 — BUILDING SECTION WALL SECTION
GRID KEY A1 / SHEET APPEARS ON A400 — INTERIOR ELEVATION ONE WALL
A1 / D1 A600 B1 / C1 — INTERIOR ELEVATION MORE THAN ONE WALL SAME ROOM
WINDOW TYPE W1 — WINDOW TYPE
DOOR NUMBER 111 — DOOR NUMBER
STOREFRONT NUMBER AL-1 — STOREFRONT DESIGNATION
SHEET LARGE SCALE PLAN OCCURS ON A4.17 — LARGE SCALE PLAN
ROOM 100 — NAME / NUMBER — ROOM NAME & NUMBER

C1 SYMBOLS / LEGEND

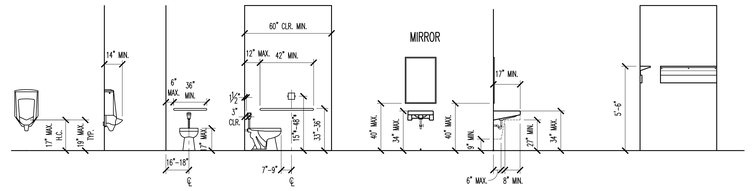
SCALE: NTS

CHILDREN'S USE (TO AGE 12)



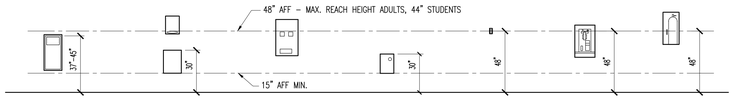
WATER CLOSET — WALL MOUNTED LAVATORY

ADULT/STAFF USE



WALL MOUNTED URINAL — WATER CLOSET — WALL MOUNTED LAVATORY — UTILITY SHELF W/ MOP HOLDER

* PROVIDE 12" CLEARANCE ABOVE GRAB BAR AND 1½" CLEARANCE BELOW GRAB BAR



RECESSED WASTE RECEPTACLE UNIT — TOWEL/WASTE RECEPTACLE UNIT — SANITARY NAPKIN TAMPON VENDOR — SANITARY NAPKIN DISPOSAL — ROBE/TOWEL HOOK — PHONE — F.E.C.

C3 TYPICAL MOUNTING HEIGHTS

SCALE: NTS

A/C	AIR CONDITION
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUSTABLE
AHU	AIR HANDLING UNIT
AFF	ABOVE FINISHED FLOOR
ALM	ALARM
ALUM	ALUMINUM
ANOD	ANODIZED
ARCH	ARCHITECT
AWT	ACOUSTICAL WALL TREATMENT
BALC	BALCONY
BD	BOARD
BI FLD DR	BIFOLDING DOORS
BITUM	BITUMINOUS
BLDG	BUILDING
BM	BENCHMARK
BOT	BOTTOM
BR	BEDROOM
BRKT	BRACKET
CL	CENTER LINE
C/C	CENTER TO CENTER
CAB	CABINET
CBB	CEMENTITIOUS (BACKER) BOARD
CH	COAT HOOK
CH BD	CHALKBOARD
CJ	CONTROL JOINT
CLG	CEILING
CLL	COLUMN LINE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CPT	CARPET
CR	CLOSET ROD
CT	CERAMIC TILE
CTB	CERAMIC TILE BASE
CTR	CENTER
CW	CASEMENT WINDOW
DBL	DOUBLE
DEMO	DEMOLISH OR DEMOLITION
DET	DETAIL
DHW	DOUBLE HUNG WINDOWS
DIA	DIAMETER
DIM	DIMENSION
DMPF	DAMP PROOFING
DN	DOWN
DR	DOOR
DS	DOWN SPOUT
DWG	DRAWING
E	EAST
EA	EACH
EB	EXPANSION BOLT
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEV	ELEVATOR OR ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXT	EXTERIOR
FA	FIRE ALARM
FEC	FIRE EXTINGUISHER CABINET
FIN	FINISH
FIN FLR	FINISH FLOOR
FIN GR	FINISH GRADE
FLR	FLOOR
FLR FIN	FLOOR FINISH
FLR SK	FLOOR SINK
FLUOR	FLUORESCENT
FO	FINISHED OPENING
FOS	FACE OF STUD
FT	FEET
FX	FIRE EXTINGUISHER
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GDR	GUARD RAIL
GFRG	GLASS-FIBER-REINFORCED GYPSUM
GL	GLASS
GL BLK	GLASS BLOCK
GR FL	GROUND FLOOR
GYM	GYMNASIUM
GYP BD	GYPSUM WALL BOARD
H&CW	HOT AND COLD WATER
HB	HOSE BIB
HC	HANDICAP
HCT	HOSE CABINET
HDG	HOT DIPPED GALVANIZED
HMD	HOLLOW METAL DOOR
HMDF	HOLLOW METAL DOOR AND FRAME
HMF	HOLLOW METAL FRAME
HORIZ	HORIZONTAL
HT	HEIGHT
HW	HOT WATER
ID	INSIDE DIAMETER
INCL	INCLUDED
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN CLO	JANITOR CLOSET
LAM	LAMINATE
LAM GL	LAMINATED GLASS
LAV	LAVATORY
LD BRG	LOAD-BEARING
LT GA	LIGHT GAGE
LVR	LOUVER
LWC	LIGHTWEIGHT CONCRETE
MAX	MAXIMUM
MBR	MASTER BEDROOM
MD	METAL DECK
MEMB	MEMBRANE
METD	METAL DOOR
METF	METAL FLASHING
MEZZ	MEZZANINE
MID	MIDDLE
MO	MASONRY OPENING
MECH	MECHANICAL
MFR	MANUFACTURER
MFR REC	MANUFACTURER'S RECOMMENDATION
MIN	MINIMUM
MISC	MISCELLANEOUS
MLDG	MOLDING (MOULDING)
MRT	MARBLE THRESHOLD
MS	MOP SINK
MTL	METAL
MWB	MEMBRANE WATERPROOFING
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NO	NUMBER
OC	ON CENTER
OF/CI	OWNER FURNISHED INSTALLED
OF/OI	OWNER FURNISHED / OWNER INSTALLED
OH DR	OVERHEAD (COILING) DOOR
ORD	OVERFLOW ROOF DRAIN
PCC	PRE-CAST CONCRETE
PERIM	PERIMETER
PLAM	PLASTIC LAMINATE
PNL	PANEL
PR	PAIR
PT	PAINT / PRESSURE TREATED
PWR	POWER
PEMB	PRE-ENGINEERED METAL BUILDING
QTY	QUANTITY
QTR	QUARTER
R	RADIUS
RB	RUBBER
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RDL	ROOF DRAIN LEADER
RDG INS	RIGID INSULATION, SOLID
REBAR	REINFORCING STEEL BARS
REC	RECESSED
REF	REFERENCE
REINF	REINFORCE
REQD	REQUIRED
REV	REVISION
RH	RIGHT HAND
RLG	RAILING
RM	ROOM
RO	ROUGH OPENING
S	SOUTH
SAN	SANITARY
SCHED	SCHEDULE
SCMU	SOLID CONCRETE MASONRY UNIT
SCWD	SOLID CORE WOOD DOOR
SD	SHOP DRAWINGS
SCP	SCUPPER
SGD	SLIDING GLASS DOOR
SH	SHINGLES
SHR	SHOWER
SHRD	SHOWER DRAIN
SHR HD	SHOWER HEAD
SHT	SHEET
SHV	SHELVING
SIM	SIMILAR
SKLT	SKYLIGHT
SF	SQUARE FOOT (FEET)
SLNT	SEALANT
SM	SHEET METAL
SMLS	SEAMLESS
SQ	SQUARE
SQ YD	SQUARE YARD
SS	STANDING SEAM (ROOF)
SST	STAINLESS STEEL
ST	STREET
STC	SOUND TRANSMISSION CLASS
STL	STEEL
STL JST	STEEL JOIST
STL RF DK	STEEL ROOF DECK
TEMP	TEMPORARY
THK	THICKNESS
TMPD GL	TEMPERED GLASS
TN	TRUE NORTH
TO	TOP OF _____
TOB	TOP OF BEAM
TOS	TOP OF STEEL
TYP	TYPICAL
UCD	UNDERCUT DOOR
UR	URINAL
VAP PRF	VAPOR PROOF
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VFAT	VINYL FACED ACOUSTICAL TILE
VIF	VERIFY IN FIELD
VR	VAPOR RETARDER
VTR	VENT THROUGH ROOF
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WDF	WOOD DOOR AND FRAME
WGL	WIRED GLASS
WH	WATER HEATER
WP	WEATHERPROOF
WPM	WEATHERPROOF MEMBRANE
WWF	WELDED WIRE FABRIC

A1 ABBREVIATIONS

SCALE: NTS

B4 .

SCALE: NTS

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

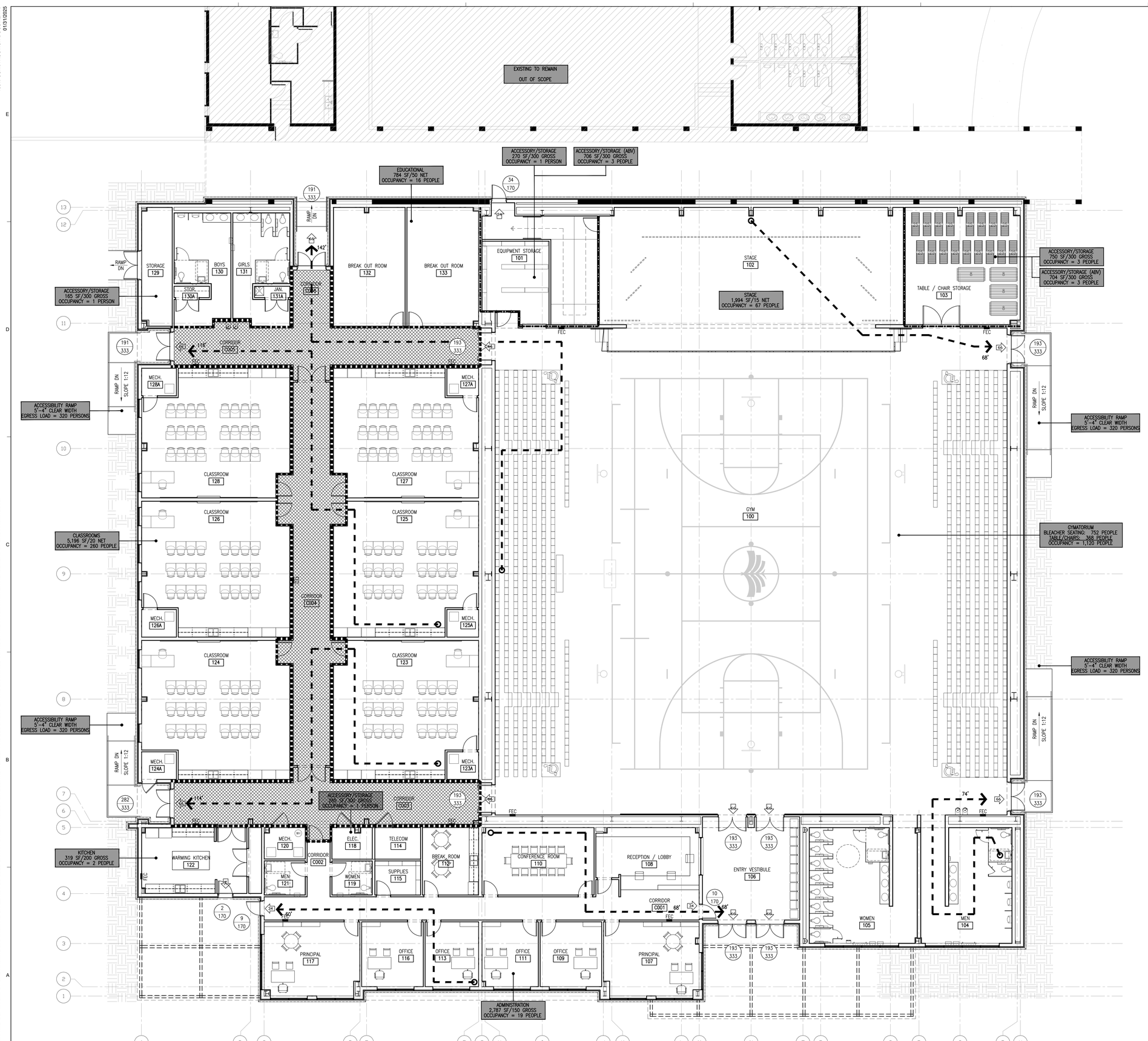
REVISIONS:

No.	Description	Date

ABBREVIATIONS, SYMBOLS, & LEGEND

PROJECT NUMBER 22019
DATED 01/31/2025

A010



LIFE SAFETY LEGEND

- PRIMARY EGRESS WITH UNITS IN INCHES
- EGRESS DISTANCE AND DIRECTION
- FIRE EXTINGUISHER TRAVEL DISTANCE
- EXIT OCCUPANT LOAD / EXIT OCCUPANT CAPACITY
- F.E.C. — FIRE EXTINGUISHER CABINET
- F.E. — FIRE EXTINGUISHER (BRACKET MOUNTED)
- 1-HOUR RATED PARTITION
- EXIT SIGNAGE
- SMOKE PARTITION
- EXTENTS OF SMOKE ENCLOSURE TUNNEL — SEE PARTITION TYPES FOR MORE INFORMATION

LIFE SAFETY NOTES

1. TYPE IIB Construction (2023 FBC)
2. Building Square Footage: 31,285 Gross
3. Minimum corridor width 72" (Educational Occupancy)
4. Minimum clear opening of exit doors - 34"
5. Maximum Travel Distance
   - Common Path = 75 feet or less
   - Dead End Corridor = 20 feet or less
   - Exit Access Travel Distance with sprinkler system = 250 feet or less

CHAPTER 5 GENERAL BUILDING HEIGHT AND AREA

Occupancy - Chapter 3, Section 305 - Educational Group E. Also refer to Section 468 - Schools, Colleges and Universities.
Type IIB Construction - Sprinklered
504.3 - Height in Feet (Table 504.3)
Allowed: 75'
Designed: 42'-6"
504.4 - Number of Stories (Table 504.4)
Allowed: 3 stories
Designed: 1 story
506.2 - Allowable Area (Table 506.2)
Allowed: 58,000 sf
Designed: 31,285 sf

NS = 14,500 sf
S1 = 58,000
Single occ, one story
Aa=At+(NSxIf)
Aa=58,000+(14,500x0.75)
Aa=68,675

CHAPTER 10 MEANS OF EGRESS

Seating Capacity: 752 Seats = 752 Regular Bleacher (Includes 8 Handicap Seats)
Minimum of 8 Handicap Seats - 2023 Florida Accessibility Code, Table 221.2.1.1 Seating Capacity
Occupancy - Chapter 3, Section 305 - Educational Group E with Assembly Group A-4

Occupant Load: Section 453.18.1.2- Gymnasium:
Bleacher (Fixed) Seating: 752 people
Main Court/15 net: 4,200 square feet/15 = 280 people
(or) Table/Chair Layout: 368 Seats
Gymnasium Occupancy: 1,120 people
Stage: 1,694 SF / 15 net = 67 people
Educational-Classrooms: 5,196 SF / 20 net = 260 people
Educational-Other Areas: 794 SF / 50 net = 16 people
Administration: 2,787 SF / 150 gross = 19 people
Kitchen: 319 SF / 200 gross = 2 people
Accessory/Storage: 2,801 square feet/300 = 10 people

Total Number of Occupants : 1,495 people

Egress Width (1005.3.2)
Egress = 0.2" per occupant

Total Egress Required: 1,495 occupants x 0.2 = 299" min.
Total Egress Provided: 786" provided.

See structural drawings for minimum superimposed design load requirement per Florida Building Code

Provide product approvals for the exterior envelope including but not limited to:
Windows
Exterior Doors
Roofing Systems
Metal Wall Panels
Structural Components
Roof Vent Hatch

CHAPTER 29 PLUMBING FIXTURES

Plumbing Fixture Counts (Table 2902.1) 2023 FBC
Assembly - 1,197 persons
Educational - 298 persons
Total - 1,495 persons

Water Closets	
Assembly - 1/125 men 1/65 women	(2 men, 9 women) (3 urinals)
Educational - 1/50 persons	(2 men, 4 women) (2 urinals)
Lavatories	
Assembly - 1/200 persons	(4 men, 4 women)
Educational - 1/50 persons	(3 men, 3 women)
Bathtubs & Showers	
Assembly - Not required	(not provided)
Educational - Not required	(not provided)
Drinking Fountains	
Assembly - 1/500 persons	(2 provided)
Education - 1/100 persons	(2 provided)
Service Sink	
Assembly - 1 required	(1 provided)
Educational - 1 required	(1 provided)

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A New Gymatorium for:
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1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

LIFE SAFETY PLAN

PROJECT NUMBER 22019
DATED 01/31/2025

LS101

A1 LIFE SAFETY PLAN
SCALE: 1/8" = 1'-0"

Florida Building Code:

ADMINISTRATION
A. Applicable Building Codes

Florida Building Code (FBC), Eighth Edition (2023)
Florida Accessibility Code, Eighth Edition (2023)
Florida Plumbing Code, Eighth Edition (2023)
Florida Mechanical Code, Eighth Edition (2023)
Florida Fuel Gas Code, Eighth Edition (2023)
Florida Energy Code (FEC), Eighth Edition (2023)
National Electrical Code, NFPA 70, 2020 Edition
Florida Fire Prevention Code, Eighth Edition (2023)
NFPA 101 (2020)

DEFINITIONS - Not Listed

USE AND OCCUPANCY CLASSIFICATION

a. Group E - Educational (Section 305)
1. Public education occupancies shall comply with 453
b. Group A-4 - Assembly with spectator seating for viewing sporting events.

SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

A. State Requirements for Educational Facilities (Section 453)
a. Definitions (453.5)
Assembly: gathering of 50 or more. Includes adjacent and related spaces to the main seating area (stages, lobbies, dressing rooms, etc.)
Auxiliary Facility:
b. Life Safety (453.7) support spaces at educational facilities which do not contain student stations but are used by students.
1. Separate exits: in assembly occupancies, each required exit must exit into a separate atmosphere or to the exterior to be considered as a separate exit.
c. Construction Type (453.8.3) minimum shall be noncombustible type I, II or IV or better.
d. Natural Light and Ventilation (453.13.8.1) windows and operable glazing in new construction to provide net free open area = 5% of the floor area in all classrooms on the perimeter of building. Auxiliary spaces...need not have operable window for the purpose of providing natural light and ventilation.
e. Pluming (453.16)
1. Educational and ancillary facilities shall have fixtures for all occupants, in ratios and accessible as required by the FBC
a. Unisex toilets shall not be provided in addition to group toilets in assembly occupancies.
2. Toilet facilities for assembly occupancies are NOT required to be in addition to the overall required plumbing fixture count.
3. Student toilets shall be distributed throughout the facility...the path of travel to the nearest toilet facility shall not exceed 200'
4. all group toilet rooms shall be provided with at least one floor drain and one easily accessible hose bibb. the floor shall be sloped down to
e. Assembly Occupancies in Public Educational Facilities (453.18)
1. Occupant capacity for egress per table 1004.1.1
a. Dressing rooms:
f. Storage (453.20) 20 Net per person
1. Sinks located in general storage rooms shall not be used for custodial services.
2. Custodial closets shall be provided with storage shelving and a service sink supplied with hot and cold water...and shall be located to serve other areas such as...stages, auditoriums.
f. Enclosed Courtyard (453.5.5.2)
CHAPTER 4 Courtyard not roofed by more than 50 percent of the courtyard area and that is substantially surrounded by a building(s) on two sides or more, has a minimum width of 40 feet (1219 mm) and each opening to the exterior is less than 40 feet (1219 mm) in width. The courtyard area shall be calculated for maximum occupancy as an assembly space and the number and size of remotely located exits shall be calculated for the maximum possible load. The maximum possible load is the greater of the calculated capacity of the courtyard or the load imposed by the surrounding spaces. An enclosed courtyard may be used as a component of exit access provided that the walls and wall openings meet the requirements of Florida Building Code, Building, Tables 601 and 602 and the maximum travel to the exit discharge does not exceed 150 feet (45 720 mm) from any point within the enclosed courtyard. If the minimum courtyard width exceeds 60 feet (18 288 mm), the travel distance to a courtyard opening/exit may exceed 150 feet (45 720 mm). An enclosed courtyard cannot serve as the exterior for exiting or for emergency rescue openings.
CHAPTER 5 Egress Breakdown
A. Classification Size of courtyard = 8,044 sq ft net
Combined size of classrooms exiting to courtyard = 7,872 sq ft net

8,044 sq ft / 15 persons per sq ft net (Assembly occupant load) = 536 people
7,872 sq ft / 20 persons per sq ft net (Classroom occupant load) = 394 people
536 > 394 therefore 536 people will be used for egress sizing
2.

536 X 0.2" = 112.6" (9'-4 5/8"±) required egress
44'-0" provided egress from courtyard

SECTION 410 STAGES, PLATFORMS, AND TECHNICAL PRODUCTION AREAS

410.1 Applicability - The provisions of Sections 410.1 through 410.8 shall apply to all parts of buildings and structures that contain stages or platforms and similar appurtenances as herein defined.

410.3 Stages - Stage construction shall comply with Sections 410.3.1 through 410.3.7.

410.3.1 Stage construction - Stages shall be constructed of materials as required for floors for the type of construction of the building in which such stages are located.
the drain.
Exception: Stages need not be constructed of the same materials as required for the type of construction provided the construction complies with one of the following:

1.Stages of Type IIB or IV construction with a nominal 2-inch (51 mm) wood deck, provided that the stage is separated from other areas in accordance with Section 410.3.4.

2.In buildings of Type IIA, IIIA and VA construction, a fire-resistance-rated floor is not required, provided the space below the stage is equipped with an automatic sprinkler system or fire-extinguishing system in accordance with Section 903 or 904.

3.In all types of construction, the finished floor shall be constructed of wood or approved noncombustible materials. Openings through stage floors shall be equipped with tight-fitting, solid wood trap doors with approved safety locks.

410.3.1.1 Stage height and area - Stage areas shall be measured to include the entire performance area and adjacent backstage and support areas not separated from the performance area by fire-resistance-rated construction. Stage height shall be measured from the lowest point on the stage floor to the highest point of the roof or floor deck above the stage.

410.3.7 Stage ventilation - Emergency ventilation shall be provided for stages larger than 1,000 square feet (93 m2) in floor area, or with a stage height greater than 50 feet (15 240 mm). Such ventilation shall comply with Section 410.3.7.1 or 410.3.7.2.

410.3.7.1 Roof vents - Two or more vents constructed to open automatically by approved heat-activated devices and with an aggregate clear opening area of not less than 5 percent of the area of the stage shall be located near the center and above the highest part of the stage area. Supplemental means shall be provided for manual operation of the ventilator. Curbs shall be provided as required for skylights in Section 2610.2. Vents shall be labeled.

410.3.7.2 Smoke control - Smoke control in accordance with Section 909 shall be provided to maintain the smoke layer interface not less than 6 feet (1829 mm) above the highest level of the assembly seating or above the top of the proscenium opening where a proscenium wall is provided in compliance with Section 410.3.4.

410.4 Platform construction - Permanent platforms shall be constructed of materials as required for the type of construction of the building in which the permanent platform is located. Permanent platforms are permitted to be constructed of fire-retardant-treated wood for Types I, II and IV construction where the platforms are not more than 30 inches (762 mm) above the main floor, and not more than one-third of the room floor area and not more than 3,000 square feet (279 m2) in area. Where the space beneath the permanent platform is used for storage or any purpose other than equipment, wiring or plumbing, the floor assembly shall be not less than 1-hour fire-resistance-rated construction. Where the space beneath the permanent platform is used only for equipment, wiring or plumbing, the underside of the permanent platform need not be protected.

CHAPTER 5 GENERAL HEIGHTS & AREAS
A. Building Data
a. Floor Area Educational: **16,063 gsf**

b. Story(s):1 Story
c. Height: ±36'-0"
B. Allowable Heights and Building Areas (Table 503)
a. Type II
b. Fire Resistant Rating - "B"
c. Building Height Limit = 55'
d. Maximum Stories = 2
e. Maximum Area per Floor = 14,500 s.f.
C. Height Modifications (Section 504)
a. Not Used
D. F. Section 508 Mixed Use and Occupancy
a. per 303.1.3 Assembly associated with Group E is not considered a separate occupancy.
b. Accessory occupancy (S-1) ancillary to main occupancy
1. <=10% of the building area (373sf = <10% of 14,192)
2. Individually classified and code shall apply to each portion
3. no separation required.

SECTION 505 MEZZANINES AND EQUIPMENT PLATFORMS
505.1 General
Mezzanines shall comply with Section 505.2. Equipment platforms shall comply with Section 505.3.

505.2 Mezzanines - A mezzanine or mezzanines in compliance with Section 505.2 shall be considered a portion of the story below. Such mezzanines shall not contribute to either the building area or number of stories as regulated by Section 503.1. The area of the mezzanine shall be included in determining the fire area. The clear height above and below the mezzanine floor construction shall be not less than 7 feet (2134 mm).

505.2.1 Area limitation - The aggregate area of a mezzanine or mezzanines within a room shall be not greater than one-third of the floor area of that room or space in which they are located. The enclosed portion of a room shall not be included in a determination of the floor area of the room in which the mezzanine is located. In determining the allowable mezzanine area, the area of the mezzanine shall not be included in the floor area of the room.

Where a room contains both a mezzanine and an equipment platform, the aggregate area of the two raised floor levels shall be not greater than two-thirds of the floor area of that room or space in which they are located.

Exceptions:

1. The aggregate area of mezzanines in buildings and structures of Type I or II construction for special industrial occupancies in accordance with Section 503.1.1 shall be not greater than two-thirds of the floor area of the room.

2. The aggregate area of mezzanines in buildings and structures of Type I or II construction shall be not greater than one-half of the floor area of the room in buildings and structures equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 and an approved emergency voice/alarm communication system in accordance with Section 907.5.2.2.

3. In sprinklered Group S2 occupancies of Type III construction, the enclosed and unenclosed areas under mezzanines shall be allowed to be included when calculating the permissible size of mezzanines.

505.2.2 Means of egress - The means of egress for mezzanines shall comply with the applicable provisions of Chapter 10.

505.2.3 Openness - A mezzanine shall be open and unobstructed to the room in which such mezzanine is located except for walls not more than 42 inches (1067 mm) in height, columns and posts.

Exceptions:

1. Mezzanines or portions thereof are not required to be open to the room in which the mezzanines are located, provided that the occupant load of the aggregate area of the enclosed space is not greater than 10.

2. A mezzanine having two or more exits or access to exits is not required to be open to the room in which the mezzanine is located.

3. Mezzanines or portions thereof are not required to be open to the room in which the mezzanines are located, provided that the aggregate floor area of the enclosed space is not greater than 10 percent of the mezzanine area.

4. In industrial facilities, mezzanines used for control equipment are permitted to be glazed on all sides.

5. In occupancies other than Groups H and I, that are no more than two stories above grade plane and equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, a mezzanine having two or more means of egress shall not be required to be open to the room in which the mezzanine is located.

505.3 Equipment platforms - Equipment platforms in buildings shall not be considered as a portion of the floor below. Such equipment platforms shall not contribute to either the building area or the number of stories as regulated by Section 503.1. The area of the equipment platform shall not be included in determining the fire area in accordance with Section 903. Equipment platforms shall not be a part of any mezzanine and such platforms and the walkways, stairways, alternating tread devices and ladders providing access to an equipment platform shall not serve as a part of the means of egress from the building.

505.3.1 Area limitation - The aggregate area of all equipment platforms within a room shall be not greater than two-thirds of the area of the room in which they are located. Where an equipment platform is located in the same room as a mezzanine, the area of the mezzanine shall be determined by Section 505.2.1 and the combined aggregate area of the equipment platforms and mezzanines shall be not greater than two-thirds of the room in which they are located.

505.3.2 Automatic sprinkler system - Where located in a building that is required to be protected by an automatic sprinkler system, equipment platforms shall be fully protected by sprinklers above and below the platform, where required by the standards referenced in Section 903.3.

505.3.3 Guards - Equipment platforms shall have guards where required by Section 1015.2.

CHAPTER 6 TYPES OF CONSTRUCTION
A. Construction Classification
a. Type II B (Section 602.2)
1. Fire Resistant Rating Requirements (hours) For Building Elements (Table 601)
a. Structural Frame - columns, girders, trusses = 0 hours
b. Bearing Walls - Exterior = 0 hours
c. Bearing Walls - Interior = 0 hours
d. Non-bearing walls and partitions - Exterior = See Table 602
1. <5 = 1
2. >=5 to <10 = 1
3. >=10 to <30 = 0
4. >=30 = 0
e. Non-bearing walls and partitions - Interior = 0 hours
f. Floor Construction - beams, joist = 0 (d,j) hours
1. (d) = not applicable
2. (j) = not applicable
g. Roof Construction - beams, joist = 0 hours

CHAPTER 7 FIRE-RESISTANT RATED CONSTRUCTION
A. 705: Exterior Walls
a. 705.3 Buildings on the Same Lot
1. for determining required wall and opening protection and roof-covering requirements, buildings on the same lot shall have an imaginary line between them.
2. When a new building is on the same lot as an existing building, the imaginary line with relation to the existing building shall be such that the exterior wall and opening protection of the existing building meet 705.5 and 705.8.
b. 705.5 Fire-resistance rating
1. Exterior wall shall be rated per 601 and 602
2. exterior walls with >10' fire separation distance shall be rated for exposure from inside
c. 705.8 Openings: Maximum are of exterior wall openings based on separation distance
0-<3': NOT PERMITTED
3-<5': 15% (sprinklered or protected)
5-<10': 25% (sprinklered or protected)
10-<15': 45% (sprinklered or protected)
15'<20': 75% (sprinklered or protected)
20' or >: No Limit
1. the Max area of unprotected and protected openings permitted in an exterior wall in any story of a building shall not exceed percentages per 705.8.
a. EXCEPT: #2 Buildings whose exterior bearing walls..etc are not required to be fire-rated shall be permitted to have unlimited unprotected openings.
d. 705.11 Parapets: parapets shall be provided on exterior walls EXCEPT where any of the following conditions exist...#1 the wall is not required to be fire-resistant rated per table 602 because of fire separation distance & #6 Where the wall is permitted to have at least 25% of the exterior wall areas of unprotected openings based on fire separation distance per 705.8
B. 707 Fire Barriers: fire resistance rating shall be:
a. Interior Exit stairway and Ramp construction: comply with 1022.1 = **1HR**
b. Exit passageway: separating building areas from exit passageway comply with 1023.3 = **1HR**
b. Horizontal Exit: separating building areas from horizontal exit comply with 1025.1 = 2HR
C. 708 Fire Partitions: corridor walls as required by 1018.1 shall comply
a. a fire resistance rating not less than 1 hour Except in group E when sprinklered.
D. 709 Smoke Barriers: a 1 hour fire-resistance rating is required for smoke barriers and must be continuous from wall to wall and floor to roof deck.
E. 710 Smoke Partitions: Not required to be fire rated and must be continuous from wall to wall and floor to roof deck OR a ceiling membrane constructed to limit the transfer of smoke

CHAPTER 8 INTERIOR FINISHES
A. Interior Wall and Ceiling Finish Requirements (Table 803.9 SPRINKLERED)
a. Group A-4
1. Exit enclosures and exit passageways = B
2. Corridors = B
3. Rooms and enclosed spaces = C
a. Group E
1. Exit enclosures and exit passageways = B
2. Corridors = C
3. Rooms and enclosed spaces = C

CHAPTER 9 FIRE PROTECTION SYSTEMS
A. Automatic Sprinkler System (Section 903)
a. Group E required where
1. Fire area exceeds 12,000 s.f.
2. REQUIRED
b. Group A-4 required where
1. Fire area exceeds 12,000 s.f.
2. Fire area has occupant load of 300 or more
3. REQUIRED
B. Standpipe Systems (Section 905)
a. Stages (905.3.4) > 1,000 sf. & sprinklered = Class III wet standpipe system with 1 ½" hose connections on each side of stage.
1. 1 ½" hose connection equipped with sufficient lengths of hose to provide fire protection for the stage area. Shall be equipped with approved adjustable fog nozzle and be mounted in a cabinet or on a track.
C. Fire Alarm and Detection Systems (Section 907)
a. Required

CHAPTER 10 MEANS OF EGRESS
A. Occupant Load (Table 1004.1.1) = **791 TOTAL CALCULATION**
a. Educational Areas:
1. Dressing rooms 662 @20nsf = 33 persons
2. Stage 2,253 @15nsf = 150 persons
b. Assembly Areas:
1. Assembly with fixed seats (theater @ 608) = 608 persons
c. Storage & Mechanical Areas = 1/300 gross = 1422 gsf = 5 persons **(does not count)**
d. See Life Safety plans for identified areas
e. Every Assembly room shall have the occupant load or the room posted near the main exit.
B. Egress Width (1005.1)
a. Other Egress = 0.2" per occupant (796 person load = 159.2" Total Egress Width Required)
b. Where multiple exits, they shall be sized such that the loss of one shall not reduce capacity to less than 50% of required capacity.
c. Door encroachment - doors when fully open,shall not reduce the required width by more than 7".
1. Doors in any position shall not reduce the required width by more than 1/2.
C. Panic and fire exit Hardware (1008.1.10)
a. Doors serving rooms or spaces with an occupant load of 50 or more in group A or E shall not be provided with a lock or latch unless it is panic hardware or fire exit hardware.
D. Egress through intervening spaces (1014.2)
a. an exit access shall not pass through a room that can be locked.
D. Common Path of Egress Travel (Section 1014.3)
a. That portion of exit access which the occupants are required to traverse before two separate and distinct paths of egress travel to two exits are available. Paths that merge are common paths of travel. Common paths of egress travel shall be included within the permitted travel distance.
1. Group A within E = see 1028.8 =
2. Group E= 75' maximum
E. Exit and Exit Access Doorways (1015)
a. (1015.1) Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:
1. Occupant load of the space exceeds values in Table 1015.1 (E >49 persons)
2. The common path of egress travel exceeds the limitations of Section 1014.3
b. (1015.1.1) Three exits for occupancy of 501-1000; **FOUR exits** or exit access doorways shall be provided from any space with an occupant load >1,000.
F. Exit Access Travel Distance (Table 1016.1) per floor
a. Occupancy Group E w/sprinkler = **250 feet**
b. Occupancy Group A w/sprinkler = **250 feet**
G. Aisles (1017): when serving as portion of exit access shall be provided from all occupied portions of the exit access which contain seats and shall comply with Section 1028.
H. Corridor Fire Resistant Rating (Table 1018.1); walls shall comply with 709-fire partitions
a. No Corridor Rating Required in Group E when:
1. Instructional rooms have door opening directly to exterior
2. Assembly rooms have at least ½ of required means of egress doors opening directly to exterior at ground level.
b. Occupancy Group E,A corridor serving >30 = 0 HR when sprinklered
1. when protected with supervised automatic sprinkler, corridor wall not rated BUT form SMOKE PARTITIONS per Florida Fire Prevention Code.
I. Corridor Width: per 1005, but not less than 44"
a. **72"** in Group E with corridor capacity >100.
J. Dead Ends (Section 1018.4)
a. **50 Feet Group E**; 50' Group A (when sprinklered)
K. Minimum Number of Exits for Occupant load (Table 1021.1)
a. Occupant Load 1-500 persons = 2 exits
b. Occupant Load 501-1,000 persons = 3 exits
c. Occupant Load >1,000 = 4 exits
L. Assembly (1028)
a. Every assembly occupancy greater than 300 occupants shall be provided with a main entrance/exit with a min. aggregate width for Group A sufficient to accommodate 50% of the occupant load and be at the level of exit discharge.
b. Every level shall have access to main exit; and additional exits that accommodate ½ total load
c. Clear width of aisles and other means of egress when not smoke protected shall provide capacity in accordance with:
1. Ramped; where slopes are steeper than 1 vertical in 12 horizontal shall have at least .22" clear width for each occupant served.
2. Level or where slopes < $\frac{1}{12}$ shall have clear width .20" per occupant served. 220(.2) = 44" min.
d. Travel Distance (1028.7): exits and aisles located so travel distance to exit door <250' along line of travel when sprinklered. Does not include travel over or on seats.
e. Common Path of egress travel (1028.8)
1. 30' from any seat to a point where there is a choice of two paths
2. 75' from any point where serving <50 persons
3. Where one path is across the aisle through a row of seats to another aisle, no more than 24 seats between aisles.
a. minimum clear width between rows = 12"+.6" for each seat above 7.
f. Assembly aisles required (1028.9): every occupied area containing seats shall have aisles leading to exits as follows:
1. Min. clear width for seating not at tables:
a. 42" at level or ramped aisles with seats both sides
b. 36" at level or ramped aisles with seats on one side
g. Clear width of aisles accessways serving seating in rows (1028.10.2.)
1. rows with <= 14 seats = 12" clear
2. dual access rows with > 14 seats = 12" + .3" for each additional seat over 14 (18 seats = 13.2" clear)

CHAPTER 11 Accessibility (from FBC-Accessibility)
A. 213.3 Plumbing Fixtures and Accessories:
a. Toilet compartments: where provided:
1. One complying with 604.8.1
2. + One min. complying with 604.8.2 where six or more compartments are provided.
b. Water Closets: One min. complying with 604
c. Urinals: One min. complying with 605
d. Lavatories: One min. complying with 606 NOT in a toilet compartment
e. Mirrors: One min. complying with 603.3

CHAPTER 12 INTERIOR ENVIRONMENT - Not Listed
CHAPTER 13 ENERGY EFFICENCY - See Mechanical
CHAPTER 16 STRUCTURAL - See Structural

CHAPTER 29 PLUMBING FIXTURES
A. Plumbing Fixture Counts (Table 2902.1) 2023 FBC
a. per 453.16 - Assembly associated with Group E - Toilet facilities for assembly occupancies are NOT required to be in addition to the overall required plumbing fixture count.

B. A-4 Assembly Occupancy - 1000 person count as calculated above (total count)
1. Water Closets - 1/125 men 1/65 women (= 4 men, 8 women)
2. Lavatories - 1/200 (= 3 men, 3 women)
3. Bathtubs & Showers (= 0 minimum)
4. Drinking Fountains - 1/500 (= 2 minimum)
5. Service Sink (= 1 minimum)

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100% CONSTRUCTION DOCUMENTS

Digitally signed by Owen Eric Gipson
Date: 2025.02.07 15:25:35-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

CODE SUMMARY

PROJECT NUMBER 22019
DATED 01/31/2025

LS102

A1 CODE ANALYSIS
SCALE: 1/8" = 1'-0"

22019
PROJECT STATUS
Issue Date

BLOCK BUILDING
FFE = 31.59

AWNING

ELECTRIC TRANSFORMER PAD

4' CHAIN LINK FENCE (AC UNITS BEHIND FENCE)

BLOCK BUILDING

SIGN (NO PARKING)

SIGN (NO PARKING)

BUILDING AND COVERED HALLWAY

SEWER MANHOLE TOP=30.45' N.INV.6"PVC=23.65'

4' CHAIN LINK FENCE

PLAYGROUND AREA

EXISTING SIGN TO BE REMOVED

SEWER MANHOLE RIM=29.79' INV.8"TER.(N)=28.35' INV.3"C.I.(S)=28.42' INV.3"C.I.(S)=28.41'

E.T.P.

EXISTING 2" SEWER FORCEMAIN TO BE GROUT FILLED AND ABANDONED IN PLACE

30" YARD DRAIN

END 2" WATER MAIN REMOVAL AT POINT OF NEW SERVICE CONNECTION

EXISTING CONCRETE WALKWAY UNDER CANOPY TO BE REMOVED

BEGIN SINGLE ROW OF SILT FENCE

COVERED WALK

END SINGLE ROW OF SILT FENCE

WATER SPIGOT TO BE REMOVED AND SUPPLY LINE TO BE CAPPED

END 2" FORCE MAIN REMOVAL AT EDGE OF SIDEWALK. CAP EXISTING FORCE MAIN TO REMAIN

LAT. N30°10'08.0203" LONG. W85°40'26.3000"

EXISTING 2" GRAVITY SEWER TO BE REMOVED

EXISTING SANITARY SEWER CLEANOUT TO BE REMOVED

EXISTING LIFT STATION TO BE REMOVED

EXISTING CONCRETE TO BE REMOVED

ASPHALT PARKING

SAW CUT AND REMOVE EXISTING CONCRETE

LAT. N30°10'07.3417" LONG. W85°40'26.9526"

EXISTING 2" WATER MAIN TO BE REMOVED. ACTUAL LOCATION OF WATER MAIN UNKNOWN. CONTRACTOR TO FIELD LOCATE PRIOR TO START OF DEMOLITION.

LAT. N30°10'06.8217" LONG. W85°40'26.3279"

LAT. N30°10'06.6120" LONG. W85°40'25.6507"

EXISTING SIGN TO BE REMOVED

ASPHALT DRIVE

6" WIDE WOOD RETAINING WALL

CONCRETE PARKING

EXISTING CONCRETE TO BE REMOVED

SAW CUT AND REMOVE EXISTING ASPHALT

ASPHALT PARKING

CATCH BASIN TOP=25.39' INV.18"RCP(S)=21.89'

EXISTING CATCH BASIN TO BE REMOVED TOP = 25.39' INV. 18"RCP(S)=21.89'

20' OF EXISTING 18" RCP TO BE REMOVED

CATCH BASIN TOP=25.22' INV.30"CPP(E)=18.50' INV.30"CPP(W)=18.34'

CATCH BASIN TOP=25.71' INV.30"CPP(E)=19.11' INV.30"CPP(W)=19.09'

CATCH BASIN TOP=23.73' INV.18"RCP(N)=19.84' INV.30"CPP(E)=19.49' INV.30"CPP(W)=19.54'

CATCH BASIN TOP=23.73' INV.24"RCP(S)=19.49' INV.18"RCP(E)=20.23' INV.30"CPP(W)=19.72'

PROVIDE INLET SEDIMENT FILTER AT EXISTING INLETS WHERE SHOWN (TYP)

HAND AUGER HA-1

HAND AUGER HA-2

HAND AUGER HA-3

PALM TREES

EXISTING SIGN AND PALM TREES TO REMAIN AND BE PROTECTED IN PLACE

SIGN (PALM BAY)

FIBER OPTIC MARKER

GAS LINE MARKER

CONCRETE WALK

STORM MANHOLE RIM=24.05' INV.30"CPP(E)=16.65' INV.30"CPP(S)=16.60'

STORM MANHOLE RIM=24.40' INV.24"RCP(N)=18.83' INV.24"RCP(W)=19.95' INV.18"RCP(S)=20.00'

STORM MANHOLE RIM=26.95' INV.18"RCP(N)=21.60' INV.18"RCP(W)=21.34'

YARD DRAIN

NOTE: LOWER TOP OF EXISTING MANHOLE BY 12" AND REPLACE SOLID COVER WITH STORMWATER GRATE

BEGIN 2" WATER MAIN REMOVAL AT OUTLET SIDE OF METER BOX

EXISTING WATER METER TO

W 11TH ST

WOOD AVE.

INV.6"PVC=27.84'
M.E.S.
INV.6"PVC=27.87'
M.E.S.
INV.6"PVC=27.94'
INV.6"PVC=27.89'
M.E.S.
INV.6"PVC=26.56'
M.E.S.
INV.6"PVC=26.43'
M.E.S.
INV.6"PVC=26.40'
INV.6"PVC=26.36'

0' 10' 20' 40'
SCALE: 1" = 20'

SCALE: 1" = 20'

SYMBOLS & ABBREVIATIONS:

- # = NUMBER
- L.B. = LICENSED BUSINESS
- P.S.M. = PROFESSIONAL SURVEYOR AND MAPPER
- INV. = INVERT
- PVC = POLYVINYL CHLORIDE
- C.P.P. = CORRUGATED PLASTIC PIPE
- R.C.P. = REINFORCED CONCRETE PIPE
- TER = TERRACOTTA CLAY
- M.E.S. = MITERED END SECTION
- = SANITARY SEWER MANHOLE
- = STORM SEWER MANHOLE
- = FLAG POLE
- = ELECTRIC BOX
- = TELEPHONE BOX
- = LAMP POLE
- = TRAFFIC SIGN
- = WATER VALVE
- = WATER METER
- = SANITARY SEWER VALVE
- = CLEANOUT
- = MAILBOX
- = TEMPORARY BENCHMARK
- = GUY ANCHOR
- = UTILITY POLE
- = YARD LIGHT
- = EXISTING PALM TREE (DIAMETER SHOWN IN INCHES)
- = EXISTING TREE, TYPE UNKNOWN (DIAMETER SHOWN IN INCHES)
- 10' = CONTOUR ELEVATION AT 1' INTERVALS
- OHU = OVERHEAD UTILITY LINE
- 10.38 = SPOT ELEVATION AT "X"
- = EXISTING CONCRETE TO REMAIN
- = EXISTING CONCRETE TO BE REMOVED
- = EXISTING ASPHALT TO REMAIN
- = EXISTING ASPHALT TO BE REMOVED
- = SILT FENCE
- = INLET SEDIMENT FILTER

NOTES:
1. CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT TREES.
2. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO THE START OF DEMOLITION.
3. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY UPON IDENTIFICATION OF UNKNOWN UNDERGROUND UTILITIES.
4. CONTRACTOR SHALL PROVIDE EROSION CONTROL FOR ALL EXISTING DRAINAGE STRUCTURES TO REMAIN UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL TAKE DUE CARE WHEN INSTALLING SILT FENCE AROUND EXISTING UNDERGROUND UTILITIES.
6. CONTRACTOR MAY ADJUST SILT FENCE LOCATIONS WITHIN INDICATED LIMITS OF CONSTRUCTION AS NEEDED TO PERFORM WORK.

EROSION CONTROL NOTES:

1. EROSION CONTROL MEASURES WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT TO RESTRICT ANY TURBID RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
2. CONTROL OF SEDIMENT-LADEN RUNOFF SHALL BE PROVIDED WITH HAY BALES AND/OR GEOTECH STYLE FABRICS. ALL CONTROL MEASURES SHALL BE PROPERLY LOCATED AND CONSTRUCTED TO PREVENT SEDIMENT TRANSPORT. THE MEANS FOR RETAINING THE SEDIMENTS WILL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT IMPROVEMENTS ARE COMPLETE.
3. THE CONTRACTOR IS RESPONSIBLE FOR TREATING ALL ONSITE STORMWATER DRAINAGE AS REQUIRED TO MEET THE CRITERIA OF 62-3 FLORIDA ADMINISTRATIVE CODE, F.A.C. PRIOR TO DISCHARGE.
4. ALL CATCH BASINS, INLETS AND ACCESSES TO UNDERGROUND STORMWATER SYSTEMS SHALL BE PROTECTED IN ACCORDANCE WITH THE ATTACHED DETAILS.
5. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS AND CONDITIONS OF ANY STORMWATER PERMITS THAT MAY APPLY (FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FLORIDA DEPARTMENT OF TRANSPORTATION, BAY COUNTY, WATER MANAGEMENT DISTRICT, ETC.).

SURVEY PREPARED BY:
DEWBERRY ENGINEERS INC.
203 ABERDEEN PARKWAY
PANAMA CITY, FLORIDA 32405

SOURCE CONTROL POINTS:

Description	Northing	Easting	Elev. (NAVD 19
FOUND CONCRETE MONUMENT ANDREW RESET (NOT GRAPHICALLY SHOWN)	427795.46	1591835.70	36.02

SITE BENCHMARKS:

1. SET NAIL & DISK IN LIGHT POLE L.B. 8011 – ELEVATION = 37.47'
2. SET NAIL & DISK IN ASPHALT L.B. 8011 – ELEVATION = 30.91'

PANHANDLE ENGINEERING, INC.
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100% CONSTRUCTION DOCUMENTS

NOT FOR CONSTRUCTION

(FOR REVIEW AND FINAL COORDINATION)

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	REDUCED CONCRETE REMOVAL	2025-07-03

EROSION CONTROL & DEMOLITION PLAN

Project Number	133407
Dated	01/31/2025
Drawn By	JNF
Approved By	JDC
PM	JDC

C1

22019
PROJECT STATUS
Issue Date

BLOCK BUILDING

COVERED WALK

PROPOSED BUILDING
FINISH FLOOR ELEVATION = 29.50'

HC RAMP

DWS

6" HIGH, 24" WIDE SPEED BUMP

PALN TREE

EXISTING SIGN

NOTE:
LOWER TOP OF EXISTING MANHOLE BY 12" AND REPLACE SOLID COVER WITH STORMWATER GRATE

SCALE: 1" = 20'

0' 10' 20' 40'
SCALE: 1" = 20'

SITE NOTES:

1. ABOVE GROUND STRUCTURES ARE SHOWN ON THIS SHEET.
2. ALL TRAFFIC STRIPING TO BE PAINT PER FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. CONTRACTOR TO FIELD VERIFY ALL UTILITIES AND NOTIFY ALL UTILITY COMPANIES 2 DAYS PRIOR TO CONSTRUCTION.
4. ALL DEMOLISHED MATERIALS (i.e. SIGNS, CONCRETE, ASPHALT, ETC.) TO BE REMOVED AND DISPOSED OF IN LEGAL MANNER.
5. TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE ALL TESTS.
6. SEED AND MULCH ALL DISTURBED AREAS, EXCEPT WHERE SOD IS SPECIFIED.
7. SOD ALL AREAS AS SHOWN OR AS REQUIRED FOR EROSION CONTROL.
8. SOD AND SEED SHALL BE BERMUDA.
9. ALL REGULATORY SIGNS SHALL BE INSTALLED PER FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LEGEND

- PROPOSED CONSTRUCTION
- EXISTING TO REMAIN
- SIGN
- HANDICAP PARKING
- PROPOSED ASPHALT PAVEMENT
- EXISTING ASPHALT PAVEMENT
- PROPOSED CONCRETE
- EXISTING CONCRETE
- DETECTABLE WARNING SURFACE (DWS)
- (10) PARKING COUNT IN ROW

NOTES:
1. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY UPON IDENTIFICATION OF CONFLICTS.

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

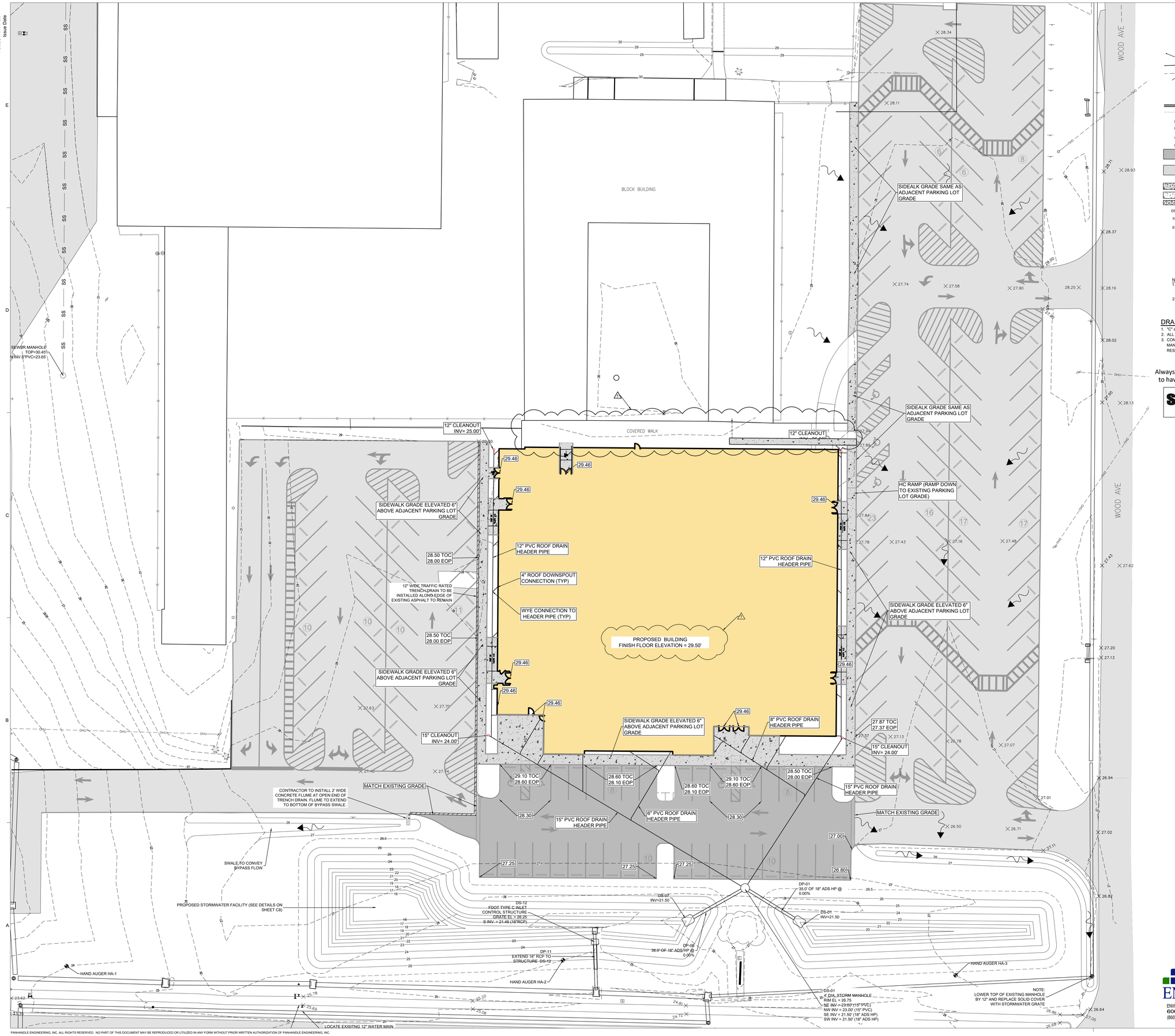
No.	Description	Date
1	REDUCED CONCRETE REMOVAL	2025-07-03

SITE PLAN

Project Number	133407
Dated	01/31/2025
Drawn By	JNF
Approved By	JDC
PM	JDC

C2

22019
PROJECT STATUS
Issue Date



LEGEND

X 36.00	EXISTING GRADE
XX.XX	PROPOSED FINISH GRADE
36	PROPOSED GRADE CONTOUR
36	EXISTING GRADE CONTOUR
	STORMWATER FLOW ARROW
	PROPOSED MANHOLE (SANITARY OR STORM)
	PROPOSED DRAINAGE INLETS (TYPE & SIZE NOTED ON PLANS)
	PROPOSED STORM PIPE
OHW	EXISTING OVERHEAD UTILITIES
DS-1	STORM DRAIN STRUCTURE i.e. #1
DP-1	STORM DRAIN PIPE i.e. #1
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
	PROPOSED ASPHALT PAVEMENT
	EXISTING ASPHALT PAVEMENT
	PROPOSED CONCRETE
	EXISTING CONCRETE
	DETECTABLE WARNING SURFACE (DWS)
DS ⌀	DOWNSPOUT
TOC	TOP OF CONCRETE
EOP	EDGE OF PAVEMENT

NOTES:
1. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY UPON IDENTIFICATION OF CONFLICTS.

DRAINAGE STRUCTURE NOTES:

1. "C" and "E" INLETS PER FDOT STD. PLANS INDEX 425-052
2. ALL STORM STRUCTURES TO HAVE 1ft. SUMPS.
3. CONTRACTOR MAY UTILIZE ADS HP STORM PIPE WHERE COVER EXCEEDS MANUFACTURER'S MINIMUM CRITERIA FOR COVER AND FLOTATION RESISTANCE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

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PANHANDLE ENGINEERING, INC.
ENVIRONMENTAL ENGINEERS ● CIVIL ENGINEERS ● LAND PLANNERS
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DAG ARCHITECTS
DAG Architects AR0009694
455 Harrison Ave., Panama City, FL 32401
850.387.1671
www.DAGarchitects.com

100% CONSTRUCTION DOCUMENTS

NOT FOR CONSTRUCTION

(FOR REVIEW AND FINAL COORDINATION)

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	ADDED FINISH FLOOR ELEVATION	2025-07-03
1	REDUCED CONCRETE REMOVAL	2025-07-03

GRADING AND DRAINAGE PLAN

Project Number	133407
Dated	01/31/2025
Drawn By	JNF
Approved By	JDC
PM	JDC

C3

22019
PROJECT STATUS
Issue Date

SIGN (NO PARKING)

SIGN (NO PARKING)

SEWER MANHOLE TOP=30.45' N.INV.8"PVC=23.65'

4' CHAIN LINK FENCE

CORE AND CONNECT 2" FORCE MAIN TO EXISTING MANHOLE INV.= 27.00'

2" PVC FORCE MAIN (SDR-21)

BUILDING AND COVERED HALLWAY

PLAYGROUND AREA

BLOCK BUILDING FFE = 31.59

AWNING

ELECTRIC TRANSFORMER PAD

4' CHAIN LINK FENCE (AC UNITS BEHIND FENCE)

BLOCK BUILDING

SEWER MANHOLE RIM=29.79' INV.8"TER.(N)=28.35' INV.3"C.I.(S)=28.42' INV.3"C.I.(S)=28.41'

E.T.P.

30" YARD DRAIN

CONNECT NEW 2" WATER SERVICE LINE TO EXISTING 2" WATER SERVICE LINE WITH ELBOW

COVERED WALK

PROPOSED BUILDING FINISH FLOOR ELEVATION = 29.50'

2.5" POTABLE WATER SERVICE POINT OF CONNECTION (SEE PLUMBING PLANS FOR CONTINUATION)

4" FIRE SERVICE POINT OF CONNECTION(SEE FIRE PROTECTION PLANS FOR CONTINUATION)

2.5" ELBOW
2.5" GATE VALVE

2.5" PVC WATER MAIN(SDR-21)

4" PVC SEWER POINT OF CONNECTION INV = 24.42' (SEE PLUMBING PLANS FOR CONTINUATION)

DUPLEX GRINDER LIFT STATION WITH VALVE BOX AND CONTROL PANEL.SEE DETAILS ON SHEET C10.

2" PVC WATER MAIN(SDR-21)

INV.6"PVC=27.91'

INV.6"PVC=27.96'

INV.6"PVC=27.85'

M.E.S.

6" WIDE WOOD RETAINING WALL

2" IRRIGATION POINT OF CONNECTION

FIRE HYDRANT ASSEMBLY

4" PVC WATER MAIN(DR 18)

2" PVC WATER MAIN (SDR 21)

2.5" PVC WATER MAIN (SDR 21)

6" PVC WATER MAIN (DR 18)

6"X4" REDUCER

4" TEE

4" DOUBLE DETECTOR CHECK ASSEMBLY WITH FDC

3" POTABLE WATER METER AND 3" RPZ BACKFLOW PREVENTER ASSEMBLY

2" IRRIGATION METER AND BACKFLOW PREVENTER ASSEMBLY

3"X2" REDUCER
2" GATE VALVE

3"X2.5" REDUCER

6"X3" TEE

3" TEE
3" GATE VALVE

LOCATE EXISITNG 12" WATER MAIN AND CONNECT WITH 12"x6" TAPPING SADDLE AND VALVE

SAW CUT SIDEWALK AT NEAREST JOINTS AND REMOVE FOR WATER MAIN INSTALLATION. REPLACE SIDEWALK TO MATCH EXISTING CONDITION

EXISTING METER TO REMAIN IN PLACE AND CONTINUE TO SERVE THE EXISTING BUILDING

2" PVC WATER MAIN (SDR-21)

PALM TREES

SIGN (PALM BAY)

PULL BOX

FIBER OPTIC MARKER

GAS LINE MARKER

CONCRETE WALK

W 11TH ST

STORM MANHOLE RIM=24.05' INV.30"CPP(E)=16.65' INV.30"CPP(S)=16.60'

STORM MANHOLE RIM=24.40' INV.24"RCP(N)=18.83' INV.24"RCP(W)=19.95' INV.18"RCP(S)=20.00'

LEGEND

- SS – EXISTING SANITARY SEWER LINE
- 4"SS – PROPOSED SANITARY SEWER LINE (SIZE AS NOTED)
- WM – EXISTING WATER LINE
- 2"WM – PROPOSED WATER LINE (SIZE AS NOTED)
- 2"FM – PROPOSED FORCE MAIN (SIZE AS NOTED)
- PROPOSED STORM PIPE
- OHW – EXISTING OVERHEAD UTILITIES
- PROPOSED ASPHALT PAVEMENT
- EXISTING ASPHALT PAVEMENT
- PROPOSED CONCRETE
- EXISTING CONCRETE

NOTES:
1. ALL EXISTING UTILITY LOCATIONS AND ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY UPON IDENTIFICATION OF CONFLICTS.

Always call 811 two full business days before you dig to have underground utilities located and marked.

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SCALE: 1" = 20'

0' 10' 20' 40'

SCALE: 1" = 20'

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	UTILITY REVISIONS	2025-07-03

UTILITY PLAN

Project Number	133407
Dated	01/31/2025
Drawn By	JNF
Approved By	JDC
PM	JDC

C4

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GENERAL NOTES

EXISTING SITE RELATED ITEMS:

1. THE LOCATION OF UTILITIES SHOWN ON THE PLANS MAY NOT BE ACCURATE AND ALL UTILITIES MAY NOT BE SHOWN. THE LOCATIONS OF UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED BY THEIR OWNER OR PANHANDLE ENGINEERING, INC.
2. THE EXACT LOCATION AND ELEVATION OF EXISTING STRUCTURES, UTILITIES, AND PIPING SHALL BE PHYSICALLY VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE CONSTRUCTION BEGINS. THESE DRAWINGS DO NOT INTEND TO SHOW IN COMPLETE DETAIL ALL EXISTING STRUCTURES, UTILITIES, OR PIPING. THE CONTRACTOR SHALL EXAMINE ALL AVAILABLE RECORDS AND MAKE ALL EXPLORATIONS AND EXCAVATIONS AS REQUIRED TO DETERMINE THE LOCATION OF EXISTING STRUCTURES, UTILITIES, AND PIPING, WHENEVER NECESSARY. THE OWNER RESERVES THE RIGHT TO CHANGE LOCATION OF LINES TO AVOID CONFLICT WITH EXISTING STRUCTURES, UTILITIES, OR PIPING.
3. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING. THE SURVEY MAY NOT SHOW ALL OBJECTS WITHIN THE PATH OF THE NEW UTILITIES. IF OBJECTS ARE NOT SHOWN ON THE SURVEY, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SEVEN DAYS PRIOR TO THE BID DATE. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ALL OBJECTS NOT SHOWN ON THE SURVEY.
4. STATIONING ON THE PLANS RELATES TO THE “2D PLAN VIEW” CENTERLINE OF ALL ROADWAYS/ RIGHT-OF-WAYS AND SHALL BE USED FOR LOCATION PURPOSES ONLY. CONTRACTOR SHALL NOT USE STATIONING WHEN CALCULATING PIPE OR ROADWAY LENGTHS. ACTUAL LENGTH MAY DIFFER DUE TO VERTICAL ELEVATION CHANGES AND HORIZONTAL OFFSETS.
5. THE CONTRACTOR SHALL PHYSICALLY EXAMINE THE ENTIRE PROJECT SITE AND INFORM HIMSELF FULLY IN REGARD TO ALL CONDITIONS PERTAINING TO THE PLACE WHERE THE WORK IS TO BE PERFORMED FOR PURPOSE OF DETERMINING HIS COST TO PERFORM THE WORK. THE CONTRACTOR SHOULD PAY SPECIAL ATTENTION TO AREAS INVOLVING CLEARING AND GRUBBING, EXISTING FACILITIES REMOVAL AND REPLACEMENT, SUPPORT ON RELOCATION, AND WORK INVOLVED IN WETLAND AREAS.
6. THE CONTRACTOR SHALL CHECK PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNER'S ENGINEER OF ANY CONFLICT BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
7. THE CONTRACTOR SHALL VIDEO THE ENTIRE ROUTE PRIOR TO CONSTRUCTION AND PROVIDE A COPY TO THE ENGINEER PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION.
9. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF WORK CALLED FOR IN THESE CONTRACT DOCUMENTS.
10. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR DUE TO THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

CONSTRUCTION REGULATIONS AND PERMITS RELATED ITEMS:

11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LEARN, KNOW, AND COMPLY WITH THE REGULATIONS, ORDINANCES, PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION. THE CONTRACTOR SHALL SCHEDULE THE REQUIRED INSPECTIONS AND APPROVALS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT CONDITIONS. THE CONTRACTOR SHALL NOTIFY THE NECESSARY AGENCIES OF CONSTRUCTION COMMENCEMENT.
12. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO SHALL BE OF LATEST ISSUE AND SHALL BE CONSIDERED A PART OF THESE DOCUMENTS AS THOUGH INCLUDED.
13. CONTRACTOR SHALL HAVE COPIES OF ALL PERMITS IN POSSESSION AT ALL TIMES DURING CONSTRUCTION. ANY INDIVIDUAL CREW OR INDIVIDUAL PERSON WORKING ON THE INSTALLATION OF ANY PART OF THIS PROJECT SHALL HAVE A SET OF PLANS AND SPECIFICATIONS WITH THEM AT ALL TIMES.
14. THE CONTRACTOR SHALL FOLLOW ALL CONDITIONS OF THE PERMIT REQUIREMENTS. SEE SPECIFICATIONS FOR COPY OF PERMITS.
15. CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR CONSTRUCTION.
16. CONTRACTOR SHALL FOLLOW ALL OSHA REQUIREMENTS FOR CONSTRUCTION.

CONSTRUCTION & SITE RESTORATION RELATED ITEMS:

17. WHERE IT BECOMES NECESSARY TO TEMPORARILY REMOVE, REPOSITION, OR SUPPORT EXISTING FACILITIES, UTILITY POLES, ETC. THIS WORK SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE AND IN ACCORDANCE WITH REQUIREMENTS OF THE OWNER OF THE EXISTING FACILITY, UTILITY POLE, ETC. THE CONTRACTOR SHALL GIVE PROPER NOTICE TO THE UTILITIES.
18. THE CONTRACTOR SHALL REMOVE AND REPLACE, TO THEIR ORIGINAL NATURE, ALL DISTURBED MATERIALS OR OBJECTS WITHIN THE PATH OF THE NEW UTILITIES AS NECESSARY. ALL REPLACED MATERIALS SHALL BE EQUAL OR BETTER AND SHALL BE APPROVED BY THE ENGINEER. THIS INCLUDES ALL LANDSCAPING WITHIN THE RIGHT OF WAY IN THE PATH OF THE NEW UTILITIES.
19. ALL DISTURBED OBJECTS SUCH AS DRIVEWAYS, CULVERTS, RETAINING WALLS, FENCING, SIGNS, MAILBOXES, LANDSCAPING, ETC. SHALL BE REINSTALLED TO EXISTING OR ACCEPTABLE CONDITION BY THE OWNER AT THE CONTRACTOR'S EXPENSE.
20. ALL PAVEMENT SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH ENGINEERING PLANS AND SPECIFICATIONS. FOR THE REPLACEMENT OF ASPHALT ROADS AND PAVEMENT DRIVES, THE CONTRACTOR SHALL REMOVE THE EXISTING ASPHALT AND REPLACE AS SHOWN IN DETAILS.
21. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE PROPOSED PAVEMENT ABUTS.
22. ALL CONCRETE DRIVEWAYS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH ENGINEERING PLANS AND SPECIFICATIONS. FOR REPLACEMENT OF CONCRETE CROSSINGS, THE CONTRACTOR SHALL SAW CUT BACK TO THE CLOSEST JOINT AND REPLACE AS SHOWN IN DETAILS.
23. ALL DISTURBED DRIVES SHALL BE CONNECTED TO THE EXISTING PAVEMENT IN A CONDITION EQUAL TO OR BETTER THAN ITS PREVIOUS CONDITION USING THE SAME MATERIALS THAT WERE REMOVED.
24. THE CONTRACTOR SHALL MAINTAIN A REASONABLE ACCESS TO ALL RESIDENCES AND BUSINESSES DURING CONSTRUCTION.
25. THE CONTRACTOR SHALL TAKE WHATEVER PRECAUTIONS NECESSARY TO AVOID TRESPASSING AND DAMAGING PRIVATE PROPERTY.
26. ALL SPOIL MATERIAL FROM EXCAVATION SHALL BE PLACED ON THE UPLAND SIDE OF ANY SLOPED CONSTRUCTION AREA.
27. ALL EXISTING CONCRETE, ASPHALT, TREES, STUMPS, AND OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FLORIDA LAWS.
28. A ONE FOOT STRIP OF SOD SHALL BE INSTALLED ON THE EDGE OF ALL ASPHALT OVERLAY AREAS AND AROUND ALL ABOVE GROUND CONCRETE STRUCTURES INCLUDING BUT NOT LIMITED TO VALVE PADS, BLOW OFF VAULTS, AND AIR RELEASE VAULTS.
29. ALL CONSTRUCTION STAKING SHALL BE DONE AT CONTRACTORS EXPENSE. CONTRACTOR IS TO FURNISH "AS BUILT PLANS" INDICATING LOCATIONS OF ALL MANHOLES, FITTINGS, VALVES, AND DEAD END RUNS WITH THREE (3) PHYSICAL FEATURES (LOT CORNERS, TREES, ETC.). THIS IS MANDATORY, NO EXCEPTIONS.

MAINTENANCE OF TRAFFIC AND ROADWAY RELATED ITEMS:

30. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN ADEQUATE TRAFFIC CONTROL AND TO PROVIDE DETOURS AROUND CONSTRUCTION ACTIVITIES. NO STREET SHALL REMAIN CLOSED TO TRAFFIC OVERNIGHT. IN ADDITION, THE CONTRACTOR SHALL COOPERATE WITH LOCAL RESIDENTS IN GAINING ACCESS TO THEIR HOMES AND BUSINESSES DURING WORKING HOURS AND SHALL ASSIST AT ALL TIMES WHEN VEHICLES EXPERIENCE TROUBLE DUE TO CONSTRUCTION ACTIVITIES.
31. THE CONTRACTOR SHALL INSTALL ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE PROJECT IN ACCORDANCE WITH THE LATEST EDITION OF THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL.
32. ALL DRIVEWAYS SHALL BE COMPACTED AND MAINTAINED DURING CONSTRUCTION TO ALLOW ACCESS TO FACILITIES AT ALL TIMES. ALL TEMPORARY STABILIZATION SHALL BE SMOOTH AND LEVEL.

EROSION CONTROL AND DEWATERING ITEMS:

33. PRIOR TO STARTING ANY CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
34. THE CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENT CONTROL PER THE GUIDELINES OF THE FLORIDA DEVELOPMENT MANUAL. ALL REQUIRED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE SHALL BE INCLUDED IN COST OF OTHER ITEMS OF WORK.
35. CONTRACTOR SHALL INSTALL ANY REQUIRED SLOPE STABILIZATION, SILT FENCING, BALED HAY BARRIERS, OR TURBIDITY CURTAINS PER CURRENT FDOT DESIGN STANDARDS FOR EROSION CONTROL AND WATER QUALITY. LOCATION SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED IN THE FIELD.
36. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL CONSTRUCTION AND PREVENT SEDIMENTS FROM DISCHARGING TO ADJACENT PROPERTIES, WETLANDS, STORM DRAINAGE SYSTEMS, AND/OR OFF-SITE AREAS, WHETHER SUCH EROSION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT AT NO ADDITIONAL COST TO OWNER. ADDITIONAL EROSION CONTROLS SHALL BE UTILIZED AS NECESSARY AND AS DIRECTED BY THE ENGINEER TO LIMIT SEDIMENTS FROM DISCHARGING TO ADJACENT PROPERTIES, WETLAND OR STORM DRAINAGE SYSTEMS. THERE WILL BE NO DIRECT PAYMENT FOR THIS WORK.
37. ALL CONSTRUCTION AREAS SHALL BE STABILIZED AT THE CLOSE OF EACH CONSTRUCTION DAY. EROSION CONTROLS SHALL BE CHECKED AT THIS TIME AND MAINTAINED OR REINFORCED IF NECESSARY.
38. EROSION CONTROLS SHALL REMAIN IN PLACE AND BE MAINTAINED FOR THE DURATION OF THE PROJECT TO LIMIT THE MOVEMENT OF SILTATION AND SEDIMENTS FROM ENTERING EXISTING DRAINAGE SYSTEMS OR FROM LEAVING THE CONSTRUCTION SITE. ANY ACCUMULATED SEDIMENTS ARE TO BE REMOVED FROM THE EROSION CONTROLS AND DISPOSED TO PROPERLY. ADDITIONALLY, ALL EROSION CONTROLS ARE TO BE INSPECTED AFTER A STORM EVENT AND THE CONTROLS REPLACED OR ARMORED AS NECESSARY AND ACCUMULATED SEDIMENTS REMOVED.
39. TEMPORARY STOCKPILING OF MATERIALS RELATED TO THE CONSTRUCTION ACTIVITIES ARE TO BE PROPERLY STABILIZED, PROTECTED AND DEMARCATED TO LIMIT MATERIAL MOVEMENT AND EROSION FROM DEPOSITING INTO ADJACENT PROPERTIES, WETLAND OR STORM DRAINAGE SYSTEMS.
40. THE INSTALLATION OF ALL CONCRETE STRUCTURES, GRAVITY SEWER, FORCE MAINS, WATER MAINS, ETC. SHALL BE INSTALLED IN DRY CONDITIONS. DEWATERING MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER. COMPREHENSIVE PLANS FOR DEWATERING OPERATIONS, IF USED, SHALL BE SUBMITTED BY THE CONTRACTOR TO ENGINEER PRIOR TO INSTALLATION.
41. THE CONTRACTOR SHALL UTILIZE APPROPRIATE DEWATERING SYSTEMS AND TECHNIQUES TO MAINTAIN THE EXCAVATED AREA SUFFICIENTLY DRY FROM GROUNDWATER AND/OR SURFACE RUNOFF SO AS NOT TO ADVERSELY AFFECT CONSTRUCTION PROCEDURES OR CAUSE EXCESSIVE DISTURBANCE OF UNDERLYING NATURAL GROUND.
42. WATER FROM TRENCHES AND EXCAVATIONS SHALL NOT BE DISCHARGED INTO ANY SANITARY SEWER SYSTEM.
43. WATER FROM TRENCHES AND EXCAVATIONS SHALL NOT BE DISCHARGED DIRECTLY TO STORM DRAIN SYSTEMS. PROPER TREATMENT TO A SEDIMENTATION AREA IS TO TAKE PLACE PRIOR TO DISCHARGE TO ANY DRAINAGE SYSTEMS.
44. WATER FROM THE TRENCHES AND EXCAVATIONS SHALL BE DISPOSED OF IN SUCH A MANNER AS TO AVOID PUBLIC NUISANCE, INJURY TO PUBLIC HEALTH OR THE ENVIRONMENT, DAMAGE OR PUBLIC OR PRIVATE PROPERTY, OR DAMAGE TO PUBLIC OR PRIVATE PROPERTY, OR DAMAGE TO THE WORK COMPLETED OR IN PROGRESS. SILTATION BARRIERS SHALL BE UTILIZED AS NECESSARY.
45. THE CONTRACTOR SHALL REPAIR ANY DAMAGE RESULTING FROM THE FAILURE OF THE DEWATERING OPERATIONS OR FROM FAILURE TO MAINTAIN ALL THE AREAS OF WORK IN SUITABLE DRY CONDITION.
46. PRECAUTIONS SHALL BE TAKEN TO PROTECT NEW WORK FROM FLOODING DURING STORMS OR FROM OTHER CAUSES. GRADING IN THE AREAS SURROUNDING ALL EXCAVATIONS SHALL BE PROPERLY SLOPED TO PREVENT WATER FROM RUNNING INTO THE EXCAVATED AREA OR TO ADJACENT PROPERTIES. WHERE REQUIRED, TEMPORARY DITCHES SHALL BE PROVIDED FOR DRAINAGE. UPON COMPLETION OF THE WORK AND WHEN DIRECTED, ALL AREAS SHALL BE RESTORED IN A SATISFACTORY MANNER AND AS DIRECTED.

SPECIAL NOTES

1. CONTRACTOR SHALL CUT AND REMOVE ASPHALT ROADWAYS AS NECESSARY TO INSTALL NEW SEWER MAINS, SEWER LATERALS, WATER MAINS, WATER SERVICE LINES AND OTHER REQUIRED UTILITY IMPROVEMENTS.
2. ALL ROADWAYS AND DRIVEWAYS SHALL BE COMPACTED AND MAINTAINED DURING CONSTRUCTION SO RESIDENTS AND BUSINESSES CAN HAVE ACCESS AT ALL TIMES. ALL TEMPORARY STABILIZATION SHALL BE SMOOTH AND LEVEL.
3. PIPE TESTING SHALL BE PERFORMED WITHIN IN ONE WEEK OF COMPLETING UTILITY IMPROVEMENTS IN ANY SECTION. SEE TEST SCHEDULE FOR MORE REQUIREMENTS.
4. ALL ROADWAY, DRIVEWAY AND SIDEWALK RESTORATION SHALL BE COMPLETED WITHIN ONE WEEK OF SUCCESSFUL PIPE TESTING IN ANY SECTION.
5. ALL DISTURBED YARD AND GRASSED AREAS SHALL BE SODDED WITH CENTIPEDE.
6. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING DAMAGED SECTIONS OF CONCRETE CURB.
7. COST FOR ALL NECESSARY REMOVAL AND REPLACEMENT OF DRIVEWAYS, SIDEWALKS, AND CURBS SPECIFIED ON CONSTRUCTION DRAWINGS SHALL BE INCLUDED IN LUMP SUM BID PRICE FOR EACH SECTION.
8. CONTRACTOR SHALL REMOVE AND REPLACE ALL TREES, SHRUBS AND IRRIGATION DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL SUBMIT A WORK CHANGE DIRECTIVE PRIOR TO CONSTRUCTION FOR ANY ADDITIONAL COST FOR WORK REQUIRED IN LANDSCAPED AREAS.
9. CONTRACTOR SHALL EXCAVATE AND VERIFY THE EXISTING WATER MAIN, FORCE MAIN, AND GRAVITY SEWER LOCATIONS AND SIZE PRIOR TO SCHEDULING WATER OUTAGE FOR CONNECTION.
10. CONTRACTOR SHALL PROVIDE FITTINGS AS NECESSARY TO MAINTAIN WATER MAIN SEPARATION REQUIREMENTS. CONTRACTOR SHALL RESTRAIN ALL WATER MAINS JOINTS WHERE 6' HORIZONTAL SEPARATIONS CANNOT BE MAINTAINED BETWEEN EXITING SEWER AND STORMWATER UTILITIES.
11. CONTRACTOR SHALL COMPLETE WATER SERVICE CONNECTIONS TO EXISTING METERS AFTER NEW WATER MAINS HAVE BEEN CERTIFIED AND PLACED INTO SERVICE.
12. CONTRACTOR SHALL PRESSURE TEST ALL NEW GRAVITY SEWER AND SEWER LATERALS UP TO THE CLEANOUT.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR BYPASS PUMPING FOR ALL GRAVITY SEWER AND MANHOLE INSTALLATIONS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITY OWNER TO STABILIZE POWER POLES AS THEY ARE ENCOUNTERED THROUGHOUT THE ENTIRE PROJECT.
15. REMOVAL AND REPLACEMENT OF EXISTING DRIVEWAYS AND DRIVEWAY CULVERTS SHALL BE INCLUDED IN THE BID PRICE. NEW DRIVEWAYS SHALL MATCH EXISTING MATERIALS.
16. REMOVAL AND REPLACEMENT OF EXISTING SIGNS, MAILBOXES, SODDING, IRRIGATION, LANDSCAPING, STRUCTURES, ETC. SHALL BE INCLUDED IN THE BID PRICE.
17. COMPACTION TESTING SHALL BE PERFORMED AT EACH ROADWAY CUT FOR SERVICE LATERALS AND PER FDOT SPECIFICATIONS FOR ROAD RECONSTRUCTION AND SHALL BE INCLUDED IN THE BID PRICE.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXISTING UTILITIES INCLUDING RECONNECTING ALL WATER AND SEWER SERVICES DAMAGED/BROKEN DURING THE INSTALLATION ON ALL PROPOSED UTILITIES AND OTHER IMPROVEMENTS, WITH NO ADDITIONAL COST TO THE OWNER.
19. THE CONTRACTOR SHALL AVOID OR MINIMIZE THE DISTURBANCE OF EXISTING TREES DURING THE INSTALLATION OF ALL GRAVITY SEWER, WATER MAINS AND OTHER PROPOSED IMPROVEMENTS WITHIN THE RIGHT OF WAYS AND EASEMENTS. IF TREES ARE DAMAGED OR REQUIRED TO BE MOVED, THEY SHALL BE REPLACED WITH TREES OF SIMILAR SIZE AND SPECIES WITH NO ADDITIONAL COST TO THE OWNER. IF APPLICABLE, THE CONTRACTOR MAY USE THE DIRECTIONAL BORE (FOR PRESSURE PIPE) OR JACK AND BORE (FOR GRAVITY PIPE) METHODS IN LIEU OF OPEN CUTTING TO AVOID IMPACTS AT CONTRACTORS EXPENSE.
20. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING SEWER MAINS AND LATERALS EXCAVATED DURING THE INSTALLATION OF THE PROPOSED GRAVITY SEWER IMPROVEMENTS. ALL ABANDONED SECTIONS OF NON-EXCAVATED EXISTING GRAVITY SEWER SHALL BE FLOWABLE FILLED. ALL DEMOLITION AND FLOWABLE FILL WORK SHALL BE INCLUDED IN THE BID PRICE.
21. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A MAINTENANCE OF TRAFFIC PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION. SIGNAGE SHALL BE MAINTAINED AT ALL TIMES AND SHALL BE INCLUDED IN THE BID PRICE.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BY-PASS PUMPING AND SHALL BE INCLUDED IN THE BID PRICE.
23. CONTRACTOR SHALL PROVIDE DE-WATERING AS NECESSARY FOR THE INSTALLATION OF ALL PROPOSED IMPROVEMENTS. ALL DE-WATERING SHALL BE INCLUDED IN THE BID PRICE.
24. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NPDES PERMIT AND MAINTAINING THE SILT FENCE, INLET PROTECTION, AND ANY OTHER EROSION CONTROL NECESSARY IN THE NPDES PERMIT GUIDELINES.
25. THE GRAVITY SEWER LINES SHALL BE VIDEO TAPED UPON COMPLETION OF THE INSTALLATION AND PROVIDED TO THE CITY ENGINEER IN DVD FORMAT FOR REVIEW.

TESTING NOTES AND SCHEDULE

1. COPIES OF TEST REPORTS FOR ASPHALT, SUBGRADE, FILL, AND BACKFILL UNDER ROADWAYS AND STRUCTURES, AND UTILITY TRENCHES SHALL BE PROVIDED DIRECTLY TO THE ENGINEER FOR APPROVAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE TESTING AND INSURE THAT ALL APPLICABLE TESTS HAVE BEEN PERFORMED. FAILURE TO OBTAIN TEST RESULTS AT ANY POINT OF CONSTRUCTION WILL REQUIRE THE REMOVAL OF THE IMPROVEMENT AND REPLACEMENT BY THE CONTRACTOR. IT SHOULD BE NOTED THAT THE ENGINEER WILL REQUIRE COMPACTION TESTING IN ACCORDANCE WITH THE TESTING SCHEDULE FOR UTILITY TRENCH FILL AND BACKFILL.
2. TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TESTING SCHEDULE CONTAINED WITHIN THESE PLANS. SELECTION AND CONTRACTING WITH THE TESTING FIRMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE ALL TESTS.
3. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER 15 CALENDAR DAYS PRIOR TO PRESSURE TESTING AND BACTERIOLOGICAL TESTING SO A TESTING PLAN CAN BE ESTABLISHED.

62-555.314 (5)

(A) WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE.

1. USE OF PRESSURE-RATED PIPE CONFORMING TO THE AMERIAN WATER WORKS ASSOCIATION STANDARDS INCORPORATED INTO RULE 62-555.330, F.A.C., FOR THE OTHER PIPELINE IF IT IS A GRAVITY - OR VACUUM - TYPE PIPELINE;
2. USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE; OR
3. USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE.

(B) WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THREE FEET HORIZONTALLY FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE:

1. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATER MAIN; AND
2. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.

F.A.C. 62-555.314 EXCEPTIONS

CITY OF PANAMA CITY FLORIDA	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	UTILITY SEPARATION REQUIREMENTS (2)	FIGURE : PW-22

PANAMA CITY UTILITY CONSTRUCTION NOTES

FORCE MAIN INSTALLATION RELATED ITEMS:

1. PVC PIPE LESS THAN 4" DIAMETER SHALL BE ASTM DD2241, SDR-21.
2. PVC PIPE 4"-6" SHALL BE AWWA C900 (DR25).
3. PVC PIPE 8"-12" SHALL BE AWWA C900 (DR25).
4. PVC PIPE GREATER THAN 12" SHALL BE AWWA C905 (DR18).
5. FITTINGS AND VALVES 4" AND GREATER SHALL BE MECHANICAL JOINT DUCTILE IRON (250 PSI MIN.).
6. MECHANICAL JOINT RESTRAINTS SHALL BE UTILIZED. (EBBA OR APPROVED EQUAL).
7. ALL FORCE MAINS SHALL BE COLOR GREEN OR BROWN.
8. ALL SANITARY FORCE MAINS SHALL BE HYDROSTATICALLY TESTED PER AWWA STANDARD C600 (LATEST EDITION) AT 100 PSIG (MINIMUM) FOR TWO HOURS.
9. ALL FLUSHING REQUIREMENTS PER AWWA STANDARDS (3 FPS MINIMUM, 6 X PIPE VOLUME MINIMUM.)

GRAVITY SEWER INSTALLATION RELATED ITEMS:

10. ALL GRAVITY SEWER PIPE, MANHOLES, SERVICE LATERALS AND PIPE BEDDING SHALL BE INSTALLED ACCORDING TO ENGINEERING DRAWINGS AND SPECIFICATIONS.
11. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING SEWER MAINS AND SEWER LATERALS TO BE CONNECTED TO PRIOR TO CONSTRUCTION.
12. ALL GRAVITY SEWER PIPE SIZES 4” TO 15” AND DEPTHS UP TO 15 FEET SHALL BE PVC AND IN ACCORDANCE WITH ASTM D-3034-SDR26, UNLESS SPECIFIED TO 15” AND DEPTHS UP TO 15 FEET SHALL BE PVC AND IN ACCORDANCE WITH ASTM D-3034-SDR26, UNLESS SPECIFIED AND DEPTHS UP TO 15 FEET SHALL BE PVC AND IN ACCORDANCE WITH ASTM D-3034-SDR26, UNLESS SPECIFIED OTHERWISE.
13. ALL SEWER SERVICE LATERAL CONNECTIONS SHALL BE INSTALLED A MINIMUM OF 5 FEET FROM THE NEAREST MANHOLE AND HAVE A 2 FEET MINIMUM SEPARATION BETWEEN MANHOLE. ALL SEWER SERVICE LATERALS CONNECTIONS TO NEW PVC SEWER PIPE SHALL BE MADE WITH GASKETED PVC TEE OR WYE FITTINGS. SADDLE CONNECTIONS SHALL NOT BE ALLOWED.
14. ALL SEWER SERVICE LATERALS SHALL BE 4 INCHES UNLESS NOTED OTHER WISE. THE MINIMUM SEWER SERVICE LATERAL PIPE SLOPE SHALL BE; 4 INCHES=2%; 6 INCHES= 1%; 8 INCHES=0.5%.
15. LOCATOR TAPE SHALL BE INSTALLED 12” TO 18” ABOVE ALL GRAVITY SEWER MAINS AND SERVICE LATERALS. LOCATER TAPE SHALL BE MARKED “SANITARY SEWER BELOW”.
16. ALL CONNECTIONS TO EXISTING SEWER MAINS AND LATERALS OF DISSIMILAR MATERIALS SHALL BE MADE WITH STRONG BACK FLEXIBLE REPAIR COUPLINGS.
17. MANHOLES SHALL BE A MINIMUM FOUR (4) FOOT DIAMETER AND CONSTRUCTED PER THE STANDARDS AND SPECIFICATIONS.
18. ALL MANHOLE BENCHES SHALL BE REPAIRED OR REPLACED AS NECESSARY TO HAVE SMOOTH TRANSITIONS THROUGH MANHOLE.
19. ALL GRAVITY SEWER PIPE (MAINS AND LATERALS) SHALL HAVE AIR TEST AND COLOR CCTV INSPECTION COMPLETED AND APPROVED BY THE ENGINEER PRIOR TO ROADWAY RESURFACING.
20. CCTV INSPECTIONS SHALL BE COMPLETED IMMEDIATELY AFTER FLUSHING WITH CLEAN WATER. ANY DEBRIS ENCOUNTERED WILL RESULT IN A FAILED INSPECTION AND PRESSURE TEST.
21. GRAVITY SEWER PIPE SAGS SHALL NOT EXCEED MORE THAN 10% OF THE PIPE DIAMETER.

POTABLE AND REUSE WATER MAINS POTABLE AND REUSE WATER MAINS

22. PVC PIPE LESS THAN 4" DIAMETER SHALL BE ASTM DD2241, SDR-21.
23. PVC PIPE 4"-6" SHALL BE AWWA C900 DR18 (PC 235).
24. PVC PIPE 8"-12" SHALL BE AWWA C900 DR25 (PC 165).
25. PVC PIPE GREATER THAN 12" SHALL BE AWWA C905 DR25 (PC 160).
26. FITTINGS AND VALVES 4" AND GREATER SHALL BE MECHANICAL JOINT DUCTILE IRON (250 PSI MIN.).
27. MECHANICAL JOINT RESTRAINTS SHALL BE UTILIZED.
28. ALL POTABLE WATER MAINS SHALL BE PVC COLOR BLUE. ALL RECLAIMED WATER MAINS SHALL BE PVC COLOR PURPLE.
29. ALL FLUSHING REQUIREMENTS PER AWWA STANDARDS (3.0 fps MINIMUM., 6 X PIPE VOLUME MINIMUM.)
30. ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED PER AWWA STANDARD C600 (LATEST EDITION) AT 150 PSIG (MINIMUM) FOR TWO HOURS.
31. ALL WATER MAINS REQUIRE DISINFECTION PER AWWA STANDARD C651.

WATER AND REUSE VALVES WATER AND REUSE VALVES

32. 12" AND LESS SHALL BE EPOXY COATED RESILIENT SEAT GATE VALVES.
33. 16" AND ABOVE SHALL BE EPOXY COATED RESILIENT BUTTERFLY VALVES.

FORCE MAIN

34. PVC PIPE LESS THAN 4" DIAMETER SHALL BE ASTM DD2241, SDR-21.
35. PVC PIPE 4"-6" SHALL BE AWWA C900 DR18 (PC 235).
36. PVC PIPE 8"-12" SHALL BE AWWA C900 DR25 (PC 165).
37. PVC PIPE GREATER THAN 12" SHALL BE AWWA C905 DR25(PC 160).
38. FITTINGS AND VALVES 4" AND GREATER SHALL BE MECHANICAL JOINT DUCTILE IRON (250 PSI MIN.).
39. MECHANICAL JOINT RESTRAINTS SHALL BE UTILIZED (GBBA MEGALUG OR MECHANICAL JOINT RESTRAINTS SHALL BE UTILIZED (GBBA MEGALUG OR APPROVED EQUAL).
40. ALL FORCE MAINS SHALL BE COLOR GREEN OR BROWN.
41. ALL SANITARY FORCE MAINS SHALL BE HYDROSTATICALLY TESTED PER AWWA STANDARD C600 (LATEST EDITION) AT 100 PSIG (MINIMUM) FOR TWO HOURS.
42. ALL FLUSHING REQUIREMENTS PER AWWA STANDARDS (3.0 fps MINIMUM., 6 X PIPE VOLUME MINIMUM.)

GRAVITY SEWER

43. PVC PIPE 4"-15" DIAMETER SHALL BE ASTM D3034, (SDR-35.)
44. PVC PIPE 18"-27" DIAMETER SHALL BE F679 (SDR-35.)
45. PVC PIPE DEEPER THAN 14 FEET SHALL BE SDR 26.
46. ALL SEWER LINES SHALL BE COLOR GREEN OR BROWN.
47. ALL GRAVITY SEWER PIPING SHALL BE TESTED IN ACCORDANCE WITH UNI-B-6-98, UNIBELL PVC PIPE CORPORATION. CONSTANT PRESSURE OF 4.0 PSIG (GREATER THAN THE AVERAGE GROUNDWATER BACK PRESSURE).
48. FIBERGLASS OR STAINLESS MANHOLE COVER INSERTS ARE REQUIRED AT ALL MANHOLES WITH RIM ELEVATIONS BELOW 7 FEET NGVD.
49. MANHOLE RINGS AND COVER SHOULD BE 3 INCHES ABOVE GRADE IN UNPAVED AREAS TO PREVENT STORMWATER INFLOW.

DENSITY TESTING SCHEDULE

ITEM	DENSITY REQUIREMENT	DENSITY TEST FREQUENCY
UTILITY TRENCH FILL & BACKFILL	90% STANDARD DENSITY	PER SOIL TYPE ONE PER 500 LF HORIZONTAL OR ONE PER 750 SY WITH A MINIMUM OF 3 TESTS, ALTERNATING LIFTS (12”) ONE PER SOIL TYPE
FILL & BACKFILL UNDER ROADWAYS AND STRUCTURES	98% OF STANDARD DENSITY	PER SOIL TYPE ONE PER 200 LF HORIZONTAL OR ONE PER 750 SY WITH A MINIMUM OF 3 TESTS (PER SECTION OF WORK), ALTERNATING LIFTS (12”) ONE PER SOIL TYPE
SUBGRADE UNDER ROADWAYS AND STRUCTURES	98% OF MAXIMUM DENSITY, MODIFIED PROCTOR	ONE PER SITE OR AT MATERIAL CHANGES PER SOIL TYPE ONE PER 200 LF HORIZONTAL OR ONE PER 750 SY WITH A MINIMUM OF 3 TESTS (PER SECTION OF WORK)
LIMEROCK BASE UNDER ROADWAYS AND STRUCTURES	98% OF MAXIMUM DENSITY, MODIFIED PROCTOR	ONE PER SITE OR AT MATERIAL CHANGES ONE PER 200 LF HORIZONTAL OR ONE PER 1200 SY WITH A MINIMUM OF 3 TESTS (PER SECTION OF WORK)

PANHANDLE
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100% CONSTRUCTION
DOCUMENTS

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(FOR REVIEW AND
FINAL
COORDINATION)

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

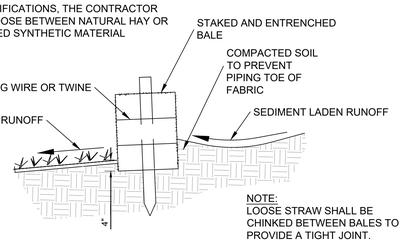
No.	Description	Date

GENERAL NOTES

Project Number 133407
Dated 12/15/2024
Drawn By JNF
Approved By JDC
PM JDC

C5

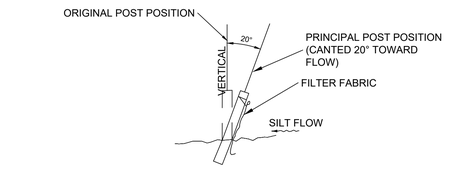
NOTE:
UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR MAY CHOOSE BETWEEN NATURAL HAY OR APPROVED SYNTHETIC MATERIAL



NOTE:
LOOSE STRAW SHALL BE CHINKED BETWEEN BALES TO PROVIDE A TIGHT JOINT.

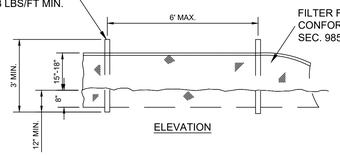
STAKED BALE
N.T.S

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	STAKED HAY BALE	FIGURE : G-1



SECTION

POST OPTIONS:
SOFTWOOD 2½" MIN. DIA.
SOFTWOOD 2" X 4"
HARDWORD 1½ " X 1½ "
STEEL 1.33 LBS/FT MIN.



ELEVATION

TYPE III SILT FENCE
N.T.S

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	TYPE III SILT FENCE	FIGURE : G-2

ENVIRONMENTAL SEQUENCE

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS, DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

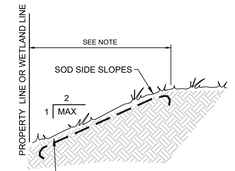
SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCES AND HAY BALES, AS REQUIRED.
3. CONSTRUCT SEDIMENTATION BASIN.
4. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN AT PERMANENT POND LOCATION.
5. CONTINUE CLEARING AND GRUBBING.
6. STOCKPILE TOP SOIL IF REQUIRED.
7. PERFORM PRELIMINARY GRADING ONSITE, AS REQUIRED.
8. STABILIZE DENUDED AREA AND STOCKPILES AS SOON AS PRACTICABLE.
9. INSTALL UTILITIES, STORM SEWER, CURBS AND GUTTER.
10. APPLY BASE TO PROJECT.
11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING.
12. COMPLETE FINAL PAVING.
13. REMOVE ACCUMULATED SEDIMENT FROM BASINS.
14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/ SOD, AS REQUIRED.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION AND TURBIDITY CONTROL PLAN.



EROSION CONTROL BLANKET #2010-01 BY EROSION CONTROL SYSTEMS. (1-800-641-3277) UNDER SOD ANCHORED WITH 6" SOD STAPLES.

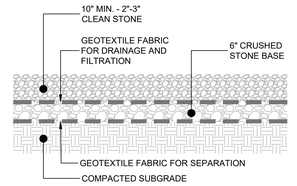
NOTE: PROVIDE EROSION CONTROL BLANKET FROM PROPERTY LINE OR WETLAND LINE WHERE APPLICABLE TO BACK OF CURB, BUILDING OR TO TOP OF BASIN AS REQUIRED.

SLOPE STABILIZATION DETAIL
NOT TO SCALE

SLOPE STABILIZATION NOTES

FLAT TO 1:3 - SEED AND MULCH, HYDRO-SEED OR SOD.
1:3 TO 1:2 - SOD LAPPED AND PINNED.
1:2 TO 1:1 - EROSION CONTROL BLANKET AND SOD.
1:1 OR GREATER - RETAINING WALL OR ARMOR FORM.

NOTE:
AREAS NOT SODDED TO BE STABILIZED WITH HYDROSEEDING. SEE SLOPE STABILIZATION DETAIL THIS SHEET



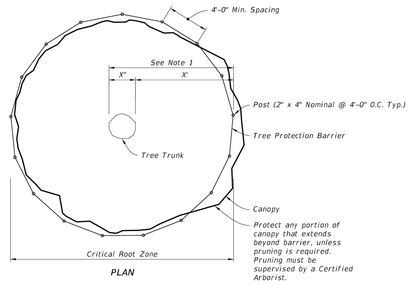
CONSTRUCTION ENTRANCE NOTES:

1. GRADE SLOPE TO SITE.
2. PROVIDE CULVERT AS REQUIRED TO CARRY PRE-EXISTING DITCH FLOW. (SEE EXISTING PLAN VIEW FOR LOCATION)
3. CONTRACTOR TO LOCATE TEMPORARY CONSTRUCTION FENCING, JERSEY BARRIERS, OR BOTH ALONG THE SIDES OF THE CONSTRUCTION EXIT TO PREVENT CONSTRUCTION TRAFFIC FROM SHORT CIRCUITING/BYPASSING THE EXIT.
4. ALL MATERIALS SPILLED, DROPPED OR TRACKED ONTO PUBLIC ROADS (INCLUDING AGGREGATE STONE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY.

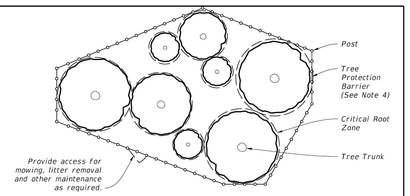
CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

NOTES:

1. Critical Root Zone: Extends in all directions from trunk of tree to a distance equal to one foot per inch of trunk diameter at breast height.
2. Staging, storage, dumping, washing and operation of equipment is not permitted within the limits of the tree protection barrier, including during barrier installation.
3. Install all tree protection prior to commencement of construction and remove when directed by the Engineer. Maintain protection at all times.
4. For closely spaced groups of trees, place the tree protection barrier around the entire group.
5. Inspect trunk protection and tree quarterly to prevent girdling. Adjust bands to allow tree growth as needed.
6. See plans for any additional requirements or modifications within the tree protection area.
7. Place weather resistant sign every 50' along the barrier, with 6" minimum text height and provide text in English and Spanish. Sign should read " Keep Out Tree Protection Area".
8. Alternate tree protection systems approved by the Engineer may be used in lieu of the tree protection barrier detailed on this Index as long as the critical root zone is protected.
9. The Critical Root Zone may be reduced, in the field, by a certified Arborist or Landscape Architect.

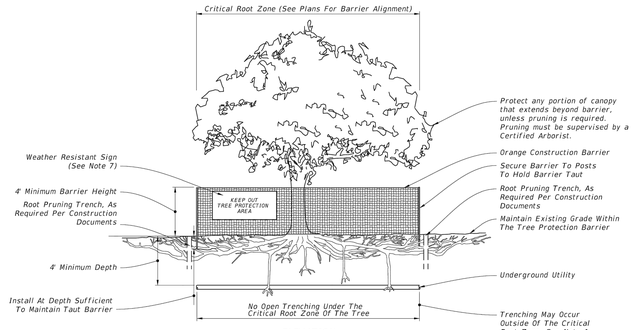


PLAN



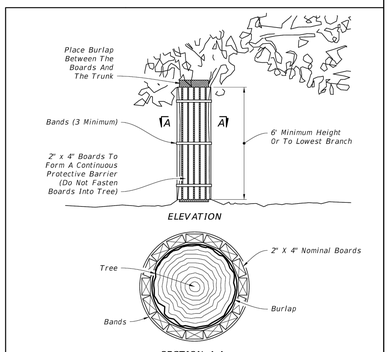
PLAN

PROTECTION BARRIER FOR TREE GROUPINGS



ELEVATION

TREE PROTECTION BARRIER



NOTES:

1. Trunk protection may be used when Tree Protection Barrier can not be reasonably erected, when approved by Engineer.
2. See Selective Clearing and Grubbing Plan for location of trunk protection, when applicable.
3. Adjust bands to allow tree growth (inspect quarterly to prevent girdling).

TRUNK PROTECTION

LAST REVISION 11/01/18	REVISION	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	TREE PROTECTION AND PRESERVATION	INDEX 110-100	SHEET 1 of 1

10/29/2019 8:14:39 AM

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DAG Architects AR0009694
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100% CONSTRUCTION DOCUMENTS

NOT FOR CONSTRUCTION

(FOR REVIEW AND FINAL COORDINATION)

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

CONSTRUCTION DETAILS

Project Number	133407
Dated	12/15/2024
Drawn By	JNF
Approved By	JDC
PM	JDC

C6

PANHANDLE ENGINEERING, INC.
ENVIRONMENTAL ENGINEERS ● CIVIL ENGINEERS ● LAND PLANNERS
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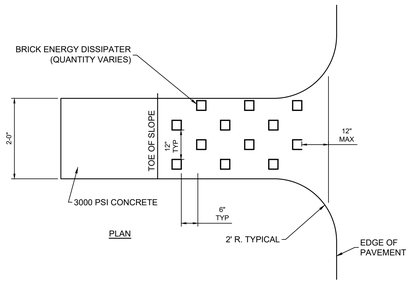
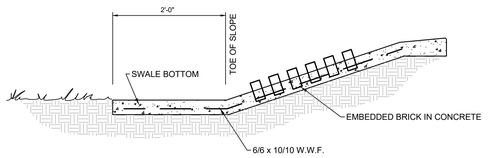
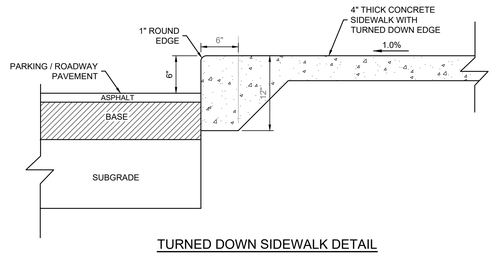


PLAN



SECTION

FLUME AND ENERGY DISSIPATER DETAIL
NOT TO SCALE



TURNED DOWN SIDEWALK DETAIL
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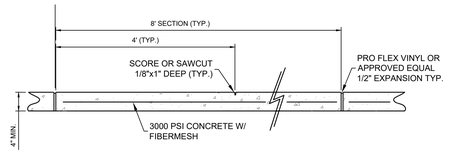
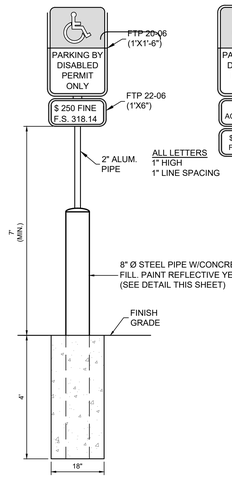


NOTE:
SIDEWALKS CROSS SLOPE NOT TO EXCEED 2.0% (50:1)

CONCRETE SIDEWALK DETAIL
NOT TO SCALE



HANDICAP SIGN DETAIL
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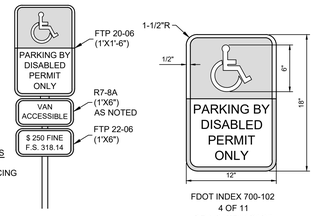
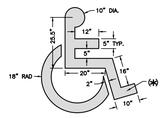
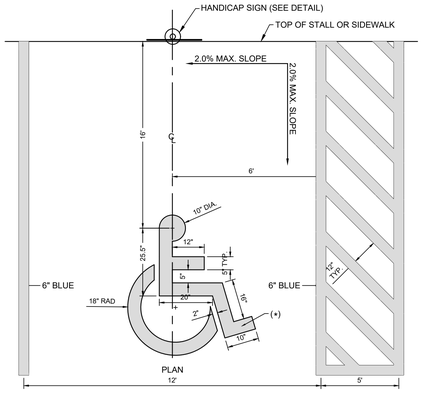


FDOT INDEX 700-102
4 OF 11
REV. DATE:11/01/17

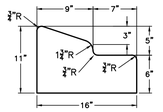


SYMBOL DETAIL
(*) INTERNATIONAL SYMBOL OF ACCESSIBILITY DISPLAY CONDITIONS. THE SYMBOL CONTRAST SHALL BE LIGHT ON DARK, OR DARK ON LIGHT.



(*) INTERNATIONAL SYMBOL OF ACCESSIBILITY DISPLAY CONDITION:
THE SYMBOL CONTRAST SHALL BE LIGHT ON DARK, OR DARK ON LIGHT.

HANDICAP STRIPING DETAIL
NOT TO SCALE



TYPE A CURB DETAIL
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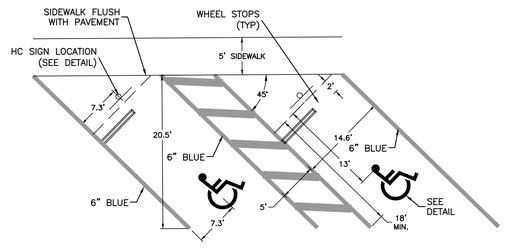
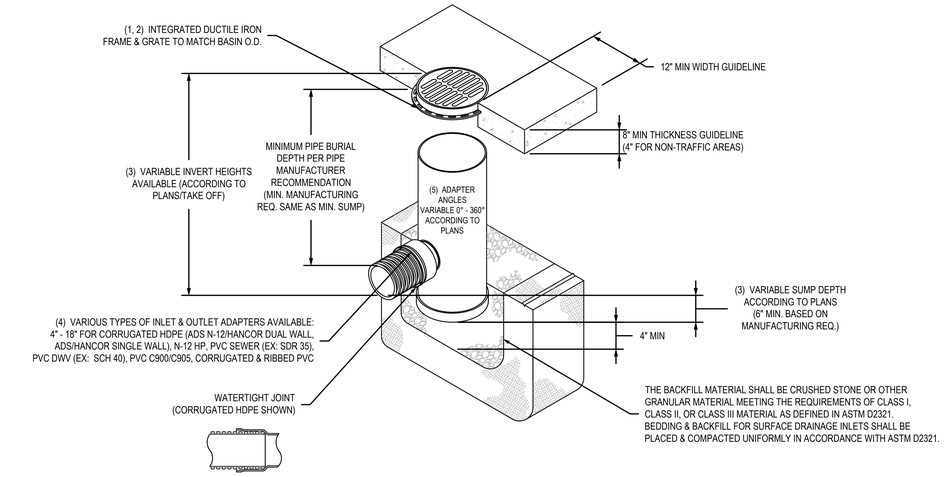
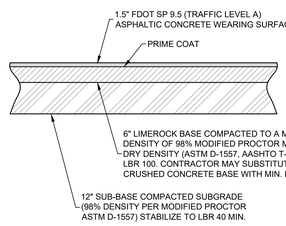


NOTE: ALL STRIPING TO BE PER ADA STANDARDS

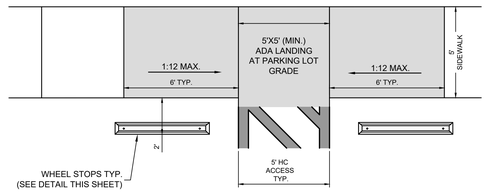
45° HANDICAP STRIPING DETAIL RAMP
NOT TO SCALE



NYLOPLAST DRAIN BASIN DETAIL
NOT TO SCALE

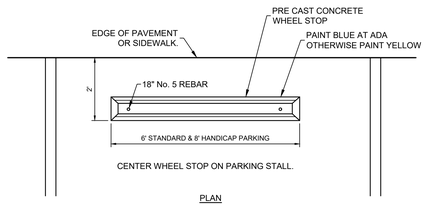


ASPHALTIC PAVEMENT DETAIL
NOT TO SCALE



NOTE: CONTRACTOR RESPONSIBLE TO CONSTRUCT
HC RAMPS TO MEET ADA SPECIFICATIONS

TYPICAL ADA SIDEWALK RAMP
NOT TO SCALE



PLAN

WHEEL STOP DETAIL
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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

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Dated	12/15/2024
Drawn By	JNF
Approved By	JDC
PM	JDC

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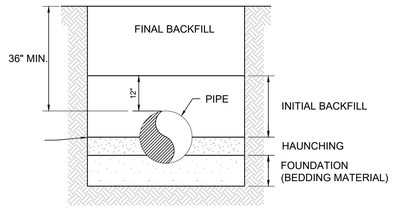
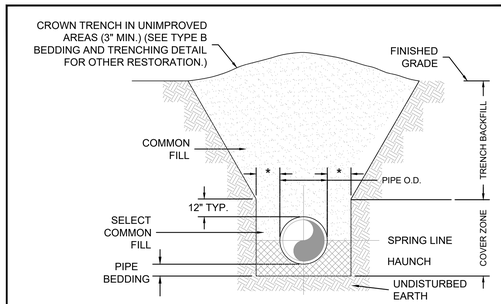
NOTE:
SEE SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS



TRENCH TERMINOLOGY
N.T.S

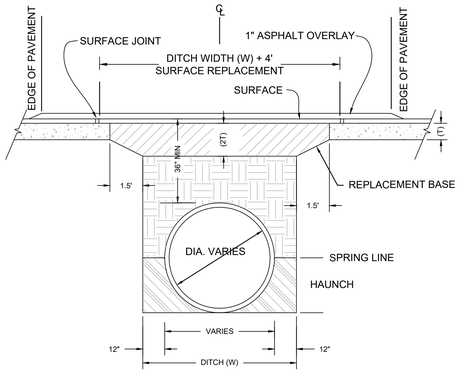
	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	TRENCH TERMINIOLOGY	FIGURE : G-4



NOTES:
1. SHEETING AND BRACING IN EXCAVATED TRENCHES TO COMPLY WITH THE MANUFACTURER SPECIFICATIONS, AND MUST MEET THE STATE "TRENCH SAFETY ACT".
2. ALL PIPE TO BE INSTALLED AS PER THE LINES, GRADES, AND SLOPES CALLED FOR IN THE PLANS, AND AT A MINIMUM OF 36 INCHES BELOW THE TOP OF THE FINISH GRADE.
3. (*)THE WIDTH OF THE TRENCH IS TO BE 24 INCHES WIDER THAN THE OUTSIDE DIAMETER OF PIPE.
4. IF THE TRENCH IS UNDERCUT OR UNSUITABLE MATERIAL IS ENCOUNTERED, BEDDING MATERIAL (SELECT COMMON FILL OR BEDDING ROCK) IS TO BE UTILIZED AND LEFT IN A LOOSE CONDITION BELOW THE MIDDLE THIRD OF THE OUTSIDE DIAMETER OF THE PIPE. THE REMAINDER OF THE TRENCH BOTTOM IS TO BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY AS (DETERMINED BY ASTM D1557.
5. WHEN BEDDING MATERIAL IS TO BE UTILIZED, IT IS TO BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES BELOW THE BOTTOM OF THE PIPE.
6. IF THE TRENCH IS NOT UNDERCUT, EXCAVATE FOR THE PIPE BELLS BEFORE LAYING THE PIPE.
7. THE PIPES ARE TO BE INSTALLED SO THAT THE BELL OF THE PIPE IS FACING UPSTREAM TO THE DIRECTION OF FLOW.
8. HAND TAMP THE FILL MATERIAL IN THE HAUNCH AREA THAT CANNOT BE REACHED BY MECHANICAL TAMPERS.
9. FOR CONCRETE PIPE, COMPACT THE BACKFILL IN 6 INCH LAYERS (UP TO A MAXIMUM OF 12 INCHES ABOVE THE TOP OF THE PIPE) TO A DENSITY OF AT LEAST 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D1557. FOR METAL AND PLASTIC PIPE, COMPACT THE BACKFILL IN 6 INCH LAYERS (UP TO A MAXIMUM OF 12 INCHES ABOVE THE TOP OF THE PIPE) TO A DENSITY OF AT LEAST 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.
10. COMPACT AND STABILIZE THE REMAINING BACKFILL, IN LAYERS OF APPROVED THICKNESS, TO THE DENSITIES SPECIFIED IN THE PLANS AND SPECIFICATIONS
11. CONTRACTOR TO PLACE A WOVEN OR NON-WOVEN FILTER FABRIC (TYPE D-3) AROUND THE HUBBED JOINT OF ALL CONCRETE PIPE TO PREVENT POTENTIAL SOIL INFILTRATION.
12. WATER WILL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION. DEWATER AS NECESSARY DURING PLACEMENT.

TRENCH TYPE "A"
N.T.S.

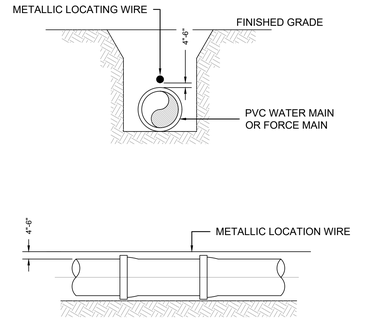
	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	TRENCH TYPE "A"	FIGURE : G-5



NOTES:
1. SHEETING AND BRACING IN EXCAVATED TRENCHES TO COMPLY WITH THE MANUFACTURER SPECIFICATIONS, AND MUST MEET THE STATE "TRENCH SAFETY ACT".
2. ALL PIPE TO BE INSTALLED AS PER THE LINES, GRADES, AND SLOPES CALLED FOR IN THE PLANS, AND AT A MINIMUM OF 36 INCHES BELOW THE TOP OF PAVEMENT.
3. HAND TAMP THE FILL MATERIAL IN THE HAUNCH AREA THAT CANNOT BE REACHED BY MECHANICAL TAMPERS.
4. FOR CONCRETE PIPE, COMPACT THE BACKFILL IN 6 INCH LAYERS (UP TO A MAXIMUM OF 12 INCHES ABOVE THE TOP OF THE PIPE) TO A DENSITY OF AT LEAST 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D1557. FOR METAL AND PLASTIC PIPE, COMPACT THE BACKFILL IN 6 INCH LAYERS (UP TO A MAXIMUM OF 12 INCHES ABOVE THE TOP OF THE PIPE) TO A DENSITY OF AT LEAST 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.
5. COMPACT AND STABILIZE THE REMAINING BACKFILL IN LAYERS OF AN APPROVED THICKNESS, TO A DENSITY AS SPECIFIED BY THE PLANS AND SPECIFICATIONS.
6. THE EXISTING ASPHALT IS TO BE SAWED MECHANICALLY AND REMOVED TO LEAVE NEAT LINES A MINIMUM OF 1.5 FEET WIDER ON EACH SIDE OF THE TRENCH CUT.
7. IF THE EXISTING BASE IS NOT AN ASPHALTIC BASE, IT IS TO BE REPLACED WITH THE SAME MATERIAL AT TWICE THE THICKNESS OF THE EXISTING BASE, IN 6 INCH LAYERS, AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.
8. IF THE EXISTING BASE IS AN APSHALTIC BASE, IT IS TO BE REPLACED WITH A MINIMUM OF 5 INCHES OF AN APPROVED ASPHALT BASE COURSE AND MEET THE REQUIREMENTS OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
9. THE SURFACE COURSE IS TO BE REPLACED CONSISTENT WITH THE EXISTING SURFACE COURSE. THE LENGTH OF THE TRENCH CUT IS TO BE OVERLAYED WITH 1 INCH TYPE S-3 ASPHALT (OR AN APPROPRIATE, APPROVED SUPERPAVE MIX) THE WIDTH OF THE EXISTING PAVEMENT AND FEATHERED AT THE SIDES AND THE ENDS.
10. CONTRACTOR SHALL PLACE A WOVEN OR NON-WOVEN FILTER FABRIC (TYPE D-3) AROUND THE HUBBED JOINT OF ALL CONCRETE PIPE TO PREVENT POTENTIAL SOIL INFILTRATION.
11. WATER WILL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION. DEWATER AS NECESSARY DURING PLACEMENT.

TRENCH TYPE "B"
N.T.S.

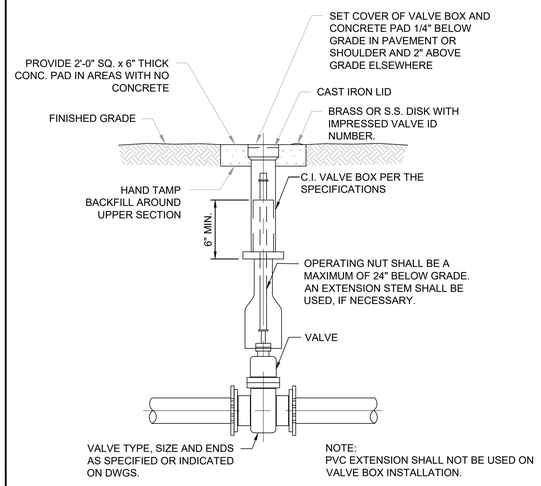
	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	TRENCH TYPE "B"	FIGURE : G-6



NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
2. LOCATING WIRE SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING 24" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
3. ALL SPLICES SHALL BE MADE USING A WATER-TIGHT SEALING METHOD APPROVED BY THE CITY.

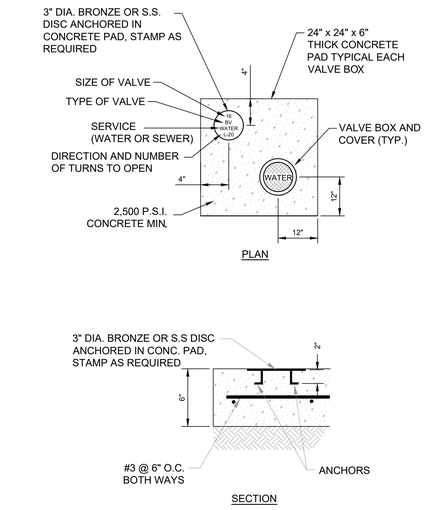
LOCATING WIRE

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	LOCATING WIRE DETAILS	FIGURE : G-13



WATER VALVE AND BOX
N.T.S.

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	WATER VALVE AND BOX DETAIL	FIGURE : PW-1



WATER VALVE COLLAR
N.T.S.

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	WATER VALVE COLLAR DETAIL	FIGURE : PW-2

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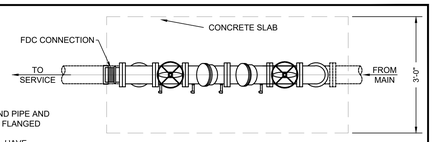
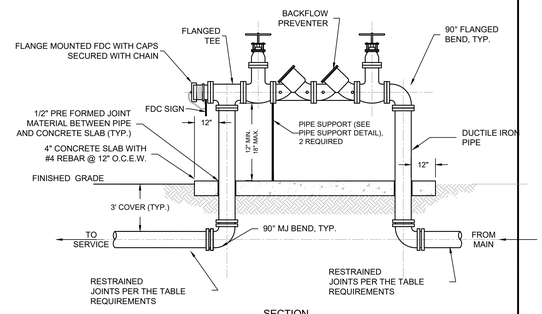


PLAN VIEW

NOTES:
1. ALL ABOVE GROUND PIPE AND FITTINGS SHALL BE FLANGED DUCTILE IRON.
2. ALL VALVES SHALL HAVE HANDWHEELS.
3. BACKFLOW DEVICE SHALL BE RPZ OR DC TYPE AS APPROVED BY CITY.
4. VALVE(S) SHALL BE CHAINED AND PADLOCKED IN OPENED POSITION.
5. BACKFLOW DEVICE SHALL BE TESTED AND CERTIFIED BY A LICENSED PROFESSIONAL ANNUALLY. THE REPORT SHALL BE DELIVERED TO THE CITY.
6. DUCTILE IRON PIPE SHALL BE PRESSURE CLASS 350.
7. ABOVE GROUND PIPE SHALL BE INSULATED PER THE SPECIFICATIONS.
8. A 3/4" METER SHALL BE PROVIDED ON THIS LINE, PER THE CITY'S REQUEST, AT NO COST TO THE CITY

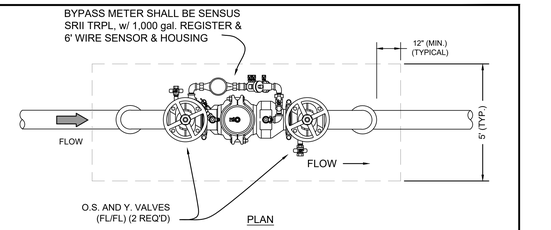


SECTION

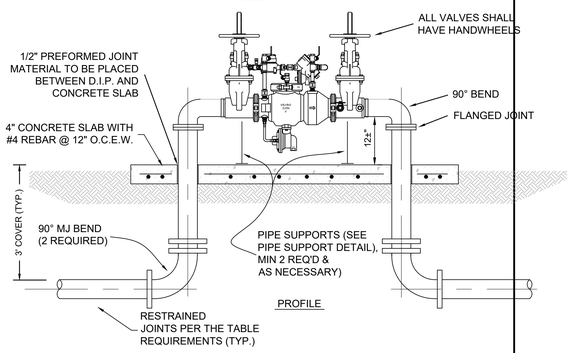
FIRE LINE BACKFLOW PREVENTER

N.T.S.

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	FIRE LINE BACKFLOW PREVENTER	FIGURE : PW-15



PLAN



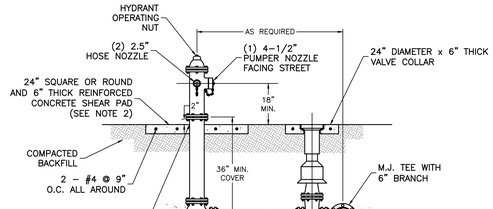
PROFILE

NOTES:
1. ALL ABOVE GROUND PIPE SHALL BE DUCTILE IRON w/ FLANGED JOINTS.
2. DUCTILE IRON PIPE SHALL BE PRESSURE CLASS 350.
3. ABOVE GROUND PIPE SHALL BE INSULATED PER THE SPECIFICATIONS

DOUBLE DETECTOR CHECK VALVE ASSEMBLY

N.T.S.

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	DOUBLE DETECTION CHECK VALVE ASSEMBLY	FIGURE : PW-23



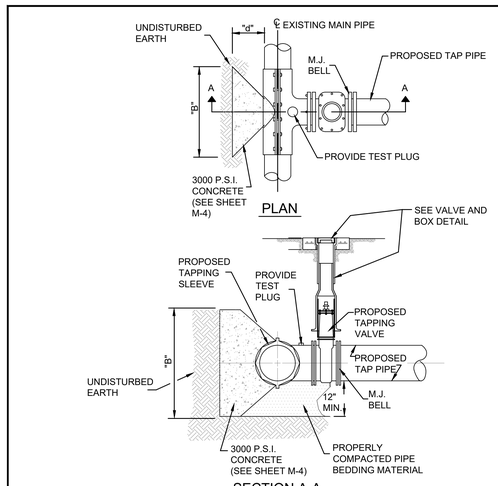
NOTES:
1. THE SHEAR PAD MAY BE RECESSED UP TO 6 INCHES BELOW FINISHED GRADE.
2. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE 2" MINIMUM.

HYDRANTS SHALL:
1. BE ABLE TO DELIVER 600 GPM WITH A FRICTION LOSS OF NOT MORE THAN 5 PSI IN THE HYDRANT AND A TOTAL LOSS OF NOT MORE THAN 5 PSI BETWEEN STREET MAIN AND OUTLET.
2. HAVE AT LEAST TWO 2 1/2" OUTLETS AND ONE 4 1/2" OUTLET, WITH NATIONAL STANDARD TYPE THREADS.
3. BE OF SUCH A DESIGN THAT WHEN THE BARREL IS BROKEN OFF THE HYDRANT WILL REMAIN CLOSED.
4. HAVE CONNECTION TO THE STREET MAIN OF NOT LESS THAN 6 INCHES IN DIA.
5. HAVE ALL FITTINGS WITH MEG-A-LUG GLANDS.
6. HAVE ALL D.I.P. PIPING.
7. HAVE A GATE VALVE BETWEEN HYDRANT AND THE STREET MAIN.
8. HAVE A 5 1/4" MAIN VALVE SEAT.
9. APPROVED MODELS ARE AMERICAN DARLING B84B, MUELLER CENTURION, AVK 2790, M&H 129 OR CLOW MEDALLION. NO SUBSTITUTIONS ARE ALLOWED.

FIRE HYDRANT ASSEMBLY

N.T.S.

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	FIRE HYDRANT ASSEMBLY DETAIL	FIGURE : PW-25



PLAN

SECTION A-A

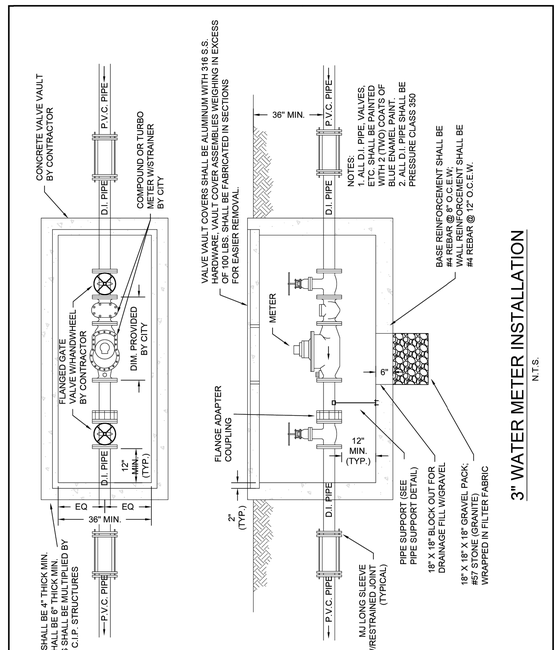
FOR DIMENSIONS "B" AND "d" SEE THRUST BLOCK REQUIREMENTS

NOTES:
1.) NO CUTS SHALL BE MADE BEFORE:
(A) A TEST ON THE SLEEVE AT 150 P.S.I. FOR 30 MINUTES IS MADE.
(B) ALL FITTINGS TO BE WRAPPED WITH 24 MIL POLYETHYLENE AT THE THRUST BLOCK
(C) ALL TAPS ARE TO BE MADE BY THE CITY OF PANAMA CITY UTILITIES DEPT. UNLESS OTHER ARRANGEMENTS ARE MADE. THE MATERIAL IS TO BE FURNISHED BY THE INFRASTRUCTURE CONTRACTOR.
2.) ALL TAPS MUST BE OF A SMALLER SIZE THAN THE MAIN BEING TAPPED & PLACED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO ONE (1) MAIN PIPE DIAMETER PLUS TWO (2) TAP PIPE DIAMETERS (WHICHEVER IS LARGER) FROM A JOINT OR FITTING.
3.) CONTRACTOR TO SUPPLY A DRY HOLE FOR TAPPING CREW TO WORK AND A BACK-HOE TO LOWER MACHINE INTO HOLE.

TAPPING SLEEVE AND VALVE BLOCKING

N.T.S.

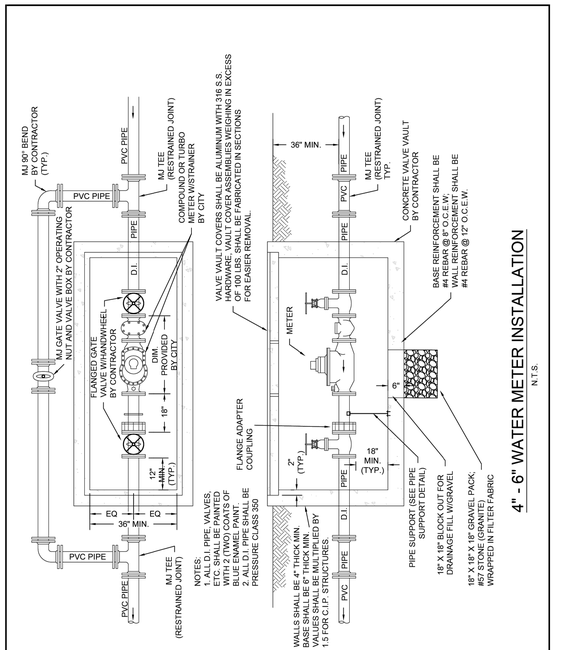
	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2018 SCALE : NTS
	TAPPING SLEEVE AND VALVE BLOCKING	FIGURE : G-24



3" WATER METER INSTALLATION

N.T.S.

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2022 SCALE : NTS
	3" WATER METER INSTALLATION	FIGURE : PW-10



4" - 6" WATER METER INSTALLATION

N.T.S.

	PANAMA CITY, FLORIDA STANDARD DETAILS	DATE : MARCH 2022 SCALE : NTS
	4" - 6" WATER METER INSTALLATION	FIGURE : PW-11

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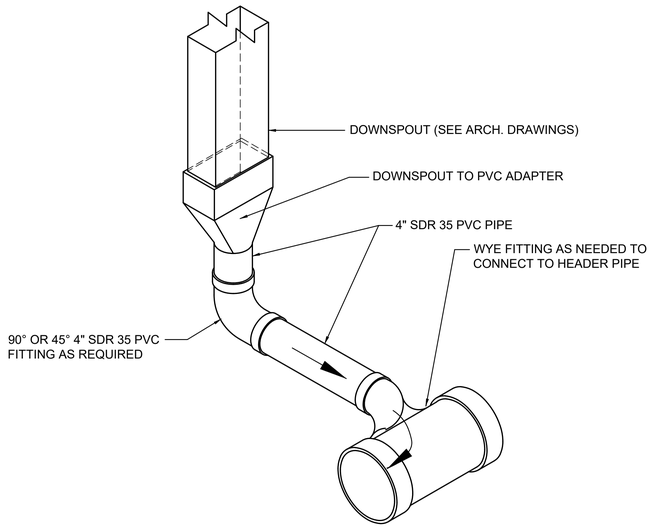
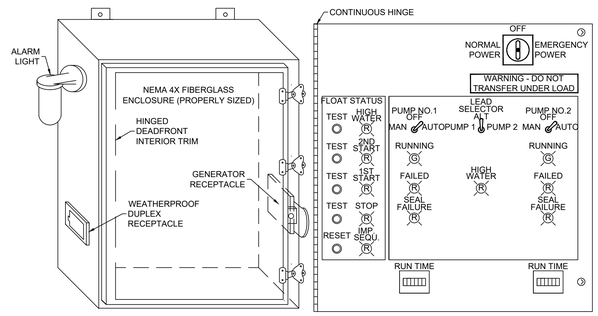


DOWNSPOUT CONNECTION DETAIL

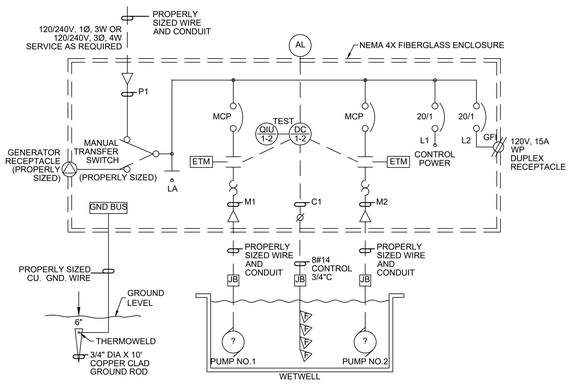
NOT TO SCALE



PHYSICAL LAYOUT

DUPLEX GRINDER LIFT STATION CONTROL PANEL DEADFRONT DETAIL

- CONTROL PANEL SHALL BE EQUIPPED WITH A FLASHING RED LIGHT WITH LONG LIFE BULB IN GUARDED ENCLOSURE AND 6" DIA. HORN.
- HORN SHALL EMIT 120 DB AT 10'.
- ALARM HORN AND LIGHT SHALL BE POWERED FROM 12V DC POWER SUPPLY WITH BATTERY BACK-UP.
- PROVIDE A RECHARGEABLE BATTERY RATED TO POWER BOTH THE HORN AND LIGHT FOR A MINIMUM OF TWO HOURS UPON LOSS OF MAIN POWER.
- PROVIDE CIRCUITRY TO AUTOMATICALLY RECHARGE THE BATTERY AFTER MAIN POWER IS RESTORED.
- FULL CHARGE OF THE BATTERY SHALL TAKE NO MORE THAN TWENTY HOURS.
- PANEL SHALL HAVE POWER ON LIGHT, PUSH TO TEST BUTTON FOR HORN AND LIGHT AND PUSH TO SILENCE BUTTONS FOR HORN AND LIGHT WITH AUTOMATIC RESET FOR NEXT ALARM.
- ALARM SHALL ACTIVATE UNDER THE FOLLOWING CONDITIONS:
  - A. HIGH LIQUID LEVEL AS SENSED BY FLOAT SWITCH
  - B. LOSS OF MAIN POWER



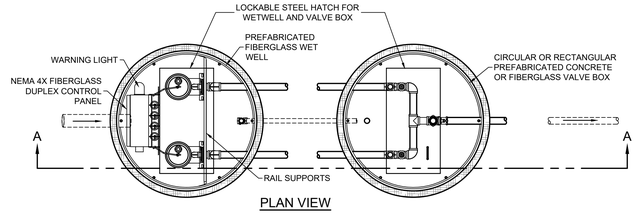
240 VOLT DUPLEX GRINDER LIFT STATION CONTROL PANEL ONE LINE POWER DIAGRAM AND PROCESS AND INSTRUMENTATION DIAGRAM (P&ID)

LEGEND

	LIGHTNING ARRESTOR -	SEE COMPONENT SPECIFICATIONS
DC	DUPLEX CONTROLLER -	SEE COMPONENT SPECIFICATIONS
QIU	FLOAT TEST/IMPROPER SEQUENCE MODULE -	SEE COMPONENT SPECIFICATIONS
ETM	ELAPSED TIME METER -	SEE COMPONENT SPECIFICATIONS
AL	OUTSIDE ALARM LIGHT -	SEE COMPONENT SPECIFICATIONS
	FLOAT SWITCH -	SEE COMPONENT SPECIFICATIONS

DIRECT MOUNT CONTROL PANEL

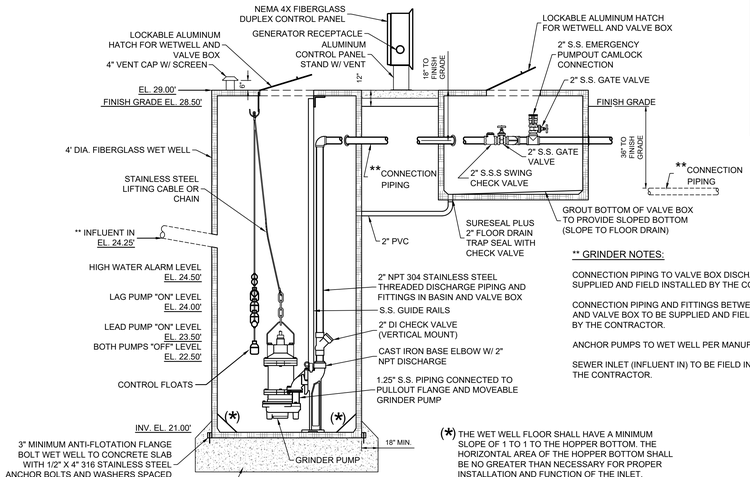
NOT TO SCALE



PLAN VIEW

PUMP INFORMATION	
TYPE:	DUPLEX GRINDER
VOLTAGE:	208
PHASE:	3
HP :	2.0 HP
GPM:	50.0 GPM
THD:	9.2 TDH

NOTE:
ELECTRICAL SERVICE (VOLTAGE AND PHASE) MUST BE VERIFIED PRIOR TO ORDERING EQUIPMENT.
PUMP TO BE LIBERTY LSG203M OR APPROVED ALTERNATIVE



** GRINDER NOTES:

CONNECTION PIPING TO VALVE BOX DISCHARGE TO BE SUPPLIED AND FIELD INSTALLED BY THE CONTRACTOR.

CONNECTION PIPING AND FITTINGS BETWEEN THE BASIN AND VALVE BOX TO BE SUPPLIED AND FIELD INSTALLED BY THE CONTRACTOR.

ANCHOR PUMPS TO WET WELL PER MANUFACTURES REQ.

SEWER INLET (INFLUENT IN) TO BE FIELD INSTALLED BY THE CONTRACTOR.

(*) THE WET WELL FLOOR SHALL HAVE A MINIMUM SLOPE OF 1 TO 1 TO THE HOPPER BOTTOM. THE HORIZONTAL AREA OF THE HOPPER BOTTOM SHALL BE NO GREATER THAN NECESSARY FOR PROPER INSTALLATION AND FUNCTION OF THE INLET.

SECTION A-A

DUPLEX GRINDER LIFT STATION PACKAGE WITH DIRECT MOUNT CONTROL PANEL

NOT TO SCALE

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

CONSTRUCTION DETAILS

Project Number	**133407**
Dated	12/15/2024
Drawn By	JNF
Approved By	JDC
PM	JDC

C10

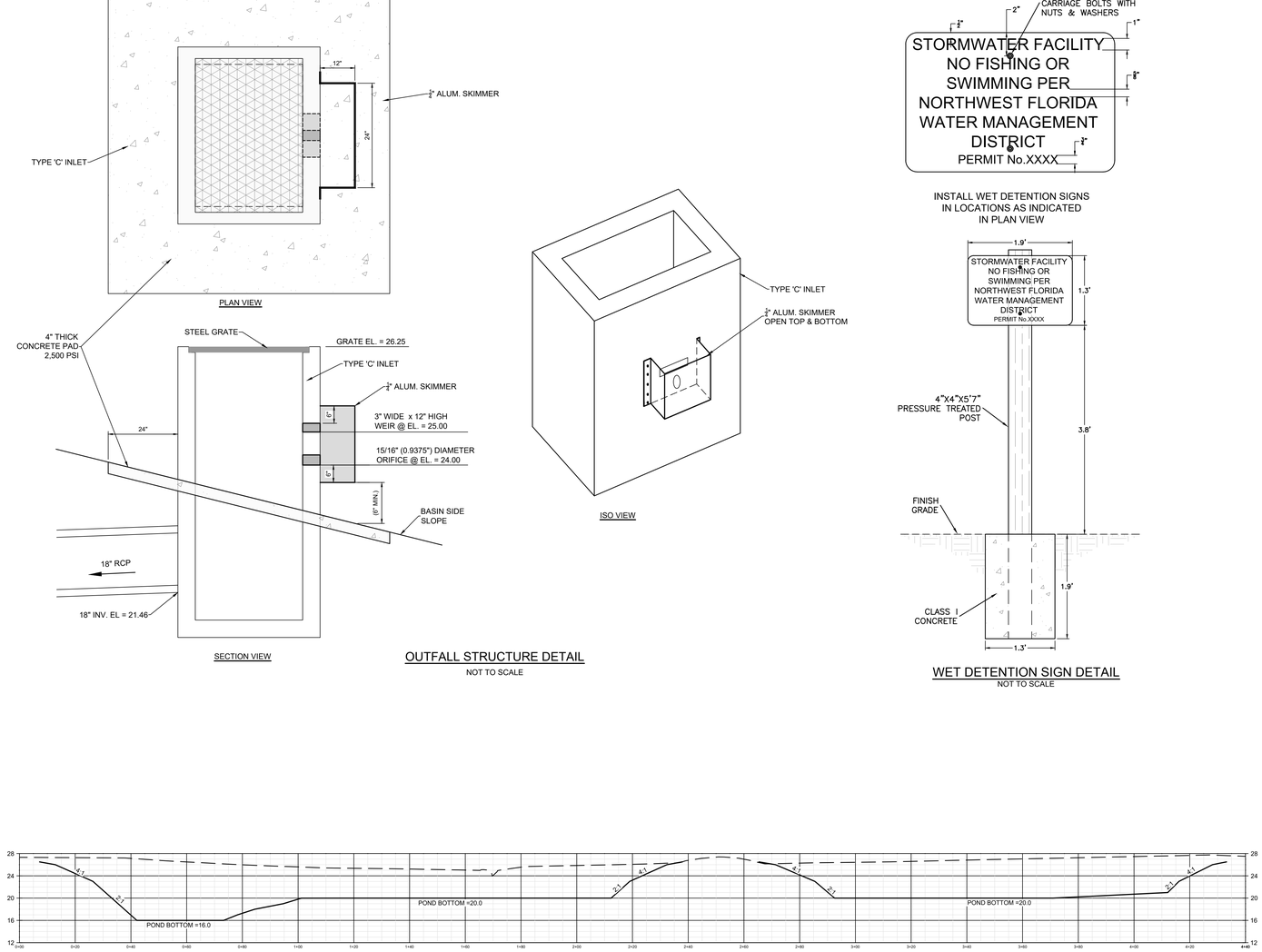
22019 PROJECT STATUS Issue Date

20040 DESIGN DEVELOPMENT Issue Date

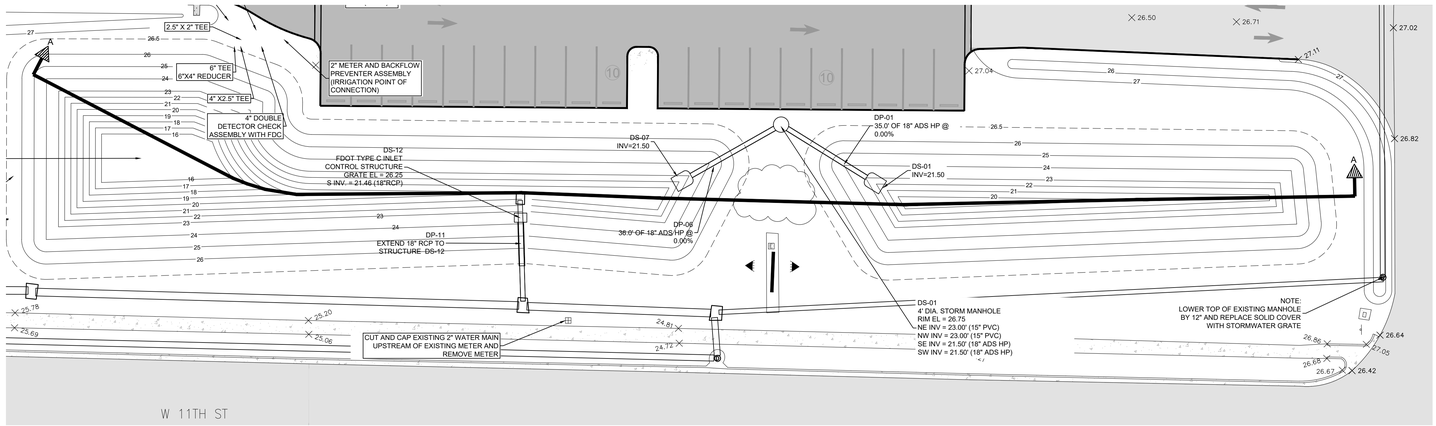
OUTFALL STRUCTURE DETAIL
NOT TO SCALE

INSTALL WET DETENTION SIGNS IN LOCATIONS AS INDICATED IN PLAN VIEW

WET DETENTION SIGN DETAIL
NOT TO SCALE



DETENTION BASIN SECTION A-A
SCALES: 1" = 20' HORIZ., 1" = 10' VERT.



DETENTION BASIN PLAN VIEW
SCALE: 1" = 20'

DAG ARCHITECTS

DAG Architects AR0009694
455 Harrison Ave., Panama City, FL 32401
850.387.1671
www.DAGarchitects.com

100% CONSTRUCTION DOCUMENTS

NOT FOR CONSTRUCTION

(FOR REVIEW AND FINAL COORDINATION)

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

STORMWATER FACILITY DETAILS

Project Number	**133407**
Dated	12/15/2024
Drawn By	JNF
Approved By	JDC
PM	JDC

C11

PANHANDLE ENGINEERING, INC.
ENVIRONMENTAL ENGINEERS ● CIVIL ENGINEERS ● LAND PLANNERS
600 Ohio Avenue Lynn Haven, Florida 32444
(850)763-5200 Fax (850)763-5200 www.panhandleengineering.com

SITE DESCRIPTION

PROJECT NAME AND LOCATION:	**PALM BAY CHARTER ACADEMY GYMATORIUM** **1104 BALBOA AVENUE** **PANAMA CITY, FLORIDA 32401** **LAT 30°10"12' ~ LON 85°10'12"** **SECTION TOWNSHIP RANGE ~ 5-4S-14W**
DEVELOPER NAME AND ADDRESS:	**PALM BAY EDUCATION GROUP, INC.** **1104 BALBOA AVENUE** **PANAMA CITY, FLORIDA 32401**
DESCRIPTION:	**PALM BAY CHARTER ACADEMY GYMATORIUM**

SOIL DISTURBING ACTIVITIES WILL INCLUDE:

CLEARING AND GRUBBING, EARTHWORK, PAVEMENT AND GRADING, STORM WATER AND UTILITIES.

RUNOFF COEFFICIENTS:

1. PRE-CONSTRUCTION	C= **0.53**
2. DURING CONSTRUCTION	C= **0.60**
3. POST-CONSTRUCTION	C= **0.67**

SOILS:

SEE SOIL BORING REPORT FOR SOILS DATA

SITE MAPS:

* SEE ATTACHED GRADING FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOILS DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORMWATER DISCHARGE POINTS.

* SEE ATTACHED EROSION AND TURBIDITY CONTROL PLAN FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES AND TURBIDITY BARRIERS.

* SEE GRADING NOTES FOR REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

SITE AREA:

1.) TOTAL AREA OF SITE = **17.4± ACRES**
2.) TOTAL AREA TO BE DISTURBED = **APPROX. 1.8± ACRES**

NAME OF RECEIVING WATERS: **11TH STREET DRAINAGE SYSTEM**

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN-OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THAT PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

STORM WATER MANAGEMENT

STORM WATER DRAINAGE WILL BE PROVIDED BY: ONSITE COLLECTION & ATTENUATION

ONSITE IMPROVEMENTS

SEE SITE, GRADING & DRAINAGE AND UTILITY PLANS.

TIMING OF CONTROLS/MEASURES

REFER TO "CONTRACTORS RESPONSIBILITY" FOR THE TIMING OF CONTROL/MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

CONTROL/MEASURES.
IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

NWFWMD ENVIRONMENTAL RESOURCE PERMIT PENDING

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED: ______________________________
NAME (OPERATOR AND/OR RESPONSIBLE AUTHORITY)

DATED: ______________________

GENERAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS, DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCES AND HAY BALES, AS REQUIRED.
3. CONSTRUCT SEDIMENTATION BASIN.
4. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN AT PERMANENT POND LOCATION.
5. CONTINUE CLEARING AND GRUBBING.
6. STOCKPILE TOP SOIL IF REQUIRED.
7. PERFORM PRELIMINARY GRADING ONSITE, AS REQUIRED.
8. STABILIZE DENUDED AREA AND STOCKPILES AS SOON AS PRACTICABLE.
9. INSTALL UTILITIES, STORM SEWER, CURBS AND GUTTER.
10. APPLY BASE TO PROJECT.
11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING.
12. COMPLETE FINAL PAVING.
13. REMOVE ACCUMULATED SEDIMENT FROM BASINS.
14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/ SOD, AS REQUIRED.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION AND TURBIDITY CONTROL PLAN.

ENDANGERED SPECIES AND CRITICAL HABITAT

1. ARE THERE ENDANGERED SPECIES ON SITE?
2. ARE THERE CRITICAL HABITAT ON SITE?

IF YES TO EITHER QUESTION, PLEASE EXPLAIN:

"______________________________
____
____
____
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____
____
____
____

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS
STABILIZATION PRACTICES

1. HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:

   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
   C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
   D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO ENSURE AGAINST WASHOUT.

REFER TO EROSION CONTROL DETAILS FOR CONSTRUCTING THE HAY BALE BARRIER. ALSO REFER TO THE EROSION CONTROL PLAN FOR PROPER LOCATION.

2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:

   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OF DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

REFER TO THE EROSION CONTROL DETAILS FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER.

3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.

4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.

5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHOULD BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.

6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL BE MINIMIZED.

7. INLET PROTECTION: INLETS AND CATCH-BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FORM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.

8. DUST CONTROL: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL TREATMENT WITHIN 30 DAYS SHALL BE STABILIZED.

9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.

10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX AND AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.

11. TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.

12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.

14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.

2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN A DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA.

THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE:

   A. BLOCK AND GRAVEL SEDIMENT FILTER - THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

   B. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

   C. DROP INLET SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S<0.50%) AND WHERE SHEET OR OVERLAND FLOWS (Q<0.50CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS.

3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION AND SEDIMENT PROBLEMS TO THE RECEIVING WATER BODY. SILT FENCES AND HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.

4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 67 CUBIC YARDS OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE VOLUME OF THE BASIN AT CLEAN OUT SHALL BE 22 CUBIC YARDS PER ACRE.

THE 67 CUBIC YARDS OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL
WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER, SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THAT PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT AS NEEDED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH THE TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

- ☐ Concrete
- ☐ Asphalt
- ☐
- ☐ Detergents
- ☐
- ☐ Fertilizers
- ☐ Petroleum Based Products
- ☐ Cleaning Solvents
- ☐ Paints
- ☐
- ☐ Wood
- ☐ Masonry Blocks
- ☐ Roofing Materials
- ☐ Metal Studs
- ☐

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.

* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.

* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IS ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e.:KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WILL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL REVIEW SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATION OF SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.

* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.

* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED. * TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING.

* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

FOR NON-STORM WATER DISCHARGES REFER TO THE DEP GENERIC PERMIT FOR DISCHARGE OF NON-CONTAMINATED PRODUCED GROUND WATER.
(http://www.dep.state.fl.us/legal/rules/shared/62-621(2).doc)

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERAL PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

NAME	TITLE	COMPANY ADDRESS AND PHONE NUMBER	DATE

NOTE TO CONTRACTOR:

THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE STATE OF FLORIDA NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), GENERIC PERMIT FOR STORMWATER DISCHARGE FOR CONSTRUCTION SITES OVER 1 ACRES. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES. IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR. MORE INFORMATION MAY BE OBTAINED AT **WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES**

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS
OF A RAINFALL EVENT OF 0.25 INCHES OR MORE

INSPECTOR:______________________ DATE:______________________

INSPECTOR'S QUALIFICATIONS:
____
____
____

DAYS SINCE LAST RAINFALL: __________ AMOUNT OF LAST RAINFALL ______ INCHES

STABILIZATION MEASURES

INSPECTION AREA (DESCRIPTION OF LOCATION)	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED ? (YES/NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED:
____
____
____

TO BE PERFORMED BY:______________________ ON OR BEFORE:__________

PAGE 1 OF 4

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
STRUCTURAL CONTROLS

DATE:______________________

EARTH DIKES/SWALES

DIKE OR SWALE	FROM	TO	IS DIKE/SWALE STABILIZED ?	IS THERE EVIDENCE OF WASHOUT OR OVERTOPPING

MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE:
____
____
____
____

TO BE PERFORMED BY:______________________ ON OR BEFORE:__________

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CLOGING/WASHOUT OR BYPASSING ?	ARE TURBIDITY CONTROLS IN NEED OF REPLACING	DOES SILT NEED TO BE REMOVED FROM AROUND CONTROL

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS:
____
____
____
____

TO BE PERFORMED BY:______________________ ON OR BEFORE:__________

PAGE 2 OF 4

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM
SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN	DEPTH OF SEDIMENT SIDE BASIN	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN:
____
____
____

TO BE PERFORMED BY:______________________ ON OR BEFORE:__________

OTHER CONTROLS STABILIZED
CONSTRUCTION ENTRANCE

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD ?	IS THE GRAVEL CLEAN OR IS IT FILLED WITH SEDIMENT?	DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE ?	IS THE CULVERT BENEATH THE ENTRANCE WORKING? (IF APPLICABLE)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE:
____
____
____
____
____

TO BE PERFORMED BY:______________________ ON OR BEFORE:__________

PAGE 3 OF 4

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:
____
____
____
____
____
____

REASONS FOR CHANGES:
____
____
____
____
____
____

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE:______________________________

DATE:______________________

PAGE 4 OF 4

DAG ARCHITECTS
DAG Architects AR0009694
455 Harrison Ave., Panama City, FL 32401
850.387.1671
www.DAGarchitects.com

100% CONSTRUCTION DOCUMENTS

NOT FOR CONSTRUCTION

(FOR REVIEW AND FINAL COORDINATION)

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

PANHANDLE ENGINEERING, INC.
ENVIRONMENTAL ENGINEERS • CIVIL ENGINEERS • LAND PLANNERS
600 Ohio Avenue Lynn Haven, Florida 32444
(850)763-5200 Fax (850)763-5200 www.panhandleengineering.com

STORMWATER POLLUTION PREVENTION PLAN

Project Number	133407
Dated	12/15/2024
Drawn By	JNF
Approved By	JDC
PM	JDC

C12

22019
50% CONSTRUCTION DOCUMENTS
1/09/2023

LANDSCAPE NOTES:
1. ALL UTILITIES TO BE LOCATED PRIOR TO LANDSCAPE INSTALLATION.
2. ALL PLANT MATERIAL TO BE FLORIDA #1 OR BETTER.
3. ALL BED AREAS TO RECEIVE A 2" MINIMUM THICKNESS PINE STRAW MULCH APPLICATION.
4. ALL TREES, SHRUBS, AND GROUNDCOVERS TO RECEIVE A SLOW RELEASE FERTILIZER UPON INITIAL INSTALLATION.
5. QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY AND SHOULD BE VERIFIED BY THE CONTRACTOR.

NORTH

LANDSCAPE REQUIREMENT CHART
PER CITY OF PANAMA CITY CODE

FRONT SETBACK BUFFER
10' WIDE BUFFER WITH 2.5 CANOPY, 2 UNDERSTORY, 20 SHRUBS PER 100'

BOUNDARY	LENGTH	PROVIDED
NORTHERN	-	-
SOUTHERN	504'	13 CANOPY, 10 UNDERSTORY, 101 SHRUB
EASTERN	92'	2 CANOPY, 2 UNDERSTORY, 18 SHRUB
WESTERN	-	-

INTERIOR LANDSCAPE AREAS
1 TREE PER PARKING ISLAND/TERMINATION

PARKING ISLANDS & TERMINATIONS	PROVIDED
6	6

MISCELLANEOUS BUFFERS

DESCRIPTION
-
-
-
-

15 - SUPER BLUE LIRIOPE
1 GAL. 2' O.C.

6 - PRINGLES DWARF JAPANESE YEW
3 GAL. 4' O.C.

70 - SUPER BLUE LIRIOPE
1 GAL. 2' O.C.

2 - OAKLEAF HOLLY
15 GAL.

9 - PRINGLES DWARF JAPANESE YEW
3 GAL. 4' O.C.

6 - PRINGLES DWARF JAPANESE YEW
3 GAL. 4' O.C.

10 - LITTLE JOHN BOTTLEBRUSH
3 GAL. 4' O.C.

21 - FLAX LILY
3 GAL. 2' O.C.

56 - ANGYO ASIAN JASMINE
1 GAL. 2' O.C.

16 - PRINGLES DWARF JAPANESE YEW
3 GAL. 4' O.C.

72 - ANGYO ASIAN JASMINE
1 GAL. 2' O.C.

69 - ANGYO ASIAN JASMINE
1 GAL. 2' O.C.

56 - ANGYO ASIAN JASMINE
1 GAL. 2' O.C.

46 - SUPER BLUE LIRIOPE
1 GAL. 2' O.C.

6 - WINGED ELM
30 GAL.

1 - RED MAPLE
30 GAL.

1 - OAKLEAF HOLLY
15 GAL.

18 - CERISE CHARM LOROPETALUM
3 GAL. 4' O.C.

1 - SWEETBAY MAGNOLIA
30 GAL.

1 - RED MAPLE
30 GAL.

TIFTUF BERMUDA SOD
35,700 S.F. (FOR ENTIRE SITE)

136 - FLAX LILY
1 GAL. 2' O.C.

9 - RED MAPLE
30 GAL.

10 - MUHLY GRASS
3 GAL. 4' O.C.

9 - MUHLY GRASS
3 GAL. 4' O.C.

9 - DWARF YAUPON HOLLY
3 GAL. 4' O.C.

9 - DWARF YAUPON HOLLY
3 GAL. 4' O.C.

9 - DWARF YAUPON HOLLY
3 GAL. 4' O.C.

9 - MUHLY GRASS
3 GAL. 4' O.C.

9 - MUHLY GRASS
3 GAL. 4' O.C.

60 - FLAX LILY
1 GAL. 2' O.C.

7 - OAKLEAF HOLLY
15 GAL.

9 - DWARF YAUPON HOLLY
3 GAL. 4' O.C.

88 - CHAPEL HILL LANTANA
1 GAL. 2' O.C.

4 - RED MAPLE
30 GAL.

48 - FLAX LILY
1 GAL. 2' O.C.

3 - OAKLEAF HOLLY
15 GAL.

9 - MUHLY GRASS
3 GAL. 4' O.C.

9 - DWARF YAUPON HOLLY
3 GAL. 4' O.C.

10 - DWARF YAUPON HOLLY
3 GAL. 4' O.C.

LAWNSCAPES, INC.
LANDSCAPE DESIGN • CONSTRUCTION • MANAGEMENT • NURSERY
P.O. Box 1726 • Panama City, FL 32404
850-763-2975
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100% CONSTRUCTION DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

01/09/23

REVISIONS:

No.	Description	Date
1	100% CD's	01/09/23

L1

LANDSCAPE PLAN

PROJECT NUMBER	22019
DATED	1/09/2023

NORTH

GENERAL IRRIGATION NOTES:

1. ALL UTILITIES TO BE LOCATED BEFORE COMMENCEMENT OF CONSTRUCTION. APPLY NECESSARY PROTECTIVE MEASURES TO REDUCE POSSIBILITY OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION.
2. ALL CONTROL WIRE TO BE 14 GAUGE. INSTALL ONE (1) RED WIRE TO EACH CONTROL VALVE, ONE (1) COMMON WHITE TO LOOP CONTINUOUSLY THROUGHOUT THE WIRE PATH, AND ONE (1) EXTRA BLUE WIRE TO RUN PARALLEL WITH COMMON.
3. ALL LATERAL LINES TO MAINTAIN A 8" MINIMUM DEPTH. ALL MAINLINE TO MAINTAIN A MINIMUM 12" DEPTH.
4. ALL SPRAYS AND ROTORS TO BE MOUNTED FLUSH WITH FINAL GRADE.
5. ALL WATERING ARCS TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO ADJACENT BUILDINGS OR HARDSCAPE.

SYSTEM DESIGN NOTES:

WATER SOURCE: 2" IRRIGATION METER
DESIGN VOLUME: 50 GPM
DESIGN PRESSURE: 65 PSI

DRIP IRRIGATION NOTES:

REFERENCE THE FOLLOWING TABLE FOR DRIP EMITTER INSTALLATION PER PLANT:

PLANT SIZE	EMITTER QTY/FLOW
1 GAL. OR LESS	1 @ 0.5 GPH
3 GAL.	1 @ 2.0 GPH
7 GAL.	1 @ 5.0 GPH
15 GAL.	2 @ 5.0 GPH
30 GAL.	3 @ 5.0 GPH
45 GAL.	3 @ 10.0 GPH
65 GAL.	3 @ 10.0 GPH
100 GAL.	4 @ 10.0 GPH
PALMS	3 @ 10.0 GPH

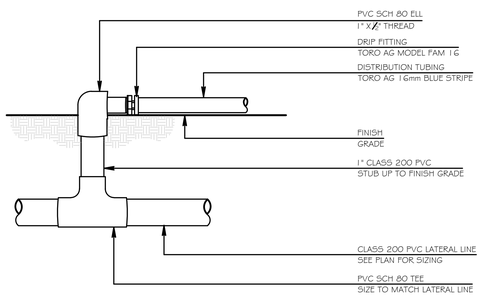
*XERI-SPRAYS MAY BE USED TO IRRIGATE ANNUAL PLANTING AREAS

PIPING LEGEND

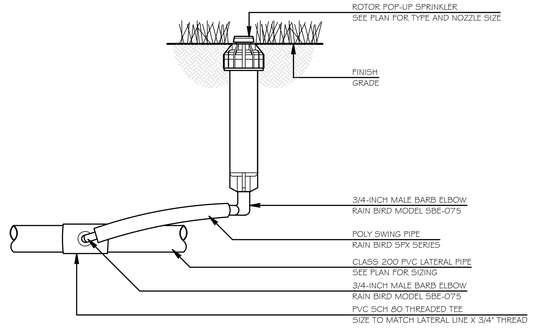
- 2" - CLASS 200 MAINLINE
- 1" - CLASS 200 LATERAL
- 1-1/4" - CLASS 200 LATERAL
- 1-1/2" - CLASS 200 LATERAL
- 2" - CLASS 200 LATERAL
- 4" SCH. 40 SLEEVE
- ZONE # / SIZE — CONTROL VALVE IDENTIFICATION TAG

IRRIGATION SCHEDULE

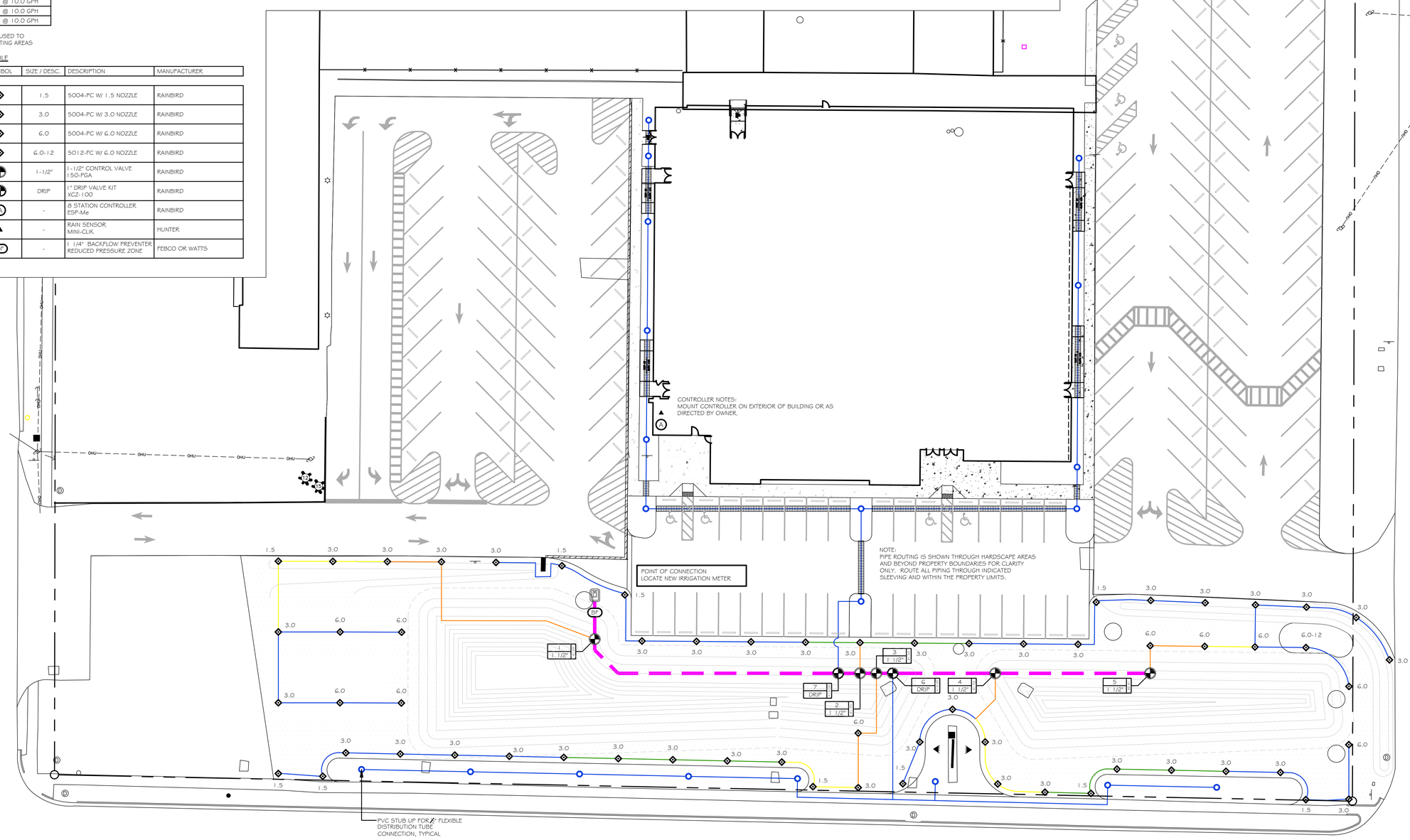
QUANTITY	SYMBOL	SIZE / DESC.	DESCRIPTION	MANUFACTURER
10	◆	1.5	5004-PC W/ 1.5 NOZZLE	RAINBIRD
41	◆	3.0	5004-PC W/ 3.0 NOZZLE	RAINBIRD
10	◆	6.0	5004-PC W/ 6.0 NOZZLE	RAINBIRD
1	◆	6.0-12	5012-PC W/ 6.0 NOZZLE	RAINBIRD
5	◔	1-1/2"	1-1/2" CONTROL VALVE 150-PGA	RAINBIRD
2	◔	DRIP	1" DRIP VALVE KIT XCZ-100	RAINBIRD
1	(A)	-	8 STATION CONTROLLER ESP-Me	RAINBIRD
1	▲	-	RAIN SENSOR MINI-CLIK	HUNTER
1	BF	-	1 1/4" BACKFLOW PREVENTER REDUCED PRESSURE ZONE	FEBCO OR WATTS



1 / L2 DRIP DISTRIBUTION LINE CONNECTION
NOT TO SCALE



2 / L2 POP-UP ROTOR INSTALLATION
NOT TO SCALE



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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

01/09/23

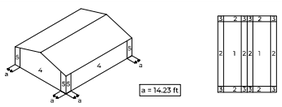
REVISIONS:

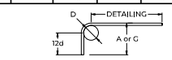
No.	Description	Date
1	100% CD's	01/09/23

L2

IRRIGATION PLAN

PROJECT NUMBER	22019
DATED	1/09/2023





STRUCTURAL GENERAL NOTES

ABBREVIATIONS

AB	ANCHOR BOLT
ADDL	ADDITIONAL
ALT	ALTERNATE
ALUM	ALUMINUM
ARCH	ARCHITECTURAL or ARCHITECT
B/	BOTTOM OF
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOS	BOTTOM OF STEEL
BRG	BEARING
B/S	BOTTOM SIDE
BTM or (B)	BOTTOM, "BOT" SIM
BTW	BETWEEN
CB	CARRIAGE BOLT
CFS	COLD FORMED STEEL
CIP	CAST IN PLACE
C.J.	CONTROL JOINT
CL or (℄)	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
C.O.	CASED OPENING
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUE or CONTINUOUS
CSJ	CONSTRUCTION JOINT
CTR	CENTERED, "CNTR'd" SIM
DET	DETAIL
DBL	DOUBLE
DIA or (⌀)	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIR	DIRECTION
D.L.	DEAD LOAD
DN	DOWN
DWG	DRAWING
DWL	DOWEL
EA	EACH
E.E.	EACH END
E.F.	EACH FACE
EJ	EXPANSION JOINT
ELEV	ELEVATION
EMBED	EMBEDDED or EMBEDMENT
EOS	EDGE OF SLAB
E.G.	EXISTING GRADE
E.S.	EACH SIDE
EQ	EQUAL
E.W.	EACH WAY
EX	EXISTING
EXPB	EXPANSION BOLT
EXT	EXTERIOR
F.F.	FAR FACE
FFE	FINISHED FLOOR ELEVATION
F.G.	FINISHED GRADE
FIN	FINISH
FL	FLOOR
FLG	FLANGE
FND	FOUNDATION
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FP	FULL PENETRATION
F/S	FAR SIDE
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GDR	GIRDER
GP	GUSSET PLATE
HAS	HEADED ANCHOR STUD
HD	HOLDOWN
HDG	HOT DIP GALVANIZED
HDR	HEADER
HK	HOOK
HOR	HORIZONTAL
HSB	HIGH STRENGTH BOLT
H.S.S.	HEADED SHEAR or "NELSON" STUD
HSS	HOLLOW STL SECTION or TUBE
I.F.	INSIDE FACE
IN	INCH OR INCHES
INT.	INTERIOR
INV	INVERT
JST	JOIST
JT	JOINT
K	KIP (1,000 POUNDS)
LB	POUNDS
L.E.	LEFT END
L.L.	LIVE LOAD
LLD	LONG LEG DOWN
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LVL	LAMINATED VENEER LUMBER
LWC	LIGHT WEIGHT CONCRETE
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MFGR	MANUFACTURER
MID or (M)	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
M.R.D.	METAL ROOF DECK
MTL	METAL
MTRL	MATERIAL
N.F.	NEAR FACE
NOM	NOMINAL
NO.	NUMBER OR #
N/S	NEAR SIDE
NS	NON-SHRINK
N.T.S.	NOT TO SCALE
NWC	NORMAL WEIGHT CONCRETE
O.C.	ON CENTER, "C.C." SIM
O.D.	OVERALL DIM. "O/O" SIM
O.F.	OUTSIDE FACE
OPP	OPPOSITE
OVS	OVERSIZED
PCC	PRECAST CONCRETE
PEN	PENETRATION
PERP	PERPENDICULAR
P.L.	POINT LOAD
PL	PLATE
PSL	PARALLEL STRAND LUMBER
PT	POINT
P.T.	PRESSURE TREATED or POST-TENSION
P.U.	RIGHT END
REINF	REINFORCING
REF	REFERENCE
RET	RETURN
REQ	REQUIRED
R.L.L.	ROOF LIVE LOAD
R.O.	ROUGH OPENING
SC	SLIP CRITICAL
SCHED	SCHEDULE
S.D.N.	STRUCTURAL DESIGN NOTES
SIM	SIMILAR
SOG	SLAB ON GRADE
S.E.	STUD PACK
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL, "S.S." SIM
STAG	STAGGERED
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STR	STRUCTURAL, "STRUCT" SIMILAR
S.W.	SHEAR WALL
SYM	SYMMETRICAL
T or (T)	TOP
T&B	TOP AND BOTTOM
T&S	TEMPERATURE & SHRINKAGE REINF.
T/	TOP OF
T/S	TOP SIDE
TDR	THREADED ROD
TEMP.	"T&S" FOR REINF
THK	THICK OR THICKNESS
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UWA	UNDER WALL ABOVE
VERT	VERTICAL
W/	WITH
WF	WIDE FLANGE
WP	WORKING POINT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

1. GENERAL NOTES:

1.1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH PROJECT SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR OPENINGS, DEPRESSIONS, EQUIPMENT WEIGHTS AND LOCATIONS, EMBEDDED ITEMS AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

1.2. DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

1.3. NO STRUCTURAL MEMBER OR COMPONENT SHALL BE CUT, NOTCHED, OR OTHERWISE ALTERED UNLESS APPROVED IN WRITING BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS INCURRED BY THE ENGINEER OF RECORD FOR REVIEW OF ANY SUCH DEVIATIONS.

1.4. DO NOT SCALE DRAWINGS.

1.5. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, AND TIEDOWNS.

1.6. DETAILS LABELED "TYPICAL DETAILS" ON THE DRAWINGS SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. THE APPLICABILITY OF THE DETAIL TO ITS LOCATION ON THE DRAWINGS CAN BE DETERMINED BY THE TITLE OF DETAIL. SUCH DETAILS SHALL APPLY WHETHER OR NOT THEY ARE REFERENCED AT EACH LOCATION. QUESTIONS REGARDING APPLICABILITY OF TYPICAL DETAILS SHALL BE DETERMINED BY THE ENGINEER OF RECORD.

1.7. THE GENERAL CONTRACTOR SHALL COMPARE THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, CIVIL AND STRUCTURAL DRAWINGS AND REPORT ANY DISCREPANCIES BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS TO THE ARCHITECT AND ENGINEER OF RECORD PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.

1.8. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, SEQUENCE AND SAFETY. THE ENGINEER DOES NOT HAVE CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

1.9. THE REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR ALSO SHALL BE RESPONSIBLE FOR MEANS, METHOD, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.

1.10. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF ATLAS ENGINEERING AND CONSULTING, LLC IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHALL NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK.

1.11. ALL STRUCTURES REQUIRE PERIODIC MAINTENANCE TO EXCEED LIFE SPAN AND TO ENSURE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT. A PLANNED PROGRAM OF MAINTENANCE SHALL BE ESTABLISHED BY THE OWNER. THIS PROGRAM SHALL INCLUDE ITEMS SUCH AS, BUT NOT LIMITED TO, PAINTING OF STRUCTURAL STEEL, PROTECTIVE COATINGS FOR CONCRETE, SEALANTS, CAULKED JOINTS, EXPANSION JOINTS, CONTROL JOINTS, SPALLS AND CRACKS IN CONCRETE, AND PRESSURE WASHING OF EXPOSED STRUCTURAL ELEMENTS EXPOSED TO SALT ENVIRONMENT OR OTHER HARSH CHEMICALS.

1.12. STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR THE DESIGN OF STEEL STAIRS, HANDRAILS, CURTAIN WALL/WINDOW WALL SYSTEMS, COLD-FORMED STEEL FRAMING, OR OTHER SYSTEMS NOT SHOWN IN THE STRUCTURAL DOCUMENTS. SUCH SYSTEMS SHALL BE DESIGNED, FURNISHED, AND INSTALLED AS REQUIRED BY OTHER PORTIONS OF THE CONTRACT DOCUMENTS.

1.13. ALL CONSTRUCTION SHALL CONFORM TO THE FLORIDA BUILDING CODE 8TH EDITION (2023). REFERENCE TO OTHER CODES OR STANDARD SPECIFICATIONS REFER TO THE LATEST EDITION OF SUCH CODES OR SPECIFICATIONS, UNLESS STATED OTHERWISE.

1.14. NO PROVISIONS HAVE BEEN MADE FOR VERTICAL OR HORIZONTAL EXPANSION EXCEPT AS SHOWN ON CONTRACT DOCUMENTS.

1.15. FINISH FLOOR ELEVATION (FIRST FLOOR) OF 0"-0" IS USED AS A REFERENCE ELEVATION. SEE CIVIL DRAWINGS FOR ACTUAL ELEVATION.

1.16. THE USE OF REPRODUCTIONS OF THESE CONTRACT DOCUMENTS AND USE OF CAD FILES BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS IS PROHIBITED UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM ENGINEER OF RECORD.

1.17. IN THE EVENT THAT THE STRUCTURAL CONTRACTS DRAWINGS AND SPECIFICATIONS CONFLICT ON INFORMATION, THE STRUCTURAL CONTRACT DRAWINGS SHALL SUPERSEDE THE SPECIFICATIONS.

2. CODE DESIGN:

2.1. STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2023 FLORIDA BUILDING CODE.

2.2. GRAVITY LOADS

2.2.1. UNIFORM FLOOR LIVE LOADS (REDUCED AS ALLOWED BY THE BUILDING CODE):

CLASSROOMS	40 PSF
STAIRS/RAMPS	100 PSF
BLEACHERS	100 PSF
STAGE	150 PSF

2.2.2. UNIFORM ROOF LIVE LOADS (REDUCED AS ALLOWED BY THE BUILDING CODE):

ROOF	100 PSF

PONDING AND DRIFT EFFECTS HAVE BEEN INCLUDED IN DESIGN.

2.3. WIND LOADS (ASCE 7-22):

BASIC WIND SPEED = 170 MPH (INTERPOLATED VALUE)
STRUCTURAL RISK CATEGORY = III
WIND EXPOSURE CATEGORY = B
ENCLOSURE CLASSIFICATION = ENCLOSED
INTERNAL PRESSURE COEFFICIENT = 0.18 +/-

COMPONENTS AND CLADDING (PER ASD)

ROOF: (LOADING IN PSF)

	ZONE 1 (INTERIOR)		ZONE 2 (EDGE)		ZONE 3 (CORNER)	
TRIBUTARY AREA (SQFT)	(+)	(-)	(+)	(-)	(+)	(-)
10	21.23	59.32	21.23	78.37	21.23	102.86
20	19.34	51.00	19.34	67.67	19.34	88.12
100	14.95	31.69	14.95	42.81	14.95	53.88

WALLS: (LOADING IN PSF)

	ZONE 4 (INTERIOR)		ZONE 5 (EDGE/CORNER)	
TRIBUTARY AREA (SQFT)	(+)	(-)	(+)	(-)
10	32.11	34.83	32.11	42.99
20	30.66	33.38	30.66	40.10
100	27.30	30.03	27.30	33.38

2.4. FLOOD DESIGN DATA:

FLOOD ZONE = X
BFE = N/A
PANEL NO = 12005C0341J

2.5. ROOF RAIN LOAD DESIGN DATA:

RAIN LOAD = 5 PSF
RAIN INTENSITY (i) = 4.5 IN/HR

3. FOUNDATIONS:

3.1. THE FOUNDATIONS ARE DESIGNED FOR AN ANTICIPATED ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF ON COMPACTED FILL IF GEOTECHNICAL INVESTIGATION HAS NOT BEEN CONDUCTED.

3.2. REGARDLESS OF WHETHER OR NOT A GEOTECHNICAL INVESTIGATION IS PERFORMED, NO WARRANTIES, EXPRESSED OR IMPLIED, ARE MADE BY ATLAS ENGINEERING AND CONSULTING, LLC FOR THE PERFORMANCE OF THE FOUNDATION.

3.3. AT A MINIMUM, SITE PREPARATION WORK SHALL INCLUDE:

3.3.1. STRIPPING AND GRUBBING OF THE BUILDING FOOTPRINT PLUS A MARGIN OF 5 FEET AROUND THE BUILDING, REMOVING ALL ORGANIC MATERIALS.

3.3.2. PROOF ROLLING THE BUILDING SITE TO LOCATE ANY UNFORESEEN SOFT AREAS. ANY SOFT AREAS SHALL BE\ EXCAVATED AND REPLACED WITH CLEAN FILL. A DENSITY OF AT LEAST 95% FOR A DEPTH OF 2 FEET IS REQUIRED UNDER THE BUILDING FOOTPRINT.

3.3.3. ALL FILL SHALL BE CLEAN SAND AND FREE OF ORGANIC MATERIALS. COMPACT FILL IN 12 INCH (UNCOMPACTED THICKNESS) LIFTS TO A MINIMUM OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY VALUE.

3.3.4. EXCAVATIONS FOR FOUNDATIONS SHALL BE COMPACTED TO 95% FOR A DEPTH OF AT LEAST 2 FEET BELOW THE BOTTOM OF THE FOUNDATION.

3.3.5. DEWATERING MAY BE REQUIRED TO ACHIEVE THE REQUIRED COMPACTION VALUES, AND IF USED, SHOULD DRAW DOWN THE WATER LEVEL TO AT LEAST 2 FEET BELOW THE BOTTOM OF THE EXCAVATION.

3.4. SLABS ON GRADE SHALL BE PLACED OVER A 15 MIL, CLASS "B" VAPOR RETARDER. VAPOR RETARDER SHALL BE LAPPED A MINIMUM OF 6", OR AS RECOMMENDED BY THE MANUFACTURER (WHICHEVER IS GREATER) AND TAPED AT ALL JOINTS. ALL PUNCTURES IN THE VAPOR RETARDER SHALL BE REPAIRED PER MANUFACTURER'S WRITTEN INSTRUCTIONS. ALL PENETRATIONS THROUGH THE VAPOR RETARDER (COLUMNS, PLUMBING, CONDUITS, ETC) SHALL BE SEALED PER MANUFACTURER'S WRITTEN INSTRUCTIONS. VAPOR RETARDER SHALL BE CONTINUOUS UNDER WALL FOUNDATIONS OR SEALED TO EXTERIOR WALLS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

4. CONCRETE:

4.1. CONCRETE SHALL BE PLACED AND CURED ACCORDING TO ACI STANDARDS AND SPECIFICATIONS.

4.2. UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL BE NORMAL WEIGHT AND HAVE THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTHS:

4.2.1. FOUNDATIONS & SLAB-ON-GRADE 3,000 PSI
4.2.2. STRUCTURAL SLABS 4,000 PSI
4.2.3. CIP BEAMS, COLUMNS & WALLS 4,000 PSI
4.2.4. EXTERIOR RETAINING WALLS 4,000 PSI

4.3. SUBMIT PROPOSED MIX DESIGN WITH RECENT FIELD CYLINDER OR LAB TESTS FOR REVIEW PRIOR TO USE. MIX SHALL BE UNIQUELY IDENTIFIED BY MIX NUMBER OR OTHER POSITIVE IDENTIFICATION. MIX SHALL MEET THE REQUIREMENTS OF ASTM C33 FOR COARSE AGGREGATE.

4.4. CONCRETE SHALL COMPLY WITH THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED.

4.5. THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1-1/2) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN THAT STATED ABOVE, THE CONCRETE SHALL BE DISCARDED. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE.

4.6. CALCIUM CHLORIDES SHALL NOT BE UTILIZED; OTHER ADMIXTURES MAY BE USED ONLY WITH THE APPROVAL OF THE ENGINEER.

4.7. CONCRETE MIX DESIGNS SHALL INCLUDE A WRITTEN DESCRIPTION INDICATING WHERE EACH PARTICULAR MIX IS TO BE PLACED WITHIN THE STRUCTURE.

4.8. CONDUITS, PIPES AND SLEEVES SHALL BE PLACED AND SPACED IN ACCORDANCE WITH ACI 318, 20.6.

4.9. CONCRETE DESIGN MIX SUBMITTALS SHALL INCLUDE TESTED, STATISTICAL BACK-UP DATA AS PER 26.4.4 OF ACI 318.

4.10. CONCRETE SLABS ON GRADE SHALL BE REINFORCED WITH 6x6 W1.4xW1.4 STEEL MESH OR SYNTHETIC FIBERS AT A MINIMUM RATE OF 3.0 LBS/CY, OR AS RECOMMENDED BY THE FIBER MANUFACTURER FOR CONTROL OF TEMPERATURE AND SHRINKAGE/CRACKING, WHICHEVER IS GREATER. UNLESS NOTED OTHERWISE.

4.11. WHEN WATER-BASED ADHESIVE ARE BEING USED ON CONCRETE SURFACES, THE CONTRACTOR SHALL VERIFY THAT THE WATER CONTENT OF THE CONCRETE IS WITHIN THE ALLOWABLE RANGE BEFORE INSTALLATION.

4.12. CHAMFER OR ROUND ALL EXPOSED CORNERS A MINIMUM OF 3/4".

5. REINFORCING STEEL

5.1. SHALL BE ASTM A615 GRADE 60 DEFORMED BARS, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL BENDING DIAGRAM AND PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS.

MINIMUM LAP SPLICE LENGTH (IN.) - 3000 PSI CONCRETE						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
FOOTINGS (HOR.)	21	23	29	37	50	-
VERT. DOWELS	22	29	36	43	63	72
MINIMUM LAP SPLICE LENGTH (IN.) - 4000 PSI CONCRETE						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
BEAMS/SLABS	-	-	-	-	-	-
- TOP BARS	22	29	36	43	63	72
- OTHER	21	21	26	31	39	51
COLUMNS	16	18	19	22	37	45
C.I.P. WALLS	-	-	-	-	-	-
- VERT. (1 MAT)	21	21	22	25	39	51
- VERT. (2 MATS)	16	18	19	22	34	43
- HORIZONTAL	16	19	27	37	60	74
MINIMUM LAP SPLICE LENGTH (IN.) - 1500 PSI NORMAL WEIGHT CMU						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
6-in CMU WALL	19	25	39	81	-	-
8-in CMU WALL	19	25	31	57	79	113
12-in CMU WALL	19	25	31	53	61	75

RECOMMENED END HOOKS ANCHORAGE LENGTH (IN.) - 3000 PSI CONCRETE						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
D	2.25	3.00	3.75	4.50	5.25	6.00
A or G	6	8	10	12	14	16
RECOMMENED END HOOKS ANCHORAGE LENGTH (IN.) - 4000 PSI CONCRETE						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
D	2.25	3.00	3.75	4.50	5.25	6.00
A or G	7	10	12	15	17	19

5.2. REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE CLEAR COVER UNO (PER ACI 318-05 PAR.7.7.1)

5.2.1. CONCRETE CAST AGAINST EARTH: 3"

5.2.2. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
2" (#6 BARS & LARGER)
1-1/2" (#5 BARS & SMALLER)

5.2.3. CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
3/4" (SLABS)
1" (WALLS)
1-1/2" (STIRRUPS & TIES)

5.3. SECURE APPROVAL OF SHOP DRAWINGS PRIOR TO COMMENCING FABRICATION.

5.4. PROVIDE STANDARD HOOKS AT DISCONTINUOUS ENDS OF ALL TOP BARS.

5.5. WHERE REINFORCING IS SHOWN CONTINUOUS, SPLICE BOTTOM BARS OVER SUPPORTS AND TOP BARS AT CENTER OF SPAN. ALL OTHER LAP SPLICES SHALL BE IN ACCORDANCE WITH SPLICE TABLES AND DETAILS SHOWN ON DRAWINGS.

5.6. PROVIDE DOWELS INTO FOOTINGS, PILE CAPS, SUPPORT BEAMS, ETC. TO MATCH VERTICAL BARS WITH CLASS B TENSION LAP SPLICES, U.N.O.

5.7. WHERE HOOKS ARE SHOWN ON THE PLANS OR DETAILS, HOOKS SHALL BE DETAILED TO EXTEND DEEP ENOUGH INTO SUPPORTING STRUCTURE TO DEVELOP THE FULL STRENGTH OF THE HOOKED BAR. PROVIDE ADDITIONAL TIES OR STIRRUPS IN SUPPORTING STRUCTURE AS REQUIRED TO SATISFY ACI 318 HOOK DEVELOPMENT, CONFINEMENT, AND ANCHORAGE CRITERIA.

5.8. ALL REINFORCEMENT SHALL BE BENT COLD, UNLESS OTHERWISE APPROVED BY THE STRUCTURAL EOR.

5.9. SHOP DRAWINGS SHOWING ALL FABRICATION DIMENSIONS AND LOCATIONS FOR PLACING REINFORCING STEEL IN MAT SLABS, CAST-IN-PLACE WALLS, AND STRUCTURAL SLABS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

5.10. ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS FOR REINFORCED CONCRETE, "ACI 318" AND THE "MANUALS OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315 (LATEST EDITION).

5.11. ALL REINFORCING STEEL AND EMBEDMENTS SHALL BE SECURELY TIED AND SUFFICIENTLY SUPPORTED TO MAINTAIN THE POSITION WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES. "WET STICKING" DOWELS INTO CONCRETE IS NOT PERMITTED.

5.12. CONTINUOUS REINFORCEMENT SHALL BE PROVIDED WHEREVER POSSIBLE. REINFORCEMENT SHALL BE SPLICED ONLY AS SHOWN OR NOTED IN THE STRUCTURAL CONTRACT DOCUMENTS. STAGGER SPLICES WHERE POSSIBLE; USE FULL TENSION SPLICE (CLASS "B") UNLESS NOTED OTHERWISE. DOWELS SHALL MATCH THE SIZE AND SPACING OF THE SPECIFIED REINFORCEMENT AND SHALL BE LAPPED WITH FULL TENSION SPLICES (CLASS "B") UNLESS NOTED OTHERWISE. TERMINATE BARS WITH STANDARD HOOKS.

5.13. REINFORCING STEEL SHALL NOT BE WELDED OR TACK WELDED UNLESS APPROVED BY THE STRUCTURAL EOR.

5.14. ALL STEEL REINFORCING USED IN SLAB-ON-GRADE CONSTRUCTION IS REQUIRED TO BE SUPPORTED IN THE CENTER TO UPPER ONE THIRD OF THE SLAB.

6. WELDED WIRE FABRIC:

6.1. SHALL CONFORM TO ASTM A-185, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS.

6.2. MINIMUM LAP SHALL BE ONE SPACE PLUS TWO INCHES.

6.3. ALL WELD WIRE MESH USED IN SLAB-ON-GRADE CONSTRUCTION IS REQUIRED TO BE SUPPORTED IN THE CENTER TO UPPER ONE THIRD OF THE SLAB.

7. WOOD:

7.1. STRUCTURAL GLUED LAMINATED TIMBER SHALL BE PRODUCED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC). MINIMUM ALLOWABLE BENDING STRESS SHALL BE 2,400 PSI (DRY CONDITIONS).

7.2. PROVIDE DRESSED SEASONED LUMBER, S4S, WITH A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF DRESSING AS LISTED BELOW.

7.2.1. INTERIOR AND EXTERIOR LOAD-BEARING WALLS:
SOUTHERN PINE, NO. 2 GRADE.

7.2.2. LINTELS, FLOOR JOISTS AND BEAMS:
SOUTHERN PINE, NO. 2 GRADE.

7.2.3. WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE FOUNDATION GRADE PRESSURE-TREATED. USE GALVANIZED NAILS IN PRESSURE-TREATED WOOD. THE PROTECTIVE COATING ON LIGHT GAUGE STEEL CONNECTIONS IN CONTACT W/ PRESSURE-TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUFACTURERS RECOMMENDATIONS.

7.3. ENGINEERED LUMBER PRODUCTS

7.3.1. PARALLEL STRAND LUMBER (PSL) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS F/B = 2900 PSI
COMPRESSION PERPENDICULAR TO GRAIN F/C⊥ = 750 PSI
COMPRESSION PARALLEL TO GRAIN F/C|| = 2900 PSI
HORIZONTAL SHEAR F/V = 290 PSI
MODULUS OF ELASTICITY E = 2,000,000 PSI

7.3.2. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS F/B = 2600 PSI
COMPRESSION PERPENDICULAR TO GRAIN F/C⊥ = 750 PSI
COMPRESSION PARALLEL TO GRAIN F/C|| = 2510 PSI
HORIZONTAL SHEAR F/V = 285 PSI
MODULUS OF ELASTICITY E = 2,000,000 PSI

7.3.3. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS F/B = 1700 PSI
COMPRESSION PERPENDICULAR TO GRAIN F/C⊥ = 710 PSI
COMPRESSION PARALLEL TO GRAIN F/C|| = 1835 PSI
HORIZONTAL SHEAR F/V = 425 PSI
MODULUS OF ELASTICITY E = 1,300,000 PSI

7.3.4. GLULAM BEAMS SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS F/B = 3000 PSI
COMPRESSION PERPENDICULAR TO GRAIN F/C⊥ = 805 PSI
TENSION PARALLEL TO GRAIN F/T|| = 1350 PSI
HORIZONTAL SHEAR F/V = 300 PSI
MODULUS OF ELASTICITY E = 2,100,000 PSI

7.3.5. PRESERVED GLULAM BEAMS SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS F/B = 2400 PSI
COMPRESSION PERPENDICULAR TO GRAIN F/C⊥ = 740 PSI
HORIZONTAL SHEAR F/V = 300 PSI
MODULUS OF ELASTICITY E = 1,800,000 PS

7.4. STRUCTURAL PANELS

7.4.1. FLOOR PANELS SHALL BE CONSTRUCTED WITH TONGUE AND GROOVE APA RATED, EXPOSURE 1, $\frac{23}{32}$" PLYWOOD. FLOOR PANELS SHALL BE GLUED AND NAILED W/ 10d RING SHANK NAILS @ 4" O/C AT PANEL EDGES AND AT 6" O/C IN THE FIELD.

7.4.2. WALL PANELS SHALL BE CONSTRUCTED WITH APA RATED, EXPOSURE 1, $\frac{15}{32}$" SHEATHING, SHEATHING SHALL BE ATTACHED WITH 10d COMMON NAILS @ 3" O/C AT PANEL EDGES AND 6" O/C IN THE FIELD. ALL PANEL EDGES SHALL BE BLOCKED.

7.4.3. ROOF PANELS SHALL BE CONSTRUCTED WITH APA RATED, EXPOSURE 1, $\frac{19}{32}$" SHEATHING. SHEATHING SHALL BE ATTACHED WITH 10d RING SHANK NAILS @ 4" O/C AT PANEL EDGES AND AT 6" O/C IN THE FIELD. ALL PANEL EDGES SHALL BE BLOCKED OR ATTACHED WITH SIMPSON PSCA PANEL SHEATHING CLIPS. NAIL HEADS SHALL NOT PENETRATE THE OUTER SURFACE OF SHEATHING.

7.5. FABRICATED WOOD TRUSSES

7.5.1. DESIGN OF WOOD TRUSSES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SUBMIT SHOP DRAWINGS, DESIGN LOAD DATA, AND SUPPORT REACTIONS SEALED BY AN ENGINEER LICENSED IN THE PROJECT STATE. REVIEW OF SHOP DRAWINGS SHALL BE FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS WITH REGARD TO TRUSS CONFIGURATION, AND THE CONTRACTOR'S INTERPRETATION OF DESIGN LOADS AND DETAILS. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF THE FULL RESPONSIBILITY FOR THE DESIGN OF THE TRUSSES OR TRUSS CONNECTIONS NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS.

7.5.2. ERECTION AND TEMPORARY BRACING OF PREFABRICATED WOOD TRUSSES SHALL BE IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE TRUSS MANUFACTURER AND THE TRUSS PLATE INSTITUTE'S "BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS".

7.5.3. SECURE EACH COMMON ROOF TRUSS/RAFTER TO TOP PLATE WITH SIMPSON H-10 OR H-7 HURRICANE CLIP AT ALL BEARING POINTS. USE SIMPSON H-7 AT GIRDER TRUSSES. PROVIDE A MINIMUM OF TWO STUDS UNDER GIRDER TRUSS END BEARING.

7.5.4. TRUSSES ON SITE PRIOR TO INSTALLATION SHALL BE STORED IN A VERTICAL POSITION WITH SUPPORT POINTS PROVIDED AT FINAL BEARING POINTS AND BRACED TO AVOID TIPPING.

7.5.5. INSTALLATION OF ALL TRUSSES SHALL BE DONE USING A SPREADER BAR WITH A THREE POINT VERTICAL PICK AND CARE IS TO BE USED IN LIFTING TO MINIMIZE HORIZONTAL BENDING.

7.5.6. IMPROPER HANDLING OF THE TRUSSES AS NOTED ABOVE AND IN THE SPECIFICATIONS SHALL MEAN REMOVAL OF THE TRUSSES FROM THE JOB SITE.

7.5.7. DOUBLE TRUSSES SHALL BE NAILED TOGETHER W/ 10d @12" O.C. EACH SIDE, TOP AND BOTTOM CHORDS & WEBS.

7.5.8. TRUSS TO TRUSS CONNECTIONS SHALL BE VERIFIED BY THE TRUSS DESIGNER.

7.5.9. CONTRACTOR TO REFER TO "STANDARD FOR HURRICANE RESISTANT CONSTRUCTION SSTD 10-99 FOR FRAMING REQUIREMENTS OF WOOD FRAMED WALL SYSTEMS.

7.5.10. FLOOR TRUSS LOADS:

FLOOR TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS UNLESS A SPECIAL LOADING PATTERN IS PROVIDED BY THE STRUCTURAL ENGINEER OF RECORD.

TOP CHORD LIVE LOAD	40 PSF
TOP CHORD DEAD LOAD	20 PSF
BOTTOM CHORD DEAD LOAD	10 PSF
TOTAL	70 PSF

7.5.11. ROOF TRUSS LOADS:

ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS UNLESS A SPECIAL LOADING PATTERN IS PROVIDED BY THE STRUCTURAL ENGINEER OF RECORD.

TOP CHORD LIVE LOAD	20 PSF
TOP CHORD DEAD LOAD	20 PSF
BOTTOM CHORD DEAD LOAD	10 PSF
TOTAL	40 PSF

7.6. CONNECTIONS

7.6.1. CONNECTIONS FOR STRUCTURAL TIMBER SHALL BE GALVANIZED STRONG TIE CONNECTORS BY THE SIMPSON COMPANY OR APPROVED EQUAL. CONNECTORS SHALL FOLLOW MANUF. CORROSION PROTECTION RECOMMENDATIONS.

7.6.2. THE NUMBER OF FASTENERS PER CONNECTION SHALL BE THE MAX. ALLOWED FOR THAT PARTICULAR FASTENER.

8. TIE-DOWN NOTES:

8.1. ANCHOR TIE-DOWN RODS SHALL HAVE A MINIMUM SHAFT DIAMETER OF 1/2" (ONE HALF INCH) U.N.O.

8.2. TIE-DOWN RODS MAY BE CONNECTED DIRECTLY TO THE PLAN SPECIFIED 5/8" ANCHOR BOLTS USING A SIMPSON CNW5/8"-1/2" TRANSITION COUPLER NUT ABOVE THE REQUIRED BP3-5/8" AND 5/8" NUT ATOP THE SILL PLATE.

8.3. TIE-DOWN DIRECT CONNECTION MAY BE USED BY UTILIZING SIMPSON SET ANCHORAGE ADHESIVE WITH MINIMUM ROD EMBEDMENT OF 6" WHEREVER CAST-IN-PLACE ANCHOR BOLTS ARE SPECIFIED FOR COUPLED EXTENSION TO ABOVE.

8.4. ANY PLACE WHERE A TIE-DOWN LOCATION IS FILLED WITH STUDS; USE A SIMPSON LTTI31 OR HDU5 HOLDOWN CONNECTED AT THE TOP AND BOTTOM OF A MINIMUM 2PLY STUD PACK TO PRESERVE TENSION LOAD PATH TO FLOORS ABOVE AND/OR BELOW. RESUME INDICATED TIE-DOWN ROD PATH AT ENDS OF STUD PACK IF POSSIBLE.

8.5. SIMPSON LTTI31 & HDU5 HOLDOWNS SHALL BE ANCHORED INTO GROUT FILLED CMU WALLS OR PIERS WITH A SIMPSON SB5/8 OR SSTB ANCHOR BOLT WITH EMBEDMENT PER MFGR. RECOMMENDATION.

8.6. RODS SHALL INSTALLED PLUMB. THE MAXIMUM ALLOWABLE ROD DRIFT FROM PLUMB SHOULD NOT EXCEED 1.33 DEGREES OR MAXIMUM CENTERLINE OFFSET DISTANCE OF 1.75" PER FLOOR.

8.7. TIE-DOWN RODS SHALL HAVE A SIMPSON BP-3 WITH NUT ATOP THE TERMINAL TOP PLATE. RODS AT SLOPED OR RAKED PLATES SHALL REQUIRE HILLSIDE WASHERS BETWEEN BP-3 AND NUT TO LEVEL.

8.8. ALL RODS ARE TO BE TIGHTENED AT EACH FLOOR AND THE TOP PLATE CONNECTION AFTER ROOF IS FULLY LOADED, JUST PRIOR TO GYPSUM BOARD INSTALLATION. ALL RODS WITH BP AND NUT CONNECTIONS TO THE BOTTOM SIDE OF THE FIRST FLOOR FRAMING SHALL BE TIGHTENED AT THE END OF THE CONSTRUCTION PROCESS PRIOR TO C.O. OPTIONAL: CONTRACTOR MAY INSTALL A SIMPSON BPRTUD AND RTUD TAKE-UP DEVICE AT THE TERMINAL TOP PLATE CONNECTION TO REMOVED UNWANTED SYSTEM SLACK DUE TO STRUCTURE SETTLING OR CREEP.

9. MASONRY WALLS:

9.1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530/ASCE 5/TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND ACI 530.1/ASCE 6/TMS 602 "SPECIFICATION FOR MASONRY STRUCTURES", LATEST EDITION.

9.2. MASONRY UNITS SHALL MEET ASTM C-90 FOR HOLLOW LOAD BEARING TYPE MASONRY WITH UNIT STRENGTH OF 1900 PSI ON THE NET AREA (f'm = 1500 PSI). MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C-270.

9.3. GROUT SHALL BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C-476 AND HAVE A SLUMP BETWEEN 8" AND 11" WITH WATER CM RATIO OF 0.55 MAXIMUM AND WITH 3/8" MAXIMUM AGGREGATE.

9.4. PROVIDE HOOKED DOWELS IN FOUNDATIONS FOR VERTICAL REINFORCING ABOVE. REFER TO TABLE FOR SPLICE LENGTH.

9.5. BLOCK CELLS SHALL BE GROUT FILLED WITH VERTICAL REINFORCING BARS AT CORNERS, INTERSECTIONS, EACH SIDE OF OPENINGS AND AS SHOWN ON THE DRAWINGS.

9.6. DOWELS SHALL BE USED TO PROVIDE CONTINUITY INTO THE STRUCTURE ABOVE AND/OR BELOW, UNLESS NOTED OTHERWISE.

9.7. USE METAL LATH, MORTAR OR SPECIAL UNITS TO CONFINE CONCRETE AND GROUT TO AREA AS REQUIRED.

9.8. MASONRY SHALL BE LAID IN RUNNING BOND PATTERN UNLESS NOTED OTHERWISE. AT FILLED CELLS LAY UNITS WITH FULL BED JOINTS AROUND CELLS.

9.9. PROVIDE 9 GAUGE GALVANIZED HORIZONTAL JOINT REINFORCING AT ALTERNATE BLOCK COURSES. LADDER TYPE IS RECOMMENDED WITH REINFORCED FILLED CELLS. PROVIDE PREFABRICATED "TEE" OR CORNER SECTIONS AT WALL INTERSECTIONS.

9.10. CONTROL JOINTS SHALL BE CONSTRUCTED IN CONCRETE MASONRY CONSTRUCTION AT A MAXIMUM HORIZONTAL SPACING BETWEEN JOINTS OF 25'-0" AND NOT MORE THAN 12'6" FROM CORNERS. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS. CONSTRUCT INTERIOR CONTROL JOINTS AT A MAXIMUM HORIZONTAL SPACING OF 32'-0" OR 16'-0" FROM CORNERS. NO JOINTS SHALL BE LOCATED WITHIN 2'-0" OF STEEL BEAM BEARINGS. HORIZONTAL WALL REINFORCING SHALL BE STOPPED EACH SIDE OF CONTROL JOINTS. SEE ARCHITECTURAL DRAWINGS FOR SEALANT REQUIREMENTS AT CONTROL JOINTS.

9.11. SUBMIT PROPOSED GROUT MIX DESIGNS FOR REVIEW PRIOR TO USE. MIX NUMBER OR OTHER POSITIVE IDENTIFICATION SHALL UNIQUELY IDENTIFY MIX.

9.12. USE OF SUPERPLASTICIZER IS PROHIBITED.

9.13. CELLS TO BE GROUT FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUS VERTICAL GROUT SPACE.

9.14. CLEANOUT OPENINGS SHALL BE PROVIDED AT THE BOTTOM OF CELLS TO BE GROUT FILLED IN EACH POUR IN EXCESS OF 5 FEET IN HEIGHT. AFTER INSPECTION AND BEFORE GROUTING, THE REBAR SHALL BE TIED AT THE CLEANOUTS AND THE CLEANOUTS SHALL BE SEALED.

9.15. ANY OVERHANGING MORTAR OR OTHER OBSTRUCTION OR DEBRIS SHALL BE REMOVED FROM THE INSIDES OF SUCH CELL WALLS.

9.16. VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 192 BAR DIAMETERS.

9.17. ALL CELLS SHALL BE FILLED SOLIDLY WITH GROUT (U.N.O). SAMPLE AND TEST GROUT PER ASTM C1019.

9.18. GROUT SHALL BE POURED IN LIFTS OF 4 FEET MAXIMUM HEIGHT. GROUT SHALL BE CONSOLIDATED AT TIME OF PLACING BY VIBRATING AND RECONSOLIDATED LATER BY VIBRATING BEFORE PLASTICITY IS LOST.

9.19. WHEN TOTAL GROUT POUR EXCEEDS 5 FEET IN HEIGHT, (HIGH LIFT GROUTING), THE GROUT SHALL BE PLACED IN 4-FOOT LIFTS WITH A MINIMUM OF A 30 MINUTE DELAY BETWEEN LIFTS. MINIMUM CELL DIMENSION SHALL BE IN ACCORDANCE WITH TABLE 5 OF ACI 530.1 (3" X 3" FOR COARSE GROUT, 12 FT. MAXIMUM POUR HEIGHT).

9.20. WHEN THE GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE MADE BY STOPPING THE POUR OF GROUT NOT LESS THAN 1-1/2 INCH BELOW THE TOP OF THE UPPERMOST UNIT GROUTED.

9.21. MASONRY WALLS MARKED AS "LOAD BEARING" ARE DESIGNED TO CARRY FLOOR GRAVITY LOADS AND MUST BE CONSTRUCTED TO SUPPORT THE CONCRETE FLOOR SLAB CONCURRENTLY WITH CONCRETE COLUMN CONSTRUCTION.

9.22. MASONRY WALLS INDICATED AS "INFILL" ARE DESIGNED TO RESIST LATERAL LOADS AND MUST BE CONSTRUCTED AFTER THE CONCRETE SLAB IS CAST AND POST TENSIONING OPERATION IS COMPLETED. INFILL WALLS SHALL BE CONSTRUCTED STARTING AT THE FOUNDATION LEVEL AND WORKING UPWARD ONE LEVEL AT A TIME. DO NOT START NEXT HIGHER LEVEL OF WALL PRIOR TO COMPLETION OF WALL BELOW. ALLOW A MINIMUM OF 3 DAYS CURING FOR GROUT OF WALL BELOW PRIOR TO STARTING WALL ABOVE.

9.23. SINGLE STORY MASONRY WALLS INDICATED AS "PARTITION WALLS" SHALL BE CAST ON THICKENED SLAB FOUNDATIONS AND ARE NOT DESIGNED TO CARRY ANY LOADS FROM THE MAIN BUILDING STRUCTURES. ISOLATE TOP OF PARTITION WALLS FROM UNDERSIDE OF CONCRETE SLAB WITH A MINIMUM 1/2" THICK COMPRESSIBLE MATERIAL.

9.24. SUBMIT WRITTEN CONSTRUCTION SEQUENCES AND PROCEDURES PRIOR TO THE START OF MASONRY CONSTRUCTION.

10. CHEMICAL (ADHESIVE) ANCHORS:

10.1. SHALL BE A TWO PART EPOXY POLYMER INJECTION SYSTEM, SUCH AS HILTI HIT HY150, HILTI RE500, OR SIMPSON SET ADHESIVE SYSTEM, OR ENGINEER APPROVED SUBSTITUTION.

10.2. EPOXY TYPES AND BRANDS VARY IN THEIR BOND STRENGTH AND SUITABILITY OF USE, DEPENDING ON TYPE OF LOADING, ANCHOR SPACING, ETC. WHEN A PARTICULAR TYPE OF EPOXY IS SPECIFIED IN THESE DRAWINGS, A UNIQUE CALCULATION HAS BEEN MADE BASED ON THE PROPERTIES OF THAT SPECIFIC TYPE OF EPOXY FOR THE SPECIFIC CONDITION SHOWN IN THE DETAIL. SUBSTITUTION OF EPOXY TYPE IS NOT ALLOWED WHERE DETAIL SPECIFIES ONLY ONE TYPE OF EPOXY, WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER OF RECORD. NOT ALL EPOXY BRANDS OR TYPES WILL BE ALLOWED AS SUBSTITUTES.

10.3. SUBSTITUTION OF EPOXIES IN ONE CONDITION SHALL NOT BE CONSTRUED AS APPROVAL TO MAKE SIMILAR SUBSTITUTION OF EPOXIES IN OTHER DIFFERING CONDITIONS. EACH SUBSTITUTION MUST RECEIVE PRIOR WRITTEN APPROVAL BY THE ENGINEER OF RECORD.

10.4. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

10.5. THE MANUFACTURER'S REPRESENTATIVE SHALL TRAIN INSTALLERS.

10.6. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL HOLE CLEAN-OUT REQUIREMENTS ARE FULLY COMPLETED BY THE INSTALLERS PRIOR TO INJECTING EPOXY INTO THE HOLES.

10.7. NO LOAD SHALL BE APPLIED TO THE EPOXY ANCHORS UNTIL THE EPOXY HAS FULLY CURED AND HAS ACHIEVED IT'S SPECIFIED STRENGTH.

10.8. IF DETAIL SHOWS EPOXY ANCHORS IN SLOTTED HOLES, IT IS IMPERATIVE THAT ANY EXCESS EPOXY IS CLEANED UP FROM AROUND THE ANCHOR ROD, SO THAT IT DOES NOT INTERFERE WITH ADJUSTABILITY OF ANCHOR ROD IN SLOTTED HOLE.

11. MECHANICAL ANCHORS:

11.1. SHALL BE EITHER HEAVY DUTY CONCRETE SCREW ANCHOR (SUCH AS POWERS WEDGE-BOLT, SIMPSON TITEN HD, OR HILTI HUS-H) OR WEDGE TYPE EXPANSION ANCHOR (SUCH AS POWERS POWER-STUD, SIMPSON WEDGE-ALL, OR HILTI KWIK BOLT 3).

11.2. TYPE OF ANCHOR SHALL BE AS SPECIFIED ON THE DRAWINGS, WHILE BRAND AND MODEL OF ANCHOR MAY BE SELECTED FROM THE ABOVE LISTED ANCHORS. SUBSTITUTION ANCHORS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVED IN WRITING BY THE ENGINEER OF RECORD PRIOR TO USE.

11.3. IN SOME CASES OF CRITICAL LOADING OR GEOMETRIC CONDITIONS, ONLY SPECIFIC ANCHORS WILL BE ALLOWED, AS NOTED ON THE DRAWINGS. IN THESE CASES, THE SPECIFIED BRAND AND MODEL OF ANCHOR MUST BE USED.

11.4. INSTALL IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

11.5. THE MANUFACTURER'S REPRESENTATIVE SHALL TRAIN INSTALLERS.

11.6. MINIMUM EMBEDMENT DEPTH OF 1/4" TAPCONS INSTALLED IN CONCRETE SHALL BE 1.25" AND INSTALLED INTO MASONRY SHALL BE 1.5". SELECT ANCHOR LENGTH AS REQUIRED TO ACHIEVE THE SPECIFIED MINIMUM EMBEDMENT DEPTH.

11.7. TAPCON SCREWS MAY BE REPLACED W/ 0.157" SHANK DIAMETER PAF ANCHORS (HILTI X-U OR EQUAL) ON A 1:1 SUBSTITUTION BASIS. MINIMUM EMBEDMENT DEPTH SHALL BE 1.25" WHEN INSTALLED INTO CONCRETE OR GROUTED MASONRY. FOLLOW MANUFACTURER'S INSTALLATION RECOMMENDATIONS, MINIMUM EDGE DISTANCES, AND PLACEMENT LIMITATIONS (RELATIVE TO MORTAR JOINTS IN MASONRY).

12. STRUCTURAL STEEL:

12.1. STEEL WORK SHALL BE NEW AND CONFORM TO THE ANSI/AISC 360-05 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.

12.2. MATERIAL SHALL CONFORM TO THE FOLLOWING, EXCEPT AS NOTED:

WIDE FLANGE SHAPES	ASTM A992 (Fy=50 KSI)
ANGLES, CHANNELS AND PLATES	ASTM A36 (Fy=36 KSI)
RECTANGULAR HSS ASTM	A500, GRADE B (Fy=46 KSI)
HIGH STRENGTH BOLTS	ASTM A325 OR A490
THREADED RODS	ASTM A36 (Fy=36 KSI)
HEAVY HEX NUTS	ASTM A563
HARDENED STEEL WASHERS	ASTM F436
ANCHOR RODS	ASTM F1554 GR. 36 (Fy=36 KSI)

12.3. CONNECTIONS:

12.3.1. BOLTS SHALL BE HIGH-STRENGTH, BEARING TYPE IN SNUG TIGHT CONDITION, U.N.O. TIGHTEN BY AN AISC APPROVED METHOD.

12.3.2. WELDING ELECTRODES SHALL BE PER AWS D1.1. RETURN FILLET WELDS FOR FRAMED CONNECTIONS 1/2" AT EACH END.

12.3.3. FIELD CONNECTIONS SHALL BE BOLTED, EXCEPT AS NOTED OTHERWISE.

12.3.4. DETAIL FLOOR AND ROOF FRAMING CONNECTIONS FOLLOWING THE REQUIREMENTS SHOWN IN THE TYPICAL CONNECTION SCHEDULES SHOWN IN THESE DRAWINGS, BASED ON THE BEAM OR GIRDER SIZE.

12.3.5. FOR THE PURPOSE OF CORRECTLY INTERPRETING THE CONNECTION SCHEDULES, GIRDERS SHALL BE CONSIDERED AS ANY FLOOR OR ROOF BEAM WHICH CARRIES OTHER FLOOR OR ROOF BEAMS, OR ANY FLOOR OR ROOF BEAM WHICH CARRIES STEEL COLUMNS.

12.3.6. DETAIL DIAGONAL BRACING CONNECTIONS AS SHOWN IN THE DETAILS. IF NO DETAIL IS PROVIDED, DETAIL CONNECTION TO DEVELOP THE FULL TENSION CAPACITY OF THE DIAGONAL BRACING MEMBER.

12.4. HIGH STRENGTH BOLTS IN BEARING CONDITION SUPPORTING SIMPLE SPAN BEAMS NOT SUBJECT TO AXIAL LOADS MAY BE INSTALLED TO "SNUG TIGHT" CONDITION IF NORMAL, OR SHORT SLOTTED HOLES ARE USED. THE ENGINEER OF RECORD WILL BE THE ULTIMATE AUTHORITY IN THE USE OF "SNUG TIGHT" BOLTS. IF LONG SLOTTED OR OVERSIZED HOLES ARE USED, BOLTS MUST BE FULLY PRETENSIONED AND SLIP CRITICAL. PROPER SURFACE PREPARATION IS REQUIRED FOR SLIP CRITICAL BOLTS, INCLUDING OMISSION OF PRIMER OR FIRE PROOFING, AS APPROPRIATE.

12.5. BOLTS SHARING LOAD WITH WELDS IN A CONNECTION SHALL BE FULLY PRETENSIONED AND SLIP CRITICAL.

12.6. WHERE FULLY PRETENSIONED OR SLIP CRITICAL BOLTS ARE REQUIRED, TIGHTENING SHALL BE ACHIEVED USING EITHER TWIST-OFF TENSION CONTROL BOLTS OR DIRECT TENSION INDICATING WASHERS.

12.7. ALL STRUCTURAL STEEL EXPOSED TO EXTERIOR CONDITIONS SHALL BE HOT DIPPED GALVANIZED PER ASTM A123 AND ALL FASTENERS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A153.

12.8. GROUT UNDER BEARING PLATES SHALL BE NON-METALLIC, NON-SHRINK TYPE WITH A COMPRESSIVE STRENGTH OF AT LEAST 5,000 PSI IN 28 DAYS.

12.9. THE CAMBER OF STEEL MEMBERS SHALL BE VERIFIED IN THE SHOP AND THE FIELD. WHEN NO CAMBER IS INDICATED, TURN THE MEMBER NATURAL CAMBER UP.

12.10. APPLY FIREPROOFING TO STEEL STRUCTURE CALCULATING THE THICKNESS OF FIREPROOFING BY COMPARING THE ACTUAL MEMBER SIZE TO THE MEMBER SIZE USED IN THE DESIGNATED UL RATING AND ADJUSTING APPROPRIATELY.

13. RAILINGS AND HANDRAILS:

13.1. ENGINEERED RAILING SYSTEM AND CONNECTION OF SAME TO THIS STRUCTURE SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA.

13.2. THE CONFIGURATION OF THE RAILING SYSTEM SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS.

13.3. RAILING SYSTEM AND CONNECTIONS SHALL BE DESIGNED FOR APPLICABLE LOADS AS INDICATED ON THE DRAWINGS AND IN THE BUILDING CODE.

13.4. THE LOADS SHALL BE CLEARLY INDICATED ON SHOP DRAWINGS AND SHALL COMPLY WITH ALL APPLICABLE CODES.

13.5. SHOP DRAWINGS SHALL SHOW AND SPECIFY CONNECTIONS UTILIZED WITHIN THE RAILING SYSTEM AS WELL AS CONNECTIONS TO AND LOADS IMPOSED UPON THE STRUCTURAL SYSTEM SHOWN ON THESE DRAWINGS.

13.6. SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA.

14. STRUCTURAL SUBMITTALS

14.1. SHOP DRAWINGS OR REPORTS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD PRIOR TO FABRICATION OR CONSTRUCTION (AS APPLICABLE) U.N.O.

14.1.1. PILE INSTALLATION QUALITY CONTROL
14.1.2. PILE INSTALLTION MONITORING LOG
14.1.3. CONCRETE ADMIXTURES
14.1.4. CONCRETE STRENGTH TESTS
14.1.5. CONCRETE DETAILING
14.1.6. ENGINEERED FILL COMPACTION TESTING
14.1.7. ENGINEERED ROOF AND FLOOR TRUSSES
14.1.8. STEEL JOISTS
14.1.9. STRUCTURAL STEEL
14.1.10. HANDRAILS AND STAIRS

REVISIONS

SYM	DESCRIPTION	BY	DATE	SHEETS
△	REVISED RAMP ADJACENT TO STAGE. CORRECTED DISCREPANCY WITHIN FOOTING SCHEDULE.	CLH	08/14/2025	S101 S301

CODY L. HARDEN
No. 89388

Cody L Harden
Digitally signed by Cody L Harden
Date: 2025.08.27 09:26:21 -05'00'

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY CODY L. HARDEN, P.E., STATE OF FLORIDA 89388, ON THE DATE ADJACENT TO THE SEAL USING A SHA AUTHENTICATION CODE.

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100% CONSTRUCTION DOCUMENTS

CODY L. HARDEN
No. 89388

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	ASI #2 / RESPONSE TO RFI #2	8/8/25

STRUCTURAL GENERAL NOTES

PROJECT NUMBER	22019
DATED	01/31/2025

S001

22019
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(01/31/2025

PLAN LEGEND

- DENOTES THICKENED SLAB @ WALL BEARING & SLAB STEP DOWN LOCATIONS.
- DENOTES FOOTER OUTLINE BELOW.
- DENOTES SLAB TURNDOWN OUTLINE.
- DENOTES LOAD BEARING WALL BELOW.

TYP. C.I.P. PIER & FOOTING CALLOUT

FOOTING NOTES

1. TOPS OF ALL FOOTINGS (EXCEPT TURNDOWNS) MUST BE COVERED WITH A MINIMUM OF 12" OF FINISH GRADE MATERIAL, (U.N.O.).
2. BOTTOMS OF ALL FOOTINGS MUST BEAR ATOP UNDISTURBED SOIL OR ENGINEERED FILL COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR A MINIMUM OF 12" BELOW EXISTING GRADE UNLESS PROPER PROVISIONS HAVE BEEN MADE FOR THE USE OF ENGINEERED FILL BASED ON A SITE SPECIFIC GEOTECHNICAL EVALUATION (BY OTHERS).
3. ALL CONTINUOUS FOOTINGS & PEDESTALS MUST BE CENTERED ON THE WALL/PIER UNLESS SPECIFICALLY NOTED AS ECCENTRIC FOOTING.
4. VERTICAL DOWEL HOOKS SHOULD EXTEND 9" IN TO FTG'S, BELOW & RUNNING PERPENDICULAR TO FLEXURAL REINF.
5. NO "WET STICK" SETTING OF REINFORCING WILL BE APPROVED.
6. ALL VERTICAL REINFORCING MUST BE IN PLACE & TIED TO FOOTING REINF. PRIOR TO POUR.
7. COORDINATE ALL FOOTING LOCATIONS WITH CIVIL, PLUMBING, AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL PROVIDE PIPE SLEEVES BELOW OR ABOVE CONTINUOUS WALL FOOTINGS.
8. SEE ARCH. DRAWINGS FOR DIMENSIONS NOT SHOWN. IF A CONFLICT EXISTS, THE ARCH. DIMENSIONS SHALL GOVERN. BOTH ENGINEER AND ARCHITECT OF RECORD SHALL BE NOTIFIED IN WRITING OF ALL CONFLICTS.

PEMB BID NOTIFICATION TO CONTRACTOR:

WITH THE SUBMISSION OF THEIR BID, THE GENERAL CONTRACTOR CERTIFIES AND HAS CONFIRMED THAT THE PRE-ENGINEERED METAL BUILDING COMPANY WHOSE PRICE WAS USED TO GENERATE THIS BID HAS THOROUGHLY REVIEWED THE REQUIREMENTS OF THE CURRENT ARCHITECTURAL AND STRUCTURAL PLANS. THE BID PRICING REFLECTS THEIR ABILITY TO PROVIDE A PRE-ENGINEERED METAL BUILDING PACKAGE THAT COMPLIES WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS TO THE ARCHITECTS SATISFACTION. THE BIDDING CONTRACTOR FURTHER UNDERSTANDS AND ACKNOWLEDGES THAT THEY HAVE INCLUDED WITHIN THEIR BID PRICE ALL COSTS FOR ALL INITIAL OR SUPPLEMENTAL DESIGN ENGINEERING FROM THE PEMB PROVIDER TO ENSURE THAT THE APPROVED DESIGN TO BE RELEASED FOR FABRICATION COMPLIES WITH THE INTENT OF THE CONTRACT DRAWINGS. THIS INCLUDES COLUMN LOCATIONS AND SPACING, BEAM CLEAR HEIGHTS AND SPANS, AS WELL AS WINDOWS, DOORS, AND STOREFRONT OPENING REQUIREMENTS. THE COST OF ANY STEEL MATERIAL REQUIRED TO COMPLY WITH THESE ARCHITECTURAL REQUIREMENTS IS INCLUDED IN THIS BID. ADDITIONALLY, THE PEMB PROVIDER HAS INCLUDED SUITABLE DESIGN AND SUPPLEMENTAL STEEL BRACING WITHIN THE GYM ROOF FRAMING TO SUPPORT THE SIX RETRACTING BASKETBALL BACKSTOP ASSEMBLIES.

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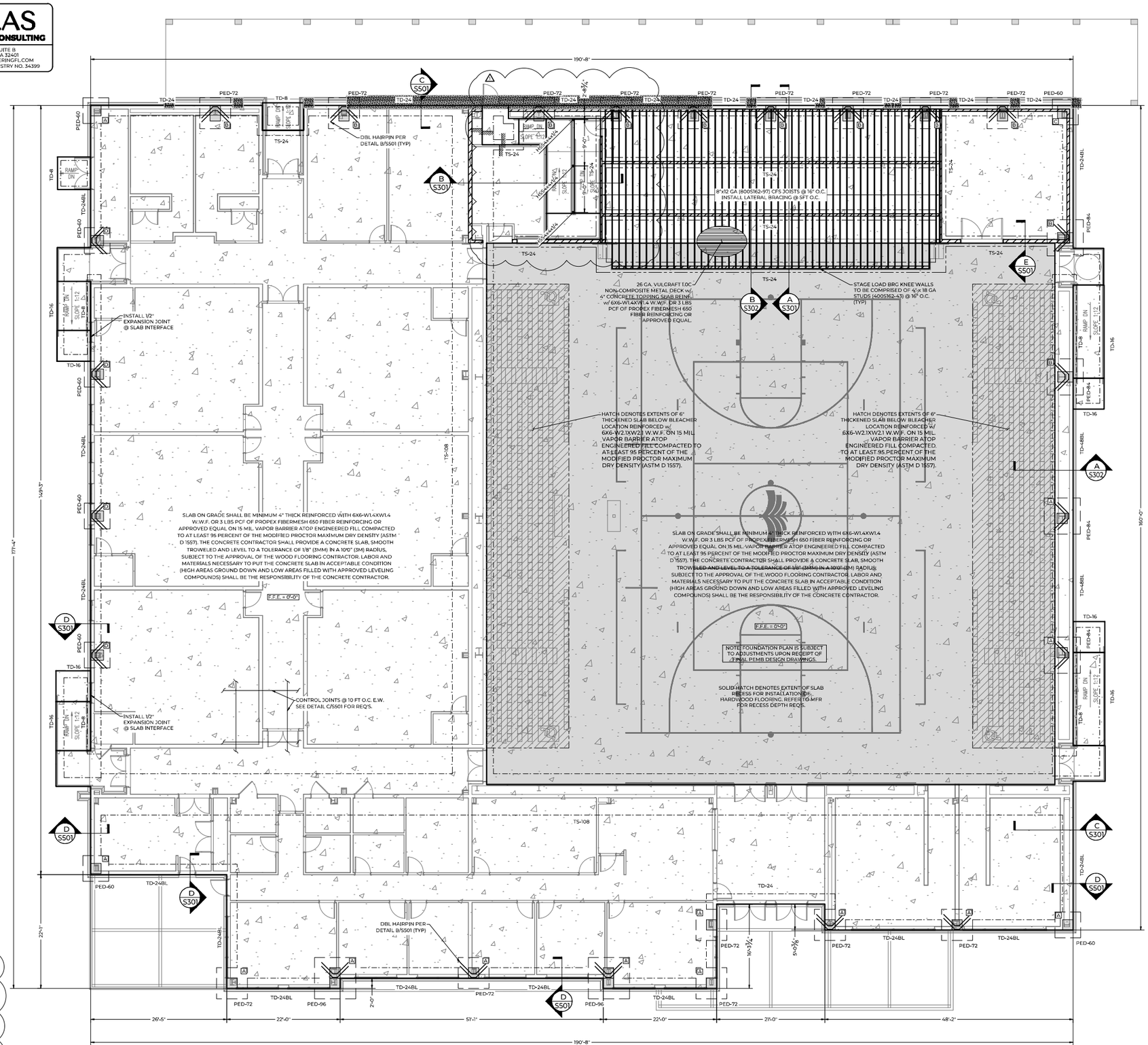

CONTINUOUS FOOTING SCHEDULE

DESIGNATION	TYPE	DIMENSIONS	CONTINUOUS REINF.	TRANSVERSE REINF.
TS-24	THICKENED SLAB	12" D x 24" W	(3) #5 BARS	#5 BARS x 18'-0" @ 18" O.C.
TS-108	THICKENED SLAB	20" D x 108" W	(12) #5 BARS	#5 BARS x 102" @ 18" O.C.
TD-8	TURN DOWN	16" D x 8" W	(1) #5 BARS	N/A
TD-16	TURN DOWN	16" D x 16" W	(2) #5 BARS	#5 BARS x 10'-0" @ 24" O.C.
TD-24	TURN DOWN	16" D x 24" W	(3) #5 BARS	#5 BARS x 11'-6" @ 24" O.C.
TD-24BL	TURN DOWN	16" D x 32" W	(4) #5 BARS	#5 BARS x 2'-2" @ 24" O.C.
TD-48BL	TURN DOWN	16" D x 56" W	(6) #5 BARS	#5 BARS x 4'-2" @ 24" O.C.

PEDESTAL FOOTING SCHEDULE

DESIGNATION	TYPE	DIMENSIONS	LONGITUDINAL REINF.	TRANSVERSE REINF.
PED-60	PEDESTAL FTG.	16" D x 60" SQR.	(7) #5 BARS EQ. SPACED	(7) #5 BARS EQ. SPACED
PED-72	PEDESTAL FTG.	20" D x 72" SQR.	(8) #5 BARS EQ. SPACED	(8) #5 BARS EQ. SPACED
PED-84	PEDESTAL FTG.	20" D x 84" SQR.	(9) #5 BARS EQ. SPACED	(9) #5 BARS EQ. SPACED
PED-96	PEDESTAL FTG.	20" D x 96" SQR.	(10) #5 BARS EQ. SPACED	(10) #5 BARS EQ. SPACED

A FOUNDATION PLAN
SCALE: 1/8"=1'-0"

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REVISIONS:

No.	Description	Date
1	ASI #2 / RESPONSE TO RFI #2	8/8/25

FOUNDATION PLAN

PROJECT NUMBER 22019
DATED 01/31/2025

S101

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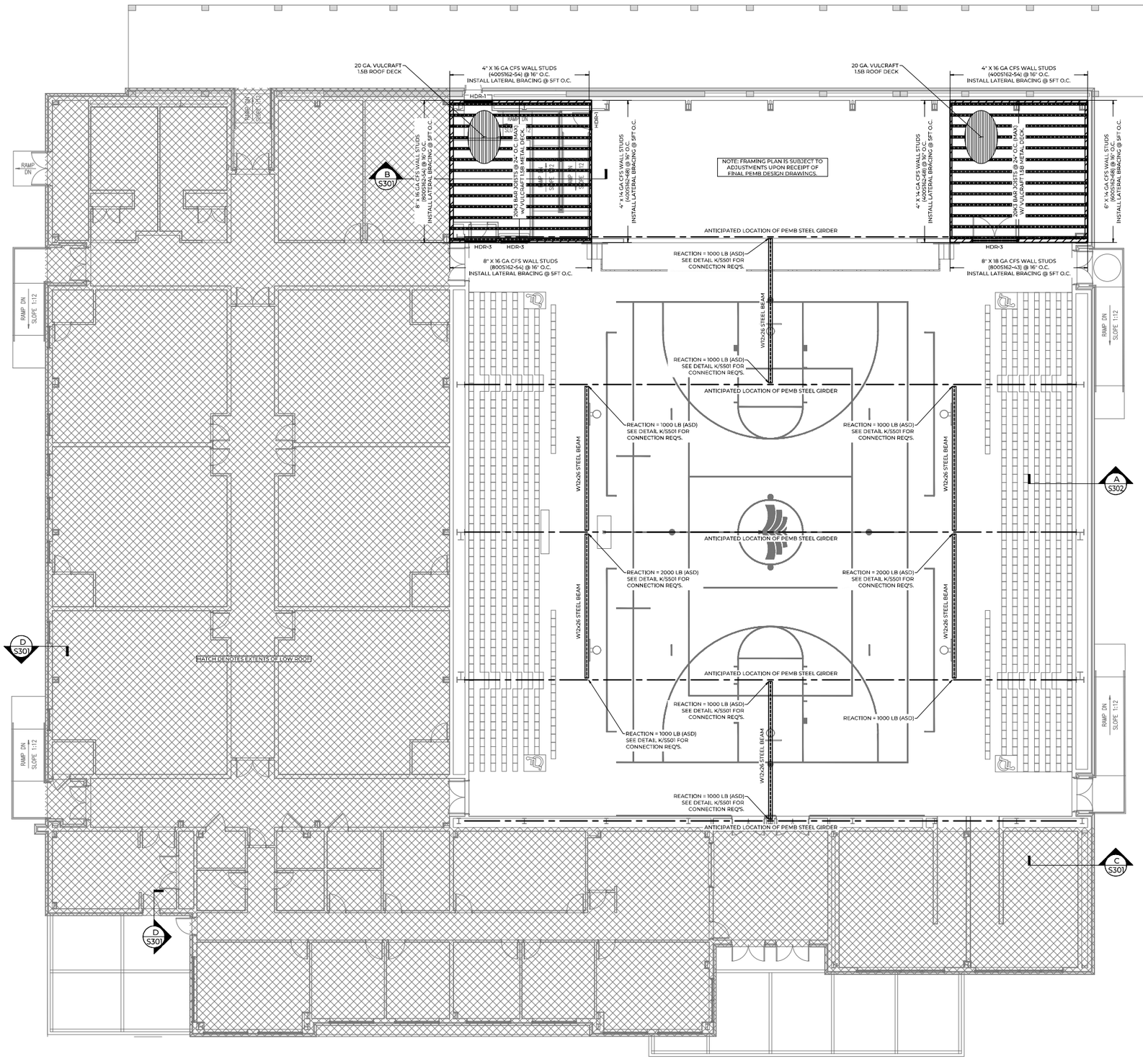
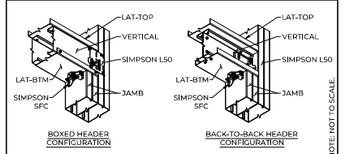


COLD FORMED STEEL HEADER SCHEDULE



CONCRETE BEAM SCHEDULE

DESIG.	VERTICAL	LAT-TOP	LAT-BTM	JAMB	HEADER SHAPE
HDR-1	800S162-54	400S162-33	400S162-33	(2) 400S162-54	BACK-TO-BACK
HDR-2	800S162-97	400S162-33	400S162-33	(2) 400S162-54	BACK-TO-BACK
HDR-3	800S162-54	800S162-33	800S162-33	(2) 800S162-54	BACK-TO-BACK

A MEZZANINE FRAMING PLAN
SCALE: 1/8"=1'-0"

100% CONSTRUCTION DOCUMENTS 01/31/2025

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No.	Description	Date
1	ASI #2 / RESPONSE TO RFI #2	8/8/25

MEZZANINE FRAMING PLAN

PROJECT NUMBER 22019
DATED 01/31/2025

S102

ATLAS
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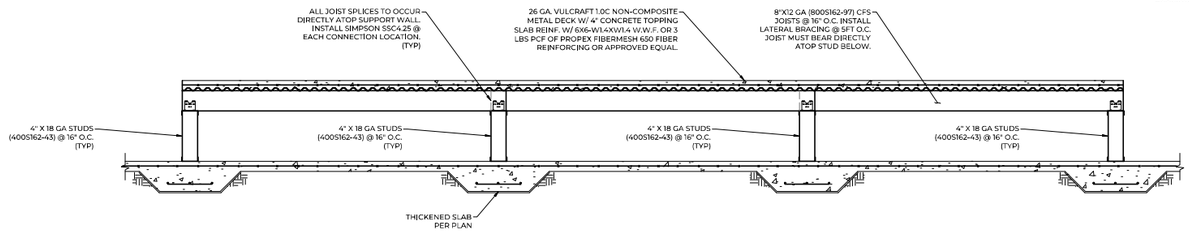
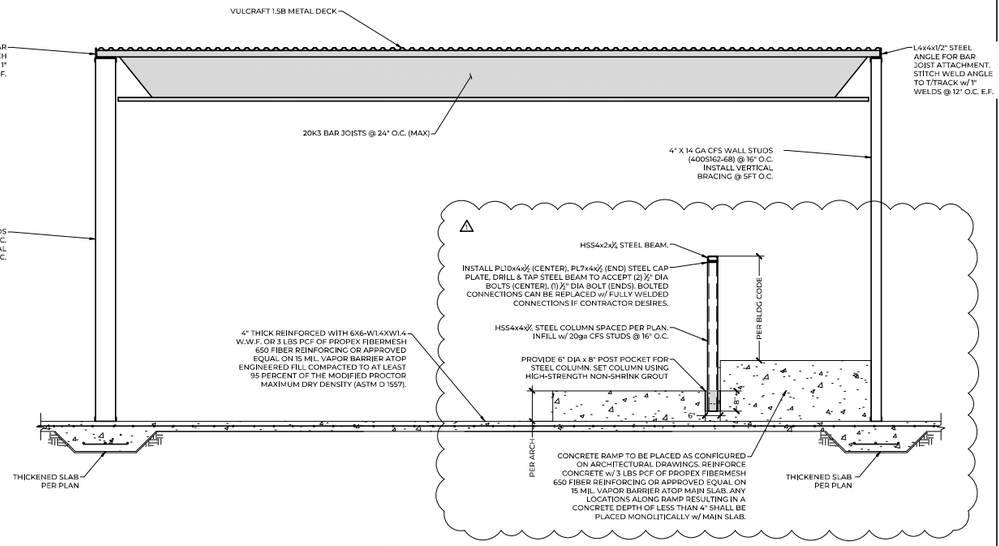
455 HARRISON AVE, SUITE B
PANAMA CITY, FLORIDA, 32401
EMAIL: INFO@ATLASENGINEERINGFL.COM
PHONE: (850) 257-5316 REGISTRY NO. 34399

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025

NOTE: ELEVATIONS & DIMENSIONS TO BE CONFIRMED UPON RECEIPT OF FINAL PEMB DESIGN DOCUMENTS.

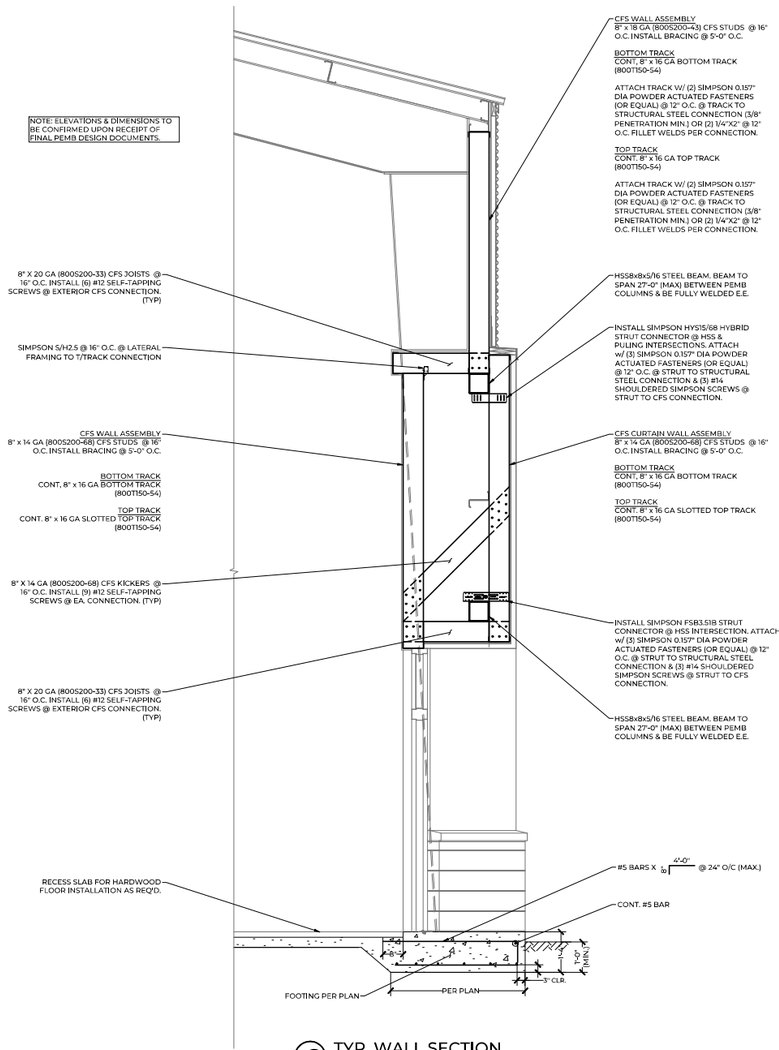


A SECTION @ STAGE
SCALE: 1/2"=1'-0"

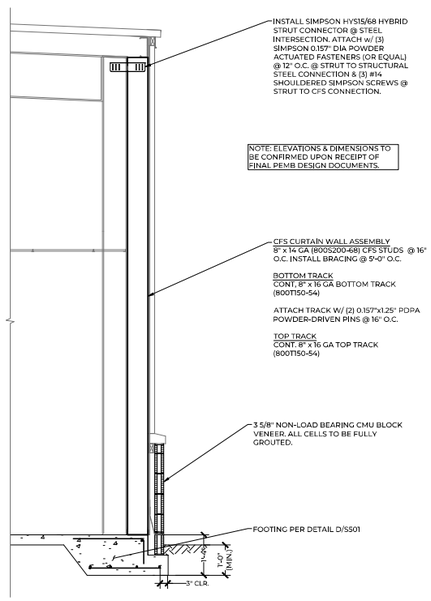


B SECTION @ MEZZANINE
SCALE: 1/2"=1'-0"

NOTE: ELEVATIONS & DIMENSIONS TO BE CONFIRMED UPON RECEIPT OF FINAL PEMB DESIGN DOCUMENTS.



C TYP. WALL SECTION
SCALE: 1/2"=1'-0"



D TYP. WALL SECTION
SCALE: 1/2"=1'-0"

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CODY L. HARDEN
LICENSE
No. 89388
STATE OF FLORIDA
PROFESSIONAL ENGINEER

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

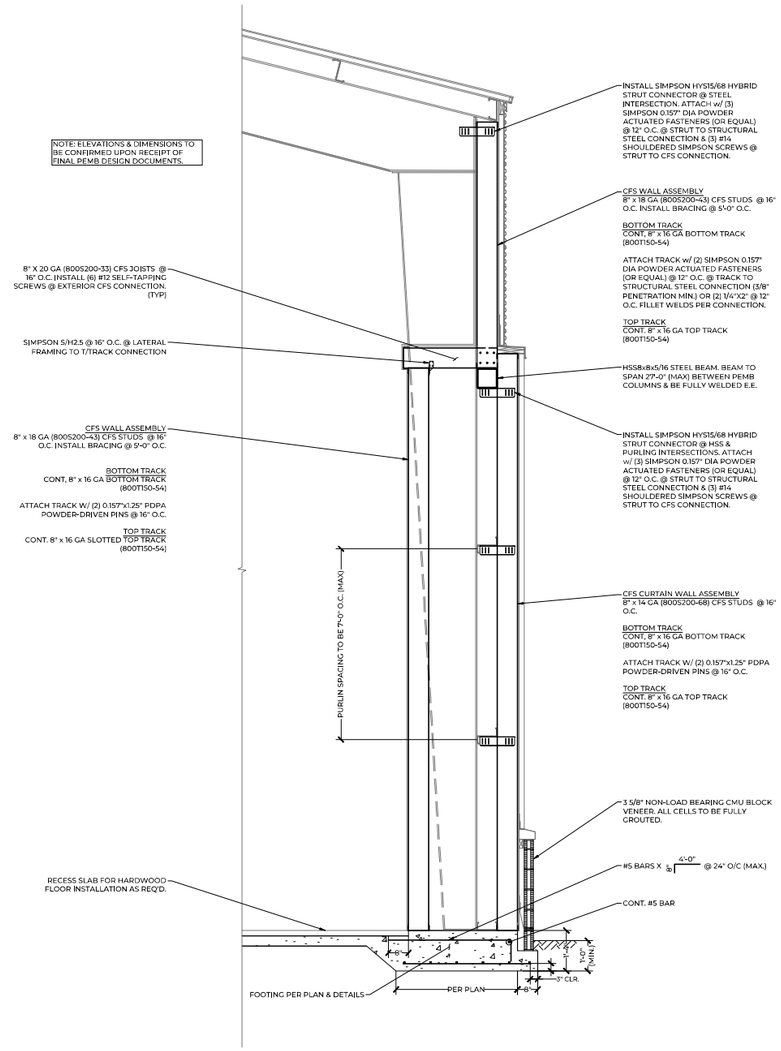
No.	Description	Date
1	ASI #2 / RESPONSE TO RFI #2	8/8/25

STRUCTURAL SECTIONS

PROJECT NUMBER 22019
DATED 01/31/2025

S301

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



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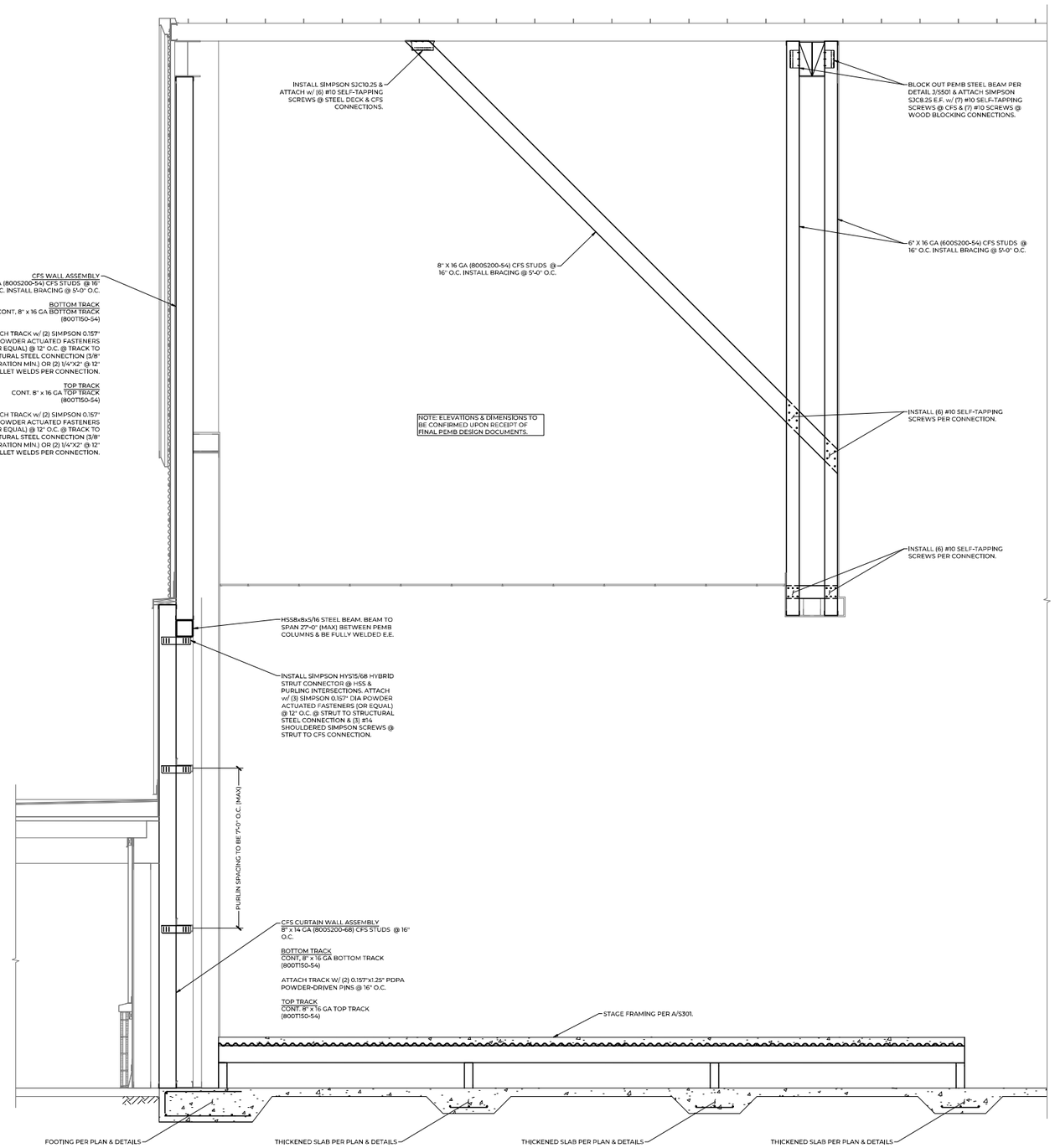

B TYP. WALL SECTION
SCALE:1/2"=1'-0"

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CODY L. HARDEN LICENSE No. 89388 STATE OF FLORIDA PROFESSIONAL ENGINEER

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

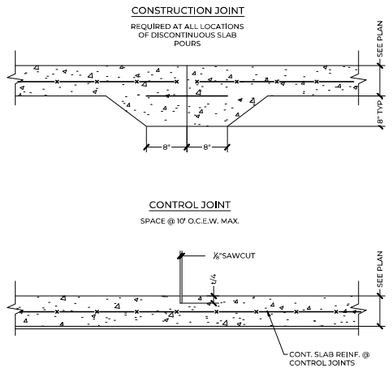
No.	Description	Date
1	ASI #2 / RESPONSE TO RFI #2	8/8/25

STRUCTURAL SECTIONS

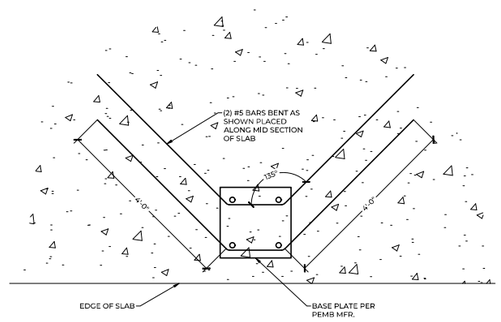
PROJECT NUMBER 22019
DATED 01/31/2025

S302

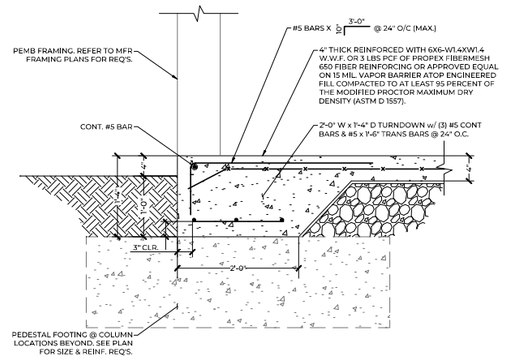
22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



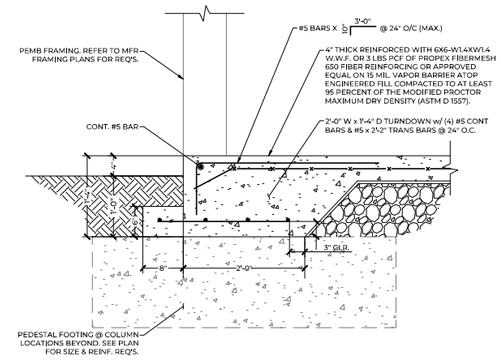
A TYP. SLAB FINISHING DETAIL
SCALE : 1" = 1'-0"



B TYP. HAIRPIN DETAIL
SCALE : 1" = 1'-0"



C TYP. TURNDOWN DETAIL
SCALE : 1" = 1'-0"

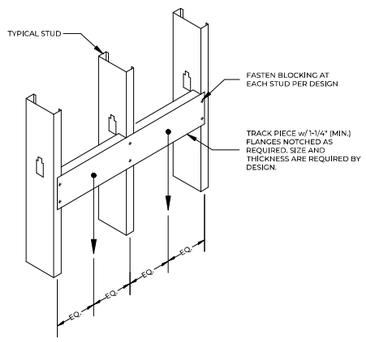


D TYP. TURNDOWN w/ BRICK LEDGE DETAIL
SCALE : 1" = 1'-0"

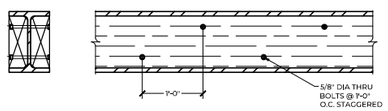
E TYP. THICKENED SLAB DETAIL
SCALE : 1" = 1'-0"

F TYP. CONCRETE PIER DETAIL
SCALE : 1" = 1'-0"

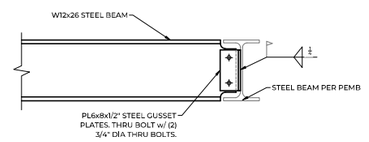
G TYP. BLOCK & STRAP BRIDGING DETAIL
SCALE : 1" = 1'-0"



H TYP. BACKING PLATE DETAIL
SCALE : 1" = 1'-0"



J TYP. STEEL BEAM WEB BLOCKING DETAIL
SCALE : 1" = 1'-0"



K TYP. STEEL BEAM TO BEAM CONNECTION
SCALE : 1" = 1'-0"

DAG ARCHITECTS

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CODY L. HADDEN
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STATE OF FLORIDA
PROFESSIONAL ENGINEER

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	ASI #2 / RESPONSE TO RFI #2	8/8/25

STRUCTURAL CONSTRUCTION DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

S501

ATLAS ENGINEERING AND CONSULTING
455 HARRISON AVE, SUITE B
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EMAIL: INFO@ATLASENGINEERINGFL.COM
PHONE: (850) 257-5316 REGISTRY NO. 34399

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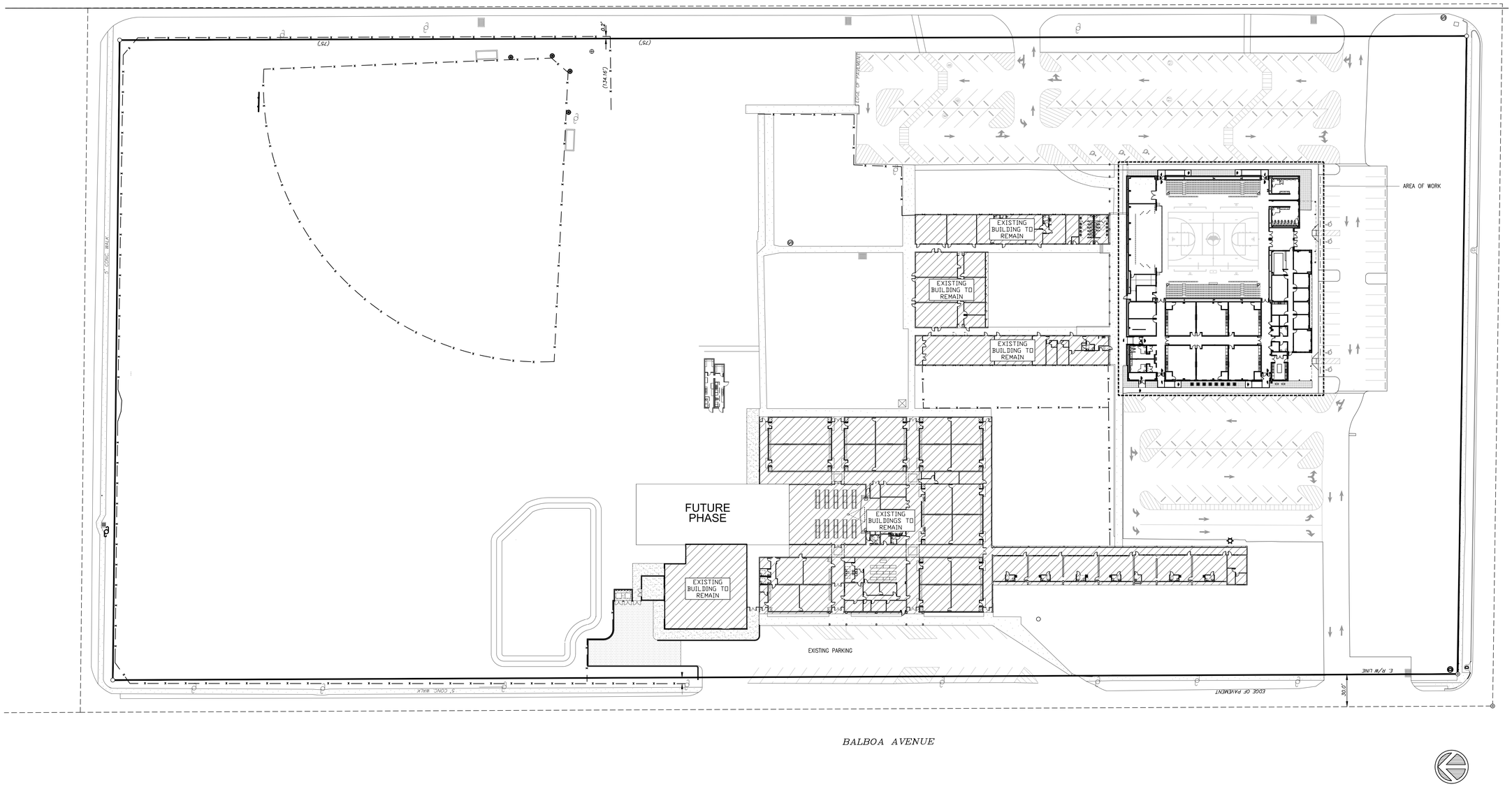

A1	SITE PLAN
SCALE: 1" = 40'-0"	

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Date: 2025.02.07 15:25:55-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

SITE PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A100

22019
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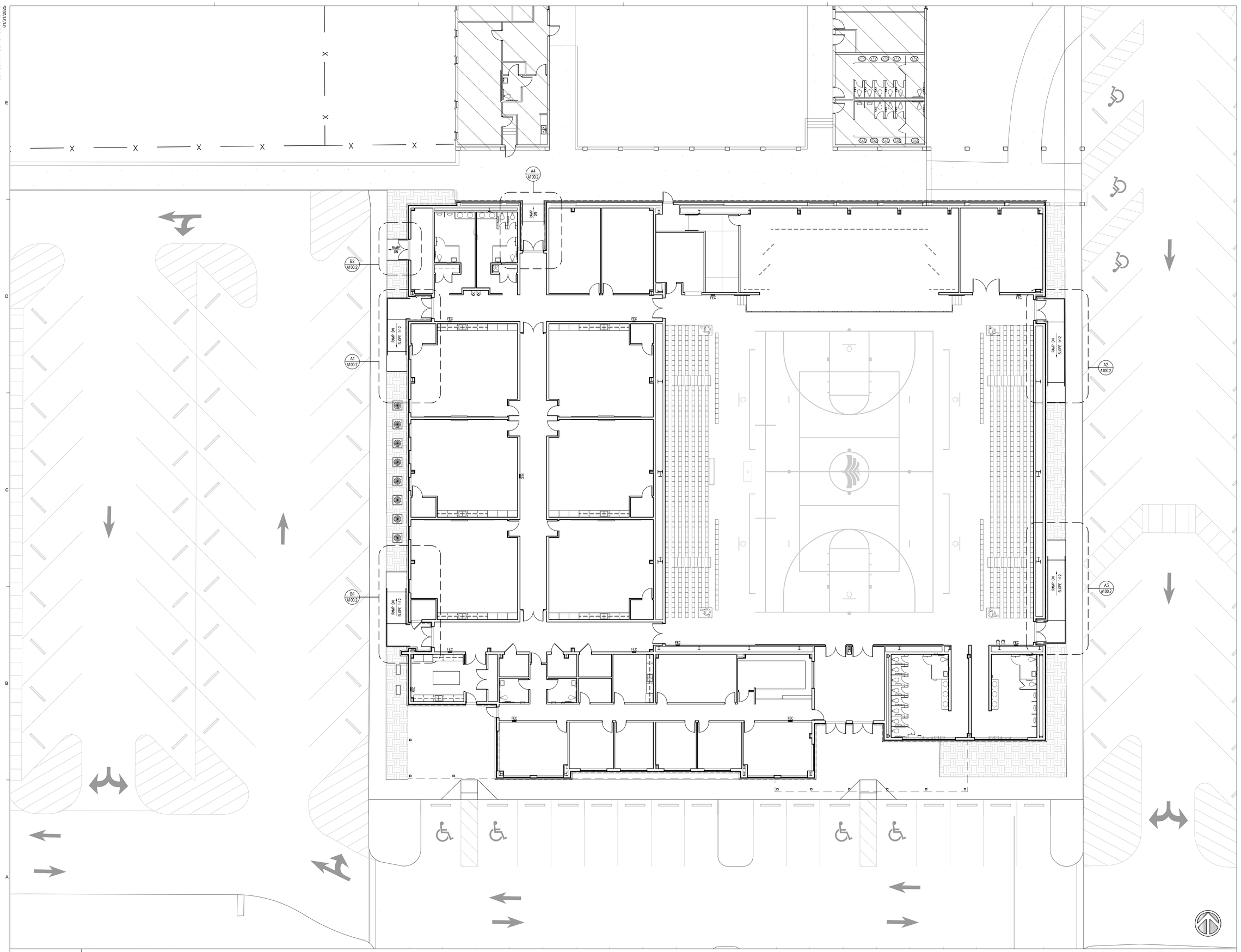
01/31/2025



A1 | ENLARGED SITE PLAN

SCALE: 1" = 10'-0"

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STATE OF FLORIDA
OWEN R. GIPSON
AR0007704
REGISTERED ARCHITECT

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Date: 2025.02.07 15:26:57-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

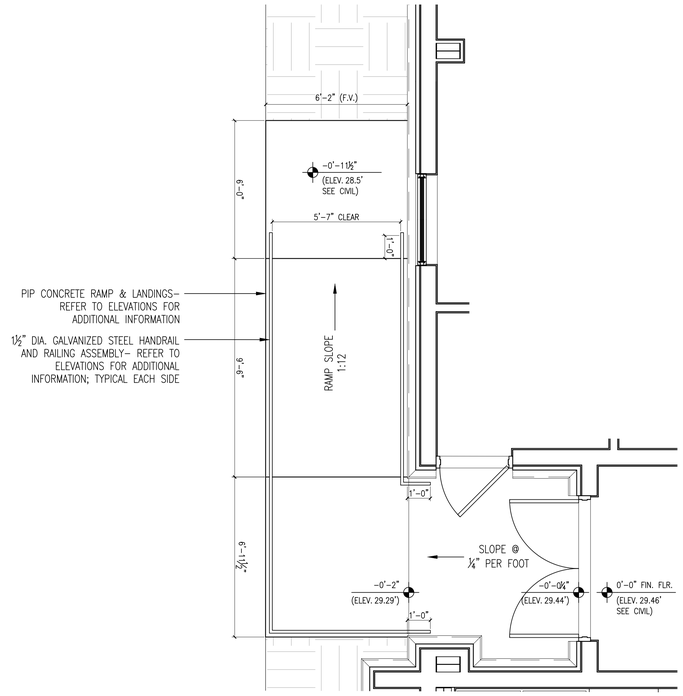
No.	Description	Date

ENLARGED SITE PLAN

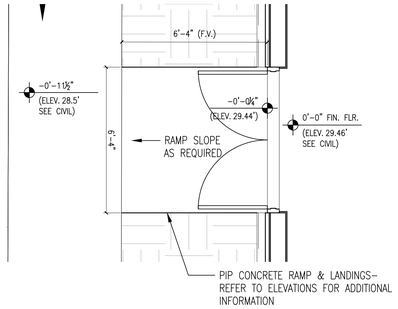
PROJECT NUMBER	22019
DATED	01/31/2025

A100.1

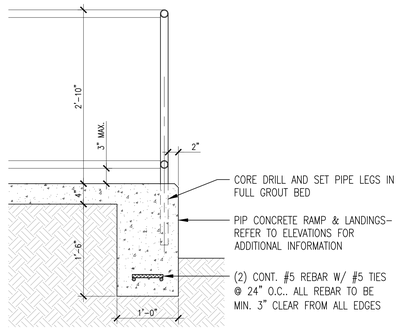
22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



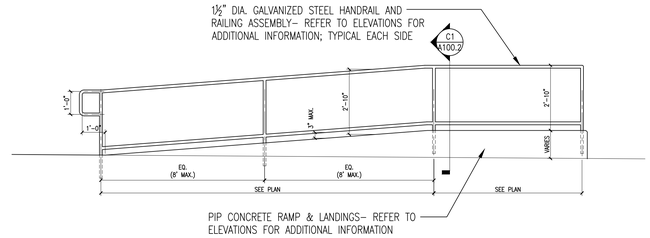
B1 | RAMP PLAN
SCALE: 3/8" = 1'-0" | SOUTHWEST ENTRANCE



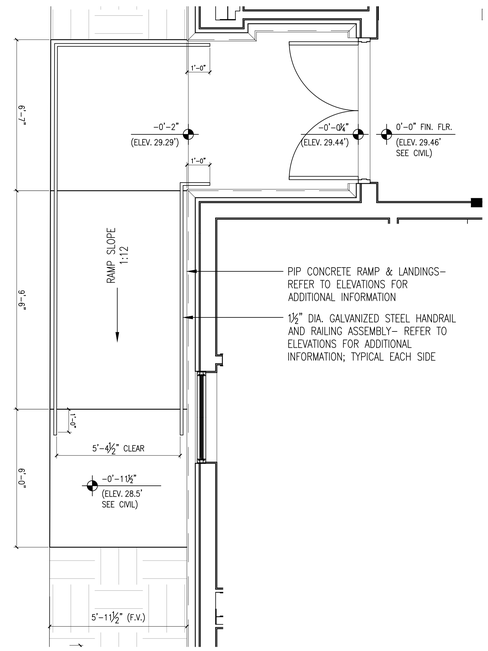
B2 | RAMP PLAN
SCALE: 3/8" = 1'-0" | STORAGE ROOM #129



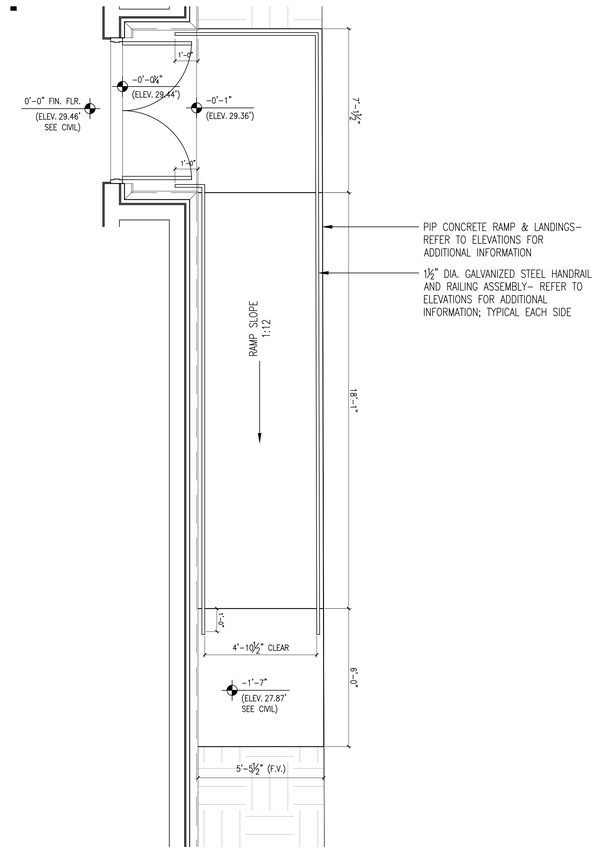
C1 | TYPICAL HANDRAIL SECTION
SCALE: 1" = 1'-0"



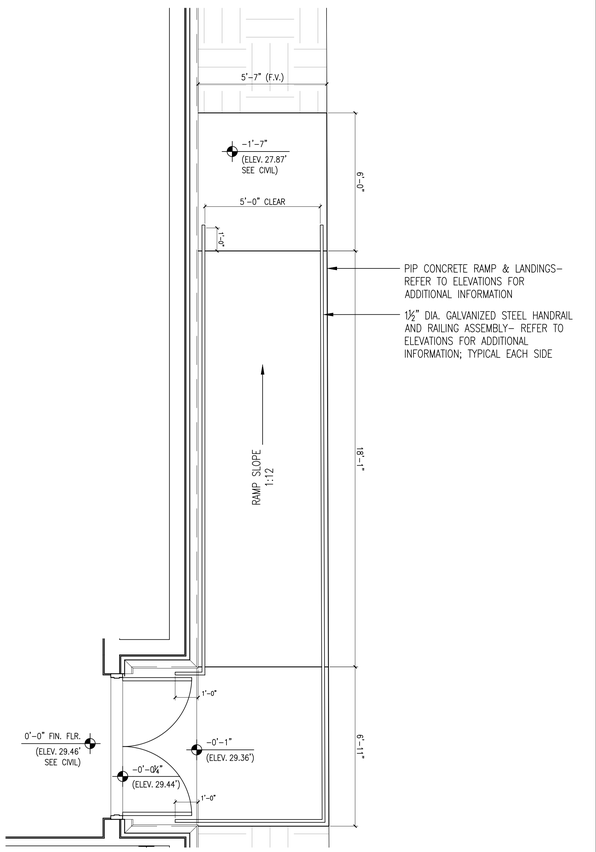
B3 | RAMP PLAN
SCALE: 3/8" = 1'-0" |



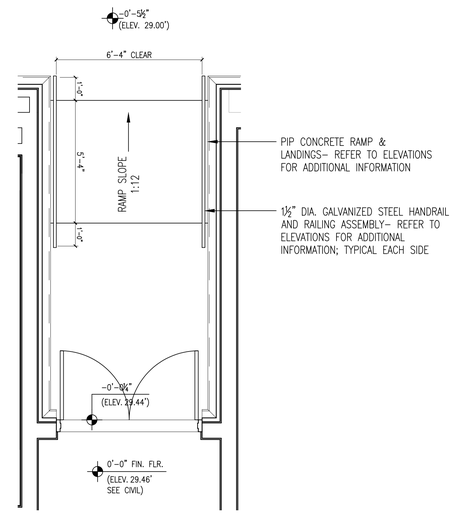
A1 | RAMP PLAN
SCALE: 3/8" = 1'-0" | NORTHWEST ENTRANCE



A2 | RAMP PLAN
SCALE: 3/8" = 1'-0" | NORTHEAST ENTRANCE



A3 | RAMP PLAN
SCALE: 3/8" = 1'-0" | SOUTHEAST ENTRANCE



A4 | RAMP PLAN
SCALE: 3/8" = 1'-0" | NORTH ENTRANCE

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Date: 2025.02.07 15:27:19-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

SITE PLAN DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

A100.2

22019
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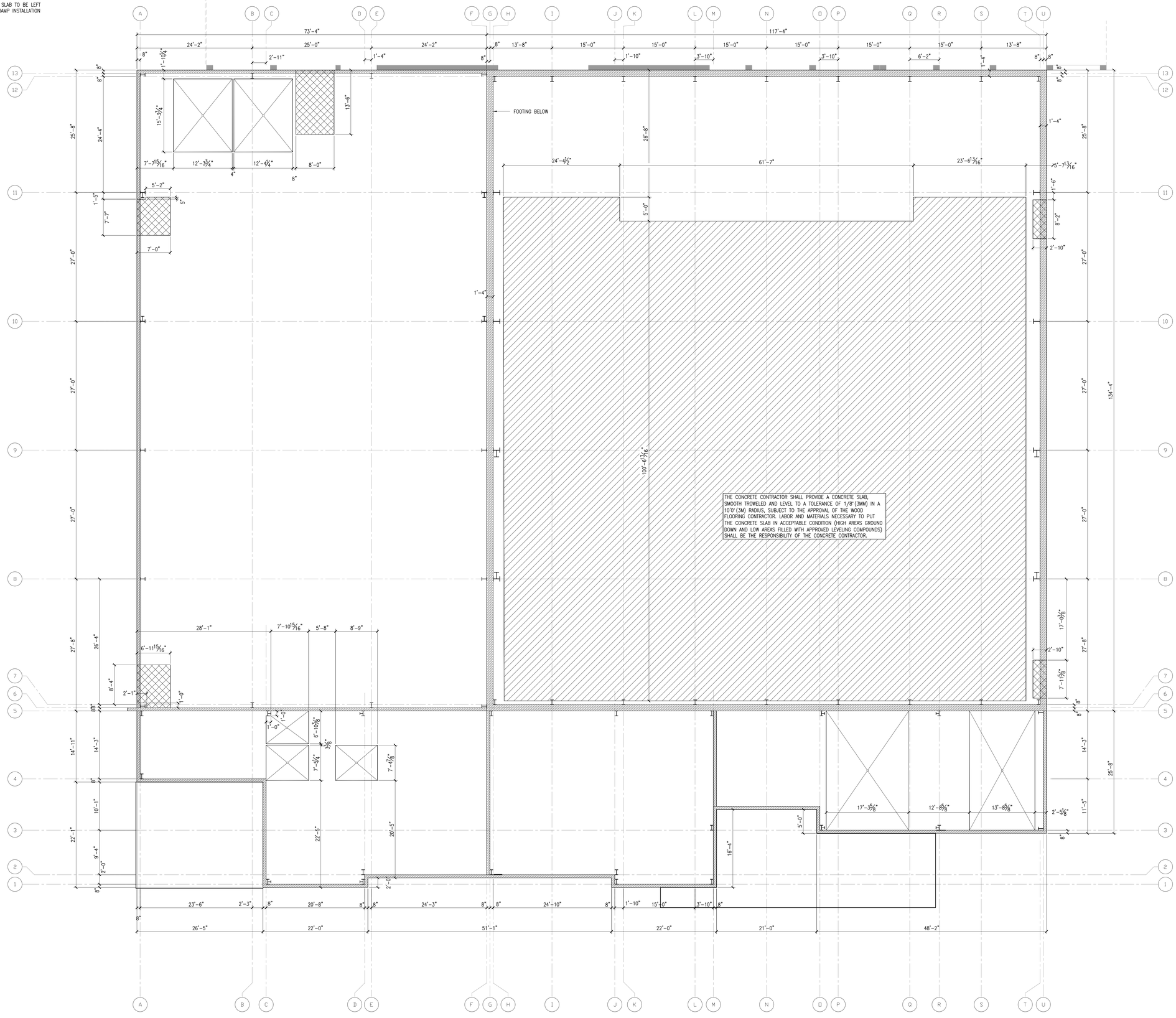
01/31/2025

REPRESENTS AREA OF SLAB TO BE LEFT VOID TO ALLOW FOR RAMP INSTALLATION



A1	EDGE OF SLAB PLAN
SCALE: 1/8" = 1'-0"	

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

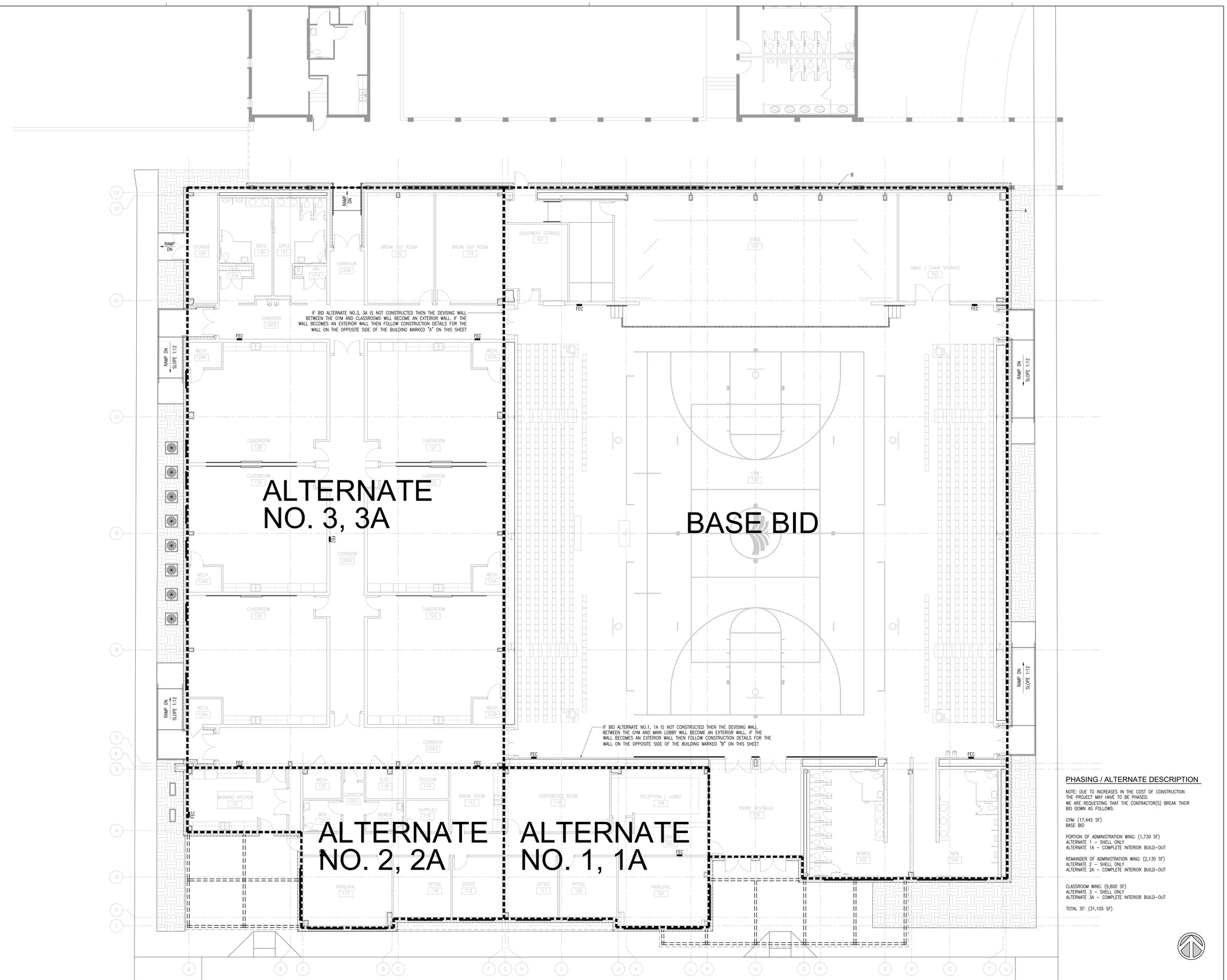
No.	Description	Date

EDGE OF SLAB PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

EOS

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



PHASING / ALTERNATE DESCRIPTION

NOTE: DUE TO INCREASES IN THE COST OF CONSTRUCTION THE PROJECT MAY HAVE TO BE PHASED.
WE ARE REQUESTING THAT THE CONTRACTOR(S) BREAK THEIR BID DOWN AS FOLLOWS:

GYM: (17,445 SF)
BASE BID

PORTION OF ADMINISTRATION WING: (1,730 SF)
ALTERNATE 1 – SHELL ONLY
ALTERNATE 1A – COMPLETE INTERIOR BUILD-OUT

REMAINDER OF ADMINISTRATION WING: (2,130 SF)
ALTERNATE 2 – SHELL ONLY
ALTERNATE 2A – COMPLETE INTERIOR BUILD-OUT

CLASSROOM WING: (9,800 SF)
ALTERNATE 3 – SHELL ONLY
ALTERNATE 3A – COMPLETE INTERIOR BUILD-OUT

TOTAL SF: (31,105 SF)

A1	PHASING PLAN
SCALE: 1/8" = 1'-0"	

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100% CONSTRUCTION DOCUMENTS

STATE OF FLORIDA · OWEN E. GIPSON · 90000 · REGISTERED ARCHITECT

Digitally signed by Owen Eric Gipson
Date: 2025.02.07 15:28:19-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

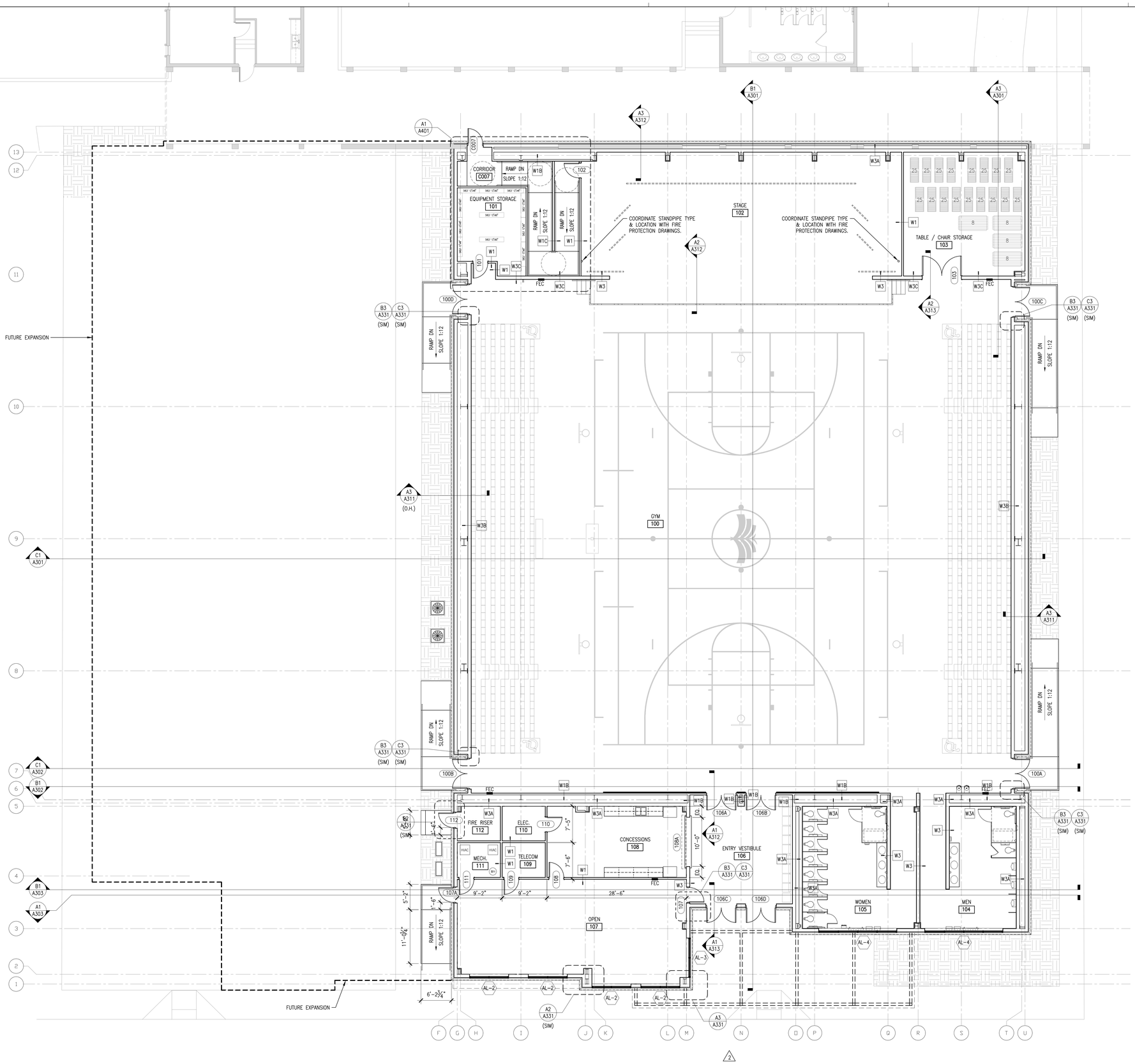
REVISIONS:

No.	Description	Date

PHASING PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

PHASING



GENERAL NOTES

1. ALL CONTRACTORS MUST FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PERFORMING NEW WORK.
2. THE CONTRACTOR SHALL PROVIDE REINFORCING WITH MATERIALS CONSISTENT WITH CONSTRUCTION MATERIALS BEHIND WALL MOUNTED AND CEILING MOUNTED EQUIPMENT. COORDINATE WITH A/V, DATA, CASEWORK, FURNITURE, ELECTRICAL, AND INTERIOR ELEVATION DRAWINGS.
3. CONTRACTOR SHALL COORDINATE WORK WITH MECHANICAL, ELECTRICAL, PLUMBING, AND ALL OTHER DISCIPLINES.
4. INTERIOR DOORS TO BE LOCATED MIN 4" FROM ADJACENT STUD PARTITIONS AND 8" FROM ADJACENT MASONRY PARTITIONS, UNLESS DIMENSIONED OR NOTED OTHERWISE.
5. REFER TO FINISH SCHEDULE(S) IN A500 SERIES SHEETS FOR FINISHES.
6. REFER TO A600 SERIES SHEETS FOR ADDITIONAL INFORMATION, INCLUDING TOILET ROOM DIMENSIONS.
7. REFER TO LS-SERIES LIFE SAFETY SHEETS FOR FIRE RATED AND SMOKE PARTITION LOCATIONS.
8. REFER TO STRUCTURAL FOR BRACING TYPE AND LOCATIONS.
9. REFER TO PLUMBING FOR FIXTURE SCHEDULES.
10. CONTRACTOR SHALL PROVIDE ISOLATION BETWEEN DISSIMILAR METALS.
11. PROVIDE CONCRETE SPLASH BLOCKS / METAL SPLASH PANS AT ALL DOWNSPOUTS THAT DRAIN TO ROOFS OR GRADE, AND AT ALL CANOPY COLUMNS THAT DRAIN TO GRADE.

PEMB BID WARNING TO CONTRACTOR:

WITH THE SUBMISSION OF THEIR BID, THE GENERAL CONTRACTOR CERTIFIES AND HAS CONFIRMED THAT THE PRE-ENGINEERED METAL BUILDING COMPANY WHOSE PRICE WAS USED TO GENERATE THIS BID HAS THOROUGHLY REVIEWED THE REQUIREMENTS OF THE CURRENT ARCHITECTURAL AND STRUCTURAL PLANS. THE BID PRICING REFLECTS THEIR ABILITY TO PROVIDE A PRE-ENGINEERED METAL BUILDING PACKAGE THAT COMPLIES WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS TO THE ARCHITECT'S SATISFACTION. THE BIDDING CONTRACTOR FURTHER UNDERSTANDS AND ACKNOWLEDGES THAT THEY HAVE INCLUDED WITHIN THEIR BID PRICE ALL COSTS FOR ALL INITIAL OR SUPPLEMENTAL DESIGN ENGINEERING FROM THE PEMB PROVIDER TO ENSURE THAT THE APPROVED DESIGN TO BE RELEASED FOR FABRICATION COMPLIES WITH THE INTENT OF THE CONTRACT DRAWINGS. THIS INCLUDES COLUMN LOCATIONS AND SPACING, BEAM CLEAR HEIGHTS AND SPANS, AS WELL AS WINDOWS, DOORS, AND STOREFRONT OPENING REQUIREMENTS. THE COST OF ANY STEEL MATERIAL REQUIRED TO COMPLY WITH THESE ARCHITECTURAL REQUIREMENTS IS INCLUDED IN THIS BID. ADDITIONALLY, THE PEMB PROVIDER HAS INCLUDED SUITABLE DESIGN AND SUPPLEMENTAL STEEL BRACING WITHIN THE GYM ROOF FRAMING TO SUPPORT THE SIX RETRACTING BASKETBALL BACKSTOP ASSEMBLIES.

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	SCOPE REDUCTION	2/6/2026

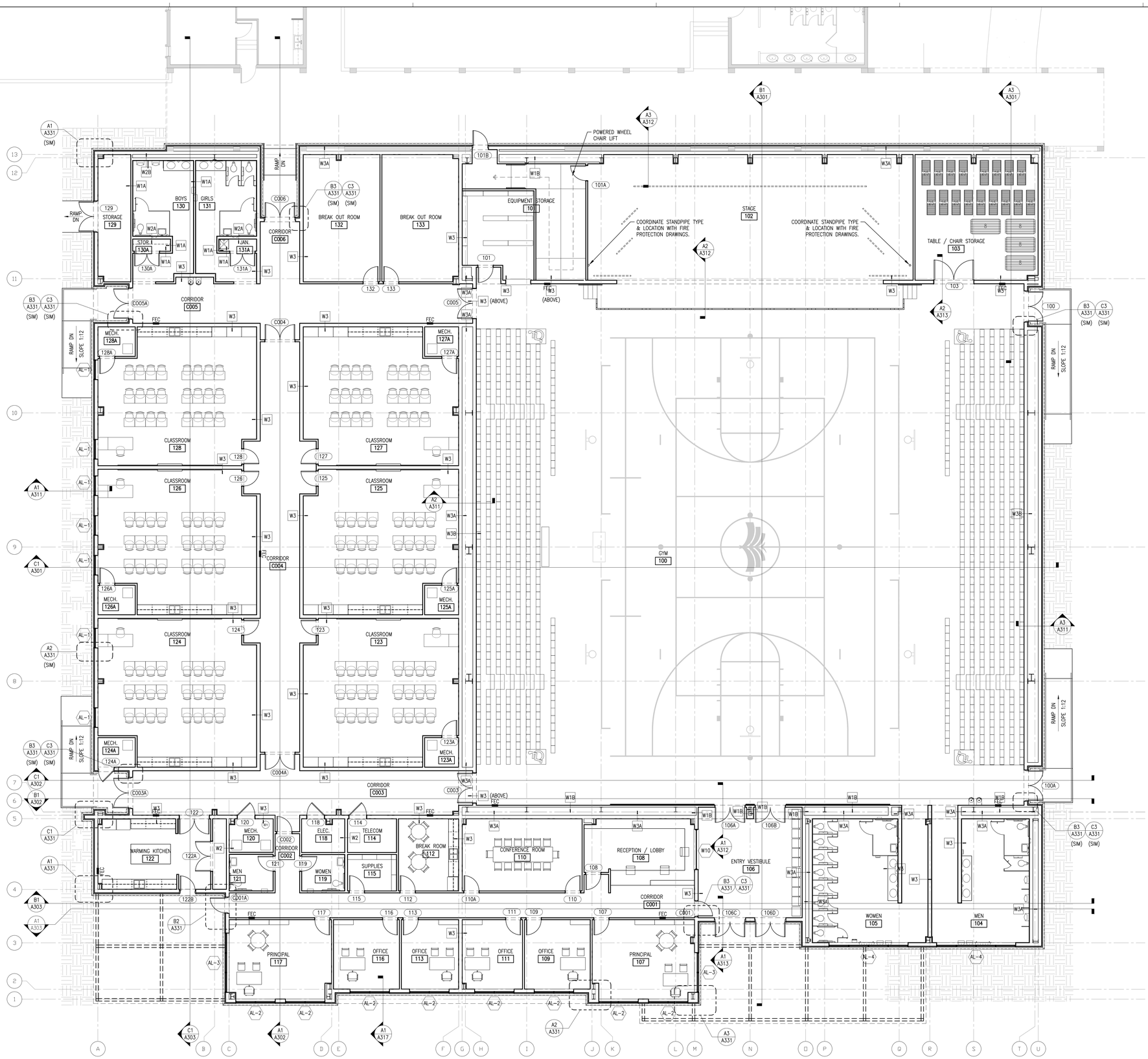
ALTERNATE
FLOOR PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A101.A

A1 FLOOR PLAN
SCALE: 1/8" = 1'-0"

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



GENERAL NOTES

1. ALL CONTRACTORS MUST FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PERFORMING NEW WORK.
2. THE CONTRACTOR SHALL PROVIDE REINFORCING WITH MATERIALS CONSISTENT WITH CONSTRUCTION MATERIALS BEHIND WALL MOUNTED AND CEILING MOUNTED EQUIPMENT. COORDINATE WITH A/V, DATA, CASEWORK, FURNITURE, ELECTRICAL, AND INTERIOR ELEVATION DRAWINGS.
3. CONTRACTOR SHALL COORDINATE WORK WITH MECHANICAL, ELECTRICAL, PLUMBING, AND ALL OTHER DISCIPLINES.
4. INTERIOR DOORS TO BE LOCATED MIN 4" FROM ADJACENT STUD PARTITIONS AND 8" FROM ADJACENT MASONRY PARTITIONS, UNLESS DIMENSIONED OR NOTED OTHERWISE.
5. REFER TO FINISH SCHEDULE(S) IN A500 SERIES SHEETS FOR FINISHES.
6. REFER TO A600 SERIES SHEETS FOR ADDITIONAL INFORMATION, INCLUDING TOILET ROOM DIMENSIONS.
7. REFER TO LS-SERIES LIFE SAFETY SHEETS FOR FIRE RATED AND SMOKE PARTITION LOCATIONS.
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11. PROVIDE CONCRETE SPLASH BLOCKS / METAL SPLASH PANS AT ALL DOWNSPOUTS THAT DRAIN TO ROOFS OR GRADE, AND AT ALL CANOPY COLUMNS THAT DRAIN TO GRADE.

PEMB BID WARNING TO CONTRACTOR:

WITH THE SUBMISSION OF THEIR BID, THE GENERAL CONTRACTOR CERTIFIES AND HAS CONFIRMED THAT THE PRE-ENGINEERED METAL BUILDING COMPANY WHOSE PRICE WAS USED TO GENERATE THIS BID HAS THOROUGHLY REVIEWED THE REQUIREMENTS OF THE CURRENT ARCHITECTURAL AND STRUCTURAL PLANS. THE BID PRICING REFLECTS THEIR ABILITY TO PROVIDE A PRE-ENGINEERED METAL BUILDING PACKAGE THAT COMPLIES WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS TO THE ARCHITECT'S SATISFACTION. THE BIDDING CONTRACTOR FURTHER UNDERSTANDS AND ACKNOWLEDGES THAT THEY HAVE INCLUDED WITHIN THEIR BID PRICE ALL COSTS FOR ALL INITIAL OR SUPPLEMENTAL DESIGN ENGINEERING FROM THE PEMB PROVIDER TO ENSURE THAT THE APPROVED DESIGN TO BE RELEASED FOR FABRICATION COMPLIES WITH THE INTENT OF THE CONTRACT DRAWINGS. THIS INCLUDES COLUMN LOCATIONS AND SPACING, BEAM CLEAR HEIGHTS AND SPANS, AS WELL AS WINDOWS, DOORS, AND STOREFRONT OPENING REQUIREMENTS. THE COST OF ANY STEEL MATERIAL REQUIRED TO COMPLY WITH THESE ARCHITECTURAL REQUIREMENTS IS INCLUDED IN THIS BID. ADDITIONALLY, THE PEMB PROVIDER HAS INCLUDED SUITABLE DESIGN AND SUPPLEMENTAL STEEL BRACING WITHIN THE GYM ROOF FRAMING TO SUPPORT THE SIX RETRACTING BASKETBALL BACKSTOP ASSEMBLIES.

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

FLOOR PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A101

A1 FLOOR PLAN
SCALE: 1/8" = 1'-0"

22019
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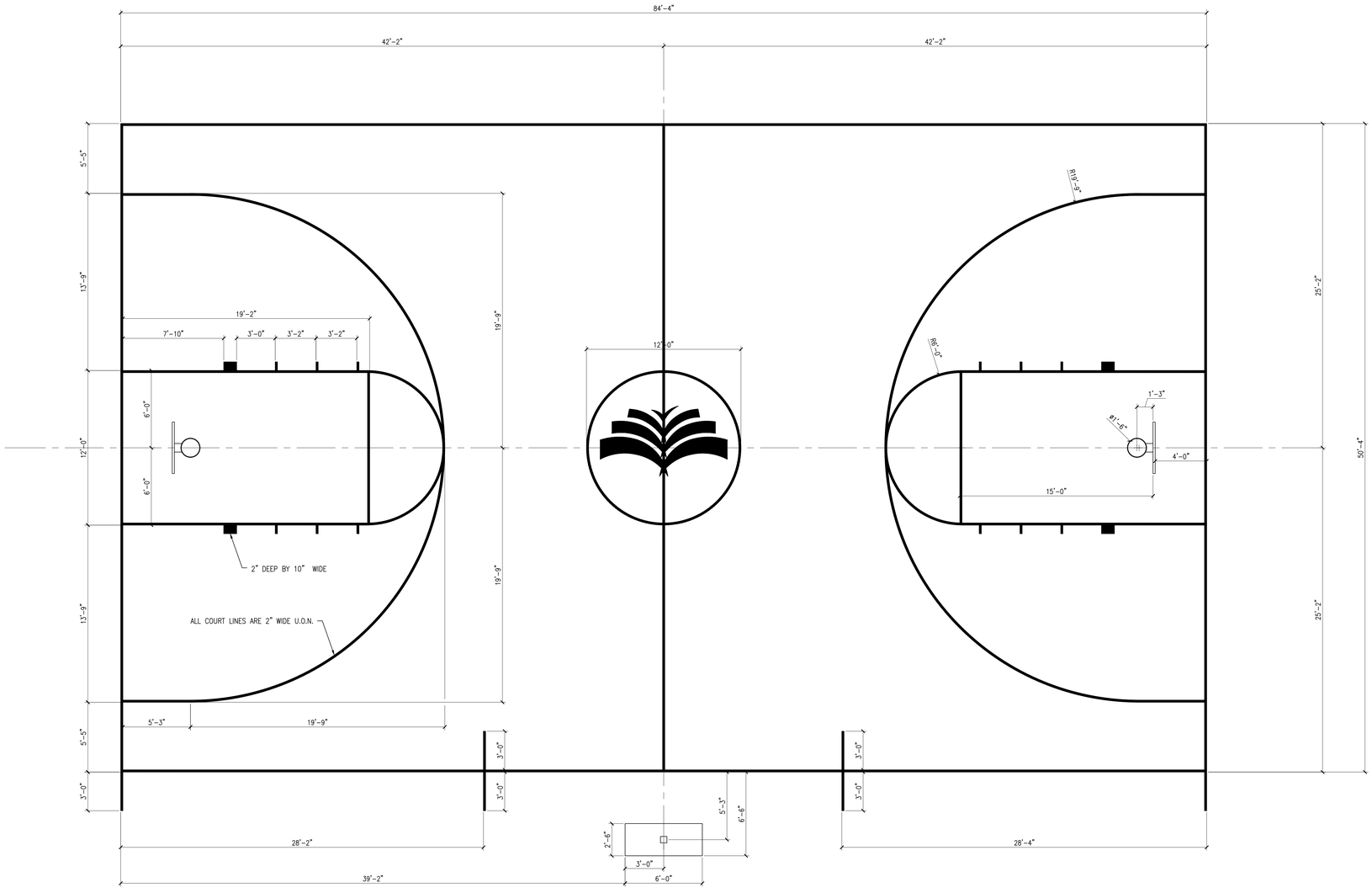
01/31/2025



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STATE OF FLORIDA
OWEN ERIC GIPSON
AR0017744
REGISTERED ARCHITECT

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PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

STRIPING PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A101.01

A1	STRIPING PLAN - PRIMARY COURT
SCALE: 1/4" = 1'-0"	MAIN COURT

22019
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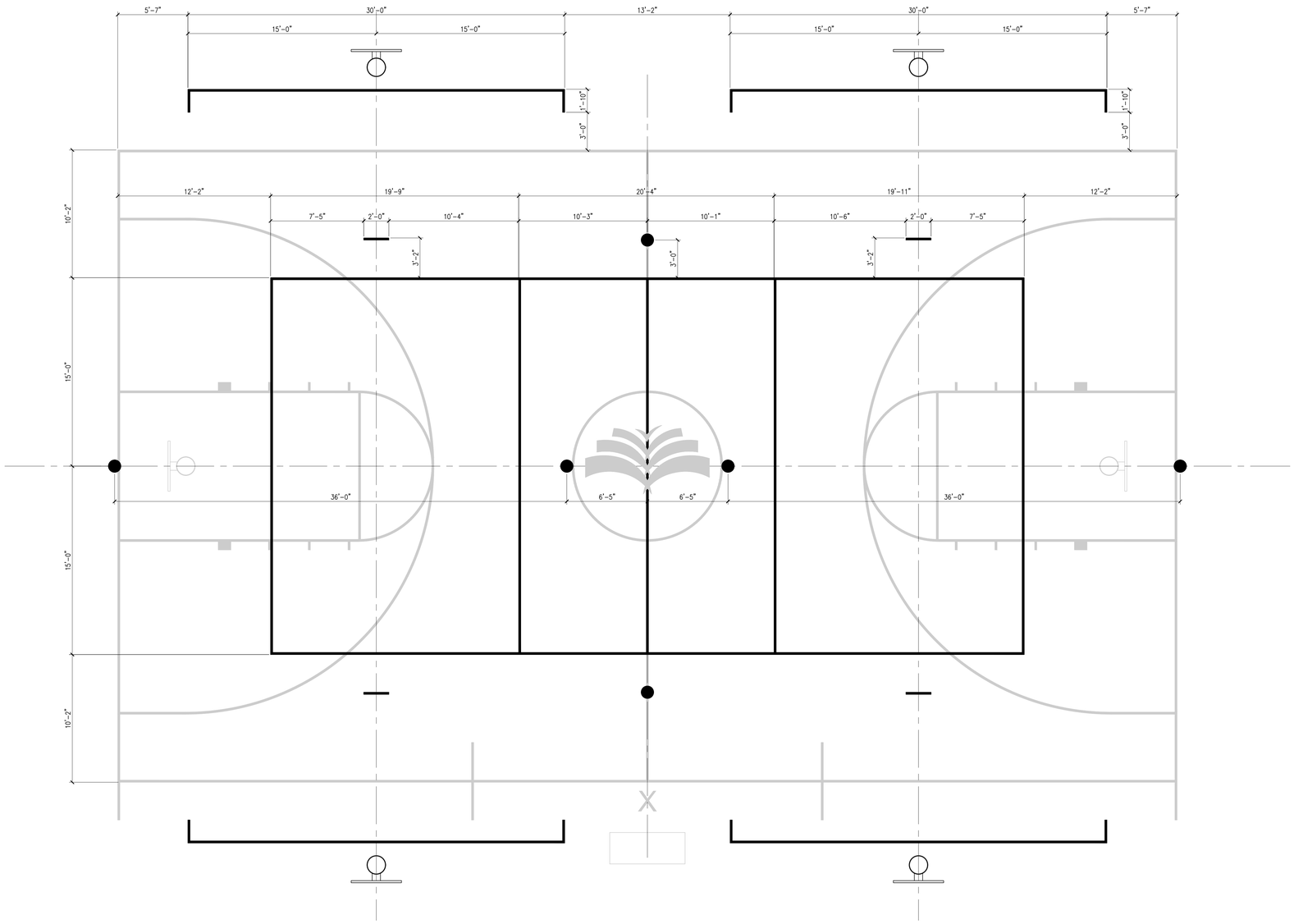
01/31/2025



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REVISIONS:

No.	Description	Date

STRIPING PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

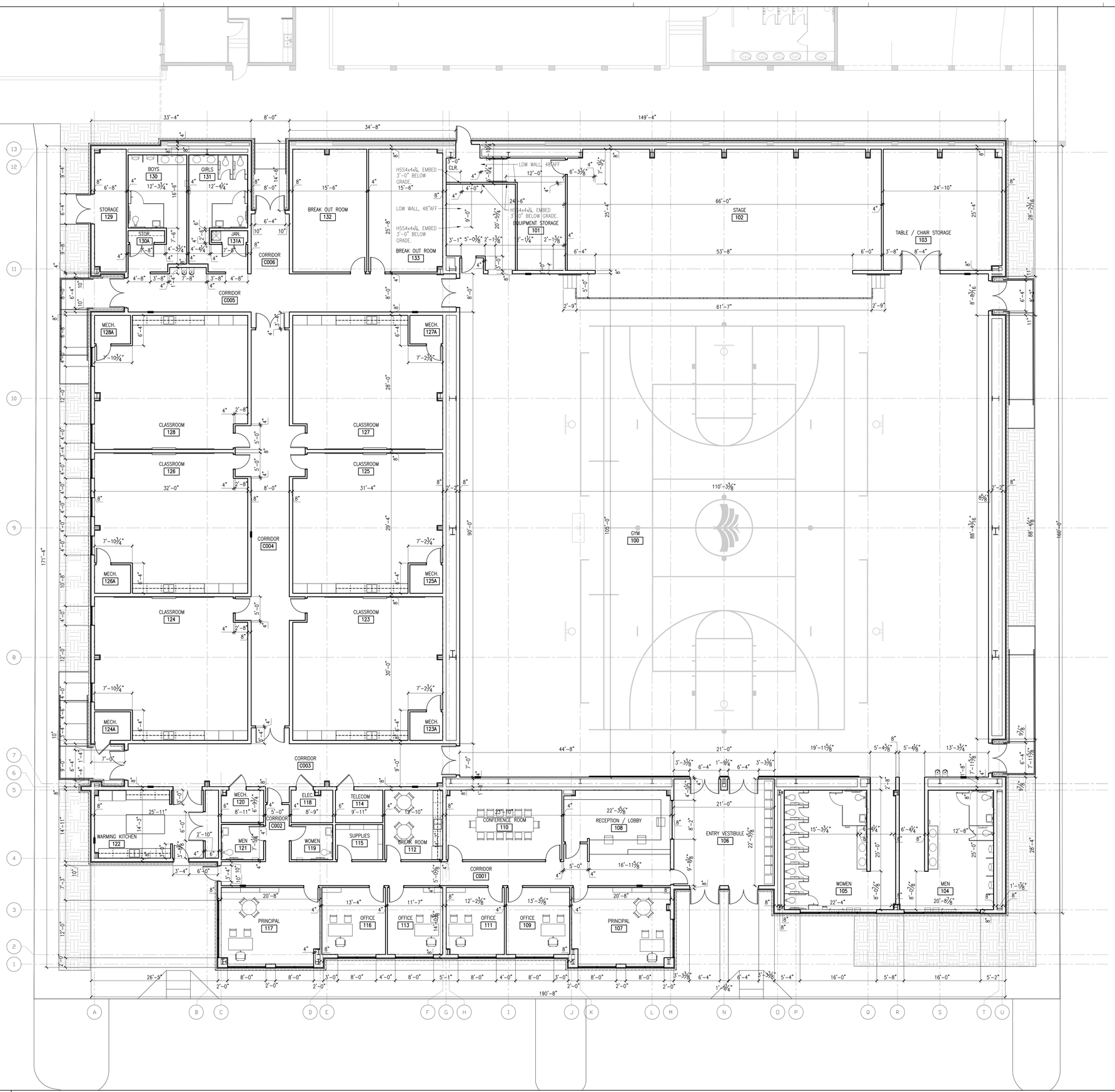
A101.02

A1
STRIPING PLAN - SECONDARY COURT
SCALE: 1/4" = 1'-0"
VOLLEYBALL AND PRACTICE COURTS

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025

GENERAL NOTES

1. ALL CONTRACTORS MUST FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PERFORMING NEW WORK.
2. THE CONTRACTOR SHALL PROVIDE REINFORCING WITH MATERIALS CONSISTENT WITH CONSTRUCTION MATERIALS BEHIND WALL MOUNTED AND CEILING MOUNTED EQUIPMENT. COORDINATE WITH A/V, DATA, CASEWORK, FURNITURE, ELECTRICAL, AND INTERIOR ELEVATION DRAWINGS.
3. CONTRACTOR SHALL COORDINATE WORK WITH MECHANICAL, ELECTRICAL, PLUMBING, AND ALL OTHER DISCIPLINES.
4. INTERIOR DOORS TO BE LOCATED MIN 4" FROM ADJACENT STUD PARTITIONS AND 8" FROM ADJACENT MASONRY PARTITIONS, UNLESS DIMENSIONED OR NOTED OTHERWISE.
5. REFER TO FINISH SCHEDULE(S) IN A500 SERIES SHEETS FOR FINISHES.
6. REFER TO A800 SERIES SHEETS FOR ADDITIONAL INFORMATION, INCLUDING TOILET ROOM DIMENSIONS.
7. REFER TO LS-SERIES LIFE SAFETY SHEETS FOR FIRE RATED AND SMOKE PARTITION LOCATIONS.
8. REFER TO STRUCTURAL FOR BRACING TYPE AND LOCATIONS.
9. REFER TO PLUMBING FOR FIXTURE SCHEDULES.
10. CONTRACTOR SHALL PROVIDE ISOLATION BETWEEN DISSIMILAR METALS.
11. PROVIDE CONCRETE SPLASH BLOCKS / METAL SPLASH PANS AT ALL DOWNSPOUTS THAT DRAIN TO ROOFS OR GRADE, AND AT ALL CANOPY COLUMNS THAT DRAIN TO GRADE.



A1 DIMENSION PLAN
SCALE: 1/8" = 1'-0"

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REVISIONS:

No.	Description	Date

FIRST FLOOR DIMENSION PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A101.1

22019
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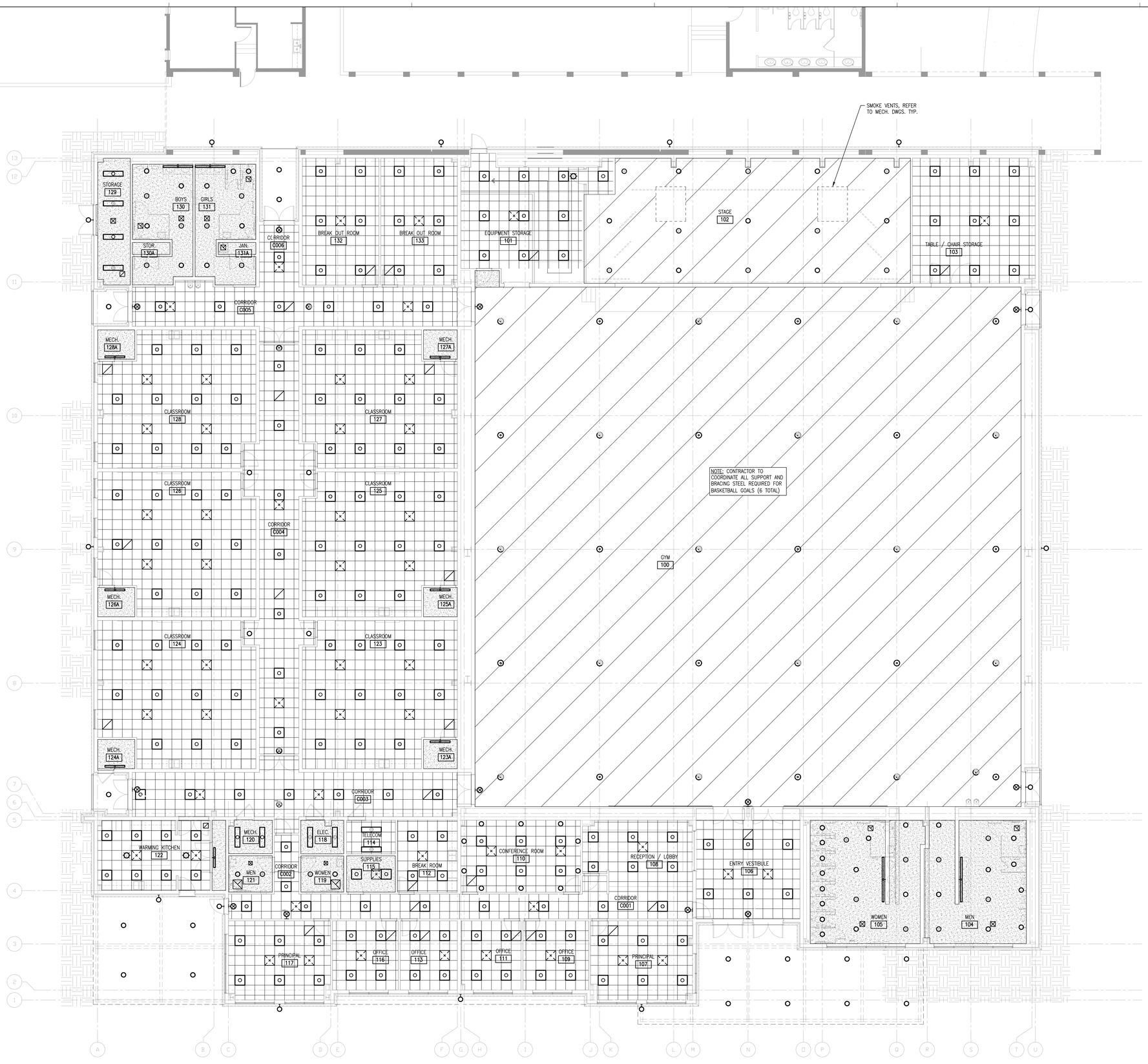
01/31/2025



GENERAL NOTES

1. CONTRACTORS SHALL COORDINATE ALL WORK, SHOWN OR UN-SHOWN, WITH ALL OTHER DISCIPLINES.
2. CONTRACTOR SHALL PROVIDE REINFORCING [TYPE TBD] BEHIND ALL CEILING MOUNTED EQUIPMENT.
3. REFER TO FINISH SCHEDULE(S) IN A-600 SERIES SHEETS FOR FINISHES AND ADDITIONAL INFORMATION.
4. ALL ACCESS PANEL SIZES AND LOCATIONS TO BE COORDINATED WITH MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE SPRINKLER WORK.
5. CENTER ACT GRID AND LIGHTS WITHIN EACH ROOM, UNO.
6. REFER TO ELECTRICAL FOR LIGHTING FIXTURE SCHEDULE(S).
7. ALL FIRE SPRINKLER HEADS AND ELECTRICAL FIXTURES SHALL BE CENTERED WITHIN CEILING TILES, UNO.
8. CEILING HEIGHTS NOTED REFERENCE ELEVATION ABOVE FINISH FLOOR OF ASSOCIATED BUILDING LEVEL.

ACOUSTICAL TILE CEILING

5/8" GYP. BOARD CEILING

EXPOSED STRUCTURE W/ DRY FOG PAINT

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REVISIONS:

No.	Description	Date

REFLECTED CEILING PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A101.2

A1 REFLECTED CEILING PLAN

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

- GYM WOOD FLOOR SYSTEM, MANUF. TBD
- SEALED CONCRETE
- TANDUS CENTIVA (CPT) WALK-OFF MAT ASSERTIVE RIB 04838 CHROMIUM 26201
- TANDUS CENTIVA (LVT) URBAN STONE- GATEHOUSE
- TANDUS CENTIVA (LVT) URBAN STONE- CEMENT
- TANDUS CENTIVA (CPT) LINEWEAVE 04864 SUBMERGE 21307
- TANDUS CENTIVA (CPT) ANGULATE 04655 REVVED 22104
- TANDUS CENTIVA (CPT) ANGULATE 04655 CASTING SHADOW 22107
- TANDUS CENTIVA (CPT) ANGULATE 04655 LUMINARIE 22105
- TANDUS CENTIVA (CPT) CACHE TWEED A0002 SATURATED GREY 42703
- TANDUS CENTIVA (CPT) CACHE TWEED A0002 OCEAN ISLE 42718
- TANDUS CENTIVA (LVT) COLOR BEAM CUSTOM BLUE STRIKE OFF 248-1419
- TANDUS CENTIVA (LVT) COLOR BEAM- FLANNEL
- DUR-A-FLEX MACRO-CHIP COLOR PEWTER
- DUR-A-FLEX HYBRI-FLEX EQ Q28-21 #4 GROUT COAT ARMOR TOP GLOSS WITH GRIT

A1 | FINISH PLAN
SCALE: 1/8" = 1'-0"

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REVISIONS:

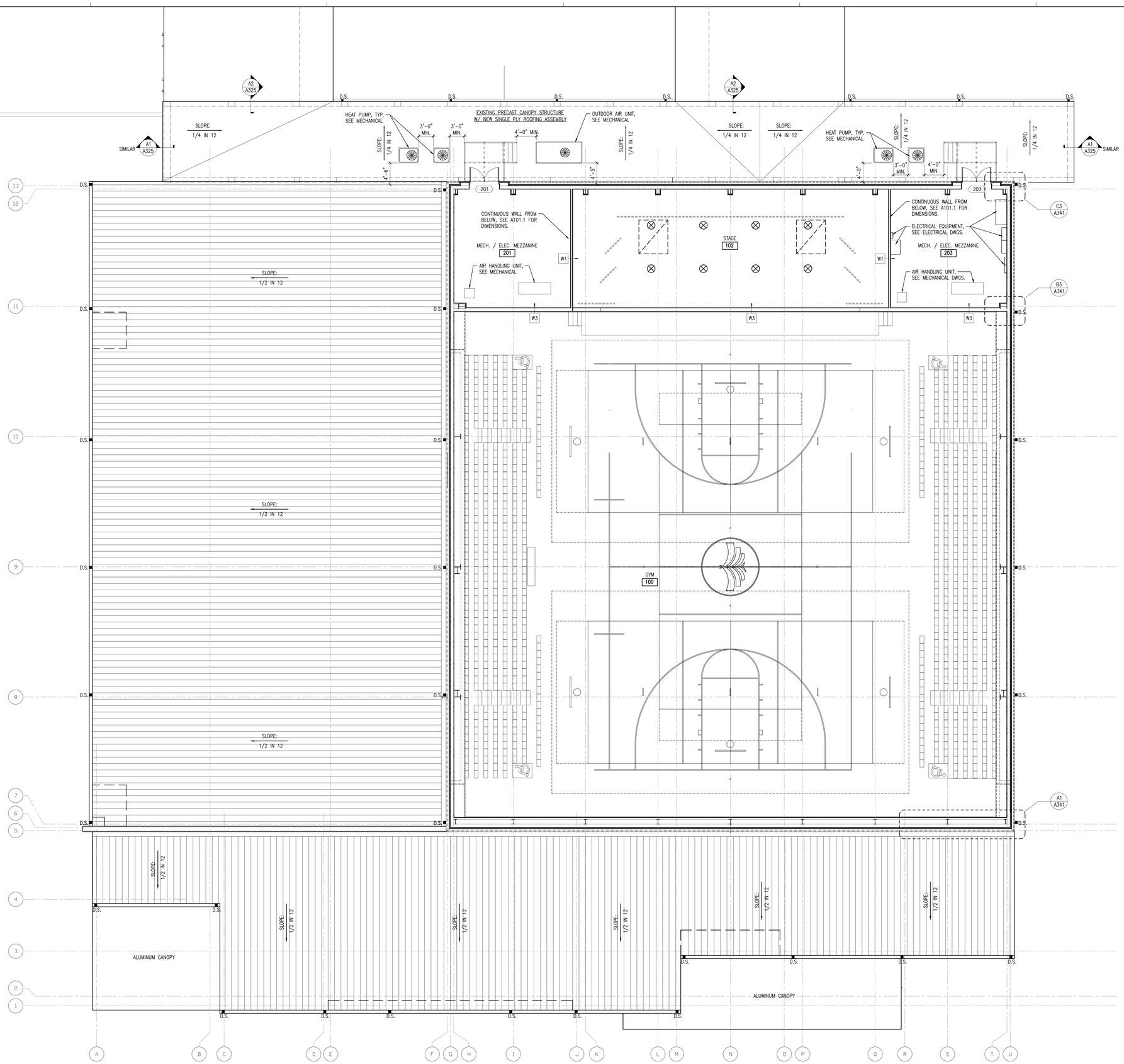
No.	Description	Date

FINISH PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A101.3

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



A1 MEZZANINE / ROOF PLAN

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

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REVISIONS:

No.	Description	Date

MEZZANINE / ROOF PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A102

22019
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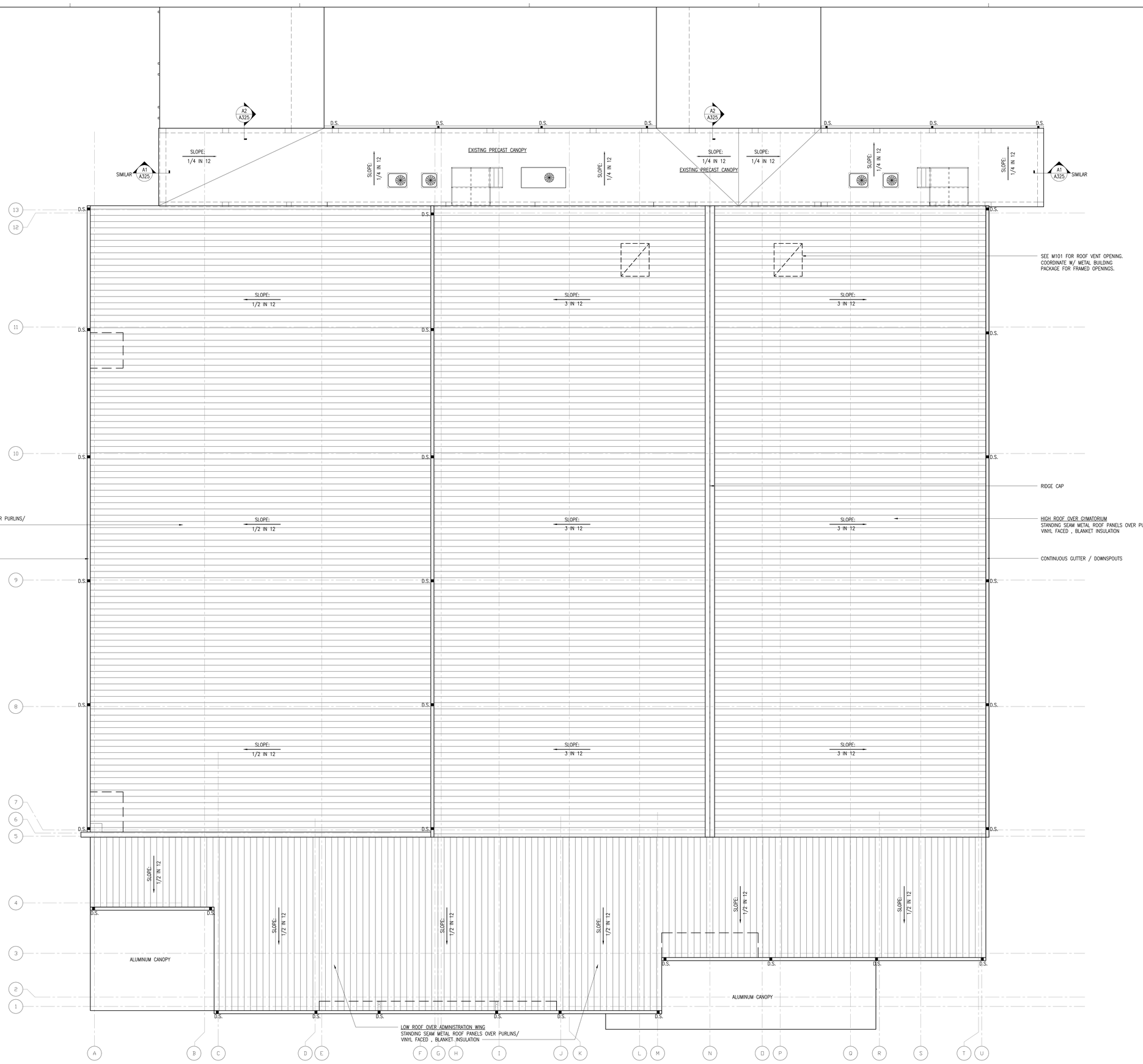
01/31/2025



A1 ROOF PLAN

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

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REVISIONS:

No.	Description	Date

ROOF PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

A103

22019
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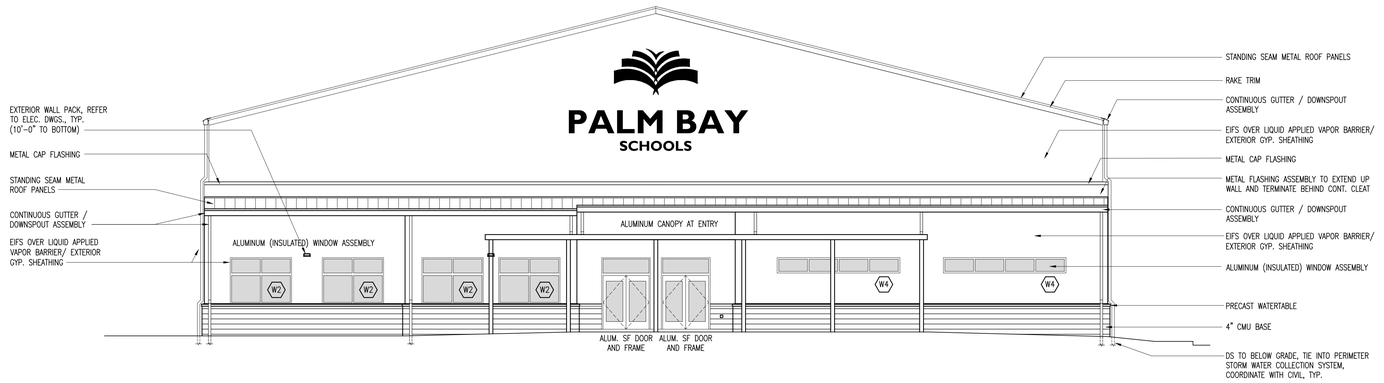
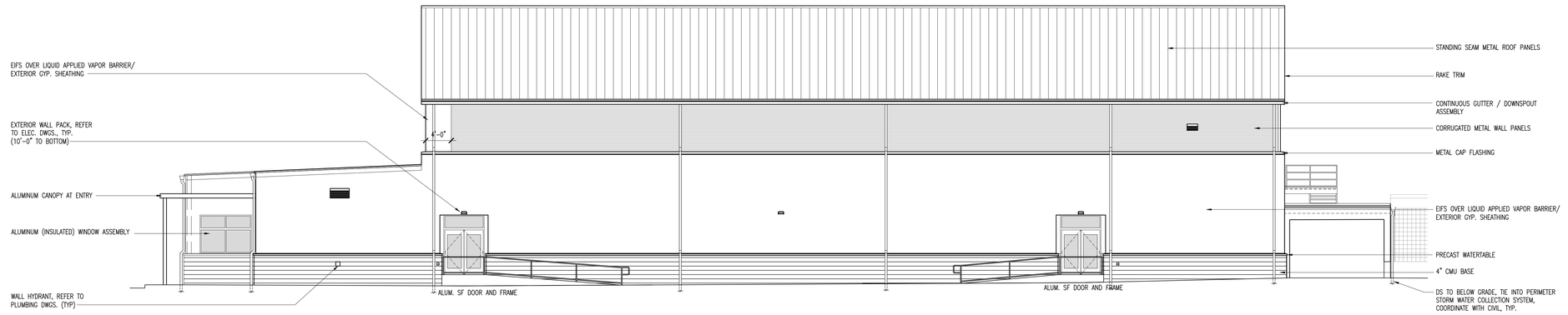
01/31/2025



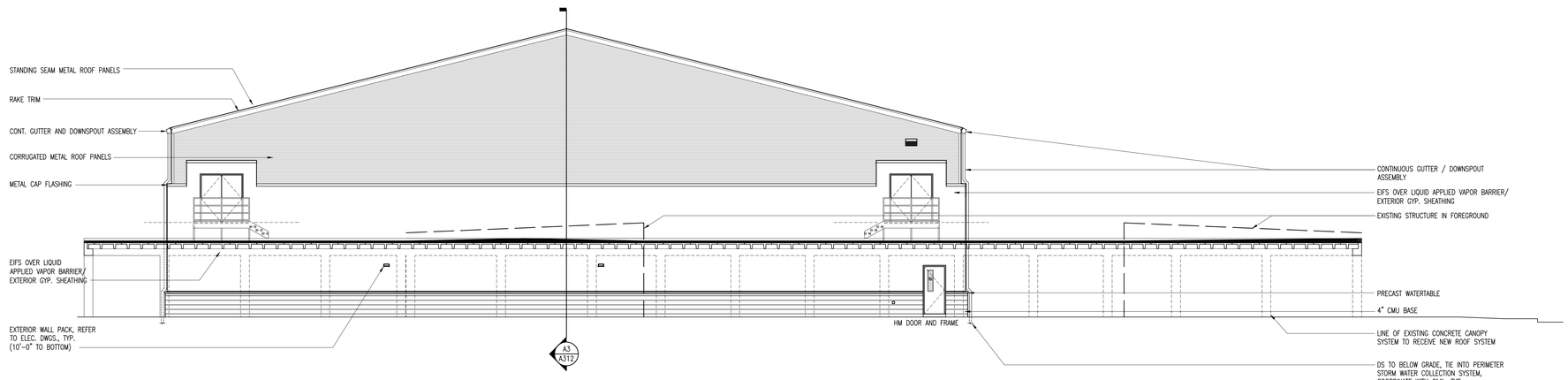
C1 SOUTH ELEVATION

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



B1 EAST ELEVATION

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



A1 NORTH ELEVATION

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

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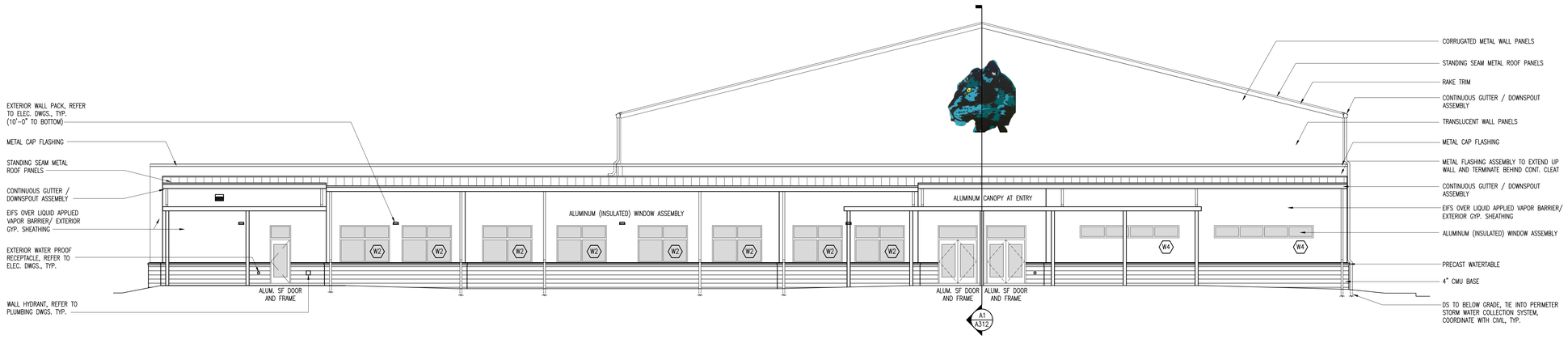
REVISIONS:

No.	Description	Date
1	SCOPE REDUCTION	2/6/2026

ALTERNATE
EXTERIOR ELEVATIONS

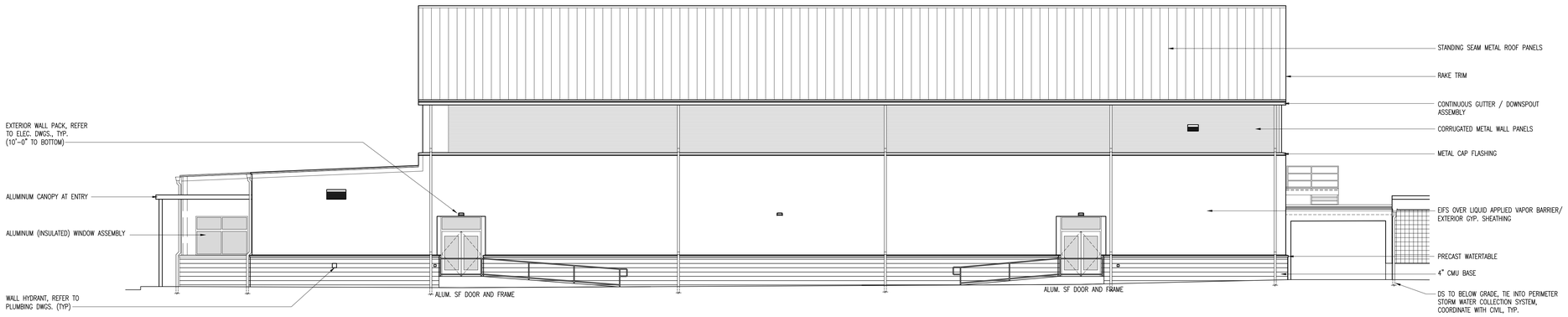
PROJECT NUMBER	**22019**
DATED	01/31/2025

A201.A



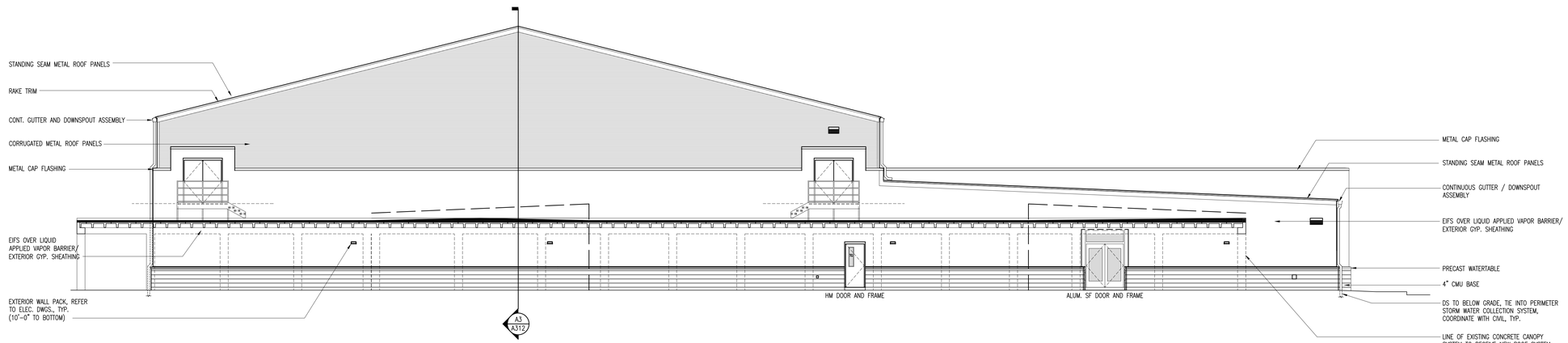
C1 SOUTH ELEVATION

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



B1 EAST ELEVATION

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



A1 NORTH ELEVATION

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

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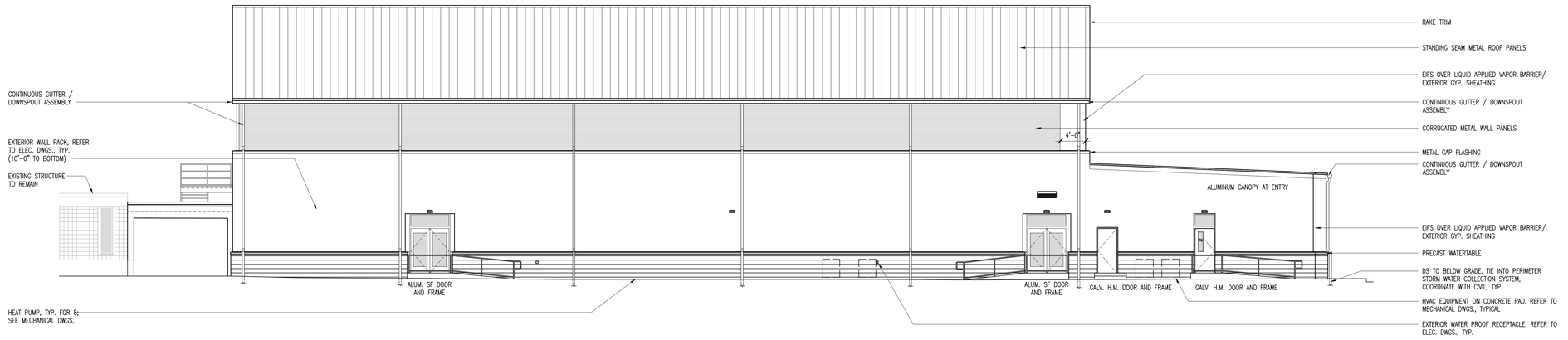
No.	Description	Date

EXTERIOR ELEVATIONS

PROJECT NUMBER	**22019**
DATED	01/31/2025

A201



C1 | WEST ELEVATION

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

B1

SCALE:

A1

SCALE:

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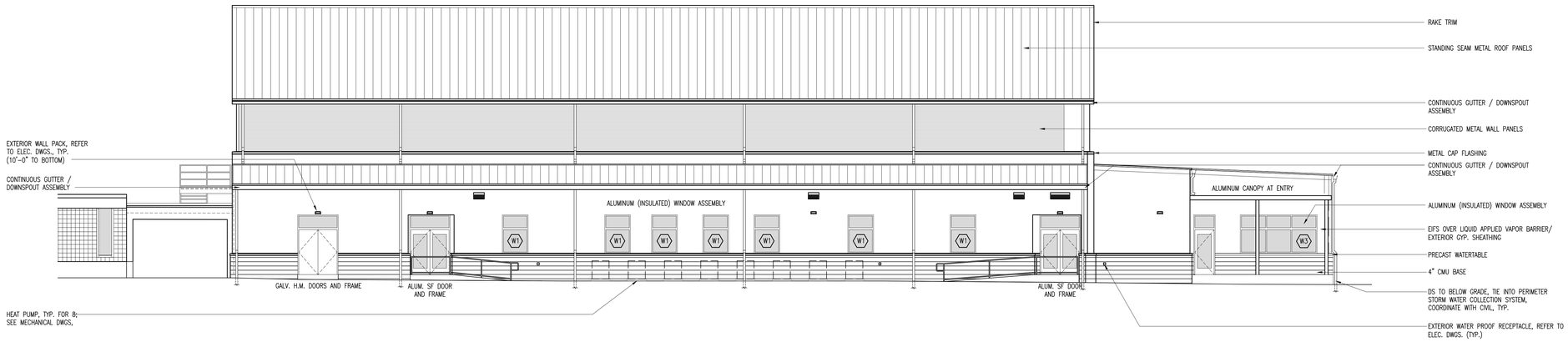
No.	Description	Date
1	SCOPE REDUCTION	2/6/2026

ALTERNATE
EXTERIOR ELEVATIONS

PROJECT NUMBER	**22019**
DATED	01/31/2025

A202.A



C1 — WEST ELEVATION

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

B1

SCALE:

A1

SCALE:

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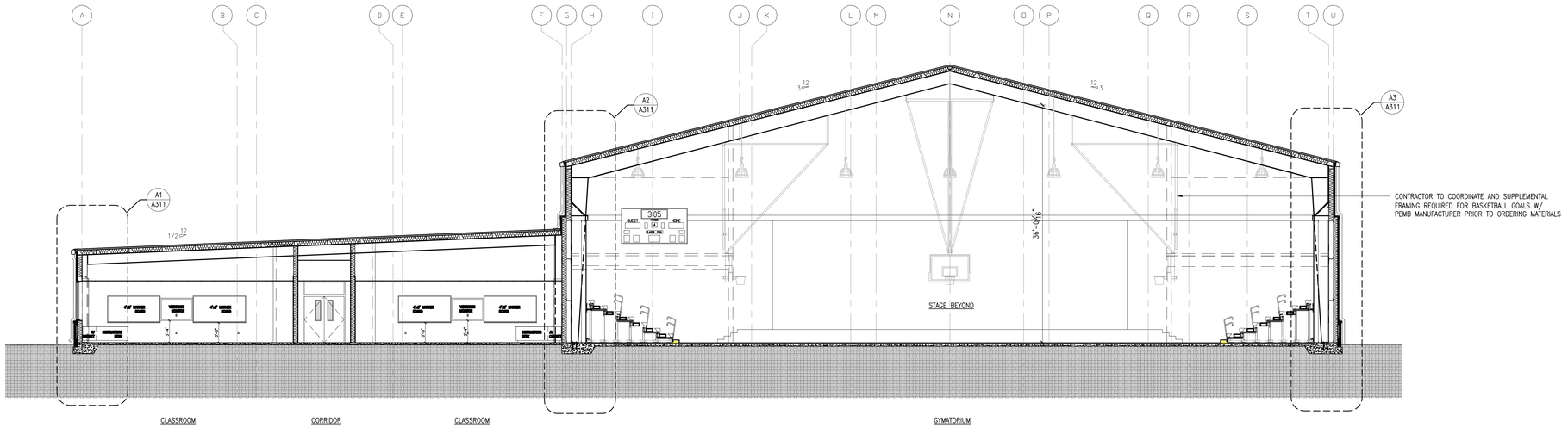
REVISIONS:

No.	Description	Date

EXTERIOR ELEVATIONS

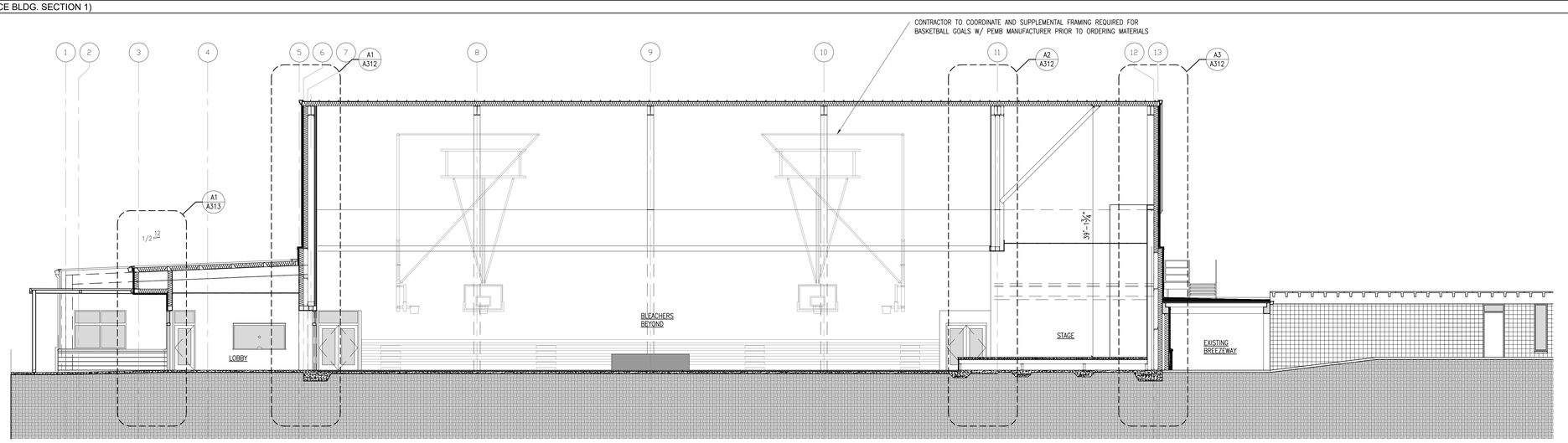
PROJECT NUMBER	22019
DATED	01/31/2025

A202



C1 BUILDING SECTION

SCALE: 1/8" = 1'-0" (REFERENCE BLDG. SECTION 1)



B1 BUILDING SECTION

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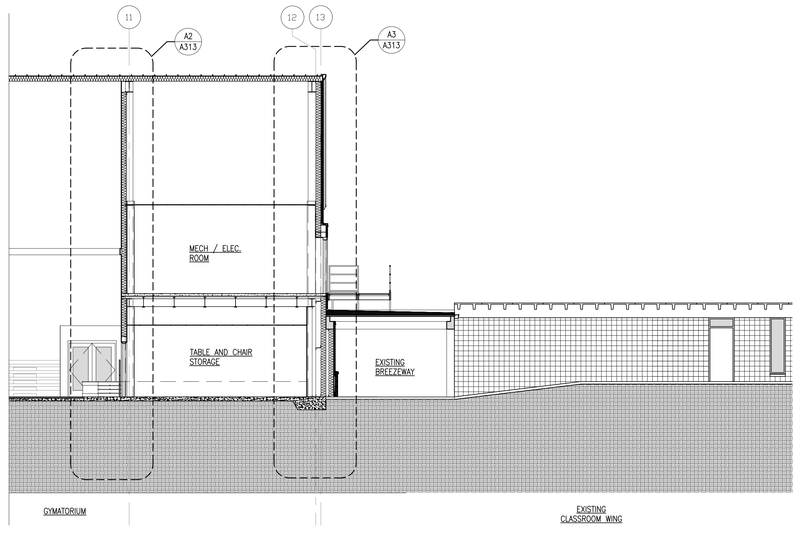

A3 BUILDING SECTION

SCALE: 1/8" = 1'-0" (REFERENCE BLDG. SECTION 2)

A1

SCALE: .

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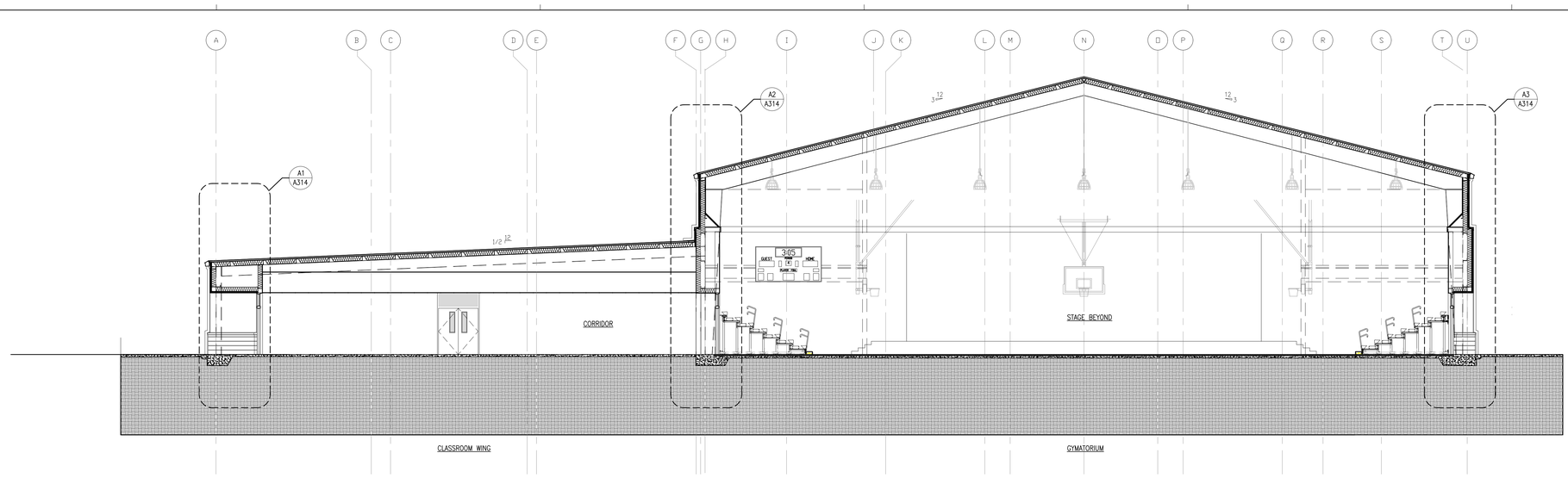
REVISIONS:

No.	Description	Date

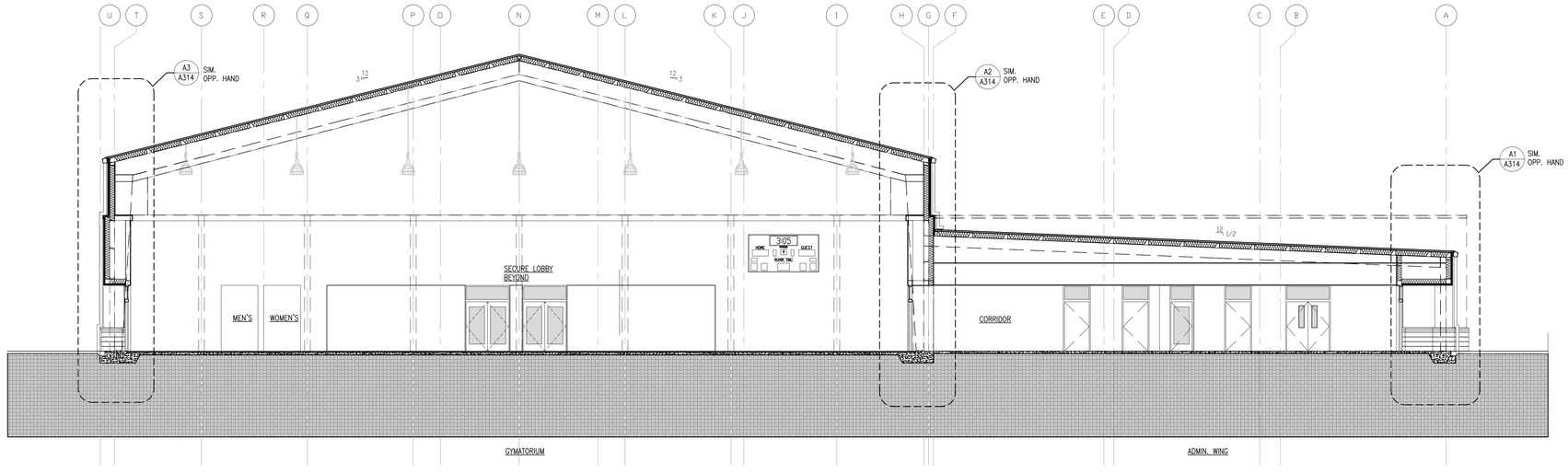
BUILDING SECTIONS

PROJECT NUMBER	22019
DATED	01/31/2025

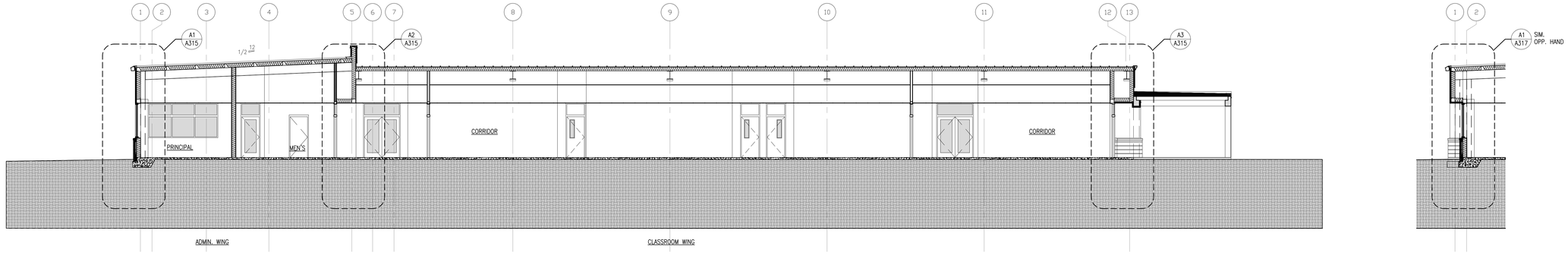
A301



C1	BUILDING SECTION
SCALE: 1/8" = 1'-0"	(REFERENCE BLDG. SECTION 3)



B1	BUILDING SECTION
SCALE: 1/8"=1'-0"	(REFERENCE BUILDING SECTION 4)



A1	BUILDING SECTION
SCALE: 1/8"=1'-0"	(REFERENCE BUILDING SECTION 5)

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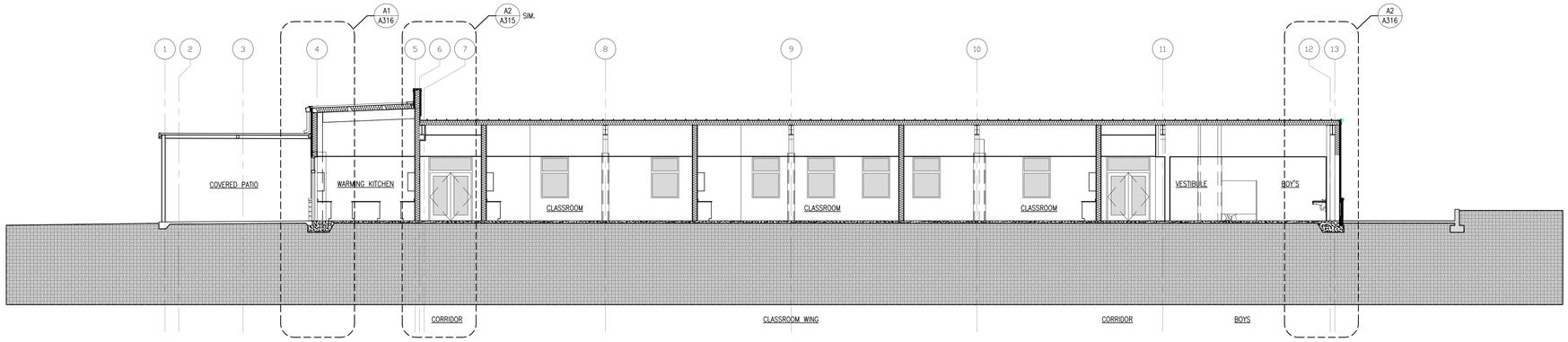
REVISIONS:

No.	Description	Date

BUILDING SECTIONS

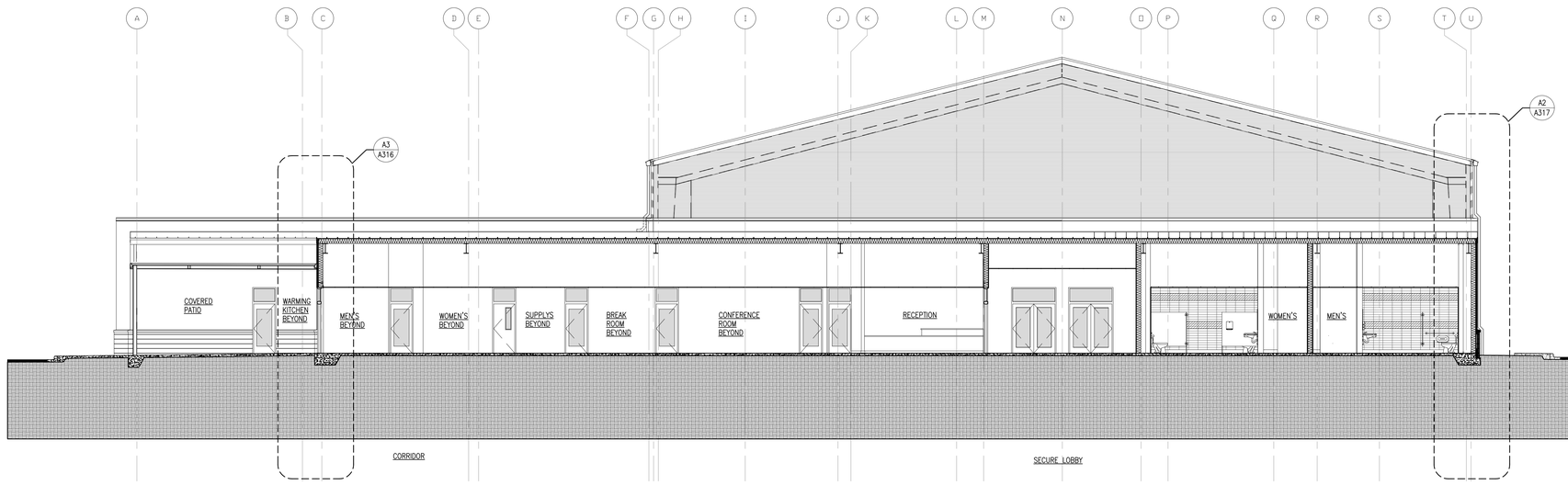
PROJECT NUMBER	22019
DATED	01/31/2025

A302



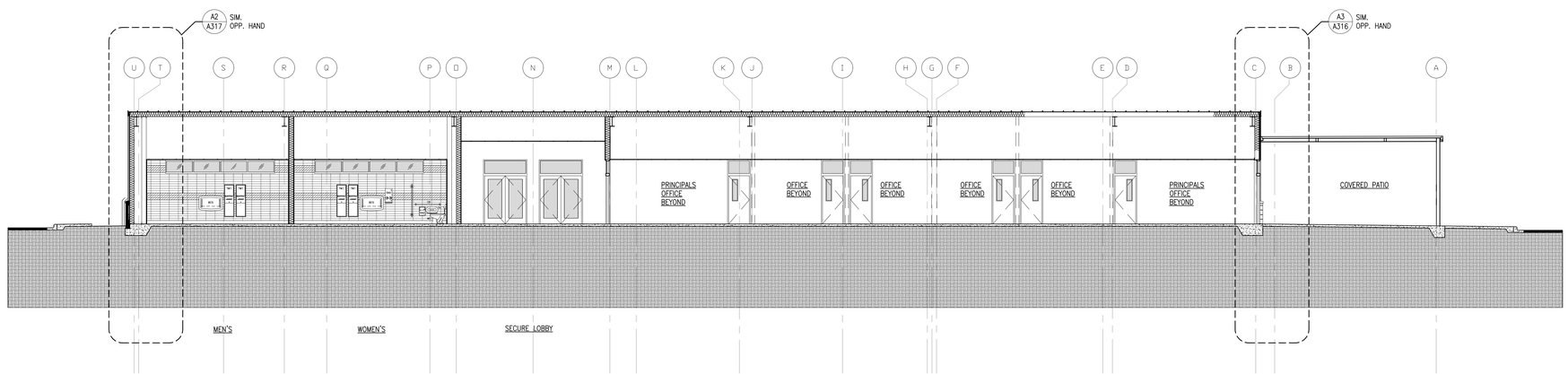
C1 BUILDING SECTION

SCALE: 1/8" = 1'-0" (REFERENCE BLDG. SECTION 6)



B1 BUILDING SECTION

SCALE: 1/8" = 1'-0" (REFERENCE BLDG. SECTION 7)



A1 BUILDING SECTION

SCALE: 1/8" = 1'-0" (REFERENCE BLDG. SECTION 8)

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1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

BUILDING SECTIONS

PROJECT NUMBER	22019
DATED	01/31/2025

A303

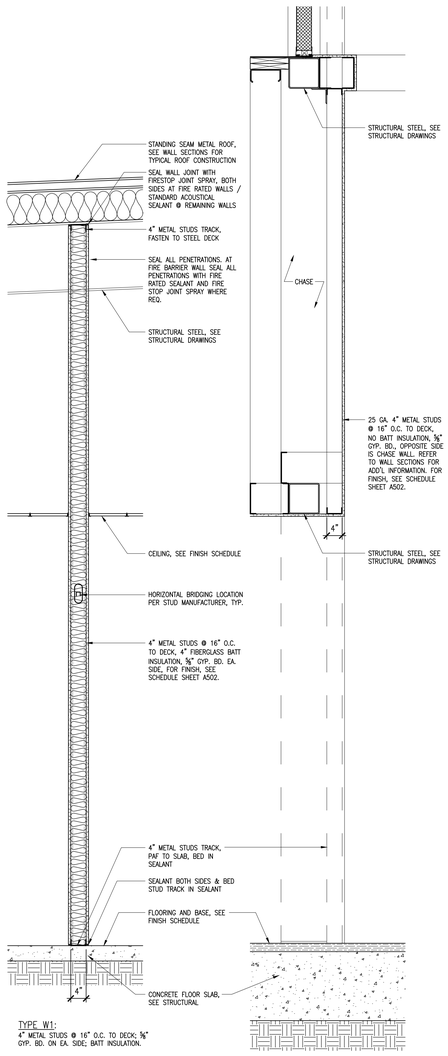
WALL/PARTITION NOTES:

1. SEAL WALL JOINTS AND AT THE ROOF DECK TO ENSURE ACOUSTICAL INTEGRITY (WHERE APPLICABLE) AND FIRE RATING (WHERE REQUIRED).
2. BRACE ALL WALLS THAT TERMINATE AT 6" ABOVE CEILINGS.
3. STENCIL ABOVE CEILING ON BOTH SIDES OF ALL FIRE RATED WALLS 3" HIGH LETTERING TO READ "FIRE BARRIER–PROTECT ALL OPENINGS".
4. ALL ROOMS WITHOUT CEILING HAVE FINISHED, PAINTED GYPSUM BOARD FROM TOP OF SLAB TO BOTTOM OF DECK.
5. PROVIDE TILE BACKERBOARD BEHIND TILE
6. PROVIDE MOISTURE RESISTANT BACKERBOARD ABOVE TILE, IN JANITOR'S CLOSET AND DAMP LOCATIONS.
7. SEE BID PLAN SHEET FOR NOTES REGARDING PROCEDURE FOR WALL CONSTRUCTION IN THE EVENT THAT ONE OR MORE BID ALTERNATES ARE NOT TAKEN.

E1 NOTES

SCALE: NTS

FIRE BARRIER AT WALL TYPE W1:
CONSTRUCT WALL IN ACCORDANCE WITH UL U905 AND U419. STENCIL ABOVE CEILING AS NOTED ON A101. SEE A101 FLOOR PLAN FOR LOCATIONS.



TYPE W1:
4" METAL STUDS @ 16" O.C. TO DECK; ⅝" GYP. BD. ON EA. SIDE; BATT INSULATION.

TYPE W1A:
4" METAL STUDS @ 16" O.C. TO DECK; ⅝" GYP. BD. ON EA. SIDE; NO BATT INSULATION.

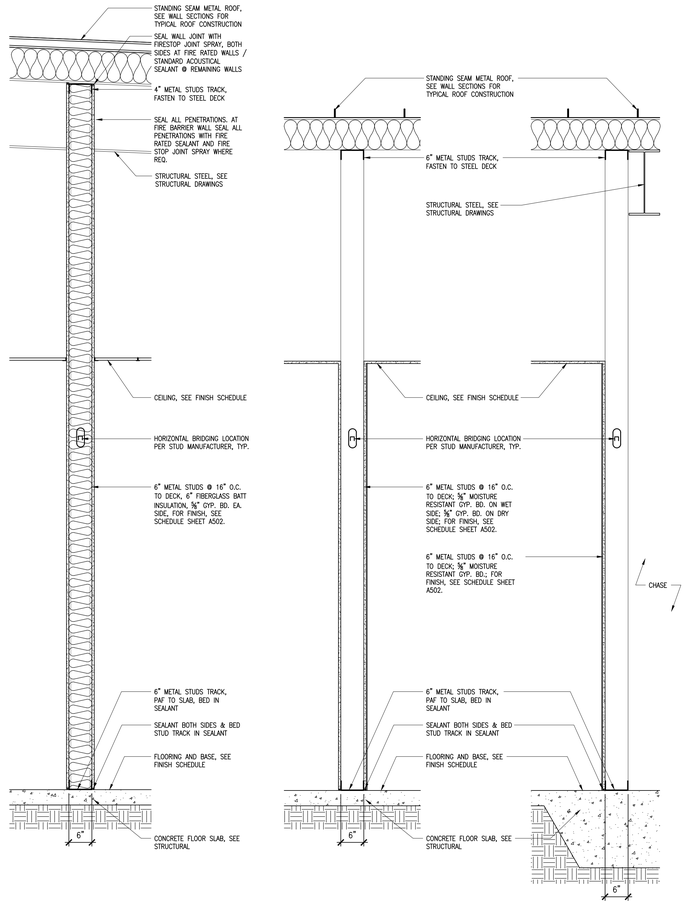
TYPE W1B:
4" METAL STUDS @ 16" O.C. TO DECK; ⅝" GYP. BD.; OPPOSITE SIDE IS CHASE WALL, NO BATT INSULATION.

TYPE 'W1' & 'W1A'

TYPE 'W1B'

A1 PARTITION TYPE W1

SCALE: 3/4" = 1'-0"



TYPE W2:
6" METAL STUDS @ 16" O.C. TO DECK; ⅝" GYP. BD. ON EA. SIDE; BATT INSULATION.

TYPE W2A:
SAME AS TYPE W-2, ⅝" MOISTURE RESISTANT GYP. BD. ON WET SIDE, ⅝" GYP. BD. ON DRY SIDE, NO BATT INSULATION.

TYPE W2B:
SAME AS TYPE W-2, ⅝" MOISTURE RESISTANT GYP. BD. ON WET SIDE, OPPOSITE SIDE IS CHASE WALL, NO BATT INSULATION.

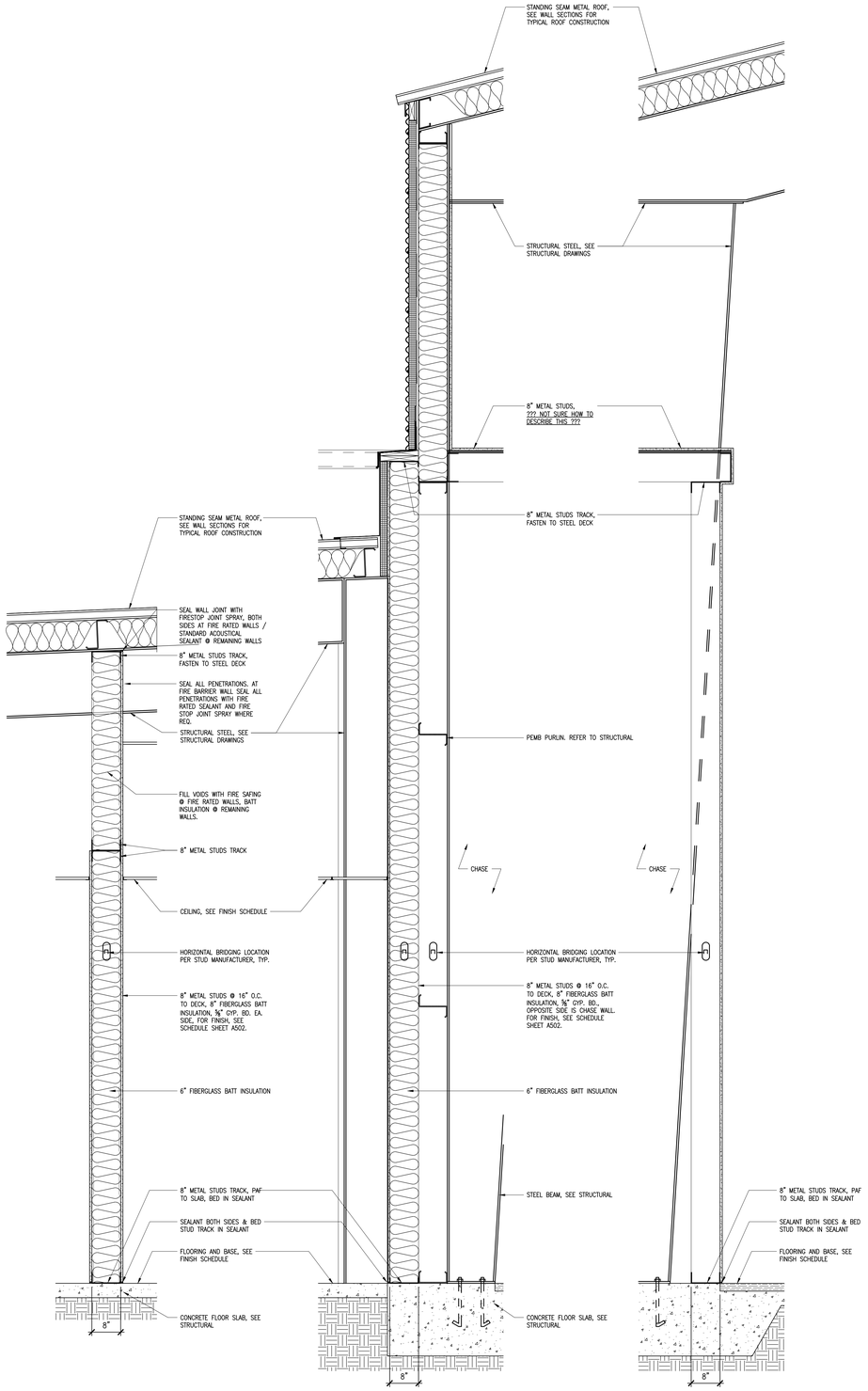
TYPE 'W2'

TYPE 'W2A'

TYPE 'W2B'

A2 PARTITION TYPE W2

SCALE: 3/4" = 1'-0"



TYPE W3:
8" METAL STUDS @ 16" O.C. TO DECK; ⅝" GYP. BD. ON EA. SIDE; BATT INSULATION.

TYPE W3A:
SIM TO TYPE W–3, ⅝" GYP. BD., OPPOSITE SIDE IS CHASE WALL, NO BATT INSULATION.

TYPE W–3B:
SIM TO TYPE W–3, ⅝" GYP. BD., OPPOSITE SIDE IS CHASE WALL, NO BATT INSULATION.

TYPE 'W3'

TYPE 'W3A'

TYPE 'W3B'

A3 PARTITION TYPE W3

SCALE: 3/4" = 1'-0"

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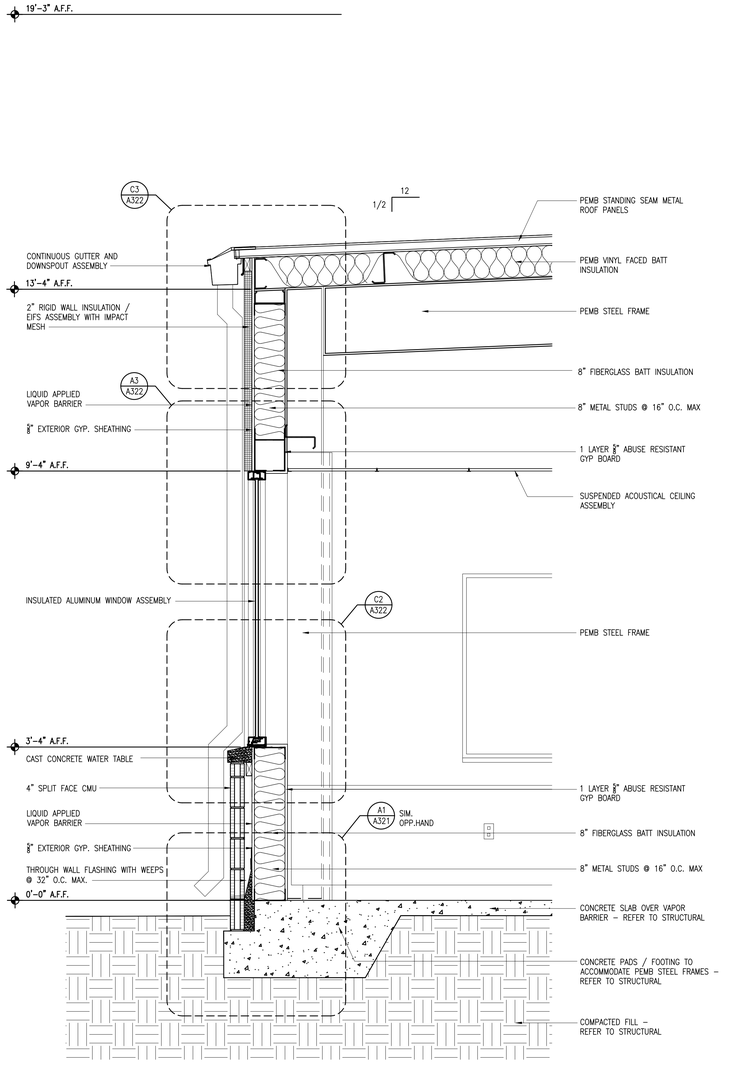
REVISIONS:

No.	Description	Date

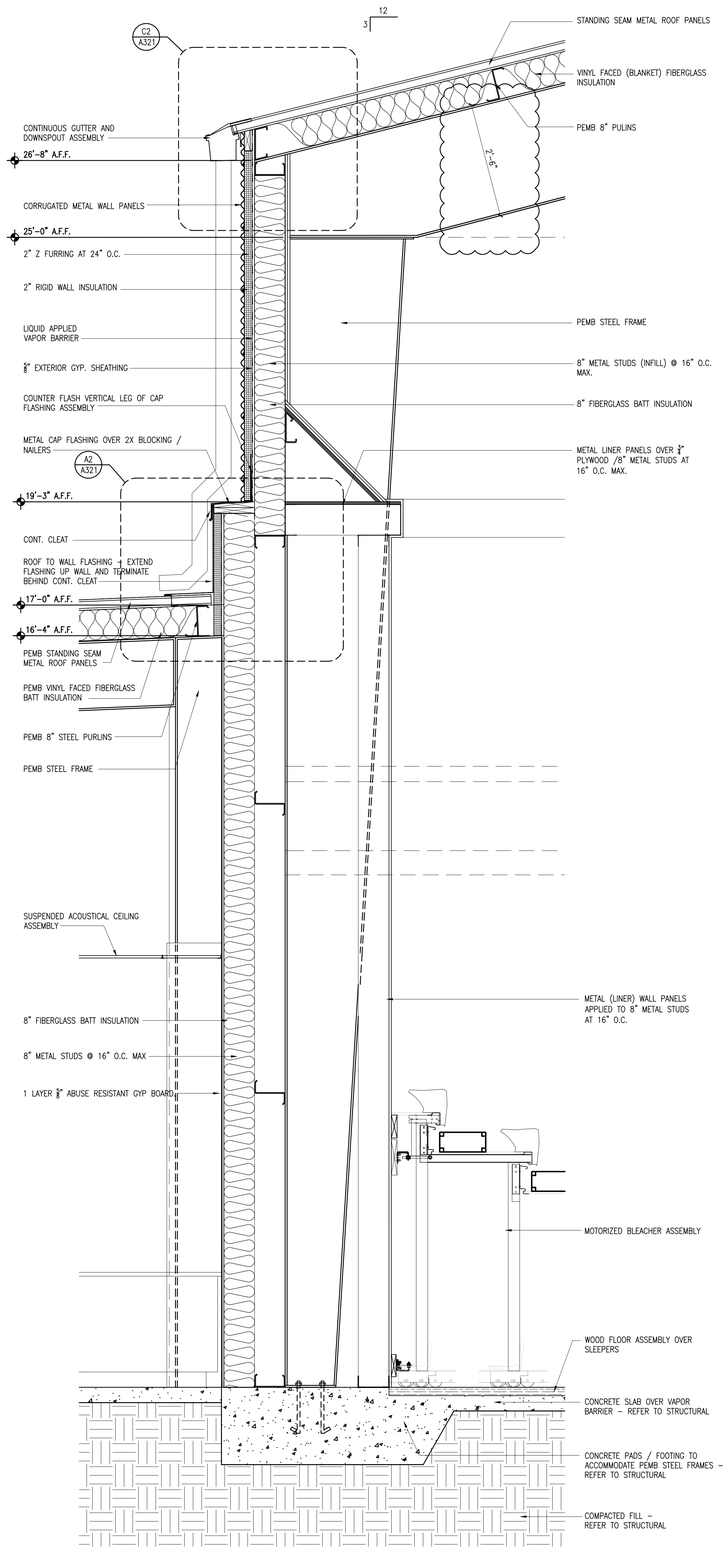
PARTITION TYPES

PROJECT NUMBER	22019
DATED	01/31/2025

A310



A1 WALL SECTION
SCALE: 3/4" = 1'-0"
(REFERENCE BLDG. SECTION 1)



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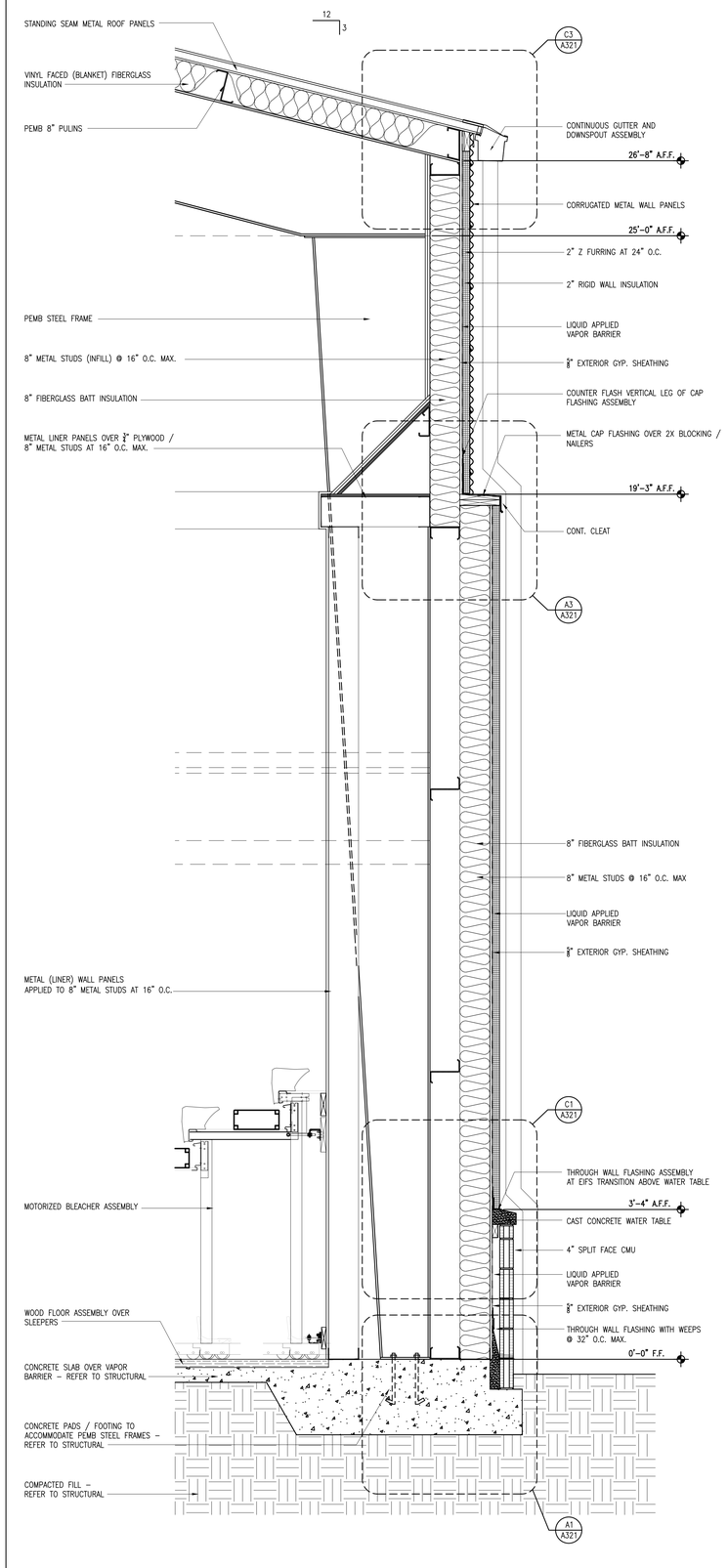

A3 WALL SECTION
SCALE: 3/4" = 1'-0"
(REFERENCE BLDG. SECTION 1)

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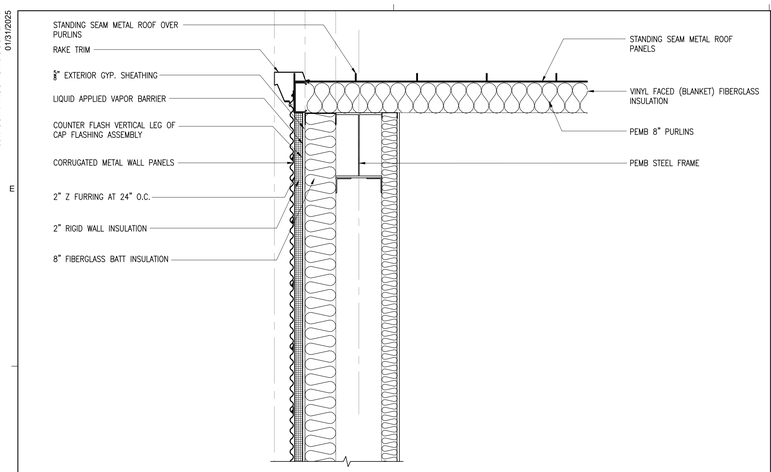
REVISIONS:

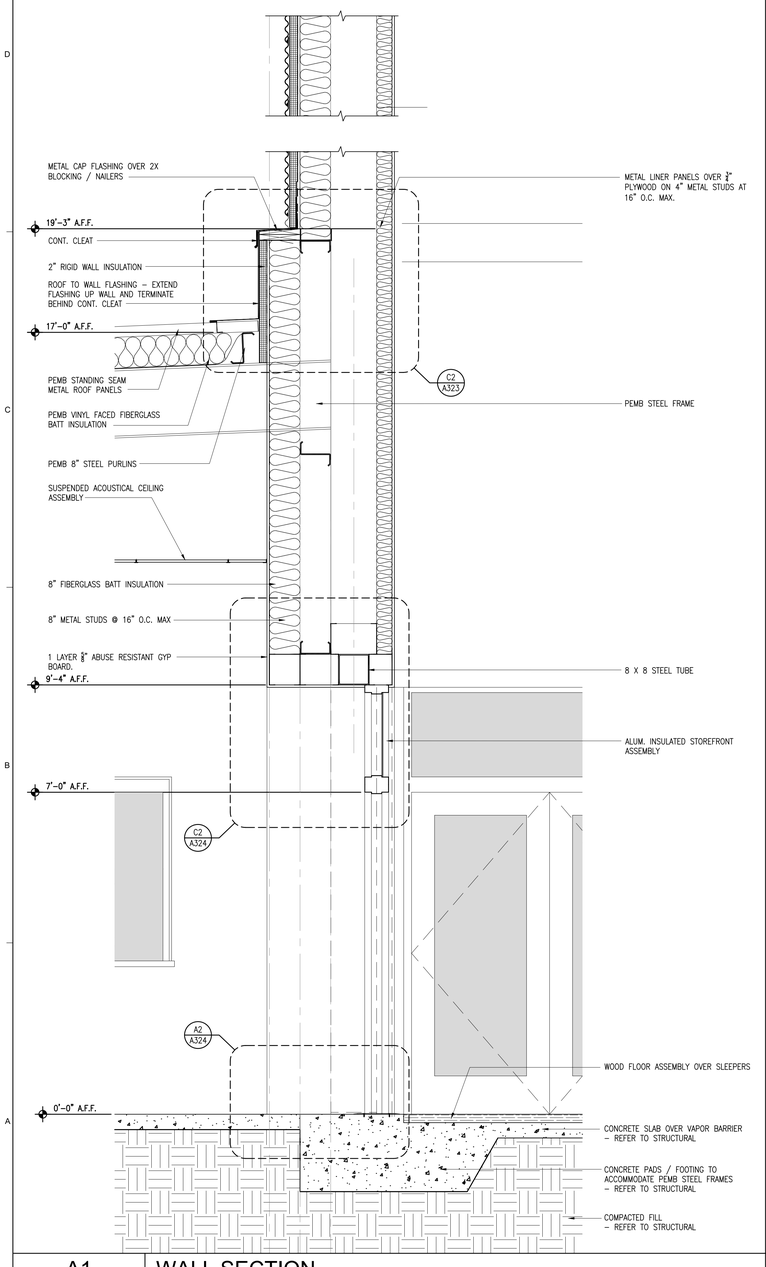
No.	Description	Date

WALL SECTIONS

PROJECT NUMBER	22019
DATED	01/31/2025

A311





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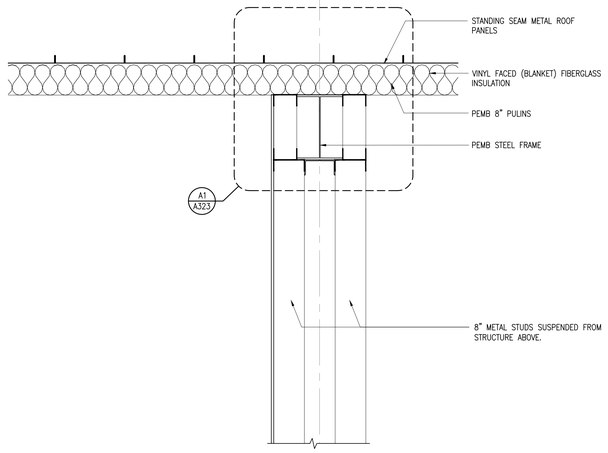

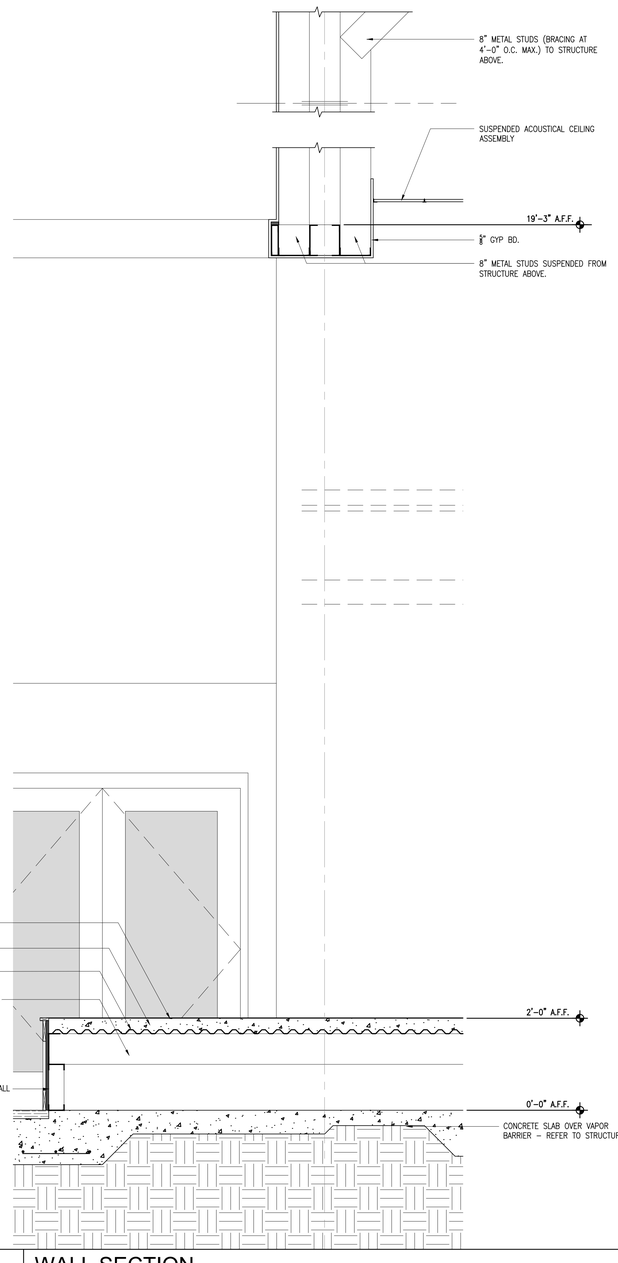

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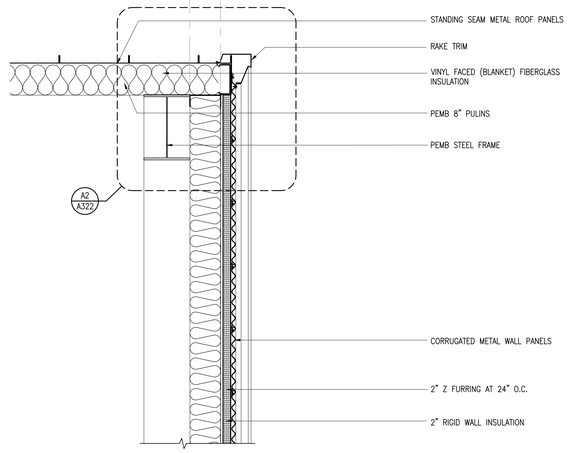
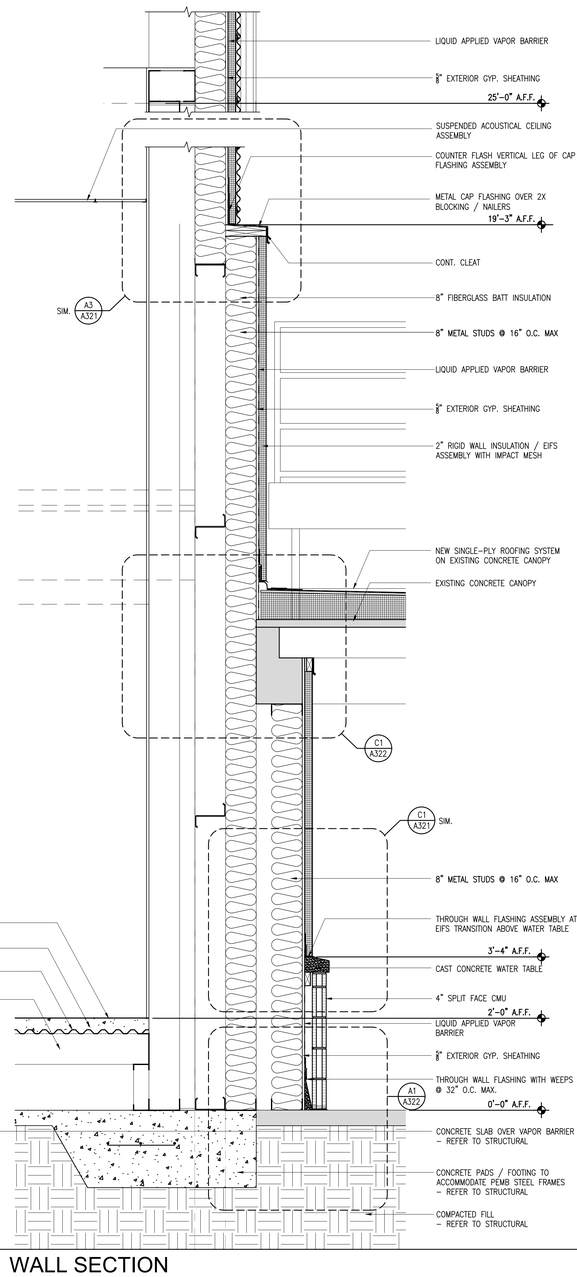
(REFERENCE BLDG. SECTION 2)





A3 WALL SECTION
SCALE: 3/4" = 1'-0"
(REFERENCE BLDG. SECTION 2)

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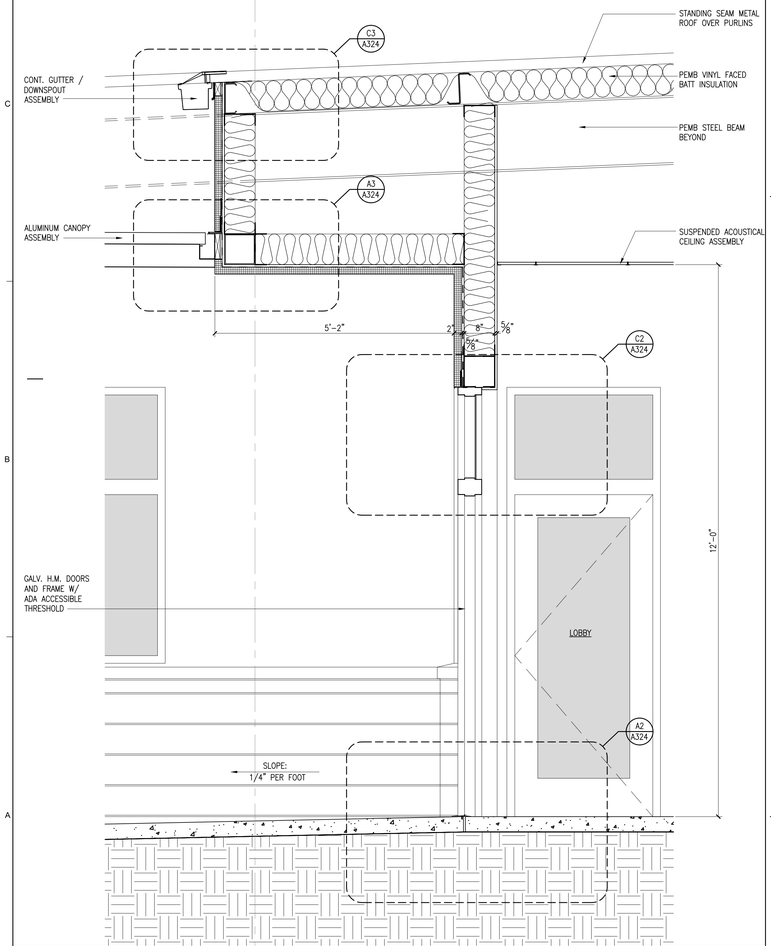
No.	Description	Date

WALL SECTIONS

PROJECT NUMBER	22019
DATED	01/31/2025

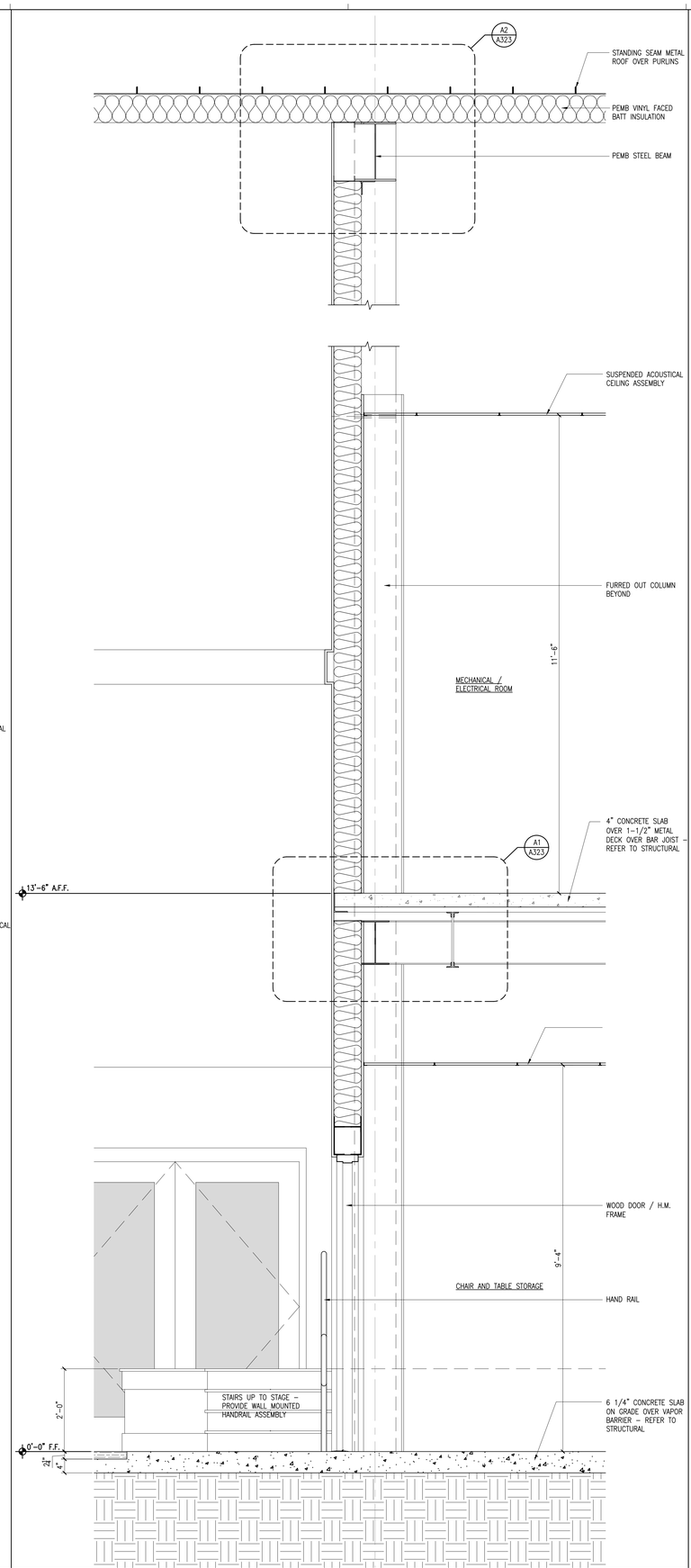
A312



A1 WALL SECTION

SCALE: 3/4" = 1'-0"

(REFERENCE BLDG. SECTION 2)



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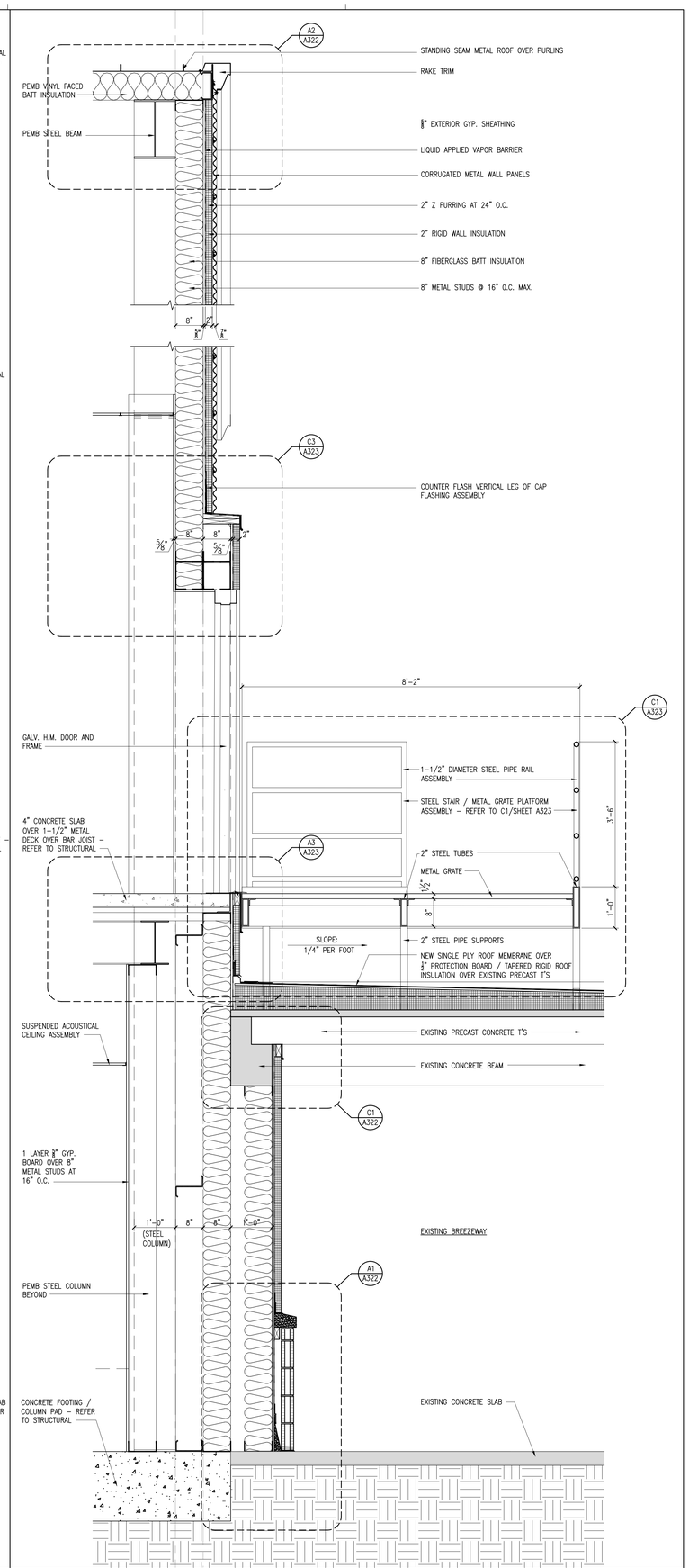
SCALE: 3/4" = 1'-0"

(REFERENCE BLDG. SECTION 2)



A3 WALL SECTION

SCALE: 3/4" = 1'-0"

(REFERENCE BLDG. SECTION 2)

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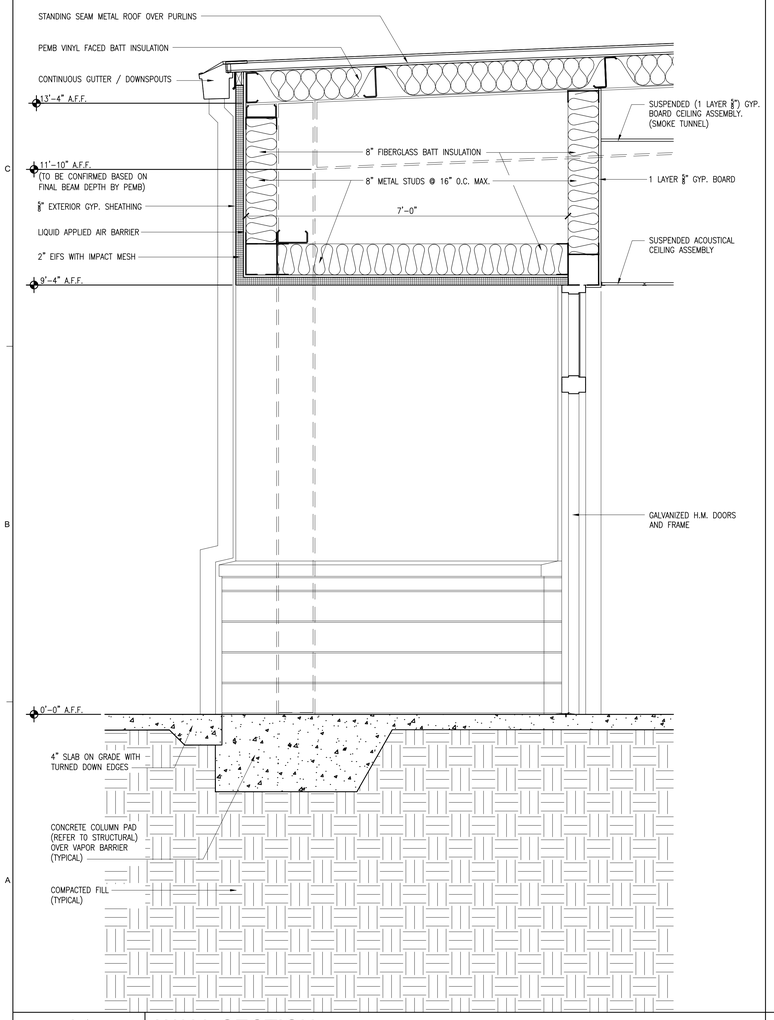
REVISIONS:

No.	Description	Date

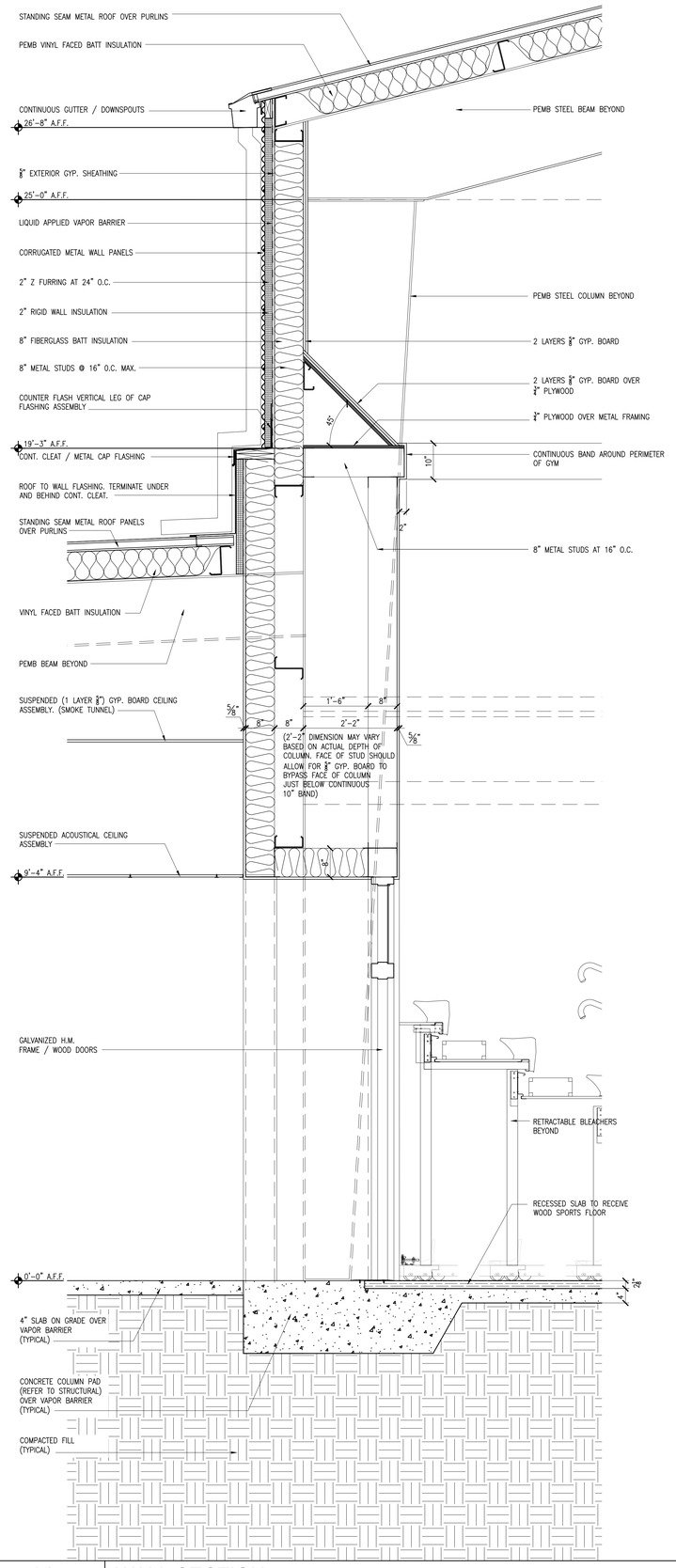
WALL SECTIONS

PROJECT NUMBER	22019
DATED	01/31/2025

A313



A1 | WALL SECTION
SCALE: 3/4" = 1'-0" | (REFERENCE BLDG. SECTION 3)



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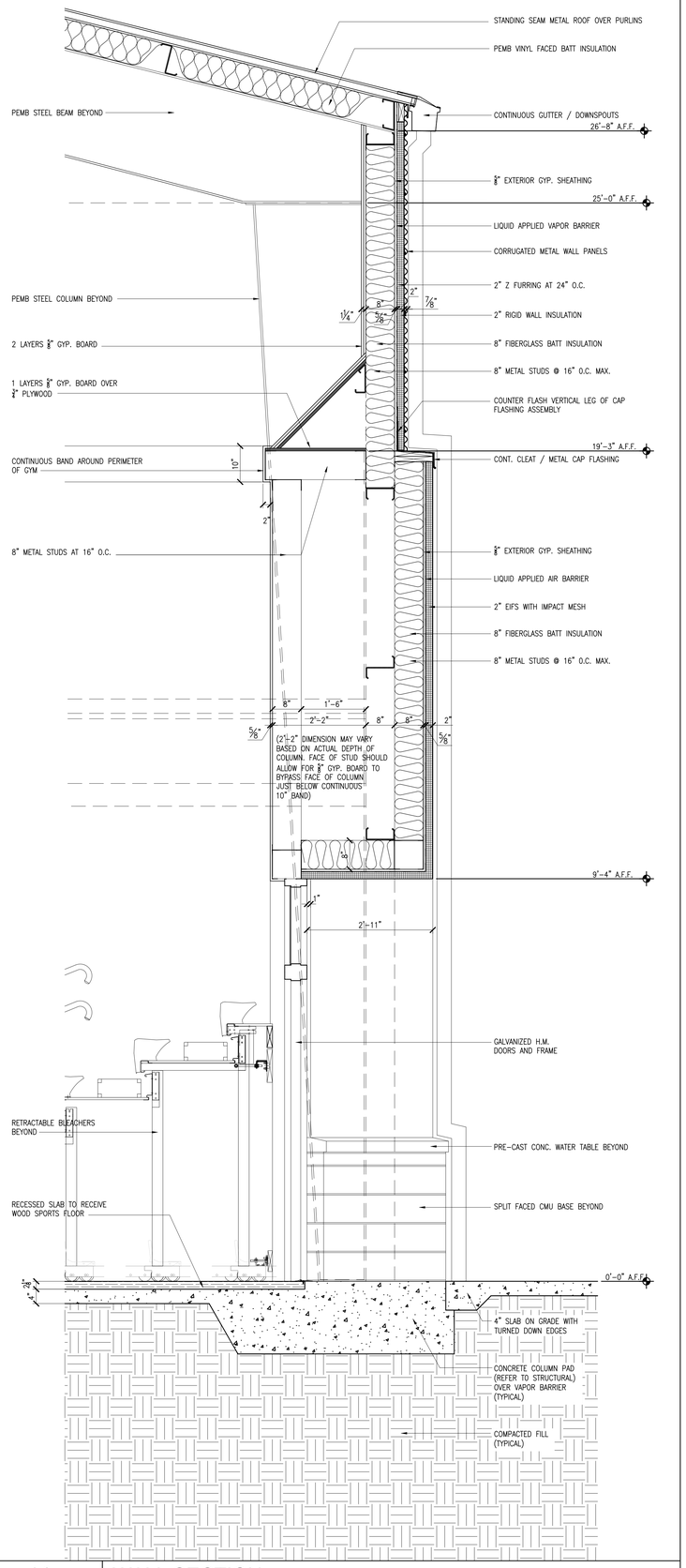
SCALE: 3/4" = 1'-0" | (REFERENCE BLDG. SECTION 3)



A3 | WALL SECTION
SCALE: 3/4" = 1'-0" | (REFERENCE BLDG. SECTION 3)

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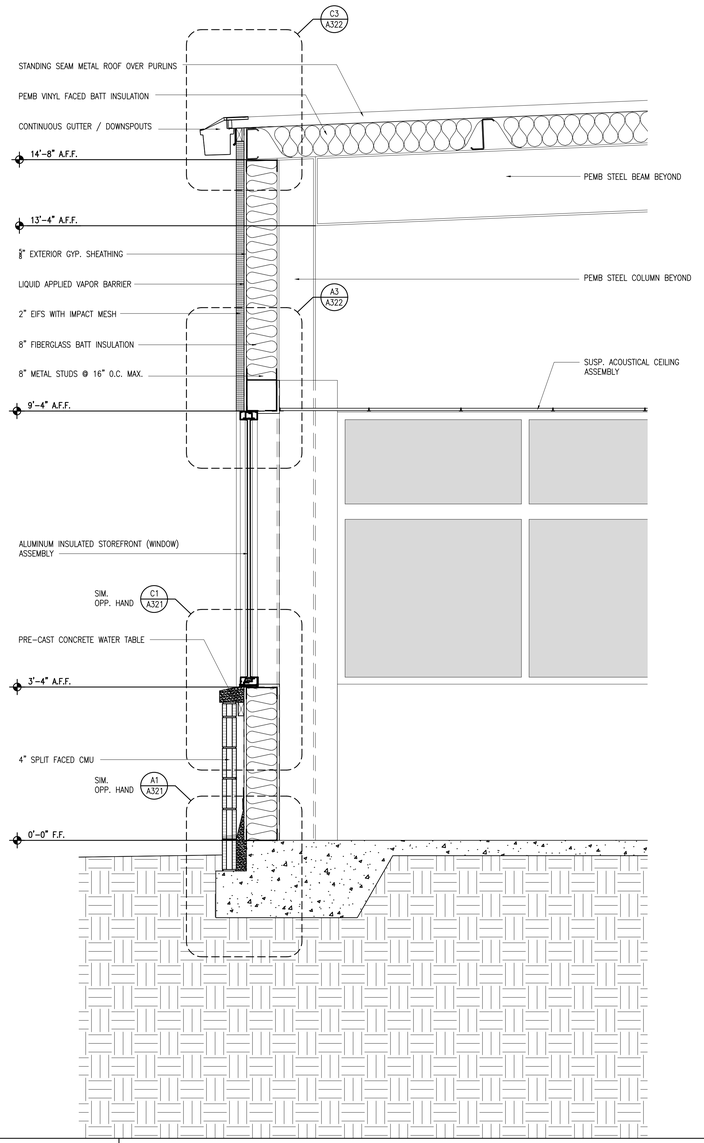
REVISIONS:

No.	Description	Date

WALL SECTIONS

PROJECT NUMBER	22019
DATED	01/31/2025

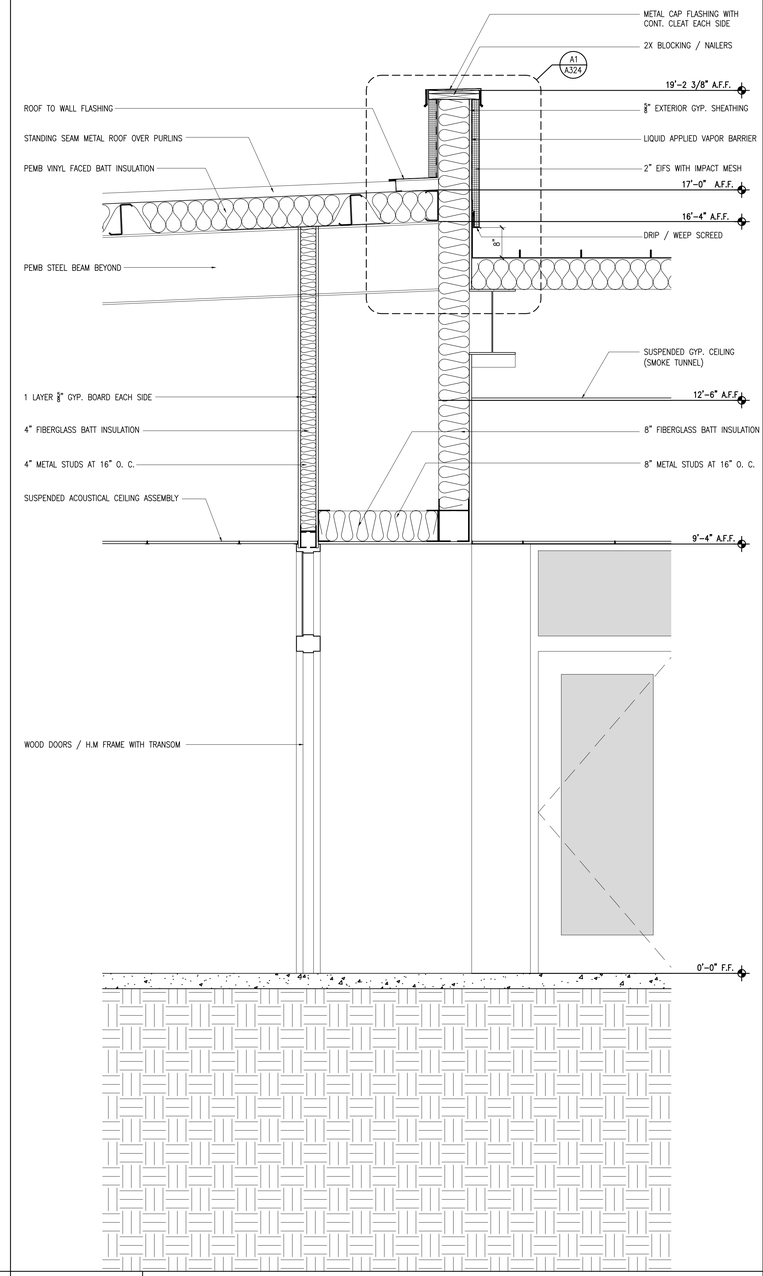
A314



A1 WALL SECTION

SCALE: 3/4" = 1'-0"

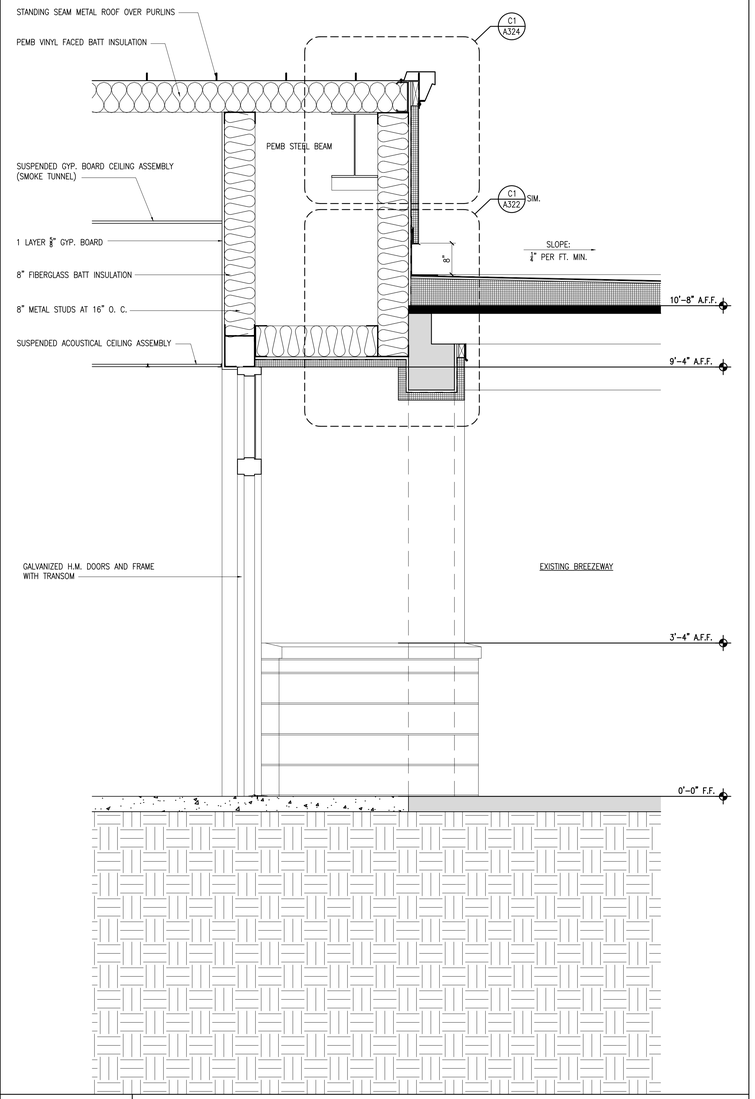
(REFERENCE BLDG. SECTION 5)



A2 WALL SECTION

SCALE: 3/4" = 1'-0"

(REFERENCE BLDG. SECTION 5)



A3 WALL SECTION

SCALE: 3/4" = 1'-0"

(REFERENCE BLDG. SECTION 5)

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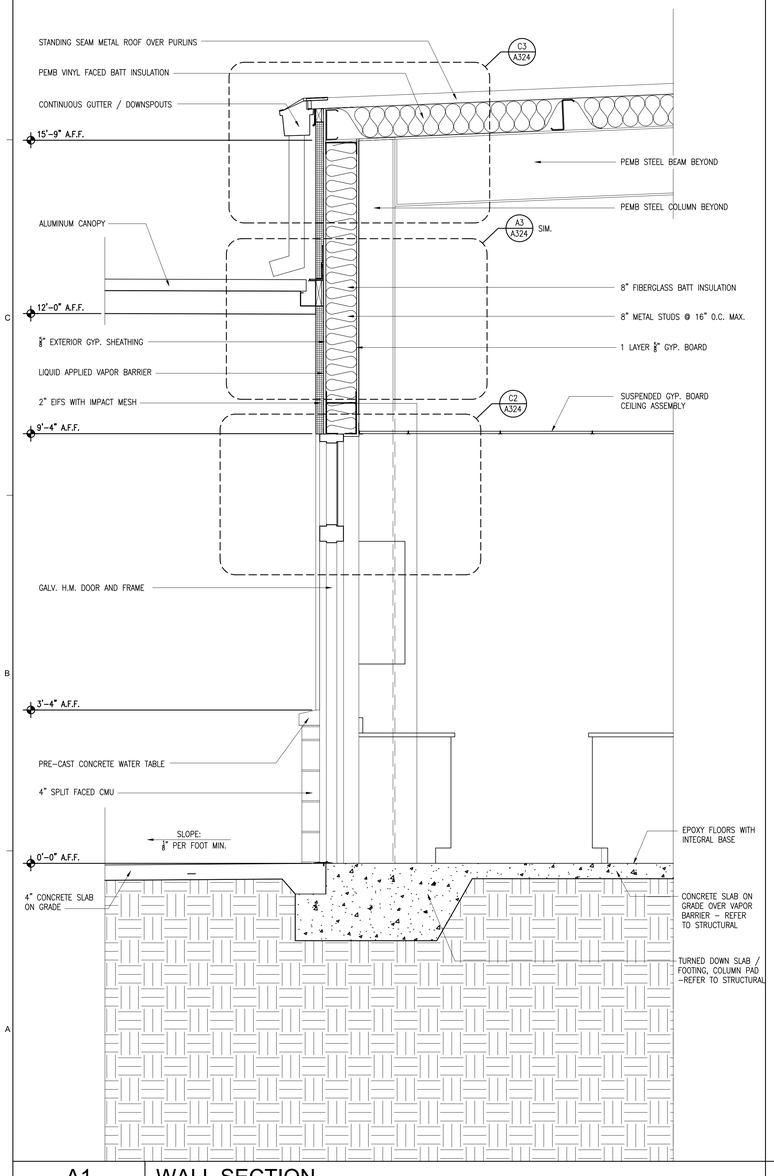
REVISIONS:

No.	Description	Date

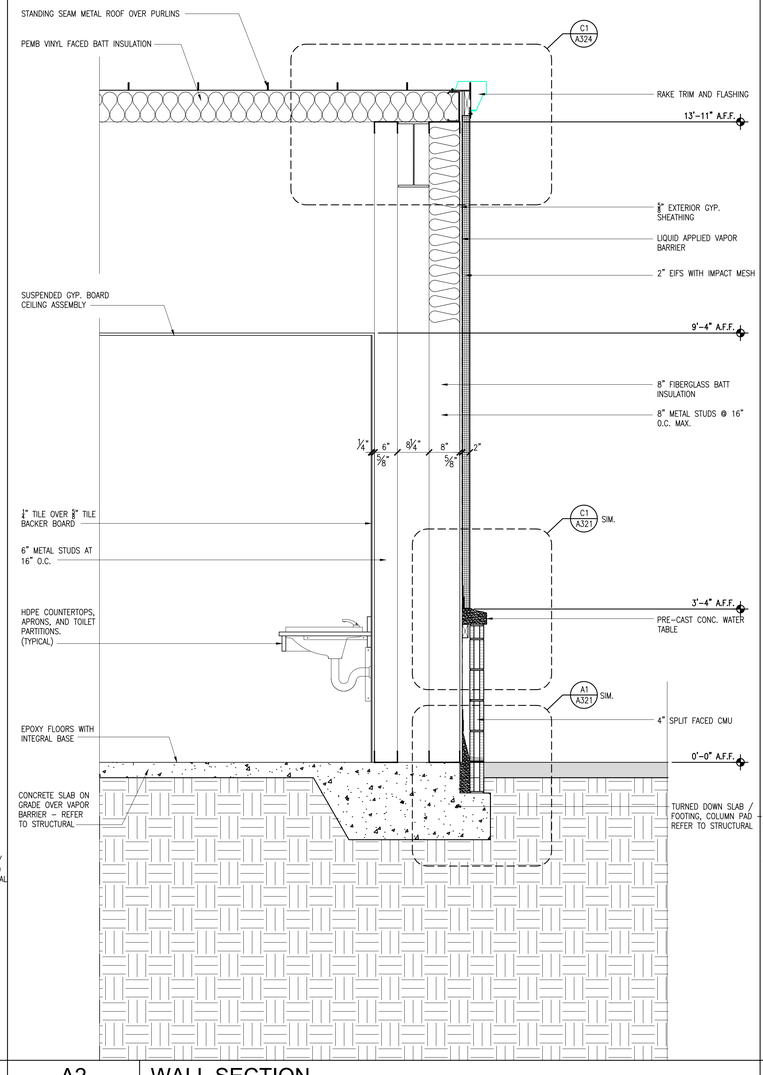
WALL SECTIONS

PROJECT NUMBER	22019
DATED	01/31/2025

A315



A1 WALL SECTION
SCALE: 3/4" = 1'-0" (REFERENCE BLDG. SECTION 6)



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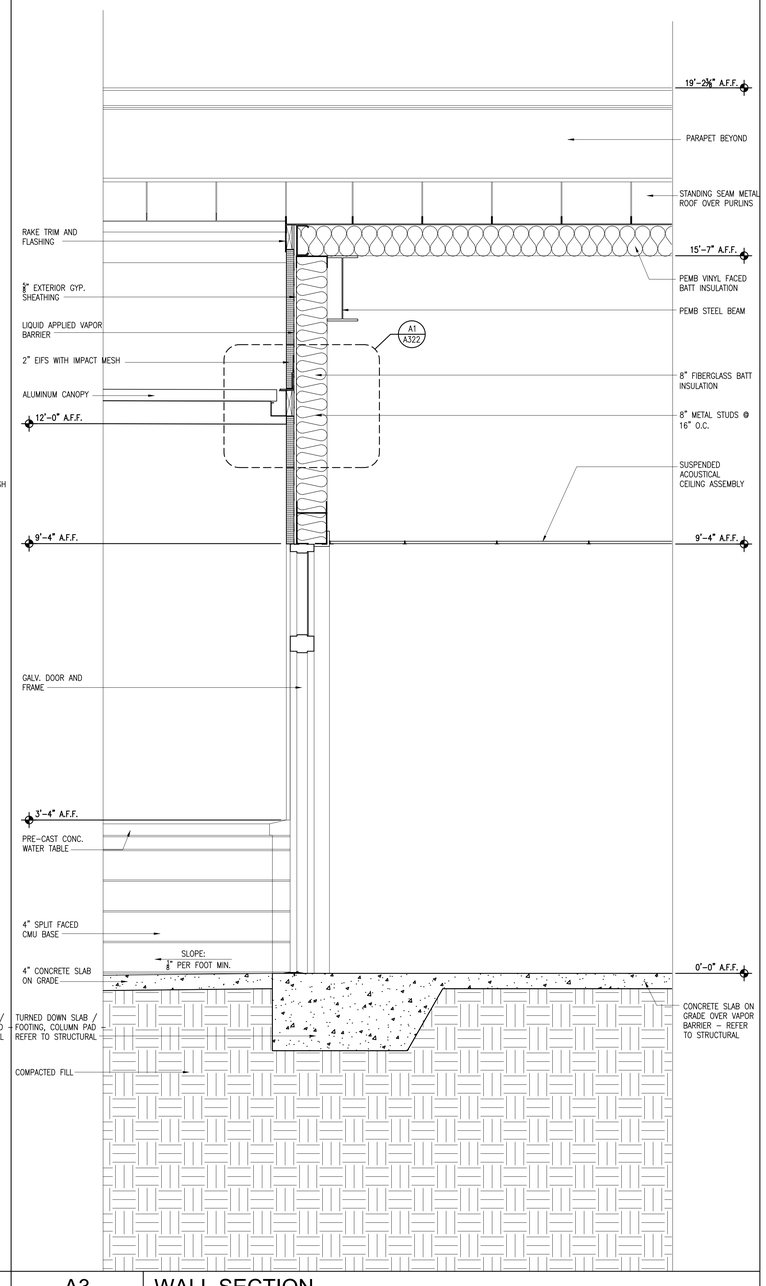

A3 WALL SECTION
SCALE: 3/4" = 1'-0" (REFERENCE BLDG. SECTION 7)

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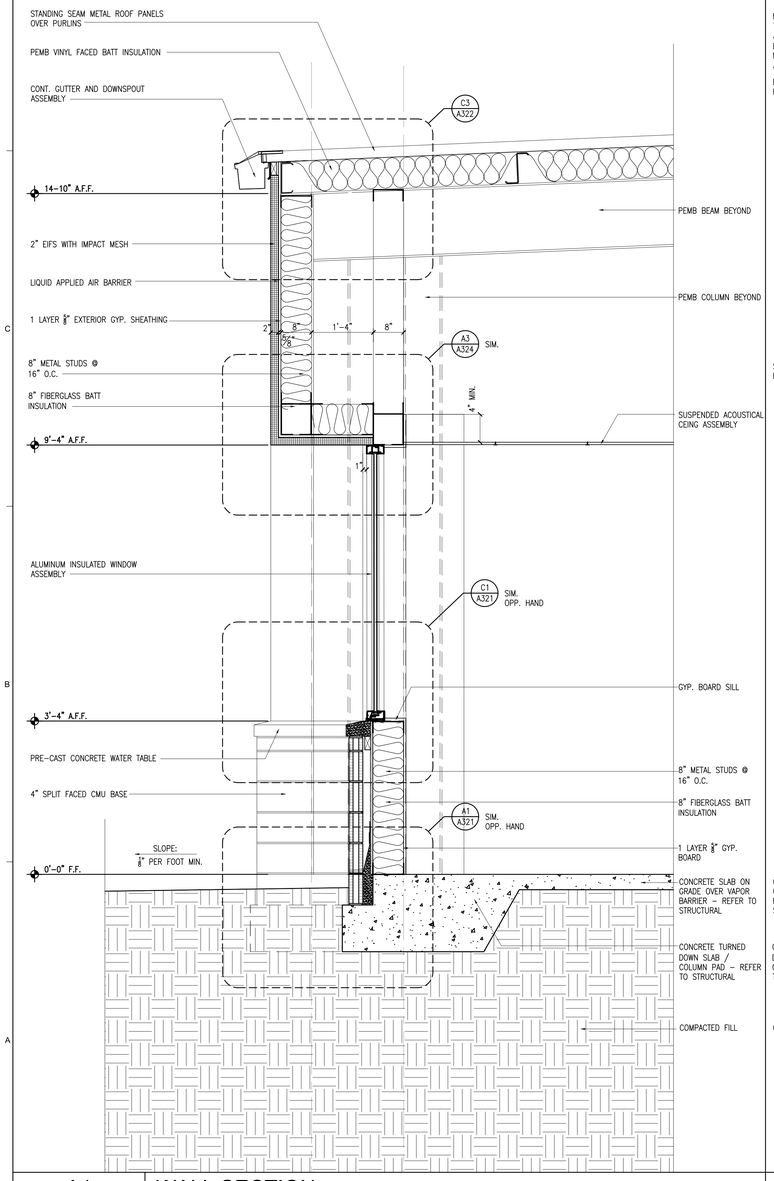
REVISIONS:

No.	Description	Date

WALL SECTIONS

PROJECT NUMBER 22019
DATED 01/31/2025

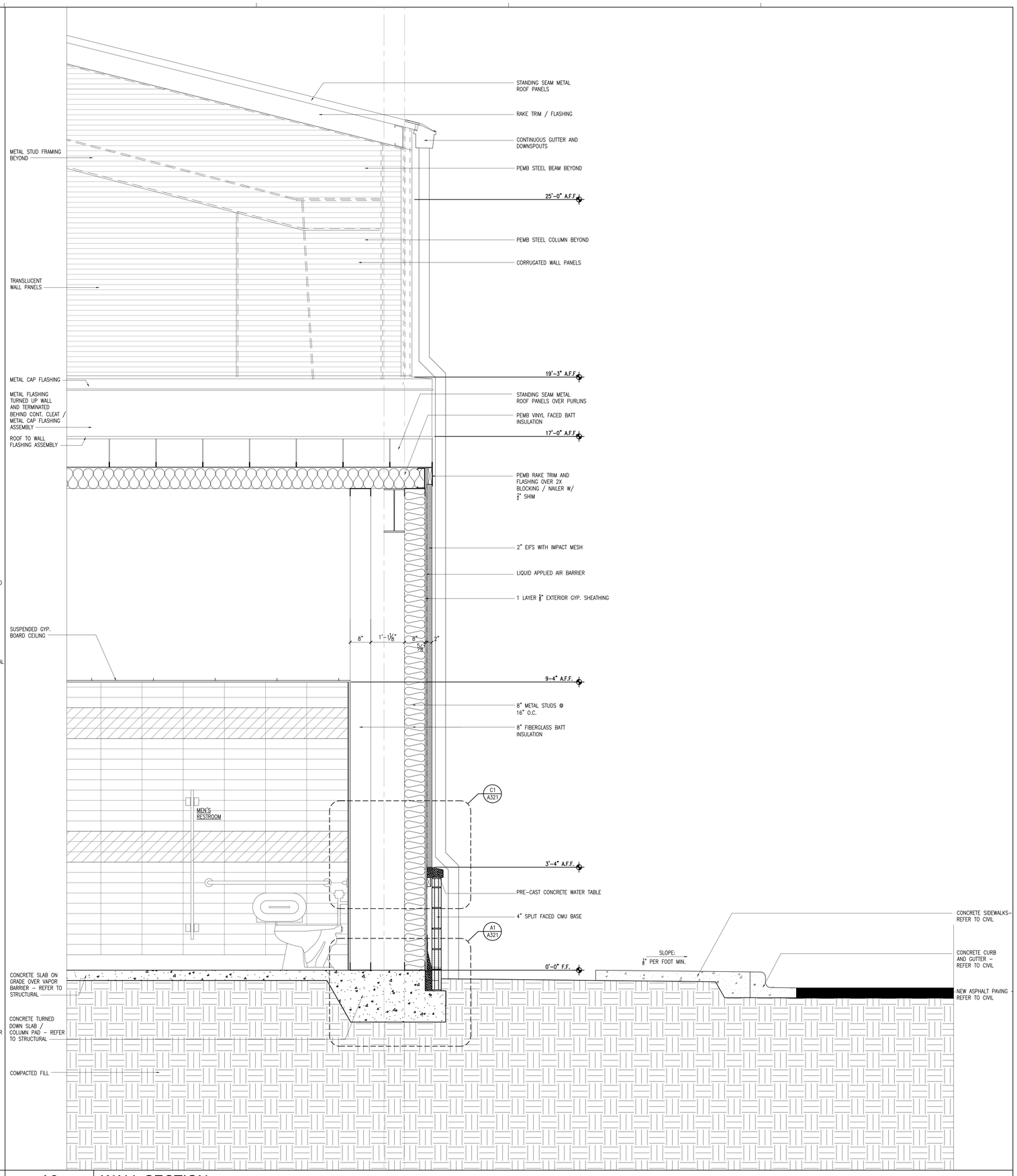
A316



A1 WALL SECTION

SCALE: 3/4" = 1'-0"

(REFERENCE BLDG. SECTION 8)



A2 WALL SECTION

SCALE: 3/4" = 1'-0"

(REFERENCE BLDG. SECTION 5)

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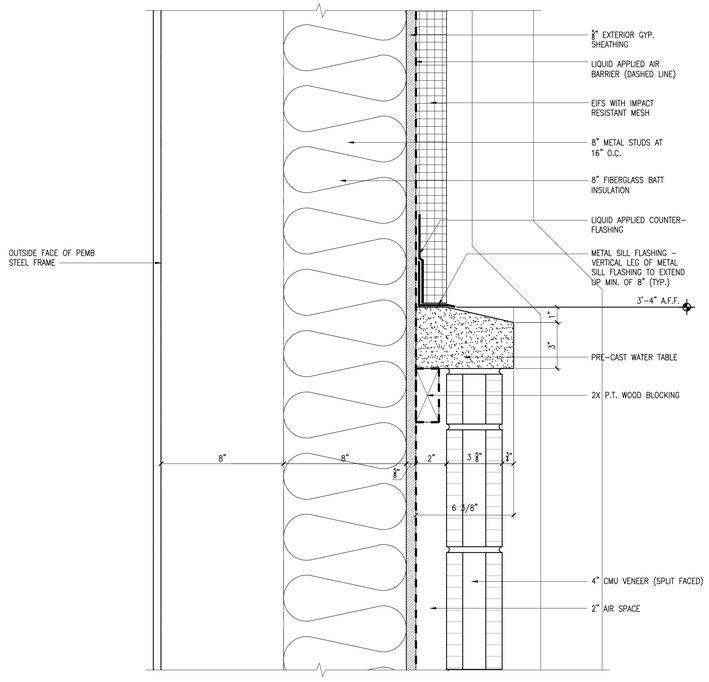
REVISIONS:

No.	Description	Date

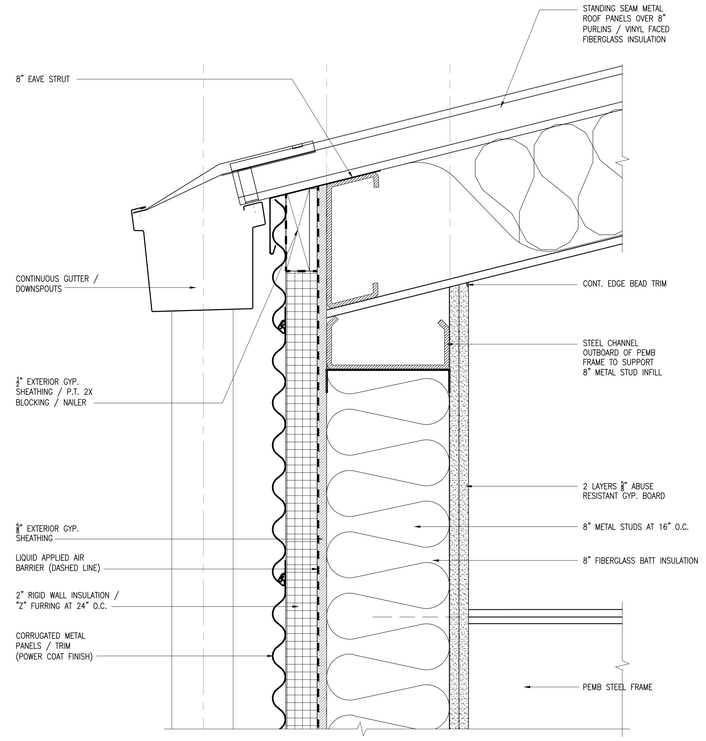
WALL SECTIONS

PROJECT NUMBER	22019
DATED	01/31/2025

A317



C1	SECTION DETAIL
SCALE: 3" = 1'-0"	REF. BUILDING SECTION ONE



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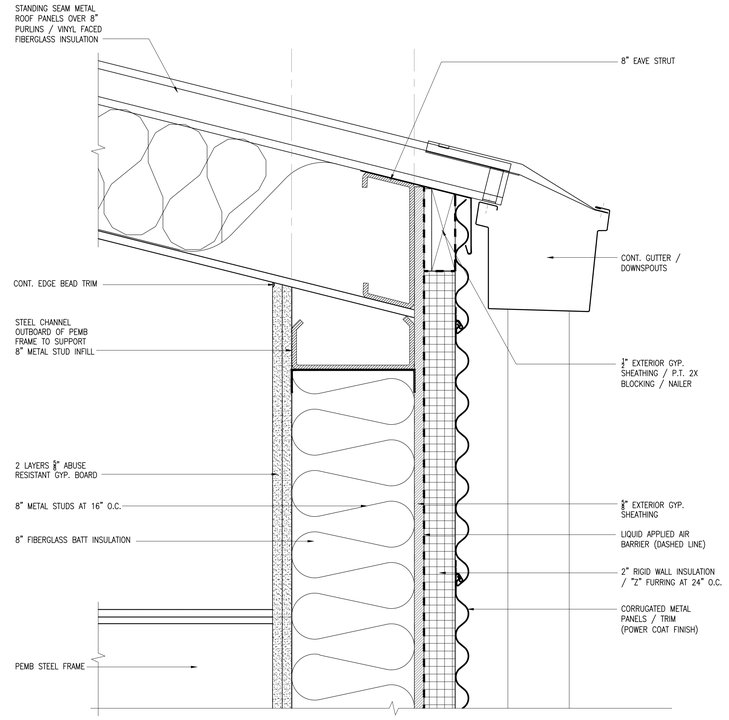

C3	SECTION DETAIL
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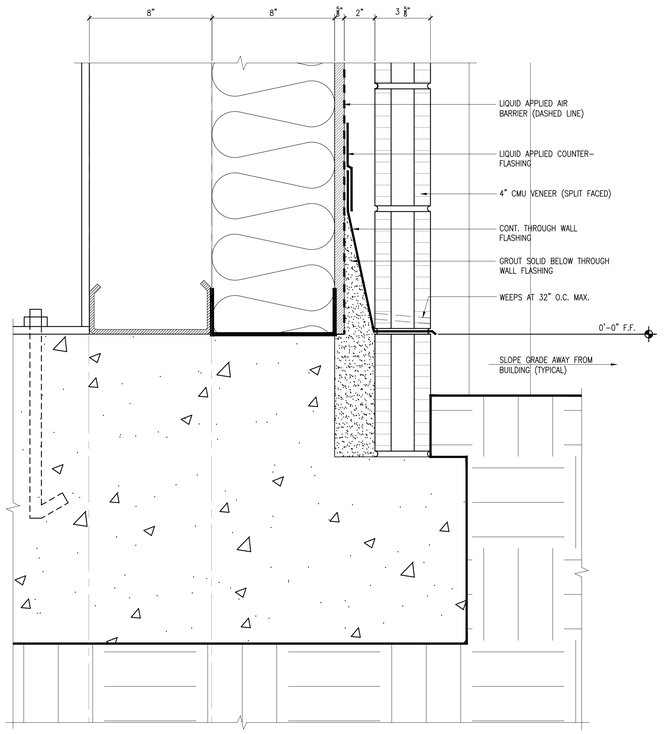
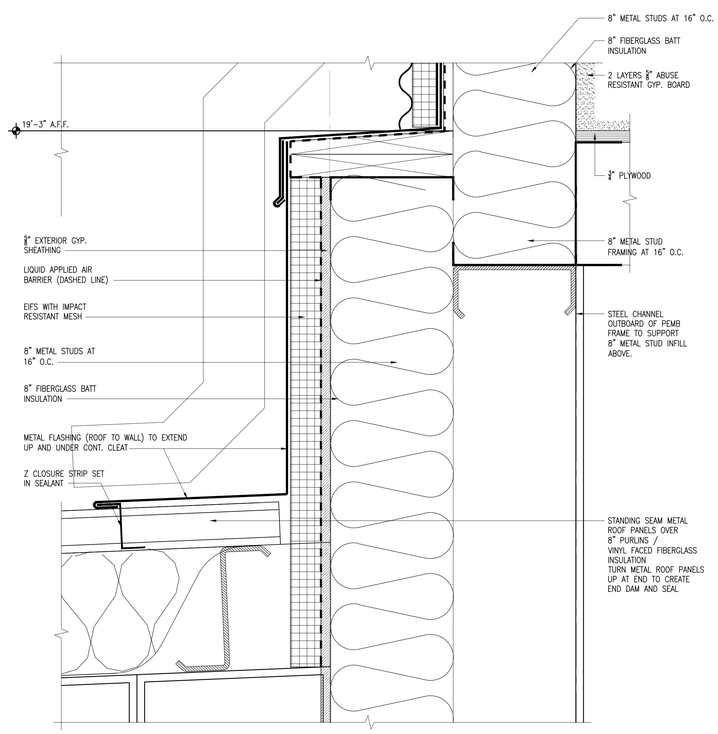


A1	SECTION DETAIL
SCALE: 3" = 1'-0"	REF. BUILDING SECTION ONE



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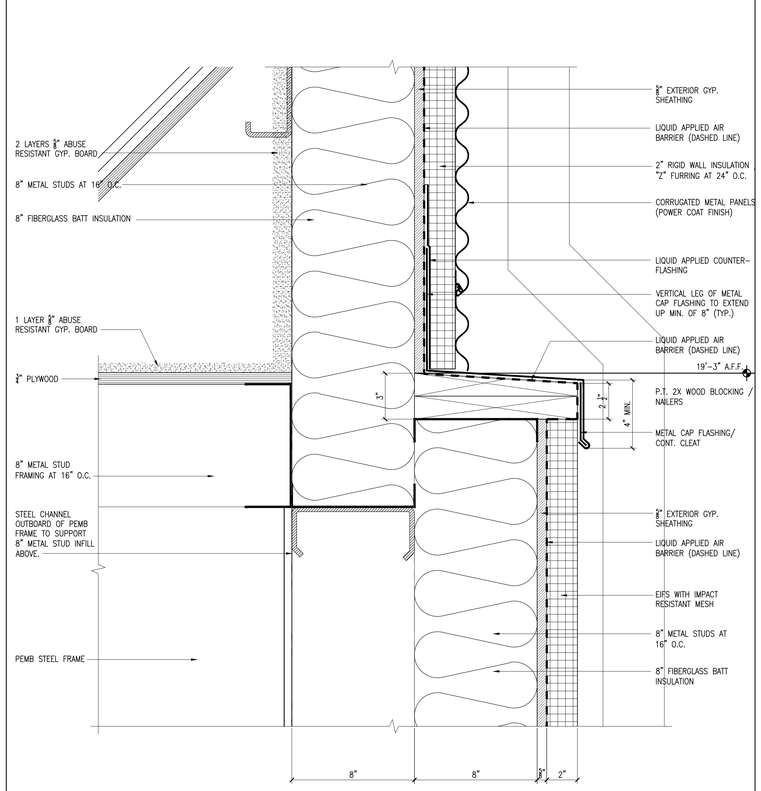

A3	SECTION DETAIL
SCALE: 3" = 1'-0"	REF. BUILDING SECTION ONE

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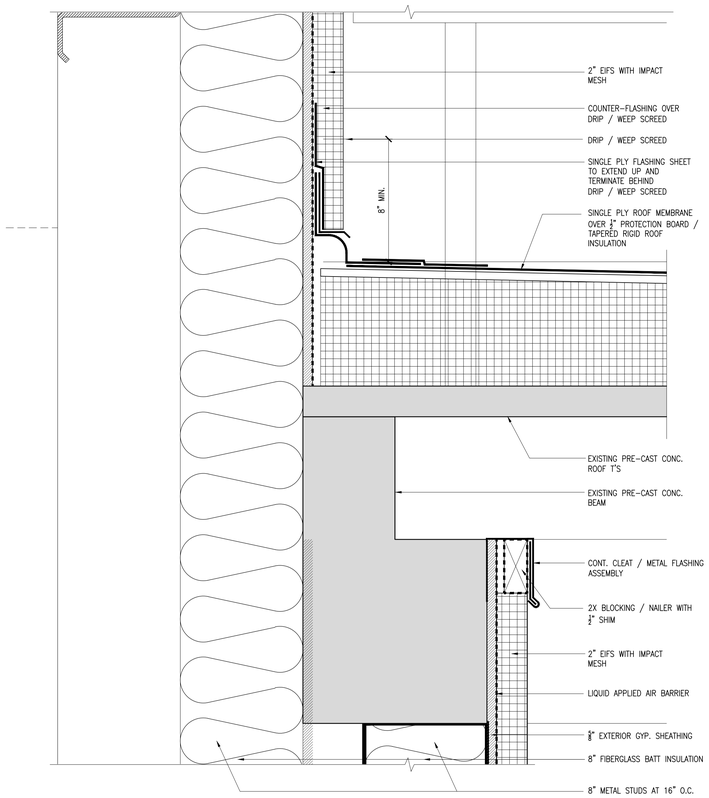
REVISIONS:

No.	Description	Date

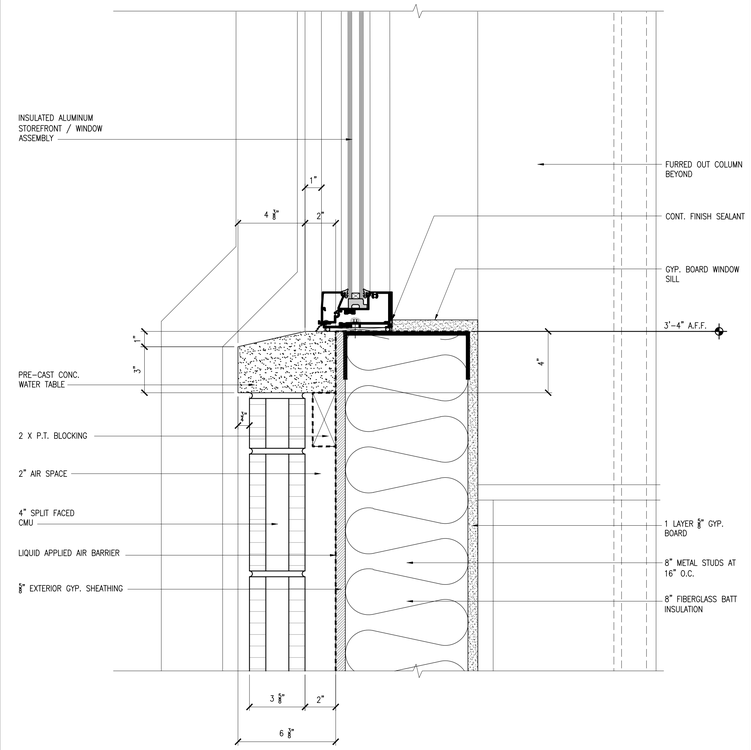
SECTION DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

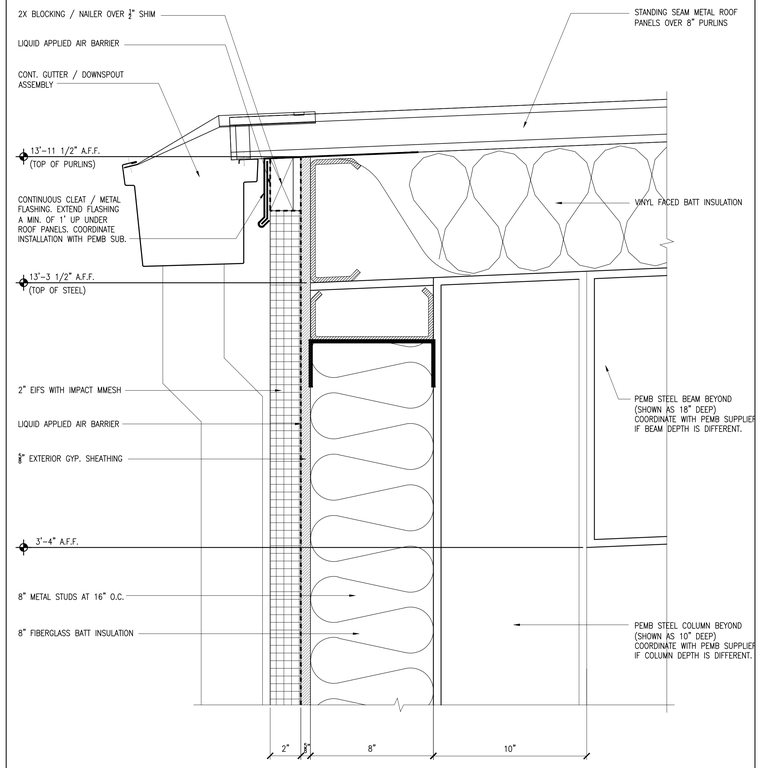
A321



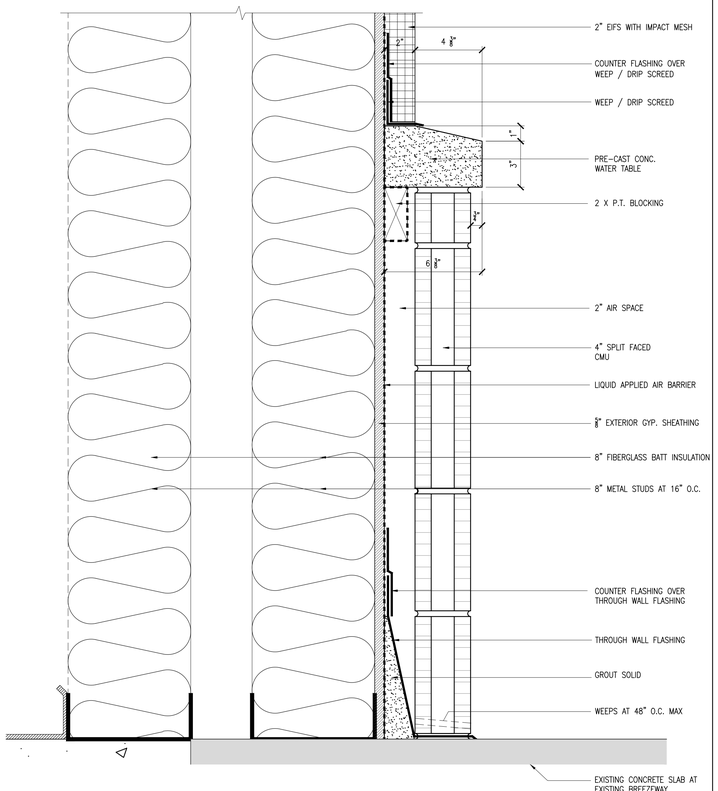
C1 SECTION DETAIL
SCALE: 3" = 1'-0"



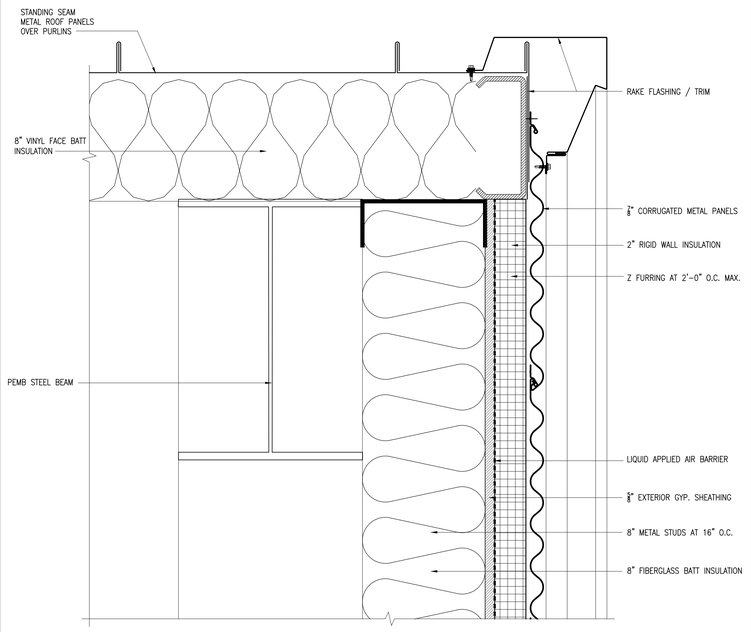
C2 SECTION DETAIL
SCALE: 3" = 1'-0"



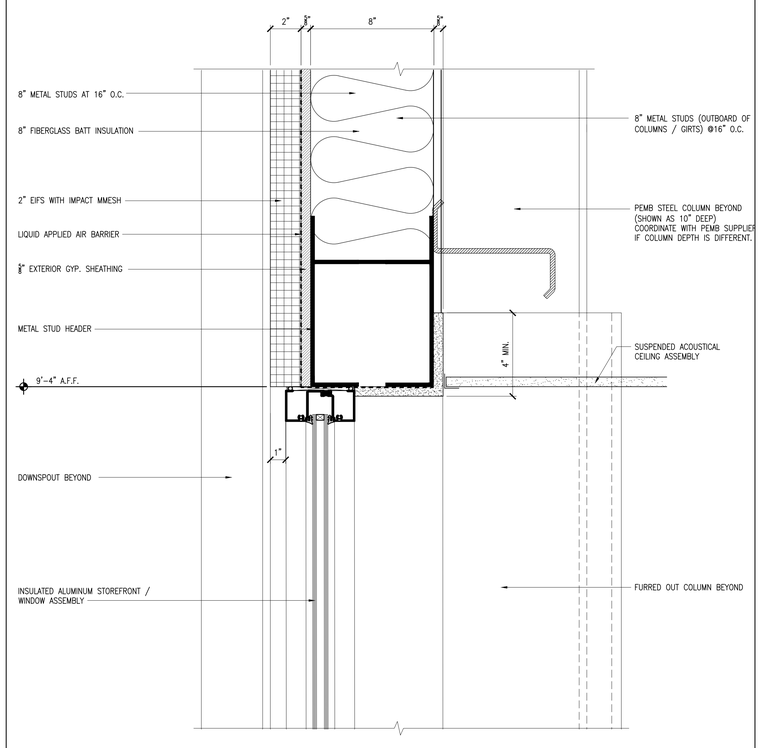
C3 SECTION DETAIL
SCALE: 3" = 1'-0"
REF. BUILDING SECTION ONE



A1 SECTION DETAIL
SCALE: 3" = 1'-0"



A2 SECTION DETAIL
SCALE: 3" = 1'-0"



A3 SECTION DETAIL
SCALE: 3" = 1'-0"
REF. BUILDING SECTION ONE

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Date: 2025.02.07 15:38:01-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

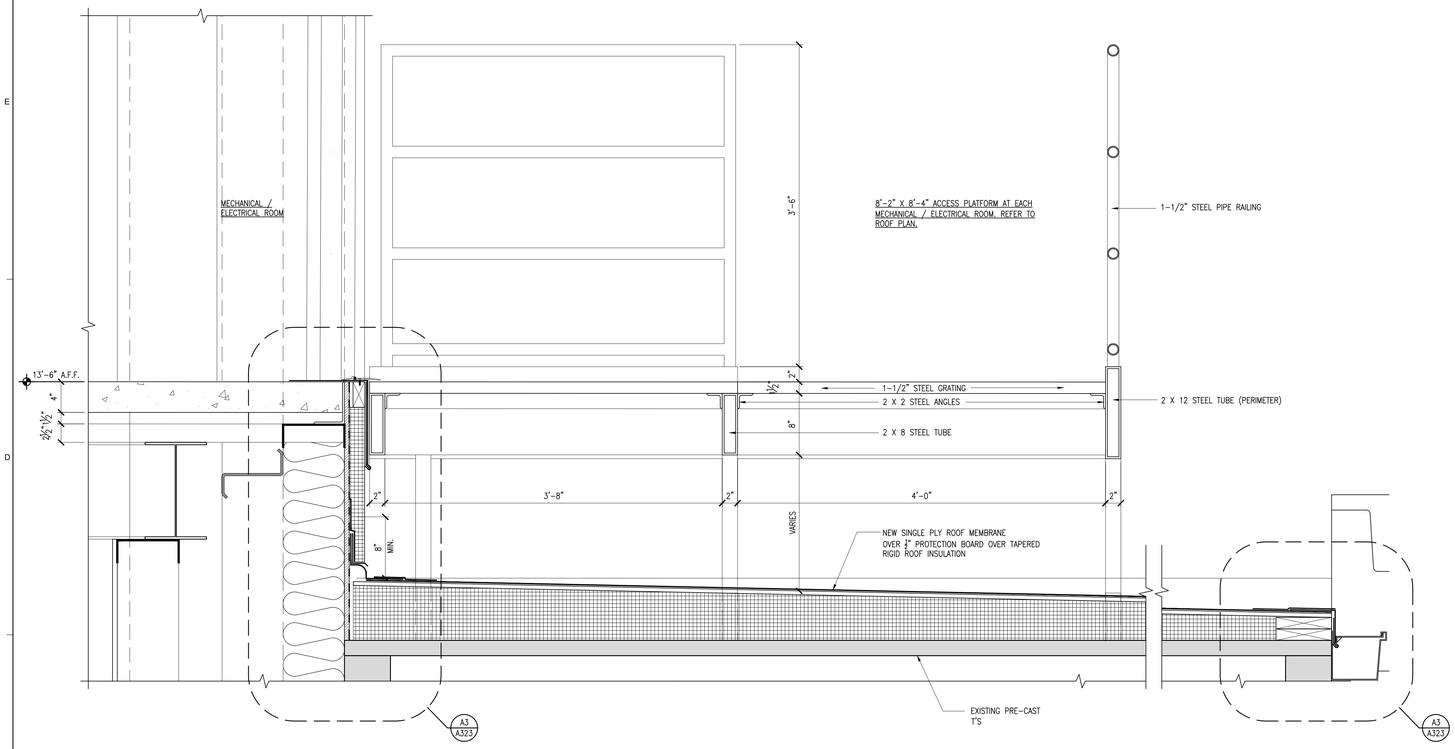
REVISIONS:

No.	Description	Date

SECTION DETAILS

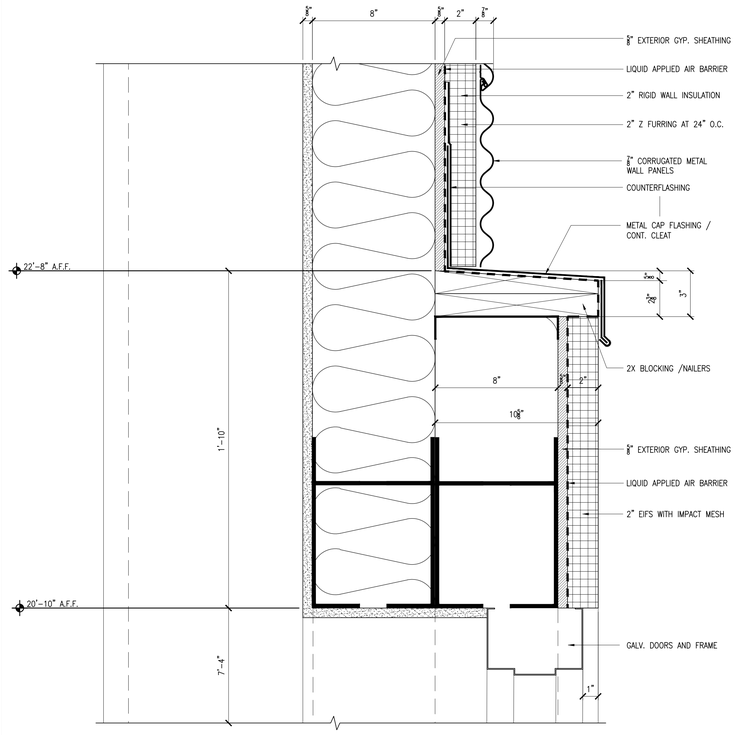
PROJECT NUMBER	22019
DATED	01/31/2025

A322



C1 SECTION DETAIL

SCALE: 1/2" = 1'-0"



C2 SECTION DETAIL

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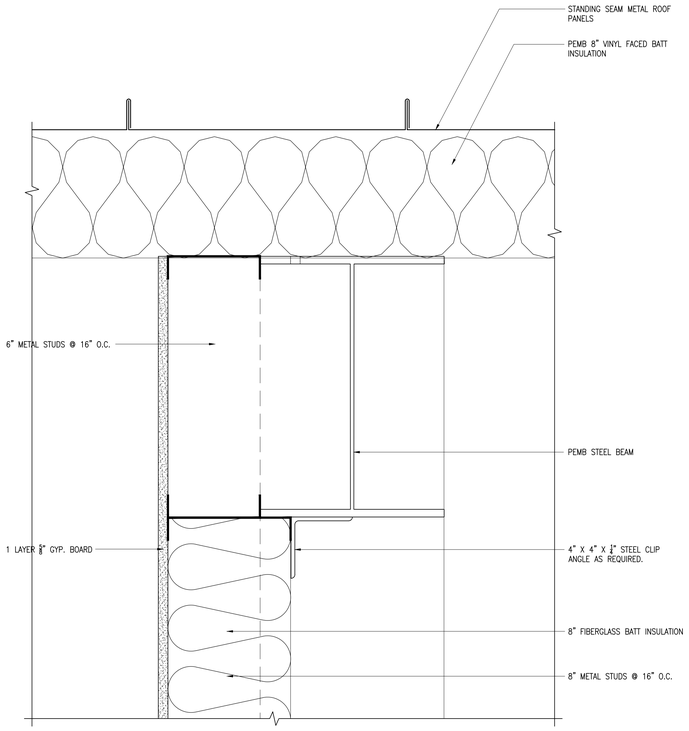
REF. BUILDING SECTION ONE



A1 SECTION DETAIL

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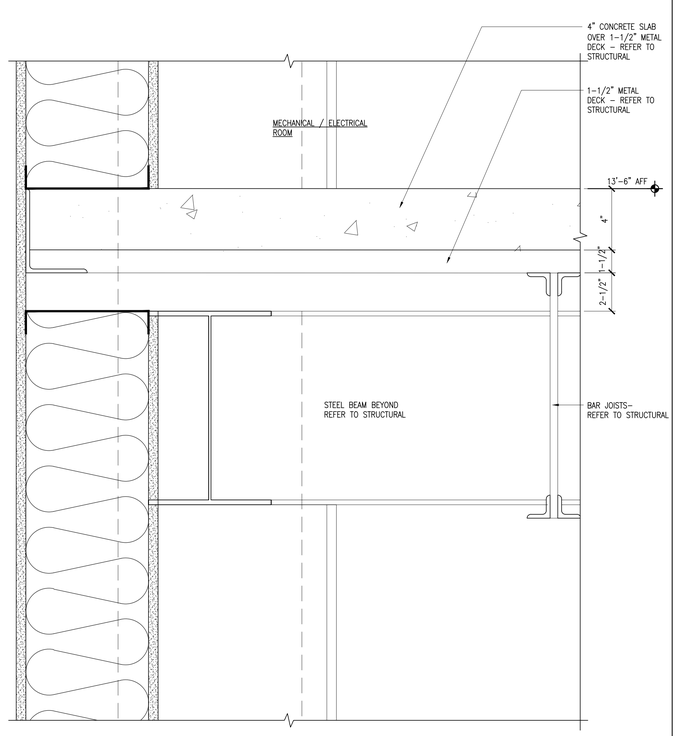

A2 SECTION DETAIL

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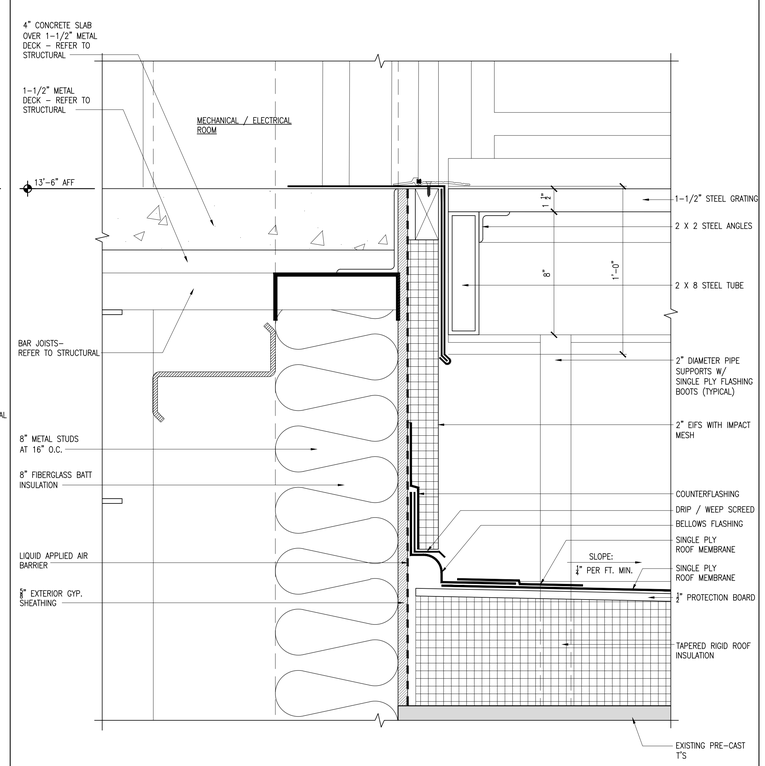

A3 SECTION DETAIL

SCALE: 3" = 1'-0"

REF. BUILDING SECTION ONE

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

SECTION DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

A323

22019
01/31/2025
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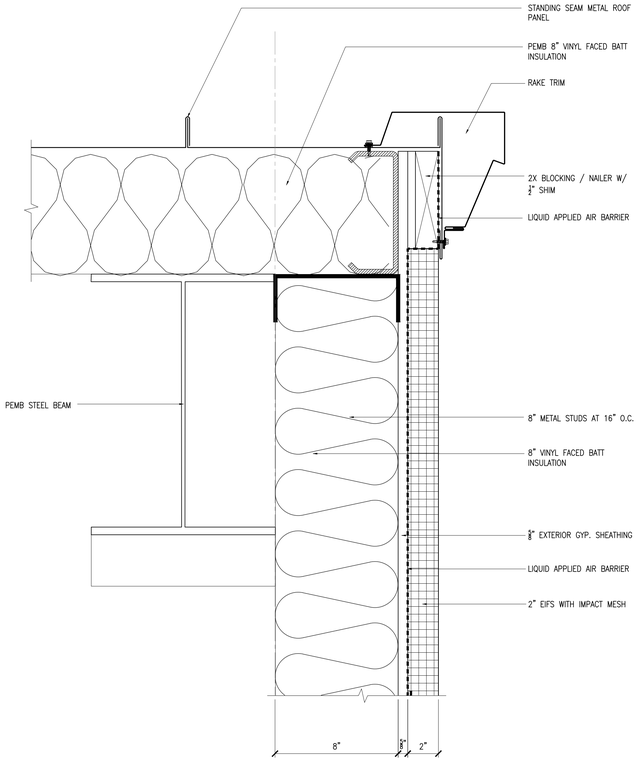

C1 SECTION DETAIL

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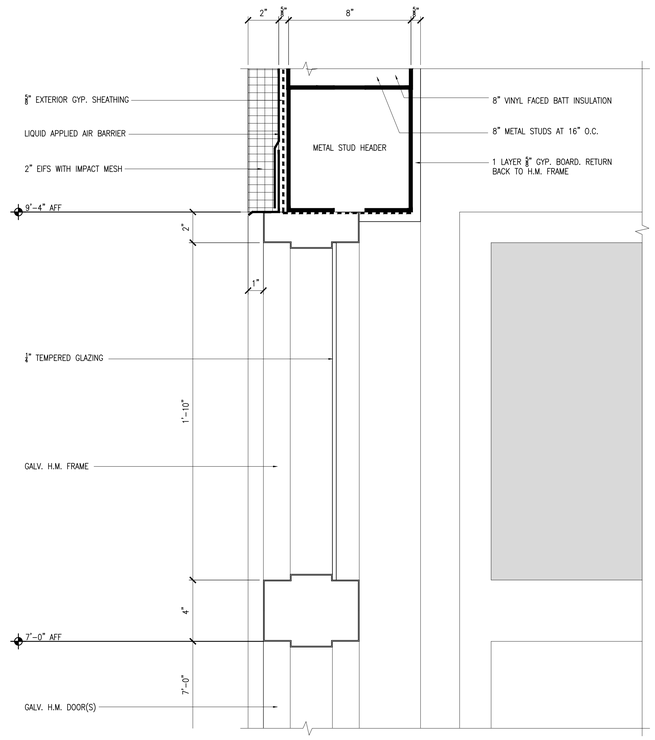

C2 SECTION DETAIL

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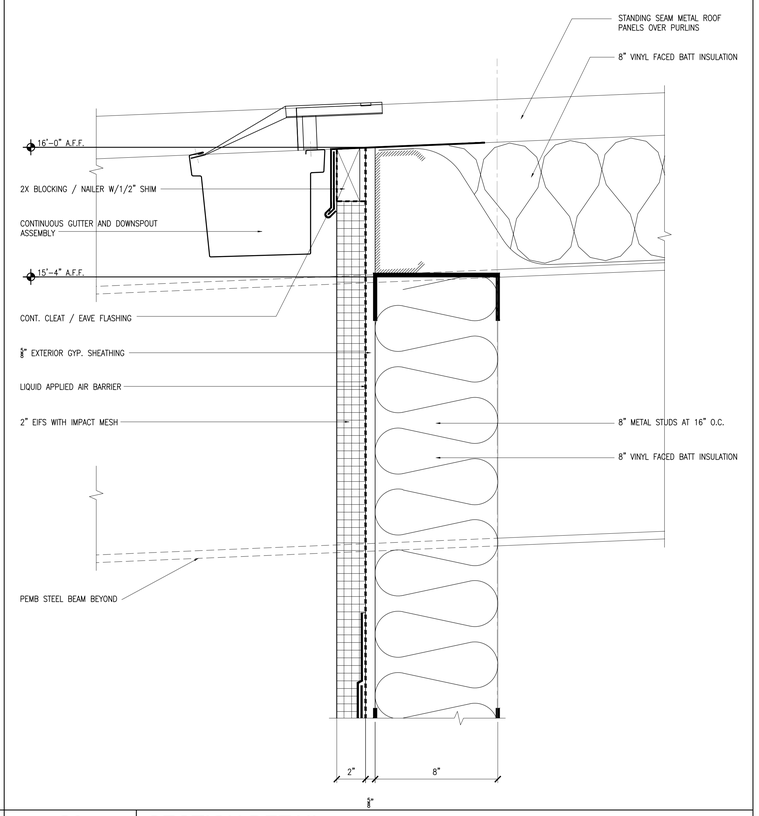
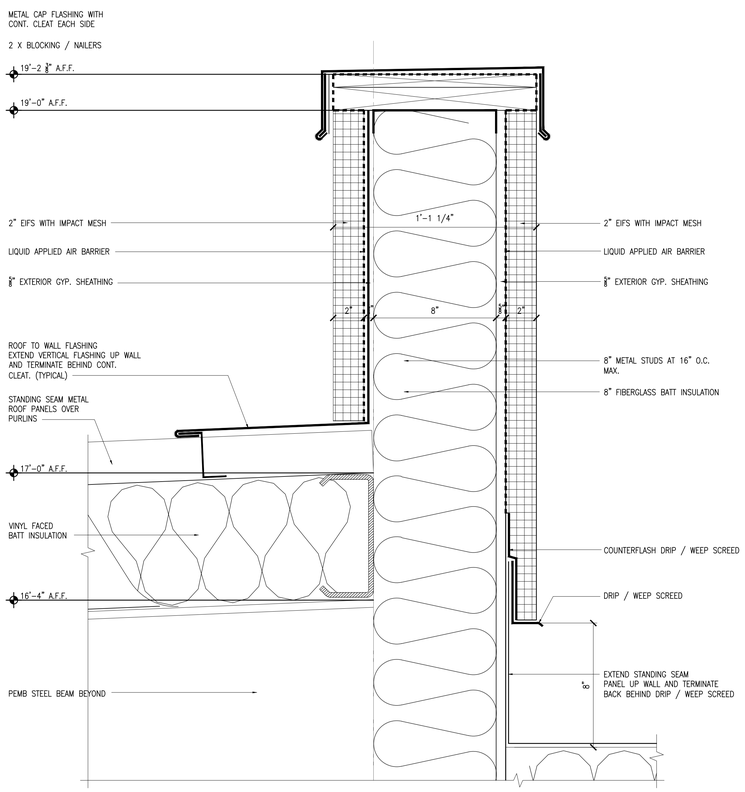


C3 SECTION DETAIL

SCALE: 3" = 1'-0"

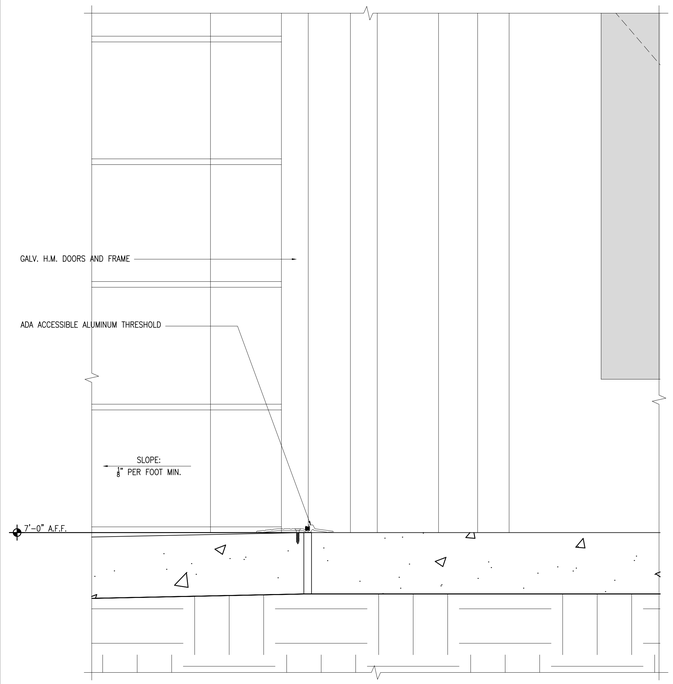
REF. BUILDING SECTION ONE



A1 SECTION DETAIL

SCALE: 3"=1'-0"

(REFERENCE BUILDING SECTION 5)



A2 SECTION DETAIL

SCALE: 3" = 1'-0"

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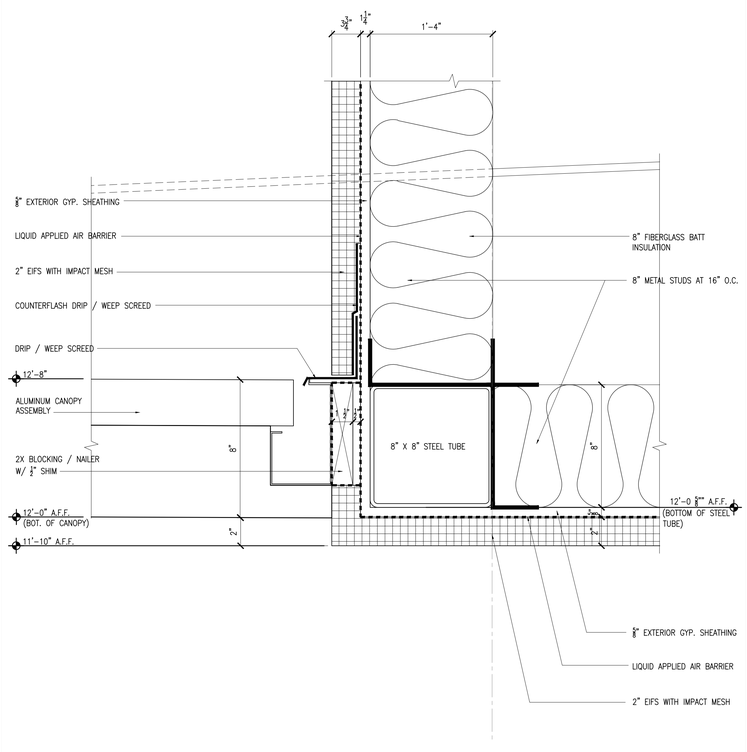

A3 SECTION DETAIL

SCALE: 3" = 1'-0"

REF. BUILDING SECTION ONE

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

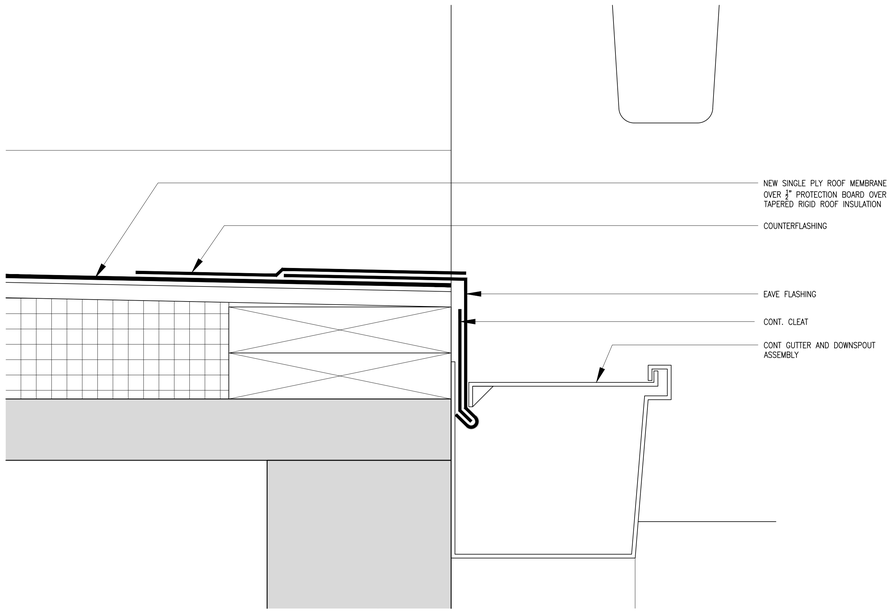
REVISIONS:

No.	Description	Date

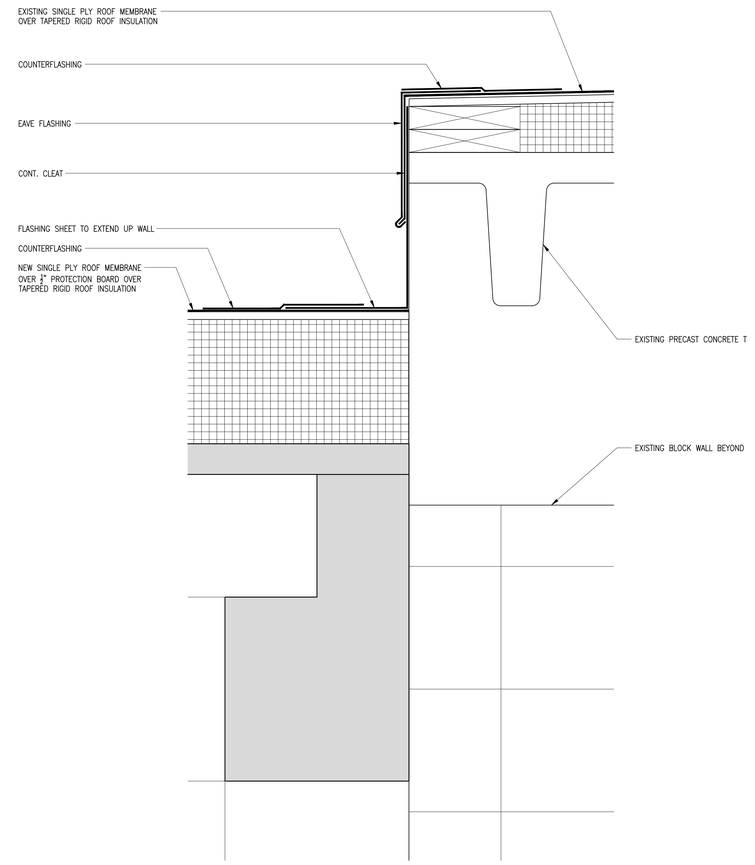
SECTION DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

A324



A1 | SECTION DETAIL
SCALE: 6"=1'-0" | (REFERENCE BUILDING SECTION 5)



A2 | SECTION DETAIL
SCALE: 3"=1'-0" | (REFERENCE BUILDING SECTION 5)

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Date: 2025.02.07 15:39:22-06'00'

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1104 Balboa Avenue, Panama City, FL 32401

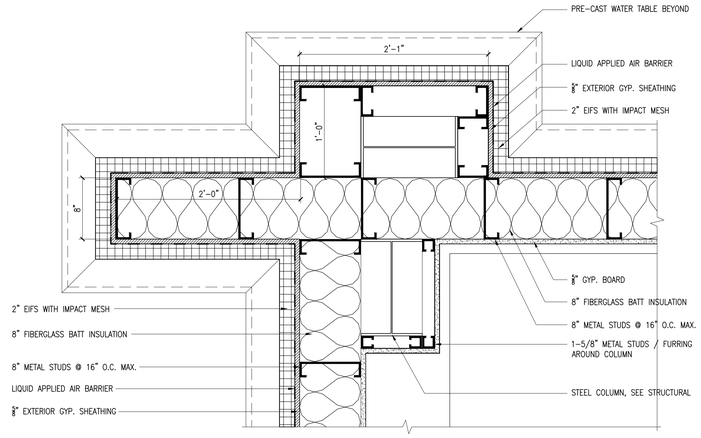
REVISIONS:

No.	Description	Date

SECTION DETAILS

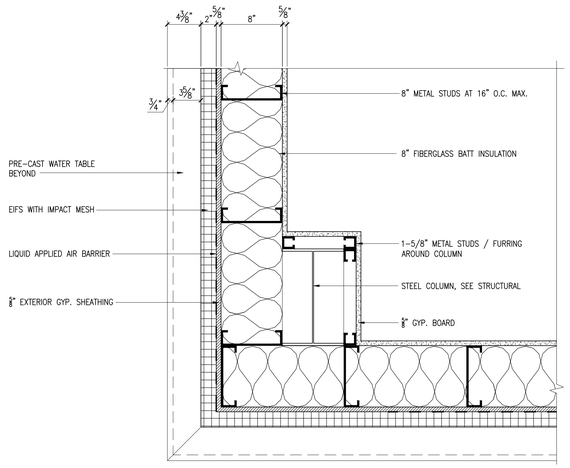
PROJECT NUMBER 22019
DATED 01/31/2025

A325

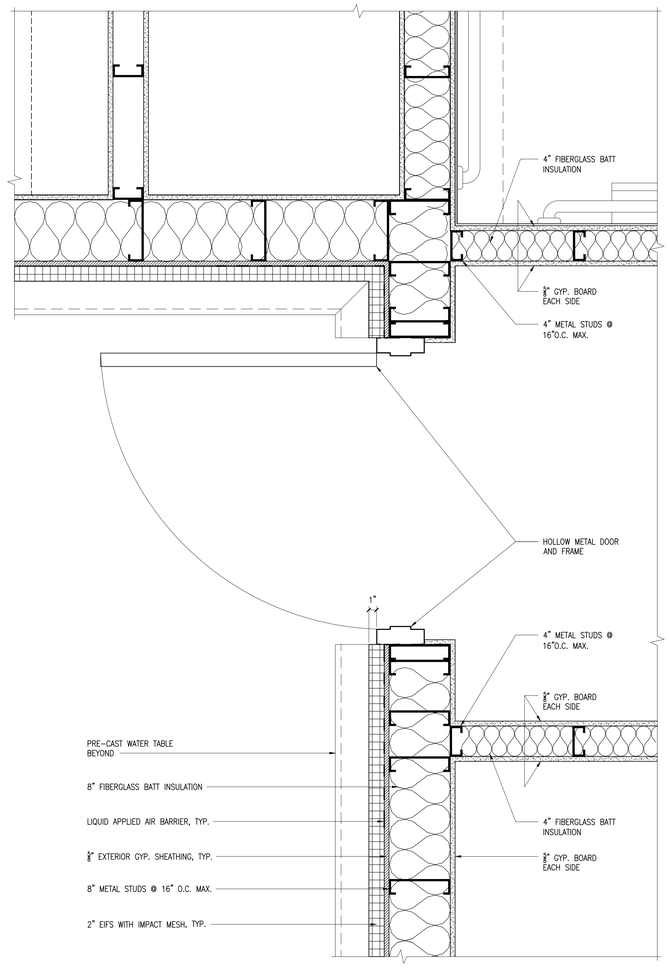


C1 PLAN DETAIL
SCALE: 3" = 1'-0"

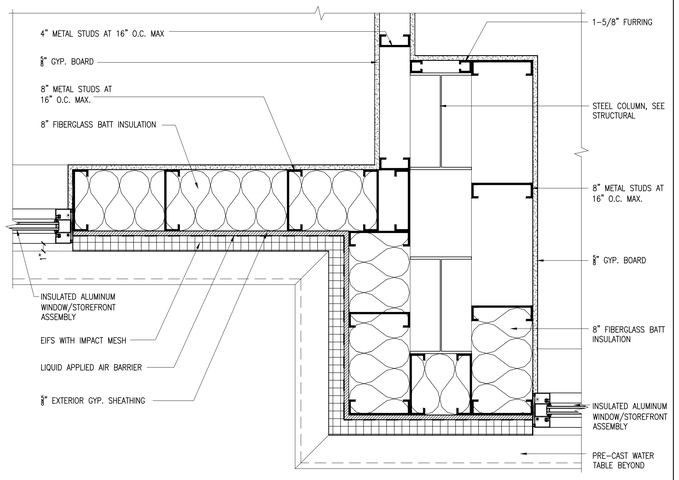
B1 .
SCALE: N/A



A1 PLAN DETAIL
SCALE: 1-1/2" = 1'-0"



B2 PLAN DETAIL
SCALE: 1-1/2" = 1'-0"



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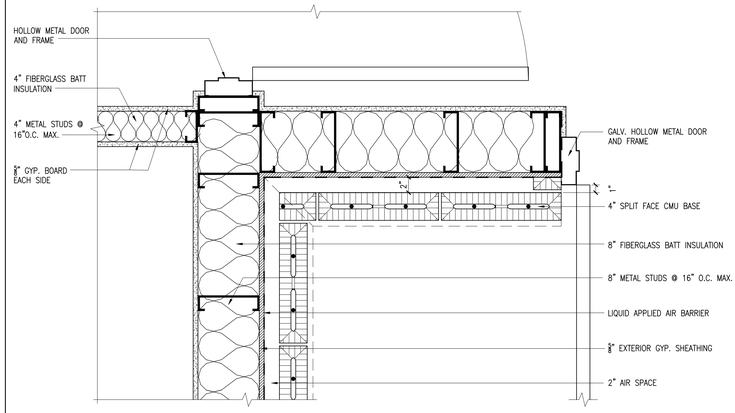
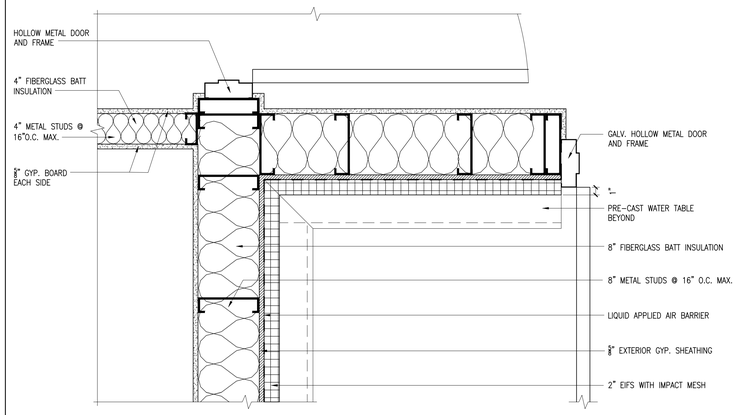
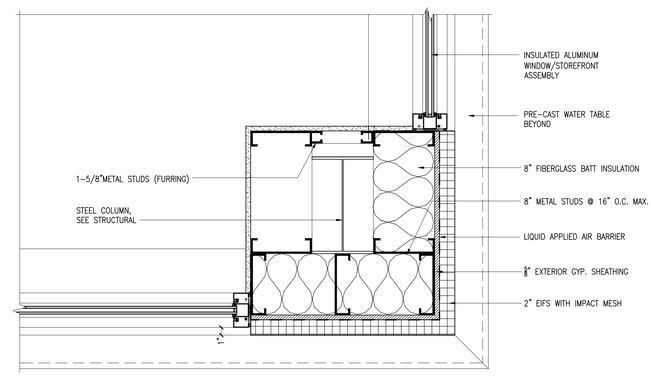
SCALE: 1-1/2" = 1'-0"



C3 PLAN DETAIL (BELOW PRE-CAST WATER TABLE)
SCALE: 1-1/2" = 1'-0"



B3 PLAN DETAIL (ABOVE PRE-CAST WATER TABLE)
SCALE: 1-1/2" = 1'-0"



A3 PLAN DETAIL
SCALE: 1-1/2" = 1'-0"

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1104 Balboa Avenue, Panama City, FL 32401

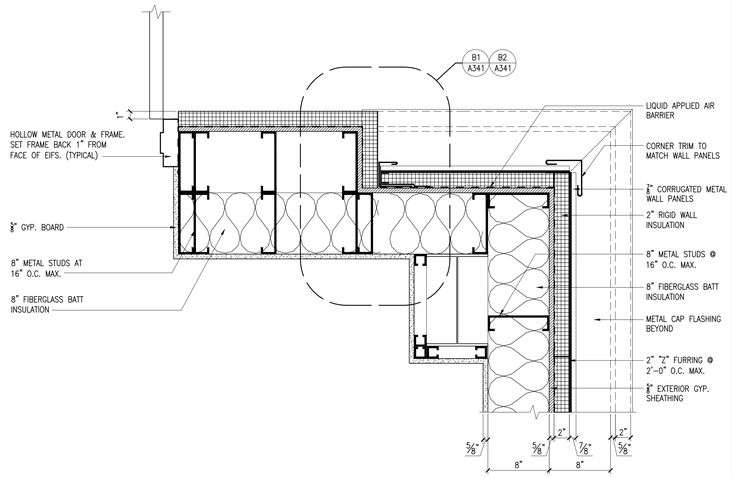
REVISIONS:

No.	Description	Date

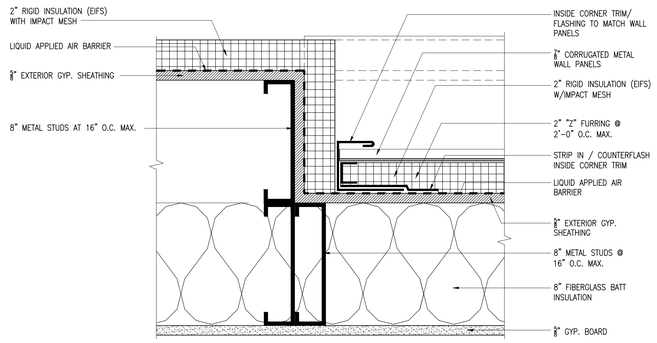
PLAN DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

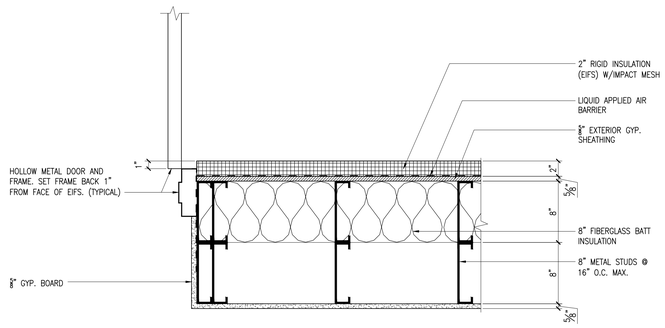
A331



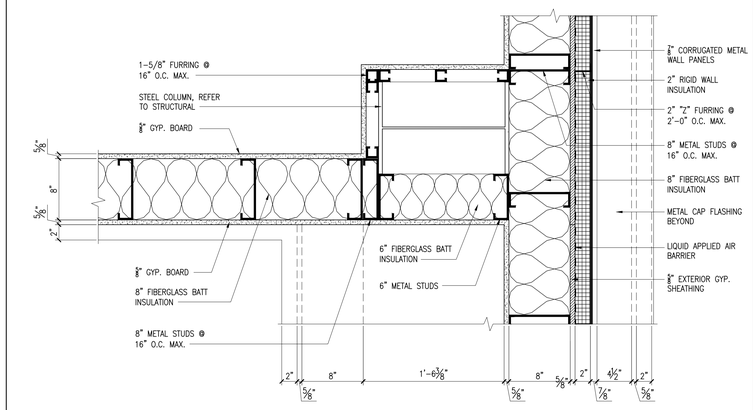
C3	PLAN DETAIL
SCALE: 1-1/2" = 1'-0"	



B1	PLAN DETAIL
SCALE: 3" = 1'-0"	



B2	PLAN DETAIL
SCALE: 1-1/2" = 1'-0"	



B3	PLAN DETAIL
SCALE: 1-1/2" = 1'-0"	

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1104 Balboa Avenue, Panama City, FL 32401

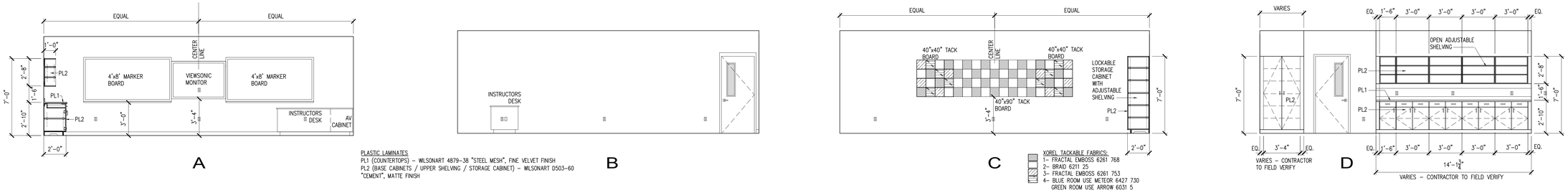
REVISIONS:

No.	Description	Date

PLAN DETAILS

PROJECT NUMBER	**22019**
DATED	01/31/2025

A341



PLASTIC LAMINATES
PL1 (COUNTERTOPS) – WILSONART 4879-38 "STEEL MESH", FINE VELVET FINISH
PL2 (BASE CABINETS / UPPER SHELVING / STORAGE CABINET) – WILSONART D503-60 "CEMENT", MATTE FINISH

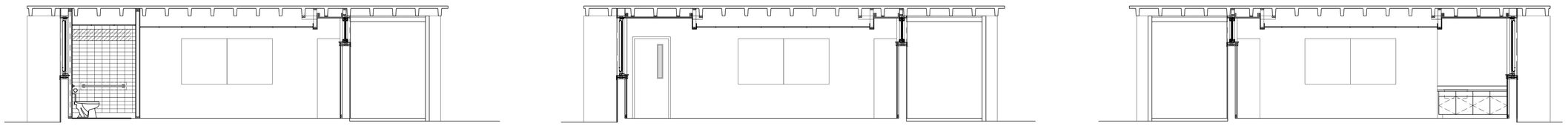
XOREL TACKABLE FABRICS:
1– FRACTAL EMBOSS 6261 768
2– BRAD 6211 25
3– FRACTAL EMBOSS 6261 753
4– BLUE ROOM USE METEOR 6427 730
GREEN ROOM USE ARROW 6031 5

E1 TYPICAL CLASSROOM - INTERIOR ELEVATIONS (BUILDING A)

SCALE: 1/4" = 1'-0" | ROOM 126

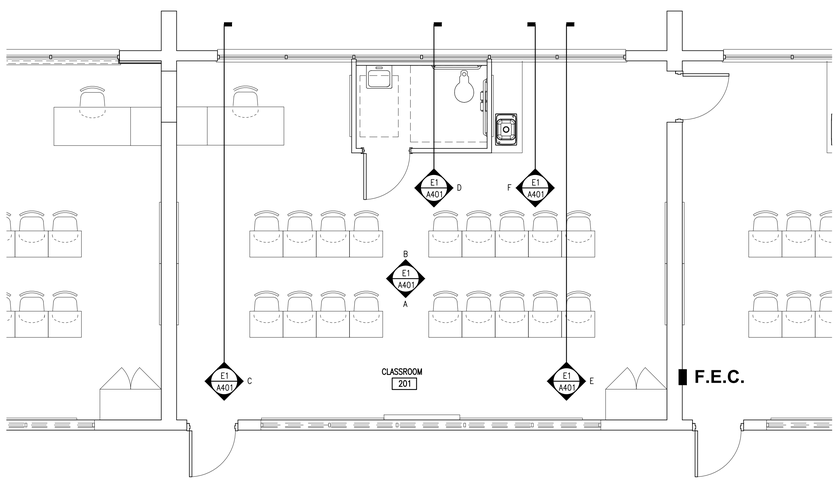
D1 TYPICAL CLASSROOM - INTERIOR ELEVATIONS (BUILDING K)

SCALE: 1/4" = 1'-0" | ROOM 201



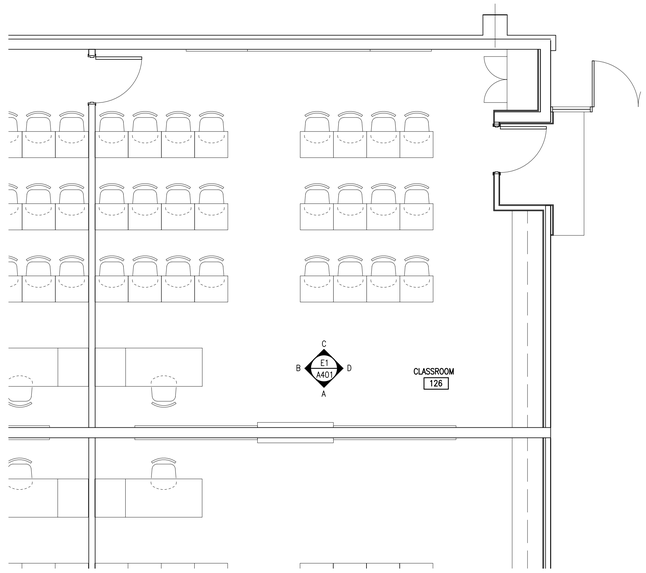
C1 TYPICAL CLASSROOM - INTERIOR ELEVATIONS (BUILDING K)

SCALE: 1/4" = 1'-0" | ROOM 201



A1 ENLARGED PLAN OF TYP. CLASSROOM

SCALE: 1/4" = 1'-0" | BUILDING K



A3 ENLARGED PLAN OF TYP. CLASSROOM

SCALE: 1/4" = 1'-0" | BUILDING A

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

ENLARGED CLASSROOM PLAN
- INTERIOR ELEVATIONS

PROJECT NUMBER 22019
DATED 01/31/2025

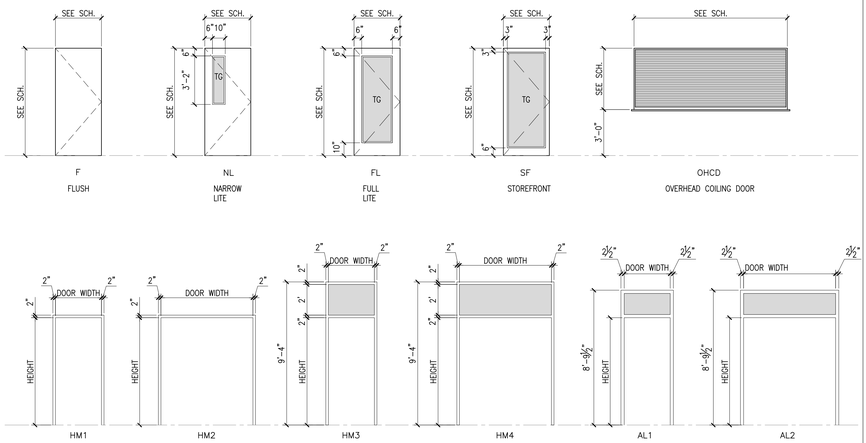
A401

DOOR SCHEDULE

DOOR NO.	DOOR TYPE	DOOR MATERIAL	DOOR SIZE	FRAME TYPE	FRAME MATERIAL	FRAME: DOOR DETAILS ARE LABELED ON THE "TYPES" OF THIS SHEET (DETAIL LOCATED ON SHEET A501.2 & A501.3) HEAD	JAMB	SILL	FIRE RATING LABEL	REMARKS SEE SPECIFIC NOTES
C007	NL	GHM	3'-0"x7'-0"	HM1	GHM	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
100A	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
100B	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
100C	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
100D	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
101	NL	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A3 / 501.2	60 MIN	
102	NL	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	60 MIN	
103	NL	SCWD	PR 4'-0"x7'-0"	HM2	HM	E2 / 501.2	D2 / 501.2	A3 / 501.2	60 MIN	
106A	SF	SCWD	PR 3'-0"x7'-0"	AL2	HM	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
106B	SF	SCWD	PR 3'-0"x7'-0"	AL2	HM	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
106C	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
106D	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
107	FL	SCWD	3'-0"x7'-0"	HM3	HM	E3 / 501.2	D2 / 501.2	A1 / 501.2	N/A	
107A	NL	GHM	3'-0"x7'-0"	HM3	GHM	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	DOOR ADDED ON REV. 2
108	FL	SCWD	3'-0"x7'-0"	HM1	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
108A	OHCD SEE SPECS		10'-0"Wx4'-0"H"	O.H. ROLLING COIL DOOR		E1 / 501.3 SIM	D1 / 501.3 SIM	C1 / 501.3 SIM	N/A	BASIS OF DESIGN - MANUF.: OVERHEAD DOOR / MODEL: 650 ROLLING COUNTER DOOR, FACE MOUNT / OPERATION: MANUAL PUSH UP RH
109	F	SCWD	3'-6"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
110	F	SCWD	3'-6"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
111	F	SCWD	3'-6"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
112	F	GHM	3'-0"x7'-0"	HM1	GHM	C3 / 501.2	B2 & B3 / A501.2	A2 / 501.2	N/A	
DOORS LISTED BELOW WERE DELETED OR RENUMBERED ON SCOPE REDUCTION										
101A										
113										
114										
115										
116										
117										
118										
119										
120										
121										
122										
122A										
122B										
123										
123A										
124										
124A										
125										
125A										
126										
126A										
127										
127A										
128										
128A										
129										
130A										
131A										
132										
133										
201										
203										
C001										
C001A										
C002										
C003										
C003A										
C004										
C004A										
C005										
C005A										
C006										

C3 DOOR AND FRAME SCHEDULE

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



B3 H.M. DOOR AND FRAME TYPES

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

DOOR SCHEDULE GENERAL NOTES

1. MATERIAL ABBREVIATIONS
   HM = HOLLOW METAL
   GHM = GALVANIZED HOLLOW METAL
   SCWD = SOLID CORE WOOD DOOR
   SF = ALUMINUM STOREFRONT
   AL = ALUMINUM
   PR = PAIR
2. UNLESS NOTED OTHERWISE WHERE GLASS OCCURS IN DOORS PROVIDE TEMPERED GLASS (TG)
3. GLASS TYPE ABBREVIATIONS SEE SPECIFICATIONS
4. UNLESS NOTED OTHERWISE ALL DOORS ARE 1-3/4" THICK.
5. SEE DOOR HARDWARE SPECIFICATIONS FOR HARDWARE LOCKSET SCHEDULE.
6. ALL STOREFRONT DOOR GLASS TO BE LAMINATED GLASS (LG).
7. ALL STOREFRONT TRANSOM GLASS TO BE INSULATED, SEE SPECIFICATIONS.
8. EXTERIOR AND WET AREA HOLLOW METAL FRAMES AND DOORS TO BE GALVANIZED.
9. ALL CLASSROOM DOORS OFF OF CORRIDORS TO HAVE A CLOSER.

A3 GENERAL NOTES

SCALE: NTS

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	SCOPE REDUCTION	2/6/2026

ALTERNATE
DOOR & WINDOW
SCHEDULES

PROJECT NUMBER	22019
DATED	01/31/2025

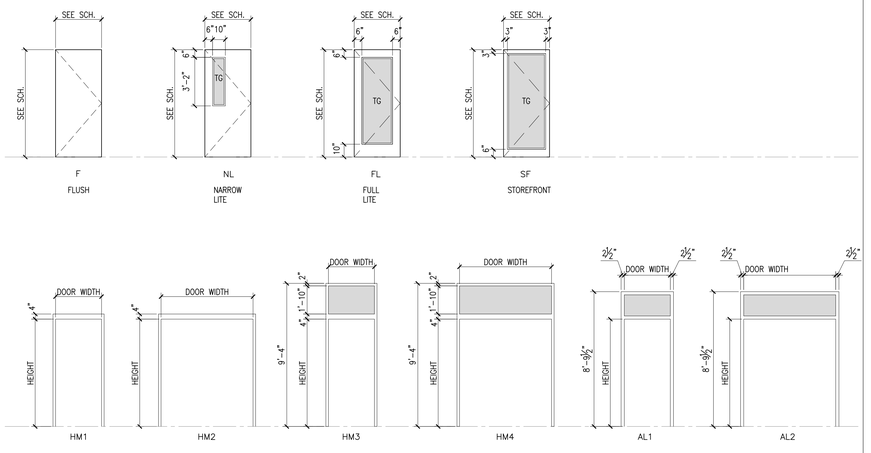
A501.A

DOOR SCHEDULE

DOOR SEE B3/A501 FOR DOOR TYPES						FRAME				
DOOR NO.	DOOR TYPE	DOOR MATERIAL	DOOR SIZE	FRAME TYPE	FRAME MATERIAL	DOOR DETAILS ARE LABELED ON THE "TYPES" OF THIS SHEET			FIRE RATING LABEL	REMARKS SEE SPECIFIC NOTES
						HEAD	JAMB	SILL		
						(DETAIL LOCATED ON SHEET A501.2 & A501.3)				
100	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
100A	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
101	NL	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A3 / 501.2	60 MIN	
101A	NL	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	60 MIN	
101B	NL	GHM	3'-0"x7'-0"	HM1	GHM	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
103	NL	SCWD	PR 4'-0"x7'-0"	HM2	HM	E2 / 501.2	D2 / 501.2	A3 / 501.2	60 MIN	
106A	SF	SCWD	PR 3'-0"x7'-0"	AL2	HM	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
106B	SF	SCWD	PR 3'-0"x7'-0"	AL2	HM	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
106C	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
106D	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
107	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
108	FL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
109	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
110	FL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
110A	FL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
111	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
112	FL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
113	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
114	F	SCWD	3'-6"x7'-0"	HM3	HM	E3 / 501.2	D2 / 501.2	A1 / 501.2	N/A	
115	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
116	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
117	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
118	F	SCWD	3'-6"x7'-0"	HM3	HM	E3 / 501.2	D2 / 501.2	A1 / 501.2	N/A	
119	F	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
120	F	SCWD	3'-6"x7'-0"	HM3	HM	E3 / 501.2	D2 / 501.2	A1 / 501.2	N/A	
121	F	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
122	NL	SCWD	PR 3'-0"x7'-0"	HM4	HM	E3 / 501.2	D2 / 501.2	A1 / 501.2	N/A	
122A	F	SCWD	PR 3'-0"x7'-0"	HM2	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
122B	NL	GHM	3'-0"x7'-0"	HM3	HM	C3 / 501.2	B2 & B3 / A501.2	A2 / 501.2	N/A	
123	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
123A	F	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
124	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
124A	F	GHM	3'-0"x7'-0"	HM3	GHM	C3 / 501.2	B2 & B3 / A501.2	A2 / 501.2	N/A	
125	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
125A	F	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
126	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
126A	F	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
127	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
127A	F	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
128	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
128A	F	SCWD	3'-0"x7'-0"	HM1	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
129	F	GHM	PR 3'-0"x7'-0"	HM4	GHM	C3 / 501.2	B2 & B3 / A501.2	A2 / 501.2	N/A	
130A	F	SCWD	PR 2'-6"x7'-0"	HM2	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
131A	F	SCWD	PR 2'-6"x7'-0"	HM2	HM	D1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
132	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
133	NL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
201	F	GHM	PR 3'-0"x7'-0"	HM2	GHM	C2 / 501.2	B2 / 501.2	A2 / 501.2	N/A	
203	F	GHM	PR 3'-0"x7'-0"	HM2	GHM	C2 / 501.2	B2 / 501.2	A2 / 501.2	N/A	
C001	FL	SCWD	3'-0"x7'-0"	HM3	HM	E3 / 501.2	D2 / 501.2	A1 / 501.2	N/A	
C001A	SF	AL	3'-0"x7'-0"	AL1	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
C002	FL	SCWD	3'-0"x7'-0"	HM3	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
C003	FL	SCWD	PR 3'-0"x7'-0"	HM4	HM	E4 / 501.2	D2 / 501.2	A3 / 501.2	N/A	
C003A	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
C004	NL	SCWD	PR 3'-0"x7'-0"	HM4	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
C004A	NL	SCWD	PR 3'-0"x7'-0"	HM4	HM	C1 / 501.2	B1 / 501.2	A1 / 501.2	N/A	
C005	FL	SCWD	PR 3'-0"x7'-0"	HM4	HM	E4 / 501.2	D2 / 501.2	A3 / 501.2	N/A	
C005A	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	
C006	SF	AL	PR 3'-0"x7'-0"	AL2	AL	C2 / 501.3	B1 & B2 / A501.3	A1 / 501.3	N/A	

C3 DOOR AND FRAME SCHEDULE

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



B3 H.M. DOOR AND FRAME TYPES

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

DOOR SCHEDULE GENERAL NOTES

1. MATERIAL ABBREVIATIONS
   HM = HOLLOW METAL
   GHM = GALVANIZED HOLLOW METAL
   SCWD = SOLID CORE WOOD DOOR
   SF = ALUMINUM STOREFRONT
   AL = ALUMINUM
   PR = PAIR
2. UNLESS NOTED OTHERWISE WHERE GLASS OCCURS IN DOORS PROVIDE TEMPERED GLASS (TG)
3. GLASS TYPE ABBREVIATIONS SEE SPECIFICATIONS
4. UNLESS NOTED OTHERWISE ALL DOORS ARE 1-3/4" THICK.
5. SEE DOOR HARDWARE SPECIFICATIONS FOR HARDWARE LOCKSET SCHEDULE.
6. ALL STOREFRONT DOOR GLASS TO BE LAMINATED GLASS (LG).
7. ALL STOREFRONT TRANSOM GLASS TO BE INSULATED, SEE SPECIFICATIONS.
8. EXTERIOR AND WET AREA HOLLOW METAL FRAMES AND DOORS TO BE GALVANIZED.
9. ALL CLASSROOM DOORS OFF OF CORRIDORS TO HAVE A CLOSER.

A3 GENERAL NOTES

SCALE: NTS

DAG ARCHITECTS

DAG Architects AR0009694
455 Harrison Ave Suite I Panama City, FL 32401
850.387.1671
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100% CONSTRUCTION DOCUMENTS

Digitally signed by Owen Eric Gipson
Date: 2025.02.07 15:40:55-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

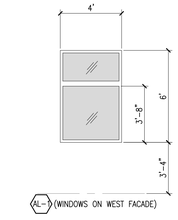
REVISIONS:

No.	Description	Date

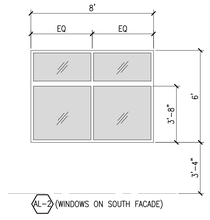
DOOR & WINDOW SCHEDULES

PROJECT NUMBER	22019
DATED	01/31/2025

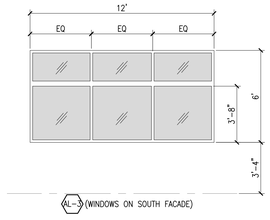
A501



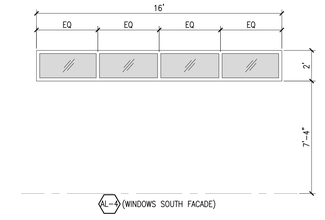
BASIS OF DESIGN: FL 550 (CORAL INDUSTRIES) – 2-1/2" X 5" WITH 1-5/16 INSULATED LAMINATED GLAZING.



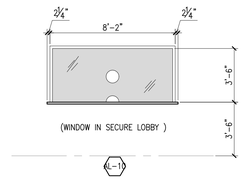
BASIS OF DESIGN: FL 550 (CORAL INDUSTRIES) – 2-1/2" X 5" WITH 1-5/16 INSULATED LAMINATED GLAZING.



BASIS OF DESIGN: FL 550 (CORAL INDUSTRIES) – 2-1/2" X 5" WITH 1-5/16 INSULATED LAMINATED GLAZING.



BASIS OF DESIGN: FL 550 (CORAL INDUSTRIES) – 2-1/2" X 5" WITH 1-5/16 INSULATED LAMINATED GLAZING.



BASIS OF DESIGN: FL 550 (CORAL INDUSTRIES) – 2-1/2" X 5" WITH 1-5/16 INSULATED LAMINATED GLAZING.

C3	STOREFRONT WINDOW TYPES / ELEVATIONS
SCALE: 1/4" = 1'-0"	

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025

DAG ARCHITECTS

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STATE OF FLORIDA
OWEN E. GIPSON
AR0009694
REGISTERED ARCHITECT

Digitally signed by Owen Eric Gipson
Date: 2025.02.07 15:41:26-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

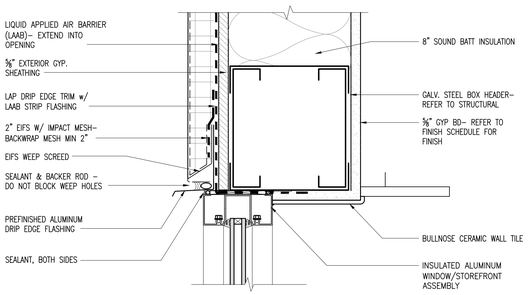
REVISIONS:

No.	Description	Date

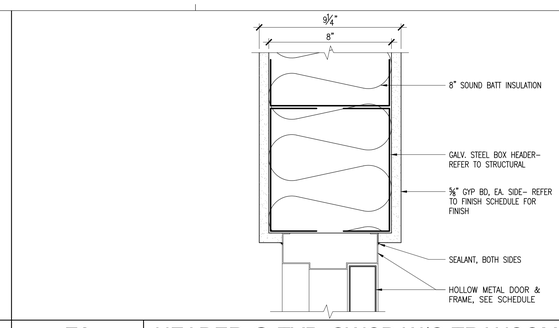
WINDOW AND WALL PANEL TYPES / ELEVATIONS

PROJECT NUMBER	22019
DATED	01/31/2025

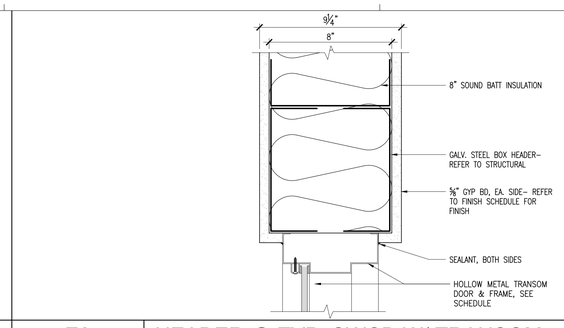
A501.1



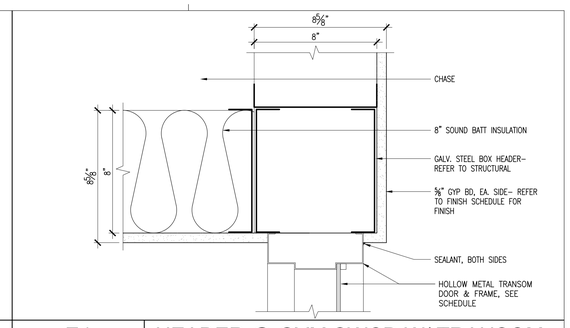
E1	HEAD @ R.R. TRANSOM WINDOW
SCALE: 3"=1'-0"	



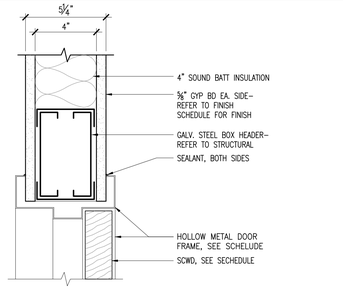
E2	HEADER @ TYP. SWCD W/O TRANSOM
SCALE: 3"=1'-0"	8" INTERIOR GYP. BD. WALL



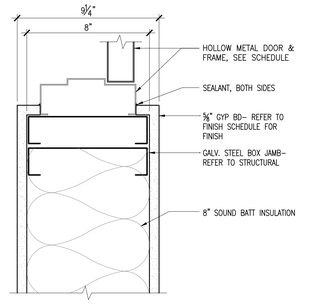
E3	HEADER @ TYP. SWCD W/ TRANSOM
SCALE: 3"=1'-0"	8" INTERIOR GYP. BD. WALL



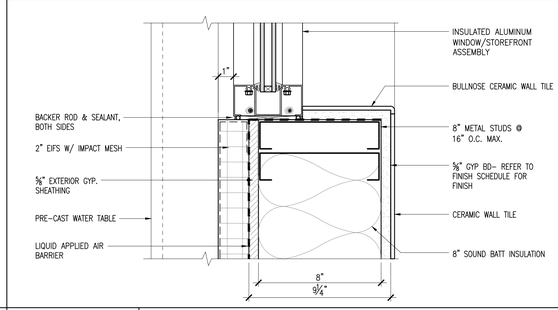
E4	HEADER @ GYM SWCD W/ TRANSOM
SCALE: 3"=1'-0"	8" INTERIOR GYP. BD. CHASE WALL



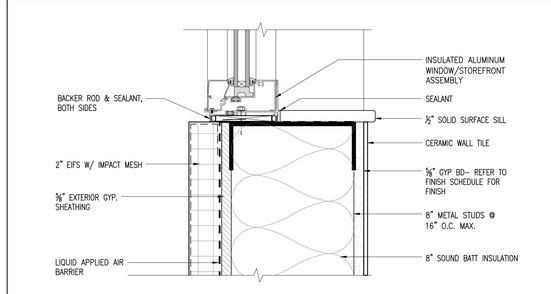
D1	HEAD W/O TRANSOM @ TYP. SCWD
SCALE: 3"=1'-0"	4" INTERIOR GYP. BD. WALL



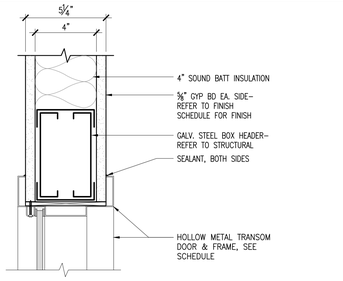
D2	JAMB @ TYP. INTERIOR SCWD
SCALE: 3"=1'-0"	8" INTERIOR GYP. BD. WALL



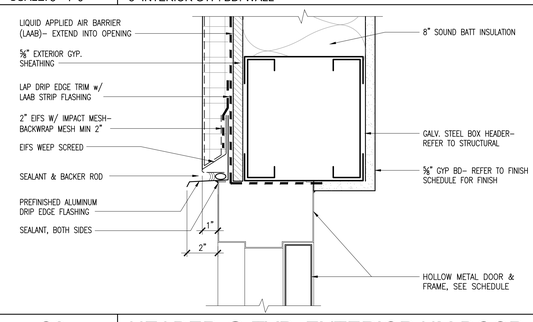
D3	JAMB @ R.R. TRANSOM WINDOW
SCALE: 3"=1'-0"	



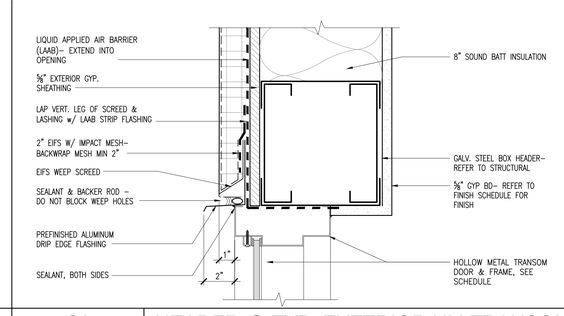
D4	SILL @ R.R. TRANSOM WINDOW
SCALE: 3"=1'-0"	



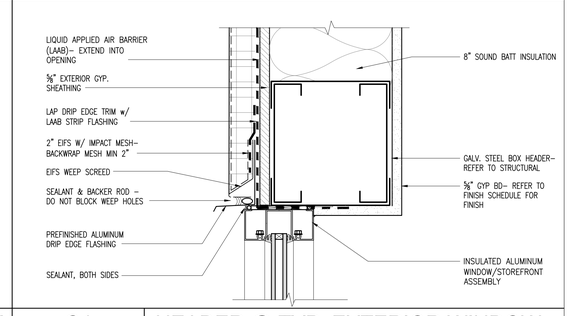
C1	HEADER W/ TRANSOM @ TYP. SCWD
SCALE: 3"=1'-0"	4" INTERIOR GYP. BD. WALL



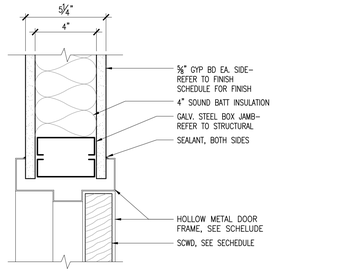
C2	HEADER @ TYP. EXTERIOR HM DOOR
SCALE: 3"=1'-0"	8" EXTERIOR WALL



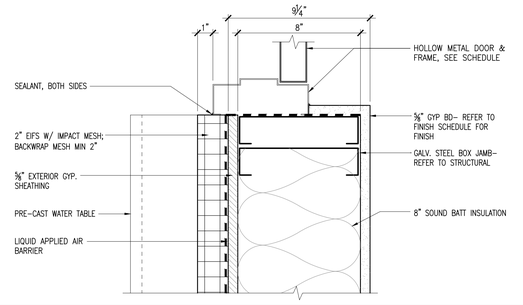
C3	HEADER @ TYP. EXTERIOR HM TRANSOM
SCALE: 3"=1'-0"	8" EXTERIOR WALL



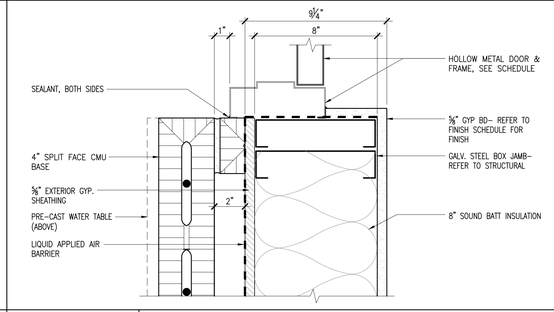
C4	HEADER @ TYP. EXTERIOR WINDOW
SCALE: 3"=1'-0"	8" EXTERIOR WALL



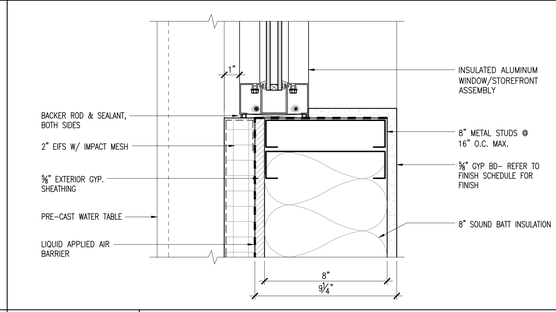
B1	JAMB @ TYP. INTERIOR SCWD
SCALE: 3"=1'-0"	4" INTERIOR GYP. BD. WALL



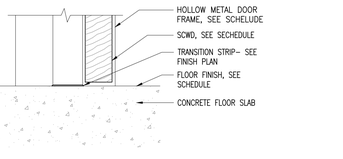
B2	JAMB @ TYP. EXTERIOR HM DOOR
SCALE: 3"=1'-0"	ABOVE WATER TABLE



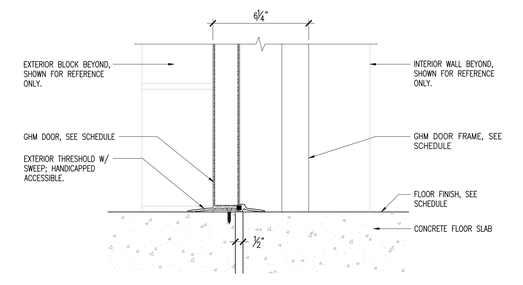
B3	JAMB @ TYP. EXTERIOR HM DOOR
SCALE: 3"=1'-0"	BELOW WATER TABLE



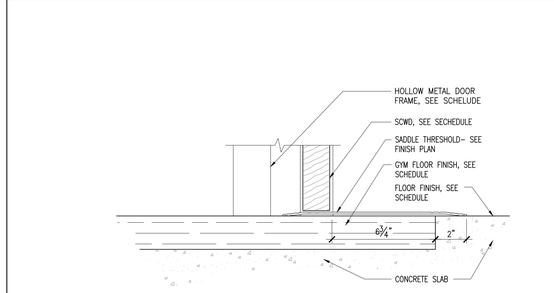
B4	JAMB @ TYP. EXTERIOR WINDOW
SCALE: 3"=1'-0"	8" EXTERIOR WALL



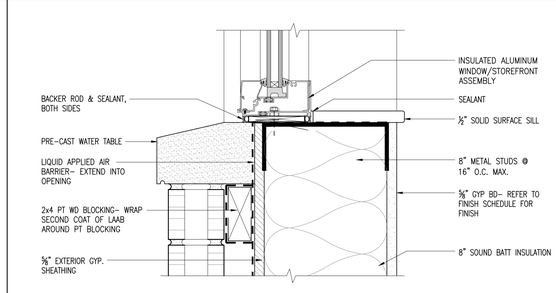
A1	THRESHOLD @ TYP. SCWD
SCALE: 3"=1'-0"	4" OR 8" INTERIOR GYP. BD. WALL



A2	THRESHOLD @ EXTERIOR HM DOOR
SCALE: 3"=1'-0"	8" EXTERIOR WALL



A3	THRESHOLD @ GYM DOOR
SCALE: 3"=1'-0"	INTERIOR



A4	SILL @ TYP. EXTERIOR WINDOW
SCALE: 3"=1'-0"	8" EXTERIOR WALL

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STATE OF FLORIDA
Owen E. Gipson
AR0017964
REGISTERED ARCHITECT

Digitally signed by Owen Eric Gipson
Date: 2025.02.07 15:41:51-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

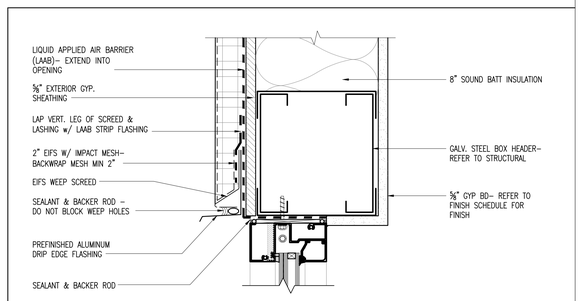
REVISIONS:

No.	Description	Date

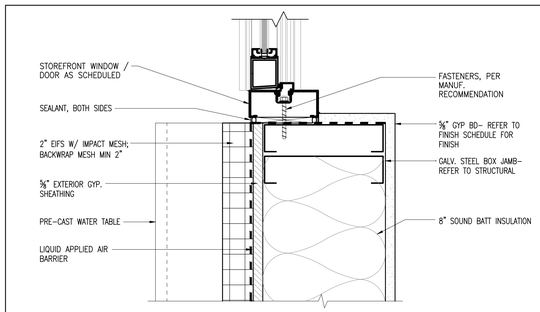
HEAD, JAMB, & SILL DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

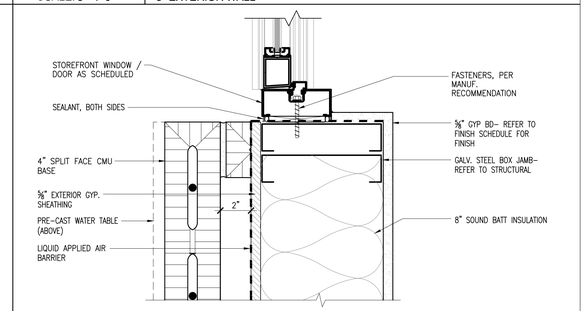
A501.2



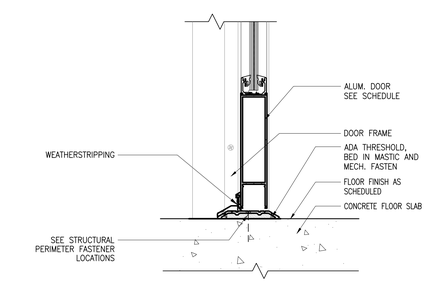
C2	HEADER @ TYP. EXTERIOR SF DOOR
SCALE: 3"=1'-0"	8" EXTERIOR WALL



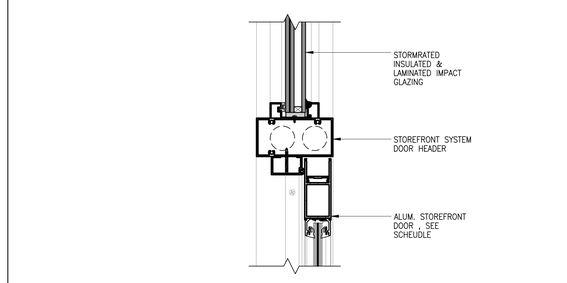
B1	JAMB @ TYP. EXTERIOR SF DOOR
SCALE: 3"=1'-0"	ABOVE WATER TABLE



B2	JAMB @ TYP. EXTERIOR SF DOOR
SCALE: 3"=1'-0"	BELOW WATER TABLE



A1	THRESHOLD @ EXTERIOR SF DOOR
SCALE: 3"=1'-0"	8" EXTERIOR WALL



A2	HEADER @ TYP. EXT TRANSOM DOOR
SCALE: 3"=1'-0"	8" EXTERIOR WALL

DAG ARCHITECTS

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100% CONSTRUCTION DOCUMENTS

Digitally signed by Owen Eric Gipson
Date: 2025.02.07 15:42:20-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

HEAD, JAMB, & SILL DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

A501.3

FIRST FLOOR FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	FLOOR BASE	WALLS								CEILING			REMARKS
		FINISH		NORTH		EAST		SOUTH		WEST		MATERIAL	FINISH	HEIGHT	
				MAT.	FINISH	MAT.	FINISH	MAT.	FINISH	MAT.	FINISH				
C007	CORRIDOR	CONC	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	10'-0"	
100	GYM	WD	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
101	EQ. STORAGE	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	10'-0"	
102	STAGE	WD	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
103	TABLE/CHAIR STORAGE	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	10'-0"	
104	MEN	EPXF	-	CWT	-	CWT	-	CWT	-	CWT	-	GB	PTD	10'-0"	
105	WOMEN	EPXF	-	CWT	-	CWT	-	CWT	-	CWT	-	GB	PTD	10'-0"	
106	ENTRY VESTIBULE	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
107	OPEN	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
108	CONCESSIONS	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
109	TELECOM	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
110	ELECTRICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	9'-4"	
111	MECHANICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	9'-4"	
112	FIRE RISER	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	9'-4"	
ROOMS BELOW WERE DELETED OR RENUMBERED ON SCOPE REDUCTION															
113	OFFICE														
114	TELECOM														
115	SUPPLIES														
116	OFFICE														
117	PRINCIPAL														
118	ELECTRICAL														
119	WOMEN														
120	MECHANICAL														
121	MEN														
122	WARMING KITCHEN														
122A	CLOSET														
123	CLASSROOM														
123A	MECHANICAL														
124	CLASSROOM														
124A	MECHANICAL														
125	CLASSROOM														
125A	MECHANICAL														
126	CLASSROOM														
126A	MECHANICAL														
127	CLASSROOM														
127A	MECHANICAL														
128	CLASSROOM														
128A	MECHANICAL														
129	STORAGE														
130	BOYS														
130A	STOR. CLOSET														
131	GIRLS														
131A	JANITOR CLOSET														
132	BREAK OUT ROOM														
133	BREAK OUT ROOM														
C001	CORRIDOR														
C002	CORRIDOR														
C003	CORRIDOR														
C004	CORRIDOR														
C005	CORRIDOR														
C006	CORRIDOR														

ABBREVIATIONS

ACT	2'x2' SUSPENDED ACOUSTICAL CEILING SYSTEM
WD	WOOD FLOOR ASSEMBLY
CONC	CONCRETE – SEALED
CPT1	CARPET TILE 1
CPT2	CARPET TILE 2
CTB	CERAMIC TILE BASE
CWT	CERAMIC WALL TILE
EPXF	EPOXY TYPE FLOORING WITH INTEGRAL BASE
EQ	EQUIPMENT
EXP	EXPOSED STRUCTURE (PRIME AND PAINT)
GB	GYPSUM BOARD, CEILING/SOFFIT – TEXTURE: LEVEL 3, LIGHT TEXTURE, SEE SPECIFICATIONS
GBSC	SUSPENDED GYPSUM BOARD CEILING SYSTEM – TEXTURE: LEVEL 3, LIGHT TEXTURE, SEE SPECIFICATIONS
GYP.BD.	GYPSUM WALL BOARD – ABUSE RESISTANT – TEXTURED FINISH, SEE SPECIFICATIONS
MAT	MATERIAL
PC	CONCRETE – POLISHED
PTD	PAINT
RBR	4" RUBBER BASE
SCONC	CONCRETE – STAINED
SAF	SYNTHETIC ATHLETIC FLOORING
CTBB	CEMENTITIOUS TILE BACKER BOARD
VCT	VINYL COMPOSITION TILE
WGB	NEW WATER RESISTANT GYPSUM BOARD FOR THIN SET TILE

SEE SPECIFICATION FOR ADDITIONAL INFORMATION.

ROOM FINISH SCHEDULE GENERAL NOTES

1. FINISH COLOR SELECTIONS BY ARCHITECT
2. ALL NEW GYP. BOARD WALLS FINISH SEE SPECIFICATIONS.
3. PROVIDE AND INSTALL BLINDS AT ALL EXTERIOR WINDOWS.
4. ROOM SIGNAGE IS TO BE MOUNTED AT LATCH SIDE OF DOOR OUTSIDE OF ROOM.

ROOM FINISH SCHEDULE SPECIFIC NOTES (REMARKS COLUMN)

1. ALL VISIBLE PORTIONS OF CEILING AREA, INCLUDING STRUCTURE, DECKING AND BRACING, TO BE PRIMED AND PAINTED.
2. COMM./ELEC. ROOMS AND IT ROOM, INSTALL PAINTED FIRE RETARDED PLYWOOD FROM BASE TO CEILING, SEE SPECIFICATIONS.
3. ELEVATOR WALLS AND CEILING, SEE SPECIFICATIONS

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100% CONSTRUCTION DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	SCOPE REDUCTION	2/6/2026

ALTERNATE
FINISH SCHEDULE

PROJECT NUMBER	22019
DATED	01/31/2025

A502.A

A1 | ROOM FINISH SCHEDULE
SCALE: NTS

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025

FIRST FLOOR FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	FLOOR BASE	WALLS								CEILING			REMARKS
		FINISH		NORTH		EAST		SOUTH		WEST		MATERIAL	FINISH	HEIGHT	
				MAT.	FINISH	MAT.	FINISH	MAT.	FINISH	MAT.	FINISH				
100	GYM	WD	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
101	EQ. STORAGE	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	
102	STAGE	WD	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
103	TABLE/CHAIR STORAGE	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	
104	MEN	EPXF	-	CWT	-	CWT	-	CWT	-	CWT	-	GB	PTD	10'-0"	
105	WOMEN	EPXF	-	CWT	-	CWT	-	CWT	-	CWT	-	GB	PTD	10'-0"	
106	ENTRY VESTIBULE	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	9'-4"	
107	PRINCIPAL	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
108	RECEPTION / LOBBY	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
109	OFFICE	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
110	CONFERENCE RM.	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
111	OFFICE	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
112	BREAK ROOM	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
113	OFFICE	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
114	TELECOM	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	
115	SUPPLIES	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	10'-0"	
116	OFFICE	CPT1	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
117	PRINCIPAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
118	ELECTRICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
119	WOMEN	EPXF	-	GYP.BD.	PTD	CWT	-	CWT	-	GYP.BD.	PTD	GB	PTD	9'-4"	
120	MECHANICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
121	MEN	EPXF	-	GYP.BD.	PTD	GYP.BD.	PTD	CWT	-	CWT	-	GB	PTD	9'-4"	
122	WARMING KITCHEN	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	9'-4"	
122A	STORAGE	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	9'-4"	
123	CLASSROOM	CPT 2	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
123A	MECHANICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
124	CLASSROOM	CPT 2	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
124A	MECHANICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
125	CLASSROOM	CPT 2	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
125A	MECHANICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
126	CLASSROOM	CPT 2	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
126A	MECHANICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
127	CLASSROOM	CPT 2	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
127A	MECHANICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
128	CLASSROOM	CPT 2	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
128A	MECHANICAL	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
129	STORAGE	CONC	-	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	-	-	-	
130	BOYS	EPXF	-	CWT	-	CWT	-	CWT	-	CWT	-	GB	PTD	9'-4"	
131	GIRLS	EPXF	-	CWT	-	CWT	-	CWT	-	CWT	-	GB	PTD	9'-4"	
132	BREAK OUT ROOM	CPT 2	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
133	BREAK OUT ROOM	CPT 2	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	ACT	-	9'-4"	
C001	CORRIDOR	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	
C002	CORRIDOR	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	
C003	CORRIDOR	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	
C004	CORRIDOR	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	
C005	CORRIDOR	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	
C006	CORRIDOR	LVT	RBR	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GYP.BD.	PTD	GB	PTD	10'-0"	

ABBREVIATIONS

ACT	2'x2' SUSPENDED ACOUSTICAL CEILING SYSTEM
WD	WOOD FLOOR ASSEMBLY
CONC	CONCRETE – SEALED
CPT1	CARPET TILE 1
CPT2	CARPET TILE 2
CTB	CERAMIC TILE BASE
CWT	CERAMIC WALL TILE
EPXF	EPOXY TYPE FLOORING WITH INTEGRAL BASE
EQ	EQUIPMENT
EXP	EXPOSED STRUCTURE (PRIME AND PAINT)
GB	GYPSUM BOARD, CEILING/SOFFIT – TEXTURE: LEVEL 3, LIGHT TEXTURE, SEE SPECIFICATIONS
GBSC	SUSPENDED GYPSUM BOARD CEILING SYSTEM – TEXTURE: LEVEL 3, LIGHT TEXTURE, SEE SPECIFICATIONS
GYP.BD.	GYPSUM WALL BOARD – ABUSE RESISTANT – TEXTURED FINISH, SEE SPECIFICATIONS
MAT	MATERIAL
PC	CONCRETE – POLISHED
PTD	PAINT
RBR	4" RUBBER BASE
SCONC	CONCRETE – STAINED
SAF	SYNTHETIC ATHLETIC FLOORING
CTBB	CEMENTITIOUS TILE BACKER BOARD
VCT	VINYL COMPOSITION TILE
WGB	NEW WATER RESISTANT GYPSUM BOARD FOR THIN SET TILE

SEE SPECIFICATION FOR ADDITIONAL INFORMATION.

ROOM FINISH SCHEDULE GENERAL NOTES

1. FINISH COLOR SELECTIONS BY ARCHITECT
2. ALL NEW GYP. BOARD WALLS FINISH SEE SPECIFICATIONS.
3. PROVIDE AND INSTALL BLINDS AT ALL EXTERIOR WINDOWS.
4. ROOM SIGNAGE IS TO BE MOUNTED AT LATCH SIDE OF DOOR OUTSIDE OF ROOM.

ROOM FINISH SCHEDULE SPECIFIC NOTES (REMARKS COLUMN)

1. ALL VISIBLE PORTIONS OF CEILING AREA, INCLUDING STRUCTURE, DECKING AND BRACING, TO BE PRIMED AND PAINTED.
2. COMM./ELEC. ROOMS AND IT ROOM, INSTALL PAINTED FIRE RETARDED PLYWOOD FROM BASE TO CEILING, SEE SPECIFICATIONS.
3. ELEVATOR WALLS AND CEILING, SEE SPECIFICATIONS

A1 | ROOM FINISH SCHEDULE
SCALE: NTS

DAG ARCHITECTS
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100% CONSTRUCTION DOCUMENTS

Digitally signed by Owen Eric Gipson
Date: 2025.02.07 15:42:45-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

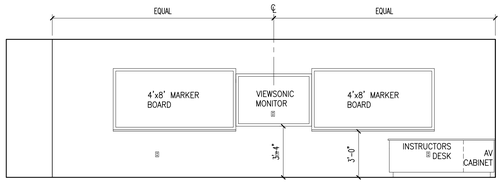
REVISIONS:

No.	Description	Date

FINISH SCHEDULE

PROJECT NUMBER	22019
DATED	01/31/2025

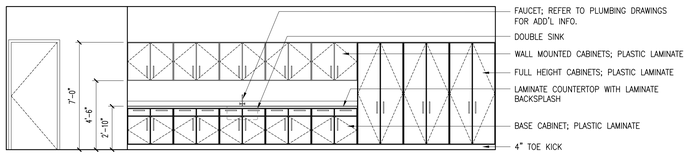
A502



E1 — CLASSROOM - NORTH / SOUTH

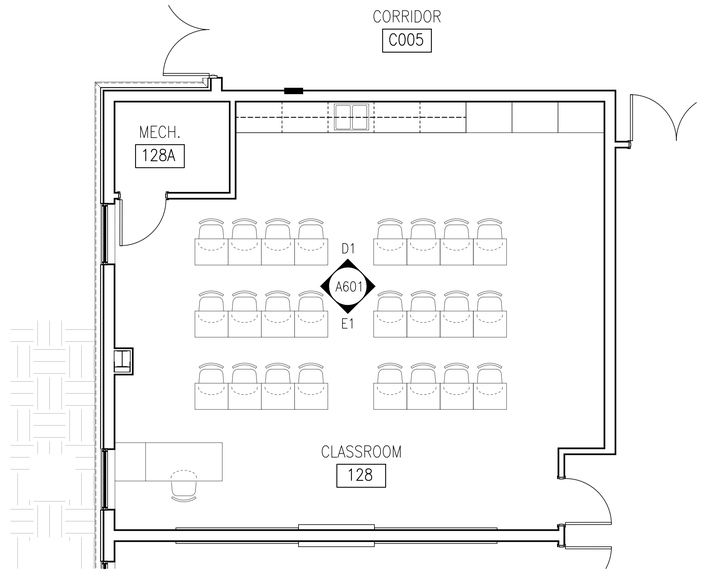
SCALE: 1/4" = 1'-0" | ROOMS 123 - 128

NOTE:
CONTRACTOR SHALL FIELD VERIFY DIMENSIONS.



D1 — CLASSROOM - NORTH / SOUTH

SCALE: 1/4" = 1'-0" | ROOMS 123 - 128



D2 — GENERAL CLASSROOM PLAN

SCALE: 1/4" = 1'-0" | ROOMS 123 - 128

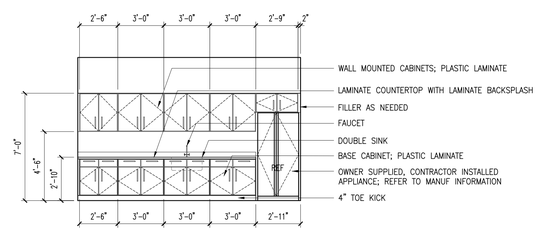
NOTES:

1. PROVIDE INSULATED COVERINGS ON ALL PIPES BENEATH ALL LAVATORIES SIMILAR TO LAVATORY GUARD. LPG – LAVATORY PIPE GUARD
2. ALL ITEMS FURNISHED AND INSTALLED BY CONTRACTOR.
3. INSTALL WOOD BLOCK IN THE WALL FOR MOUNTING ALL ACCESSORIES.
4. INSTALL MARBLE THRESHOLD AT ALL TILE TO OTHER FLOORING TRANSITIONS.

B1 — N/A

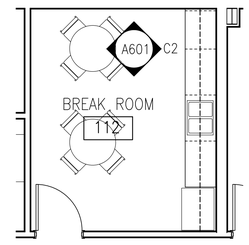
SCALE: NTS | .

NOTE:
CONTRACTOR SHALL FIELD VERIFY DIMENSIONS.



C2 — BREAK ROOM - EAST

SCALE: 1/4" = 1'-0" | ROOM 112



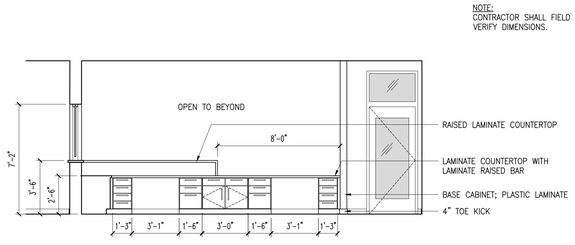
C3 — BREAK ROOM PLAN

SCALE: 1/4" = 1'-0" | ROOM 112

B1 — N/A

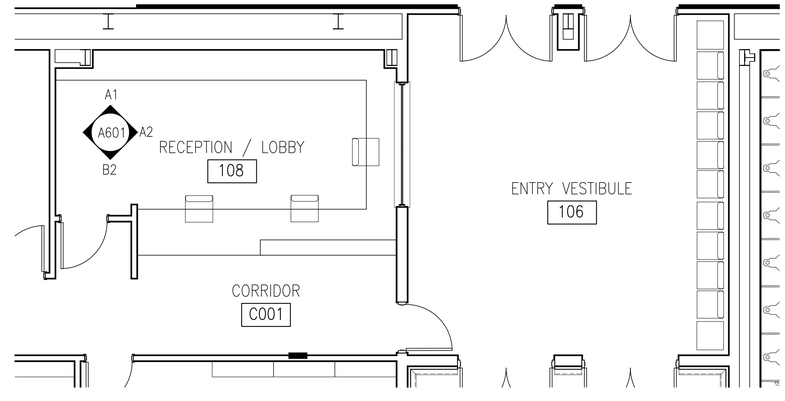
SCALE: NTS | .

NOTE:
CONTRACTOR SHALL FIELD VERIFY DIMENSIONS.



B2 — RECEPTION - SOUTH

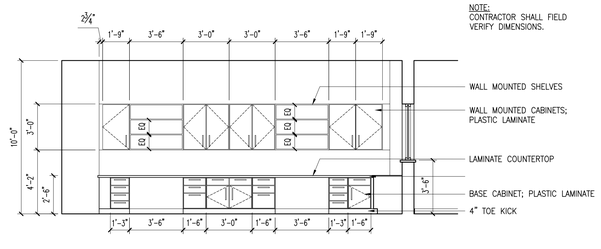
SCALE: 1/4" = 1'-0" | ROOM 108



A3 — RECEPTION / LOBBY PLAN

SCALE: 1/4" = 1'-0" | ROOM 108

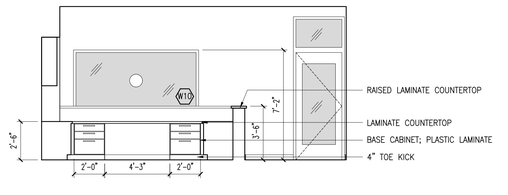
NOTE:
CONTRACTOR SHALL FIELD VERIFY DIMENSIONS.



A1 — RECEPTION - NORTH

SCALE: 1/4" = 1'-0" | ROOM 108

NOTE:
CONTRACTOR SHALL FIELD VERIFY DIMENSIONS.



A2 — RECEPTION - EAST

SCALE: 1/4" = 1'-0" | ROOM 108

DAG ARCHITECTS
DAG Architects AR0009694
455 Harrison Ave Suite I Panama City, FL 32401
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100% CONSTRUCTION DOCUMENTS

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Date: 2025.02.07 15:43:10-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

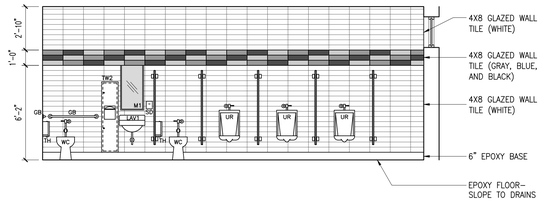
No.	Description	Date

INTERIOR ELEVATIONS

PROJECT NUMBER	22019
DATED	01/31/2025

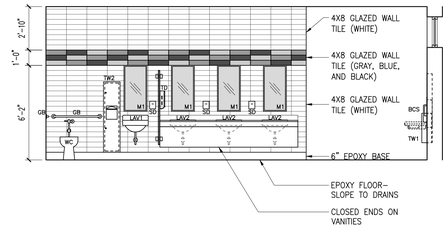
A601

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



E1 MEN'S RESTROOM - EAST

SCALE: 1/4" = 1'-0" | ROOM 104



E2 WOMEN'S RESTROOM - EAST

SCALE: 1/4" = 1'-0" | ROOM 105

PLUMBING FIXTURE SCHEDULE				
NO.	MANUF.	MODEL NO.	DESCRIPTION	REMARKS
BCS	KOOLA KARE	KB310–SSRE	BABY CHANGING STATION	SURFACE MOUNTED BCS, MOUNT PER MANUF. INSTRUCTIONS.
GB	BOBRICK	B–5806.99x36 B–5806.99x42	GRAB BAR (36" LENGTH BHIND WC & 42" TO THE SIDE OF THE WC)	MOUNT CENTERLINE OF GRAB BAR 2'–10" AFF
M1	BOBRICK	B–2908 18x36	FRAMED MIRROR	MOUNT BOTTOM OF MIRROR 3'–3" AFF
MBH	BOBRICK	B–223X24	MOP AND BROOM HOLDER	3 HOLDER WALL MOUNTED MBH, MOUNT TOP 6'–0" AFF
SD	BOBRICK	B–2112	WALL MOUNTED SOAP DISPENSER	SURFACE WALL MOUNTED SD, MOUNT BOTTOM OF DISPENSER 3'–11½" AFF
SN1	BOBRICK	B–353	SANITARY NAPKIN DISPOSAL	RECESSED MOUNTED SND, MOUNT TOP OF DISPOSAL 2'–6" AFF
SN2	BOBRICK	B–254	SANITARY NAPKIN DISPOSAL	SURFACE MOUNTED SND, MOUNT TOP OF DISPOSAL 2'–6" AFF
SNV	BOBRICK	B–2706 25	SANITARY NAPKIN VENDOR	SURFACE MOUNTED SNV, MOUNT TOP OF VENDOR 5'–2" AFF
TD	BOBRICK	B–262	TOWEL DISPENSER	SURFACE MOUNTED TD, MOUNT TOP OF TD 4'–8" AFF
TH	BOBRICK	B–2892	TOILET TISSUE HOLDER TWIN JUMBO–ROLL DISPENSER	SURFACE MOUNTED TH, MOUNT TOP OF TOILET PAPER HOLDER 2'–6" AFF
TW1	BOBRICK	B–3944	TOWEL DISPENSER AND WASTE RECEPTACLE	RECESSED MOUNTED TW1, MOUNT TOP OF TD 5'–7½" AFF
TW2	BOBRICK	B–38034	TOWEL DISPENSER AND WASTE RECEPTACLE	RECESSED MOUNTED TW2, MOUNT TOP OF TD 4'–11¾" AFF
LAV1	–	WALL MOUNTED LAVATORY		REFER TO PLUMBING DRAWINGS
LAV2	–	LAVATORY		REFER TO PLUMBING DRAWINGS
MS	–	MOP SINK		REFER TO PLUMBING DRAWINGS
UR	–	WALL MOUNTED URINAL		REFER TO PLUMBING DRAWINGS
WC	–	WATER CLOSET		REFER TO PLUMBING DRAWINGS

NOTES:

1. PROVIDE INSULATED COVERINGS ON ALL PIPES BENEATH ALL LAVATORIES SIMILAR TO LAVATORY GUARD. LPG – LAVATORY PIPE GUARD
2. ALL ITEMS FURNISHED AND INSTALLED BY CONTRACTOR.
3. INSTALL WOOD BLOCK IN THE WALL FOR MOUNTING ALL ACCESSORIES.
4. INSTALL MARBLE THRESHOLD AT ALL TILE TO OTHER FLOORING TRANSITIONS.

D4 FIXTURE SCHEDULE & NOTES

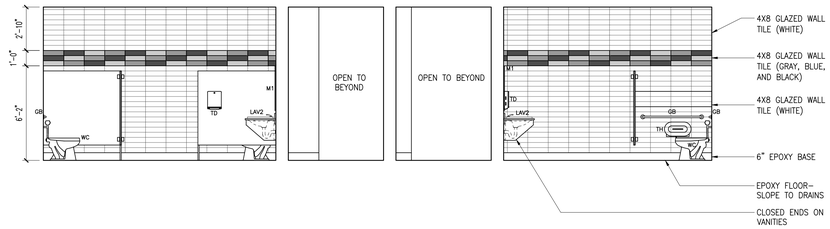
SCALE: NTS

D1 MEN'S / WOMEN'S RESTROOM - SOUTH

SCALE: 1/4" = 1'-0" | ROOM 104 / 105

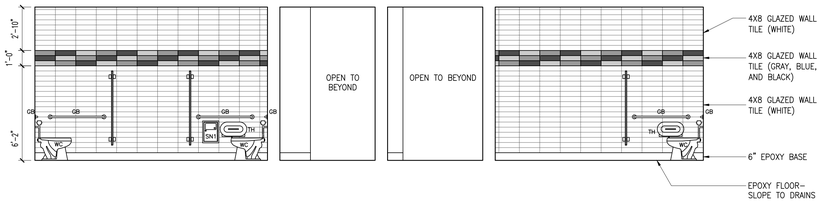
D3 TOILET ACC.

SCALE: NTS | ROOM N / A



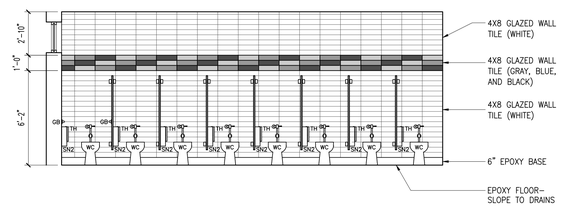
C1 MEN'S / WOMEN'S RESTROOM - NORTH 1

SCALE: 1/4" = 1'-0" | ROOM 104 / 105



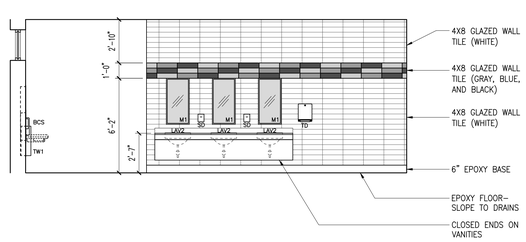
C2 MEN'S / WOMEN'S RESTROOM - NORTH 2

SCALE: 1/4" = 1'-0" | ROOM 104 / 105



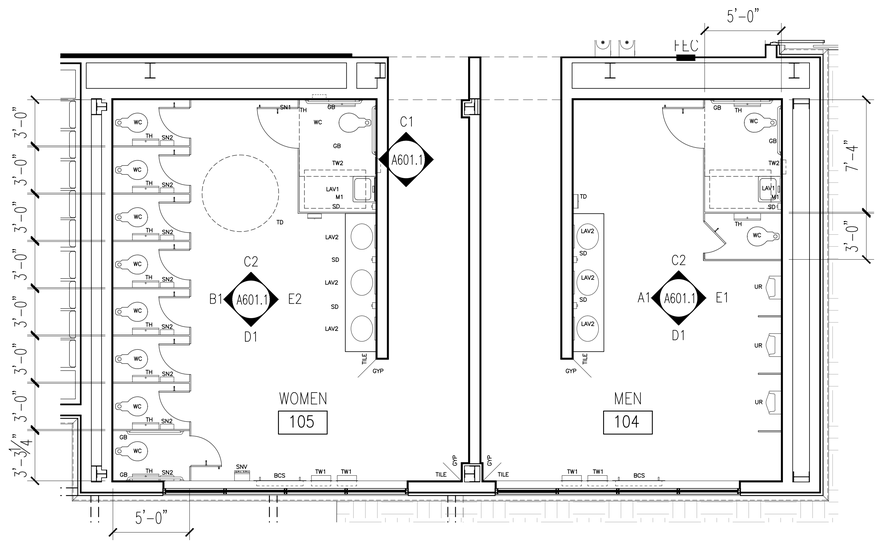
B1 WOMEN'S RESTROOM - WEST

SCALE: 1/4" = 1'-0" | ROOM 105



A1 MEN'S RESTROOM - WEST

SCALE: 1/4" = 1'-0" | ROOM 104



A2 ENLARGED PLAN OF GANG TOILETS

SCALE: 1/4" = 1'-0" | ROOM N / A

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100% CONSTRUCTION DOCUMENTS

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Date: 2025.02.07 15:43:37-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

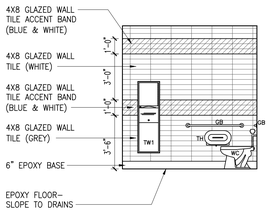
REVISIONS:

No.	Description	Date

INTERIOR ELEVATIONS

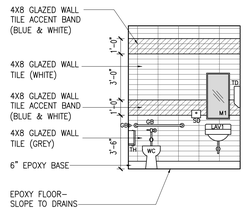
PROJECT NUMBER 22019
DATED 01/31/2025

A601.1



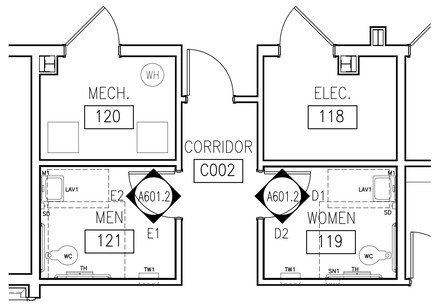
E1 MEN'S - SOUTH

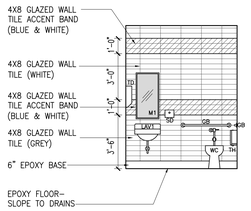
SCALE: 1/4" = 1'-0" | ROOM 121



E2 MEN'S - WEST

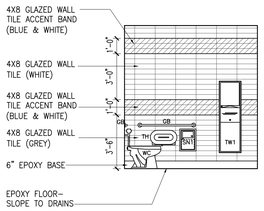
SCALE: 1/4" = 1'-0" | ROOM 121





D1 WOMEN'S - EAST

SCALE: 1/4" = 1'-0" | ROOM 119



D2 WOMEN'S - SOUTH

SCALE: 1/4" = 1'-0" | ROOM 119

D3 JAN. TYP.

SCALE: 1/4" = 1'-0" | ROOMS 119 / 121

PLUMBING FIXTURE SCHEDULE

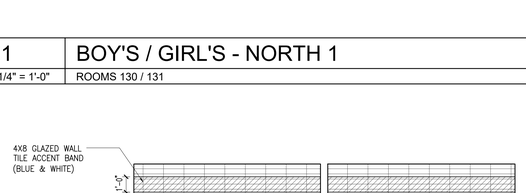
NO.	MANUF.	MODEL NO.	DESCRIPTION	REMARKS
BCS	KOOLA KARE	KB310–SSRE	BABY CHANGING STATION	SURFACE MOUNTED BCS, MOUNT PER MANUF. INSTRUCTIONS.
GB	BOBRICK	B–5806.99x36 B–5806.99x42	GRAB BAR (36" LENGTH BHIND WC & 42" TO THE SIDE OF THE WC)	MOUNT CENTERLINE OF GRAB BAR 2'–10" AFF
M1	BOBRICK	B–2908 18x36	FRAMED MIRROR	MOUNT BOTTOM OF MIRROR 3'–3" AFF
MBH	BOBRICK	B–223X24	MOP AND BROOM HOLDER	3 HOLDER WALL MOUNTED MBH, MOUNT TOP 6'–0" AFF
SD	BOBRICK	B–2112	WALL MOUNTED SOAP DISPENSER	SURFACE WALL MOUNTED SD, MOUNT BOTTOM OF DISPENSER 3'–11½" AFF
SN1	BOBRICK	B–353	SANITARY NAPKIN DISPOSAL	RECESSED MOUNTED SND, MOUNT TOP OF DISPOSAL 2'–6" AFF
SN2	BOBRICK	B–254	SANITARY NAPKIN DISPOSAL	SURFACE MOUNTED SND, MOUNT TOP OF DISPOSAL 2'–6" AFF
SNV	BOBRICK	B–2706 25	SANITARY NAPKIN VENDOR	SURFACE MOUNTED SNV, MOUNT TOP OF VENDOR 5'–2" AFF
TD	BOBRICK	B–262	TOWEL DISPENSER	SURFACE MOUNTED TD, MOUNT TOP OF TD 4'–8" AFF
TH	BOBRICK	B–2892	TOILET TISSUE HOLDER TWIN JUMBO–ROLL DISPENSER	SURFACE MOUNTED TH, MOUNT TOP OF TOILET PAPER HOLDER 2'–6" AFF
TW1	BOBRICK	B–3944	TOWEL DISPENSER AND WASTE RECEPTACLE	RECESSED MOUNTED TW1, MOUNT TOP OF TD 5'–7½" AFF
TW2	BOBRICK	B–38034	TOWEL DISPENSER AND WASTE RECEPTACLE	RECESSED MOUNTED TW2, MOUNT TOP OF TD 4'–11¾" AFF
LAV1	–	WALL MOUNTED LAVATORY		REFER TO PLUMBING DRAWINGS
LAV2	–	LAVATORY		REFER TO PLUMBING DRAWINGS
MS	–	MOP SINK		REFER TO PLUMBING DRAWINGS
UR	–	WALL MOUNTED URINAL		REFER TO PLUMBING DRAWINGS
WC	–	WATER CLOSET		REFER TO PLUMBING DRAWINGS

NOTES:

1. PROVIDE INSULATED COVERINGS ON ALL PIPES BENEATH ALL LAVATORIES SIMILAR TO LAVATORY GUARD. LPG – LAVATORY PIPE GUARD
2. ALL ITEMS FURNISHED AND INSTALLED BY CONTRACTOR.
3. INSTALL WOOD BLOCK IN THE WALL FOR MOUNTING ALL ACCESSORIES.
4. INSTALL MARBLE THRESHOLD AT ALL TILE TO OTHER FLOORING TRANSITIONS.

C3 FIXTURE SCHEDULE & NOTES

SCALE: NTS

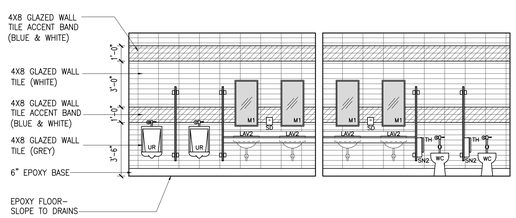


C1 BOY'S / GIRL'S - NORTH 1

SCALE: 1/4" = 1'-0" | ROOMS 130 / 131

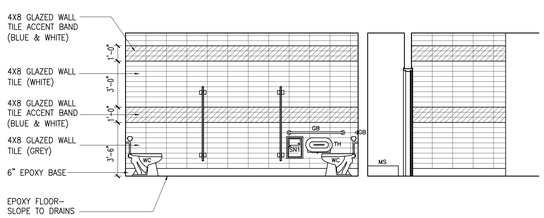
C2 .

SCALE: NTS



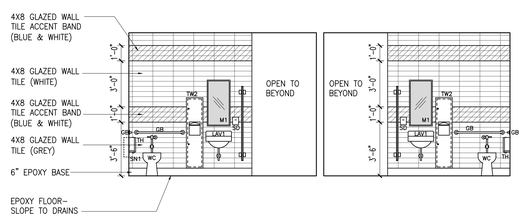
B1 BOY'S / GIRL'S - NORTH 2

SCALE: 1/4" = 1'-0" | ROOMS 130 / 131



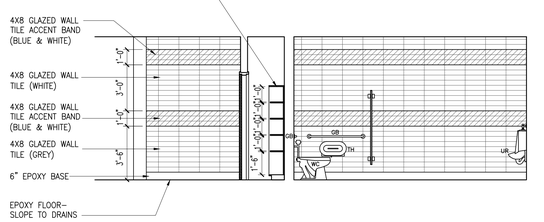
B2 GIRL'S - EAST

SCALE: 1/4" = 1'-0" | ROOM 131



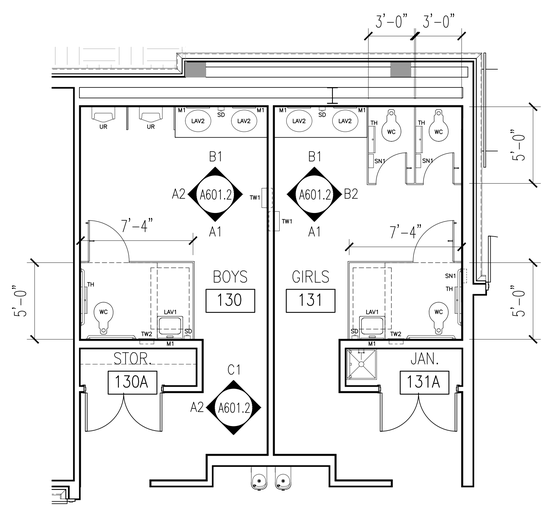
A1 BOY'S / GIRL'S - SOUTH

SCALE: 1/4" = 1'-0" | ROOMS 130 / 131



A2 BOY'S - WEST

SCALE: 1/4" = 1'-0" | ROOMS 130 / 131



A3 ENLARGED PLAN OF GANG TOILETS

SCALE: 1/4" = 1'-0" | ROOMS 130 / 131

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Date: 2025.02.07 15:44:06-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

INTERIOR ELEVATIONS

PROJECT NUMBER 22019
DATED 01/31/2025

A601.2

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025

LEGEND

FW	FIRE WATER SUPPLY (SITE)
PW	POTABLE WATER SUPPLY
WM	WATER MAIN
FW	EXISTING FIRE WATER SUPPLY
	FIRE SPRINKLER MAIN
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
	FIRE HYDRANT

SYSTEM ENGINEERING SUMMARY

AREA SERVICED	30,086 SF
HYDRAULICALLY MOST REMOTE AREA	1500 SF
HAZARD CLASSIFICATION OF REMOTE AREA	LIGHT HAZARD
SYSTEM DESIGN FLOW RATE (INDOOR)	195 GPM
OUTSIDE HOSE STREAM DEMAND	100 GPM
DOMESTIC DEMAND	0 GPM
TOTAL WATER DEMAND	295 GPM
WATER PRESSURE DATA	
END HEAD PRESSURE	7.0 PSI
ELEVATION LOSS	18.62 PSI
OUTSIDE FRICTION LOSS	7.62 GPM
BACK FLOW PREVENTOR	3 PSI
SAFETY FACTOR	10 PSI
AVAILABLE INSIDE FRICTION LOSS	20 PSI

DESIGN CRITERIA

THE NEW FACILITY SHALL BE PROTECTED BY A WET PIPE SPRINKLER SYSTEM. INCLUDE A DOMESTIC WATER DEMAND OF - GPM ON THE MAIN SERVING THE SITE FIRE AND DOMESTIC WATER SYSTEMS. THE WET PIPE SYSTEM SHALL BE HYDRAULICALLY DESIGNED WITH AN OUTSIDE HOSE STREAM ALLOWANCE AS NOTED ON EACH SYSTEM ENGINEERING SUMMARY AND DENSITY VALUES AS FOLLOWS:

LIGHT HAZARD = 0.10 GPM/SF WITH A MAXIMUM OF 225 SF COVERAGE PER SPRINKLER

ORDINARY HAZARD GROUP 1 = 0.15 GPM/SF WITH A MAXIMUM OF 130 SF COVERAGE PER SPRINKLER

ORDINARY HAZARD GROUP 2 = 0.20 GPM/SF WITH A MAXIMUM OF 130 SF COVERAGE PER SPRINKLER

THE SPRINKLER DESIGN SHALL BE BASED ON THE MOST HYDRAULICALLY DEMANDING 1500 SF. THE CONTRACTOR IS ALLOWED TO REDUCE THE DESIGN AREA BASED ON THE USE OF QUICK RESPONSE SPRINKLERS AND CEILING HEIGHT IN ACCORDANCE WITH NFPA 13.

THE DESIGN OF THE SPRINKLER SYSTEM SHALL BE BASED UPON WATER SUPPLY INFORMATION OBTAINED BY THE SPRINKLER CONTRACTOR AND WITNESSED BY THE AUTHORITY HAVING JURISDICTION. WATER SUPPLY SHALL BE PRESUMED AVAILABLE AT THE POINT OF CONNECTION OF THE FIRE MAIN TO THE WATER SUPPLY SYSTEM. THE FOLLOWING FLOW TEST DATA WAS OBTAINED BY THE ENGINEER ON OCTOBER 11, 2022, PROVIDED BY SEAGO FIRE PROTECTION.

HYDRANT #1:

STATIC = 67

RESIDUAL = 51

HYDRANT #2:

FLOWING = 760

COEFFICIENT = 0.9

GENERAL NOTES

1. IT IS NOTED THAT SOME AREAS WILL BE REQUIRED TO BE PROTECTED AS ORDINARY HAZARD (MECHANICAL ROOMS, ETC.) THESE AREAS HAVE BEEN IDENTIFIED BY A DIFFERENT HATCHING PATTERN THEN THE LIGHT HAZARD AREAS ON THE PLANS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN CURRENT WATER FLOW DATA AND DESIGN SPRINKLER SYSTEMS ACCORDINGLY. SHALL OBTAIN CURRENT WATER FLOW DATA AND DESIGN MODIFICATIONS ACCORDINGLY.
3. MAINTAIN THE INTEGRITY OF ALL FIRE RATED ASSEMBLIES AND ACOUSTICAL ASSEMBLIES.
4. CONTRACTOR SHALL COORDINATE SYSTEM DESIGN WITH ALL OTHER TRADES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING INSPECTOR'S TEST LOCATIONS IN ACCORDANCE WITH NFPA 13 AND THE AUTHORITY HAVING JURISDICTION.
6. ALL PIPING SHALL OBSERVE PROPER PITCH. PROVIDE DRAINS FOR LOW POINTS.
7. THE SPRINKLER SYSTEM SHALL BE ARRANGED FOR FLUSHING. READILY REMOVABLE FITTINGS SHALL BE PROVIDED AT THE END OF ALL CROSSMAINS.
8. PIPE HANGERS SHALL BE INSTALLED AS REQUIRED BY NFPA 13 FOR SUPPORTING SPRINKLER PIPING. NO OTHER PIPING OR DEVICES SHALL BE ATTACHED TO THE SPRINKLER HANGER SYSTEM UNLESS THE HANGER HAS BEEN DESIGNED TO CARRY THE ADDITIONAL LOAD.
9. THIS CONTRACT DOES NOT INCLUDE ANY MATERIAL OR DEVICE TO IMPROVE THE STRUCTURAL STRENGTH OF THE BUILDING TO ENABLE IT TO CARRY THE LOAD OF THE FIRE PROTECTION SYSTEM.
10. ALL ABOVE GROUND WET SPRINKLER PIPE THAT IS THREADED SHALL BE SCHEDULE 40 BLACK WITH BLACK CAST/MALEABLE IRON FITTINGS WITH JOINTS PER NFPA 13. TEFLON TAPE SHALL BE ADDED TO ALL MALE THREADS OF PIPE AS A JOINING COMPOUND. CPVC PIPING IS NOT ACCEPTABLE.
11. ALL ABOVE GROUND WET SYSTEM SPRINKLER PIPE THAT IS WELDED OR ROLL-GROOVED SHALL BE SCHEDULE 10 BLACK WITH BLACK CAST/MALEBLE IRON FITTINGS WITH JOINTS PER NFPA 13. CPVC PIPING IS NOT ACCEPTABLE.
12. INSTALL SPRINKLER HEADS CENTER OF TILE IN ACOUSTICAL CEILINGS. HEAD LOCATIONS SHALL BE GUIDED BY ARCHITECTURAL ELEMENTS FOR OTHER CEILING TYPES.
13. DO NOT LOCATE INSPECTORS TEST LOCATIONS OR DRAINS IN FINISHED SPACES. INDICATE ALL LOCATIONS OF EXPOSED PIPING ON SHOP DRAWINGS.
14. FLEXIBLE CONNECTIONS TO SPRINKLER HEADS ARE NOT ALLOWED.
15. PROVIDE CLASS II WET STANDPIPES WITH 1.5" HOSE STATIONS ON EACH SIDE OF THE STAGE IN ACCORDANCE WITH NFPA 14.

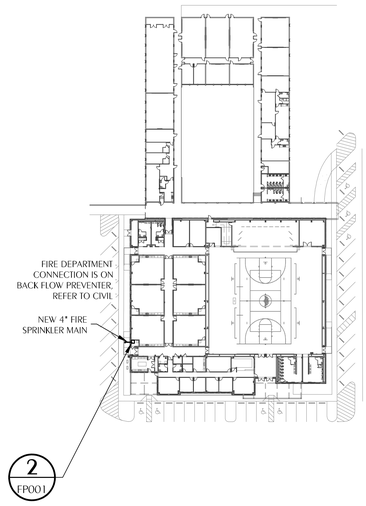
WATER BASED SPRINKLER SYSTEM REQUIREMENTS

1. THE POINT OF SERVICE AND BACKFLOW PREVENTER ARE SHOWN FOR REFERENCE ONLY. REFER TO THE CIVIL SITE UTILITY PLAN FOR FURTHER INFORMATION.
2. THE BUILDING SHALL BE FULLY SPRINKLED IN ACCORDANCE WITH THE MOST RECENT EDITION OF NFPA 13 AND LOCAL CODES.
3. REFER TO PLAN SHEETS AND HAZARD CLASSIFICATION LEGEND FOR HAZARD CLASSIFICATION OF EACH ROOM OR AREA.
4. THE NEW SYSTEMS SHALL SHALL BE HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13.

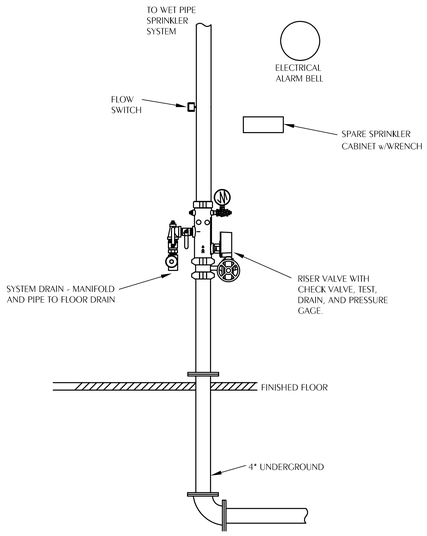
   LIGHT HAZARD: 0.10 GPM/SF, MAX 225 SF PER HEAD, 15 FT MAX NOMINAL SPACING, ORDINARY TEMPERATURE RATING HEADS.
   ORDINARY HAZARD GROUP 1: 0.15 GPM/SF, MAX 130 SF PER HEAD, 15 FT MAX NOMINAL SPACING, INTERMEDIATE TEMPERATURE RATING HEADS.
   ORDINARY HAZARD GROUP 2: 0.20 GPM/SF, MAX 130 SF PER HEAD, 15 FT MAX NOMINAL SPACING, INTERMEDIATE TEMPERATURE RATING HEADS.

   FOR ADDITIONAL REQUIREMENTS, REFER TO DESIGN CRITERIA NOTES ON THIS SHEET.

5. THE POINT OF SERVICE CONNECTION IS NOT A CIRCULATING MAIN.
6. REFER TO DESIGN CRITERIA NOTES ON THIS SHEET FOR FLOW TEST DATA.
7. REFER TO WET PIPE RISER DETAIL FOR VALVE AND SUPERVISION REQUIREMENTS.
8. MICROBIAL INDUCED CORROSION IS NOT ANTICIPATED IN THIS PROJECT.
9. REFER TO CIVIL SITE UTILITY DRAWINGS FOR BACKFLOW PREVENTER. MAXIMUM DESIGN PRESSURE DROP SHALL NOT EXCEED 3 PSI.
10. REFER TO DIVISION 21 SPECIFICATIONS FOR QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL FIRE PROTECTION COMPONENTS.
11. NO FIRE PUMP IS REQUIRED.
12. NO ON SITE FIREWATER STORAGE TANK IS REQUIRED.



N 1 FP001 **FIRE PROTECTION SITE PLAN**
SCALE: 1" = 60'



2 FP001 **WET PIPE RISER DETAIL**
SCALE: NONE

DAG
ARCHITECTS
DAG Architects AR0009694
455 Harrison Ave Suite B Panama City, FL 32401
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100% CONSTRUCTION DOCUMENTS

Keith A. Johnson, State of Florida, Professional Engineer, License No. 86457
This item has been digitally signed and sealed by Keith A. Johnson on the date adjacent here.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

KEITH A. JOHNSON LICENSE NO. 86457 STATE OF FLORIDA PROFESSIONAL ENGINEER
Date: 2025.01.31 15:04:55-06'00'

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

FIRE PROTECTION LEGEND, NOTES, AND SITE PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

FP001

WATFORD ENGINEERING
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Project Number: 2022-039
Checked By: KAJ
Drawn By: TLC

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025

HAZARD CLASSIFICATION

	LIGHT HAZARD
	ORDINARY HAZARD GROUP 1
	ORDINARY HAZARD GROUP 2

N 2 FP101 **FIRE PROTECTION NEW WORK PLAN - MEZZANINE**
SCALE: 1/8" = 1'-0"

N 1 FP101 **FIRE PROTECTION PLAN**
SCALE: 1/8" = 1'-0"

WATFORD ENGINEERING
4452 Clinton Street Marianna, Florida 32446
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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

FIRE PROTECTION PLAN

PROJECT NUMBER 22019
DATED 01/31/2025

FP101

LEGEND

———	S or W	SOIL OR WASTE PIPING
– – –	V	VENT PIPING
—·—	CW	COLD WATER SUPPLY PIPING
—··—	HW	HOT WATER SUPPLY PIPING
— - - —	HWR	HOT WATER RETURN PIPING
— GAS — GAS —	G	GAS PIPING
—⋈—	GV	GATE VALVE
	CV	CHECK VALVE
	BV	BALL VALVE
	HB	HOSE BIBB
	WH	WALL HYDRANT
——○	CO	CLEANOUT TO FLOOR
——⊘	FD	FLOOR DRAIN
——⊡	COTS	CLEANOUT TO GRADE
—‖—		UNION
	VTR	VENT THRU ROOF
⬡1		SHEET NOTE
▚		POINT OF CONNECTION TO EXISTING
S⋈		SOLENOID VALVE
	MR	MOP RECEPTOR
	WC	WATER CLOSET
	TP	TRAP PRIMER
	EWH	ELECTRIC WATER HEATER
	WHA	WATER HAMMER ARRESTOR TYPE A
	WHB	WATER HAMMER ARRESTOR TYPE B
	WHC	WATER HAMMER ARRESTOR TYPE C
	L	LAVATORY
	UR	URINAL
	KW	KILOWATT
	TVC	TEMPERATURE CONTROL VALVE
	MS	MASTER SHUT OFF VALVE
	S	SWITCH
	WV	WET VENT
	CP	CIRCULATOR PUMP
	HD	2" HUB DRAIN WITH FLEXIBLE TRAP SEAL BY MIFAB OR EQUAL ABOVE CEILING UNLESS NOTED
	MV	MIXING VALVE
	EWC	ELECTRIC WATER COOLER
	UB	UTILITY BOX
	SH	SHOWER
	SK	SINK

PLUMBING SPECIFICATIONS

WC-1 WATER CLOSET, FLOOR-MOUNT (ADULT HANDICAP, MANUAL VALVE):

VITREOUS CHINA, 1.28 GALLONS PER FLUSH, ELONGATED, HIGH EFFICIENCY SIPHON JET, WHITE, WATER SAVER BOWL WITH 1-1/2" TOP SPUD, 17" HIGH FOR HANDICAPPED. EXPOSED CHROME PLATE FLUSH VALVE, WITH SCREWDRIVER STOP, VACUUM BREAKER, QUIET FLUSH FEATURE, WITH SWEAT SOLDER KIT AND CAST WALL FLANGE. HEAVY MOLDED PLASTIC, WHITE, ELONGATED, OPEN FRONT SEAT LESS COVER, WITH STAINLESS STEEL, SELF-SUSTAINING CHECK HINGES. HOLD CENTERLINE FLUSH VALVE ASSEMBLY OFF FINISH WALL FOR GRAB BAR CLEARANCES, COORDINATE WITH ARCHITECTURAL DRAWINGS.

WATER CLOSET	ZURN Z5665BWL
VALVE	ZURN Z6000PL-HET
SEAT	ZURN Z5955SS-EL-STS
CLOSET BOLT/WAX RING KIT	ZURN Z5972-COMB

WC-2 WATER CLOSET, FLOOR-MOUNT (ADULT STANDARD/CHILD ADA, MANUAL VALVE):

VITREOUS CHINA, 1.28 GALLONS PER FLUSH, ELONGATED, HIGH EFFICIENCY SIPHON JET, WHITE, WATER SAVER BOWL WITH 1-1/2" TOP SPUD. 15" HIGH FOR HANDICAPPED CHILDREN AGES 5 THROUGH 8. EXPOSED CHROME PLATE FLUSH VALVE, WITH SCREWDRIVER STOP, VACUUM BREAKER, QUIET FLUSH FEATURE, WITH SWEAT SOLDER KIT AND CAST WALL FLANGE. HEAVY MOLDED PLASTIC, WHITE, ELONGATED, OPEN FRONT SEAT LESS COVER, WITH STAINLESS STEEL, SELF-SUSTAINING CHECK HINGES.

WATER CLOSET	ZURN Z5654-BWL
VALVE	ZURN Z6000PL-HET
SEAT	ZURN Z5955SS-JUV-STS
CLOSET BOLT/WAX RING KIT	ZURNZ5972-COMB

UR-1 URINAL, WALL-MOUNT (HANDICAP, MANUAL VALVE):

VITREOUS CHINA, 0.5 GALLONS PER FLUSH, SIPHON JET FLUSH, 3/4" TOP SPUD, AND 2" OUTLET URINAL. EXPOSED CHROME PLATED FLUSH VALVE WITH SCREWDRIVER STOP, VACUUM BREAKER AND QUIET FLUSH FEATURE. MOUNT TO SATISFY ADA REQUIREMENTS, COORDINATE WITH ARCHITECTURAL DRAWINGS (TOILET ROOM ELEVATIONS) FOR FINAL MOUNTING HEIGHT. FURNISH FLOOR MOUNTED SINGLE CARRIER WITH HANGER PLATE, BEARING PLATE, ADJUSTABLE SUPPORTING RODS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE BASE TO FLOOR FOR RIGID CONNECTION WITH 1/2" X 3-3/4" THREADED ZINC PLATED STEEL HEAVY DUTY WEDGE ANCHORS, COMPLETE WITH STAINLESS STEEL CLIP, WASHER AND THREADED NUT, CONFORMING TO FEDERAL SPEC. FF-S-325.

URINAL	ZURN Z5738-U
VALVE	ZURN Z6003AV
URINAL FLANGE KIT	ZURN Z5976-URINAL
CARRIER	ZURN Z-1222
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375

UR-2 URINAL, WALL-MOUNT (STANDARD, MANUAL VALVE):

VITREOUS CHINA, 0.5 GALLONS PER FLUSH, SIPHON JET FLUSH, 3/4" TOP SPUD, AND 2" OUTLET URINAL. EXPOSED CHROME PLATED FLUSH VALVE WITH SCREWDRIVER STOP, VACUUM BREAKER AND QUIET FLUSH FEATURE. SEE ARCHITECTURAL DRAWINGS (TOILET ROOM ELEVATIONS) FOR MOUNTING HEIGHT. FURNISH FLOOR MOUNTED SINGLE CARRIER WITH HANGER PLATE, BEARING PLATE, ADJUSTABLE SUPPORTING RODS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE BASE TO FLOOR FOR RIGID CONNECTION WITH 1/2" X 3-3/4" THREADED ZINC PLATED STEEL HEAVY DUTY WEDGE ANCHORS, COMPLETE WITH STAINLESS STEEL CLIP, WASHER AND THREADED NUT, CONFORMING TO FEDERAL SPEC. FF-S-325.

URINAL	ZURN Z5738-U
VALVE	ZURN Z6003AV-EWS
URINAL FLANGE KIT	ZURN Z5976-URINAL
CARRIER	ZURN Z-1222
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375

L-1 LAVATORY, WALL-MOUNT HANDICAP):

VITREOUS CHINA 20" X 18", COLOR "WHITE", 8" ON CENTERS, FRONT OVERFLOW, FOR CONCEALED ARM SUPPORT. FURNISH FLOOR-MOUNTED SINGLE CARRIER WITH CONCEALED ARMS, LEVELING AND SECURING SCREWS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE BASE TO FLOOR FOR RIGID CONNECTION WITH 1/2" X 3-3/4" THREADED ZINC PLATED STEEL HEAVY DUTY WEDGE ANCHORS, COMPLETE WITH STAINLESS STEEL CLIP, WASHER AND THREADED NUT, CONFORMING TO FEDERAL SPEC. FF-S-325. PROVIDE CHROME PLATED ANGLE STOP TO WALL WITH CHROME PLATED 3/8" FLEXIBLE SUPPLY AND LOOSE KEY OPERATOR, INTEGRAL PERFORATED CAST BRASS STRAINER WITH ELBOW AND 1-1/4" OFFSET TAILPIECE, CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL. POLISHED CHROME PLATED CAST BRASS WATER FAUCET WITH WRIST BLADE HANDLES, WITH 0.5 GPM AERATOR. LAVATORY P-TRAP AN ANGLE VALVE ASSEMBLIES SHALL BE INSULATED WITH FULLY MOLDED INSULATION KIT, AND LIGHT GRAY COLOR WITH 3-PIECE INTERLOCKING RAP ASSEMBLY AND 2-PIECE INTERLOCKING ANGLE VALVE ASSEMBLY. FASTENERS SHALL BE NYLON-TYPE SUPPLIED WITH KIT. LAVATORY SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 28" FROM FLOOR TO BOTTOM OF THE APRON. KNEE AND TOE CLEARANCES SHALL BE AS FOLLOWS: 27" CLEAR HEIGHT SHALL BE PROVIDED FROM FINISHED FLOOR TO A POINT ON UNDERSIDE OF BOWL 8" IN FROM FRONT APRON. TOE CLEARANCE SHALL BE A MINIMUM HEIGHT OF 9" UNDER P-TRAP AND SUPPLIES OR STOPS. SEE ARCHITECTURAL DRAWINGS FOR FINAL MOUNTING HEIGHT. UNDER SINK MIXING VALVE WITH THREADED CONNECTION, BRONZE BODY, LIMITS HOT WATER BETWEEN 80°F & 120°F AND SET AT 95 DEGREE F, DOUBLE THROTTLING, INTEGRAL INLET FILTER WASHERS & CHECK VALVES, TAMPER RESISTANT LOCKING CAP. MEETS ASSE 1070 STANDARDS.

LAVATORY	ZURN Z5348
FAUCET	ZURN Z-81104-XL-3M
SUPPLY W/STOP	ZURN Z8800LRLK-PC
P-TRAP	ZURN Z8700-PC
STRAINER/TAILPIECE	ZURN Z8746
INSULATION KIT	ZURN Z8946-3-NT
CARRIER	ZURN Z-1231
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375
MIXING VALVE	MV-1

VITREOUS CHINA 20" X 18", COLOR "WHITE", 3 FAUCET HOLES ON 8" CENTER, FRONT OVERFLOW, FOR CONCEALED ARM SUPPORT. FURNISH FLOOR-MOUNTED SINGLE CARRIER WITH CONCEALED ARMS, LEVELING AND SECURING SCREWS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE BASE TO FLOOR FOR RIGID CONNECTION WITH 1/2" X 3-3/4" THREADED ZINC PLATED STEEL HEAVY DUTY WEDGE ANCHORS, COMPLETE WITH STAINLESS STEEL CLIP, WASHER AND THREADED NUT, CONFORMING TO FEDERAL SPEC. FF-S-325. PROVIDE CHROME PLATED ANGLE STOP TO WALL WITH CHROME PLATED 1/2" IPS X 3/8" OD FLEXIBLE COPPER SUPPLY RISERS AND LOOSE KEY OPERATOR, INTEGRAL PERFORATED CAST BRASS STRAINER WITH 1-1/4" OFFSET TAILPIECE AND P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL, WITH WATER SAVER TRAP PRIMER AND STAINLESS-STEEL PRIMER HOSE. POLISHED CHROME PLATED CAST BRASS SINGLE WATER METERING FAUCET WITH COVER PLATE, 0.5 GPM AERATOR OUTLET AND PUSH BUTTON. LAVATORY P-TRAP AND ANGLE VALVE ASSEMBLIES SHALL BE INSULATED WITH FULLY MOLDED INSULATION KIT, AND LIGHT GRAY COLOR WITH 3-PIECE INTERLOCKING RAP ASSEMBLY AND 2-PIECE INTERLOCKING ANGLE VALVE ASSEMBLY. FASTENERS SHALL BE NYLON-TYPE SUPPLIED WITH KIT. LAVATORY SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 28" FROM FLOOR TO BOTTOM OF THE APRON. KNEE AND TOE CLEARANCES SHALL BE AS FOLLOWS: 27" CLEAR HEIGHT SHALL BE PROVIDED FROM FINISHED FLOOR TO A POINT ON UNDERSIDE OF BOWL 8" IN FROM FRONT APRON. TOE CLEARANCE SHALL BE A MINIMUM HEIGHT OF 9" UNDER P-TRAP AND SUPPLIES OR STOPS. SEE ARCHITECTURAL DRAWINGS FOR FINAL MOUNTING HEIGHT.

LAVATORY	ZURN Z5348
FAUCET	ZURN Z-86300-3M
SUPPLY W/STOP	ZURN Z-8802LRLK-PC
P-TRAP	ZURN Z1021
STRAINER/TAILPIECE	ZURN Z-8746
INSULATION KIT	ZURN Z8946-3-NT
AERATOR	ZURN -3M
CARRIER	ZURN Z-1231
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375
MIXING VALVE	MV-1

L-2 LAVATORY, WALL-MOUNT (HANDICAP):

VITREOUS CHINA 20" X 17", OVAL, COLOR "WHITE", CENTER HOLE SETTING, FRONT OVERFLOW. PROVIDE CHROME PLATED 1/2" IPS X 3/8"OD, LOOSE KEY OPERATED, ANGLE STOP TO WALL WITH CHROME PLATED 3/8" FLEXIBLE COPPER RISERS, INTEGRAL PERFORATED CAST BRASS STRAINER WITH ELBOW AND 1-1/4" OFFSET TAILPIECE, CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL. POLISHED CHROME PLATED CAST BRASS SINGLE WATER METERING FAUCET WITH COVER PLATE, 0.5 GPM AERATOR OUTLET AND PUSH BUTTON.

LAVATORY	ZURN Z5111
FAUCET	ZURN Z-86300-3M
SUPPLY W/STOP	ZURN Z8802LRLK-PC
P-TRAP	ZURN Z8700-PC
STRAINER/TAILPIECE	ZURN Z8746
CARRIER	ZURN Z-1231
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375
MIXING VALVE	MV-1

SK-1 DOUBLE COMPARTMENT STAINLESS STEEL SINK (MATERIAL STORAGE):

29" X 22" X 8" DEEP (BOWL IS 11-1/2X16X6-3/8), TYPE 304, 18 GAUGE, 8" CENTERS, SELF RIMMING SINGLE COMPARTMENT, (18-8) NICKEL BEARING STAINLESS STEEL, BACK LEDGE SINK WITH SATIN FINISH AND SOUND DEADENING MATERIALS ON SIDE AND BOTTOM OF SINK. PROVIDE POLISHED CHROME PLATED TOP MOUNT SWING GOOSENECK SPOUT AND VACUUM BREAKER, STRAIGHT LEVER HANDLES, PRESSURE COMPENSATING AERATOR, STRAINER WITH REMOVABLE CRUMB CUP AND STOPPER, CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL. CHROME PLATED LOOSE KEY ANGLE STOP TO WALL WITH 3/8" CHROME PLATED FLEXIBLE HOT AND COLD WATER SUPPLIES. COORDINATE WITH CABINET SHOP DRAWINGS, BASE CABINET MUST BE A TRUE MINIMUM 24" DEEP BACK TO FRONT IN ORDER FOR SINK TO DROP INTO COUNTERTOP OPENING. SINK DRILLINGS SHALL ACCOMMODATE FITTING INSTALLATION, ONLY, NO OTHER CAPPED OPENINGS WILL BE ALLOWED.

SINK	ELKAY LRAD292265PD-3
FAUCET	ZURN Z-871 B1
STRAINER	ELKAY LK-35
SUPPLIES	ZURN Z-8800-LR-LK
P-TRAP	ZURN Z8700-PC
MIXING VALVE	MV-1

MV-1 WATER MIXING VALVE (THERMOSTATIC MIXING):

UNDER SINK 3/8" COMPRESSION FITTING MIXING VALVE, BRASS BODY, LEAD FREE, LIMITS HOT WATER BETWEEN 80°F & 120°F, DUAL CHECK VALVES, 0.25GPM MIN. FLOW, 40 MESH STAINLESS STEEL STRAINER, TAMPER RESISTANT LOCKING CAP. MEETS ASSE 1070 STANDARDS.

EXPOSED MIXING VALVE	WATTS LFUSG-B

UB-1 ICE MAKER HOOK-UP (REFRIGERATOR SPACE):

RECESSED METAL WALL BOX CONSTRUCTED AND SUITABLE FOR FIRE RATED PARTITIONS, COMPLETE WITH FACTORY INSTALLED SHANK VALVE WITH 1/4" O.D. COPPER OUTLET TESTED @ 100 P.S.I. PROVIDE APPROXIMATELY 5'-0" OF 1/4" O.D. SOFT COPPER TUBING WITH COMPRESSION FITTING IN TIGHT COIL. ANCHOR BOX TO WALL STRUCTURE. VERIFY LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS OR MOUNT TO MANUFACTURERS RECOMMENDATIONS.

WALL BOX	GUY GRAY BIM 875

CP-1 CIRCULATOR PUMP (INLINE TYPE):

INFINITELY VARIABLE CIRCULATOR MADE OF COMPOSITE CASING, HOUSING, IMPELLER, CERAMIC SHAFT, AND CARBON BEARINGS. A 44 WATT ECM PERMANENT MAGNET MOTOR AND ELECTRICAL CHARACTERISTICS ARE 120V/1 PHASE, 60 HZ., WITH 1" CONNECTIONS, MAXIMUM OPERATING PRESSURE OF 150 PSI, UL STANDARD 778 AND NSF CERTIFIED. DIGITAL TIMER WITH CIRCULATOR PROGRAMMING. TEMPERATURE AQUASTAT, MAINTAINS WATER TEMPERATURE BETWEEN 95°F AND 115°F. CIRCUIT SETTER CALIBRATED BALANCE VALVE, LEAD-FREE BRASS, WITH 1/4" NPT TAPPED DRAIN PORT, MEMORY STOP FEATURE, SET AT 1 GPM. PROVIDE CIRCUIT SOLVER A SELF-ACTING THERMOSTATIC RECIRCULATION VALVE SET AT 110°F.

CIRCULATOR	TACO 006E3
TIMER	TACO 265-3
AQUASTAT	TACO 563-2
CIRCUIT SETTER	XYLEM CB-1/2S LF
RECIRCULATION VALVE (TVC)	CIRCUIT SOLVER CS-1/2-110,

EWH-1 ELECTRIC WATER HEATER:

ASHRAE STANDARD 90, GLASS LINED TANK SUITABLE FOR 150 PSI WORKING PRESSURE, 300-PSI TEST. FINISH OF DURABLE HIGH GLOSS BAKED ENAMEL. BLANKET GLASS FIBER INSULATION OVER ENTIRE TANK. CONTROL CIRCUIT TRANSFORMER AND MANUAL RESET HIGH TEMPERATURE LIMIT CONTROL. ASME PRESSURE AND TEMPERATURE RELIEF VALVE. WATER HEATER SHALL BE ACCEPTABLE FOR COMMERCIAL APPLICATION BY MANUFACTURER. PROVIDE 3 FULL YEAR WARRANTY, SNAP ACTION AUTOMATIC IMMERSION MOUNTED THERMOSTATS, IMMERSION TYPE HEATING ELEMENTS AND MAGNESIUM ANODE ROD. PROVIDE UNIT MOUNTED DISCONNECT SWITCH. PROVIDE INLET AND OUTLET SHUT-OFF VALVES, VACUUM RELIEF VALVE ON INLET WATER SUPPLY. PROVIDE GALVANIZED STEEL DRIP PAN. PROVIDE PRE-CHARGED EXPANSION TANK, OUTER STEEL SHELL (FLEXIBLE DIAPHRAGM TYPE), ON COLD WATER INLET SIDE OF WATER HEATER FOR THERMAL EXPANSION CONTROL, TANK VOLUME IN GALLONS SHALL BE OF SUFFICIENT SIZE TO ACCOMMODATE WATER HEATER SIZE IN GALLONS. 80 GAL 5KW 208V/3 PHASE. WIRED FOR SIMULTANEOUS OPERATION.

WATER HEATER	A. O. SMITH DEN 80
VACUUM RELIEF	WATTS 36A
EXPANSION TANK	AMTROL "THERM-X-TROL"

EWH-2 ELECTRIC WATER HEATER:

ASHRAE STANDARD 90, GLASS LINED TANK SUITABLE FOR 150 PSI WORKING PRESSURE, 300-PSI TEST. FINISH OF DURABLE HIGH GLOSS BAKED ENAMEL. BLANKET GLASS FIBER INSULATION OVER ENTIRE TANK. CONTROL CIRCUIT TRANSFORMER AND MANUAL RESET HIGH TEMPERATURE LIMIT CONTROL. ASME PRESSURE AND TEMPERATURE RELIEF VALVE. WATER HEATER SHALL BE ACCEPTABLE FOR COMMERCIAL APPLICATION BY MANUFACTURER. PROVIDE 3 FULL YEAR WARRANTY, SNAP ACTION AUTOMATIC IMMERSION MOUNTED THERMOSTATS, IMMERSION TYPE HEATING ELEMENTS AND MAGNESIUM ANODE ROD. PROVIDE UNIT MOUNTED DISCONNECT SWITCH. PROVIDE INLET AND OUTLET SHUT-OFF VALVES, VACUUM RELIEF VALVE ON INLET WATER SUPPLY. PROVIDE GALVANIZED STEEL DRIP PAN. PROVIDE PRE-CHARGED EXPANSION TANK, OUTER STEEL SHELL (FLEXIBLE DIAPHRAGM TYPE), ON COLD WATER INLET SIDE OF WATER HEATER FOR THERMAL EXPANSION CONTROL, TANK VOLUME IN GALLONS SHALL BE OF SUFFICIENT SIZE TO ACCOMMODATE WATER HEATER SIZE IN GALLONS. 36 GAL 3KW 208V/3 PHASE. WIRED FOR SIMULTANEOUS OPERATION.

WATER HEATER	A. O. SMITH DEL 30
VACUUM RELIEF	WATTS 36A
EXPANSION TANK	AMTROL "THERM-X-TROL"

FD FLOOR DRAIN:

DURA-COATED CAST IRON BODY, BOTTOM OUTLET AND TRAP PRIMER CONNECTION. TYPE B POLISHED NICKEL BRONZE STRAINER, MEMBRANE CLAMP & ADJUSTABLE COLLAR WITH SLOTS.

FLOOR DRAIN	ZURN Z-415B-P

WH RECESSED HOSE BIB & WALL HYDRANT:

AITI-SIPHON VACUUM BREAKER, FLUSH MOUNTING STAINLESS STEEL WALL BOX WITH HINGED COVER, 3/4 INCH HOSE THREAD, BRONZE BODY AND INTER PARTS, WHEEL HANDLE, LOOSE KEY FAUCET OPERATED CONTROL VALVE, DUAL CHECK VALVE, SCREWDRIVER OPERATED STOP VALVE IN SUPPLY, NARROW INSTALLATION.

WALL FAUCET	ZURN Z1335

HB RECESSED HOSE BIB & WALL HYDRANT:

AITI-SIPHON VACUUM BREAKER, FLUSH MOUNTING WALL BOX, 3/4 INCH, MALE HOSE THREAD, BRASS CASTING WITH CHROME FINISH POLYCARBONATE WHEEL HANDLE, LOOSE KEY FAUCET OPERATOR.

WALL FAUCET	WOODFORD MODEL B24

TP TRAP PRIMERS:

PROVIDE BRASS TRAP PRIMERS AND DISTRIBUTION UNITS TO SEAL FLOOR DRAINS INDICATED ON DRAWINGS. TRAP PRIMER VALVES SHALL BE AUTOMATIC, SELF CONTAINED TYPE WITH NO SPRINGS OR DIAPHRAGMS AND SHALL NOT REQUIRE ADJUSTMENT. INLET AND OUTLET SIZE IS 1/2". TRAP PRIMER VALVES SHALL BE THE TYPE THAT CAN BE INSTALLED ANYWHERE ON COLD WATER PIPING SIZE 1-1/2" OR LESS. DISTRIBUTION UNITS SHALL SUPPLY 1-4 FLOOR DRAINS. TRAP PRIMER VALVES SHALL COMPLY WITH ASSE 1018. PRECISION PLUMBING PRODUCTS (PPP)

TRAP PRIMER	PPP PR-500
DISTRIBUTION UNIT	PPP DU-U

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	FIXTURE CONNECTIONS			PIPE SIZES-INCHES			
		CW	HW	W	CW	HW	W	V
WC-1	WATER CLOSET (ADULT HANDICAP, MANUAL)	1	-	4	1	-	4	-
WC-2	WATER CLOSET (CHILD HANDICAP/ADULT STANDARD, MANUAL)	1	-	4	1	-	4	-
UR-1	URINAL (HANDICAP, MANUAL)	3/4	-	2	3/4	-	2	1-1/2
UR-2	URINAL (STANDARD, MANUAL)	3/4	-	2	3/4	-	2	1-1/2
L-1	LAVATORY (HANDICAP, 20X18)	1/2	1/2	2	3/8	3/8	1-1/4	1-1/2
L-2	LAVATORY (HANDICAP, 20X18)	1/2	1/2	2	3/8	3/8	1-1/4	1-1/2
SK-1	SINK (29"x22"x7-8")	1/2	1/2	2	3/8	3/8	1-1/2	1-1/2
UB-1	RECESSED UTILITY WALL BOX (ICE-MAKER HOOK-UP)	-	-	-	1/4	-	-	-
EWC-1	ELECTRIC WATER COOLER (DUAL LEVEL, BOTTLE FILL STATION)	1/2	-	2	3/8	-	1-1/2	-
MV-1	WATER MIXING VALVE	-	-	-	3/8	3/8	-	-
EWH-1	ELECTRIC WATER HEATER	1	1	-	3/4 INLET	3/4 OUTLET	-	-
EWH-2	ELECTRIC WATER HEATER	1	1	-	3/4 INLET	3/4 OUTLET	-	-
CP-1	CIRCULATOR PUMP(INLINE)	-	1/2	-	-	3/4 FLANGE	-	-
TCV-1	TEMPERATURE CONTROL VALVE	-	1/2	-	-	1/2	-	-
FD	FLOOR DRAIN	-	-	3	1/2	-	3	-
HB	HOSE BIBB	3/4	-	-	3/4	-	-	-
WH	RECESSED WALL HYDRANT	3/4	-	-	3/4	-	-	-
TP-1	TRAP PRIMER	-	-	-	1/2	-	-	-

1. WATER SUPPLY TAPPING TO EACH PLUMBING FIXTURE SHALL BE FULL SIZE (MINIMUM).
2. SEE ELECTRICAL DWGS FOR FINAL POWER REQUIREMENTS.
3. PROVIDE WATER HAMMER ARRESTERS ON HOT & COLD WATER SUPPLY BRANCHES SERVING SINGULAR, MULTIPLE OR GROUPS OF PLUMBING FIXTURES. ADHERENCE TO THE PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I.-WH201 (PER SPECIFICATIONS) SHALL BE EMPLOYED IN DETERMINING PROPER SIZE, SELECTION, PLACEMENT, LOCATION AND INSTALLATION OF ARRESTERS.

GENERAL NOTES

1. COORDINATE ALL PIPING WITH DUCTWORK SHOP DRAWINGS AND EXISTING CONDITIONS. ROUTE PIPING AS REQUIRED TO AVOID CONFLICTS.
2. PRIOR TO START OF ANY WORK, COORDINATE SANITARY SEWER AND POTABLE WATER PIPING WITH CIVIL DRAWINGS.
3. FIELD VERIFY PIPE INVERTS PRIOR TO LAYING OUT SANITARY SEWER PIPING.
4. ALL PIPING PASSING THROUGH ANY WALL SHALL HAVE A SLEEVE PER SPECIFICATIONS.
5. ALL PIPING PASSING THROUGH FIRE-RATED WALLS SHALL HAVE A FIRE-RATED SLEEVE PER SPECIFICATIONS. ALL PIPING PENETRATIONS THROUGH WALLS OR FLOORS SHALL BE SEALED TO EQUAL THE RATING OF THE WALLS OR FLOORS.
6. ALL PIPING INDICATED IS ABOVE THE CEILING EXCEPT THE OBVIOUS SANITARY SOIL, WASTE, VENT AND POTABLE WATER PIPING BELOW FLOOR OR GRADE.
7. SEE TOILET ROOM ELEVATIONS ON ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHT.
8. COORDINATE EXACT LOCATION OF ALL EXTERIOR WALL HYDRANTS WITH ARCHITECTURAL DRAWINGS.
9. UNDER SLAB SOIL, WASTE AND VENT PIPING PASSING TO UNDERSIDE OR THROUGH FOUNDATION FOOTING, WALL OR GRADE BEAM SHALL BE PROVIDED WITH A RELIEVING ARCH OR PIPE SLEEVE 2 (TWO) PIPE SIZES GREATER THAN PIPE SIZE INDICATED ON PLANS. COORDINATE FINAL PIPE ROUTING AND LAYOUT WITH STRUCTURAL DRAWINGS.
10. PRIOR TO SUBSTANTIAL COMPLETION OF NEW AND ALTERED WORK AREAS, CONTRACTOR SHALL HAVE SANITARY PLUMBING SYSTEM CLEARED OF DEBRIS OR ANY MATTER THAT WOULD INTERFERE OR PREVENT ADEQUATE CONVEYANCE OF MATERIALS FROM MOVING THROUGH AND TERMINATING INTO BUILDING OR PUBLIC DISPOSAL FACILITIES.
11. ALL (VTR'S) VENT THRU ROOF PENETRATIONS INDICATED ON PLANS ARE PRELIMINARY. FINAL LOCATIONS SHALL BE COORDINATED WITH ALL TRADES. ALL VTR'S SHALL BE A MINIMUM OF 10'-0" FROM ALL FRESH AIR INTAKE OPENINGS.
12. ALL TRAP PRIMERS AND DOMESTIC WATER ISOLATION VALVES SHALL BE ACCESSIBLE. TRAP PRIMERS LOCATED IN THE VICINITY OF WATER CLOSETS SHALL BE ACTIVATED BY WATER CLOSET USAGE. ISOLATION VALVES SHALL BE OF THE QUARTER TURN BALL OR GATE TYPE.
13. CONTRACTOR SHALL DEVELOP AND SUBMIT COORDINATION SHOP DRAWINGS WHICH IDENTIFY ROUTING OF PLUMBING PIPE AND LOCATION OF EQUIPMENT. SHOP DRAWINGS SHALL INDICATE COORDINATION WITH THE WORK OF OTHER TRADES.
14. ALL WORK SHALL COMPLY WITH THE FLORIDA BUILDING CODE 8TH EDITION (2023) PLUMBING.

⬡1 A FOUNDATION MAY BE REQUIRED IN VERY POOR SOIL CONDITIONS.

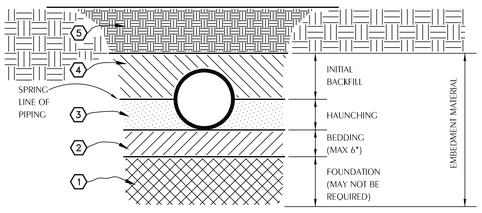
⬡2 BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE. IN DRY SOIL CONDITIONS, CLASS II OR III MATERIAL SHALL BE HAND PLACED IN 4-6", LIGHTLY COMPACTED UNIFORM AND NOT FINER THAN THE FOUNDATION MATERIAL. IN WET CONDITIONS, CLASS I, II OR III MATERIAL SHALL BE HAND PLACED IN 4-6", UNIFORM AND NOT FINER THAN THE FOUNDATION MATERIAL. WHEN UTILIZING CLASS I MATERIAL, SUFFICIENT AMOUNTS OF CLASS II OR III MATERIAL SHALL BE ADDED TO FILL ALL VOIDS CREATED BY THE USE OF CLASS I MATERIAL.

⬡3 HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. CLASS II OR III MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.

⬡4 INITIAL BACKFILL MATERIAL SHALL BE CLASS II OR III. IT SHALL BE PLACED WITHIN 24-30" ABOVE THE TOP OF THE PIPE AND TAMPED BY A PORTABLE VIBRATOR. FINAL BACKFILL MATERIAL MAY BE MACHINE PLACED. THE MATERIAL SHALL BE CLASS II OR III MATERIAL. CLASS IV MATERIAL MAY BE INSTALLED OUTSIDE OF ROADWAY.

⬡5 FINAL BACKFILL UNDER ROADWAYS MAY REQUIRE SPECIAL COMPACTION AND DENSITY TESTS. A MINIMUM OF 30" OF COVER OVER THE TOP OF THE PIPE SHALL BE PROVIDED BEFORE THE TRENCH IS WHEEL- LOADED.

NOTE:
ALL EMBEDMENT MATERIALS SHALL BE NO LESS THAN 95% OF MAXIMUM DENSITY. LABORATORY TESTING OF THE SOIL WILL BE REQUIRED. THIS PROCEDURE SHALL BE REQUIRED ON ALL INSTALLATIONS. ALL TRENCHING, EXCAVATION, AND BACKFILLING SHALL BE IN ACCORDANCE WITH 2023 FLORIDA BUILDING CODE, PLUMBING SECTION 306.



EMBEDMENT MATERIALS

CLASS I:	ANGUALAR, 1/4"-1-1/2", GRADED STONE, INCLUDING A NUMBER OF FILL MATERIALS THAT HAVE REGIONAL SIGNIFICANCE SUCH AS CORAL, SLAG, CINDERS, CRUSHED STONE AND CRUSHED SHELLS.
CLASS II:	COARSE SANDS AND GRAVELS WITH MAXIMUM PARTICLE SIZE OF 1-1/2" INCLUDING VARIOUS GRADED SANDS AND GRAVELS CONTAINING SMALL PERCENTAGES OF FINES, GENERALLY GRANULAR AND NON-COHESIVE, EITHER WET OR DRY. SOIL TYPES GW, GP, SW, AND SP ARE INCLUDED IN THIS CLASS.
CLASS III:	FINE SAND AND CLAY GRAVELS, INCLUDING FINE SANDS, SAND-CLAY MIXTURES AND GRAVEL-CLAY MIXTURES. SOIL TYPES GM, GC, SM, AND SC ARE INCLUDED IN THIS CLASS.
CLASS IV:	SILT, SILTY CLAYS, AND CLAYS, INCLUDING INORGANIC CLAYS AND SILT OF MEDIUM TO HIGH PLASTICITY AND LIQUID LIMITS. SOIL TYPES MH, ML, CH, AND CL ARE INCLUDED IN THIS CLASS. THESE MATERIALS ARE NOT TO BE USED FOR BEDDING, HAUNCHING, OR INITIAL BACKFILL.
CLASS V:	THIS CLASS INCLUDES THE ORGANIC SOILS, AS WELL AS SOILS CONTAINING FROZEN EARTH, DEBRIS, ROCKS LARGER THAN 1-1/2" IN DIAMETER AND OTHER FOREIGN MATERIALS. THESE MATERIALS ARE NOT TO BE USED FOR BEDDING, HAUNCHING, OR INITIAL BACKFILL.

1 EXCAVATION AND BACKFILL DETAIL

P001
SCALE: NONE

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Keith A Johnson, State of Florida, Professional Engineer, License No. 86457

This item has been digitally signed and sealed by Keith A Johnson on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Date:
2025.01.31
15:31:59-06'00'

KEITH A. JOHNSON
LICENSE
NO. 86457

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

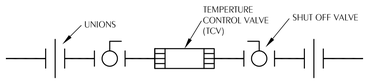
REVISIONS:

No.	Description	Date

PLUMBING LEGEND, SCHEDULE, NOTES, AND DETAILS

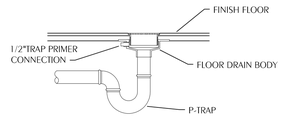
PROJECT NUMBER 22019
DATED 01/31/2025

P001



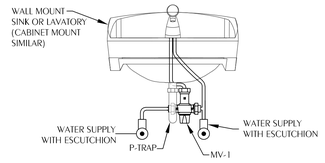
1 P002 THERMOSTATIC TEMPERATURE CONTROL VALVE DETAIL

SCALE: NONE



2 P002 FLOOR DRAIN WITH TRAP PRIMER DETAIL

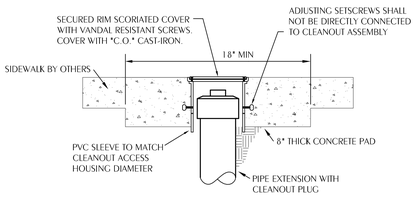
SCALE: NONE



3 P002 LAV/SINK MIXING VALVE DETAIL

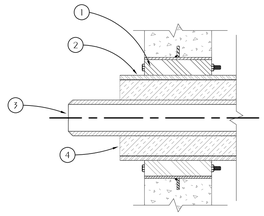
SCALE: NONE

NOTE: MIXING VALVE WILL BE TYPICAL FOR L-1, L-2, & SK-1



4 P002 CLEANOUT TO SIDEWALK

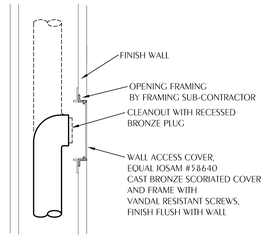
SCALE: NONE



1. WALL SEAL APPURTENANCES PER SPECIFICATIONS
2. PIPE SLEEVE PER SPECIFICATIONS
3. PIPING
4. INSTALLATION

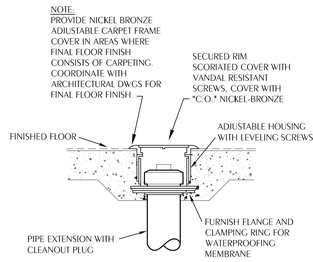
5 P002 TYPICAL PIPE PENETRATION OF WALL

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



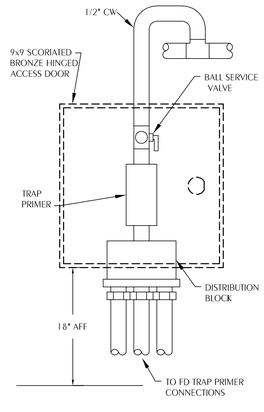
6 P002 CLEANOUT TO WALL

SCALE: NONE



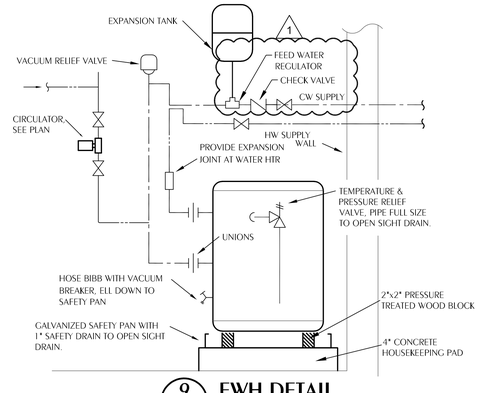
7 P002 CLEANOUT TO FLOOR

SCALE: NONE



8 P002 TRAP PRIMER DETAIL

SCALE: NONE



9 P002 EWH DETAIL

SCALE: NONE

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

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REVISIONS:

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PLUMBING DETAILS

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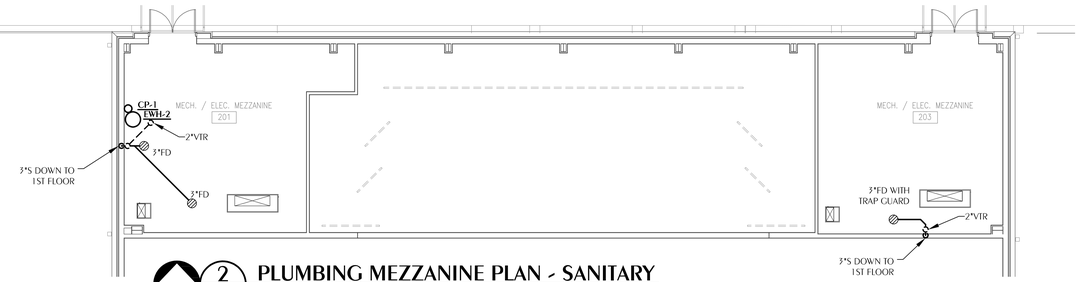
DATED 01/31/2025

P002

SHEET NOTES

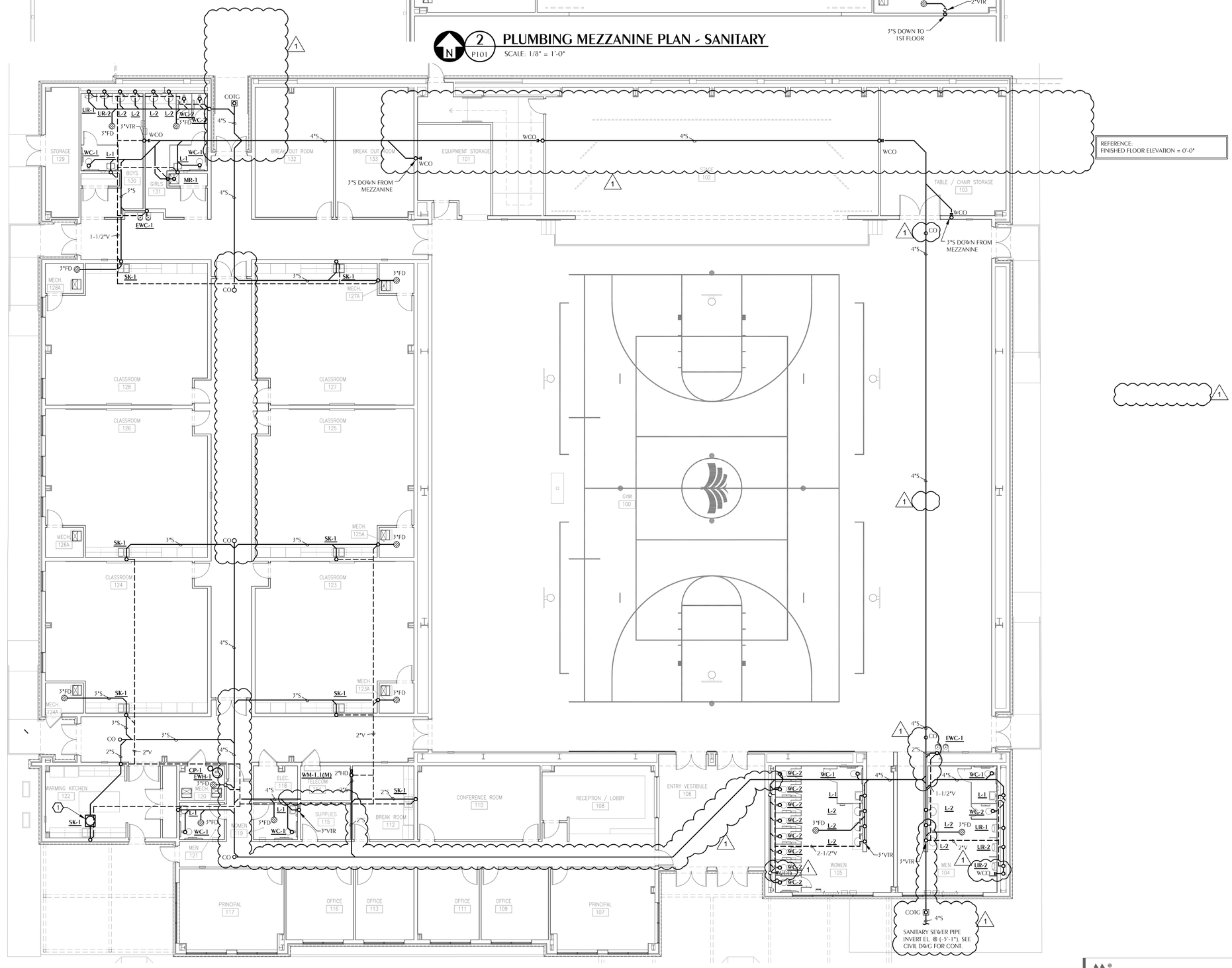
1. GI-1 GREASE INTERCEPTOR:
SEAMLESS, ROTATIONALLY- MOLDED POLYETHYLENE GREASE INTERCEPTOR WITH A UNIFORM WALL THICKNESS OF 5/16". AVAILABLE FOR ABOVE OR BELOW GRADE INSTALLATION. INTERCEPTOR SHALL HAVE BUILT-IN FLOW CONTROL. FLOW RATE SHALL BE 20GPM AND HAVE A CAPACITY OF 70LBS OR A FLOW RATE SHALL BE 25GPM AND HAVE A CAPACITY OF 65LBS. THE SOLID CAPACITY IS 1.3CAL & LIQUID IS 1OCAL. PEDESTRIAN RATED COVER SHALL BE WATER/GAS TIGHT SEAL WITH A MINIMUM OF 450LBS LOAD CAPACITY. 4"EPT INLET/OUTLET, WITH 2" & 3" PLAIN END FITTING ADAPTERS.

GREASE INTERCEPTOR SCHIER GB1



N 2 P101 PLUMBING MEZZANINE PLAN - SANITARY

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



N 1 P101 PLUMBING PLAN - SANITARY

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

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No.	Description	Date
1	SANITARY REVISION	07/01/2025

PLUMBING PLAN - SANITARY

PROJECT NUMBER	22019
DATED	01/31/2025

P101

22019
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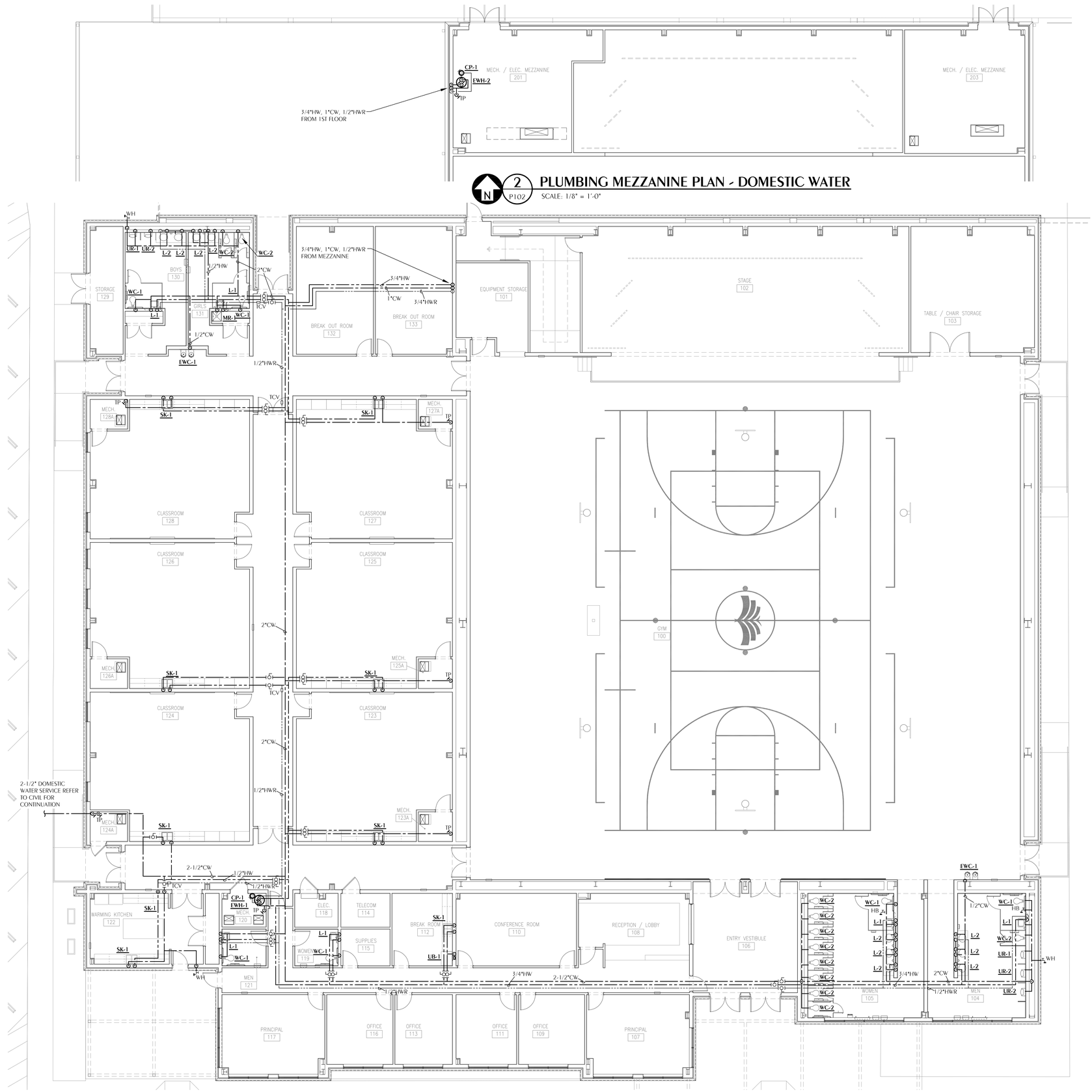
01/31/2025



N 2 P102 **PLUMBING MEZZANINE PLAN - DOMESTIC WATER**
SCALE: 1/8" = 1'-0"

N 1 P102 **PLUMBING PLAN - DOMESTIC WATER**
SCALE: 1/8" = 1'-0"

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PLUMBING PLAN - DOMESTIC WATER

PROJECT NUMBER	22019
DATED	01/31/2025

P102

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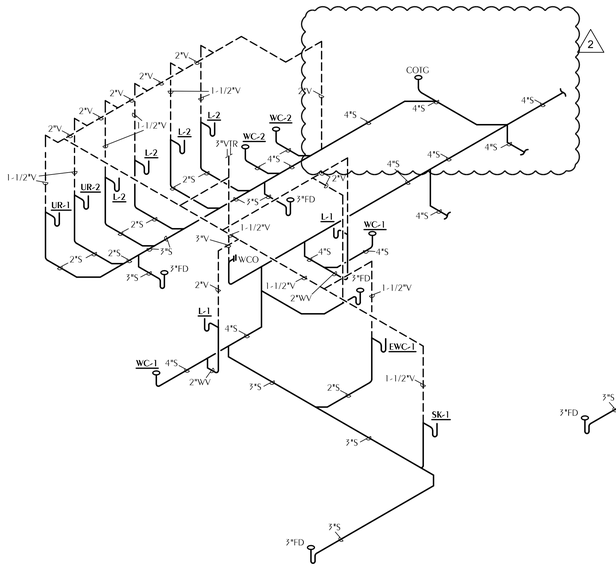
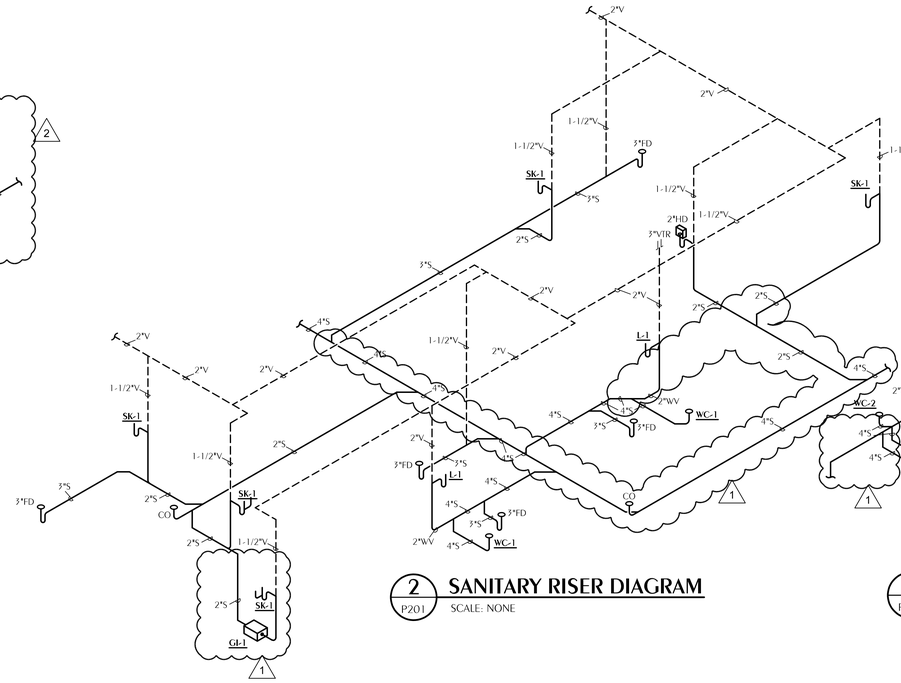


1 P201 **SANITARY RISER DIAGRAM**
SCALE: NONE



2 P201 **SANITARY RISER DIAGRAM**
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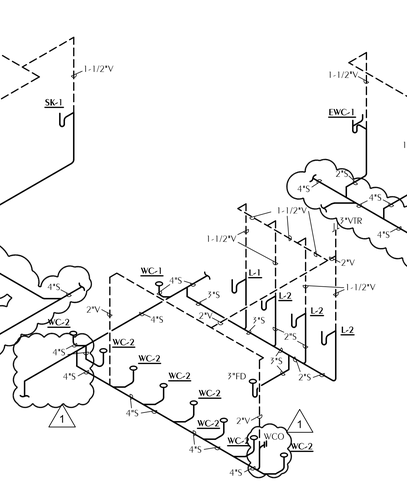
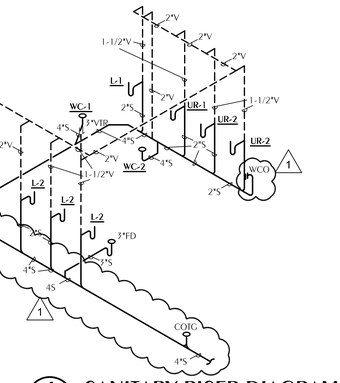
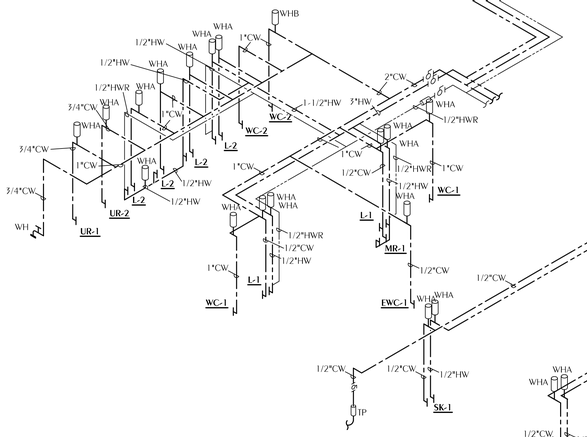
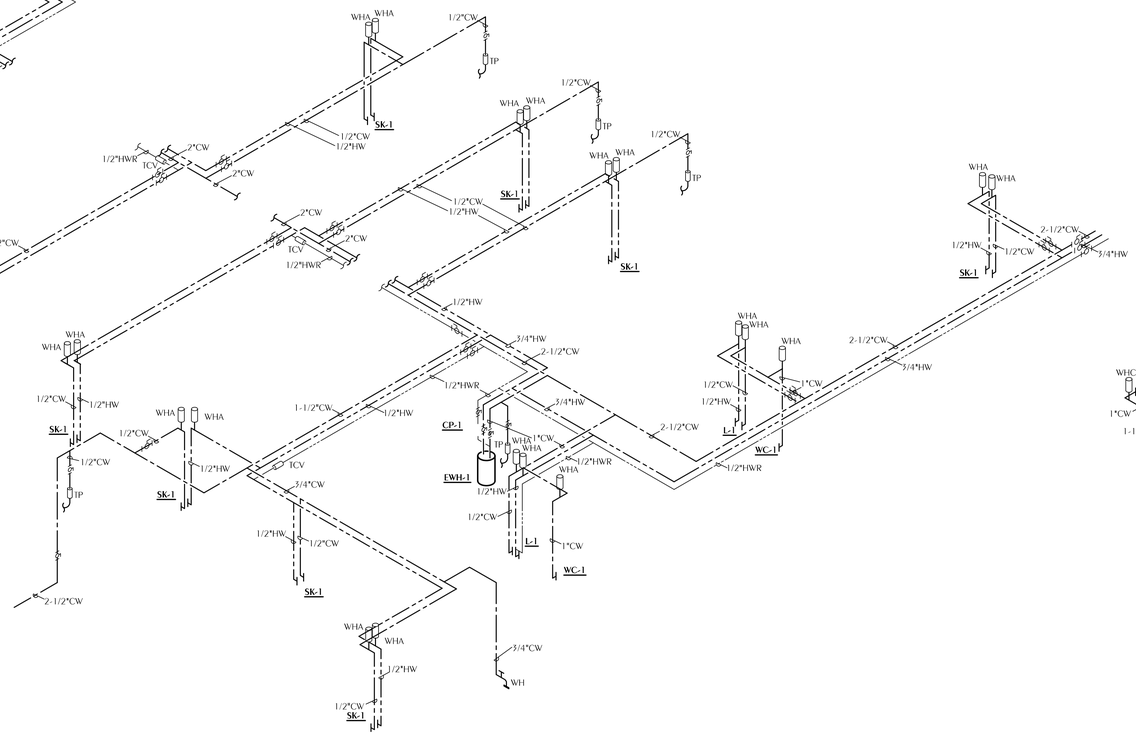


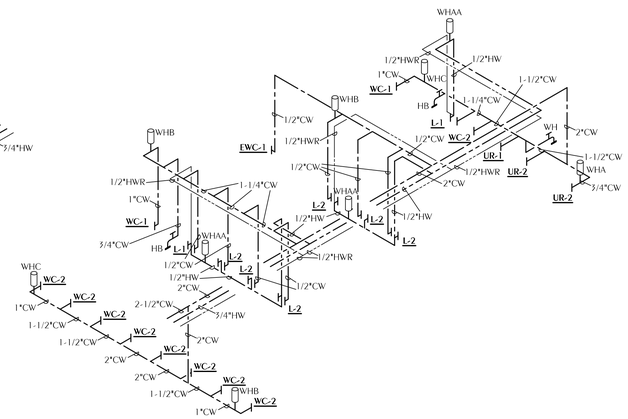
3 P201 **SANITARY RISER DIAGRAM**
SCALE: NONE



4 P201 **SANITARY RISER DIAGRAM**
SCALE: NONE







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PLUMBING
RISER DIAGRAMS

PROJECT NUMBER	22019
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P201

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LEGEND

- AHU-1 — EQUIPMENT TAG
- DETAIL TAG ("1" INDICATES IDENTIFICATION NUMBER; "M3" INDICATES THE SHEET NUMBER DRAWN ON)
- SHEET NOTE
- SUPPLY DUCT SECTION POSITIVE PRESSURE
- RETURN OR EXHAUST DUCT NEGATIVE PRESSURE
- AxB — RECTANGULAR DUCT SIZE ("A" INDICATES SIDE SHOWN; "B" INDICATES SIDE NOT SHOWN)
- INDICATES RISE IN ELEVATION OF DUCT.
- EXTERNALLY INSULATED DUCTWORK
- DOUBLE WALL SPIRAL DUCTWORK
- INTERNALLY INSULATED DUCTWORK
- FABRIC DISPERSION DUCTWORK
- EXTERNALLY INSULATED ROUND FLEXIBLE DUCTWORK
- DUCT ELBOW WITH TURNING VANES
- RADIUSED DUCT ELBOW
- FLEXIBLE DUCT CONNECTION
- MANUAL VOLUME BALANCING DAMPER
- MOTORIZED DAMPER (M)
- FIRE DAMPER WITH ACCESS DOORS (FD)
- SMOKE DAMPER WITH ACCESS DOORS (SD)
- BACKDRAFT DAMPER (BD)
- TEE WITH TURNING VANES
- TRANSITION
- FLEX DUCT TAKE OFF WITH MVD SIZE EQUALS DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE
- LOW PROFILE RECTANGULAR TO ROUND SIDE TAKEOFF FITTING WITH MVD; CROWN MODEL 3300-DS OR EQUAL
- BRANCH DUCT TAKEOFF WITH MVD
- CO — CLEANOUT
- C — CONDENSATE DRAIN LINE
- REF = REFRIGERANT PIPE PAIR

- EXISTING DUCTWORK TO BE DEMOLISHED
- 18x16e — EXISTING DUCTWORK TO REMAIN
- SR-1 / 100 — AIR DEVICE TAG. TOP LINE INDICATES TYPE OF DEVICE BOTTOM LINE INDICATES AIRFLOW IN CFM
- (2)SR-1 / 100 — AIR DEVICE TAG. TOP LINE INDICATES TYPE OF DEVICE BOTTOM LINE INDICATES AIRFLOW IN CFM (2) INDICATES TYPICAL OF TWO DEVICES

TYP	TYPICAL
TEMP	TEMPERATURE
SA	SUPPLY AIR
RA	RETURN AIR
EA	EXHAUST AIR
MA	MIXED AIR
OA	OUTDOOR AIR
TA	TRANSFER AIR
EF	EXHAUST FAN
CD	CEILING DIFFUSER
RG	RETURN GRILLE
EG	EXHAUST GRILLE
ER	EXHAUST REGISTER
CEF	CEILING MOUNTED EXHAUST FAN
AHU	INDOOR AIR HANDLING UNIT
HP	OUTDOOR HEAT PUMP UNIT
OAU	OUTSIDE AIR PRECONDITIONING UNT
CU	OUTDOOR CONDENSING UNIT-COOLING ONLY
T1	THERMOSTAT AND HUMIDISTAT, "1" INDICATES UNIT CONTROLLED
C	CO2 MONITORING STATION
S	DUCT MOUNTED SMOKE DETECTOR
FD	FLOOR DRAIN
UC	UNDERCUT DOOR ¾"
DG	DOOR GRILLE, REFER TO DOOR SCHEDULE
FD DG	22x22 FIRE RATED DOOR GRILLE WITH AUXILIARY FRAME
AFF	ABOVE FINISHED FLOOR
FD	FIRE DAMPER AT CEILING DIFFUSER OR GRILLE.
XFR	TRANSFER AIR
RLF	PRESSURE RELIEF
	TYPICAL 4 WAY THROW CEILING DIFFUSER
	CEILING DIFFUSER WITH THROW INDICATED
VRF	VARIABLE REFRIGERANT FLOW
E OR (E)	EXISTING
CC	DUCTLESS FCU-CEILING MOUNTED CASSETTE
CAH	DUCTED FCU-CONCEALED AIR HANDLING UNIT
WM	DUCTLESS FCU-WALL MOUNTED UNIT
DP	DEW POINT
	POINT OF CONNECTION TO EXISTING

GENERAL NOTES

1. ALL DUCT DIMENSIONS ARE NET INSIDE.
2. VERIFY COLLAR SIZES ON ALL AIR TERMINALS, EQUIPMENT OUTLETS AND INLETS, TRANSITION DUCTWORK AS NECESSARY. EXTERNALLY INSULATE TRANSITIONS AT EQUIPMENT CONNECTIONS.
3. FIELD VERIFY CLEAR SPACE AVAILABLE, ROUTING PATH, AND CONFLICTS WITH STRUCTURE AND THE WORK OF OTHER TRADES PRIOR TO FABRICATING DUCTWORK. PROVIDE OFFSETS IN DUCTWORK AS REQUIRED, WHETHER SPECIFICALLY INDICATED ON DRAWINGS OR NOT. SUBMIT SHOP DRAWINGS ON DUCTWORK LAYOUT PRIOR TO COMMENCING WORK. MAINTAIN CLEARANCE AROUND ALL LIGHT FIXTURES AS REQUIRED TO REMOVE AND SERVICE FIXTURES. COORDINATE WITH ROOF TRUSSES/STRUCTURE. PRESSURE TEST ALL DUCTWORK FOR LEAKS.
4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT, PIPING, AND DUCTWORK SUCH THAT MANUFACTURERS' RECOMMENDED CLEARANCES ARE MET FOR ALL ACCESS PANELS, MOTORS, FANS, BELTS, FILTERS AND AIR INTAKES. CONDENSATE LINES SHALL BE CLEAR OF FILTER RACK ACCESS.
5. PROVIDE DUCT FLEX CONNECTIONS & VIBRATION ISOLATION FOR ALL UNITS NOT INTERNALLY ISOLATED.
6. ALL SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR INTAKE DUCTWORK SHALL BE GALVANIZED SHEET METAL UNLESS OTHERWISE NOTED.
7. ALL AHU FILTERS SHALL BE OF A READILY AVAILABLE SIZE, OF DISPOSABLE TYPE, AND BE ACCESSIBLE WITHOUT THE USE OF SCREWS OR OTHER MECHANICAL DEVICES REQUIRING TOOLS.
8. PROVIDE ACCESS PANELS IN CEILINGS AS REQUIRED FOR MAINTENANCE AND ADJUSTMENT OF EQUIPMENT LOCATED ABOVE CEILING.
9. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING LOCATION OF ALL EQUIPMENT AND UTILITIES.
10. ALL WORK SHALL COMPLY WITH THE EIGHTH EDITION (2023) FLORIDA BUILDING CODE.
11. COORDINATE LOCATION OF ALL CEILING MOUNTED EQUIPMENT WITH ARCHITECTS REFLECTED CEILING PLAN.
12. SLOPE ALL CONDENSATE DRAIN PIPING AT 1/8" PER FOOT.

DUCTWORK NOTES

1. ALL ROUND FLEXIBLE DUCT SHALL BE FLEXMASTER TYPE 8M ACOUSTICAL FLEX OR ENGINEER APPROVED EQUAL. MAXIMUM LENGTH OF ANY FLEXIBLE DUCT RUNOUT SHALL BE 5'-0". WHERE LENGTH REQUIRED EXCEEDS 5'-0", INSTALL EXTERNALLY INSULATED ROUND SNAPLOCK DUCT FOR BALANCE OF DISTANCE TO SPIN-IN TAP AT MAIN DUCT TRUNK.
2. SEAL ALL DUCT PENETRATIONS OF WALLS AIRTIGHT, REGARDLESS OF WHETHER WALLS ARE FIRE RATED OR NOT.
3. ALL SUPPLY AIR DUCTWORK FROM AHU'S (EXCEPT TAKEOFFS TO SUPPLY AIR DIFFUSERS) SHALL BE LOW PRESSURE RECTANGULAR, SMACNA STATIC PRESSURE CLASS 2" W.G., SEAL CLASS A, EXTERNALLY INSULATED UNLESS OTHERWISE INDICATED. DUCT SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
4. ALL RETURN AIR DUCTWORK SHALL BE LOW PRESSURE RECTANGULAR, SMACNA STATIC PRESSURE CLASS 2" W.G., SEAL CLASS A, EXTERNALLY INSULATED UNLESS OTHERWISE INDICATED. DUCT SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
5. ALL OUTSIDE AIR INTAKE DUCTWORK SHALL BE LOW PRESSURE RECTANGULAR, SMACNA STATIC PRESSURE CLASS 2" W.G., SEAL CLASS A, EXTERNALLY INSULATED. DUCT SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
6. STANDARD EXHAUST AIR DUCTWORK SHALL BE LOW PRESSURE RECTANGULAR, SMACNA STATIC PRESSURE CLASS 1/2" W.G., SEAL CLASS A.
7. WHEN ROUTING DUCTWORK OVER LIGHTS, PROVIDE A MINIMUM 6" CLEARANCE BETWEEN DUCT AND LIGHTS.
8. EXTERNALLY INSULATE DUCTWORK WITH 2" THICK FLEXIBLE FIBERGLASS INSULATION.

VENTILATION SCHEDULE

SPACE TYPE	VENTILATION CFM/S.F.	VENTILATION CFM/PERSON
CLASSROOM	0.12	10
CORRIDOR	0.06	0
STORAGE	0.06	0
OFFICE	0.06	5
BREAK	0.18	7.5
CAFETERIA	0.18	7.5
MULTIPURPOSE ASSEMBLY	0.06	7.5
DRESSING ROOM	0.25	0
RESTROOM-INTERMITTENT	0	70/FIXTURE
RESTROOM-CONTINUOUS	0	50/FIXTURE
SHOWER-CONTINUOUS	0	20/FIXTURE
JANITORS CLOSETS	1	0

NOTE:
VENTILATION RATES IN COMPLIANCE WITH ASHRAE STANDARD 62.1-2019.

LOUVER SCHEDULE

MARK	AIRFLOW CFM (MAX)	LOUVER SIZE (WxH) INCHES	FREE AREA FT² (MIN)
LVR-1 / CFM	320	24x12	0.6
LVR-2 / CFM	180	20x12	0.4
LVR-3 / CFM	395	36x12	0.9
LVR-4 / CFM	140	16x12	0.3
LVR-5 / CFM	700	36x18	1.8

1. PROVIDE GREENHECK MODEL 'EHV-901D' (OR EQUAL) EXTRUDED ALUMINUM, WIND-DRIVEN RAIN RESISTANT, STATIONARY LOUVER WITH BIRDSCREEN.
2. FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.

FAN SCHEDULE

UNIT	TYPE	CFM	MAX. FAN RPM	ESP (IN. H20)	MAX. MOTOR POWER	SONES/db (MAX.)	BASIS OF DESIGN	MODEL	CONTROL	ELECTRICAL VOLTS/PHASE	NOTES
EF-1	INLINE	320	948	0.25	50 W	1.2	GREENHECK	CSP-A510	INTERLOCK WITH AHU-10 OA DAMPER	115/1	1,2,3,4,5,7
EF-2	CEF	70	799	0.20	10 W	0.3	GREENHECK	SP-A110	INTERLOCK WITH LIGHTS	115/1	1,2,3,4,5,6,7
EF-3	CEF	70	799	0.20	10 W	0.3	GREENHECK	SP-A110	INTERLOCK WITH LIGHTS	115/1	1,2,3,4,5,6,7
EF-4	INLINE	700	801	0.25	318 W	0.3	GREENHECK	CSP-A900	INTERLOCK WITH AHU-8 OA DAMPER	115/1	1,2,3,4,5,7

1. PROVIDE DISCONNECT
2. PROVIDE SOLID STATE SPEED CONTROLLER.
3. PROVIDE BACK DRAFT DAMPER
4. PROVIDE THERMAL OVERLOAD
5. PROVIDE DIRECT DRIVE FAN
6. PROVIDE WHITE FINISH ALUMINUM GRILLE
7. PROVIDE VIBRATION ISOLATION HANGERS.

MINI SPLIT SYSTEM CONDENSING UNIT SCHEDULE

UNIT MHP	BASIS OF DESIGN	MODEL	NOMINAL COOL CAPACITY (BTUH)	DESIGN COOLING OUTDOOR TEMP DB	SEER2	NOMINAL HEAT CAPACITY (BTUH)	DESIGN HEATING OUTDOOR TEMP DB	HSPF	VOLTS/PHASE	MCA (AMPS)	MOP (AMPS)	NOTES
1	MITSUBISHI	PUY-A18NKA7	18000	95.0	19.8	NA	25.0	NA	208/1	11.0	28.0	1,2,3,4

1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB)
2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°(WB)
3. EFFICIENCY VALUES FOR EER, IEER, AND COP ARE BASED ON AHRI 1230 TEST METHOD FOR MIXTURE OF DUCTED AND NON-DUCTED INDOOR UNITS.
4. PROVIDE UNITS WITH EPA APPROVED REFRIGERANT. PROVIDE INSTALLED REFRIGERANT MONITORING SYSTEM

MINI SPLIT SYSTEM AIR HANDLING UNIT SCHEDULE

UNIT	BASIS OF DESIGN	MODEL	TYPE	NOMINAL COOL CAPACITY (BTUH)	DESIGN COOLING EAT °F DB/WB	DESIGN COOLING CAPACITY (BTUH) COOLING TOTAL	DESIGN COOLING CAPACITY (BTUH) COOLING SENSIBLE	NOMINAL HEAT CAPACITY (BTUH)	DESIGN HEATING TOTAL CAPACITY (BTUH)	DESIGN HEATING EAT °F DB	AIRFLOW (CFM)	VOLTS/PHASE	MCA (AMPS)	MOP (AMPS)	NOTES
WM-1.1	MITSUBISHI	PKA-A18LA	WALL MOUNT	18000	18000	18000	18000	NA	NA	NA	310	FED FROM MHP	NA	NA	1,2,3,4,6,7,8

1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB)
2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°(WB)
3. DESIGN COOLING CONDITIONS ARE AT 95°F AMBIENT; DESIGN HEATING CONDITIONS ARE AT 26°F AMBIENT
4. DESIGN CAPACITY IS NET CAPACITY FOR INSTALLATION ACCOUNTING FOR 150 FT PIPE RUN LENGTHS, ETC.
5. DESIGN CAPACITY IS NET CAPACITY FOR INSTALLATION ACCOUNTING FOR 65 FT PIPE RUN LENGTHS, ETC.
6. CALCULATE REFRIGERANT LINE SIZES BASED UPON FINAL FIELD PIPING LAYOUT.
7. EXPOSED (INDOOR OR OUTDOOR) REF PIPING SHALL BE HARD DRAWN COPPER.
8. PROVIDE HARD WIRED REMOTE THERMOSTAT.

100% OUTSIDE AIR UNIT SCHEDULE

UNIT OAU	BASIS OF DESIGN	OAU MODEL	CONFIGURATION	OA (CFM)	WEIGHT (LBS)	ESP (IN. WC)	FAN POWER (HP)	COOLING EAT° (DB/WB)	COOLING LAT° (DP)	COOLING TOTAL (BTUH)	COOLING SENSIBLE (BTUH)	ISMRE2 ASHRAE 90.1 MIN EFFICENCY	ISMRE2 CALCULATED EFFICENCY	HEATING EAT (DB)	HEATING LAT° (F)	HEATING KW	OAU ELECTRICAL VOLTS/PHASE	OAU ELECTRICAL MCA	OAU ELECTRICAL MOP	NOTES
1	GREENHECK	RV-45-30L-1-F2	PACKAGED	3500	3251	1	2	83.9/80.5	52.5/51.9	345500	113100	3.8	7.1	25.4	69.8	49.2	208/3	179.2	200	1,2,3,4,5,6

1. DIRECT DRIVE FAN WITH ECM MOTOR
2. REFER TO CONDENSING UNIT SCHEDULE FOR EFFICIENCIES
3. ESP DOES NOT INCLUDE FILTER, CASING, ETC.
4. PROVIDE 100% OUTSIDE AIR DEHUMIDIFICATION UNIT WITH HOT GAS REHEAT.
5. PROVIDE MOTORIZED OA DAMPER
6. PROVIDE COATED INDOOR COILS, NON FUSED DISCONNECT, PHASE FAILURE MONITOR, DIRTY FILTER SWITCH, OUTSIDE AIR TEMPERATURE SENSOR, DISCHARGE AIR TEMPERATURE SENSOR AND LEAVING COIL TEMPERATURE SENSOR.

AIR DEVICE SCHEDULE

MARK	MAX AIRFLOW CFM	AIR DEVICE SIZE	DUCT CONNECTION SIZE	TITUS MODEL
CD-1 / CFM	80	9x9	6Ø	TDC
CD-2 / CFM	245	12x12	8Ø	TDC
CD-3 / CFM	350	12x12	10Ø	TDC
CD-4 / CFM	210	18-1/4Ø	10Ø	TMR
RG,EG,SG,IG,RR,ER				
xx-1 / CFM	450	12x12	12x12	350FL
xx-2 / CFM	1705	22x22	22x22	350FL
xx-3 / CFM	220	8x8	8x8	33RL
xx-4 / CFM	1255	22x22	22x22	33RL
xx-5 / CFM	3470	48x36	48x36	33RL

NOTES:
1. MAX NC=20
2. PROVIDE 2x2 LAY IN PANEL FOR AIR DEVICES IN LAY IN CEILINGS.
3. PROVIDE BEVELED MOUNTING FRAME FOR CEILING DIFFUSERS IN HARD CEILINGS.
4. PROVIDE FLAT MOUNTING FRAME FOR GRILLES LOCATED IN HARD CEILINGS.

AIR PURIFICATION EQUIPMENT SCHEDULE

ZONE AHU	SUPPLY CFM	OA CFM	PRESS. IN. W.C.	BASIS OF DESIGN	MODEL	QUANTITY	ELECTRICAL VOLTS/PHASE	ELECTRICAL WATTS	NOTES
1	915	90	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
2	825	80	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
3	1015	100	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
4	720	75	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
5	940	95	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
6	955	85	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
7	2080	210	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
8	1895	185	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
9	7310	1750	-	GPS	GPS-DM48-AC	2	24VAC	12	1,2,3,4
10	1360	135	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4
11	7535	1750	-	GPS	GPS-DM48-AC	2	24VAC	12	1,2,3,4
12	1455	145	<0.01	GPS	DM-2	1	24 VAC	11	1,2,3,4

1. GPS = GLOBAL PLASMA SOLUTIONS.
2. PROVIDE BASIS OF DESIGN OR APPROVED EQUAL.
3. BI-POLAR IONIZATION SYSTEMS REQUIRING PERISHABLE GLASS TUBES ARE NOT ACCEPTABLE.
4. MANUFACTURER MUST PASS UL-867-2007 OZONE CHAMBER TESTING BY EITHER UL OR ETL

SPLIT SYSTEM HEAT PUMP SCHEDULE

UNIT	SA (CFM)	OA (CFM)	ESP (IN.H20)	FAN (HP)	COOLING MAT °F (DB/WB)	COOLING OAT °F (DB/WB)	COOLING TOTAL (BTUH)	COOLING SENSIBLE (BTUH)	COOLING SEER2	HEATING MAT °F (DB)	HEATING OAT °F (DB)	HEATING TOTAL (BTUH)	HEATING HSPF2	SUPPL HEAT	AHU ELECTRICAL VOLTS/PHASE	AHU ELECTRICAL MCA	AHU ELECTRICAL MOP	HP ELECTRICAL VOLTS/PHASE	HP ELECTRICAL MCA	HP ELECTRICAL MOP	NOTES
1	915	90	0.50	0.50	74.4/63.5	95.0/78.0	26200	19700	14.3	66.0	25.0	7300	7.5	3.0KW	208/1	26	30	208/3	12	20	1,2,3,4,5,8,10,11
2	825	80	0.50	0.50	74.2/63.5	95.0/78.0	23600	17500	14.3	66.0	25.0	5000	7.5	2.1KW	208/1	26	30	208/3	12	20	1,2,3,4,5,8,10,11
3	1015	100	0.50	0.50	74.8/63.7	95.0/78.0	28500	21700	14.3	65.8	25.0	8400	7.5	3.4KW	208/1	26	30	208/3	12	20	1,2,3,4,5,8,10,11
4	720	75	0.50	0.50	74.9/63.9	95.0/78.0	21600	15800	14.3	65.6	25.0	3800	7.5	1.8KW	208/1	26	30	208/3	12	20	1,2,3,4,5,8,10,11
5	940	95	0.50	0.50	74.8/63.6	95.0/78.0	27100	20400	14.3	65.7	25.0	7700	7.5	3.1KW	208/1	26	30	208/3	12	20	1,2,3,4,5,8,10,11
6	955	85	0.50	0.50	74.5/63.3	95.0/78.0	26900	20600	14.3	66.2	25.0	6600	7.5	2.8KW	208/1	26	30	208/3	12	20	1,2,3,4,5,8,10,11
7	2080	210	0.70	1.00	74.3/62.9	95.0/78.0	52000	42800	13.8	65.6	25.0	26100	7.5	9.4KW	208/1	36	40	208/3	18	30	1,2,3,4,5,8,10,11
8	1895	185	0.75	1.00	74.8/63.6	95.0/78.0	49600	39200	13.8	65.7	25.0	24700	7.5	5.9KW	208/1	36	40	208/3	18	30	1,2,3,4,5,8,10,11
9	7310	1750	0.50	7.50	71.9/62.2	95.0/78.0	158000	129100	10.6 EER	70.1	25.0	30000	3.3 COP	10.2KW	208/3	82	90	208/3	39	60	1,2,3,4,5,6,7,8,9,10,11,12
10	1360	135	0.70	1.00	74.9/63.6	95.0/78.0	37900	29100	14.3	65.6	25.0	18800	7.5	6.7KW	208/1	30	30	208/3	18	30	1,2,3,4,5,8,10,11
11	7535	1750	0.50	7.50	71.8/62.1	95.0/78.0	162100	132800	10.6 EER	69.8	25.0	34500	3.3 COP	13.3KW	208/3	82	90	208/3	39	60	1,2,3,4,5,6,7,8,9,10,11,12
12	1455	145	0.50	1.00	74.7/63.4	95.0/78.0	40900	31500	14.3	65.8	25.0	17100	7.5	6.2KW	208/1	30	30	208/3	18	30	1,2,3,4,5,8,10,11

1. PROVIDE 2 " MERV 13 FILTERS.
2. EFFICIENCIES IN ACCORDANCE WITH ARI STANDARD 210/240.
3. ESP DOES NOT INCLUDE FILTER, CASING, ETC.
4. PROVIDE CONTROL KIT TO INCLUDE BLOWER CONTACTOR OR STARTER, TRANSFORMER, ELECTRIC HEATER INTLERLOCKS. ELECTRICAL SERVICE SHALL BE A SINGLE POINT OF CONNECTION.
5. PROVIDE THERMAL EXPANSION VALVES.
6. BELT DRIVE AHU FAN.
7. PRETREATED OUTSIDE AIR.
8. COOLING CAPACITY IS NET AND DOES NOT INCLUDE FAN HEAT.
9. PROVIDE TWO STAGE COMPRESSORS.
10. PROVIDE SEACOAST COATING ON CONDENSER COILS.
11. PROVIDE UNITS WITH EPA APPROVED REFRIGERANT. PROVIDE FACTORY INSTALLED REFRIGERANT MONITORING SYSTEM.
12. PROVIDE TWO 7.5 TON HEAT PUMPS. HP ELECTRICAL DATA IS FOR A SINGLE UNIT.

DAG ARCHITECTS
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455 Harrison Ave Suite B Panama City, FL 32401
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100% CONSTRUCTION DOCUMENTS

Keith A. Johnson, State of Florida, Professional Engineer, License No. 86457.
This item has been digitally signed and sealed by Keith A. Johnson on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
Date: 2025.01.31 14:30:31-06'00'

KEITH A. JOHNSON LICENSE NO. 86457 STATE OF FLORIDA PROFESSIONAL ENGINEER

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

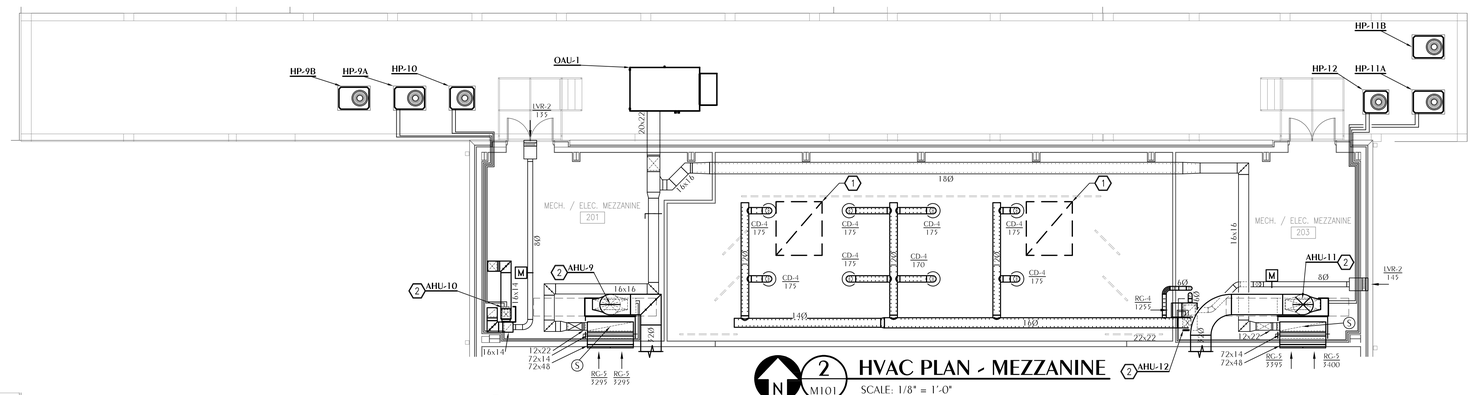
HVAC LEGEND, SCHEDULES, AND NOTES

PROJECT NUMBER 22019
DATED 01/31/2025

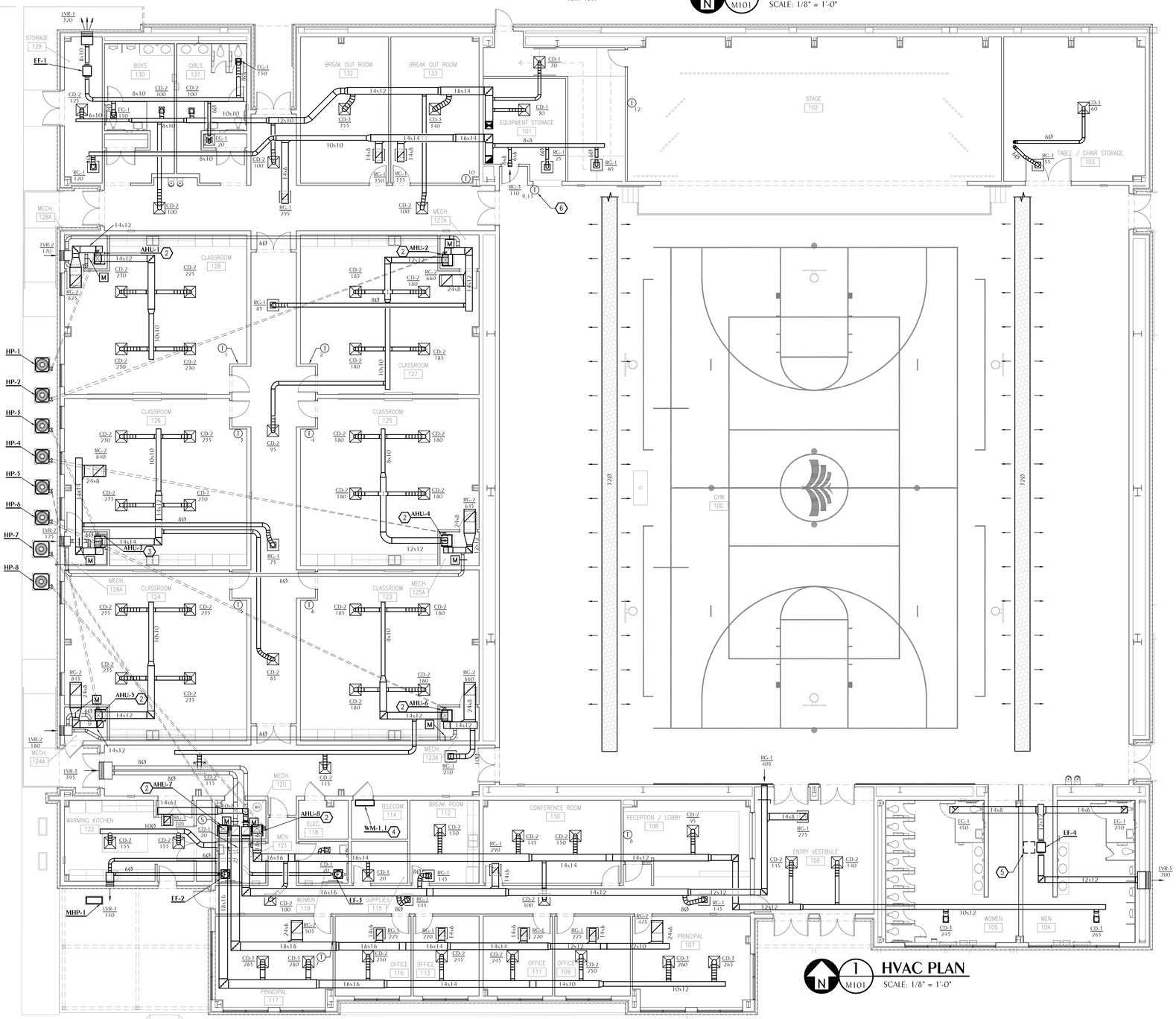
M001

WATFORD ENGINEERING
4452 Clinton Street Marianna, Florida 32446
Florida CA Number: 27525
Keith A. Johnson, PE
Florida License Number: 86457
850.526.3447
Project Number: 2022-039
Checked By: KAJ
Drawn By: BBS

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



N 2 M101 **HVAC PLAN - MEZZANINE**
SCALE: 1/8" = 1'-0"



N 1 M101 **HVAC PLAN**
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. PROVIDE ACOUSTICAL HEAT AND SMOKE VENTS. OPERATION IS INITIATED BY FUSIBLE LINK OR MANUAL RELEASE HANDLES. SOUND RATING IS STC-50. BASIS OF DESIGN IS HART AND COOLEY, INC.; MODEL UPL STC-50-7284. UNIT WEIGHT IS APPROXIMATELY 1695LBS.
2. ROUTE CONDENSATE TO NEAREST FLOOR DRAIN.
3. ROUTE CONDENSATE TO EXTERIOR OF BUILDING. TURN DOWN AND DISCHARGE OVER ARCHITECTURAL SPLASH BLOCK.
4. ROUTE CONDENSATE TO NEAREST HUB DRAIN.
5. PROVIDE 24X24 ACCESS DOOR. COORDINATE WITH LIGHTING AND EQUIPMENT ACCESS REQUIREMENTS. MILCOR M OR APPROVED EQUAL.
6. PROVIDE WIRE GUARD OVER THERMOSTAT.

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A New Gymatorium for:
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1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

HVAC PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

M101

WATFORD ENGINEERING
4452 Clinton Street Marianna, Florida 32446
Florida CA Number: 27825
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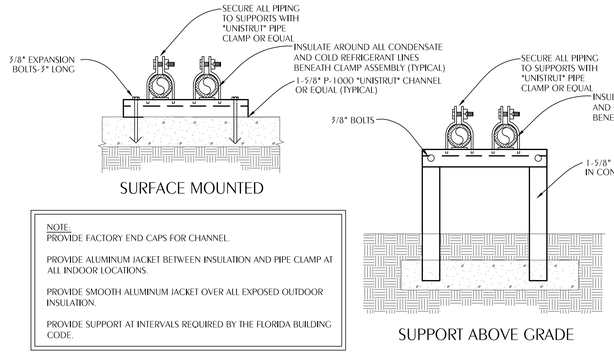
Florida License Number: 86457
850.528.3447
Project Number: 2022-039
Checked By:KAJ
Drawn By: SBS



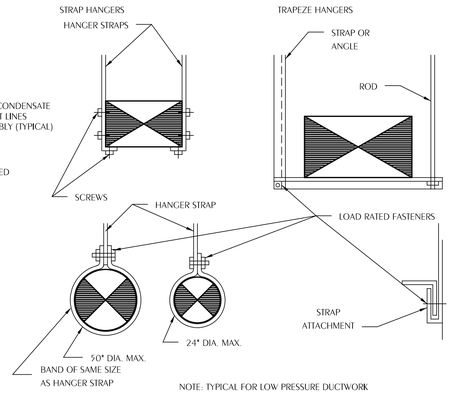
NOTE:
PROVIDE FACTORY END CAPS FOR CHANNEL.

PROVIDE ALUMINUM JACKET BETWEEN INSULATION AND PIPE CLAMP AT ALL INDOOR LOCATIONS.

PROVIDE SMOOTH ALUMINUM JACKET OVER ALL EXPOSED OUTDOOR INSULATION.

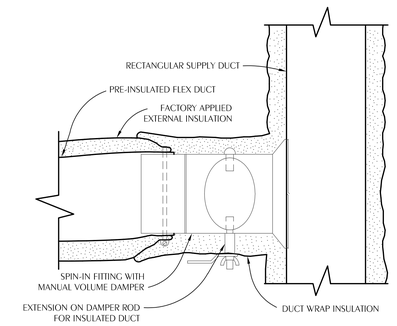
PROVIDE SUPPORT AT INTERVALS REQUIRED BY THE FLORIDA BUILDING CODE.

1 TYPICAL EXTERIOR PIPING SUPPORT DETAIL
M201 SCALE: NONE



NOTE: TYPICAL FOR LOW PRESSURE DUCTWORK

2 DUCT HANGER DETAILS
M201 SCALE: NONE

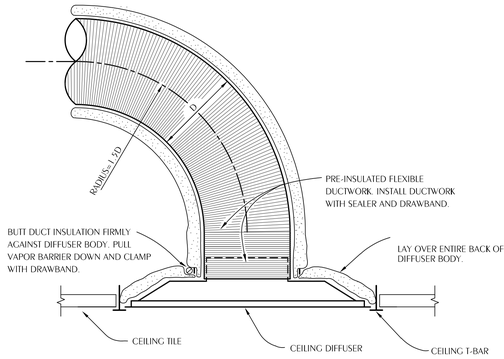


NOTES:
CONNECT FLEXIBLE DUCT TO FITTING WITH DRAWBAND AND SEALER.

ROUND HARD DUCT RUNOUTS SHOULD START WITH SPIN-IN FITTINGS SIMILAR TO THIS DETAIL.

PROVIDE CABLE ACTIVATED DAMPER WITH ADJUSTMENT IN FACE OF CEILING DIFFUSER.

3 TYPICAL FLEX DUCT TAKEOFF DETAIL
M201 SCALE: NONE

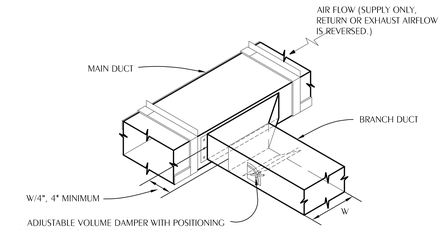


NOTES:
FLEX DUCT SHALL BE NO LONGER THAN 5'-0".

PROVIDE 24x24 LAY IN PANEL FOR DIFFUSERS IN LAY IN CEILINGS.

PROVIDE BEVELED MOUNTING FRAME FOR DIFFUSERS IN HARD CEILINGS.

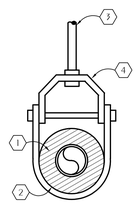
4 TYPICAL FLEX DUCT TAKEOFF DETAIL
M201 SCALE: NONE



NOTES:
PROVIDE CABLE ACTIVATED DAMPER WITH ADJUSTMENT IN FACE OF AIR DEVICE FOR INACCESSIBLE TAKEOFFS LOCATED ABOVE HARD CEILINGS.

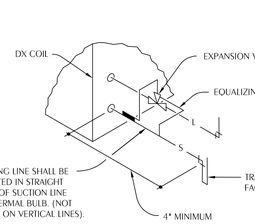
FLEXIBLE INSULATION SHALL BE 2" THICK, ASTM C553, TYPE 1, CLASS B-3 WITH 1 PCF DENSITY AND UL RATED ALUMINUM FOIL VAPOR BARRIER (FSK)

5 TYPICAL BRANCH DUCT TAKEOFF
M201 SCALE: NONE



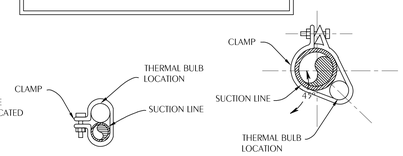
1. INSULATION
2. PIPE COVERING PROTECTION SADDLE
3. HANGER ROD FASTEN TO STRUCTURE PER SPECIFICATION
4. CLEVIS TYPE HANGER

6 OVERHEAD PIPE SUPPORT
M201 SCALE: NONE

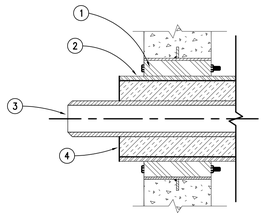


NOTES:
THERMOSTATIC BULB TO BE AS CLOSE TO COIL AS POSSIBLE NOT ALLOWED ON VERTICAL LINES.

INSULATE REFRIGERANT LINES PER SPECIFICATIONS.

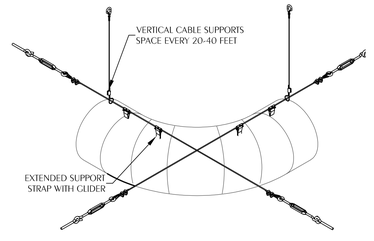


7 REFRIGERANT COIL CONNECTION DETAIL
M201 SCALE: NONE



1. WALL OR FLOOR SEAL APPURTENANCES PER SPECIFICATIONS
2. PIPE SLEEVE PER SPECIFICATIONS
3. PIPING
4. INSULATION

8 TYPICAL WALL PIPE PENETRATION
M201 SCALE: NONE

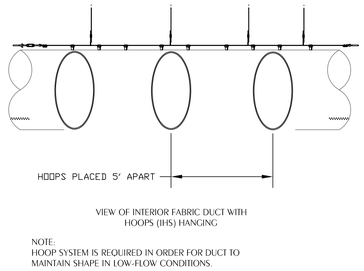


NOTES:
SECURE REFRIGERANT LINES AND CONDENSATE PIPING WITH UNISTRUT.

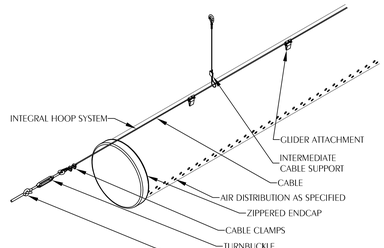
PROVIDE FACTORY FABRICATED RETURN AIR PLENUM OR ENGINEER APPROVED EQUAL.

SIZE COPPER CONDENSATE LINE AT FULL SIZE OF UNIT CONNECTION, BUT IN NO CASE SMALLER THAN 3/4".

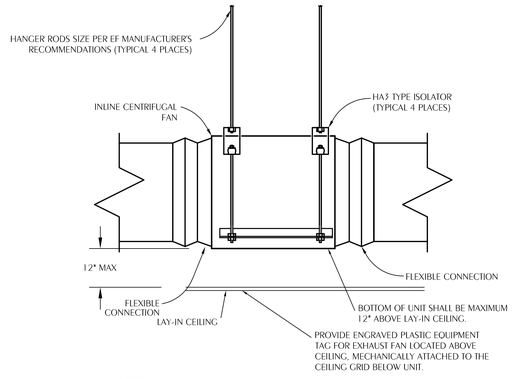
9 VERTICAL UPFLOW AHU DETAIL
M201 SCALE: NONE



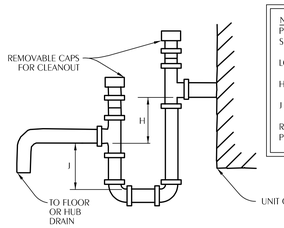
NOTE:
HOOP SYSTEM IS REQUIRED IN ORDER FOR DUCT TO MAINTAIN SHAPE IN LOW-FLOW CONDITIONS.



10 FABRIC DUCT SUSPENSION DETAIL
M201 SCALE: NONE



11 INLINE FAN DETAIL
M201 SCALE: NONE



NOTES:
PIPE TYPE 'L' HARD DRAWN COPPER CONDENSATE LINE AT FULL SIZE OF UNIT CONNECTION, BUT IN NO CASE SMALLER THAN 3/4".

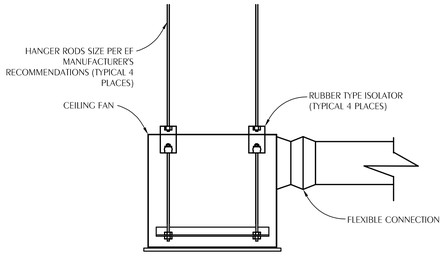
LOCATE TRAPS SO AS TO BE ACCESSIBLE FOR CLEANING.

H = AIR UNIT TOTAL STATIC PRESSURE + 1"

J = H/2

ROUTE CONDENSATE TO NEAREST FLOOR DRAIN. CONDENSATE PIPE SHALL BE PROVIDED BY THE HVAC CONTRACTOR.

12 NEGATIVE PRESSURE CONDENSATE DRAIN TRAP
M201 SCALE: NONE



13 CEILING FAN DETAIL
M201 SCALE: NONE

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100% CONSTRUCTION DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

HVAC DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

M201

WATFORD ENGINEERING
4452 Clinton Street Marianna, Florida 32446
Florida CA Number: 27925
Keith A. Johnson, PE
Florida License Number: 86457
850.526.3447
Project Number: 2022-039
Checked By:KAJ
Drawn By:SBS

22019
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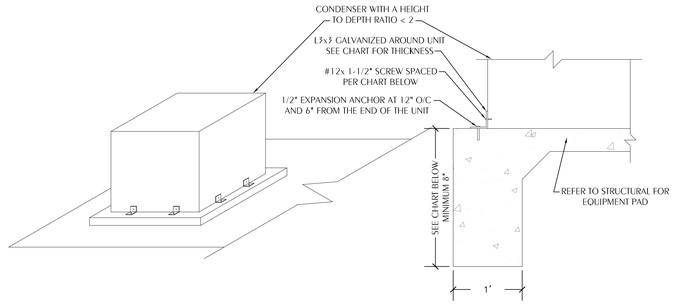
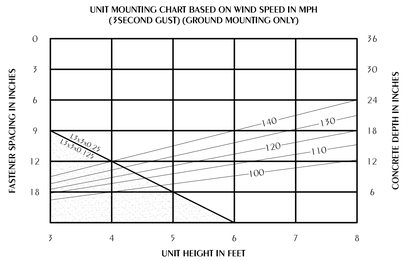


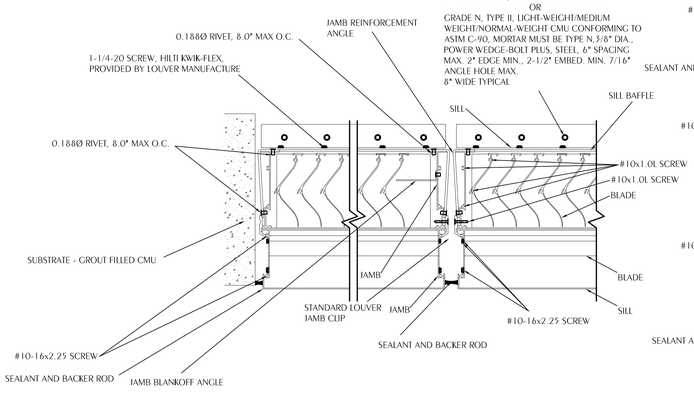


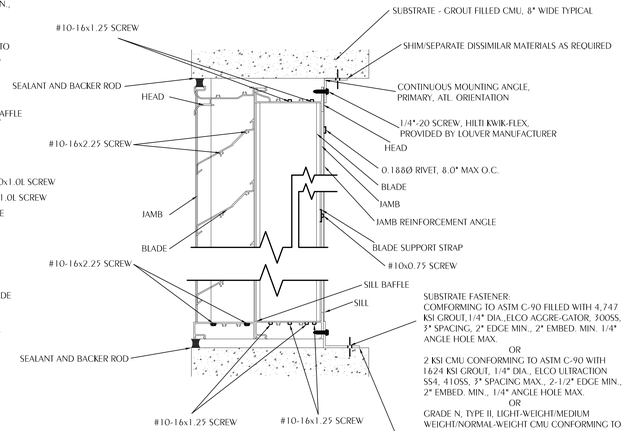
DESIGN CRITERIA:

CODE:	ASCE 7-05
VELOCITY:	SEE BELOW
Kz:	0.70
Kzt:	1.00
Kd:	0.85
IMPORTANCE:	1.15
EXPOSURE:	B
GI:	1.3
GE:	0.85
qz:	
100 mph	17.52 psf
110 mph	21.20 psf
120 mph	25.22 psf
130 mph	29.60 psf
140 mph	34.33 psf
Pdesign:	
100 mph	19.36 psf
110 mph	23.42 psf
120 mph	27.87 psf
130 mph	32.71 psf
140 mph	37.94 psf

1 OUTDOOR MECHANICAL UNIT MOUNTING DETAIL
M202 SCALE: NONE

SUBSTRATE FASTENER:
COMFORMING TO ASTM C-90 FILLED WITH 4,747 KSI GROUT,1/4" DIA.,ELCO AGGRE-GATOR, 3005S, 3" SPACING, 2" EDGE MIN., 2" EMBED. MIN. 1/4" ANGLE HOLE MAX.
OR
2 KSI CMU CONFORMING TO ASTM C-90 WITH 1624 KSI GROUT, 1/4" DIA., ELCO ULTRACTION SS4, 4105S, 3" SPACING MAX., 2-1/2" EDGE MIN., 2" EMBED. MIN., 1/4" ANGLE HOLE MAX.
OR
GRADE N, TYPE II, LIGHT-WEIGHT/MEDIUM WEIGHT/NORMAL-WEIGHT CMU CONFORMING TO ASTM C-90, MORTAR MUST BE TYPE N,3/8" DIA., POWER WEDGE-BOLT PLUS, STEEL, 6" SPACING MAX. 2" EDGE MIN., 2-1/2" EMBED. MIN. 7/16" ANGLE HOLE MAX.
8" WIDE TYPICAL





2 WALL LOUVER DETAIL
M202 SCALE: NONE NOA #:19-0516.09

NOTES:

1. THE INSTALLATION SHOWN HEREIN MUST BE FOLLOWED STRICTLY TO ENSURE COMPLIANCE WITH FLORIDA BUILDING CODE PRODUCT APPROVAL.
2. CONTINUOUS INSTALLATION ANGLES AND FASTENERS ARE SHIPPED LOOSE AND REQUIRE INSTALLATION IN THE FIELD.
3. SHIMS MAY BE REQUIRED TO ACHIEVE CONSISTENT CLEARANCE BETWEEN LOUVER AND OPENING ON ALL SIDES.
4. INSTALLATION DETAIL IS BASED UPON GREENHECK MODEL 'EHV-901D', IF AN ALTERNATE MANUFACTURER'S LOUVER IS USED, IT MUST BE INSTALLED WITH ITS FLORIDA PRODUCT APPROVAL.

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REVISIONS:

No.	Description	Date

HVAC DETAILS

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4452 Clinton Street Marianna, Florida 32446
Florida CA Number: 27925
Keith A. Johnson, PE
Florida License Number: 86457
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Drawn By:SBS

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M202

DDC SYSTEM GENERAL NOTES

1. THE DDC CONTRACTOR SHALL PROVIDE A COMPLETE NEW DDC SYSTEM TO PERFORM THE INDICATED SEQUENCES, ALL OTHER FUNCTIONS REQUIRED BY THE CONTRACT DOCUMENTS, AND ALL OTHER FUNCTIONS REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM. 1
2. THE CONTROLS CONTRACTOR SHALL PROVIDE A DDC SYSTEM FOR THE NEW EQUIPMENT THAT MEETS ALL REQUIREMENTS OF THESE CONSTRUCTION DOCUMENTS. THIS SHALL INCLUDE ALL GRAPHICS, AREA CONTROL MEMBERS, TIME SCHEDULING, ETC. ALL WORK SHALL BE THE RESPONSIBILITY OF THIS CONTROLS CONTRACTOR.
3. ALL SEQUENCES ARE SUBJECT TO SAFETIES. DDC CONTRACTOR SHALL PROVIDE ALL NECESSARY AND CUSTOMARY SAFETIES.
4. ALL WIRING SHALL BE IN CONDUIT. ALL CONDUIT SHALL BE IN ACCORDANCE WITH ELECTRICAL SPECIFICATIONS, REQUIREMENTS FOR 120 VAC CIRCUITS.
5. ALL CONTROL TUBING SHALL BE RUN IN CONDUIT. ALL CONDUIT SHALL BE IN ACCORDANCE WITH ELECTRICAL SPECIFICATIONS, REQUIREMENTS FOR 120 VAC CIRCUITS.
6. CONDUIT SHALL BE RUN PERPENDICULAR AND PARALLEL TO BUILDING LINES IN A FIRST CLASS WORKMANSHIP LIKE MANNER.
7. NO EXPOSED CONDUIT SHALL BE USED IN FINISHED SPACES.
8. PROVIDE WIRE GUARD FOR THERMOSTATS AND TEMPERATURE SENSORS LOCATED IN MULTIPURPOSE ROOMS AND CORRIDORS.
9. THE DDC SYSTEM SHALL COMMUNICATE WITHIN THE BUILDING ON ITS OWN WIRING SYSTEM AND SHALL NOT UTILIZE THE OWNER'S LOCAL AREA NETWORK WITHIN THE BUILDING.

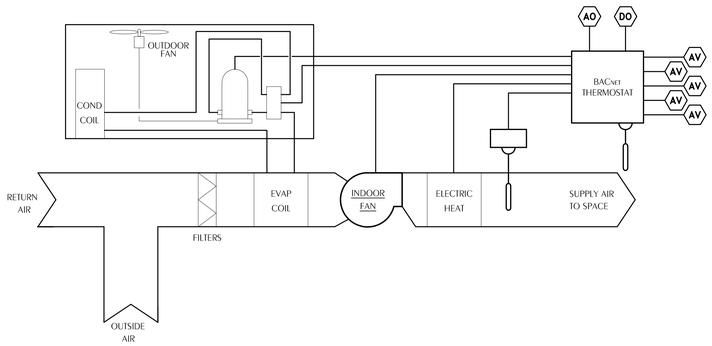
SEQUENCE OF OPERATION
HEAT PUMP-PRETREATED OA

GENERAL: THE UNIT SHALL BE STARTED AUTOMATICALLY BY THE BACnet THERMOSTAT. ALL CONTROLS ACTIVATED SUBJECT TO THE FIRE ALARM RELAY, SAFETIES AND OVERLOADS. THE DDC SYSTEM SHALL INCLUDE A GRAPHIC FOR EACH UNIT AND COMMUNICATE THE INDICATED VALUES AND SETPOINTS ON THE GRAPHIC. THE DDC SHALL POST AN ALARM WHEN THE RELATIVE HUMIDITY EXCEEDS 65% (ADJUSTABLE) AND TEMPERATURE EXCEEDS SETPOINT ±5°F FOR SPACE TEMPERATURE MORE THAN 1 HOUR AFTER OCCUPIED MODE BEGINS.

OCCUPIED MODE: THE INDOOR FAN SHALL RUN CONTINUALLY AND THE HEAT PUMP SHALL CYCLE WITH A CALL FOR HEATING AND COOLING. THE SET POINT FOR COOLING SHALL BE 75°F ADJUSTABLE. THE SET POINT FOR HEATING SHALL BE 70°F ADJUSTABLE. THE SUPPLEMENTAL ELECTRIC HEAT SHALL OPERATE AS A SECOND STAGE OF HEATING ENABLED ONLY DURING DEFROST OR WHEN THE OUTDOOR TEMPERATURE IS BELOW 35°F AND THE HEAT PUMP CAN NOT SATISFY THE CALL FOR HEATING AFTER 20 MINUTES OF RUN TIME.

UNOCCUPIED MODE: THE INDOOR FAN AND HP SHALL CYCLE TO MAINTAIN SET POINT TEMPERATURE. THE SET POINT FOR COOLING SHALL BE 80°F ADJUSTABLE. THE SET POINT FOR HEATING SHALL BE 65°F ADJUSTABLE.

OVERRIDE MODE: THE OVERRIDE MODE SHALL PLACE THE SYSTEM IN OCCUPIED MODE FOR 1 HR AND THE OUTSIDE AIR UNIT FOR THE UNIT IN OVERRIDE SHALL BE PLACED IN OCCUPIED MODE FOR 1 HR.



1 M301 **HEAT PUMP-PRETREATED OA CONTROL DIAGRAM**
SCALE: NONE

HEAT PUMP-PRETREATED OA POINTS LIST

	HARDWARE POINTS				SOFTWARE POINTS					
POINT NAME	AI	AO	DI	DO	AV	DV	SCHED	TREND	ALARM	GRAPHIC
OCCUPIED/UNOCCUPIED SCHED				X						X
BMS TEMPERATURE SETPOINT		X								X
ZONE TEMP SETPOINT					X					X
ZONE TEMP					X				X	X
ZONE RELATIVE HUMIDITY					X				X	X
SUPPLY AIR TEMP					X					X

SEQUENCE OF OPERATION
100% OUTSIDE AIR UNIT

GENERAL: THE DDC CONTRACTOR SHALL INSTALL FIELD MOUNTED SENSORS PROVIDED BY THE UNIT MANUFACTURER. THE DDC SYSTEM SHALL CONNECT TO THE UNITS BACNET INTERFACE TO READ THE POINTS INDICATED. THE DDC SYSTEM SHALL PROVIDE OCCUPIED/UNOCCUPIED SIGNAL TO THE FACTORY MOUNTED UNIT CONTROLLER, MONITOR ALARM STATUS, AND MONITOR VALUES INDICATED. THE DDC SHALL MONITOR BUILDING RELATIVE HUMIDITY (BACnet POINTS FROM ROOM THERMOSTATS) AND OUTSIDE AIR SUPPLY AIR DEWPOINT TEMPERATURE. WHEN THE OA DEWPOINT SUPPLY AIR TEMPERATURE RISES ABOVE 60°F FOR MORE THAN 10 MINUTES (ADJUSTABLE), THE DDC SHALL POST AN ALARM AND SHUT DOWN THE OUTSIDE AIR UNIT.

THE FOLLOWING SEQUENCE OF OPERATIONS SHALL BE PROVIDED BY THE UNIT MANUFACTURER:

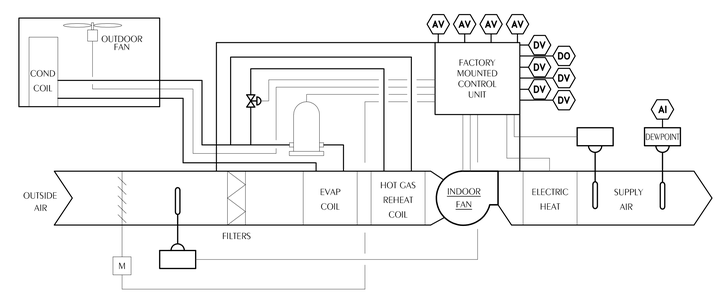
GENERAL: STARTING AND STOPPING OF EQUIPMENT SHALL BE BY A UNIT MOUNTED DIGITAL CONTROLLER. WITH THE DIGITAL CONTROLLER IN THE AUTO POSITION, THE UNIT SHALL BE STARTED AUTOMATICALLY BY THE ELECTRONIC CONTROL SYSTEM AND ALL CONTROLS ACTIVATED SUBJECT TO THE FIRE ALARM RELAY, SAFETIES AND OVERLOADS.

OCCUPIED MODE DEHUMIDIFICATION: THE MOTORIZED OA DAMPER SHALL OPEN TO THE BALANCED POSITION AND THE INDOOR FAN SHALL RUN CONTINUOUSLY. THE UNIT SHALL DEHUMIDIFY SUPPLY AIR ANYTIME THE OUTDOOR AIR DEWPOINT IS ABOVE 55°F. THE UNIT SHALL REHEAT SUPPLY AIR TO SPACE CONDITIONS WITH VARIABLE HOT GAS, MAINTAINING LEAVING AIR TEMPERATURE OF 72°F.

OCCUPIED MODE HEATING: WHEN THE OUTDOOR AIR TEMPERATURE FALLS BELOW 50°F, THE ELECTRIC HEAT SHALL OPERATE AS REQUIRED TO MAINTAIN 70°F LEAVING AIR TEMPERATURE. THE ELECTRIC HEAT SHALL BE LOCKED OUT DURING COOLING.

UNOCCUPIED MODE: THE MOTORIZED OA DAMPER SHALL CLOSE AND THE UNIT SHALL BE NOT OPERATE.

OVERRIDE MODE: THE OVERRIDE MODE SHALL PLACE THE SYSTEM IN OCCUPIED MODE AND THE OUTSIDE AIR DAMPER FOR THE UNIT IN OVERRIDE SHALL OPEN TO THE BALANCED POSITION.



2 M301 **100% OUTSIDE AIR UNIT CONTROL DIAGRAM**
SCALE: NONE

100% OUTSIDE AIR UNIT POINTS LIST

	HARDWARE POINTS				SOFTWARE POINTS					
POINT NAME	AI	AO	DI	DO	AV	DV	SCHED	TREND	ALARM	GRAPHIC
SCHEDULE				X						X
FAULT						X			X	X
OUTSIDE AIR SUPPLY DEW POINT	X								X	X
OUTDOOR AIR TEMP					X					X
OUTSIDE AIR DEW POINT					X					X
SUPPLY AIR TEMP					X					X
ELECTRIC HEAT					X					X
OA DAMPER						X				X
COMPRESSOR						X				X
FAN START/STOP						X				X
FAN STATUS						X			X	X

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A New Gymatorium for:
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1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date
1	Addendum #2	04/28/25

HVAC CONTROLS

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4452 Clinton Street Marianna, Florida 32446
Florida CA Number: 27525
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Project Number: 2022-039
Checked By:KAJ
Drawn By:BBS

PROJECT NUMBER	22019
DATED	01/31/2025

M301

SEQUENCE OF OPERATION
HEAT PUMP-UNTREATED OA

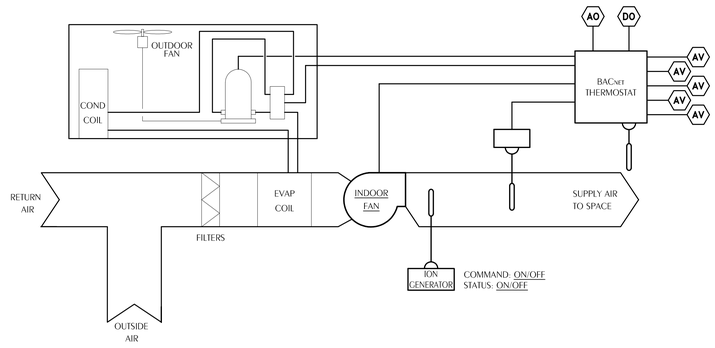
GENERAL: THE UNIT SHALL BE STARTED AUTOMATICALLY BY THE BACnet THERMOSTAT. ALL CONTROLS ACTIVATED SUBJECT TO THE FIRE ALARM RELAY, SAFETIES AND OVERLOADS.

OCCUPIED MODE: THE INDOOR FAN SHALL RUN CONTINUALLY AND THE HEAT PUMP SHALL STAGE COMPRESSORS WITH A CALL FOR HEATING AND COOLING. THE SET POINT FOR COOLING SHALL BE 75°F ADJUSTABLE. THE SET POINT FOR HEATING SHALL BE 70°F ADJUSTABLE.

UNOCCUPIED MODE: THE INDOOR FAN AND HP SHALL CYCLE TO MAINTAIN SET POINT TEMPERATURE. THE SET POINT FOR COOLING SHALL BE 80°F ADJUSTABLE. THE SET POINT FOR HEATING SHALL BE 65°F ADJUSTABLE.

OVERRIDE MODE: THE OVERRIDE MODE SHALL PLACE THE SYSTEM IN OCCUPIED MODE FOR 1 HR.

HUMIDITY CONTROL: UPON A CALL FOR DEHUMIDIFICATION (SETPOINT EQUALS 60%, ADJUSTABLE), THE UNIT SHALL BE PLACED IN COOLING MODE ON LOW FAN SPEED UNTIL THE CALL FOR DEHUMIDIFICATION HAS BEEN SATISIFIED OR THE SPACE TEMPERATURE FALLS 2°F. BELOW COOLING SETPOINT.



1 M302 HEAT PUMP-UNTREATED OA CONTROL DIAGRAM
SCALE: NONE

HEAT PUMP-UNTREATED OA POINTS LIST

	HARDWARE POINTS				LOCAL CONTROLLER POINTS				
POINT NAME	AI	AO	DI	DO	AV	DV	SCHED	TREND	ALARM
OCCUPIED/UNOCCUPIED SCHED							X		
ZONE TEMP SETPOINT					X				
ZONE TEMP					X				
ZONE RELATIVE HUMIDITY					X				
SUPPLY AIR TEMP					X				

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M302

ELECTRICAL LEGEND

A–1 'B' — A–1 ADJACENT TO ARROW INDICATES HOMERUN OF CIRCUIT NO. 1 TO PANEL A; "B" INDICATES FIXTURE TYPE; MARKS ACROSS RACEWAY RUN INDICATES THE NUMBER OF NO. 12 CONDUCTORS; UNLESS NOTED OTHERWISE NO MARKS INDICATES TWO NO. 12 CONDUCTORS AND ONE NO. 12 GREEN GROUND CONDUCTOR IN 1/2" CONDUIT (2#12 & 1#12 GND–1/2"C)

CEILING FIXTURE

CEILING FIXTURE WITH INTEGRAL EMERGENCY BATTERY BACKUP

WALL BRACKET FIXTURE

2' X 2' FIXTURE; CEILING MOUNTED; ARROW INDICATES LENS DIRECTION

2' X 2' FIXTURE WITH INTEGRAL EMERGENCY BATTERY OR CONNECTED TO AN EMERGENCY CIRCUIT AS INDICATED; CEILING MOUNTED; ARROW INDICATES LENS DIRECTION

1' x 4' FIXTURE; CEILING MOUNTED

LED 1' x 4' FIXTURE WITH INTEGRAL EMERGENCY BATTERY OR CONNECTED TO AN EMERGENCY CIRCUIT AS INDICATED; MOUNTING TYPE DEFINED ON LIGHTING FIXTURE SCHEDULE

LED WALL MOUNTED FIXTURE; MOUNTING TYPE DEFINED ON LIGHTING FIXTURE SCHEDULE

HIGH BAY FIXTURE; PENDANT MOUNTED

HIGH BAY EMERGENCY FIXTURE; PENDANT MOUNTED

POLE MOUNTED LIGHT FIXTURE.

EXIT SIGN; CEILING MOUNTED; ARROWS AS NOTED; SHADED SECTION INDICATES LIGHTED FACE OF EXIT SIGN

WG — EXIT SIGN; BACK MOUNTED; ARROWS AS NOTED; SHADED SECTION INDICATES LIGHTED FACE OF EXIT SIGN; WG, IF SHOWN, INDICATES WIRE GUARD

JUNCTION BOX; MOUNTED ABOVE CEILING

JUNCTION BOX; MOUNTED FLUSH IN WALL WITH BLANK COVER

DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES HBL5352

CEILING MOUNTED DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; MT FLUSH IN CEILING UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES HBL5352

CEILING MOUNTED QUAD RECEPTACLE; 125V; 20A; 3 POLE GND; MT FLUSH IN CEILING UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES HBL5352

DUPLEX FLOOR RECEPTACLE, 125 V, 20 A; NEMA 5–20R; HUBBELL SERIES HBL5352

QUAD RECEPTACLE; 125V; 20A; 3 POLE GND; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES HBL5352

TAMPER RESISTANT DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES HBL SERIES BR20xxTR

TAMPER RESISTANT QUAD RECEPTACLE; 125V; 20A; 3 POLE GND; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES HBL SERIES BR20xxTR

TAMPER RESISTANT DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; GFI; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES GFTR20

QUAD RECEPTACLE; TAMPER RESISTANT; 125V; 20A; 3 POLE GND; GFI; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES GFTR20

QUAD RECEPTACLE; 125V; 20A; 3 POLE GND; GFI; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA GF–5–20R; HUBBELL SERIES GF5362

DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; GFI; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA GF–5–20R; HUBBELL SERIES GF5362

WP — LETTERS "WP" ADJACENT TO SYMBOL INDICATES GFI WEATHER RESISTANT RECEPTACLE; HUBBELL HBLGFTW20 SERIES WITH WEATHERPROOF COVER; HUBBELL/TAYMAC MR420CW COVER.

DUPLEX RECEPTACLE FOR TELEVISION WITH SURGE PROTECTION, LED AND ALARM; 125V; 20A; 2 POLE; 3 WIRE; GND; SEE TELECOM PLANS FOR MOUNTING DETAILS. NEMA 5–20R; HUBBELL SERIES HBL5362SA

COMBINATION POWER/TELECOM FLOOR BOX; FOUR DUPLEX RECEPTACLES; 125V; 20A; 3 POLE GND; NEMA 5–20R; HUBBELL SERIES HBL5352; REFER TO TELECOM AND A/V PLANS FOR FLOOR BOX PART NUMBERS, INSTALLATION DETAILS AND LOCATION.

LETTERS +XX" ADJACENT TO SYMBOL INDICATES RECEPTACLE MOUNTING HEIGHT.
- +AC" = ABOVE COUNTER.
- +DF" = VERIFY HEIGHT FOR DRINKING FOUNTAIN WITH MECHANICAL CONTRACTOR
- +TV" = VERIFY HEIGHT OF TV WITH OWNER.
- +SB" = SMARTBOARD/INTERACTIVE FLAT PANEL TV RECEPTACLE, VERIFY MOUNTING REQUIREMENTS WITH TELECOM PLANS.
- +TS" = TEACHER STATION RECEPTACLE, VERIFY MOUNTING REQUIREMENTS WITH TELECOM PLANS.
- +DW" = DISHWASHER RECEPTACLE, VERIFY MOUNTING REQUIREMENTS WITH MECHANICAL CONTRACTOR.
- +REF" = REFRIGERATOR, VERIFY & COORDINATE MOUNTING HEIGHT WITH REFRIGERATOR MANUFACTURER.

SIMPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5–20R; HUBBELL SERIES HBL5351

S — WALL SWITCH; 120/277V; 20A; 1 POLE; A.C. ONLY; MT 48" AFF TO C/L; HUBBELL SERIES HBL1221

S$_W$ — WALL SWITCH; 120/277V; 20A; VACANCY SENSOR DUAL TECHNOLOGY MULTI–WAY TYPE; MT 48" AFF TO C/L; REFER TO SPECS; WATTSTOPPER #DW–100–W.

S$_D$ — WALL MOUNT SINGLE POLE–DOUBLE THROW KEYED MOMENTARY SWITCH; 120/277V; 20A; MT 48" AFF TO C/L; WATTSTOPPER #1250–L

S$_{LV}$ — LOW VOLTAGE WALL SWITCH; CONNECT TO LOCAL NON–NETWORKED POWER PACK OR ROOM CONTROLLER; MT 48" AFF TO C/L; REFER TO SPECS; SEE LIGHTING CONTROL DETAILS. NUMBER "X" INDICATES BUTTON COUNT; REFER TO LOW VOLTAGE SWITCH MATRIX FOR SPECIFIC INFORMATION.

MOTOR CONTROL SWITCH; 600V; 30A; 2 POLE; A.C. ONLY; NEAR OR ON EQUIPMENT BEING SERVED; HUBBELL–BRYANT 30102D.

WP — NEMA 3R MOTOR CONTROL SWITCH; 600V; 30A; 2 POLE; A.C. ONLY; NEAR OR ON EQUIPMENT BEING SERVED; HUBBELL–BRYANT 30322D.

LCR — LIGHTING CONTROLS ROOM CONTROLLER; INSTALL CONCEALED ABOVE CEILING SPACE; REFER TO LIGHTING CONTROLS DETAILS

ELCU — EMERGENCY RELAY; EQUAL TO WATTSTOPPER #ELCU–200. MOUNT ABOVE CEILING; UNLESS NOTED OTHERWISE. REFER TO EMERGENCY LIGHTING RELAY CONNECTION DETAIL.

LOW VOLTAGE OCCUPANCY SENSOR; 360° DUAL–TECHNOLOGY TYPE; CEILING MOUNTED; UNLESS OTHERWISE NOTED; REFER TO LIGHTING CONTROLS DETAILS

LOW VOLTAGE VACANCY SENSOR; 360° DUAL–TECHNOLOGY TYPE; CEILING MOUNTED; UNLESS OTHERWISE NOTED; REFER TO LIGHTING CONTROLS DETAILS

LOW VOLTAGE DAYLIGHTING SENSOR; CEILING MOUNTED; UNLESS OTHERWISE NOTED; REFER TO LIGHTING CONTROLS DETAILS

HIGH BAY PASSIVE INFRARED OCCUPANCY SENSOR; CEILING MOUNTED; CONNECT TO LIGHTING CONTROL PANEL, UNLESS OTHERWISE NOTED.

P — PHOTOCELL; REFER TO LIGHTING CONTROL DIAGRAM

PANEL; 120/208V; MT 72" AFF TO TOP

T — TRANSFORMER; SIZE AND RATING AS NOTED

NON–FUSED DISCONNECT SWITCH; AMP SIZE AS NOTED

FUSED DISCONNECT SWITCH; AMP SIZE AS NOTED; FUSE SIZE PER EQUIPMENT NAMEPLATE DATA

MOTOR; FURNISHED BY OTHERS

RACEWAY INSTALLED CONCEALED IN WALLS AND/OR ABOVE CEILING

RACEWAY INSTALLED CONCEALED IN FLOOR SLAB AND/OR BELOW GRADE

RACEWAY INSTALLED EXPOSED

LV — LOW VOLTAGE CONDUCTOR; COORDINATE WITH DEVICE CONNECTION REQUIREMENTS.

FLEXIBLE CONDUIT CONNECTION

CONDUIT STUB UP WITH FLEXIBLE CONDUIT CONNECTION TO EQUIPMENT

ELECTRICAL GENERAL NOTES

A. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT SIZE AND LOCATION OF EQUIPMENT WHICH IS FURNISHED BY OTHERS AND CONNECTED BY ELECTRICAL.

B. RECEPTACLES, SWITCHES AND COVERPLATES COLOR SHALL BE SELECTED BY THE ARCHITECT FROM STANDARD COLORS.

C. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGHING–IN WALL FOR SWITCHES.

D. LOCATION OF LIGHTING FIXTURES, DISCONNECT SWITCHES, ETC. FOR MECHANICAL EQUIPMENT/ROOM SHALL BE COORDINATED WITH FINAL MECHANICAL EQUIPMENT LOCATION TO PROVIDE NATIONAL ELECTRIC CODE REQUIRED ACCESS SPACE.

E. FINAL CONNECTION TO ALL MOTORS SHALL BE WITH FLEXIBLE CONDUIT CONNECTION.

F. ALL EXIT AND EMERGENCY FIXTURES SHALL BE CONNECTED TO LIGHT CIRCUIT AHEAD OF LOCAL SWITCH.

G. ALL PANELBOARDS, BACKBOARDS, TERMINAL CABINETS, ETC SHALL HAVE CUSTOM ENGRAVED MICARTA NAMEPLATE MECHANICALLY AFFIXED IDENTIFYING SYSTEM.

H. PROVIDE GREEN GROUND CONDUCTOR IN ALL CIRCUITS – SIZE PER N.E.C.

I. ALL EXPOSED CONDUITS, BOXES, STRAPS AND HANGERS IN THE CONTRACT AREA WHETHER NEW OR EXISTING THAT ARE PART OF THE ELECTRICAL SYSTEM SHALL BE PAINTED TO MATCH ADJACENT FINISH.

J. PROVIDE CONCRETE MARKER AT END OF ALL CONDUITS STUBBED OUT OF BUILDING FOR FUTURE USE. MARKER SHALL BE 6" DIA X 18" HIGH WITH 2" ABOVE FINISHED GRADE. INSCRIBE IN TOP OF MARKER "E" FOR ELECTRICAL,"T" FOR TELEPHONE,"V" FOR TV CABLE,"F" FOR FIRE ALARM, AND "IC" FOR INTERCOM.

K. GENERAL CONTRACTOR SHALL FIELD–VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. FAILURE TO DO SO INDICATES THAT THE CONTRACTOR ACCEPTS THE CONDITIONS AS THEY EXIST, AND SHALL PERFORM THE WORK REQUIRED AS SHOWN AND SPECIFIED.

L. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AND REVIEW THE MECHANICAL AND SPECIAL EQUIPMENT SUBMITTALS PRIOR TO SUBMITTING THE ELECTRICAL SUBMITTALS. ANY ELECTRICAL EQUIPMENT, CONDUIT, AND WIRE SIZE CHANGES RESULTING FROM THIS REVIEW SHALL ALSO BE SUBMITTED FOR APPROVAL.

M. FIRE ALARM LOW VOLTAGE SOURCE AND BATTERY STANDBY SHALL ENERGIZE ALL ITEMS IN FIRE ALARM SYSTEM THAT REQUIRE POWER.

N. VERIFY EXACT LOCATION OF ALL FLOOR OUTLETS WITH THE ARCHITECT PRIOR TO ROUGHING–IN.

O. FINAL CONNECTION TO ALL DRY TYPE TRANSFORMERS SHALL BE WITH FLEXIBLE CONDUIT CONNECTION

P. THE ELECTRICAL CONTRACTOR SHALL PROVIDE FAULT CURRENT CALCULATIONS FOR THE SERVICE EQUIPMENT AND SHALL MARK THE EQUIPMENT WITH THE AVAILABLE FAULT CURRENT AND DATE OF THE CALCULATION PER NEC 110.24. REFER TO TYPICAL SERVICE EQUIPMENT FAULT CURRENT LABEL DETAIL.

Q. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ARC FAULT LABELS PER NFPA 70E ARTICLE 110.16 FOR NEW EQUIPMENT. THE OWNER SHALL PROVIDE AVAILABLE CALCULATION DATA FOR THE EXISTING EQUIPMENT IN THE ELECTRICAL SYSTEM. REFER TO TYPICAL ARC FLASH HAZARD LABEL DETAIL.

R. PROVIDE NEUTRAL AT ALL LINE VOLTAGE SWITCH LOCATIONS PER N.E.C. 404.2(C).

S. PROVIDE 'LSI' TRIP UNITS FOR ALL BREAKERS GREATER THAN OR EQUAL TO 200A.

T. PROVIDE BUSHINGS ON ALL CONDUIT.

ABBREVIATIONS

AFF – ABOVE FINISHED FLOOR
AHU – AIR HANDLING UNIT
C. – CONDUIT
C/L – CENTERLINE
CP – CIRCULATION PUMP
EC – ELECTRICAL CONTRACTOR
EF – EXHAUST FAN
EMT – ELECTRICAL METALLIC TUBING
EWC – ELECTRIC WATER COOLER
EWH – ELECTRIC WATER HEATER
GFI – GROUND FAULT PROTECTION
GND – GROUND CONDUCTOR
HP – HEAT PUMP
IMC – INTERMEDIATE METAL CONDUIT
LSI – INDICATES BREAKER SETTING (LONG, SHORT, INSTANTANEOUS)
LTG – LIGHTING
LTS – LIGHTS
MHP – MINI–SPLIT HEAT PUMP
MW – MINI–SPLIT WALL MOUNT
NEC – NATIONAL ELECTRIC CODE (NFPA–70)
NFPA – NATIONAL FIRE PROTECTION ASSOCIATION
OAU – OUTDOOR AIR UNIT
PC – POLYCARBONATE COVER
PVC – POLYVINYL CHLORIDE CONDUIT
REC – RECEPTACLE
UNO – UNLESS NOTED OTHERWISE
WG – WIRE GUARD (SIZE AS REQUIRED)
WP – WEATHERPROOF

DRAWING SHEET INDEX

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Date: 2025.01.31 14:36:17-06'00'

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

LEGEND AND NOTES

PROJECT NUMBER	22019
DATED	01/31/2025

E001

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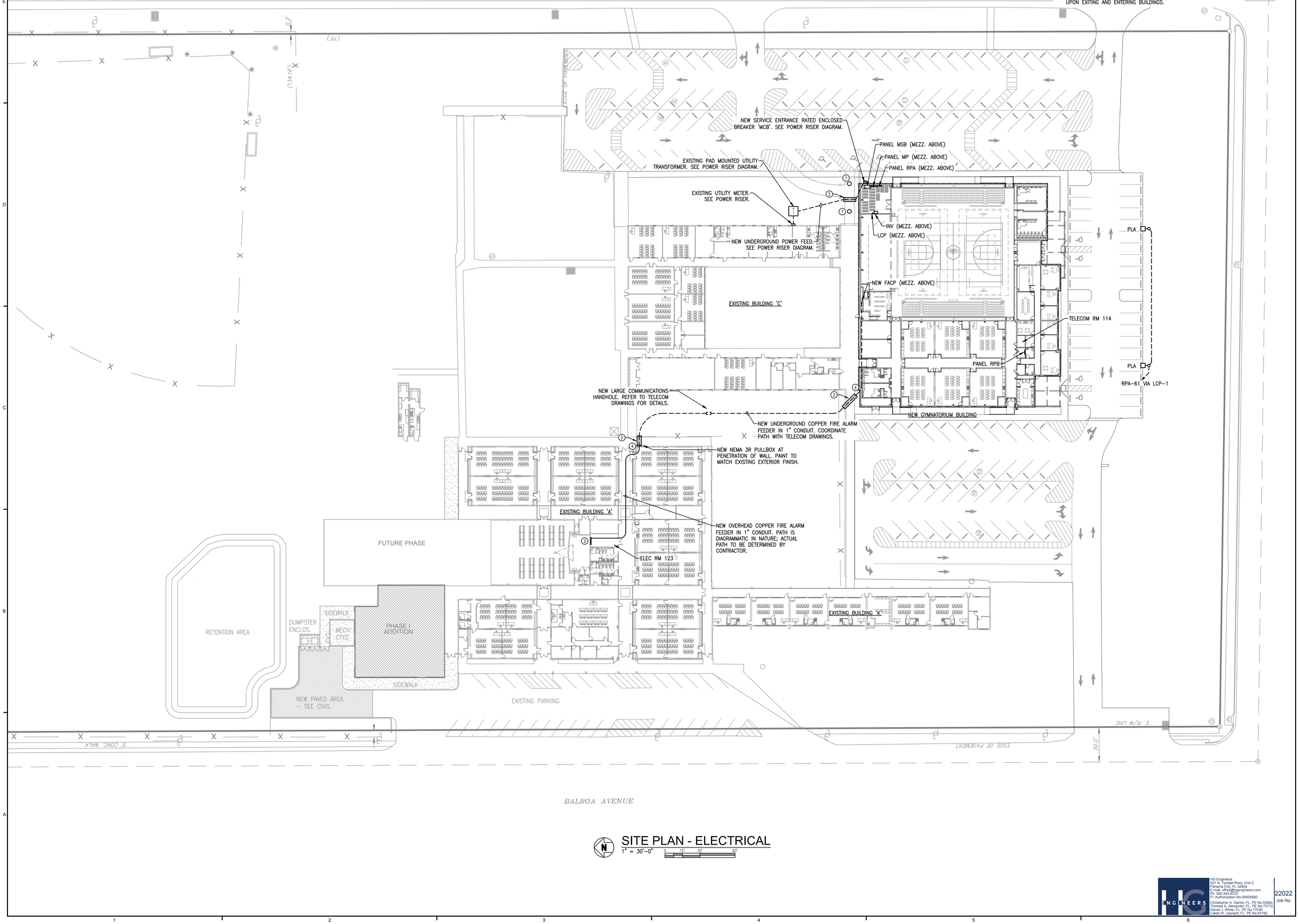
22022 Job No.

SPECIAL NOTE

REFER TO TELECOM PLANS FOR ADDITIONAL CONDUIT REQUIREMENTS TO BE PROVIDED BY ELECTRICAL CONTRACTOR.

KEYNOTES

1. DEMO AND REMOVE EXISTING CANOPY LIGHT FIXTURES IN THEIR ENTIRETY. ENSURE THAT THE EXISTING CIRCUIT CONDUIT AND CONDUCTORS, IF FEEDING OTHER DEVICES OR FIXTURES, ARE EXTENDED AS NECESSARY TO MAINTAIN CIRCUIT CONTINUITY.
2. SAW, CUT AND PATCH EXISTING SIDEWALK AS REQUIRED.
3. EXISTING EDWARDS IO-SERIES FIRE ALARM CONTROL PANEL WITH AUDIO NOTIFICATION SYSTEM AND POWER SUPPLIES. NEW SYSTEM SHALL BE FULLY COMPATIBLE WITH EXISTING SYSTEM.
4. PROVIDE SURGE PROTECTION FOR FIRE ALARM CABLING WITHIN 6 FEET UPON EXITING AND ENTERING BUILDINGS.



SITE PLAN - ELECTRICAL

1" = 30'-0"

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1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

SITE PLAN - ELECTRICAL

PROJECT NUMBER	22019
DATED	01/31/2025

E101

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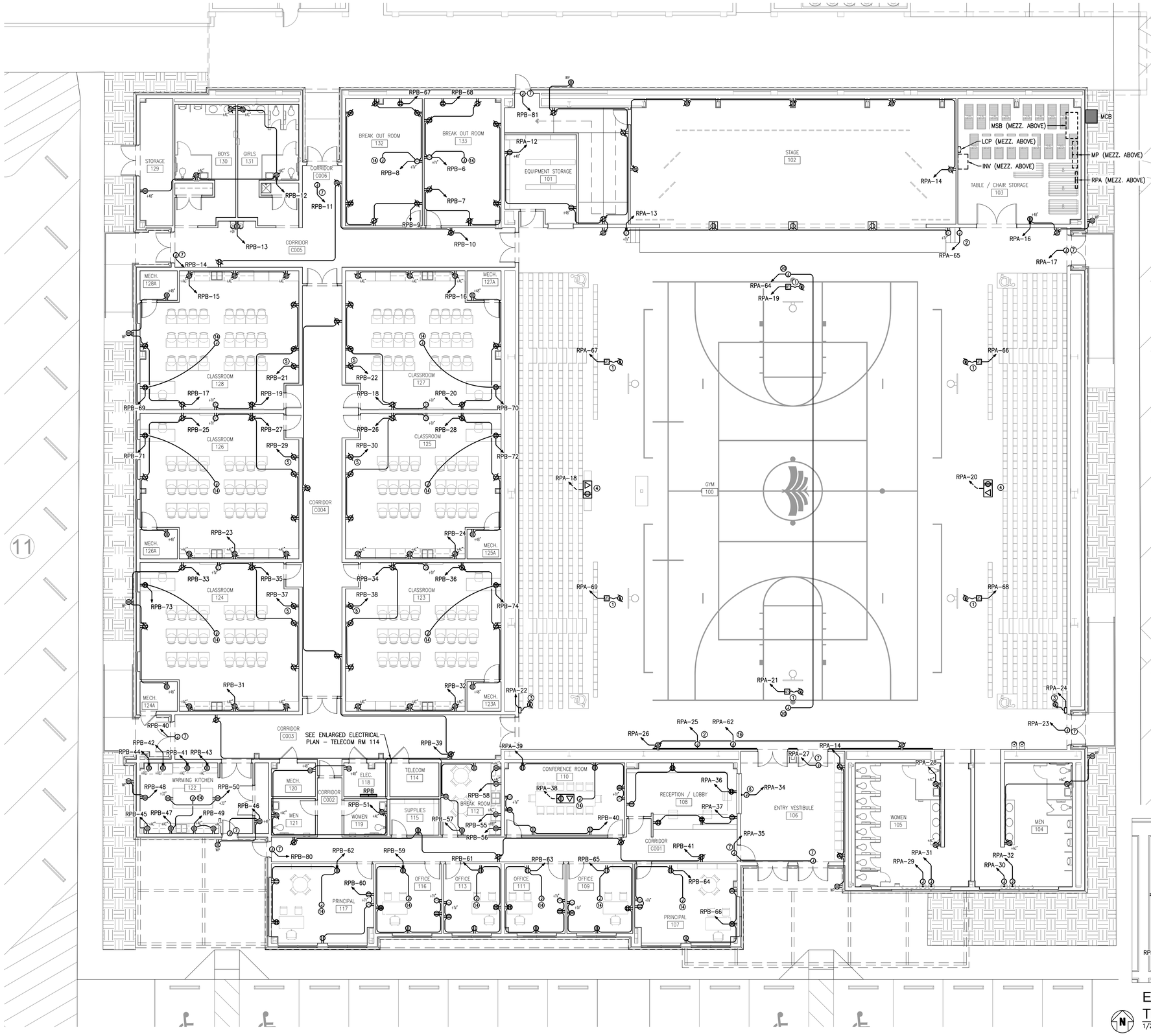
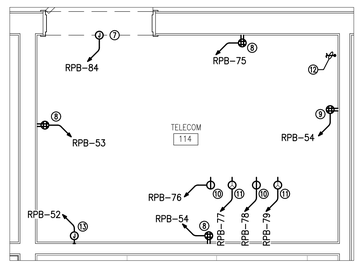


FLOOR PLAN - POWER

1/8" = 1'-0"



ENLARGED ELECTRICAL PLAN - TELECOM RM 114

1/2" = 1'-0"

KEYNOTES

1. INSTALL 4–SQUARE JUNCTION BOX (POWER) AND CONTROL WIRING (BY OTHERS) FOR GOAL HOIST SYSTEM. CONCEAL CONDUIT ALONG CEILING JOISTS. INSTALL GOAL HOIST CONTROLS (2–GANG BOX) AT LOCATION SELECTED BY OWNER/ARCHITECT. INSTALL PER MANUFACTURERS SPECIFICATIONS. COORDINATE FINAL LOCATIONS WITH ARCHITECTURAL PLANS PRIOR TO ROUGHING IN.
2. INSTALL JUNCTION BOX FOR SCOREBOARD POWER AND CONTROLS. INSTALL PER MANUFACTURERS REQUIREMENTS. COORDINATE FINAL LOCATIONS WITH ARCHITECTURAL PLANS PRIOR TO ROUGHING IN.
3. INSTALL DISCONNECT SWITCH FOR CONNECTION TO MOTORIZED AUTOMATIC BLEACHER. COORDINATE ELECTRICAL REQUIREMENTS WITH MANUFACTURER PRIOR TO PURCHASING AND INSTALLING EQUIPMENT. INSTALL CONTROLS AS REQUIRED. COORDINATE FINAL LOCATIONS WITH ARCHITECTURAL PLANS PRIOR TO ROUGHING IN.
4. PROVIDE FLOOR BOX DATA AND POWER FOR SCORER'S TABLE. REFER TO TELECOM DRAWINGS FOR DETAILS. COORDINATE LOCATION WITH OWNER/ARCHITECT. COORDINATE INSTALLATION WITH TELECOM CONTRACTOR.
5. PROVIDE DEDICATED 120V 20A RECEPTACLE FOR MOBILE CHARGING STATION. PROVIDE LABEL STATING "DEDICATED CHARGING STATION".
6. PROVIDE POWER FOR ACSC TALK–THRU DEVICE. SEE TELECOM DRAWINGS AND COORDINATE INSTALLATION WITH ACS CONTRACTOR.
7. PROVIDE DEDICATED 120V 20A CIRCUIT FOR DOOR ACCESS CONTROLS POWER SUPPLY. PROVIDE JUNCTION BOX AND CONDUIT AS NOTED ON TELECOM DRAWINGS FOR SECURED ACCESS DOOR CONTROLS. COORDINATE INSTALLATION AND POWER REQUIREMENTS WITH ACCESS CONTROL SYSTEMS MANUFACTURER AND ACCESS CONTROL SYSTEMS CONTRACTOR. SEE TELECOM DRAWINGS.
8. PROVIDE DEDICATED 120V 20A QUAD RECEPTACLE CIRCUIT. ROUGH–IN WALL BOX FLUSH WITH FACE OF BACKBOARD. EXTEND EMT CONDUIT FROM BOX CONCEALED BEHIND BACKBOARD. SEE TELECOM DRAWINGS.
9. PROVIDE DEDICATED 120V 20A QUAD RECEPTACLE CIRCUIT MOUNTED DIRECTLY UNDER CCTV ENCLOSURE. ROUGH–IN WALL BOX FLUSH WITH FACE OF BACKBOARD. EXTEND EMT CONDUIT FROM BOX CONCEALED BEHIND BACKBOARD. SEE TELECOM DRAWINGS.
10. INSTALL DEDICATED 120V 20A SIMPLEX RECEPTACLE ON BACKSIDE OF CABLE RUNWAY IN NON–METALLIC BOX FOR SURGE SUPPRESSOR POWER. SEE TELECOM DRAWINGS.
11. INSTALL DEDICATED 120V L5–30 30A RECEPTACLE ON REAR OF RACK FOR 3000VA UPS. PROVIDE 2#10, #10G, IN 3/4"C SEE TELECOM DRAWINGS.
12. INSTALL 3/4" EMT CONDUIT WITH PULLSTRING TO MAIN CIRCUIT BREAKER MCB. SEE TELECOM DRAWINGS.
13. PROVIDE 120V 20A DEDICATED CIRCUIT FOR ACCESS CONTROL PANEL. SEE TELECOM DRAWINGS.
14. POWER FOR TEACHER AMPLIFICATION SPEAKER. SEE TELECOM DRAWINGS.
15. INSTALL JUNCTION BOX FOR SHOT CLOCK POWER AND CONTROLS. INSTALL PER MANUFACTURERS REQUIREMENTS. COORDINATE FINAL LOCATIONS WITH ARCHITECTURAL PLANS PRIOR TO ROUGHING IN.
16. INSTALL JUNCTION BOX FOR BASKETBALL HOIST OPERATOR SWITCHES. INSTALL PER MANUFACTURERS REQUIREMENTS. COORDINATE FINAL LOCATIONS WITH ARCHITECTURAL PLANS PRIOR TO ROUGHING IN.

SPECIAL NOTE

REFER TO TELECOM, AV, AND THEATRICAL PLANS FOR ADDITIONAL CONDUIT REQUIREMENTS TO BE PROVIDED BY ELECTRICAL CONTRACTOR.

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

FLOOR PLAN - POWER

PROJECT NUMBER	22019
DATED	01/31/2025

E201

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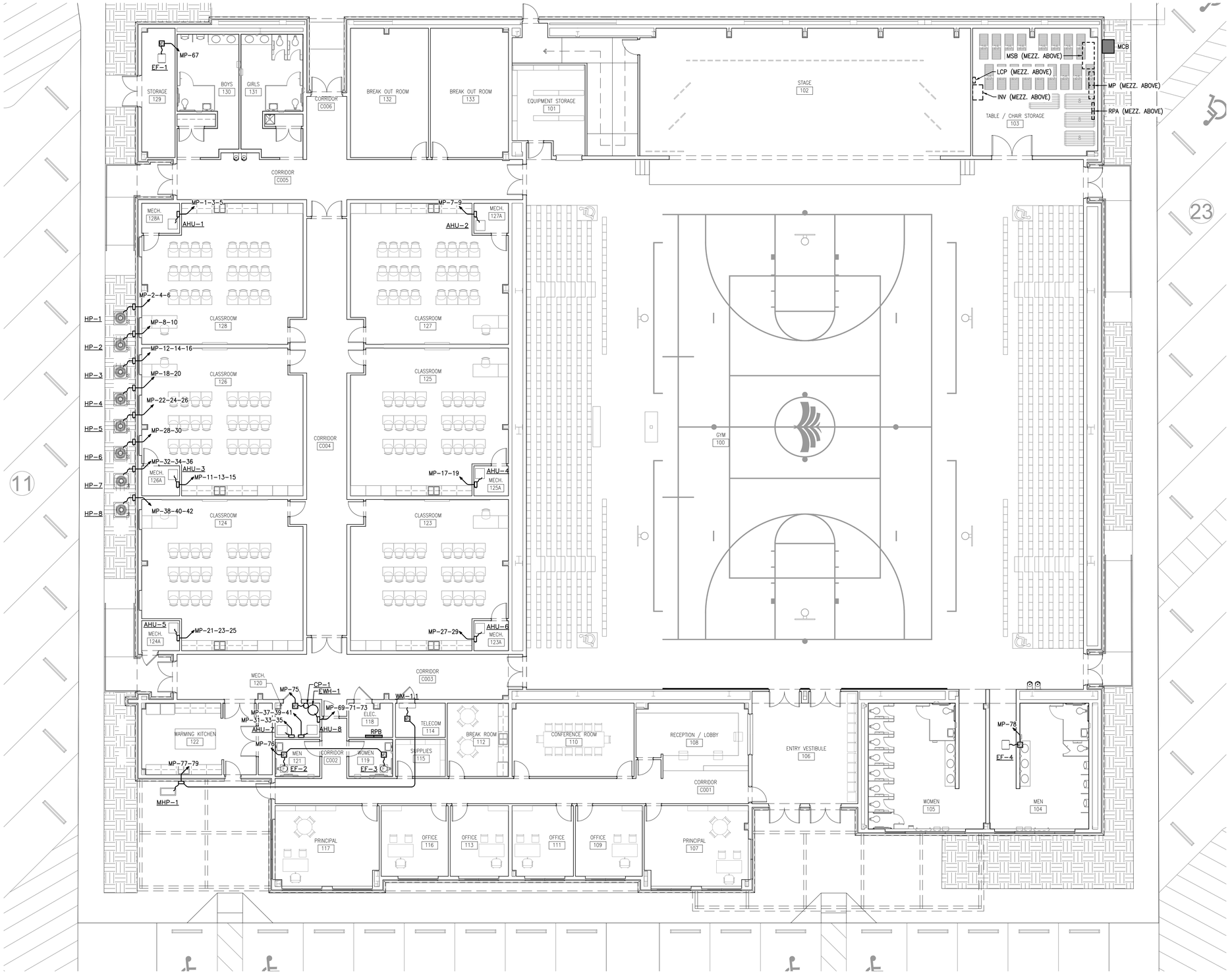

FLOOR PLAN - HVAC POWER

1/8" = 1'-0" 0 4' 8' 16'

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FLOOR PLAN - HVAC POWER

PROJECT NUMBER	22019
DATED	01/31/2025

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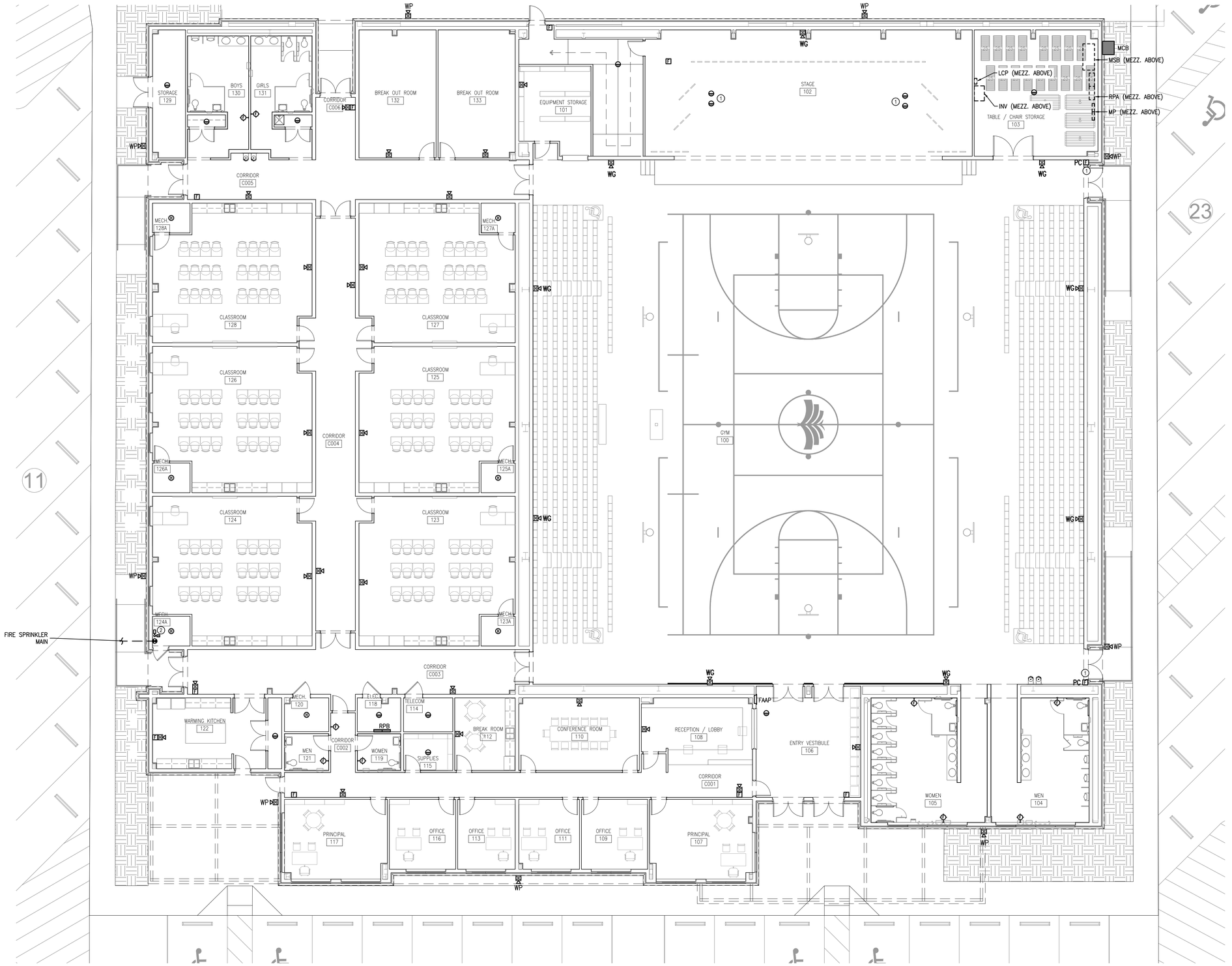
KEYNOTES

1. INSTALL PROTECTIVE POLYCARBONATE SHIELD.
2. VERIFY QUANTITY & LOCATION WITH FIRE SPRINKLER SUPPLIER.
3. ONE SMOKE DETECTOR TO SERVE THE ABOVE-STAGE SPACE. THE SECOND SMOKE DETECTOR TO SERVE THE BENEATH-STAGE CAVITY.



FLOOR PLAN - FIRE ALARM

1/8" = 1'-0"

0 4' 8' 16'

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FLOOR PLAN - FIRE ALARM

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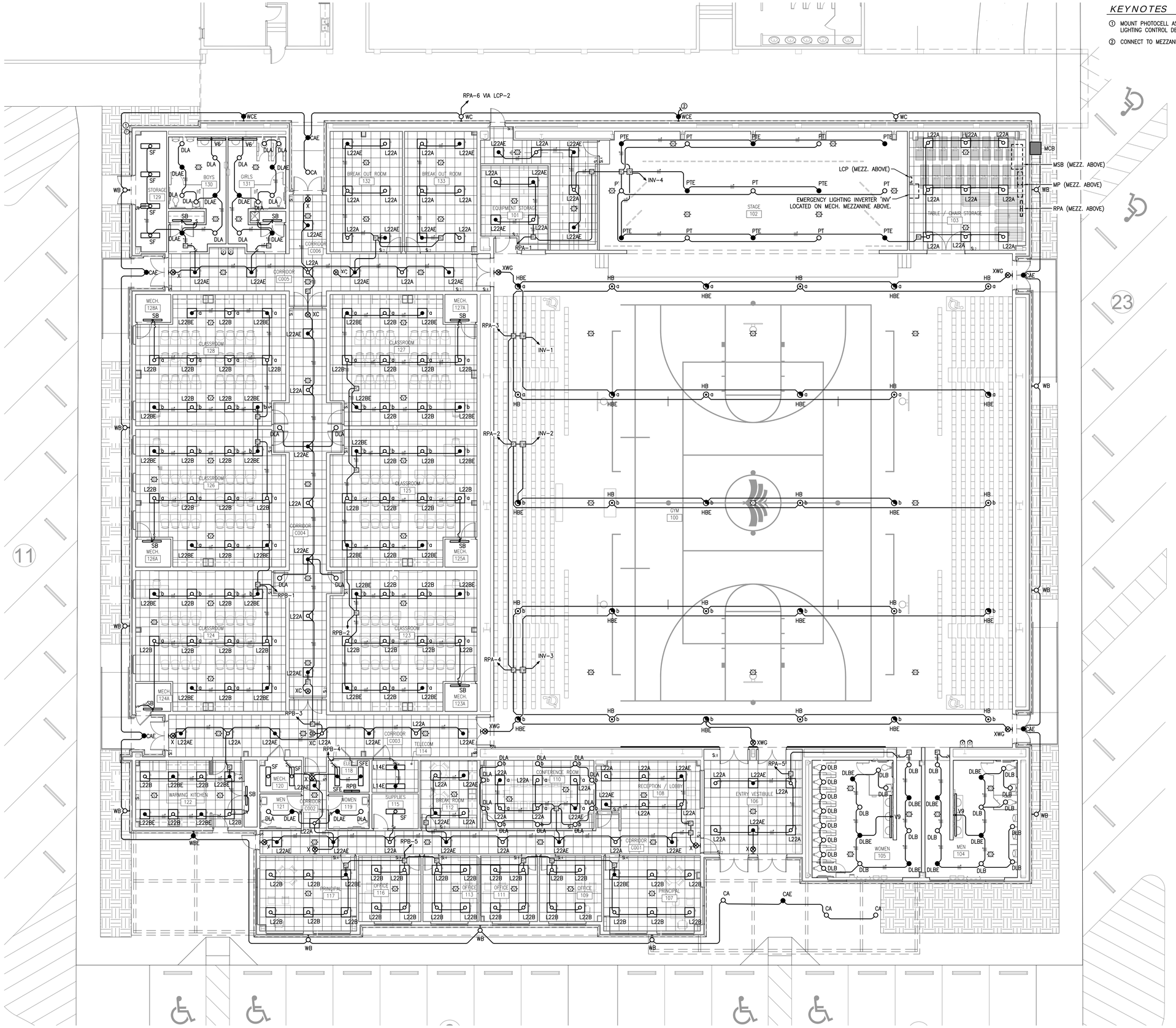
01/31/2025

KEYNOTES

1. MOUNT PHOTOCELL AS HIGH AS POSSIBLE FACING NORTH. REFER TO LIGHTING CONTROL DETAILS.
2. CONNECT TO MEZZANINE EXTERIOR LIGHTING CIRCUIT.



FLOOR PLAN - LIGHTING

1/8" = 1'-0"

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REVISIONS:

No.	Description	Date

FLOOR PLAN - LIGHTING

PROJECT NUMBER	22019
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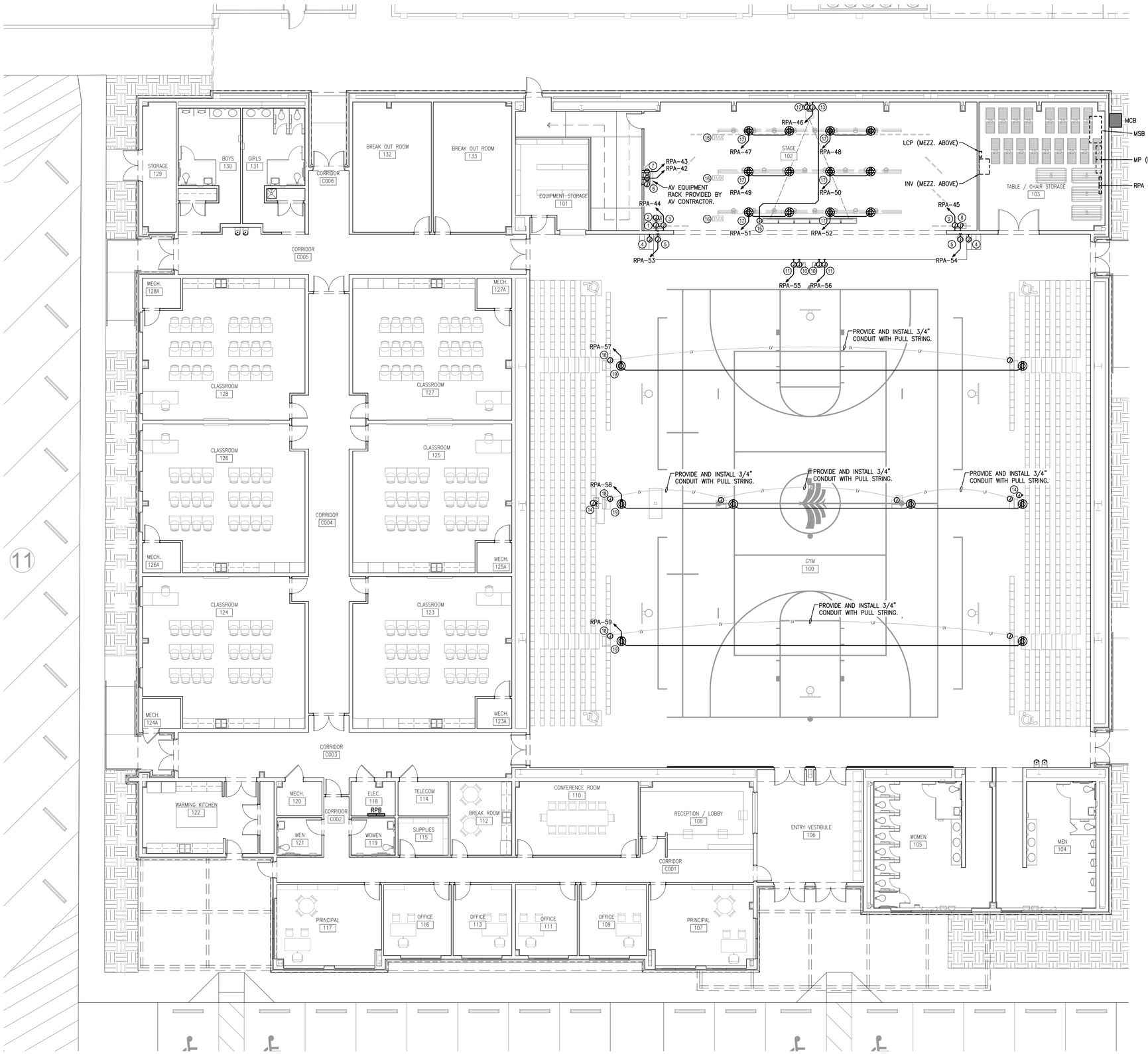

FLOOR PLAN - AV POWER & THEATRICAL LIGHTING

1/8" = 1'-0"

KEYNOTES

1. INSTALL 8" X 8" JUNCTION BOX RECESSED IN-WALL 18" AFF FOR AV INPUT PLATE. PROVIDE AND INSTALL 1" CONDUIT FROM AV INPUT PLATE TO WALL REMOTE. PROVIDE AND INSTALL THREE 1" CONDUITS FROM AV INPUT PLATE TO STAGE JUNCTION BOX AT AV EQUIPMENT RACK IN EQUIPMENT STORAGE RM 101. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL BOXES, CONDUIT AND POWER. AV CONNECTOR PLATE PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
2. PROVIDE AND INSTALL RECESSED IN-WALL 2-GANG JUNCTION BOX 60" AFF FOR AV INPUT PLATE AND AV WALL REMOTE. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL BOXES, CONDUIT AND POWER. WALL REMOTE PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
3. AV COMPONENT POWER. PROVIDE AND INSTALL 120V 20A DEDICATED CIRCUIT ADJACENT TO AV INPUT PLATE FOR AV COMPONENT POWER. REFER TO AV/THEATRICAL DRAWINGS.
4. LOUDSPEAKER JUNCTION BOX. INSTALL SINGLE GANG JUNCTION BOX 84" AFF. INSTALL 1" CONDUIT TO STAGE JUNCTION BOX AT AV EQUIPMENT RACK. INSTALL 120V 20A DEDICATED CIRCUIT ADJACENT TO JUNCTION BOX 84" AFF FOR LOUDSPEAKER POWER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
5. PROVIDE AND INSTALL 120V 20A DEDICATED CIRCUIT ADJACENT TO JUNCTION BOX 84" AFF FOR LOUDSPEAKER POWER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
6. INSTALL STAGE JUNCTION BOX RECESSED IN-WALL 18" AFF. SIZE JUNCTION BOX BASED ON QUANTITY AND SIZE OF CONDUIT TERMINATIONS PER NEC. INSTALL 1" CONDUIT FROM STAGE JUNCTION BOX TO 'OVER STAGE' AREA FOR SUSPENDED MICROPHONE CABLES. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
7. INSTALL TWO 120V 20A DEDICATED RECEPTACLE CIRCUITS ADJACENT TO STAGE JUNCTION BOX FOR AV COMPONENT POWER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
8. PROVIDE AND INSTALL 8" X 8" AV JUNCTION BOX 18" AFF RECESSED IN-WALL. PROVIDE AND INSTALL THREE 1" CONDUITS TO STAGE JUNCTION BOX AT AV EQUIPMENT RACK IN EQUIPMENT STORAGE RM 101. BOXES AND CONDUIT PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. AV CONNECTOR PLATE PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
9. PROVIDE AND INSTALL 120V 20A DEDICATED CIRCUIT FOR AV COMPONENT POWER. REFER TO AV/THEATRICAL DRAWINGS.
10. PROVIDE AND INSTALL SINGLE GANG BOX IN VERTICAL STEP RISER. PROVIDE AND INSTALL 1" CONDUIT TO STAGE JUNCTION BOX AT AV EQUIPMENT RACK IN EQUIPMENT ROOM 101. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
11. PROVIDE AND INSTALL 120V 20A DEDICATED CIRCUIT ADJACENT TO AV JUNCTION BOX FOR AV COMPONENT POWER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
12. PROVIDE AND INSTALL 2-GANG JUNCTION BOX 9'-0" AFF. PROVIDE AND INSTALL 1" CONDUIT TO STAGE JUNCTION BOX AT AV EQUIPMENT RACK IN EQUIPMENT STORAGE 101. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. PROJECTOR PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
13. PROVIDE AND INSTALL 120V 20A SHARED CIRCUIT 9'-0" AFF FOR PROJECTOR AND PROJECTION SCREEN POWER. REFER TO AV/THEATRICAL DRAWINGS.
14. PROVIDE AND INSTALL 1" CONDUIT FROM SCORER'S DESK FLOOR BOX TO AV EQUIPMENT RACK IN EQUIPMENT STORAGE RM 101 FOR GYM AV INPUT. FLOOR BOX AND CONDUIT PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. AV CONNECTOR PLATE PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
15. PROVIDE AND INSTALL 120V 20A SHARED CIRCUIT WITH PROJECTOR. PROVIDE AND INSTALL 1" CONDUIT TO STAGE JUNCTION BOX AT AV EQUIPMENT RACK FOR UP/DOWN CONTROL CABLING. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. PROJECTION SCREEN PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
16. PROVIDE AND INSTALL 1" CONDUIT TO FROM DMX JUNCTION BOX ON BATTEN TO STAGE JUNCTION BOX IN EQUIPMENT STORAGE RM 101 FOR DMX CABLING. CONDUIT, BOXES & POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. STAGE LIGHTING LED FIXTURES, 1.5" PIPE BATTEN & DMX CABLING PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
17. PROVIDE AND INSTALL 120V 20A CIRCUITS (TWO QUADRAPLEX RECEPTACLES PER CIRCUIT) FOR DMX AND STAGE LIGHTING FIXTURE POWER. COORDINATE LOCATION AND INSTALLATION WITH AV/THEATRICAL LIGHTING CONTRACTOR. STAGE LIGHTING LED FIXTURES, 1.5" PIPE BATTEN & DMX CABLING PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
18. PROVIDE AND INSTALL SINGLE GANG JUNCTION BOX TO STEEL STRUCTURE. PROVIDE AND INSTALL 1" CONDUIT TO FROM LOUDSPEAKER JUNCTION BOX TO AV EQUIPMENT RACK IN EQUIPMENT STORAGE RM 101. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. LOUDSPEAKER PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.
19. PROVIDE AND INSTALL 120V 20A CIRCUIT PER ROW OF LOUDSPEAKERS. MOUNT CEILING RECEPTACLE ADJACENT TO LOUDSPEAKER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. LOUDSPEAKER PROVIDED AND INSTALLED BY AV CONTRACTOR. REFER TO AV/THEATRICAL DRAWINGS.

SPECIAL NOTE

REFER TO TELECOM, AV, AND THEATRICAL PLANS FOR ADDITIONAL CONDUIT REQUIREMENTS TO BE PROVIDED BY ELECTRICAL CONTRACTOR.

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100% CONSTRUCTION DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

FLOOR PLAN - AV POWER & THEATRICAL LIGHTING

PROJECT NUMBER	22019
DATED	01/31/2025

E205

HG ENGINEERS
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621 N. Tyndall Pkwy, Unit C
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Daniel J. White, FL. PE No.73790
Caleb W. Leonard, FL. PE No.91782

22022 Job No.

22019
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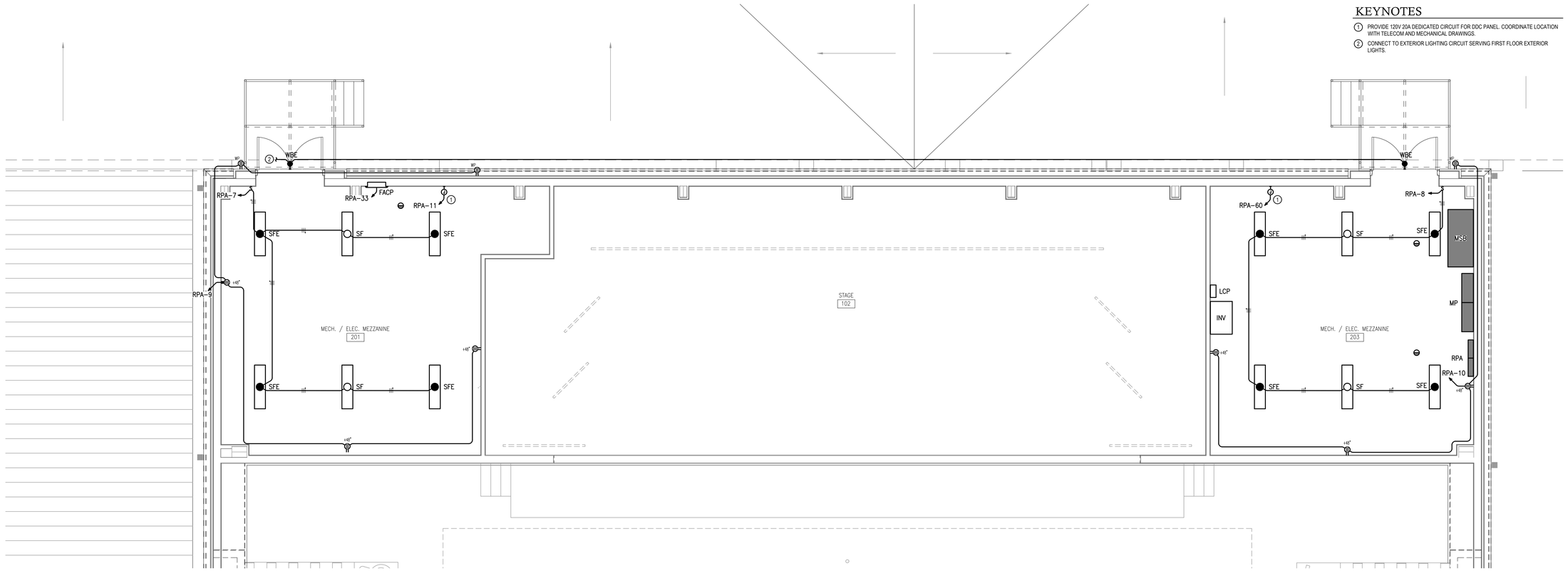
01/31/2025

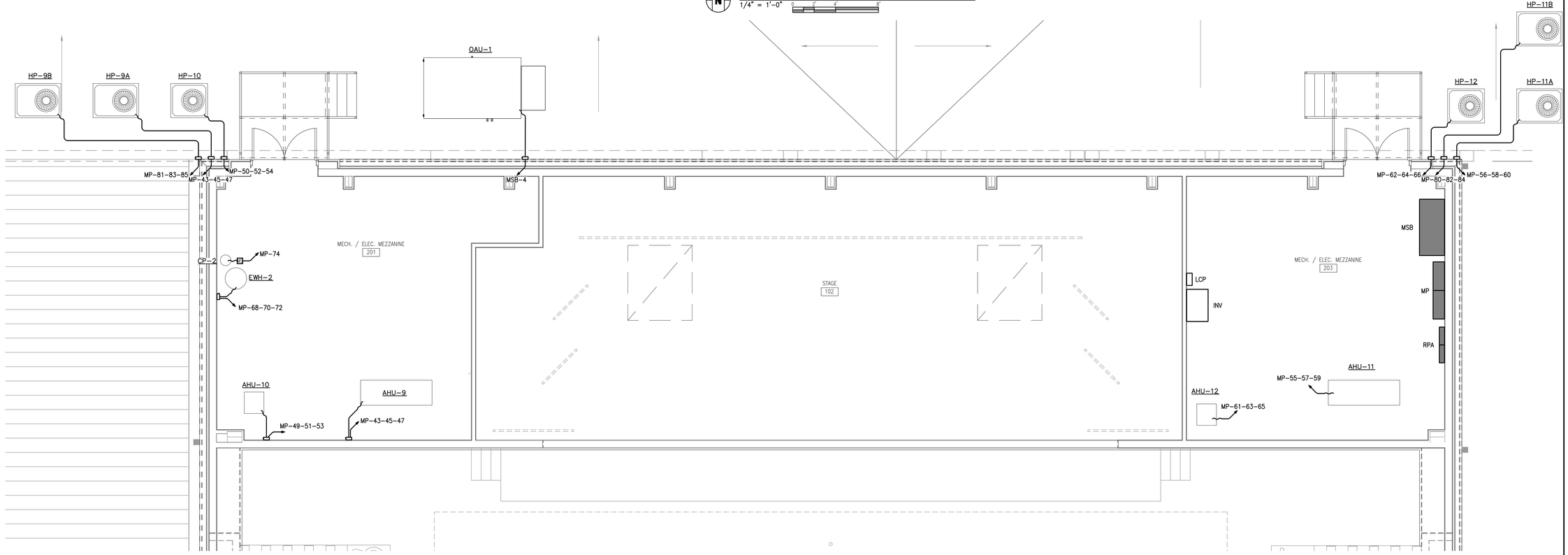
KEYNOTES

1. PROVIDE 120V 20A DEDICATED CIRCUIT FOR DDC PANEL. COORDINATE LOCATION WITH TELECOM AND MECHANICAL DRAWINGS.
2. CONNECT TO EXTERIOR LIGHTING CIRCUIT SERVING FIRST FLOOR EXTERIOR LIGHTS.



MEZZANINE PLAN - ELECTRICAL

1/4" = 1'–0"



MEZZANINE PLAN - HVAC POWER

1/4" = 1'–0"

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REVISIONS:

No.	Description	Date

MEZZANINE PLAN - ELECTRICAL

PROJECT NUMBER	22019
DATED	01/31/2025

E206

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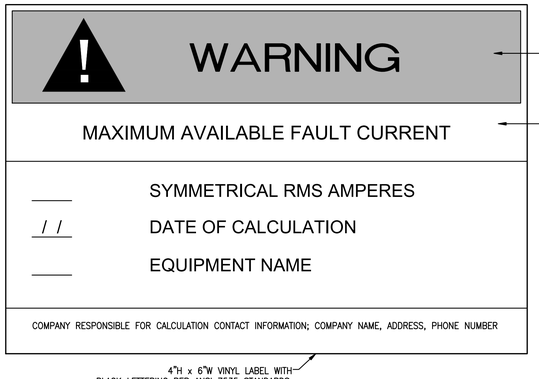
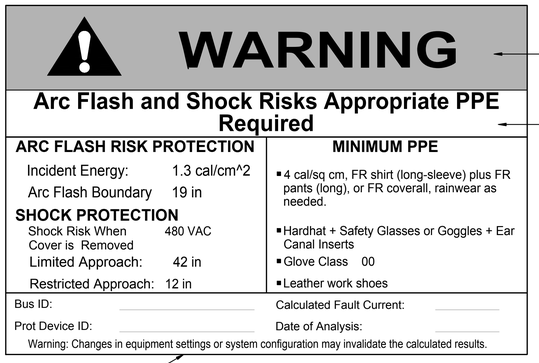
22022 Job No.



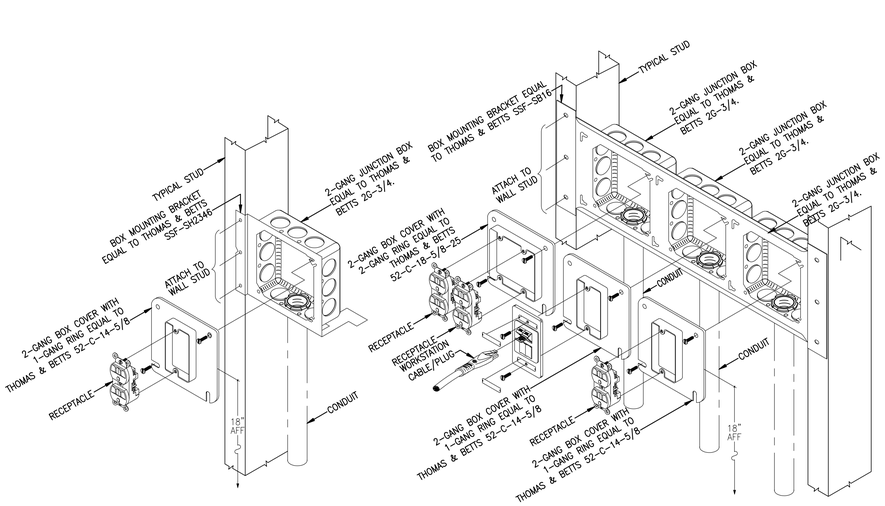
TYPICAL SERVICE EQUIPMENT FAULT CURRENT LABEL DETAIL
NOT TO SCALE



TYPICAL ARC FLASH HAZARD LABEL DETAIL
NOT TO SCALE

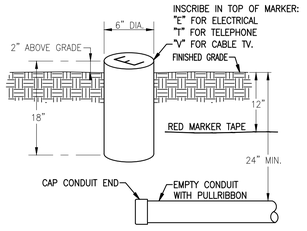
TYPICAL FLOOR MARKING AT ELECTRICAL PANELS
NOT TO SCALE

TYPICAL ELECTRICAL EQUIPMENT NAMEPLATE
NOT TO SCALE

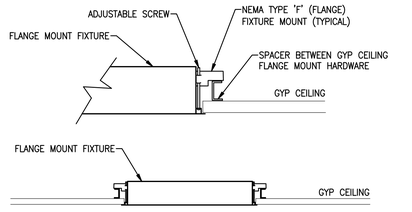


TYPICAL POWER OUTLET INSTALLATION DETAIL
NOT TO SCALE

TYPICAL POWER/COMMUNICATIONS OUTLET INSTALLATION DETAIL
NOT TO SCALE

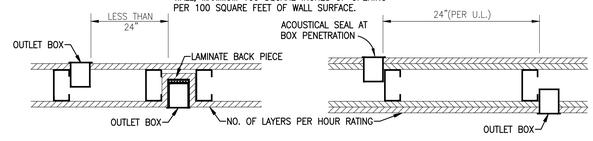


CONDUIT MARKER DETAIL
NOT TO SCALE



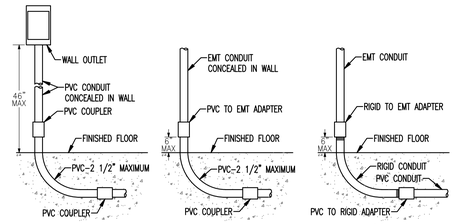
FLANGE MOUNT FIXTURE IN GYP BOARD CEILING
NOT TO SCALE

note:
FOR ONE HOUR OR TWO HOUR FIRE OR SMOKE WALL; MAXIMUM 100 SQUARE INCHES OF OPENING PER 100 SQUARE FEET OF WALL SURFACE.



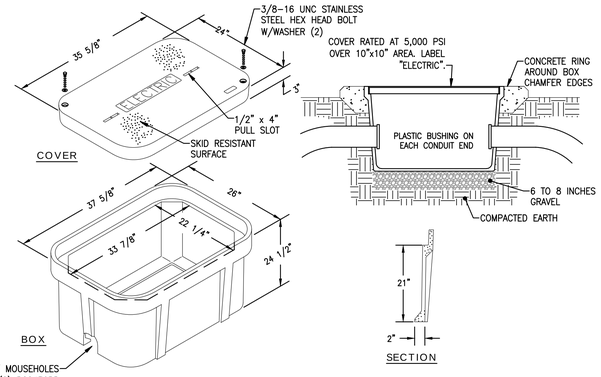
FIVE SIDED ELECTRICAL BOX ADJACENT ELECTRICAL BOXES

WALL DETAILS - ELECTRICAL BOX INSTALLATION
NOT TO SCALE

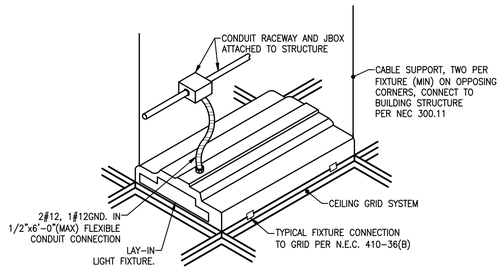


WITH OUTLET BOX WITHOUT OUTLET BOX EXPOSED OR FEEDER CONDUIT

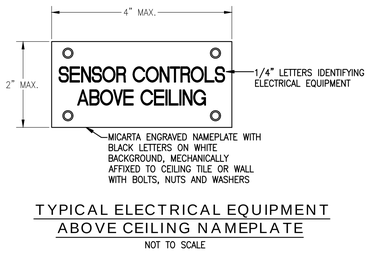
PVC STUB-UP DETAILS
NOT TO SCALE



ELECTRICAL PULLBOX DETAIL
NOT TO SCALE

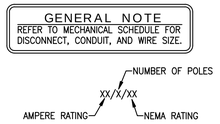


LAY-IN FIXTURE CABLE SUPPORT DETAIL
NOT TO SCALE

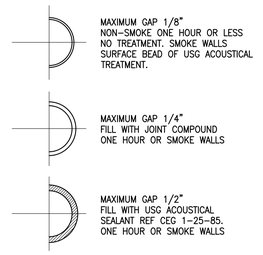


TYPICAL ELECTRICAL EQUIPMENT ABOVE CEILING NAMEPLATE
NOT TO SCALE

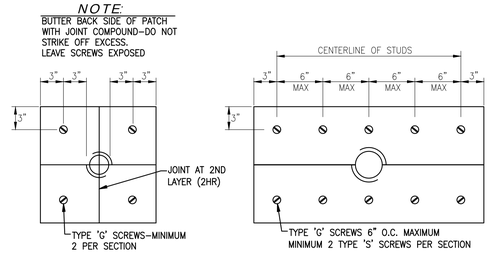
EXIT SIGN NOMENCLATURE
NOT TO SCALE



DISCONNECT SWITCH DESCRIPTION NOMENCLATURE



SMALL DIAMETER GAPS IN ONE HOUR WALLS



OPENINGS UP TO 3" DIA. OPENINGS OVER 3" DIA.

WALL PENETRATIONS –APPLIES TO ALL CORRIDOR, SMOKE AND FIRE RATED WALLS
NOT TO SCALE

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

ELECTRICAL DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

HG ENGINEERS
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Daniel J. White, FL. PE No.73700
Caleb W. Leonard, FL. PE No.91782

22022 Job No.

E301

LIGHTING FIXTURE SCHEDULE

Project: #2022 - PALM BAY GYMNATORIUM

Note: Per electrical specifications, alternate fixtures shall be submitted to the engineer for prior approval a minimum of (10) ten business days prior to bid date. Any alternate fixtures not submitted for prior approval will not be reviewed.

Luminaire Designation	Manufacturer	Catalog Number	Connected Voltage	Luminaire Load (va)	Lamping Source	Color Rendering Index (CRI)	Kelvin Temperature	Mounting	Comments
CA	GARDCO	SFC-5R-48L-250-NW-G2-UNV-MGY	120	38	LED	80	4000	CANOPY SURFACE	
CAE	GARDCO	SFC-5R-48L-250-NW-G2-UNV-MGY	120	38	LED	80	4000	CANOPY SURFACE	PROVIDE WITH BATTERY PACK CAPABLE OF OPERATING FIXTURE FOR 90-MINUTES UPON LOSS OF POWER. IF EXTERNAL BATTERY PACK REQUIRED, MOUNT INDOORS ABOVE ACCESSIBLE CEILING.
DLA	HE WILLIAMS	6DR-TL-L10/840-DIM-UNV-OW-OF-CS-N	120	9	LED	80	4000	CEILING RECESSED	
DLAE	HE WILLIAMS	6DR-TL-L10/840-EM/10W-DIM-UNV-OW-OF-CS-N	120	9	LED	80	4000	CEILING RECESSED	
DLB	HE WILLIAMS	6DR-TL-L15/840-DIM-UNV-OW-OF-CS-N	120	14	LED	80	4000	CEILING RECESSED	
DLBE	HE WILLIAMS	6DR-TL-L15/840-EM/10W-DIM-UNV-OW-OF-CS-N	120	14	LED	80	4000	CEILING RECESSED	
HB	TGS	CHB-P-150W-40K-WD-U-D-W-PM	120	150	LED	80	4000	PENDANT MOUNT 25'-0" AFF TO BOTTOM OF FIXTURE	WIRE GUARD: CHB-P-WG-W; SPECIFY PENDANT LENGTH
HBE	TGS	CHB-P-150W-40K-WD-U-D-W-PM	120	150	LED	80	4000	PENDANT MOUNT 25'-0" AFF TO BOTTOM OF FIXTURE	WIRE GUARD: CHB-P-WG-W; SPECIFY PENDANT LENGTH; HOMERUN VIA INVERTER
L14E	HE WILLIAMS	LT-14-L63/840-EM/10W-AF-DRV-UNV	120	49	LED	80	4000	CEILING GRID LAY-IN	
L22A	HE WILLIAMS	LT-22-L27/840-AF-DIM-UNV	120	22	LED	80	4000	CEILING GRID LAY-IN	
L22AE	HE WILLIAMS	LT-22-L27/840-EM/10W-AF-DIM-UNV	120	22	LED	80	4000	CEILING GRID LAY-IN	
L22B	HE WILLIAMS	LT-22-L39/840-AF-DIM-UNV	120	34	LED	80	4000	CEILING GRID LAY-IN	
L22BE	HE WILLIAMS	LT-22-L39/840-EM/10W-AF-DIM-UNV	120	34	LED	80	4000	CEILING GRID LAY-IN	
PLA	GARDCO	ECF-S-48L-900-NW-G2-AR-3-UNV-DD-TLRD5-BZ	-	135	LED	70	4000	POLE MOUNTED 18'-0" AFG TO BOTTOM OF FIXTURE	MOUNT TO POLE - PL(POLE)
PT	HE WILLIAMS	6CR-TL-L30/840-WHT-DIM-UNV-OW-CS-PM36	120	28	LED	80	4000	PENDANT MOUNT 20'-0" AFF TO BOTTOM OF FIXTURE	SPECIFY PENDANT LENGTH
PTE	HE WILLIAMS	6CR-TL-L30/840-WHT-DIM-UNV-OW-CS-PM36	120	28	LED	80	4000	PENDANT MOUNT 20'-0" AFF TO BOTTOM OF FIXTURE	SPECIFY PENDANT LENGTH; HOMERUN VIA INVERTER
SB	HE WILLIAMS	SLF-4-L26/840-HIA-DRV-UNV	120	22	LED	80	4000	WALL MOUNT 8'-0" AFF TO BOTTOM OF FIXTURE	
SF	HE WILLIAMS	39-4-L30/840-A-DRV-UNV	120	23	LED	80	4000	CEILING SURFACE MOUNT	
SFE	HE WILLIAMS	39-4-L30/840-A-EM/10WLP-DRV-UNV	120	23	LED	80	4000	CEILING SURFACE MOUNT	
V6	HE WILLIAMS	P2WDP-5W-C1R-72-40K-WH	120	30	LED	80	4000	WALL MOUNT 6" ABOVE VANITY MIRROR TO BOTTOM OF FIXTURE	
V9	HE WILLIAMS	P2WDP-5W-C1R-108-40K-WH	120	45	LED	80	4000	WALL MOUNT 6" ABOVE VANITY MIRROR TO BOTTOM OF FIXTURE	
WB	HE WILLIAMS	VWM-V-L20-740-T3-DBZ-SDGL-DIM-UNV	120	27	LED	80	4000	WALL MOUNT 10'-0" AFG TO BOTTOM OF FIXTURE	
WBE	HE WILLIAMS	VWM-V-L20-740-T3-DBZ-SDGL-DIM-UNV	120	27	LED	80	4000	WALL MOUNT 10'-0" AFG TO BOTTOM OF FIXTURE	PROVIDE WITH BATTERY PACK CAPABLE OF OPERATING FIXTURE FOR 90-MINUTES UPON LOSS OF POWER. IF EXTERNAL BATTERY PACK REQUIRED, MOUNT INDOORS ABOVE ACCESSIBLE CEILING.
WC	HE WILLIAMS	WPAL-L49/850-BZ-DIM-UNV	120	69	LED	80	5000	WALL MOUNT 8'-0" AFG TO BOTTOM OF FIXTURE	
X	HE WILLIAMS	EXIT-R-EM-WHT-SDT-D	120	4	LED	-	-	WALL MOUNT ABOVE DOOR AT 8'-0" AFF TO BOTTOM OF FIXTURE	
XC	HE WILLIAMS	EXIT-R-EM-WHT-SDT-D	120	4	LED	-	-	UNIVERSAL CEILING MOUNT	
XWG	HE WILLIAMS	EXIT-R-EM-WHT-SDT-WG-D	120	4	LED	-	-	WALL MOUNT ABOVE DOOR AT 8'-0" AFF TO BOTTOM OF FIXTURE	
PL(POLE)	VALMONT	R170830506T4-D1-335	-	-	-	-	-	CONCRETE BASE	REFER TO POLE BASE DETAIL

LIGHTING CONTROL PANEL

PANEL LCP

VOLTAGE: 120V **SUPPLY CIRCUIT:** RPA-63 **MOUNTING:** SURFACE
PANEL: LMCP8-115/277-8 **AIC RATING:** 10k MINIMUM
NEMA RATING 1 **OPTIONS:** **LOCATION** MEZZ. RM 201

RELAY	LOAD (VA)	LINE FEED	SERVING	VOLTAGE	VOLTAGE	SERVING	LINE FEED	LOAD (VA)	RELAY
1	270	RPA-61	PARKING/SITE LIGHTING	120V	120V	BUILDING EXTERIOR	RPA-6	780	2
3	--	--	SPARE	120V	120V	SPARE	--	--	4
5	--	--	SPARE	120V	120V	SPARE	--	--	6
7	--	--	SPARE	120V	120V	SPARE	--	--	8

LIGHTING CONTROL GENERAL NOTES

A. THE DIAGRAMS ARE NOT INTENDED TO SHOW EXACT QUANTITIES OF DEVICES. REFER TO PLAN FOR ESTIMATED DEVICE QUANTITIES AND LOCATIONS.

B. THE LOCAL DEVICE INTERCONNECTIONS FOR ALL LIGHTING CONTROL DEVICES SHALL BE OF THE TOPOLOGY FREE TYPE.

C. COLORS FOR ALL DEVICES AND DEVICE COVERS SHALL BE SELECTED BY THE ARCHITECT.

D. ALL DATA LINE SWITCHES SHALL INCLUDE CUSTOM ENGRAVED LABEL INDICATING FUNCTION OF SWITCH. COORDINATE EXACT LABEL DESCRIPTIONS WITH OWNER PRIOR TO INSTALLATION.

E. PROVIDE ADDITIONAL POWER AND CONTROL MODULES AS RECOMMENDED BY THE SYSTEM SUPPLIER.

F. THE DIAGRAMS REPRESENT A TYPICAL SYSTEM AND ARE NOT INTENDED FOR INSTALLATION, SYSTEM SUPPLIER SHALL PROVIDE INSTALLATION DRAWINGS AND WIRING DIAGRAMS.

G. E.C. SHALL COORDINATE FIELD PROGRAMMING OF LIGHTING CONTROL SYSTEM WITH SYSTEM PROGRAMMER, SPECIFYING ENGINEER, AND OWNER TO ENSURE PROPER OPERATION AND TIME SCHEDULES.

H. ALL EMERGENCY AND EXIT LIGHTING CIRCUITS SHALL BE CONNECTED TO CONTINUOUS POWER SOURCE AHEAD OF RELAY PANEL OR INDIVIDUAL RELAY COMPONENTS.

I. INSTALL ALL CEILING SENSORS MINIMUM OF 6FT CLEAR OF DUCT REGISTERS.

J. THE LIGHTING CONTROL AND EMERGENCY LIGHTING SYSTEMS SHALL BE CAPABLE OF BEING ACCESSED VIA THE LOCAL AREA NETWORK AND REMOTELY VIA AUTHORIZED PERSONNEL ONLY.

K. PROGRAMMER / COMMISSIONING AGENT SHALL BE CERTIFIED BY THE EQUIPMENT MANUFACTURER ON THE SYSTEM INSTALLED.

L. THE MANUFACTURER CERTIFIED TECHNICIAN WILL MEET ONSITE WITH THE ELECTRICAL CONTRACTORS TO COORDINATE INSTALLATION DETAILS, REVIEW BEST PRACTICES, AND DISCUSS PROJECT SPECIFIC CHALLENGES; PRIOR TO THE INSTALLATION BEING STARTED, ENABLING THE CONTRACTORS TO WORK WITH THE TECHNICIAN TO PREPARE AND MAKE CHANGES UP FRONT.

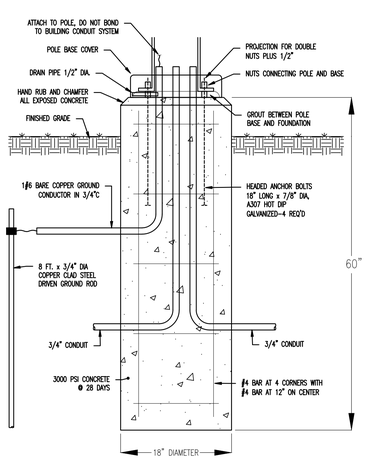
M. THE MANUFACTURER'S LIGHTING SYSTEMS TEAM SHALL WORK ONSITE AFTER FIXTURE AND CONTROLS INSTALLATION IS COMPLETED. THE MANUFACTURER'S AGENT IS TO VERIFY THE PROJECT IS REVIEWED AND CHECKED FOR PROPER WIRING, INSTALLATION AND FUNCTIONALITY OF THE SYSTEM AS A WHOLE. ANY PROBLEMS SHALL BE ADDRESSED AND RESOLVED WITH THE ONSITE CONTRACTORS.

N. MANUFACTURER'S TECHNICIANS SHALL MAP OUT THE FIXTURE LOCATIONS AND ADDRESSES WITHIN THE LIGHTING CONTROL SOFTWARE. ASTRONOMIC TIMECLOCK EVENTS, SCENES, AND SCHEDULES ARE PROGRAMMED ACCORDING TO A PRE-DEFINED SCRIPT. THESE EVENTS, SCENES, AND SCHEDULES ARE TESTED AND FINALIZED FOR FINAL APPROVAL BY THE PROJECT'S OWNERSHIP.

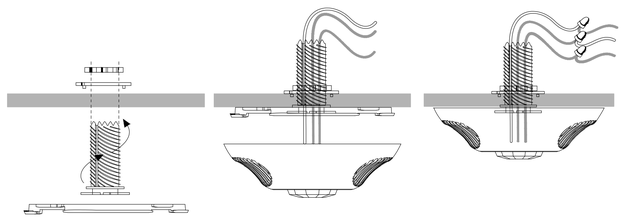
O. MANUFACTURER'S TECHNICIANS SHALL PROVIDE TRAINING FOR SYSTEM USERS AND THE SYSTEM MAINTENANCE TEAM. THE DETAILS OF THE TECHNOLOGY SHALL BE COVERED FROM A MAINTENANCE AND TROUBLESHOOTING POINT OF VIEW. THIS COVERS THE LIGHTING CONTROL SYSTEM AND ITS CORE FUNCTIONALITY, WITH A FOCUS ON HOW TO EDIT EXISTING SCENES AND ASTRONOMIC LIGHTING EVENTS.

P. THE MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE IN-DEPTH TRAINING TO THE END USER ON MANAGING THE SPECIFIC CONTROL SYSTEM, GIVING THEM THE TOOLS AND KNOWLEDGE TO OPERATE THEIR SYSTEM.

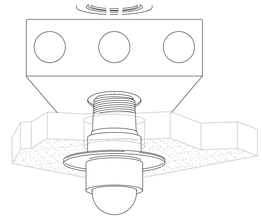
Lighting Space and Zones				Sequence of Opperations									Low Voltage Switch Matrix (Button Labels to be designated by owner during installation)			
		ZONE OF CONTROL		CONTROL SCENARIOS									CONNECT TO NON-NETWORKED LOCAL ROOM CONTROL			
Space Type	Room Number	Description	Designator	Manual On	Manual Off	Dimming	Multi-Level Control	Timeclock On	Timeclock Off	Occupancy Sensor On	Vacancy Sensor Off	Daylight Harvesting	Photo Sensor On	SL2 (2-Button)	SL4 (4-Button)	SL8 (8-Button)	Control Detail #
CORRIDOR	TYPICAL			X	X					X				X			1
ENTRY VESTIBULE	106			X	X					X	X			X			1
CLASSROOM	123-128	NORMAL	a	X	X	X					X					X	2
		AV	b	X	X	X					X						
OFFICE	TYPICAL			X	X	X					X				X		3
PRINCIPAL'S OFFICE	TYPICAL			X	X	X					X				X		3
RESTROOMS	TYPICAL			X						X	X						4
RECEPTION/LOBBY	108			X	X					X				X			5
BREAK OUT ROOM	132, 133			X	X					X	X			X			5
EQUIPMENT STORAGE	101			X	X					X	X			X			5
BREAK ROOM	112			X	X						X			X			5
WARMING KITCHEN	122			X	X					X	X			X			5
STAGE	102			X	X	X					X				X		6
GYM	100	ZONE A	a	X	X	X					X					X	7
		ZONE B	b	X	X	X					X						
CONFERENCE ROOM	110	NORMAL	a	X	X	X					X					X	8
		PERIMETER/DOWNLIGHTS	b	X	X	X					X						
EXISTING CANOPY - NORTH	N/A							X	X				X				9
BUILDING EXTERIOR	N/A							X	X				X				9
PARKING/SITE LIGHTING	N/A							X	X				X				9



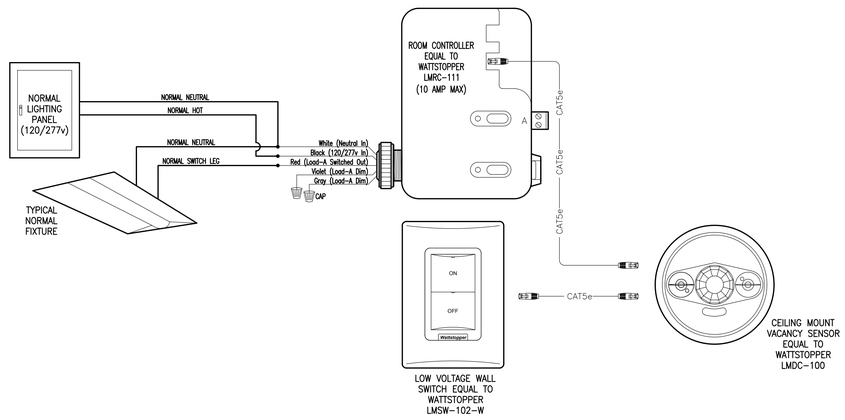
POLE PL - CONCRETE POLE BASE FOR FIXTURE "PLA"
NOT TO SCALE



OCCUPANCY SENSOR MOUNTING DETAIL
NOT TO SCALE



INDOOR PHOTOCELL MOUNTING DETAIL
NOT TO SCALE



LIGHTING CONTROL DETAIL #1
NOT TO SCALE

DAG
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100% CONSTRUCTION DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

LIGHTING FIXTURE SCHEDULE AND CONTROLS

PROJECT NUMBER	22019
DATED	01/31/2025

E302

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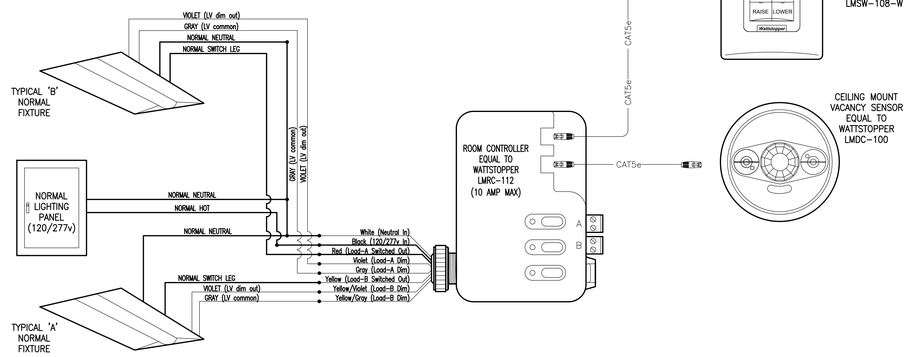
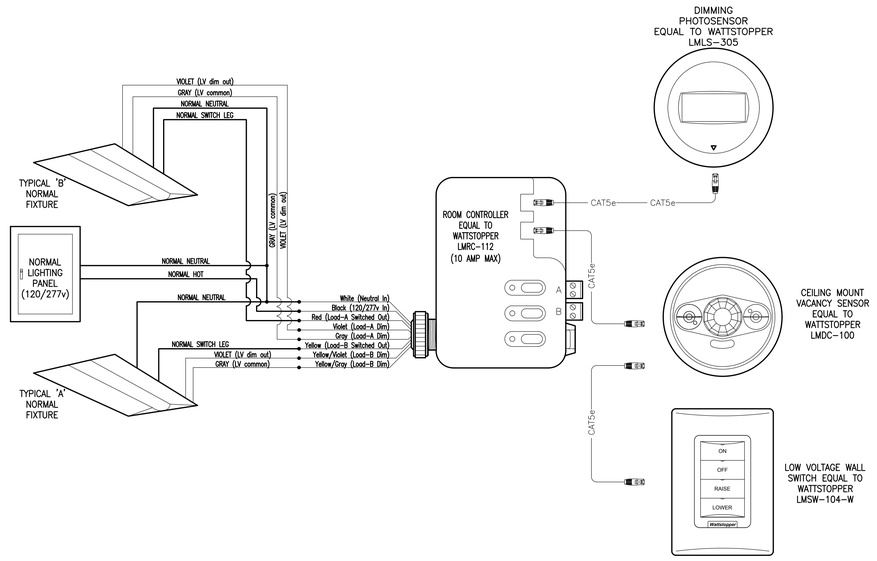
22022 Job No.

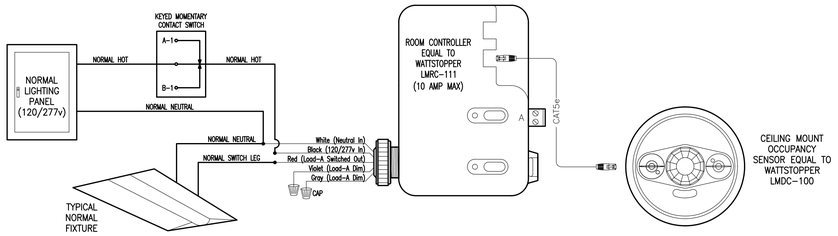
22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



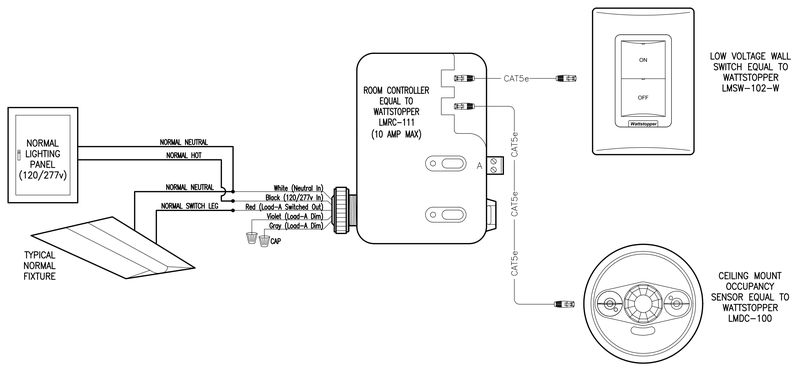
LIGHTING CONTROL DETAIL #2
NOT TO SCALE



LIGHTING CONTROL DETAIL #3
NOT TO SCALE



LIGHTING CONTROL DETAIL #4
NOT TO SCALE



LIGHTING CONTROL DETAIL #5
NOT TO SCALE

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

LIGHTING CONTROLS DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

E303

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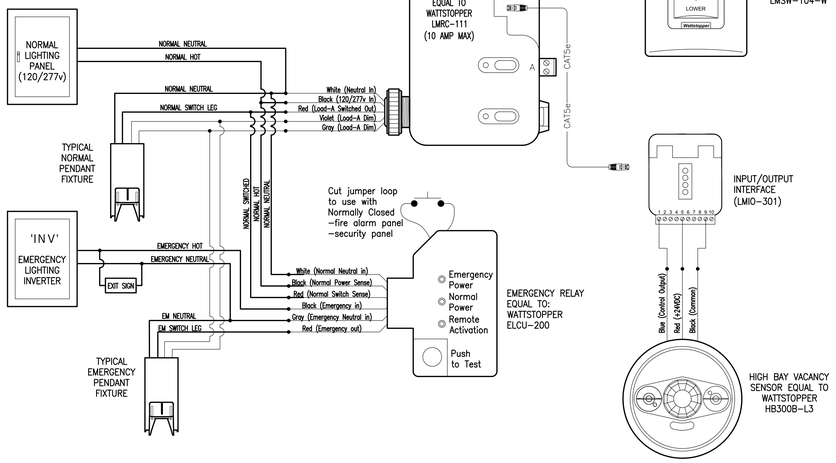
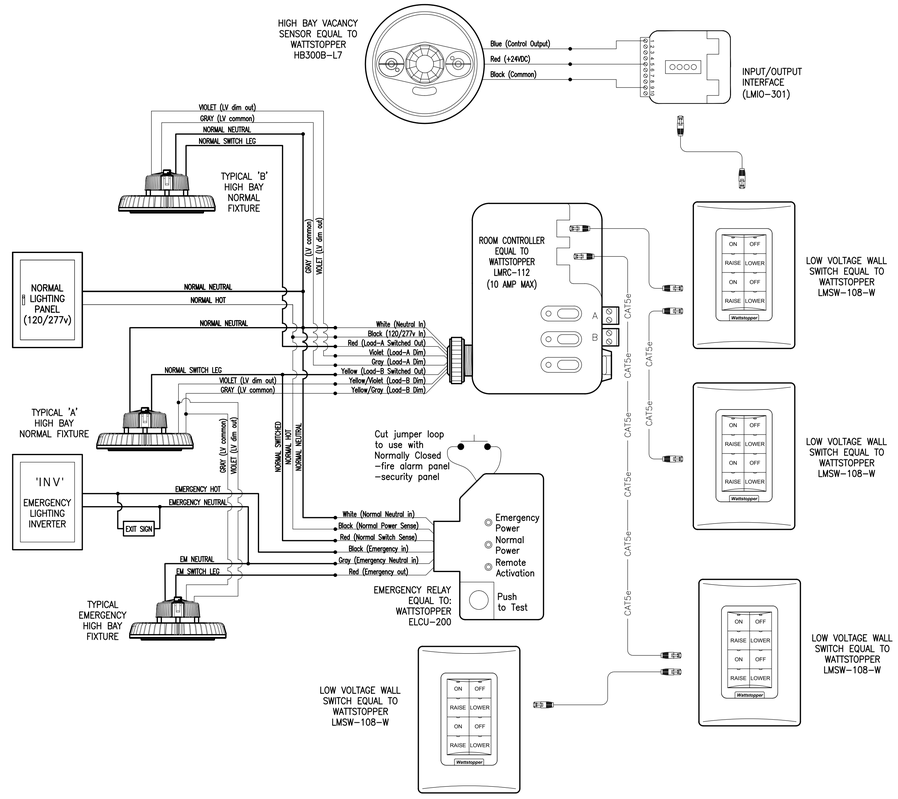
22022 Job No.



LIGHTING CONTROL DETAIL #6
NOT TO SCALE



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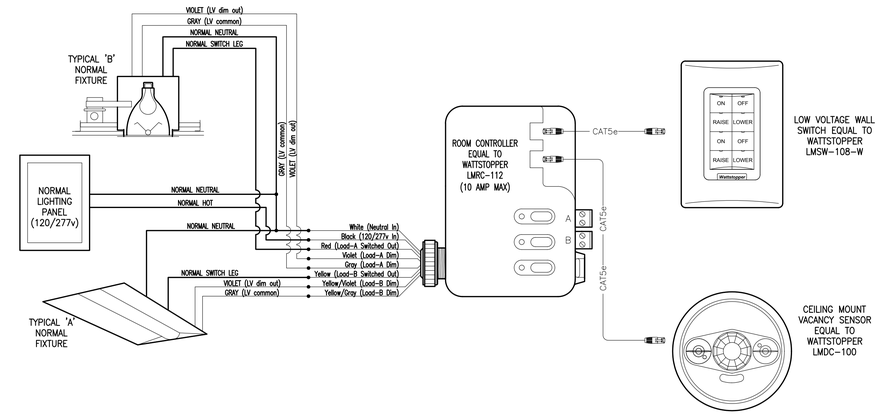
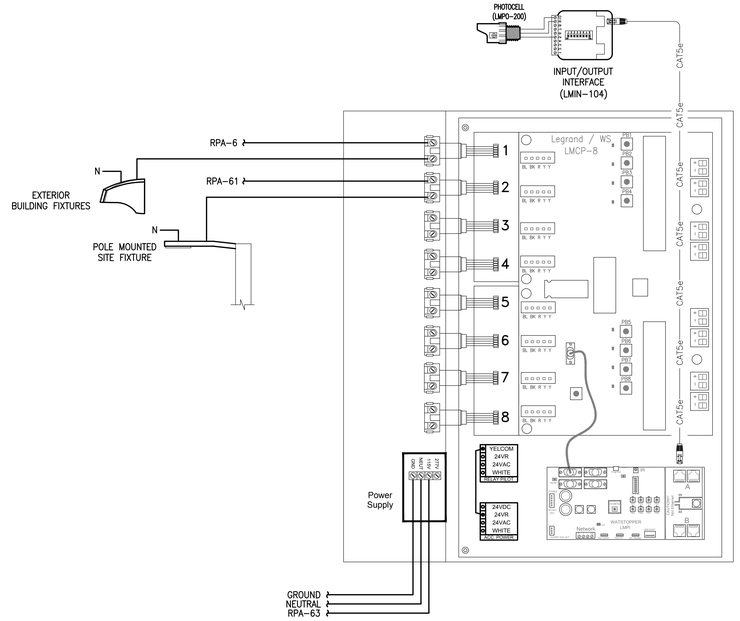


LIGHTING CONTROL DETAIL #8
NOT TO SCALE



LIGHTING CONTROL DETAIL #9
NOT TO SCALE

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A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

LIGHTING CONTROLS DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

E304

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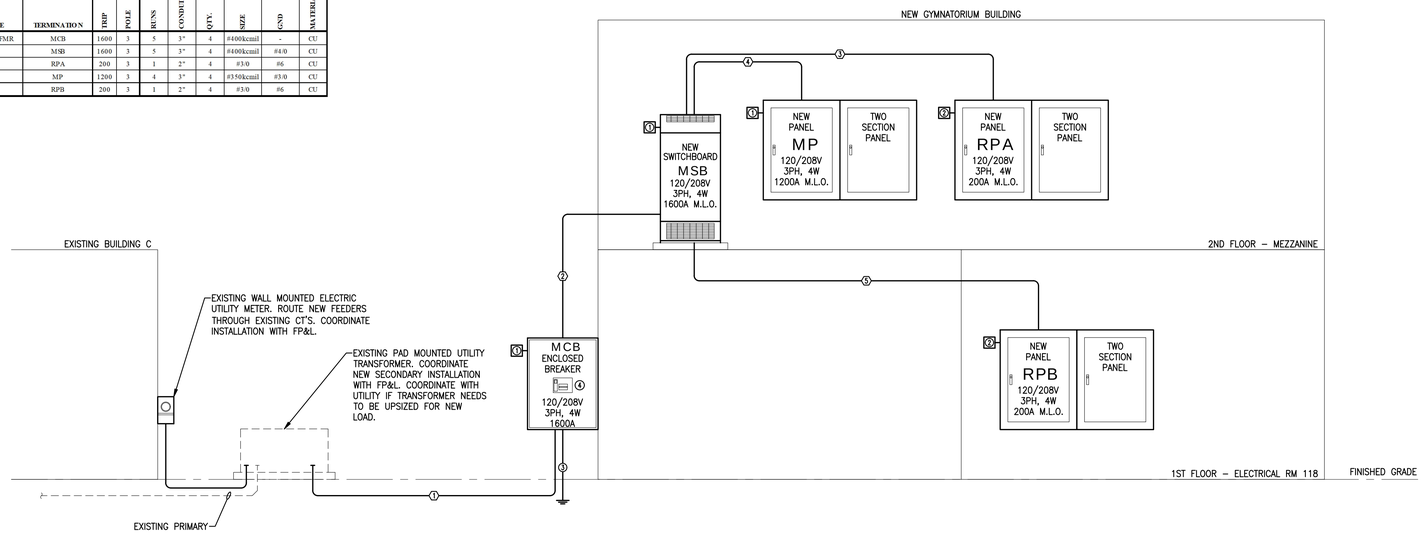
Caleb W. Leonard: FL. PE No.81782

22022
Job No.

FEEDER SCHEDULE											
DESIGNATION (#)	EQUIPMENT		BREAKER		CONDUCTOR / CONDUIT SIZE						
							CONDUCTORS				
	SOURCE	TERMINATION	TRIP	POLE	RUNS	CONDUIT	QTY.	SIZE	GND	MATERIAL
1	UTILITY XFMR	MCB	1600	3	5	3"	4	#400kcmil	-	CU
2	MCB	MSB	1600	3	5	3"	4	#400kcmil	#4/0	CU
3	MSB	RPA	200	3	1	2"	4	#3/0	#6	CU
4	MSB	MP	1200	3	4	3"	4	#350kcmil	#3/0	CU
5	MSB	RPB	200	3	1	2"	4	#3/0	#6	CU

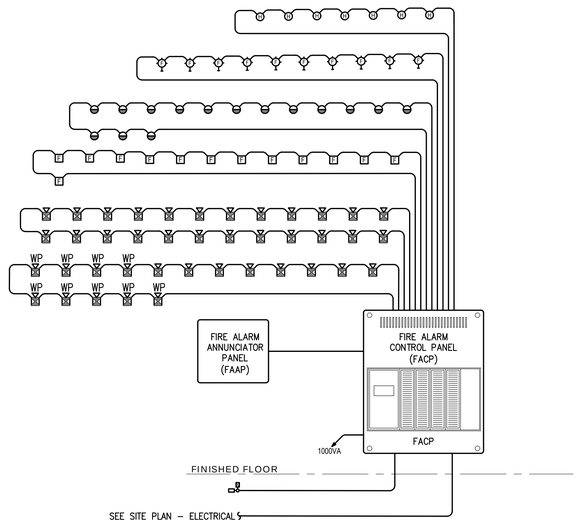


SINGLE LINE POWER RISER DIAGRAM
NOT TO SCALE

KEYNOTES

1. INSTALL SURGE SUPPRESSOR WITH 4#6, 1#10 GROUND IN 1" CONDUIT; LOCATE SURGE SUPPRESSOR SO LEAD LENGTH DOES NOT EXCEED 14 INCHES PER 1449–2014 4TH EDITION. PROVIDE FUSES PER MANUFACTURER RECOMMENDATIONS.
2. INSTALL SURGE SUPPRESSOR WITH 4#10, 1#10 GROUND IN 3/4" CONDUIT; LOCATE SURGE SUPPRESSOR SO LEAD LENGTH DOES NOT EXCEED 14 INCHES PER ANSI/UL 1449–2014 4TH EDITION. PROVIDE FUSES PER MANUFACTURER RECOMMENDATIONS.
3. REFER TO GROUNDING DETAILS.
4. SERVICE ENTRANCE RATED ENCLOSED BREAKER. LSI TYPE. SURFACE MOUNT NEMA 3R. 65K AIC MIN.

*** SPECIAL NOTE ***
PROVIDE 'LSI' TRIP UNITS FOR BREAKERS GREATER THAN OR EQUAL TO 200A.



FIRE ALARM SYSTEM RISER
NOT TO SCALE

LEGEND
FIRE ALARM WIRING

FIRE ALARM RISER GENERAL NOTES

A. THIS DIAGRAM IS NOT INTENDED TO SHOW EXACT QUANTITIES OF DEVICES. REFER TO PLAN FOR DEVICE QUANTITIES AND LOCATIONS.

B. THE RISER REPRESENTS A TYPICAL SYSTEM AND IS NOT INTENDED FOR INSTALLATION, SYSTEM SUPPLIER SHALL PROVIDE INSTALLATION DRAWINGS AND WIRING DIAGRAMS.

C. PROVIDE ADDITIONAL MONITOR AND CONTROL MODULES AS RECOMMENDED BY THE SYSTEM SUPPLIER.

D. FIRE ALARM SYSTEM SHALL HAVE U.L. APPROVED DIGITAL ALARM DIALER/COMMUNICATOR TO SEND ALARM SIGNAL TO MONITORING SERVICE.

E. FIRE ALARM SYSTEM LOW VOLTAGE SOURCE AND BATTERY STAND–BY SHALL ENERGIZE ALL ITEMS IN FIRE ALARM SYSTEM THAT REQUIRE POWER.

F. REFER TO MECHANICAL DRAWINGS FOR SMOKE AND/OR SMOKE/FIRE DAMPER LOCATIONS. CONNECT TO FIRE ALARM SYSTEM AND TO 120V POWER.

G. VERIFY LOCATION AND QUANTITIES OF FLOW AND TAMPER SWITCHES WITH SPRINKLER CONTRACTOR.

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100% CONSTRUCTION DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

SINGLE LINE POWER & FIRE ALARM RISER DIAGRAMS

PROJECT NUMBER	22019
DATED	01/31/2025

E401

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Daniel J. White: FL. PE No.73790
Caleb W. Leonard: FL. PE No.91782

22022 Job No.

SWITCHBOARD

MSB

SYSTEM 208/120V 3Φ 4W
RATING 1600A M.L.O. 65,000 AIC MINIMUM
ENCLOSURE NEMA 1 FREE STANDING; 4' CONCRETE PAD
OPTIONS BOLT ON BREAKERS

CKT #	SERVING	CKT BKR			CONNECTED LOAD (VA)
		UNIT	TRIP	POLE	
1	PANEL MP	LSI	1200	3	334868
2	PANEL RPA	LSI	200	3	51366
3	PANEL RPB	LSI	200	3	58445
4	OUTSIDE AIR HANDLER UNIT - OAU	LSI	200	3	47951
5	EMERGENCY LIGHTING INVERTER - INV	-	40	1	2774
6	SPACE ONLY (100A FRAME)	-	-	3	-
7	SPACE ONLY (200A FRAME)	-	-	3	-
8	SPACE ONLY (200A FRAME)	-	-	3	-
9	SPACE ONLY (60A FRAME)	-		3	-
10	SURGE PROTECTIVE DEVICE	-	60	3	-

TOTAL CONNECTED LOAD = 495404 VA / 360 = 1376.1 A

NOTES:

POWER PANEL

RPB

SYSTEM 208/120V 3Φ 4W
RATING 200A M.L.O. 10,000 AIC MINIMUM
ENCLOSURE NEMA 1 SURFACE MOUNT
OPTIONS BOLT ON BREAKERS; TWO EQUAL SECTIONS

CKT #	SERVING	CKT BKR		CONNECTED LOAD (VA)		CKT BKR		SERVING	CKT #
		TRIP	POLE			POLE	TRIP		
1	LTG - CLASSROOMS - 124, 126, 128	20	1	1188	1188	1	20	LTG - CLASSROOMS - 123, 125, 127	2
3	LTG - C003-C005, RR 130-131, BRK OUT 132-133	20	1	1365	912	1	20	LTG - C001, C002, 108, 110, 112, 114, 115, 118-121	4
5	LTG - OFFICES 107, 109, 111, 113, 116-117	20	1	952	610	1	20	REC - BRK OUT RM 133 N.	6
7	REC - BREAK OUT RM 133 S.	20	1	720	610	1	20	REC - BRK OUT RM 132 N.	8
9	REC - BREAK OUT RM 132 S.	20	1	720	540	1	20	REC - CORR C005, C006	10
11	SECURED ENTRY - CORR C006 N.	20	1	500	1080	1	20	REC - RR 130-131, STO 129, EXT NW.	12
13	REC - DRINKING FOUNTAIN - CORR C005	20	1	1000	500	1	20	SECURED ENTRY - CORR C005 W.	14
15	REC - CLASSROOM 128 - ABV CNTR	20	1	540	540	1	20	REC - CLASSROOM 127 - ABV CNTR	16
17	REC - CLASSROOM 128 - W.	20	1	720	800	1	20	REC - CLASSROOM 127 - W.	18
19	REC - CLASSROOM 128 - E.	20	1	800	540	1	20	REC - CLASSROOM 127 - E.	20
21	REC - CLASSROOM 128 - CHARGING CART	20	1	500	500	1	20	REC - CLASSROOM 127 - CHARGING CART	22
23	REC - CLASSROOM 126 - ABV CNTR	20	1	540	540	1	20	REC - CLASSROOM 125 - ABV CNTR	24
25	REC - CLASSROOM 126 - W.	20	1	540	800	1	20	REC - CLASSROOM 125 - W.	26
27	REC - CLASSROOM 126 - E.	20	1	800	540	1	20	REC - CLASSROOM 125 - E.	28
29	REC - CLASSROOM 126 - CHARGING CART	20	1	500	500	1	20	REC - CLASSROOM 125 - CHARGING CART	30
31	REC - CLASSROOM 124 - ABV CNTR	20	1	540	540	1	20	REC - CLASSROOM 123 - ABV CNTR	32
33	REC - CLASSROOM 124 - W.	20	1	720	800	1	20	REC - CLASSROOM 123 - W.	34
35	REC - CLASSROOM 124 - E.	20	1	800	540	1	20	REC - CLASSROOM 123 - E.	36
37	REC - CLASSROOM 124 - CHARGING CART	20	1	500	500	1	20	REC - CLASSROOM 123 - CHARGING CART	38
39	REC - CORR C003, C004	20	1	900	500	1	20	SECURED ENTRY - CORR C003 W.	40
41	REC - KITCHEN - ABV CNTER N.	20	1	180	1500	1	20	REC - KITCHEN - REF	42
43	REC - KITCHEN - ABV CNTER N.	20	1	180	1500	1	20	REC - KITCHEN - REF	44
45	REC - KITCHEN - ABV CNTER S.	20	1	180	860	1	20	REC - KITCHEN - PANTRY/SEC. ENTRY/EXT.	46
47	REC - KITCHEN - ABV CNTER S.	20	1	180	360	1	20	REC - KITCHEN - W./EXTERIOR	48
49	REC - KITCHEN - ABV CNTER S.	20	1	180	360	1	20	REC - KITCHEN - ISLAND	50
51	REC - MECH/ELEC/MNS/WMNS - 118-121	20	1	720	500	1	20	ACCESS CONTROL PANEL - COMM 114	52
53	REC - DEDICATED QUAD - COMM 114	20	1	720	360	1	20	REC - DEDICATED QUAD - COMM 114	54
55	REC - BRK RM - ABV CNTR	20	1	180	1500	1	20	REC - BRK RM - REF	56
57	REC - BRK RM - W.	20	1	540	180	1	20	REC - BRK RM - ABV CNTR	58
59	REC - OFFICE 116	20	1	1220	790	1	20	REC - PRINCIPAL OFF. 117	60
61	REC - OFFICE 113	20	1	1220	790	1	20	REC - PRINCIPAL OFF. 117	62
63	REC - OFFICE 111	20	1	1220	790	1	20	REC - PRINCIPAL OFF. 107	64
65	REC - OFFICE 109	20	1	1220	790	1	20	REC - PRINCIPAL OFF. 107	66
67	REC - TEACHER STATION - BRK OUT 132	20	1	430	430	1	20	REC - TEACHER STATION - BRK OUT 133	68
69	REC - TEACHER STATION - CLSSRM 128	20	1	430	430	1	20	REC - TEACHER STATION - CLSSRM 127	70
71	REC - TEACHER STATION - CLSSRM 126	20	1	430	430	1	20	REC - TEACHER STATION - CLSSRM 125	72
73	REC - TEACHER STATION - CLSSRM 124	20	1	430	430	1	20	REC - TEACHER STATION - CLSSRM 123	74
75	REC - DEDICATED QUAD - COMM 114	20	1	360	500	1	20	REC - DED. SIMPLEX REC - COMM 114	76
77	REC - DED. 30A REC - COMM 114	30	1	3000	500	1	20	REC - DED. SIMPLEX REC - COMM 114	78
79	REC - DED. 30A REC - COMM 114	30	1	3000	500	1	20	SECURED ENTRY - CORR C001	80
81	SECURED ENTRY - ENTRY 101B	20	1	500	500	1	20	SECURED ENTRY - TELECOM 114	82
83	SPARE	20	1	-	-	1	20	SPARE	84
85	SPARE	20	1	-	-	1	20	SPARE	86
87	SPARE	20	1	-	-	1	20	SPARE	88
89	SPARE	20	1	-	-	1	20	SPARE	90
91	SPARE	20	1	-	-	1	20	SPARE	92
93	SPARE	20	1	-	-	1	20	SPARE	94
95	SPARE	20	1	-	-	1	20	SPARE	96
97	SPARE	20	1	-	-	1	20	SPARE	98
99	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	100
101	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	102
103	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	104
105	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	106
107	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	108
109	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	110
111	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	112
113	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	114
115	SPACE ONLY	-	-	-	0	3	30	SURGE PROTECTIVE DEVICE	116
117	SPACE ONLY	-	-	-	-	-	-	----	118
119	SPACE ONLY	-	-	-	-	-	-	----	120

TOTAL CONNECTED LOAD = 58445 VA / 360 = 162.3 A

NOTES:
*

Emergency Lighting Inverter

INVERTER
INV

INPUT VOLTAGE 120V **OUPUT VOLTAGE** 120V
PART NUMBER CHLORIDE#: CHT-AA-3.5-S0-05A-00-Z-0-Z*
SUPPLY CIRCUIT MDP-13; 2#8, #10G, 3/4"C

CKT #	SERVING	CKT BKR		CONNECTED LOAD (VA)
		TRIP	POLE	
1	LTG - GYM RM 100 - NORTH	20	1	1050
2	LTG - GYM RM 100 - CENTER	20	1	750
3	LTG - GYM RM 100 - SOUTH	20	1	750
4	LTG - STAGE RM 102 - HOUSE LTS	20	1	224
5	SPARE	20	1	-

TOTAL CONNECTED LOAD = 2774 VA / 120 VOLT = 23.1 A

NOTES:
* PROVIDE COMPLETE FACTORY STARTUP.

POWER PANEL

RPA

SYSTEM 208/120V 3Φ 4W
RATING 200A M.L.O. 65,000 AIC MINIMUM
ENCLOSURE NEMA 1 SURFACE MOUNT
OPTIONS BOLT ON BREAKERS; TWO EQUAL SECTIONS

CKT #	SERVING	CKT BKR		CONNECTED LOAD (VA)		CKT BKR		SERVING	CKT #
		TRIP	POLE			POLE	TRIP		
1	LTG - EQ/CHAIR STO, STAGE - 101-103	20	1	816	1500	1	20	LTG - GYM 100 - CNTR	2
3	LTG - GYM 100 - N.	20	1	1500	1500	1	20	LTG - GYM 100 - S.	4
5	LTG - ENTRY, MENS, WOMENS - 104-106	20	1	572	812	1	20	LTG - EXTERIOR BLDG/CANOPY LIGHTING	6
7	LTG - MEZZ 201	20	1	138	138	1	20	LTG - MEZZ 203	8
9	REC - MEZZ 201	20	1	540	540	1	20	REC - MEZZ 203	10
11	DDC PANEL - MEZZANINE 201	20	1	500	1080	1	20	REC - EQ. STORAGE 101, GYM 100 N.	12
13	REC - FLR REC STAGE, TV'S STAGE - 102	20	1	1040	900	1	20	REC - STAGE 102	14
15	A/V EQUIPMENT - TABLE/CHAIR STO 103	20	1	1000	540	1	20	REC - ENTRY VESTIBULE/ EXTERIOR	16
17	SECURED ENTRY - GYM 100 NE.	20	1	500	500	1	20	GYM 100 - SCORER'S TABLE W.	18
19	BASKETBALL GOAL - GYM 100 N.	20	1	1000	500	1	20	GYM 100 - SCORER'S TABLE E.	20
21	BASKETBALL GOAL - GYM 100 S.	20	1	1000	1500	1	20	GYM 100 - BLEACHERS W.	22
23	SECURED ENTRY - GYM 100 SE.	20	1	500	1500	1	20	GYM 100 - BLEACHERS E.	24
25	GYM 100 S. - WALL SCOREBOARD	20	1	1200	360	1	20	REC - GYM 100 S.	26
27	SECURED ENTRY - GYM 100 S.	20	1	500	720	1	20	REC - MENS 105/WOMENS 104	28
29	HAND DRYER - WOMENS	20	1	1000	1000	1	20	HAND DRYER - MENS	30
31	HAND DRYER - WOMENS	20	1	1000	1000	1	20	HAND DRYER - MENS	32
33	FIRE ALARM CONTROL PANEL (FACP) - 106*	20	1	500	500	1	20	SECURED ENTRY - TALK THRU RECEPTION	34
35	SECURED ENTRY - ENTRY VEST - 106	20	1	500	1040	1	20	REC - RECEPTION/LOBBY - 108	36
37	REC - RECEPTION/LOBBY - 108	20	1	1040	180	1	20	REC - FLOOR BOX - CONF 110	38
39	REC - CONF 110 - NE.	20	1	790	790	1	20	REC - CONF 110 - SW.	40
41	REC - CORR C001, SUPPLIES 115	20	1	900	500	1	20	REC - AV COMPONENT PWR - EQ STO 101	42
43	REC - AV COMPONENT PWR - EQ STO 101	20	1	500	500	1	20	AV COMPONENT - STAGE 102	44
45	AV COMPONENT - STAGE 102	20	1	500	500	1	20	PROJECTOR AND PROJECTION SCREEN	46
47	CLG REC - STAGE LTG - 102	20	1	720	720	1	20	CLG REC - STAGE LTG - 102	48
49	CLG REC - STAGE LTG - 102	20	1	720	720	1	20	CLG REC - STAGE LTG - 102	50
51	CLG REC - STAGE LTG - 102	20	1	720	720	1	20	CLG REC - STAGE LTG - 102	52
53	STAGE LEFT - LOUDSPEAKER	20	1	500	500	1	20	STAGE RIGHT - LOUDSPEAKER	54
55	AV COMPONENT - FRONT STAGE 102	20	1	500	500	1	20	AV COMPONENT - FRONT STAGE 102	56
57	GYM 100 - LOUDSPEAKERS - N. ROW	20	1	360	720	1	20	GYM 100 - LOUDSPEAKERS - CNTR. ROW	58
59	GYM 100 - LOUDSPEAKERS - S. ROW	20	1	360	500	1	20	DDC PANEL - MEZZANINE 203	60
61	LTG - PARKING LOT - SOUTH	20	1	270	500	1	20	GYM 100 - HOIST SWITCHES	62
63	LIGHTING CONTROL PANEL (LCP)	20	1	500	1000	1	20	GYM 100 - SHOT CLOCKS	64
65	GYM 100 N. - WALL SCOREBOARD	20	1	1200	1000	1	20	BASKETBALL GOAL - GYM 100 NE.	66
67	BASKETBALL GOAL - GYM 100 NW.	20	1	1000	1000	1	20	BASKETBALL GOAL - GYM 100 SE.	68
69	BASKETBALL GOAL - GYM 100 SW.	20	1	1000	-	1	20	SPARE	70
71	SPARE	20	1	-	-	1	20	SPARE	72
73	SPARE	20	1	-	-	1	20	SPARE	74
75	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	76
77	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	78
79	SPACE ONLY	-	-	-	0	3	30	SURGE PROTECTIVE DEVICE	80
81	SPACE ONLY	-	-	-	-	-	-	----	82
83	SPACE ONLY	-	-	-	-	-	-	----	84

TOTAL CONNECTED LOAD = 51366 VA / 360 = 142.7 A

NOTES:
* PROVIDE BREAKER LABELED "FIRE ALARM CIRCUIT" WITH RED HANDLE LOCKABLE IN THE ON POSITION.

*** SPECIAL NOTE ***
PROVIDE 'LSI' TRIP UNITS FOR BREAKERS GREATER THAN OR EQUAL TO 200A.

POWER PANEL

MP

SYSTEM 208/120V 3Φ 4W
RATING 1200A M.L.O. 65,000 AIC MINIMUM
ENCLOSURE NEMA 1 SURFACE MOUNT
OPTIONS BOLT ON BREAKERS; TWO EQUAL SECTIONS

CKT #	SERVING	CKT BKR		CONNECTED LOAD (VA)		CKT BKR		SERVING	CKT #
		TRIP	POLE			POLE	TRIP		
1	AHU-1	30	3	9477	8000	3	20	HP-1	2
3	---	--	--	--	--	--	--	---	4
5	---	--	--	--	--	--	--	---	6
7	AHU-2	30	2	5853	5000	2	25	HP-2	8
9	---	--	--	--	--	--	--	---	10
11	AHU-3	30	3	9477	8000	3	20	HP-3	12
13	---	--	--	--	--	--	--	---	14
15	---	--	--	--	--	--	--	---	16
17	AHU-4	30	2	5835	5000	2	25	HP-4	18
19	---	--	--	--	--	--	--	---	20
21	AHU-5	30	3	9477	8000	3	20	HP-5	22
23	---	--	--	--	--	--	--	---	24
25	---	--	--	--	--	--	--	---	26
27	AHU-6	30	2	5835	5000	2	25	HP-6	28
29	---	--	--	--	--	--	--	---	30
31	AHU-7	40	3	12738	10000	3	30	HP-7	32
33	---	--	--	--	--	--	--	---	34
35	---	--	--	--	--	--	--	---	36
37	AHU-8	40	3	12738	10000	3	30	HP-8	38
39	---	--	--	--	--	--	--	---	40
41	---	--	--	--	--	--	--	---	42
43	AHU-9A	90	3	28718	20000	3	60	HP-9	44
45	---	--	--	--	--	--	--	---	46
47	---	--	--	--	--	--	--	---	48
49	AHU-10	30	3	10738	8500	3	30	HP-10	50
51	---	--	--	--	--	--	--	---	52
53	---	--	--	--	--	--	--	---	54
55	AHU-11A	90	3	28718	20000	3	60	HP-11	56
57	---	--	--	--	--	--	--	---	58
59	---	--	--	--	--	--	--	---	60
61	AHU-12	30	3	10738	8000	3	30	HP-12	62
63	---	--	--	--	--	--	--	---	64
65	---	--	--	--	--	--	--	---	66
67	EF-1 - EXHAUST FAN - STO. 129	15	1	396	3000	3	15	EWH-2 - WATER HEATER - MEZZ	68
69	EWH-1 - WATER HEATER - MECH 120	15	3	5000	--	--	--	---	70
71	---	--	--	--	--	--	--	---	72
73	---	--	--	--	65	1	15	CP-2 - CIRCULATION PUMP - MEZZ	74
75	CP-1 - CIRCULATION PUMP - MECH 120	15	1	65	288	1	15	EF-2-3 - MENS 121, WOMENS 119	76
77	MINISPLIT - MHP-1/WM-1.1	25	2	1600	1176	1	25	EF-4 - WOMENS 105, MENS 104	78
79	---	--	--	--	28718	3	90	AHU-11B	80
81	AHU-9B	90	3	28718	--	--	--	---	82
83	---	--	--	--	--	--	--	---	84
85	---	--	--	--	-	1	20	SPARE	86
87	SPARE	20	1	-	-	1	20	SPARE	88
89	SPARE	20	1	-	-	1	20	SPARE	90
91	SPARE	20	1	-	-	1	20	SPARE	92
93	SPARE	20	1	-	-	1	20	SPARE	94
95	SPARE	20	1	-	-	1	20	SPARE	96
97	SPARE	20	1	-	-	1	20	SPARE	98
99	SPARE	20	1	-	-	1	20	SPARE	100
101	SPARE	20	1	-	-	1	20	SPARE	102
103	SPARE	20	1	-	-	1	20	SPARE	104
105	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	106
107	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	108
109	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	110
111	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	112
113	SPACE ONLY	-	-	-	-	-	-	SPACE ONLY	114
115	SPACE ONLY	-	-	-	0	3	60	SURGE PROTECTIVE DEVICE	116
117	SPACE ONLY	-	-	-	-	-	-	----	118
119	SPACE ONLY	-	-	-	-	-	-	----	120

TOTAL CONNECTED LOAD = 334868 VA / 360 = 930.2 A

NOTES:
*

MECHANICAL EQUIPMENT SCHEDULE

(VERIFY ALL EQUIPMENT CIRCUIT REQUIREMENTS WITH MANUFACTURERS SHOP DRAWINGS PRIOR TO ROUGH-IN)

EQUIPMENT DESIGNATION	DESCRIPTION	CFM	VOLT	Φ	ELECTRICAL LOAD						PROTECTION				CONDUCTOR / CONDUIT SIZE					DISC.	REMARKS
					MOTOR(S) FLA								SPECIFIED			CONDUCTORS					
					QTY	LARGEST	SUM OF REMAINING	ELECTRIC HEAT KW	OTHER VA	TOTAL CONNECTED VA	MCA	MOCP	TRIP	POLE	SETS	QTY.	SIZE	GND	CONDUIT		
AHU-1	AIR HANDLER UNIT	894	208	3	1	4.1		8		9477	26	30	30	3	1	4	#10	#10	3/4"	30/3/1	
AHU-2	AIR HANDLER UNIT	946	208	1	1	4.1		5		5853	28	30	30	2	1	3	#10	#10	3/4"	30/2/1	
AHU-3	AIR HANDLER UNIT	1111	208	3	1	4.1		8		9477	26	30	30	3	1	4	#10	#10	3/4"	30/3/1	
AHU-4	AIR HANDLER UNIT	728	208	1	1	4.1		5		5853	28	30	30	2	1	3	#10	#10	3/4"	30/2/1	
AHU-5	AIR HANDLER UNIT	894	208	3	1	4.1		8		9477	26	30	30	3	1	4	#10	#10	3/4"	30/3/1	
AHU-6	AIR HANDLER UNIT	946	208	1	1	4.1		5		5853	28	30	30	2	1	3	#10	#10	3/4"	30/2/1	
AHU-7	AIR HANDLER UNIT	2089	208	3	1	7.6		10		12738	36	40	40	3	1	4	#8	#10	3/4"	60/3/1	
AHU-8	AIR HANDLER UNIT	2070	208	3	1	7.6		10		12738	36	40	40	3	1	4	#8	#10	3/4"	60/3/1	
AHU-9	AIR HANDLER UNIT	7310	208	3	1	24.2		20		28718	82	90	90	3	1	4	#3	#8	1-1/4"	100/3/1	
AHU-10	AIR HANDLER UNIT	1294	208	3	1	7.6		8		10738	30	30	30	3	1	4	#10	#10	3/4"	30/3/1	
AHU-11	AIR HANDLER UNIT	7535	208	3	1	24.2		20		28718	82	90	90	3	1	4	#3	#8	1-1/4"	BREAKER	
AHU-12	AIR HANDLER UNIT	1599	208	3	1	7.6		8		10738	30	30	30	3	1	4	#10	#10	3/4"	BREAKER	
CP-1	CIRCULATION PUMP		120	1	1	0.54				65	0.7	15	15	1	1	2	#12	#12	3/4"	MOTOR SWITCH	
CP-2	CIRCULATION PUMP		120	1	1	0.54				65	0.7	15	15	1	1	2	#12	#12	3/4"	MOTOR SWITCH	
EF-1	EXHAUST FAN	300	120	1	1	3.3				396	4.1	15	15	1	1	2	#12	#12	3/4"	MOTOR SWITCH	INTERLOCK WITH AHU-10 OUTSIDE AIR DAMPER
EF-2	EXHAUST FAN	70	120	1	1	0.19				23	0.2	15	15	1	1	2	#12	#12	3/4"	MOTOR SWITCH	INTERLOCK WITH LIGHTS
EF-3	EXHAUST FAN	70	120	1	1	0.19				23	0.2	15	15	1	1	2	#12	#12	3/4"	MOTOR SWITCH	INTERLOCK WITH LIGHTS
EF-4	EXHAUST FAN	700	120	1	1	3				360	3.8	15	15	1	1	2	#12	#12	3/4"	MOTOR SWITCH	INTERLOCK WITH AHU-8 OUTSIDE AIR DAMPER
EWC-1	ELECTRIC WATER COOLER		120	1	1	5				600	6.3	15	15	1	1	2	#12	#12	3/4"	RECEPTACLE	
EWH-1	ELECTRIC WATER HEATER		208	3				5		5000	13.9	15	15	3	1	4	#12	#12	3/4"	30/3/1	
EWH-2	ELECTRIC WATER HEATER		208	3				3		3000	8.3	15	15	3	1	4	#12	#12	3/4"	30/3/1	
HP-1	HEAT PUMP		208	3	2			8		8000	12	20	20	3	1	4	#12	#12	3/4"	30/3/3R	
HP-2	HEAT PUMP		208	1	2			5		5000	17	25	25	2	1	3	#10	#10	3/4"	30/2/3R	
HP-3	HEAT PUMP		208	3	2			8		8000	12	20	20	3	1	4	#12	#12	3/4"	30/3/3R	
HP-4	HEAT PUMP		208	1	2			5		5000	17	25	25	2	1	3	#10	#10	3/4"	30/2/3R	
HP-5	HEAT PUMP		208	3	2			8		8000	12	20	20	3	1	4	#12	#12	3/4"	30/3/3R	
HP-6	HEAT PUMP		208	1	2			5		5000	17	25	25	2	1	3	#10	#10	3/4"	30/2/3R	
HP-7	HEAT PUMP		208	3	2			10		10000	18	30	30	3	1	4	#10	#10	3/4"	30/3/3R	
HP-8	HEAT PUMP		208	3	2			10		10000	18	30	30	3	1	4	#10	#10	3/4"	30/3/3R	
HP-9A	HEAT PUMP		208	3	3			20		20000	39	60	60	3	1	4	#6	#10	1"	60/3/3R	
HP-9B	HEAT PUMP		208	3	3			20		20000	39	60	60	3	1	4	#6	#10	1"	60/3/3R	
HP-10	HEAT PUMP		208	3	2			8.5		8500	18	30	30	3	1	4	#10	#10	3/4"	30/3/3R	
HP-11A	HEAT PUMP		208	3	3			20		20000	39	60	60	3	1	4	#6	#10	1"	60/3/3R	
HP-11B	HEAT PUMP		208	3	3			20		20000	39	60	60	3	1	4	#6	#10	1"	60/3/3R	
HP-12	HEAT PUMP		208	3	2			8		8000	18	30	30	3	1	4	#10	#10	3/4"	30/3/3R	
OAU-1	OUTDOOR AIR HANDLER	3500	208	3	6	55.8	77.3			47951	179.2	200	200	3	1	4	#3/0	#6	2"	200/3/3R	
MHP-1	MINI-SPLIT OUTDOOR UNIT	1590	208	1	2	7	0.5			1560	11	28	25	2	1	3	#10	#10	3/4"	30/2/3R	
WM-1.1	MINI-SPLIT INDOOR UNIT	455	208	1	1	0.19				40	1	15	15	2	1	3	#12	#12	3/4"	MOTOR SWITCH	INDOOR UNIT IS POWERED BY OUTDOOR UNIT
	WHEEL CHAIR LIFT		120	1	1	9.8				1176			15	1	1	2	#12	#12	3/4"	MOTOR SWITCH	

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100% CONSTRUCTION DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

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22022
Job No.

MECHANICAL EQUIPMENT & PANEL SCHEDULES

PROJECT NUMBER	**22019**
DATED	01/31/2025

E501

GENERAL NOTES

1 BOND HOT AND COLD WATER PIPING SYSTEMS.

2 CONDUCTOR SIZES SHOWN ARE MINIMUM AND MAY BE LARGER THAN THE MINIMUM SIZES REQUIRED BY NEC.

3 INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.

4 INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250-66 USING THE SERVICE PHASE CONDUCTOR SIZE.

5 INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250-122 USING THE FEEDER CIRCUIT OVERCURRENT DEVICE SIZE OR THE SEPARATELY DERIVED SYSTEM OVERCURRENT DEVICE SIZE.

KEYNOTES

① INSTALL GROUNDED (NEUTRAL) CONDUCTOR SAME SIZE AS THE LARGEST PHASE CONDUCTOR IF THE LINE-TO-NEUTRAL LOAD EXCEEDS 5% OF THE CONNECTED LOAD. IF NEUTRAL LOAD IS SMALLER, INSTALL THE NEC MINIMUM GROUNDED CONDUCTOR.

② INSTALL GROUNDING ELECTRODE CONDUCTOR, SIZED BASED ON NEC TABLE 250-66 USING THE SERVICE PHASE CONDUCTOR SIZE, BUT NOT SMALLER THAN NO 4.

③ INSTALL EQUIPMENT GROUNDING CONDUCTOR SIZED BASED ON NEC TABLE 250-122 USING THE FEEDER OVERCURRENT DEVICE SIZE.

④ 20 FOOT MINIMUM X 3/4" DIAMETER COPPER CLAD STEEL SECTIONAL DRIVEN GROUND ROD.

⑤ INSTALL BONDING JUMPER WIRE THAT IS SIZED BASED ON NEC TABLE 250-66 OR 250.28(D)(1) USING THE SERVICE OR SEPARATELY-DERIVED SYSTEM PHASE PHASE CONDUCTOR SIZE.

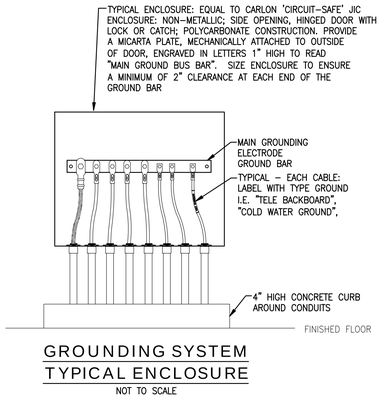
⑥ INSTALL A CONCRETE-ENCASED MAIN GROUNDING ELECTRODE IN THE BUILDING FOUNDATION PER NEC ARTICLE 250.52 (A) (3).

⑦ BOND EACH PERIMETER STRUCTURAL STEEL COLUMN TO THE CONCRETE-ENCASED MAIN GROUNDING ELECTRODE. USE COMPRESSION CONNECTORS THAT MEET IEEE 837 REQUIREMENTS OR USE EXOTHERMIC WELDS.

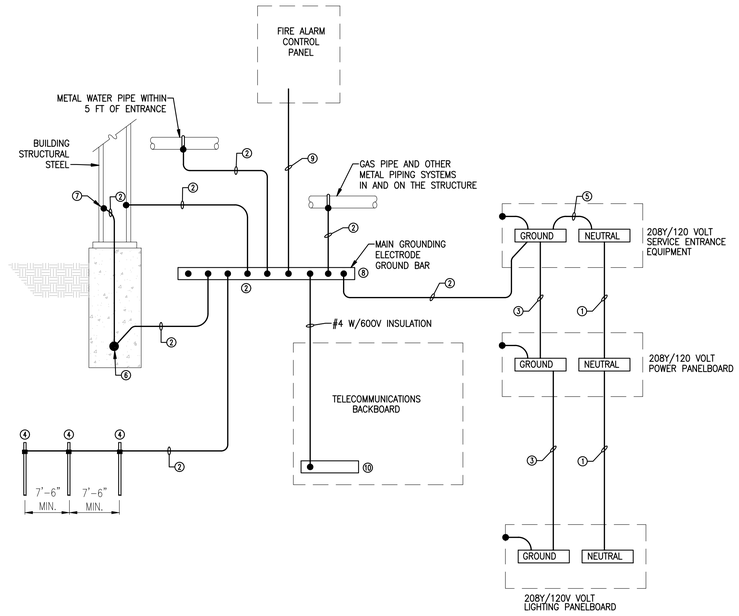
⑧ INSTALL A "MAIN GROUND ELECTRODE GROUND BAR" FOR SINGLE POINT GROUNDING. LOCATE AT AN ACCESSIBLE POINT NEAR THE SERVICE ENTRANCE EQUIPMENT. MAKE CONNECTIONS TO THE GROUND ELECTRODE CONDUCTOR USING IRREVERSIBLE CONNECTORS OR EXOTHERMIC WELDS. MAKE OTHER CONNECTIONS TO THE GROUND BAR USING TWO-HOLE COMPRESSION SPADE LUGS THAT MEET IEEE 837 REQUIREMENTS. LABEL EACH CONNECTION TO THE GROUND BAR

⑨ FIRE ALARM CONTROL PANEL GROUND – #6 COPPER CONDUCTOR.

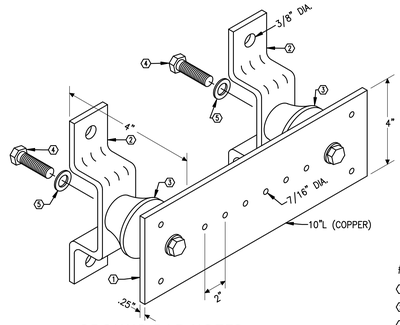
⑩ INSTALL A COPPER GROUNDING BAR IN EACH TELECOMMUNICATIONS ROOM. CONNECT TO THE "MAIN GROUNDING ELECTRODE GROUND BAR" USING 600V INSULATED #4 COPPER CABLE AND COMPRESSION SPADE LUGS.



GROUNDING SYSTEM
TYPICAL ENCLOSURE
NOT TO SCALE



208Y/120V GROUNDING SYSTEM DIAGRAM
NOT TO SCALE



GROUND BAR NOTES:

1 INSTALL ONE BAR AT EACH COMMUNICATIONS ROOM.

2 ROUTE 1#4 BARE CU IN 1"CONDUIT FROM GROUND BAR TO BUILDING ELECTRICAL SERVICE ENTRANCE GROUND.

3 CONNECT BARS WITH 1#6 BARE CU IN 1" CONDUIT.

INSULATED GROUNDING BAR DETAIL
NOT TO SCALE

#	DESCRIPTION
①	GROUND BAR
②	WALL MTG. BRACKET
③	INSULATORS
④	5/8" X 1" H.H.C.S. BOLT
⑤	5/8" LOCKWASHER

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100% CONSTRUCTION DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

GROUNDING DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

E601

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22022 Job No.

RIGID CONDUIT NOTE

PROVIDE RIGID THREADED CONDUIT (RMC) WITH THREADED MALLEABLE IRON FITTINGS AS INDICATED FOR BACKBONE CONDUIT. MAINTAIN ELECTRICAL CONTINUITY FROM END-TO-END AND GROUND PER "CC GROUNDING NOTES" AND "GENERAL ABOVEGROUND CONDUIT NOTES".

GENERAL CONDUIT PATHWAYS NOTE

RUN ALL CABLING IN CONDUIT PATHWAYS AS INDICATED. THE CONTRACTOR AGREES TO USE THE CONDUIT SYSTEM AS SHOWN, OR SHALL PROVIDE ADDITIONAL CONDUIT AT NO ADDITIONAL COST TO THE OWNER AS REQUIRED TO PROPERLY INSTALL ALL CABLING INDICATED, WITHOUT DAMAGE TO CABLING. ALL CONDUIT SHALL CONFORM TO REQUIREMENTS OF THE CONTRACT DOCUMENTS, WHETHER SPECIFICALLY SHOWN ON THE DRAWINGS OR NOT.

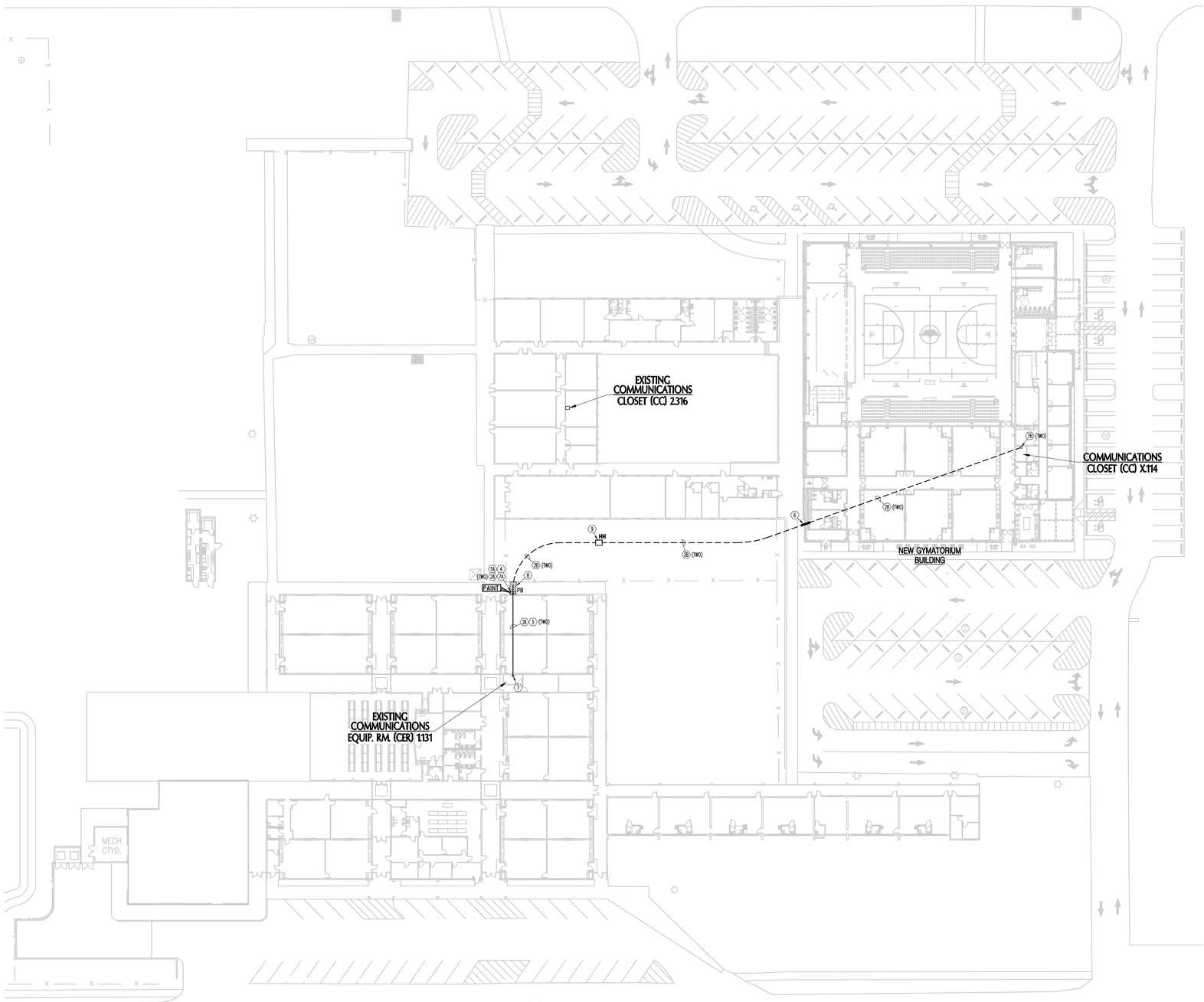
DOCUMENTATION OF EXISTING CONDITIONS

THE PROJECT MAY REQUIRE THAT THE CONTRACTOR WORK ABOVE CEILINGS IN EXISTING OCCUPIED BUILDINGS. IN ALL SUCH CASES, THE CONTRACTOR SHALL PROVIDE PHOTOGRAPHIC DOCUMENTATION OF THE CONDITIONS OF ALL EXISTING CEILINGS (TO REMAIN) WHERE WORK IS TO BE PERFORMED USING A HIGH RESOLUTION DIGITAL CAMERA PRIOR TO COMMENCING ANY WORK. THE CONTRACTOR SHALL PROVIDE DIGITAL FILES OF ALL PHOTOGRAPHS (WITH AREAS LABELED) TO THE OWNER'S PROJECT MANAGER. THE CONTRACTOR SHALL REPLACE ALL CEILING TILES OR REPAIR OTHER CEILING TYPE FINISHES (MATCH EXISTING) DAMAGED AS A RESULT OF WORK UNDER THIS CONTRACT.

FIRESTOPPING NOTE:

THE CONTRACTOR SHALL FIRESTOP ALL PENETRATIONS OF ALL FLOORS AND ALL WALLS WHICH EXTEND TO THE UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE. FIRESTOPPING SHALL BE ACCOMPLISHED USING UL CLASSIFIED SYSTEMS WITH FIRE RATING EQUAL TO OR GREATER THAN THE FIRE RATING OF THE FLOOR OR WALL ASSEMBLY PENETRATED. FIRESTOP SYSTEMS SHALL BE 3M, NELSON OR ENGINEER APPROVED EQUAL. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. THE CONTRACTOR SHALL SUBMIT A MANUFACTURER'S STANDARD DETAIL FOR EACH TYPE OF FLOOR AND WALL PENETRATION REQUIRED FOR THIS PROJECT. ALL OTHER PENETRATIONS OR OPENINGS IN NON-FIRE RATED WALLS SHALL BE REPAIRED AND SEALED WITH MATERIALS TO MATCH THE CONSTRUCTION OF THE WALL.

THE CONTRACTOR SHALL PROVIDE DETAILS FOR EACH DIFFERENT TYPE OF FIRESTOP ASSEMBLY REQUIRED TO THE BUILDING OFFICIAL FOR APPROVAL PRIOR TO INSTALLATION. EACH DETAIL SHALL INCLUDE THE TEST ASSEMBLY NUMBER AND A DESCRIPTION OF THE MATERIALS TO BE USED. HAVE APPROVED FIRESTOPPING DETAILS AVAILABLE AT PROJECT SITE AT TIME OF INSPECTION.



NORTH

COMMUNICATIONS SITE PLAN

SCALE: 1" = 30'-0"

NOTE: SITE PLAN SCALE IS APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY ALL DISTANCES IN THE FIELD PRIOR TO BIDS.

CONDUIT WORK NOTE

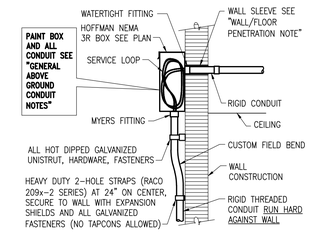
ALL CONDUIT WORK INDICATED SHALL BE PROVIDED AS PART OF THIS CONTRACT AND SHALL BE PERFORMED BY A LICENSED CERTIFIED ELECTRICAL CONTRACTOR IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRIC CODE. PERMANENTLY LABEL ALL CONDUITS.

NIGHT WORK NOTE:

ALL WORK WITHIN EXISTING OCCUPIED BUILDINGS SHALL BE ACCOMPLISHED ON WEEKDAYS OR AT NIGHT WHEN SCHOOL IS NOT IN REGULAR SESSION. EXACT TIMES SHALL BE AS DIRECTED BY THE SCHOOL PRINCIPAL. WORK DURING THE DAY AND ON WEEKENDS SHALL NOT BE ALLOWED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE SCHOOL PRINCIPAL. ALL EXISTING SYSTEMS SHALL BE MAINTAINED IN FULL WORKING ORDER AT ALL TIMES.

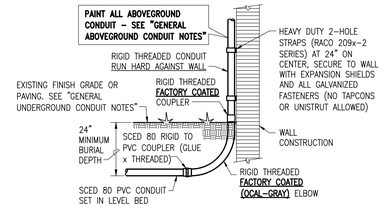
PROJECT NOTE (ALL SHEETS):

ALL MATERIALS AND EQUIPMENT INDICATED AND REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION SHALL BE NEW AND SHALL BE PROVIDED BY THE CONTRACTOR UNDER THIS PROJECT UNLESS SPECIFICALLY INDICATED TO BE EXISTING OR TO BE PROVIDED BY OTHERS.



BUILDING ENTRANCE - NEMA 3R BOX AT CONDUIT PENETRATION OF WALL OR FASCIA

NOT TO SCALE



BUILDING ENTRANCE - CONDUIT TURNING DOWN INTO EARTH

NOT TO SCALE

COMMUNICATIONS SITE PLAN KEY NOTES:

1A NEMA 3R PULLBOX AT PENETRATION OF WALL, GALVANIZED STEEL WITH FACTORY PAINTED FINISH, SIZE 12"x 12"x 6", HOFFMAN A-12R126 (NO EQUAL).

2A 2" RIGID METALLIC CONDUIT (RMC OUTDOORS, RMC OR IMC INDOORS). SEE "GENERAL ABOVEGROUND CONDUIT NOTES".

2B 2" PVC CONDUIT (UNDERGROUND), SCHEDULE 80, RUN UNDERGROUND DIRECT BURIED. MINIMUM BURIAL DEPTH 24" BELOW FINISHED GRADE. PROVIDE CONTINUOUS WARNING TAPE (ORANGE 3" WIDE - DETECTABLE - CARLON MAT3061) OVER ALL BURIED CONDUIT AT 6" BELOW FINISH GRADE. INSTALL 3/8" MARKED PULL TAPE (CARLON TL382) ALONG WITH REQUIRED CABLES. SEE "GENERAL UNDERGROUND CONDUIT NOTES".

4 CONDUIT PENETRATION THRU BUILDING EXTERIOR WALL/FLOOR/SOFFIT/FASCIA, SEE "WALL/FLOOR/SOFFIT/FASCIA PENETRATION NOTE".

5 ROUTE BACKBONE CONDUIT THRU BUILDING ABOVE CEILING AND UP HIGH ALONG UNDERSIDE OF ROOF STRUCTURE. SEE "GENERAL ABOVEGROUND CONDUIT NOTES".

6 SLEEVE CONDUIT WITH 6'-0" LONG SECTION OF SCHEDULE 80 PVC SLEEVE (4" SLEEVE FOR 2" CONDUIT & 6" SLEEVE FOR 3" CONDUIT) WHERE CONDUIT PENETRATES OR PASSES UNDER FOUNDATION/FOUNDATION WALL.

7 TURN RIGID (RMC OR IMC) CONDUIT DOWN AT EXISTING COMMUNICATIONS BACKBOARD, TO 6" BELOW CEILING, TRIM CEILING TILE NEATLY AND TERMINATE WITH UL LISTED RIGID CONDUIT THREADED MALLEABLE IRON INSULATED GROUNDING BUSHING WITH BRONZE LUG (O-Z/GEDNEY TYPE IBC-1-BC) PRIOR TO INSTALLING CABLING AND BOND TO EXISTING GROUNDING BUSBAR WITH #6 AWG INSULATED (GREEN) COPPER GROUNDING CONDUCTOR.

7A TURN RIGID CONDUIT UP FROM UNDERGROUND, UP EXTERIOR WALL, AND INTO NEMA 3R BOX TO ENTER BUILDING, GROUP TOGETHER WITH EXISTING. PAINT TO MATCH WALL. SEE "BUILDING ENTRANCE - NEMA 3R BOX AT CONDUIT PENETRATION OF WALL OR FASCIA" AND "BUILDING ENTRANCE - CONDUIT TURNING DOWN INTO EARTH".

7B TURN SCHED 80 PVC CONDUIT UP, SLEEVE AND SEAL FLOOR PENETRATION AND TERMINATE WITH CARLON E997x SERIES END BELL AT 4" A.F.F. SEE ENLARGED FLOOR PLANS FOR LOCATION OF CONDUIT TURNING UP.

8 SAW CUT AND PATCH EXISTING SIDEWALK TO MATCH EXISTING.

9 LARGE COMMUNICATIONS HANDHOLE, SEE DETAIL.

WALL/FLOOR/SOFFIT/FASCIA PENETRATION NOTE:

FIRE-RATED WALLS AND FLOORS:
THE CONTRACTOR SHALL FIRESTOP ALL PENETRATIONS OF ALL FLOORS AND ALL WALLS THAT EXTEND TO THE UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE. FIRESTOPPING SHALL BE ACCOMPLISHED USING UL CLASSIFIED SYSTEMS WITH FIRE RATING EQUAL TO OR GREATER THAN THE FIRE RATING OF THE FLOOR OR WALL ASSEMBLY PENETRATED. FIRESTOP SYSTEMS SHALL BE 3M, NELSON OR ENGINEER APPROVED EQUAL. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. THE CONTRACTOR SHALL SUBMIT A MANUFACTURER'S STANDARD DETAIL FOR EACH TYPE OF FIRE-RATED WALL AND FLOOR PENETRATION REQUIRED FOR THIS PROJECT.

INTERIOR NON FIRE-RATED WALLS:
ALL OPENINGS IN WALLS THAT DO NOT EXTEND TO THE UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE SHALL BE SLEEVED, REPAIRED AND COMPLETELY SEALED WITH MATERIALS TO MATCH THE WALL CONSTRUCTION.

EXTERIOR WALLS:
SLEEVE WALL OPENING WITH SECTION OF SCHEDULE 40 PVC CONDUIT SIZED TO ACCEPT CONDUIT WITH ±1/4" ANNULAR SPACE FOR CAULK. SEAL BETWEEN SLEEVE AND CONDUIT WITH BACKER AND DOUBLE APPLICATION OF CLEAR LIFETIME SILICONE CAULK (BOTH SIDES). REPAIR WALL OPENING AROUND SLEEVE WITH NON-SHRINK HYDRAULIC GROUT FINISHED SMOOTH TO WALL SURFACE (BOTH SIDES). FINISH PAINT TO MATCH EXISTING BUILDING WALL COLOR.

SOFFITS:
PENETRATE SOFFIT CENTERED IN FLAT PART OF PANEL. CUT CIRCULAR OPENING IN FASCIA NO MORE THAN 1/4" LARGER THAN SLEEVE DIAMETER. COVER OPENING AND MAKE WEATHERTIGHT WITH STAINLESS STEEL ESCUTCHEON SET IN BED OF CLEAR LIFETIME SILICONE CAULK AND SECURED WITH SS SCREWS.

FASCIA:
PENETRATE FASCIA CENTERED IN FLAT PART OF PANEL. CUT CIRCULAR OPENING IN FASCIA NO MORE THAN 1/4" LARGER THAN SLEEVE DIAMETER. PROVIDE SLEEVE SAME AS FOR EXTERIOR WALLS AND SEAL WATERTIGHT (SLEEVE TO FASCIA AND SLEEVE TO CONDUIT) WITH BACKING AND DOUBLE APPLICATION OF CLEAR LIFETIME SILICONE CAULK (BOTH SIDES). COVER OPENING WITH STAINLESS STEEL ESCUTCHEON SET IN BED OF CLEAR LIFETIME SILICONE CAULK AND MAKE WEATHERTIGHT. SECURED WITH SS SCREWS.

COMMUNICATIONS SITE PLAN LEGEND:

- PB — COMMUNICATIONS PULL BOX, SIZE AS INDICATED.
- HH — COMMUNICATIONS HAND HOLE. SEE HAND HOLE DETAILS.
- ——— COMMUNICATIONS BACKBONE CONDUIT RUN ABOVEGROUND, QUANTITY AS INDICATED.
- — — — COMMUNICATIONS BACKBONE CONDUIT RUN UNDERGROUND, QUANTITY AS INDICATED.

Graphic Scale

30 15 0 30FT 60FT

SCALE: 1" = 30'-0"

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100% CONSTRUCTION DOCUMENTS

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1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

COMMUNICATIONS SITE PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

T101

PROJECT NOTE (ALL SHEETS):

ALL MATERIALS AND EQUIPMENT INDICATED AND REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION SHALL BE NEW AND SHALL BE PROVIDED BY THE CONTRACTOR UNDER THIS PROJECT UNLESS SPECIFICALLY INDICATED TO BE EXISTING OR TO BE PROVIDED BY OTHERS.

GENERAL LABELING NOTE

1. ALL COs AND HORIZONTAL PATCH PANELS SHALL BE LABELED USING THE FINAL FISH ROOM NUMBERS. OBTAIN FINAL FISH ROOM NUMBERS FROM THE ARCHITECT PRIOR TO LABELING.
2. ALL LABELS FOR COs AND HORIZONTAL PATCH PANELS SHALL BE PRODUCED USING FACTORY LABEL SHEETS FOR LASER PRINTERS MANUFACTURED FOR THE SPECIFIC DEVICE.

SPECIAL SERVICES NOTE:

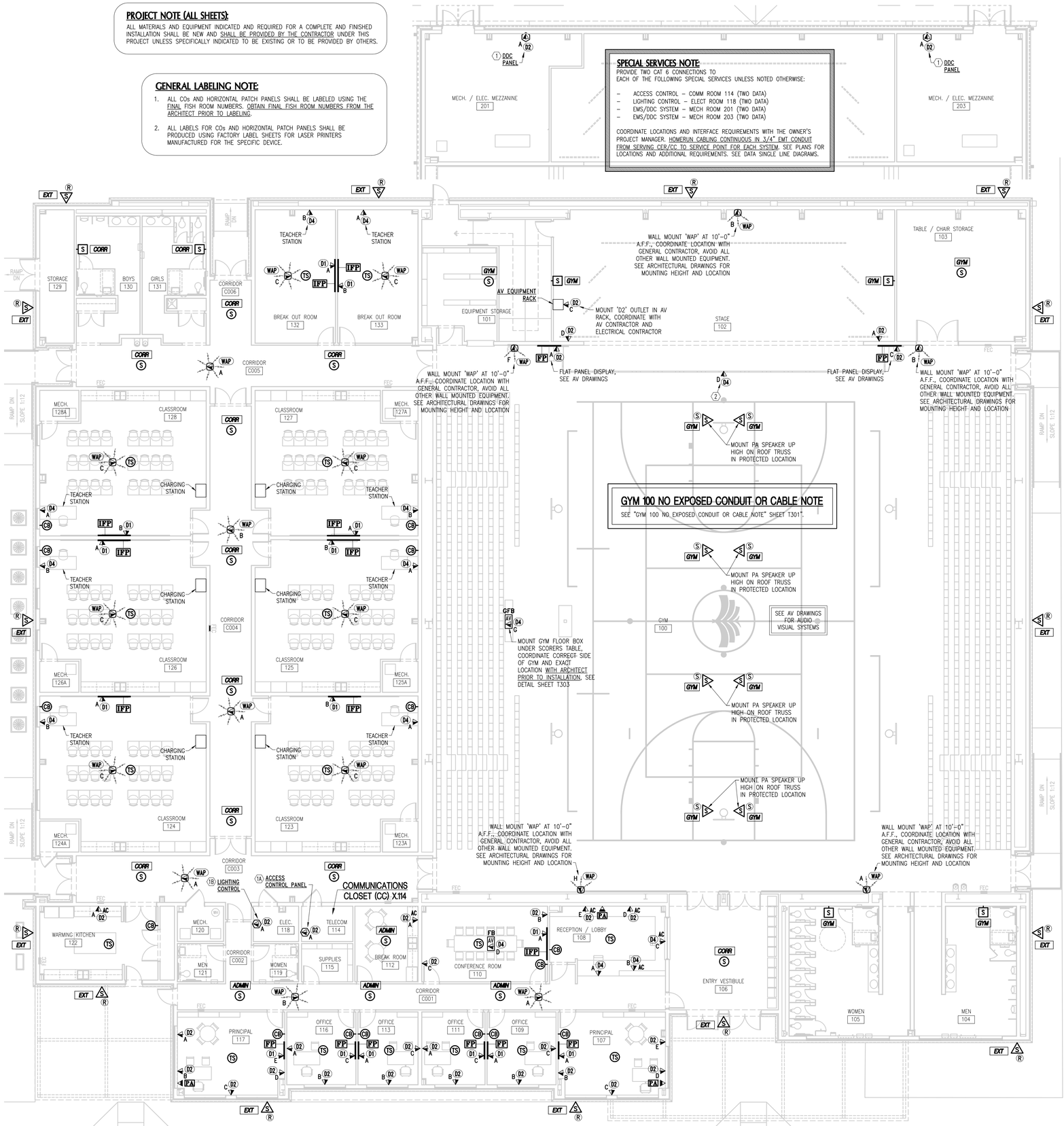
PROVIDE TWO CAT 6 CONNECTIONS TO EACH OF THE FOLLOWING SPECIAL SERVICES UNLESS NOTED OTHERWISE:

- ACCESS CONTROL – COMM ROOM 114 (TWO DATA)
- LIGHTING CONTROL – ELECT ROOM 118 (TWO DATA)
- EMS/DDC SYSTEM – MECH ROOM 201 (TWO DATA)
- EMS/DDC SYSTEM – MECH ROOM 203 (TWO DATA)

COORDINATE LOCATIONS AND INTERFACE REQUIREMENTS WITH THE OWNER'S PROJECT MANAGER. HOMERUN CABLING CONTINUOUS IN 3/4" EMT CONDUIT FROM SERVING CER/CC TO SERVICE POINT FOR EACH SYSTEM. SEE PLANS FOR LOCATIONS AND ADDITIONAL REQUIREMENTS. SEE DATA SINGLE LINE DIAGRAMS.

COMMUNICATIONS OUTLET NOTE

COMMUNICATIONS OUTLET LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EACH OUTLET WITH THE ARCHITECT, THE OWNER'S PROJECT MANAGER AND THE ELECTRICAL CONTRACTOR PRIOR TO THE CONDUIT AND DEVICE BOX ROUGH-IN. PARTICULAR ATTENTION SHALL BE GIVEN TO COORDINATION OF OUTLET LOCATIONS RELATIVE TO WINDOWS, CASEWORK AND OTHER OBSTRUCTIONS. ALL COMMUNICATIONS OUTLETS (CO's) SHALL BE LOCATED AT 18" A.F.F. UNLESS INDICATED OTHERWISE ON FLOOR PLANS AND DETAILS OR SO DIRECTED BY ARCHITECT IN THE FIELD. FOR MOUNTING HEIGHTS OF LARGE SURFACE RACEWAY AND BOXES AT STUDENT COMPUTER STATIONS AND TEACHER STATIONS, SEE LARGE RACEWAY DETAILS.



COMMUNICATIONS LEGEND

- CLASSROOM 127 — ARCHITECT'S ROOM NUMBER, SEE "GENERAL LABELING NOTE."
- D1 A — COMMUNICATIONS OUTLET (CO), TYPE 'D1'. SEE DETAILS. LETTER INDICATES DESIGNATION OF OUTLET IN ROOMS WITH MORE THAN ONE OUTLET.
- D2 A — COMMUNICATIONS OUTLET (CO), TYPE 'D2'. SEE DETAILS. LETTER INDICATES DESIGNATION OF OUTLET IN ROOMS WITH MORE THAN ONE OUTLET.
- D4 A — COMMUNICATIONS OUTLET (CO), TYPE 'D4'. SEE DETAILS. LETTER INDICATES DESIGNATION OF OUTLET IN ROOMS WITH MORE THAN ONE OUTLET.
- GFB AV D4 A — COMMUNICATIONS OUTLET (CO) MOUNTED IN GYM FLOOR BOX, TYPE 'D4', AV AND POWER. LETTER INDICATES DESIGNATION OF OUTLET IN ROOMS WITH MORE THAN ONE OUTLET. SEE "HIGH LOAD CAPACITY GYMNASIUM FLOOR BOX DETAIL", SHEET T303. SEE ELECTRICAL DRAWINGS AND AV DRAWINGS.
- FB AV D4 A — COMMUNICATIONS OUTLET (CO) MOUNTED IN FLOOR BOX, TYPE 'D4', AV AND POWER. LETTER INDICATES DESIGNATION OF OUTLET IN ROOMS WITH MORE THAN ONE OUTLET. SEE ELECTRICAL DRAWINGS. SEE FLOOR BOX AND POKE-THRU CONDUIT NOTES SHEET T-303.
- WAP A — WIRELESS ACCESS POINT (WAP) MOUNTED IN CEILING OR ON WALL AS INDICATED. SEE WIRELESS ACCESS POINT (WAP) MOUNTING DETAILS. LETTER INDICATES DESIGNATION OF WAP IN ROOMS WITH MORE THAN ONE WAP.
- D2 A — SPECIAL SERVICE OUTLET (CO), TYPE 'D2'. SEE "SPECIAL SERVICES NOTE" AND PLANS. RUN CABLING CONTINUOUS TO CC IN CONDUIT. LETTER INDICATES DESIGNATION OF OUTLET IN ROOMS WITH MORE THAN ONE OUTLET.
- IFP — INTERACTIVE FLAT PANEL, SEE DETAILS.
- FP — FLAT PANEL, SEE DETAILS.
- CORR — INTERCOM/PA SYSTEM ONE-WAY SPEAKER HARD-WIRED ZONE NAME.
- TS — INDOOR CEILING MOUNT TALKBACK INTERCOM/PA SPEAKER. IN LAY-IN CEILINGS CAREHAWK SPL-24-RTRJ. IN HARD CEILINGS 8-INCH ROUND SPEAKERS CAREHAWK WITH BRIDGE AND BACKBOX. IN ROOMS WITH EXPOSED ROOF STRUCTURE OR IN ROOMS WITH INACCESSIBLE HARD CEILINGS CAREHAWK VANDAL RESISTANT SURFACE WALL MOUNT SPEAKER WITH PAINTED STEEL ANGLED ENCLOSURE. CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATION AND QUANTITIES OF SPEAKER TYPES BASED ON CEILING CONDITIONS.
- S S — INDOOR CEILING MOUNT ONE-WAY INTERCOM/PA SPEAKER WITH TWO RJ45 JACKS FOR DAISY CHAINING OF MULTIPLE SPEAKERS ON SAME ZONE. IN LAY-IN CEILINGS CAREHAWK SPL-24-RTRJ. IN HARD CEILINGS 8-INCH ROUND SPEAKERS CAREHAWK WITH BRIDGE AND BACKBOX. IN ROOMS WITH EXPOSED ROOF STRUCTURE OR IN ROOMS WITH INACCESSIBLE HARD CEILINGS CAREHAWK VANDAL RESISTANT SURFACE WALL MOUNT SPEAKER WITH PAINTED STEEL ANGLED ENCLOSURE. CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATION AND QUANTITIES OF SPEAKER TYPES BASED ON CEILING CONDITIONS.
- S R A — OUTDOOR ONE-WAY PA VANDAL RESISTANT SPEAKER, RECESSED MOUNT 16 WATT, TELECOR STB-16 SPEAKER AND FLUSH MOUNT FACEPLATE ASSEMBLY WITH TELECOR H16 FULLY RECESSED FACTORY BACKBOX. FLUSH MOUNT IN WALL AT FINAL HEIGHT AND LOCATION AS DIRECTED BY THE ARCHITECT. COORDINATE WITH GENERAL CONTRACTOR AND ARCHITECT PRIOR TO ROUGH-IN. PROVIDE 3/4" CONDUIT SLEEVE THRU WALL AND SET JUNCTION BOX IN ACCESSIBLE LOCATION ABOVE LAY-IN CEILING, THEN FREE ROUTE CABLING ABOVE CEILING TO SERVING CC. SEE "SPEAKER ATTACHMENT NOTES".
- S S A — GYM SPEAKERS – OUTDOOR/INDOOR GRADE HEAVY DUTY ONE-WAY INTERCOM/PA SPEAKER WITH VOLUME CONTROL, SURFACE MOUNT 5 WATT HORN TYPE SPEAKER, CAREHAWK. MOUNT SPEAKER BASE DIRECTLY TO GYM ROOF TRUSS. RUN 3/4" CONDUIT HARD AGAINST ROOF TRUSS ALONG WITH OTHER UTILITIES OVER TO ACCESSIBLE LOCATION ABOVE LAY-IN CEILING, THEN FREE ROUTE CABLING ABOVE CEILING TO SERVING CC. GENERAL CONTRACTOR PAINT CONDUIT TO MATCH GYM ROOF STRUCTURE. SEE "SPEAKER ATTACHMENT NOTES" SHEET T305.
- CB — INTERCOM/PA CALL SWITCH, CAREHAWK CS100. FLUSH MOUNT IN WALL AT 48" A.F.F. USING CONCEALED CONDUIT ROUGH-IN. SEE DETAILS.
- PA — PA OUTLET FOR PA SYSTEM ADMIN HANDSET. ROUGH-IN SAME AS REQUIRED FOR COMMUNICATIONS OUTLET EXCEPT HOMERUN CONDUIT BACK TO CC.

ABBREVIATIONS

CER	COMMUNICATIONS EQUIPMENT ROOM	RMC	RIGID METALLIC CONDUIT	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CC	COMMUNICATIONS CLOSET	IMC	INTERMEDIATE METALLIC CONDUIT	OFOI	OWNER FURNISHED OWNER INSTALLED
CO	COMMUNICATIONS OUTLET	HH	HAND HOLE	CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
A.F.F.	ABOVE FINISHED FLOOR	WP	WATERPROOF	AV, A/V	AUDIO-VISUAL
AC	ABOVE COUNTER	SS	STAINLESS STEEL	WAP	WIRELESS ACCESS POINT
N.I.C.	NOT IN CONTRACT	IFP	INTERACTIVE FLAT PANEL DISPLAY	CM	CONSTRUCTION MANAGER
HPP	HORIZONTAL PATCH PANEL	FP	FLAT PANEL DISPLAY	PM	PROJECT MANAGER
PB	PULLBOX	SCED	SCHEDULE	GC	GENERAL CONTRACTOR
GALV	GALVANIZED STEEL	TYP	TYPICAL	PA	PUBLIC ADDRESS SYSTEM
DDC	DIRECT DIGITAL CONTROLS (HVAC)	ARCH	ARCHITECTURAL	EXT	EXTERIOR
EMS	ENERGY MANAGEMENT SYSTEM = DDC (HVAC)	SCS	STRUCTURED CABLING SYSTEM	CCTV	CLOSED CIRCUIT TELEVISION SECURITY CAMERA SYSTEM
IP	INTERNET PROTOCOL	SCSC	STRUCTURED CABLING SYSTEM CONTRACTOR		

COMMUNICATIONS FLOOR PLAN KEY NOTES:

(1) EMS/DDC SYSTEM CONNECTION: SEE SPECIAL SERVICES NOTE. RUN CABLING CONTINUOUS IN CONDUIT. PROVIDE "BISCUIT" STYLE 'D2' OUTLET LABELED WITH "DDC" AND SERVING CLOSET. MOUNT OUTLET INSIDE THE EMS/DDC PANEL LOCATION AS DIRECTED BY THE DDC CONTRACTOR. FINAL LOCATION OF DDC PANEL IS UNKNOWN – COORDINATE WITH THE GENERAL CONTRACTOR AND THE EMS/DDC SYSTEM INSTALLER FOR FINAL DDC PANEL LOCATION. SEE DATA SINGLE LINE FOR CABLING.

(1A) ACCESS CONTROL PANEL CONNECTION: SEE SPECIAL SERVICES NOTE. RUN CABLING CONTINUOUS IN CONDUIT. PROVIDE "BISCUIT" STYLE 'D2' OUTLET LABELED WITH "ACCESS CONTROL" AND SERVING CLOSET. MOUNT INSIDE ACCESS CONTROL PANEL. COORDINATE WITH GENERAL CONTRACTOR, ELECTRICAL CONTRACTOR, AND ACCESS CONTROL SYSTEM CONTRACTOR. ACCESS CONTROL SYSTEM CONTRACTOR IS RESPONSIBLE FOR ANY UL SECONDARY LISTED SURGE PROTECTION DEVICE REQUIRED TO PROTECT ACCESS CONTROL PANEL. SEE DATA SINGLE LINE FOR CABLING.

(1B) LIGHTING CONTROL PANEL CONNECTION: SEE SPECIAL SERVICES NOTE. RUN CABLING CONTINUOUS IN CONDUIT. PROVIDE "BISCUIT" STYLE 'D2' OUTLET LABELED WITH "LIGHTING CONTROL" AND SERVING CLOSET. MOUNT OUTLET INSIDE THE LIGHTING CONTROL PANEL AS DIRECTED BY THE ELECTRICAL CONTRACTOR. FINAL LOCATION OF LCP PANEL IS UNKNOWN – COORDINATE WITH THE GENERAL CONTRACTOR AND THE ELECTRICAL CONTRACTOR FOR FINAL LCP PANEL LOCATION. SEE DATA SINGLE LINE FOR CABLING.

(2) MOUNT CO FLUSH ON VERTICAL FACE OF STAGE WALL – USE BELDEN STAINLESS STEEL FACEPLATE THIS APPLICATION. RUN 1" SCHEDULE 80 PVC CONDUIT DOWN CONCEALED IN WALL AND TURN TO RUN UNDER FLOOR SLAB TO SERVING CC. RUN UNDERGROUND CONDUIT STRAIGHT "AS THE CROW FLIES" FROM POINT OF TURNING DOWN THRU FLOOR SLAB TO RUN UNDERGROUND OVER TO POINT OF TURNING UP IN SERVING CC. IN CC TURN CONDUITS UP THRU FLOOR IN LOCATION SHOWN ON ENLARGED CC FLOOR PLAN AND TERMINATE AT 4" A.F.F. WITH END BELL. MAKE ALL UNDERGROUND JOINTS WATERTIGHT. ELECTRICAL CONTRACTOR VALIDATE CONTINUITY OF CONDUIT, BLOW OR VACUUM ALL WATER OUT OF CONDUIT, AND INSTALL HEAVY DUTY PULL STRING CONTINUOUS FROM END TO END OF EACH CONDUIT PRIOR TO FLOOR SLAB POUR. ELECTRICAL CONTRACTOR PROVIDE 10' OF PULL STRING SLACK AT EACH END. TEMPORARILY CAP CONDUIT ENDS TO PREVENT ENTRY OF WATER AND DIRT. STRUCTURED CABLING SYSTEM CONTRACTOR AGAIN BLOW WATER OUT OF CONDUITS PRIOR TO INSTALLING CABLES. SCSC PROVIDE ALL BURIAL GRADE CATEGORY 6 CABLE. SEE CC ENLARGED FLOOR PLAN AND GENERAL ABOVEGROUND CONDUIT NOTES.

COMMUNICATIONS FLOOR PLAN

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

Graphic Scale
8 4 0 8FT 16FT
SCALE: 1/8" = 1'-0"

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100% CONSTRUCTION DOCUMENTS

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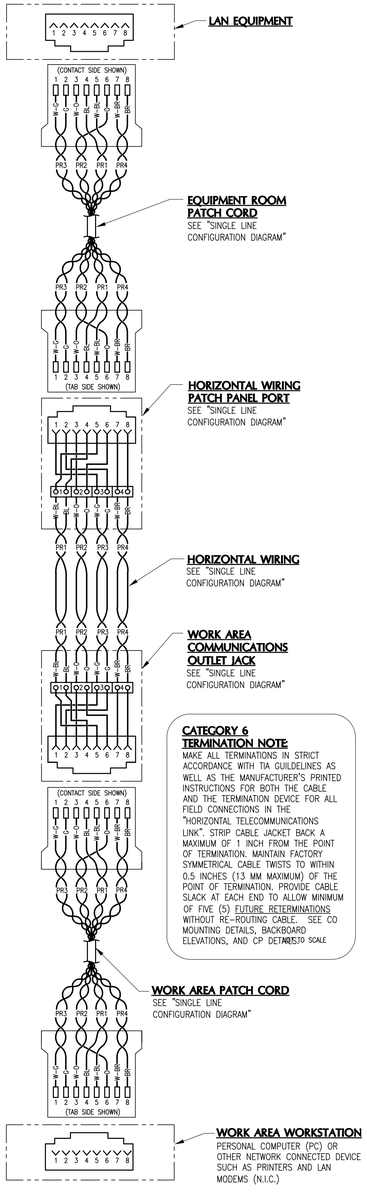
REVISIONS:

No.	Description	Date

COMMUNICATIONS FLOOR PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

T201



CATEGORY 6 TERMINATION NOTE:

MAKE ALL TERMINATIONS IN STRICT ACCORDANCE WITH TIA GUILDELINES AS WELL AS THE MANUFACTURER'S PRINTED INSTRUCTIONS FOR BOTH THE CABLE AND THE TERMINATION DEVICE FOR ALL FIELD CONNECTIONS IN THE "HORIZONTAL TELECOMMUNICATIONS LINK". STRIP CABLE JACKET BACK A MAXIMUM OF 1 INCH FROM THE POINT OF TERMINATION. MAINTAIN FACTORY SYMMETRICAL CABLE TWISTS TO WITHIN 0.5 INCHES (13 MM MAXIMUM) OF THE POINT OF TERMINATION. PROVIDE CABLE SLACK AT EACH END TO ALLOW MINIMUM OF FIVE (5) FUTURE RETERMINATIONS WITHOUT RE-ROUTING CABLE. SEE CO MOUNTING DETAILS, BACKBOARD ELEVATIONS, AND CP DETAILS.

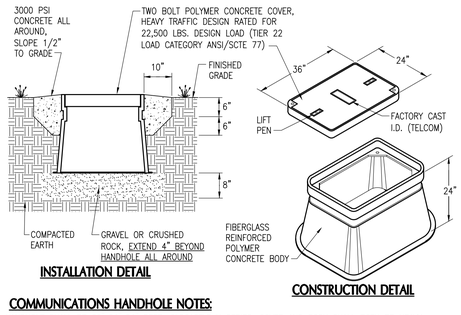
NOT TO SCALE

TYPICAL POINT-TO-POINT WIRING DIAGRAM WORK AREA WORKSTATION TO LAN EQUIPMENT CATEGORY 6 "HORIZONTAL TELECOMMUNICATIONS CHANNEL"

NOT TO SCALE

IP SECURITY CAMERA SPECIAL CONDUIT NOTES:

1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING FINAL CONDUIT ROUTING IN THE FIELD. THE CONTRACTOR SHALL COORDINATE THE FINAL ROUTING OF CONDUITS TO CONCEAL CONDUITS AND TO AVOID CONFLICTS WITH THE BUILDING STRUCTURE, OTHER UTILITIES AND OBSTACLES, WHILE MINIMIZING CHANGES IN DIRECTION AND OVERALL CONDUIT LENGTH. ALL CONDUIT SHALL BE RUN OVERHEAD AND CONCEALED EXCEPT AS SPECIFICALLY INDICATED. BEST ROUTING WITHIN BUILDINGS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR WITH THE LIMITATIONS SPECIFIED IN THESE NOTES AND THE CONTRACT DOCUMENTS IN GENERAL.
2. A HOMERUN CONDUIT SHALL BE RUN TO EACH CAMERA. CONDUITS RUN INDOORS SHALL BE RUN CONCEALED OVERHEAD ABOVE CEILINGS UNLESS LOCATED IN SPACES WITHOUT CEILINGS, IN SPACES WITH EXPOSED ROOF STRUCTURE, OR AS OTHERWISE SPECIFICALLY INDICATED. INDOOR CONDUIT SHALL BE EMT WITH STEEL COMPRESSION FITTINGS. DIE CAST EMT FITTINGS ARE NOT ALLOWABLE. SUPPORT EXPOSED CONDUIT AT A MINIMUM OF 4'-0" ON CENTER WITH 2-HOLE HEAVY DUTY GALVANIZED STEEL HARDWARE.
3. HOMERUN CONDUITS FROM CC SHALL BE A MAXIMUM OF 260 FEET LONG. PROVIDE PULLBOXES AT EVERY 100 FEET ON CENTER AND AT EACH END OF CONDUIT RUNS CONTAINING A TOTAL OF TWO 90 deg BENDS OR A COMBINATION OF LESSER BENDS TOTALING 180 deg (MINIMUM REQUIREMENTS – PROVIDE WHETHER SPECIFICALLY INDICATED OR NOT). CONDUIT RUNS CONTAINING MORE THAN TWO 90 deg BEND WITHOUT A PULLBOX ARE NOT ALLOWABLE. FACTORY CONDUIT ELBOWS AND ALL OTHER BENDS SHALL HAVE A MINIMUM RADIUS OF SIX TIMES THE INTERNAL CONDUIT DIAMETER. CONDUIT OFFSETS AND PULLBOXES REQUIRED TO SUIT FIELD CONDITIONS AND TO CONFORM TO THESE REQUIREMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER. PULL BOXES FOR 3/4" HOMERUN CONDUITS SHALL BE 4"x4"x2-1/8" WITH BLANK COVER.
4. IDENTIFICATION: IDENTIFY ALL INDOOR IP CAMERA CONDUITS, PULLBOXES ABOVE LAY-IN CEILINGS AND ACCESS DOORS WITH GREEN PAINT AT EVERY PULLBOX AND ON CONDUIT AT EACH COUPLER (PAINT ENTIRE COUPLER). IDENTIFY ALL CCTV CONDUIT PULLBOXES BY PAINTING WITH 1" TALL LETTER STENCIL (COLOR GREEN) THE WORDS "CCTV" ON EACH PULLBOX COVER. LETTERING SHALL BE LEVEL AND SQUARE AND AT CENTER OF PULLBOX COVER. DO NOT PAINT CONDUIT COUPLERS AND ENCLOSURES IN CC.
5. SEE ADDITIONAL NOTES FOR SECURITY CAMERAS ON SEC SHEETS.



INSTALLATION DETAIL

CONSTRUCTION DETAIL

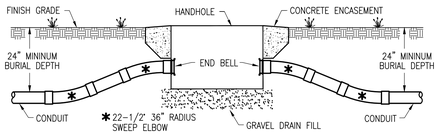
COMMUNICATIONS HANDHOLE NOTES:

1) HANDHOLE SHALL BE 36"x24"x24" DEEP, OLDCASTLE H SERIES. COVER AND BODY SHALL BOTH BE HEAVY TRAFFIC RATED, 22,500 POUND DESIGN LOAD, ANSI/SCTE 77 TIER 22 LOAD CATEGORY. COVER LOGO SHALL BE "TELCOM" OR "COMMUNICATIONS". INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS AND THE REQUIREMENTS OF THIS PROJECT.

2) TERMINATE CONDUITS ENTERING HANDHOLE WITH END BELL (CARLON E997). CONSTRUCT CONDUIT RISE TO ENTER BOX FROM SIDE WITH 22-1/2° SWEEP ELBOWS. SEE "TYPICAL HANDHOLE CONDUIT ENTRY DETAIL". DO NOT ENTER HANDHOLE FROM BOTTOM.

LARGE COMMUNICATIONS HANDHOLE TYPICAL DETAILS

NOT TO SCALE



TYPICAL HANDHOLE CONDUIT ENTRY DETAIL

NOT TO SCALE

GENERAL ABOVEGROUND CONDUIT NOTES:

1. SEE PLANS, NOTES AND DETAILS FOR SPECIAL REQUIREMENTS TO RUN HORIZONTAL CABLING, SECURITY CAMERA CABLING, AND ACCESS CONTROL SYSTEM CABLING IN CONDUIT UNDERGROUND – ALL SUCH CABLING SHALL BE BURIAL GRADE GEL FILLED.
2. CONDUIT INSTALLER PROVIDE PULL STRINGS IN ALL HORIZONTAL CABLE CONDUITS AND PULL TAPE IN ALL BACKBONE CONDUITS FOR USE BY CABLING INSTALLER.
3. LOCATION AND ROUTING OF ABOVEGROUND CONDUITS IS APPROXIMATE AND DEPICTS DESIGN INTENT ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING FINAL CONDUIT ROUTING IN THE FIELD. THE CONTRACTOR SHALL COORDINATE THE FINAL ROUTING OF CONDUITS TO AVOID CONFLICTS WITH OTHER TRADES, WHILE MINIMIZING CHANGES IN DIRECTION AND OVERALL CONDUIT LENGTH. OBTAIN APPROVAL OF ENGINEER PRIOR TO ANY CHANGES IN ROUTING. CONDUIT INSTALLER – PROVIDE PULL TAPE IN ALL BACKBONE CABLING CONDUITS CONTINUOUS FROM END TO END.
4. FREE-ROUTE CATEGORY 6 AND CATEGORY 6A HORIZONTAL CABLES NOT OTHERWISE INDICATED TO BE HOMERUN IN CONDUIT. SEE "HORIZONTAL CABLE ROUTING NOTE" AND "HORIZONTAL CABLING CONDUIT SLEEVES NOTE".
5. PROVIDE A HOMERUN CONDUIT RUN CONTINUOUSLY CONCEALED IN WALLS AND OVERHEAD FROM EACHY IP SECURITY CAMERA TO SERVING CC. EACH HOMERUN CONDUIT SHALL BE 3/4" TRADE SIZE. SEE "CCTV SECURITY CAMERA CONDUIT NOTES" THIS SHEET. CONDUIT INSTALLER SHALL PROVIDE PULL STRINGS IN ALL HORIZONTAL CONDUITS CONTINUOUS FROM END TO END.
6. PROVIDE A HOMERUN CONDUIT RUN CONTINUOUSLY CONCEALED IN WALLS AND OVERHEAD FROM EACH SPECIAL SERVICE OUTLET TO SERVING CC. EACH HOMERUN CONDUIT SHALL BE 3/4" TRADE SIZE. CONDUIT INSTALLER SHALL PROVIDE PULL STRINGS IN ALL HORIZONTAL CONDUITS CONTINUOUS FROM END TO END.
7. CONDUITS RUN INDOORS SHALL BE RUN CONCEALED OVERHEAD ABOVE CEILINGS UNLESS LOCATED IN SPACES WITHOUT CEILINGS, IN AN UNFINISHED SPACE SUCH AS EQUIPMENT ROOMS. INDOOR CONDUIT SHALL BE EMT WITH STEEL FITTINGS EXCEPT WHERE RIGID THREADED CONDUIT IS INDICATED. DIE CAST EMT FITTINGS ARE NOT ALLOWABLE. FITTINGS IN EXPOSED INDOOR LOCATIONS SHALL BE STEEL COMPRESSION TYPE. FITTINGS IN CONCEALED INDOOR LOCATIONS SHALL BE STEEL SET SCREW TYPE. SUPPORT EXPOSED CONDUIT AT A MINIMUM OF 4'-0" ON CENTER WITH 2-HOLE HEAVY DUTY GALVANIZED STEEL HARDWARE. DO NOT RUN CONDUITS BELOW SLAB EXCEPT AS SPECIFICALLY INDICATED.
8. WHERE RIGID CONDUIT (RMC) IS INDICATED, PROVIDE ALL THREADED WATERTIGHT RIGID GALVANIZED THREADED FITTINGS. IN ALL LOCATIONS WHERE INDICATED OUTDOORS PROVIDE RIGID CONDUIT ONLY (RMC). WHERE INDICATED INDOORS CONTRACTOR MAY PROVIDE IMC CONDUIT, BUT ALL FITTINGS SHALL BE THREADED RMC. MAINTAIN ELECTRICAL CONTINUITY FROM END-TO-END AND TERMINATE/GROUND WITH UL LISTED BONDING BUSHING.
9. SUPPORT CONDUIT DIRECTLY FROM BUILDING STRUCTURE USING APPROVED HARDWARE. DO NOT SUPPORT CONDUIT FROM OTHER SYSTEMS COMPONENTS OR SUPPORTS. ROUTE ALL CONDUITS AS HIGH AS POSSIBLE. WHERE CONDUIT IS EXPOSED RUN HARD AGAINST WALL OR UNDERSIDE OF ROOF/FLOOR DECK. RUN ALL CONDUITS PARALLEL/PERPENDICULAR AND PLUMB WITH BUILDING LINES.
10. CONDUIT BODIES SUCH AS 'LB' FITTINGS ARE NOT ALLOWABLE.
11. PROVIDE PULLBOXES OF THE SAME TYPE AND SIZE AS THOSE INDICATED ON DRAWINGS FOR EACH RUN OF CONDUIT AT EVERY 100 FEET ON CENTER AND AT EACH END OF CONDUIT RUNS CONTAINING A TOTAL OF TWO 90 deg BENDS OR A COMBINATION OF LESSER BENDS TOTALING 180 deg (MINIMUM REQUIREMENTS – PROVIDE WHETHER SPECIFICALLY INDICATED OR NOT). CONDUIT RUNS CONTAINING MORE THAN TWO 90 deg BENDS WITHOUT A PULLBOX ARE NOT ALLOWABLE. FACTORY CONDUIT ELBOWS AND ALL OTHER BENDS SHALL HAVE A MINIMUM RADIUS OF SIX TIMES THE INTERNAL CONDUIT DIAMETER. CONDUIT OFFSETS AND PULLBOXES REQUIRED TO SUIT FIELD CONDITIONS AND TO CONFORM TO THESE REQUIREMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
12. PULLBOXES FOR BACKBONE CONDUITS SHALL BE AS INDICATED. PULL BOXES FOR HOMERUN CONDUITS SHALL BE 4" WIDE x 4" LONG x 2-1/8" DEEP NEMA 1 GALVANIZED STEEL WITH SCREW COVER. WHERE HOMERUN CONDUITS ARE TIGHTLY RACKED WITH UNIFORM SPACING, WIDER PULL BOXES MAY BE PROVIDED TO SERVE MULTIPLE CONDUITS. TERMINATE CONDUITS AT OPPOSITE ENDS OF PULLBOXES. DO NOT TERMINATE CONDUITS IN PULLBOXES AT RIGHT ANGLES TO EACH OTHER. HOMERUN CONDUITS SHALL NOT BE COMBINED INTO LARGER CONDUITS SERVING MULTIPLE OUTLETS. PROVIDE INDIVIDUAL HOMERUN CONDUITS FROM EACH SECURITY CAMERA.
13. WHERE CONDUIT AND PULLBOXES ARE LOCATED ABOVE NON-ACCESSIBLE CEILINGS OR SOFFITS (EXAMPLE PLASTER, METAL, OR GYPSUM BOARD), INSTALL AN 24"x 24" ALL ALUMINUM CEILING ACCESS DOOR IN CEILING DIRECTLY BELOW EACH SUCH PULLBOX. ACCESS DOORS SHALL BE LARSEN'S L-LCP, ALL ALUMINUM CONSTRUCTION AND FASTENERS. PROVIDE ACCESS DOORS FACTORY PRIMED FOR PAINTING. FINISH PAINT WITH TWO COATS ENAMEL AFTER INSTALLATION TO MATCH EXISTING CEILING, SOFFIT, OR WALL.
14. TERMINATE ALL CONDUIT ENDS WITH THREADED PLASTIC INSULATING BUSHINGS (PUSH-ON NOT ALLOWABLE). BUSHINGS MUST FIT TIGHTLY ON CONDUIT CONNECTOR THREADS. INSTALL ALL BUSHINGS PRIOR TO PULLING CABLE. CONDUIT INSTALLER PROVIDE PULL STRINGS IN ALL HORIZONTAL CABLE CONDUITS AND PULL TAPE IN ALL BACKBONE CONDUITS FOR USE BY CABLING INSTALLER. LEAVE 10'-0" OF PULL TAPE SLACK AT EACH END OF BACKBONE CONDUIT AND TAPE EXCESS INTO ROLL.
15. IDENTIFICATION: IDENTIFY ALL COMMUNICATIONS CONDUITS AND PULLBOXES ABOVE LAY-IN CEILINGS, ACCESS DOORS AND IN ROOF SPACE WITH BLUE PAINT AT EVERY PULLBOX AND ON CONDUIT AT EACH COUPLER (PAINT ENTIRE COUPLER). DO NOT PAINT CONDUIT COUPLERS AND ENCLOSURES IN CC. IDENTIFY ALL BACKBONE CONDUIT PULLBOXES. PAINT WITH 1" TALL LETTER STENCIL (COLOR BLUE) THE WORDS "TELCOM" ON EACH PULLBOX COVER. LETTERING SHALL BE LEVEL AND SQUARE AND AT CENTER OF PULLBOX COVER.
16. IDENTIFICATION: IDENTIFY ALL CCTV IP SECURITY CAMERA CONDUITS AND PULLBOXES ABOVE LAY-IN CEILINGS, ACCESS DOORS AND IN ROOF SPACE WITH RED PAINT AT EVERY PULLBOX AND ON CONDUIT AT EACH COUPLER (PAINT ENTIRE COUPLER). DO NOT PAINT CONDUIT COUPLERS AND ENCLOSURES IN CC. IDENTIFY ALL CCTV CONDUIT PULLBOXES. PAINTING WITH 1" TALL LETTER STENCIL (COLOR GREEN) THE WORDS "CCTV" ON EACH PULLBOX COVER. LETTERING SHALL BE LEVEL AND SQUARE AND AT CENTER OF PULLBOX COVER.
17. IDENTIFICATION: IDENTIFY ALL INTERCOM/PA CONDUIT SLEEVES AND PULLBOXES ABOVE LAY-IN CEILINGS, ACCESS DOORS AND IN ROOF SPACE WITH YELLOW PAINT AT EVERY PULLBOX AND ON CONDUIT AT EACH COUPLER (PAINT ENTIRE COUPLER). DO NOT PAINT CONDUIT COUPLERS AND ENCLOSURES IN CC. PAINT WITH 1" TALL LETTER STENCIL (COLOR YELLOW) THE WORDS "INTERCOM/PA" ON EACH PULLBOX COVER. LETTERING SHALL BE LEVEL AND SQUARE AND AT CENTER OF PULLBOX COVER.

GENERAL UNDERGROUND CONDUIT NOTES:

1. LOCATION AND ROUTING OF NEW UNDERGROUND CONDUIT IS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE THE FINAL LOCATION AND ROUTING OF CONDUIT TO AVOID CONFLICTS WITH BURIED UTILITIES AND OTHER OBSTRUCTIONS. SIGNIFICANT CHANGES TO CONDUIT ROUTING SHALL REQUIRE THE APPROVAL OF THE ENGINEER.
2. ALL BURIED CONDUIT SHALL BE SCHEDULE 80 ELECTRICAL GRADE PVC CONDUIT. ALL PVC CONDUIT JOINTS SHALL BE CLEANED AND GLUED FOR A WATERTIGHT CONNECTION. TERMINATE ENDS OF PVC CONDUIT AT CLOSETS AND HANDHOLES WITH END BELLS.
3. SEAL ALL UNDERGROUND CONDUITS WATERTIGHT AT ALL HANDHOLE EXITS AND AT ALL BUILDING ENTRY POINTS FOLLOWING CABLE INSTALLATION TO PREVENT THE ENTRY OF WATER INTO BUILDINGS, AND TO PREVENT THE ENTRY OF WATER OR DEBRIS INTO THE CONDUITS FROM THE BUILDING OR HANDHOLES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING BURIED UTILITIES PRIOR TO COMMENCING ANY EXCAVATION REQUIRED FOR WORK UNDER THE PROJECT. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITIES THAT OCCURS AS A RESULT OF OPERATIONS PERFORMED UNDER THIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER. REPAIRS SHALL BE MADE USING MATERIALS & METHODS TO MATCH EXISTING CONSTRUCTION AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO RE-COVERING.
5. LOCATION OF HANDHOLES SHOWN IS INTENDED TO PLACE HANDHOLES IN ACCESSIBLE SODDED, PLANTED OR PAVED AREAS. COORDINATE LOCATIONS WITH DRAINAGE STRUCTURES, SIDEWALKS, OTHER OUTSIDE STRUCTURES, AND LANDSCAPING TO AVOID CONFLICTS.
6. PROVIDE HANDHOLES IN UNDERGROUND CONDUIT AS INDICATED AND ADDITIONAL HANDHOLES AS REQUIRED DUE TO CHANGES IN CONDUIT DIRECTION. INSTALL A HANDHOLE IN EACH CONDUIT RUN OF LONGER THAN 500 FEET OR CONTAINING THE EQUIVALENT OF MORE THAN TWO 90° BENDS. INSTALL HANDHOLES AFTER BENDS AS INDICATED. DO NOT USE HANDHOLES TO MAKE A CHANGE IN DIRECTION.
7. RESTORE TO THEIR ORIGINAL ELEVATION AND CONDITION UNPAVED SURFACES DISTURBED DURING INSTALLATION OF UNDERGROUND CONDUIT. PRESERVE AND REPLACE SOD OR TOPSOIL AFTER INSTALLATION IS COMPLETED. REPLACE SOD THAT IS DAMAGED WITH SOD OF TYPE AND QUALITY EQUAL TO THAT REMOVED.
8. WHERE TRENCHES OR OTHER EXCAVATIONS ARE MADE IN AREAS OF EXISTING WALKWAYS WHERE SURFACE TREATMENT OF ANY KIND EXISTS, RESTORE SUCH SURFACE TREATMENT TO THE SAME THICKNESS AND IN THE SAME KIND AS PREVIOUSLY EXISTED (EXCEPT AS OTHERWISE INDICATED) AND TO MATCH AND TIE INTO THE ADJACENT AND SURROUNDING SURFACES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXTENT OF EXISTING SURFACE TREATMENT SUCH AS CONCRETE OR ASPHALTIC PAVING. THE DRAWINGS SHALL NOT BE CONSTRUED AS PROVIDING ACCURATE REPRESENTATION OF THE TYPE, LOCATION OR EXTENT OF SURFACE TREATMENT OF ANY KIND.
10. THE MINIMUM BEND RADIUS FOR ALL UNDERGROUND CONDUITS SHALL BE 10 TIMES THE INTERNAL CONDUIT DIAMETER.
11. BURIED WARNING AND IDENTIFICATION TAPE: PROVIDE METALLIC DETECTION TAPE MANUFACTURED SPECIFICALLY FOR WARNING AND IDENTIFICATION OF BURIED UTILITIES. INSTALL TAPE DIRECTLY ABOVE EACH BURIED CONDUIT AT DEPTH OF 10 TO 12 INCHES BELOW GRADE FOR ENTIRE LENGTH OF CONDUIT. TAPE SHALL BE DETECTABLE BY ANY STANDARD NON-FERRIC METAL DETECTOR. PROVIDE TAPE IN ROLLS, 2 INCHES MINIMUM WIDTH, COLOR ORANGE, WITH WARNING AND IDENTIFICATION IMPRINTED IN BOLD BLACK LETTERS CONTINUOUSLY AND REPEATEDLY OVER ENTIRE TAPE LENGTH. WARNING AND IDENTIFICATION SHALL READ "CAUTION BURIED COMMUNICATIONS LINE BELOW". USE PERMANENT CODE AND LETTER COLORING UNAFFECTED BY MOISTURE AND OTHER SUBSTANCES CONTAINED IN BACKFILL MATERIAL.
12. UNDERGROUND CONDUIT VALIDATION – FOLLOWING INSTALLATION OF UNDERGROUND CONDUITS, PERFORM THE FOLLOWING OPERATION FOR EACH CONDUIT: CLEAN, LUBRICATE AND VALIDATE EACH INSTALLED CONDUIT FOR SERVICEABILITY BY RUNNING A FULL SIZE RUBBER DUCT SWAB THROUGH THE CONDUIT FROM END TO END. CONDUITS THAT ARE OBSTRUCTED MAY BE CLEANED USING A WIRE BRUSH MANDREL, THEN REVALIDATED WITH THE FULL SIZE RUBBER DUCT SWAB. CONDUITS THAT DO NOT ALLOW PASSAGE OF THE FULL SIZE RUBBER DUCT SWAB SHALL BE REPLACED.
13. PULL TAPES: AS BACKBONE CABLING RUNS ARE INSTALLED CONDUIT INSTALLER SHALL PROVIDE A CONTINUOUS MARKED PULL TAPE (MULE TAPE WP2500P 2500 LB. TENSILE STRENGTH) FOR THE FULL LENGTH OF THE END-TO-END CABLE RUN WITH 10 FEET OF SLACK AT EACH END PULLED IN ALONGSIDE CABLING. BUNDLE SLACK NEATLY AT EACH END AND TIE OFF TO CONDUIT SUPPORT STRUT AT EACH END. PROVIDE CONTINUOUS FACTORY UNCUT LENGTHS OF PULL TAPE FROM END-TO-END – UNDER NO CIRCUMSTANCES SHALL PULL PARTIAL LENGTH SECTION OF PULL TAPE BE TIED TOGETHER.
14. SPARE CONDUITS: FOR CONDUITS THAT ARE INDICATED AS SPARE, INSTALL A CONTINUOUS MARKED PULL TAPE (CARLON TL382 1800 LB. TENSILE STRENGTH) FOR THE FULL LENGTH OF THE END-TO-END CONDUIT RUN WITH 10 FEET OF SLACK AT EACH END, TIE EACH END OF THE TAPE TO A BLANK DUCT PLUG WITH ROPE TIE TAB, PUSH SLACK TAPE BACK INTO CONDUIT, AND INSTALL A DUCT PLUG IN EACH CONDUIT END FOR A WATERTIGHT SEAL.
15. SEE "HORIZONTAL DIRECTIONAL DRILLING NOTES" THIS SHEETS FOR ADDITIONAL REQUIREMENTS.

GYM 100 NO EXPOSED CONDUIT OR CABLE NOTE

EXPOSED CONDUIT OR CABLE IS NOT ALLOWED IN GYM 100 AND ADJACENT EXPOSED ROOF STRUCTURE AREAS AS FOLLOWS (EXCEPT THAT LIMITED EXPOSED CONDUIT IS ALLOWED IN THE GYM FOR STRUCTURE MOUNTED INTERCOM/PA HORN SPEAKERS).

ALL CONDUIT AND CABLE FOR COMMUNICATIONS OUTLETS, WAPs, EXTERIOR INTERCOM/PA SPEAKERS, SECURITY CAMERAS, SECURE DOORS AND OTHER DEVICES SHOWN MOUNTED IN THE NORTH AND EAST WALLS OF GYM 100, STAGE 102 AND TABLE/CHAIR STORAGE 103 AND IN MECH/ELEC MEZZANINES 201 AND 203 SHALL BE RUN CONCEALED IN WALLS DOWN TO TURN AND RUN UNDERGROUND BELOW SLAB TO SERVING CC. CONDUITS SHALL BE 1" SCHEDULE 80 PVC WITHIN WALLS AND BELOW SLAB. 3/4" CONDUIT SIZES INDICATED IN DETAILS SHOWING CONDUIT AND CABLE RUN ABOVE THE FLOOR SLAY DO NOT APPLY – PROVIDE ALL 1" CONDUITS FOR BURIAL APPLICATIONS. IN SERVING CC TURN CONDUITS UP IN TIGHT RECTANGULAR UNIFORM GROUPING SEPARATED BY SERVICE (DO NOT MIX SYSTEMS) THRU FLOOR SLAB IN LOCATION SHOWN ON ENLARGED CC FLOOR PLAN AND TERMINATE AT 4" A.F.F. WITH END BELL. RUN UNDERGROUND CONDUIT STRAIGHT "AS THE CROW FLIES" FROM POINT OF TURNING DOWN THRU FLOOR SLAB TO RUN UNDERGROUND OVER TO POINT OF TURNING UP IN SERVING CC. THE ONLY BENDS OR CHANGES IN DIRECTION IN EACH UNDERGROUND CONDUIT SHALL BE THOSE TWO 90 DEGREE ELBOWS, AND THOSE ELBOWS SHALL BE SCHEDULE 80 LONG RADIUS. CLEAN, GLUE AND MAKE ALL UNDERGROUND CONDUIT JOINTS WATERTIGHT. ELECTRICAL CONTRACTOR VALIDATE CONTINUITY OF CONDUITS, BLOW OR VACUUM ALL WATER OUT OF CONDUITS, AND INSTALL HEAVY DUTY PULL STRING CONTINUOUS FROM END TO END OF EACH CONDUIT PRIOR TO FLOOR SLAB POUR – ELECTRICAL CONTRACTOR PROVIDE 10' OF HEAVY DUTY PULL STRING SLACK AT EACH END. TEMPORARILY CAP CONDUIT ENDS TO PREVENT ENTRY OF WATER AND DIRT. SUBCONTRACTOR FOR EACH SYSTEM AGAIN BLOW WATER OUT OF CONDUITS PRIOR TO INSTALLING CABLES. SCSC PROVIDE ALL BURIAL GRADE CATEGORY 6 CABLE EXCEPT PROVIDE CATEGORY 6A BURIAL GRADE CABLE FOR WAPS. INTERCOM/PA CONTRACTOR PROVIDE BURIAL GRADE SPEAKER CABLE. ACCESS CONTROL SYSTEM CONTRACTOR PROVIDE BURIAL GRADE ACS CABLE. SEE CC ENLARGED FLOOR PLAN AND 'GENERAL ABOVEGROUND CONDUIT NOTES'.

FREE-ROUTED HORIZONTAL CABLING CONDUIT SLEEVES NOTE

CONDUIT SLEEVES FOR FREE-ROUTED HORIZONTAL CAT 6 AND CAT 6A CABLING: FINAL ROUTING PATHS FOR HORIZONTAL CABLING SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD. FOR THIS REASON CONDUIT SLEEVES ARE NOT INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE EMT CONDUIT SLEEVES IN THE QUANTITIES AND LOCATIONS REQUIRED TO SUIT THE CONTRACTOR SELECTED HORIZONTAL CABLE ROUTING AND AS REQUIRED FOR A COMPLETE INSTALLATION, REGARDLESS OF WHETHER THOSE SLEEVES ARE INDICATED ON THE DRAWINGS OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER. AT ALL LOCATIONS WHERE HORIZONTAL CABLING RUNS THRU MECHANICAL OR ELECTRICAL EQUIPMENT ROOMS, STORAGE ROOMS, OR ANY OTHER TYPE OF ROOM WITH EXPOSED STRUCTURE CEILING, ALL SUCH CABLING SHALL BE RUN IN CONTINUOUS CONDUIT SLEEVES EXTENDING TO THE NEAREST ACCESSIBLE LAY-IN CEILING AT BOTH ENDS. IN ADDITION, THE CONTRACTOR SHALL PROVIDE CONDUIT SLEEVES TRAVERSING INACCESSIBLE (HARD) CEILING OR SOFFIT AREAS AND EXTENDING TO THE NEAREST ACCESSIBLE LAY-IN CEILING AT BOTH ENDS FOR CABLE PASS-THRU – PROVIDE ACCESS PANELS IN INACCESSIBLE CEILINGS AS REQUIRED TO INSTALL SLEEVES. SLEEVES SHALL BE SIZED FOR MAXIMUM 30 PERCENT CABLE FILL AND SHALL BE CONSTRUCTED AND PROVIDED WITH PULL BOXES AND ACCESS DOORS PER THE GENERAL ABOVEGROUND CONDUIT NOTES. GENERAL CONTRACTOR PAINT EXPOSED CONDUIT SLEEVES IN ALL FINISHED/OCCUPIED SPACES WITH NO CEILINGS TO MATCH ADJACENT SURFACES.

FREE-ROUTED HORIZONTAL CABLE ROUTING NOTE

ALL COMMUNICATIONS CABLE NOT SHOWN TO BE INSTALLED IN CONDUIT SHALL BE RUN ABOVE CEILINGS AND SHALL BE ROUTED UP HIGH DIRECTLY UNDER THE BUILDING ROOF STRUCTURE AND PROPERLY SUPPORTED WITH APPROVED HANGERS AT 4'-0" ON CENTER TO THE NEAREST WIRE BASKET CABLE TRAY (SEE 'WIRE BASKET CABLE TRAY NOTES' THIS SHEET). DO NOT RUN CABLES CLOSER THAN 6" BELOW ROOF DECK (TO AVOID DAMAGE FROM LONG SCREWS USED IN FUTURE ROOF REPLACEMENTS). RUN ALL CABLING ABOVE DUCTWORK, PIPING, CONDUITS AND ALL OTHER WORK BY OTHER TRADES AND PLACE FOR MAXIMUM PHYSICAL PROTECTION. BUNDLE CABLES TOGETHER AND ROUTE PARALLEL AND PERPENDICULAR TO BUILDING LINES. HANGERS SHALL BE ERICO CADDY "CABLECAT" CATEGORY-5 WITH WIDE BASE LOOP. SEE 'CATEGORY 6 & CATEGORY 6A CABLE J-HOOK SCHEDULE' FOR MINIMUM J-HOOK SIZES AND MAXIMUM CABLE BUNDLE CABLE REQUIREMENTS. BUNDLE CABLES AT 4'-0" O.C. WITH VELCRO, COLOR BLUE FOR CATEGORY 6 CABLES AND COLOR RED FOR CATEGORY 6A WAP CABLES. ATTACH HANGERS TO THE BUILDING STRUCTURE. DO NOT ATTACH HANGERS TO CEILING GRID OR SUPPORT WIRES, CONDUITS, DUCTWORK, PIPING, OR ANY OTHER SYSTEM COMPONENT OR WORK OF OTHER TRADES. INSTALL CABLES TO AVOID ELECTROMAGNETIC INTERFERENCE FROM MOTORS, TRANSFORMERS, GENERATORS, ELEVATORS, POWER CABLES/CONDUITS, LIGHTING FIXTURES, ETC. DO NOT ROUTE CABLE THRU FIRE DAMPERS, HVAC DUCTS, VENTILATING SHAFTS, OR GRATES. DO NOT BLOCK ACCESS TO PULL/JUNCTION BOXES, HATCHES, DOORS, UTILITY ACCESS PANELS, MECHANICAL SERVICE AREAS, ELECTRICAL SERVICE AREAS, OR ANY OTHER SPACE ASSOCIATED WITH SERVICE OR ACCESS OF ANY TYPE. DO NOT RUN HORIZONTAL CABLING ABOVE CEILINGS OF CHEMICAL STORAGE ROOMS.

DUST CONTROL NOTE !

THE GENERAL CONTRACTOR AND THE STRUCTURED CABLING SYSTEM CONTRACTOR SHALL SHARE FULL RESPONSIBILITY FOR PROTECTING ALL COMMUNICATIONS OUTLETS AND THE CER/CC FROM DUST AND DEBRIS DURING CONSTRUCTION AND UNTIL FINAL COMPLETION OF THE PROJECT. THE SCS SHALL NOT INSTALL WIRE MANAGERS, PATCH PANELS, OR DRESS OUT AND TERMINATE CABLES UNTIL THE CC ARE COMPLETELY ISOLATED FROM DUST INFILTRATION WITH PLASTIC SHEETING AND DUCT TAPE. ALL COS JACKS SHALL BE PROTECTED BY BAGGING AND SEALING DUST TIGHT AT ALL TIMES AFTER CONNECTIVITY DEVICES ARE INSTALLED. ALL SYSTEM COMPONENTS THAT, IN THE SOLE JUDGMENT OF THE ENGINEER, ARE EXPOSED TO EXCESSIVE ACCUMULATION OF CONSTRUCTION DUST/DEBRIS AT ANY STAGE OF THE PROJECT SHALL BE REMOVED AND REPLACED WITH NEW COMPONENTS AT NO ADDITIONAL COST TO THE OWNER.

USE OF SCS FACILITIES BY BY OTHER TRADES

CC:	THE CC WITH ALL RELATED SPACE, BACKBOARDS, CABLE RUNWAY, ETC. ARE DEDICATED TO STRUCTURED CABLING SYSTEM COMPONENTS ONLY AND SHALL NOT BE USED IN ANY WAY BY ANY OTHER TRADE WITH THE EXCEPTION OF ELECTRICAL POWER AND HVAC WORK SPECIFICALLY ASSOCIATED WITH THAT SPACE.
J-HOOKS:	CATEGORY 5 J-HOOKS INDICATED ON 'TEL' DRAWINGS ARE DEDICATED TO SCS CABLING (HORIZONTAL CATEGORY 6 AND CATEGORY 6A CABLES) AND SHALL NOT BE USED FOR ANY OTHER TYPE OF CABLING.
CONDUITS:	CONDUITS INDICATED ON 'TEL' DRAWINGS ARE DEDICATED TO SCS CABLING AND SHALL NOT BE USED FOR ANY OTHER TYPE OF CABLING.

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100% CONSTRUCTION DOCUMENTS

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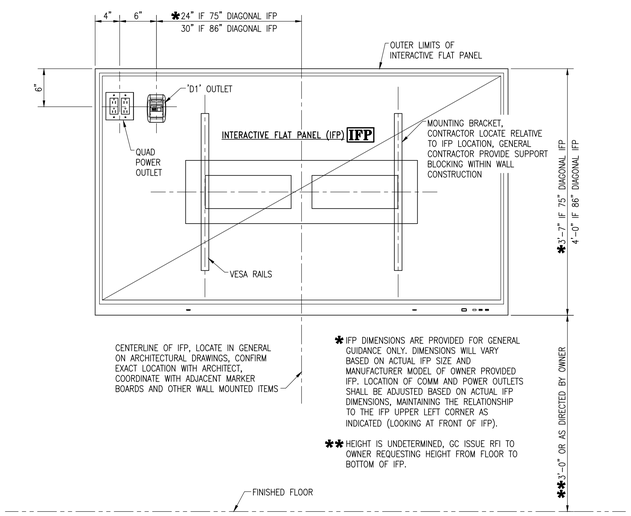
REVISIONS:

No.	Description	Date

COMMUNICATIONS TYPICAL DETAILS

PROJECT NUMBER 22019
DATED 01/31/2025

T301

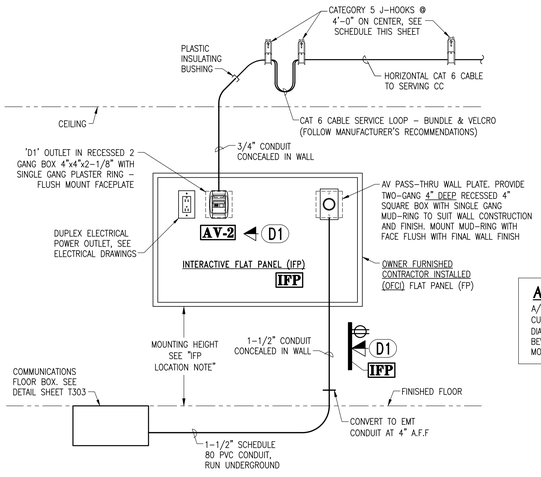


INTERACTIVE FLAT PANEL DIMENSIONAL MOUNTING DETAIL

NOT TO SCALE

IFP OWNER FURNISHED CONTRACTOR INSTALLED (OFCI) NOTES:

1. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION FOR EACH IFP BASED ON CENTERLINE IN PLAN VIEW AND HEIGHT WITH THE ARCHITECT AND THE OWNER'S PROJECT MANAGER. THE GENERAL CONTRACTOR SHALL PROVIDE SUPPORT BLOCKING FOR IFPs AT FRAMED OR OTHER NON-SUPPORTING WALL TYPE.
2. THE CONTRACTOR SHALL PROVIDE COMMUNICATIONS OUTLET AND POWER RECEPTACLE CONCEALED BEHIND EACH IFP BASED ON THE LOCATION DETERMINED IN STEP 1 AND THE IFP DIMENSIONAL MOUNTING DETAIL THIS SHEET.
3. THE OWNER WILL FURNISH THE IFPs WITH FACTORY SUPPLIED MATCHING WALL MOUNT BRACKETS FOR INSTALLATION BY THE CONTRACTOR.
4. THE OWNER WILL SETUP THE IFP.



FLUSH MOUNT 'D1' OUTLET A/V PASS-THRU AND QUAD POWER AT 'IFP' MOUNTING DETAIL - CONFERENCE ROOM 110

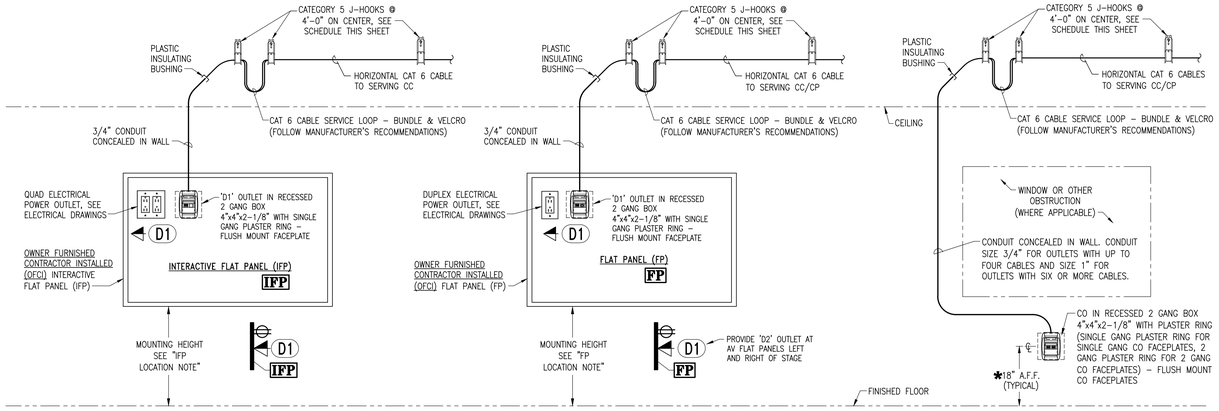
NOT TO SCALE

FP LOCATION NOTE:

LOCATE FLAT PANELS IN GENERAL ON ARCHITECTURAL DRAWINGS. CONFIRM EXACT LOCATION WITH ARCHITECT, COORDINATE WITH ADJACENT MARKER BOARDS AND OTHER WALL MOUNTED ITEMS.

A/V PASS-THRU PLATE

A/V WALL PLATE (PASS-THRU) SHALL BE RCI CUSTOM 'AL118BK' ONE-GANG PLATE WITH 2" DIAMETER GROMMET, 1/8 THICK T6 ALUMINUM, BEVELED EDGES, BLACK ANODIZED FINISH. MOUNT USING FACTORY BLACK SCREWS.



TYPICAL FLUSH MOUNT 'D1' OUTLET AND QUAD POWER AT 'IFP' MOUNTING DETAIL

NOT TO SCALE

IFP LOCATION NOTE:

LOCATE INTERACTIVE FLAT PANELS IN GENERAL ON ARCHITECTURAL DRAWINGS. CONFIRM EXACT LOCATION WITH ARCHITECT, COORDINATE WITH ADJACENT MARKER BOARDS AND OTHER WALL MOUNTED ITEMS.

TYPICAL FLUSH MOUNT 'D1' OUTLET AND DUPLEX POWER AT 'FP' MOUNTING DETAIL

NOT TO SCALE

FP LOCATION NOTE:

PRIOR TO INSTALLING FPs, ASSOCIATED CONDUITS AND POWER OBTAIN PLAN AND MOUNTING HEIGHT DIMENSIONS FROM OWNER AND ARCHITECT FOR FP PLACEMENT. DO NOT SCALE FP LOCATIONS FROM 'T' DRAWINGS OR ANY OTHER DRAWINGS. REQUEST INFORMATION THRU GENERAL CONTRACTOR IN WRITING.

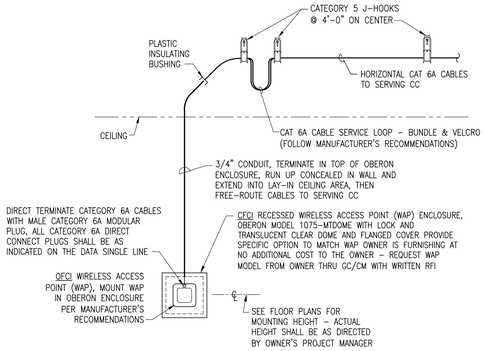
*NOTES:

1) COMMUNICATIONS OUTLET (CO) MOUNTING HEIGHT MAY VARY AT CABINETS OR CASEWORK. LOCATE AND MOUNT CO's AS DIRECTED BY ARCHITECT IN FIELD. MATCH HEIGHT OF ADJACENT ELECTRICAL POWER OUTLETS.
2) MOUNTING HEIGHT OF COMMUNICATIONS OUTLET (CO) SHOWN TO BE MOUNTED ABOVE COUNTER (AC) SHALL BE COORDINATED WITH THE ARCHITECT AND THE GENERAL CONTRACTOR IN THE FIELD PRIOR TO ROUGH-IN.
3) REFER TO ARCHITECTURAL DRAWINGS INTERIOR ELEVATIONS FOR CASEWORK DRAWINGS.

TYPICAL FLUSH MOUNT COMMUNICATIONS OUTLET (CO) MOUNTING DETAIL

NOT TO SCALE

D2 D4 D6



WALL MOUNT WIRELESS ACCESS POINT (WAP) IN GYM MOUNTING DETAIL

NOT TO SCALE

CATEGORY 6 & CATEGORY 6A CABLE J-HOOK SCHEDULE

J-HOOK SIZE, ERICO CADDY CAT HP SERIES PART #	MAXIMUM BUNDLE SIZE (NUMBER OF CABLES)		NOTES
	CATEGORY 6	CATEGORY 6A	
CAT32HP	24	24	NOTES 1, 2, 3

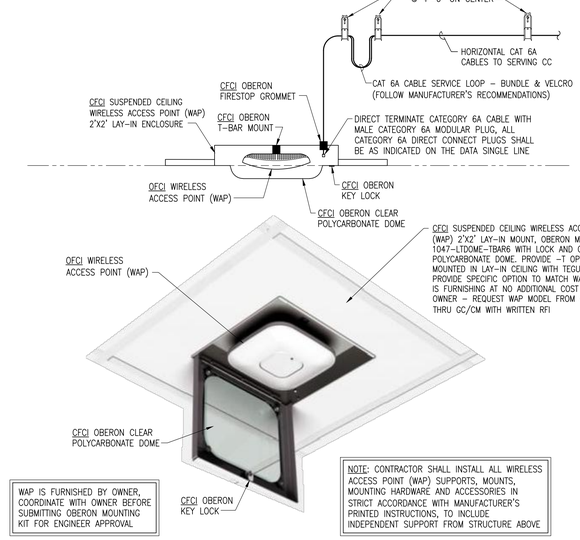
NOTES:

1. USE CADDY CAT32HP SIZE J-HOOKS FOR ALL CABLE TYPES AND APPLICATIONS.
2. LIMIT BUNDLE SIZE TO 24 CABLES MAXIMUM FOR ALL CABLE TYPES AND APPLICATIONS.
3. ALWAYS RUN CAT 6 CABLES AND CAT 6A CABLES IN SEPARATE CABLE BUNDLES, J-HOOKS AND SLEEVES.

ATTACHMENT NOTES

ALL ATTACHMENTS SHALL BE MADE WITH HIGH STRENGTH/HIGH LOAD COMMERCIAL GRADE FASTENERS. ALL FASTENERS AND MISCELLANEOUS RELATED HARDWARE SHALL BE STAINLESS STEEL. TAP-CONS OR RAM-SET TYPE FASTENERS ARE NOT ALLOWABLE. ATTACHMENTS AT VARIOUS BUILDING WALL CONSTRUCTIONS SHALL BE AS FOLLOWS AS A MINIMUM REQUIREMENT, COMPLY WITH MORE STRINGENT FASTENER SPECIFICATIONS WHEN REQUIRED BY THE LOADING APPLICATION OR RECOMMENDED BY THE MANUFACTURER OF EACH SYSTEM COMPONENT:

1. AT FRAMED WALLS WITH GYP BOARD FINISH OR AT OPEN BLOCK CELLS OF CMU WALLS PROVIDE TOGGLER 'SNAP-TOGGLE' TOGGLE BOLTS. AT FRAMED WALLS FASTENERS SHALL BE PLACED AT STUDS.
2. AT BRICK WALLS, BLOCK WEBS AND FILLED CELLS OF CMU WALLS, AND AT CONCRETE WALLS, PROVIDE COMMERCIAL GRADE HIGH LOAD EXPANSION ANCHORS SUCH AS TOGGLER 'ALLIGATOR' SOLID-WALL ANCHORS WITH STAINLESS STEEL FASTENERS.
3. FASTENERS SHALL BE FULL SIZE OF FASTENER HOLES/OPENING IN EQUIPMENT TO BE SECURED (ALLOWING FOR STANDARD CLEARANCES - FASTENERS SIZE 1/16" LESS THAN HOLE SIZE).



WAP IS FURNISHED BY OWNER, COORDINATE WITH OWNER BEFORE SUBMITTING OBERON MOUNTING KIT FOR ENGINEER APPROVAL

NOTE: CONTRACTOR SHALL INSTALL ALL WIRELESS ACCESS POINT (WAP) SUPPORTS, MOUNTS, MOUNTING HARDWARE AND ACCESSORIES IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS, TO INCLUDE INDEPENDENT SUPPORT FROM STRUCTURE ABOVE

LAY-IN CEILING RECESSED MOUNT WIRELESS ACCESS POINT (WAP) MOUNTING DETAILS

NOT TO SCALE

WAP

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100% CONSTRUCTION DOCUMENTS

BICSI Registered Communications Distribution Designer
Gregory A. Cook
BICSI ID # 104998
EXPIRES 12-31-27
RCDD

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

COMMUNICATIONS TYPICAL DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

T302

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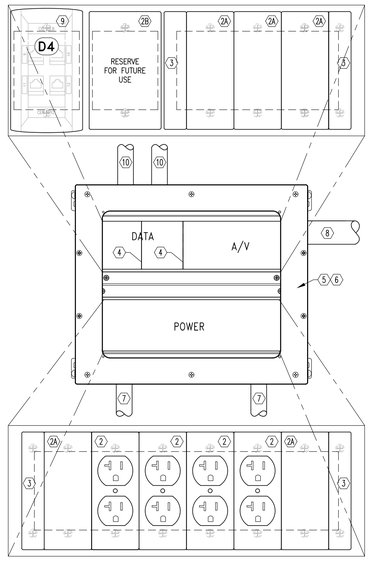
Premier Project #220124

WIREMOLD RFB11 FLOOR BOX REPLACEMENT MODEL

THE WIREMOLD RFB11-OG FLOOR BOX SPECIFIED THIS SHEET HAS BEEN OBSOLETED BY THE MANUFACTURER. INSTEAD PROVIDE WIREMOLD RFBA10R FLOOR BOX WITH EQUIVALENT FEATURES, FITTINGS AND CONDUIT CONNECTORS. OPTIONALLY PROVIDE FSR (WWW.FSRINC.COM) MODEL FL-600P-6-B FLOOR BOX BOTTOM WITH STEEL CONSTRUCTION COVER, CONCRETE POUR PLAN AND FACTORY FINISH COVER. COVER SHALL BE UL LISTED SCRUB WATER RATED FOR TILE AND CARPET INSTALLATIONS. COVER STYLE AND FINISH SHALL BE SELECTED BY THE ARCHITECT AND SHALL BE ANY FACTORY OPTION FOR COVER STYLES 1, 2, 3, 4 OR 5. IF THE ARCHITECTS SELECT STYLE 1, 2 OR 3 WITH INSET FOR FLOORING THE GC SHALL PROVIDE FLOORING MATERIAL TO FILL THE INSET, THICKNESS AS REQUIRED TO MAKE FINISH FLUSH WITH TOP OF FLANGE AND FLUSH WITH THE SURROUNDING FLOOR FINISH. FOR PRODUCT SUBMITTALS THE MANUFACTURER'S REP SHALL PROVIDE A SUBMITTAL PACKAGE FOR THE CONTRACTOR THAT INCLUDE COMPLETE DATASHEETS WITH ALL COMPONENTS HIGHLIGHTED OR OTHERWISE IDENIFIED.



FLOOR BOX KEY NOTES:

1. BY ELECTRICAL CONTRACTOR: RECTANGULAR 11-GANG ON GRADE FLOOR BOX, WIREMOLD RFB11-OG. PROVIDE WITH FLANGED COVER AND DEVICE PLATES.

   INSTALL FLOOR BOX IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS AND AS FOLLOWS:

   SET FLOOR BOX ON TOP OF VAPOR BARRIER AND LEVEL WHILE MAINTAINING FULL SLAB THICKNESS BELOW AND AROUND FLOOR BOX. INSTALL FACTORY FURNISHED MUDCAP TO PREVENT ENTRY OF CONCRETE DURING POUR. SET TOP EDGE OF BOX FLUSH WITH TOP OF THE CONCRETE SLAB (COORDINATE WITH GENERAL CONTRACTOR).

   COMPLETE INSTALLATION OF DEVICES PER NOTES FOLLOWING.

2. BY ELECTRICAL CONTRACTOR: WIREMOLD RFB119-SD SECTIONAL ONE-GANG DUPLEX RECEPTACLE DEVICE PLATE WITH DUPLEX POWER RECEPTACLE, QUANTITY AS INDICATED ON ELECTRICAL DRAWINGS. PROVIDE WIREMOLD RFB119-SB SECTIONAL BLANK DEVICE PLATE WHERE NUMBER OF DEVICES IN FLOOR BOX INDICATED ON ELECTRICAL DRAWINGS IS LESS THAN THAT INDICATED ON THIS DETAIL.

2A. BY ELECTRICAL CONTRACTOR: WIREMOLD RFB119-B STANDARD WIDTH ONE-GANG BLANK OR RFB119-SB SECTIONAL ONE-GANG BLANK TO SUIT. PROVIDE FOR ALL UNUSED SPACES.

2B. BY ELECTRICAL CONTRACTOR: WIREMOLD RFB119-2SB SECTIONAL TWO-GANG BLANK.

3. BY ELECTRICAL CONTRACTOR: WIREMOLD RFB119-SPACER.

4. BY ELECTRICAL CONTRACTOR: WIREMOLD FACTORY POWER/COMMUNICATIONS PARTITION PLATE PER NEC.

5. BY ELECTRICAL CONTRACTOR: FLOOR BOX FLANGED COVER WITH FLOOR INSERT TO MATCH FLOORING, WIREMOLD RFB119CTCAL FOR CARPET, WIREMOLD RFB119BTCAL FOR TERRAZZO, TILE AND WOOD FLOORS. GENERAL CONTRACTOR PROVIDE SECTION OF FLOOR FINISH IN COVER INSET.

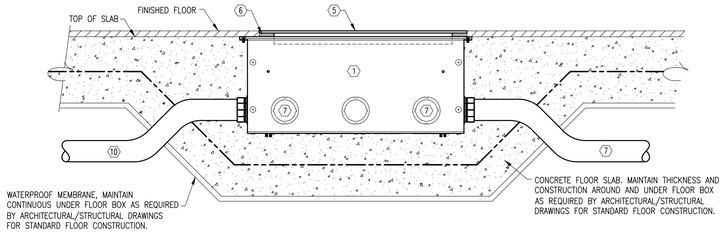
6. BY ELECTRICAL CONTRACTOR: PROVIDE SPACERS AS REQUIRED FOR FLOORING TYPE GREATER THAN 1/4" THICK, WIREMOLD RFB119-PAN AND RFB119-TS FOR TERRAZZO, WIREMOLD RFB119-TS FOR WOOD AND TILE. PROVIDE MULTIPLE QUANTITY OF SPACERS AS REQUIRED TO SET TOP SURFACE OF COVER ASSEMBLY FLUSH WITH FINISHED FLOOR SURFACE.

7. BY ELECTRICAL CONTRACTOR: PROVIDE QUANTITY AND SIZE OF POWER CONDUITS WITH WATERTIGHT FITTINGS INDICATED ON ELECTRICAL DRAWINGS AND SPECIFICATIONS.

8. BY ELECTRICAL CONTRACTOR: PROVIDE ONE 1-1/2" SCHEDULE 80 PVC CONDUIT, RUN CONDUIT UNDERGROUND TO INTERACTIVE FLAT PANEL WALL, TURN CONDUIT UP CONCEALED IN WALL AND CONVERT TO EMT AT 4" A.F.F, THEN EXTEND CONDUIT UP CONCEALED IN WALL AND TERMINATE ON WALL BOX FOR AV PASS-THRU PLATE BEHIND INTERACTIVE FLAT PANEL. SEE "FLUSH MOUNT 'D1' OUTLET, A/V PASS-THRU AND QUAD POWER AT 'IFP' MOUNTING DETAIL – CONFERENCE ROOM 110" SHEET T302.

9. BY STRUCTURED CABLING SYSTEM CONTRACTOR: STANDARD 'D4' COMMUNICATION OUTLET. SEE FACEPLATE DETAILS. ALL CABLING RUN IN UNDERGROUND CONDUITS SHALL BE GEL FILLED BURIAL GRADE AS NOTED ON THE CATEGORY 6 CABLING SCHEDULE ON THE VOICE AND DATA SINGLE LINE DIAGRAMS.

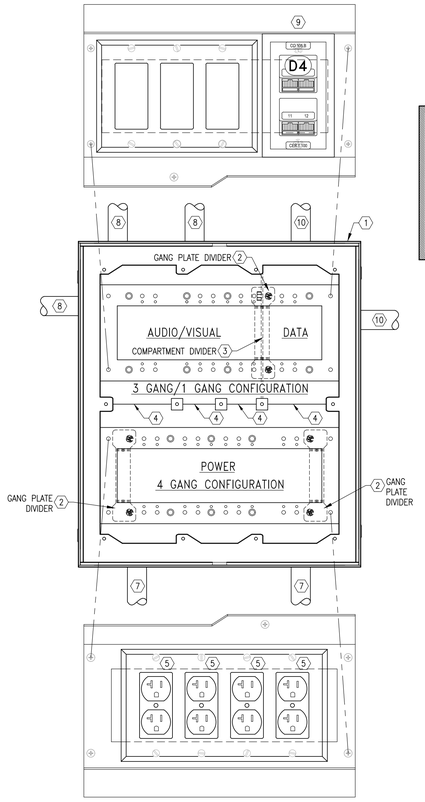
10. BY ELECTRICAL CONTRACTOR: PROVIDE TWO 1" COMMUNICATIONS CONDUITS (ONE EMPTY CONDUIT W/PULLSTRING AND ONE USED). RUN SCHDULE 80 PVC CONDUITS UNDER FLOOR, TURN UP CONCEALED IN WALL AND CONVERT TO EMT AT 4" A.F.F, THEN EXTEND UP IN WALL, RUN CONCEALED TO ACCESSIBLE LAY-IN CEILING AND TERMINATE WITH PLASTIC INSULATION BUSHING.



COMMUNICATIONS FLOOR BOX DETAIL

NOT TO SCALE (AT CONFERENCE ROOM 110)

FB AV D4 = 4 CAT 6 JACKS IN ONE 'D4' CO + AV + POWER



GYM FLOOR BOX FINISH NOTE:

GENERAL CONTRACTOR COORDINATE WORK OF FLOOR FINISH PROVIDER TO INSTALL FLOOR FINISH MATCHING ADJACENT SURFACES INSET INTO FLOOR BOX COVER CAVITY FOR TILE/STONE/WOOD AND CARPETED FLOORS. THE FLOOR BOX MANUFACTURERS HAVE DIFFERENT TYPES OF COVERS FOR EACH TYPE OF FLOOR FINISH – THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REQUIRED FLOOR BOX COVER FOR EACH AREA BASED ON FLOOR FINISH. FINAL HEIGHT OF HIGH LOAD FLOOR BOXES AND LARGE FLOOR BOXES IN TILE/STONE/WOOD FLOOR AREAS AT TOP OF COVER AND INSET FINISH SHALL BE ABSOLUTELY FLUSH WITH TOP OF SURROUNDING FLOOR FINISH. COVER FLANGE OF LARGE FLOOR BOXES IN CARPETED AREAS SHALL SIT ON TOP OF SURROUNDING CARPET AND CARPET SHALL BE FLUSH WITH TOP OF COVER FLANGE.

HIGH LOAD CAPACITY GYM FLOOR BOX KEY NOTES:

1. BY ELECTRICAL CONTRACTOR: HIGH LOAD CAPACITY RECTANGULAR 8-GANG FLOOR BOX, FSR FLH20 WITH RECESSED COVER FOR WOOD FLOOR INSERT. GENERAL CONTRACTOR COORDINATE WITH BOX MANUFACTURER AND ELECTRICAL CONTRACTOR TO SELECT COVER WITH RECESS DEPTH AND PERIMETER WALL THICKNESS DIMENSION TO SUIT WOOD FLOOR INSERT – BOTH DIMENSIONS ARE FACTORY OPTIONS. GENERAL CONTRACTOR PROVIDE WOOD FLOOR INSERT IN COVER RECESS TO MATCH GYM FLOOR.

   INSTALL FLOOR BOX IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. SEE DETAIL THIS SHEET. INSTALL FACTORY FURNISHED MUDCAP TO PREVENT ENTRY OF CONCRETE DURING POUR. COORDINATE WITH GENERAL CONTRACTOR.

   COMPLETE INSTALLATION OF DEVICES PER NOTES FOLLOWING.

2. BY ELECTRICAL CONTRACTOR: FACTORY GANG PLATE DIVIDER.

3. BY ELECTRICAL CONTRACTOR: FACTORY COMPARTMENT DIVIDER.

4. BY ELECTRICAL CONTRACTOR: FACTORY CENTER DIVIDER.

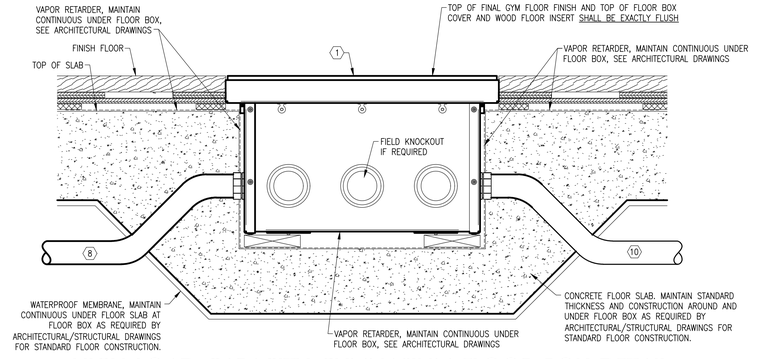
5. ELECTRICAL POWER RECEPTACLES, SEE ELECTRICAL DRAWINGS.

7. BY ELECTRICAL CONTRACTOR: PROVIDE QUANTITY AND SIZE OF POWER CONDUITS WITH WATERTIGHT FITTINGS INDICATED ON ELECTRICAL DRAWINGS AND SPECIFICATIONS.

8. BY ELECTRICAL CONTRACTOR: PROVIDE QUANTITY AND SIZE OF A/V CONDUITS WITH WATERTIGHT FITTINGS INDICATED ON A/V DRAWINGS. TERMINATE IN A/V SECTION OF FLOOR BOX.

9. BY STRUCTURED CABLING SYSTEM CONTRACTOR: STANDARD 'D4' COMMUNICATION OUTLET. SEE FACEPLATE DETAILS.

10. BY ELECTRICAL CONTRACTOR: PROVIDE ONE 1" COMMUNICATIONS HOMERUN CONDUIT FOR EACH 'D4' OUTLET INDICATED ON PLAN PLUS ONE 1" EMPTY CONDUIT W/PULLSTRING. RUN MINIMUM OF TWO 1" SCHEDULE 80 PVC CONDUITS – RUN CONDUITS UNDERGROUND TO SERVING CC AND TERMINATE AT 4" A.F.F. WITH END BELL. SEE "GENERAL ABOVEGROUND CONDUIT NOTES."



HIGH LOAD CAPACITY GYMNASIUM FLOOR BOX DETAIL

NOT TO SCALE (AT SCORER'S TABLE)

GFB AV D4 = 4 CAT 6 JACKS IN ONE 'D4' CO + AV + POWER

UNDERGROUND CONDUITS - WATERTIGHT REQUIREMENTS

ALL UNDERGROUND CONDUITS FOR COMMUNICATIONS AND AUDIO-VISUAL CABLING SERVED BY FLOOR BOXES SHALL BE SCHEDULE 80 PVC, SHALL HAVE CONDUIT ENTRY INTO FLOOR BOXES SEALED WITH LEXEL CAULK/ADHESIVE, AND SHALL OTHERWISE BE MADE FULLY WATERTIGHT TO PROTECT THE CABLES FROM WATER INTRUSION.

NO CABLES SHALL BE INSTALLED IN THE UNDERGROUND CONDUITS UNTIL THE ENTIRE BUILDING IS UNDER ROOF, FULLY ENCLOSED AND AIR CONDITIONED, AT WHICH TIME THE CONDUIT SHALL BE VACUUMED BY THE ELECTRICAL CONTRACTOR TO REMOVE ALL WATER AND THE CONDUITS LEFT TO DRY COMPLETELY.

AT THAT POINT THE STRUCTURED CABLING SYSTEM CONTRACTOR SHALL VACUUM THE CONDUITS A SECOND TIME TO VERIFY THAT ALL WATER HAS BEEN REMOVED BEFORE INSTALLING ANY CABLES. CABLES PULLED INTO CONDUITS CONTAINING WATER OR CABLES INSTALLED IN CONDUITS FOUND TO CONTAIN WATER FOLLOWING THE CABLE INSTALLATION SHALL BE REMOVED AND REPLACED WITH NEW AT NO COST TO THE OWNER.

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100% CONSTRUCTION DOCUMENTS

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BICSI ID # 104998
EXPIRES 12-31-27
RCDD

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

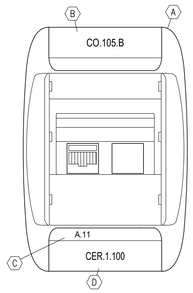
REVISIONS:

No.	Description	Date

COMMUNICATIONS TYPICAL FLOOR BOX DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

T303



TYPE "D1" CO KEY NOTES:

(A) SINGLE GANG FACEPLATE, COLOR ELECTRIC WHITE, BELDEN AX101747. PROVIDE WITH FACTORY CLEAR TOP LABEL COVER AND ADDITIONAL BELDEN AX101773 CLEAR BOTTOM LABEL COVER. PROVIDE WITH ONE 2 PORT ANGLED INSERT COLOR ELECTRIC WHITE, BELDEN AX102413, ONE TIA CATEGORY 6+ 8-PIN MODULAR JACK, COLOR ELECTRIC WHITE, BELDEN REVCONNECT RV6MJKUEW, AND ONE BLANK JACK COVER. PROVIDE WITH ONE BELDEN AX101759 1-UNIT FILLER INSERT AND ONE BELDEN AX101763 2-UNIT FILLER INSERT, BOTH COLOR ELECTRIC WHITE.

(B) LASER PRINTED LABEL INDICATING OUTLET IDENTIFIER – SEE "CO IDENTIFICATION NOMENCLATURE". TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

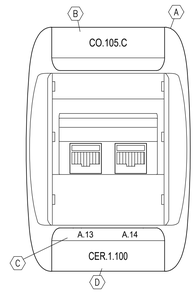
(C) LASER PRINTED LABEL INDICATING SERVING HORIZONTAL PATCH PANEL ALPHA IDENTIFIER AND JACK PORT NUMBER – SEE "CO IDENTIFICATION NOMENCLATURE". TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

(D) LASER PRINTED LABEL INDICATING SERVING CER. TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

TYPE "D1" COMMUNICATIONS OUTLET (CO)

NOT TO SCALE

(D1 = ONE DATA) ◀ D1



TYPE "D1ITV" CO KEY NOTES:

(A) SINGLE GANG FACEPLATE, COLOR ELECTRIC WHITE, BELDEN AX101747. PROVIDE WITH FACTORY CLEAR TOP LABEL COVER AND ADDITIONAL BELDEN AX101773 CLEAR BOTTOM LABEL COVER. PROVIDE WITH ONE 2 PORT ANGLED INSERT, COLOR ELECTRIC WHITE, BELDEN AX102413 AND TWO TIA CATEGORY 6+ 8-PIN MODULAR JACKS, COLOR ELECTRIC WHITE, BELDEN REVCONNECT RV6MJKUEW. PROVIDE WITH ONE BELDEN AX101759 1-UNIT FILLER INSERT AND ONE BELDEN AX101763 2-UNIT FILLER INSERT, BOTH COLOR ELECTRIC WHITE.

(B) LASER PRINTED LABEL INDICATING OUTLET IDENTIFIER – SEE "CO IDENTIFICATION NOMENCLATURE". TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

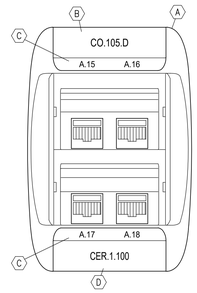
(C) LASER PRINTED LABEL INDICATING ITV, SERVING HORIZONTAL PATCH PANEL ALPHA IDENTIFIER AND JACK PORT NUMBER – SEE "CO IDENTIFICATION NOMENCLATURE". TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

(D) LASER PRINTED LABEL INDICATING SERVING CER. TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

TYPE "D2" COMMUNICATIONS OUTLET (CO)

NOT TO SCALE

(D2 = TWO DATA/VOICE) ◀ D2



TYPE "D4" CO KEY NOTES:

(A) SINGLE GANG FACEPLATE, COLOR ELECTRIC WHITE, BELDEN AX101747. PROVIDE WITH FACTORY CLEAR TOP LABEL COVER AND ADDITIONAL BELDEN AX101773 CLEAR BOTTOM LABEL COVER. PROVIDE WITH TWO 2 PORT ANGLED INSERTS, COLOR ELECTRIC WHITE, BELDEN AX102413 AND FOUR TIA CATEGORY 6+ 8-PIN MODULAR JACKS, COLOR ELECTRIC WHITE, BELDEN REVCONNECT RV6MJKUEW.

(B) LASER PRINTED LABEL INDICATING OUTLET IDENTIFIER – SEE "CO IDENTIFICATION NOMENCLATURE". TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

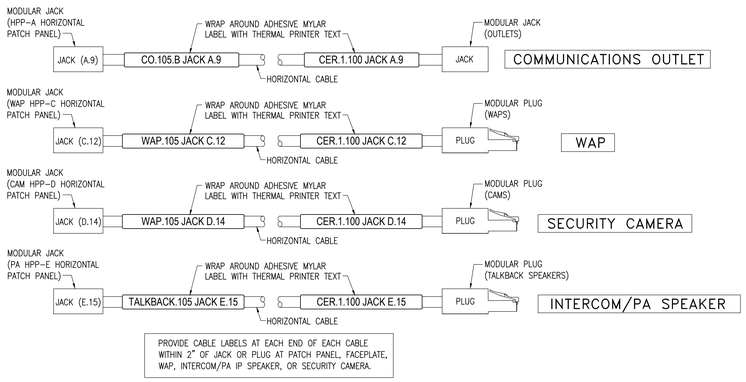
(C) LASER PRINTED LABEL INDICATING SERVING HORIZONTAL PATCH PANEL ALPHA IDENTIFIER AND JACK PORT NUMBERS – SEE "CO IDENTIFICATION NOMENCLATURE". TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

(D) LASER PRINTED LABEL INDICATING SERVING CER. TEXT SHALL BE MINIMUM 12 POINT ARIAL NARROW FONT.

TYPE "D4" COMMUNICATIONS OUTLET (CO)

NOT TO SCALE

(D4 = FOUR DATA/VOICE) ◀ D4



HORIZONTAL CABLE IDENTIFIER LABELS

NOT TO SCALE

CATEGORY 6 and 6A HORIZONTAL PATCH PANEL TERMINATION/LABELING REQUIREMENTS

HORIZONTAL PATCH PANEL I.D. NOMENCLATURE

CER.1.100.A
- HORIZONTAL PATCH PANEL IDENTIFIER
- CER NUMBER

CER.1.100.A INDICATES THE FIRST HORIZONTAL PATCH PANEL IN CER.1.100 (LETTER PATCH PANELS BEGINNING WITH 'A' TOP TO BOTTOM AND LEFT TO RIGHT)

1) TERMINATE CATEGORY 6 HORIZONTAL CABLING ON HORIZONTAL PATCH PANELS IN NUMERICAL ORDER BY ROOM NUMBER. REFER TO FLOOR PLANS FOR ROOM NUMBER AND LOCATION. TERMINATE JACKS FOR EACH 'CO' SEQUENTIALLY IN ORDER OF ASSIGNED PATCH PANEL PORT NUMBER.

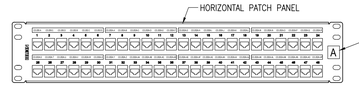
2) PROVIDE OVERALL IDENTIFICATION TAG FOR EACH HORIZONTAL PATCH PANEL IN ACCORDANCE WITH "HORIZONTAL PATCH PANEL I.D. NOMENCLATURE". TAG CONSTRUCTION AND LAYOUT SHALL BE PER "TYPICAL HORIZONTAL PATCH PANEL LAMINATED I.D. TAG DETAIL".

3) PROVIDE ENGRAVED TAG FOR EACH HORIZONTAL PATCH PANEL INDICATING LETTER IDENTIFIER. SEE "TYPICAL HPP ENGRAVED TAG DETAIL."

HORIZONTAL PATCH PANEL PORT NUMBER IDENTIFICATION

A.12
- PATCH PANEL CONSECUTIVE PORT NUMBER
- PATCH PANEL IDENTIFIER

A.12 INDICATES 'CO' OUTLET TERMINATED ON PATCH PANEL 'A' PORT 12.



TYPICAL HPP ENGRAVED TAG DETAIL

NOT TO SCALE

HORIZONTAL PATCH PANEL PORT LABELING NOMENCLATURE

LASER PRINTED LABEL INSIDE FACTORY LABEL HOLDER – PRINT WITH ROOM NUMBER AND OUTLET IDENTIFIER IN WHICH OUTLET IS LOCATED.

NOTE: FOR INTERCOM/PA PATCH PANELS, THE NOMENCLATURE SHALL MATCH THE SPEAKER IDENTIFIER LABEL, NOT STANDARD 'CO' LABELING.

NOTE: FOR WAP PATCH PANELS, REPLACE 'CO' WITH 'WAP'.

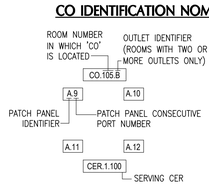
NOTE: FOR CAM PATCH PANELS, REPLACE 'CO' WITH 'CAM'.

I.D. TAG WITH 0.15" HIGH BLACK LETTERS ON WHITE BACKGROUND. GBC "DOCUSEAL" LAMINATING POUCH, LUGGAGE TAG SIZE WITH LOOP (AVAILABLE FROM OFFICE SUPPLY STORES). USE LOOP TO SECURE TO PROTECTOR.

TYPICAL HORIZONTAL PATCH PANEL LAMINATED I.D. TAG DETAIL

NOT TO SCALE

CO IDENTIFICATION NOMENCLATURE



105.B INDICATES 'CO' OUTLET 'B' LOCATED IN ROOM 105 AND SERVED BY CER.1.100

ENGRAVED PLASTIC TAG WITH 1/2" HIGH WHITE LETTER ON BLACK BACKGROUND. TAG SHALL HAVE ALL EDGES BEVELED AND SMOOTH, SECURE TAG WITH DOUBLE SIDED TAPE ON FAR RIGHT SIDE OF PATCH PANEL FRONT FACE

A

TYPICAL HORIZONTAL PATCH PANEL ENGRAVED TAG DETAIL

NOT TO SCALE

SEE "COMMUNCATIONS TYPICAL LABELING DETAILS"

GENERAL LABELING NOTES:

1. ROOM NUMBERS INDICATED THIS SHEET TO INCLUDE COMMUNICATIONS ROOM NUMBERS ARE PROTOTYPICAL TO INDICATE REQUIRED LABELING METHODS AND ARE NOT BASED ON ACTUAL ROOM NUMBERS FOR THIS PROJECT.
2. ALL LABELS SHALL BE BASED ON THE FINAL FLORIDA INVENTORY OF SCHOOL HOUSES ("FISH") ACTUAL ROOM NUMBERS. OBTAIN FINAL "FISH" ROOM NUMBERS FROM THE ARCHITECT PRIOR TO LABELING.
3. ALL LABELS FOR COMMUNICATIONS OUTLETS AND HORIZONTAL PATCH PANELS SHALL BE PRODUCED USING FACTORY NON-ADHESIVE LABEL SHEETS FOR LASER PRINTERS MANUFACTURED FOR THE SPECIFIC DEVICE AND USING LABELING SOFTWARE PROVIDED BY MANUFACTURER'S REPRESENTATIVE.
4. ALL LABELS SHALL BE HEIGHT OF PLASTIC LABEL HOLDERS AND SAME HEIGHT AND WIDTH AS INDIVIDUAL PAPER LABELS FACTORY FURNISHED WITH THE COMMUNICATIONS OUTLETS OR PATCH PANEL LABEL HOLDERS (LABELS SHALL COMPLETELY FILL PLASTIC LABEL HOLDERS).
5. ALL LABELS SHALL BE INSTALLED IN A NEAT AND PROFESSIONAL MANNER, STRAIGHT AND CENTERED ON LABEL HOLDERS.

GENERAL TEXT WIDTH NOTE:

USE ARIAL NARROW FONT, WHICH IS VERY COMPRESSED BY WIDTH. IF ADDITIONAL WIDTH COMPRESSION IS REQUIRED FOR UNUSUALLY LONG LABELS, USE THE MS WORD FORMAT-FONT-CHARACTER SPACING-SPACING-CONDENSED-BY X POINTS (USE POINT REDUCTIONS OF LESS THAN ONE IN TENTHS OF A POINT – USE NO MORE REDUCTION THAN REQUIRED TO FIT LABEL).

FACEPLATE AND DEVICE COLOR NOTE

VERIFY ALL FACEPLATE AND DEVICE COLORS WITH THE ARCHITECT AND OWNER'S PROJECT MANAGER PRIOR TO PRE-INSTALLATION SUBMITTALS. PROVIDE ALTERNATE COLOR STANDARD WITH THE MANUFACTURER AT NO ADDITIONAL COST TO THE OWNER IF SO DIRECTED. COORDINATE WITH THE ENGINEER PRIOR TO ORDERING MATERIALS.

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100% CONSTRUCTION DOCUMENTS

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REVISIONS:

No.	Description	Date

COMMUNICATIONS TYPICAL FACEPLATE & LABELING DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

T304

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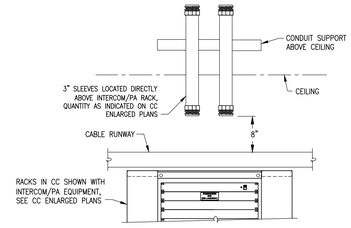
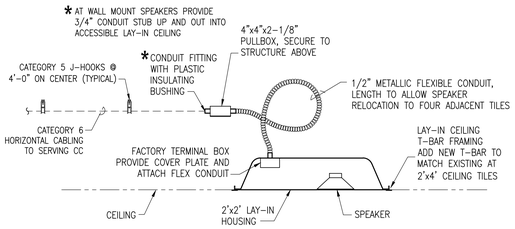
Premier Project #220124



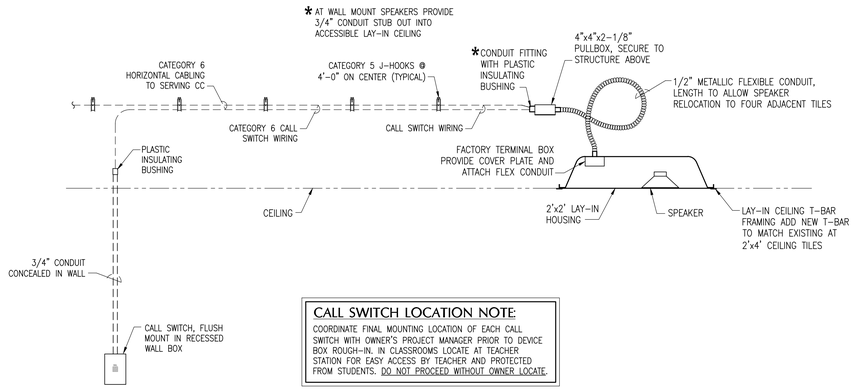
TYPICAL HOMERUN SPEAKER CONDUITS AT CC DETAIL

NOT TO SCALE



TYPICAL ONE-WAY SPEAKER MOUNTING DETAIL

NOT TO SCALE



CALL SWITCH LOCATION NOTE:

COORDINATE FINAL MOUNTING LOCATION OF EACH CALL SWITCH WITH OWNER'S PROJECT MANAGER PRIOR TO DEVICE BOX ROUGH-IN. IN CLASSROOMS LOCATE AT TEACHER STATION FOR EASY ACCESS BY TEACHER AND PROTECTED FROM STUDENTS. DO NOT PROCEED WITHOUT OWNER LOCATE.

TYPICAL TALKBACK SPEAKER/CALL SWITCH STATION MOUNTING DETAIL

NOT TO SCALE

SPEAKER ATTACHMENT NOTES

ALL ATTACHMENTS SHALL BE MADE WITH HIGH STRENGTH/HIGH LOAD COMMERCIAL GRADE FASTENERS. ALL FASTENERS AND MISCELLANEOUS RELATED HARDWARE SHALL BE STAINLESS STEEL. TAP-CONS OR RAM-SET TYPE FASTENERS ARE NOT ALLOWABLE. ATTACHMENTS AT VARIOUS BUILDING WALL CONSTRUCTIONS SHALL BE AS FOLLOWS AS A MINIMUM REQUIREMENT, COMPLY WITH MORE STRINGENT FASTENER SPECIFICATIONS WHEN REQUIRED BY THE LOADING APPLICATION OR RECOMMENDED BY THE MANUFACTURER OF EACH SYSTEM COMPONENT:

1. AT FRAMED WALLS WITH GYP BOARD FINISH OR AT OPEN BLOCK CELLS OF CMU WALLS PROVIDE TOGGLER "SNAP-TOGGLE" TOGGLE BOLTS. AT FRAMED WALLS FASTENERS SHALL BE PLACED AT STUDS.
2. AT BRICK WALLS, BLOCK WEBS AND FILLED CELLS OF CMU WALLS, AND AT CONCRETE WALLS, PROVIDE COMMERCIAL GRADE HIGH LOAD EXPANSION ANCHORS SUCH AS TOGGLER 'ALLIGATOR' SOLID-WALL ANCHORS WITH STAINLESS STEEL FASTENERS.
3. AT METAL SOFFIT OR FASCIA CONSTRUCTION PROVIDE STAINLESS STEEL THRU BOLTS ALL THE WAY THRU SOFFIT OR FASCIA FRAMING. PROVIDE SUPPLEMENTARY FRAMING ON INTERIOR AS REQUIRED FOR SECURE MOUNTING.
4. FASTENERS SHALL BE FULL SIZE OF FASTENER HOLES/OPENING IN EQUIPMENT TO BE SECURED (ALLOWING FOR STANDARD CLEARANCES – FASTENERS SIZE 1/16" LESS THAN HOLE SIZE).

INTERCOM/PA GENERAL NOTES

1. RUN CABLING CONTINUOUSLY IN CONDUIT IN ALL AREAS WITH NO CEILING AND EXPOSED ROOF STRUCTURE TO ACCESSIBLE LAY-IN CEILING SPACE. WORK WITH CC TO ROUTE CONDUITS THRU AREA FOR LOWEST POSSIBLE VISIBILITY. RUN WITH OTHER TRADES WHEREVER POSSIBLE. PREP, PRIME AND PAINT ALL EXPOSED CONDUIT TO MATCH ADJACENT SURFACES.
2. PROVIDE CONDUIT FOR EXTERIOR SPEAKERS EXTENDING INTO THE BUILDING TO ACCESSIBLE LAY-IN CEILING SPACE.
6. PROVIDE CONDUIT SLEEVES WITH INSULATING BUSHING EACH END TURNING DOWN INTO SERVING CCs FOR ENTRY OF FREE ROUTED CABLES INTO CCs. SIZE SLEEVES FOR 30% FILL.
7. IDENTIFY ALL INDOOR INTERCOM/PA, SLEEVES, CONDUIT AND PULLBOXES ABOVE LAY-IN CEILINGS, AT ACCESS DOORS, IN ROOF SPACE, AND IN ALL EXPOSED LOCATIONS (EXCEPT WITHIN CER/CCs) WITH YELLOW PAINT AT EVERY PULLBOX AND ON CONDUIT AT EACH COUPLER (PAINT ENTIRE COUPLER).
8. ALL HORIZONTAL INTERCOM/PA (NETWORK) CABLES TO TALKBACK SPEAKERS SHALL BE FOUR PAIR 24 AWG UTP CATEGORY 6 RISER (CMR) RATED JACKET WITH YELLOW JACKET SHALL BE FREE ROUTED FROM THE SERVING CC TO EACH TALKBACK SPEAKER AS INDICATED ON THE SINGLE LINE DIAGRAM. IN NO CASE SHALL CABLES BE DAISY-CHAINED BETWEEN MULTIPLE TALKBACK SPEAKERS OR ANY OTHER INTERCOM/PA DEVICE EXCEPT AS INDICATED FROM CALL SWITCH TO ASSOCIATED TALKBACK SPEAKER IN SAME ROOM. PUNCH CABLES DOWN ON PATCH PANELS IN CC AND DIRECT CONNECTORIZE AT SPEAKERS USING CATEGORY 6 PLUG PER SINGLE LINE DIAGRAM.
9. ALL HORIZONTAL INTERCOM/PA (SPEAKER SIGNAL AND POWER) CABLES TO ONE-WAY SPEAKERS SHALL BE FOUR PAIR 24 AWG UTP CATEGORY 6 RISER (CMR) RATED JACKET WITH YELLOW JACKET AND SHALL BE FREE ROUTED FROM THE CC TO THE NEAREST ONE-WAY SPEAKER ON THAT ZONE, THEN DAISY-CHAINED TO OTHER ONE-WAY SPEAKERS ON THE SAME ZONE AND IN CLOSE PROXIMITY TO THE FIRST ONE-WAY SPEAKER. PUNCH CABLES DOWN ON 110 WIRING BLOCKS IN CC AND DIRECT TERMINATE ON WIRING TERMINALS AT ONE-WAY SPEAKERS. SEE INTERCOM SINGLE LINE WIRING DIAGRAMS FOR MAXIMUM SPEAKER QUANTITIES PER DAISY-CHAIN.
10. MAKE ALL NON-NETWORK WIRING CONNECTIONS ON FACTORY WIRING TERMINALS OF SPEAKERS AND CALL SWITCHES. WHERE FACTORY WIRE LEADS ONLY ARE PROVIDED AT SPEAKERS MAKE CONNECTIONS USING SCOTCHLOK 'UR2' SEALANT FILLED CONNECTORS USING ONLY 3M FACTORY TERMINATION TOOLS. WHERE WIRE-TO-WIRE CONNECTIONS ARE REQUIRED MAKE CONNECTIONS USING SCOTCHLOK 'UR2' CONNECTORS.
11. CEILING MOUNT SPEAKER LOCATIONS SHOWN ARE APPROXIMATE. COORDINATE EXACT SPEAKER LOCATIONS WITHIN CEILING GRID WITH LIGHT FIXTURES, HVAC AIR DISTRIBUTION DEVICES, FIRE ALARM DEVICES, AND ANY OTHER CEILING MOUNTED DEVICES TO AVOID CONFLICTS. PLACE AS NEAR TO LOCATION INDICATED AS POSSIBLE IN SYMMETRICAL PATTERN. MOUNT TALKBACK SPEAKERS IN CLASSROOMS FOR EASE OF USE BY TEACHER (TALKBACK/CALLOUT) WHILE MAINTAINING ADEQUATE SOUND DISTRIBUTION THROUGHOUT CLASSROOM SPACE.

DIRECT CONNECT NOTE

DIRECT TERMINATE CATEGORY 6 CABLES FOR INTERCOM/PA TALKBACK SPEAKERS WITH PLATINUM TOOLS EZEX-RJ45 TERMINATION SYSTEM WITH EZEX44 OR EZEX48 CONNECTOR AS REQUIRED TO SUIT CABLE CONDUCTOR AND OVERALL JACKET DIAMETERS. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS USING FACTORY EXO CRIMP FRAME WITH EXO-EX DIE (100061C). CABLE JACKET MUST BE EXTENDED INTO THE CONNECTOR FOR STRAIN RELIEF.

INTERCOM/PA SYSTEM HORIZONTAL CABLING CONDUIT SLEEVES NOTE:

CONDUIT SLEEVES FOR INTERCOM/PA SYSTEM HORIZONTAL CABLING: FINAL ROUTING PATHS FOR HORIZONTAL CABLING SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR IN THE FIELD. FOR THIS REASON CONDUIT SLEEVES ARE NOT INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE EMT CONDUIT SLEEVES IN THE QUANTITIES AND LOCATIONS REQUIRED TO SUIT THE CONTRACTOR SELECTED HORIZONTAL CABLE ROUTING AND AS REQUIRED FOR A COMPLETE INSTALLATION, REGARDLESS OF WHETHER THOSE SLEEVES ARE INDICATED ON THE DRAWINGS OR NOT, AND AT NO ADDITIONAL COST TO THE OWNER. AT ALL LOCATIONS WHERE HORIZONTAL CABLING RUNS THRU MECHANICAL OR ELECTRICAL EQUIPMENT ROOMS, STORAGE ROOMS, OR ANY OTHER TYPE OF ROOM WITH EXPOSED STRUCTURE CEILING, ALL SUCH CABLING SHALL BE RUN IN CONTINUOUS CONDUIT SLEEVES EXTENDING TO THE NEAREST ACCESSIBLE LAY-IN CEILING AT BOTH ENDS. IN ADDITION, THE CONTRACTOR SHALL PROVIDE CONDUIT SLEEVES TRAVERSING INACCESSIBLE (HARD) CEILING OR SOFFIT AREAS AND EXTENDING TO THE NEAREST ACCESSIBLE LAY-IN CEILING AT BOTH ENDS FOR CABLE PASS-THRU. SLEEVES SHALL BE SIZED FOR MAXIMUM 30 PERCENT CABLE FILL AND SHALL BE CONSTRUCTED PER THE GENERAL ABOVEGROUND CONDUIT NOTES. GENERAL CONTRACTOR PAINT EXPOSED CONDUIT SLEEVES IN ALL FINISHED/OCCUPIED SPACES WITH EXPOSED STRUCTURE TO MATCH ADJACENT SURFACES. ALL SLEEVES SHALL BE NEW AND SHALL BE USED FOR INTERCOM/PA SYSTEM CABLING ONLY. STRUCTURED CABLING SYSTEM SLEEVES SHALL NOT BE USED UNDER ANY CIRCUMSTANCES.

INTERCOM/PA SYSTEM HORIZONTAL CABLE ROUTING NOTE

ALL INTERCOM/PA SYSTEM CABLING NOT SHOWN TO BE INSTALLED IN CONDUIT SHALL BE RUN ABOVE CEILINGS AND SHALL BE ROUTED UP HIGH DIRECTLY UNDER THE BUILDING ROOF STRUCTURE AND PROPERLY SUPPORTED WITH APPROVED HANGERS AT 4'-0" ON CENTER, BUT DO NOT RUN CABLES CLOSER THAN 6" BELOW ROOF DECK (TO AVOID DAMAGE FROM LONG SCREWS USED IN FUTURE ROOF REPLACEMENTS). RUN ALL CABLING ABOVE DUCTWORK, PIPING, CONDUITS AND ALL OTHER WORK BY OTHER TRADES AND PLACE FOR MAXIMUM PHYSICAL PROTECTION. BUNDLE INTERCOM/PA CABLES TOGETHER AND ROUTE PARALLEL AND PERPENDICULAR TO BUILDING LINES. HANGERS SHALL BE ERICO CADDY "CABLECAT" CATEGORY-5 WITH WIDE BASE LOOP. BUNDLE CABLES AT 4'-0" O.C. WITH PLENUM RATED VELCRO, COLOR YELLOW. ATTACH HANGERS TO THE BUILDING STRUCTURE. DO NOT ATTACH HANGERS TO CEILING GRID OR SUPPORT WIRES, CONDUITS, DUCTWORK, PIPING, OR ANY OTHER SYSTEM COMPONENT OR WORK OF OTHER TRADES. INSTALL CABLES TO AVOID ELECTROMAGNETIC INTERFERENCE FROM MOTORS, TRANSFORMERS, GENERATORS, ELEVATORS, POWER CABLES/CONDUITS, LIGHTING FIXTURES, ETC. DO NOT ROUTE CABLE THRU FIRE DAMPERS, HVAC DUCTS, VENTILATING SHAFTS, OR GRATES. DO NOT BLOCK ACCESS TO PULL/JUNCTION BOXES, HATCHES, DOORS, UTILITY ACCESS PANELS, MECHANICAL SERVICE AREAS, ELECTRICAL SERVICE AREAS, OR ANY OTHER SPACE ASSOCIATED WITH SERVICE OR ACCESS OF ANY TYPE. ALL HANGERS, SUPPORTS AND VELCRO WRAPS SHALL BE NEW AND SHALL BE USED FOR INTERCOM/PA SYSTEM CABLING ONLY. STRUCTURED CABLING SYSTEM CABLE HANGERS SHALL NOT BE USED UNDER ANY CIRCUMSTANCES.

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PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

INTERCOM/PA SYSTEM NOTES & LABELING DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

T305

FIBER PATCH CORD NOTE:
FIBER PATCH CORDS CONNECTING TO OWNER FURNISHED EQUIPMENT SHALL HAVE ENDS TO SUIT THE EQUIPMENT. THE CONTRACTOR SHALL CONTACT THE OWNER'S PROJECT MANAGER PRIOR TO PURCHASING FIBER PATCH CORDS TO DETERMINE THE TYPES OF FIBER PATCH CORD ENDS REQUIRED.

FIBER OPTIC BACKBONE CABLE NOMENCLATURE

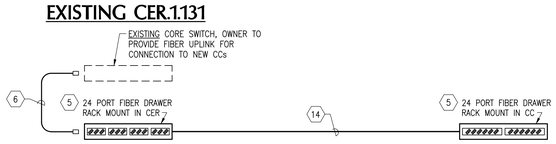
CER.1.131 / CC.X.114
- CER.1.131 — TELCOM ROOM NUMBER POINT OF ORIGIN
- CC.X.114 — TELCOM ROOM NUMBER POINT OF ENDING

FIBER OPTIC CABLE LABELING
LABEL ALL FIBER OPTIC CABLES AS INDICATED WITH PERMANENT MYLAR WRAP WRITE-ON MARKERS

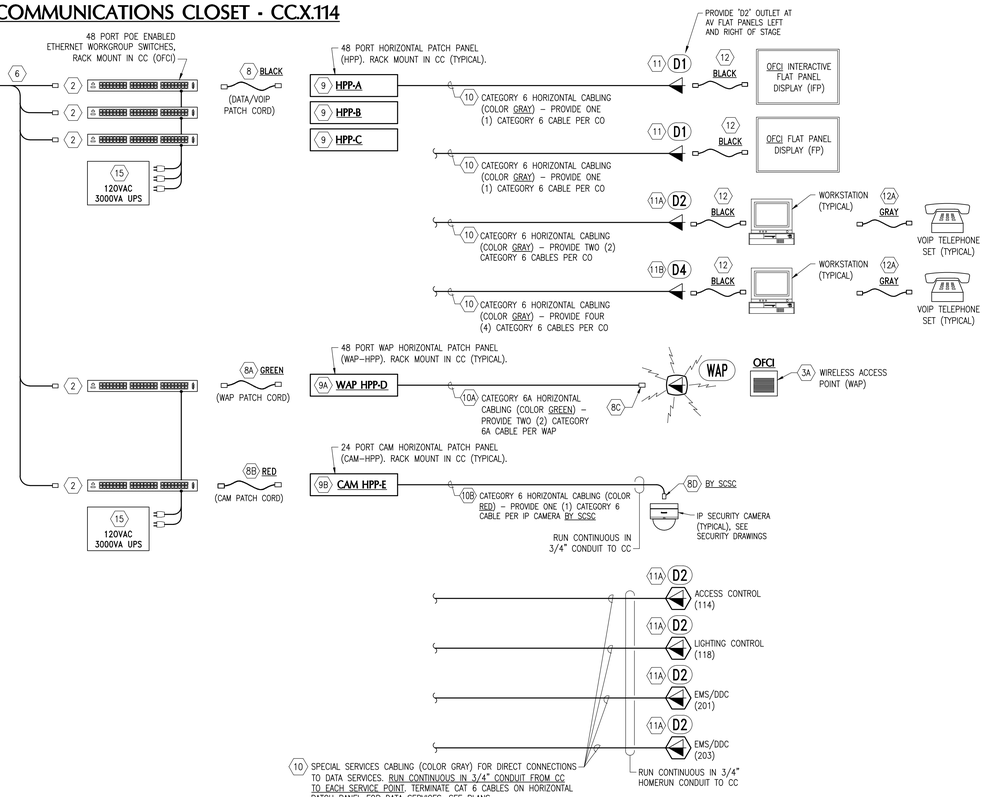
USER/SERVICE COLOR SCHEDULE

SERVICE	EQUIPMENT ROOM PATCH CORDS	PATCH PANEL JACK COLOR	HORIZONTAL CABLING	'CO' MODULAR JACKS	WORK AREA PATCH CORDS
DATA	CAT 6 – BLACK	CAT 6 JACK – BLACK	CAT 6 – GRAY	CAT 6 – MATCH FACEPLATE	CAT 6 – BLACK
VOIP	CAT 6 – BLACK	CAT 6 JACK – BLACK	CAT 6 – GRAY	CAT 6 – MATCH FACEPLATE	CAT 6 – GRAY
WAP	CAT 6A – GREEN	CAT 6A JACK – GREEN	CAT 6A – GREEN	N/A	N/A
CAM	CAT 6A – RED	CAT 6A JACK – RED	CAT 6A – RED	N/A	N/A
INTERCOM/PA	CAT 6 – YELLOW	CAT 6 JACK – YELLOW	CAT 6 – YELLOW	N/A	N/A

EXISTING CER.1.131



COMMUNICATIONS CLOSET - CC.X.114



DATA SYSTEM SINGLE LINE KEY NOTES:

(2) OWNER FURNISHED CONTRACTOR INSTALLED (OFCI): 24 OR 48 PORT POE ENABLED ETHERNET WORKGROUP SWITCH WITH FIBER UPLINK. MOUNT IN RACK AS DIRECTED BY OWNER'S PROJECT MANAGER AND COMPLETE ALL PATCHING – SEE SPECIFICATIONS.

(3A) OWNER FURNISHED CONTRACTOR INSTALLED (OFCI): WIRELESS ACCESS POINT.

(5) FIBER DRAWER FOR OS2 SINGLEMODE BACKBONE CABLING, SPECIFICATION GRADE, 24 FIBER (12 DUPLEX PORTS), RACK MOUNT 1U, BELDEN FX ECX-01U. PROVIDE WITH TWO (2) 12 FIBER (6 DUPLEX PORTS) 'LC' SHUTTERED SINGLEMODE FIBER FUSION SPLICE CASSETTES, COLOR BLUE, BELDEN FCSXOBLDFP. SPLICE CASSETTES SHALL BE FACTORY PRE-LOADED AND SHALL INCLUDE FACTORY 250 MICRON AND 900 MICRON PIGTAILS WITH HEAT SHRINK SLEEVES READY FOR FIELD FUSION SPLICING. SECURE FIBER OPTIC CABLE ASSEMBLY TO FIBER DRAWER USING FACTORY STRAIN RELIEF ATTACHMENTS. LABEL PORTS WITH SOURCE (CER), DESTINATION (MINI-CPS) AND NUMERICAL PORT NUMBER.

(6) FIBER OPTIC PATCH CORD, DUPLEX FIBER, SINGLEMODE, DUAL 'LC' CONNECTORS BOTH ENDS, BELDEN, COLOR YELLOW. PROVIDE QUANTITIES AND LENGTHS AS SCHEDULED THIS SHEET. FOR FIBER PATCH CORDS CONNECTING OWNER FURNISHED EQUIPMENT, PROVIDE 'LC' X OTHER END AS REQUIRED TO SUIT EQUIPMENT. VERIFY END CONNECTORS REQUIRED PRIOR TO PURCHASING, SEE "FIBER PATCH CORD NOTE" THIS SHEET.

(8) EQUIPMENT ROOM DATA/VOIP PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6+ MODULAR PATCH CORD (UTP) 4-PAIR UNSHIELDED CABLE WITH 23 GAGE SOLID COPPER CONDUCTORS, COLOR BLACK. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, BELDEN C6011xxxxx (NO EQUAL). FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. PROVIDE PATCH CORD QUANTITIES AND LENGTHS AS SCHEDULED THIS SHEET. PROVIDE DOCUMENTATION OF FACTORY TESTING AT SUBMITTAL.

(8A) EQUIPMENT ROOM WAP PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6A MODULAR PATCH CORD (UTP) 4-PAIR UNSHIELDED CABLE WITH 23 GAGE SOLID COPPER CONDUCTORS, COLOR GREEN. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, BELDEN C601100xxx (NO EQUAL). FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. PROVIDE PATCH CORD QUANTITIES AND LENGTHS AS SCHEDULED THIS SHEET. PROVIDE DOCUMENTATION OF FACTORY TESTING AT SUBMITTAL.

(8B) EQUIPMENT ROOM CAM PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6+ MODULAR PATCH CORD (UTP) 4-PAIR UNSHIELDED CABLE WITH 23 GAGE SOLID COPPER CONDUCTORS, COLOR RED. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, BELDEN C6011xxxxx (NO EQUAL). FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. PROVIDE PATCH CORD QUANTITIES AND LENGTHS AS SCHEDULED THIS SHEET. PROVIDE DOCUMENTATION OF FACTORY TESTING AT SUBMITTAL.

(8C) DIRECT TERMINATE CATEGORY 6A CABLES FOR WAPS WITH MALE CATEGORY 6A MODULAR PLUG, 8P8C, GOLD PLATED CONTACTS WITH INTEGRAL STRAIN RELIEF BOOT, BELDEN REVConnect "RVAFPUBK" WITH CABLE DIAMETER RANGE MATCHING CATEGORY 6A CABLE PROVIDED. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS USING FACTORY FURNISHED DIE SET AND HAND CRIMP TOOL. CABLE JACKET MUST BE EXTENDED THRU THE STAIN RELIEF BOOT AND INTO THE CABLE JACKET STRAIN RELIEF CRIMP TABS AND PROPERLY SECURED.

(8D) DIRECT TERMINATE CATEGORY 6 CABLES FOR IP SECURITY CAMERAS WITH PLATINUM TOOLS ezEX-RJ45 TERMINATION SYSTEM WITH ezEX44 OR ezEX48 CONNECTOR AS REQUIRED TO SUIT CABLE CONDUCTOR AND OVERALL JACKET DIAMETERS. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS USING FACTORY EXO CRIMP FRAME WITH EXO-EX DIE (100061C). CABLE JACKET MUST BE EXTENDED INTO THE CONNECTOR FOR STRAIN RELIEF.

(9) HORIZONTAL UN-LOADED PATCH PANEL, 48 PORT, TIA 568A PINOUT, BELDEN RVMPPF2U48BK-P. PROVIDE WITH FACTORY PLASTIC LABELING WINDOWS AND BELDEN AX107527 ACCESSORY NON-ADHESIVE LABEL SHEETS, FACTORY CABLE MANAGEMENT BAR, AND MOUNTING HARDWARE. PROVIDE WITH TIA CATEGORY 6+ 8-PIN MODULAR JACKS IN ALL PORTS, BELDEN REVCONNECT RV6MJKUBK COLOR BLACK TO MATCH THE USER/SERVICE COLOR SCHEDULE.

(9A) HORIZONTAL UN-LOADED WAP PATCH PANEL, 48 PORT, TIA 568A PINOUT, BELDEN RVMPPF2U48BK-P. PROVIDE WITH FACTORY PLASTIC LABELING WINDOWS AND BELDEN AX107527 ACCESSORY NON-ADHESIVE LABEL SHEETS, FACTORY CABLE MANAGEMENT BAR, AND MOUNTING HARDWARE. PROVIDE WITH TIA CATEGORY 6A 10GX 8-PIN MODULAR JACKS IN ALL PORTS, BELDEN RV6MJKUGN COLOR GREEN TO MATCH THE USER/SERVICE COLOR SCHEDULE.

(9B) HORIZONTAL UN-LOADED CAM PATCH PANEL, 24 PORT, TIA 568A PINOUT, BELDEN RVMPPF1U24BK-P. PROVIDE WITH FACTORY PLASTIC LABELING WINDOWS AND BELDEN AX107527 ACCESSORY NON-ADHESIVE LABEL SHEETS, FACTORY CABLE MANAGEMENT BAR, AND MOUNTING HARDWARE. PROVIDE WITH TIA CATEGORY 6+ 8-PIN MODULAR JACKS IN ALL PORTS, BELDEN REVCONNECT RV6MJKURD COLOR RED TO MATCH THE USER/SERVICE COLOR SCHEDULE.

(10) TIA CATEGORY 6 DATA/VOIP HORIZONTAL CABLING, 4 PAIR UTP, 23 GAGE SOLID COPPER CONDUCTORS. MAXIMUM INSTALLED LENGTH 90 METERS (295'). PROVIDE DOCUMENTATION OF CURRENT UL CERTIFICATION WITH SUBMITTALS. PROVIDE WITH CMR (RISER) JACKET, COLOR GREY. SEE SCHEDULE THIS SHEET FOR APPROVED CABLES.

(10A) TIA CATEGORY 6A WAP HORIZONTAL CABLING, 4 PAIR UTP, 23 GAGE SOLID COPPER CONDUCTORS. MAXIMUM INSTALLED LENGTH 90 METERS (295'). PROVIDE DOCUMENTATION OF CURRENT UL CERTIFICATION WITH SUBMITTALS. PROVIDE WITH CMR (RISER) JACKET, COLOR GREEN. SEE SCHEDULE THIS SHEET FOR APPROVED CABLES.

(10B) TIA CATEGORY 6 CAM HORIZONTAL CABLING, 4 PAIR UTP, 23 GAGE SOLID COPPER CONDUCTORS. MAXIMUM INSTALLED LENGTH 90 METERS (295'). PROVIDE DOCUMENTATION OF CURRENT UL CERTIFICATION WITH SUBMITTALS. PROVIDE WITH CMR (RISER) JACKET, COLOR RED. SEE SCHEDULE THIS SHEET FOR APPROVED CABLES.

(11) TYPE "D1" COMMUNICATIONS OUTLET (CO) WITH ONE (1) CATEGORY 6 8-PIN MODULAR JACK. SEE PLANS AND DETAILS.

(11A) TYPE "D2" COMMUNICATIONS OUTLET (CO) WITH TWO (2) CATEGORY 6 8-PIN MODULAR JACKS. SEE PLANS AND DETAILS.

(11B) TYPE "D4" COMMUNICATIONS OUTLET (CO) WITH FOUR (4) CATEGORY 6 8-PIN MODULAR JACKS. SEE PLANS AND DETAILS.

(12) WORKSTATION DATA PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6+ MODULAR PATCH CORD (UTP) 4-PAIR UNSHIELDED CABLE WITH 23 GAGE SOLID COPPER CONDUCTORS, COLOR BLACK. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, BELDEN C60110Oxxx (NO EQUAL). FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. PROVIDE PATCH CORD QUANTITIES AND LENGTHS AS SCHEDULED THIS SHEET. PROVIDE DOCUMENTATION OF FACTORY TESTING AT SUBMITTAL.

(12A) WORKSTATION VOIP PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6+ MODULAR PATCH CORD (UTP) 4-PAIR UNSHIELDED CABLE WITH 23 GAGE SOLID COPPER CONDUCTORS, COLOR GRAY. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, BELDEN C6011xxxxx (NO EQUAL). FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. PROVIDE PATCH CORD QUANTITIES AND LENGTHS AS SCHEDULED THIS SHEET. PROVIDE DOCUMENTATION OF FACTORY TESTING AT SUBMITTAL.

(14) FIBER OPTIC BACKBONE 'BLACK' CABLE, LOOSE TUBE PE JACKET DIRECT BURIAL GRADE OUTSIDE PLANT, DRY WATER BLOCK CABLE CORE, GEL FILLED BUFFER TUBES. 24 FIBER COUNT, 24 STRANDS SINGLEMODE (0.40 dB/km @ 1310nm, 0.30 dB/km @ 1550 nm). GENERAL CABLE AQ0244MA-DWB OR ENGINEER APPROVED EQUAL BY CORNING, BELDEN OR SUPERIOR ESSEX. AT BOTH ENDS PROVIDE SLACK IN CABLE BEHIND FIBER DRAWER TO ALLOW DRAWER PULL-OUT. SECURE FIBER OPTIC CABLE ASSEMBLY TO FIBER DRAWER USING FACTORY STRAIN RELIEF ATTACHMENTS. AT BOTH ENDS PROVIDE SLACK IN CABLE BEHIND FIBER DRAWER TO ALLOW DRAWER PULL-OUT. SECURE FIBER OPTIC CABLE ASSEMBLY TO FIBER DRAWER USING FACTORY STRAIN RELIEF ATTACHMENTS. AT BOTH ENDS TERMINATE FIBERS ON FUSION SPLICE PIGTAILS WITH HEAT SHRINK SLEEVES IN BELDEN UNLOADED CASSETTES USING FIELD FUSION SPLICER IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. NEATLY ORGANIZE TERMINATED FIBER WITHIN FIBER DRAWER AND SECURE. RUN CABLE CONTINUOUS FROM SOURCE TO DESTINATION WITH NO SPLICES OR TERMINATIONS.

(15) UNINTERRUPTIBLE POWER SUPPLY (UPS), 3000 VA, PROVIDED BY SCSC. RACK MOUNT IN CC. SEE RACK ELEVATIONS.

DATA SYSTEM SINGLE LINE CONFIGURATION DIAGRAM

NOT TO SCALE

NOTE: RUN ALL CABLES CONTINUOUS BETWEEN TERMINATION POINTS INDICATED WITH NO INTERMEDIATE SLICES OR TERMINATIONS.

APPROVED CATEGORY 6 & CATEGORY 6A HORIZONTAL CABLES

APPLICATION	MANUFACTURER	PART NUMBER	UL JACKET	JACKET COLOR
RISER CAT 6 (DATA/VOIP)	MOHAWK	ADVANCENET 6E M57196	CMR	GRAY
	BERK-TEK	LANMARK 2000 11098648	CMR	GRAY
	GENERAL	GENSPEED 6500 7133933	CMR	GRAY
	BELDEN	3600 SERIES 3613008x1000	CMR	GRAY
RISER CAT 6 (CAMERAS)	MOHAWK	ADVANCENET M57207	CMR	RED
	BERK-TEK	LANMARK 2000 10170693	CMR	RED
	GENERAL	GENSPEED 6500 7133934	CMR	RED
	BELDEN	3600 SERIES 3612xxx	CMR	RED
RISER CAT 6A (WAP)	MOHAWK	GIGALAN10 SD M59151	CMR	GREEN
	BERK-TEK	LANMARK-SST 11091203	CMR	GREEN
	GENERAL	GENSPEED 10MTP 7143854	CMR	GREEN
	BELDEN	10GXS13002	CMR	GREEN
RISER CAT 6 (INTERCOM/PA)	MOHAWK	6 LAN M58294	CMR	YELLOW
	BERK-TEK	LANMARK 2000 10170693	CMR	YELLOW
	GENERAL	GENSPEED 6000 7133962	CMR	YELLOW
	BELDEN	2400 SERIES 2412004	CMR	YELLOW
OSP BURIAL GRADE CAT 6	BERK-TEK	LANMARK-1000 OSP 11072213	NOT RATED	BLACK PE
	GENERAL	GENSPEED OSP 7136100	NOT RATED	BLACK PE
	BELDEN	OSP6U 010	NOT RATED	BLACK PE
OSP BURIAL GRADE CAT 6A	BERK-TEK	LANMARK-10G OSP 11094458	NOT RATED	BLACK PE
	GENERAL	GENSPEED OSP 8136100	NOT RATED	BLACK PE
	BELDEN	OSP6AU 010	NOT RATED	BLACK PE

DATA PATCH CORD SCHEDULE

TYPE	LENGTH/QTY	LENGTH/QTY	LENGTH/QTY	LENGTH/QTY	LENGTH/QTY	LENGTH/QTY	LENGTH/QTY	LENGTH/QTY	LENGTH/QTY
(6) FIBER	1M / 5	2M / 10	3M / 8	10M / 6	-- / --	-- / --	-- / --	-- / --	-- / --
(8) DATA/VOIP	1' / 125	3' / 50	5' / 25	-- / --	-- / --	-- / --	-- / --	-- / --	-- / --
(8A) WAP	1' / 30	3' / 15	5' / 5	-- / --	-- / --	-- / --	-- / --	-- / --	-- / --
(8B) CAM	1' / 20	3' / 10	5' / 5	-- / --	-- / --	-- / --	-- / --	-- / --	-- / --
(12) DATA	-- / --	3' / 25	5' / 50	7' / 75	10' / 25	-- / --	-- / --	-- / --	-- / --
(12A) VOIP	-- / --	-- / --	5' / 10	7' / 15	10' / 10	-- / --	-- / --	-- / --	-- / --

DATA PATCH CORD SCHEDULE NOTES:

1) FURNISH PATCH CORDS TO OWNER LOOSE PRIOR TO INSTALLATION. VERIFY ALL QUANTITIES AND LENGTHS WITH THE OWNER'S PROJECT MANAGER AND PROVIDE SIGNED COPY OF RECEIPT TO ENGINEER AT PROJECT SUBSTANTIAL COMPLETION.

2) SEE SPECIFICATIONS FOR DETAILED REQUIREMENTS FOR PATCH CORD DELIVERY AND INSTALLATION. ALL PATCH CORDS SHALL BE NEATLY ROUTED, BUNDLED AND SECURED AT 6" ON CENTER WITH BLACK VELCRO STRAPS. BUNDLE DATA PATCH CORDS SEPARATELY, DO NOT BUNDLE WITH VOICE PATCH CORDS. BUNDLE FIBER OPTIC PATCH CORDS SEPARATELY FROM COPPER PATCH CORDS.

3) PROVIDE EXCEL SPREADSHEET IDENTIFYING CONNECTIONS MADE, SEE SPECIFICATIONS.

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REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER BICSI Gregory A. Cook BICSI ID # 104998 EXPIRES 12-31-27 RCDD

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

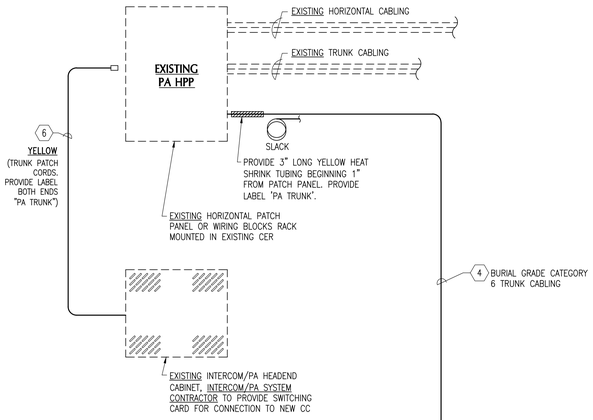
No.	Description	Date

DATA SYSTEM SINGLE LINE DIAGRAM

PROJECT NUMBER 22019
DATED 01/31/2025

T401

EXISTING CER.1.131



INTERCOM/PA SYSTEM SINGLE LINE KEY NOTES:

(2) BY INTERCOM/PA SYSTEM CONTRACTOR: DISPLAY ADMINISTRATIVE CONSOLE, CAREHAWK DA1. EXACT LOCATIONS ANYWHERE AS DIRECTED BY SCHOOL – ELECTRICAL CONTRACTOR AND CM COORDINATE WITH PRINCIPAL FOR LOCATION PRIOR TO ROUGH–IN. PROVIDE WALL PLATE AND PATCH CORD FOR EACH LOCATION WITHIN 24" OF LOCATION DIRECTED BY PRINCIPAL.

(3) BY INTERCOM/PA SYSTEM CONTRACTOR: 32 PORT SWITCHING MODULE, CAREHAWK SS32. PROVIDES ANNUNCIATION CALL–IN AND BIDIRECTIONAL COMMUNICATIONS WITH DISPLAY ADMIN CONSOLES. RACK MOUNT USING CAREHAWK PART #84103 RACK MOUNT KIT, QUANTITY AS REQUIRED. BOND DIRECTLY TO CC GROUNDING BUSBAR WITH #10 AWG INSULATED GROUNDING CONDUCTOR (GREEN) AND HEAVY DUTY COMPRESSION RING CONNECTORS, MATCH RING SIZE TO FASTENER SIZE, ATTACH TO SS32 AT FACTORY DESIGNATED AND MASKED OFF POINT AT CASING MOUNTING FLANGE FOR CLEAN METAL–TO–METAL CONTACT, ROUTE GROUNDING CONDUCTOR ALONG AND SECURE TO BACK OF RACK USING SCSC PROVIDED NYLON CABLE STANDOFF BRACKETS, UP TO CABLE RUNWAY AND IN A DIRECT PATH PARALLEL TO RUNWAY LINES OVER TO BACKBOARD AND DOWN TO BUSBAR, ROUTE WITH AND SECURE SAME AS OTHER GROUNDING CONDUCTORS BY SCSC.

(4) BY INTERCOM/PA SYSTEM CONTRACTOR: SIX OSP BURIAL GRADE CATEGORY 6 CABLES, BELDEN '0SP6U' (NO EQUAL). PULL IN ALONG WITH FIBER OPTIC BACKBONE CABLING TO CC. TWO CABLES ARE SPARE, TERMINATE, TEST, LABEL AND COIL 20 FEET SLACK EACH END ON BACK OF VERTICAL CABLE RUNWAY AT UNDERGROUND CONDUIT ENTRY. PROVIDE INDUSTRIAL GRADE SURGE PROTECTION AT EACH END, DITEK OR ENGINEER APPROVED EQUAL – INSTALL AND BOND TO GROUND IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

(6) BY INTERCOM/PA SYSTEM CONTRACTOR: EQUIPMENT ROOM INTERCOM/PA PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6 MODULAR PATCH CORD (UTP) 4–PAIR UNSHIELDED CABLE WITH 23 GAGE SOLID COPPER CONDUCTORS, COLOR YELLOW. PROVIDE WITH 8–PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, BELDEN C6011xxxxx (NO EQUAL). FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. PROVIDE PATCH CORD QUANTITIES AND LENGTHS AS REQUIRED PLUS 25% SPARE. PROVIDE DOCUMENTATION OF FACTORY TESTING AT SUBMITTAL.

(7) BY INTERCOM/PA SYSTEM CONTRACTOR: HORIZONTAL UN–LOADED PATCH PANEL, 48 PORT, TIA 568A PINOUT, BELDEN RVMPPF2U48BK–P. PROVIDE WITH FACTORY PLASTIC LABELING WINDOWS AND BELDEN AX107527 ACCESSORY NON–ADHESIVE LABEL SHEETS, FACTORY CABLE MANAGEMENT BAR, AND MOUNTING HARDWARE. PROVIDE WITH TIA CATEGORY 6+ 8–PIN MODULAR JACKS IN ALL PORTS, BELDEN REVCONNECT RV6MJKUYL COLOR YELLOW TO MATCH THE USER/SERVICE COLOR SCHEDULE. SEE SCHEDULE ON SHEET T401. SEE CATEGORY 6 CABLE NOTE BELOW FOR PINOUT.

(8) BY INTERCOM/PA SYSTEM CONTRACTOR: TIA CATEGORY 6 INTERCOM/PA HORIZONTAL CABLING, 4 PAIR UTP, 23 GAGE SOLID COPPER CONDUCTORS. MAXIMUM INSTALLED LENGTH 90 METERS (295'). PROVIDE DOCUMENTATION OF CURRENT UL CERTIFICATION WITH SUBMITTALS. PROVIDE WITH CMR (RISER) JACKET, COLOR YELLOW. SEE SCHEDULE ON SHEET T401 FOR APPROVED CABLES. PINOUT FOR THE CAREHAWK SYSTEM IS NOT TIA 568A OR 568B BUT IS CUSTOM FOR THE CAREHAWK SYSTEM, PUNCH DOWN ACCORDINGLY.

(9) BY INTERCOM/PA SYSTEM CONTRACTOR: WORKSTATION PATCH CORDS FOR INTERCOM/PA ADMIN HANDSET, FACTORY TERMINATED AND TESTED CATEGORY 6 MODULAR PATCH CORD (UTP) 4–PAIR UNSHIELDED CABLE WITH 23 GAGE SOLID COPPER CONDUCTORS, COLOR BLACK. PROVIDE WITH 8–PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, BELDEN C601100xxx (NO EQUAL). FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. PROVIDE PATCH CORD QUANTITIES AND LENGTHS AS REQUIRED PLUS 25% SPARE. PROVIDE DOCUMENTATION OF FACTORY TESTING AT SUBMITTAL.

ALLOWANCE FOR INTERCOM/PA SYSTEM

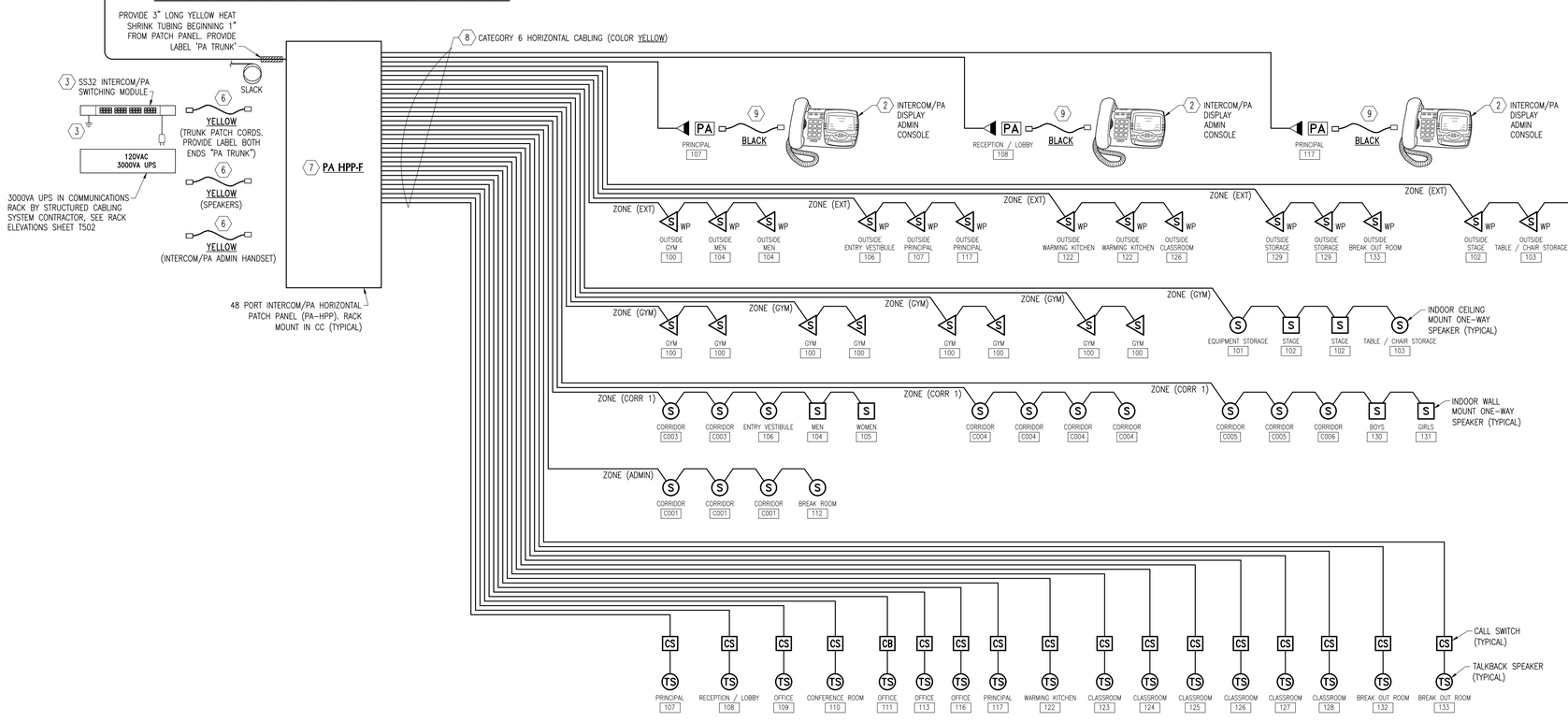
THE GENERAL CONTRACTOR SHALL INCLUDE AN ALLOWANCE FOR THE PROVISION OF A COMPLETE INTERCOM/PA SYSTEM FOR THIS PROJECT IN THE BASE BID. ALL REFERENCES TO MATERIALS AND LABOR ASSOCIATED WITH THE INTERCOM/PA SYSTEM WITHIN THE CONTRACT DOCUMENTS SHALL BE INCLUDED IN THIS ALLOWANCE UNLESS SPECIFICALLY INDICATED OTHERWISE. THE AMOUNT OF THE ALLOWANCE SHALL BE ISSUED AS AN ADDENDUM PRIOR TO THE BID DATE. THE SCOPE OF WORK FOR THE ALLOWANCE SHALL INCLUDE:

1. THE INTERCOM/PA SYSTEM COMPLETE WITH ALL DEVICES AND EQUIPMENT DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS, TO INCLUDE A FULL INTERFACE TO THE EXISTING SCHOOL CAREHAWK INTERCOM/PA SYSTEM AND THREE NEW ADMIN CONSOLES.
2. ALL DEVICES AND EQUIPMENT IN THE INTERCOM/PA SYSTEM PROVIDER'S COST PROPOSAL AND ASSOCIATED STATEMENT OF WORK.
3. ALL OTHER DEVICES AND EQUIPMENT REQUIRED FOR A COMPLETE SYSTEM.
4. ALL ASSOCIATED CABLING.
5. ALL WIRING AND CABLING, ALL CABINETS AND ENCLOSURES AND ALL PROGRAMMING AND SETUP REQUIRED TO MAKE THE SYSTEM FULLY OPERATIONAL AND FUNCTIONAL TO THE SATISFACTION OF THE OWNER.
6. AN INTERFACE TO THE TELEPHONE SYSTEM TO ALLOW INTERCOM/PA CALLS TO BE MADE THRU ANY VOIP TELEPHONE SET ANYWHERE ON CAMPUS.

RELATED WORK TO BE PROVIDED BY OTHERS UNDER THE BASE BID BUT NOT INCLUDED IN THE SCOPE OF THE ALLOWANCE SHALL INCLUDE A '0Z' SPECIAL SERVICES COMMUNICATIONS OUTLET AT THE INTERCOM/PA SYSTEM FOR CONNECTION TO THE VOIP TELEPHONE SYSTEM (BY THE STRUCTURED CABLING SYSTEM CONTRACTOR), CONDUIT FOR ALL INTERCOM/PA SYSTEM WIRING AND CABLING (BY THE ELECTRICAL CONTRACTOR), AND ALL POWER AND GROUNDING REQUIRED FOR THE SYSTEM (BY THE ELECTRICAL CONTRACTOR). EACH ELECTRICAL CONTRACTOR PROVIDING A BID FOR THIS PROJECT SHALL BE RESPONSIBLE FOR COORDINATING THE ASSOCIATED CONDUIT, POWER AND GROUNDING WORK WITH THE SYSTEM PROVIDER PRIOR TO BIDS – BUT THE SCOPE OF CONDUIT AND POWER WORK SHALL NOT BE LESS THAN THAT DESCRIBED ON THE DRAWINGS.

THE INTERCOM/PA SYSTEM CONTRACTOR SHALL BE JACKSONVILLE SOUND & COMMUNICATIONS, TALLAHASSEE FL. CONTACT JAMIE BAKER AT J.BAKER@JSCSYSTEMS.NET.

COMMUNICATIONS CLOSET - CC.X.114



INTERCOM/PA SYSTEM SINGLE LINE CONFIGURATION DIAGRAM

NOT TO SCALE

NOTE

SEE FLOOR PLAN FOR SPEAKER AND CALL BUTTON QUANTITIES IF GREATER THAN THE QUANTITY SHOWN ON THE SINGLE LINE.

NOTE: RUN ALL CABLES CONTINUOUS BETWEEN TERMINATION POINTS INDICATED WITH NO INTERMEDIATE SLICES OR TERMINATIONS.

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A New Gymatorium for:
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REVISIONS:

No.	Description	Date

INTERCOM/PA SYSTEM SINGLE LINE DIAGRAM

PROJECT NUMBER	22019
DATED	01/31/2025

T402

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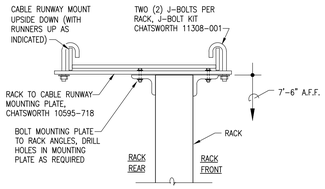
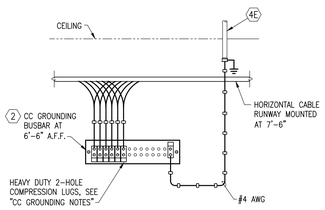
CABLE RUNWAY MOUNTING HEIGHT NOTE

BOTTOM OF CABLE RUNWAY MUST BE MOUNTED AT EXACTLY 7'-6" ABOVE THE FINSHED FLOOR TO ALLOW INSTALLATION OF 7'-6" HIGH RACKS. RACKS ARE 7'-6" HIGH TO ALLOW CABLE RUNWAY TO CLEAR DOOR FRAMES.



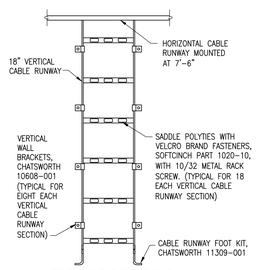
TYPICAL CABLE RUNWAY RACK SUPPORT DETAIL

NOT TO SCALE



TYPICAL CC GROUNDING BUSBAR DETAIL

NOT TO SCALE



7C TYPICAL VERTICAL CABLE RUNWAY DETAIL

NOT TO SCALE

CC ENLARGED FLOOR PLAN KEY NOTES:

1. PLYWOOD BACKBOARD, 8'-0" HIGH X FULL WIDTH OF WALL AS INDICATED, MOUNT WITH BOTTOM AT 6" ABOVE FINISH FLOOR. ROUGH ALL ELECTRICAL OUTLETS INTO WALL BEHIND BACKBOARD AND BACKBOARD FOR FLUSH MOUNT INSTALLATION OF FACEPLATES. COORDINATE WORK WITH ELECTRICAL CONTRACTOR TO ENSURE THAT POWER RECEPTACLES ARE PROPERLY LOCATED. POWER CONDUITS ARE RECESSED INTO WALL AND BACKBOARD, AND FACEPLATES ARE FLUSH ON FACE OF BACKBOARD. FILL AND SAND SMOOTH ALL SEAMS, COUNTERSUNK SCREW HOLES AND VOIDS. PRIME WITH TWO COATS PRIMER, SANDING SMOOTH AFTER EACH COAT. PRETREAT BARE PLYWOOD WITH FLAMECHECK M-111 AND ALLOW TO DRY BEFORE PAINTING. APPLY FIRST COAT WITH FIRE RETARDANT PAINT – ADD 8 OUNCES OF FLAMECHECK M-111PA TO ONE GALLON OF ACRYLIC PAINT, THOROUGHLY MIX AND APPLY TWO FULL COATS FOR 2 MIL THICKNESS PER MANUFACTURER'S PRINTED RECOMMENDATIONS. FINISH WITH THICK COAT OF SEMI-GLOSS ACRYLIC PAINT, COLOR BATTLESHIP GREY. FINAL SURFACE SHALL BE UNIFORMLY SMOOTH AND EVEN. TOUCH UP AT END OF PROJECT.

   SPECIAL BACKBOARD DUST CONTROL NOTE: COMPLETE ALL BACKBOARD WORK INCLUDING FINISH PAINTING PRIOR TO INSTALLATION OF RACKS AND BACKBOARD MOUNTED EQUIPMENT AND PRIOR TO PULLING CABLING INTO CC.

2. CC GROUNDING BUSBAR, HARGER GBI-14420G WITH TWO ROWS OF 7/16"ø HOLES AT 1" SPACING EACH WAY. MAKE ALL CONNECTIONS WITH TWO HOLE LONG BARREL COMPRESSION LUGS (HARGER GECLB4-2C FOR #4 AWG, GECLB6-2C FOR #6 AWG) AND BOND TO BUSBAR WITH TWO 3/8"ø SS HEX HEAD CAP SCREWS WITH SS LOCKING NUTS. SEE "CC GROUNDING NOTES" AND "VOICE SYSTEM SINGLE LINE CONFIGURATION DIAGRAM".

3. BY ELECTRICAL CONTRACTOR: 120 VAC 20 AMP DOUBLE DUPLEX POWER RECEPTACLE. ROUGH-IN WALL BOX FLUSH WITH FACE OF BACKBOARD. EXTEND EMT CONDUIT FROM BOX CONCEALED BEHIND BACKBOARD. SEE ELECTRICAL DRAWINGS.

3A. BY ELECTRICAL CONTRACTOR: 120 VAC 20 AMP DOUBLE DUPLEX POWER RECEPTACLE. MOUNT DIRECTLY UNDER CCTV ENCLOSURE CHASE NIPPLE FOR POWER CORD PASS-THRU. ROUGH-IN WALL BOX FLUSH WITH FACE OF BACKBOARD. EXTEND EMT CONDUIT FROM BOX CONCEALED BEHIND BACKBOARD. SEE ELECTRICAL DRAWINGS.

3B. BY ELECTRICAL CONTRACTOR: 120 VAC 20 AMP SIMPLEX POWER RECEPTACLE WITH DEDICATED 120 VAC 20 AMP CIRCUIT. MOUNT ON BACKSIDE OF CABLE RUNWAY IN NON-METALLIC SINGLE GANG BOX TO SERVE RACK MOUNTED POWER SURGE SUPPRESSOR. PROVIDE 1/2" PVC ELECTRICAL CONDUIT FROM BACKBOARD ALONG UNDERSIDE OF CABLE RUNWAY, SAME AS REQUIRED FOR 30 AMP POWER OUTLET. PAINT FLAT BLACK. SEE ELECTRICAL DRAWINGS.

3C. ELECTRICAL CONTRACTOR: 120 VAC L5-30 30 AMP POWER RECEPTACLE WITH DEDICATED 120 VAC 30 AMP CIRCUIT. MOUNT ON HEAVY DUTY (3/16" THICK) BLANK FILLER PLATE ON REAR OF RACK AS INDICATED TO SERVE 3000 VA UPS. RUN POWER CIRCUIT FROM BACKBOARD IN PVC ELECTRICAL CONDUIT UNDER CABLE RUNWAY AND IN FLEXIBLE NON-METALLIC CONDUIT INSIDE OF RACK CHANNEL CONCEALED – MAINTAIN MINIMUM SEPARATION FROM DATA CABLING. PAINT ALL FLAT BLACK. SEE "TYPICAL POWER CONDUIT TO UPS 30 AMP POWER OUTLET DETAIL", "TYPICAL 3000 VA UPS 30 AMP POWER OUTLET MOUNTING DETAIL" AND "TYPICAL RACK POWER DISTRIBUTION DIAGRAM" DETAILS, SHEET T6.2. SEE ELECTRICAL DRAWINGS.

4. UNDERGROUND BACKBONE CONDUIT. SEE "COMMUNICATIONS SITE PLAN" FOR CONDUIT REQUIREMENTS AND ROUTING. SEE SINGLE LINE CONFIGURATION DIAGRAMS SHEETS FOR CABLE REQUIREMENTS. TURN UP WITH CONDUIT CENTERLINE AT 6" FROM BACKBOARD AND TERMINATE AT 4" A.F.F WITH PVC END BELL PRIOR TO INSTALLING CABLING.

4B. 3/4" HOMERUN CONDUITS FOR DIRECT CONNECTIONS TO SPECIAL SERVICES. SEE "SPECIAL SERVICES NOTE" SHEET T201. STUB CONDUITS THRU CEILING TILE (TRIM TILE CLOSE AROUND CONDUIT) AND TERMINATE AT 8" ABOVE CABLE RUNWAY.

4C. EMT CONDUIT SLEEVES (CAT 6 & CAT 6A) UP INTO CEILING SPACE, SIZE AS INDICATED. STUB CONDUIT SLEEVE THRU CEILING TILE (TRIM TILE CLOSE AROUND CONDUIT) AND TERMINATE AT 8" ABOVE CABLE RUNWAY. SECURE EACH SLEEVE ABOVE AND BELOW CEILING – PROVIDE SUPPORTS AS REQUIRED. CONNECTORIZE EACH END OF CONDUIT AND INSTALL PLASTIC INSULATING BUSHINGS ON CONNECTORS BEFORE PULLING CABLING. LOCATE SLACK CABLE ABOVE CEILING (NOT IN CC CABLE RUNWAY), COIL SLACK CABLE IN NEAT "U BENDS" BUNDLED WITH VELCRO AND SECURED TO ROOF STRUCTURE. BOND STRUT TO GROUNDING BUSBAR.

4D. EMT CONDUIT SLEEVES (INTERCOM/PA) UP THRU CEILING AND INTO PULL BOX ABOVE, SIZE AS INDICATED, QUANTITY AS INDICATED OR PROVIDE ADDITIONAL SLEEVES IF SO DIRECTED BY INTERCOM/PA SYSTEM PROVIDER. STUB CONDUIT SLEEVE THRU CEILING TILE (TRIM TILE CLOSE AROUND CONDUIT) AND TERMINATE AT 8" ABOVE CABLE RUNWAY. SECURE EACH SLEEVE ABOVE AND BELOW CEILING – PROVIDE SUPPORTS AS REQUIRED. CONNECTORIZE EACH END OF CONDUIT AND INSTALL PLASTIC INSULATING BUSHINGS ON CONNECTORS BEFORE PULLING CABLING. LOCATE SLACK CABLE IN PULL BOX ABOVE CEILING, COIL SLACK CABLE IN NEAT "U BENDS" BUNDLED WITH VELCRO. BOND STRUT TO GROUNDING BUSBAR.

4E. BY ELECTRICAL CONTRACTOR: 3/4" EMT CONDUIT TO BUILDING MAIN ELECTRICAL PANEL FOR GROUNDING CONDUCTOR. PROVIDE WITH INSULATED GROUNDING BUSHING – MALLEABLE IRON, STEEL CITY #BG-80Z.

5. FLOOR MOUNT EQUIPMENT RACK. REFER TO RACK ELEVATION DETAILS.

7. 18" WIDE CABLE RUNWAY, CHATSWORTH 10250-718, COLOR BLACK. PROVIDE BUTT-SPLICE KIT, CHATSWORTH 11301-001 TO BUTT-SPLICE SECTIONS OF CABLE RUNWAY (PAINT BEFORE INSTALLING AND TOUCH UP AFTER INSTALLATION). INSTALL ALL CABLE RUNWAY, FITTINGS, AND ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.

7F. CABLE RUNWAY WALL ANGLE SUPPORT KIT, CHATSWORTH 11421-718.

7G. 18" WIDE CABLE RUNWAY, MOUNTED VERTICALLY FROM CONDUIT ENTRANCE IN FLOOR TO 7'-6". SEE "TYPICAL VERTICAL CABLE RUNWAY DETAIL".

8. 1" UNDERGROUND HOMERUN CONDUIT FROM COs, WAPS, INTERCOM/PA SPEAKERS, SECURITY CAMERAS, SECURE DOORS AND MONITORED DOORS SHOWN TO HAVE CABLES RUN BELOW GRADE. SEE COMMUNICATIONS FLOOR PLANS, IP SECURITY CAMERA PLANS AND ACCESS CONTROL PLANS FOR CONDUIT REQUIREMENTS. SEE SINGLE LINE DIAGRAMS SHEETS FOR CABLE REQUIREMENTS. TURN UP WITH CONDUITS GROUPED TIGHT TOGETHER BY APPLICATION AND TERMINATE AT 4" A.F.F WITH PVC END BELL PRIOR TO INSTALLING CABLING.

CC GENERAL NOTES:

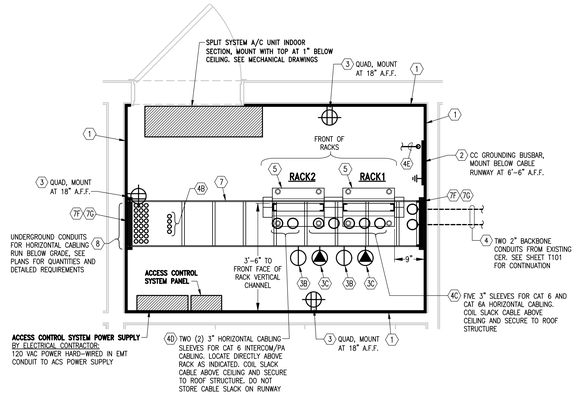
CABLE ROUTING: ROUTE CABLING IN CABLE RUNWAY. BUNDLE FIBER OPTIC, VOICE BACKBONE AND HORIZONTAL CABLING SEPARATELY. SECURE BUNDLES WITH BLACK VELCRO AT MINIMUM OF 12" ON CENTER IN CABLE RUNWAY AND AT MINIMUM OF 6" ON CENTER IN RACK VERTICAL CABLING SECTIONS. THE FINISHED INSTALLATION SHALL MEET THE APPROVAL OF THE ENGINEER FOR OVERALL QUALITY, ORGANIZATION, AND NEATNESS OF APPEARANCE. SEE SINGLE LINE CONFIGURATION DIAGRAMS FOR CABLE TYPES AND QUANTITIES.

BACKBOARD LAYOUT: BACKBOARD AND RACK ARRANGEMENT AND EQUIPMENT LOCATIONS INDICATED ARE DRAWN TO SCALE. DO NOT MODIFY LAYOUT WITHOUT PRIOR APPROVAL OF ENGINEER. USE ALL BLACK HARDWARE ON FACE OF RACKS.

CC FASTENERS: ALL ATTACHMENTS MADE TO CABLE TRAY OR RACKS SHALL HAVE SCREWS, BOLTS OR ANY OTHER MOUNTING HARDWARE INSTALLED IN DIRECTION AWAY FROM ANY COMMUNICATIONS CABLING. SELF TAPPING SCREWS ARE NOT ACCEPTABLE. ALL MOUNTING SCREWS SHALL BE BLACK.

CC PAINTING: TOUCH-UP PAINT ALL NICKS AND SCRATCHES ON ALL RACKS, CABLE RUNWAY, BACKBOARDS, ETC. AFTER INSTALLATION IS COMPLETE. TOUCH-UP SHALL BE DONE USING MANUFACTURER PROVIDED PAINT TO MATCH. ALL SCREWS, NUTS, AND BOLTS SHALL BE PAINTED TO MATCH HARDWARE.

CATEGORY 6 TERMINATIONS: MAKE ALL TERMINATIONS IN STRICT ACCORDANCE WITH TIA GUIDELINES AS WELL AS THE MANUFACTURER'S PRINTED INSTRUCTIONS FOR BOTH THE CABLE AND THE TERMINATION DEVICE FOR ALL FIELD CONNECTIONS IN THE "HORIZONTAL TELECOMMUNICATIONS LINK". STRIP CABLE JACKET BACK A MAXIMUM OF 1 INCH FROM THE POINT OF TERMINATION. MAINTAIN FACTORY SYMMETRICAL CABLE TWISTS TO WITHIN 0.5 INCHES (13 MM MAXIMUM) OF THE POINT OF TERMINATION. PROVIDE CABLE SLACK AT EACH END TO ALLOW MINIMUM OF FIVE (5) FUTURE RETERMINATIONS WITHOUT RE-ROUTING CABLE. SEE CO MOUNTING DETAILS, BACKBOARD ELEVATIONS, AND CC DETAILS.



CC.X.114 - ENLARGED FLOOR PLAN

SCALE: 1/2" =1'-0"

NORTH

ELECTRICAL CONTRACTOR NOTE

IN CC, RECESS ALL POWER CONDUITS AND DEVICE BOXES INTO WALLS BEHIND BACKBOARD TO ALLOW FLUSH MOUNTING OF POWER OUTLET FACE PLATES. DO NOT SURFACE MOUNT CONDUITS ON BACKBOARDS

CC LIGHT FIXTURE NOTE

LOCATE LIGHT FIXTURES TO CLEAR CABLE RUNWAY FOR LAMP CHANGE/FIXTURE MAINTENANCE, REGARLESS OF FIXTURE LAYOUT INDICATED ON ELECTRICAL DRAWINGS. PROVIDE UNIFORM 50 FOOTCANDLE LIGHT LEVEL AT 48" A.F.F.

CC GROUNDING NOTES

1. ALL GROUND CONNECTIONS SHALL BE MADE WITH HEAVY DUTY 2 HOLE COMPRESSION LUGS (HARGER GECLB4-2C FOR #4AWG, GECLB6-2C FOR #6AWG) AND 3/8"ø SS HEX HEAD CAP SCREWS WITH SS LOCKING NUTS (TWO SCREWS AND NUTS PER 2 HOLE LUG).
2. PROVIDE GROUNDING BUSBAR IN "CC" AS INDICATED. ELECTRICAL CONTRACTOR GROUND MAIN BUSBAR TO BUILDING MAIN ELECTRICAL SERVICE GROUND (BUILDING IN WHICH CC IS LOCATED) WITH #4 AWG INSULATED (GREEN) SOLID COPPER GROUNDING CONDUCTOR. RUN CONDUCTOR FROM BUSBAR LOCATION TO BUILDING MAIN ELECTRICAL SERVICE GROUND IN EMT CONDUIT. PROVIDE UL LISTED RIGID CONDUIT THREADED MALLEABLE IRON INSULATED GROUNDING BUSHING WITH BRONZE LUG (O-Z/GEDNEY TYPE IBC-L-BC) AT BOTH CONDUIT ENDS AND GROUND EACH END PER NEC. GROUNDING TO BUILDING STRUCTURE, CONDUITS, UTILITY PIPING, OR ELECTRICAL SUBPANELS IN LIEU OF BONDING TO BUILDING MAIN ELECTRICAL SERVICE GROUND IS NOT ACCEPTABLE.
3. GROUND ALL COMMUNICATION RACKS WITH #6 AWG INSULATED (GREEN) SOLID COPPER GROUNDING CONDUCTOR TO MAIN GROUNDING BUSBAR. GROUND RACKS INDIVIDUALLY TO BUSBAR (DO NOT LOOP GROUNDS). ROUTE CONDUCTOR ALONG RACK REAR AND IN CABLE RUNWAY TO GROUNDING BUSBAR.
4. GROUND EACH CONDUIT AND CONDUIT SUPPORT STRUT WITH #6 AWG INSULATED (GREEN) SOLID COPPER GROUNDING CONDUCTOR TO GROUNDING BUSBAR. ROUTE CONDUCTOR IN CABLE RUNWAY TO GROUNDING BUSBAR.
5. GROUND CABLE RUNWAY WITH #6 AWG INSULATED (GREEN) SOLID COPPER GROUNDING CONDUCTOR TO GROUNDING BUSBAR. ROUTE CONDUCTOR IN CABLE RUNWAY TO GROUNDING BUSBAR.
6. PROVIDE UL LISTED RIGID CONDUIT THREADED MALLEABLE IRON INSULATED GROUNDING BUSHING WITH BRONZE LUG (O-Z/GEDNEY TYPE IBC-L-BC) ON END OF BACKBONE CONDUITS AND GROUND TO BUSBAR WITH #6 AWG INSULATED (GREEN) COPPER GROUNDING CONDUCTOR. PLASTIC INSULATING BUSHING IS ALSO REQUIRED.

Graphic Scale

2 1 0 2FT 4FT

SCALE: 1/2" = 1'-0"

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REVISIONS:

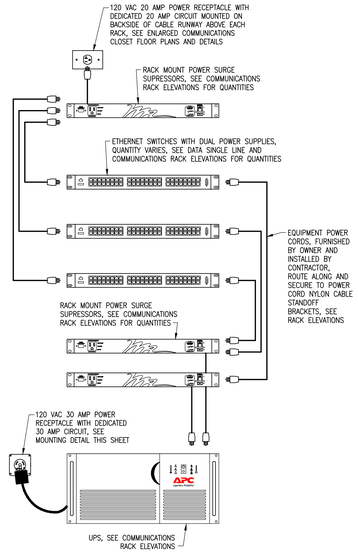
No.	Description	Date

COMMUNICATIONS CLOSET ENLARGED FLOOR PLAN

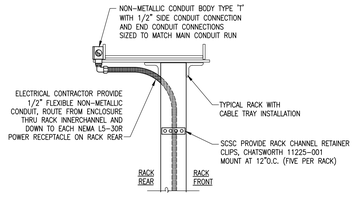
PROJECT NUMBER 22019

DATED 01/31/2025

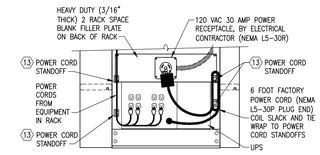
T501



TYPICAL RACK POWER DISTRIBUTION DIAGRAM
NOT TO SCALE



TYPICAL POWER CONDUIT TO UPS 30 AMP POWER OUTLET DETAIL



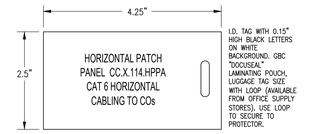
POWER CORD ROUTING DETAIL AT UPS PARTIAL RACK REAR ELEVATIONS

ENGRAVED PLASTIC TAG WITH 1/2" HIGH WHITE LETTER ON BLACK BACKGROUND. TAG SHALL HAVE ALL EDGES BEVELED AND SMOOTH, SECURE TAG WITH DOUBLE SIDED TAPE ON FAR RIGHT SIDE OF PATCH PANEL FRONT FACE

A

TYPICAL HORIZONTAL PATCH PANEL ENGRAVED TAG DETAIL
NOT TO SCALE

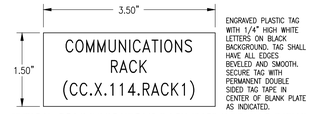
SEE "COMMUNICATIONS TYPICAL LABELING DETAILS"



I.D. TAG WITH 0.15" HIGH BLACK LETTERS ON WHITE BACKGROUND. GBC "DOCUSEAL" LAMINATING POUCH, LUGGAGE TAG SIZE WITH LOOP (AVAILABLE FROM OFFICE SUPPLY STORES). USE LOOP TO SECURE TO PROTECTOR.

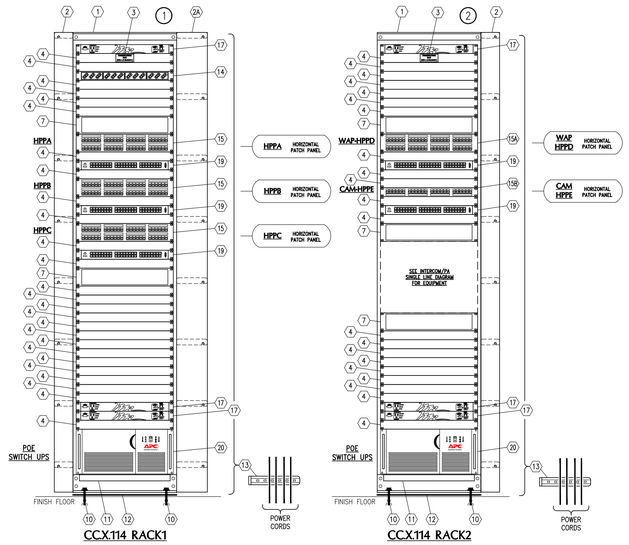
TYPICAL HORIZONTAL PATCH PANEL LAMINATED I.D. TAG DETAIL
NOT TO SCALE

SEE "COMMUNICATIONS TYPICAL LABELING DETAILS"



ENGRAVED PLASTIC TAG WITH 1/4" HIGH WHITE LETTERS ON BLACK BACKGROUND. TAG SHALL HAVE ALL EDGES BEVELED AND SMOOTH. SECURE TAG WITH PERMANENT DOUBLE SIDED TAG TAPE IN CENTER OF BLANK PLATE AS INDICATED.

TYPICAL COMMUNICATIONS RACK ENGRAVED TAG DETAIL
FULL SIZE



COMMUNICATIONS RACK ELEVATIONS
SCALE: 1"= 1'-0"

COMMUNICATIONS RACK ELEVATION KEY NOTES:

1. UNIVERSAL 7'-6" HIGH x 19" WIDE ALUMINUM FLOOR MOUNT RACK WITH UNIVERSAL 5/8", 5/8", 1/2" ALTERNATING HOLE PATTERN FRONT AND BACK, AND BLACK BAKED ENAMEL FINISH, CHATSWORTH 46353-705. PROVIDE WITH GROUND TERMINAL BLOCK, CHATSWORTH 08009-001.
2. DOUBLE SIDED VERTICAL CABLE MANAGER WITH INTEGRAL HINGED FRONT DOOR/COVER, SIZE 3.65" x 7'-6", COLOR BLACK, CHATSWORTH "CCS" 30161-705.
2A. DOUBLE SIDED VERTICAL CABLE MANAGER WITH INTEGRAL HINGED FRONT DOOR/COVER, SIZE 6" x 7'-6", COLOR BLACK, CHATSWORTH "CCS" 30162-705.
3. IDENTIFICATION TAG AT TOP OF RACK, SEE "TYPICAL COMMUNICATIONS RACK ENGRAVED TAG DETAIL".
4. ONE RACK SPACE BLANK FILLER PLATE, COLOR BLACK, CHATSWORTH 30026-701.
7. TWO RACK SPACE HINGED HORIZONTAL CABLE MANAGER ON FRONT SIDE OF RACK, PANDUIT WMPHF2E.
10. CONCRETE FLOOR RACK MOUNTING KIT, CHATSWORTH 40604-001.
11. RACK BASE DUST COVER, BLACK ENAMEL FINISH, CHATSWORTH 41050-719.
12. RACK ISOLATION KIT, CHATSWORTH 10605-019.
13. NYLON CABLE STANDOFF BRACKET, CHATSWORTH 10001-001. MOUNT ON BACK LEFT SIDE OF ALL RACKS AT 12" ON CENTER FOR ROUTING GROUNDING CONDUCTORS AND POWER EXTENSION CORDS UP AND DOWN RACKS. TYWRAP EACH CONDUCTOR AND CORD INDIVIDUALLY ON STANDOFF. (NOT SHOWN ON ELEVATIONS)
14. FIBER DRAWER FOR BACKBONE CABLES, 24 PORT, RACK MOUNT. SEE "DATA SINGLE LINE CONFIGURATION DIAGRAM".
15. 48 PORT CATEGORY 6 HORIZONTAL PATCH PANEL (HPP), SEE "DATA SINGLE LINE CONFIGURATION DIAGRAM".
15A. 48 PORT CATEGORY 6A WAP HORIZONTAL PATCH PANEL (WAP-HPP), SEE "DATA SINGLE LINE CONFIGURATION DIAGRAM".
15B. 24 PORT CATEGORY 6 HORIZONTAL PATCH PANEL (CAM-HPP), SEE "DATA SINGLE LINE CONFIGURATION DIAGRAM".
17. RACKMOUNT POWER POWER STRIP/SURGE SUPPRESSOR, MIDDLE ATLANTIC PDX-920R-SP, COLOR BLACK, SERIES SURGE PROTECTION WITH 9 YEAR WARRANTY, WITH EIGHT 120 VAC POWER RECEPTACLES ON BACK OF UNIT, ONE 120 VAC CONVENIENCE OUTLET ON FRONT, FRONT POWER SWITCH, AND 10' POWER CORD.
19. OWNER FURNISHED CONTRACTOR INSTALLED (OFCI): 48 PORT POE ETHERNET WORKGROUP SWITCH FOR DATA, VOIP, IP SECURITY CAMERAS AND WAP CONNECTIONS. SEE "DATA SYSTEM SINGLE LINE CONFIGURATION DIAGRAM". WHERE EQUIPMENT VARIES IN SIZE OR QUANTITY FROM THAT INDICATED, PROVIDE BLANK FILLER PLATES TO COVER ALL UNUSED RACK SPACES.
20. SCSC PROVIDE: AMERICAN POWER CONVERSION SMX3000LVNC (4 RACK UNITS HIGH - 2 POST MOUNTING) 3000 VA RACK MOUNT UPS, (QUANTITY TWO - FOR POE ETHERNET WORKGROUP SWITCHES), PROVIDE WITH FACTORY NETWORK CARD. ELECTRICAL CONTRACTOR PROVIDE RACK MOUNT 120 VAC L5-30R 30 AMP DEDICATED CIRCUIT RECEPTACLE FOR EACH UPS. SEE "TYPICAL POWER CONDUIT TO UPS 30 AMP POWER OUTLET DETAIL", "POWER CORD ROUTING DETAIL AT UPS PARTIAL RACK REAR ELEVATIONS" AND TYPICAL RACK POWER DISTRIBUTION DIAGRAM" DETAILS, THIS SHEET.

Graphic Scale

1 .5 0 1FT 2FT

SCALE: 1" = 1'-0"

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100% CONSTRUCTION DOCUMENTS

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
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EXPIRES 12-31-27
RCDD

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

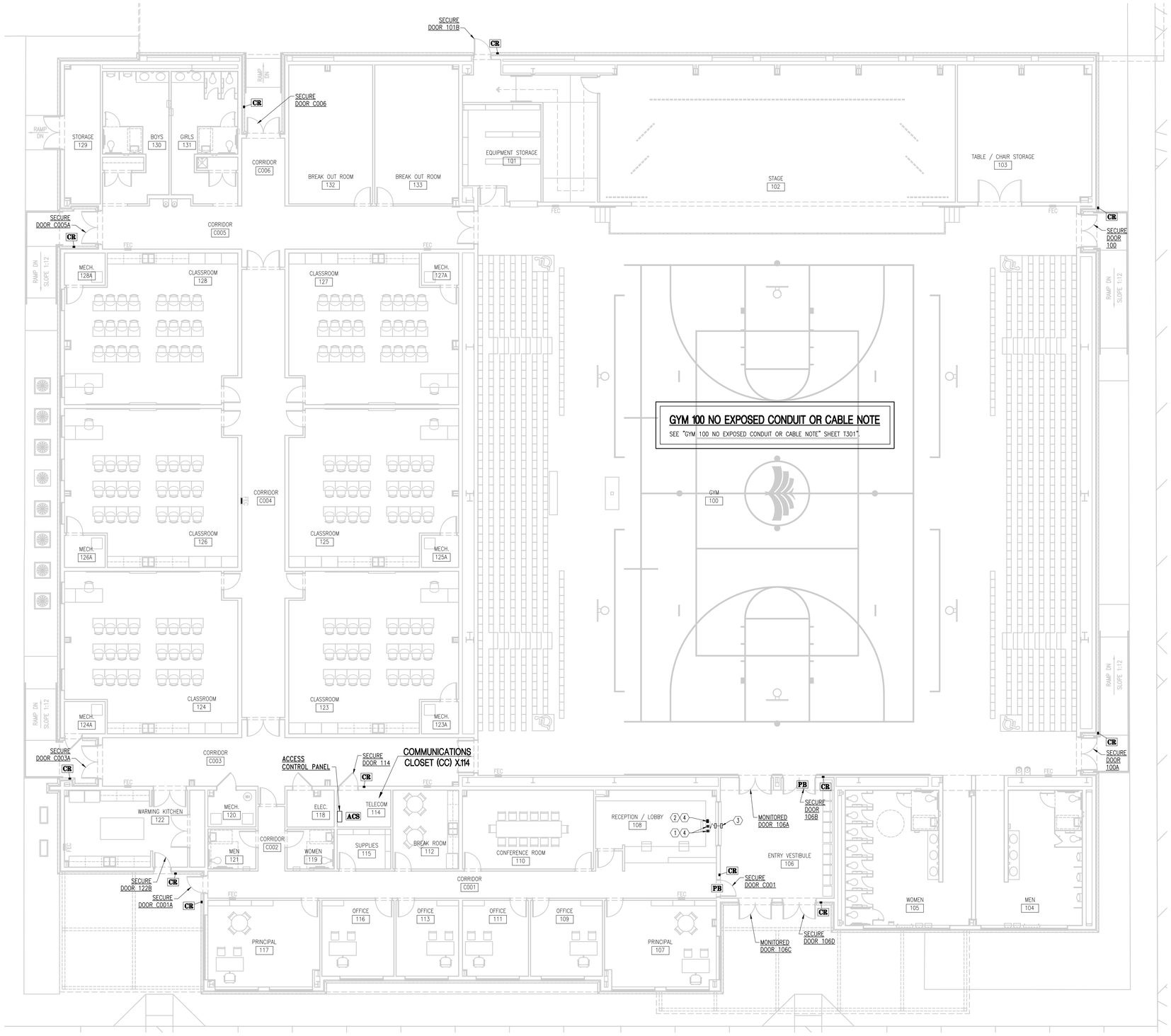
REVISIONS:

No.	Description	Date

COMMUNICATIONS RACK ELEVATIONS

PROJECT NUMBER 22019
DATED 01/31/2025

T502



CR LOCATION NOTE

CARD READER LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND INTENDED ONLY TO SHOW DOOR SERVED AND UNSECURE SIDE MOUNTING. THE OWNER'S PROJECT MANAGER WILL LOCATE ALL LISTED DEVICES IN THE FIELD ANYWHERE IN THE GENERAL VICINITY OF THE DOOR SERVED OR AREA INDICATED AT NO ADDITIONAL COST TO THE OWNER. CC/CM, ACSC AND EC COORDINATE FINAL LOCATIONS WITH OWNER AND ARCHITECT PRIOR TO BEGINNING ROUGH-IN. DEVICE HEIGHTS SHALL BE AS DIRECTED BY THE ARCHITECT.

STOREFRONT NOTE

MOUNT ALL CARD READERS FLUSH IN WALL. MOUNT CARD READERS IN STOREFRONT FRAMING ONLY WHERE SPECIFICALLY DIRECTED BY THE OWNER AND ACSC. GENERAL CONTRACTOR REQUEST DIRECTION FROM THE OWNER AND ACSC PRIOR TO COMMENCEMENT OF ANY RELATED WORK AND REVIEW EACH SECURE DOOR INSTALLATION. WHERE STOREFRONT MOUNTING IS REQUIRED SEE "GENERAL CONDUIT NOTES – ACCESS CONTROL SYSTEM" NOTE 3 SHEET ACS301 AND ACSC PROVIDE NARROW STILE CARD READER. THE GENERAL CONTRACTOR AND STOREFRONT SYSTEM INSTALLER SHALL PROVIDE THE ELECTRICAL CONTRACTOR ACCESS TO THE FRAMING TO RUN THE WIRING AS EACH DOOR IS INSTALLED.

ACCESS CONTROL SYSTEM FLOOR PLAN KEY NOTES

1. ACSC PROVIDE PUSHBUTTONS FOR TIMED UNLOCK OF SECURE DOORS INDICATED C001 AND 106B). PROVIDE TWO PUSHBUTTONS LOCATED AT KNEE SPACE OF RECEPTION CASEWORK. MOUNT CONCEALED UNDER RECEPTION COUNTER IN EXACT LOCATION AS DIRECTED BY OWNER'S PROJECT MANAGER IN THE FIELD FOR CONVENIENT ACCESS BY RECEPTION STAFF. WHERE DRAWER OR KEYBOARD TRAYS EXIST AT KNEE SPACES MOUNT PUSHBUTTONS ON SIDE OF KNEE SPACE JUST BELOW DRAWER OR KEYBOARD TRAYS. EXTEND ARMORED CABLE ACCORDINGLY. PUSHBUTTONS SHALL BE ALLEGION 660-PB. SET TIME DELAY FOR DELAYED DOOR RE-LOCKING IN COORDINATION WITH OWNER USING SDC "10TD MINI-TIMER" ADJUSTABLE TIME DELAY MODULE. PROVIDE END-OF-LINE MOV FOR EACH DOOR. RUN 3/4" EMT CONDUIT FOR EACH SET OF PUSHBUTTONS FROM BELOW COUNTER INTO KNEE WALL AND UP CONCEALED IN WALL AND ABOVE CEILING TO MAIN JUNCTION BOX FOR EACH SECURE DOOR – SEE KEY NOTE 4 FOR CONDUIT CONTINUATION BELOW COUNTER. PROVIDE ENGRAVED PLASTIC TAGS ON LIP OF COUNTER TO IDENTIFY DOOR SERVED BY EACH PUSHBUTTON AS DIRECTED BY OWNER.
2. ACSC PROVIDE LOCKDOWN/PANIC SWITCH LOCATED AT KNEE SPACE OF RECEPTION CASEWORK. MOUNT CONCEALED UNDER RECEPTION COUNTER IN EXACT LOCATION AS DIRECTED BY OWNER'S PROJECT MANAGER IN THE FIELD FOR CONVENIENT ACCESS BY RECEPTION STAFF. WHERE DRAWER OR KEYBOARD TRAYS EXIST AT KNEE SPACES MOUNT LOCKDOWN SWITCHES ON SIDE OF KNEE SPACE JUST BELOW DRAWER OR KEYBOARD TRAYS. EXTEND ARMORED CABLE ACCORDINGLY. LOCKDOWN SWITCHES SHALL BE MAGNASPHERE MK-3045T (PREVIOUSLY INTERLOGIX 3045-W). RUN 3/4" EMT CONDUIT FOR EACH LOCKDOWN SWITCH FROM UNDER COUNTER INTO KNEE WALL AND UP CONCEALED IN WALL AND HOMERUNNED ABOVE CEILING TO ACCESS CONTROL SYSTEM ENCLOSURE IN SERVING CC – SEE KEY NOTE 4 FOR CONDUIT CONTINUATION BELOW COUNTER. PROVIDE ENGRAVED PLASTIC TAGS ON LIP OF COUNTER TO IDENTIFY EACH LOCKDOWN SWITCH AS DIRECTED BY OWNER.
3. ACSC PROVIDE TALK-THRU DEVICE, NORCON TTU-3X-NC WITH NOISE CANCELLING OPTION. ADJUST SETTINGS FOR BEST SOUND QUALITY AND TRAIN SCHOOL STAFF IN USE OF SYSTEM. ELECTRICAL CONTRACTOR PROVIDE CONCEALED 120 VAC ELECTRICAL POWER CONNECTION AND INSTALL CONNECTING WIRING USING SMALL STAINLESS STEEL FLEX ARMORED CABLE CONCEALED BELOW COUNTER AND IN KNEE WALL. LOCATION IS TO BE DETERMINED IN THE FIELD – LOCATE ANYWHERE ALONG ADMIN RECEPTION COUNTER AS DIRECTED BY OWNER'S PROJECT MANAGER.
4. AT EACH SET OF PUSHBUTTONS AND AT EACH LOCKDOWN/PANIC SWITCH PROVIDE WIREMOLD V5748S SHALLOW METAL RACEWAY SURFACE JUNCTION BOX WITH STAINLESS STEEL BLANK PLATE AND TERMINATE 3/4" CONDUIT DESCRIBED IN KEY NOTES 1 AND 2 ON EACH BOX. DRILL HOLE IN JUNCTION BOX FOR CONNECTION OF STAINLESS STEEL ARMORED CABLE (ONE ARMORED CABLE FOR EACH PUSHBUTTON AND ONE FOR EACH LOCKDOWN SWITCH) AND CONNECT EACH ARMORED CABLE TO BOX WITH FITTING INTENDED FOR PURPOSE. FROM BOX RUN ARMORED CABLE CONCEALED ALONG UNDERSIDE OF COUNTERTOP AND SECURE TO COUNTERTOP AT MINIMUM OF 8" ON CENTER USING STAINLESS STEEL CUSHIONED CLAMPS. TERMINATE ARMORED CABLE AT EACH PUSHBUTTON AND LOCKDOWN SWITCH WITH CUSHIONED CLAMP.

NO EXPOSED CONDUIT OR CABLE NOTE

SEE T SHEET FLOOR PLANS FOR NOTES PROHIBITING EXPOSED CONDUIT OR CABLING AT AREAS WITH EXPOSED ROOF STRUCTURE IN AND AROUND THE GYM. PROVIDE BURIAL GRADE CABLES IN ALL UNDERGROUND CONDUITS.

ACCESS CONTROL SYSTEM LEGEND

- CLASSROOM 127 — ARCHITECT'S ROOM NUMBER, SEE "GENERAL LABELING NOTE"
- ACS — ACCESS CONTROL SYSTEM PANEL
- CR — CARD READER
- PB — DOOR CONTROLLED BY UNLOCK PUSHBUTTON
- LD — LOCKDOWN SWITCH
- TT — TALK-THRU DEVICE

ABBREVIATIONS

CC	COMMUNICATIONS CLOSET
CP	COMMUNICATIONS PANEL
ACS	ACCESS CONTROL SYSTEM
ACSC	ACCESS CONTROL SYSTEM CONTRACTOR
SCSC	STRUCTURED CABLING SYSTEM CONTRACTOR
EC	ELECTRICAL CONTRACTOR
CM/GC	CONSTRUCTION MANAGER

SECURE SIDE MOUNTING

ALL CONDUIT AT SECURE DOORS SHALL BE INSTALLED ON THE SECURE SIDE (SIDE OPPOSITE CARD READER).

NORTH

ACCESS CONTROL SYSTEM FLOOR PLAN

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

PROJECT NOTE (ALL SHEETS):

ALL MATERIALS AND EQUIPMENT INDICATED AND REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION SHALL BE NEW AND SHALL BE PROVIDED BY THE CONTRACTOR UNDER THIS PROJECT UNLESS SPECIFICALLY INDICATED TO BE EXISTING OR PROVIDED BY OTHERS.

Graphic Scale

8 4 0 8FT 16FT

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

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100% CONSTRUCTION DOCUMENTS

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EXPIRES 12-31-27
RCDD

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS
1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

No.	Description	Date

ACCESS CONTROL SYSTEM FLOOR PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

ACS101

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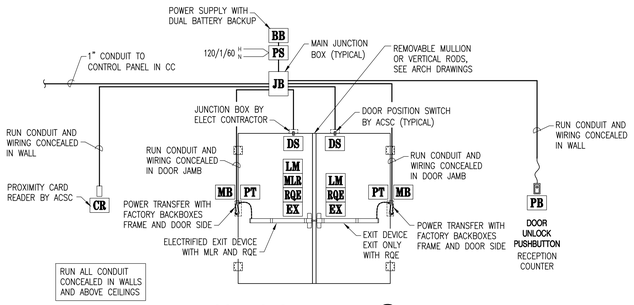
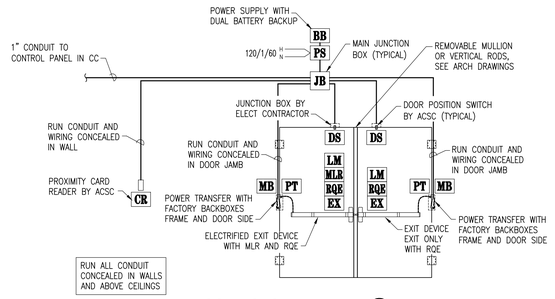
Premier Project #22024



DOOR ROUGH-IN DETAIL (1)

N.T.S.

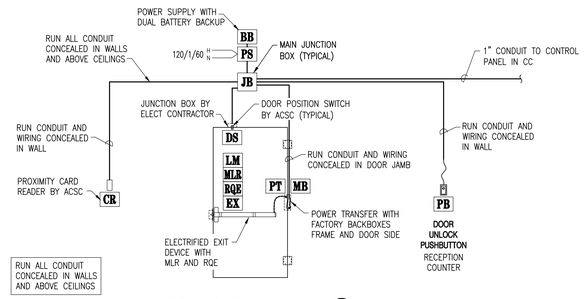
DOOR 106B | #10



DOOR ROUGH-IN DETAIL (2)

N.T.S.

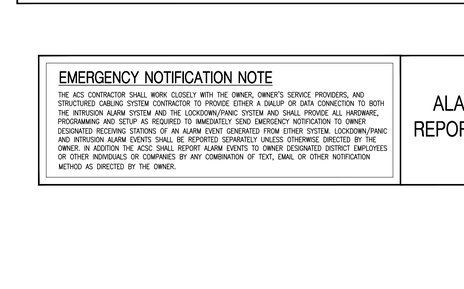
DOORS 100, 100A, C003A, C005A, C006, 106D | #01 | #03



DOOR ROUGH-IN DETAIL (3)

N.T.S.

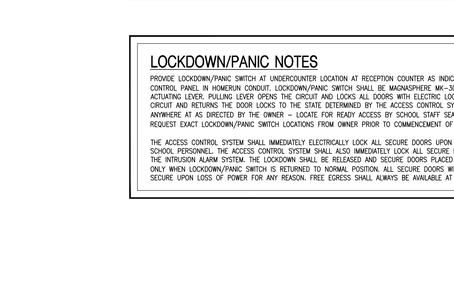
DOOR C001 | #12



DOOR ROUGH-IN DETAIL (4)

N.T.S.

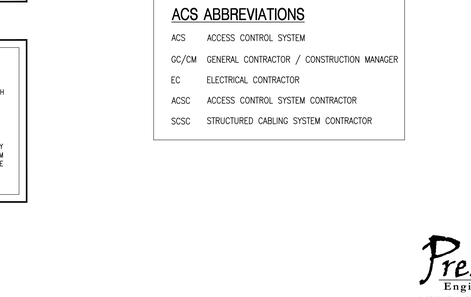
DOORS 101B, 122B, C001A | #04 | #05



DOOR ROUGH-IN DETAIL (5)

N.T.S.

DOORS 106A & 106C - MONITORED ONLY | #02 | #11



DOOR ROUGH-IN DETAIL (6)

N.T.S.

DOORS 114, 122B | #??

INTRUSION ALARM NOTES

THE ACS CONTRACTOR SHALL SETUP THE INTRUSION ALARM SYSTEM AS AN EXTENSION OF AND FULLY INTEGRATED INTO THE OWNER'S MONITORCAST ACCESS CONTROL SYSTEM FOR A SEAMLESS USER INTERFACE.

ALL SECURE DOORS ARE MECHANICAL FREE EGRESS AT ALL TIMES. ALL SECURE DOORS SHALL FAIL SECURE (LOCKED) UPON A POWER FAILURE. A FIRE ALARM EVENT SHALL NOT UNLOCK ANY SECURE DOOR.

ALL SECURE DOORS SHALL HAVE REQUEST TO EXIT INTEGRAL TO THE DOOR HARDWARE SUCH THAT EGRESS THRU A SECURE DOOR FROM THE SECURE SIDE SHALL NOT GENERATE AN INTRUSION ALARM.

THE INTRUSION ALARM SHALL OPERATE ON AN ARMED/DISARMED MODE BASIS, WITH THE MODE BASED ON TIME OF DAY.

IN ADDITION THE OWNER SHALL HAVE THE ABILITY TO INDEX THE SYSTEM TO MULTIPLE SPECIAL EVENT MODES.

ARMED MODE – GENERAL:
IN THE ARMED MODE ALL SECURE DOORS ARE ELECTRICALLY LOCKED AND MAY BE ENTERED ONLY BY INDIVIDUALS WITH VALID CARD READER CREDENTIAL AND PERMISSION TO ENTER THE BUILDING DURING THE TIME WHEN THE SYSTEM IS ARMED.

UNARMED MODE – GENERAL:
IN THE UNARMED MODE ALL SECURE DOORS ARE ELECTRICALLY LOCKED AND MAY BE ENTERED ONLY BY INDIVIDUALS WITH VALID CARD READER CREDENTIAL AND PERMISSION TO ENTER THE BUILDING DURING THE TIME WHEN THE SYSTEM IS UNARMED. ALTERNATELY THE OWNER MAY CHOOSE TO HAVE ONE OR MORE SECURE DOORS ELECTRICALLY UNLOCKED DURING THE TIME WHEN THE SYSTEM IS UNARMED.

THE OWNER MAY ELECT TO SET SYSTEM ARMED AND UNARMED MODES BASED ON TIME OF DAY ONLY, OR TO KEEP THE SYSTEM IN ARMED MODE AT ALL TIMES.

AN INTRUSION ALARM SHALL BE GENERATED ANYTIME A SECURE DOOR IS ELECTRICALLY LOCKED AND IS FORCED OPEN AS SENSED BY THE DOOR POSITION SWITCH, EXCEPT FOR EXCEPTIONS ON A DOOR-BY-DOOR AND TIME-OF-DAY BASIS AS DIRECTED BY THE OWNER. IN ARMED MODE A DOOR-HELD-OPEN NOTIFICATION MAY BE GENERATED FIRST, FOLLOWED BY AN INTRUSION ALARM, AS DIRECTED BY THE OWNER.

AN INTRUSION ALARM SHALL AUTOMATICALLY INITIATE A LOCKDOWN, UNLESS OTHERWISE DIRECTED BY THE OWNER.

SEE "EMERGENCY NOTIFICATION NOTE" FOR REQUIREMENTS RELATED TO EMERGENCY NOTIFICATION OF INTRUSION ALARMS. THE OWNER MAY ELECT TO HAVE UP TO FIVE DIFFERENT LEVELS OR TYPES OF ALARM NOTIFICATION FOR INTRUSION ALARMS.

THESE MODES OF OPERATION MAY VARY AT THE OWNER'S DIRECTION AND NO ADDITIONAL COST TO THE OWNER.

THESE OPERATING NOTES ARE FOR GENERAL INFORMATION ONLY AND ARE NOT INTENDED TO CONVEY THE FULL SCOPE OF ACS CONTRACTOR WORK. IT SHALL BE THE SOLE RESPONSIBILITY OF THE ACS CONTRACTOR TO COORDINATE ALL REQUIRED DETAILS OF BUILDING OPERATIONAL MODES ALONG WITH DETAILS OF SYSTEM OPERATION WITH THE OWNER'S PROJECT MANAGER AND OTHER OWNER PERSONNEL, AND SHALL INCORPORATE RELATED DETAILS IN THE CONTRACTOR'S AS-BUILT DRAWINGS. INTENDED SYSTEM OPERATION SHALL BE APPROVED BY THE OWNER'S PROJECT MANAGER PRIOR TO SYSTEM SETUP AND PROGRAMMING. PROVIDE A MINIMUM OF 4 HOURS TRAINING TO STAFF ACROSS THE FIRST YEAR OF OPERATION, WITH TIMES AND DURATION SET BY THE OWNER'S PROJECT MANAGER. FOLLOWING OCCUPANCY OF THE SCHOOL THE ACSC SHALL CONTINUE TO FINE TUNE OPERATING MODES WITH THE INVOLVEMENT OF THE SCHOOL PRINCIPAL AND THE OWNER'S PROJECT MANAGER FOR THE FIRST YEAR OF OPERATION.

EMERGENCY NOTIFICATION NOTE

THE ACS CONTRACTOR SHALL WORK CLOSELY WITH THE OWNER, OWNER'S SERVICE PROVIDERS, AND STRUCTURED CABLING SYSTEM CONTRACTOR TO PROVIDE EITHER A DIALUP OR DATA CONNECTION TO BOTH THE INTRUSION ALARM SYSTEM AND THE LOCKDOWN/PANIC SYSTEM AND SHALL PROVIDE ALL HARDWARE, PROGRAMMING AND SETUP AS REQUIRED TO IMMEDIATELY SEND EMERGENCY NOTIFICATION TO OWNER DESIGNATED RECEIVING STATIONS OF AN ALARM EVENT GENERATED FROM EITHER SYSTEM. LOCKDOWN/PANIC AND INTRUSION ALARM EVENTS SHALL BE REPORTED SEPARATELY UNLESS OTHERWISE DIRECTED BY THE OWNER. IN ADDITION THE ACSC SHALL REPORT ALARM EVENTS TO OWNER DESIGNATED DISTRICT EMPLOYEES OR OTHER INDIVIDUALS OR COMPANIES BY ANY COMBINATION OF TEXT, EMAIL OR OTHER NOTIFICATION METHOD AS DIRECTED BY THE OWNER.

ALARM REPORTING

TYPICAL SECURE DOOR OPERATION

PRESENTING VALID CREDENTIAL TO CARD READER SIGNALS TIMED ELECTRIC RETRACTION OF THE EXIT DEVICE LATCH BOLT ON ACTIVE LEAF (RIGHT HAND RETURN LEAF). ELECTRIC LOCKING MECHANISM IN ACTIVE LEAF SHALL ALWAYS FAIL SECURE (LOCKS ON LOSS OF POWER). INACTIVE LEAF IS FOR EXIT ONLY. DOOR POSITION SWITCHES TOGETHER WITH LATCH MONITORS INTEGRAL TO EACH EXIT DEVICE AND LOCKSET TIED TO INTRUSION ALARM SYSTEM MONITOR STATUS OF EACH DOOR LEAF FOR DOOR HELD OPEN OR UNAUTHORIZED ENTRY. REQUEST-TO-EXIT SWITCHES INTERNAL TO BOTH EXIT DEVICES ARE ACTIVATED UPON EXITING THROUGH EITHER LEAF SIGNALING AUTHORIZED EXITING. MECHANICAL FREE EGRESS SHALL ALWAYS BE POSSIBLE THROUGH EITHER LEAF.

DOOR POSITION SWITCH NORMALLY OPEN

DOOR POSITION SWITCHES SHALL BE NORMALLY OPEN. EACH DPS SHALL BE HELD IN CLOSED POSITION BY MAGNET WHEN DOOR IS CLOSED AND MAGNET IS WITHIN MANUFACTURER'S SPECIFIED GAP DISTANCE FROM SWITCH. DPS SHALL MOVE TO OPEN POSITION WHEN DOOR IS OPENED (CIRCUIT IS OPENED AND CURRENT DOES NOT FLOW). CIRCUIT IS ALSO OPENED IF WIRE IS CUT. OPEN CIRCUIT SHALL GENERATE ALARM STATE UNLESS RQE IS SIGNALED.

CARD READER NOTES

CARD READERS SHALL BE HID 'SIGNO 40NKS' OR CARD READER STANDARD WITH THE SCHOOL DISTRICT AT THE TIME OF PROJECT MATERIAL SUBMITTALS. THE OWNER WILL PROVIDE FINAL DIRECTION ON THE CARD READER PART NUMBER TO USE. ALL CARD READERS SHALL BE INSTALLED USING OPTIONAL GASKET HID PART NUMBER IP65GSKT TO MAKE THE INSTALLATION WATERTIGHT TO IP66 STANDARDS.

PROVIDE SINGLE GANG DEEP WALL BOX FOR ALL CARD READERS UNLESS OTHERWISE DIRECTED BY ACCESS CONTROL SYSTEM CONTRACTOR. PROVIDE MASONRY BOX WHERE MOUNTED IN BRICK. UNDER NO CIRCUMSTANCES SHALL OVERSIZE OPENINGS BE COVERED WITH PLATES AND THE DEVICES MOUNTED ON THE PLATES. BRICK OPENING SHALL BE COMPLETELY COVERED AND CONCEALED BY THE CARD READER. MAKE INSTALLATION WATERTIGHT.

LOCKDOWN/PANIC NOTES

PROVIDE LOCKDOWN/PANIC SWITCH AT UNDERCOUNTER LOCATION AT RECEPTION COUNTER AS INDICATED ON THE PLANS. HARD-WIRE TO ACS CONTROL PANEL IN HOMERUN CONDUIT. LOCKDOWN/PANIC SWITCH SHALL BE MAGNASPHERE MK-3045T (PREVIOUSLY INTERLOCK 3045-W) WITH ACTUATING LEVER. PULLING LEVER OPENS THE CIRCUIT AND LOCKS ALL DOORS WITH ELECTRIC LOCKING DEVICE. CLOSING LEVER CLOSES THE CIRCUIT AND RETURNS THE DOOR LOCKS TO THE STATE DETERMINED BY THE ACCESS CONTROL SYSTEM. MOUNT CONCEALED UNDER COUNTER ANYWHERE AT AS DIRECTED BY THE OWNER – LOCATE FOR READY ACCESS BY SCHOOL STAFF SEATED IN A NORMAL WORK POSITION. GC/CM REQUEST EXACT LOCKDOWN/PANIC SWITCH LOCATIONS FROM OWNER PRIOR TO COMMENCEMENT OF ROUGH-IN.

THE ACCESS CONTROL SYSTEM SHALL IMMEDIATELY ELECTRICALLY LOCK ALL SECURE DOORS UPON ACTIVATION OF LOCKDOWN/PANIC SWITCH BY SCHOOL PERSONNEL. THE ACCESS CONTROL SYSTEM SHALL ALSO IMMEDIATELY LOCK ALL SECURE DOORS UPON A FORCED ENTRY ALARM FROM THE INTRUSION ALARM SYSTEM. THE LOCKDOWN SHALL BE RELEASED AND SECURE DOORS PLACED IN NORMAL STATUS FOR THE CURRENT TIME ONLY WHEN LOCKDOWN/PANIC SWITCH IS RETURNED TO NORMAL POSITION. ALL SECURE DOORS WITH ELECTRIC LOCKING DEVICES SHALL FAIL SECURE UPON LOSS OF POWER FOR ANY REASON. FREE EGRESS SHALL ALWAYS BE AVAILABLE AT ALL SECURE DOORS.

SECURE SIDE MOUNTING

ALL CONDUIT AT SECURE SHALL BE INSTALLED ON THE SECURE SIDE (SIDE OPPOSITE CARD READER).

ACCESS CONTROL SYSTEM LEGEND

BB	BATTERY BACKUP	LD	LOCKDOWN SWITCH
CR	CARD READER	LM	LATCH MONITOR
DS	DOOR POSITION SWITCH	MB	MORTAR BOX
EX	RIM EXIT DEVICE	PB	PUSHBUTTON UNLOCK
EM	ELECTRIFIED LOCKSET	PS	POWER SUPPLY
IC	SECURITY INTERCOM	PT	POWER TRANSFER
JB	JUNCTION BOX	RQE	REQUEST TO EXIT
		(1)	DOOR DETAIL NUMBER
		#1	DOOR HARDWARE SPEC NUMBER

DOOR ORIENTATION NOTE:

RIGHT HAND/LEFT HAND ORIENTATION FOR EACH DOOR SHALL BE IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS – DOOR LAYOUTS INDICATED ON THIS SHEET ARE DIAGRAMMATIC AND NOT INTENDED TO PROVIDE CORRECT ORIENTATION.

ACS ABBREVIATIONS

ACS	ACCESS CONTROL SYSTEM
GC/CM	GENERAL CONTRACTOR / CONSTRUCTION MANAGER
EC	ELECTRICAL CONTRACTOR
ACSC	ACCESS CONTROL SYSTEM CONTRACTOR
SCSC	STRUCTURED CABLING SYSTEM CONTRACTOR

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100% CONSTRUCTION DOCUMENTS

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REVISIONS:

No.	Description	Date

ACCESS CONTROL SYSTEM DETAILS

PROJECT NUMBER 22019
DATED 01/31/2025

ACS201

GENERAL CONDUIT NOTES - ACCESS CONTROL SYSTEM

1. RUN ALL ACCESS CONTROL SYSTEM CABLING CONTINUOUSLY IN CONDUIT. ALL INTERIOR CONDUIT SHALL BE EMT WITH STEEL COMPRESSION FITTINGS (SCREW FITTINGS AND DIE CAST FITTINGS ARE NOT ALLOWABLE). CONDUIT SIZE SHALL BE 1" MINIMUM OR LARGER AS INDICATED, EXCEPT WHERE 1/2" CONDUIT IS SPECIFICALLY ALLOWED AT LOCAL DOOR DEVICES. WHERE CONDUIT SIZE IS NOT SPECIFICALLY INDICATED PROVIDE SIZE AS REQUIRED FOR EACH CONDUIT RUN WITH MAXIMUM 30% CONDUIT FILL RATE.
2. ELECTRICAL CONTRACTOR PROVIDE ALL CONDUIT AS INDICATED AND ALL ADDITIONAL CONDUIT AS REQUIRED FOR A COMPLETE SYSTEM. THE ACS IS TO BE PROVIDED UNDER AN ALLOWANCE AND THE SYSTEM PROVIDER IS IDENTIFIED (SEE "ALLOWANCE FOR ACCESS CONTROL SYSTEM" THIS SHEET). PRIOR TO BIDS EACH BIDDER FOR ELECTRICAL WORK SHALL CONTACT THE ACS PROVIDER, SHALL OBTAIN A SCOPE OF WORK FOR ASSOCIATED CONDUIT WORK TO INCLUDE ANY CONDUIT REQUIRED BY THE PROVIDER IN ADDITION TO THAT INDICATED ON THE DRAWINGS ALONG WITH ALL CONDUIT INDICATED ON THE DRAWINGS, AND SHALL INCLUDE AS PART OF THE BASE BID ALL SUCH CONDUIT WORK.
3. WHERE DOORS ARE MOUNTED IN A STOREFRONT SYSTEM AND THE OWNER DIRECTS THE ACSC TO MOUNT THE ASSOCIATED CARD READERS IN THE STOREFRONT SYSTEM RUN ALL WIRING IN CONDUIT PROVIDED BY THE ELECTRICAL CONTRACTOR CONCEALED IN STOREFRONT SYSTEM FRAMING. AT CONTRACTOR'S OPTION WIRING WITHIN THE STOREFRONT MAY BE RUN CONTINUOUSLY IN STAINLESS STEEL ARMORED FLEXIBLE CONDUIT, SIZE AS REQUIRED, CONNECTING TO THE EMT WITH A FITTING MADE FOR THAT PURPOSE CONCEALED IN A JUNCTION BOX ABOVE THE CEILING, BUT UNDER NO CIRCUMSTANCES SHALL ANY WIRING BE RUN WITHIN STOREFRONT FRAMING WITHOUT CONDUIT. CLOSELY COORDINATE REQUIREMENTS WITH GENERAL CONTRACTOR AND STOREFRONT SUPPLIER PRIOR TO MANUFACTURER OF STOREFRONT SYSTEM. DO NOT MOUNT CARD READERS IN STOREFRONT FRAMING UNLESS SPECIFICALLY DIRECTED TO DO SO BY THE OWNER.
4. RUN 1" HOMERUN CONDUIT FROM ACCESS CONTROL SYSTEM PANEL TO EACH SECURE DOOR JUNCTION BOX 'JB'. RUN 1/2" CONDUIT FROM 'JB' CONTINUOUS TO EACH POWER TRANSFER BACKBOX, EACH DOOR POSITION SWITCH JUNCTION BOX AND EACH CARD READER JUNCTION BOX. PROVIDE OTHER CONDUITS AS INDICATED IN DOOR DETAILS AND ELSEWHERE ON THE DRAWINGS AND AS REQUIRED BY THE ACSC.
5. RUN CONDUIT AND MOUNT MAIN JUNCTION BOXES FOR EACH SECURE DOOR ON THE SECURE SIDE OF THE DOOR SERVED IN AN ACCESSIBLE/SERVICABLE LOCATION ABOVE A LAY-IN CEILING AS CLOSE TO THE DOOR AS POSSIBLE OR IN A NEARBY ELECTRICAL EQUIPMENT ROOM. MOUNT ACS PANELS AND ASSOCIATED POWER SUPPLIES IN COMM ROOMS ONLY. MOUNT POWER SUPPLIES NEXT TO OR INSIDE OF ACS PANELS.
6. FIRE WALLS: FIRESTOP ALL FLOOR PENETRATIONS AND ALL PENETRATIONS OF FIRE RATED WALLS. FIRESTOP USING ASSEMBLY UL LISTED FOR THE SPECIFIC APPLICATION AND FLOOR OR WALL RATING. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS AND THE CONDITIONS OF THE UL LISTING.
7. SMOKE WALL PENETRATIONS AND PENETRATIONS OF WALLS EXTENDING UP TO THE STRUCTURE ABOVE: ALL CONDUIT PENETRATIONS OF ALL WALLS INDICATED ON THE ARCHITECTURAL DRAWINGS AS SMOKE WALLS/BARRIERS/PARITIONS AND ALL WALLS INDICATED ON THE ARCHITECTURAL DRAWINGS AS EXTENDING UP TO THE STRUCTURE ABOVE SHALL BE SEALED SMOKETIGHT WITH STI SMOKE 'N' SOUND SEALANT WITH UL LISTED 'L' SMOKE RATING AND 'ST' ACOUSTICAL RATING OF 62. SEALANT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS FOR ¼" SEALANT CAULK ON BOTH SIDES OF THE WALL. SEALANT INSTALLATION ON ONLY ONE SIDE OF THE WALL IS NOT ACCEPTABLE. AT THE CONTRACTOR'S OPTION PROVIDE AN ALTERNATE ACOUSTICAL SEALANT WITH EQUAL 'ST' RATING AT THRU PENETRATIONS OF NON-SMOKE WALLS THAT EXTEND UP TO THE STRUCTURE ABOVE FOR SOUND ISOLATION. INSTALL SAME AS INDICATED FOR STI SMOKE 'N' SOUND ABOVE.
8. RUN ALL CONDUIT CONCEALED ABOVE CEILINGS AND IN WALLS. EXPOSED WIRING, SURFACE RACEWAY AND ARMORED DOOR LOOPS AND CABLES ARE NOT ALLOWED.
9. EC PROVIDE HEAVY DUTY PULL STRINGS IN ALL CONDUITS SERVING SECURE DOORS AND DEVICES AND PROVIDE PULL TAPE IN ALL BACKBONE CONDUITS BETWEEN ACS PANELS FOR USE BY CABLING INSTALLER – RUN CONTINUOUS FROM PULL POINT TO PULL POINT WITH NOT LESS THAN 10 FEET SLACK COILED AT EACH END.
10. LOCATION AND ROUTING OF ABOVEGROUND CONDUITS IS APPROXIMATE AND DEPICTS GENERAL DESIGN INTENT ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING FINAL CONDUIT ROUTING IN THE FIELD. THE CONTRACTOR SHALL COORDINATE THE FINAL ROUTING OF CONDUITS TO AVOID CONFLICTS WITH OTHER TRADES, WHILE MINIMIZING CHANGES IN DIRECTION AND OVERALL CONDUIT LENGTH.
11. CONDUITS SHALL BE RUN CONCEALED OVERHEAD ABOVE CEILINGS UNLESS LOCATED IN SPACES WITHOUT CEILINGS OR IN AN UNFINISHED SPACE SUCH AS EQUIPMENT ROOMS. SUPPORT EXPOSED CONDUIT AT A MINIMUM OF 4'-0" ON CENTER WITH 2-HOLE HEAVY DUTY GALVANIZED STEEL HARDWARE.
12. SUPPORT CONDUIT DIRECTLY FROM BUILDING STRUCTURE USING APPROVED HARDWARE. DO NOT SUPPORT CONDUIT FROM OTHER SYSTEMS COMPONENTS OR SUPPORTS. ROUTE ALL CONDUITS AS HIGH AS POSSIBLE. WHERE CONDUIT IS EXPOSED RUN HARD AGAINST WALL OR UNDERSIDE OF ROOF/FLOOR DECK. RUN ALL CONDUITS PARALLEL/PERPENDICULAR AND PLUMB WITH BUILDING LINES.
13. CONDUIT BODIES SUCH AS 'LB' FITTINGS ARE NOT ALLOWABLE.
14. PROVIDE PULLBOXES OF THE SAME TYPE AND SIZE AS THOSE INDICATED ON DRAWINGS FOR EACH RUN OF CONDUIT AT EVERY 100 FEET ON CENTER AND AT EACH END OF CONDUIT RUNS CONTAINING A TOTAL OF TWO 90 deg BENDS OR A COMBINATION OF LESSER BENDS TOTALING 180 deg (MINIMUM REQUIREMENTS – PROVIDE WHETHER SPECIFICALLY INDICATED OR NOT). CONDUIT RUNS CONTAINING MORE THAN TWO 90 deg BENDS WITHOUT A PULLBOX ARE NOT ALLOWABLE. FACTORY CONDUIT ELBOWS AND ALL OTHER BENDS SHALL HAVE A MINIMUM RADIUS OF SIX TIMES THE INTERNAL CONDUIT DIAMETER. CONDUIT OFFSETS AND PULLBOXES REQUIRED TO SUIT FIELD CONDITIONS AND TO CONFORM TO THESE REQUIREMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
15. PULL BOXES SHALL BE 4" WIDE x 4" LONG x 2-1/8" DEEP NEMA 1 GALVANIZED STEEL WITH SCREW COVER. WHERE CONDUITS ARE TIGHTLY RACKED WITH UNIFORM SPACING, WIDER PULL BOXES MAY BE PROVIDED TO SERVE MULTIPLE CONDUITS. TERMINATE CONDUITS AT OPPOSITE ENDS OF PULLBOXES. DO NOT TERMINATE CONDUITS IN PULLBOXES AT RIGHT ANGLES TO EACH OTHER. HOMERUN CONDUITS SHALL NOT BE COMBINED INTO LARGER CONDUITS SERVING MULTIPLE DOORS OR DEVICES.
16. TERMINATE ALL CONDUIT ENDS WITH THREADED PLASTIC INSULATING BUSHINGS (PUSH-ON NOT ALLOWABLE). BUSHINGS MUST FIT TIGHTLY ON CONDUIT CONNECTOR THREADS. INSTALL ALL BUSHINGS PRIOR TO PULLING CABLE.
17. IDENTIFICATION: IDENTIFY ALL INDOOR ACS CONDUITS AND PULLBOXES ABOVE LAY-IN CEILINGS AT EVERY PULLBOX AND ON CONDUIT AT EACH COUPLER (PAINT ENTIRE COUPLER) WITH GREEN PAINT. DO NOT PAINT CONDUIT COUPLERS AND ENCLOSURES IN EQUIPMENT ROOMS. CONDUIT IN FINISHED SPACES WITH EXPOSED STRUCTURE CEILING SHALL BE PAINTED BY THE GENERAL CONTRACTOR TO MATCH ADJACENT FINISHES AND OTHER EXPOSED UTILITIES.

ACSC, EC, SCSC AND GC/CM COORDINATION NOTES

1. THE ACSC SHALL PROVIDE THE ACCESS CONTROL SYSTEM NOTIFICATION OF ALARMS TO OWNER IDENTIFIED CENTRAL RECEIVING STATIONS, OTHER WORK SHOWN TO BE BY THE ACSC IN THE DRAWINGS AND SPECIFICATIONS, AND ALL OTHER WORK REQUIRED FOR COMPLETE AND FULLY FUNCTIONAL SYSTEMS.
2. THE ACSC WILL FULLY INTEGRATE THE ACCESS CONTROL SYSTEM INTO THE OWNER'S EXISTING DSX ACCESS CONTROL SYSTEM SOFTWARE FOR MANAGEMENT OF THE ACCESS CONTROL SYSTEM TO INCLUDE INTRUSION, LOCKDOWN AND PANIC.
3. THE ACSC SHALL PROVIDE ALL LOW VOLTAGE WIRING ASSOCIATED WITH THE SYSTEM LISTED ABOVE.
4. THE ACSC SHALL PROVIDE A DETAILED STATEMENT OF WORK WITH INCLUSIONS AND EXCLUSIONS TO THE GC/CM AND EC FOR FINAL COORDINATION, ALONG WITH WIRING DIAGRAMS, INSTALLATION, OPERATION AND MAINTENANCE MANUALS, AND OTHER INFORMATION REQUIRED FOR THE GC AND EC TO COMPLETE THEIR ASSOCIATED WORK IN A TIMELY MANNER IN ACCORDANCE WITH THE OVERALL PROJECT SCHEDULE.
5. THE GC/CM SHALL PROVIDE OVERALL COORDINATION AND SCHEDULING FOR THE SYSTEM LISTED ABOVE TO INCLUDE DIRECT COORDINATION BETWEEN THE ACSC AND EC FOR ROUGH-IN AND OTHER WORK ITEMS THAT ARE TIME CRITICAL. THE GC/CM SHALL ALSO PROVIDE OVERALL COORDINATION OF EQUIPMENT LOCATIONS WITH THE ARCHITECT, OWNER, EC AND ACSC.
6. THE EC AND ACSC SHALL COORDINATE PROJECT REQUIREMENTS AS SOON AS THE ACSC IS IDENTIFIED BY THE OWNER AND CONTINUALLY DURING THE COURSE OF THE PROJECT.
7. THE EC SHALL PROVIDE ALL CONDUIT, BOXES, ENCLOSURES, PULL STRINGS AND TAPES, SLEEVES, FIRESTOPPING, SMOKESTOPPING, POWER, GROUNDING, AND ALL OTHER WORK REQUIRED BY CODE OR FOR COMPLETE AND FULLY FUNCTIONAL SYSTEMS BUT NOT PROVIDED BY THE ACSC OR SPECIFICALLY IDENTIFIED AS PROVIDED BY OTHERS, WHETHER SPECIFICALLY SHOWN OR NOT.
8. THE EC SHALL WIRE AND MAKE ALL CONNECTIONS TO ALL ELECTRIFIED DOOR HARDWARE AND DOOR HARDWARE THAT REQUIRES ANY TYPE OF 120 VAC WIRING CONNECTION. SEE DOOR HARDWARE SPECIFICATION SECTION 087100 AND ARCHITECTURAL AND ELECTRICAL DRAWINGS.
9. ACCESS CONTROL SYSTEM PANELS – CATEGORY 6 OUTLET: CATEGORY 6 CABLING AND MODULAR OUTLETS FOR NETWORK CONNECTIONS TO ACSC PANELS SHALL BE PROVIDED BY THE STRUCTURED CABLING SYSTEM CONTRACTOR (SCSC) COMPLETE TO INCLUDE PATCH PANELS, TERMINATION, LABELING, TESTING, AND PATCHING TO ASSIGNED NETWORK CONNECTIONS. THE CATEGORY 6 CABLES SHALL BE TERMINATED ON A BISCUIT JACK BY THE SCSC INSIDE THE ACSC PANELS. SCSC AND ACSC COORDINATE FINAL OUTLET LOCATIONS WITHIN PANELS. THE SCSC SHALL ALSO PROVIDE CATEGORY 6 CABLING AND FACEPLATES FOR EACH SECURITY VIDEO INTERCOM SYSTEM OUTDOOR STATION AND INDOOR STATION.

ACCESS CONTROL SYSTEM GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 087100 – DOOR HARDWARE TO CROSS REFERENCE DOOR HARDWARE SET NUMBERS TO INDIVIDUAL DOOR NUMBERS ALONG WITH OTHER INFORMATION FOR SECURE DOORS TO INCLUDE OPERATION. DOOR HARDWARE INDICATED ON ACS DRAWINGS IS FOR INFORMATION ONLY. SEE DOOR HARDWARE SPECIFICATION FOR FINAL DOOR HARDWARE REQUIREMENTS. ALL DOOR HARDWARE COMPONENTS LISTED IN SPECIFICATION SECTION 087100 – DOOR HARDWARE SHALL BE PROVIDED BY THE DOOR HARDWARE PROVIDER UNLESS SPECIFICALLY INDICATED TO BE PROVIDED BY OTHERS. CARD READERS AND DOOR POSITION SWITCHES SHALL BE PROVIDED BY THE ACCESS CONTROL SYSTEM CONTRACTOR. POWER SUPPLIES AT ALL SECURE DOORS WITH EXIT DEVICES SHALL BE PROVIDED AS PART OF THE DOOR HARDWARE PACKAGE AND SHALL BE THE SAME MANUFACTURER AS THE EXIT DEVICE. POWER SUPPLIES SERVING ACCESS CONTROL SYSTEM PANELS AND DOORS WITH ELECTRIFIED LOCKSETS SHALL BE PROVIDED BY THE ACSC AND SHALL BE LOCATED IN OR DIRECTLY ADJACENT TO ACCESS CONTROL SYSTEM PANELS IN COMM ROOMS. ALL POWER SUPPLIES SHALL HAVE DUAL BATTERY BACKUP AND SHALL BE TURNED OVER TO THE ELECTRICAL CONTRACTOR FOR INSTALLATION. LOW VOLTAGE WIRING SHALL BE PROVIDED BY THE ACCESS CONTROL SYSTEM CONTRACTOR. ALL CONDUIT FOR LOW VOLTAGE WIRING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. 120VAC POWER AND ALL CONDUIT FOR POWER SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
2. ALL DOORS SHALL FAIL SECURE UPON LOSS OF POWER TO LOCKING DEVICE FOR ANY REASON.
3. ALL DOORS SHALL HAVE MECHANICAL FREE EGRESS FROM SECURE SIDE TO UNSECURE SIDE UNLESS SPECIAL CIRCUMSTANCES DICTATE OTHERWISE AS SPECIFICALLY DESCRIBED IN THE DOOR HARDWARE SPECIFICATIONS.
4. ALL DOORS SHALL HAVE REQUEST TO EXIT SWITCH INTEGRAL TO THE ELECTRIFIED DOOR LOCKING DEVICES AS PART OF THE DOOR HARDWARE PACKAGE. REQUEST TO EXIT SWITCH SHALL INDICATE AUTHORIZED EGRESS FROM SECURE SIDE TO UNSECURE SIDE AND PREVENT ACTIVATION OF THE INTRUSION ALARM.
5. ALL SECURE DOOR MAIN JUNCTION BOXES SHALL BE 12"x12"x6" NEMA 1 SCREW COVER AND SHALL BE INSTALLED IN ACCESSIBLE LOCATION ABOVE LAY-IN CEILING AS CLOSE TO DOOR OR GATE SERVED AS POSSIBLE.
6. MOUNT ALL CARD READERS FLUSH IN WALL. WHERE STOREFRONT MOUNTING IS REQUIRED BY THE OWNER SEE "GENERAL CONDUIT NOTES" NOTE 3 THIS SHEET AND ACSC PROVIDE NARROW STILE CARD READER.
7. PROVIDE WEATHERPROOF CARD READERS, ROUGH-IN AND MOUNTING AT ALL LOCATIONS.
8. CARD READER LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND INTENDED ONLY TO SHOW DOOR SERVED AND UNSECURE SIDE MOUNTING. THE OWNER'S PROJECT MANAGER AND ARCHITECT PROVIDE DIRECTION ON EXACT LOCATION OF ALL CARD READERS IN THE FIELD – WHICH MAY BE ANYWHERE IN THE VICINITY OF THE DOOR SERVED AT NO ADDITIONAL COST TO THE OWNER. THE GC SHALL REQUEST LOCATIONS WELL PRIOR TO COMMENCEMENT OF ROUGH-IN.
9. THE GC/CM SHALL PROVIDE OVERALL COORDINATION AND SCHEDULING FOR THE ACCESS CONTROL SYSTEM INCLUDING DIRECT COORDINATION BETWEEN THE ACSC AND EC FOR ROUGH-IN AND OTHER WORK ITEMS THAT ARE TIME CRITICAL. THE GC SHALL ALSO PROVIDE OVERALL COORDINATION OF EQUIPMENT LOCATIONS (CARD READERS AND KEYPADS) WITH THE ARCHITECT, OWNER, EC AND ACSC.
10. PROVIDE WALL/MORTAR/JUNCTION BOXES AT ALL POWER TRANSFERS, AND DOOR POSITION SWITCHES REGARDLESS OF WALL TYPE AND WHETHER DOOR FRAMES ARE MORTAR FILLED OR NOT. CONNECT CONDUIT TO BOXES WITH MORTAR TIGHT COMPRESSION FITTINGS. PROVIDE GROMMETS WHERE WIRING PASSES THRU OPENINGS IN METAL COMPONENTS. COMPLY WITH CODE FOR PROTECTION OF CONDUITS IN CONTACT WITH MORTAR OR CONCRETE.
11. FINAL DOOR NUMBERS SHALL BE BASIS FOR SYSTEM LABELING AND PROGRAMMING SHALL BE BASED ON FINAL ROOM NUMBERS USED FOR ROOM SIGNAGE. FINAL NUMBERING/LABELING SCHEME FOR DOORS OTHER SECURITY DEVICES SHALL BE WORKED OUT IN CLOSE COORDINATION WITH THE OWNER'S PROJECT MANAGER AND ARCHITECT.

ACCESS CONTROL SYSTEM CABLING REQUIREMENTS

1. PROVIDE JACKETED WIRE FOR ALL APPLICATIONS.
2. PROVIDE SHIELDED CABLE WHERE RECOMMENDED BY THE CONNECTED EQUIPMENT MANUFACTURER. TERMINATE SHIELD PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. HOMERUN CARD READER CABLE FROM READER TO SERVING ACCESS CONTROL SYSTEM PANEL. PROVIDE SLACK IN CABLE AT MAIN PULL BOX AT EACH SECURE DOOR. MAKE ALL WIRING CONNECTIONS TO CABLE IN MAIN PULL BOX AT EACH SECURE DOOR.
4. FOR PURPOSES OF BIDS THE ACS CONTRACTOR SHALL PROVIDE THE FOLLOWING WIRING FOR THE ACS AND OTHER SECURITY SYSTEMS. FOLLOWING BIDS THE ACSC SHALL SHALL PROVIDE WIRING AS REQUIRED FOR EACH APPLICATION AT NO ADDITIONAL COST TO THE OWNER.
5. PROVIDE THE FOLLOWING WIRING TO EACH CARD READER:
   4-CONDUCTOR/18 AWG, 3-PAIR/22 AWG, 2-CONDUCTOR/22 AWG, 4-CONDUCTOR/22 AWG
6. PROVIDE WIRING AS REQUIRED TO ALL OTHER ACCESS CONTROL AND INTRUSION ALARM SYSTEM DEVICES AND POWER SUPPLIES.
7. CONDUCTOR QUANTITIES AND GAUGES ARE MINIMUM, PROVIDE HIGHER CONDUCTOR COUNT AND LARGER GAUGES AS REQUIRED FOR EACH WIRED DEVICE PER MANUFACTURER'S INSTRUCTIONS.

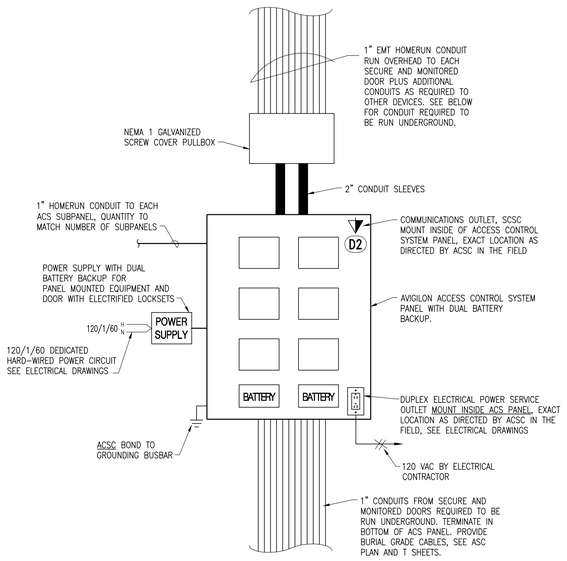
ALLOWANCE FOR ACCESS CONTROL SYSTEM

THE GENERAL CONTRACTOR SHALL INCLUDE AN ALLOWANCE FOR THE PROVISION OF A COMPLETE ACCESS CONTROL SYSTEM WITH INTEGRATED INTRUSION ALARM FOR THIS PROJECT IN THE BASE BID. ALL REFERENCES TO MATERIALS AND LABOR ASSOCIATED WITH THE ACCESS CONTROL SYSTEM WITHIN THE CONTRACT DOCUMENTS SHALL BE INCLUDED IN THIS ALLOWANCE UNLESS SPECIFICALLY INDICATED OTHERWISE. THE AMOUNT OF THE ALLOWANCE SHALL BE ISSUED AS AN ADDENDUM PRIOR TO THE BID DATE.

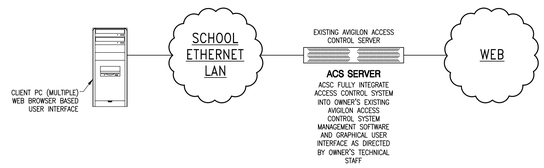
THE SCOPE OF WORK SHALL INCLUDE THE ACCESS CONTROL SYSTEM COMPLETE WITH ALL WORK INDICATED ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS, ALL DEVICES, EQUIPMENT AND WORK DESCRIBED IN THE INTEGRATOR'S COST PROPOSAL AND ASSOCIATED STATEMENT OF WORK. ALL OTHER DEVICES, EQUIPMENT AND WORK REQUIRED FOR A COMPLETE SYSTEM, ALL WIRING AND CABLING (EXCEPT AS INDICATED BELOW FOR CATEGORY 6 CABLING BY THE SCSC), AND ALL PROGRAMMING AND SETUP REQUIRED TO MAKE THE SYSTEM FULLY OPERATIONAL AND FUNCTIONAL TO THE SATISFACTION OF THE OWNER.

RELATED WORK TO BE PROVIDED BY OTHERS UNDER THE BASE BID BUT NOT INCLUDED IN THE SCOPE OF THE ALLOWANCE SHALL INCLUDE CONDUIT FOR ALL ACCESS CONTROL SYSTEM WIRING AND CABLING AND ALL POWER AND GROUNDING REQUIRED FOR THE ACCESS CONTROL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE ASSOCIATED CONDUIT, POWER AND GROUNDING WORK WITH THE ACCESS CONTROL SYSTEM CONTRACTOR – BUT THE SCOPE OF CONDUIT, POWER AND GROUNDING WORK SHALL NOT BE LESS THAN THAT DESCRIBED ON THE DRAWINGS. THE SCSC SHALL PROVIDE CATEGORY 6 CABLING TO EACH ACCESS CONTROL SYSTEM PANEL AS INDICATED ON THE DRAWINGS.

THE ACCESS CONTROL SYSTEM PROVIDER SHALL BE UNDER MULTI-YEAR CONTRACT WITH THE OWNER, SHALL BE AVIGILON CERTIFIED AND SHALL BE MCA (CONTACT TONY COOPER – EMAIL TONYCOOPER@CALLMC.COM).



TYPICAL ACCESS CONTROL SYSTEM PANEL DETAIL
NOT TO SCALE



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REVISIONS:

No.	Description	Date

ACCESS CONTROL SYSTEM DETAILS

PROJECT NUMBER	22019
DATED	01/31/2025

ACS301

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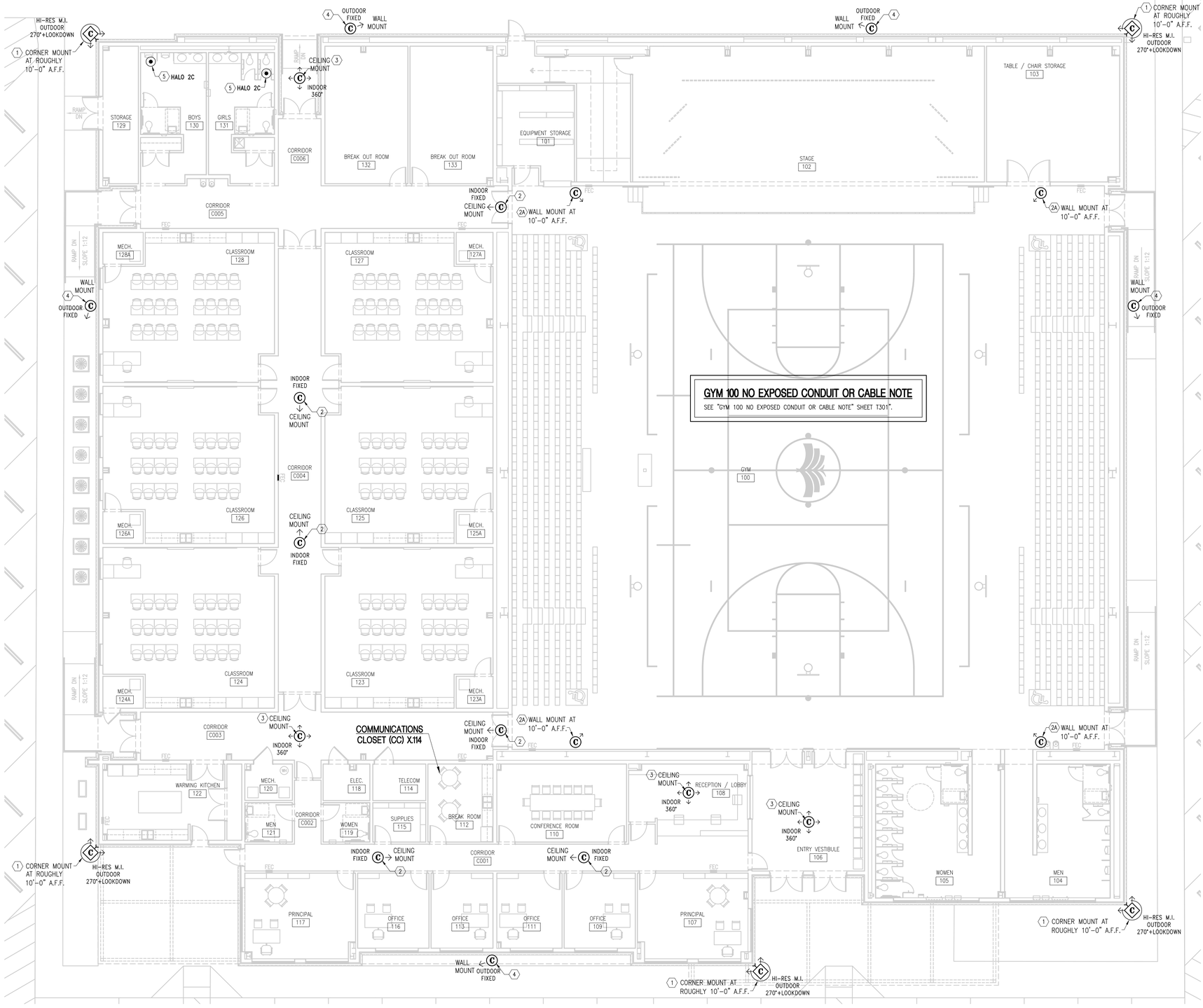
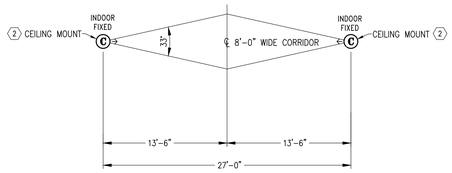


GYM 100 NO EXPOSED CONDUIT OR CABLE NOTE

SEE "GYM 100 NO EXPOSED CONDUIT OR CABLE NOTE" SHEET T301".



CORRIDOR MODE

FOR INDOOR FIXED CAMERAS WITH OPPOSING VIEW IN 8'-0" WIDE CORRIDORS AND TAGGED WITH KEY NOTE 2 (iPRO MODEL WV-S22500-V3L), CONFIGURE FOR CORRIDOR VIEW AS FOLLOWS:

1. LOCATE CENTER OF CORRIDOR IN BOTH DIRECTIONS (CORRIDOR WIDTH AND LENGTH).
2. SET EACH CAMERA AT 13'-6" FROM CORRIDOR CENTER FOR TOTAL DISTANCE BETWEEN CAMERAS OF 27'-0".
3. SET CAMERA TO CORRIDOR MODE AT 3:4 ASPECT RATIO FOR 2304X3072 RESOLUTION (REVERSES 4:3 ASPECT RATIO).
4. SET CAMERA HORIZONTAL ANGULAR FIELD OF VIEW TO FACTORY MINIMUM OF 33 DEGREES NOTING THAT HORIZONTAL AND VERTICAL FIELDS OF VIEW ARE REVERSED WITH CAMERA SET FOR CORRIDOR MODE. ADJUST DISTANCE FOR ACTUAL MINIMUM ANGULAR FIELD OF VIEW FOR CAMERA FURNISHED.
5. WHERE CAMERA VIEWS MEET AT CENTER OF CORRIDOR HORIZONTAL FIELD OF VIEW SHOULD EQUAL WIDTH OF CORRIDOR.
6. SET VERTICAL ADJUSTING ANGLE TO MAXIMIZE VIEW OF FLOOR WITH MINIMUM VIEW OF CEILING AT END OF CORRIDOR.
7. FOR CORRIDOR C001 SPACE CAMERAS AT 38'-4".

CORRIDOR C004 CAMERA LAYOUT DIAGRAM

NOT TO SCALE

IP SECURITY CAMERA SYSTEM FLOOR PLAN KEY NOTES

1. iPRO WV-S8574L 33 MEGAPIXEL HI-RES 4 X 4K MULTI-IMAGER OUTDOOR FIXED IK10 VANDAL CAMERA WITH BUILT-IN IRLED (COLOR WHITE) – CORNER MOUNT, INSTALL AND SETUP FOR 270 DEGREE VIEW PLUS DOWNLOOK. VERIFY EXACT LOCATION WITH OWNER AND CAMERA INTEGRATOR PRIOR TO INSTALLATION. CORNER MOUNT USING iPRO WV-QSR503-W SHROUD, iPRO WV-QWL501-W OUTDOOR WALL MOUNT AND iPRO WV-QCN500-W CORNER MOUNT ADAPTER (ALL COLOR WHITE). LOCATE CORNER MOUNT AND DRILL HOLE THROUGH CORNER OF WALL IN EXACT LOCATION REQUIRED FOR CONDUIT TO EXTEND THRU FACTORY OPENING IN CORNER MOUNT AND TERMINATE IN FACTORY CONDUIT CONNECTOR IN WALL MOUNT. UNDER NO CIRCUMSTANCES WILL EXPOSED CONDUIT OR WIRING BE ALLOWED AT CAMERA MOUNTING. SET CORNER MOUNT IN FULL BED OF LEXEL CLEAR SEALANT/ADHESIVE AND SECURE TO STRUCTURE WITH EIGHT 3/8" DIAMETER STAINLESS STEEL BOLTS AND WASHERS. SECURE WALL MOUNT TO CORNER MOUNT WITH FOUR 3/8" DIAMETER STAINLESS STEEL BOLTS AND WASHERS. MAKE ALL PENETRATIONS OF WALL WATERTIGHT WITH LEXEL SEALANT. EXTEND CONDUIT TO 4"X4"X2-1/8" NEMA 1 PULL BOX MOUNTED INDOORS IN NEAREST ACCESSIBLE LOCATION ABOVE LAY-IN CEILING NEAR CAMERA, THEN RUN 3/4" CONDUIT FROM PULL BOX CONCEALED CONTINUOUS TO SERVING CC. SCSC PROVIDE CATEGORY 6 CABLE FOR NETWORK AND POE SERVICES CONTINUOUS FROM CAMERA TO SERVING CC.
2. iPRO WV-S22500-V3L 5MP INDOOR FIXED IK10 VANDAL CAMERA WITH BUILT-IN IRLED (COLOR WHITE)– CEILING MOUNT. VERIFY EXACT LOCATION WITH OWNER AND CAMERA INTEGRATOR PRIOR TO INSTALLATION. FLUSH MOUNT IN LAY-IN CEILING USING PANASONIC WV-QEM100-W EMBEDDED CEILING MOUNT BRACKET. SUPPORT MOUNTING BRACKET FROM ROOF STRUCTURE ABOVE. EXTEND CONDUIT TO 4"X4"X2-1/8" NEMA 1 PULL BOX MOUNTED INDOORS IN NEAREST ACCESSIBLE LOCATION ABOVE LAY-IN CEILING NEAR CAMERA, THEN RUN 3/4" CONDUIT FROM PULL BOX CONCEALED CONTINUOUS TO SERVING CC. SCSC PROVIDE CATEGORY 6 CABLE FOR NETWORK AND POE SERVICES CONTINUOUS FROM CAMERA TO SERVING CC.
2A. iPRO WV-S22700-V2L 5MP INDOOR FIXED IK10 VANDAL CAMERA WITH BUILT-IN IRLED (COLOR WHITE) – WALL MOUNT. VERIFY EXACT LOCATION WITH OWNER AND CAMERA INTEGRATOR PRIOR TO INSTALLATION. FLUSH WALL MOUNT ON COMPATIBLE OCTAGON RECESSED METAL GANG BOX (OR AS RECOMMENDED BY CAMERA INTEGRATOR) USING iPRO WV-QAT502-W (OR CURRENT MODEL) GANGBOX ADAPTER. EXTEND CONDUIT TO 4"X4"X2-1/8" NEMA 1 PULL BOX MOUNTED INDOORS IN NEAREST ACCESSIBLE LOCATION ABOVE LAY-IN CEILING NEAR CAMERA, THEN RUN 3/4" CONDUIT FROM PULL BOX CONCEALED CONTINUOUS TO SERVING CC. SCSC PROVIDE CATEGORY 6 CABLE FOR NETWORK AND POE SERVICES CONTINUOUS FROM CAMERA TO SERVING CC.
3. iPRO WV-S4176A 12 MEGAPIXEL INDOOR 360 DEGREE IK10 VANDAL CAMERA WITH BUILT-IN IRLED (COLOR WHITE) – CEILING MOUNT FOR 360 DEGREE VIEW. VERIFY EXACT LOCATION WITH OWNER AND CAMERA INTEGRATOR PRIOR TO INSTALLATION. MOUNT ON CEILING USING DOUBLE GANG ELECTRICAL BOX WITH DOUBLE GANG PLASTER RING (OR AS RECOMMENDED BY CAMERA INTEGRATOR) SUPPORTED CEILING SUPPORT STRUCTURE AND iPRO FACTORY PROVIDED CAMERA ATTACHMENT PLATE. EXTEND CONDUIT TO 4"X4"X2-1/8" NEMA 1 PULL BOX MOUNTED INDOORS IN NEAREST ACCESSIBLE LOCATION ABOVE LAY-IN CEILING NEAR CAMERA, THEN RUN 3/4" CONDUIT FROM PULL BOX CONCEALED CONTINUOUS TO SERVING CC. SCSC PROVIDE CATEGORY 6 CABLE FOR NETWORK AND POE SERVICES CONTINUOUS FROM CAMERA TO SERVING CC.
4. iPRO WV-S25700-V2LN 4K OUTDOOR FIXED IK10 VANDAL CAMERA WITH BUILT-IN IRLED (COLOR WHITE) – WALL MOUNT. VERIFY EXACT LOCATION WITH OWNER AND CAMERA INTEGRATOR PRIOR TO INSTALLATION. WALL MOUNT USING iPRO WV-QSR501-W SHROUD AND iPRO WV-QWL501-W OUTDOOR WALL MOUNT (ALL COLOR WHITE). LOCATE WALL MOUNT AND DRILL HOLE THROUGH WALL IN EXACT LOCATION REQUIRED FOR CONDUIT TO TERMINATE IN FACTORY CONDUIT CONNECTOR IN WALL MOUNT. UNDER NO CIRCUMSTANCES WILL EXPOSED CONDUIT OR WIRING BE ALLOWED AT CAMERA MOUNTING. SET WALL MOUNT IN FULL BED OF LEXEL CLEAR SEALANT/ADHESIVE AND SECURE TO STRUCTURE WITH FOUR 3/8" DIAMETER STAINLESS STEEL BOLTS. MAKE ALL PENETRATIONS OF WALL WATERTIGHT WITH LEXEL CLEAR SEALANT. SECURE WALL MOUNT TO CORNER MOUNT WITH FOUR 3/8" DIAMETER STAINLESS STEEL BOLTS AND WASHERS. MAKE ALL PENETRATIONS OF WALL WATERTIGHT WITH LEXEL SEALANT. EXTEND CONDUIT TO 4"X4"X2-1/8" NEMA 1 PULL BOX MOUNTED INDOORS IN NEAREST ACCESSIBLE LOCATION ABOVE LAY-IN CEILING NEAR CAMERA, THEN RUN 3/4" CONDUIT FROM PULL BOX CONCEALED CONTINUOUS TO SERVING CC. SCSC PROVIDE CATEGORY 6 CABLE FOR NETWORK AND POE SERVICES CONTINUOUS FROM CAMERA TO SERVING CC.
5. HALO 2C SMART DETECTOR, INSTALL IN CEILING IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS. CAMERA INTEGRATOR SETUP IN VIDEO INSIGHT AS DIRECTED BY OWNER. EXTEND 3/4" CONDUIT TO 4"X4"X2-1/8" NEMA 1 PULL BOX MOUNTED INDOORS IN NEAREST ACCESSIBLE LOCATION ABOVE LAY-IN CEILING NEAR CAMERA, THEN RUN 3/4" CONDUIT FROM PULL BOX CONCEALED CONTINUOUS TO SERVING CC. SCSC PROVIDE CATEGORY 6 CABLE FOR NETWORK AND POE SERVICES CONTINUOUS FROM CAMERA TO SERVING CC.

BURIAL GRADE CABLE NOTE

RUN ALL ACS AND SECURITY CAMERA CONDUIT AND CABLING UNDERGROUND LOCATED ON THE NON CER SIDE OF THE BUILDING TO SERVING COMMUNICATIONS EQUIPMENT ROOM CER.107. IN ALL SUCH CASES THE ACS CONTRACTOR SHALL PROVIDE BURIAL GRADE CABLE. CABLE SHALL BE CONTINUOUS FROM EACH SECURE OR MONITORED DOOR TO THE ACCESS CONTROL SYSTEM PANEL PULL BOX AND FROM EACH SECURITY CAMERA TO THE RACK MOUNTED CATEGORY 6 PATCH PANEL WITH NO TERMINATIONS OR SPLICES. THE CONTRACTOR SHALL INCLUDE A SUBMITTAL FOR EACH TYPE OF BURIAL GRADE CABLE FOR ENGINEER APPROVAL IN THE SUBMITTAL PACKAGE.

NO EXPOSED CONDUIT OR CABLE NOTE

SEE 1 SHEET FLOOR PLANS FOR NOTES PROHIBITING EXPOSED CONDUIT OR CABLING AT AREAS WITH EXPOSED ROOF STRUCTURE IN AND AROUND THE GYM. PROVIDE BURIAL GRADE CABLES IN ALL UNDERGROUND CONDUITS.

SECURITY LEGEND

CLASSROOM 127 — ARCHITECT'S ROOM NUMBER, SEE "SECURITY DEVICE IDENTIFICATION NOTE."

- OUTDOOR WALL MOUNT FIXED SECURITY CAMERA
- INDOOR CEILING MOUNT FIXED SECURITY CAMERA
- INDOOR CEILING MOUNT 360 DEGREE FIXED SECURITY CAMERA.
- OUTDOOR CORNER MOUNT HI-RES MULTI-IMAGER (M.I.) 270 DEGREE FIXED SECURITY CAMERA.

ABBREVIATIONS

CER	COMMUNICATIONS EQUIPMENT ROOM
CC	COMMUNICATIONS CLOSET
SCSC	STRUCTURED CABLING SYSTEM CONTRACTOR
EC	ELECTRICAL CONTRACTOR
CM/GC	CONSTRUCTION MANAGER

SECURITY DEVICE IDENTIFICATION NOTE:

ALL CAMERAS AND OTHER SECURITY DEVICES SHALL BE IDENTIFIED BASED ON FINAL FISH ROOM NUMBERS OR AS OTHERWISE DIRECTED BY THE OWNER DURING CONSRUCTION. OBTAIN FINAL ROOM NUMBERS FROM THE ARCHITECT PRIOR TO IDENTIFYING AND LABELING DEVICES.

PROJECT NOTE (ALL SHEETS):

ALL MATERIALS AND EQUIPMENT INDICATED AND REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION SHALL BE NEW AND SHALL BE PROVIDED BY THE CONTRACTOR UNDER THIS PROJECT UNLESS SPECIFICALLY INDICATED TO BE PROVIDED BY OTHERS.

IP SECURITY CAMERA SYSTEM FLOOR PLAN

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

DIRECT CONNECT NOTE

DIRECT TERMINATE CATEGORY 6 CABLE FOR SECURITY CAMERAS WITH MALE MODULAR PLUG. ALL CATEGORY 6 DIRECT CONNECT PLUGS SHALL BE AS INDICATED ON THE DATA SINGLE LINE.

CAMERA FASTENER SIZE NOTE:

FASTENER SIZES INDICATED FOR CAMERA MOUNTS ARE APPROXIMATE AND MUST BE VERIFIED WITH THE ACTUAL HARDWARE RECEIVED. FASTENERS FOR THREADED CONNECTIONS SHALL BE SAME SIZE AS THREADED HOLE. FASTENERS FOR SMOOTH HOLES SHALL BE 1/16" SMALLER THAN HOLE DIAMETER. ALL FASTENERS SHALL BE STAINLESS STEEL.

Graphic Scale

8 4 0 8FT 16FT

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

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100% CONSTRUCTION DOCUMENTS

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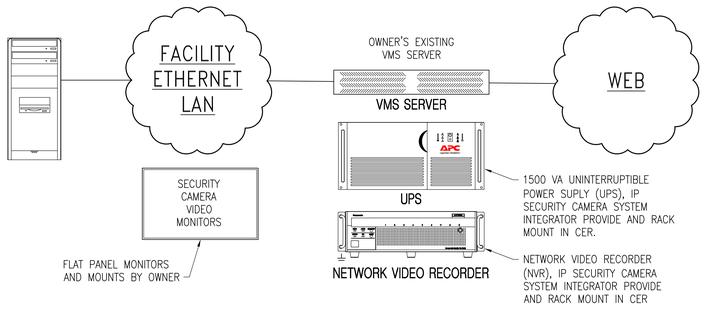
REVISIONS:

No.	Description	Date

IP SECURITY CAMERA SYSTEM FLOOR PLAN

PROJECT NUMBER	22019
DATED	01/31/2025

SEC101



AVIGILON SOFTWARE

AVIGILON SOFTWARE VIDEO MANAGEMENT SOFTWARE (VMS) IS EXISTING FOR PALM BAY CHARTER SCHOOL. UNDER THIS PROJECT THE IP SECURITY CAMERA SYSTEM INTEGRATOR SHALL FULLY INTEGRATE THE SECURITY CAMERAS AND HALO DETECTORS PROVIDED UNDER THIS PROJECT INTO THE EXISTING SOFTWARE. PROVIDE EXPANSION, PROGRAMMING, SETUP, LICENSING, AND ALL OTHER WORK REQUIRED TO INTEGRATE THE CAMERAS INTO THE AVIGILON SYSTEM FOR THE FULL RANGE OF FUNCTIONS AVAILABLE FROM THE MANUFACTURER FOR EACH CAMERA AND DESIRABLE FOR THE VARIOUS CAMERA VIEWING AND RECORDING APPLICATIONS ENCOMPASSED BY THIS PROJECT.

NETWORK VIDEO RECORDER

THE IP SECURITY CAMERA SYSTEM INTEGRATOR SHALL PROVIDE A NETWORK VIDEO RECORDER (NVR) RACK MOUNTED IN THE CER WITH RAID 5 OR 6 STORAGE. HARD DRIVES SHALL BE VIDEO SURVEILLANCE GRADE (PURPLE). THE NVR SHALL HAVE SUFFICIENT UNUSED HARD DRIVE SLOTS TO ALLOW AT LEAST 50% EXPANSION OF STORAGE IN THE FUTURE, AFTER THE HARD DRIVES FOR THIS PROJECT ARE INSTALLED. SUFFICIENT STORAGE SHALL BE PROVIDED UNDER THIS PROJECT TO ARCHIVE 30 DAYS OF VIDEO WITH ALL CAMERAS RECORDING AT FULL RESOLUTION IN COLOR AND AT A MINIMUM OF 15 FRAMES PER SECOND. THE INTEGRATOR SHALL UTILIZE H.265 SMARTCODEC WHERE FACTORY INTEGRATED IN THE SPECIFIED CAMERAS (PREFERRED) OR H.264 SMARTCODEC WHERE H.265 IS NOT FACTORY INTEGRATED. SETUP TO OPTIMIZE STORAGE WITHOUT SACRIFICING STORED VIDEO QUALITY. IF SO DIRECTED BY THE OWNER THE CAMERA INTEGRATOR SHALL EXPAND THE STORAGE CAPACITY OF THE EXISTING NVR AS REQIRED TO MEET THESE REQUIREMENTS.

ALLOWANCE FOR IP SECURITY CAMERA SYSTEM INTEGRATOR

THE GENERAL CONTRACTOR SHALL INCLUDE AN ALLOWANCE FOR ALL WORK BY THE IP SECURITY CAMERA SYSTEM INTEGRATOR IN THE BASE BID.

THE IP SECURITY CAMERA SYSTEM INTEGRATOR SHALL ALSO BE THE ACCESS CONTROL SYSTEM CONTRACTOR AND THE INTRUSION ALARM SYSTEM CONTRACTOR FOR THIS PROJECT. SEE "ALLOWANCE FOR ACCESS CONTROL SYSTEM" NOTE SHEET ACS301.

THE IP SECURITY CAMERA SYSTEM INTEGRATOR SHALL PROVIDE WORK AS SPECIFICALLY INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS AND AS DESCRIBED IN THE IP SECURITY CAMERA SYSTEM INTEGRATOR ALLOWANCE COST PROPOSAL AND ASSOCIATED SCOPE OF WORK STATEMENT. **THE ALLOWANCE COST AND SCOPE OF WORK STATEMENT WILL BE ISSUED IN AN ADDENDUM PRIOR TO BIDS.**

THE IP SECURITY CAMERA SYSTEM INTEGRATOR SHALL PROVIDE ALL CAMERAS, LOCATE CAMERAS PRIOR TO ROUGH-IN, TEST THE OPERATION OF EACH INSTALLED CAMERA, SET FINAL CAMERA VIEWING ANGLES, FIELDS OF VIEW, LENS SETTINGS, COMPRESSION SETTINGS AND OTHER CAMERA SETTINGS FOR OPTIMUM PERFORMANCE, SHALL PROVIDE A NEW NVR WITH STORAGE CAPACITY AS REQUIRED OR SHALL EXPAND THE EXISTING NVR, SHALL PROVIDE SOFTWARE UPGRADES AND REGISTER CAMERA LICENSES, SHALL PROVIDE FINAL SETUP, PROGRAMMING, TESTING AND OWNER TRAINING FOR THE SYSTEM, AND SHALL MAKE THE SYSTEM FULLY OPERATIONAL AND FUNCTIONAL TO THE SATISFACTION OF THE OWNER.

RELATED WORK TO BE PROVIDED BY OTHERS UNDER THE BASE BID BUT NOT INCLUDED IN THE SCOPE OF THE ALLOWANCE SHALL INCLUDE WORK BY THE SCSC AS INDICATED ON THE DRAWINGS. THE SCSC SHALL PROVIDE ALL CATEGORY 6 CABLING, PATCH PANELS, TERMINATION AND TESTING, AND CLOSE COORDINATION WITH THE GC/CM, ELECTRICAL CONTRACTOR AND THE IP SECURITY CAMERA SYSTEM INTEGRATOR.

ADDITIONAL RELATED WORK TO BE PROVIDED BY OTHERS UNDER THE BASE BID BUT NOT INCLUDED IN THE SCOPE OF THE ALLOWANCE SHALL INCLUDE CONDUIT REQUIRED FOR WIRING AND CABLING, AND ALL POWER AND GROUNDING REQUIRED FOR THE IP SECURITY CAMERA SYSTEM. EACH ELECTRICAL CONTRACTOR PROVIDING A BID FOR THIS PROJECT SHALL BE RESPONSIBLE FOR COORDINATING THE ASSOCIATED CONDUIT, POWER AND GROUNDING WORK WITH THE SCSC – BUT THE SCOPE OF CONDUIT, POWER AND GROUNDING WORK SHALL NOT BE LESS THAN THAT DESCRIBED ON THE DRAWINGS.

THE IP SECURITY CAMERA SYSTEM INTEGRATOR SHALL BE UNDER CONTRACT WITH THE OWNER, SHALL BE AVIGILON CERTIFIED AND SHALL BE MCA (CONTACT TONY COOPER – EMAIL TONYCOOPER@CALLMC.COM).

IP SECURITY CAMERA LOCATION NOTES

MOUNTING LOCATIONS INDIATED FOR CAMERAS ARE APPROXIMATE AND SHALL BE COORDINATED IN DETAIL BEFORE ANY ROUGH-IN BEGINS. THE CM SHALL TAKE THE LEAD IN COORDINATING FINAL CAMERA LOCATIONS WITH THE ARCHITECT, DISTRICT SECURITY STAFF AND CAMERA INTEGRATOR. SEE SPECIFICATIONS. THE CM AND CAMERA INTEGRATOR SHALL COORDINATE ROUGH-IN REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR BASED ON THE CAMERA LOCATIONS DETERMINED BY THIS EFFORT.

THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF ALL INDOOR CEILING MOUNTED CAMERAS WITH LIGHTING FIXTURES AND OTHER CEILING MOUNTED DEVICES THAT EXTEND BELOW THE CEILING ALONG WITH CEILING FEATURES INVOLVING CHANGES IN CEILING HEIGHT THAT WILL IMPEDE FULL CAMERA VIEWS.

THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF ALL INDOOR WALL MOUNTED CAMERAS WITH ALL NEARBY WALL MOUNTED OR CEILING MOUNTED LIGHTING FIXTURES AND OTHER DEVICES THAT WILL IMPEDE FULL CAMERA VIEWS.

THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF ALL OUTDOOR CAMERAS WITH LIGHT FIXTURES, CANOPIES, SOFFITS, GUTTER DOWNSPOUTS, POLES AND ANY OTHER OBSTRUCTION THAT WILL IMPEDE FULL CAMERA VIEWS.

WHERE GUTTER DOWNSPOUTS OR OTHER OBSTRUCTIONS INTERFERE WITH A CAMERAS FULL FIELD OF VIEW TIGHT TO THE BUILDING EXTERIOR, PROVIDE STANDOFF PADDING USING KING STARBOARD, 1-1/2" THICK, COLOR TO MATCH COLOR OF CAMERA MOUNT AS CLOSELY AS POSSIBLE. MAKE CUTS STRAIGHT AND SQUARE AND FILE EDGES SMOOTH. PROVIDE MULTIPLE STANDOFF PADS AS REQUIRED TO COMPLETELY CLEAR DOWNSPOUT OR OBSTRUCTION AND PROVIDE FULL CAMERA VIEW AS INDICATED.

ALL FINAL CAMERA LOCATIONS SHALL PROVIDE AN UNOBSTRUCTED VIEW OF THE AREA SERVED BY EACH CAMERA.

CAMERA COORDINATION NOTES

THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT, BOXES, ENCLOSURES, PULL STRINGS, FIRESTOPPING, SMOKESTOPPING, POWER, GROUNDING, AND ALL OTHER WORK REQUIRED BY CODE OR FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM BUT NOT SPECIFICALLY IDENTIFIED AS PROVIDED BY OTHERS,.

THE SCSC SHALL PROVIDE ALL CATEGORY 6 CABLING FOR NETWORK CONNECTIONS TO IP SECURITY CAMERAS COMPLETE TO INCLUDE PATCH PANELS, TERMINATION, LABELING, TESTING, AND PREPPING SLACK AT CAMERA LOCATIONS FOR FINAL CONNECTIONS TO CAMERAS.

THE IP CAMERA SYSTEM INTEGRATOR SHALL PROVIDE CAMERAS, MOUNTS, DIRECTION TO EC AND GC FOR EXACT LOCATION OF CAMERAS, NETWORK VIDEO RECORDER EXPANSION, SETTING OF CAMERA VIEWS, CAMERA SETUP, NETWORK VIDEO RECORDER SETUP, INTEGRATION OF SYSTEM INTO OWNER'S EXJISTING VMS, AND ALL OTHER WORK REQUIRED FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM.

RECORDING OF CAMERA IMAGES TO THE NETWORK VIDEO RECORDER SHALL BE MADE AT HIGHEST CAMERA RESOLUTION SETTINGS IN COLOR WHEN AMBIENT LIGHT LEVELS ALLOW AND IN BLACK AND WHITE DURING LOW LIGHT CONDITIONS. FRAMES PER SECOND SHALL BE AS DIRECTED BY COUNTY STAFF (15 FPS MINIMUM). ALL OTHER SETTINGS TO INCLUDE COMPRESSION SHALL BE MADE TO OPTIMIZE IMAGE QUALITY WHILE MINIMIZING STORAGE REQUIREMENTS.

IP SECURITY CAMERAS GENERAL ABOVEGROUND CONDUIT NOTES

1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING FINAL CONDUIT ROUTING IN THE FIELD. THE CONTRACTOR SHALL COORDINATE THE FINAL ROUTING OF CONDUITS TO CONCEAL CONDUITS AND TO AVOID CONFLICTS WITH THE BUILDING STRUCTURE, OTHER UTILITIES AND OBSTACLES, WHILE MINIMIZING CHANGES IN DIRECTION AND OVERALL CONDUIT LENGTH. ALL CONDUIT SHALL BE RUN OVERHEAD AND CONCEALED EXCEPT AS SPECIFICALLY INDICATED. BEST ROUTING WITHIN BUILDINGS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR WITH THE LIMITATIONS SPECIFIED IN THESE NOTES AND THE CONTRACT DOCUMENTS IN GENERAL.
2. CONDUITS RUN INDOORS SHALL BE RUN CONCEALED OVERHEAD ABOVE CEILINGS UNLESS LOCATED IN SPACES WITHOUT CEILINGS, IN SPACES WITH EXPOSED ROOF STRUCTURE, OR AS OTHERWISE SPECIFICALLY INDICATED. INDOOR CONDUIT SHALL BE EMT WITH STEEL COMPRESSION FITTINGS. DIE CAST EMT FITTINGS ARE NOT ALLOWABLE. SUPPORT EXPOSED CONDUIT AT A MINIMUM OF 4'-0" ON CENTER WITH 2-HOLE HEAVY DUTY GALVANIZED STEEL HARDWARE.
3. SUPPORT CONDUIT DIRECTLY FROM BUILDING STRUCTURE USING APPROVED HARDWARE. DO NOT SUPPORT CONDUIT FROM OTHER SYSTEMS COMPONENTS OR SUPPORTS UNLESS SPECIFICALLY APPROVED BY THE ENGINEER. ROUTE ALL CONDUITS AS HIGH AS POSSIBLE, BUT DO NOT RUN CONDUITS CLOSER THAN 6" BELOW ROOF DECK (TO AVOID DAMAGE FROM LONG SCREWS USED IN FUTURE ROOF REPLACEMENTS). RUN ALL CONDUITS PARALLEL/PERPENDICULAR AND PLUMB WITH BUILDING LINES.
4. CONDUIT BODIES SUCH AS 'LB' FITTINGS ARE NOT ALLOWABLE.
5. HOMERUN CONDUITS FROM CCs SHALL BE A MAXIMUM OF 260 FEET LONG. PROVIDE PULLBOXES AT EVERY 100 FEET ON CENTER AND AT EACH END OF CONDUIT RUNS CONTAINING A TOTAL OF TWO 90 deg BENDS OR A COMBINATION OF LESSER BENDS TOTALING 180 deg (MINIMUM REQUIREMENTS – PROVIDE WHETHER SPECIFICALLY INDICATED OR NOT). CONDUIT RUNS CONTAINING MORE THAN TWO 90 deg BEND WITHOUT A PULLBOX ARE NOT ALLOWABLE. FACTORY CONDUIT ELBOWS AND ALL OTHER BENDS SHALL HAVE A MINIMUM RADIUS OF SIX TIMES THE INTERNAL CONDUIT DIAMETER. CONDUIT OFFSETS AND PULLBOXES REQUIRED TO SUIT FIELD CONDITIONS AND TO CONFORM TO THESE REQUIREMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER. PULL BOXES FOR 3/4" HOMERUN CONDUITS SHALL BE 4"x4"x2-1/8" WITH BLANK COVER.
6. TERMINATE CONDUITS AT OPPOSITE ENDS OF PULLBOXES. DO NOT TERMINATE CONDUITS AT RIGHT ANGLES TO EACH OTHER EXCEPT AS SPECIFICALLY INDICATED.
7. TERMINATE ALL CONDUIT ENDS WITH THREADED PLASTIC INSULATING BUSHINGS (PUSH-ON NOT ALLOWABLE). BUSHINGS MUST FIT TIGHTLY ON CONDUIT CONNECTOR THREADS. INSTALL ALL BUSHINGS PRIOR TO PULLING CABLE.
8. IDENTIFICATION: IDENTIFY ALL INDOOR IP CAMERA CONDUITS, PULLBOXES ABOVE LAY-IN CEILINGS, ACCESS DOORS, IN ROOF SPACE, AND IN ALL EXPOSED LOCATIONS WITH RED PAINT AT EVERY PULLBOX AND ON CONDUIT AT EACH COUPLER (PAINT ENTIRE COUPLER). IDENTIFY ALL CCTV CONDUIT PULLBOXES BY PAINTING WITH 1" TALL LETTER STENCIL (COLOR RED) THE WORDS "CCTV" ON EACH PULLBOX COVER. LETTERING SHALL BE LEVEL AND SQUARE AND AT CENTER OF PULLBOX COVER.

FIRESTOPPING NOTE:

THE CONTRACTOR SHALL FIRESTOP ALL PENETRATIONS OF ALL FLOORS AND ALL WALLS WHICH EXTEND TO THE UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE. FIRESTOPPING SHALL BE ACCOMPLISHED USING UL CLASSIFIED SYSTEMS WITH FIRE RATING EQUAL TO OR GREATER THAN THE FIRE RATING OF THE FLOOR OR WALL ASSEMBLY PENETRATED. FIRESTOP SYSTEMS SHALL BE 3M, NELSON OR ENGINEER APPROVED EQUAL. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. THE CONTRACTOR SHALL SUBMIT A MANUFACTURER'S STANDARD DETAIL FOR EACH TYPE OF FLOOR AND WALL PENETRATION REQUIRED FOR THIS PROJECT. ALL OTHER PENETRATIONS OR OPENINGS IN NON-FIRE RATED WALLS SHALL BE REPAIRED AND SEALED WITH MATERIALS TO MATCH THE CONSTRUCTION OF THE WALL.

THE CONTRACTOR SHALL PROVIDE DETAILS FOR EACH DIFFERENT TYPE OF FIRESTOP ASSEMBLY REQUIRED TO THE BUILDING OFFICIAL FOR APPROVAL PRIOR TO INSTALLATION. EACH DETAIL SHALL INCLUDE THE TEST ASSEMBLY NUMBER AND A DESCRIPTION OF THE MATERIALS TO BE USED. HAVE APPROVED FIRESTOPPING DETAILS AVAILABLE AT PROJECT SITE AT TIME OF INSPECTION.

CAMERA ATTACHMENT NOTES:

ALL CAMERA ATTACHMENTS SHALL BE MADE VANDAL-RESISTANT WITH NON-REMOVEABLE FASTENERS. FASTENER SIZES SHALL BE FULL SIZE ACCOMMODATED BY EQUIPMENT HOLE SIZE.

FASTENER SIZES INDICATED FOR CAMERA MOUNTS ARE APPROXIMATE AND MUST BE VERIFIED WITH THE ACTUAL HARDWARE RECEIVED. FASTENERS FOR THREADED CONNECTIONS SHALL BE SAME SIZE AS THREADED HOLE. FASTENERS FOR SMOOTH HOLES SHALL BE 1/16" SMALLER THAN HOLE DIAMETER. ALL FASTENERS AND MISCELLANEOUS RELATED HARDWARE SHALL BE STAINLESS STEEL.

ATTACHMENTS AT VARIOUS WALL CONSTRUCTIONS SHALL BE AS FOLLOWS:

1. AT FRAMED WALLS AND AT OPEN CELLS OF CMU WALLS, PROVIDE STAINLESS STEEL "SNAP-TOGGLER" TOGGLE BOLTS. ATTACH TO FRAMING OF FRAMED WALLS.
2. AT METAL SOFFIT OR FASCIA CONSTRUCTION PROVIDE STAINLESS STEEL THRU BOLTS ALL THE WAY THRU SOFFIT OR FASCIA FRAMING. PROVIDE SUPPLEMENTARY FRAMING ON INTERIOR AS REQUIRED FOR SECURE MOUNTING.
3. AT BRICK WALLS, BLOCK WEBS AND FILLED CELLS OF CMU WALLS, AND AT CONCRETE WALLS, PROVIDE COMMERCIAL GRADE HIGH LOAD EXPANSION ANCHORS SUCH AS TOGGLER 'ALLIGATOR' SOLID-WALL ANCHORS WITH STAINLESS STEEL FASTENERS.

ABBREVIATIONS

CER	COMMUNICATIONS EQUIPMENT ROOM
CC	COMMUNICATIONS CLOSET
SCSC	STRUCTURED CABLING SYSTEM CONTRACTOR
EC	ELECTRICAL CONTRACTOR
CM/GC	CONSTRUCTION MANAGER / GENERAL CONTRACTOR

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100% CONSTRUCTION DOCUMENTS

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REVISIONS:

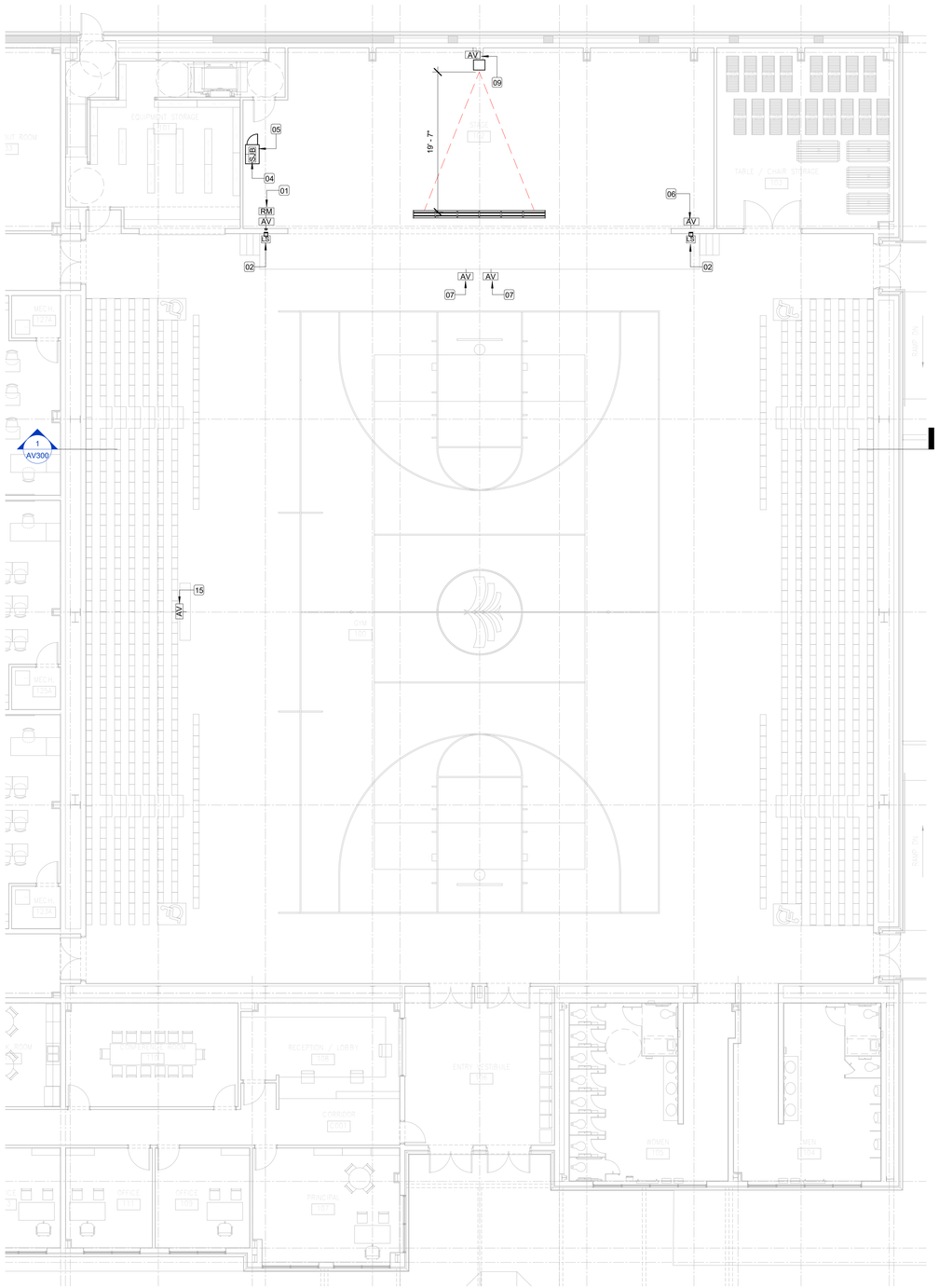
No.	Description	Date

IP SECURITY CAMERA SYSTEM DETAILS

PROJECT NUMBER 22019
DATED 01/31/2025

SEC200

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



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

AV Keynote Legend	
Key Value	Keynote Text
01	AV INPUT PLATE & AV WALL REMOTE. MOUNT 8 X 8 JUNCTION BOX [AV] @ 18" A.F.F. IN WALL AND 2 GANG BOX [RM] @ 60" A.F.F. WHERE SHOWN. CONNECT [RM] TO [AV] WITH 1" CONDUIT. ROUTE (3) 1" CONDUIT FROM [AV] TO [SJB] AT AV EQUIPMENT RACK ON STAGE. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. AV CONNECTOR PLATE PROVIDED AND INSTALLED BY AV CONTRACTOR. PROVIDE 120V 20A CIRCUIT ADJACENT TO [AV] FOR AV COMPONENT POWER.
02	LOUDSPEAKER JUNCTION BOX. MOUNT 1 GANG BOX @ 84" A.F.F. WHERE SHOWN. ROUTE 1" CONDUIT TO [SJB] AT AV EQUIPMENT RACK. PROVIDE 120V 20A CIRCUIT ADJACENT TO [AV] BOX @ 84" A.F.F. FOR LOUDSPEAKER POWER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
04	STAGE J-BOX MOUNTED AT 18" A.F.F. IN WALL WHERE SHOWN. SIZE JUNCTION BOX BASED ON QUANTITY AND SIZE OF CONDUIT TERMINATIONS. PROVIDE (2) 120V 20A CIRCUITS (RECEPTACLES) ADJACENT TO [SJB] FOR AV COMPONENT POWER. ROUTE 1" CONDUIT FROM [SJB] TO 'OVER STAGE' AREA FOR SUSPENDED MICROPHONE CABLES. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
05	AV EQUIPMENT RACK. PROVIDED BY AV CONTRACTOR.
06	AV JUNCTION BOX. MOUNT 8X8 BOX @ 18" A.F.F. IN WALL WHERE SHOWN. ROUTE (3) 1" CONDUIT TO [SJB] AT AV EQUIPMENT RACK. BOXES AND CONDUIT PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. AV CONNECTOR PLATE PROVIDED AND INSTALLED BY AV CONTRACTOR. PROVIDE 120V 20A CIRCUIT ADJACENT TO [AV] FOR AV COMPONENT POWER.
07	1 GANG BOX IN VERTICAL STEP RISER. ROUTE 1" CONDUIT TO [SJB] AT AV EQUIPMENT RACK. PROVIDE 120V 20A CIRCUIT ADJACENT TO [AV] FOR AV COMPONENT POWER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
09	VIDEO PROJECTOR. MOUNT 2 GANG BOX AT 9' A.A.F. ON BACK STAGE WALL WHERE SHOWN. ROUTE 1" CONDUIT TO [SJB] AT AV EQUIPMENT RACK. PROVIDE 120V 20A SHARED CIRCUIT FOR PROJECTOR AND SCREEN POWER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. WALL SHELF FOR PROJECTOR PROVIDED BY GENERAL CONTRACTOR. VERIFY SIZE WITH AV CONTRACTOR / CONSULTANT. PROJECTOR PROVIDED AND INSTALLED BY AV CONTRACTOR.
15	GYM AV INPUT AT SCORER'S DESK. ROUTE 1" CONDUIT FROM SCORER'S DESK FLOOR BOX TO AV EQUIPMENT RACK IN EQUIPMENT STORAGE. FLOOR BOX AND CONDUIT PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. AV CONNECTOR PLATE PROVIDED AND INSTALLED BY AV CONTRACTOR.

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CONSTRUCTION
DOCUMENTS

A New Gymatorium for:
PALM BAY CHARTER SCHOOLS

1104 Balboa Avenue, Panama City, FL 32401

REVISIONS:

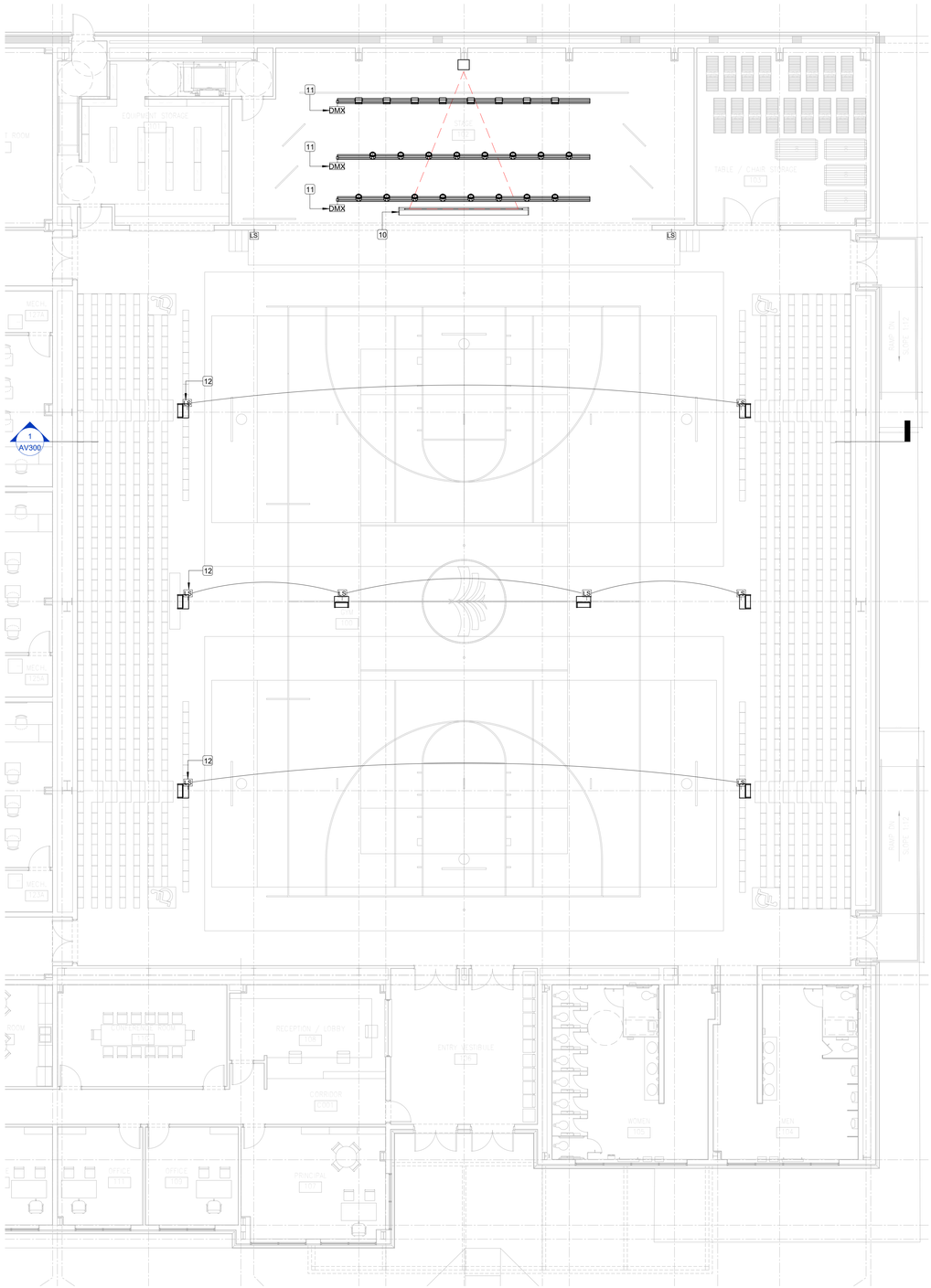
No.	Description	Date

AV FLOOR PLAN

Project Number	22019
Dated	01/31/2025
Drawn By	Author
Approved By	Approver
PM	Designer

AV100

22019
100% CONSTRUCTION DOCUMENTS
01/31/2025



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

AV Keynote Legend	
Key Value	Keynote Text
10	MOTORIZED PROJECTION SCREEN MOUNTED BEHIND MAIN DRAPE. PROVIDE 120V 20A SHARED CIRCUIT WITH PROJECTOR. ROUTE 1" CONDUIT TO [SJB] AT AV EQUIPMENT RACK FOR UP/DOWN CONTROL CABLE. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. PROJECTION SCREEN PROVIDED AND INSTALLED BY AV CONTRACTOR.
11	DMX AND STAGE LED LIGHTING FIXTURES. PROVIDE 1" CONDUIT TO FROM [DMX] 1 GANG BOX ON BATTEN TO [SJB] FOR DMX CABLING. PROVIDE (2) 120V 20A CIRCUIT (2 QUAD RECEPTACLE PER CIRCUIT DISTRIBUTED ALONG BATTEN) FOR FIXTURE POWER. CONDUIT, BOXES & POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. LED FIXTURES, 1.5" PIPE BATTEN & DMX CABLING PROVIDED AND INSTALLED BY AV CONTRACTOR.
12	GYMNASIUM LOUDSPEAKER [LS]. MOUNT 1 GANG BOX ON STEEL WHERE SHOWN. ROUTE 1" CONDUIT TO AV EQUIPMENT RACK IN EQUIPMENT STORAGE. CONNECT ADJACENT [LS] WITH 3/4" CONDUIT AS SHOWN. PROVIDE 120V 20A CIRCUIT PER ROW OF [LS] LOUDSPEAKERS. MOUNT RECEPTACLE ADJACENT TO [LS] BOX FOR LOUDSPEAKER POWER. BOXES, CONDUIT AND POWER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. LOUDSPEAKER PROVIDED AND INSTALLED BY AV CONTRACTOR.

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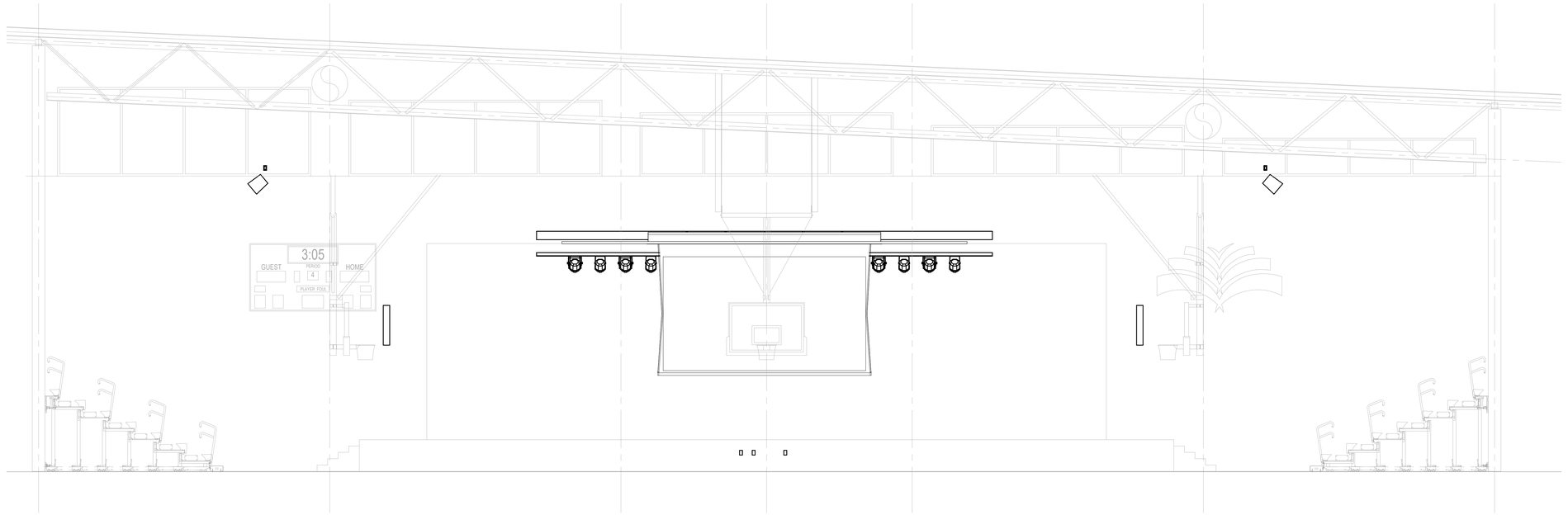
AV REFLECTED CEILING PLAN

Project Number	22019
Dated	01/31/2025
Drawn By	Author
Approved By	Approver
PM	Designer

AV200



1 AV STAGE ELEVATION

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

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AV SECTIONS & ELEVATIONS

Project Number	22019
Dated	01/31/2025
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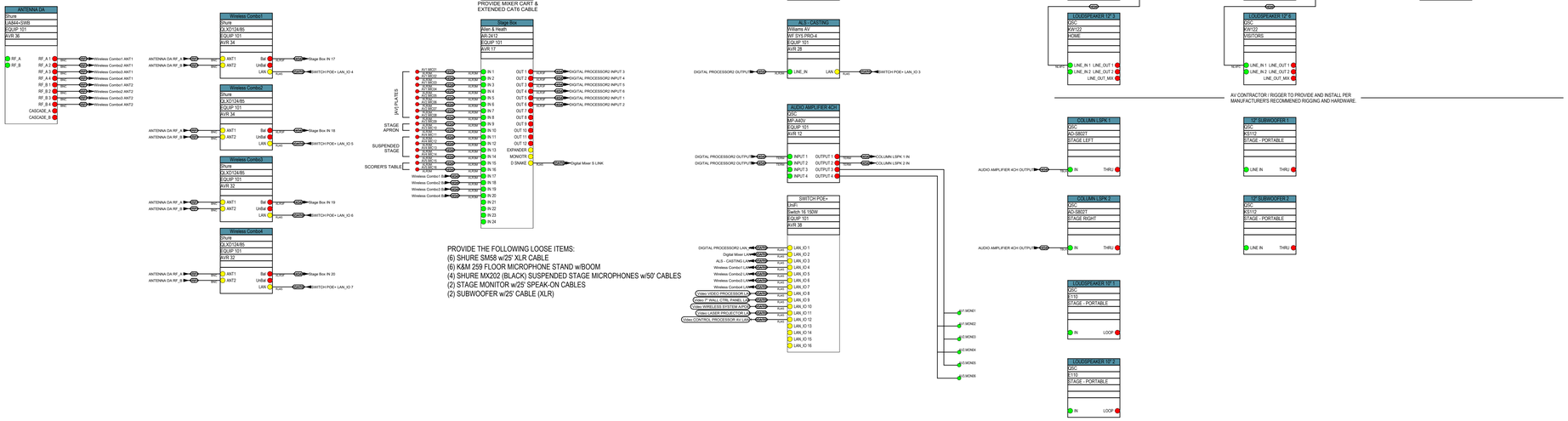
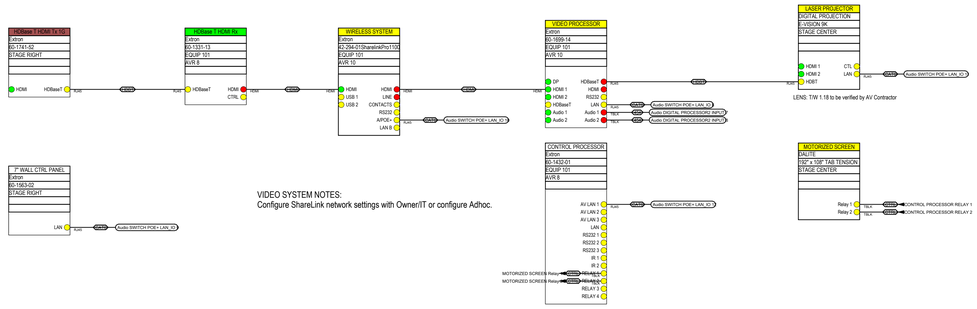
Approved By	Approver
PM	Designer

AV300



1 AUDIO SYSTEM SCHEMATIC

SCALE: 12" = 1'-0"



2 VIDEO SYSTEM SCHEMATIC

SCALE: 12" = 1'-0"

3 STAGE LIGHTING SYSTEM SCHEMATIC

SCALE: 12" = 1'-0"

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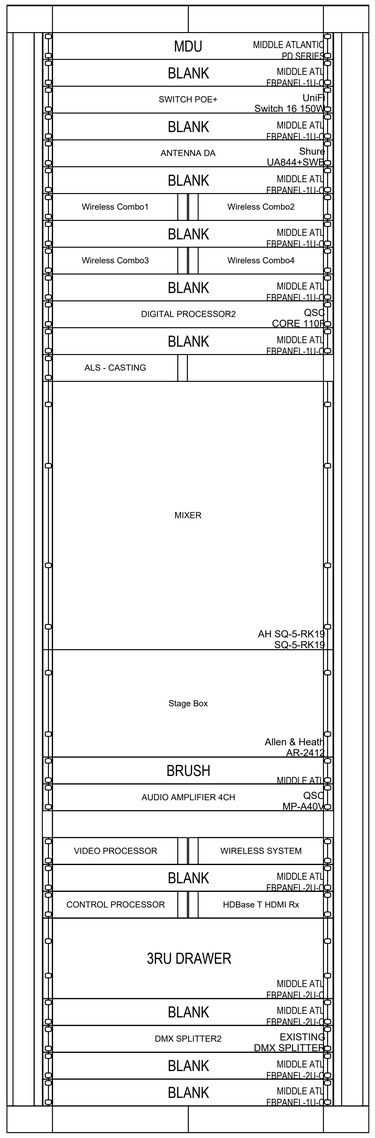
No.	Description	Date

AV SYSTEM SCHEMATIC - PART 1

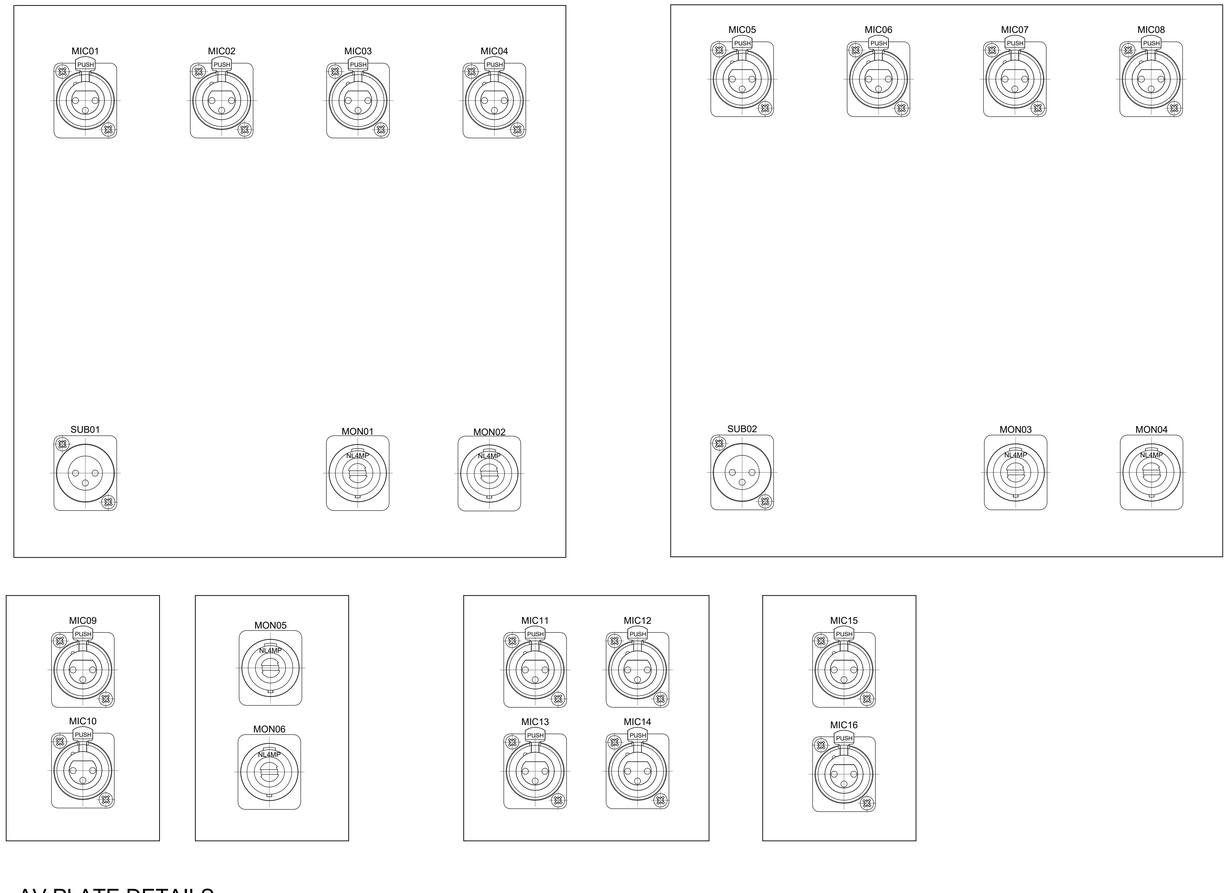
Project Number	22019
Dated	01/31/2025
Drawn By	Author
Approved By	Approver
PM	Designer

AV400



1 AV EQUIPMENT RACK

SCALE: 3" = 1'-0"



2 AV PLATE DETAILS

SCALE: 12" = 1'-0"

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REVISIONS:

No.	Description	Date

AV SYSTEM SCHEMATIC - PART 2

Project Number	22019
Dated	01/31/2025
Drawn By	Author
Approved By	Approver
PM	Designer

AV401