

MONTGOMERY COUNTY PUBLIC SCHOOLS

PORTABLE CLASSROOMS AT COLLEGE GARDENS ELEMENTARY SCHOOL

1700 YALE PLACE, ROCKVILLE, MD. 20850

MR. R. CRAIG SHUMAN
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DIRECTOR, DIVISION OF CONSTRUCTION
PROJECT MANAGER



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PROJECT NAME:

Montgomery County
Public Schools



PORTABLE CLASSROOMS
AT COLLEGE GARDENS
ELEMENTARY SCHOOL

1700 YALE PLACE
ROCKVILLE, MD 20850

SEAL:

PROFESSIONAL CERTIFICATION:
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of State of Maryland License No. 13306, Expiration Date: 10.25.2014

ISSUED FOR:

DATE	DESCRIPTION
04/23/14	100% SUBMISSION
04/29/14	PERMIT SET

PROJECT NO: 0114j

SCALE: AS SHOWN

DRAWN BY: AA

CHECKED BY: JK

DATE: 04/29/14

SHEET TITLE:

COVER SHEET

DRAWING NO:

CS

GENERAL NOTES

- ALL WORK SHALL BE DONE IN COMPLIANCE WITH ALL CURRENT GOVERNING CODES, ALL APPLICABLE ORDINANCES, REGULATIONS AND OTHER LOCAL CODES THAT APPLY.
- THE INFORMATION PROVIDED IN THIS DOCUMENT IS FROM DOCUMENTATION AVAILABLE AND MAY NOT REFLECT EXACT FIELD CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL INFORMATION. BRING CONFLICTS TO THE ATTENTION OF THE OWNER AND OBTAIN APPROVAL FROM THE OWNER OR AUTHORITY HAVING JURISDICTION PRIOR TO PROCEEDING WITH ALTERNATE METHODS AND/OR MATERIALS, ETC.
- THE ARCHITECT WILL NOT HAVE CONTROL OVER OR CHARGE OF AND WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUE, SEQUENCE OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, SINCE THESE ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY. THE ARCHITECT WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL VISIT THE SITE TO HAVE A COMPLETE UNDERSTANDING OF THE SCOPE OF PROJECT BEFORE SUBMITTING THEIR PROPOSAL.
- THE CONTRACTOR SHALL REVIEW THE CONTRACT DRAWINGS FOR ANY CONDITIONS WHICH RELATE TO THE PERFORMANCE AND COORDINATION OF SPECIFIC TRADES.
- ALL SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATING THEIR WORK WITH ALL OTHER TRADES AND SEQUENCING OF CONSTRUCTION OPERATIONS.
- DO NOT SCALE DRAWINGS. ALL DIMENSIONS SHALL BE FROM FINISHED FACE TO FINISHED FACE UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
- ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS AND THE CONSULTING ENGINEER'S DRAWINGS. IF DISCREPANCIES OCCUR IT SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK. ANY WORK INSTALLED IN CONFLICT WITH THE DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE AND AT NO ADDITIONAL EXPENSE TO THE OWNER.
- AS WORK PROGRESSES AND FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL MAINTAIN A COMPLETE AND SEPARATE SET OF PRINTS OF THE CONTRACT DRAWINGS INCLUDING ALL REVISIONS AND ADDENDA AT THE JOB SITE AT ALL TIMES. THE CONTRACTOR SHALL CLEARLY AND ACCURATELY RECORD ALL WORK COMPLETED AND ALL MODIFICATIONS AND CHANGES FROM THE ORIGINAL CONTRACT DRAWINGS.
- DETAILS ARE NOT INTENDED TO SHOW METHOD AND MANNER OF ACCOMPLISHING WORK. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT THE JOB DIMENSIONS OR CONDITIONS AND SHALL BE INCLUDED AS PART OF THE WORK. OBTAIN THE ARCHITECT'S APPROVAL PRIOR TO PROCEEDING WITH ANY DEVIATIONS FROM DETAILS.
- THE CONTRACTOR SHALL PERFORM DAILY CLEAN-UP OF ALL TRASH AND DEBRIS RESULTING FROM THEIR WORK AND SHALL CONTINUE TO BE RESPONSIBLE FOR THE DAILY CLEAN-UP AND REMOVAL OF ALL TRASH AND DEBRIS WHICH RESULTS FROM THEIR OPERATIONS. IF THE CONTRACTOR FAILS TO COMPLY WITH THIS, THE OWNER SHALL PERFORM THE NECESSARY CLEAN-UP AND DEDUCT THE COST FROM THE CONTRACT AMOUNT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATION OF ALL UTILITY LINES AND SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT UTILITY LINES WHETHER SHOWN OR NOT SHOWN ON DRAWINGS.
- THE CONTRACTOR SHALL CONDUCT THE ACTIVITIES IN A SAFE MANNER AND SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL SAFETY REGULATIONS OF OSHA AND LOCAL LIFE SAFETY AGENCIES.

SCOPE OF WORK

TEMPORARY PLACEMENT OF (2) PORTABLE CLASSROOMS AT EXIST. ELEMENTARY SCHOOL SITE

DRAWING INDEX

- CS COVER SHEET
- SP SITE PLAN
- A-1 EXIST./DEMO, PLAN, FOUNDATION PLAN & FLOOR PLAN
- A-2 CANOPY ROOF PLAN
- A-3 TYPICAL DETAILS-1
- A-4 TYPICAL DETAILS-2
- E-1 FLOOR PLAN & SITE PLAN
- E-2 RISER DIAGRAM, SYMBOL LEGEND, GENERAL NOTES & DETAILS
- E-3 LOW VOLTAGE ONE-LINE DIAGRAM, PLANS, NOTES & DETAILS

VICINITY MAP



PROJECT DATA

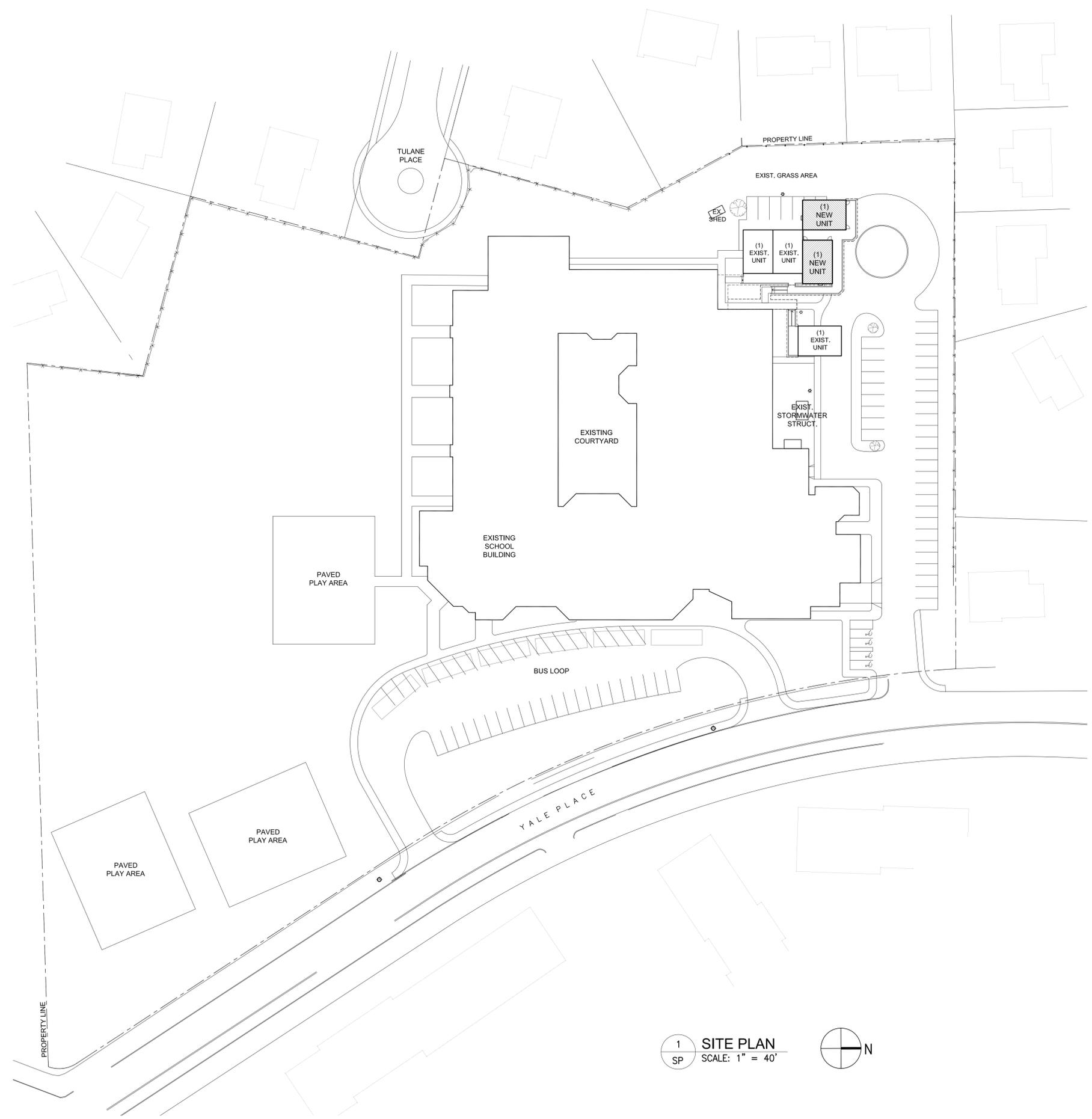
USE GROUP/ MIXED USE (PER IBC CODE): E
OCCUPANT LOAD
(TABLE 7.3.1.2 PER NFPA-101) = 1,588 SF / 20 SF/PERSON = 79 OCCUPANTS
(TABLE 1004.1.1 PER IBC) = 1,588 SF / 20 SF/PERSON = 79 OCCUPANTS
TYPE OF CONSTRUCTION: 5B
SPRINKLER PROTECTION: N/A
FULLY SPRINKLERED: NO
FIRE ALARM: FIRE HORN/ STROBE
STANDPIPES: NO
HEIGHT/ NO. OF STORIES: 12'-0" / 1 STORY
NO. OF STORIES BELOW GRADE: 0
FLOOR AREA OF ADD/ ALTER: 1,588 SF

APPLICABLE CODES:
INTERNATIONAL BUILDING CODE 2012
NATIONAL ELECTRICAL CODE 2011 (NFPA 70)
ADAAG AMERICAN WITH DISABILITIES ACT 2010
NFPA 101 LIFE SAFETY CODE 2012

BUILDING CODE SUMMARY

USE GROUP/ MIXED USE (PER IBC CODE): E
 OCCUPANT LOAD
 (TABLE 7.3.1.2 PER NFPA-101) = 1,588 SF / 20 SF/PERSON = 79 OCCUPANTS
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 STANDPIPES: NO
 HEIGHT/ NO. OF STORIES: 12'-0"/ 1 STORY
 NO. OF STORIES BELOW GRADE: 0
 FLOOR AREA OF ADD/ ALTER: 1,588 SF

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1 SITE PLAN
 SP SCALE: 1" = 40'



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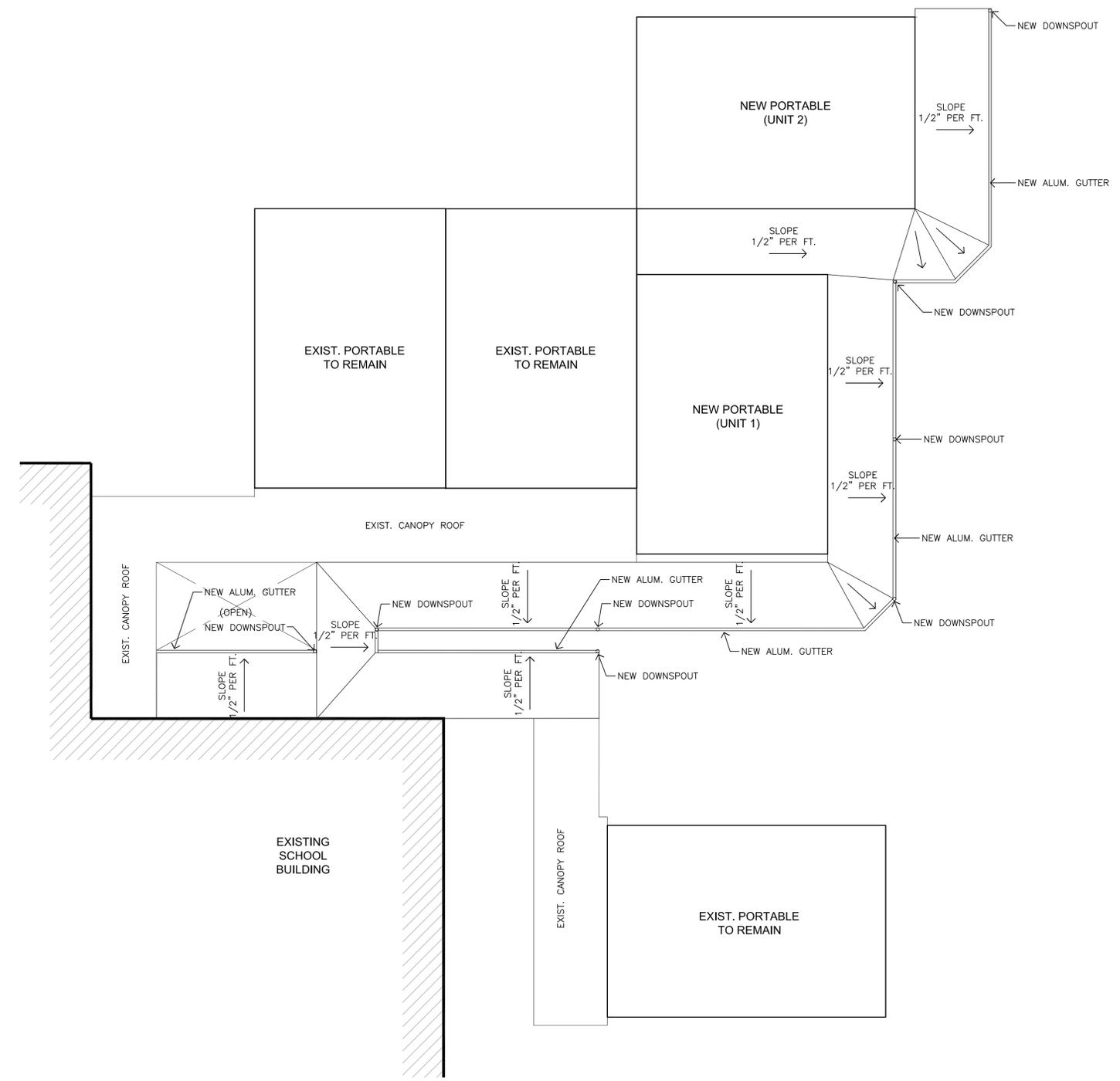
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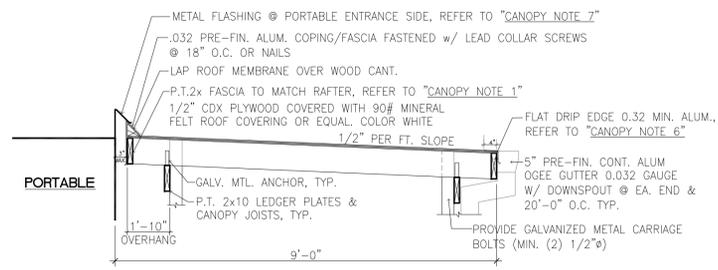


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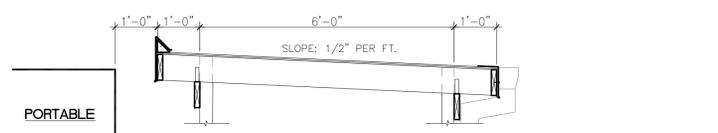


1 CANOPY ROOF PLAN
A-2 SCALE: 1/8" = 1'-0"

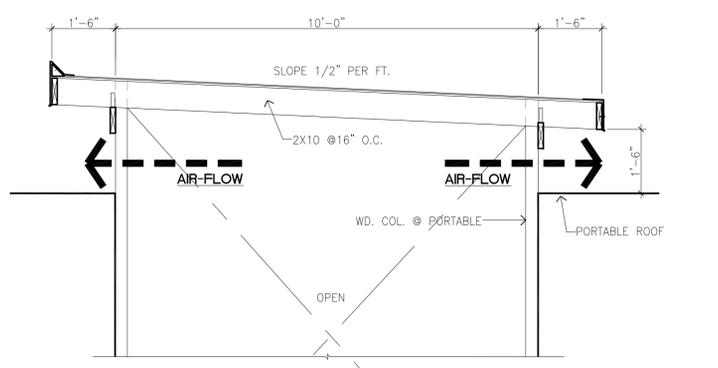




SECTION 2B: PORTABLES ON ONE SIDE OF CANOPY (AT DOORWAY)

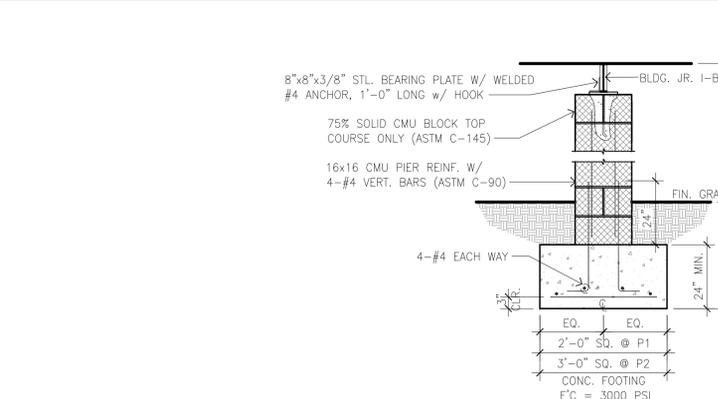


SECTION 2A: PORTABLES ON ONE SIDE OF CANOPY (AT WINDOW)
(SEE CANOPY NOTES ABOVE)

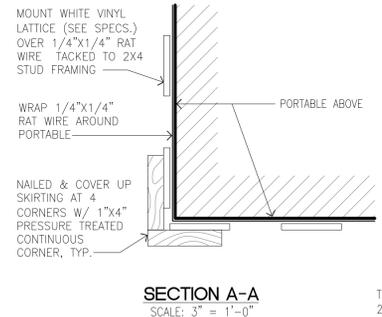


SECTION 1: PORTABLES FACING EACH OTHER
(SEE CANOPY NOTES ABOVE)

6 CANOPY SECTIONS
SCALE: 1/2" = 1'-0"

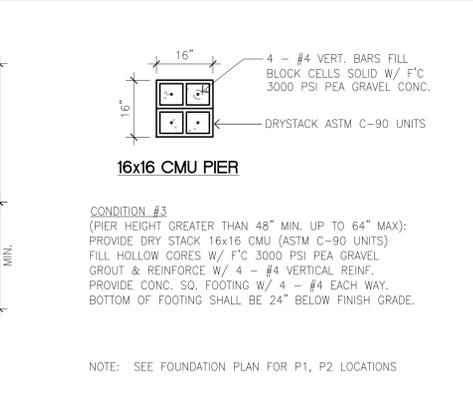


3 PIER DETAIL CONDITION #3
SCALE: 1/2" = 1'-0"

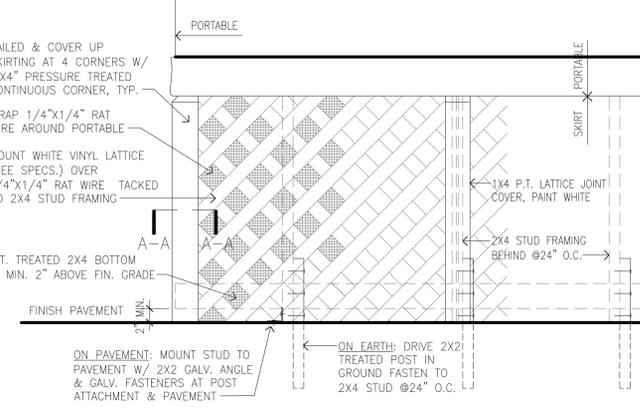


SECTION A-A
SCALE: 3" = 1'-0"

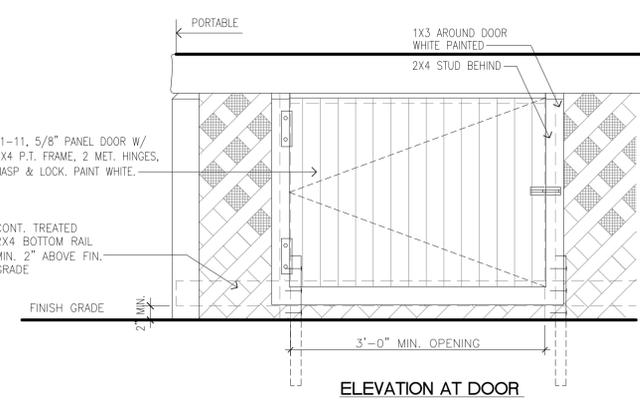
5 POST TIE DOWN DETAIL
SCALE: 3" = 1'-0"



NOTE: SEE FOUNDATION PLAN FOR P1, P2 LOCATIONS

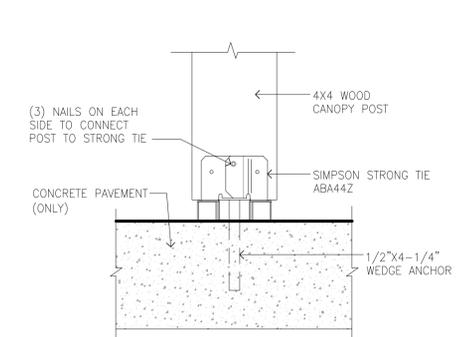


ELEVATION



ELEVATION AT DOOR

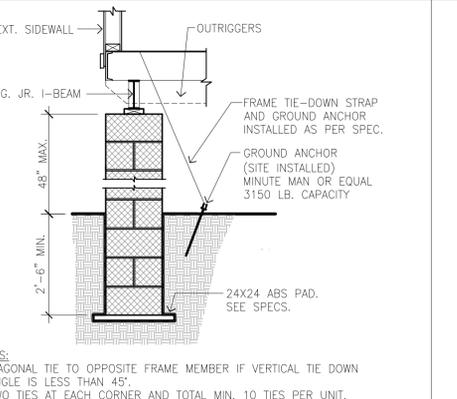
7 SKIRTING DETAILS
SCALE: 1" = 1'-0"



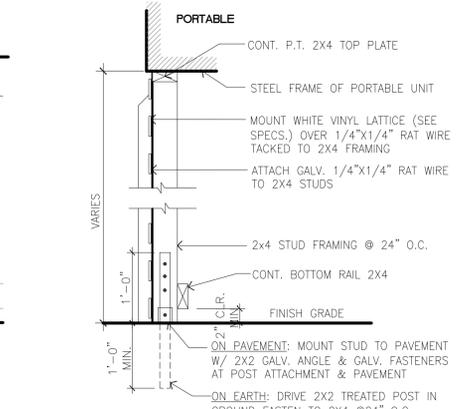
ANCHORED BEARING

NOTE: 1. UP TO A HEIGHT OF 32" MAX: 16" SQUARE DRYSTACKED CMU PIERS MAY BE USED IN LIEU OF UNREINFORCED SONOTUBE PIERS, IF USED, ALL 16" SQUARE CMU PIERS ARE TO BE 75% SOLID TYPE CMU, MAX. 32" (4 COURSES) HIGH, WITH ALTERNATING BOND, TYP.
2. PORTABLE UNITS ARE TO BE ANCHORED TO PIERS & STRAPPED INTO GRADE TO WITHSTAND LATERAL FORCE LOADS, PER ALL MANUFACTURER AND CODE REQUIREMENTS, TYP.

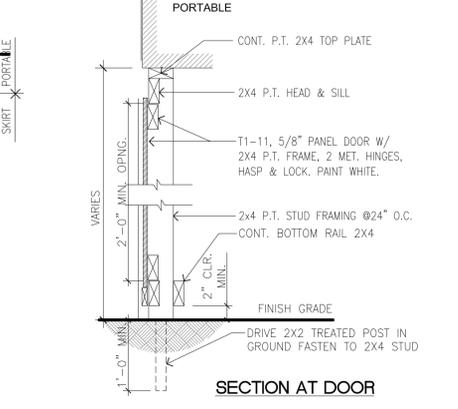
4 SHORT & TALL PIER BEARING DETAILS (CMSI UNITS)
SCALE: 1/2" = 1'-0"



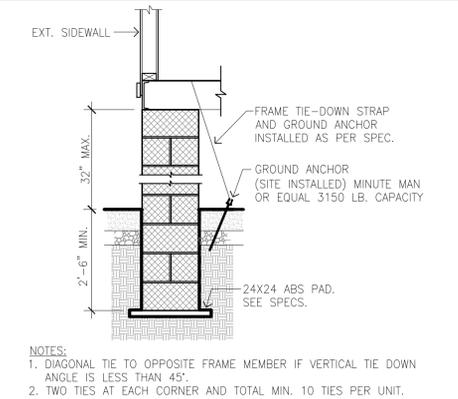
2 PIER DETAIL CONDITION #2 (ON GRADE)
SCALE: 1/2" = 1'-0"



TYPICAL SECTION



SECTION AT DOOR



1 PIER DETAIL CONDITION #1 (ON ASPHALT)
SCALE: 1/2" = 1'-0"

FOUNDATION NOTES

- ALL FOUNDATION CONSTRUCTION, MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES. THE PIER LOCATIONS PROVIDED ON THIS PLAN ARE FOR THE SOLE PURPOSE OF IDENTIFYING THE LOCATION OF THE REQUIRED BLOCKING POINTS FOR THIS BUILDING. FOUNDATION REQUIREMENTS ARE NOT KNOWN DUE TO VARYING SOIL CONDITIONS. FOUNDATION REVIEW AND INSPECTION IS TO BE PERFORMED BY ENGINEER REGISTERED IN THE STATE OF MARYLAND.
- TIE-DOWN STRAPS TO BE 1-1/4" x .035" TYPE-1. FINISH B. GRADE 1 ZINC COATED STEEL STRAPPING CONFORMING WITH ASTM D3953-91. TIE DOWN STRAPS AND CONNECTING HARDWARE SHALL HAVE A MINIMUM WORKING CAPACITY OF 3150#.
- GROUND ANCHORS SHALL HAVE A 3150# MINIMUM WORKING CAPACITY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- CRAWL SPACE TO BE VENTILATED (I.S.O. FT./150 SQ. FT.)
- IN LIEU OF SONOTUBE PIERS UP TO BEAM OF PORTABLE UNIT, 16" SQUARE DRY STACKED CMU PIERS MAY BE USED TO A HEIGHT OF 2'-8" MAX, PLACED ATOP 5" OF ASPHALT.
- ABS PADS SHALL BE MODEL #1055-13 AS MANUFACTURED BY OLIVER TECHNOLOGIES OR APPROVED EQUAL.

DESIGN LOADS

1. **LIVE LOAD**
Roof: 30 psf
Floor (as the basis of foundation design): 40 psf

2. **SNOW LOADS**
Ground Snow Load: PG = 30 psf
Snow Exposure Factor: CE = 1.0
Snow Importance Factor: I = 1.1
Flat Roof Snow Load: PF = 23 psf

3. **LATERAL LOADS**

WIND LOADS PER IBC 2012

- Ultimate Design Wind Speed: 120 mph
- Nominal Design Wind Speed: 93 mph
- Wind Load Importance Factor: 1.0
- Risk Category: III
- Wind Exposure Category: B
- Internal Pressure Coefficient: ±0.18
- min. & max. design wind pressure for the main wind force-resisting system: 18 psf & 21 psf
- Min. & Max. Wind Pressure For Components & Cladding Materials: 26 psf & 30 psf

SEISMIC LOADS PER IBC 2012

- Seismic Importance Factor: IE = 1.25
- Risk Category: III
- Mapped Spectral Response Accelerations: S_s = 0.125 & S₁ = 0.055
- Site Class: D
- Mapped Spectral Response Coefficients: S_{ds} = 0.133 & S_{d1} = 0.088
- Seismic Design Category: B
- Basic Seismic-Force-Resistance System: Light Framed Walls W/ Shear Panels
- Design Base Shear: 0.1W
- Seismic Response Coefficients: C_s = 0.1
- Response Modification Factors: R = 2
- Analysis Procedure Used: Equivalent Lateral Force Procedure

STRUCTURAL NOTES

SOIL BEARING

- DESIGN SOIL BEARING PRESSURE IS 2000 PSF SHALL BE VERIFIED.

CONCRETE

- ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE ACI CODE 318-11
- 28- DAY CONCRETE STRENGTH SHALL BE AS FOLLOWS: STONE CONCRETE: COURSE AGGREGATE SHALL CONFORM TO ASTM C33, F'c = 3500 PSI
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR ENTRAINED WITH 6% ± 1%.

FOUNDATION

- ALL FOOTING SHALL BE PROJECT AT LEAST 1'-0" INTO UNDISTURBED NATURAL SOIL OR THE COMPACTED CONTROLLED FILL HAVING A BEARING VALUE AT LEAST EQUAL TO THAT SPECIFIED ABOVE.
- BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE AT LEAST 2'-6" BELOW FINISHED GRADE.

MASONRY

- SOLID CONCRETE MASONRY SHALL BE GRADE N1 IN ACCORDANCE WITH ASTM C-145 AND MAY BE 75% SOLID, UNLESS OTHERWISE NOTED.
- HOLLOW CONCRETE MASONRY UNITS SHALL BE GRADE N1 CONFORMING TO ASTM C-90.

TESTING AND INSPECTION

- INSPECTION FOR ALL STRUCTURAL PORTIONS OF THE PROJECT SHALL BE PROVIDED AS REQUIRED BY THE APPLICABLE BUILDING CODE.
- THE CONTRACTOR'S TESTING AGENCY SHALL PERFORM ALL INSPECTIONS & TESTINGS
- ALL CONCRETE WORK SHOWN ON THESE DRAWINGS AND SPECIFIED IN THE SPECIFICATIONS SHALL BE INSPECTED IN ACCORDANCE WITH ACI-318 (LATEST EDITION). COPIES OF FIELD REPORTS, CONCRETE MIXES, CYLINDER TESTS, AND OTHER DATA SHALL BE SENT TO THE ARCHITECT, ENGINEER, AND CONTRACTOR
- ALL FIELD AND LAB TESTING OF CONCRETE SHALL CONFORM TO THE LATEST APPROVED EDITIONS OF ASTM APPLICABLE SPECIFICATIONS.
- ALL PIERS SHALL BE INSPECTED FOR ALIGNMENT AND VERTICAL PLUMBNESS PRIOR TO INSTALLATION OF UNITS

CANOPY NOTES

- TYPICAL ROOF JOIST SIZE AND SPACING ARE BASED ON REQUIRED SPAN:
 - UP TO 8'-0" SPAN = 2X6 JOISTS @ 24" O.C. EDGE CLIP FOR 1/2" PLYWOOD SPANNING 24" O.C. JOIST
 - 8'-0" TO 10'-0" SPAN = 2X10 JOISTS @ 16" O.C.
 - 10'-0" TO 12'-0" SPAN = 2X10 JOISTS @ 16" O.C.
 - 12'-0" TO 16'-0" SPAN = 2X12 JOISTS @ 16" O.C.
- ALL CANOPIES TO BE SLOPED TO DIVERT WATER AWAY FROM BUILDINGS. BOTTOM OF CANOPY RAFTER SHALL BE A MINIMUM OF 8'-0" FROM DECK SURFACE.
- START APPLICATION OF ROOFING AT LOW SIDE OF CANOPY, WORKING UP THE SLOPE SO WATER RUNS OVER LAPS.
- 36" ROLL ROOFING SHALL BE 125 MIL, RUBBERIZED, ASPHALT-BACKED, SELF-ADHESIVE WITH MINERAL SURFACE. (SIMILAR TO "MSR-100" AS MANUFACTURED BY NEI AT (603) 778-8899).
- ROOFING MATERIAL SHALL BE INSTALLED PER MANUFACTURERS DIRECTIONS AND IMMEDIATELY AFTER INSTALLATION OF ROOF SHEATHING. SHEATHING MUST ALSO BE COMPLETELY DRY.
- DRIP EDGE SHALL BE APPLIED DIRECTLY OVER SHEATHING, APPLY ROOF SEALER TO DRIP EDGE PRIOR TO APPLICATION OF ROLL ROOFING. THEN, ROLL ROOFING SHALL BE APPLIED OVER DRIP EDGE AND SEALED WITH ROOF SEALER SUCH AS MUNSEY OR SIMILAR, TYP.
- PROVIDE METAL FLASHING INSTALLED ON ROOF AT INTERSECTION OF CANOPY WITH PORTABLE ENTRANCE WALL.
- INSTALL WOODEN CANT STRIP (4X4 CUT 45 DEG) AT HIGH SIDE OF CANOPY SLOPE FOR FULL PERIMETER OF CANOPY THAT DOES NOT RECEIVE GUTTERS. SEE DETAIL.
- GUTTER HANGERS SHALL BE HIDDEN SCREW TYPE @ 24" O.C., TYP.
- PROVIDE DOWNSPOUTS AT EACH END OF EACH STRAIGHT SECTION OF CANOPY GUTTER @ 20' O.C. MAX. INSTALL PRE-FORMED DOWNSPOUT OUTLETS AT EACH DOWNSPOUT LOCATION. SEAL ALL GUTTER & DOWNSPOUT JOINTS, OUTLETS AND ENDCAPS, TYP.



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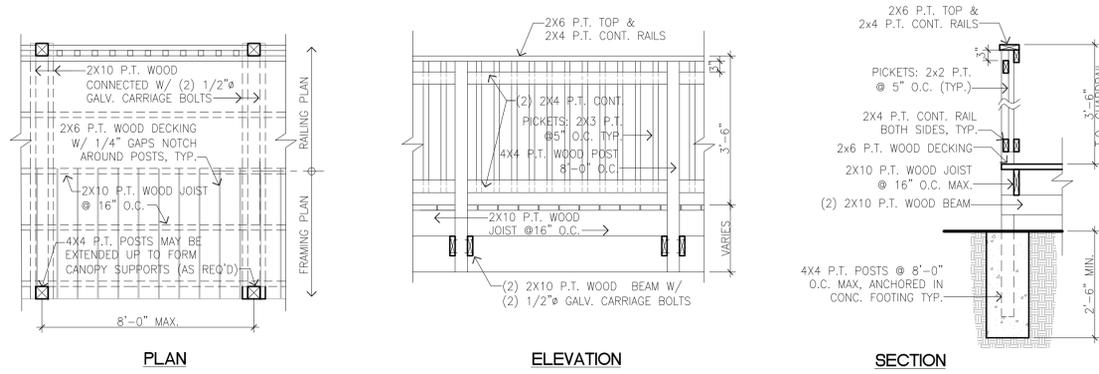
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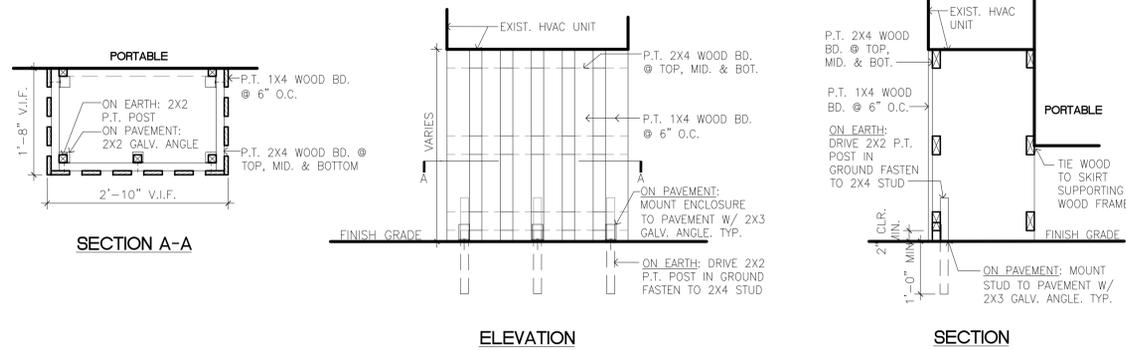
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TYPICAL DETAILS - 1

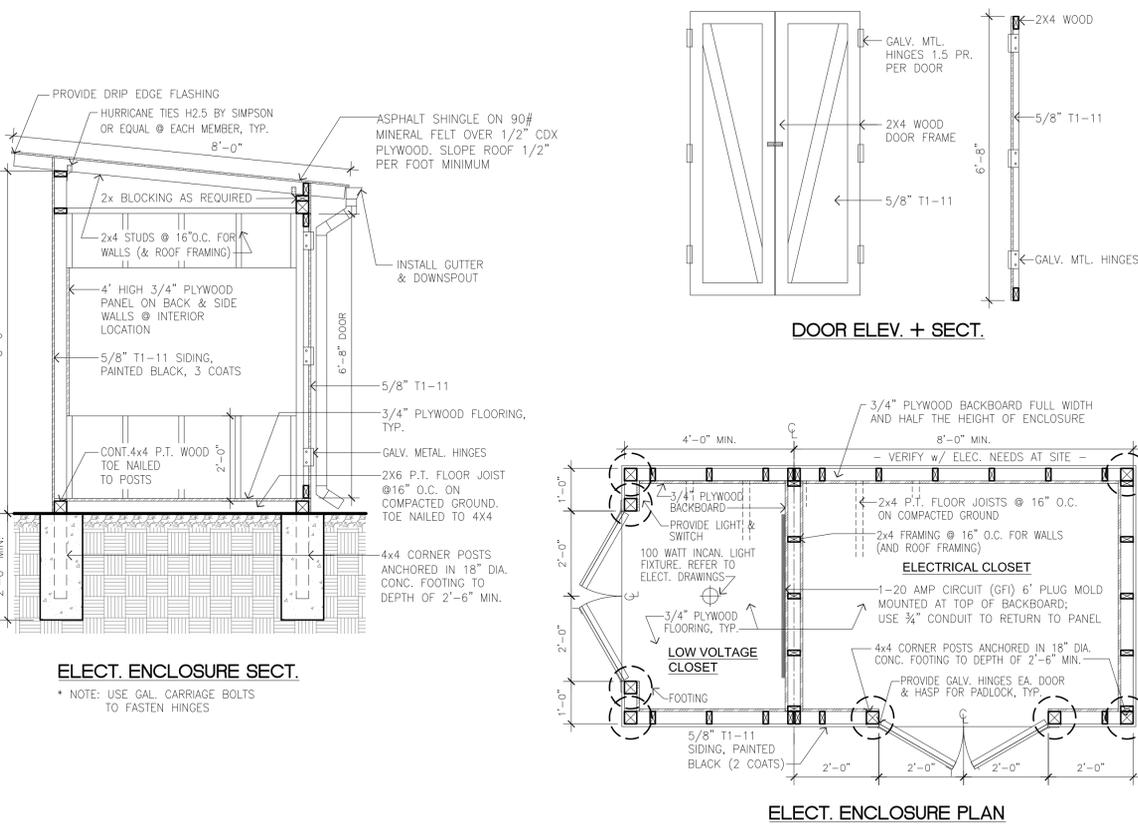
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A-3



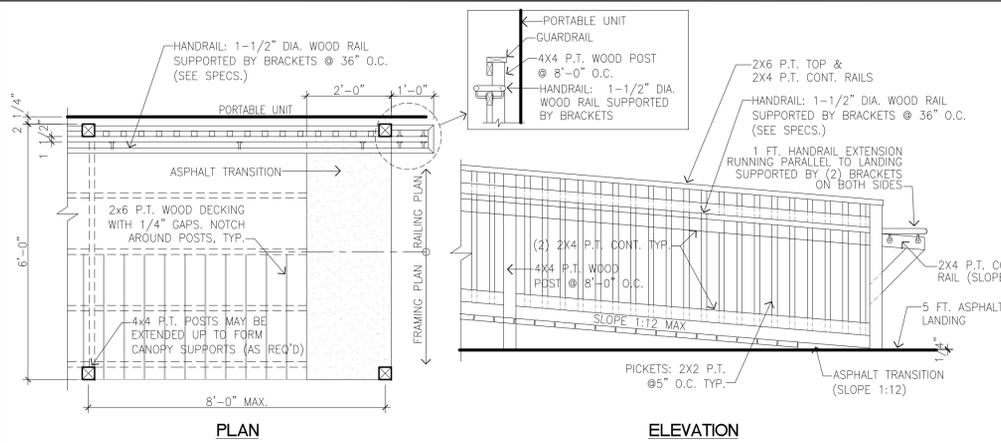
5 WOOD DECK DETAILS
 SCALE: 1/2" = 1'-0"



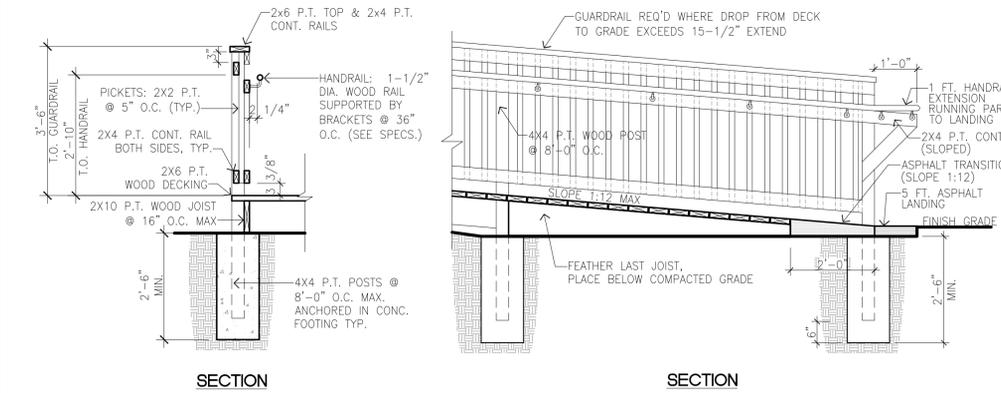
4 HVAC ENCLOSURE
 SCALE: 3/4" = 1'-0"



2 ELECTRIC ENCLOSURE DETAILS
 SCALE: 1/2" = 1'-0"



3 HC RAMP DETAILS
 SCALE: 1/2" = 1'-0"



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

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- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND CERTIFICATES OF INSPECTION REQUIRED TO COMPLETE THE WORK.
- CONTRACTOR SHALL CHECK THE SITE, AND REVIEW WITH "MISS UTILITY" (1-800-257-7777) BEFORE DRILLING OR EXCAVATING. ANY DISTURBANCES TO SITE SHALL BE RESTORED TO SIMILAR ADJACENT CONDITIONS WITH LIKE MATERIAL, AS REQ'D.

UNIT PLACEMENT

- SITE CONDITIONS AND GRADES WILL VARY. HEIGHT OF PIERS, DISTANCE OF DECK ABOVE GRADE, AND NUMBER OF RISERS MUST BE FIELD VERIFIED AT SITE PRIOR TO PLACEMENT OF UNITS, TYP.
- PIER FOOTING LAYOUT AND CONSTRUCTION, PORTABLE UNIT SET-UP, ANCHORS & STRAPS ALL TO BE IN STRICT ACCORDANCE WITH THE SPECIFIC MANUFACTURER'S REQUIREMENTS FOR UNIT SIZES IN USE AT SITE.
- REINFORCEMENT BARS SHALL BE DEFORMED BARS, ASTM A615, GRADE 60.
- WELDING SHALL BE PER THE A.W.S. WITH E70 ELECTRODES.

WOOD CONSTRUCTION

- ALL HARDWARE (NAILS, BOLTS, STRAPS, TIES, ETC.) SHALL BE GALVANIZED.
- ALL EXTERIOR WOOD LUMBER AND FRAMING SHALL PRESSURE TREATED (P.T.) NUMBER 2 OR BETTER, NO CCA ALLOWED (SEE SPECS.).
- ALL CONNECTIONS FROM 2x FRAMING MEMBERS TO 4x4 POSTS TO BE WITH (2) 1/2" GALV. CARRIAGE BOLTS, TYP. EXCEPT WHERE NOTED.
- ALL WOOD DECKING ON DECKS, RAMPS, STAIRS TO BE LAID TRUE, FLUSH AND EVEN, AND FREE OF TRIPPING CONDITIONS. ALL WOOD RAILS TO BE FREE OF SPLINTERS AND SANDED SMOOTH.
- PLATFORM LANDINGS LAID ADJACENT TO UNIT DOORS ARE TO BE SET 1/4" LOWER THAN FINISH FLOOR OF UNIT EXCEPT IN THE CITIES OF ROCKVILLE AND GAITHERSBURG.
- USE (2) 1/2" GALV. CARRIAGE BOLTS WHERE APPLICABLE - TYPICAL.
- ALL THRESHOLD FROM DECK TO PORTABLE TO BE LESS THAN 1/4" HIGH.

QUALITY ASSURANCE

- TEST CORES OF THE EXISTING PAVEMENT SHALL BE TAKEN TO DETERMINE THE COMPOSITION AND TOTAL THICKNESS OF THE EXISTING PAVEMENT.
- THE SUBGRADE SHALL BE EVALUATED BY AN ENGINEER REGISTERED IN THE STATE OF MARYLAND TO VERIFY THAT THE SUBGRADE HAS A MINIMUM ALLOWABLE BEARING CAPACITY OF 2,000 PSF AND THAT THE SOIL MEETS THE PROBE VALUE REQUIREMENTS FOR "SOIL CLASS 4A" AS RECOMMENDED BY THE TIE DOWN ANCHOR MANUFACTURER, SEE MANUFACTURER'S SPECIFICATIONS.
- THE PAVEMENT AREA WITHIN ANY SINGLE CLASSROOM SHALL BE FAIRLY LEVEL, THE AREA DIRECTLY UNDER PIERS SHALL BE FREE OF DIRT, STONE AND DEBRIS.
- A MORTAR LEVELING BED SHALL BE PROVIDED IF THE PAVEMENT IS NOT LEVEL. THE JOINTS SHALL BE FLUSH AND TIGHT WHEN PLACED AGAINST EACH OTHER.
- THE FIRST COURSE FOR EACH OF THE TWO CENTER END WALL PIERS SHALL CONSIST OF TWO (2) 12x16 SOLID CONCRETE MASONRY UNITS (100% SOLID CONFORMING TO ASTM C-55, TYPE N); THE REMAINING COURSES SHALL BE TWO (2) 8x16 SOLID CMU PIERS ABOVE.
- PIERS SHALL BE INSPECTED FOR ALIGNMENT AND VERTICAL PLUMBNESS PRIOR TO INSTALLATION OF RELOCATABLE UNITS.

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PROJECT NAME:
Montgomery County Public Schools
Portable Classrooms at College Gardens Elementary School
 1700 YALE PLACE
 ROCKVILLE, MD 20850

SEAL:

PROFESSIONAL CERTIFICATION:
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of State of Maryland License No. 18370, Expiration Date: 08-12-2015

ISSUED FOR:

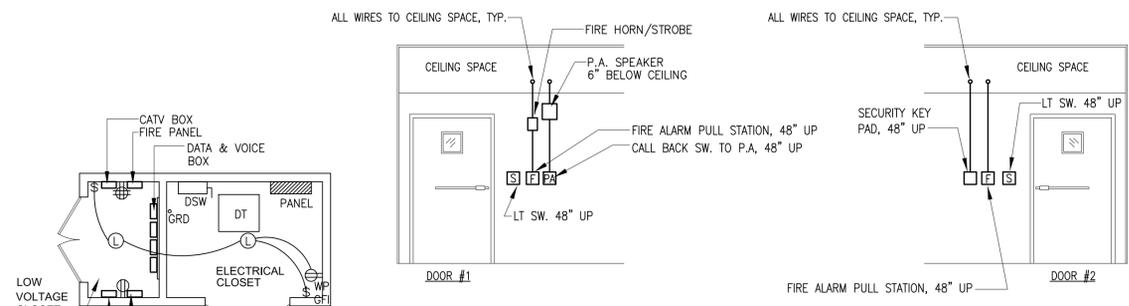
DATE	DESCRIPTION
04/23/14	100% SUBMISSION
04/29/14	PERMIT SET

PROJECT NO: 0114j
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 CHECKED BY: JK
 DATE: 04/29/14
 SHEET TITLE:
TYPICAL DETAILS -2
 DRAWING NO:
A-4

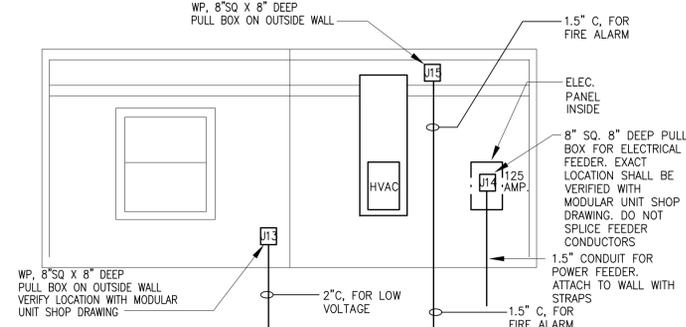
LEGEND

J1	2X4 J-BOX @ 80" AFF W/ 3/4" CONDUIT CONNECTED
J2	2X4 J-BOX @ 48" AFF W/ 1" CONDUIT THRU FLOOR, CONNECTED TO 'CALL BACK SWITCH'.
J3	2X4 J-BOX @ 48" AFF W/ 3/4" CONDUIT CONNECTED TO J2, 3" SEPARATION, 'KEY PAD BOX'.
J6	6X6X4 PULL BOX TO CEILING SPACE WITH COVER FACING DOWN
J7	2X4 J-BOX @ 18" AFF W/ 1" CONDUIT TO CEILING SPACE CONNECTED TO 'COMPUTER OUTLET'.
J9	2X4 J-BOX 4" BELOW CEILING CORNER W/ 3/4" CONDUIT CONNECTED TO J10, 'SENSOR BOX'.
J10	4X4 J-BOX 6" BELOW CEILING WITH 3/4" CONDUIT CONNECTED TO J2, 'SPEAKER BOX'.
J13	8" SQ. X 8" DEEP WP PULL BOX WITH 2" CONDUIT FOR LOW VOLTAGE. J13 TO HAVE NIPPLE THRU THE WALL INTO THE CLASSROOM.
J14	8" SQ. X 8" DEEP WP PULL BOX WITH A 1.5" CONDUIT FOR POWER FEEDER
J15	8" SQ. X 8" DEEP WP PULL BOX WITH A 1.5" CONDUIT FOR FIRE ALARM. J15 TO HAVE NIPPLE THRU THE WALL INTO ACCESSIBLE CEILING SPACE. PROVIDE INSULATING BUSHING
P	2X4 J-BOX @ 48" AFF W/ 1-1/4" OR 3/4" CONDUIT TO CEILING SPACE CONNECTED TO J6, 'FIRE ALARM PULL STATION'.
S	2X4 J-BOX @ 80" AFF W/ 3/4" CONDUIT CONNECTED TO PULL STATION, 'HORN/STROBE'.
1	1 DENOTES DOOR NUMBER, REFER TO INTERIOR VIEWS.

* ALL LOW VOLTAGE TO BE IN WIREMOLD ON THIS UNIT ONLY.



INTERIOR VIEWS AT DOOR
N.T.S.

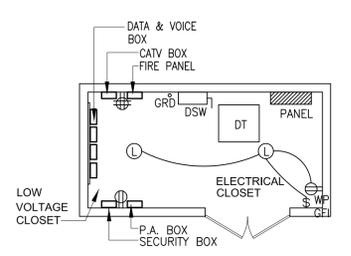


EXTERIOR VIEW AT HVAC UNIT
N.T.S.

- NOTES:**
1. PENETRATIONS THROUGH THE BUILDING ARE TO BE NO LARGER THAN NECESSARY TO ACCOMMODATE CONDUIT (TO BE RUN INSIDE THE UNIT).
 2. 100% SILICONE IS TO BE USED AT PENETRATION AND 1-1/2" STRAPS TO SUPPORT CONDUIT WHERE NECESSARY.
 3. CONDUIT RISERS ON THE WALL SHALL BE PLUMB VERTICAL AND STRAPPED TO THE WALL
 4. CONDUIT RISERS ON THE WALL SHALL BE PLUMB AND MISS THE EXISTING WP CONVENIENCE OUTLET ON THE WALL

TYPICAL ELECTRICAL SHED WITH DIVIDER
N.T.S.

- DSW 480 V. FUSED DISCONNECT SWITCH
- DT STEP-DOWN TRANSFORMER
- PANEL 208/120V, 3φ, 4W PANEL BOARD
- GRD DRIVEN GROUND ROD
- 100 WATT LAMP WITH WIRE GUARD CONNECTED TO LIGHTING CIRCUIT

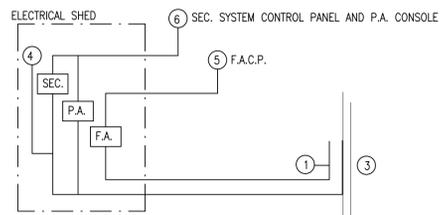


TYPICAL ELECTRICAL SHED WITHOUT DIVIDER
N.T.S.

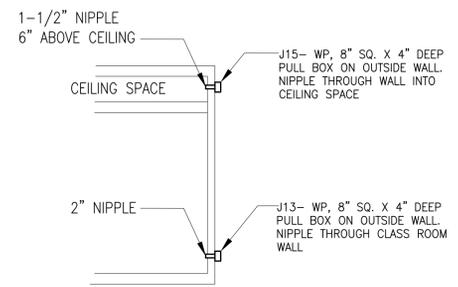
- DSW 480 V. FUSED DISCONNECT SWITCH
- DT STEP-DOWN TRANSFORMER
- PANEL 208/120V, 3φ, 4W PANEL BOARD
- GRD DRIVEN GROUND ROD
- 100 WATT LAMP WITH WIRE GUARD CONNECTED TO LIGHTING CIRCUIT

LOW VOLTAGE NOTES:

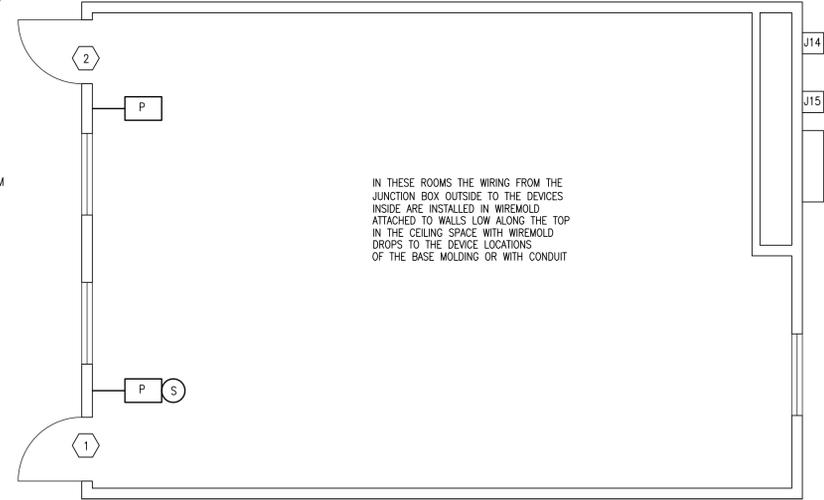
1. ONE 1.5" CONDUIT FROM BOX J6 AT NEW CLASSROOMS TO ELECTRICAL SHED FOR FIRE ALARM SYSTEM. USE FPL SHIELDED 16 GAUGE 4 CONDUCTOR WIRE.
2. NOT USED.
3. ONE 2" CONDUIT FROM NEW CLASSROOMS TO ELECTRICAL SHED FOR PA, SECURITY AND DATA SYSTEM. USE 1-18 GAUGE 4 CONDUCTORS STRANDED WIRE FOR SECURITY. USE 6-CAT5-E4-PAIR BLUE FOR DATA AND 1-CAT5-E4-PAIR WHITE FOR VOICE. USE WEST PENN #357, 22 GAUGE STANDARD 4 CONDUCTOR (2 SHIELDED, 2 UN-SHIELDED) WIRE.
4. POINT OF CONNECTION FOR DATA CONDUIT.
5. POINT OF CONNECTION FOR FIRE ALARM CONDUIT.
6. POINT OF CONNECTION FOR PA AND SECURITY CONDUIT.



LOW VOLTAGE DIAGRAM
N.T.S.

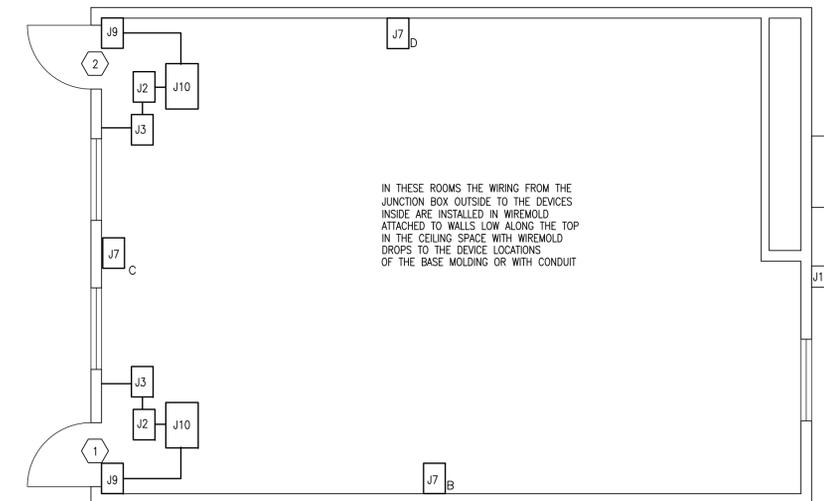


PULL BOX SECTION DETAIL
N.T.S.



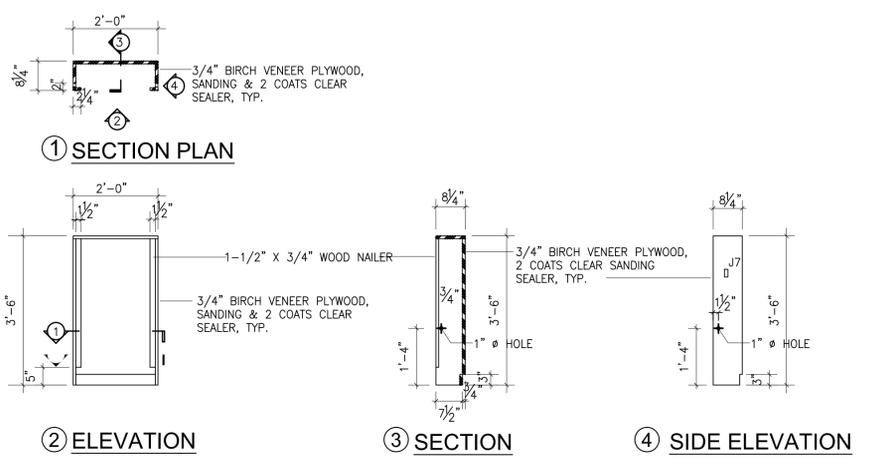
IN THESE ROOMS THE WIRING FROM THE JUNCTION BOX OUTSIDE TO THE DEVICES INSIDE ARE INSTALLED IN WIREMOLD ATTACHED TO WALLS LOW ALONG THE TOP IN THE CEILING SPACE WITH WIREMOLD DROPS TO THE DEVICE LOCATIONS OF THE BASE MOLDING OR WITH CONDUIT

FIRE ALARM CONDUIT AND BOXES LAYOUT



IN THESE ROOMS THE WIRING FROM THE JUNCTION BOX OUTSIDE TO THE DEVICES INSIDE ARE INSTALLED IN WIREMOLD ATTACHED TO WALLS LOW ALONG THE TOP IN THE CEILING SPACE WITH WIREMOLD DROPS TO THE DEVICE LOCATIONS OF THE BASE MOLDING OR WITH CONDUIT

LOW VOLTAGE LAYOUT



J-BOX ENCLOSURE ELEVATION AND SECTION (J-12)
SCALE = 3/8"=1'-0"