

PROPOSED TRAINING CENTER BUILDING FOR
KERNERSVILLE POLICE DEPARTMENT
 7385 GOODWILL CHURCH ROAD
 KERNERSVILLE, NC

PROPOSED TRAINING CENTER BUILDING FOR:
KERNERSVILLE POLICE DEPT.
 7385 GOODWILL CHURCH ROAD
 KERNERSVILLE, NC

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GENERAL NOTES:

- CONTRACTOR SHALL NOT SCALE THESE DRAWINGS FOR CONSTRUCTION PURPOSES. IN THE EVENT OF OMISSION OF NECESSARY DIMENSIONS, THE CONTRACTOR SHALL NOTIFY ARCHITECT OR OWNER'S REPRESENTATIVE.
- EACH CONTRACTOR OR SUBCONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, AND LICENSES REQUIRED FOR PROPER EXECUTION.
- EACH CONTRACTOR OR SUBCONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF ALL APPLICABLE LAWS AND ORDER OF PUBLIC OFFICIALS WITH JURISDICTION FOR SAFETY OF PERSONS/PROPERTY
- VERIFY WITH THE MANUFACTURER/SUPPLIER THE SIZE, LOCATION AND CHARACTERISTICS OF ALL WORK AND EQUIPMENT THAT IS TO BE FURNISHED BY THE OWNER OR OTHER CONTRACTORS PRIOR TO ANY CONSTRUCTION PERTAINING TO THE SAME IS BEGUN.
- KEEP DRIVEWAYS AND ENTRANCES CLEAR AT ALL TIMES. EACH SUBCONTRACTOR SHALL REMOVE RUBBISH AT THE COMPLETION AT THE COMPLETION OF HIS WORK. PROMPTLY REPAIR ANY DAMAGE DONE TO ADJACENT PROPERTY/TENANT SPACES AT NO COST TO OWNER.
- GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO VISIT THE SITE AND VERIFY ALL SITE CONDITIONS PERTAINING TO THIS PROJECT PRIOR TO SUBMISSION OF BIDS. ANY DISCREPANCIES FOUND DURING SITE INVESTIGATION TO BE REPORTED TO OWNER'S REP IN WRITING PRIOR TO BID SUBMISSION.
- CONTRACTOR TO COMPLY WITH ALL LANDLORD'S AND OWNER'S RULES AND REGULATIONS REGARDING CONSTRUCTION WITHIN THE BUILDING.
- ALL WORK SHALL BE DONE BY LICENSED CONTRACTORS AND IN CONFORMANCE WITH ALL NATIONAL, STATE, COUNTY, AND LOCAL CODES. ANY VARIANCE/NON-COMPLIANCE WITH LOCAL CODE TO BE REPORTED TO PROJECT MANAGER IN WRITING PRIOR TO BIDS.
- G.C. TO ENSURE THAT A COMPLETE OF CONSTRUCTION DOCUMENTS IS GIVEN TO ALL SUBCONTRACTORS PRIOR TO BID SUBMISSION.
- ALL WOOD BLOCKING TO BE FIRE RETARDANT TREATED
- LOCATION, TYPE AND SIZE OF PORTABLE FIRE EXTINGUISHERS TO BE DETERMINED BY THE FIRE MARSHALL. FIRE EXTINGUISHERS TO BE PROVIDED BY THE G.C.

ABBREVIATIONS:

A.C.T	ACOUSTICAL CEILING TILE	N.I.C.	NOT IN CONTRACT
A.F.F	ABOVE FINISH FLOOR	NO.	NUMBER
ALUM.	ALUMINUM	N.T.S.	NOT TO SCALE
ANOD.	ANODIZED		
BD.	BOARD	O.C.	ON CENTER
BOT.	BOTTOM OF	OP'NG	OPENING
BLDG.	BUILDING	P.C.	PRE CAST
BLK.	BLOCKING	PEMB	PRE-ENGINEERED METAL BUILDING
BRG.	BEARING	PLAS.	PLASTIC
		PLBG.	PLUMBING
CAB'T.	CABINET	PRE-FAB	PRE-FRABRICATED
¢	CENTER LINE	P(TD.)	PAINT(ED)
C.J.	CONTROL JOINT	PSF.	POUNDS PER SQUARE FOOT
CLG.	CEILING	PSI.	POUNDS PER SQUARE INCH
C.M.U	CONCRETE MASONRY UNIT		
CO.	CLEAN OUT	R.	RADIUS
COL.	COLUMN	RD.	ROOF DRAIN
CONT.	CONTINUOUS	REINF.	REINFORCEMENT
CONC.	CONCRETE	REQ'D	REQUIRED
CONST.	CONSTRUCTION	RM.	ROOM
CPT.	CARPET	RO.	ROUGH OPENING
CT.	CERAMIC TILE		
		S.C.	SOLID CORE
DIA.	DIAMETER	SHT.	SHEET
DN.	DOWN	SIM.	SIMILAR
DS.	DOWN SPOUT	SPEC.	SPECIFICATION(S)
DTL.	DETAIL	S.S.	STAINLESS STEEL
DWG	DRAWING	STL.	STEEL
		STRUCT	STRUCTURE(AL)
EA.	EACH	SQ. FT.	SQAURE FEET
E.I.F.S.	EXTERIOR INSULATION + FINISH SYSTEM		
ELEC.	ELECTRIC(AL)	T/	TOP OF
EQ.	EQUAL	THK.	THICK
EQUIP.	EQUIPMENT	TYP.	TYPICAL
EXIST.	EXISTING		
		U.N.O	UNLESS NOTED OTHERWISE
F.D.	FLOOR DRAIN	V.C.B.	VINYL COVER BASE
FLR.	FLOOR	V.C.T.	VINYL COMPOSITION TILE
F.R.P	FIBERGLASS REINFORCED PANELS	VERT.	VERTICAL
F.R.T.	FIRE RETARDANT TREATMENT	V.I.F.	VERIFY IN FIELD
		V.W.C.	VINYL WALL COVERING
G.A.	GAUGE		
GALV.	GALVANIZED	W/	WITH
G.C.	GENERAL CONTRACTOR	W.C.	WATER CLOSET
GL.	GLASS	WD.	WOOD
G.W.B.	GYPSTUM WALL BOARD	WT.	WEIGHT
GYP.	GYPSTUM		
HDW.	HARDWARE		
HM.	HOLLOW METAL		
HOL.	HOLLOW		
HORZ.	HORIZONTAL		
HR.	HOUR		
HT.	HEIGHT		
HVAC	HEATING/VENTILATION/AIR CONDITIONING		
		I.C.P.	INSULATED CEILING PANEL(S)
		INFO.	INFORMATION
		INSUL.	INSULATED
		INT.	INTERIOR
		I.W.P.	INSULATED WALL PANEL(S)
		LAM.	LAMINATED
		LT.	LIGHT
		MAX.	MAXIMUM
		MECH.	MECHANICAL
		MEZZ.	MEZZANINE
		MFR.	MANUFACTURER
		MIN.	MINIMUM
		M.O.	MASONRY OPENING
		M.R.	MOISTURE RESISTANT
		MSRY.	MASONRY
		MTL.	METAL

SYMBOLS:

	KEYED NOTE
	REVISION NUMBER
	FF&E NUMBER
	WINDOW TAG
	DOOR NUMBER
	PARTITION TYPE
	SIGN/ACCESORY NUMBER
	STEEL FABRICATION
	CASEWORK FABRICATION
	DETAIL NUMBER SHEET NUMBER, TYP
	SECTION NUMBER SHEET NUMBER, TYP
	ROOM ELEVATION NUMBER SHEET NUMBER, TYP
	NORTH ARROW
	ROOMNAME ROOM NAME & NUMBER
	SPOT ELEVATION
	COLUMN LINE

COVER SHEET



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COMM. NO.:
 DATE: 10-29-21
 REVISIONS:

SHEET NO.

COVER

2018 APPENDIX B: BUILDING CODE SUMMARY FOR ALL COMMERCIAL BUILDINGS

INCLUDING: The Americans Disabilities Act (ADA) and The Uniform Federal Accessibility Standards (UFAS)

APPENDIX B

2018 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Name of Project: **KERNERSVILLE PD TRAINING CENTER**
 Address: **7385 GOODWILL CHURCH ROAD KERNERSVILLE, NC**
 Proposed Use: **POLICE TRAINING CENTER**
 Owner or Authorized Agent: **NATALIE MCGHEE** Phone # **336-992-0382**
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: City County

CONTACT: OBRIEN:Architecture

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Building	OBRIEN:Architecture	MATTHEW OBRIEN, AIA	NC# 10509	336-423-4411	obrien@obaia.com
Surveyor/Civil	NA				
Electrical	GRAHAM ENGINEERING	SCOTT GRAHAM, PE	NC# 033738	704-402-4588	grahamengineering@gmail.com
Fire Alarm	NA				
Plumbing	GRAHAM ENGINEERING	SCOTT GRAHAM, PE	NC# 033738	704-402-4588	grahamengineering@gmail.com
Mechanical	GRAHAM ENGINEERING	SCOTT GRAHAM, PE	NC# 033738	704-402-4588	grahamengineering@gmail.com
Sprinkler-Standpipe	NA				
Structural	TBD				
Retaining Wall >5' High	NA				
Foundation	QIO ENGINEERING PLLC	CLIFTON E. QUERRY	NC# 16174	336-816-5101	

2018 EDITION OF NORTH CAROLINA BUILDING CODE FOR: New Construction Addition
 2018 EDITION OF NORTH CAROLINA EXISTING BUILDING CODE: Reconstruction Alteration Repair Renovation
 CONSTRUCTED (date) NA CURRENT OCCUPANCY(S) (CH. 3): NA
 RENOVATED (date) NA PROPOSED OCCUPANCY(S) (CH. 3): A-3
 OCCUPANCY CATEGORY (TABLE 1604.5): CURRENT: NA PROPOSED: II

BASIC BUILDING DATA

Construction Type: I-A I-B II-A II-B III-A III-B
 IV V-A V-B
 Mixed Construction: No Yes Types: _____
 Sprinklers: No Yes NFPA 13 NFPA 13R NFPA 13D
 Standpipes: No Yes Class I II III Wet Dry
 Primary Fire District: No Yes Flood Hazard Area: No Yes
 Special Inspections Required: No Yes

GROSS BUILDING AREA TABLE

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL (SQ FT)
BASEMENT	NA	NA	NA
1st Floor	0	3,000	3,000
Mezzanine	NA	NA	NA
2nd Floor	NA	NA	NA
3rd Floor	NA	NA	NA

TOTAL GROSS AREA: 3,000 sq. ft.

ALLOWABLE AREA

Primary Occupancy: Assembly A-1 A-2 A-3 A-4 A-5
 Business Educational Factory-Industrial F-1 F-2 Low Hazard Occupancy
 High-Hazard H-1 H-2 H-3 H-4 H-5
 Institutional I-1 I-2 I-3 I-4
 Mercantile Residential R-1 R-2 R-3 R-4
 Storage S-1 S-2 High-piled
 Utility and Miscellaneous Parking Garage Open Enclosed Repair
 Accessory Occupancy: **B-BUSINESS**
 Incidental Uses (Table 509): NA
 Incidental Use Separation (509)
 This separation is not exempt as a Non-Separated Use (see exceptions).

Special Uses: 508.2 508.3 508.4 508.5 508.6 508.7
 Special Provisions: 508.2 508.3 508.4 508.5 508.6 508.7
 Mixed Occupancy: No Yes Separation: NA Hr. Exception: _____

Non-Separated Use (508.3)

The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

Separated Use (508.4) - See below for area calculations.

For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Select one:

$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} < \text{OR} = 1$

Area Increase? No Yes Code Reference: _____

STORY NO.	DESCRIPTION AND USE	(A) AREA PER STORY (ACTUAL)	(B) TABLE 506.2 ⁴ AREA	(C) AREA FOR FRONTAGE INCREASE ⁵	(D) ALLOW AREA PER STORY OR UNLIMITED ²
1	A-3 TRAINING CENTER	3,000	9,500	NOT TAKEN	9,500

ALLOWABLE AREA (Cont. "Notes")

- Frontage area increases from Section 506.2 are computed thus:
 - Perimeter which fronts a public way or open space having 20 ft. min. width = _____
 - Total Building Perimeter = _____
 - Ratio (F/P) = _____
 - W=Minimum width of public way = _____
 - Percent of frontage increase $I = 100[F/P - 0.25] \times W/30 =$ _____
- Unlimited area applicable under conditions of Section (507)
- Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.4)
- The maximum area of parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.5.1
- Frontage Increase is based on the unsprinkled area value in Table 506.2

ALLOWABLE HEIGHT

	ALLOWABLE	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type II-B	NA	Type: II-B	601
Building Height in Feet (Table 504.3)	Feet = 55	NA	16	504.3
Building Height in Stories (Table 504.4)	Stories = 2	NA	1	504.4

FIRE PROTECTION REQUIREMENTS 601

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PEN.	DESIGN # FOR RATED JOINTS
		REQ'D	PROVIDED (W_NA * REDUCTION)				
STRUCTURAL FRAME (Including columns, girders, trusses)	>25	0	0				
BEARING WALLS							
Exterior (not < FR from 602)	NA						
North	NA						
East	NA						
West	NA						
South	NA						
Interior	NA						
NONBEARING WALLS & PARTITIONS							
Exterior (per TABLE 602)							
Interior							
North	>25	0	0				
East	>25	0	0				
West	>25	0	0				
South	>25	0	0				
FLOOR CONSTRUCTION (Including supporting beams and joists)		0	0				
Shafts - Exit	NA						
Shafts - Other	NA						
Corridor Separation	NA						
Fire Area Separation	NA						
Party/Fire Wall Sep.	NA						
Smoke Barrier Sep.	NA						
Tenant Separation	NA						

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
>25	UNPROTECTED, NONSPRINKLERED (UP, NS)	70%	15%

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: No Yes
 Exit Signs: No Yes
 Fire Alarm: No Yes
 Smoke Detection Systems: No Yes
 Panic Hardware: No Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A.2
 Fire and/or smoke rated wall locations (Chapter 7)
 Assumed and real property line locations (if not on site plan)
 Exterior wall opening area with respect to distance to assume property lines (705.8)
 Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
 Occupancy loads for each area

LIFE SAFETY PLAN REQUIREMENTS (CONTINUED)

- Exit access travel distances (1017)
- Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
- Dead end lengths (1020.4)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (1010.1.10)
- Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- Location of doors with electromagnetic egress locks (1010.1.9.9)
- Location of doors equipped with hold-open devices
- Location of emergency escape windows (1030)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification 1-2 (407.5)
- Note any code exceptions or table notes that may have been utilized regarding the items above

EXIT REQUIREMENTS NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM ² NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS ³ (SECTION 1013.1)	
	REQ'D	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.1)(ft.)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS (ft.)	REQUIRED DIST. BETWEEN EXIT DOORS (ft.)	ACTUAL DIST. SHOWN ON PLANS (ft.)
A-3 TRAINING CENTER	2	3	200	78.25	36	50.5

1. Corridor dead ends (SECTION 1020.4)
 2. Single exits (SECTION 1006.2.1)
 3. Maximum Common Path of Travel (TABLE 1006.2.1)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	AREA sq. ft.	AREA PER OCCUPANT (TABLE 1004.1.2)	EGRESS WIDTH PER OCCUPANT (SECTION 1005)		REQ'D WIDTH (SECTION 1005 (a/b) x c)				ACTUAL WIDTH SHOWN ON PLANS	
			STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL		
									STAIR	LEVEL
A-3 TRAINING ROOM	1,280	1,280/15 NET=85	NA	0.20	NA	17.0	NA	108		
A-3 OFFICE	136	136/100 GROSS=1	NA	0.20	NA	0.20	NA	108		
A-3 STORAGE	116	116/200 GROSS=1	NA	0.20	NA	0.20	NA	108		
COVERED PORCH	600	NA								
BATHROOMS & CIRCULATION	868	NA								
TOTAL	3,000	OCC. LOAD = 87	NA	0.20	NA	17.4	NA	108		

ACCESSIBLE DWELLING UNITS

Total Units	Accessible Units Required	Accessible Units Provided	Type A Units Required	Type A Units Provided	Type B Units Required	Type B Units Provided	Total Accessible Units Provided
		NA					

PARKING REQUIREMENTS

Lot or Parking Area	Total # of Parking Spaces		# of Accessible Spaces Provided			Total # Accessible Provided
	Required	Provided	Regular with 5' Access Aisle	152' Access Aisle	8' Access Aisle	
Total						

PLUMBING FIXTURE CALCULATIONS

OCCUPANCY	WATERCLOSETS		LAVATORIES		SHOWERS/TUBS	DRINKING FOUNTAINS	SUPPLEMENTAL FIXTURES
	MALE	FEMALE	MALE	FEMALE			
A-3							
REQUIRED	1	1	1	1	0	1	
PROVIDED	1	1	1	1	0	1	SERVICE SINK

FIXTURES REQUIRED BASED ON TABLE 2902.1 - A-3 OCCUPANCY: TRAINING CENTER W/ OFFICE

PROPOSED TRAINING CENTER BUILDING FOR:
KERNERSVILLE POLICE DEPT.
 7385 GOODWILL CHURCH ROAD
 KERNERSVILLE, NC

APPENDIX B

OBRIEN

 ARCHITECTURE

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 TELEPHONE: 336.423.4411



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AP.B

2018 APPENDIX B: BUILDING CODE SUMMARY FOR ALL COMMERCIAL BUILDINGS (CONTINUED)

INCLUDING: The Americans Disabilities Act (ADA) and The Uniform Federal Accessibility Standards (UFAS)

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design. Climate Zone: 3 4 5

Method of Compliance:
 Energy Code: Prescriptive Performance
 2007 ASHRAE 90.1: Prescriptive Performance

THERMAL ENVELOPE

Roof/Ceiling Assembly (each assembly)
 Description of assembly: METAL BUILDING PURLIN CAVITY WITH SUPER SAVER INSULATION WITH METAL ROOF PANEL; BY PEMB SUPPLIER

U-value of total assembly: 0.037
 R-value of insulation: R-19+R-11 LINER SYSTEM
 Skylights in each assembly: NA
 U-value of skylight: NA

Exterior Walls (each assembly)
 Description of assembly: METAL BUILDING W/ CONT. INSULATION & 6" BLANKET INSULATION & METAL WALL PANEL; BY PEMB SUPPLIER

U-value of total assembly: 0.060
 R-value of insulation: R-0+R15.8 CONTINUOUS

Openings (windows or doors with glazing)
 U-value of assembly: 0.50
 Solar heat gain coefficient: 0.35
 projection factor: 0.30
 Door R-Values: R-2

Floor slab on grade
 Description of assembly: 4" P.I.P. CONCRETE SLAB
 U-value of total assembly: F-0.520
 R-value of insulation: R-15 FOR 24"
 Horizontal/vertical requirement: NR

STRUCTURAL DESIGN

DESIGN LOADS:
 Importance Factors: Wind (Iw): _____
 Snow (Is): _____
 Seismic (Ie): _____
 Live Loads: Roof: _____ psf
 Mezzanine: _____ psf
 Floor: _____ psf
 Ground Snow Load: _____ psf
 Wind Load: Basic Wind Speed _____ mph (ASCE-7)
 Exposure Category _____
 Wind Base Shear: SEE STRUCTURAL DRAWINGS
 Vx = _____ K
 Vy = _____ K

SEISMIC DESIGN CATEGORY B, C, & D (cont.)
 Basic structural system:
 Bearing wall Dual w/Special Moment Frame
 Building frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum
 Seismic base shear: Vx = _____ K
 Vy = _____ K
 Analysis Procedure: Simplified
 Equivalent Lateral Force
 Modal
 Architectural, Mechanical, Components anchored?
 N/A No Yes

SEISMIC DESIGN CATEGORY B, C, & D
 Provide the following Seismic Design Parameters:
 Occupancy Category _____
 Ss _____
 S1 _____
 SITE CLASSIFICATION _____

LATERAL DESIGN CONTROL:
 Earthquake Wind
SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) _____ psf
 Presumptive Bearing Capacity _____ psf
 Fill size, type, and capacity _____

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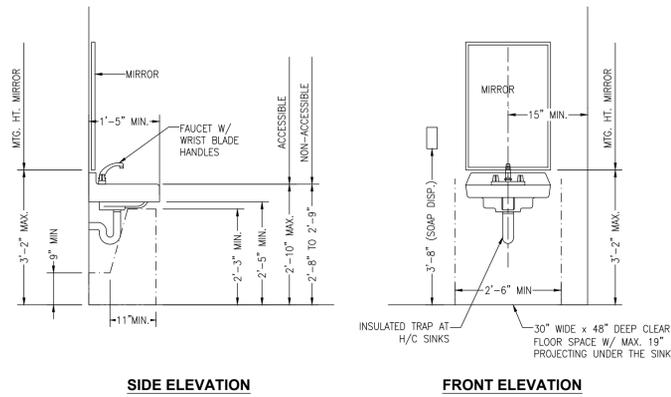
APPENDIX B



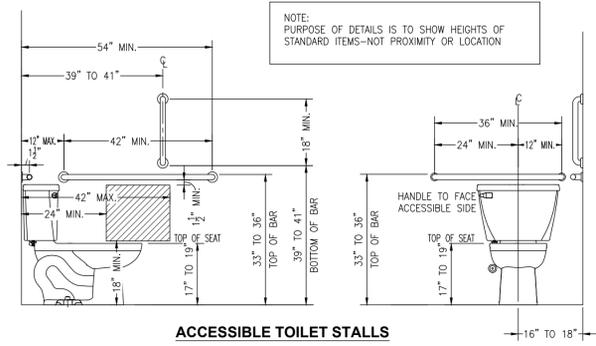
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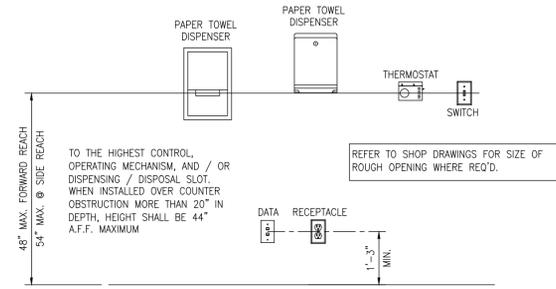
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LAVATORY ELEVATIONS



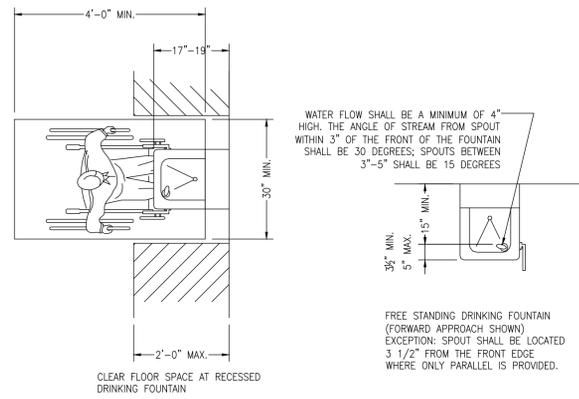
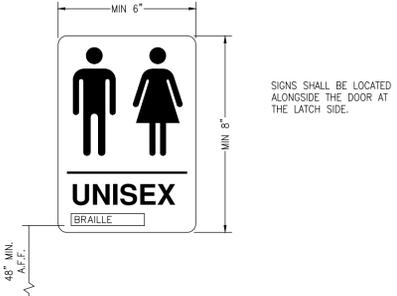
WATER CLOSET ELEVATIONS



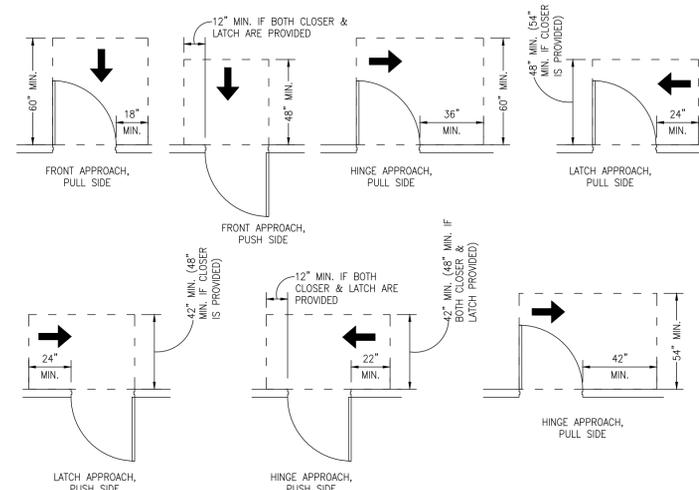
TYPICAL MOUNTING HEIGHTS

TACTILE/BRAILLE EXIT SIGNAGE & RESTROOM SIGNAGE SHALL BE PROVIDED PER ANSI-A117.1 SECTION 703. RAISED CHARACTERS SHALL BE RAISED 3/32" MINIMUM ABOVE BACKGROUND.

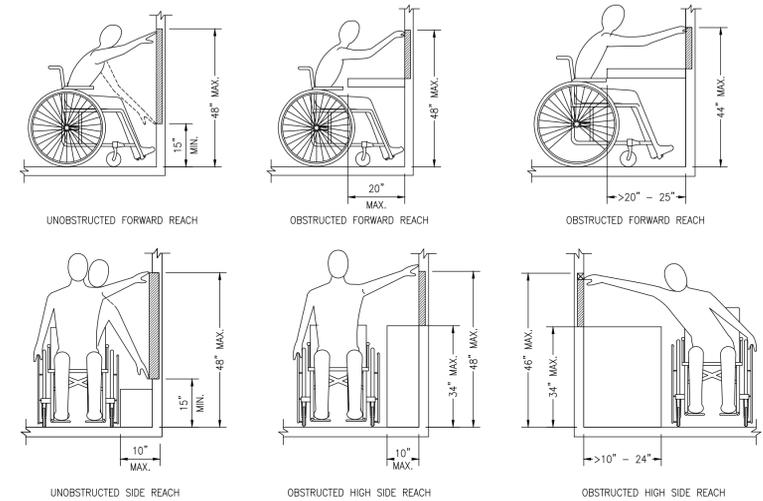
CHARACTERS AND THEIR BACKGROUND SHALL HAVE A MATTE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUNDS WITH EITHER A LIGHT CHARACTER ON A DARK BACKGROUND OR A DARK CHARACTER ON A LIGHT BACKGROUND.



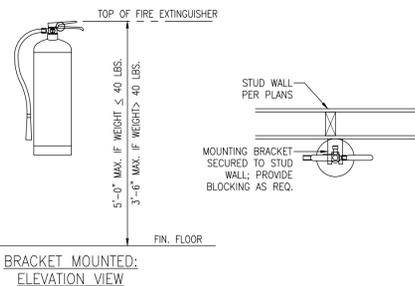
DRINKING FOUNTAINS



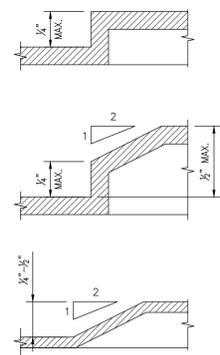
MANEUVERING CLEARANCES AT DOORS



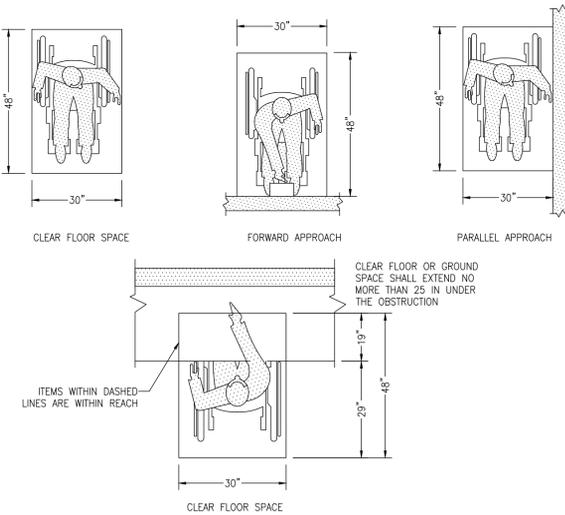
REACH RANGES



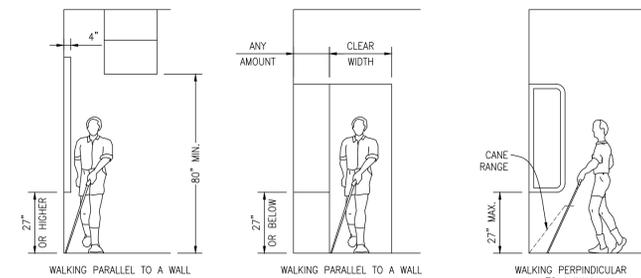
FIRE EXTINGUISHER



CHANGE OF LEVEL



MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS



PROTRUDING OBJECTS

PROPOSED TRAINING CENTER BUILDING FOR:
KERNERSVILLE POLICE DEPT.
 7385 GOODWILL CHURCH ROAD
 KERNERSVILLE, NC

FIRE RATED & PARTITION DETAILS

O'BRIEN ARCHITECTURE

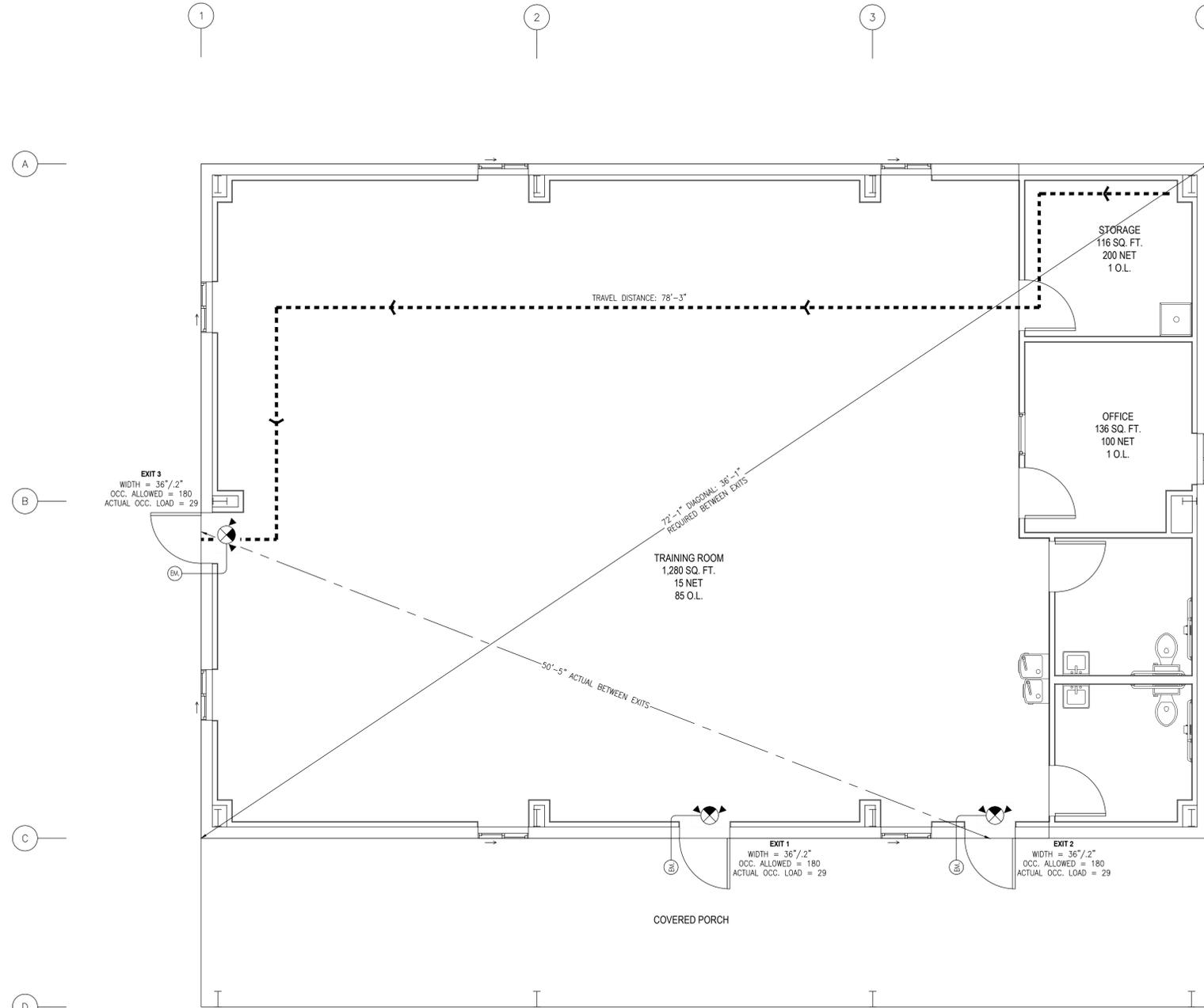
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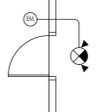
COMM. NO.:
 DATE: 10-29-21
 REVISIONS:

SHEET NO.

A.1



1 LIFE SAFETY PLAN
A.2 1/4"=1'-0"

<p>LIFE SAFETY NOTES</p> <ol style="list-style-type: none"> 1. TYPE OF BUILDING CONSTRUCTION TYPE II-B 2. BUILDING IS CLASSIFIED AS A TYPE A-3 WITH AN ACCESSORY USE OFFICE AREA. 3. SEE CIVIL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON EXIT DISCHARGE TO PUBLIC WAY. 4. SEE ELECTRICAL DWGS. FOR LOCATIONS OF EXIT SIGNS AND EGRESS LIGHTING 5. TOTAL BUILDING SQUARE FOOTAGE <u>3,000 SF</u> 	<p>LIFE SAFETY LEGEND</p> <p>← - - - - - EXIT ROUTE</p>  <p>EXIT SIGNAGE WITH DUAL-LAMP EXTERIOR EMERGENCY LIGHTING</p>
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PROPOSED TRAINING CENTER BUILDING FOR:
KERNERSVILLE POLICE DEPT.
 7385 GOODWILL CHURCH ROAD
 KERNERSVILLE, NC

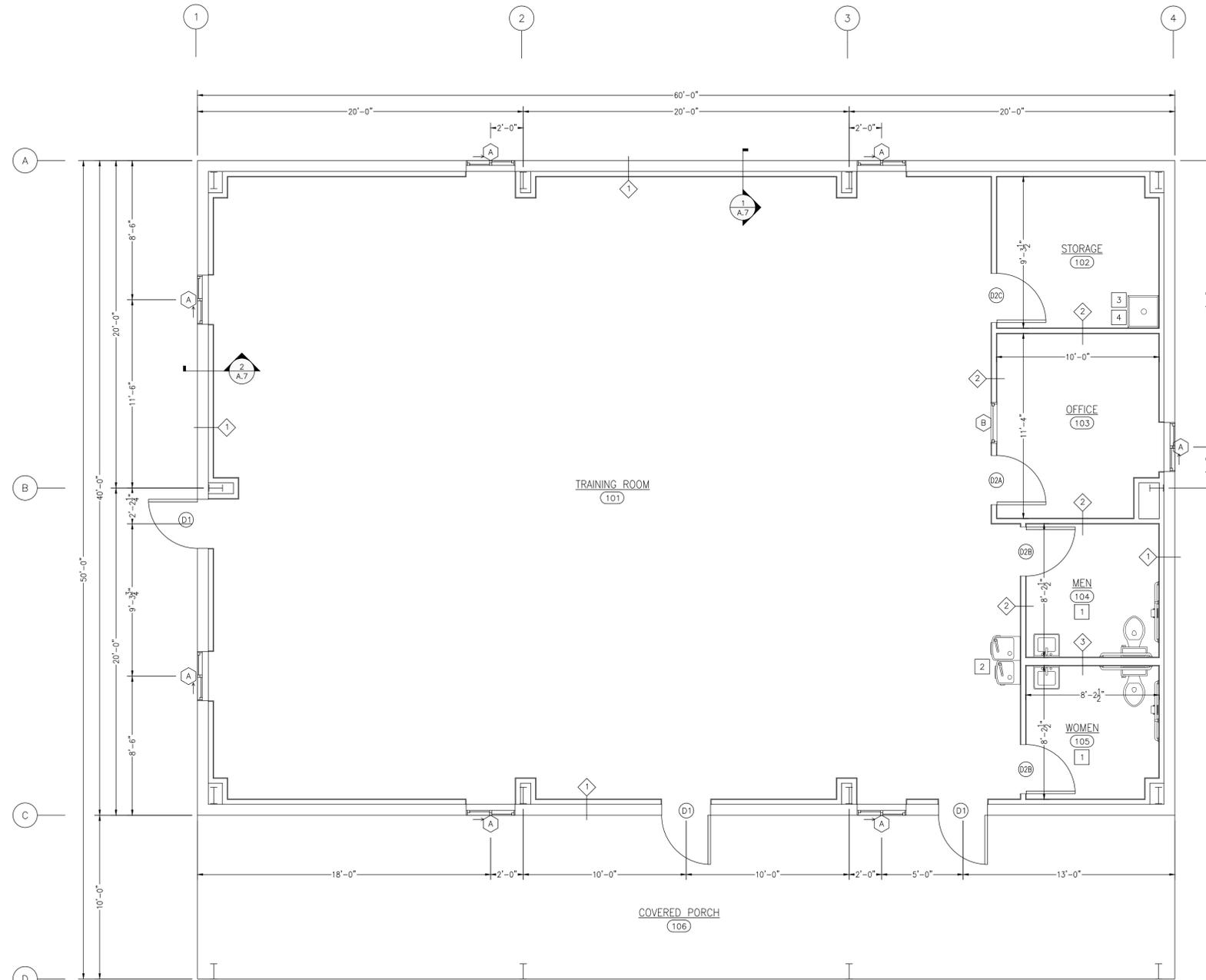
LIFE SAFETY PLAN



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1 FLOOR PLAN
A.3 1/4"=1'-0"

- KEYED NOTES - FLOOR PLAN**
- 1 PROVIDE UNISEX BATHROOM
WASTE RECEPTACLE
PAPER TOWEL DISPENSER
HAND SOAP DISPENSER
ADA GRAB BARS
TOILET TISSUE DISPENSER
CHANNEL FRAME MIRROR
 - 2 HI-LO ADA COMPLIANT WATER FOUNTAIN
 - 3 2'-0"x2'-0" STAINLESS STEEL UTILITY SINK
 - 4 INSTALL WHITE FRP UP TO 8'-0" MINIMUM A.F.F. ON WALLS AROUND SINK, SEAL ALL EDGES

WALL TYPE LEGEND	MARK	WALL SCHEDULE
	1	PRE-ENGINEERED METAL BUILDING CONSTRUCTION. METAL GIRT CAVITY WITH INSULATION BY PEMB SUPPLIER. PRE-FINISHED METAL WALL PANEL ON EXTERIOR SIDE. PROVIDE 1 1/2"x3/8" STEEL STUDS; SEE STRUCTURAL DRAWINGS FOR GAUGE & SPACING ON INSIDE FACE OF METAL BUILDING CONSTRUCTION. SEE FINISH SCHEDULE FOR INTERIOR SIDE & SHEET A.5 FOR PARTITION DETAIL.
	2	1 1/2"x3/8" STEEL STUDS; SEE STRUCTURAL DRAWINGS FOR GAUGE & SPACING (12" O.C. MIN. @ CABINET LOCATIONS) U.N.D. ON STRUCT. DRAWINGS TO 10'-0" A.F.F. INSULATED WITH SOUND BATT. INSULATION. SEE FINISH SCHEDULE. GYPSUM BOARD TO BE PAINTED PER OWNER'S SPECS. SEE SHEET A.5 FOR PARTITION DETAIL.
	3	1 1/2"x6" STEEL STUDS; SEE STRUCTURAL DRAWINGS FOR GAUGE & SPACING (12" O.C. MIN. @ CABINET LOCATIONS) U.N.D. ON STRUCT. DRAWINGS TO 10'-0" A.F.F. INSULATED WITH SOUND BATT. INSULATION. SEE FINISH SCHEDULE. GYPSUM BOARD TO BE PAINTED PER OWNER'S SPECS. SEE SHEET A.5 FOR PARTITION DETAIL.

GENERAL NOTES:

1. THE DESIGNER MAKES EVERY EFFORT TO USE ONLY PRODUCTS AND TECHNIQUES RECOGNIZED AT THE TIME AS APPROPRIATE FOR THE APPLICATIONS SHOWN. HOWEVER, MANY ITEMS SHOWN ON THESE PLANS ARE IN GENERIC TERMS AND ARE LEFT TO THE OWNER'S AND/OR CONTRACTOR'S DISCRETION OR ARE SHOWN SPECIFICALLY AS REQUESTED BY THE OWNER AND/OR THE CONTRACTOR. THE DESIGNER ASSUMES NO RESPONSIBILITY FOR THE PERFORMANCE OF ANY MATERIAL OR PRODUCTS SHOWN OR ANY TECHNIQUES NOT SPECIFICALLY SHOWN ON THE PLANS.
2. ALL CASEWORK SHALL BE SELECTED BY THE OWNER & PROVIDED BY THE BUILDER.
3. WHERE A DETAIL IS SHOWN ON DRAWINGS FOR ONE CONDITION, IT SHALL APPLY TO ALL SIMILAR OR LIKE CONDITIONS, UNLESS NOTED OR SHOWN OTHERWISE.
4. ALL ITEMS SHALL BE TIGHTLY ANCHORED OR ATTACHED SQUARE, PLUMB, AND TRUE, OR IN OTHER PLANES OR SHAPES AS SHOWN ON THE DRAWINGS. JOINTS SHALL BE TIGHT, EVEN, AND FREE OF OFFSETS. NO FIELD ALTERING OF ANY MEMBERS WILL BE ALLOWED THAT WILL CAUSE THEM NOT TO BE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, WITHOUT WRITTEN APPROVAL OF THE DESIGNER.
5. GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE SHORING TO THE STRUCTURE DURING CONSTRUCTION PROCEDURES ASSOCIATED WITH THIS PROJECT.
6. IT IS THE INTENT THAT THESE DRAWINGS BE IN CONFORMANCE WITH THE BUILDING CODE, NEC AND ALL APPLICABLE LOCAL REGULATIONS. SHOULD A DISCREPANCY ARISE BETWEEN THESE DRAWINGS AND THE CODE, THE CODE SHALL GOVERN.
7. ALL TRADES SHALL FURNISH ALL LABOR, MATERIALS AND PERFORM ALL WORK NECESSARY, INDICATED, REASONABLY INFERRED OR REQUIRED BY ANY CODE WITH JURISDICTION TO COMPLETE THEIR SCOPE OF WORK.
8. DO NOT SCALE THESE DRAWINGS; WRITTEN DIMENSIONS AND NOTES SHALL CONTROL. CONTACT THE FIELD MANAGER WITH ANY CONFLICTS IN THE PLANS BEFORE BEGINNING WORK.
9. THE GENERAL CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE DESIGNER.
10. IT IS THE RESPONSIBILITY OF THE OWNER AND/OR THE CONTRACTOR / BUILDER TO OBTAIN ANY APPROVALS, PERMITS OR STAMPS AS MAY BE REQUIRED IN LOCAL WHERE PROJECT IS LOCATED.
11. CONTRACTOR/BUILDER TO CHECK WITH OWNER AS TO LOCATION AND NEEDS OF:
 - A. TELEPHONES
 - B. OFFICE MACHINES
 - C. WALL CLOCKS
 - D. BURGLAR ALARM SYSTEM
 - E. SIGNS
 - F. ADDITIONAL OUTLETS
12. ALL ROOF PENETRATIONS (IF REQUIRED) BY CONTRACTOR.
13. ALL EXPOSED STEEL, INCLUDING THE COVERED PORCH COLUMNS, TO BE PAINTED WITH RUST INHIBITIVE PAINT.
14. ENDWALL FRAMES AT GRID LINES 1 AND 4 TO BE DESIGNED FOR FUTURE EXPANSION.

GENERAL CONTRACTOR:

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES WITHIN THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS SHALL CONSIST OF ALL THE CONSTRUCTION DRAWINGS AND THE SPECIFICATIONS, IF PROVIDED, INCLUDING ALL THE DRAWINGS OF THE VARIOUS DISCIPLINES AND AS SUCH, ANY TRADE WHETHER ARCHITECTURAL, STRUCTURAL, HVAC, PLUMBING OR ELECTRICAL SHALL BE VIEWED IN CONJUNCTION WITH ALL OTHERS, AND ANY DISCREPANCIES FOUND ON THE DRAWINGS, DIMENSIONAL OR OTHERWISE, SHALL BE IMMEDIATELY BROUGHT TO THE ARCHITECT'S/ENGINEER'S ATTENTION. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL CONSTRUCTION TRADES. FAILURE OF THE CONTRACTOR TO VERIFY JOB CONDITIONS PRIOR TO COMMENCEMENT AND TO REPORT IN WRITING TO THE A/E ANY DISCREPANCIES OR ERRORS ON THE CONSTRUCTION DOCUMENTS SHALL NOT BE A JUSTIFICATION FOR EXTRAS TO THE CONTRACT AMOUNT.

GYPSUM WALL BOARD: (DRYWALL)

GYPSUM WALLBOARD SHALL COMPLY WITH THE STANDARDS SPECIFIED FOR THE APPLICATION AND FINISHING OF GYPSUM WALLBOARD, ANSI A971, ASTM C36 AND ASTM C 475 AND SHALL NOT BE LESS THAN 3/8" IN THICKNESS. STUDS SHALL BE SPACED NO MORE THAN 16" O.C. METAL STUDS USE "C" SHAPED GALVANIZED METAL STUD WITH SELF-DRILLING, SELF-TAPPING SHEET METAL SCREWS DRIVEN BELOW THE SURFACE AND SPOTTED WITH FINISHING JOINT COMPOUND AT 8" O.C. AND THE JOINTS WERE SEALED WITH TAPE AND TWO COATS OF DRYWALL COMPOUND.

WALL HUNG FIXTURES:

STUDS IN BEARING OR NON-BEARING WALLS AND EXTERIOR WALLS SUPPORTING WALL HUNG FIXTURES SHALL BE NOT LESS THAN 1 1/2"x3/8" 20 GAUGE @ 16" O.C.; OR, NOT LESS THAN 1 1/2"x6" 20 GAUGE @ 24" O.C. STEEL STUDS SUPPORTING WALL HUNG PLUMBING FIXTURES SHALL BE DOUBLED OR NOT LESS THAN 20 GAUGE WITH A MINIMUM EFFECTIVE MOMENT OF INERTIA EQUAL TO DB47/4 AND SHALL BE RIGIDLY CONNECTED TOP AND BOTTOM. TREATED WOOD BLOCKING SECURELY FASTENED TO NOT LESS THAN TWO STUDS SHALL BE INSTALLED FOR THE ATTACHMENT OF EACH WALL HUNG PLUMBING FIXTURE AND/OR CABINETS AND BATHROOM GRAB BARS. TREATED LUMBER BLOCKING IN TOILET WALLS TO SUPPORT GRAB BARS - 250LB. LOAD APPLIED IN ANY DIRECTION.

PROPOSED TRAINING CENTER BUILDING FOR:
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FLOOR PLAN

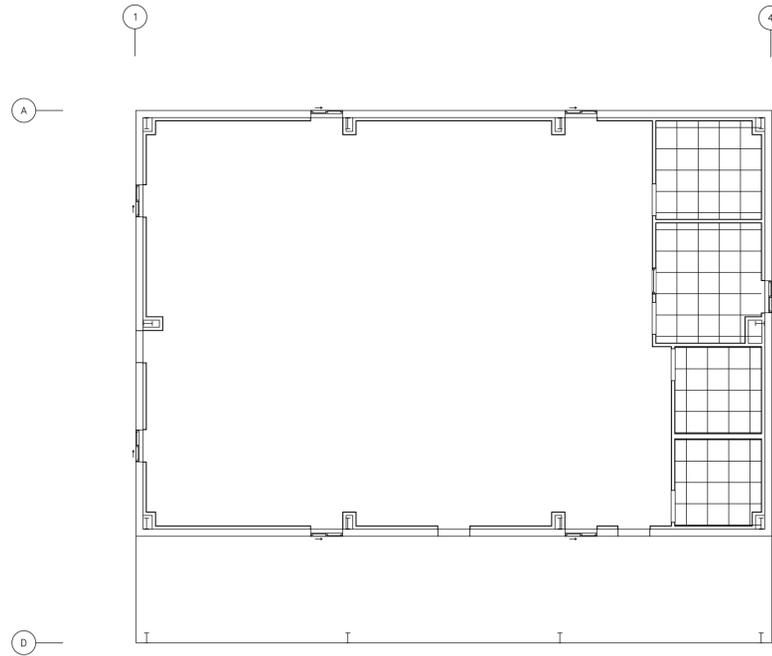


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COMM. NO.:
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SHEET NO.
A.3



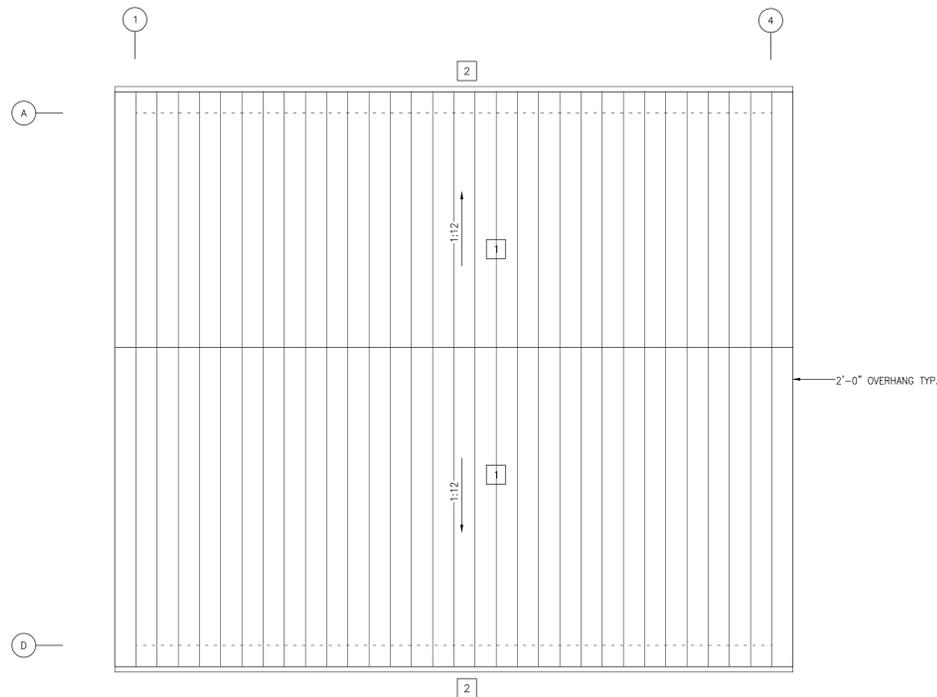
1 REFLECTED CEILING PLAN
A.4 1/8"=1'-0"

CEILING PLAN NOTES:

1. ARCHITECT MUST BE NOTIFIED OF ANY DISCREPANCIES WITH THE DESIGN INTENT OF LIGHT FIXTURES AS SHOWN, PRIOR TO INSTALLATION.
2. G.C. TO VERIFY FINAL CEILING HEIGHTS THROUGHOUT AND INFORM THE ARCHITECT OF ANY DISCREPANCIES WITH THE DRAWINGS PRIOR TO FRAMING.
3. ALL CEILING HEIGHTS MUST BE VERIFIED IN THE FIELD AND COORDINATED WITH THE ARCHITECT.
4. ALL LIGHT SWITCHES TO BE PROVIDED BY G.C.
5. ALL LIGHT FIXTURES SHALL BE LOCATED AS PER ELECTRICAL DRAWINGS
6. SEE MECHANICAL DRAWINGS FOR HVAC SUPPLY AND RETURN REGISTERS LOCATION AND SIZES.
7. ALL CEILING HEIGHTS TO BE TAKEN FROM THE TOP OF FINISHED FLOOR

ACOUSTICAL CEILING TILE NOTES

1. ACOUSTICAL CEILINGS TO BE INSTALLED AT A HEIGHT OF AS INDICATED ON THE FINISH SCHEDULE.
2. ACOUSTICAL CEILING TO BE A 2x4 VINYL CEILING TILE WHERE NOTED IN FINISH SCHEDULE.
3. TRIM: INSTALL EDGE MOLDING AT INTERSECTION OF CEILING AND VERTICAL SURFACES, USING LONGEST PRACTICAL LENGTHS. MITER CORNERS. PROVIDE EDGE MOLDINGS AT JUNCTIONS WITH OTHER INTERRUPTIONS.
4. ACOUSTICAL PANEL INSTALLATION: INSTALL ACOUSTICAL PANELS WITH EDGES IN CLOSE CONTACT WITH METAL SUPPORTS AND IN TRUE ALIGNMENT.
5. VARIATIONS FROM FLAT AND LEVEL SURFACE: 1/8 INCH IN 10 FEET.
6. VARIATION FROM PLUMB OF GRID MEMBERS: AS CAUSED BY ECCENTRIC LOADS, TWO DEGREES MAXIMUM.
7. INSTALL CEILING SYSTEM AFTER MAJOR ABOVE-CEILING WORK IS COMPLETE. COORDINATE LOCATIONS OF HANGERS WITH RELATED WORK.



2 ROOF PLAN
A.4 1/8"=1'-0"

KEYED NOTES - ROOF PLAN

- | | |
|---|---|
| 1 | 24GA. PRE-FINISHED STANDING SEAM METAL ROOF PROVIDED BY THE PEMB SUPPLIER |
| 2 | CONTINUOUS PRE-FINISHED METAL GUTTER WITH DOWNSPOUTS, FIELD LOCATED |

PROPOSED TRAINING CENTER BUILDING FOR:
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REFLECTED
CEILING PLAN &
ROOF PLAN

O'BRIEN
ARCHITECTURE

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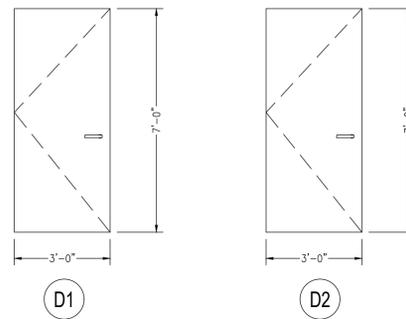
FINISH SCHEDULE							
ROOM NAME	NUMBER	FLOOR	BASE	WALLS	CEILING		REMARKS
					TYPE	HEIGHT	
TRAINING ROOM	101	SEALED CONCRETE	NONE	NONE	OPEN TO STRUCTURE	NA	
STORAGE ROOM	102	CARPET	VINYL CURVED COVERED	PTD. 5/8" GWB	2X2 ACT	8'-0"	
OFFICE	103	CARPET	VINYL CURVED COVERED	PTD. 5/8" GWB	2X2 ACT	8'-0"	
MEN	104	CERAMIC TILE	VINYL CURVED COVERED	5/8" PAINTED WATER/MOLD RESISTANT GYPSUM BOARD W/ OPT. 12"x12" CERAMIC TILE WAINSCOT W/3x12 BULLNOSE TILE AT TOP. 63" A.F.F.	2X2 ACT	8'-0"	PROVIDE BATT INSULATION ABOVE FOR NOISE CONTROL. WALL & FLOOR FINISHES SHALL BE READILY CLEANABLE, NONABSORBENT
WOMEN	105	CERAMIC TILE	VINYL CURVED COVERED	5/8" PAINTED WATER/MOLD RESISTANT GYPSUM BOARD W/ OPT. 12"x12" CERAMIC TILE WAINSCOT W/3x12 BULLNOSE TILE AT TOP. 63" A.F.F.	2X2 ACT	8'-0"	PROVIDE BATT INSULATION ABOVE FOR NOISE CONTROL. WALL & FLOOR FINISHES SHALL BE READILY CLEANABLE, NONABSORBENT

DOOR SCHEDULE											
MARK	SIZE		DOOR				FRAME		STYLE	HARDWARE	REMARKS
	WIDTH	HEIGHT	TYPE	MAT.	FIN.	MAT.	FIN.				
D1	3'-0"	7'-0"	HOLLOW METAL SIDE HINGE	METAL	PAINT	METAL	PAINT	FLUSH	101	CLOSER, NON-PULL HINGE PINS, WEATHERSTRIPPING, DOOR SWEEP, LOW PROFILE THRESHOLD ADA COMPLIANT, RAIN DRIP SHIELD, KICKPLATE, SELECTED BY OWNER/CONTRACTOR	
D2A	3'-0"	7'-0"	SOLID CORE SIDE HINGE	WOOD	PAINT	WOOD	PAINT	FLUSH	102	DOOR STOP, RUBBER FRAME SILENCERS; SELECTED BY OWNER/CONTRACTOR	
D2B	3'-0"	7'-0"	SOLID CORE SIDE HINGE	WOOD	PAINT	WOOD	PAINT	FLUSH	103	DOOR STOP, RUBBER FRAME SILENCERS; SELECTED BY OWNER/CONTRACTOR	
D2C	3'-0"	7'-0"	SOLID CORE SIDE HINGE	WOOD	PAINT	WOOD	PAINT	FLUSH	104	DOOR STOP, RUBBER FRAME SILENCERS; SELECTED BY OWNER/CONTRACTOR	

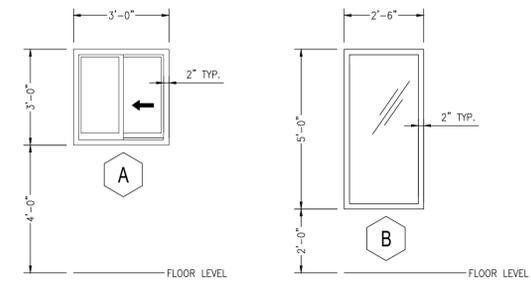
HARDWARE SCHEDULE		
KEY	TYPICAL USE	DESCRIPTION
101	ENTRANCE LOCKSET	TURN/PUSH- KEY LOCKING; LOCKING OUTSIDE LEVER REQUIRING USE OF KEY. PANIC HARDWARE ON INTERIOR SIDE TO OPEN REGARDLESS IF DOOR IS LOCKED FROM OUTSIDE. PROVIDE DOOR SEALS, DRIP CAP AT DOOR HEAD, AND DOOR BOTTOM SEAL
102	OFFICE LOCKSET	PUSH BUTTON LOCKING; PUSHING BUTTON LOCKS OUTSIDE LEVER UNTIL UNLOCKED BY KEY OR BY ROTATING INSIDE LEVER.
103	PRIVACY LOCKSET	PUSH-BUTTON LOCKING; CAN BE OPENED FROM INSIDE WITH SMALL SCREWDRIVER TURNING INSIDE LEVER OR CLOSING DOOR RELEASES BUTTON.
104	STORAGE LOCKSET	OUTSIDE LEVER FIXED; ENTRANCE BY KEY ONLY, INSIDE LEVER ALWAYS UNLOCKED. PROVIDE KNURLED KNOB.

- DOOR NOTES**
- SEE SPECIFICATIONS FOR ADDITIONAL HARDWARE INFORMATION AND REQUIREMENTS.
 - CONTRACTOR SHALL PROVIDE ALL NECESSARY HARDWARE AND ACCESSORIES TO ENSURE FULL FUNCTIONALITY OF EACH DOOR.
 - PROVIDE DOOR STOPS AS NEEDED.
 - PROVIDE CLOSERS AS NEEDED. ANY DOOR WITH A CLOSER SHALL HAVE ITS SWEEP PERIOD ADJUSTED SO THAT FROM AN OPEN POSITION TO 70°, THE DOOR WILL TAKE AT LEAST (3) SECONDS TO MOVE TO A POINT 3 INCHES SEPARATED THE LATCH AND THE LEADING EDGE OF THE DOOR. DOOR OPENING FORCE FOR PUSHING OR PULLING SHALL NOT EXCEED (5) POUNDS FORCE.
 - ALL DOOR HARDWARE SHALL BE ANISI A117.1A COMPLIANT. ALL HARDWARE FINISH TO BE SATIN NICKEL ON ALL INTERIOR DOORS.
 - DOORS TO BE PRE-MACHINED FOR LOCKSET AND INCLUDE (3) HINGES.
 - PROVIDE 3/4" UNDERCUT AT ALL INTERIOR DOORS MEASURED FROM FINISHED FLOOR FOR AIR CIRCULATION.

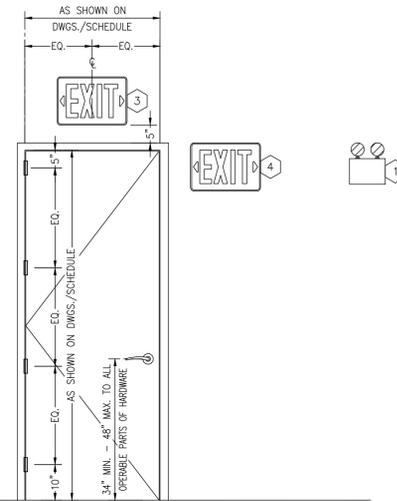
WINDOW SCHEDULE								
MARK	SIZE		TYPE	GLAZING	MAT.	FIN.	HARDWARE	REMARKS
	WIDTH	HEIGHT						
A	3'-0"	3'-0"	SLIDING	1" CLEAR INSULATED, LOW E GLASS	ALUM.	CLEAR ANODIZED	NONE	PRE-FINISHED ANODIZED ALUMINUM
B	2'-6"	5'-0"	FIXED, NON-OPERABLE DOUBLE WINDOW	1" CLEAR NON-INSULATED	ALUM.	CLEAR ANODIZED	NONE	PRE-FINISHED ANODIZED ALUMINUM



DOOR TYPES

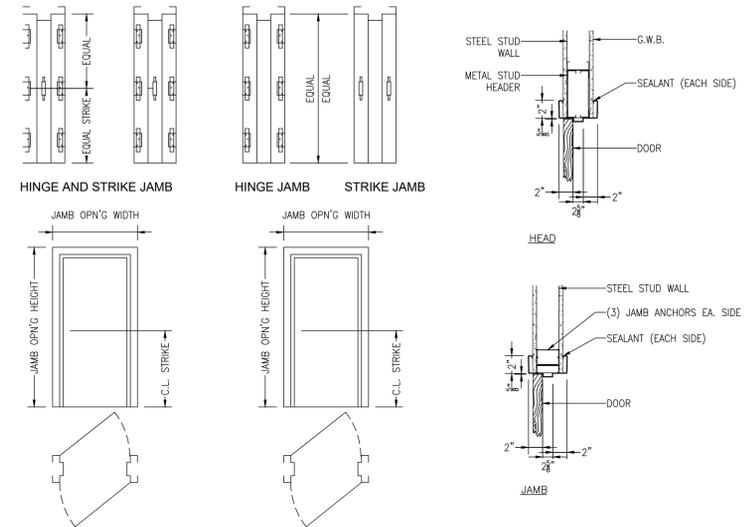


WINDOW TYPES

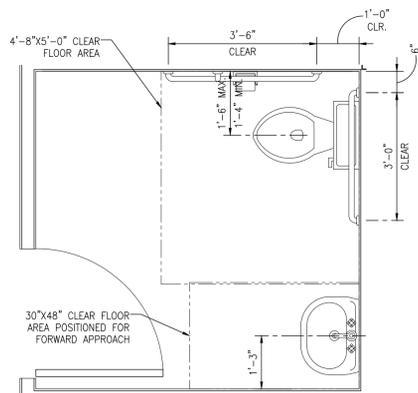


TYPICAL DOOR & MOUNTING ELEVATION

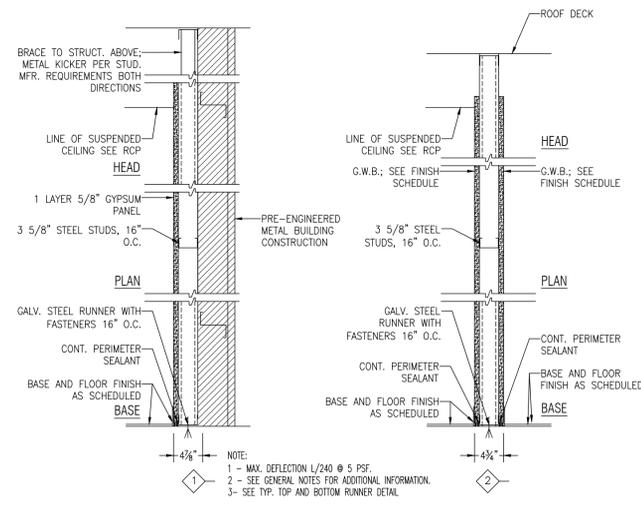
- 1 EMERGENCY LIGHTING BATTERY UNIT
- 2 ROOM SIGNATURE
- 3 EXIT SIGN PREFERRED LOCATION
- 4 ALTERNATE EXIT SIGN LOCATION (LOW CEILING HEIGHT AT DOOR)



FRAME DETAILS



1 ENLARGED RESTROOM PLAN
A.5 1/2"=1'-0"



2 TYPICAL INTERIOR PARTITIONS
A.5 NO SCALE

PROPOSED TRAINING CENTER BUILDING FOR:
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KERNERSVILLE, NC

SCHEDULES & DETAILS

O BRIEN
ARCHITECTURE

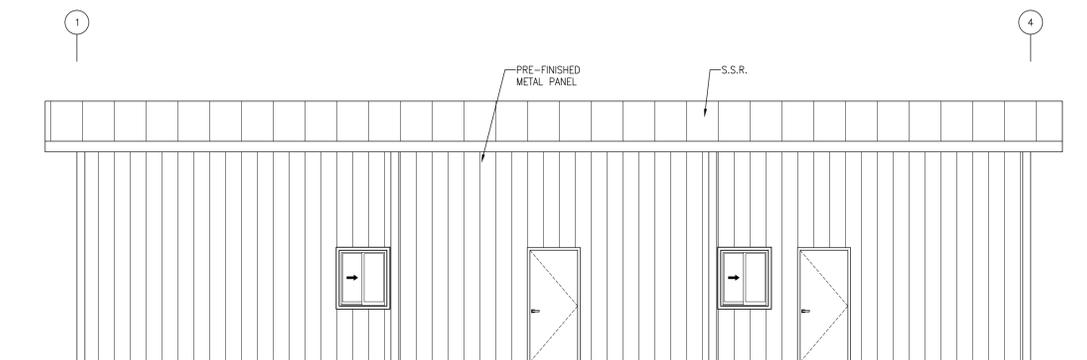
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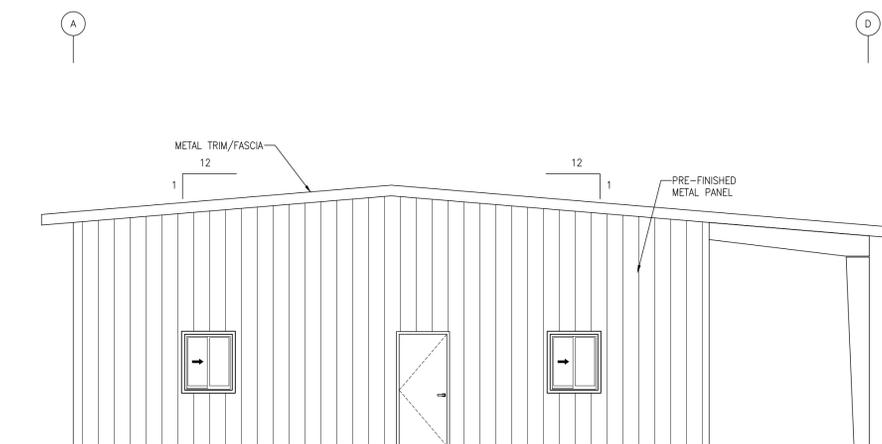
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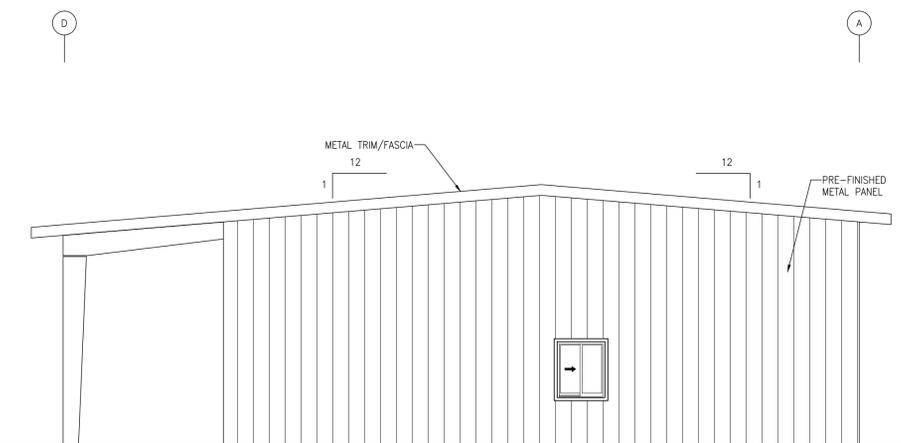
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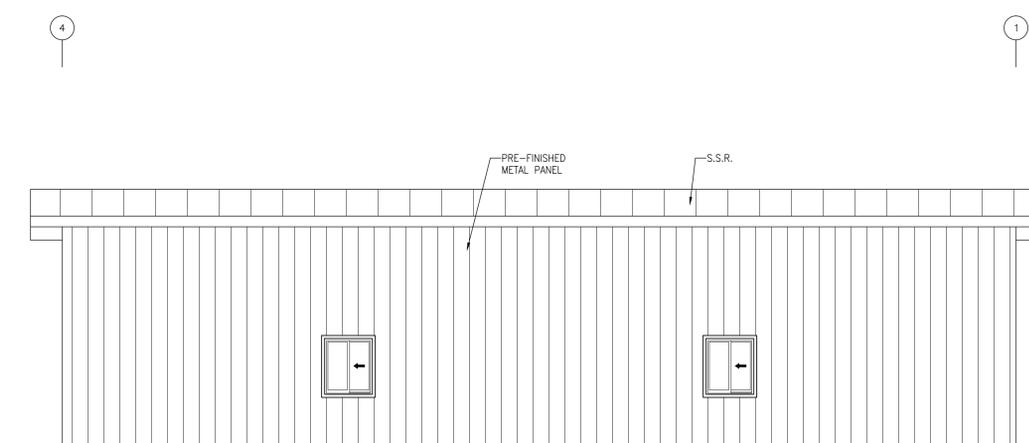
1 FRONT ELEVATION
A.6 3/16"=1'-0"



2 LEFT ELEVATION
A.6 3/16"=1'-0"



3 RIGHT ELEVATION
A.6 3/16"=1'-0"



4 REAR ELEVATION
A.6 3/16"=1'-0"

ELEVATION NOTES

- GRADE ELEVATIONS SHOWN ARE FOR DIAGRAMMATIC PURPOSES ONLY AND MAY VARY. BUILDER IS RESPONSIBLE FOR ADAPTING THIS PLAN TO SUIT THE EXISTING TOPOGRAPHY OF THE SITE.
- DOORS & WINDOWS SHOWN ARE TO SCHEMATICALLY EXPRESS DESIGN INTENT & MAY VARY PER MANUFACTURER OR PER THE OWNER'S FINAL SELECTION. CUSTOM DOORS AND WINDOWS MAY BE REQUIRED AND SHALL BE APPROVED BY OWNER/CONTRACTOR. ANY VARIATIONS FROM THAT SHOWN MUST BE APPROVED BY OWNER.
- EXTERIOR FINISHES AND ROOF MATERIALS SHOWN ARE TO SCHEMATICALLY EXPRESS DESIGN INTENT & MAY VARY PER MANUFACTURER OR PER THE OWNER'S FINAL SELECTION OF MATERIALS.
- GUTTERS & DOWNSPOUTS NOT SHOWN FOR CLARITY. CONTRACTOR TO VERIFY LOCATIONS WITH OWNER.
- EXTERIOR LIGHTING, PLUMBING (HOSE BIBBS, WELLS, ETC.), & HVAC UNITS NOT SHOWN FOR CLARITY. CONTRACTOR TO VERIFY TYPES & LOCATIONS WITH OWNER.

PROPOSED TRAINING CENTER BUILDING FOR:
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ELEVATIONS



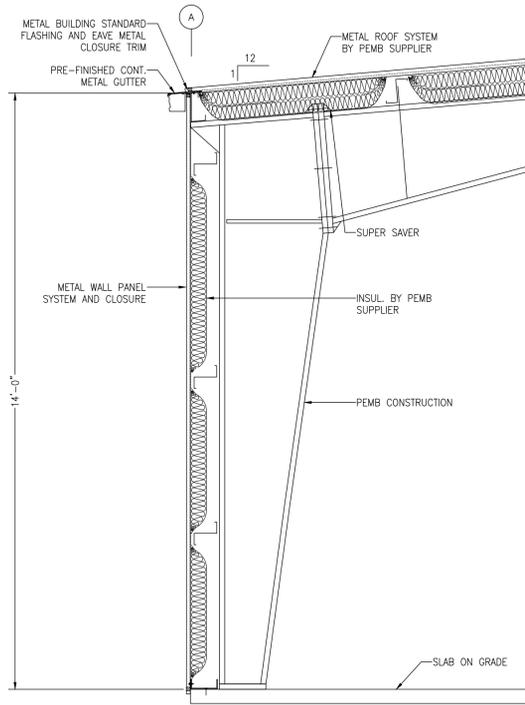
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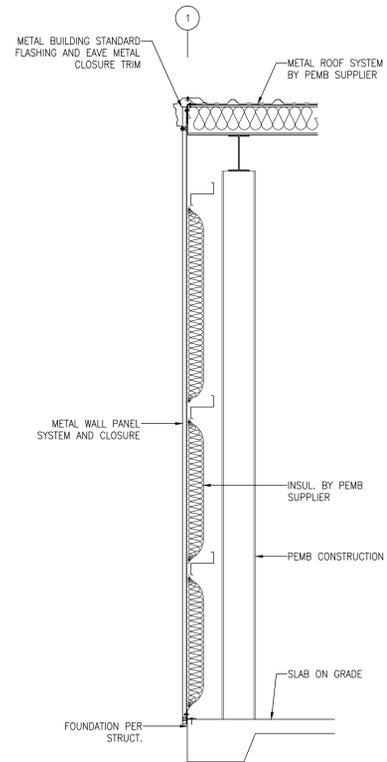
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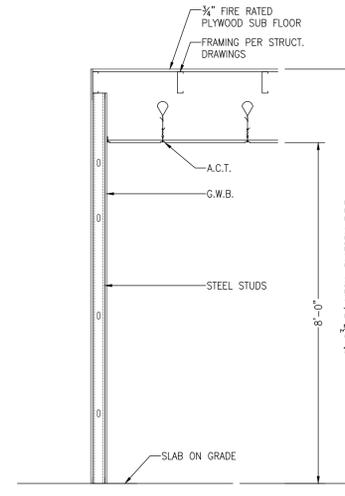
A.6



1 SECTION
A.7 1/2"=1'-0"



2 SECTION
A.7 1/2"=1'-0"



3 SECTION
A.7 1/2"=1'-0"

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SECTIONS



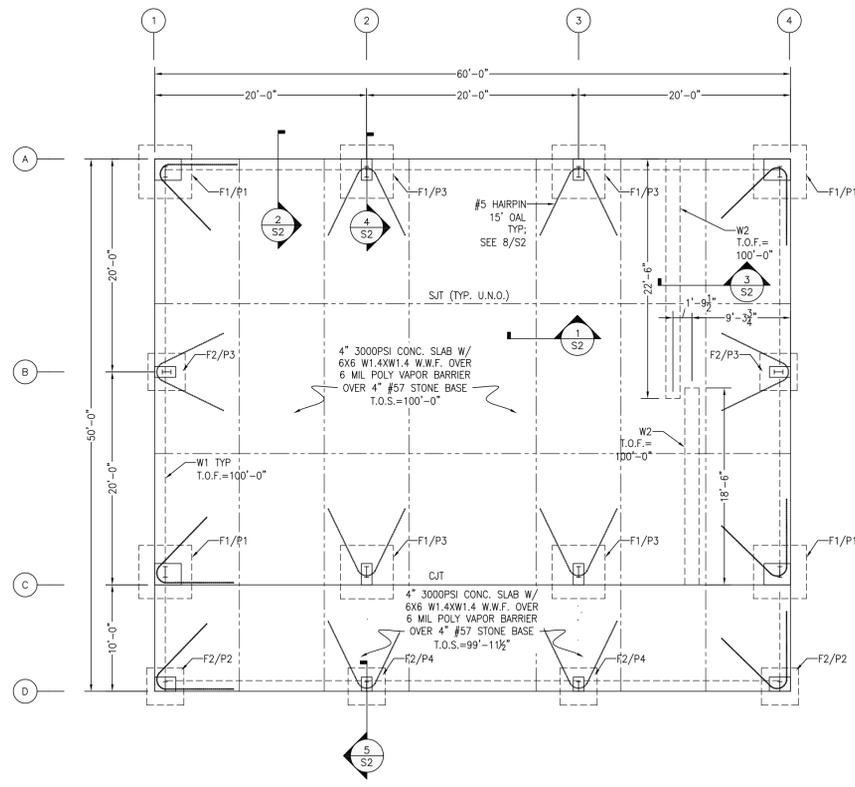
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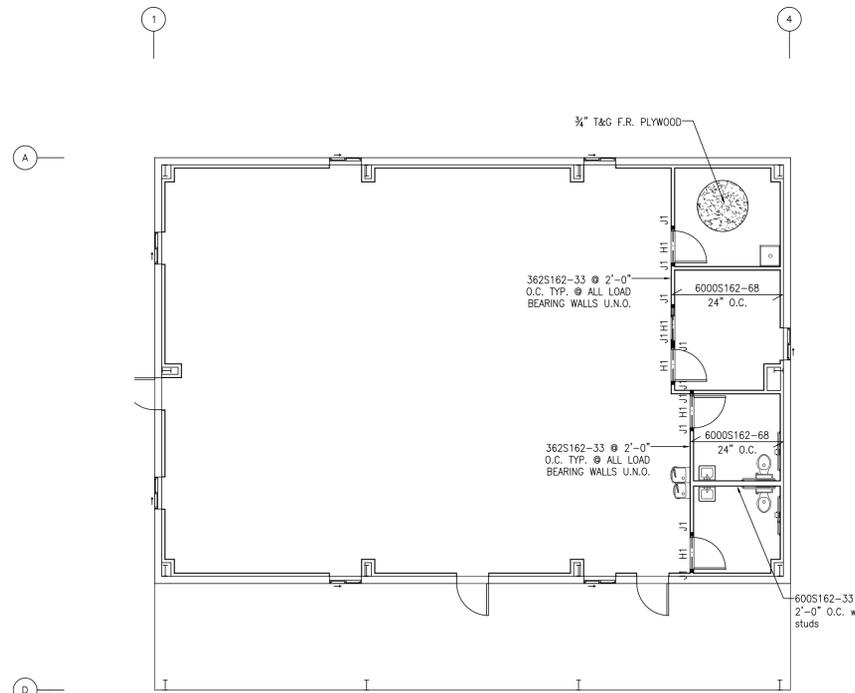


1 FOUNDATION PLAN
1/8"=1'-0"

FOOTING & PIER SCHEDULE		
MARK	SIZE	REINFORCEMENT
W1	1'-0"x1'-0" CONT.	(2) #5 CONT. REBAR W/ #5 TRANS. REBAR @ 18" O.C.
W2	1'-4"x10" CONT.	(2) #5 CONT. REBAR W/ #5 TRANS. REBAR @ 18" O.C.
F1	5'-0"x5'-0"x1'-6"D	#5 REBAR 9" o.c. EA. WAY
F2	3'-6"x3'-6"x1'-6"D	#5 REBAR 9" o.c. EA. WAY
P1	2'-0"x2'-6"x8"D	(12) #5 8" by 18" dowels W/ #3 ties spaced @ 10" O.C.
P2	1'-4"x2'-0"x8"D	(8) #5 8" by 18" dowels W/ #3 ties spaced @ 10" O.C.
P3	1'-0"x2'-0"x8"D	(8) #5 8" by 18" dowels W/ #3 ties spaced @ 10" O.C.
P4	1'-0"x1'-4"x8"D	(4) #5 8" by 18" dowels W/ #3 ties spaced @ 10" O.C.

FOUNDATION NOTES

- The contractor is to provide all necessary bracing and shoring required for stresses and instability occurring from any cause during construction.
- Foundations to be placed on original undisturbed soil or fill. Unless otherwise noted, footings shall be centered on total width of the foundation wall and/or columns.
- Provide sawcut crack control joints as shown on the plans as soon as curing permits, but not to exceed 12 hours from the time of concrete pour.
- All fill within 10' of building shall be compacted to 95% standard proctor. Maximum un-compacted lift is 6".
- Soil Bearing presumed to be 2,000psf.
- Provide a 6 mil polyethylene vapor barrier under the slab-on-earth; lap 6" minimum.
- The 28-day compressive strength of all concrete is 3,000 psi.
- Concrete properties, construction & finish properties as follows:
CEMENT: type I or type II with 6% to 7.5% air-entrainment
WATER-CEMENT RATIO: 0.4 to 0.45
SLUMP: 2" prior to on-site super plaster addition
IMMERSION OR MOIST CURED PERIOD: 10 day minimum
VIBRATION DURING PLACEMENT: 5,000 to 15,000 rpm frequency
FINISH: aluminum or magnesium float finish.
- Concrete work shall comply with ACI specifications for structural concrete for buildings (ACI 301) and applicable provisions of ACI 318. Keep a copy of ACI field reference manual (ACI-SP-15) which includes ACI 301 and other ACI and ASTM references on the job.
- All Reinforcing Steel to be ASTM A615 grade 60. All rebar laps to be 24 bar minimum U.N.O. All reinforcing steel and accessories shall be detailed, fabricated and placed in accordance with the latest editions of ACI Manual, "Manual of Standard Practice for detailing Reinforced Concrete Structures."
- Concrete coverage of reinforcing steel shall be as follows unless noted otherwise on drawings. If stirrups, ties or spiral are used, concrete coverage is measured to the outside of these members.
 - footings, caissons and other principal structural members in which the concrete is deposited against the ground = 3"
 - members with formed surfaces exposed to weather or ground
 - #6 bars and larger = 2"
 - #4 bars and larger = 1 1/2"
- Welded wire fabric (W.W.F.) shall be new billet steel cold drawn, conforming to ASTM specifications A185 and A82, grade 60 and shall be located 1/2 of the total slab thickness below the slab surface.
- Bar supports, design, detailing, fabrication and placing of reinforcing steel shall be in accordance with ACI 318-08 and "The Manual of Standard Practice for Detailing Reinforced Concrete Structures," ACI 315-11.
- T.O.F. = Top of Footing; T.O.F. = 99'-4" U.N.O..
- T.O.S. = Top of slab; T.O.S. = 100'-0" U.N.O..
- Foundation concrete mix to have 1 1/2" maximum aggregate size ASTM C33 aggregate with maximum unit weight of 150 PCF unless otherwise noted; concrete fill mix to have 1/2" maximum aggregate size.
- Reinforcing in all footings shall be continuous around corners. Where wall footings step, reinforcing shall be continuous in step.
- See Metal Building Anchor Bolt Layout for size & location of Anchor Bolts; all PEMB anchor bolts shall be 15" long with a minimum of 12" embedment, U.N.O.
- For dimensions not shown see the Architectural drawings.



2 STEEL STUD FRAMING PLAN
1/8"=1'-0"

MEMBER SCHEDULE	
MARK	SIZE
H1	600S162-33 BOXED HEADER
H2	600S162-68 BOXED HEADER
J1	600S162-33
J2	TWO 362S162-33

STRUCTURAL DESIGN
(Provide on Sheet 1 or 2 of the Structural Sheets)

DESIGN LOADS:
 Importance Factors: Wind (w): N/A
 Snow (s): 1.0
 Seismic (ie): 1.0
 Live Loads: Roof: 20 psf
 Mezzanine: N/A psf
 Mech. platform: 50 psf
 Ground Snow Load: 15 psf
 Wind Load: Basic Wind Speed 115 mph (ASCE-7)
 Exposure Category B

SEISMIC DESIGN CATEGORY A (B) C D
 Provide the following Seismic Design Parameters:
 Occupancy Category (Table 1604.5) I (II) III IV
 Spectral Response Acceleration
 S_s 17.2% S₁ 8.2%
 SITE CLASSIFICATION (ASCE-7) A B C (D) E F
 Field Test Presumptive Historical Data

Basic structural system (check one):
 Bearing Wall Dual w/Special
 Building Frame Moment Frame
 Moment Frame Dual w/ Intermediate
 R/C or Special Steel Inverted Pendulum

Analysis Procedure: Simplified
 Equivalent Lateral Force
 Dynamic

Architectural, Mechanical, Components anchored?
 Yes No

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) NA psf
 Presumptive Bearing Capacity 2000 psf
 Pile size, type, and capacity NA

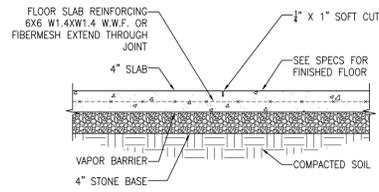


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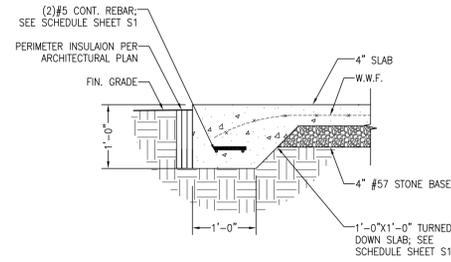
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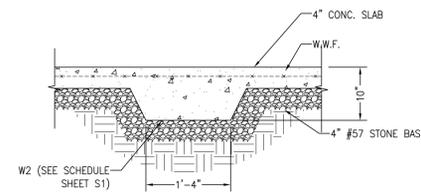
S1



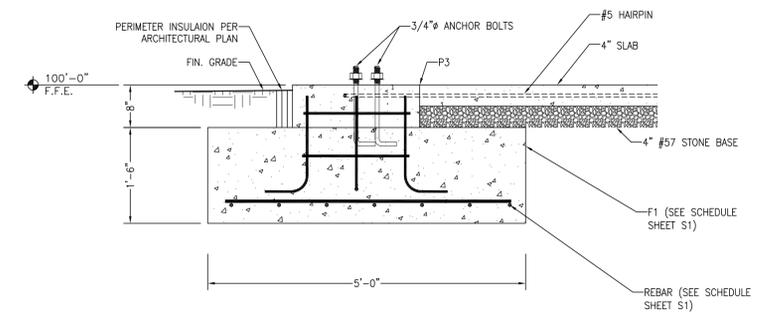
1 SAWED JOINT DETAIL
S2 3/4"=1'-0"



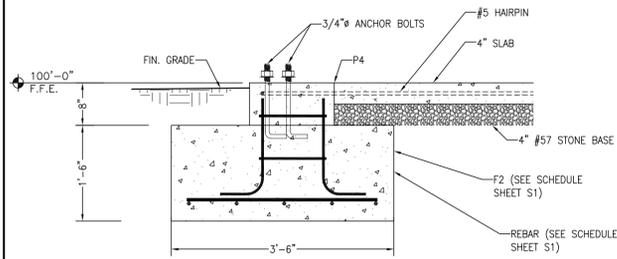
2 W1, TURNED DOWN SLAB DETAIL
S2 3/4"=1'-0"



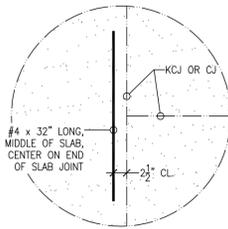
3 W2 FOUNDATION DETAIL
S2 3/4"=1'-0"



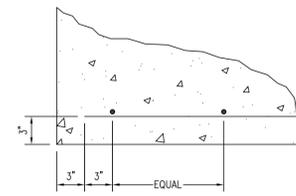
4 F1/P3 FOUNDATION DETAIL
S2 3/4"=1'-0"



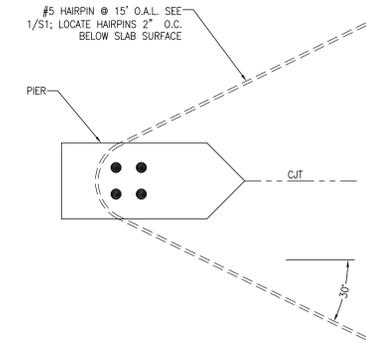
5 F2/P4 FOUNDATION DETAIL
S2 3/4"=1'-0"



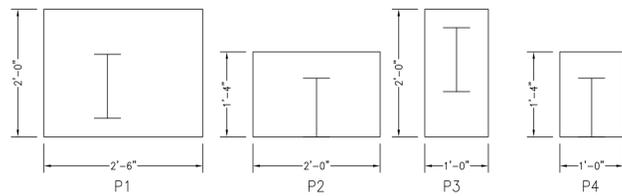
6 PLAN AT DISCONTINUOUS SLAB JOINT
S2 N.T.S.



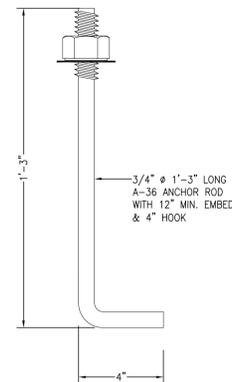
7 TYPICAL REBAR PLACEMENT DETAIL
S2 N.T.S.



8 TYPICAL HAIRPIN DETAIL
S2 N.T.S.



9 PIER DETAILS
S2 3/4"=1'-0"



10 TYPICAL ANCHOR BOLT DETAIL
S2 N.T.S.

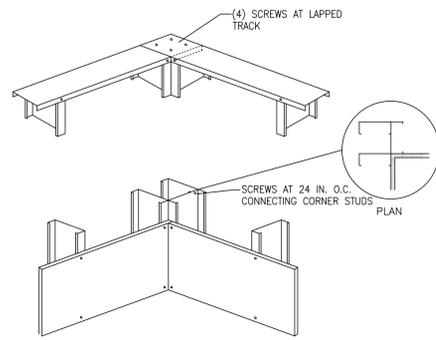


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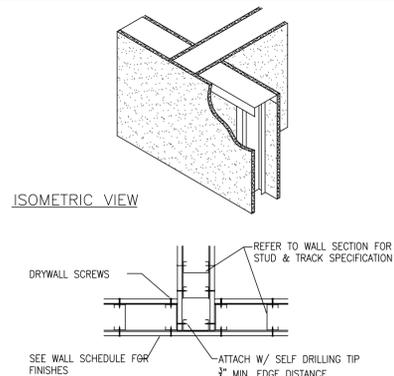
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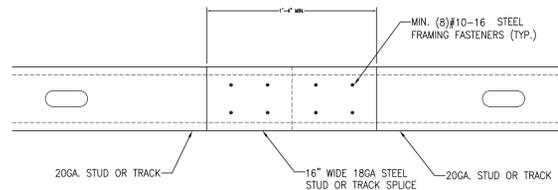
S2



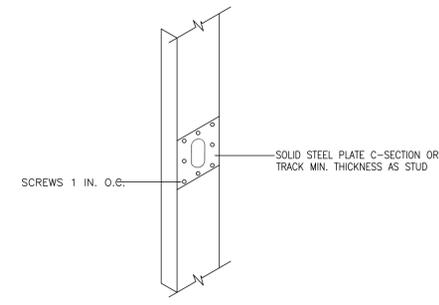
1 CORNER DETAILS
S3 N.T.S.



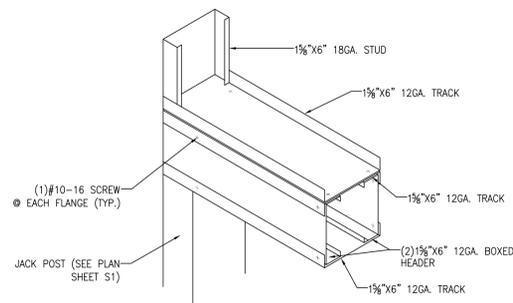
2 INSIDE CORNER DETAIL
S3 N.T.S.



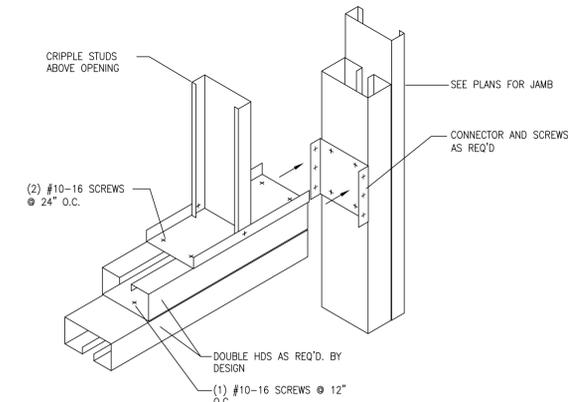
3 TRACK SPLICE DETAIL
S3 N.T.S.



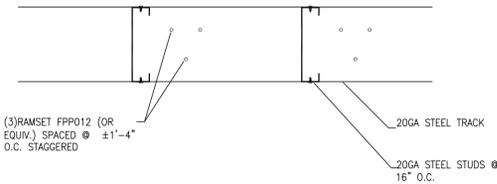
4 HOLE PATCH DETAIL
S3 N.T.S.



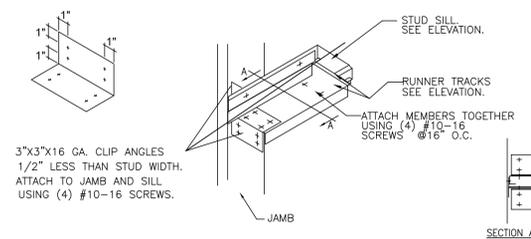
5 BOXED HEADER DETAIL
S3 N.T.S.



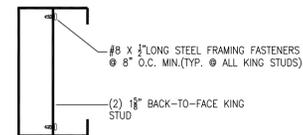
6 INTERIOR HEADER DETAIL
S3 N.T.S.



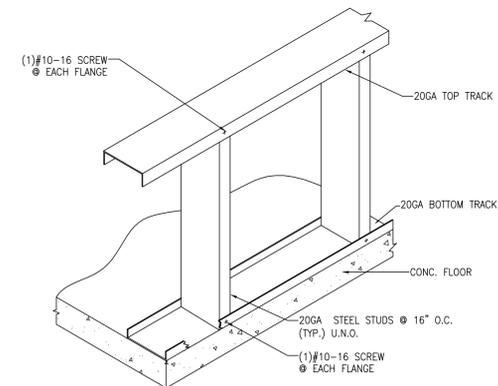
7 TYPICAL INTERIOR BASE ATTACHMENT
S3 N.T.S.



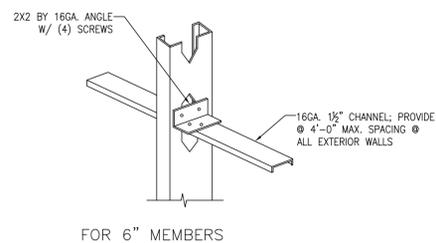
8 LAY-IN SILL CONNECTION
S3 N.T.S.



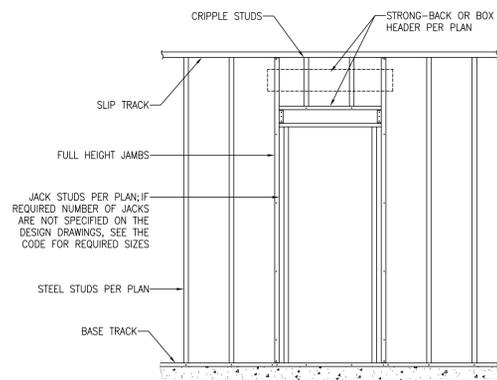
9 TYPICAL KING STUD DETAIL
S3 N.T.S.



10 EXTERIOR FRAMING ISOMETRIC
S3 N.T.S.



11 BRIDGING CHANNEL DETAIL
S3 N.T.S.



12 TYPICAL DOOR OPENING DETAIL
S3 N.T.S.

LIGHT FRAMED COLD-FORMED STEEL STUDS

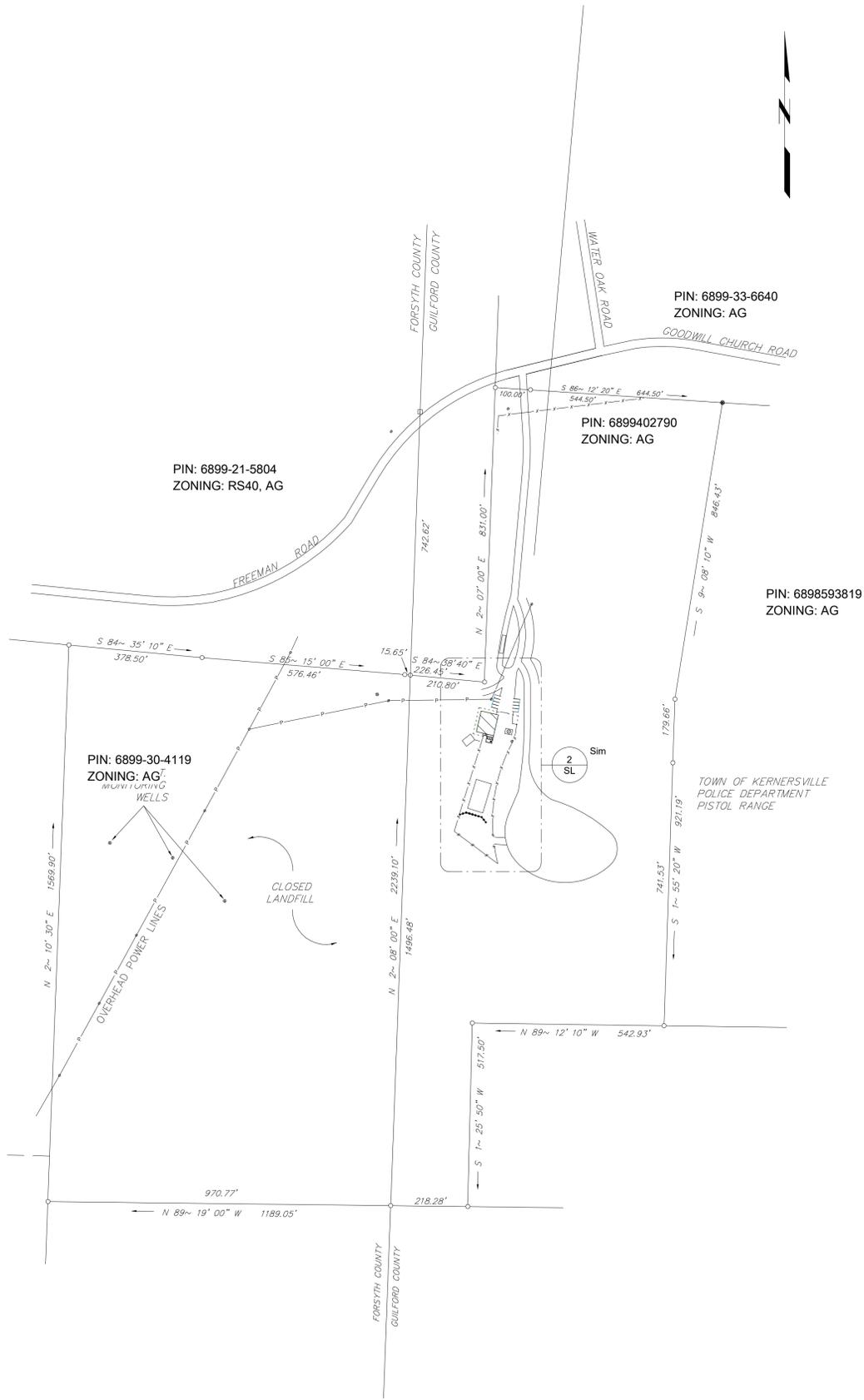
- All exterior studs shall be a minimum 1-5/8" by 3 5/8" or 6" with a 1/2" return lip. Load bearing studs shall have a minimum uncoated base metal thickness of 20 GA and shall be of the following grades of structural quality steel: ASTM A 653 S5 grade 33, ASTM S 792 S5 grade 33, ASTM A 875 S5 grade 33. As a minimum, studs shall be doubled at the ends of shear walls.
- All exterior tracks shall be a minimum 1-1/4" by 3-3/4 or 6-1/8" and of the same thickness material as the studs.
- Screws used to attach the sheathing shall have a minimum head diameter of 0.292" with countersunk heads in accordance with SAE J78. Sheathing screws may have a minimum edge distance of 3/8" and shall be installed at 6" o.c. around the perimeter and 12" o.c. along framing member within the field of the panel.
- Screws in all connections shall be of sufficient length to penetrate through the cold-formed steel-framing member by at least three exposed threads. Framing screws shall be as a minimum in accordance with SAE J78 and shall have a type II coating in accordance with ASTM B 633. All screws shall have a minimum edge distance and spacing of 0.5 inch. They shall be self-drilling tapping screws.
- Gypsum board shall be applied perpendicular to the studs with no. 6 screws in accordance with ASTM C 954 at 7" o.c. maximum along all framing members. All board end joints must be staggered.
- Vertical and diagonal members in braced bays shall be anchored such that the bottom track is not required to resist uplift by bending in the track web. Both flanges of all studs to be braced by the sheathing material.
- Structural members shall not be spliced. Wood sheathing shall not be used as a splice for any framing member. Bottom tracks shall be spliced using a 6" long section of stud laid inside the track and fastened with 4 screws through the flanges on each side of splice.
- The track shall be anchored using a 1/2" anchor bolt at 48" o.c. (U.N.O.) through a 6" long section flipped metal track laid inside the continuous bottom track and fastened with 4 screws through the flanges on each side of the track or other means as approved by the code. See code for anchorage to floors.
- Holes in structural members shall not exceed 1.5" in width by 4" in length. Holes shall be permitted only along the centerline of the web of the framing member. Such holes shall not be less than 24" o.c. and shall not be located less than 10" from the edge of hole to the end of the member unless it is patched. Such patches shall consist of either a solid steel plate, c-section or track section. The patch material shall be at least the same thickness as the member it is patching and shall extend at least 1" beyond all edges of the hole. The patch shall be attached using no. 8 screws at a maximum of 1" o.c. around the hole maintaining a minimum edge distance of 1/2". Flanges and lips of any structural member shall not be cut or notched.
- All load-bearing steel framing members shall have a legible label, stamp, stencil or embossment with at least the following information:
 - manufacturer's identification.
 - minimum uncoated steel thickness in inches.
 - minimum coating designation.
 - minimum yield strength in ksi.
- All load-bearing steel framing members shall have a metallic coating complying with one of the following:
 - a minimum of G60 in accordance with ASTM A 653.
 - a minimum of G250 in accordance with ASTM A 792.
 - a minimum of GF 60 in accordance with ASTM A 875.
- A minimum of three studs is required at all corners with top tracks lapped at corners and fastened with 4 screws.
- If headers and their required number of jacks are not specified on the design drawings, see the code for required sizes.



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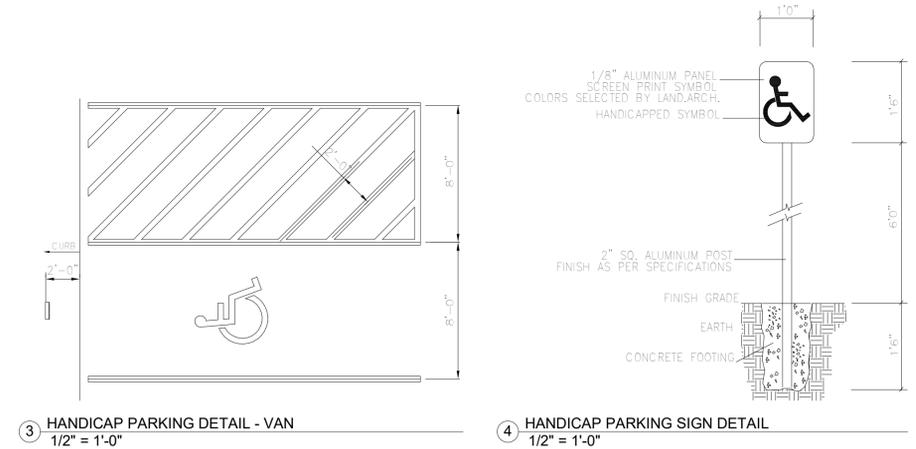
date:	drawn by:

PROJECT NO. 21087A
DRAWN BY: ESW
CHECKED BY: CEQ
DATE: 10/28/21



1 SITE LAYOUT
1" = 200'-0"

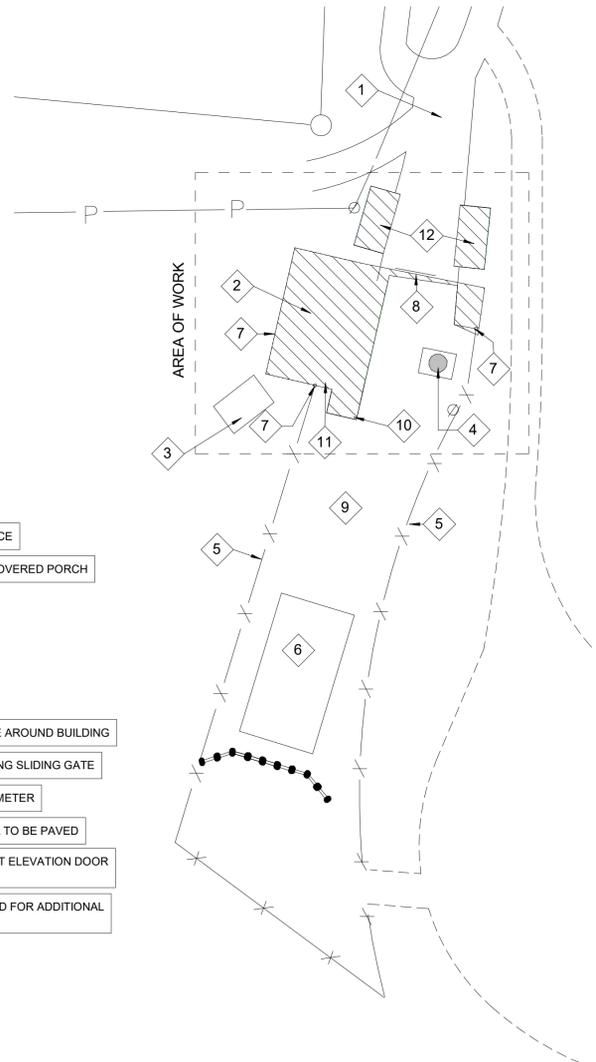
2 SITE LAYOUT - ENLARGED
1" = 50'-0"



3 HANDICAP PARKING DETAIL - VAN
1/2" = 1'-0"

4 HANDICAP PARKING SIGN DETAIL
1/2" = 1'-0"

- 1 EXISTING GRAVEL DRIVEWAY ENTRANCE
- 2 PROPOSED 3,000 SQFT BUILDING W/ COVERED PORCH
- 3 SEPTIC TANK EXISTING TO REMAIN
- 4 WELL HOUSE EXISTING TO REMAIN
- 5 FENCE EXISTING TO REMAIN
- 6 FIRING RANGE EXISTING TO REMAIN
- 7 CONTRACTOR TO INSTALL NEW FENCE AROUND BUILDING
- 8 CONTRACTOR TO INSTALL NEW 24' LONG SLIDING GATE
- 9 EXISTING GRAVEL INSIDE FENCE PERIMETER
- 10 NEW HANDICAP PARKING SPACE AREA TO BE PAVED
- 11 NEW CONCRETE SIDEWALK FROM LEFT ELEVATION DOOR TO EDGE OF COVERED PORCH
- 12 NEW GRAVEL TO BE ADDED AS NEEDED FOR ADDITIONAL PARKING SPACE

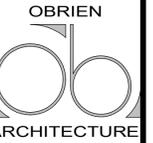


NOTE:
FIRING RANGE IS EXISTING TO REMAIN. THE SITE CURRENTLY HAS A MOBILE UNIT THAT WILL BE REMOVED AND THE NEW BUILDING BUILT IN ITS PLACE. THE EXISTING FENCE AND GRAVEL PARKING WILL NEED TO BE REWORKED. EXISTING WELL AND SEPTIC SYSTEM WILL BE USED FOR NEW BUILDING UTILITIES

DISTURBED AREA: ~6,400 SQFT
 REQUIRED PARKING SPACES: 8
 REQUIRED ADA SPACES: 1
 PROVIDED PARKING SPACES: 9
 PROVIDED ADA SPACES: 1

TRAINING CENTER FOR
KERNERSVILLE POLICE DEPT.
7385 7399 GOODWILL CHURCH RD,
KERNERSVILLE, NC 27284

SITE LAYOUT



MATTHEW OBRIEN, ARCHITECT
143 N MAIN ST, KERNERSVILLE, NC 27284
PHONE: 336.423.4411
EMAIL: OBRIEN@OBAIA.COM



COM. NO.		
No.	Description	Date

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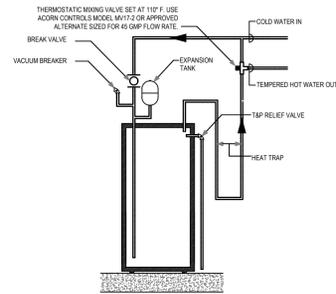
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GENERAL NOTES:

- ALL OPENINGS FOR PIPING PENETRATIONS ARE GENERALLY PROVIDED BY THE PLUMBING SUB-CONTRACTOR. EXCEPTIONS ARE COVERED BY NOTES AND DETAILS. THE LOCATION AND SIZE OF EACH OPENING SHALL BE FURNISHED TO THE GENERAL CONTRACTOR BY THE PLUMBING SUB-CONTRACTOR.
- PIPE HANGERS AND CONCRETE INSERTS UTILIZED FOR THIS PROJECT SHALL BE PROVIDED BY THE PLUMBING SUB-CONTRACTOR. THIS INCLUDES ALL SUPPLEMENTAL STEEL, ETC.
- UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT, NO BURIED PIPING UNDER THE SLAB SHALL BE INSTALLED WITHIN THE FOOTING BEARING.

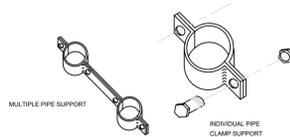
COORDINATED AND PROVIDED BY THE PLUMBING SUB-CONTRACTOR.

- ALL LINTELS REQUIRED IN MASONRY AND STUD WALLS FOR PIPING PENETRATIONS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.
- COORDINATE VERTICAL PIPING WITH ARCHITECTURAL PLANS FOR EXACT LOCATION OF RISER.
- UNLESS APPROVED BY THE ENGINEER, NO HORIZONTAL PIPING IN THE MECHANICAL ROOM, SHALL BE INSTALLED WITH A BOTTOM OF PIPE ELEVATION BELOW 8'-0" AFF.
- ALL BURIED PRESSURE PIPING SHALL BE A MINIMUM OF 24" BELOW FINISHED GRADE TO TOP OF PIPE.
- INSTALL ALL HANDICAP TOILET FLUSH VALVES ON THE WIDE SIDE OF THE TOILET.
- COORDINATE THE INVERT ELEVATIONS WITH THE SITE UTILITY DRAWINGS. THE INVERT INDICATED ON THE PLUMBING DRAWINGS IS THE MINIMUM INVERT TO EXIT THE BUILDING. THE PLUMBING SUB-CONTRACTOR SHALL COORDINATE, VERIFY AND PROVIDE THE INVERT ELEVATIONS ON THE COORDINATION DRAWINGS.
- THE PLUMBING SUB-CONTRACTOR IS REQUIRED TO COMPLETELY ROD AND FLUSH OUT ALL SANITARY, GREASE WASTE PIPING AFTER THE BUILDING IS COMPLETED.
- REFER TO SPECIFICATIONS REGARDING VIDEO INSPECTIONS OF SANITARY, GREASE WASTE AND STORM DRAINAGE PIPING.
- THE PLUMBING SUB-CONTRACTOR IS REQUIRED TO PROVIDE DETECTABLE WARNING TAPE OR TRACER WIRE FOR WATER DISTRIBUTION AND ALL DRAINAGE PIPING WITHIN THE SCOPE OF HIS CONTRACT.
- ALL PLUMBING VENTS SHALL BE INSTALLED AT A MINIMUM OF 15'-0" FROM ANY FRESH AIR INTAKES.
- REFER TO THE SPECIFICATIONS FOR WATER SUPPLY AND P-TRAP INSULATION REQUIRED FOR ALL EXPOSED ADA SINK AND LAVATORY LOCATIONS.
- ALL NATURAL GAS PIPING BY PLUMBING CONTRACTOR.
- PROVIDE LABEL ON CEILING GRID FOR ALL VALVE LOCATIONS.
- A DRIP PAN SHALL BE INSTALLED UNDER PIPING WHERE PIPING RUNS OVER A CABLE TRAY.
- PROVIDE HOT AND COLD WATER ISOLATION VALVES ON EACH FLOOR.
- INSTALL TRACER WIRE ABOVE INTERCEPTORS AND ASSOCIATED PIPING.
- PROVIDE PULSE METER TYPE ON GAS METER. COORDINATE WITH UTILITY COMPANY.
- PROVIDE GROUT AROUND WATER CLOSETS. CAULK IS NOT PERMITTED.
- PROVIDE CHROME ESCUTCHEON RINGS AT ALL EXPOSED CEILING AND WALL PENETRATIONS.
- ALL UNDERGROUND NON-METALLIC PIPE MUST BE MARKED AND IDENTIFIED WITH TRACER WIRE TAPE. INSTALL TRACER WIRE A MINIMUM 18" ABOVE THE PIPE.
- PROVIDE LOCKABLE ACCESS PANELS TO VALVES ABOVE CORE TOILET CEILINGS.
- PC SHALL INSULATE FIRST 10' AND P-TRAP OF ALL 2ND/3RD FLOOR FLOOR DRAINS RECEIVING CONDENSATE. THIS INCLUDES MECHANICAL AND CULINARY EQUIPMENT CONDENSATE. MECHANICAL ROOM DRAINS SHALL ALL RECEIVE THIS INSULATION.
- INSULATE ALL HOT WATER AND HOT WATER RECIRCULATION PIPING PER SPEC SECTION 22 0704.



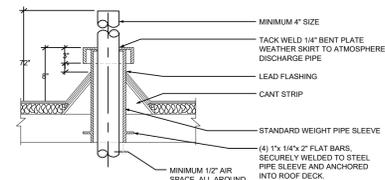
FLOOR MOUNTED WATER HEATER DETAIL

N.T.S.



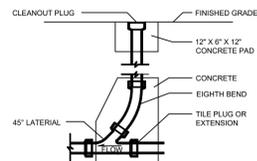
VERTICAL PIPE SUPPORT DETAIL

N.T.S.



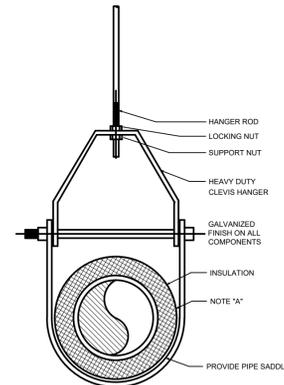
VENT PIPE THRU ROOF

NOT TO SCALE



EXTERIOR CLEANOUT DETAIL

N.T.S.



NOTE 'X' PROVIDE INSULATION PROTECTION-SEE SPECIFICATIONS

PIPE SIZE	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"
MAX ALLOWABLE SPACING	8 FT	10 FT	12 FT	15 FT	18 FT	20 FT	24 FT	30 FT	36 FT	48 FT

NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST PIPE ON TRAPEZE.

CLEVIS HANGER DETAIL

N.T.S.

PLUMBING SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
---	SANITARY OR STORM DRAIN
----	VENT PIPING
----	COLD WATER
----	HOT WATER
----	HOT WATER RECIR
----	VACUUM
----	OXYGEN
→	DIRECTION OF FLOW
○	ELBOW DOWN
○	ELBOW UP
⊥ WCO	WALL CLEANOUT
⊥ CO	FLOOR CLEANOUT
⊥ VTR	VENT THRU ROOF
⊥ O	BALL VALVE
⊥ FD	FLOOR DRAIN
⊥ YCO	YARD CLEANOUT
⊥ FCO	FLOOR CLEANOUT
⊥ FS	FLOOR SINK
⊥	CONNECT TO EXISTING
SW	SANITARY WASTE
GW	GREASE WASTE
⊥ HB	HOSE BIBB
⊥ AFWH	ANTI-FREEZE WALL HYDRANT
⊥ W	WATER HAMMER ARRESTOR WITH P.D.I. STANDARD SIZING
P.C.	PLUMBING CONTRACTOR
⊥	WASHING MACHINE OUTLET BOX
⊥	STUDOR VENT
⊥	WATER METER
⊥	ICE MAKER OUTLET BOX

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	ROUGH-IN-SIZE				REMARKS
		WASTE	VENT	CW	HW	
P1A	WATER CLOSET	4"	2"	1/2"	---	ADA
P2A	LAVATORY	2"	1 1/2"	1/2"	1/2"	ADA
WC1A	WATER COOLER	2"	2"	1/2"	---	ADA, HIGH-LOW
SS	SERVICE SINK	4"	2"	1/2"	1/2"	
HB	HOSE BIBB	---	---	1/2"	---	

PIPING MATERIALS

WASTE (STANDARD AND GREASE): SCHEDULE 40 SOLID CORE PVC
 VENT: PVC
 WATER: TYPE K COPPER BELOW GRADE, TYPE L COPPER ABOVE GRADE.

WATER HEATER SCHEDULE

DESIGNATION	EW11
SERVICE	LAVATORIES
LOCATION	FLOOR MOUNTED
MANUFACTURER	A.O. SMITH OR SIMILAR
MODEL	DRE-52-12
CAPACITY, GAL	40 GAL
POWER HW	ELECTRIC
RECOVERY	50 GPM @ 100' RISE
VOLTS/PH	208/1
SUPPLY WATER TEMP. °F	140° F
ACCESSORIES	1

ACCESSORIES:
 1. PLASTIC DRAIN PAN

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 7385 GOODWILL CHURCH RD
 KERNERSVILLE, NC 27284

WATER SUPPLY
 PIPING PLAN
 BASEMENT



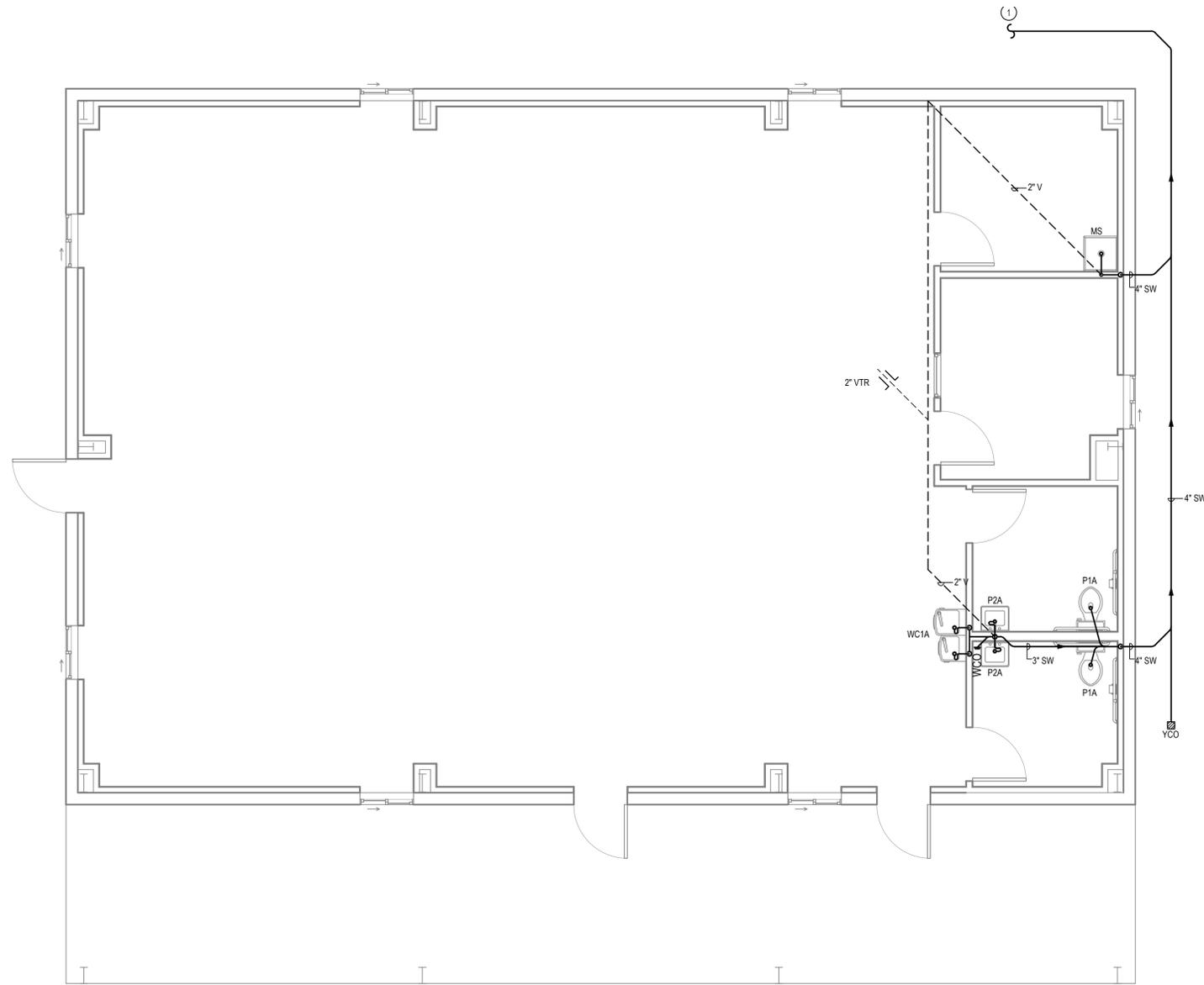
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COMM. NO.: 027-20
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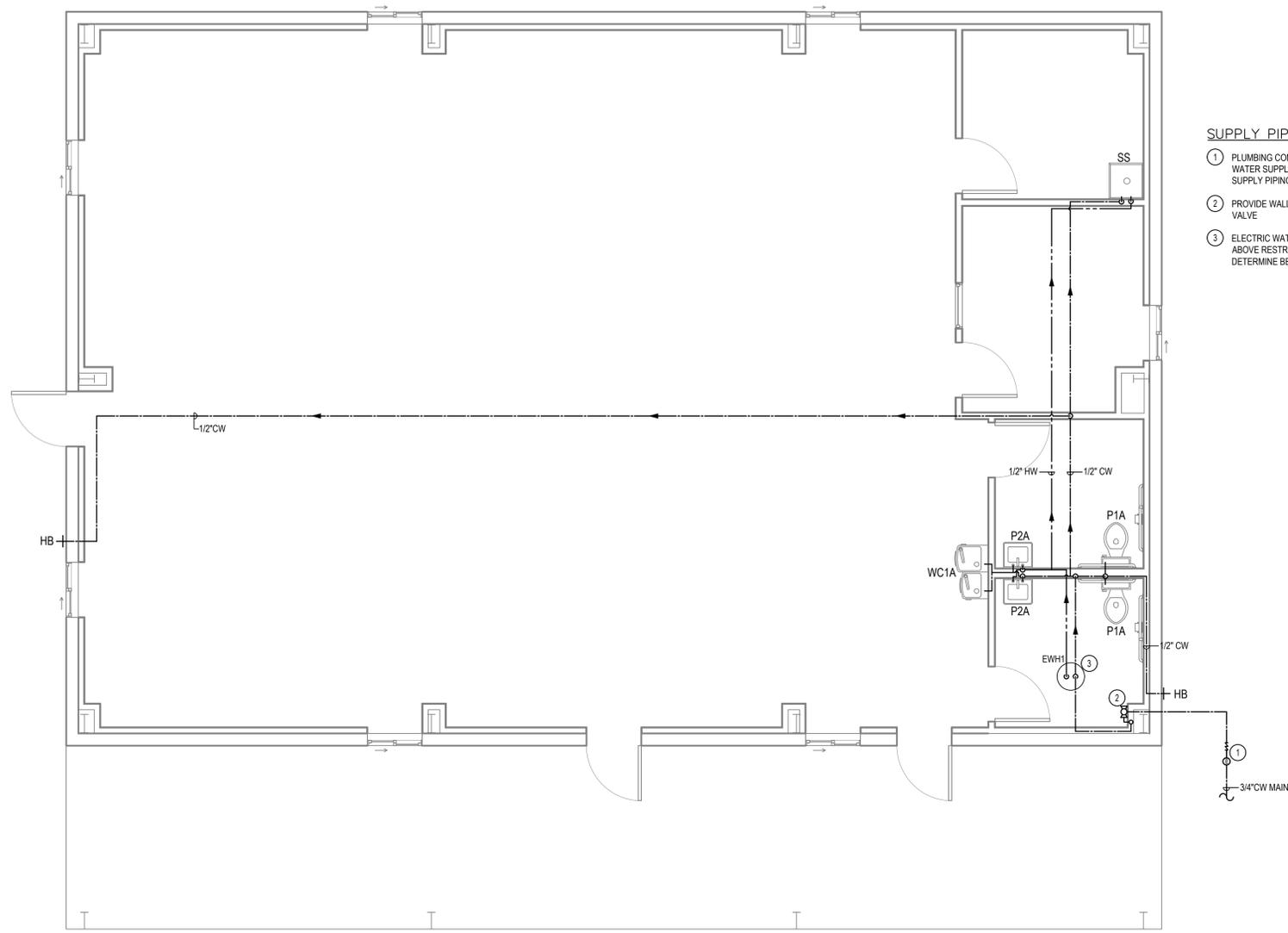
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WASTE PIPING KEY NOTES:

① PLUMBING CONTRACTOR TO FIELD LOCATE EXISTING 4\"/>





- SUPPLY PIPING KEY NOTES:**
- ① PLUMBING CONTRACTOR TO LOCATE EXISTING WELL WATER SUPPLY PIPING AND CONNECT NEW WATER SUPPLY PIPING TO EXISTING
 - ② PROVIDE WALL ACCESS PANEL & MAIN WATER SHUT OFF VALVE
 - ③ ELECTRIC WATER HEATER MOUNTED ON PLATFORM ABOVE RESTROOM. PLUMBING CONTRACTOR TO DETERMINE BEST LOCATION FOR INSTALL

GENERAL NOTES

AFTER CONTRACT IS AWARDED

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITHIN 30 DAYS, OR AS SPECIFIED IN THE SPECIFICATIONS (IF PROVIDED), OF AWARD OF PROJECT.
2. ALL EQUIPMENT PLACEMENT, DUCT ROUTING, AND PIPING LAYOUTS ARE GENERALLY DIAGRAMMATIC. IN BIDDING THE PROJECT, THE CONTRACTOR IS ATTESTING THAT THEY UNDERSTAND THERE WILL BE CONFLICTS NOT NECESSARILY SHOWN ON THE PLANS OR THAT MAY DEVELOP FROM THE CONSTRUCTION PROCESS, AND THAT THEY WILL BE RESPONSIBLE FOR COORDINATING THESE CONFLICTS AND ADJUSTING THE MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS ACCORDINGLY BY REROUTING, RESIZING, AND RESELECTING SYSTEMS.
3. PRIOR TO ORDERING EQUIPMENT, THE CONTRACTOR SHALL HOLD A COORDINATION MEETING WITH ALL THE OTHER CONTRACTORS ON THE PROJECT TO COORDINATE DIFFERENT DISCIPLINES (MECHANICAL, ELECTRICAL, PLUMBING, GENERAL, FIRE ALARM, FIRE PROTECTION, AND ALL OTHER SPECIALIZED CONTRACTORS). DURING THIS COORDINATION MEETING, ALL EQUIPMENT SHALL BE IDENTIFIED AND EXACT ROUTING SHALL BE IDENTIFIED FOR EACH DISCIPLINE.
4. AFTER MEETING WITH OTHER CONTRACTORS, THE CONTRACTOR SHALL DEVELOP WORKING DRAWINGS SHOWING ANY VARIANCE FROM THE ENGINEER'S PLANS. THESE VARIANCES, AS A MINIMUM, SHALL BE NEATLY (USING RULER AND RED PENCIL/PEN) MARKED ON THE PLANS. ONCE MARKED, THE CONTRACTOR SHALL HOLD A MEETING WITH THE ENGINEER TO IDENTIFY ALL VARIANCES.
5. THE CONTRACTOR SHALL DEVELOP A SCHEDULE OF WORK TO INCLUDE WORK PERIODS, DELIVERY OF EQUIPMENT, START DATES, COMPLETION DATES, REVIEW PERIODS, AND OTHER TYPICAL CONSTRUCTION MILESTONES. IF OTHER DISCIPLINES ARE NOT TASKED TO DO SO, THE CONTRACTOR SHALL SUBMIT AN INDEPENDENT SCHEDULE TO THE ENGINEER. IF GENERAL CONTRACTOR IS REQUIRED TO PROVIDE A SCHEDULE, CONTRACTOR IS TO INTEGRATE HIS SCHEDULE WITH THE GENERAL CONTRACTOR'S.

DURING CONSTRUCTION

1. ALL SIZING AND COMPONENTS ARE GENERALLY DIAGRAMMATIC. MANUFACTURER SIZES MAY HAVE CHANGED IN THE PROCESS OF DESIGN OR SIZES MAY VARY DEPENDING ON THE ACTUAL MANUFACTURER SUBMITTED. IN DESIGNING THE BUILDING, ALL COMPONENTS MAY NOT BE EXPOSED AND NOT ACCOUNTED FOR BY THE ENGINEER. IN BIDDING THE PROJECT, THE CONTRACTOR UNDERSTANDS THAT THESE INTERFERENCES OR CONFLICTS EXIST AND SHALL BE RESPONSIBLE TO ADJUST ACCORDINGLY. MAINTAIN SAME SIZE EQUIPMENT AND COMPONENTS WHENEVER POSSIBLE.
2. IF ANY UNUSUAL CIRCUMSTANCES ARE IDENTIFIED, IMMEDIATELY INFORM THE ENGINEER. STOP WORK IF THE UNUSUAL CIRCUMSTANCE IS DEEMED DANGEROUS OR MAY COST SIGNIFICANT CHANGES.
3. PROVIDE MINIMUM RED TAB WITH NUMBER TO ALL HIDDEN COMPONENTS ABOVE CEILINGS, WALLS, FLOOR, ETC. PROVIDE THE OWNER WITH A TYPED SUMMARY OF THE NUMBERS ON THE TAB DESIGNATING THE EQUIPMENT HIDDEN.
4. IN INSTALLING THE EQUIPMENT, ADJUST LOCATION SO AS TO ALLOW MINIMUM CLEARANCES REQUIRED BY CODE AND MANUFACTURER.
5. ALL PIPING AND CONDUIT PENETRATIONS SHALL BE PROVIDED WITH ESCUTCHEONS. FIRE CAULK ALL PENETRATION TO MATCH WALL FIRE RATING (AS NEEDED).
6. MECHANICAL:
 - A. CONTRACTOR MAY RESIZE DUCT TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
 - B. CONTRACTOR MAY UTILIZE RECTANGULAR IN LIEU OF ROUND, OR VICE VERSA, TO ACCOMMODATE SPACE CONDITIONS.
 - C. MAINTAIN A DUCT ASPECT RATIO BETWEEN 1:1 TO 2:1. IF LARGER ASPECT RATIO IS TO BE USED, THEN CROSS BRACING SHALL BE REQUIRED PER THE CURRENT SMACNA STANDARDS.
 - D. ALL DUCTWORK SHOWN ON PLANS ARE FREE FLOW AREA (DOES NOT INCLUDE DUCT AND INSULATION THICKNESS). ASSUME A MINIMUM OF 2" THICKNESS, OR WHATEVER THICKNESS OF ACTUAL COMPONENTS, WHEN PLANNING ROUTING.
 - E. SUPPLY AND RETURN DUCTWORK SHALL BE MINIMUM 24 GAUGE.
 - F. ALL DUCTWORK JOINTS SHALL BE STANDING SEAM CONNECTIONS UNLESS SHOWN OTHERWISE.
 - G. A MINIMUM OF TWO LAYERS OF MASTIC SHALL BE APPLIED TO ALL JOINTS. WIDTH SHALL EXTEND 1/2" ON ONE SIDE OF THE SEAM TO 1/2" ON THE OTHER SIDE. MASTIC SHALL BE THICK ENOUGH SO THAT NO SHEET METAL SHALL BE VISIBLE THROUGH THE MASTIC. IF NOT, CONTRACTOR WILL BE ASKED TO REDO.
 - H. DUCTWORK SHALL BE EXTERNALLY WRAPPED WITH 1-1/2" FIBERGLASS WRAP INSULATION WITH FOIL SOXRM KRAFT JACKET. ALL INSULATION JOINTS AND OPEN ENDS OF FIBERGLASS SHALL BE DUCT TAPED.
 - I. REFRIGERANT PIPING (GAS AND LIQUID) SHALL BE WRAPPED WITH MINIMUM 1/2" ARMAFLEX INSULATION UNLESS SHOWN OTHERWISE. DUCT TAPE ALL JOINTS. ALL DISHWASHER EXHAUST DUCT SHALL BE STAINLESS STEEL.
 - J. PRIMARY AND SECONDARY CONDENSATE PIPING SHALL BE MINIMUM 3/4" OR AS SHOWN ON PLANS. CONDENSATE PIPING SHALL BE HARD COPPER WHEN ROUTED IN PLENUM, EXPOSED, OR AS DEEMED BY LOCAL INSPECTOR. PVC IS ACCEPTABLE FOR OTHER APPLICATIONS. INSULATE WITH MINIMUM 1/2" ARMAFLEX WHEN ROUTED ABOVE CEILING OF OCCUPIED SPACES AND WITHIN WALLS OF OCCUPIED SPACES.
 - K. DUCTWORK AND PIPING SHALL BE STORED IN COVERED AREAS SO THAT IT IS NOT EXPOSED TO MUD, DIRT, MOISTURE, AND OTHER CONTAMINANTS. CONTRACTOR SHALL KEEP CLEAN. ENGINEER RESERVES THE RIGHT TO REJECT ANY DUCTWORK THAT IS DEEMED TO BE CONTAMINATED. CONTRACTOR MAY CLEAN OR REPLACE AT HIS OWN COST.
 - L. INSULATION SHALL BE PROPERLY PROTECTED SO THAT IT IS NOT EXPOSED TO MOISTURE, MUD, DIRT, OR CONTAMINANTS. ENGINEER RESERVES THE RIGHT TO REJECT ANY INSULATION THAT IS DEEMED TO BE CONTAMINATED. CONTRACTOR SHALL REPLACE AT HIS OWN COST.
 - M. AREA MUST BE DRIED-IN BEFORE ANY DUCT IS INSTALLED.
 - N. INSTALL DUCT PER CURRENT SMACNA STANDARDS.
 - O. CONTRACTOR, WHETHER SHOWN ON PLANS OR NOT, SHALL INSTALL FIRE AND/OR SMOKE DAMPERS ON ALL FIRE AND/OR SMOKE WALLS TO MATCH FIRE RATING.

- P. WHETHER SHOWN OR NOT, PROVIDE ACCESS DOORS FOR ALL FIRE DAMPERS.
- Q. PROVIDE ACCESS DOORS ON THE BUILDING COMPONENTS TO ACCESS ALL MECHANICAL EQUIPMENT THAT REQUIRE ACCESS (VAV BOXES, DAMPERS, ETC.).
- R. ALL ELBOWS ARE TO BE SMACNA SMOOTH RADIUS TYPE. MITERED, RECTANGULAR, OR SHORT RADIUS ELBOWS SHALL BE PER ENGINEER PERMISSION.
- S. ALL BRANCH DUCTS SHALL BE 45 DEGREE ENTRY TYPE.
- T. UNLESS SPECIFICALLY NOTED, ALL THERMOSTATS SHALL BE MOUNTED AT SAME HEIGHT (BOTTOM) AS THE LIGHT SWITCH AND LOCATED NO FURTHER THAN 12 INCHES (HORIZONTALLY) FROM THE NEAREST LIGHT SWITCH.
- U. CONTRACTOR SHALL PROVIDE TESTING AND BALANCING SERVICES FOR AIR AND WATER SYSTEMS AS PART OF THE SCOPE OF WORK. PROVIDE A TYPED WRITTEN TEST AND BALANCE REPORT BOUND IN A FOLDER TO THE ENGINEER UPON COMPLETION OF CONSTRUCTION. ENGINEER SHALL REVIEW AND APPROVE PRIOR TO APPROVING FINAL PAYMENT. CONTRACTOR SHALL BE REQUIRED TO ACHIEVE ALL AIRFLOWS LISTED ON THE PLANS.
- V. PROVIDE MINIMUM 1/2" NEOPRENE HANGER ISOLATORS AT ALL SUPPORTS OF SUSPENDED EQUIPMENT WITH FANS AND MOVING PARTS.
- W. PROVIDE MINIMUM HOUSEKEEPING PAD THAT IS 6" LARGER ON ALL SIDES OF ALL EQUIPMENT MOUNTED ON THE GROUND. THE PAD SHALL BE MINIMUM 4" THICK CONCRETE PAD.
- X. ALL DUCTWORK PENETRATIONS SHALL BE PROVIDED WITH SHEET METAL SLEEVE TO MATCH DUCTWORK.
- Y. GAS PIPING SHALL NOT BE INSTALLED IN SOLID FLOORS, PARTITIONS, AND WALLS. ALL GAS SHALL BE MARKED AT BEGINNING, ALL ENDS, ON EACH SIDE OF PARTITIONS, AND NOT LESS THAN 6 FEET INTERVALS ALONG ITS ENTIRE LENGTH DESIGNATING GAS PRESSURE AND GAS TYPE.
- Z. WHETHER SHOWN OR NOT, CONTRACTOR SHALL PROVIDE ALL GAS REGULATORS FOR ALL EQUIPMENT UTILIZING GAS TO REGULATE PRESSURE TO MANUFACTURER REQUIREMENTS.
- AA. ALL EXPOSED COMPONENTS SHALL BE PAINTGRIP AND PAINTED TO MATCH BUILDING COMPONENTS OR AS REQUIRED BY THE ARCHITECT OR OWNER.
- BB. LOCATE ALL ROOF MOUNTED EQUIPMENT A MINIMUM OF 10'-0" FROM ROOF EDGE. CONTRACTOR SHOULD HAVE VERIFIED AVAILABILITY OF CLEARANCE PRIOR TO BIDDING. IF NOT INSTALLED 10'-0" FROM EDGE, CONTRACTOR SHALL INSTALL MAINTENANCE RAILING AT ROOF EDGE AT HIS OWN COST PER LOCAL AUTHORITY REQUIREMENTS.
- CC. WHETHER SHOWN OR NOT OTHERWISE NOTED, ALL EXPOSED DUCTWORK SHALL BE DOUBLE WALL SPIRAL DUCT (MINIMUM 22 GAUGE GALVANIZED STEEL) WITH MINIMUM 1" FIBERGLASS INSULATION SANDWICHED BETWEEN THE DUCT WALLS. EXTERNAL DUCT SHALL BE PAINTGRIP AND PAINTED PER ARCHITECT/OWNER.
- DD. DUCT MOUNTED EXPOSED AIR DISTRIBUTION DEVICES SHALL BE FACTORY FINISH. COLOR PER ARCHITECT/OWNER.

APPENDIX B: MECHANICAL, SERVICE SYSTEMS AND EQUIPMENT

METHOD OF COMPLIANCE

- PRESCRIPTIVE ENERGY COST BUDGET

THERMAL ZONE

WINTER DRY BULB: 18°F
SUMMER DRY BULB: 95°F

INTERIOR DESIGN CONDITIONS

WINTER DRY BULB: 70°F
SUMMER DRY BULB: 74°F
RELATIVE HUMIDITY: 50%

BUILDING HEATING LOAD

N/A
BUILDING COOLING LOAD 318,000 BTU/HR

MECHANICAL SPACING CONDITIONING SYSTEM

UNITARY

DESCRIPTION OF UNIT:) N/A
HEATING EFFICIENCY:)
COOLING EFFICIENCY:)
HEAT OUTPUT OF UNIT:)
COOLING OUTPUT OF UNIT:)

BOILER

TOTAL BOILER OUTPUT, IF OVERSIZED, STATE REASON: N/A
CHILLER
TOTAL CHILLER CAPACITY, IF OVERSIZED, STATE REASON: N/A

LIST EQUIPMENT EFFICIENCIES

SEE SCHEDULES

EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)

MOTOR HORSEPOWER:)
NUMBER OF PHASES:)
MINIMUM EFFICIENCY:)
MOTOR TYPE:)
OF POLES:)

SPLIT SYSTEM SCHEDULE

INDOOR UNIT	
DESIGNATION	AHU-1
SERVICE	BUILDING
LOCATION	SEE PLAN
MANUFACTURER	RUUD
MODEL	RH1T6014STANAJ00
SIZE	60
SUPPLY AIRFLOW, CFM	2000
RETURN AIRFLOW, CFM	2000
OUTSIDE AIRFLOW, CFM	NATURAL VENTILATION
ESP, IN WG.	0.75
VOLTS/PH/HZ	208/1/60
MCA	6
MOP	15
OUTDOOR UNIT	
DESIGNATION	HP-1
LOCATION	OUTSIDE
MANUFACTURER	RUUD
MODEL	RP1560AJINA
VOLTS/PH/HZ	208/1/60
MCA	31
MOP	50

ACCESSORIES:

1. PROVIDE WITH 1" THROWAWAY FILTER.
2. PROVIDE 24V TRANSFORMER, AS REQUIRED.
3. PROVIDE WITH 1" TEMPORARY FILTER DURING CONSTRUCTION.
4. PROVIDE WITH OVERFLOW PAN W/ SHUTDOWN FLOAT SWITCH.

REMARKS:

- A. MOUNT PER MANUFACTURER'S INSTRUCTIONS.
- B. RUUD IS BASIS OF DESIGN. ACCEPTABLE EQUALS ARE LENNOX AND CARRIER. OWNER RESERVES THE RIGHT TO SELECT AN ACCEPTABLE EQUAL. CONSULT OWNER PRIOR TO PURCHASE.
- C. MINIMUM 13 SEER OR MINIMUM SEER PER CURRENT CODE.
- D. COORDINATE ACTUAL UNIT POWER WITH EC.
- E. UNIT IS LOCATED ABOVE COMMON AREA CEILING
- F. CONTRACTOR TOR VERIFY INDOOR AND OUTDOOR UNITS ARE COMPATIBLE

EXHAUST FAN SCHEDULE

PLAN IDENTITY	MFGR	MODEL	CFMEESP	HP/WATTS	VOLTAGE	SERVING	CONTROL	REMARKS
EF-1	BROAN	E20N EDPT	80 ZS	53 WATTS	120	BATHROOM	CONTROLLED WITH LIGHTS	
EF-2	BROAN	E20N EDPT	80 ZS	53 WATTS	120	BATHROOM	CONTROLLED WITH LIGHTS	

NATURAL VENTILATION

WINDOW TYPE A (QUANTITY 7) 3' x 2.5' AREA= 52.5 SQ. FT
DOOR TYPE A (QUANTITY 3) 3' x 7' AREA= 63 SQ. F

TOTAL VENTILATION AREA= 26.25

TOTAL SQUARE FOOTAGE OF BUILDING 2,400
2,400 TOTAL SQUARE FOOTAGE x .04 (REQUIRED % OF FLOOR FOR NATURAL VENTILATION)
=96 SQUARE FEET OF REQUIRED VENTILATION

TOTAL OPENINGS IN OUR BUILDING 115.5 IS > (GREATER THAN) THE REQUIRED 96

KERNERSVILLE POLICE DEPT.
 TRAINING CENTER
 7385 GOODWILL CHURCH RD
 KERNERSVILLE, NC 27284

DETAILS
 &
 SCHEDULES



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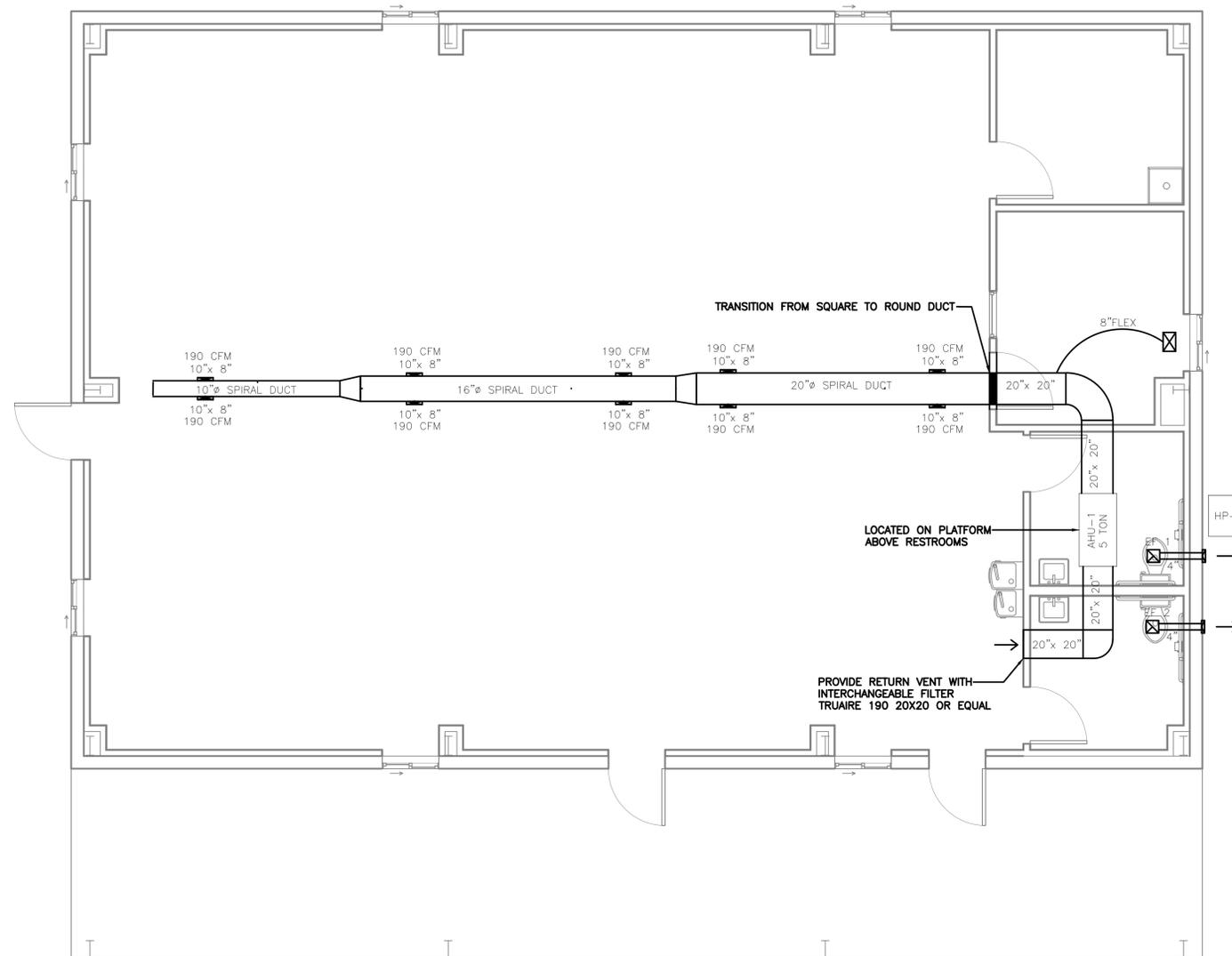


KEYED NOTES

- 1 PROVIDE WALL CAP WITH GRAVITY DAMPER AND BIRD SCREEN FOR EXHAUST FAN.

GENERAL NOTES

- 1. ALL MODEL NUMBERS ON DRAWING ARE BASIS OF DESIGN AND CONTRACTOR CAN SUBSTITUTE EQUAL DEVICES AS NEEDED.
- 2. COORDINATE WITH OTHER DISCIPLINES EXACT REQUIREMENTS FOR ELECTRICAL CONNECTIONS.
- 3. ALL INSTALLATIONS OF EQUIPMENT SHALL BE PER NC MECHANICAL CODE.



ELECTRICAL SPECIFICATIONS

GENERAL:

THE CONTRACTOR SHALL PROVIDE ALL WORK, EQUIPMENT, SERVICES, LABOR, AND MATERIALS FOR THE INSTALLATION OF COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEMS AS SPECIFIED, SHOWN, OR IMPLIED HEREIN AND ON THE DRAWINGS.

THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO INCLUDE EVERY DETAIL OF CONSTRUCTION, MATERIALS, AND EQUIPMENT. TAKE FINISH DIMENSIONS AT THE JOB SITE IN PREFERENCE TO SCALING DIMENSIONS.

THE CONTRACTOR SHALL VISIT THE SITE OF THIS PROJECT AND SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING FIELD CONDITIONS AND VERIFY ALL ASPECTS OF THE PROPOSED WORK AS DESCRIBED OR IMPLIED BY THE CONTRACT DOCUMENTS.

DURING THE COURSE OF HIS SITE VISIT, THE ELECTRICAL CONTRACTOR SHALL VERIFY EVERY ASPECT OF THE PROPOSED WORK AND THE EXISTING FIELD CONDITIONS IN THE AREAS OF CONSTRUCTION WHICH MIGHT AFFECT HIS WORK. THE CONTRACTOR SHALL RECEIVE NO COMPENSATION OR REIMBURSEMENT FOR ADDITIONAL EXPENSES HE INCURS DUE TO HIS FAILURE OR NEGLIGENCE TO MAKE A THOROUGH INVESTIGATION OF THE CONTRACT DOCUMENTS, SITE, AND EXISTING FIELD CONDITIONS.

ALL WORK AND MATERIALS SHALL BE IN COMPLIANCE WITH APPLICABLE STATE, LOCAL, AND NATIONAL CODES (INCLUDING OSHA). COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE SHALL BE THE ABSOLUTE MINIMUM STANDARD.

THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY AND ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES OF INSPECTIONS AND APPROVAL, AND THE LIKE, AND DELIVER SUCH CERTIFICATES TO THE OWNER. THE OWNER SHALL BE NOTIFIED OF ALL INSPECTION REQUESTS AT THE SAME TIME AS THE INSPECTION AUTHORITY.

CONTRACTOR SHALL COORDINATE WITH LOCAL ELECTRICAL AND TELEPHONE UTILITIES FOR SERVICE OF BUILDING.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING NECESSARY FOR THE PROPER INSTALLATION OF HIS WORK AND SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE BY HIMSELF OR HIS WORKMEN. HE SHALL REPAIR ANY DAMAGE DONE.

ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED AND LABELED BY AN ACCREDITED TESTING LABORATORY FOR THE USE INTENDED.

SHOP DRAWINGS AND CATALOG DATA SHALL BE SUBMITTED IN (SIX) 6 COPIES. ALL APPROVALS FOR SUBSTITUTIONS MUST BE OBTAINED BY THE CONTRACTOR TEN (10) CALENDAR DAYS PRIOR TO BID DATE.

TESTING SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES.

THE CONTRACTOR SHALL WARRANT ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHOWN OR IMPLIED BY THESE DOCUMENTS TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM THE TIME OF ACCEPTANCE BY THE OWNER. IF WITHIN ONE YEAR AFTER THE OWNER'S ACCEPTANCE DATE ANY WORK OR EQUIPMENT IS FOUND TO BE DEFECTIVE, THE CONTRACTOR SHALL CORRECT IT PROMPTLY AT NO COST TO THE OWNER.

THE LOCAL INSPECTION AUTHORITIES SHALL ISSUE AN ELECTRICAL INSPECTION CERTIFICATE BEFORE WORK WILL BE APPROVED FOR FINAL PAYMENT.

WIRING:

ELECTRICAL CONDUCTORS SHALL BE TESTED FOR CONTINUITY AND GROUNDS BEFORE BEING ENERGIZED. ALL FAULTY CONDUCTORS SHALL BE REPLACED.

THE CONDUIT AND NEUTRAL CONDUCTORS OF THE ELECTRICAL SYSTEM AND ALL ELECTRICAL EQUIPMENT SHALL BE GROUNDED. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITH EVERY CIRCUIT AND IN EVERY CONDUIT. THE CONDUIT SYSTEM AND NEUTRAL CONDUCTORS SHALL BE BONDED TOGETHER ONLY AT THE SERVICE ENTRANCE EQUIPMENT. NO CONDUIT SHALL CONTAIN MORE THAN THREE PHASE CONDUCTORS. DERATING OF CONDUCTORS WILL NOT BE ALLOWED.

OTHER REQUIREMENTS:

THE CONTRACTOR SHALL FURNISH AND INSTALL ANY MISCELLANEOUS METAL OR WOOD SUPPORTS, FASTENERS, MOUNTS, HANGERS, SIDE BRACES, ETC., WHICH MAY BE REQUIRED TO SECURELY ANCHOR AND SUPPORT ELECTRICAL EQUIPMENT FURNISHED UNDER HIS CONTRACT.

CALLOUT	SYMBOL	MODEL	DESCRIPTION	LAMP	BALLAST/DRIVER	MOUNTING	NOTE 1	NOTE 2	NOTE 3	INPUT WATTS	VOLTS
A	○	LITHONIA LDN4-40K-20LO4-AR-LSS-MVOLT	LED DOWN LIGHTS	(1) 20W 40K LED	LED DRIVER	RECESSED				20	120
D		EELP VLFP6 B 24 50L QT 40K OR EQUIVALENT	2x4 LED FLAT PANEL	(1) 50W 4000K LED	LED DRIVER	CEILING				50	120
EM		LITHONIA EU2 LED HO M6 OR EQUIVALENT	EMERGENCY EGRESS LUMINAIRE. INTEGRAL EMERGENCY BATTERY PACK.	(1) LED	LED DRIVER	SURFACE	CONNECT UNSWITCHED TO LOCAL LIGHTING CIRCUIT INDICATED.			1.2	120
EX		LITHONIA LHQM LED R HO OR EQUIVALENT	UNIVERSAL COMBO EXIT/EGRESS. INTEGRAL EMERGENCY BATTERY PACK.	(1) LED	LED DRIVER	WALL/CEILING	PROVIDE ILLUMINATED FACES AND DIRECTIONAL ARROWS AS REQUIRED.	CONNECT UNSWITCHED TO LOCAL LIGHTING CIRCUIT INDICATED.		5	120
EXT		LITHONIA AFN W EXT OR EQUIVALENT	EXTERIOR EMERGENCY EGRESS	(2) 5.4W LED (INCL)	LED DRIVER	SURFACE	CONNECT UNSWITCHED TO THE LIGHTING CIRCUIT INDICATED			21	120
G		LITHONIA UFIT L48 6000LM SEF MVOLT E21 35K 80CRI WH OR EQUIVALENT	LOW BAY LUMINAIRE	(1) 44.4W 35K	LED DRIVER	PENDANT/SURFACE				44.4	120

CALLOUT	SYMBOL
DUPLEX	
GFCI	
GFCI COUNTER	
GFCI/WP	

CALLOUT	SYMBOL	NEMA	VOLTS	AMPS	KVA	HP	CIRCUIT
AHU-1			208V 2P 2W	6	1.25		A-2,4
HP-1			208V 2P 2W	24.8	5.16		A-6,8
WH-1			208V 2P 2W	57.69	12		A-10,12

CALLOUT	SYMBOL
Duplex Telephone / Computer Outlet	

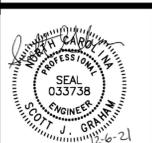
CALLOUT	SYMBOL
DIMMER (1)	\$ _D
OCC SENSOR WALL SINGLE	
Threeway Switch	\$ ₃

ROOM		MOUNTING SURFACE		FED FROM UTILITY		NOTE		VOLTS 208Y/120V 3P 4W			AIC 22,000			
								BUS AMPS 200			MAIN BKR 200			
								NEUTRAL 100%			LUGS STANDARD			
CKT #	BKR	CIRCUIT DESCRIPTION	CONDUIT/WIRE	VA LOAD			CKT #	BKR	CIRCUIT DESCRIPTION	CONDUIT/WIRE	VA LOAD			
				A	B	C					A	B	C	
1	20/1	RECEPTACLE	1#12, #12N, #12G, 1/2" C	180			2	15/2	AHU-1	2#12, #12G, 1/2" C	624			
3	20/1	RECEPTACLE	1#12, #12N, #12G, 1/2" C		360		4					624		
5	20/1	RECEPTACLE	1#12, #12N, #12G, 1/2" C			720	6	50/2	HP-1	2#8, #10G, 1/2" C			2,579	
7	20/1	RECEPTACLE	1#10, #10N, #10G, 1/2" C	900			8							
9	20/1	RECEPTACLE	1#10, #10N, #10G, 1/2" C			720	10	80/2	WH-1	2#4, #8G, 3/4" C			6,000	
11	20/1	RECEPTACLE	1#10, #10N, #10G, 1/2" C			540	12						6,000	
13	20/1	LIGHTING	1#10, #10N, #10G, 1/2" C	1,078			14	-/1	SPACE		0			
15	-/1	SPACE			0		16	-/1	SPACE		0			
17	-/1	SPACE				0	18	-/1	SPACE		0		0	
19	-/1	SPACE				0	20	-/1	SPACE		0		0	
21	-/1	SPACE				0	22	-/1	SPACE		0		0	
23	-/1	SPACE				0	24	-/1	SPACE		0		0	
25	-/1	SPACE				0	26	-/1	SPACE		0		0	
27	-/1	SPACE				0	28	-/1	SPACE		0		0	
29	-/1	SPACE				0	30	-/1	SPACE		0		0	
31	-/1	SPACE				0	32	-/1	SPACE		0		0	
33	-/1	SPACE				0	34	-/1	SPACE		0		0	
35	-/1	SPACE				0	36	-/1	SPACE		0		0	
37	-/1	SPACE				0	38	-/1	SPACE		0		0	
39	-/1	SPACE				0	40	-/1	SPACE		0		0	
41	-/1	SPACE				0	42	-/1	SPACE		0		0	
TOTAL CONNECTED KVA BY PHASE											5,361	7,704	9,839	
TOTAL CONNECTED AMPS BY PHASE											46	69	84	
		CONN VA		CALC VA				CONN VA		CALC VA				
LIGHTING		1,078		1,347		(125%)		CONTINUOUS		12,000		15,000 (125%)		
LARGEST MOTOR		5,158		1,290		(25%)		HEATING		6,406		6,406 (100%)		
RECEPTACLES		3,420		3,420		(50%>10)		COOLING		0		0 (0%)		
TOTAL LOAD											27,463			
BALANCED 3-PHASE LOAD											76 A			

ELECTRICAL SYSTEM AND EQUIPMENT:	
Method of Compliance	
Energy Code: ASHRAE 90.1	<input checked="" type="checkbox"/> Prescriptive <input type="checkbox"/> Performance
Lighting Schedule	
Lamp type required in fixture:	SEE SCHEDULE
Number of lamps in fixture:	SEE SCHEDULE
Ballast type used in fixture:	SEE SCHEDULE
Number of ballasts used in fixture:	SEE SCHEDULE
Total wattage per fixture:	SEE SCHEDULE
Total interior wattage specified vs allowed:	1,078 W vs 2,136 W
Total exterior wattage specified vs allowed:	N/A
Additional Prescriptive Compliance	
<input type="checkbox"/> More Efficient Mechanical Equipment	
<input checked="" type="checkbox"/> Reduced Lighting Power Density	
<input type="checkbox"/> Energy Recovery Ventilation Systems	
<input type="checkbox"/> Higher Efficiency Service Water Heating	
<input type="checkbox"/> On-site Supply of Renewable Energy	
<input type="checkbox"/> Automatic Daylighting Control Systems	
SECTION 406 OF THE 2018 NC ENERGY CONSERVATION CODE WAS REFERENCED WHEN CALCULATING THE CONNECTED LIGHTING LOADS	

KERNERSVILLE POLICE DEPT.
 TRAINING CENTER
 7385 GOODWILL CHURCH RD
 KERNERSVILLE, NC 27284

ELECTRICAL NOTES
 AND SCHEDULES



GRAHAM & ASSOCIATES
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 163 WILDHURST LANE
 STATESVILLE, NC 28625
 TELEPHONE: 704-402-4588

COMM. NO.: 027-20
 DATE: 4-16-2020
 REVISIONS:

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SHEET NO.
E.1

LIGHTING PLAN



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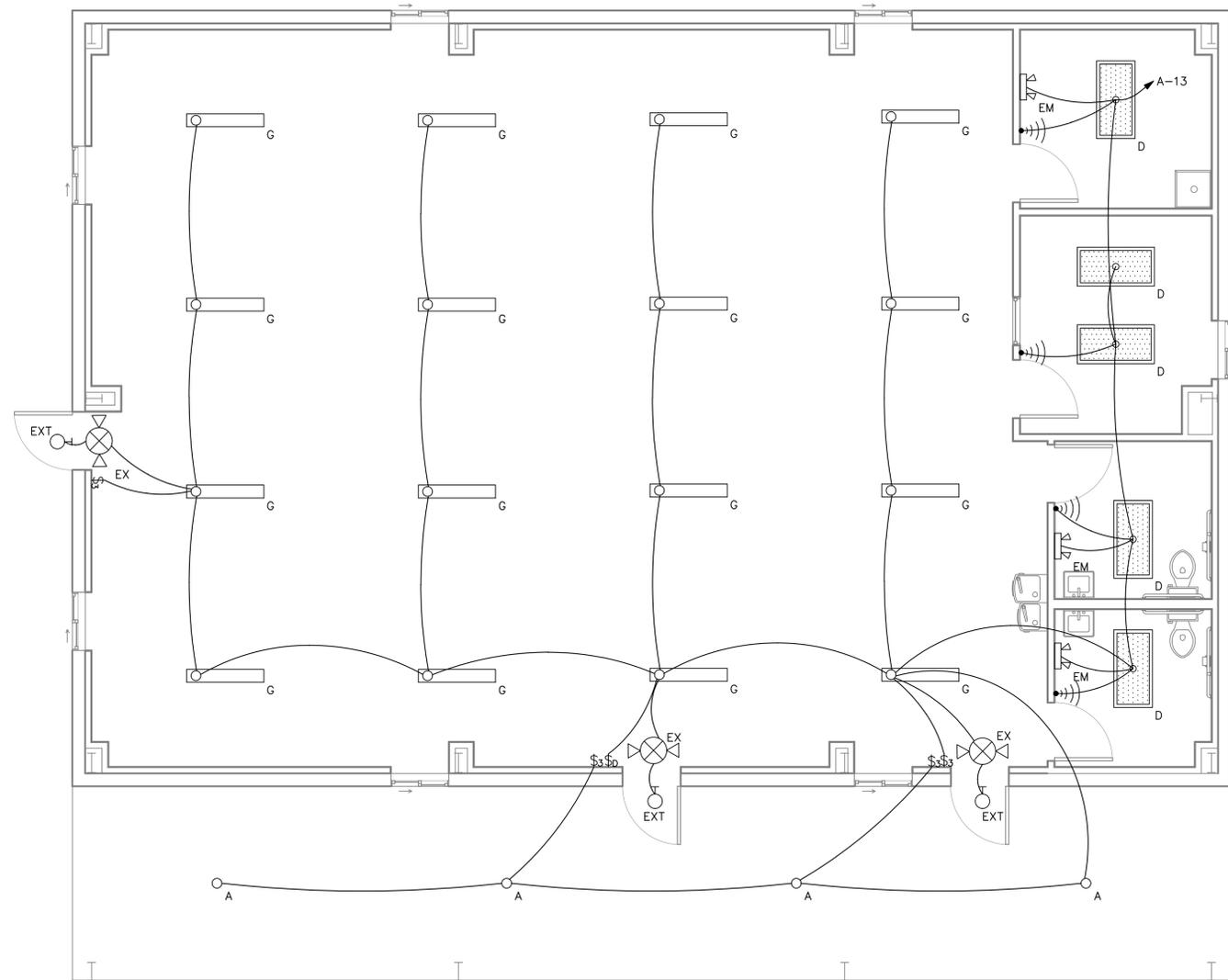
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SHEET NO.

E.2

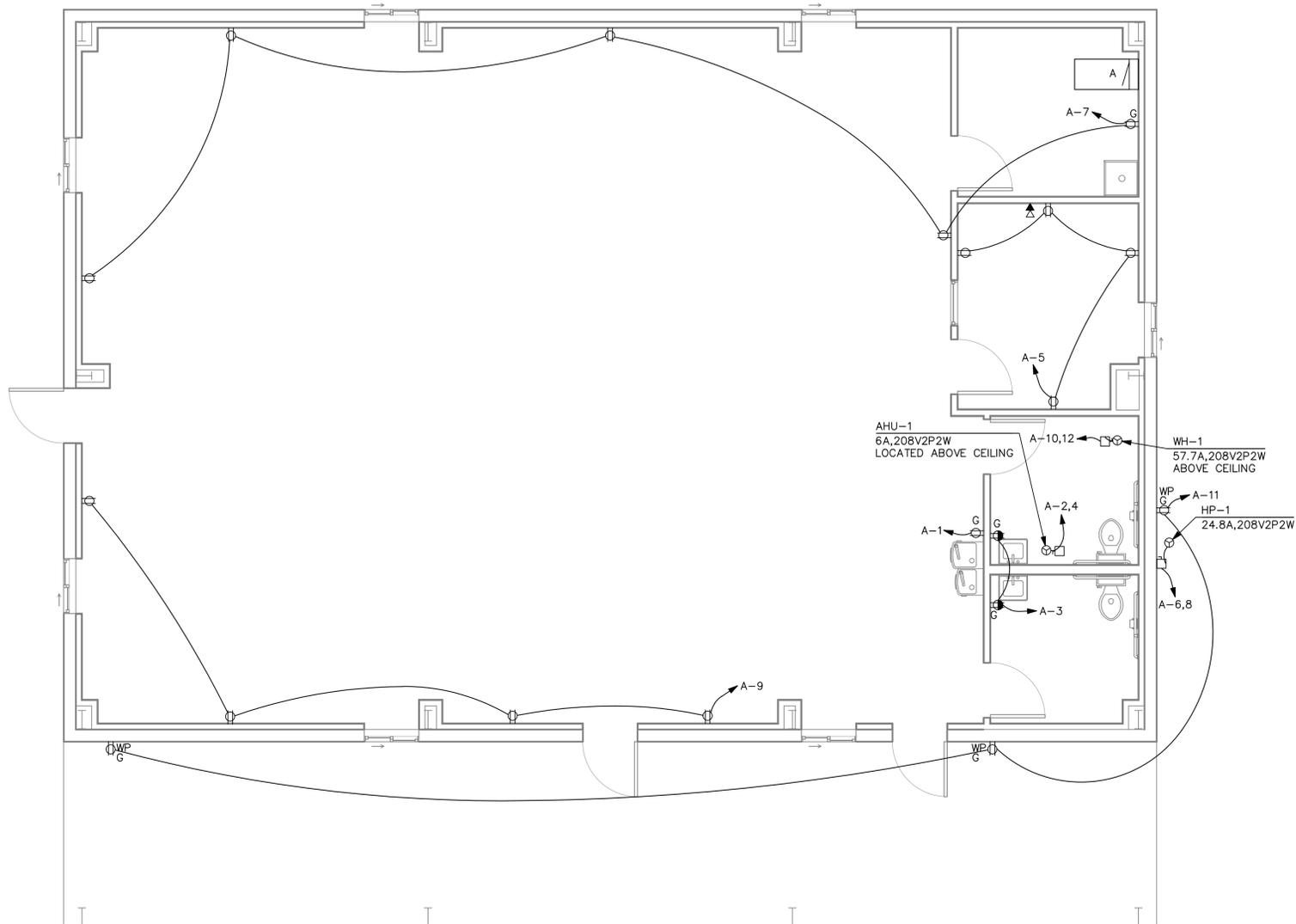
GENERAL NOTES

1. ALL MODEL NUMBERS ON DRAWING ARE BASIS OF DESIGN AND CONTRACTOR CAN SUBSTITUTE EQUAL DEVICES AS NEEDED.
2. COORDINATE WITH OTHER DISCIPLINES EXACT REQUIREMENTS FOR ELECTRICAL CONNECTIONS.
3. ALL INSTALLATIONS OF EQUIPMENT AND DEVICES SHALL BE PER NATIONAL ELECTRICAL CODE.



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POWER PLAN



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SHEET NO.
E.3