

NCDOT - DIVISION 14 OFFICE ASSEMBLY AND MAINTENANCE SHOP

SCO # 14-11007-01 PACKAGE A

OWNER:

NCDOT - DIVISION 14
1 South Wilmington Street
Raleigh, NC 27601

ARCHITECT:

6302 Fairview Rd., Suite 102
Charlotte, North Carolina, 28210
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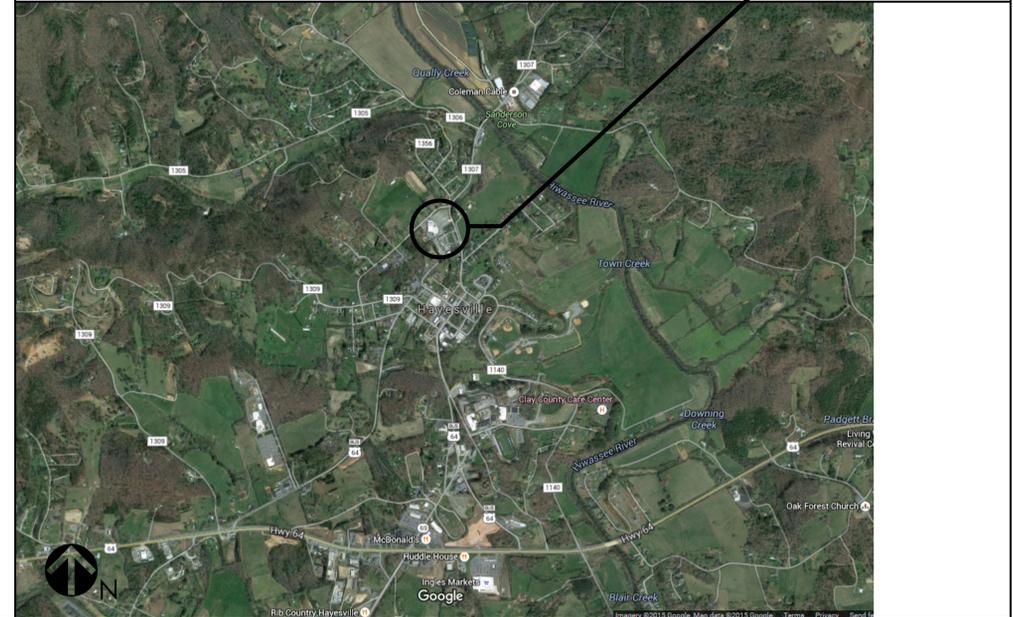
PROJECT LOCATION:

NCDOT - HAYESVILLE MAINTENANCE FACILITY
225 TUSQUITTEE STREET
HAYESVILLE, NC 28904

LIST OF DRAWINGS

GENERAL	COVER	A801	TYPICAL DETAILS
G000	APPENDIX B	A802	TYPICAL MILLWORK AND CEILING DETAILS
G001	LIFE SAFETY	A900	DOOR SCHEDULE, DOOR FRAMES, AND WINDOW TYPES
G002	UL ASSEMBLY	A901	WINDOW DETAILS - ALTERNATES
G003			
CIVIL	BOUNDARY SURVEY	INTERIORS	FIRST FLOOR FINISH PLAN, FLOOR PATTERNING PLAN & WALL PROTECTION PLAN
C001	DEMOLITION AND STAKING & PAVING PLANS	I200	
C200	GRADING & EROSION CONTROL AND DRAINAGE PLANS		
C300	UTILITY PLAN	HVAC	HVAC SYMBOLS LEGEND, NOTES & SYSTEM DIAGRAMS
C400	SITE DETAILS	H000	ENERGY CODE COMPLIANCE
		H001	HVAC DUCTWORK PLAN
STRUCTURAL	FOUNDATION PLAN	H201	HVAC ROOF PLAN
S200	LOW ROOF FRAMING PLAN	H202	HVAC PIPING PLAN
S201	HIGH ROOF FRAMING PLAN	H301	HVAC DETAILS & CONTROL DIAGRAMS
S202	SECTIONS AND DETAILS	H800	HVAC SCHEDULES
S400	STRUCTURAL NOTES	H900	
S800	TYPICAL DETAILS		
S801	TYPICAL DETAILS AND SCHEDULES	PLUMBING	PLUMBING LEGEND, NOTES & SCHEDULES
S802		P000	PLUMBING SANITARY PLAN
		P201	PLUMBING DOMESTIC WATER, LP GAS & COMPRESSED AIR PLAN
ARCHITECTURAL	BUILDING FLOOR PLANS	P301	PLUMBING DETAILS
A200	ROOF PLAN	P800	PLUMBING DETAILS
A202	BUILDING ELEVATIONS - BASE BID	P801	
A300	BUILDING ELEVATION - ADD ALT G-1, G-2, G-3	ELECTRICAL	ELECTRICAL LEGEND, NOTES, AND RISER DIAGRAM
A300.1	BUILDING SECTIONS	E000	SITE PLAN AND DETAILS
A400	WALL SECTIONS	E001	ELECTRICAL POWER AND SYSTEMS PLAN
A401	WALL SECTIONS	E201	ELECTRICAL LIGHTING PLAN
A402	WALL SECTIONS - ALTERNATES G-1, G-2	E301	ELECTRICAL DETAILS
A403	WALL SECTIONS - ALTERNATES G-1, G-2	E800	ELECTRICAL SCHEDULES
A404	WALL SECTIONS - ALTERNATES G-1, G-2	E900	
A405	WALL SECTIONS - ALTERNATES G-1, G-2		
A406	WALL SECTIONS - ALTERNATES G-1, G-2		
A500	REFLECTED CEILING PLAN		
A600	TYP. FIXTURE AND ACCESS, HEIGHTS AND LEGENDS		
A700	ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS		
A701	TYPICAL DETAILS		
A800			

LOCATION MAP



LIST OF ABBREVIATIONS

AF	ABOVE FINISH FLOOR	CJT	CONSTRUCTION JOINT	FF	FINISH FLOOR	JAN	JANITOR	OC	ON CENTER	SECT	SECTION
AP	ACCESS PANEL	CONT	CONTINUOUS	FEC	FIRE EXTINGUISHER CABINETS	JAN	JANITOR SINK	OPNG	OPENING	SIM	SIMILAR
ACOUS	ACOUSTICAL	CONTR	CONTRACTOR	FH	FIRE HOSE	JT	JOINT	OD	OUTSIDE DIAMETER	STC	SOUND TRANSMISSION COEFFICIENT
ADJ	ADJACENT	CJ	CONTROL JOINT	FL, FLR	FLOOR			OH	OVERHEAD	SPEC	SPECIFICATION
ACT	ACOUSTICAL CEILING TILE	DP	DAMP PROOFING	FD	FLOOR DRAIN	KIT	KITCHEN	PTD	PAINTED	SG	SQUARE
ANP	ACOUSTICAL WALL PANEL	DEMO	DEMOLISH	FND	FOUNDATION	LBL	LABORATORY	PR	PAIR	SS	STAINLESS STEEL
A/C	AIR CONDITIONING	DEPT	DEPARTMENT	FS	FULL SIZE	LAM	LAMINATE(D)	STD	STANDARD	STL	STEEL
ALT	ALTERNATE	DET, DTL	DETAIL	FUT	FUTURE	LAV	LAVATORY	STOR	STORAGE	STRUC	STRUCTURE, STRUCTURAL
ALUM	ALUMINUM	DIA	DIAMETER	G	GALVANIZED	LAYER	LAYER	ST. STL	STRUCTURAL STEEL	STRUC	STRUCTURAL
AS	ANCHOR BOLT	DISP	DISPENSER	GALV	GAS	LDR	LEADER	ST. SUSP	SUSPENDED	STL	STEEL
ANOD	ANODIZED	DISP	DISPOSAL	GA	GAUGE	LH	LEFT HAND	PLAM	PLATE	SUSP	SUSPENDED
APPROX	APPROXIMATE	DR	DR	GEN	GENERAL	LIB	LIBRARY	PLB	PLUMBING	SAT	SATINATED
ARCH	ARCHITECT, ARCHITECTURAL	DR	DR	GL	GLASS, GLAZING	LT	LIGHT	PLYWD	PLYWOOD	TEL	TELEPHONE
AD	AREA DRAIN	DBL	DOUBLE	GB	GRAB BAR	LV	LIGHT WEIGHT	PRE FAB	PREFABRICATED	TEMP	TEMPERATURE
@	AUTOMATIC	DN	DOWN	GR	GRADE, GRADING	MACH	MACHINE	PRT	PRESSURE TREATED	THK	THICKNESS
BM	BEAM	DS	DOWNSPOUT	GSP	GROSS SQUARE FOOT	MH	MAN HOLE	PT	PAINT	TPD	TOILET PAPER DISPENSER
BP	BEARING PLATE	DT	DRAIN TILE	CWB	CYPSUM WALL BOARD	MHC	MAN HOLE COVER	PVC	POLYVINYL CHLORIDE	TOS	TOP OF SLAB/STEEL
BM	BENCH MARK	DWR	DRAWER	GYP	GYP SUM	MFR	MANUFACTURE	PC CONC	PREFABRICATED CONCRETE	TOW	TOP OF WALL
BITUM	BITUMINOUS	DF	DRINKING FOUNTAIN	GYP BD	GYP BOARD	MFR	MANUFACTURER	PVMT	PAVEMENT	TYP	TYPICAL
BLKG	BLOCKING	EA	EACH	HDWR	HARDWARE	MO	MASONRY	QTY	QUANTITY	UNFIN	UNFINISHED
BLK	BLOCK	EF	EACH FACE	HDWD	HARDWOOD	MAT	MASONRY OPENING	QT	QUANTITY	UNFIN	UNFINISHED
BD	BOARD	EW	EACH WAY	HVAC	HEATING, VENTILATING & AIR CONDITIONING	MAX	MAXIMUM	QTB	QUARRY TILE	U	UNLESS OTHERWISE NOTED
BRK	BRICK	E	EAST	HT, HGT	HEIGHT	MECH	MECHANICAL	QTB	QUARRY TILE BASE	VEN	VENEER
BLDG	BUILDING	ELEC	ELECTRICAL	HEX	HEXAGONAL	MET	METAL	RAD	RADIUS	VIF	VERIFY IN FIELD
BN	BULLNOSE	ELEV	ELEVATION	HWY	HIGHWAY	M	MISCELLANEOUS	REF	REFERENCE	VB	VINYL BASE
		EMER	EMERGENCY	HM	HOLLOW METAL	MIN	MINIMUM	REFR	REFRIGERATOR	VCT	VINYL COMPOSITION TILE
CAB	CABINET	ENCL	ENCLOSURE	HORZ	HORIZONTAL	MISC	MISCELLANEOUS	REFR	REFRIGERATOR	VF	VINYL FABRIC
CI	CAST IRON	ENTR	ENTRANCE	HB	HOSE BIBB	MR	MOISTURE RESISTANT	REIN	REINFORCED (ING)	VWC	VINYL WALL COVERING
CPT	CARPET(ED)	EQ	EQUIPMENT	HR	HOT WATER	MTD	MOUNTED	REQD	REQUIRED	VT	VINYL TILE
CB	CATCH BASIN	EQUIP	EQUIPMENT	HR	HOUR	MTL	METAL	RVT	RESILIENT VINYL TILE	VOL	VOLUME
CLG	CEILING	EST	ESTIMATE(D)	IN	INCH	NAT	NATURAL	REV	REVISED	WC	WATER CLOSET
CLG HT	CEILING HEIGHT	EXHST	EXHAUST	INCL	INCLUDING	NRC	NOISE REDUCTION COEFFICIENT	RH	RIGHT HAND	WT	WEIGHT
CL	CENTER LINE	EXST	EXISTING	ID	INSIDE DIAMETER	NOM	NOMINAL	R	RISER	WFM	WELDED WIRE FABRIC
CER	CERAMIC	EXP	EXPANSION	INSUL	INSULATION	NOM	NOMINAL	RD	ROUGH OPENING	WWD	WELDED WIRE MESH
CT	CERAMIC TILE	F	FABRIC	INT	INTERIOR	NIC	NOT IN CONTRACT	RO	ROUGH OPENING	WJ	WITH
CB	CHALK BOARD	FABRICATE	FABRICATE	INT	INTERMEDIATE	NIS	NOT TO SCALE	SAN	SANITARY	WO	WITHOUT
CIRC	CIRCUMFERENCE	FIN	FINISH	INV	INVERT	NO, #	NUMBER	SCHED	SCHEDULE	WD	WOOD
CO	CLEAN OUT	FIN	FINISH					SEC	SECOND	YD	YARD
CLR	CLEAR										
CCL	COLUMN										
CONC	CONCRETE										
CMU	CONCRETE MASONRY UNIT										
CONST	CONSTRUCTION										

MATERIAL SYMBOLS

	EARTH		BRICK		RIGID INSULATION		1 HR RATING
	GYP SUM BOARD		STEEL		BATT OR LOOSE INSULATION		2 HR RATING
	GRAVEL TYPE 1 (ENGINEERED FILL)		GROUT		CAVITY DRAINAGE MAT		3 HR RATING
	PRECAST CONCRETE		ROUGH WOOD BLOCKING		ALUMINUM		SMOKE RATING
	CRUSHED STONE		ROUGH WOOD BLOCKING, NON-CONTINUOUS		STANDING SEAM ROOF		EXISTING BUILDING MATERIALS
	CONCRETE MASONRY UNIT (CMU)		WOOD, FINISHED WOODWORK		CONCRETE		
	METAL STUD PARTITION		PLYWOOD (LARGE SCALE)		TERRAZZO		

GRAPHIC SYMBOLS

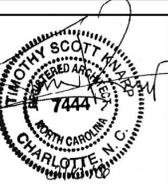
	COLUMN CENTERLINE A		PARTITION TYPE 11 (1 HR RATED) SEE PARTITION LEGEND		PROPERTY LINE		3052 36x30x14 CASEWORK TAG
	DETAIL #3 ON SHEET A201		REVISION NO. 1		FENCE		A ACCESSORY TAG
	BUILDING SECTION (NO.) or WALL SECTION (LETTER) ON SHEET A101		+100.75 EXISTING SPOT ELEVATION		EXISTING TREE TO REMAIN		W WINDOW TAG (TYPE LETTER)
	ROOM NAME 1000		+100.75 EXISTING SPOT ELEVATION		EXISTING TREE TO BE REMOVED		11 EQUIPMENT SYMBOL (NUMBER)
	INTERIOR ELEVATIONS #2 and #3 ON SHEET A501		-100 EXISTING CONTOURS		BENCHMARKS: FLOOR ELEV., or OTHER VERTICAL ELEV.		1000-1 DOOR TAG
	EXTERIOR ELEVATIONS #3 ON SHEET A301		100 FINISHED CONTOURS		KEYNOTE SYMBOL: DEMOLITION and NEW CONSTRUCTION		1 VIEW NAME PLAN VIEW TITLE WITH NORTH ARROW

SET NO.



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REVISION	DESCRIPTION
BY	CHKD
DATE	
NO.	



NCDOT - DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	02/10/16	DRAWN	DMS	CHECKED	BP
SCALE	As indicated				
SHEET TITLE	COVER				

PROJECT NUMBER	13283.01
DRAWING NUMBER	G000

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APPENDIX B

GENERAL INFORMATION

Name of Project: NC DOT - DIVISION 14 ASSEMBLY AND MAINTENANCE BUILDING
 Address: 225 TUSQUITEE ST. HAYESVILLE, NC 28904
 Proposed Use: OFFICE/MAINTENANCE SHOP
 Owner or Authorized Agent: STATE Phone #: _____
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: State of North Carolina City HAYESVILLE County CLAY

LEAD DESIGN PROFESSIONAL:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #
Architectural	Clark Patterson Lee	Timothy Knapp	7444	800-274-9000 x 3136
Civil	Clark Patterson Lee	Rich Edinger	031877	800-274-9000 x 3003
Electrical	Clark Patterson Lee	Tom Bucher	034252	800-274-9000 x 3625
Fire Alarm				
Plumbing	Clark Patterson Lee	Greg Kyzer	27581	800-274-9000 x 3209
Mechanical	Clark Patterson Lee	Greg Kyzer	27581	800-274-9000 x 3209
Sprinkler/Standpipe				
Structural	Clark Patterson Lee	Joe Rausch	031320	800-274-9000 x 1074
Retaining Walls > 5'-0" High				
Other				

2012 EDITION OF NC CODE FOR: New Construction Addition Upfit

EXISTING: Reconstruction Alteration Repair Renovation

CONSTRUCTED: (Date) N/A ORIGINAL USE(S): N/A

RENOVATED: (Date) N/A CURRENT USE(S): N/A

PROPOSED USE(S): N/A

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 NFPA 14

Standpipes: No Yes Class: I II III Wet Dry

Fire District: No Yes

Building Height: 31'-10" Feet 1 Number of Stories Unlimited Per _____

Mezzanine: No Yes Central Ref. Sheet # (if provided) _____

High Rise: No Yes

Flood Hazard Area: No Yes

Gross Building Area:
 FLOOR EXISTING (SQ. FT.) RENOVATED (SQ. FT.) NEW (SQ. FT.) SUB-TOTAL
 Basement: - - - -
 Ground: - - - -
 First Floor: - - 5,616 5,616
 TOTAL: - - - 5,616

ALLOWABLE AREA

Primary Occupancy: Assembly A-1 A-2 A-3 A-4 A-5
 Business Educational Factory-Industrial F-1 F-2
 High-Hazard H-1 H-2 H-3 H-4 H-5
 Institutional I-1 I-2 I-3 I-4
 I-3 Use Condition 1 2 3 4 5
 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

Secondary Occupancy

BUSINESS - OFFICE
 Special Occupancy: 508.2 508.3 508.4 508.5 508.6 508.7 508.8
 Mixed Occupancy: No Yes Separation: _____ Hr. Exception: _____

Non-Separated Mixed Occupancy (302.3.2)
 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 Mixed Occupancy (302.3.3) - See Below for Area Cals.
 For each story, the area of 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.

Actual Area of Occupancy A + Actual Area of Occupancy B ≤ 1
 Allowable Area of Occupancy A + Allowable Area of Occupancy B

N/A + N/A = _____ ≤ 100

Accessory Occupancies

Assembly A-1 A-2 A-3 A-4 A-5
 Business Educational Factory-Industrial F-1 F-2
 High-Hazard H-1 H-2 H-3 H-4 H-5
 Institutional I-1 I-2 I-3 I-4
 I-3 Use Condition 1 2 3 4 5
 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 Occupancies

Furnace room where any piece of equipment is over 400,000 BTU per hour input
 Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
 Refrigerant machine room
 Hydrogen cutoff rooms, not classified as Group H
 Incinerator rooms
 Paint shops, not classified as Group H, located in occupancies other than Group F
 Laboratories and vocational shops, not classified as Group H, located in a Group E or I-3 occupancy
 Laundry rooms over 100 square feet
 Group I-3 cells equipped with padded surfaces
 Group I-2 waste and linen collection rooms
 Waste and linen collection rooms over 100 square feet
 Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
 Rooms containing fire pumps
 Group I-2 storage rooms over 100 square feet
 Group I-2 commercial kitchens
 Group I-2 laundries equal to or less than 100 square feet
 Group I-2 rooms or spaces that contain fuel-fired heating equipment

Special Uses: 402 403 404 405 406 407 408 409 410 411 412
 413 414 415 416 417 418 419 420 421 422 423 424
 425 426 427

Special Provisions: 509.2 509.3 509.4 509.5 509.6 509.7 509.8 509.9

APPENDIX B CONTINUED

STORY NO.	DESCRIPTION AND USE	(A) BLDG. AREA PER STORY (ACTUAL)	(B) TABLE 503.5 AREA	(C) AREA FOR FRONTAGE INCREASE 1	(D) AREA FOR SPRINKLER INCREASE 2	(E) ALLOWABLE AREA OR UNLIMITED 3	(F) MAXIMUM BUILDING AREA*
1	OFFICE	1706	6000		N/A	6000	6000
1	MAINT. SHOP	3910	6000		N/A	6000	

- Frontage area increases from Section 506.2 are computed as thus:
 a. Perimeter which fronts a public way or open space having 20 feet minimum width = N/A (F)
 b. Total Building Perimeter = N/A (P)
 c. Ratio (F/P) = N/A (F/P)
 d. W = Minimum Width of Public Way = N/A (W)
 e. Percent of Frontage Increase 1 = 100 [(F/P) - 0.25] x W/30 = N/A (%)
- The Sprinkler Increase per Section 506.3 is as follows:
 a. Multi-Story Building 1 = 200 Percent
 b. Single Story Building 1 = 300 Percent
- Unlimited area applicable under conditions of Section 507
- Maximum Building Area = Total number of stories in the building x E (506.4)
- The maximum area of open parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with Table 412.1.2

ALLOWABLE HEIGHT

TYPE OF CONSTRUCTION	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
BUILDING HT. IN FEET	FEET 40'-0"	FEET = H + 20' = 60'-0"	TYPE V-B	31'-10"
BUILDING HT. IN STORIES	STORIES 2	STORIES + 1 = 3	TYPE V-B	1

FIRE PROTECTION REQUIREMENTS

Life Safety Plan Sheet #, if Provided G002

BUILDING ELEMENT	FIRE SEPARATION	RATING RECD. DISTANCE	DETAIL # PROVIDED (W) REDUCTION	DESIGN # AND FOR SHEET	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETR.	RATED JOINTS
Structural frame, including columns, girders, trusses	N/A	0	N/A	N/A	N/A	N/A	N/A
Bearing Walls							
Exterior	>30'	0	N/A	N/A	N/A	N/A	N/A
North	>30'	0	N/A	N/A	N/A	N/A	N/A
East	>30'	0	N/A	N/A	N/A	N/A	N/A
West	>30'	0	N/A	N/A	N/A	N/A	N/A
South	>30'	0	N/A	N/A	N/A	N/A	N/A
Interior	>10'	0	N/A	N/A	N/A	N/A	N/A
Nonbearing walls and partitions							
Exterior							
North	>30'	0	N/A	N/A	N/A	N/A	N/A
East	>30'	0	N/A	N/A	N/A	N/A	N/A
West	>30'	0	N/A	N/A	N/A	N/A	N/A
South	>30'	0	N/A	N/A	N/A	N/A	N/A
Interior	N/A	0	N/A	N/A	N/A	N/A	N/A
Rated Rooms	N/A	0	N/A	N/A	N/A	N/A	N/A
Floor construction, including supporting beams and joists	N/A	0	N/A	N/A	N/A	N/A	N/A
Roof construction, including supporting beams and joists	N/A	0	N/A	N/A	N/A	N/A	N/A
Shafts - Ext	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shafts - Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Corridor Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Occupancy Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Party Wall Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Smoke Barrier Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tenant Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A = NOT APPLICABLE
 LS = LIMIT PASSAGE OF SMOKE

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 # G002
- Fire and/or smoke rated wall locations (Chapter 7)
 - Assumed and real property line locations
 - Exterior wall opening area with respect to distance to assumed property line (705.8)
 - Existing structures within 30' of the proposed building
 - Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)
 - Occupant loads for each area
 - Exit access travel distances (1016)
 - Common path of travel distances (1014.3 & 1028.8)
 - Dead end lengths (1018.1.10)
 - Clear exit widths for each exit door
 - Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
 - Actual occupant load for each exit door
 - A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
 - Location of doors with panic hardware (1008.1.10)
 - Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
 - Location of doors with electromagnetic egress locks (1008.1.9.8)
 - Location of doors equipped with hold-open devices
 - Location of emergency escape windows (1029)
 - The Square footage of each fire area (902)
 - The square footage of each smoke compartment (407.4)
 - Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	N/A	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR W/ 5' ACCESS AISLE	VAN SPACES W/ 8' ACCESS AISLE	
TOTAL PARKING	12 MIN.	23	-	1	1
24					
TOTAL					

STRUCTURAL DESIGN - See Structural Sheet S800

DESIGN LOADS

Importance Factors: Wind (Iw) 1.0
 Snow (Is) 1.0
 Seismic (Ie) 1.0

Live Loads: Roof 20 psf
 Mezzanine n/a psf
 Floor 100 psf

Ground Snow Load: 15 psf

Wind Load: Basic Wind Speed 90 mph (ASCE 7-05)
 Exposure Category B
 Wind Base Shears (for MWFRS) Vx = 15.4 kips Vy = 15.4 kips

SEISMIC DESIGN CATEGORY

Occupancy Category II
 Spectral Response Acceleration Ss 38.6 %g S1 11.5 %g
 Site Classification C (Field Test)
 Basic Structural System (check one):
 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 = 10.7 kips Vy = 10.7 kips

Analysis Procedure: Simplified Equivalent Lateral Force Modal

Architectural, Mechanical, Components Anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES: Field Test (provide copy of test report) 2500 psf

SPECIAL INSPECTIONS REQUIRED: Yes No

PLUMBING FIXTURE REQUIREMENTS

USES	WATERCLOSETS		URINALS		LAVATORIES		SHOWERS/TUBS		DRINKING FOUNTAINS	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	REGULAR	ACCESSIBLE	REGULAR	ACCESSIBLE
EXISTING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NEW	3	2	-	2	1	-	-	-	-	1
REQUIRED	2	2	-	2	1	-	-	-	-	1

SPECIAL APPROVALS

Special Approval: (Local Jurisdiction, Dept. of Insurance, SBCCI, ICC, etc., Describe Below)

APPLICABLE CODES

Edition Year of Code: See List Below
 New Construction Renovation (Existing Building) Upfit Alteration

TRADE

TRADE	CODE	EDITION
General Construction	NCSBC: Building Code	2012
Administration and Enforcement	NCSBC: Administration Code	2012
Plumbing	NCSBC: Plumbing Code	2012
Mechanical	NCSBC: Mechanical Code	2012
Electrical	NCSBC: Electrical Code - NFPA 70	2011
Fire Prevention	NCSBC: Fire Prevention Code	2012
Gas	NCSBC: Fuel Gas Code	2012
Energy-Commercial	NCSBC: Energy Conservation Code	2012
Accessibility	NCSBC: Building Code: Chapter 11 & ANSI 117.1	2003
Rehabilitation		
Life Safety	NFPA 101 - Life Safety Code	2000 & 2009
Special Occupancy	Class _____ Code _____	
Special Fire Codes		
Zoning		NA

MECHANICAL SUMMARY - Refer to Mechanical Drawings

MECHANICAL SYSTEM AND EQUIPMENT

Thermal Zone:
 winter dry bulb: _____
 summer dry bulb: _____

Interior Design Conditions:
 winter dry bulb: _____
 summer dry bulb: _____
 relative humidity: _____

Building Heating Load: _____
 Building Cooling Load: _____

Mechanical Spacing Conditioning System:
 Unitary
 description of unit: _____
 heating efficiency: _____
 cooling efficiency: _____

Boiler
 size category of unit: _____
 size category, if oversized, state reason: _____

Chiller
 size category of unit: _____
 size category, if oversized, state reason: _____

List equipment efficiencies: _____

SCHEDULE OF SPECIAL INSPECTION SERVICES

- The following sheets comprise the required schedule of special inspections for this project. The construction divisions require special inspections for this project are as follows:
- IT-1 Verification of Soils
 - IT-2 Excavation and Fill
 - IT-3 Piling and Drilling Piers
 - IT-4 Modular Retaining Walls
 - IT-5 Reinforced Concrete
 - IT-6 Post Tension Slab
 - IT-7 Pre-Cast Concrete Erection
 - IT-8 Pre-Stressed Concrete
 - IT-9 Inspection of Pre-Cast Fabricators
 - IT-10 Inspection of Structural Steel Fabricators
 - IT-11 Structural Masonry
 - IT-12 Welding
 - IT-13 High Strength Bolts & Steel Framing Insp.
 - IT-14 Sprayed Fire-Resistance Materials
 - IT-15 Exterior Insulation and Finish System
 - IT-16 Seismic Resistance
 - IT-17 Smoke Control
 - IT-18 Deformation Basin
 - IT-19 Special Cases

ENERGY SUMMARY

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 and annual energy cost for the proposed design.

Climate Zone: 3 4 5
 Method of Compliance:
 Prescriptive (Energy Code)
 Performance (Energy Code)
 Prescriptive (ASHRAE 90.1)
 Performance (ASHRAE 90.1)

THERMAL ENVELOPE

Roofing Assembly (each assembly):
 Description of assembly: Office: wood truss with shingles, insulation at gyp. plane, vented attic; Shop: steel truss with shingles, continuous insulation
 U-Value of total assembly: Office: 0.32, Shop: 0.32
 R-Value of insulation: Office: R-30, Shop: R-30
 Skylights in each assembly: N/A
 U-Value of skylights: N/A
 Total square footage of skylights in each assembly: N/A

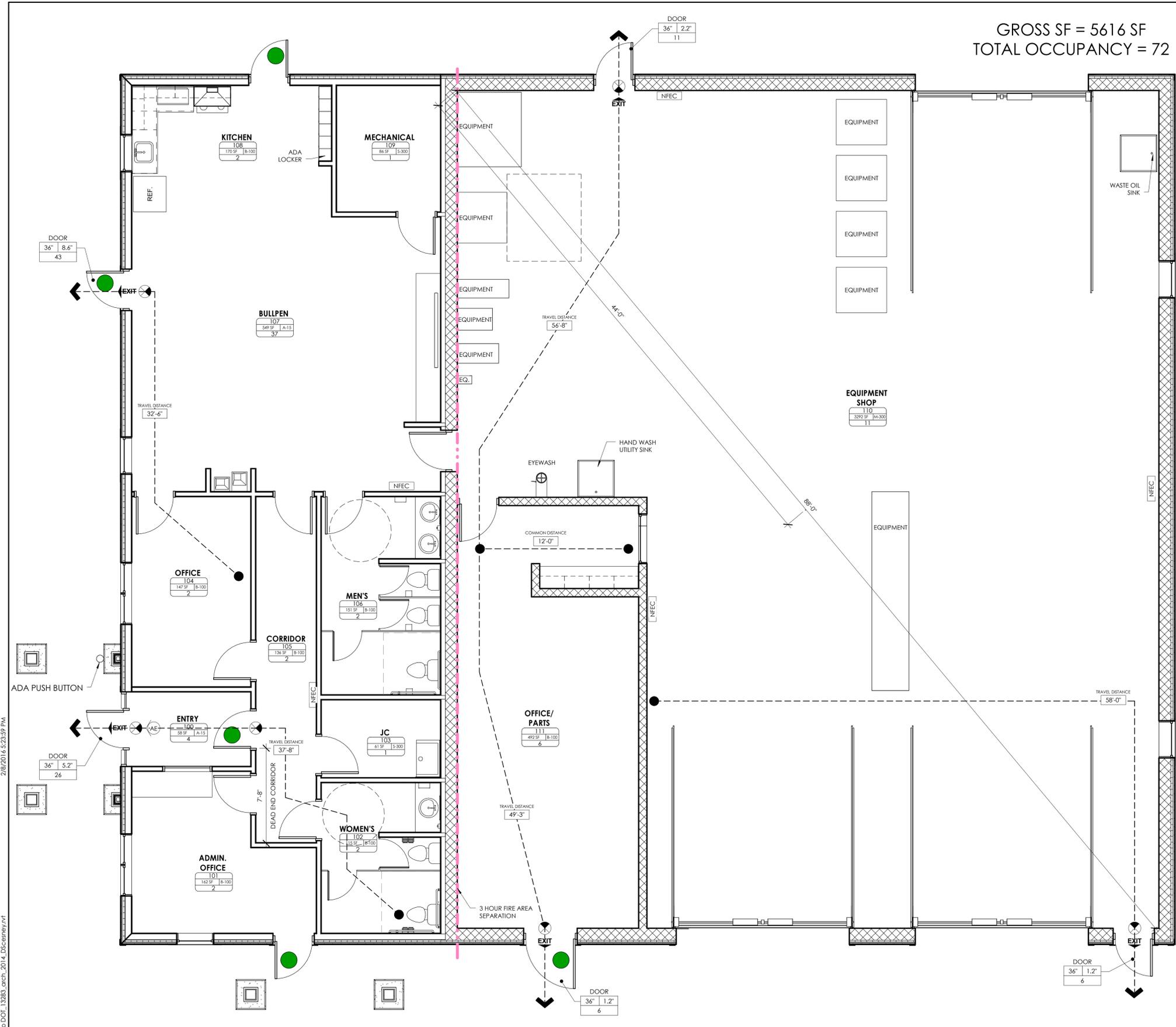
Exterior Walls (each assembly):
 Description of assembly: Office: wood studs with 5/8" sheathing, vapor barrier, 2" ci, 1" furring at cement siding; Shop: 12" CMU block with cellulose insulation, 2" ci, 1" furring at cement siding
 U-Value of total assembly: Office: 0.45, Shop: 0.74
 R-Value of insulation: Office: R-13 Batt insulation, R-10 ci; Shop: R-20 cellulose, R-10 ci
 Openings (windows or doors with glazing): Operable fiberglass window, insulated metal door, full glass door
 U-Value of assembly: 25 (window), 65 (insulated door), 8 (glass door)
 Solar Heat Gain Coefficient: 4 (window), n/a (insulated door), 7 (glass door)
 Projection factor: _____
 Door R-Values: _____

Walls below grade (each assembly):
 Description of assembly: N/A
 U-Value of total assembly: Refer to Comcheck
 R-Value of insulation: Refer to Comcheck

Floors over unconditioned space (each assembly):
 Description of assembly: Patio - Slab on Grade
 U-Value of total assembly: _____
 R-Value of insulation: _____

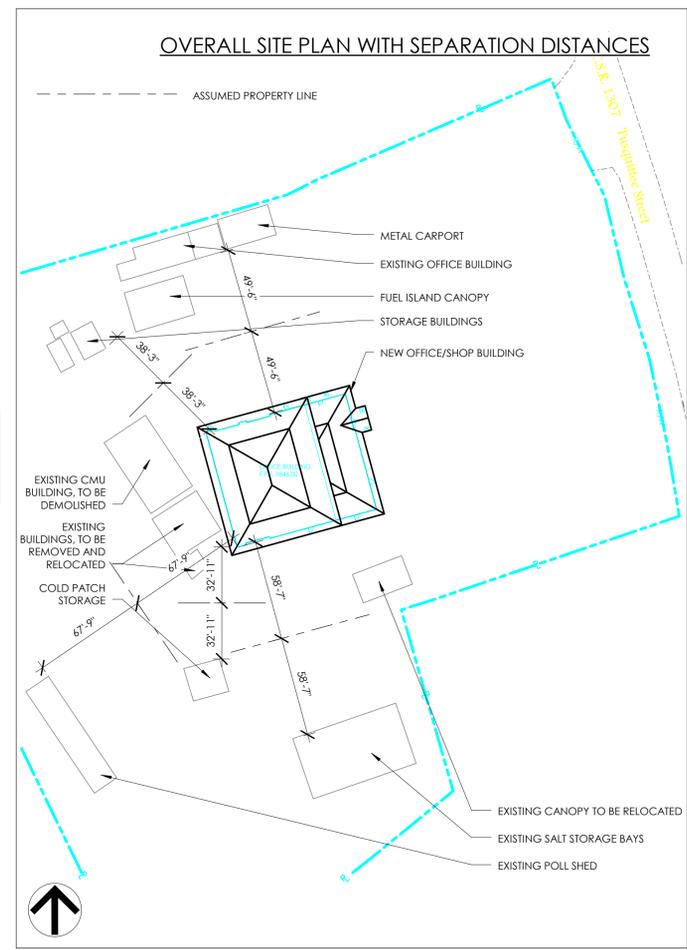
Floors slab on grade:
 Description of assembly: Slab on Grade
 U-Value of total assembly: Office: 52, Shop: 73
 R-Value of insulation: Office: R-15

GROSS SF = 5616 SF
TOTAL OCCUPANCY = 72



SYMBOL LEGEND	
	ACCESSIBLE BUILDING ENTRANCE
	EXIT
ROOM NAME	ROOM NAME ROOM NUMBER ROOM AREA OCCUPANT TYPE OCCUPANT LOAD
	PROVIDED WIDTH REQUIRED WIDTH ANTICIPATED LOAD
	TRAVEL DISTANCE TO EXIT
	COMMON PATH OF EGRESS DISTANCE
	MAXIMUM TRAVEL DISTANCE TO EXIT
	MAXIMUM COMMON PATH OF EGRESS
	3 HOUR FIRE BARRIER AREA SEPARATION
	NEW FIRE EXTINGUISHER CABINET
	NEW FIRE HOSE CABINET
	FIRE EXTINGUISHER CABINET
	EXIT SIGN. SEE ELECTRICAL DWGS
	CONTROL ACCESS - CARD READER

GENERAL BUILDING AREA SUMMARY	
NEW CONSTRUCTION	5616 SF
FLOOR PLAN	5616 SF

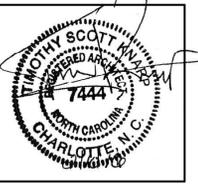


1 FIRST FLOOR LIFE SAFETY CODE PLAN
G002 1/4" = 1'-0"



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SCALE: As indicated
SHEET TITLE: LIFE SAFETY

PROJECT NUMBER 13283.01
G002 DRAWING NUMBER

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**Design No. U914
BXUV.U914
Fire Resistance Ratings - ANSI/UL 263**

[Page Bottom](#)

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

[See General Information for Fire Resistance Ratings - ANSI/UL 263](#)

[See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada](#)

Design No. U914

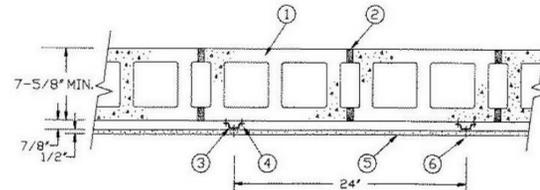
August 31, 2015

Bearing Wall Rating - 3 HR.

Nonbearing Wall Rating - 3 HR.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used - See Guide **BXUV** or **BXUVZ**.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



- Concrete Blocks*** - Various designs. Classification D-2 (2 hr). See **Concrete Blocks** category for list of eligible manufacturers.
- Mortar** - Blocks laid in full bed of mortar, nom 3/8 in. thick, of net less than 2-1/4 and not more than 3-1/2 parts clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.
- Furring Channels** - Min 0.019 in. thick (25 gauge) galv steel, 1-3/8 in. wide on top and 2-9/16 in. or 2-3/4 in. or 2-23/32 in. wide at bottom by 7/8 in. deep. Spaced 24 in. OC perpendicular to floor with a channel parallel to and approximately 3 in. above floor and 3 in. below ceiling. Clearance between vertical and horizontal channels 1/2 in.

- Channel Fasteners** - 1-1/4 in. long masonry screws with 3/16 in. body and 5/16 in. diameter head. Fasteners spaced 24 in. O.C. with the fasteners staggered on each long leg of the furring channel.
- Steel Framing Members*** - Alternate method used to attach furring channels (Item 3) to concrete blocks (Item 1). Clips spaced 48 in. OC, and secured to blocks with 1/4 in. dia. By 3 in. long concrete expansion anchor (Item 4B) through the center grommet. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.

PAC INTERNATIONAL L L C - Types RSIC-1, RSIC-1 (2.75).

- Concrete Expansion Anchor** - (Not Shown) - 1/4 in. dia. by 3 in. long carbon steel, pre-assembled, nail drive expansion anchor with mushroom head driven into the web of the concrete block. Min. embedment in concrete block of 1-3/8 in. and evaluated in accordance with ASTM E 488 to have ultimate load capacities of 980 lbs (tension) and 1400 lbs (shear) when used in 2000 psi concrete.

- Steel Framing Members*** - (Not Shown) - Alternate method used to attach furring channels (Item 3) to concrete blocks (Item 1). Clips spaced 24 in. OC, and secured to blocks with 1/4 in. dia. by 3 in. long concrete expansion anchor (Item 4B) through the center hole. Ends of adjoining channels are overlapped 6 in. and secured together with four self-tapping No. 8x1/2 Self Drilling screws (2 per side 1 in. and 4 in. from overlap edge). Furring channels are friction fitted into clips. Side joint furring channels shall be attached to concrete block with RESILMOUNT Sound Isolation Clips - Type A237R, located approximately 2 in. from each end of length of channel. Both Gypsum Boards at side joints fastened into channel with screws spaced 8 in. OC, approximately 1/2 in. from joint edge.

STUCCO BUILDING SYSTEMS - RESILMOUNT Sound Isolation Clips - Type A237R

- Gypsum Board*** - 1/2 in. thick, 4 ft wide, secured to furring channels with wallboard fasteners (Item 6). Gypsum plaster not more than 1/16 in. thick may be applied to wallboard in addition to joint treatment.

ACADIA DRYWALL SUPPLIES LTD - Type C.

AMERICAN GYPSUM CO - Types AG-C.

CERTAINTEEED GYPSUM INC - Type C.

CGC INC - Types C, IP-X2, IPC-AR.

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C - Type LGFC-C/A.

GEORGIA-PACIFIC GYPSUM L L C - Types 5, DAPC, TG-C.

NATIONAL GYPSUM CO - Types eXP-C, FSK-C, FSW-C, FSMR-C.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM - Type PG-C.

PANEL REY S A - Type PRC

THAI GYPSUM PRODUCTS PCL - Type C.

UNITED STATES GYPSUM CO - Types C, IP-X2, IPC-AR.

USG BORAL ZAWAWI DRYWALL L L C SFZ - Type C

USG MEXICO S A DE C V - Types C, IP-X2, IPC-AR.

- Gypsum Board*** - (As an alternate to Item 5) - 5/8 in. thick. Installed as described in Item 5.

NATIONAL GYPSUM CO - Type FSMR-C.

- Wallboard Fasteners** - 1 in. long, self-drilling, self-tapping steel screws with bugle heads. Fasteners attached to each furring channel and spaced 8 in. OC at butt joints and 12 in. OC in the field of the board parallel with furring channels. Clearance between fasteners and edges of wallboard 3/4 in.
- Joint System** - (Not shown) - Paper tape embedded in cementitious compound over joints. Paper tape and exposed screw heads covered with two layers of compound. Edges of compound feathered out.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2015-08-31

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Classified by Underwriters Laboratories, Inc. to UL 1479 and CANULC-S115

System No. C-AJ-1154

ANSI/UL1479 (ASTM E814)	CANULC S115
F Rating - 3 Hr	F Rating - 3 Hr
T Rating - 1/4 Hr	FT Rating - 1/4 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Rating - 3 Hr
L Rating At 400 F - 4 CFM/sq ft	FTH Rating - 1/4 Hr
	L Rating At Ambient - Less Than 1 CFM/sq ft
	L Rating At 400 F - 4 CFM/sq ft

CAJ 1154

SECTION A-A

- Floor or Wall Assembly - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 14 in. (356 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- Through-Penetrants - One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 3-1/4 in. (83 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - Steel Pipe - Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - Conduit - Nom 4 in. (254 mm) diam (or smaller) steel electrical metallic tubing or steel conduit.
 - Copper Tubing - Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - Copper Pipe - Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- Firestop System - The firestop system shall consist of the following:
 - Packing Material - Mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall to accommodate the required thickness of fill material. As an option to the above, backer rod and/or foamed plastic backer material may be used.
 - Fill, Void or Cavity Material - Sealant - Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. At the point contact location between pipe and concrete, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the concrete/pipe interface on the top surface of floor and on both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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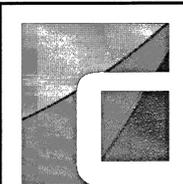
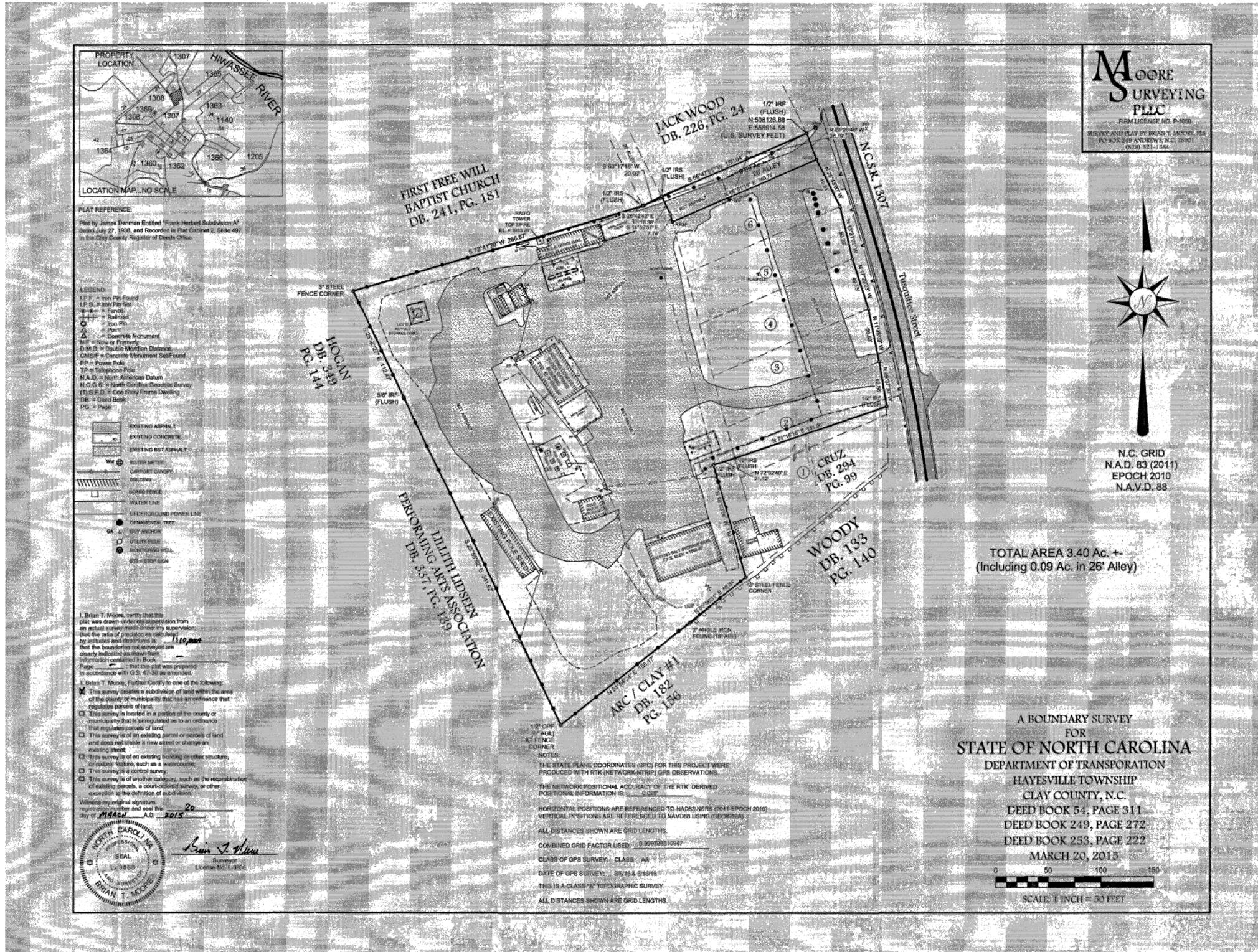
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SCALE

SHEET TITLE

UL ASSEMBLY

PROJECT NUMBER	13283.01
DRAWING NUMBER	G003



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02/10/16	MCS	RJE

SCALE SEE SURVEY

SHEET TITLE

BOUNDARY SURVEY

PROJECT NUMBER
 13283.01

DRAWING NUMBER
C001

CONTRACT NOTE:
 ALL UNDERGROUND STORM (EXCEPT DOWNSPOUT LINES) AND UTILITIES SHALL BE PROVIDED IN THIS CONTRACT. ALL OTHER ITEMS SHOWN ON THIS PLAN ARE N.I.C. STORM STRUCTURES THAT ARE TO RECEIVE DOWNSPOUT LINES SHALL BE ORDERED WITH APPROPRIATE STUB FOR FUTURE CONNECTION. STUB SHALL BE CAPPED WATERTIGHT.

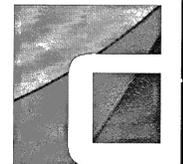
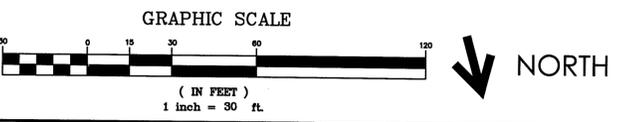
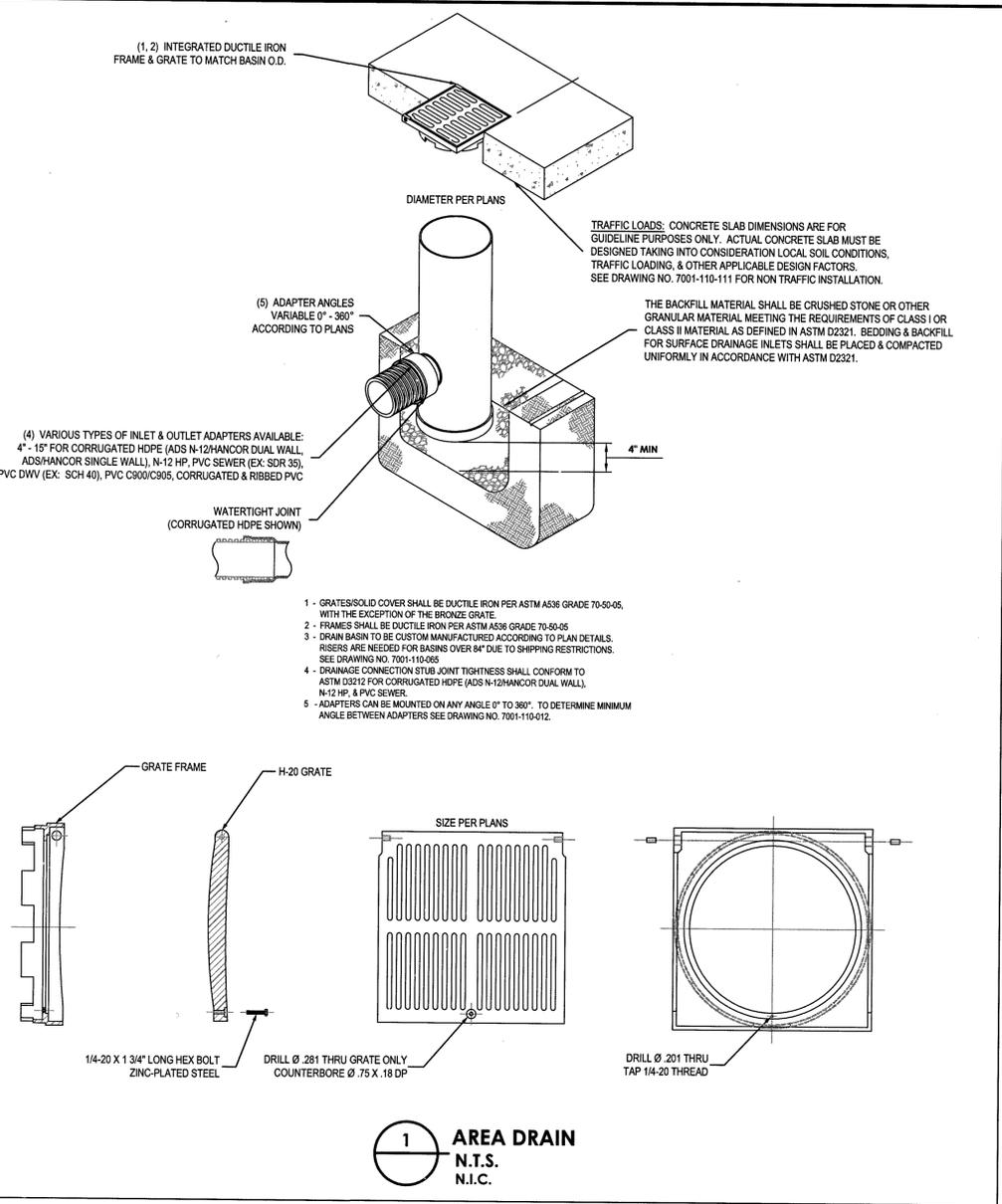
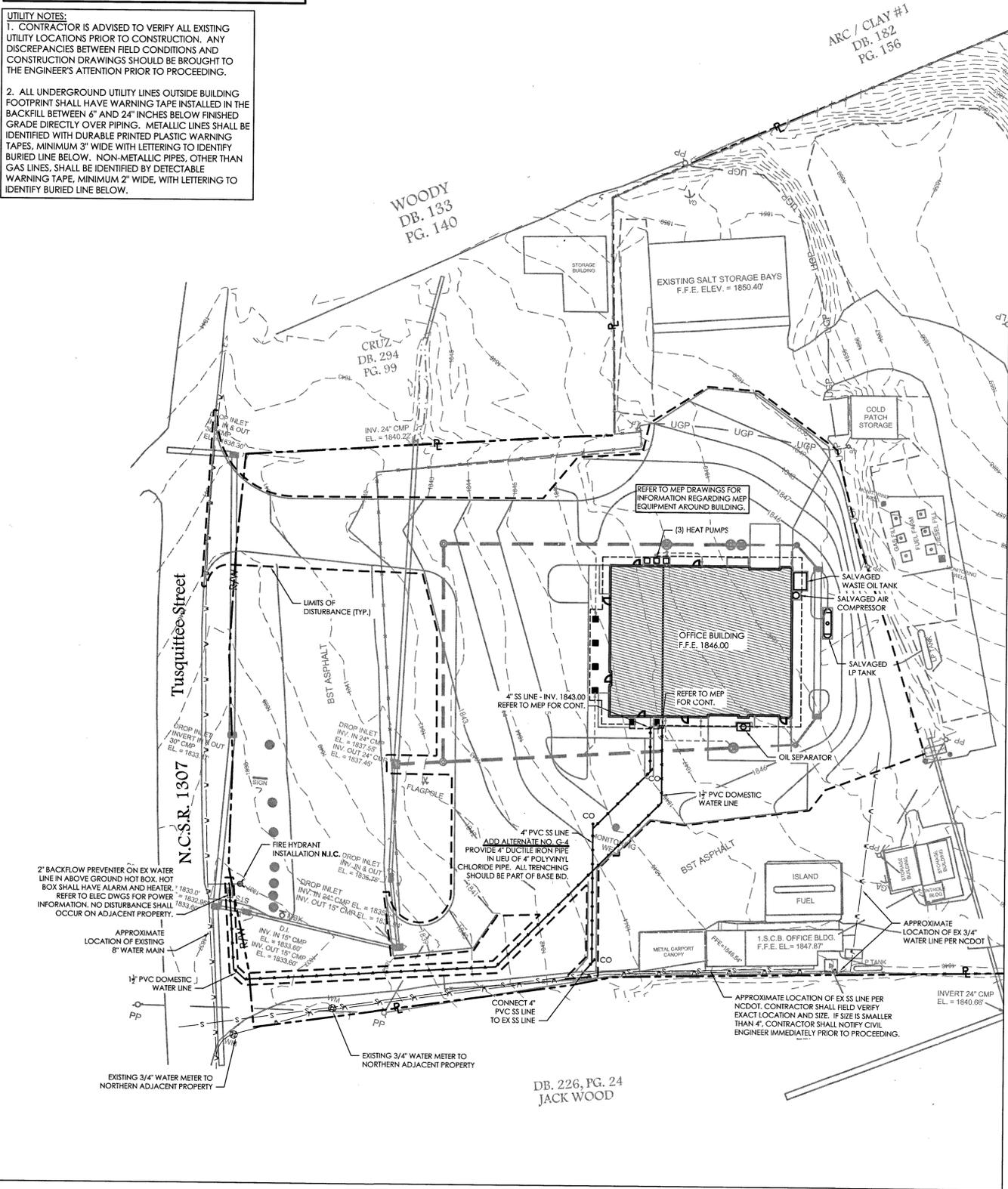
UTILITY NOTES:
 1. CONTRACTOR IS ADVISED TO VERIFY ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND CONSTRUCTION DRAWINGS SHOULD BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO PROCEEDING.
 2. ALL UNDERGROUND UTILITY LINES OUTSIDE BUILDING FOOTPRINT SHALL HAVE WARNING TAPE INSTALLED IN THE BACKFILL BETWEEN 6" AND 24" INCHES BELOW FINISHED GRADE DIRECTLY OVER PIPING. METALLIC LINES SHALL BE IDENTIFIED WITH DURABLE PRINTED PLASTIC WARNING TAPES, MINIMUM 3" WIDE WITH LETTERING TO IDENTIFY BURIED LINE BELOW. NON-METALLIC PIPES, OTHER THAN GAS LINES, SHALL BE IDENTIFIED BY DETECTABLE WARNING TAPE, MINIMUM 2" WIDE, WITH LETTERING TO IDENTIFY BURIED LINE BELOW.

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Date last plotted: 2/5/2016 8:38 AM

Date last accessed: 1/18/2016 4:51 PM

Drawing Name: S:\Projects\NCDOT\Civil\CO\Clay_Maintenance 1-15-16.dwg



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SCALE 1"=30'
 SHEET TITLE
 UTILITY PLAN

PROJECT NUMBER
 13283.01
 DRAWING NUMBER
C300

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 Date last plotted: 2/5/2016 8:36 AM
 Date last accessed: 1/18/2016 4:51 PM
 Plotted By: Meghan Simmons

6.18 COMPOST BLANKETS

Definition Compost is the organic product resulting from the controlled biological decomposition of organic material, occurring under aerobic conditions that has been sanitized through the generation of heat and stabilized to the point that it is appropriate for its particular application. Active composting is characterized by a high-temperature phase that sanitizes the product and allows a high rate of decomposition. This is followed by a low-temperature phase that allows the compost to stabilize while it continues to decompose at a slower rate. Compost should possess no objectionable odors. It shall not contain substances toxic to plants, and shall not resemble the raw material from which it was derived. Compost is not a fertilizer.

It is recommended that compost utilized on construction sites in North Carolina meet the minimum rules and regulations for proper thermophilic composting set forth by NCDENR, defined by USEPA, described in 40 Code of Federal Regulations Part 503, Appendix B, and as described in Table 6.18a.

Most compost contains a wood based fraction (e.g., bark, ground brush, wood chips, etc.) which is typically removed before the compost is used as a soil amendment. However, this coarser, woody fraction of the compost plays an important role in erosion and sediment control. For certain compost applications, it may be advantageous to add fresh, ground bark or composted, properly sized wood based material to a compost product to improve its efficacy in a particular application.

Compost materials may be considered fill material when placed in wetlands or riparian buffers. Prior to installation in these areas consult with the U.S. Army Corp of Engineers, and the NCDENR Division of Water Quality for permitting requirements.

Compost Blankets

A compost blanket is a slope stabilization, erosion control, and vegetation establishment practice used on construction sites to stabilize bare, disturbed, or erodible soils. Compost blankets may be used for temporary erosion control and in the process of providing permanent vegetative cover.

COMPOST BLANKETS

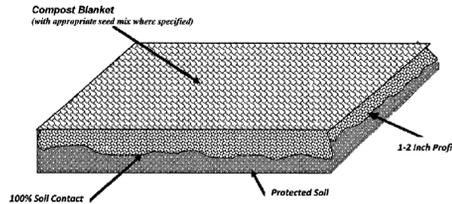


Figure 6.18a Compost Blanket Installation

Conditions Where Practice Applies

Compost blankets should be considered when soil is poor. Compost blankets can be placed on rocky slopes and shallow or infertile soils to improve the growth medium for grasses. Care should be taken not to apply compost where it can raise the nutrient level of streams. When the blanket is specified for permanent stabilization, vegetative cover shall be incorporated with the compost at rates shown in the seeding specification on the approved plan and maintained until the permanent cover is established. Where specified for temporary stabilization the blanket must be installed and maintained as specified in the construction sequence on the approved plan. A temporary vegetative cover or nurse crop should be considered for incorporation with temporary compost blankets.

Planning Considerations

Compost blankets have a multi function and cover 100% of the soil surface, and therefore provide the beneficial effects characteristic to mulches, including reduced rainfall impact and splash erosion, reduced runoff energy and sheet erosion, buffered soil temperature for plants, decreased moisture evaporation, increased moisture holding capacity at the soil surface, reduced runoff volume and velocity, and increased infiltration. Where planned and applied correctly to a properly prepared subgrade, compost blankets can aid in amending the soil. This can provide benefits to the soil's structure, increased aggregation, aeration, infiltration and percolation, moisture holding capacity, activity of beneficial microbes, availability of nutrients, decreased runoff volume and velocity, and decreased erosion, increased plant health, and long-term site sustainability.

A compost blanket may be considered appropriate for erosion and sediment control in conjunction with other methodologies, during the construction process. Compost blankets should only be used to control sheet flow from rainfall. Blankets may not be utilized in areas of concentrated runoff. Blankets may not

6.51 HARDWARE CLOTH & GRAVEL INLET PROTECTION

Definition A temporary measure of wire-mesh hardware cloth around steel posts supporting washed stone placed around the opening of a drain inlet.

Purpose To prevent sediment from entering yard inlets, graded storm drains or drop inlets during construction. This practice allows early use of the storm drain system.

Conditions Where Practice Applies To be placed around a catch basin or drop inlet and where the flow is light to moderate. If heavy flow is anticipated, use the rock/doughnut inlet protection method (Practice 6.54, Rock/Doughnut Inlet Protection). It is also used where storm drain inlets are to be made operational before permanent stabilization of the disturbed drainage area. This method of inlet protection is effective where the inlet is expected to drain shallow sheet flow. The immediate land area around the inlet should be relatively flat (less than 1 percent) and located so that accumulated sediment can be easily removed.

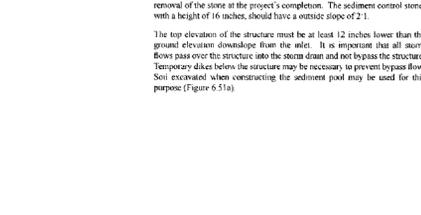
Design Criteria Ensure that drainage areas do not exceed 1 acre per inlet.

The top elevation of the structure must be at least 12 inches lower than the ground elevation downslope from the inlet. It is important that all storm flows pass over the structure into the storm drain and not bypass the structure. Temporary dikes below the structure may be necessary to prevent pass flow. Soil excavated when constructing the sediment pool may be used for this purpose (Figure 6.51a).

The posts need to be 1.25 linear ft. in length with a minimum length of 5 feet. Make sure the posts have projections to facilitate fastening the hardware cloth. Securely drive each stake into the ground to a minimum depth of 2 feet. The maximum spacing for the posts is 4 feet.

The wire mesh should be at least a 19-gauge hardware cloth with a 1/4 inch mesh opening. The total height should be a minimum of 2 feet. Providing a flag of hardware cloth on the ground projecting away from the inlet can aid in removal of the stone at the project's completion. The sediment control stone, with a height of 16 inches, should have a outside slope of 2:1.

This practice must not be used near the edge of fill material and must divert water over cut or fill slopes.



6.51

HARDWARE CLOTH & GRAVEL INLET PROTECTION

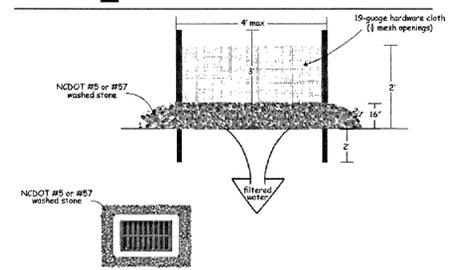


Figure 6.51a Hardware cloth and gravel inlet protection

Construction Specifications

1. Uniformly grade a shallow depression approaching the inlet.
2. Drive 5-foot steel posts 2 feet into the ground surrounding the inlet. Space posts evenly around the perimeter of the inlet, a maximum of 4 feet apart.
3. Surround the posts with wire mesh hardware cloth. Secure the wire mesh to the steel posts at the top, middle, and bottom. Placing a 2-foot flap of the wire mesh under the gravel for anchoring is recommended.
4. Place clean gravel (NCDOT #5 or #57 stone) on a 2:1 slope with a height of 16 inches around the wire, and smooth to an even grade.
5. Once the contributing drainage area has been stabilized, remove accumulated sediment, and establish final grading elevations.
6. Compact the area properly and stabilize it with groundcover.

Maintenance

Inspect inlets at least weekly and after each significant (1/2 inch or greater) rainfall event. Clear the mesh wire of any debris or other objects to provide adequate flow for subsequent rains. Take care not to damage or undercut the wire mesh during sediment removal. Replace stone as needed.

References

- Inlet Protection
- 6.52, Block and Gravel Inlet Protection
- 6.54, Rock/Doughnut Inlet Protection
- North Carolina Department of Transportation Standard Specifications for Roads and Structures

6.51a

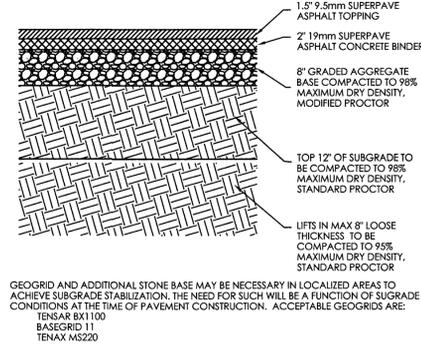


Figure 6.52 Block and Gravel Inlet Protection

4 HEAVY DUTY ASPHALT PAVING

N.T.S. N.I.C.

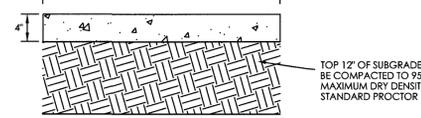


Figure 6.53 Heavy Duty Asphalt Paving

NOTES:

1. CONCRETE - 3000 P.S.I. @ 28 DAYS
2. PROVIDE 0.5 INCH WIDE EXPANSION JOINT @ 20' INTERVALS AND AT ALL CURBS, RIGID STRUCTURES, AND RIGID PAVEMENT. PROVIDE EXPANSION JOINTS PER PLAN.
3. PROVIDE 1.5 INCH DEEP TRANSVERSE GROOVES @ 5' INTERVALS.
4. TOOL ALL EXPOSED EDGES AND JOINTS TO 1/4 INCH RADIUS.
5. BROOM FINISH UNLESS NOTED OTHERWISE ON PLAN.
6. FIBER REINFORCEMENT TO BE MIXED WITH CONCRETE AT A RATE OF 1.5 POUNDS PER CUBIC YARD.

GEGRID AND ADDITIONAL STONE BASE MAY BE NECESSARY IN LOCALIZED AREAS TO ACHIEVE SUBGRADE STABILIZATION. THE NEED FOR SUCH WILL BE A FUNCTION OF SUBGRADE CONDITIONS AT THE TIME OF PAVEMENT CONSTRUCTION. ACCEPTABLE GEGRIDS ARE:

- TENSAR BX1100
- BASEGRID 11
- TENAX MS220

Figure 6.54 Concrete Walk N.T.S.

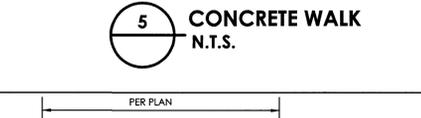


Figure 6.54 Concrete Walk N.T.S.

NOTES:

1. CONCRETE - 3000 P.S.I. @ 28 DAYS
2. PROVIDE 0.5 INCH WIDE EXPANSION JOINT @ 20' INTERVALS AND AT ALL CURBS, RIGID STRUCTURES, AND RIGID PAVEMENT. PROVIDE EXPANSION JOINTS PER PLAN.
3. PROVIDE 1.5 INCH DEEP TRANSVERSE GROOVES @ 5' INTERVALS.
4. TOOL ALL EXPOSED EDGES AND JOINTS TO 1/4 INCH RADIUS.
5. BROOM FINISH UNLESS NOTED OTHERWISE ON PLAN.
6. FIBER REINFORCEMENT TO BE MIXED WITH CONCRETE AT A RATE OF 1.5 POUNDS PER CUBIC YARD.

GEGRID AND ADDITIONAL STONE BASE MAY BE NECESSARY IN LOCALIZED AREAS TO ACHIEVE SUBGRADE STABILIZATION. THE NEED FOR SUCH WILL BE A FUNCTION OF SUBGRADE CONDITIONS AT THE TIME OF PAVEMENT CONSTRUCTION. ACCEPTABLE GEGRIDS ARE:

- TENSAR BX1100
- BASEGRID 11
- TENAX MS220

Figure 6.55 Concrete Walk N.T.S.

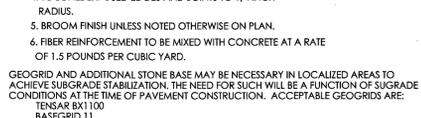


Figure 6.55 Concrete Walk N.T.S.

6 HEAVY DUTY CONCRETE PAVING

N.T.S.



Figure 6.56 Heavy Duty Concrete Paving

NOTES:

1. CONCRETE - 3000 P.S.I. @ 28 DAYS
2. PROVIDE 0.5 INCH WIDE EXPANSION JOINT @ 20' INTERVALS AND AT ALL CURBS, RIGID STRUCTURES, AND RIGID PAVEMENT. PROVIDE EXPANSION JOINTS PER PLAN.
3. PROVIDE 1.5 INCH DEEP TRANSVERSE GROOVES @ 5' INTERVALS.
4. TOOL ALL EXPOSED EDGES AND JOINTS TO 1/4 INCH RADIUS.
5. BROOM FINISH UNLESS NOTED OTHERWISE ON PLAN.
6. FIBER REINFORCEMENT TO BE MIXED WITH CONCRETE AT A RATE OF 1.5 POUNDS PER CUBIC YARD.

GEGRID AND ADDITIONAL STONE BASE MAY BE NECESSARY IN LOCALIZED AREAS TO ACHIEVE SUBGRADE STABILIZATION. THE NEED FOR SUCH WILL BE A FUNCTION OF SUBGRADE CONDITIONS AT THE TIME OF PAVEMENT CONSTRUCTION. ACCEPTABLE GEGRIDS ARE:

- TENSAR BX1100
- BASEGRID 11
- TENAX MS220

Figure 6.57 Concrete Flume N.T.S.



6.14 MULCHING

Definition Application of a protective blanket of straw or other plant residue, gravel, or synthetic material to the soil surface.

Purpose To protect the soil surface from the forces of rainfall impact and overland flow. Mulch fosters the growth of vegetation, reduces evaporation, insulates the soil, and suppresses weed growth. Mulch is frequently used to accent landscape plantings.

Conditions Where Practice Applies Mulch temporary or permanent seedlings immediately. Areas that cannot be seeded because of the season should be mulched to provide temporary protection of the soil surface. Use an organic mulch in this case (but not wood fiber), and seed the area as soon as possible. Mulch around plantings of trees, shrubs, or ground covers to stabilize the soil between plants.

MULCHING

Table 6.14a Mulching Materials and Application Rates

Material	Rate Per Acre	Quality	Notes
Straw	1-2 tons	Dry, unchopped, unweathered; avoid weeds.	Should come from wheat or oats; spread by hand or machine; must be tacked down.
Wood chips	5-8 tons	Air dry	Treat with 12 lbs nitrogen. Apply with mulch blower, chip handler, or by hand. Not for use in fine turt.
Wood fiber	0.5-1 tons	Air dry, shredded or hammer-milled, or chips.	Also referred to as wood cellulose. May be hydroseeded. Do not use in hot, dry weather.
Bark	35 cubic yards	Air dry, shredded or hammer-milled, or chips.	Apply with mulch blower, chip handler, or by hand. Do not use in hot, dry weather.
Corn stalks	4-6 tons	Cut or shredded in 4-6 in. lengths.	Apply with mulch blower or by hand. Not for use in fine turt.
Sericea lespedeza seed-bearing stems	1-3 tons	Green or dry; should contain mature seed.	Apply with mulch blower or by hand.
Nets and Mats*			
Jute net	Cover area	Heavy, uniform, woven of single jute yarn.	Withstands waterflow. Best when used with organic mulch.
Fiberglass net	Cover area		Withstands waterflow. Best when used with organic mulch.
Excelsior (wood fiber) mat	Cover area		Withstands waterflow.
Fiberglass roving	0.5-1 tons	Continuous fibers of drawn glass bound together with a non-toxic agent.	Apply with a compressed air ejector. Tack with emulsified asphalt at a rate of 25-35 gal/1,000 sq ft.
Chemical Stabilizers*			Not beneficial to plant growth.
Aqualain	Follow manufacturer's specifications		
Aerospay			
Curzol AK			
Petrolol SB			
Term Tack			
Cruel 500			
Genagua 743			
M-145			

*Refer to Practice No. 6.30, Grass Lined Channels.

*Use of trade names does not imply endorsement of product.

6.14a

1 HANDICAP SIGN N.T.S.

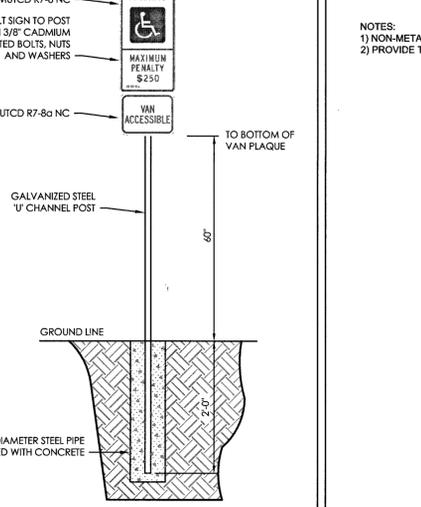


Figure 6.58 Handicap Sign N.T.S.

2 DOWNSPOUT CONNECTION N.T.S. N.I.C.

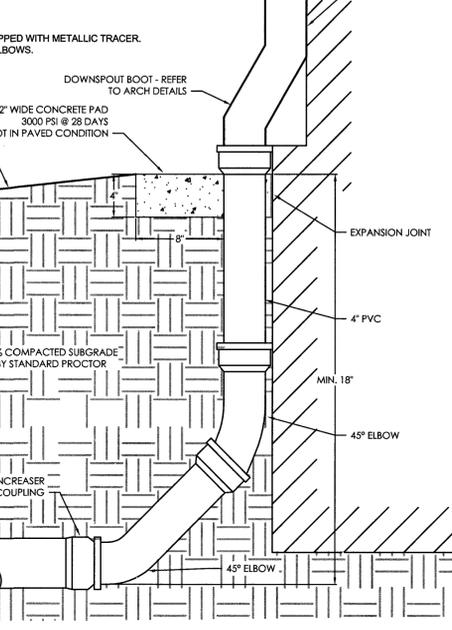


Figure 6.59 Downspout Connection N.T.S. N.I.C.

3 BOLLARD N.T.S. N.I.C.

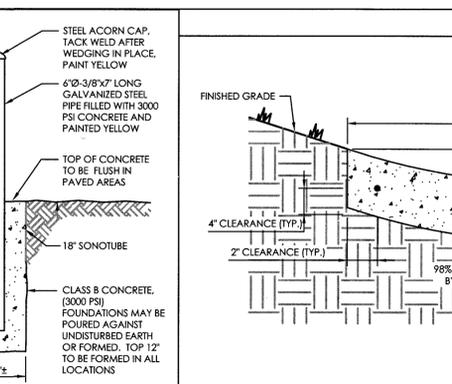


Figure 6.60 Bollard N.T.S. N.I.C.

7 CONCRETE FLUME N.T.S. N.I.C.

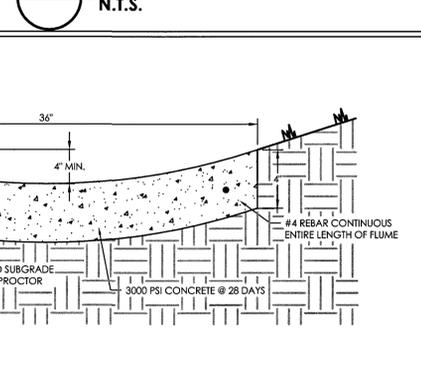
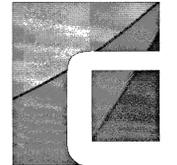


Figure 6.61 Concrete Flume N.T.S. N.I.C.

ALL EROSION CONTROL MEASURES SHALL MEET THE SPECIFICATIONS AND REQUIREMENTS SET FORTH IN THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



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 N.C. Engineering Firm License No. C-2194

NO.	DATE	BY	CHKD	DESCRIPTION



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DATE	DRAWN	CHECKED
02/10/16	MCS	RJE

SCALE N.T.S.

SHEET TITLE

SITE DETAILS

PROJECT NUMBER
13283.01

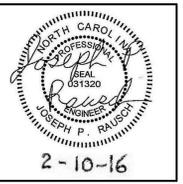
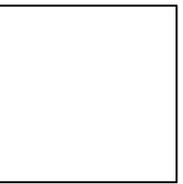
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DRAWING NUMBER



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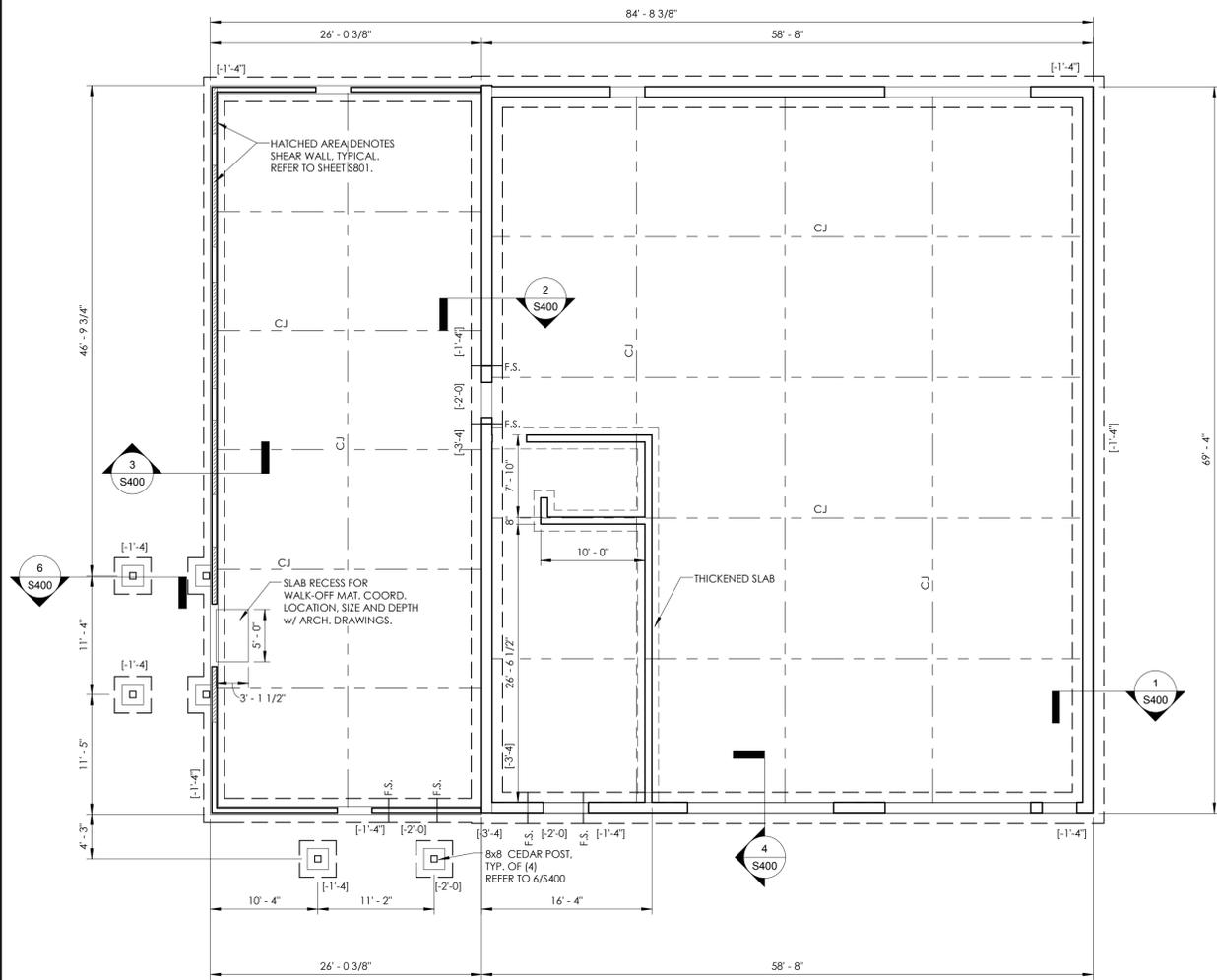
NO.	DATE	BY	CHKD	DESCRIPTION



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 CLAY COUNTY
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DATE	2/10/16	DRAWN	EAH	CHECKED	BSC
SCALE	As indicated				
SHEET TITLE	FOUNDATION PLAN				

PROJECT NUMBER	13283.00
DRAWING NUMBER	S200



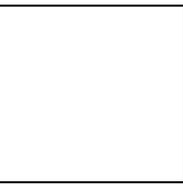
1 FOUNDATION PLAN
 S200 1/8" = 1'-0"

- FOUNDATION NOTES**
- DATUM 100'-0" = ELEVATION 1846.00' = FINISHED FLOOR ELEVATION
 - FOUNDATION HAVE BEEN DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2500 PSF PER GEOTECHNICAL REPORT BY ECS CAROLINAS, LLP (DATED: JUNE 2015)
 - EXTERIOR FOOTING SHALL BEAR AT A MINIMUM OF 1'-6" BELOW FINISHED GRADE UNLESS NOTED OTHERWISE.
 - [XX'-XX"] DENOTES TOP OF PROPOSED FOOTING AS REFERENCED FROM FINISHED FLOOR ELEVATION.
 - SLAB-ON-GRADE SHALL BE 5" THICK, NORMAL WEIGHT CONCRETE WITH 6x6-W2, 1xW2, 1W.W.F. REINFORCING, UNLESS NOTED OTHERWISE, OVER 6" COMPACTED CRUSHED STONE.
 - PROVIDE 9 GA. HORIZONTAL JOINT REINFORCING AT 16" O.C. IN ALL MASONRY WALLS, UNLESS NOTED OTHERWISE.
 - PROVIDE CONTROL JOINTS IN SLAB-ON-GRADE. SPACING OF JOINTS SHALL NOT EXCEED 15'-0".
 - PROVIDE (2) #5 VERTICAL BARS, FULL HEIGHT, AT 32" O.C. IN ALL EXTERIOR 12" CMU MASONRY WALLS, PROVIDE (2) ADDITIONAL #5 VERTICALS EACH SIDE OF ALL MASONRY OPENINGS, PROVIDE (2) #5 DOWELS AT 32" O.C. TO FOOTINGS, GROUT ALL BLOCK CORES SOLID CONTINUOUSLY BELOW FINISHED FLOOR, AND THE FIRST TWO COURSES ABOVE FOUNDATION WALL AND SLABS.
 - REFER TO ARCHITECTURAL DRAWINGS FOR FLOOR FINISHES, FLOOR DRAINS, SLOPES, SLAB DEPRESSIONS, AND WATERPROOFING.
 - REFER TO MASONRY SPECIFICATIONS AND TYPICAL DETAILS FOR CONSTRUCTION DETAILS, VENEER TIES, AND REINFORCING DETAILS.
 - THE FOLLOWING DENOTES SYMBOL REPRESENTATION:
 FS = FOOTING STEP
 FxX = SPREAD FOOTING MARKS
 FD = FLOOR DRAIN
 CJ = SLAB CONTROL JOINTS



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NO.	DATE	BY	CHKD	DESCRIPTION



2-10-16

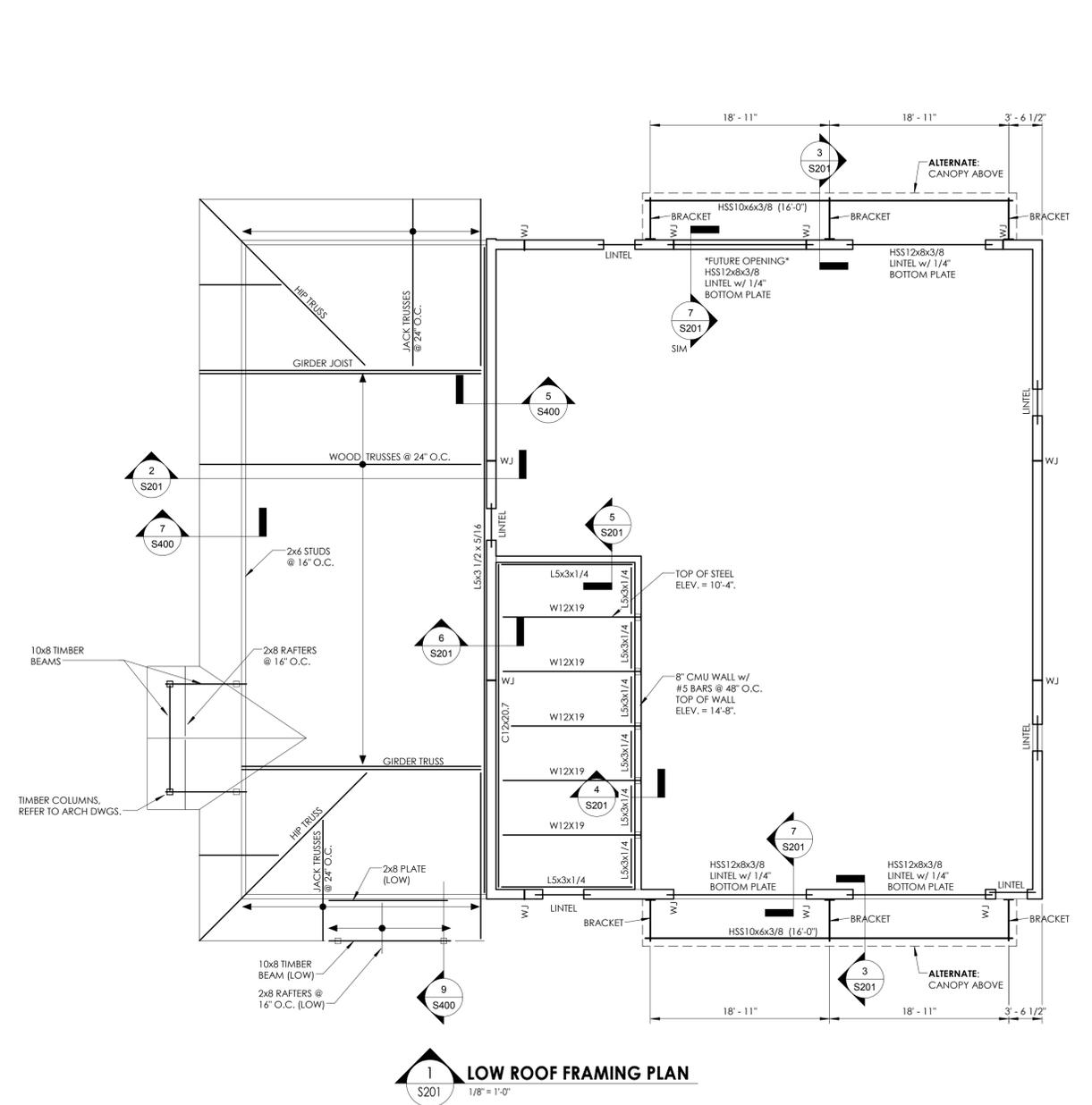
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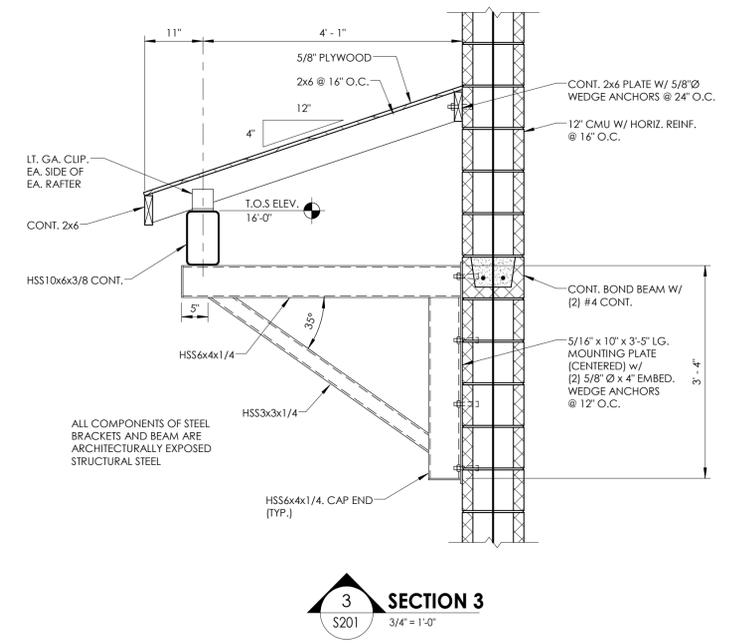
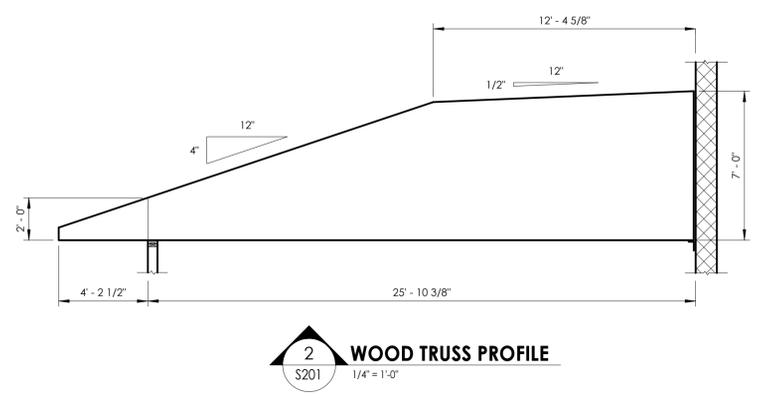
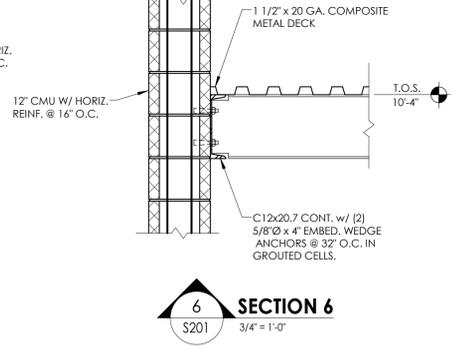
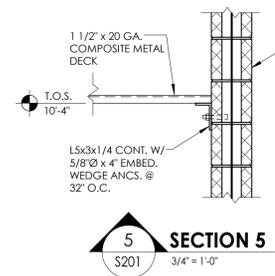
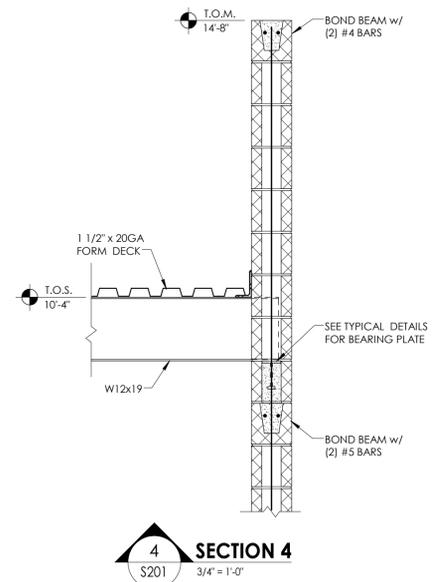
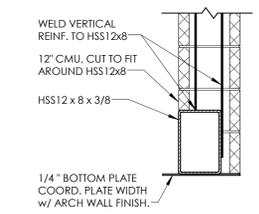
SCALE: As indicated

SHEET TITLE: LOW ROOF FRAMING PLAN

PROJECT NUMBER	13283.00
DRAWING NUMBER	S201



- LOW ROOF FRAMING NOTES**
- TOP OF 2x6 FRAMED WALL IS 12'-0" ABOVE FINISHED FLOOR.
 - PROVIDE BUILT-UP HEADERS AT ALL EXTERIOR WALL OPENINGS IN 2x6 WALLS:
 UP TO 3'-6" OPENING (3) 2x8 WITH PLYWOOD FILLERS (1) JACK STUD EACH END
 3'-7 TO 6'-0" OPENING (3) 2x10 WITH PLYWOOD FILLERS (2) JACK STUDS EACH END
 - PROVIDE LOOSE LINTELS AT MASONRY OPENINGS, UNLESS NOTED OTHERWISE. REFER TO LOOSE LINTEL SCHEDULE ON S802.

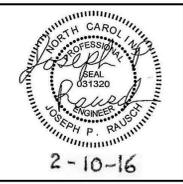
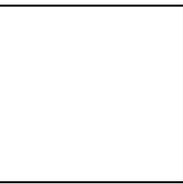


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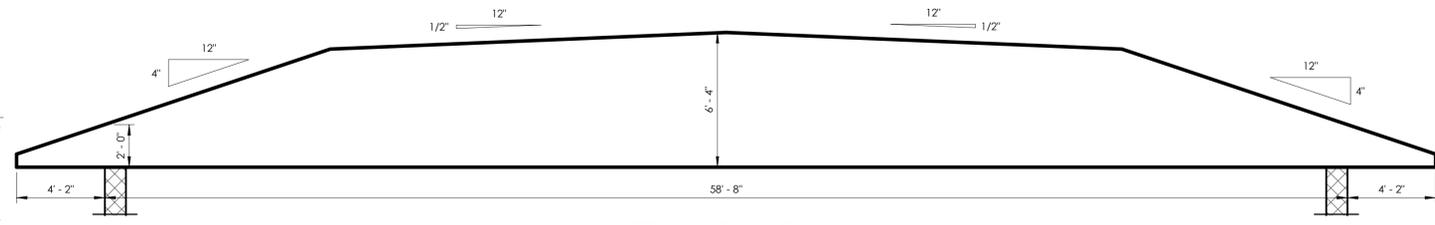
NO.	DATE	BY	CHKD	DESCRIPTION



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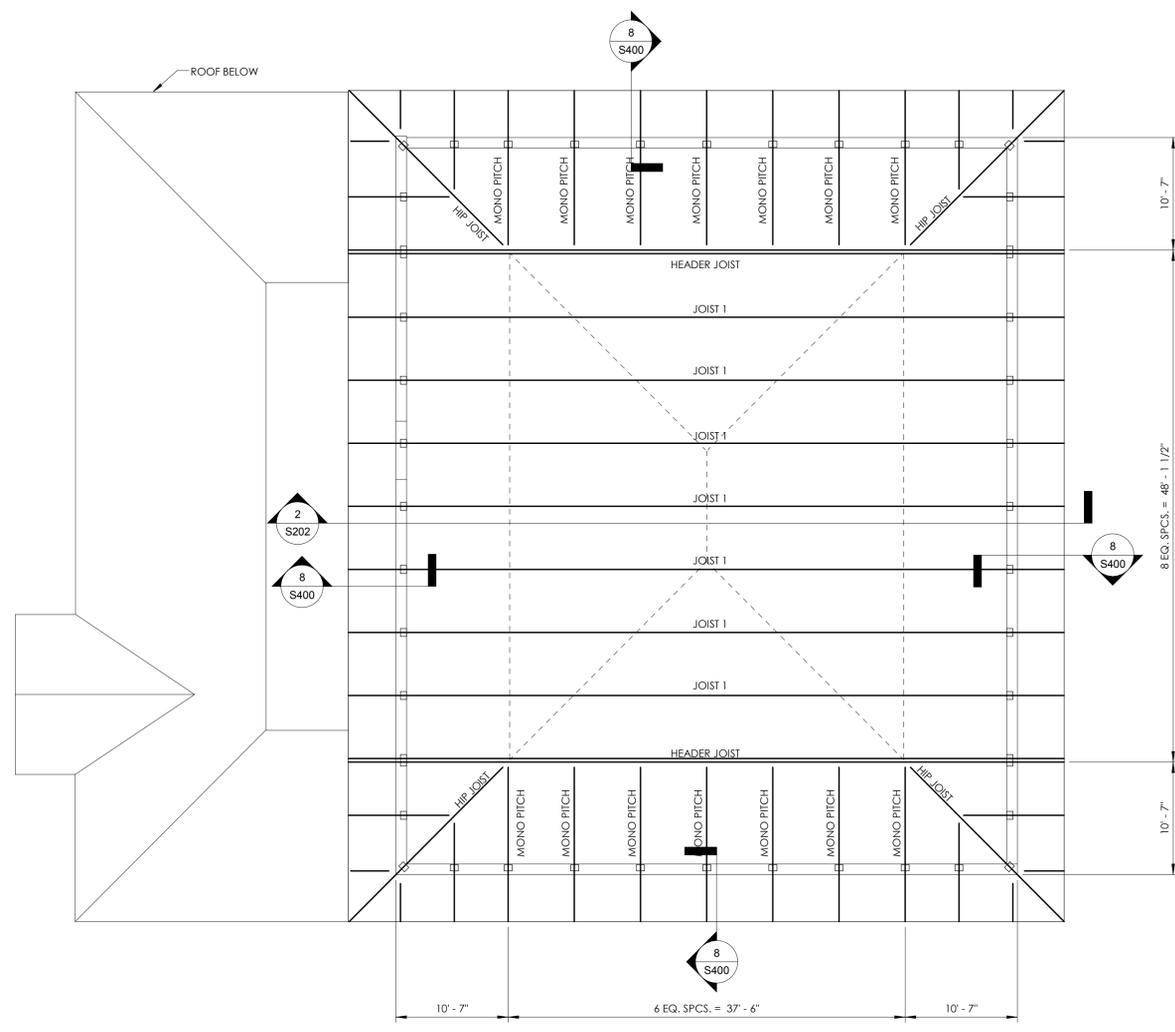
DATE	DRAWN	CHECKED
2/10/16	EAH	BSC
SCALE: As indicated		
SHEET TITLE		
HIGH ROOF FRAMING PLAN		

PROJECT NUMBER	13283.00
DRAWING NUMBER	S202



DESIGN LIVE LOAD = 120 PLF
 DESIGN TOTAL LOAD = 250 PLF

2 JOIST 1 PROFILE
 S202 1/4" = 1'-0"



1 HIGH ROOF FRAMING PLAN
 S202 1/8" = 1'-0"

- HIGH ROOF FRAMING NOTES**
1. TOP OF MASONRY IS ELEVATION 25'-0", UNLESS NOTED OTHERWISE BY (+ OR -).
 2. METAL ROOF DECK SHALL BE 20 GAGE, 1 1/2" WIDE RIB, UNLESS NOTED OTHERWISE.
 3. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ROOF PENETRATIONS INCLUDING ROOF DRAIN SUMPS. COORDINATE LOCATIONS AND DIMENSIONS WITH APPROVED SHOP DRAWINGS.
 4. BEARING PLATES FOR SINGLE JOISTS SHALL BE 9" x 7" x 1/2" WITH (2) 1/2" Ø x 6" HEADED STUDS. BEARING PLATES FOR DOUBLE JOISTS SHALL BE 12" x 7" x 1/2" WITH (2) 1/2" Ø x 6" HEADED STUDS.

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GENERAL NOTES

1. THE STRUCTURE SHOWN ON THESE DRAWINGS IS SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR SHALL TEMPORARILY BRACE THE STRUCTURE AND ITS COMPONENTS TO RESIST ALL LATERAL FORCES DURING CONSTRUCTION.

2. REFER TO THE "SPECIAL INSPECTIONS" SECTION OF THE SPECIFICATIONS FOR PROJECT REQUIREMENTS AND PERTINENT INFORMATION.

3. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS SHOWN ON THE DRAWINGS AND IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO ORDERING OR FABRICATING MATERIALS OR OTHERWISE PROCEEDING WITH THE WORK.

4. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES REQUIRED TO EXECUTE AND COMPLETE ALL ITEMS OF WORK AS SHOWN OR INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN, INCLUDING INCIDENTAL ITEMS TO EFFECT A FINISHED AND COMPLETE JOB, EVEN THOUGH SUCH ITEMS ARE NOT SHOWN OR PARTICULARLY MENTIONED.

5. ALL STRUCTURAL WORK, INCLUDING MATERIAL STRESSES AND METHODS OF CONSTRUCTION, SHALL BE IN COMPLIANCE WITH THE 2012 NORTH CAROLINA STATE BUILDING CODE.

6. CONTRACTOR SHALL MAINTAIN SAFE PUBLIC ACCESS TO AND FROM ALL BUILDING EXITS AT ALL TIMES AND SHALL NOT BLOCK SHIPPING OR RECEIVING.

7. CONTRACTOR SHALL USE CONSTRUCTION METHODS THAT ARE IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

8. CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR ADEQUATELY SHORING EXISTING CONSTRUCTION WHILE PERFORMING NEW WORK.

9. DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THESE DRAWINGS. IF THERE ARE ANY QUESTIONS REGARDING DIMENSIONS, CONTACT THE ARCHITECT/ENGINEER FOR INFORMATION PRIOR TO SUBMITTING SHOP DRAWINGS.

10. THE CONTRACTOR SHALL COORDINATE ALL STRUCTURAL WORK WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS, AND WITH THE WORK OF ALL OTHER TRADES.

11. REFER TO MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MECHANICAL OPENINGS.

12. ALL FLOOR, WALL AND CEILING PENETRATIONS THROUGH FIRE WALLS SHALL BE SEALED AGAINST SMOKE AND FIRE TRANSMISSION.

13. MATERIAL AND EQUIPMENT STORAGE SHALL BE ON SITE AND AS DIRECTED BY OWNER.

14. MAINTAIN PREMISES AND PUBLIC PROPERTIES FREE FROM ACCUMULATIONS OF WASTE MATERIALS, DEBRIS AND RUBBISH CAUSED BY OPERATIONS.

15. AFTER COMPLETION OF WORK, CONTRACTOR SHALL REMOVE ALL WASTE MATERIALS, RUBBISH, TOOLS, AND SURPLUS MATERIALS AND CLEAN SIGHT EXPOSED SURFACES. CONSTRUCTION SITE SHALL BE ORGANIZED AND CLEANED UP BY CONTRACTOR ON A DAILY BASIS.

16. THE CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION ALL SITE APURTENANCES DAMAGED UNDER THIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER.

17. ALL MATERIAL SCHEDULED FOR DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS NOTED OTHERWISE AND SHALL BE DISPOSED OF LEGALLY.

18. ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL. AN SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE, UNLESS SPECIFICALLY SHOWN OTHERWISE.

19. INFORMATION IN THESE STRUCTURAL NOTES IS A SELECTED SUMMARY OF REQUIREMENTS. REFER TO SPECIFICATIONS FOR AMPLIFICATIONS OF REQUIREMENTS.

EXCAVATION & BACKFILL NOTES

1. EXCAVATIONS TO BE SHEETED AND BRACED, OR LAID BACK TO PREVENT SLOUGHING IN OF THE EXCAVATED AREAS PER OSHA REGULATIONS.

2. PLACE ALL FOOTINGS ON FIRM, DRY, LEVEL, ACCEPTABLE BEARING SOIL.

3. REMOVE AND DISPOSE OF LEGALLY FROM SITE:
- UNACCEPTABLE BEARING SOIL
- EXCESS EXCAVATED MATERIAL
- ASPHALT MATERIAL (SEE SITE PLANS)

4. BACKFILL WITHIN BUILDING - TO WITHIN 6 INCHES OF UNDERSIDE OF FLOOR SLAB SHALL BE "SUBBASE COURSE" CONSISTING OF HARD DURABLE PEBBLES, ROCK FRAGMENTS AND SOIL BINDER. IT SHALL BE FREE OF CLAY, ORGANIC MATTER, AND OTHER DELETERIOUS MATERIAL. GRADATION: 2 INCHES MAXIMUM SIZE, 25-60% PASSING THE 1/4" SIEVE, 5-40% PASSING NO. 40 SIEVE, AND NOT MORE THAN 10% PASSING NO. 200 SIEVE.

5. UNDER SLABS ON GRADE - POROUS 6 INCH LIFT OF WASHED "CRUSHED STONES" CONSISTING OF: ASTM #57 STONE.

6. BACKFILL OUTSIDE OF BUILDING - "SELECT GRANULAR FILL" CONSISTING OF SAND, FINE GRAVEL, COARSE SILT, OR SIMILAR NON-COHESIVE HARD DURABLE MATERIALS AND SOIL BINDERS WITHOUT EXCESSIVE CLAY, ORGANIC MATTER, OR FROZEN OR DELETERIOUS MATERIAL. GRADATION: 4 INCHES MAXIMUM SIZE, 0-70% PASSING THE #40 SIEVE AND 0-15% PASSING THE #200 SIEVE.

7. FILL COMPACTION:
A. WITHIN BUILDING - 95% DRY DENSITY MODIFIED PROCTOR
B. OUTSIDE OF BUILDING - 90% DRY DENSITY MODIFIED PROCTOR

8. FILL PLACEMENT - PLACE FILL SIMULTANEOUSLY ON EACH SIDE OF FOUNDATION WALL IN 6 INCH LIFTS. THE MAXIMUM DIFFERENCE IN ELEVATION ON EITHER SIDE OF WALL SHALL NOT EXCEED 1'-6".

CONCRETE NOTES: GENERAL

1. ALL CONCRETE WORK, CONSTRUCTION AND REINFORCING DETAILS SHALL CONFORM TO THE 2012 NORTH CAROLINA STATE BUILDING CODE AND "THE SPECIFICATIONS OF THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS" (ACI-318).

2. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, U.N.O. SEE SPECIFICATIONS FOR MIX DESIGN REQUIREMENTS.

Table with 6 columns: LOCATION, W/C RATIO, SLUMP (inches), % AIR (in %), MAXIMUM AGGREGATE, MIN. STRENGTH @ 28 DAYS. Rows include FOOTINGS, FOUNDATIONS, and SLAB ON GRADE.

3. CONTRACTOR SHALL SUBMIT MIX DESIGNS PROPORTIONED BY A LICENSED TESTING LABORATORY.

4. PROVIDE MINIMUM OF FOUR (4) CYLINDERS PER EACH FIFTY (50) YARDS OR FRACTION THEREOF POURED IN ONE DAY. BREAK ONE AT 7 DAYS AND TWO AT 28 DAYS.

5. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES" (ACI-318).

6. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60, WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.

7. LAF SPLICES AND EMBEDMENT LENGTHS SHALL CONFORM TO ACI 318 - CHAPTER 12.

8. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCING WHERE WALLS OR BEAMS MEET AT CORNERS OR INTERSECT. THIS ALSO INCLUDES INTERSECTIONS OF CONCRETE WITH MASONRY WORK.

9. PROVIDE SHOP DRAWINGS FOR REINFORCING INCLUDING ALL NECESSARY ACCESSORIES TO HOLD REINFORCING SECURELY IN PLACE.

10. CLEAR COVER CONCRETE PROTECTION FOR REINFORCING STEEL SHALL BE:
3" - CONCRETE CAST AGAINST EARTH
2" - FORMED SURFACES IN CONTACT WITH SOIL OR EXPOSED TO WEATHER.
1" - FORMED SURFACES NOT IN CONTACT WITH SOIL OR EXPOSED TO WEATHER.

FOUNDATIONS

1. ALL FOUNDATIONS ARE TO BEAR ON APPROVED BEARING MATERIAL.

2. ALL FOUNDATION EXCAVATIONS ARE SUBJECT TO APPROVAL BY THE OWNER'S REPRESENTATIVE BEFORE ANY CONCRETE IS PLACED.

3. ALL FORMS AND REINFORCING STEEL IN PLACE SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE ANY CONCRETE IS PLACED.

4. NO FOUNDATION SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

5. IN GENERAL, EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN A MINIMUM OF 1'-6" BELOW FINISHED EXTERIOR GRADE.

6. CENTERLINE OF FOOTINGS, WALLS, GRADE BEAMS, COLUMNS, AND BEAMS SHALL COINCIDE, UNLESS OTHERWISE NOTED.

7. REFER TO ARCHITECTURAL DRAWINGS FOR FOUNDATION DRAINAGE.

8. ALL EXTERIOR CONCRETE USED ABOVE GRADE SHALL HAVE AN AIR ENTRAINING AGENT.

9. RUB ALL SIGHT EXPOSED CONCRETE AFTER FORMS HAVE BEEN REMOVED.

10. ALL EXPOSED CONCRETE PIER CORNERS SHALL BE CHAMFERED 3/4".

11. ALL GROUT FOR BASE PLATES SHALL BE NON-SHRINK WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.

12. ANCHOR BOLTS - ASTM F1554, Fy=36 KSI, 1" DIAMETER U.N.O.

13. ISOLATION JOINT - ASPHALT IMPREGNATED FILLER STRIP CONFORMING TO ASTM D-944.

14. ALL STEEL COLUMNS BELOW GRADE SHALL BE TWICE COATED WITH A BITUMINOUS COATING.

15. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB BEFORE COMMENCING WORK. REFER TO ARCHITECTURAL DRAWINGS FOR ANY DIMENSIONS AND DETAILS NOT SHOWN. REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATION AND DIMENSIONS OF ANY OPENING, SLEEVES, INSERTS, SLAB DEPRESSIONS, ETC.

16. EPOXY ANCHORS SHALL BE HIT HY-200 INJECTION ADHESIVE ANCHORS AS MANUFACTURED BY HILTI, INC., TULSA OK (800-879-8000).

SLABS ON GRADE

1. ALL SLABS ON GRADE SHALL BE PLACED OVER A STEGO XX MIL VAPOR BARRIER, TAFE ALL SEAMS AND PROVIDE FLASHING/BOOTS AROUND PIPE PENETRATIONS.

2. UNDER SLABS ON GRADE: POROUS 6 INCH LIFT OF CRUSHED STONE MATERIAL CONSISTING OF ASTM #57 STONE.

3. SLAB ON GRADE REINFORCEMENT SHALL BE 6x6-W2.1x2.1 WWF, UNLESS NOTED OTHERWISE.

4. WET CURE FOR 7 DAYS BEFORE APPLYING ANY WHEELED TRAFFIC OR MASONRY PARTITIONS.

5. CONTRACTION JOINTS: JOINTS SHALL BE SPACED NO FARTHER THAN 15'-0" O.C. JOINTS SHALL TYPICALLY RUN BETWEEN COLUMNS AND TERMINATE AT A COLUMN ISOLATION POUR. THE LENGTH OF ANY INDIVIDUAL JOINTED AREA SHALL NOT EXCEED 1.5 TIMES ITS WIDTH.

6. CONSTRUCTION/COLD JOINTS: TERMINATE DAY'S CONCRETE WORK AT A CONTROL JOINT LOCATION, PROVIDE A KEYWAY OR DOWELS FOR CONTINUATION OF WORK WITH NEXT POUR.

7. CONCRETE SURFACE SHALL BE HARD STEEL TROWEL FINISH.

8. FOR FLOOR FINISH, FLOOR DRAINS, SLAB DEPRESSIONS, AND WATERPROOFING DETAILS SEE ARCHITECTURAL DRAWINGS.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS." HOT ROLLED STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A36 OR ASTM A572 GRADE 50. HOLLOW STRUCTURAL SHAPES (HSS) SHALL CONFORM TO ASTM A500 GRADE B, ANGLES, CHANNELS, AND OTHER MISCELLANEOUS METALS SHALL CONFORM TO ASTM A36.

2. STEEL CONNECTIONS ARE SHOWN SCHEMATICALLY. FABRICATOR IS RESPONSIBLE FOR DESIGN AND DETAILING OF CONNECTIONS. LOADS PROVIDED ON DRAWINGS ARE UNFACTORED.

3. EACH BEAM CONNECTION SHALL BE DESIGNED FOR ONE HALF OF THE TOTAL LOAD SHOWN IN THE AISC TABLES FOR THE RESPECTIVE SPAN UNLESS OTHERWISE NOTED. WHERE POSSIBLE, EACH BEAM CONNECTION SHALL BE OF THE TWO SIDED ANGLE TYPE AS PER AISC SPECIFICATION, UNLESS OTHERWISE NOTED ON THE DRAWINGS. MINIMUM CONNECTION SHALL BE TWO (2) BOLTS. ALL BEAM AND GIRDER CONNECTIONS SHALL BE WELDED CONNECTIONS, OR BOLTED CONNECTIONS USING ASTM A325X BOLTS, 3/4" DIAMETER.

4. ALL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE EITHER WELDED CONNECTIONS, OR BOLTED CONNECTIONS USING ASTM A325X BOLTS.

5. UNLESS SPECIFICALLY DETAILED OTHERWISE, SPLICES SHALL BE DESIGNED TO DEVELOP THE FULL CAPACITY OF THE MEMBER AT THE POINT OF THE SPLICE.

6. CUTS, HOLES, COPIES, ETC., REQUIRED FOR WORK OF OTHER TRADES SHALL BE SHOWN ON SHOP DRAWINGS AND MADE IN THE SHOP. FIELD CUTTING OR BURNING WILL NOT BE PERMITTED.

7. ALL WELDING BOTH SHOP AND FIELD, SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE WITH AWS SPECIFICATIONS. WELDING ELECTRODES SHALL CONFORM TO ASTM A233, E70-XX, MINIMUM WELD SIZE SHALL BE 1/4 INCHES (FILLET) UNLESS OTHERWISE NOTED. WELDED CONNECTIONS SHALL BE DESIGNED TO BE STRESSED TO LESS THAN 50% OF THEIR ALLOWABLE CAPACITIES.

8. STRUCTURAL STEEL SHALL RECEIVE A SHOP COAT OF RUST INHIBITING PAINT EXCEPT AS FOLLOWS:

- A. CONTACT MILLED BEARING SURFACES
B. WITHIN TWO INCHES OF FIELD WELDS.

9. AFTER ERECTION, ALL DAMAGED AREAS IN THE SHOP COAT SHALL BE REPAIRED WITH THE SAME PAINT USED FOR THE SHOP COAT.

10. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW.

NONCOMPOSITE FLOOR AND ROOF DECK NOTES

1. ALL METAL DECK SHALL BE MANUFACTURED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE "DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS" BY THE STEEL DECK INSTITUTE (SDI).

2. METAL DECK SHALL BE 1 1/2 INCH X 20 GAUGE, WIDE RIB TYPE B, CLASS 1, FACTORY MUTUAL APPROVED, UNLESS NOTED OTHERWISE.

3. DECKING SHALL SPAN A MINIMUM OF THREE SPANS.

4. DECK SHALL BE WELDED TO SUPPORTING FRAME WORK. PROVIDE WELDING WASHERS WHERE NECESSARY, ANCHORING AT ROOF DECK SHALL RESIST AN UPLIFT OF 20 PSF.

5. PROVIDE SUPPORT FOR METAL DECK AT 6'-0" O.C. MAXIMUM.

6. SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS AND OTHER PERMANENT SUSPENDED LOADS SHALL NOT BE SUPPORTED BY THE METAL DECKING.

7. UNLESS NOTED OTHERWISE, ALL DECKING SHALL BE GALVANIZED IN ORDER TO BE COMPATIBLE WITH FIREPROOFING REQUIREMENTS.

8. SEE TYPICAL DETAIL FOR WELD PATTERN.

9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW.

MASONRY NOTES

1. MASONRY CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES" (ACI-ASCE 530 AND 530.1).

2. ALL CONCRETE BLOCK SHALL CONFORM TO ASTM-C90 GRADE N-I.

TWO CORE BLOCK FM = 1,900 PSI

3. ALL GROUT SHALL BE NON-SHRINK, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, AS MEASURED IN ACCORDANCE WITH ASTM C-109. GROUT FOR FILLING CELLS SHALL CONFORM TO ASTM C-476. SUBMIT MIX DESIGN FOR GROUT.

4. ALL MORTAR SHALL BE PORTLAND CEMENT, SAND, AND HYDRATED LIME TO CONFORM TO ASTM C270, TYPE S OR TYPE N. NO BAG MIXES ARE ALLOWED. MINIMUM AVERAGE COMPRESSIVE STRENGTH OF MORTAR SHALL BE:

- TYPE S - 1,800 PSI - MASONRY FOUNDATION WALLS & PIERS
TYPE N - 750 PSI - BRICK WORK

5. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND, UNLESS OTHERWISE NOTED. HORIZONTAL AND VERTICAL JOINTS SHALL HAVE A UNIFORM WIDTH OF 3/8 INCHES. SEE ARCHITECTURAL DRAWINGS FOR OTHER BOND PATTERNS OF VENEER BLOCK.

6. MAINTAIN A MINIMUM OF 1/2" CLEARANCE BETWEEN REINFORCING BARS AND MASONRY. GROUT SHALL BE PLACED IN LIFTS NOT TO EXCEED 5'-4" IN HEIGHT.

7. LADDER TYPE REINFORCEMENT SHALL BE INSTALLED IN BED JOINTS 16" APART VERTICALLY, U.N.O. IN REGULAR TWO CORE BLOCK. REINFORCEMENT SHALL BE CONTINUOUS AND LAPPED AT LEAST SIX INCHES AT SPLICES. REINFORCEMENT SHALL BE SPLICED AT ALL CORNERS AND INTERSECTIONS.

PROVIDE:
W1.7 (9 GAGE) REINFORCEMENT AT 8' CMU WALLS.
W2.8 (3/16" DIA) REINFORCEMENT AT 12' CMU WALLS.

8. GROUT ALL CELLS OF MASONRY UNITS FOR THE FIRST TWO COURSES ABOVE ALL FOUNDATION WALLS AND SLABS. PLACE GROUT IN ALL REINFORCED CELLS. PLACE GROUT IN ALL CELLS THAT ARE TO RECEIVE POST-INSTALLED WEDGE ANCHORS.

9. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.

10. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCING WHERE HORIZONTAL REINFORCING MEETS AT A CORNER OR INTERSECTION.

11. INSTALL LOOSE LIFTELS OVER ALL OPENINGS IN EXTERIOR AND INTERIOR NON-BEARING WALLS (SEE SCHEDULE), EXCEPT WHERE OTHERWISE INDICATED ON DRAWINGS. ALL EXTERIOR UNITS SHALL BE GALVANIZED.

12. SUBMIT REINFORCING SHOP DRAWINGS.

GENERAL FRAMING

1. DETAILS OF WOOD FRAMING SUCH AS NAILING, BLOCKING, BRIDGING, FIRESTOPPING, ETC. SHALL CONFORM TO THE 2012 BUILDING CODE OF NORTH CAROLINA.

2. DO NOT NOTCH, BORE, OR CUT MEMBERS FOR PIPES, DUCTS, CONDUITS, OR ANY OTHER REASON EXCEPT AS SHOWN ON THE DRAWINGS OR AS SPECIFICALLY APPROVED IN ADVANCE BY THE ENGINEER.

3. MAKE ALL BEARINGS FULL UNLESS OTHERWISE INDICATED ON THE DRAWINGS. FINISH ALL BEARING SURFACES ON WHICH STRUCTURAL MEMBERS ARE TO REST SO AS TO GIVE SURE AND EVEN SUPPORT. WHERE FRAMING MEMBERS SLOPE, CUT OR NOTCH THE ENDS AS REQUIRED TO GIVE UNIFORM BEARING SURFACE.

4. ON ALL FRAMING MEMBERS TO RECEIVE A FINISHED WALL OR CEILING, ALIGN THE FINISHED SUBSURFACE TO VARY NOT MORE THAN 1/8" FROM THE PLANE OF SURFACE OF ADJACENT FRAMING AND FURRING MEMBERS.

5. PLACE ALL PLYWOOD SHEATHING WITH FACE GRAIN PERPENDICULAR TO SUPPORTS AND CONTINUOUSLY OVER AT LEAST THREE SUPPORTS. CENTER JOINTS ACCURATELY OVER SUPPORTS. STAGGER THE END JOINTS OF PLYWOOD PANELS TO ACHIEVE CONTINUITY OVER TRUSSES.

6. NAILING

A. USE ONLY COMMON WIRE NAILS OR SPIKES OF THE DIMENSIONS SHOWN ON THE NAILING SCHEDULE, EXCEPT WHERE OTHERWISE CALLED FOR ON THE DRAWINGS.

B. FOR CONDITIONS NOT COVERED IN THE NAILING SCHEDULE, PROVIDE PENETRATION INTO THE PIECE OF RECEIVING THE POINT OF NOT LESS THAN 1/2 THE LENGTH OF THE NAIL OR SPIKE PROVIDED, HOWEVER, THAT 16D NAILS MAY BE USED TO CONNECT TWO PIECES OF TWO INCH NOMINAL THICKNESS.

C. DO ALL NAILING WITHOUT SPLITTING WOOD. PRE-BORE AS REQUIRED, REPLACE ALL SPLIT MEMBERS.

7. BOLTING - DRILL HOLES 1/16 INCH LARGER IN DIAMETER THAN THE BOLTS BEING USED. DRILL STRAIGHT AND TRUE FROM ONE SIDE ONLY. BOLT THREADS SHALL NOT BEAR ON WOOD. USE WASHERS UNDER HEAD AND NUT WHERE BOTH BEAR ON WOOD; USE WASHERS UNDER ALL NUTS.

8. SCREWS - FOR LAG SCREWS AND WOOD SCREWS, PRE-BORE HOLES SAME DIAMETER AS ROOT OF THREAD; ENLARGE HOLES TO SHANK DIAMETER FOR LENGTH OF SHANK. SCREW, DO NOT DRIVE, ALL LAG SCREWS AND WOOD SCREWS.

9. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. THE COATING WEIGHTS FOR ZINC-COATED SHALL BE IN ACCORDANCE WITH ASTM A153.

FRAMING MATERIALS

1. FRAMING LUMBER (NOMINAL 2" THICK) SHALL BE KILN DRIED No. 2 HEM-FIR, NO. 1/NO. 2 SPRUCE-PINE-FIR, OR No. 2 DOUGLAS FIR, SURFACED FOUR SIDES, CONFORMING TO THE FOLLOWING REQUIREMENTS.

- A. MOISTURE CONTENT NOT TO EXCEED 19%.
B. MINIMUM ALLOWABLE BENDING STRESS (Fb) TO BE NOT LESS THAN 875 PSI.
C. MINIMUM ALLOWABLE COMPRESSIVE STRESS (Fc) TO BE NOT LESS THAN 1150 PSI.
D. MINIMUM ALLOWABLE HORIZONTAL SHEAR STRESS (Fv) TO BE NOT LESS THAN 135 PSI.
E. MODULUS OF ELASTICITY: E = 1,400,000 PSI. (Emin = 510,000 PSI.)
F. EACH PIECE OF LUMBER CLEARLY MARKED WITH GRADE MARK OF APPLICABLE GRADING ASSOCIATION.

G. EACH PIECE OF LUMBER MUST BE SOUND, THOROUGHLY SEASONED, WELL MANUFACTURED AND FREE OF EXCESSIVE WARP THAT CANNOT BE CORRECTED BY PROPER NAILING. SPLIT LUMBER SHALL BE REJECTED.

2. PLYWOOD SHEATHING SHALL CONFORM TO U.S. VOLUNTARY PRODUCT STANDARD PS1-95 AND/OR PS2-92.

A. ROOF SHEATHING: 3/4" APA STRUCTURAL 1 RATED EXPOSURE 1, SPAN RATING 48/24.

B. WALL SHEATHING: 5/8" APA STRUCTURAL 1 RATED EXPOSURE 1, SPAN RATING 40/20.

3. WOOD THAT IS EMBEDDED IN EARTH OR CONCRETE, OR PLACED ON CONCRETE IN DIRECT CONTACT WITH THE EARTH, OR DIRECTLY EXPOSED TO WEATHER SHALL BE PRESERVATIVE TREATED INCLUDING BUT NOT LIMITED TO POSTS, BEAMS, COLUMNS, JOISTS, SLEEPERS, SILLS, AND SOLE PLATES.

4. NAILS - COMMON NAILS, EXCEPT WHERE NOTED, MEETING FEDERAL SPECIFICATION FF-N-1-1. USE GALVANIZED NAILS AT ALL EXPOSED LOCATIONS.

5. JOIST HANGERS AND FRAMING ANCHORS - MINIMUM 1/4 GA. MATERIAL, EXCEPT WHERE NOTED OR RECOMMENDED BY ACCEPTABLE MANUFACTURERS.

6. MISCELLANEOUS FASTENERS:

A. LAG SCREWS - HEX HEAD, CONFORMING TO FEDERAL SPECIFICATIONS FF-B-561, 3/8" DIAMETER EXCEPT AS NOTED. LENGTH OF EMBEDMENT 75% OF MEMBER THICKNESS, MAXIMUM 6".

B. MACHINE BOLTS AND THREADED RODS - ASTM A307, 5/8" DIAMETER EXCEPT WHERE NOTED.

C. STEEL HARDWARE - ASTM A36.

7. PROVIDE BOLTING ASSEMBLY INCLUDING PLATE WASHERS, LOCK WASHERS, NUTS BOLTS, ETC.

OPEN WEB STEEL JOIST NOTES

1. MANUFACTURE AND INSTALLATION OF OPEN WEB STEEL JOISTS SHALL CONFORM TO THE "STANDARD SPECIFICATIONS" OF THE STEEL JOIST INSTITUTE.

2. DESIGN AND INSTALLATION OF BRIDGING SHALL CONFORM TO THE "STANDARD SPECIFICATIONS" OF THE STEEL JOIST INSTITUTE.

3. ALL JOISTS SHALL BE CONNECTED TO SUPPORTING STEEL BY (2) 1/4" FILLET WELDS X 3" LONG.

4. WHERE HVAC DUCTWORK INTERSECTS DIAGONAL BRIDGING LINES, PROVIDE HORIZONTAL BRIDGING AT TOP AND BOTTOM CHORDS AS FOLLOWS:

- A. INSTALL DIAGONAL BRIDGING AS TYPICAL DURING INSTALLATION.
B. REMOVE DIAGONALS AFTER INSTALLATION AND INSTALL HORIZONTAL BRIDGING.
C. HORIZONTAL REPLACEMENT BRIDGING SHALL BE DESIGNED AND SUPPLIED BY JOIST MANUFACTURER.

D. REFER TO MECHANICAL DRAWINGS FOR LOCATION AND EXTENT OF OPENINGS.

E. AT NO TIME SHALL THIS BE DONE IN TWO CONSECUTIVE BAYS WITHOUT ENGINEER APPROVAL.

5. DO NOT CAMBER JOISTS.

6. CONTRACTOR SHALL PROVIDE ANY AND ALL EXTRA STEEL TO FRAME AROUND ANY MECHANICAL ROOF PENETRATIONS. PROVIDE A MINIMUM OF TWO EXTRA JOISTS, SAME SIZES AS SHOWN ON DRAWINGS, FOR EACH AC UNIT LOCATION. SUBMIT PROPOSAL TO ENGINEER FOR REVIEW.

7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW.

8. JOISTS SHALL BE DESIGNED TO SUPPORT A SINGLE CONCENTRATED LOAD OF 2000LBS APPLIED AT ANY BOTTOM CHORD PANEL POINT.

PRE-FABRICATED WOOD TRUSS NOTES

1. PRE-FABRICATED WOOD TRUSSES SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:

- CODES AND STANDARDS AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.

- "NATIONAL DESIGN SPECIFICATIONS FOR STRESS-GRADE LUMBER AND ITS FASTENINGS" NATIONAL FOREST PRODUCTS ASSOCIATION.

- TRUSS PLATE INSTITUTE, "HANDLING, INSTALLING, AND BRACING METAL PLATE CONNECTED WOOD TRUSSES" HB-91.

2. SHOP DRAWINGS SHALL CLEARLY SHOW ALL TRUSS DIMENSION, MEMBER SIZES, TEMPORARY AND PERMANENT BRACING, CONNECTOR PLATE SIZES, AND MISCELLANEOUS ANCHORS. CALCULATIONS SHALL INDICATE ASSUMED LOADINGS, MEMBER FORCES, JOINT DISPLACEMENTS, AND DESIGN OF ALL CONNECTIONS.

3. PREENGINEERED TRUSSES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA.

4. SUBMIT SHOP DRAWINGS FOR REVIEW. SHOP DRAWINGS AND CALCULATIONS SHALL BEAR THE SIGNATURE AND SEAL OF A PROFESSIONAL ENGINEER CURRENTLY LICENSED IN THE STATE OF NORTH CAROLINA. ALL PREENGINEERED TRUSS SHOP DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE DURING THE TIMES OF INSPECTION AND SHALL BEAR CLEAR INDICATION THAT THEY HAVE BEEN REVIEWED AND APPROVED BY THE PROJECT STRUCTURAL ENGINEER OF RECORD. ENGINEER OF RECORD TO FURNISH COPY OF APPROVED STAMPED TRUSS SHOP DRAWINGS TO STATE CONSTRUCTION OFFICE.)

5. TRUSSES SHALL BE DESIGNED TO SUSTAIN THE FOLLOWING LOADS, AND LOAD COMBINATIONS, AS MANDATED BY THE 2012 NORTH CAROLINA STATE BUILDING CODE:

TOP CHORD DEAD LOAD: 15 POUNDS PER SQUARE FOOT

TOP CHORD LIVE LOAD: 20 POUNDS PER SQUARE FOOT

BOTTOM CHORD DEAD LOAD: 10 POUNDS PER SQUARE FOOT

BOTTOM CHORD LIVE LOAD: 5 POUNDS PER SQUARE FOOT

MAXIMUM ALLOWABLE TOTAL LOAD DEFLECTION: 1/360 OF TOTAL SPAN OF TRUSS.

6. TRUSSES SHALL BE DESIGNED TO EXERT NO HORIZONTAL THRUST AT THEIR POINTS OF SUPPORT.

7. LUMBER SPECIES AND GRADE SHALL BE AS SPECIFIED BY TRUSS MANUFACTURER.

8. CONNECTOR PLATES SHALL BE A MINIMUM 20 GAUGE GALVANIZED "GANGHAIL" CONNECTOR. TRUSS MANUFACTURER SHALL SUBMIT ENGINEERING DATA ON PARTICULAR PLATES USED.

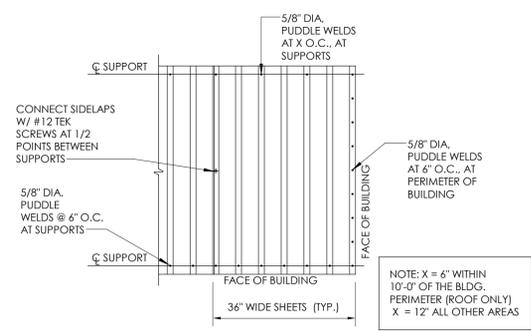
9. STRAP ANCHORS AND METAL TIES MINIMUM 18 GAUGE MATERIAL, EXCEPT WHERE NOTED.

10. ERECT TRUSSES IN STRICT ACCORDANCE WITH INSTRUCTIONS FROM THE TRUSS MANUFACTURER. DO NOT HANDLE TRUSSES IN ANY WAY WHICH WILL WEAKEN THEM OR CAUSE TRUSSES TO DISTORT ABOUT THEIR WEAK AXIS. DO NOT PLACE ANY LOADS ON TRUSSES BEFORE THEY HAVE BEEN INSTALLED AND FULLY BRACED.

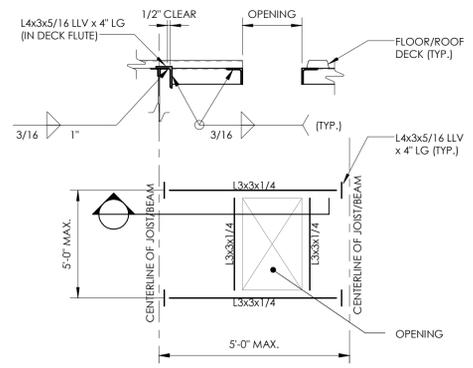
11. FURNISH AND INSTALL ALL TRUSS BRACING IN STRICT ACCORDANCE WITH THE TRUSS PLATE INSTITUTE'S "BUILDING COMPONENT SAFETY INFORMATION BOOKLET, BCSI 1-03, AND RELATED SUMMARY SHEETS.

12. BUILT-UP TRUSSES SHALL CONSIST OF TWO OR MORE SINGLE TRUSSES, FABRICATED AS INDIVIDUAL TRUSSES, AND FASTENED TOGETHER TO FORM A SINGLE TRUSS. ALL HARDWARE REQUIRED FOR CONNECTIONS BETWEEN PREENGINEERED TRUSSES SHALL BE DESIGNED AND SPECIFIED BY THE TRUSS DESIGN ENGINEER.

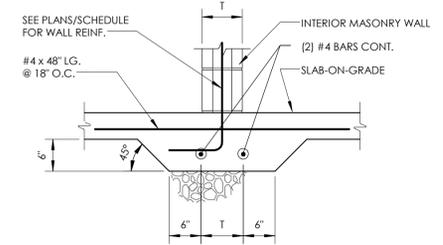
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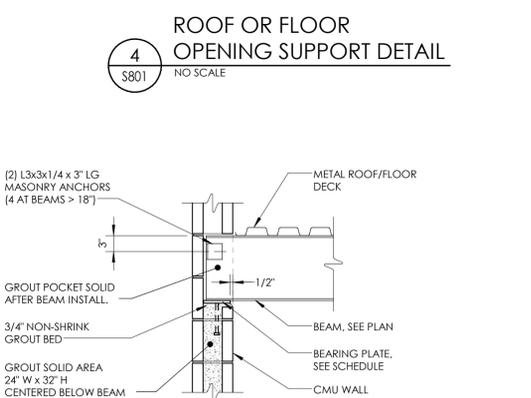
1 TYPICAL DECK ATTACHMENT DETAIL
S801 NO SCALE



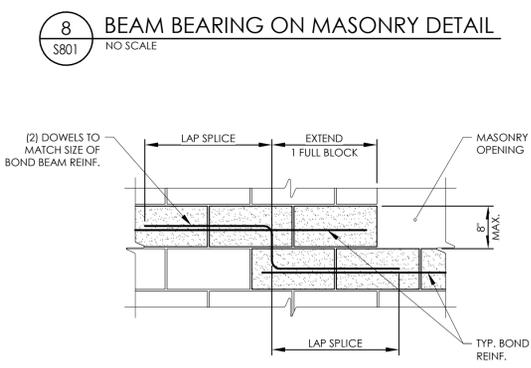
2 ROOF EQUIPMENT SUPPORT DETAIL
S801 NO SCALE



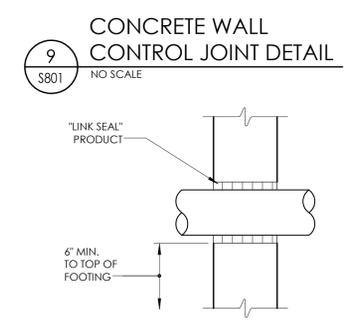
5 THICKENED SLAB-ON-GRADE AT MASONRY PARTITION DETAIL.
S801 NO SCALE



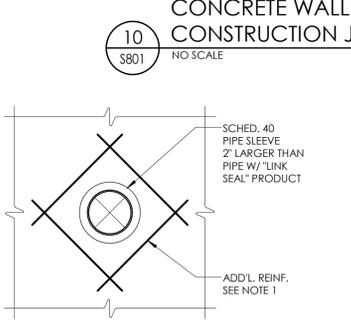
4 ROOF OR FLOOR OPENING SUPPORT DETAIL
S801 NO SCALE



8 BEAM BEARING ON MASONRY DETAIL
S801 NO SCALE



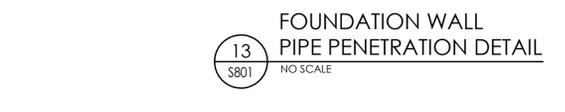
9 CONCRETE WALL CONTROL JOINT DETAIL
S801 NO SCALE



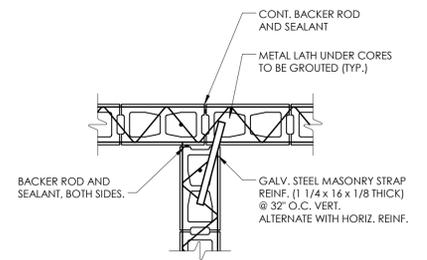
10 CONCRETE WALL CONSTRUCTION JOINT DETAIL
S801 NO SCALE



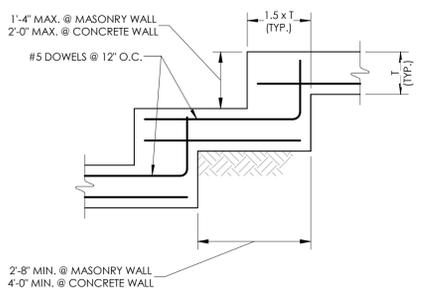
12 BOND BEAM STEP DETAIL
S801 NO SCALE



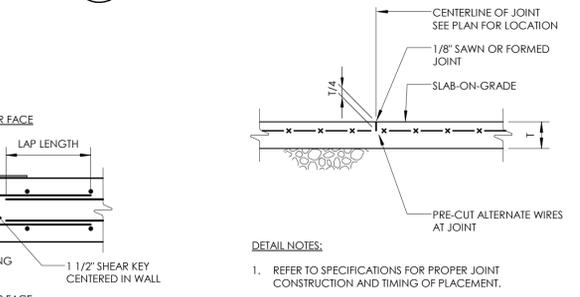
13 FOUNDATION WALL PIPE PENETRATION DETAIL
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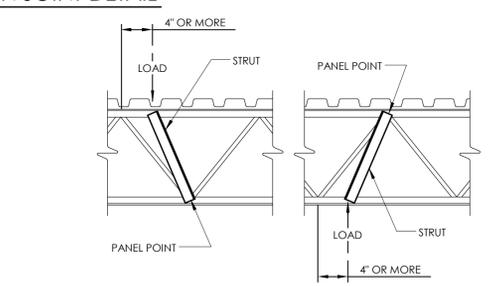
3 MASONRY FLEXIBLE WALL INTERSECTION DETAIL
S801 NO SCALE



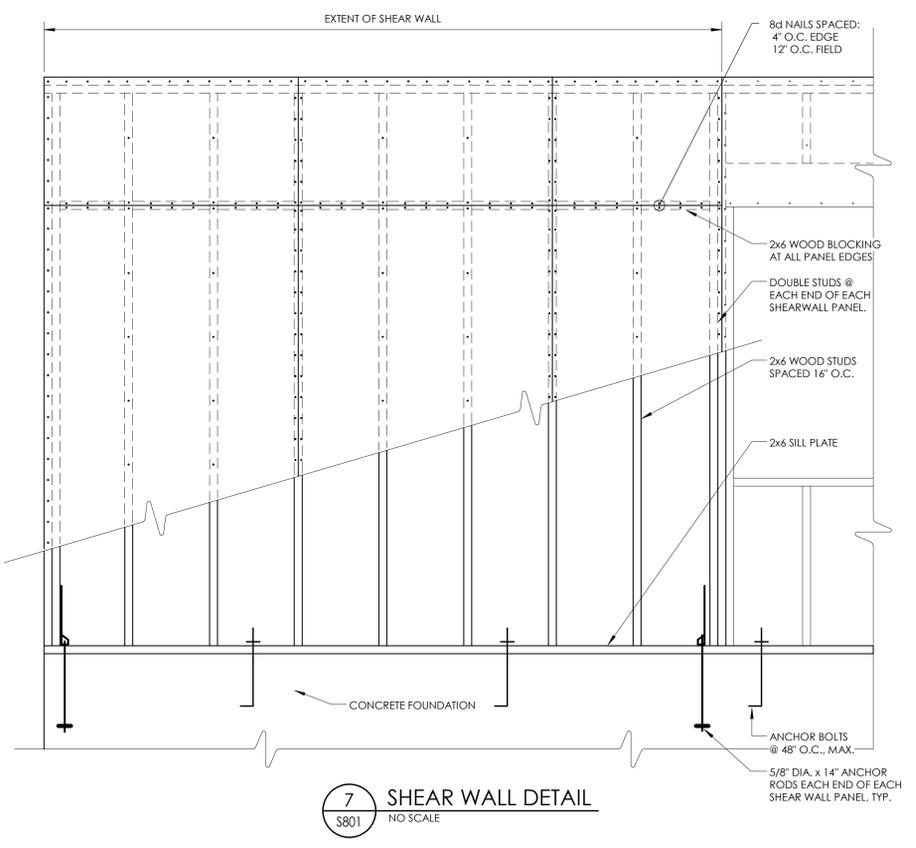
6 STEPPED WALL FOOTING DETAIL
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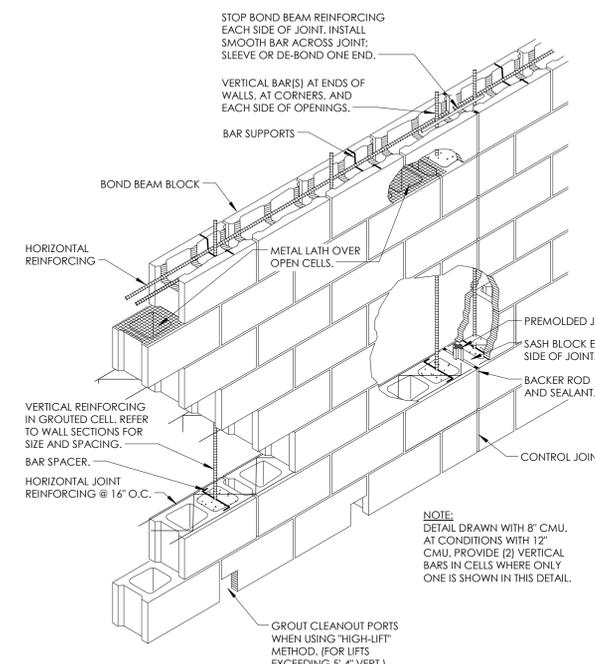
11 SLAB-ON-GRADE CONTROL JOINT DETAIL
S801 NO SCALE



14 TYP. CONCENTRATED LOAD ON JOIST DETAIL
S801 NO SCALE



7 SHEAR WALL DETAIL
S801 NO SCALE

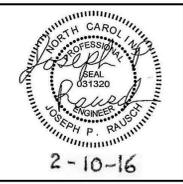


15 TYP. MASONRY WALL REINFORCING DETAIL
S801 NO SCALE



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NO.	DATE	BY	CHKD	DESCRIPTION



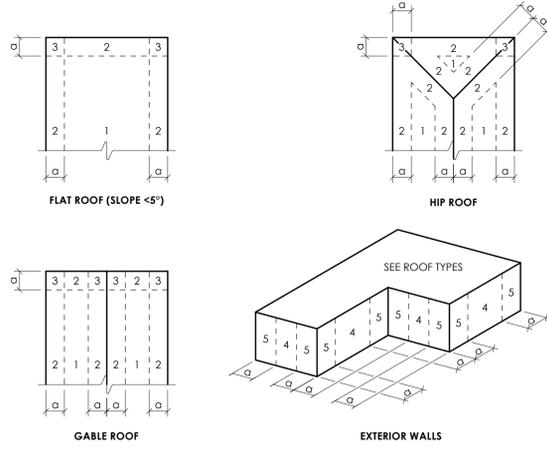
NCDOT-DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO #14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
2/10/16	EAH	BSC
SCALE 3/4" = 1'-0"		
SHEET TITLE		
TYPICAL DETAILS		

PROJECT NUMBER	13283.00
DRAWING NUMBER	S801

COMPONENTS AND CLADDING DESIGN PRESSURES					
ZONE	EFFECTIVE WIND AREA				
	10 SQ. FT.	20 SQ. FT.	50 SQ. FT.	100 SQ. FT.	500 SQ. FT.
1	10.2 / -14.1 PSF	10.0 / -15.7 PSF	10.0 / -15.3 PSF	10.0 / -14.6 PSF	10.0 / -14.6 PSF
2	10.2 / -28.1 PSF	10.0 / -25.9 PSF	10.0 / -22.9 PSF	10.0 / -20.6 PSF	10.0 / -20.6 PSF
3	10.2 / -41.5 PSF	10.0 / -38.8 PSF	10.0 / -35.2 PSF	10.0 / -32.6 PSF	10.0 / -32.6 PSF
4	17.7 / -19.2 PSF	16.8 / -18.3 PSF	15.7 / -17.3 PSF	15.0 / -14.5 PSF	13.2 / -14.6 PSF
5	17.7 / -23.6 PSF	16.8 / -22.1 PSF	15.7 / -20.0 PSF	15.0 / -18.3 PSF	13.2 / -14.6 PSF
OVERHANG 2	-32.9 PSF				
OVERHANG 3	-42.7 PSF				

- SCHEDULE NOTES:**
- PRESSURES SHOWN ARE APPLIED NORMAL TO THE SURFACE.
 - PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACE, RESPECTIVELY.
 - DISTANCE 'a' SHALL BE 6'-0" FOR ALL INSTANCES SHOWN IN THE DIAGRAMS BELOW.
 - SEE 'DESIGN CRITERIA NOTES' ON DRAWING S800 FOR OTHER PERTINENT INFORMATION.



COMPONENT AND CLADDING PRESSURE ZONE DIAGRAMS

CONNECTION	ALLOWABLE FASTENERS	LOCATION / METHOD
1 JOIST TO SILL OR GIRDER	(3) 16d COMMON (4) 3" x 0.131" NAIL	TOENAIL
2 BRIDGING TO JOIST	(2) 8d COMMON (3) 3" x 0.131" NAIL	TOE NAIL EACH END
3 SOLE PLATE TO JOIST OR BLOCKING	16d COMMON @ 16" O.C. 3" x 0.131" NAIL @ 8" O.C.	TYPICAL FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING @ SHEARWALL PANEL	(3) 16d COMMON @ 16" O.C. 3" x 0.131" NAIL @ 8" O.C.	TYPICAL FACE NAIL
4 STUD TO TOP/SOLE PLATE	(3) 16d COMMON (4) 3" x 0.131" NAIL	END NAIL
5 DOUBLE STUDS	16d COMMON @ 16" O.C. 3" x 0.131" NAIL @ 8" O.C.	FACE NAIL
6 DOUBLE TOP PLATES	16d COMMON @ 16" O.C. 3" x 0.131" NAIL @ 12" O.C.	TYPICAL FACE NAIL
DOUBLE TOP PLATES	(8) 16d COMMON (12) 3" x 0.131" NAIL	AT LAP SPICES
7 BLOCKING BETWEEN JOISTS, TRUSSES, OR RAFTERS TO TOP PLATE	(3) 8d COMMON (3) 3" x 0.131" NAIL	TOENAIL
8 RIM JOIST TO TOP PLATE	8d COMMON @ 6" O.C. 3" x 0.131" NAIL @ 6" O.C.	TOENAIL
9 TOP PLATES, LAPS, AND INTERSECTIONS	(2) 16d COMMON (3) 3" x 0.131" NAIL	FACE NAIL
10 CEILING JOISTS TO PLATE	(3) 8d COMMON (5) 3" x 0.131" NAIL	TOE NAIL
11 CONTINUOUS HEADER TO STUD	(4) 8d COMMON (4) 3" x 0.131" NAIL	TOE NAIL
12 CEILING JOISTS TO PARALLEL RAFTERS	(3) 16d COMMON, MINIMUM (4) 3" x 0.131" NAIL	FACE NAIL
13 RAFTIER / TRUSS TO TOP PLATE	(3) 16d COMMON (4) 3" x 0.131" NAIL	TOENAIL UPLIFT TIES ALSO REQUIRED
14 BUILT UP CORNER STUDS	16d COMMON @ 24" O.C. 3" x 0.131" NAIL @ 16" O.C.	
15 BUILT UP GIRDER AND BEAMS	20d COMMON @ 24" O.C. 3" x 0.131" NAIL @ 16" O.C.	FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
14 COLLAR TIE TO RAFTIER	(3) 10d COMMON (4) 3" x 0.131" NAIL	FACE NAIL
15 JACK RAFTIER TO HIP	(3) 10d COMMON (4) 3" x 0.131" NAIL	TOENAIL
	(2) 16d COMMON (3) 3" x 0.131" NAIL	FACE NAIL
16 ROOF RAFTIER TO 2x RIDGE	(2) 16d COMMON (3) 3" x 0.131" NAIL	TOENAIL
	(2) 16d COMMON (3) 3" x 0.131" NAIL	FACE NAIL
17 JOISTS TO BAND JOIST	(4) 16d COMMON (5) 3" x 0.131" NAIL	FACE NAIL
18 PANEL EDGE BLOCKING	(3) 8d COMMON (3) 3" x 0.131" NAIL	TOE NAIL
19 STRUCTURAL WOOD PANEL FLOOR AND ROOF SHEATHING	8d NAILS 2 3/8" x 0.113" NAIL	PATTERN: 4" O.C. PANEL PERIMETER, 12" O.C. AT INTERMEDIATE SUPPORTS
20 STRUCTURAL WOOD PANEL WALL SHEATHING	8d NAILS 2 3/8" x 0.113" NAIL	PATTERN: 4" O.C. PANEL PERIMETER, 12" O.C. AT INTERMEDIATE SUPPORTS
21 STRUCTURAL WOOD PANEL SHEARWALL PANEL SHEATHING	8d NAILS ONLY	PATTERN: 4" O.C. PANEL PERIMETER, 12" O.C. AT INTERMEDIATE SUPPORTS

CONCRETE REINFORCING SPLICE SCHEDULE		
BAR SIZE	SPLICE LENGTHS (IN.)	ANCHORAGE EMBEDMENT LENGTHS (IN.)
#3	23	17
#4	29	22
#5	37	28
#6	43	33
#7	63	48
#8	72	55
#9	81	62

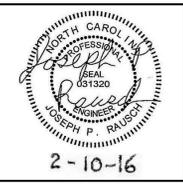
(THE ABOVE TABLE IS BASED ON THE FOLLOWING)

- $f_c = 3000$ PSI
- $f_y = 60,000$ PSI
- CATEGORY 5 - BARS #3 TO #7 COVER > 2 BAR DIAMETERS SPACING = 4 TO 6 BAR DIAMETERS
 - CATEGORY 6 - BARS #8 TO #9 COVER > 2 BAR DIAMETERS SPACING > 6 BAR DIAMETERS
- NONE ARE TOP BARS.
- NONE ARE EPOXY BARS.
- NON FOR LIGHT WEIGHT CONCRETE.
- SITUATIONS OTHER THAN ABOVE ARE SPECIFICALLY NOTED ON THE DRAWING.

LOOSE LINTEL SCHEDULE		
WALL TYPE	SPAN	LINTEL
4" BRICK VENEER	0'-0" TO 4'-6"	L3 1/2 x 3 1/2 x 5/16
	4'-7" TO 5'-6"	L4 x 3 1/2 x 5/16 (LLV.)
	5'-7" TO 6'-6"	L5 x 3 1/2 x 5/16 (LLV.)
	6'-7" TO 7'-6"	L6 x 3 1/2 x 5/16 (LLV.)
6" BLOCK	0'-0" TO 4'-6"	WT4x9
	4'-7" TO 5'-6"	WT4x10.5
	5'-7" TO 6'-6"	WT5x13
	6'-7" TO 7'-6"	WT5x13
8" BLOCK	0'-0" TO 4'-6"	(2) L3 1/2 x 3 1/2 x 5/16
	4'-7" TO 5'-6"	(2) L4 x 3 1/2 x 5/16 (LLV.)
	5'-7" TO 6'-6"	(2) L5 x 3 1/2 x 5/16 (LLV.)
	6'-7" TO 7'-6"	(2) L6 x 3 1/2 x 5/16 (LLV.)
4" BRICK & 8" BLOCK OR 12" BLOCK	0'-0" TO 4'-6"	(3) L3 1/2 x 3 1/2 x 5/16
	4'-7" TO 5'-6"	(3) L4 x 3 1/2 x 5/16 (LLV.)
	5'-7" TO 6'-6"	(3) L5 x 3 1/2 x 5/16 (LLV.)
	6'-7" TO 7'-6"	(3) L6 x 3 1/2 x 5/16 (LLV.)
8'-0" TO 10'-0"	WT8x10 + 5/16" PL.	

- PROVIDE STEEL LINTELS AT EACH MASONRY OPENING AT EXTERIOR AND INTERIOR LOCATIONS.
- MINIMUM BEARING FOR ALL LINTELS SHALL BE 8" EACH END.
- BLOCK WALLS SHALL BE GROUTED SOLID 3 COURSES BELOW BEARING POINT FOR A WIDTH OF 16" UNLESS NOTED OTHERWISE ON STRUCTURAL FRAMING PLANS.
- REFER TO ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS FOR SIZE AND LOCATION OF ALL WALL OPENINGS.
- THIS SCHEDULE PROVIDES TYPICAL LINTEL SIZES FOR INTERIOR AND EXTERIOR OPENINGS UNLESS SPECIFICALLY NOTED OTHERWISE ON STRUCTURAL FRAMING PLANS.
- FOR LINTEL SPANS GREATER THAN 6'-0", BOLT ASSEMBLIES TOGETHER AT 1/3 POINTS.
- CONTRACTOR SHALL PROVIDE AN ADDITIONAL 50 FT. OF ANGLE 5 x 3 1/2 x 5/16 OR THE EQUIVALENT.
- WHERE LINTELS REQUIRE 3 ANGLES, PROVIDE A 3/16" PLATE EQUAL TO WALL WIDTH ACROSS SPAN, ATTACHED TO THE BOTTOM OF THE LINTEL.

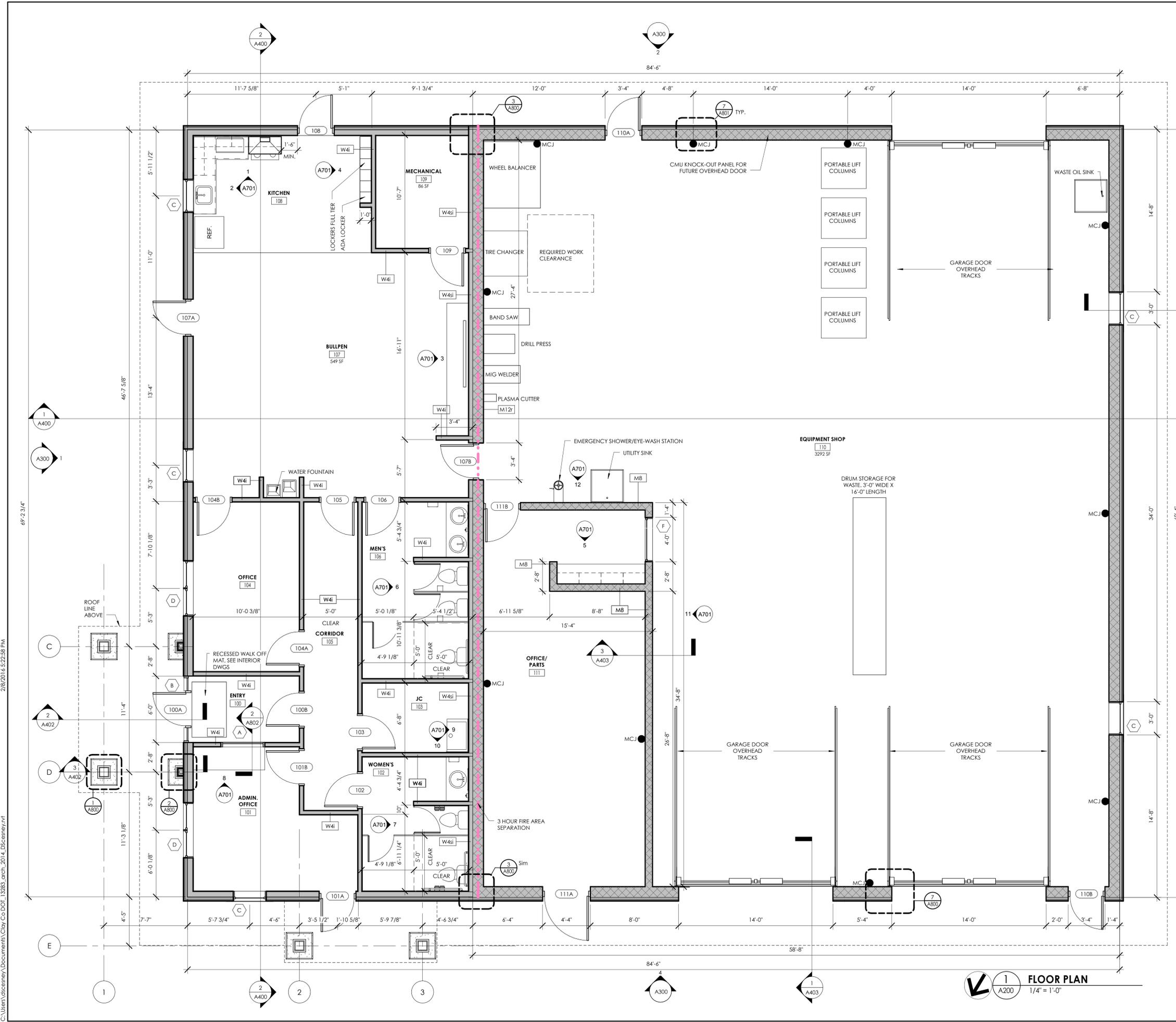
NO.	DATE	BY	DESCRIPTION



NCDOT-DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO #14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
2/10/16	EAH	BSC
SCALE	As indicated	
SHEET TITLE	TYPICAL DETAILS AND SCHEDULES	

PROJECT NUMBER	13283.00
DRAWING NUMBER	S802



FLOOR PLAN GENERAL NOTES

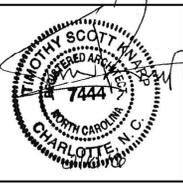
1. ALL DRAWINGS ARE GRAPHIC REPRESENTATIONS OF APPROXIMATE LOCATIONS OF NEW MATERIALS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
2. ALL WALL DIMENSIONS INDICATED ON FLOOR PLANS ARE TO FACE OF STUD FRAMING OR MASONRY UNLESS OTHERWISE NOTED.
3. SEE SHEET A400 FOR INTERIOR PARTITION TYPES
4. SEE A900S FOR INTERIOR AND EXTERIOR DOORS, WINDOWS, CURTAINWALLS, AND STOREFRONTS
5. PROVIDE AN EDGE/TRANSITION STRIP CENTERED UNDER ALL DOORS WHERE ADJACENT FLOOR FINISHES ARE OF DIFFERENT MATERIALS.
6. WORK AREAS SHALL BE MAINTAINED AND ALL WORK AREAS SHALL BE LEFT BROOMED CLEAN AT END OF EACH DAY.
7. ALL DOORS AND WINDOW SYSTEMS TO HAVE SEALANT AROUND THE ENTIRE PERIMETER (BOTH SIDES) OF FRAMES.
8. CONTRACTOR TO COORDINATE WITH OTHER TRADES FOR SEQUENCING OF WORK.
9. REFER TO A700 FOR TYPICAL FIXTURE MOUNTING HEIGHTS AND ACCESSORIES LEGEND.



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NCDOT - DIVISION 14
 OFFICE ASSEMBLY AND
 MAINTENANCE SHOP
 SCO # 14-11007-01 Package A
 CLAY COUNTY
 CONSTRUCTION DOCUMENTS

DATE	DRAWN	CHECKED
02/10/16	DMS	BP

SCALE: As indicated
 SHEET TITLE: BUILDING FLOOR PLANS

PROJECT NUMBER	13283.01
DRAWING NUMBER	A200

PLAN LEGEND

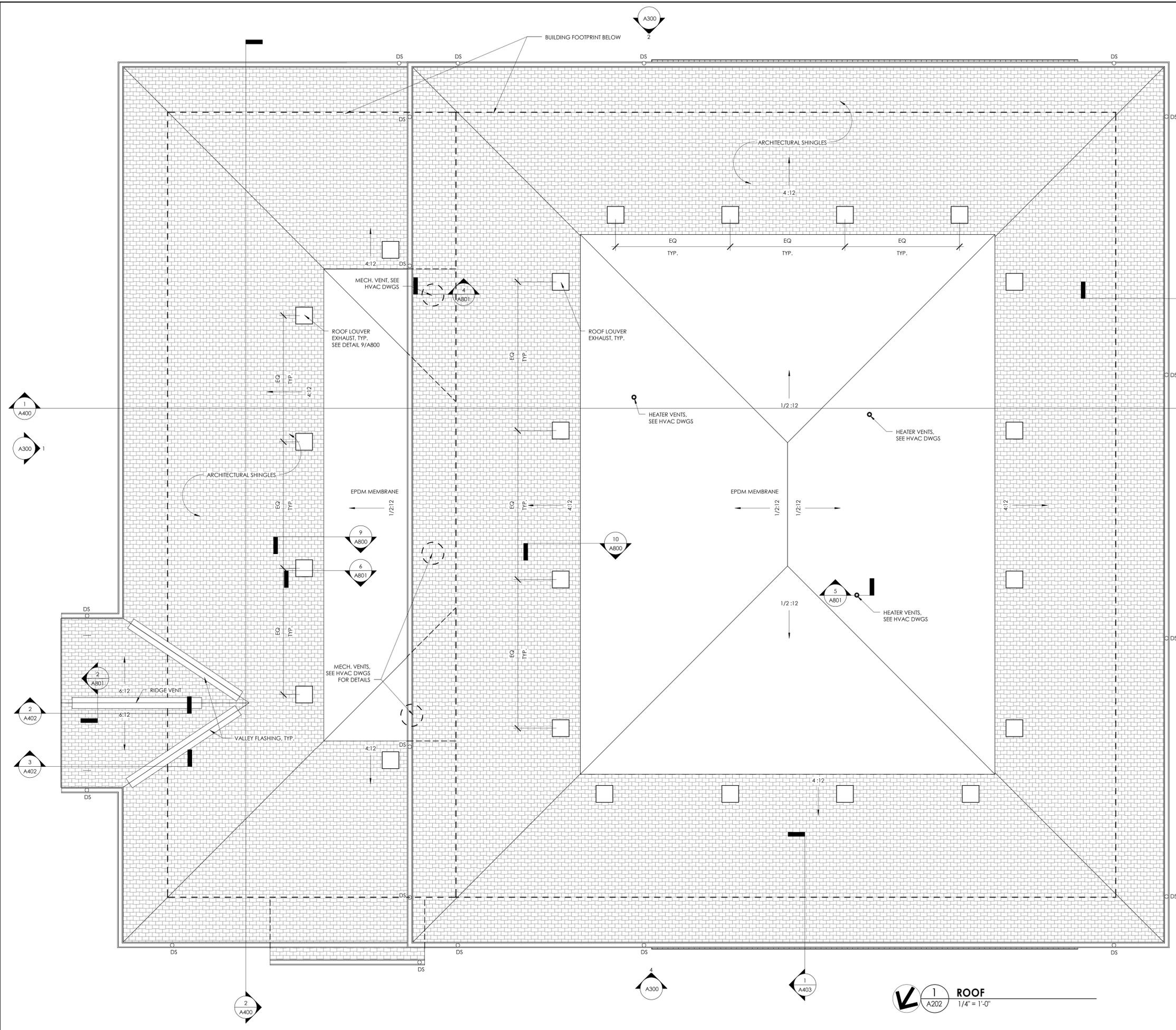
- (1000-1) DOOR TARGET, SEE SCHEDULE
- (W1) WINDOW TARGET, SEE SCHEDULE
- (A) COLUMN LINE IDENTIFICATION
- ROOM NAME ROOM TAG
- CPT WOOD DENOTES CHANGE IN FLOOR MATERIAL
- (WH) WATER HEATER/ AIR HANDLER, SEE MECHANICAL DRAWINGS
- (1/A3.1) SECTION MARK
- (A701) INTERIOR ELEVATION MARK
- (A301) EXTERIOR ELEVATION MARK
- (1/A4.1) DETAIL FOR REFERENCE MARK
- - - BLOCKING IN WALLS FOR FUTURE GRAB BAR INSTALLATION
- DENOTES FINISH FLOOR GRADE ELEVATION
- WALL TYPE SEE A/400
- (NFEC) NEW FIRE EXTINGUISHER CABINET
- (NFEM) NEW FIRE EXTINGUISHER WALL MOUNTED
- MCJ MASONRY CONTROL JOINT

FLOOR PLAN
 1/A200
 1/4" = 1'-0"

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ROOF PLAN GENERAL NOTES

1. ALL DRAWINGS ARE GRAPHIC REPRESENTATIONS OF APPROXIMATE LOCATIONS OF MATERIALS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL LOCATIONS PRIOR TO THE COMMENCEMENT OF WORK.
2. REFER TO THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND PLUMBING DRAWINGS FOR LOCATIONS OF ALL ROOF PENETRATIONS. PROVIDE FRAMING AS REQUIRED.
3. WORK AREAS SHALL BE MAINTAINED AND ALL WORK AREAS SHALL BE BROOM CLEAN AT THE END OF EACH DAY.
4. ALL WOOD BLOCKING USED SHALL BE PRESSURE TREATED.
5. THE ROOF ELEVATIONS SHOWN ON THE PLAN ARE SHOWN TO ESTABLISH RELATIVE HEIGHTS OF THE INDIVIDUAL ROOFS. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN WATER TIGHTNESS AND PROVIDE PROTECTION AT ANY/ALL OPENINGS IN THE ROOF LEFT AT THE END OF EACH DAY.
6. PROVIDE CRICKETS FOR WATER DIVERSION AT ALL CURBS, RAILS, ETC. WHICH RUN PERPENDICULAR TO THE SLOP OF THE INSULATION/SLOPED STRUCTURE.

ROOF COMPOSITION NOTES

1. **ROOF SYSTEM AT MAINTENANCE GARAGE:**
 - WOOD TRUSSES
 - VENTED NAIL BASE AT SHINGLES, R-30
 - VAPOR BARRIER, SYNTHETIC UNDERLAYMENT
 - ARCHITECTURAL SHINGLE
2. **ROOF SYSTEM AT OFFICE:**
 - WOOD TRUSSES
 - 5/8" PLYWOOD SHEATHING
 - VAPOR BARRIER, SYNTHETIC UNDERLAYMENT
 - ARCHITECTURAL SHINGLE
2. **ROOF SYSTEM AT PEAK:**
 - WOOD TRUSSES
 - EPDM MEMBRANE SYSTEM
 - RIGID INSULATION, R-30

NO.	DATE	BY	CHKD	DESCRIPTION

ROOF PLAN LEGEND

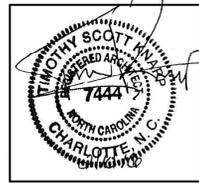
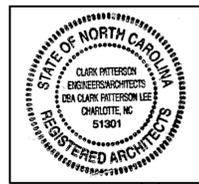
- DS 6" ALUMINUM DOWN SPOUT LOCATION, COLOR TO MATCH GUTTER
- DIRECTION OF ROOF PITCH: SLOPED STRUCTURE, RE: STRUCT. DWGS
- Y:X ROOF SLOPE
- ▭ RIDGE VENT
- ▭ VALLEY FLASHING
- VENTS, SEE PLUMBING DWGS



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OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
 BID SET

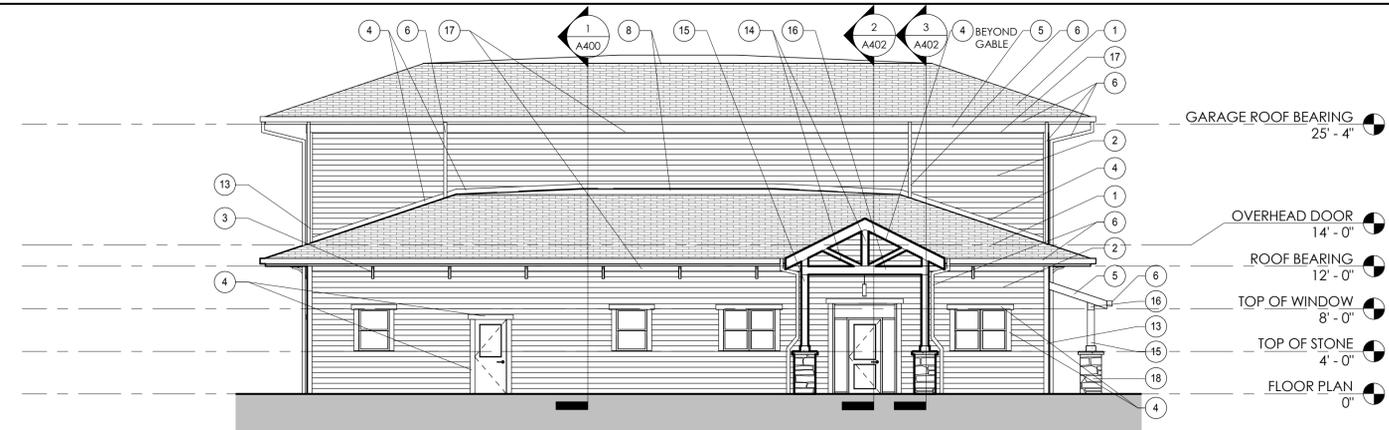
DATE	DRAWN	CHECKED
02/10/16	DMS	BP
SCALE	As indicated	
SHEET TITLE	ROOF PLAN	

PROJECT NUMBER	13283.01
DRAWING NUMBER	A202

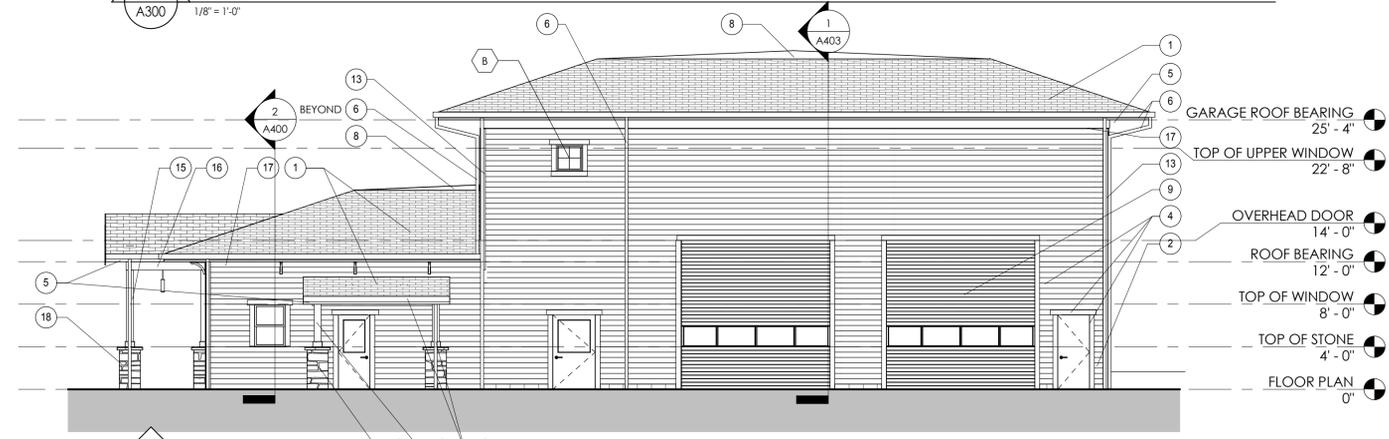
1 ROOF
 A202 1/4" = 1'-0"

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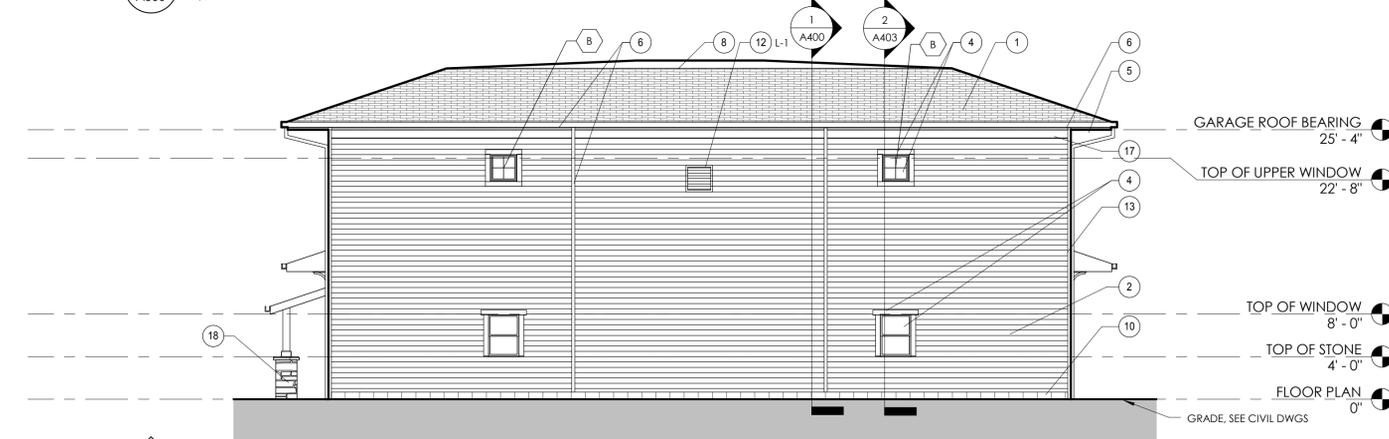
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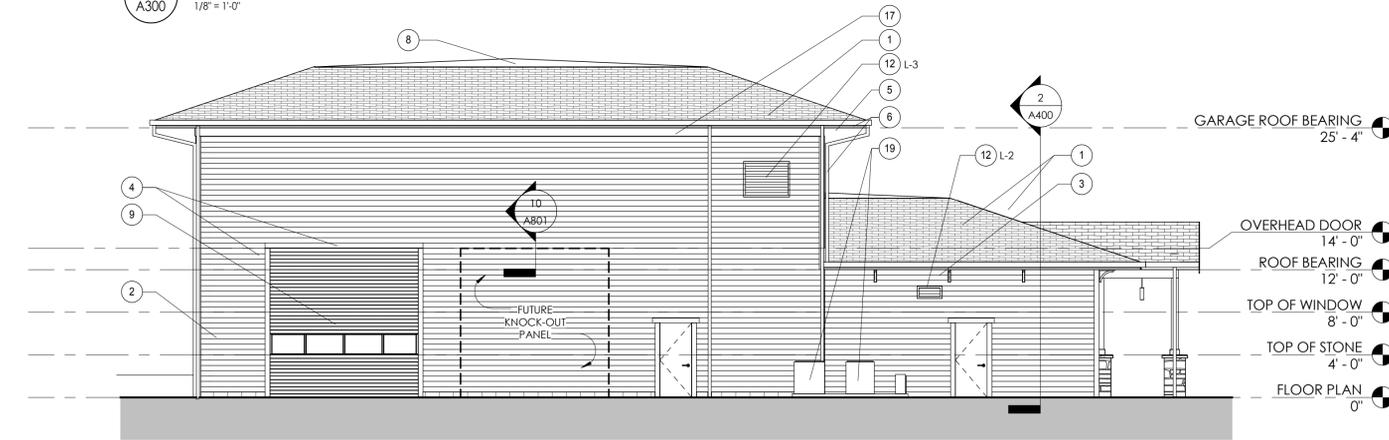
1 WEST ELEVATION
A300 1/8" = 1'-0"



2 SOUTH ELEVATION
A300 1/8" = 1'-0"



3 EAST ELEVATION
A300 1/8" = 1'-0"



4 NORTH ELEVATION
A300 1/8" = 1'-0"

GENERAL ELEVATION NOTES

- ALL DRAWINGS ARE GRAPHIC REPRESENTATIONS OF APPROXIMATE LOCATIONS OF EXISTING AND NEW MATERIALS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. REFER TO A900'S DRAWINGS FOR DOOR, FRAME, AND WINDOW TYPES.
- PROVIDE ALL LOUVER OPENINGS AS REQUIRED. COORDINATE WITH MECHANICAL CONTRACTOR FOR FINAL SIZE, LOCATION AND REQUIRED NET FREE AREA.
- SEE CIVIL DRAWINGS FOR ARCHITECTURAL ELEVATION 0'-0" EQUIVALENT
- CONTROL JOINT = CJ
- SOFT JOINT = SJ
- EXPANSION JOINT = EJ

ELEVATION KEYNOTES

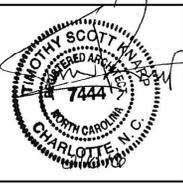
- ARCHITECTURAL SHINGLES - COLOR: WEATHERED WOOD
- CEMENT BOARD LAP SIDING - COLOR: MOUNTAIN SAGE - STYLE: 8 1/4" PLANK STYLE
- DECORATIVE BRACKET - PAINT TO MATCH TRIM - SEE 4/5 A800
- 8" TRIM BOARD - COLOR: KHAKI BROWN; TYP. AT ALL GABLE ENDS, WINDOWS, DOORS, WATERABLES (ABOVE), AND SOFFITS (BELOW)
- CEMENT BOARD FASCIA - PAINT TO MATCH GUTTER. SEE WALL SECTIONS FOR SIZE
- ALUMINUM CONTINUOUS GUTTER WITH DOWNSPOUT - COLOR: NATURAL CLAY
- EPDM MEMBRANE ROOF SYSTEM
- OVERHEAD GARAGE DOOR - INSULATED R-7.7
- EXPOSED CMU BLOCK
- ARCHITECTURAL LOUVER WITH 2" TRIM BOARD ALL SIDES. SEE HVAC DWGS
- 8" CORNER TRIM BOARD - COLOR: KHAKI BROWN
- HEAVY TIMBER TRUSS - STAIN TBD - SEE STRUCTURAL DWGS
- 8" X 8" HEAVY TIMBER COLUMN - STAIN TBD - SEE STRUCTURAL DWGS
- 8" X 10" HEAVY TIMBER BEAM - STAIN TBD - SEE STRUCTURAL DWGS
- 10" TRIM BOARD - COLOR: KHAKI BROWN; TYP. AT ROOF BEARING
- STONE VENEER - COLOR: SUEDE - STYLE: DRYSTACK LEDGESTONE
- HPY ON CONCRETE PAD. SEE STRUCTURAL DWGS



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CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
02/10/16	DMS	BP
SCALE	As indicated	
SHEET TITLE		
BUILDING ELEVATIONS - BASE BID		

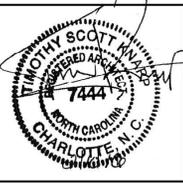
PROJECT NUMBER	13283.01
DRAWING NUMBER	A300



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 SCO # 14-11007-01 Package A
 CLAY COUNTY
 BID SET

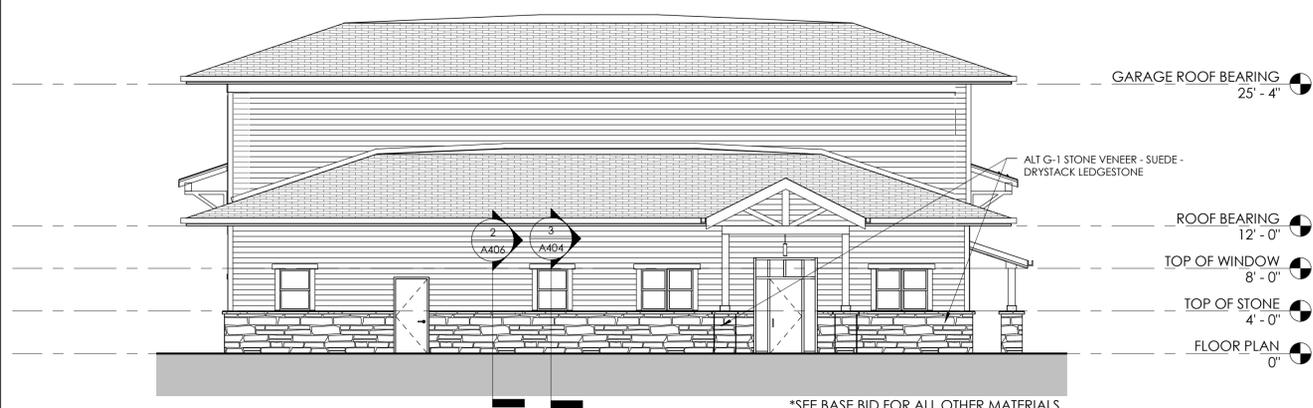
DATE	DRAWN	CHECKED
02/10/16	DMS	BP

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

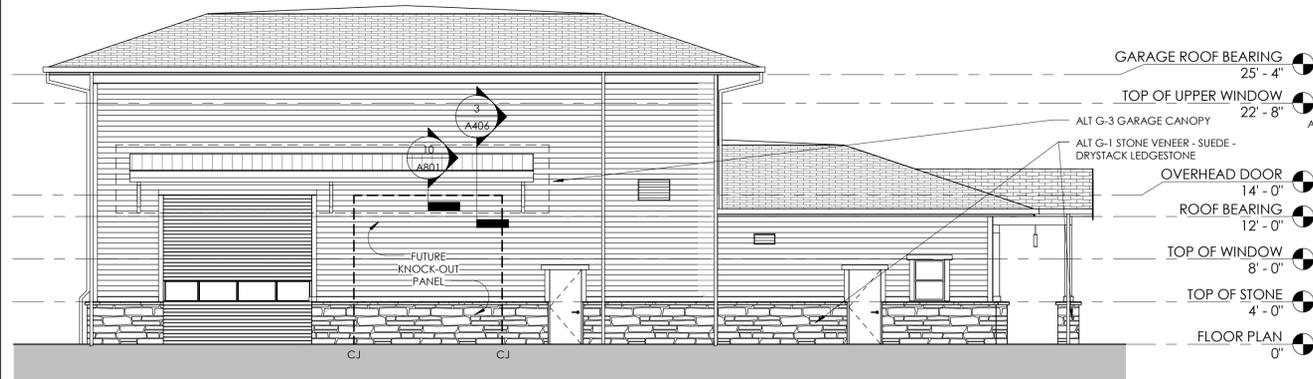
SHEET TITLE:
 BUILDING ELEVATION -
 ADD ALT G-1, G-2, G-3

PROJECT NUMBER
 13283.01

A300.1
 DRAWING NUMBER



1 WEST ELEVATION - ADD ALT G-2 STONE
 A300.1 1/8" = 1'-0"
 *SEE BASE BID FOR ALL OTHER MATERIALS.



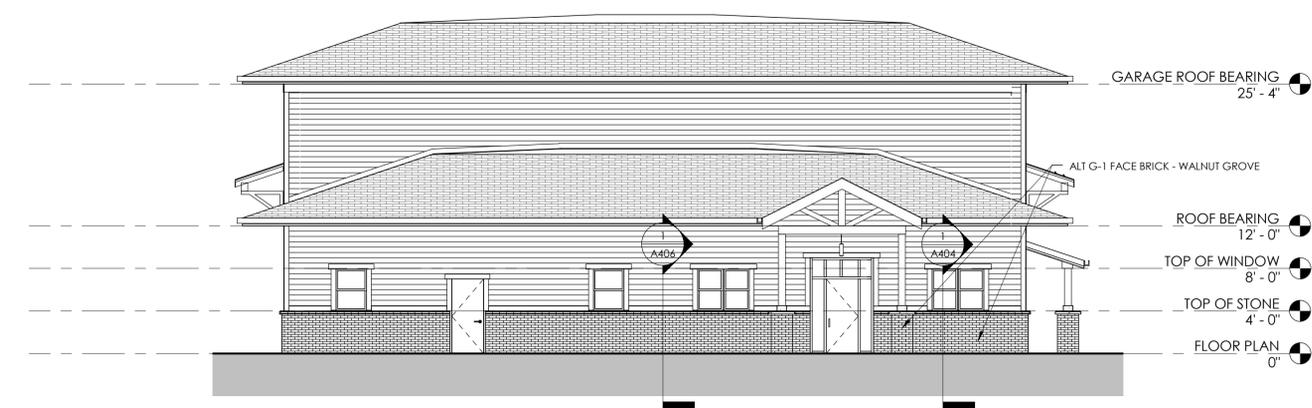
2 NORTH ELEVATION - ADD ALT G-2 STONE
 A300.1 1/8" = 1'-0"
 *SEE BASE BID FOR ALL OTHER MATERIALS.



3 EAST ELEVATION - ADD ALT G-2 STONE
 A300.1 1/8" = 1'-0"
 *SEE BASE BID FOR ALL OTHER MATERIALS.



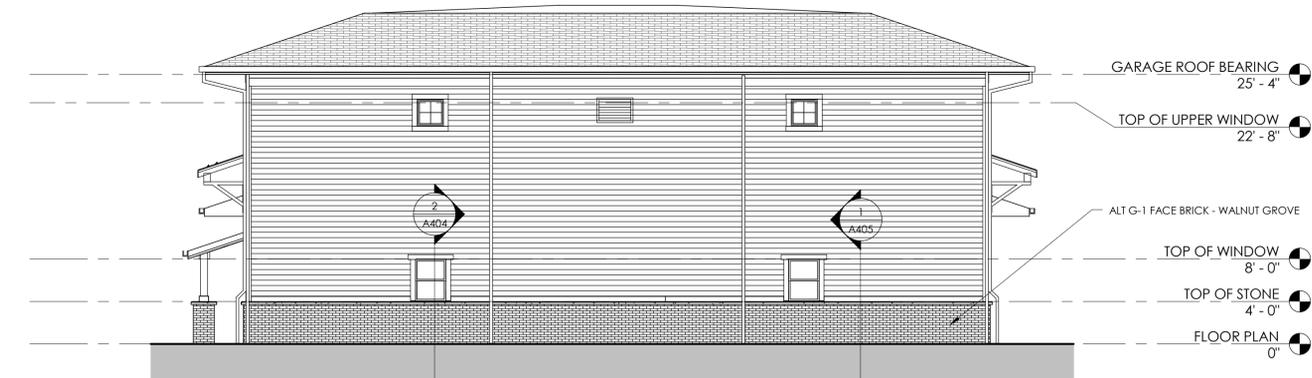
4 SOUTH ELEVATION - ADD ALT G-2 STONE
 A300.1 1/8" = 1'-0"
 *SEE BASE BID FOR ALL OTHER MATERIALS.



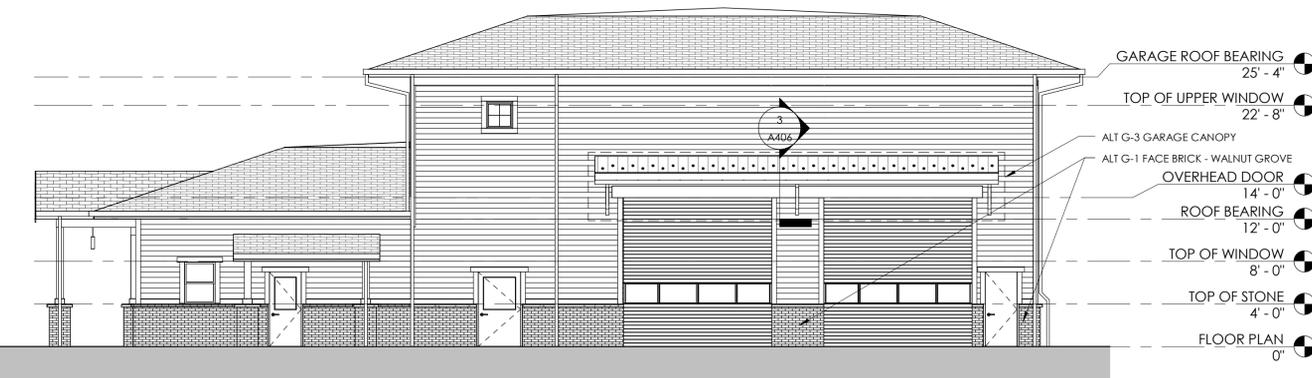
8 WEST ELEVATION - ADD ALT G-1 BRICK
 A300.1 1/8" = 1'-0"
 *SEE BASE BID FOR ALL OTHER MATERIALS.



7 NORTH ELEVATION - ADD ALT G-1 BRICK
 A300.1 1/8" = 1'-0"
 *SEE BASE BID FOR ALL OTHER MATERIALS.



6 EAST ELEVATION - ADD ALT G-1 BRICK
 A300.1 1/8" = 1'-0"
 *SEE BASE BID FOR ALL OTHER MATERIALS.

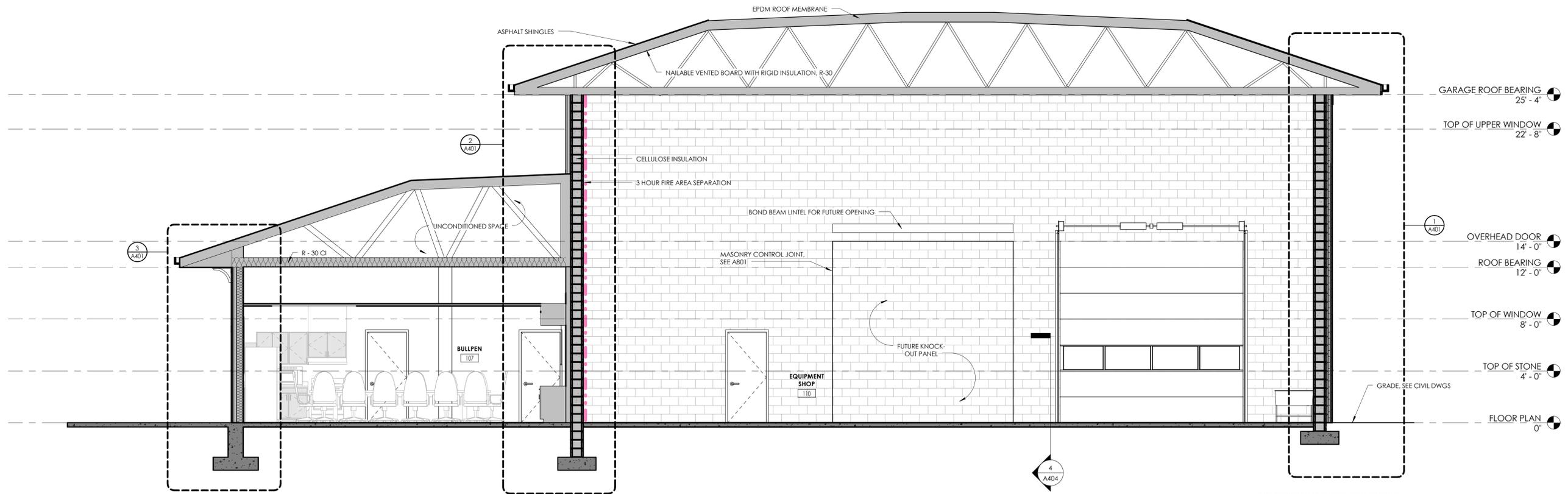


5 SOUTH ELEVATION - ADD ALT G-1 BRICK
 A300.1 1/8" = 1'-0"
 *SEE BASE BID FOR ALL OTHER MATERIALS.

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1 BUILDING SECTION
A400 1/4" = 1'-0"

GARAGE ROOF BEARING 25' - 4"

TOP OF UPPER WINDOW 22' - 8"

OVERHEAD DOOR 14' - 0"

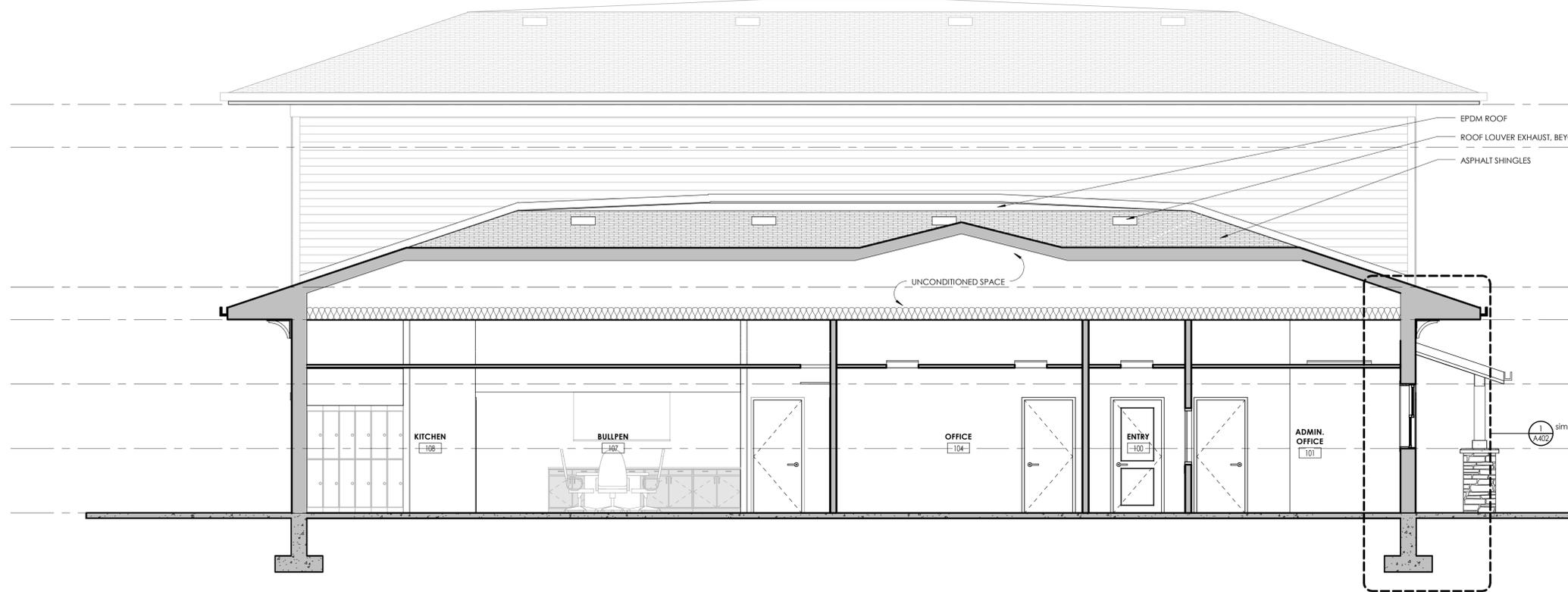
ROOF BEARING 12' - 0"

TOP OF WINDOW 8' - 0"

TOP OF STONE 4' - 0"

FLOOR PLAN 0"

*FOR BUILDING MATERIALS SEE WALL SECTIONS



2 BUILDING SECTION
A400 1/4" = 1'-0"

GARAGE ROOF BEARING 25' - 4"

TOP OF UPPER WINDOW 22' - 8"

OVERHEAD DOOR 14' - 0"

ROOF BEARING 12' - 0"

TOP OF WINDOW 8' - 0"

TOP OF STONE 4' - 0"

FLOOR PLAN 0"

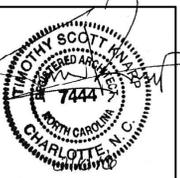
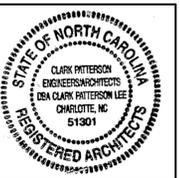
*FOR BUILDING MATERIALS SEE WALL SECTIONS



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DATE	DRAWN	CHECKED
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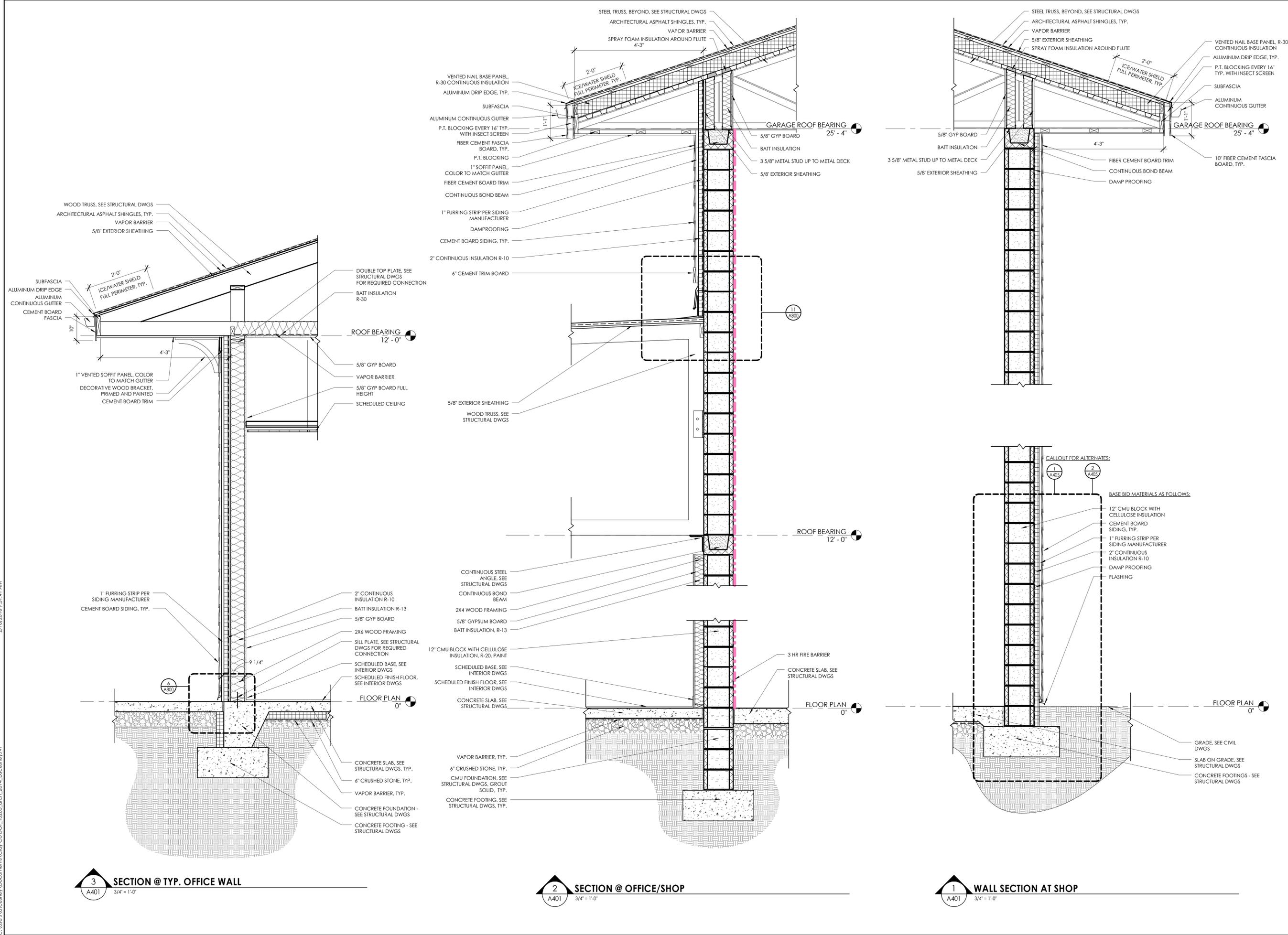
SCALE: 1/4" = 1'-0"

SHEET TITLE:
BUILDING SECTIONS

PROJECT NUMBER 13283.01
DRAWING NUMBER A400

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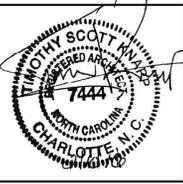
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DATE	DRAWN	CHECKED
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SHEET TITLE		
WALL SECTIONS		

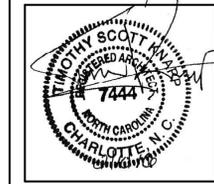
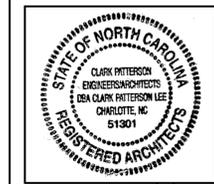
PROJECT NUMBER
13283.01
DRAWING NUMBER
A401



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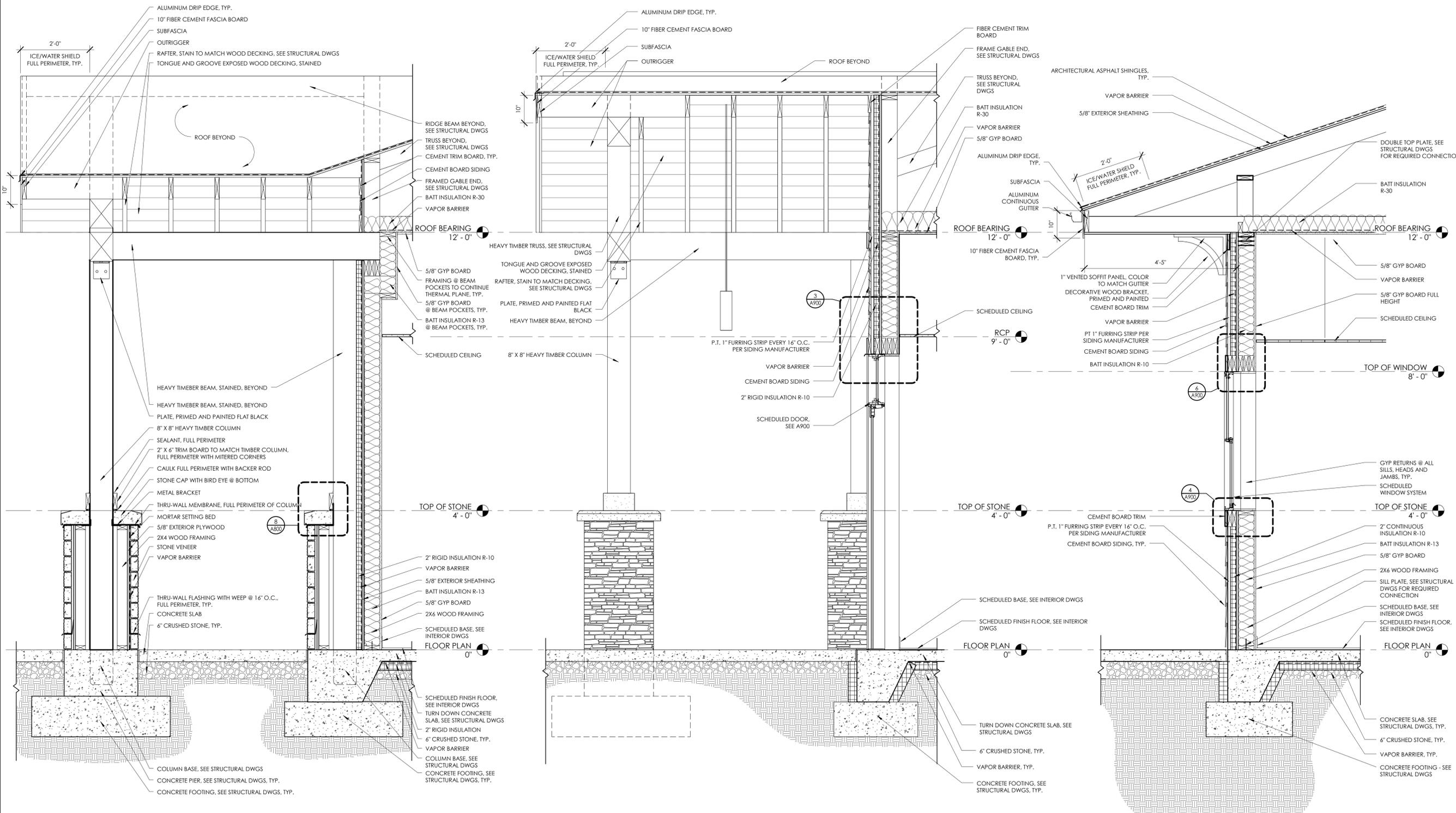
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MAINTENANCE SHOP
 SCO # 14-11007-01 Package A
 CLAY COUNTY
 BID SET

DATE	DRAWN	CHECKED
02/10/16	DMS	BP

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

SHEET TITLE: WALL SECTIONS

PROJECT NUMBER	13283.01
DRAWING NUMBER	A402



3 SECTION @ TYP. COLUMN
 A402 3/4" = 1'-0"

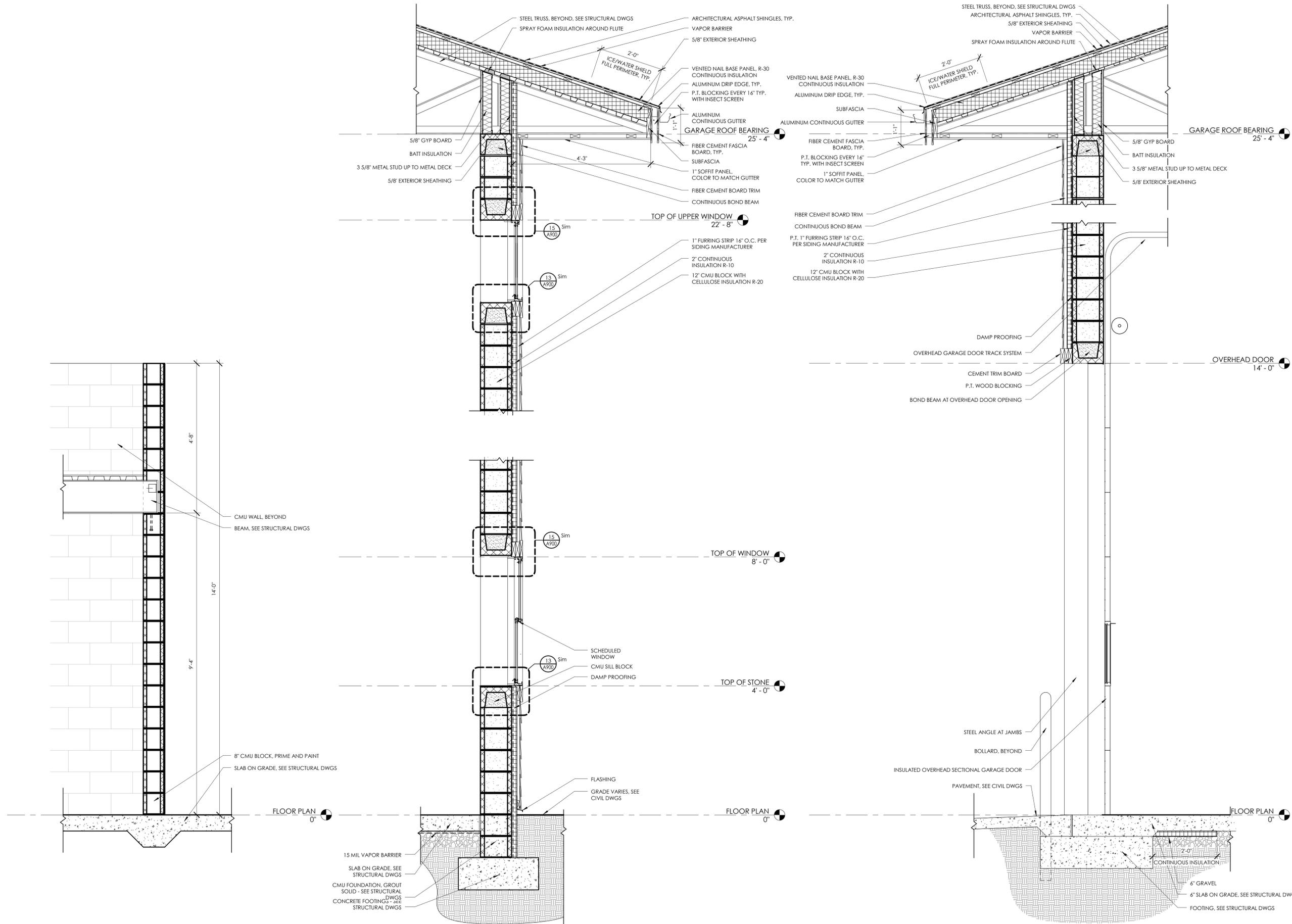
2 SECTION @ ENTRANCE CANOPY
 A402 3/4" = 1'-0"

1 BASE BID - WALL SECTION WITH CEMENT BOARD SIDING
 A402 3/4" = 1'-0"

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3 SECTION @ PARTS
A403 3/4" = 1'-0"

2 SECTION @ CMU WINDOW
A403 3/4" = 1'-0"

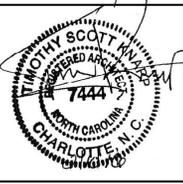
1 WALL SECTION @ GARAGE DOOR
A403 3/4" = 1'-0"



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DATE	DRAWN	CHECKED
02/10/16	DMS	BP
SCALE 3/4" = 1'-0"		
SHEET TITLE		
WALL SECTIONS		

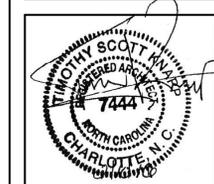
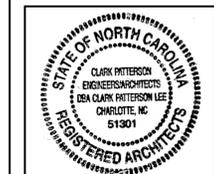
PROJECT NUMBER	13283.01
DRAWING NUMBER	A403



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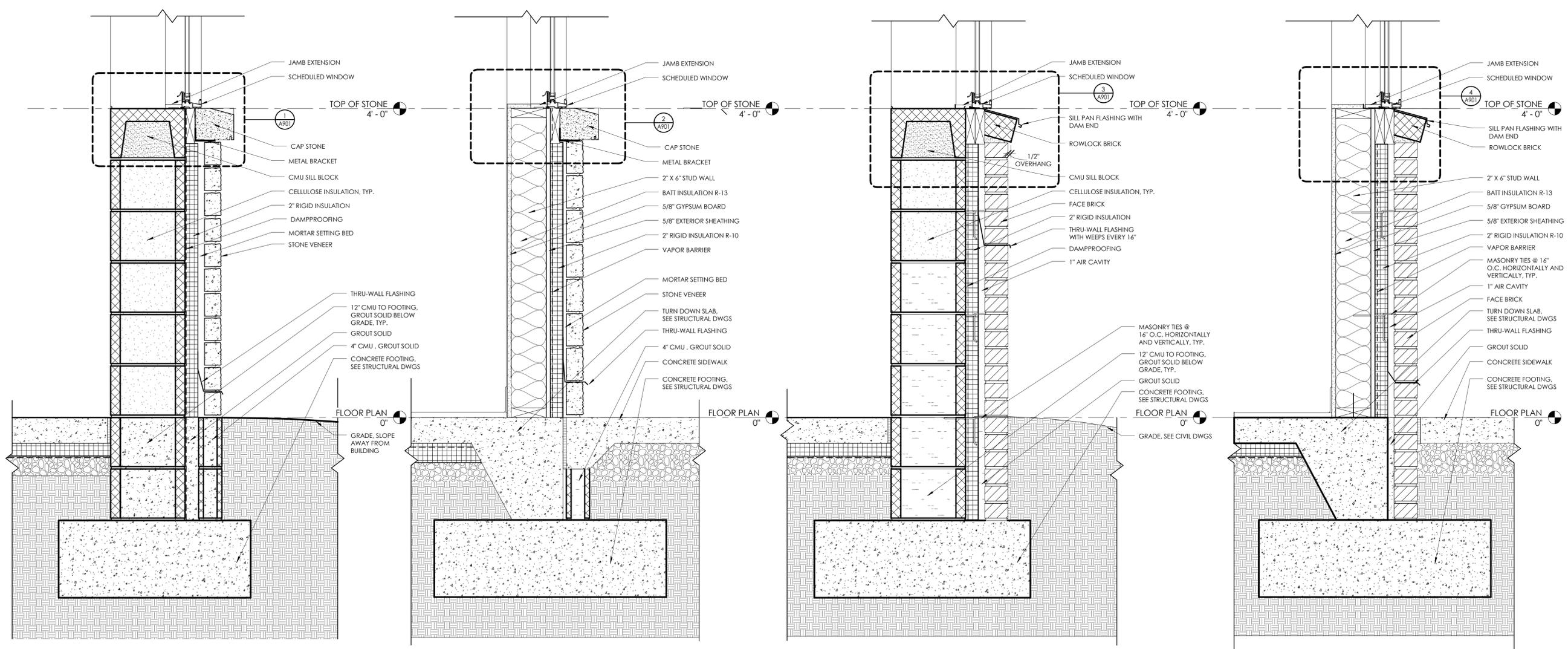
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MAINTENANCE SHOP
 SCO # 14-11007-01 Package A
 CLAY COUNTY
 BID SET

DATE	DRAWN	CHECKED
02/10/16	DMS	BP

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

SHEET TITLE
 WALL SECTIONS -
 ALTERNATES G-1, G-2

PROJECT NUMBER 13283.01
DRAWING NUMBER A404



THE ADD - ALT - G2 SECTION SHOWS LOCATION OF STONE VENEER, SEE BASE BID FOR ALL OTHER MATERIALS.

THE ADD - ALT - G2 SECTION SHOWS LOCATION OF STONE VENEER, SEE BASE BID FOR ALL OTHER MATERIALS.

THE ADD - ALT - G1 SECTION SHOWS LOCATION OF BRICK VENEER, SEE BASE BID FOR ALL OTHER MATERIALS.

THE ADD - ALT - G1 SECTION SHOWS LOCATION OF BRICK VENEER, SEE BASE BID FOR ALL OTHER MATERIALS.

SECTION @ GARAGE ALT G-2
 1 1/2" = 1'-0"

SECTION @ OFFICE WINDOW ALT G-2
 1 1/2" = 1'-0"

SECTION @ GARAGE ALT G-1
 1 1/2" = 1'-0"

SECTION @ OFFICE WINDOW, ALT G-1
 1 1/2" = 1'-0"

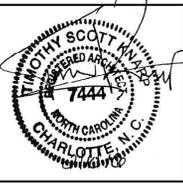
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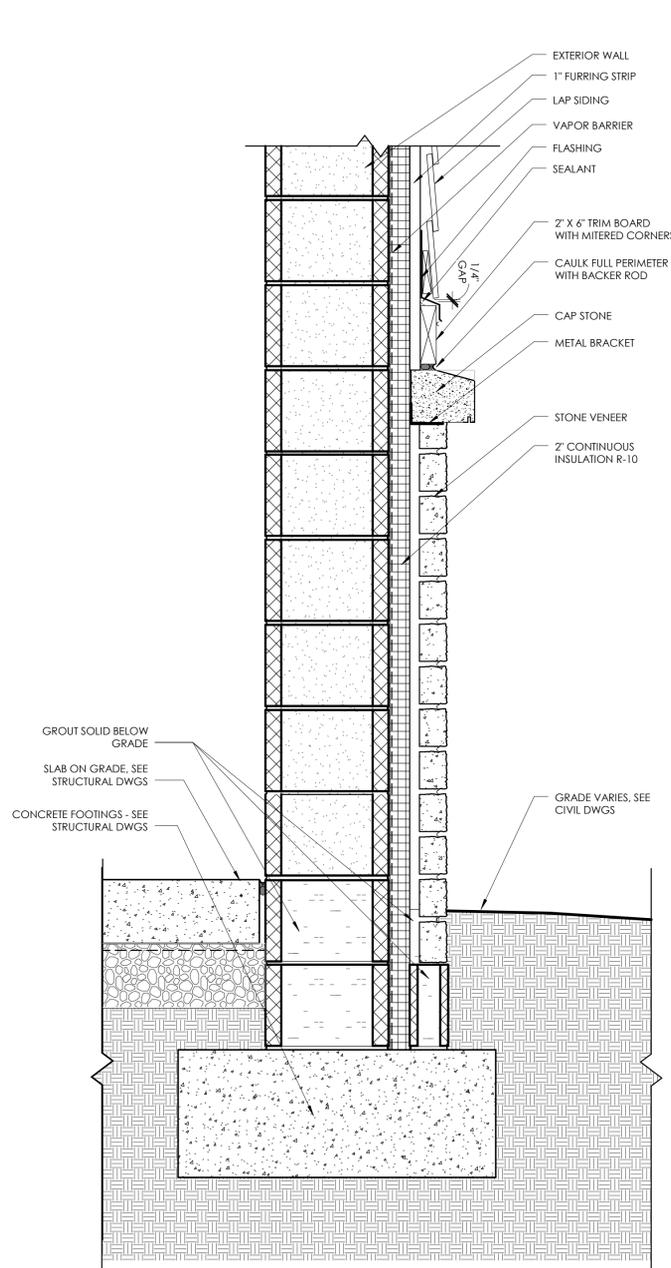
DATE	DRAWN	CHECKED
02/10/16	DMS	BP

SCALE 1 1/2" = 1'-0"
 SHEET TITLE
 WALL SECTIONS -
 ALTERNATES G-1, G-2

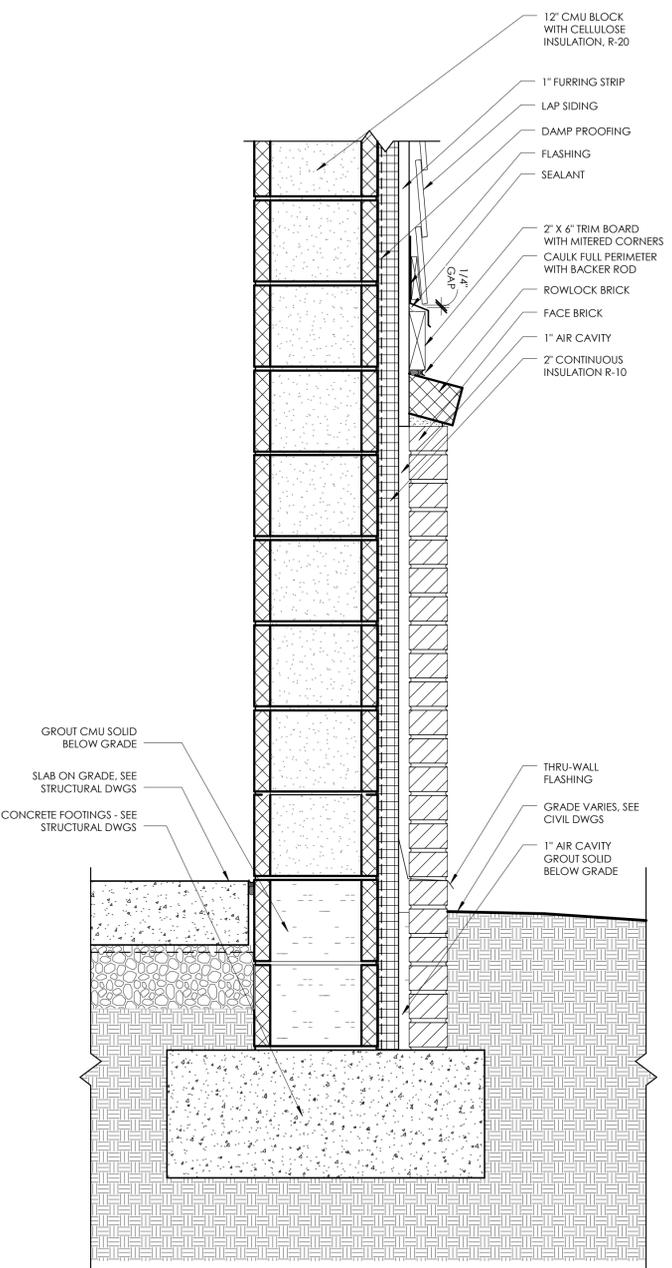
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DRAWING NUMBER	A405

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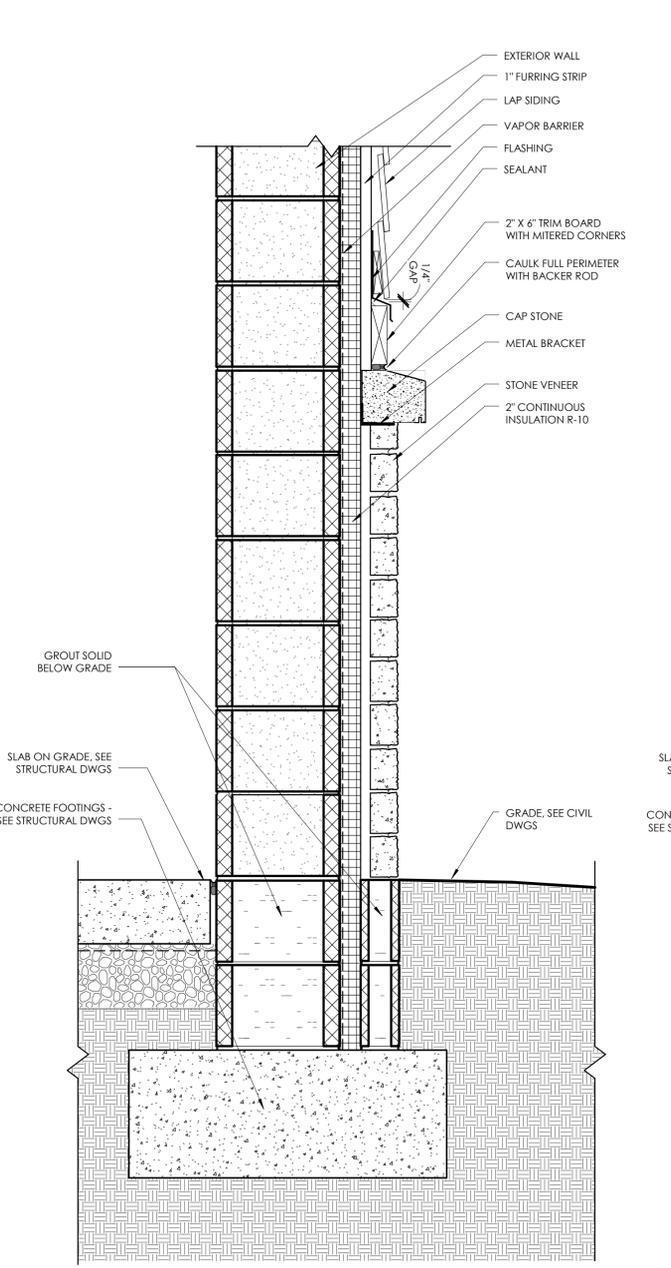
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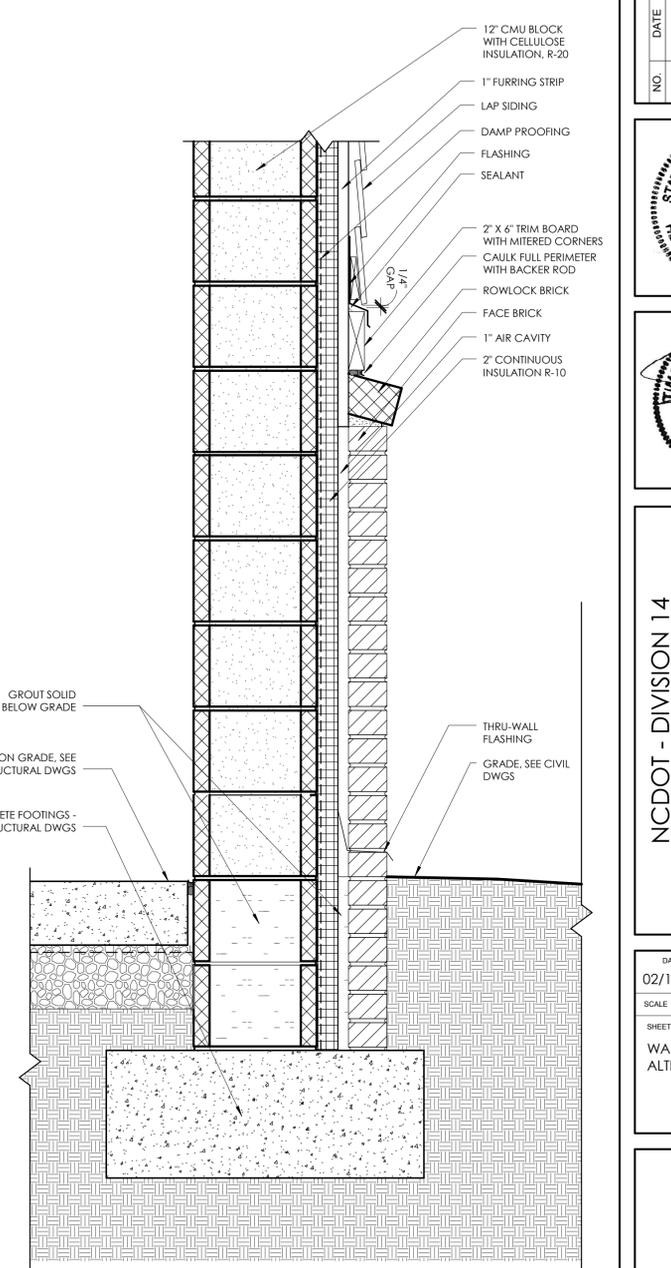
4 TYPICAL DETAIL @ TOP OF WATER TABLE @ GRADE, ALT G-2
 A405 1 1/2" = 1'-0"



3 TYPICAL DETAIL @ TOP OF WATER TABLE @ GRADE, ALT G-1
 A405 1 1/2" = 1'-0"



2 TYPICAL DETAIL @ TOP OF WATER TABLE @ HIGH GRADE, ALT G-2
 A405 1 1/2" = 1'-0"



1 TYPICAL DETAIL @ TOP OF WATER TABLE @ HIGH GRADE, ALT G-1
 A405 1 1/2" = 1'-0"



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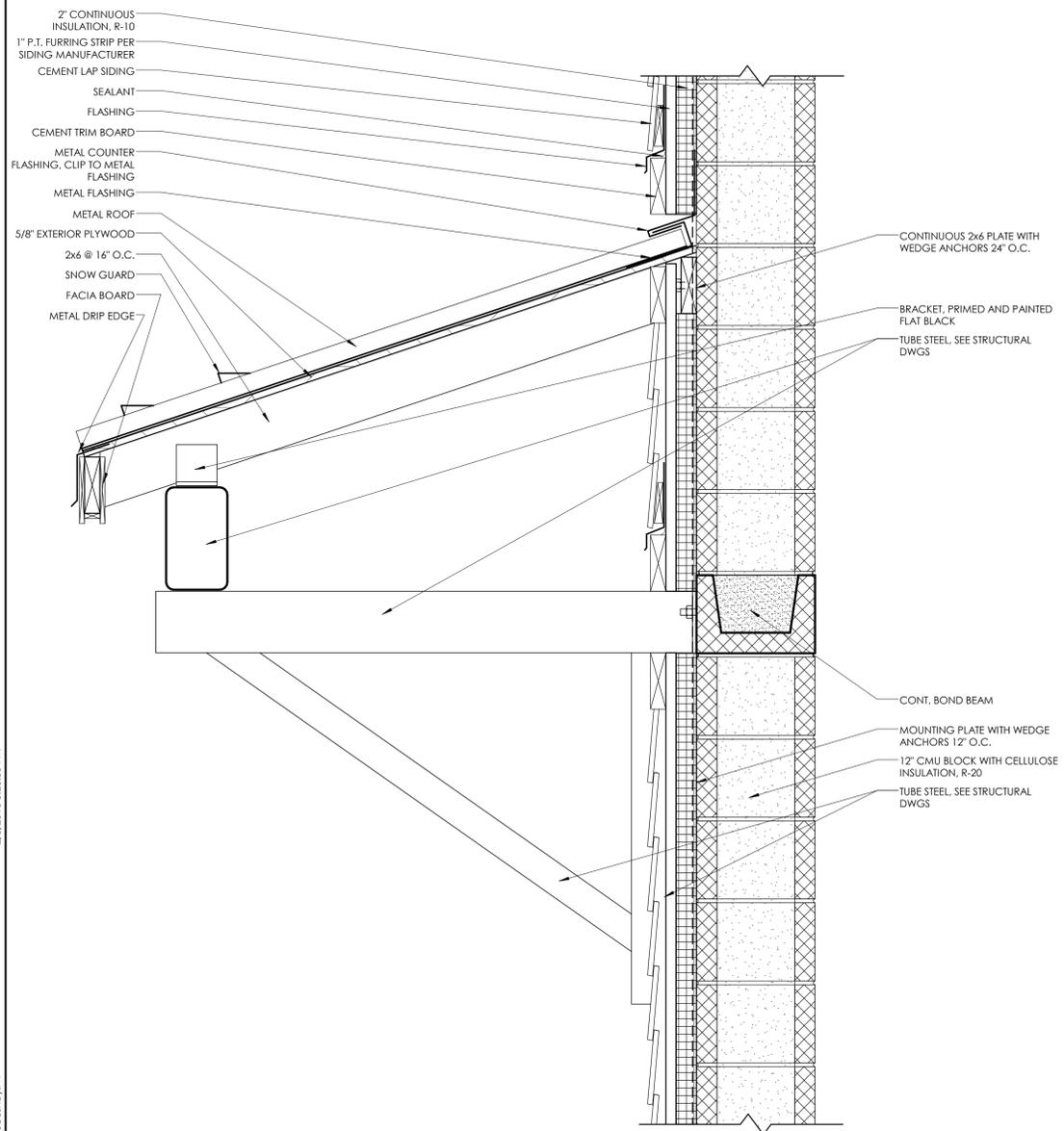
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02/10/16	DMS	BP

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

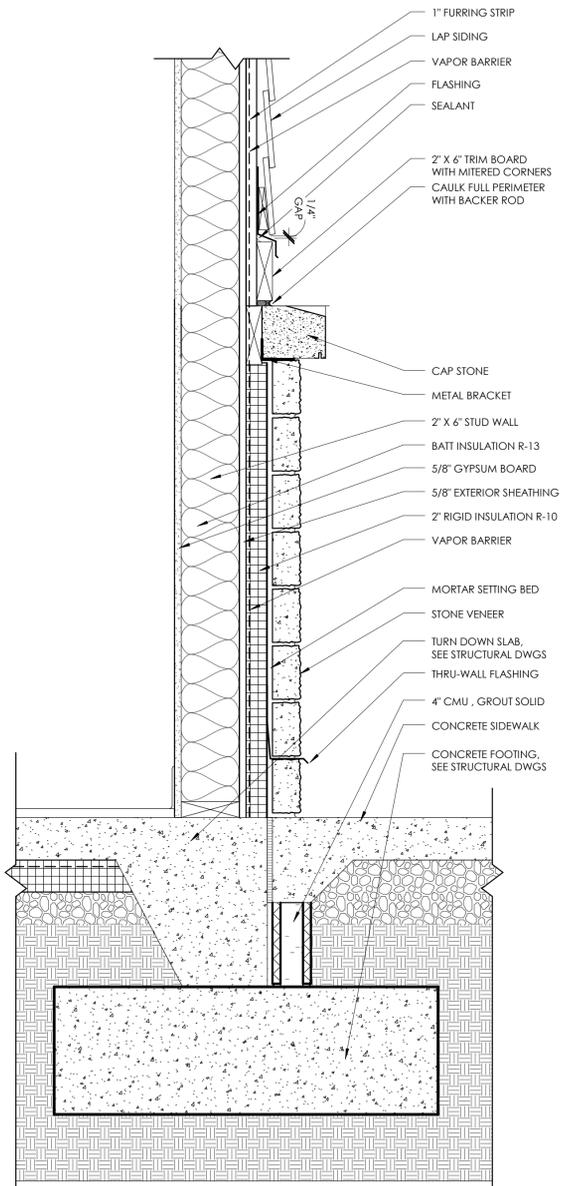
SHEET TITLE
 WALL SECTIONS -
 ALTERNATES G-1, G-2

PROJECT NUMBER
 13283.01

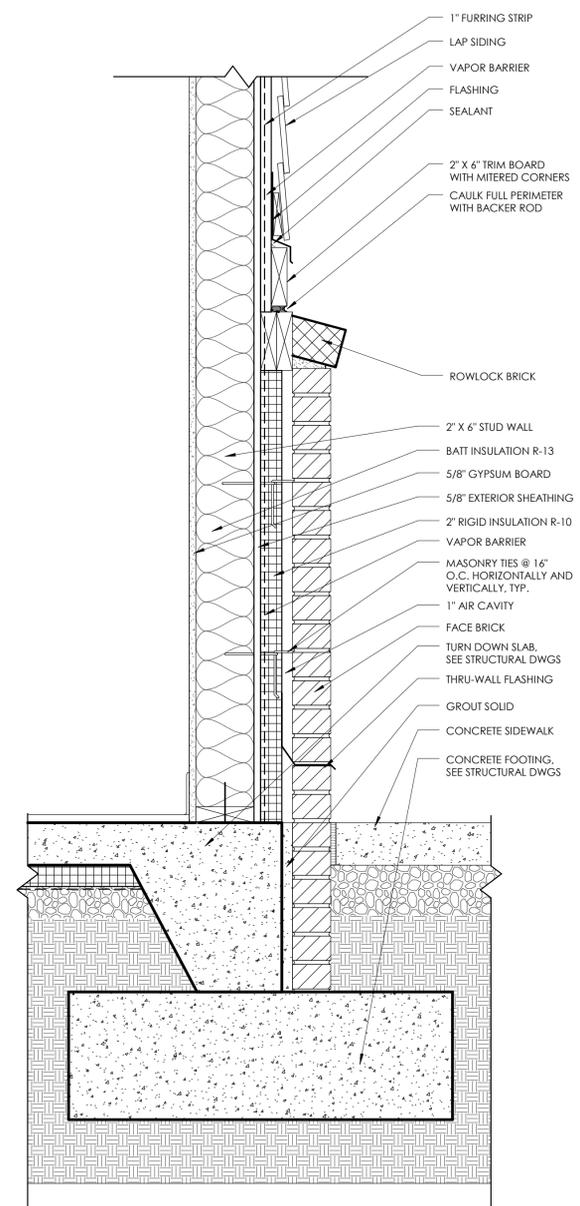
A406
 DRAWING NUMBER



3 SECTION @ GARAGE CANOPY
 1 1/2" = 1'-0"



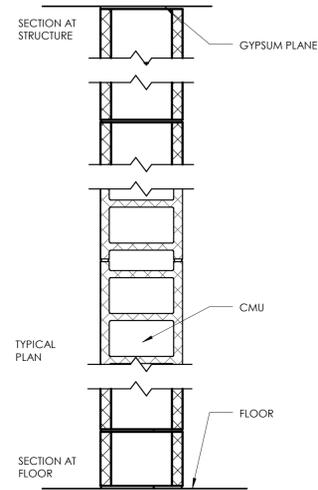
2 SECTION @ OFFICE WALL ALT G-2, TYP.
 1 1/2" = 1'-0"



1 SECTION @ OFFICE WALL ALT G-1, TYP.
 1 1/2" = 1'-0"

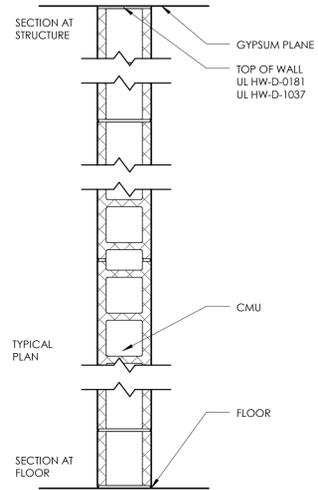
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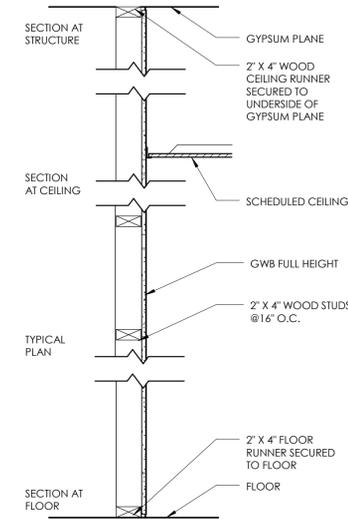
TYPE	FIRE TEST LAB DESIGN NUMBER	FIRE RATING	STC	NOTES
M12r	UL 914	3 HR	S5	

5
A500
WALL TYPE M12r
1" = 1'-0"



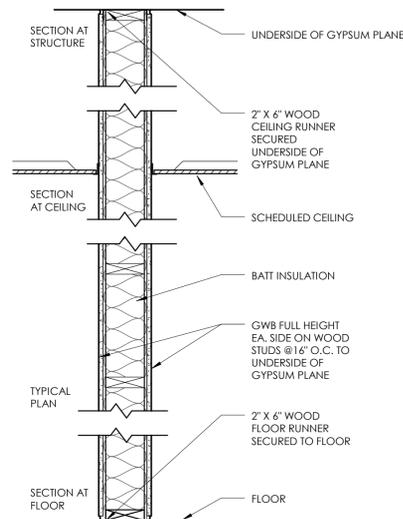
TYPE	FIRE TEST LAB DESIGN NUMBER	FIRE RATING	STC	NOTES
M8	NA	NR	S5	

4
A500
WALL TYPE M8
1" = 1'-0"



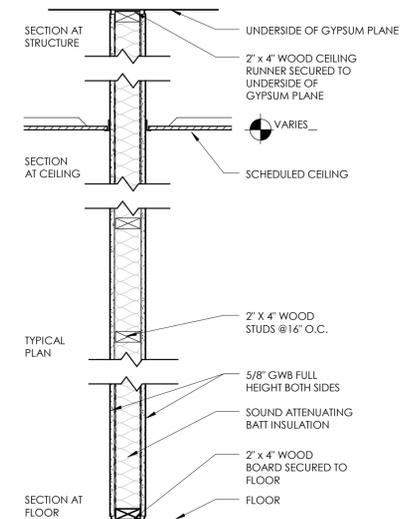
TYPE	FIRE TEST LAB DESIGN NUMBER	FIRE RATING	STC	NOTES
W4si	NA	NR	NA	

3
A500
WALL TYPE W4si
1" = 1'-0"



TYPE	FIRE TEST LAB DESIGN NUMBER	FIRE RATING	STC	NOTES
W6i	NA	NR	47	

2
A500
WALL TYPE W6i
1" = 1'-0"



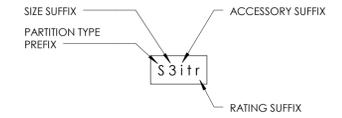
TYPE	FIRE TEST LAB DESIGN NUMBER	FIRE RATING	STC	NOTES
W4i	NA	NR	35	

1
A500
WALL TYPE W4i
1" = 1'-0"

PARTITION GENERAL NOTES:

1. ALL WALL TYPES MAY NOT BE USED ON THIS PROJECT.
2. FULL HEIGHT PARTITIONS EXTEND TO UNDERSIDE OF GYPSUM PLANE.
3. ALL PENETRATIONS IN FIRE RATED PARTITIONS TO BE FIRE STOPPED AND SEALED. REFER TO UL DETAILS.
4. PROVIDE ABUSE RESISTANT 5/8" TYPE 'X' GYPSUM WALL BOARD AT ALL LOCATIONS.
5. REFER TO STRUCTURAL DRAWINGS FOR MASONRY WALL REINFORCEMENT.
6. ALL PARTITIONS SHALL BE SEALED TO PREVENT PASSAGE FOR SMOKE.
7. ALL MASONRY EXPOSED EDGES AND CORNERS PROVIDE BULL NOSE EDGES, AT ALL OPENINGS SHALL BE SILL/JAMB BLOCKS.
8. CONTRACTOR TO REFER TO CODE/LIFE SAFETY DRAWINGS FOR RATED PARTITIONS AND UL ASSEMBLIES.
9. REFER TO INTERIOR DRAWINGS FOR LOCATIONS OF WALL TILE. PROVIDE ADDITIONAL LAYER OF BACKING BOARD.

PARTITION TYPE TAG LEGEND:



PARTITION TYPE LEGEND:

- W** WOOD STUD
- M** CONCRETE MASONRY UNIT (CMU)

PARTITION TYPE SUFFIX:

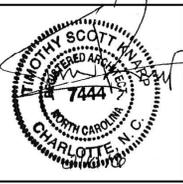
- SIZE SUFFIX:**
- 4 2' X 4' WOOD STUD
 - 6 2' X 6' WOOD STUD
 - 8 8' CONCRETE MASONRY UNIT (CMU) OR 8' METAL STUD
- ACCESSORIES SUFFIX:**
- i SOUND ATTENUATION BATT INSULATION
 - s 4" FURRING - GWB ONE SIDE ONLY
 - r (3) HOUR RATED PARTITION UP TO UNDERSIDE OF DECK ABOVE.



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				REVISION



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SCO # 14-11007-01 Package A
CLAY COUNTY
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SCALE 1" = 1'-0"

SHEET TITLE
WALL TYPES

PROJECT NUMBER 13283.01
DRAWING NUMBER A500

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GENERAL CEILING NOTES

1. ALL DRAWINGS ARE GRAPHIC REPRESENTATION OF APPROXIMATE LOCATIONS OF NEW MATERIALS FOR CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
2. REFER TO A200 SERIES FOR FLOOR PLAN.
3. FOR ANY DISCREPANCY BETWEEN THE REFLECTED CEILING PLAN AND THE FLOOR PLAN, THE FLOOR PLAN SHALL TAKE PRECEDENCE. ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT.
4. THE CONTRACTOR SHALL COORDINATE CEILING INSTALLATIONS WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.
5. REFER TO "H" SERIES DRAWINGS FOR DIFFUSERS AND GRILLE LOCATIONS.
6. REFER TO "E" SERIES DRAWINGS FOR LIGHTING TYPES AND CONTROLS.
7. WORK AREAS SHALL BE MAINTAINED AND ALL WORK AREAS SHALL BE LEFT BROOMED CLEAN AT THE END OF EACH DAY.
8. CENTER CEILING GRID (EACH WAY) IN ROOMS SCHEDULED TO RECEIVE ACOUSTICAL CEILING SYSTEMS UNLESS OTHERWISE NOTED.
9. CONTRACTOR TO VERIFY WITH ARCHITECT THE INSTALLATION OF ANY CEILING TILES LESS THAN 4" IN WIDTH.
10. PROVIDE MOISTURE RESISTANT GYP. BD. AT ALL TOILET ROOM, JANITOR'S CLOSET AND OTHER WET LOCATION CEILING ASSEMBLIES.
11. ALL GYP. BD. CEILINGS AND SOFFITS SHALL BE PRIMED AND PAINTED SCHEDULED COLOR ON ALL FACES AND UNDERSIDE SURFACE.
12. CONTRACTOR TO VERIFY SOFFIT SIZE WITH MILLWORK SHOP DRAWINGS. PROVIDE 2" OVERHANG ON EXPOSED EDGES UNLESS NOTED OTHERWISE. ALL CEILINGS THIS LEVEL @ 10' - 0" A.F.F. UNLESS NOTED OTHERWISE.
13. ALL FIXTURES AND DEVICES TO BE CENTERED IN EACH TILE OF SUSPENDED ACT CEILING SYSTEM.

CEILING SYMBOL LEGEND

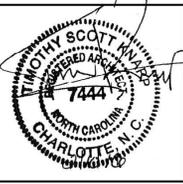
- 2'X2' LIGHT
- 2'X4' LIGHTS
- 1'X4' LINEAR LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- PENDANT LIGHT FIXTURES
- WALL SCONCE
- SUPPLY AIR DIFFUSERS
- RETURN AIR DIFFUSERS
- EXHUAUST DIFFUSERS
- GYPSUM WALL BOARD CEILING
- ACOUSTICAL TILE CEILING
- ACT-1 CEILING TYPE AND CEILING HEIGHT ABOVE FINISHED FLOOR



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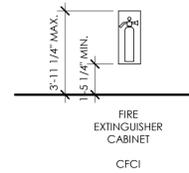
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 SCO # 14-11007-01 Package A
 CLAY COUNTY
 DESIGN DEVELOPMENT

DATE	DRAWN	CHECKED
02/10/16	DMS	BP
SCALE	As indicated	
SHEET TITLE	REFLECTED CEILING PLAN	

PROJECT NUMBER	13283.01
DRAWING NUMBER	A600

1 REFLECTIVE CEILING PLAN
 A600 1/4" = 1'-0"

MISC. ACCESSORIES/EQUIPMENT LEGEND WITH MOUNTING HEIGHTS

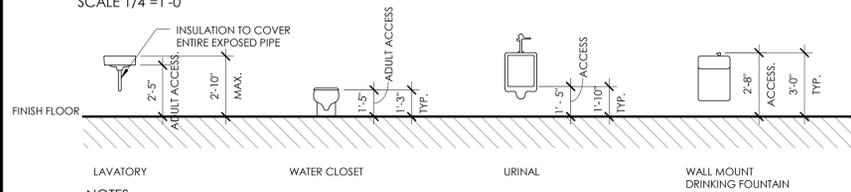


TOILET FIXTURES AND ACCESSORIES LEGENDS WITH MOUNTING HEIGHTS

SPECIAL NOTE: THIS SHEET IS INCLUDED FOR REFERENCE PURPOSES ONLY. SOME MOUNTING HEIGHTS SHOWN MAY NOT APPLY TO THE CURRENT DOCUMENTS

FIXTURES LEGEND

SCALE 1/4"=1'-0"

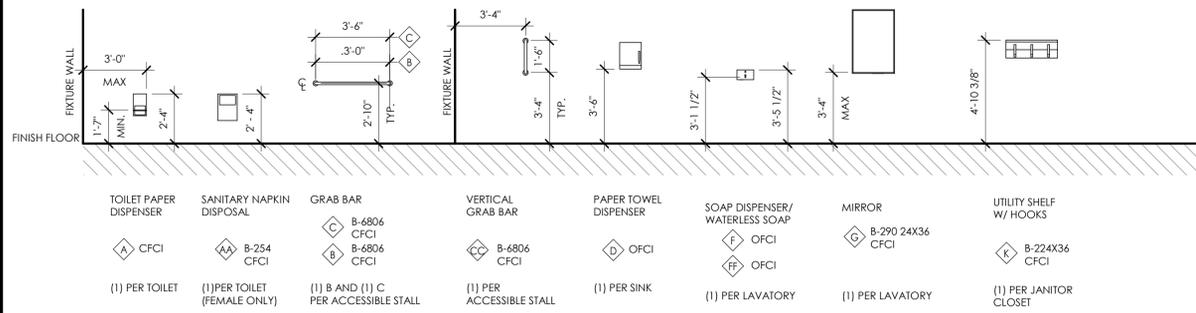


NOTES:

- DIMENSIONS REFLECT MOUNTING HEIGHT ABOVE FINISH FLOOR
- REFER TO FLOOR PLANS FOR APPROPRIATE LOCATION FOR FIXTURES.
- THIS LEGEND MAY CONTAIN FIXTURES THAT ARE NOT SPECIFIED TO BE INCLUDED IN THIS PROJECT.
- FLUSH CONTROL LOCATED ON OPEN SIDE OF WATER CLOSET.

TOILET ACCESSORY LEGEND

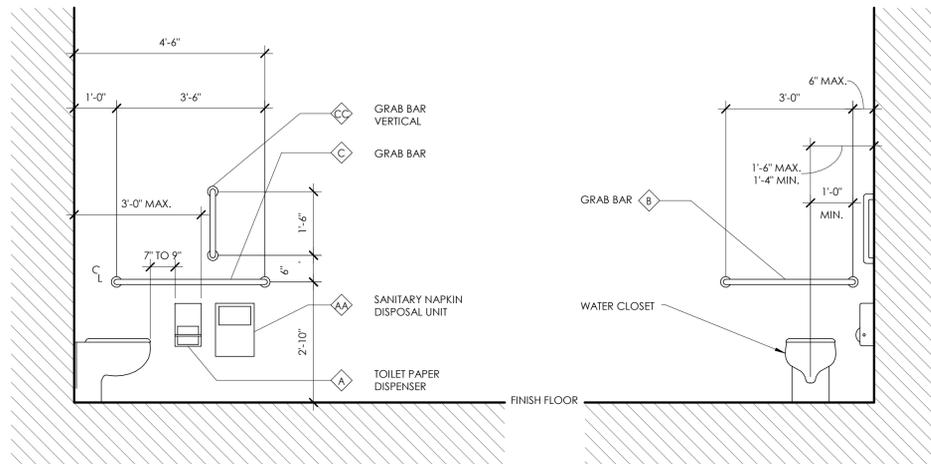
SCALE 1/4"=1'-0"



NOTES:

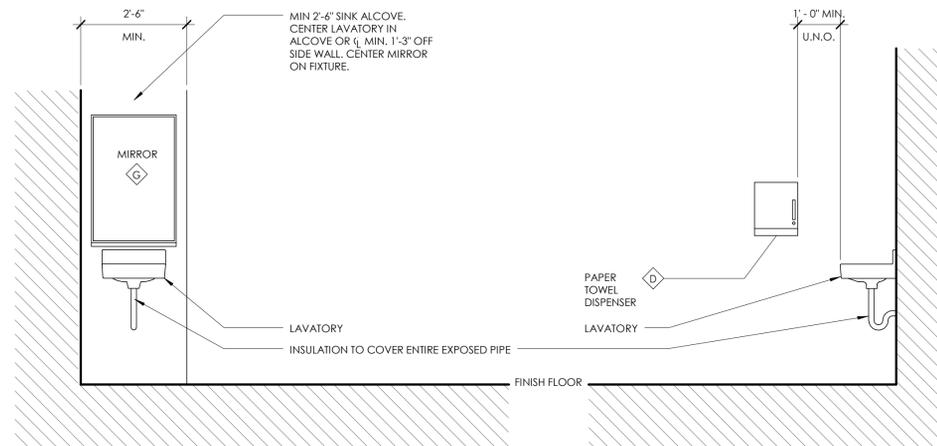
- DIMENSIONS REFLECT MOUNTING HEIGHT ABOVE FINISH FLOOR
- REFER TO INTERIOR ELEVATIONS FOR APPROPRIATE LOCATION FOR ACCESSORIES.
- ALL CONTRACTOR FURNISHED CONTRACTOR INSTALLED

TOILET ACCESSORY LOCATIONS



TYPICAL TOILET ACCESSORY LOCATIONS AT TOILET

SCALE 1/2"=1'-0" (REF. ABOVE FOR TYP. HEIGHTS)



TYPICAL TOILET ACCESSORY LOCATIONS AT SINK

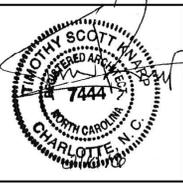
SCALE 1/2"=1'-0" (REF. ABOVE FOR TYP. HEIGHTS)



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SCALE	As indicated	
SHEET TITLE	TYP. FIXTURE AND ACCESS. HEIGHTS AND LEGENDS	

PROJECT NUMBER	13283.01
DRAWING NUMBER	A700

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GENERAL INTERIOR ELEVATIONS NOTES

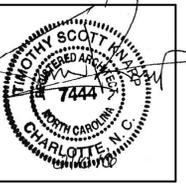
- ALL DRAWINGS ARE GRAPHIC REPRESENTATIONS OF APPROXIMATE LOCATIONS OF EXISTING AND NEW MATERIALS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
- REFER TO A700 FOR TOILET FIXTURE AND ACCESSORIES LEGEND AND MOUNTING HEIGHTS.
- REFER TO A200 SERIES DRAWINGS FOR ADDITIONAL SPECIALTIES.
- 1/8" EASED EDGES AT ALL COUNTERTOPS UNLESS OTHERWISE NOTED.
- PROVIDE SUPPORT BLOCKING AND STRAPPING FOR ALL MILLWORK, CASEWORK, AND WALL MOUNTED ACCESSORIES.
- REFER TO SPECS FOR ALL TOILET ROOM ACCESSORIES PROVIDED BY OWNER.
- PROVIDE MOISTURE RESISTANT GWB BEHIND ALL CERAMIC WALL TILE INSTALLATIONS.
- ALL WALL CABINETS ARE 15" DEEP UNLESS NOTED OTHERWISE.
- ALL BASE CABINETS ARE 24" DEEP UNLESS NOTED OTHERWISE.
- PROVIDE FULL FINISHED END PANELS ON ALL EXPOSED MILLWORK.
- PROVIDE FILLER PANEL WHERE MILLWORK MEETS WALL.
- PROVIDE SUPPORT BRACKETS AT WORK SURFACES. 48" MAX BETWEEN BRACKETS UNLESS NOTED OTHERWISE.
- ALL MILLWORK TO BE LOCKABLE UNLESS NOTED OTHERWISE.
- SEE OWNER APPROVED ROOM FINISH SCHEDULE AND COLOR LEGEND FOR FINISHES.
- REFER TO A600 SERIES DRAWINGS FOR CEILING HEIGHTS.
- REFER TO I SERIES DRAWINGS AND A700 SERIES DRAWINGS FOR MILLWORK FINISHES.
- FIELD VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING SUBMITTAL.
- ALL OUTSIDE CORNERS OF COUNTERTOPS TO BE 3" RADIUS.
- GROMMETS TO BE INSTALLED IN FIELD AND COORDINATED WITH I.T. EQUIPMENT.
- REFER TO A700 FOR TOILET FIXTURE AND ACCESSORIES LEGEND AND MOUNTING HEIGHTS.



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N.C. Engineering Firm License No.: C-2194

NO.	DATE	BY	DESCRIPTION



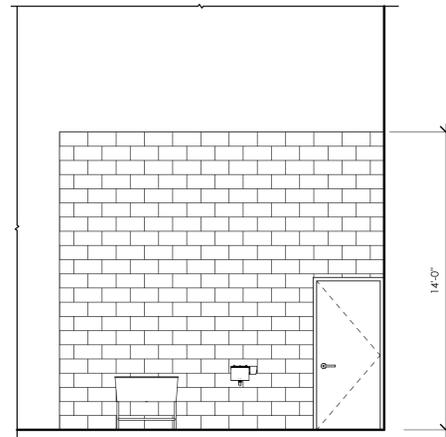
NCDOT - DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
02/10/16	DMS	BP

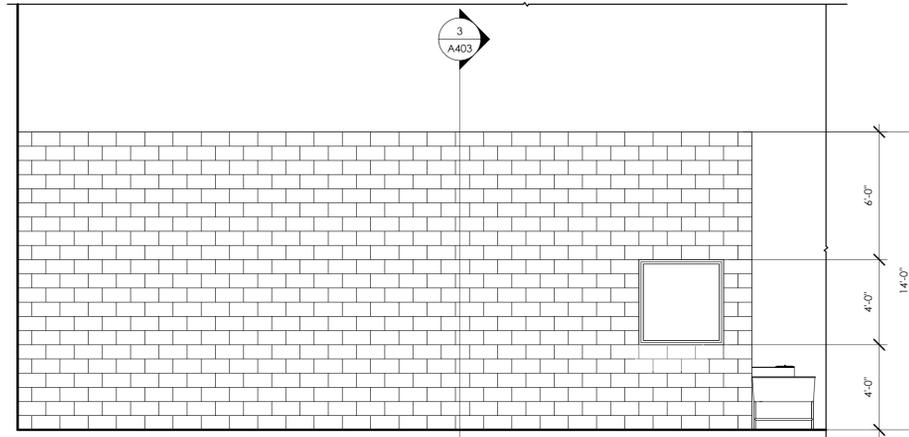
SCALE: As indicated

SHEET TITLE:
ENLARGED FLOOR PLAN
AND INTERIOR
ELEVATIONS

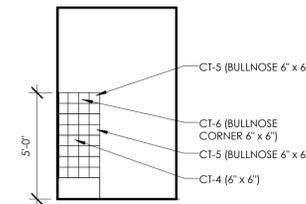
PROJECT NUMBER 13283.01
DRAWING NUMBER A701



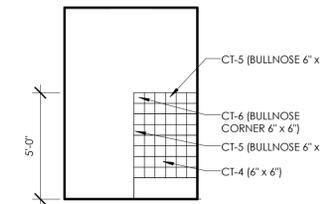
12 OFFICE/PARTS ELEVATION B
A701 1/4" = 1'-0"



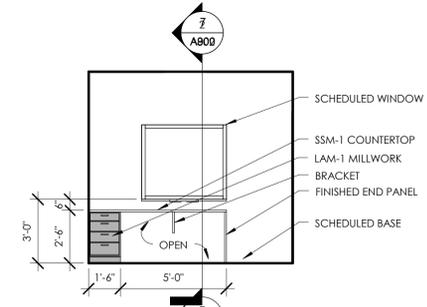
11 OFFICE/PARTS ELEVATION A
A701 1/4" = 1'-0"



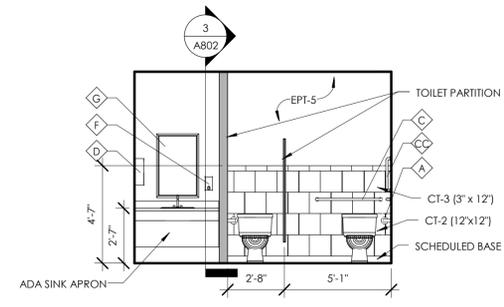
10 MOP SINK - 2
A701 1/4" = 1'-0"



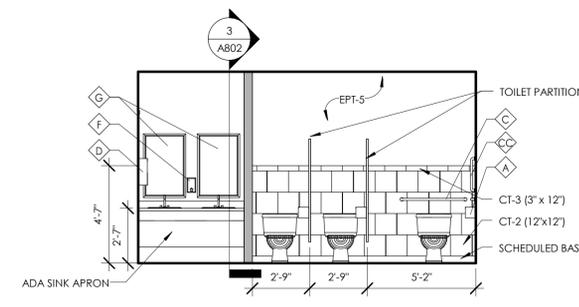
9 MOP SINK - 1
A701 1/4" = 1'-0"



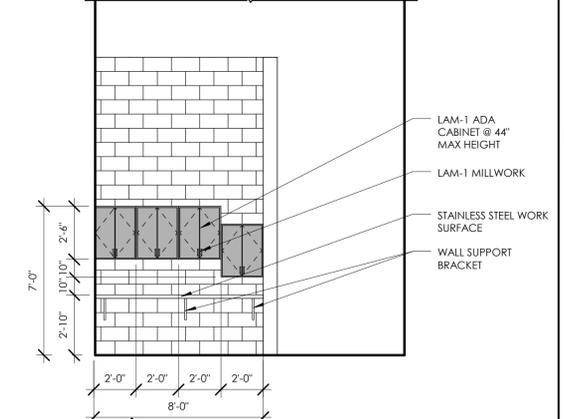
8 ADMIN COUNTER
A701 1/4" = 1'-0"



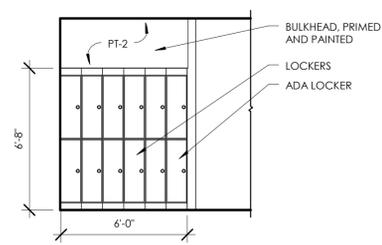
7 WOMEN'S RESTROOM ELEVATION
A701 1/4" = 1'-0"



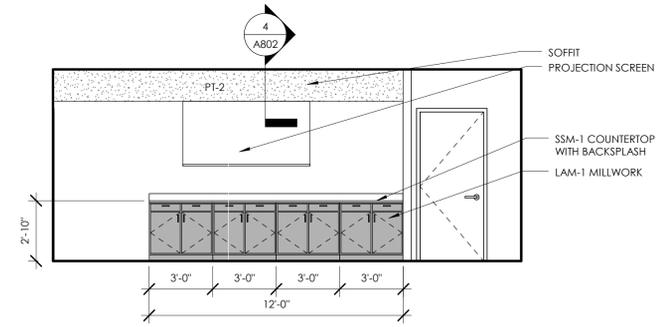
6 MEN'S RESTROOM ELEVATION
A701 1/4" = 1'-0"



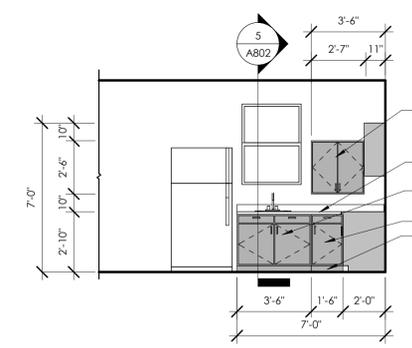
5 OFFICE/PARTS ELEVATION
A701 1/4" = 1'-0"



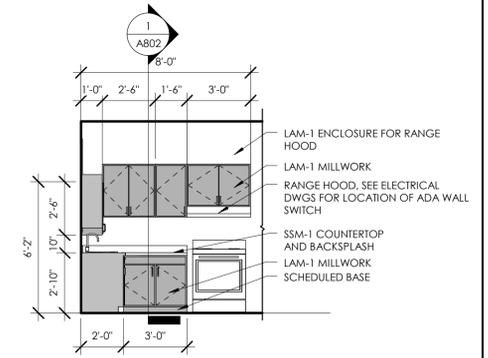
4 LOCKER ELEVATION
A701 1/4" = 1'-0"



3 BULLPEN ELEVATION
A701 1/4" = 1'-0"



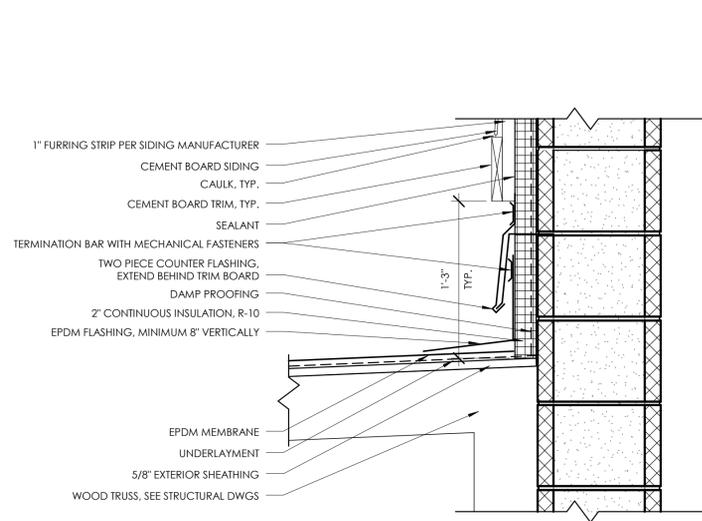
2 KITCHEN ELEVATION B
A701 1/4" = 1'-0"



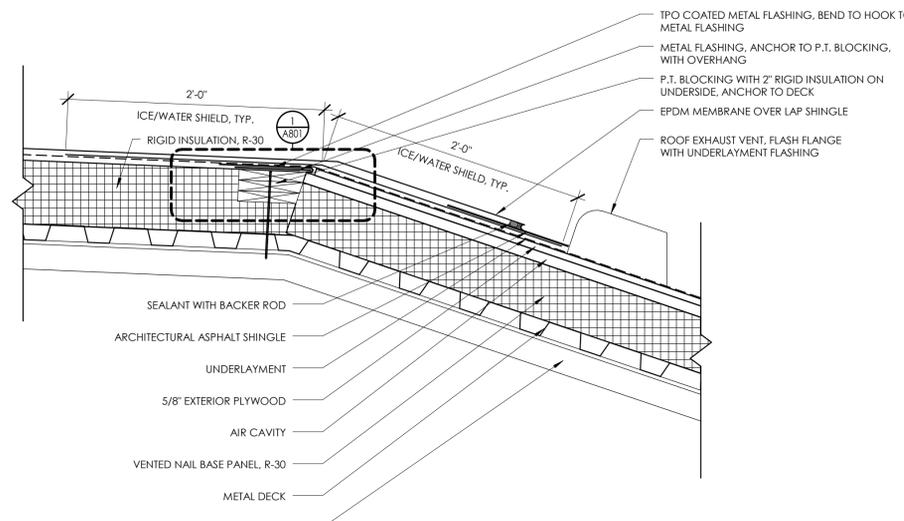
1 KITCHEN ELEVATION A
A701 1/4" = 1'-0"

2/10/2016 5:23:39 PM

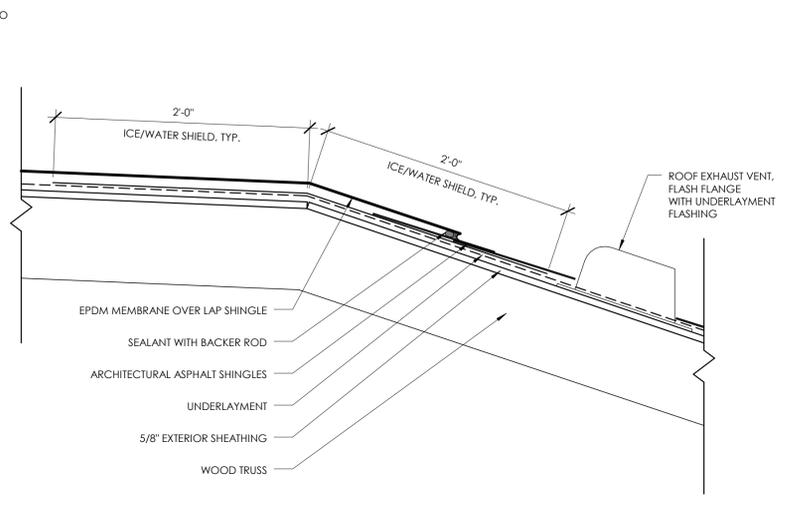
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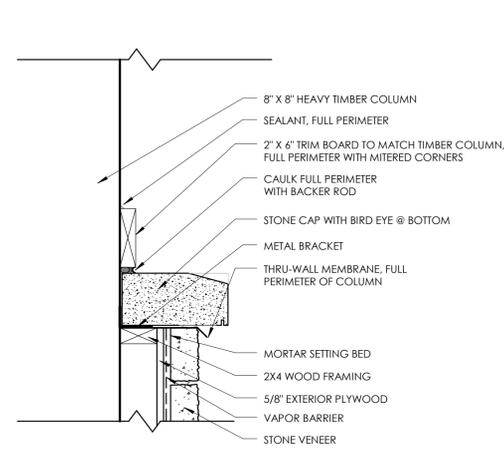
11 DETAIL @ OFFICE/SHOP
 A800 1 1/2" = 1'-0"



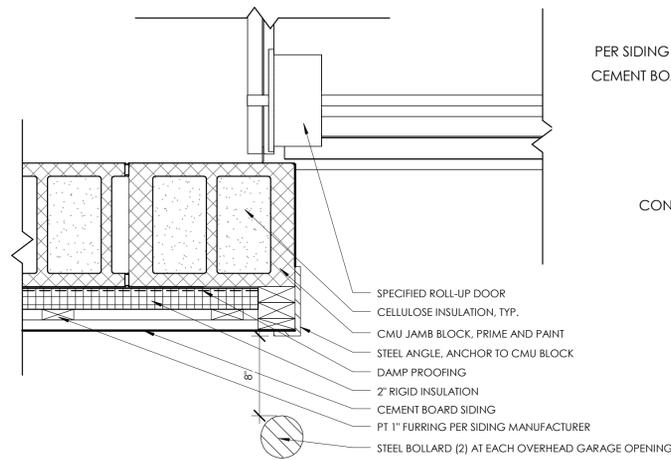
10 DETAIL @ HIGH ROOF, SHINGLES TO TPO
 A800 1 1/2" = 1'-0"



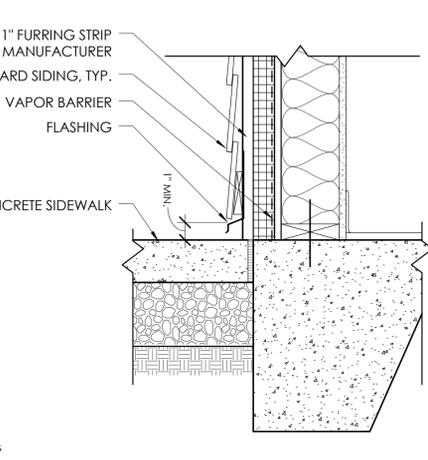
9 DETAIL @ LOW ROOF, SHINGLES TO TPO
 A800 1 1/2" = 1'-0"



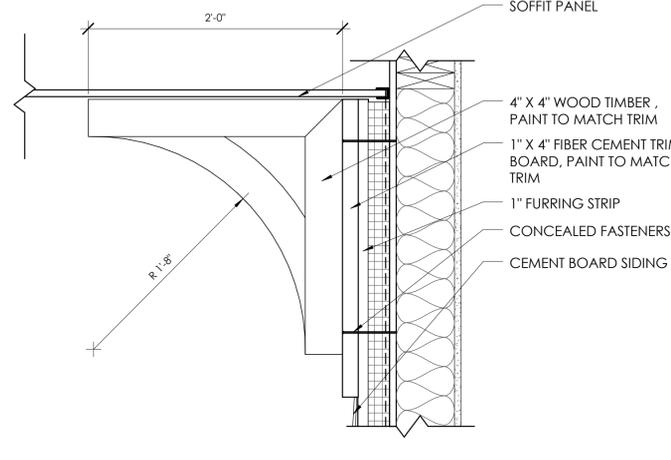
8 TYPICAL DETAIL @ TOP OF COLUMN WATERTABLE
 A800 1 1/2" = 1'-0"



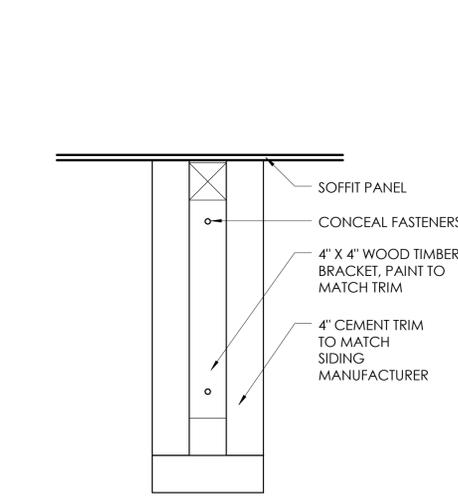
7 PLAN DETAIL @ GARAGE DOOR
 A800 1 1/2" = 1'-0"



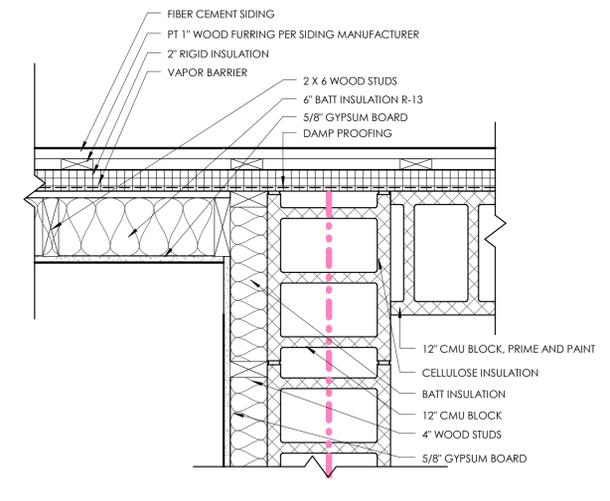
6 DETAIL @ CEMENT BOARD BASE
 A800 1 1/2" = 1'-0"



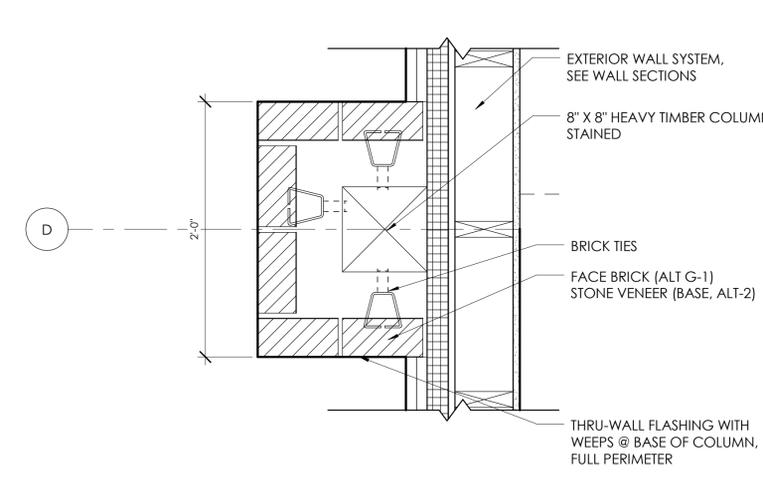
5 ARCHITECTURAL BRACKET DETAIL - SIDE
 A800 1 1/2" = 1'-0"



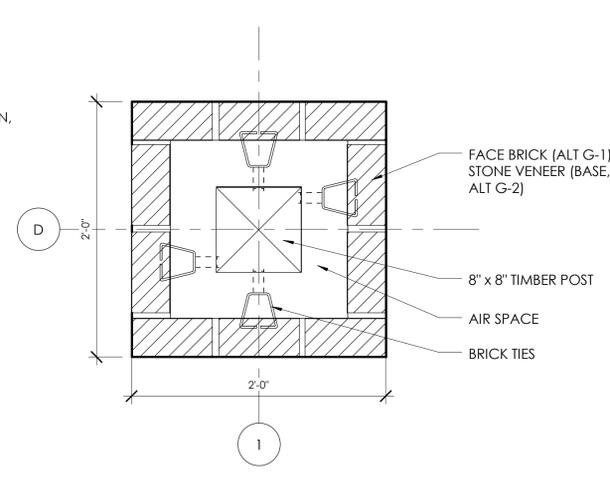
4 ARCHITECTURAL BRACKET DETAIL
 A800 1 1/2" = 1'-0"



3 PLAN DETAIL @ OFFICE/SHOP
 A800 1 1/2" = 1'-0"



2 PLAN DETAIL @ TYPICAL COLUMN @ EXTERIOR WALL
 A800 1 1/2" = 1'-0"



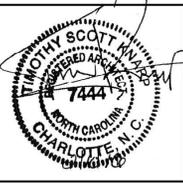
1 PLAN DETAIL @ TYPICAL COLUMN
 A800 1 1/2" = 1'-0"



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NO.	DATE	BY	DESCRIPTION



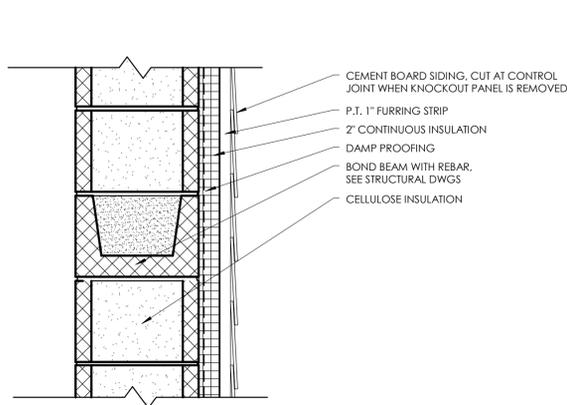
NCDOT - DIVISION 14
 OFFICE ASSEMBLY AND
 MAINTENANCE SHOP
 SCO # 14-11007-01 Package A
 CLAY COUNTY
 BID SET

DATE	DRAWN	CHECKED
02/10/16	DMS	BP
SCALE 1 1/2" = 1'-0"		
SHEET TITLE		
TYPICAL DETAILS		

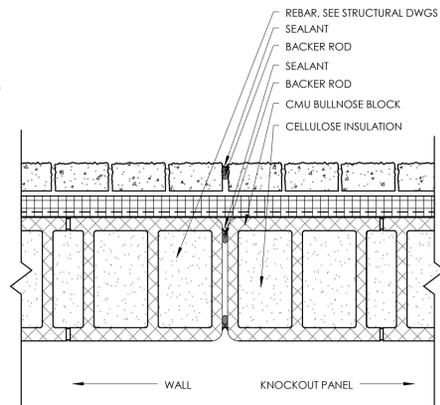
PROJECT NUMBER
 13283.01
 A800
 DRAWING NUMBER

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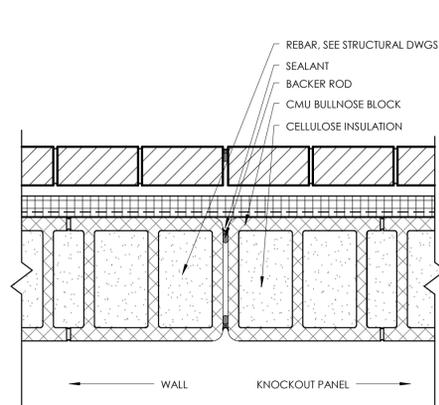
C:\Users\dccarney\Documents\Clay Co DOT 13283_sch_2014\DCcarney.rvt



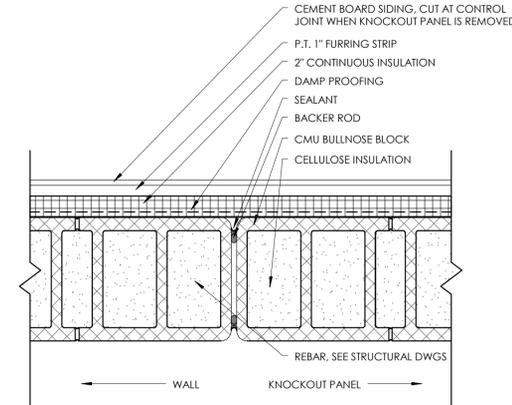
10 HEAD DETAIL @ KNOCKOUT PANEL
A801 1 1/2" = 1'-0"



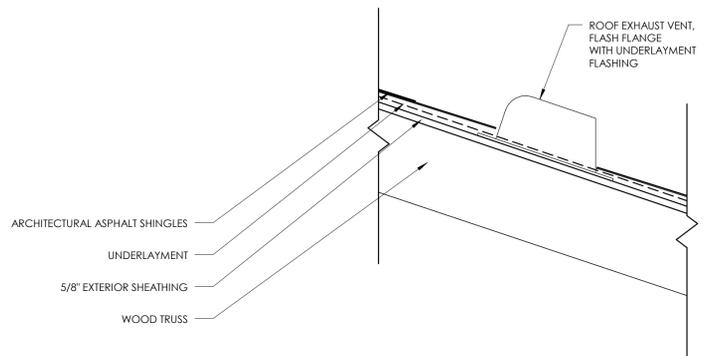
9 PLAN DETAIL @ KNOCKOUT PANEL - ALT G-2 (STONE)
A801 1 1/2" = 1'-0"



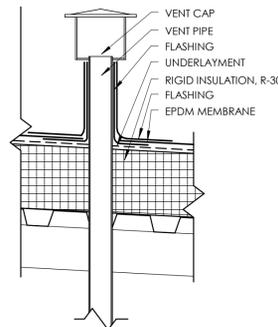
8 PLAN DETAIL @ KNOCKOUT PANEL - ALT G-1 (BRICK)
A801 1 1/2" = 1'-0"



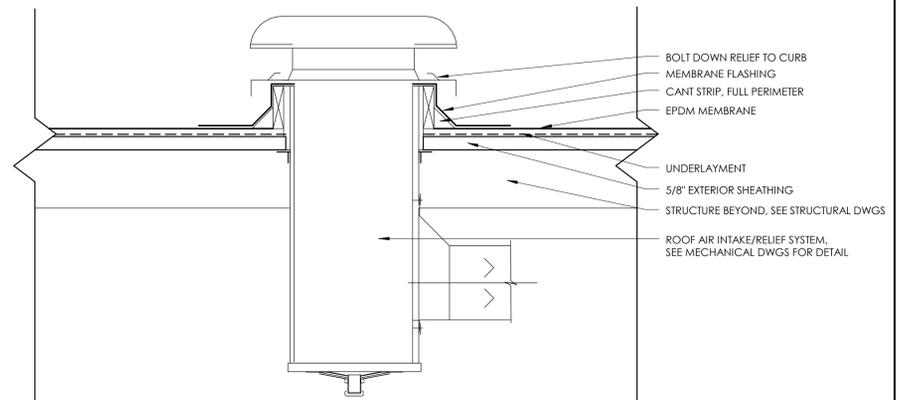
7 PLAN DETAIL @ KNOCKOUT PANEL (BASE BID)
A801 1 1/2" = 1'-0"



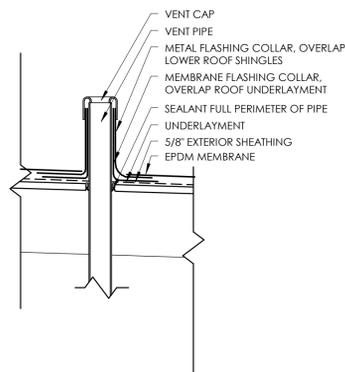
6 SECTION @ ROOF LOUVER
A801 1 1/2" = 1'-0"



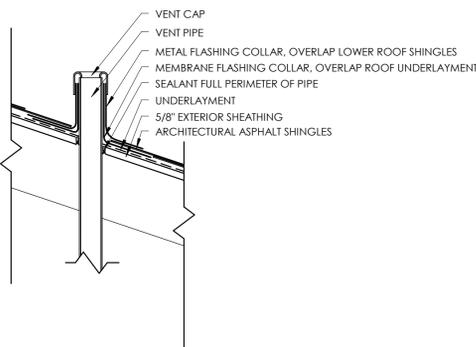
5 DETAIL @ HEATER VENT
A801 1 1/2" = 1'-0"



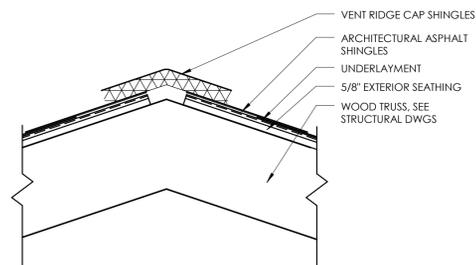
4 DETAIL @ INTAKE/RELIEF VENTILATORS
A801 3" = 1'-0"



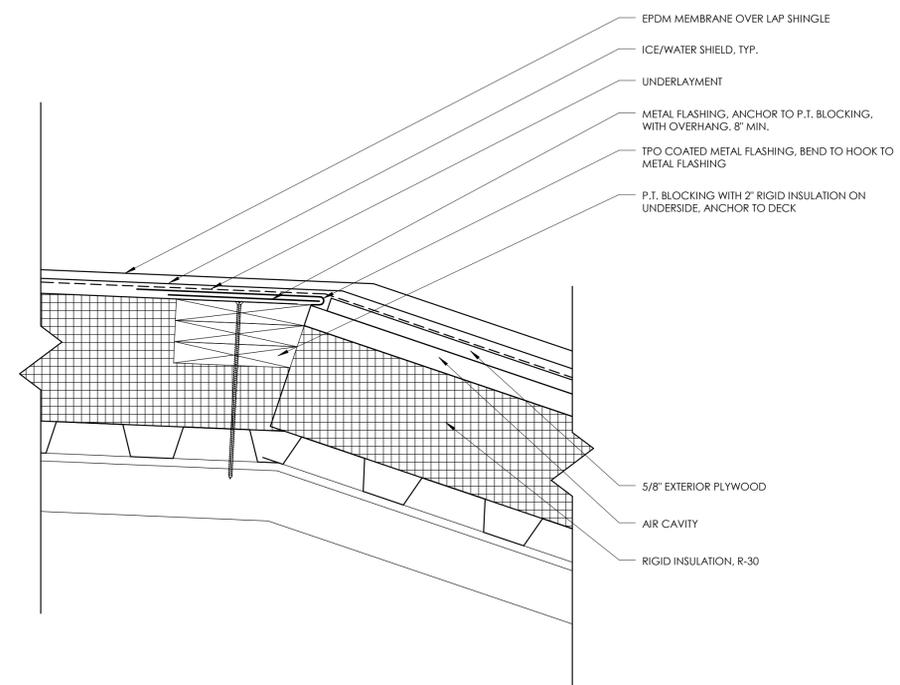
DETAIL @ EPDM ROOF



DETAIL @ SHINGLE ROOF



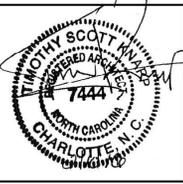
2 DETAIL @ RIDGE VENT
A801 1 1/2" = 1'-0"



1 CALLOUT @ HIGH ROOF, SHINGLES TO TPO
A801 3" = 1'-0"

3 DETAIL @ SANITARY SYSTEM VENTS
A801 1 1/2" = 1'-0"

NO.	Revision Schedule		DESCRIPTION
	BY	CHKD	



NCDOT - DIVISION 14
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SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
02/10/16	DMS	BP
SCALE	As indicated	
SHEET TITLE	TYPICAL DETAILS	

PROJECT NUMBER
13283.01
A801
DRAWING NUMBER

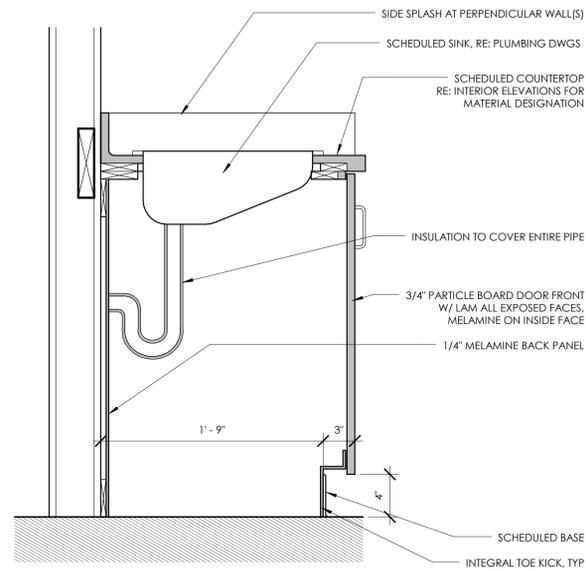
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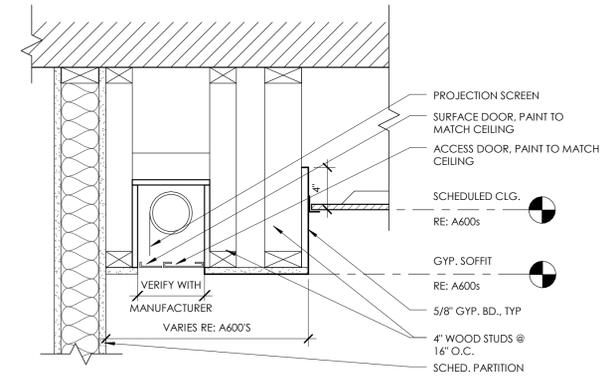
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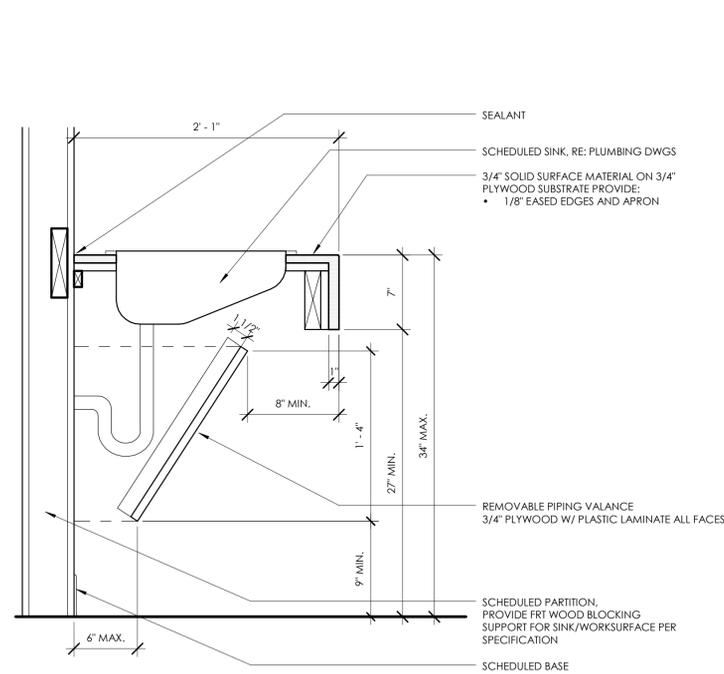
5
A802
↑ 1 1/2" = 1'-0"

TYPICAL BASE CABINET WITH INTERGAL TOE KICK @ KITCHEN



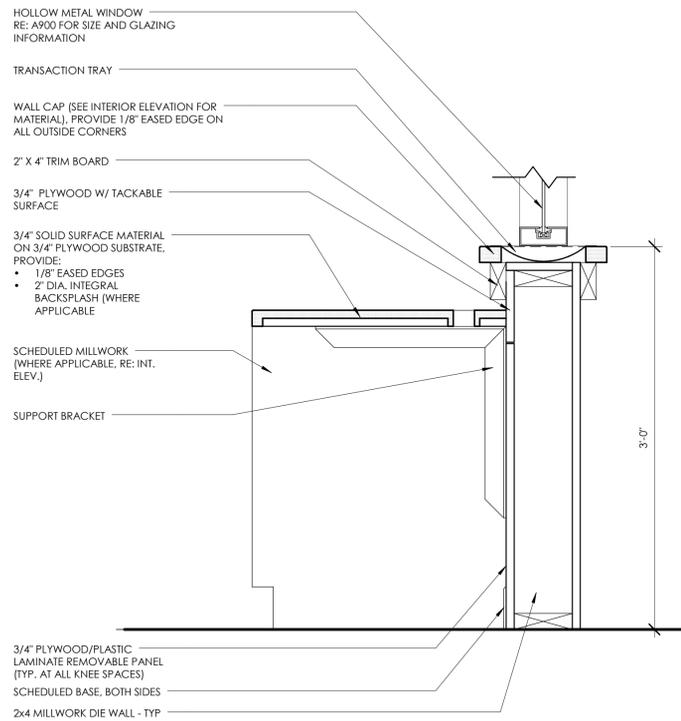
4
A802
↑ 1 1/2" = 1'-0"

GWB Soffit @ Projector Screen



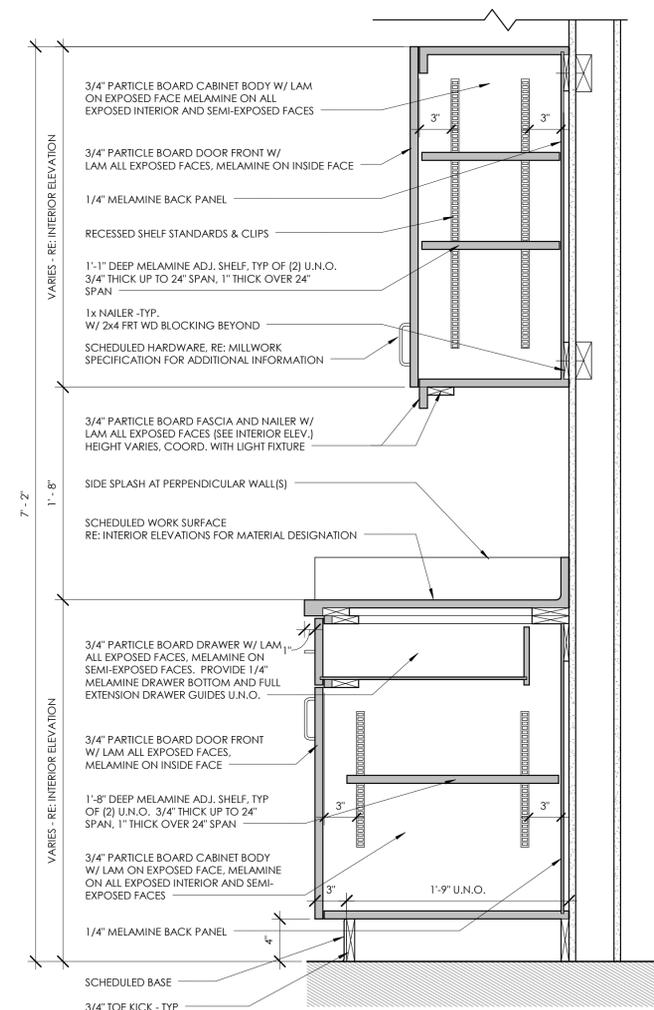
3
A802
↑ 1 1/2" = 1'-0"

TYPICAL SOLID SURFACE COUNTER W/ ADA SINK APRON



2
A802
↑ 1 1/2" = 1'-0"

RECEPTION DESK SECTION



1
A802
↑ 1 1/2" = 1'-0"

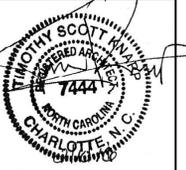
TYPICAL BASE AND UPPER CABINET MILLWORK SECTION



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NO.	DATE	BY	DESCRIPTION



NCDOT - DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
02/10/16	DMS	BP

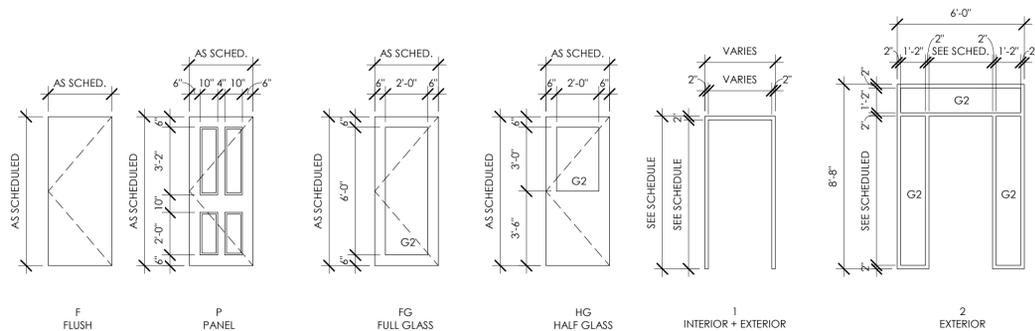
SCALE 1 1/2" = 1'-0"

SHEET TITLE
TYPICAL MILLWORK AND CEILING DETAILS

PROJECT NUMBER 13283.01
DRAWING NUMBER A802

Architectural - Door Legend

1/4" = 1'-0"



DOOR AND FRAME NOTES

1. REFER TO A900 FOR DOOR & FRAME SCHEDULE
2. ALL FRAMES ARE TO RECEIVE FULL PERIMETER SEALANT, INTERIOR AND EXTERIOR
3. ALL DOOR AND WINDOW DIMENSIONS ARE TO BE VERIFIED IN FIELD PRIOR TO FABRICATION

DOOR AND FRAME SCHEDULE LEGEND

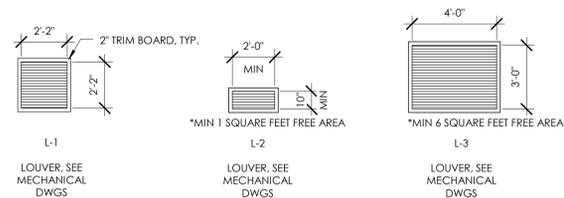
DOOR OR FRAME MATERIAL		DOOR OR FRAME FINISH	
HM	HOLLOW METAL	PT	PAINT
WD	WOOD	STN	STAIN

GLASS TYPES:

G1	1" INSULATED LOW E GLASS
G2	1/4" TEMPERED GLASS

Architectural - Louver Legend

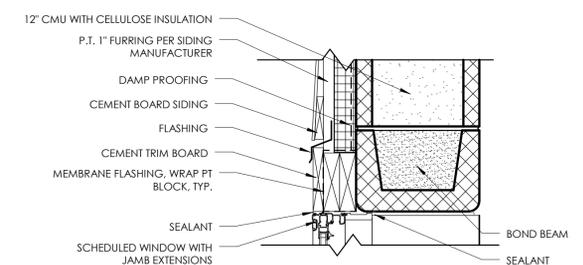
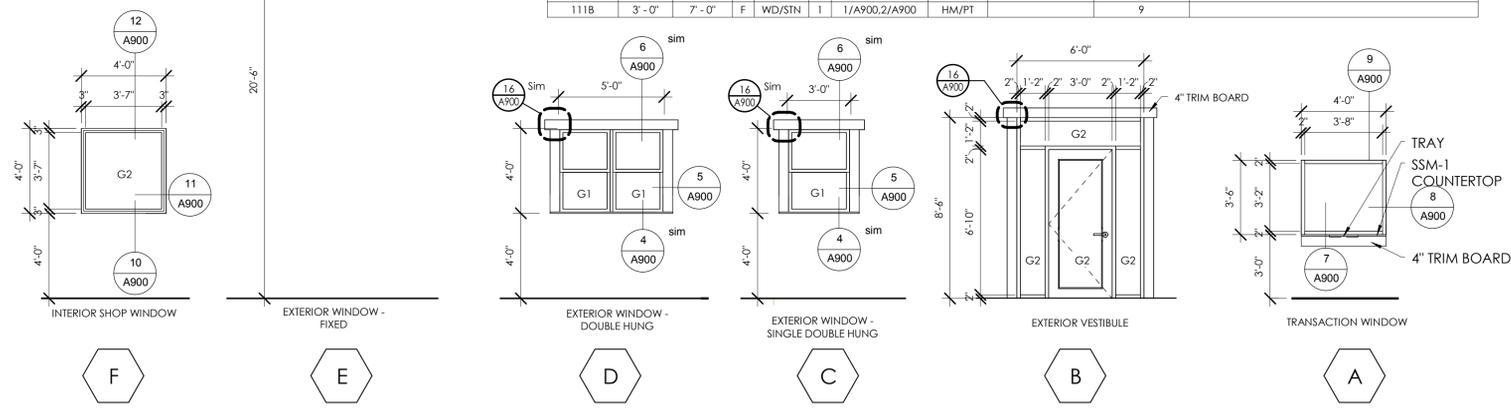
1/4" = 1'-0"



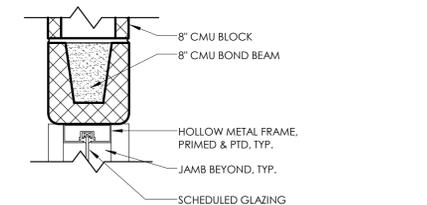
16 TYP. EXTERIOR TRIM DETAIL

1 1/2" = 1'-0"

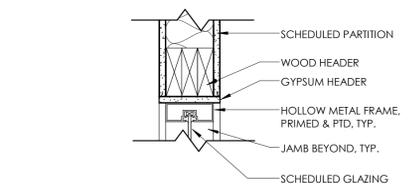
Door No.	DOOR		MATERIAL FINISH	GLASS TYPE	HARDWARE	REMARKS
	SIZE					
	WIDTH	HEIGHT				
100A	3'-0"	7'-0"	FG	WD/STN	1	TRANSOM AND SIDELIGHTS
100B	3'-0"	7'-0"	FG	WD/STN	1	
101A	3'-0"	7'-0"	HG	HM/PT	1	
101B	3'-0"	7'-0"	P	WD/STN	1	
102	3'-0"	7'-0"	P	WD/STN	1	
103	3'-0"	7'-0"	P	WD/STN	1	
104A	3'-0"	7'-0"	P	WD/STN	1	
104B	3'-0"	7'-0"	P	WD/STN	1	
105	3'-0"	7'-0"	HG	WD/STN	1	
106	3'-0"	7'-0"	P	WD/STN	1	
107A	3'-0"	7'-0"	HG	HM/PT	1	
107B	3'-0"	7'-0"	F	HM/PT	1	
108	3'-0"	7'-0"	F	HM/PT	1	
109	3'-0"	7'-0"	P	WD/STN	1	
110A	3'-0"	7'-0"	F	HM/PT	1	
110B	3'-0"	7'-0"	F	HM/PT	1	
111A	4'-0"	7'-0"	HG	HM/PT	1	
111B	3'-0"	7'-0"	F	WD/STN	1	



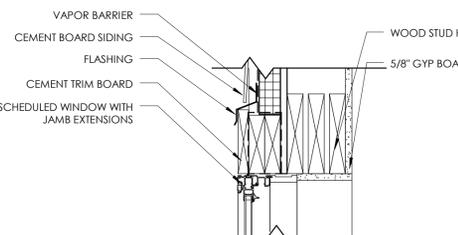
15 DETAIL @ WINDOW HEAD, CMU
A900 1 1/2" = 1'-0"



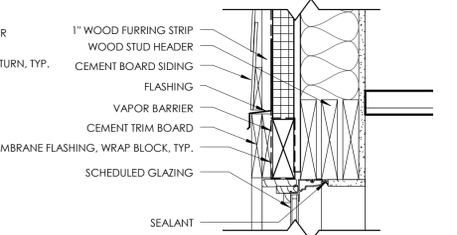
12 INTERIOR HM WINDOW HEAD DETAIL @ CMU
A900 1 1/2" = 1'-0"



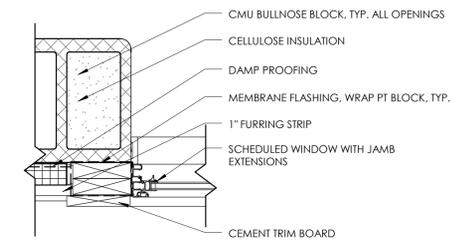
9 INTERIOR HM WINDOW HEAD DETAIL
A900 1 1/2" = 1'-0"



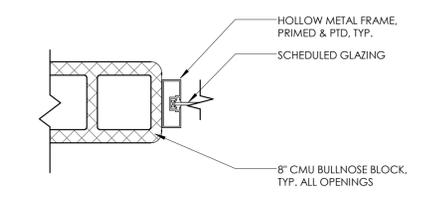
6 DETAIL @ WINDOW HEAD, TYP.
A900 1 1/2" = 1'-0"



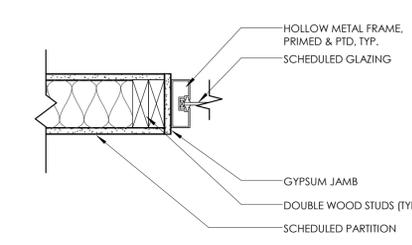
3 DOOR HEAD DETAIL @ FRONT DOOR
A900 1 1/2" = 1'-0"



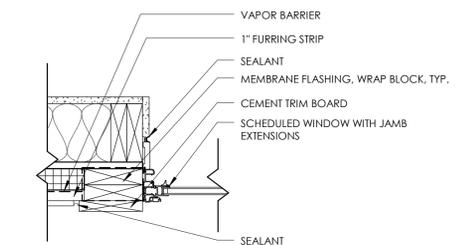
14 DETAIL @ WINDOW JAMB, CMU
A900 1 1/2" = 1'-0"



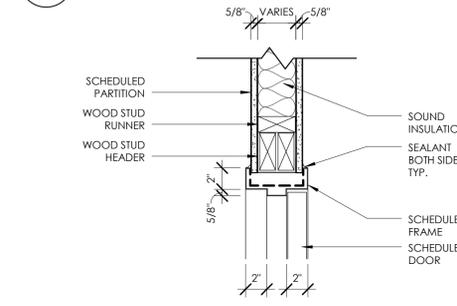
11 INTERIOR HM WINDOW JAMB @ CMU
A900 1 1/2" = 1'-0"



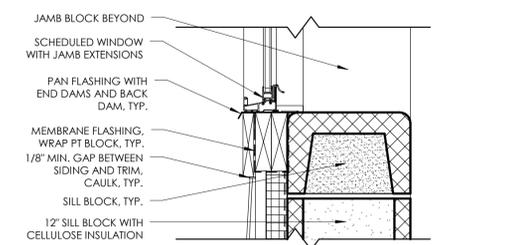
8 INTERIOR HM WINDOW JAMB DETAIL
A900 1 1/2" = 1'-0"



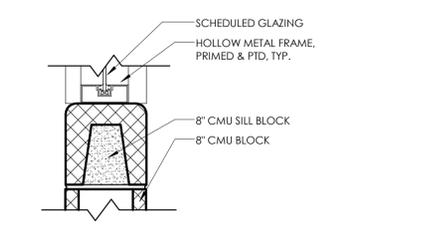
5 DETAIL @ WINDOW JAMB
A900 1 1/2" = 1'-0"



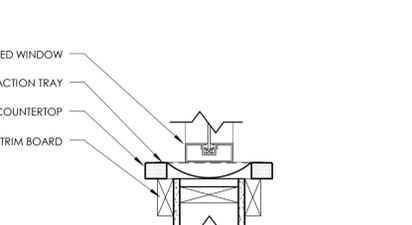
2 TYPICAL INTERIOR DOOR HEAD TYP DETAILS
A900 1 1/2" = 1'-0"



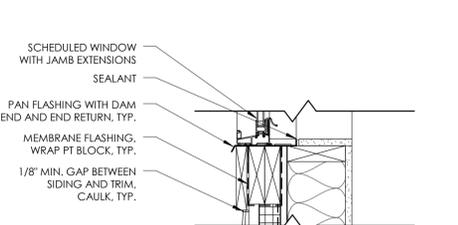
13 DETAIL @ WINDOW SILL, CMU
A900 1 1/2" = 1'-0"



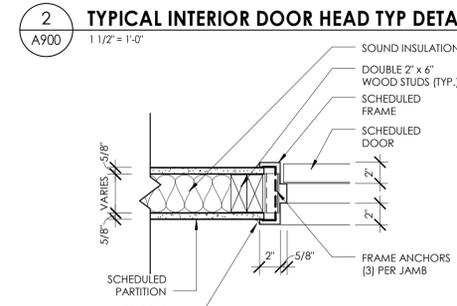
10 INTERIOR HM WINDOW SILL DETAIL @ CMU
A900 1 1/2" = 1'-0"



7 INTERIOR HM WINDOW SILL DETAIL
A900 1 1/2" = 1'-0"



4 DETAIL @ WINDOW SILL, TYP.
A900 1 1/2" = 1'-0"



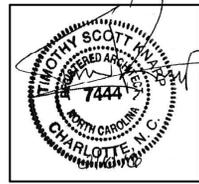
1 TYPICAL INTERIOR DOOR JAMB TYP DETAILS
A900 1 1/2" = 1'-0"



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MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
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02/10/16	DMS	BP

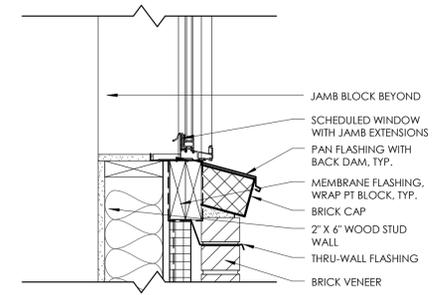
SCALE: As indicated

SHEET TITLE: DOOR SCHEDULE, DOOR FRAMES, AND WINDOW TYPES

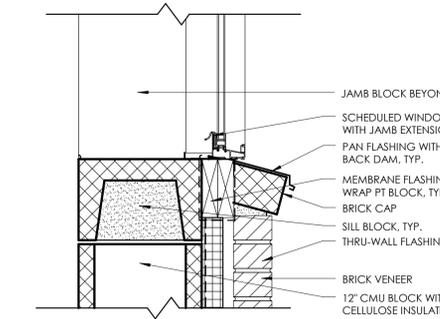
PROJECT NUMBER
13283.01

A900
DRAWING NUMBER

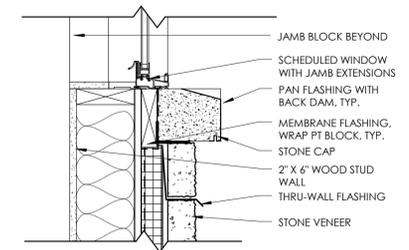
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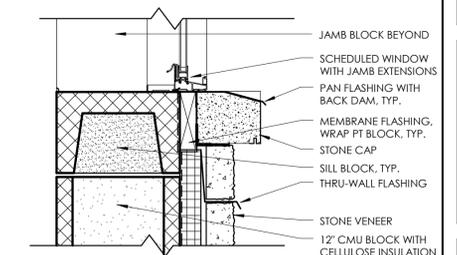
4
 A901
 1 1/2" = 1'-0"



3
 A901
 1 1/2" = 1'-0"



2
 A901
 1 1/2" = 1'-0"



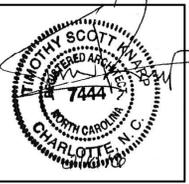
1
 A901
 1 1/2" = 1'-0"



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		BY	CHKD	



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 SCO # 14-11007-01 Package A
 CLAY COUNTY
 BID SET

DATE	DRAWN	CHECKED
02/10/16	DMS	BP
SCALE 1 1/2" = 1'-0"		
SHEET TITLE		
WINDOW DETAILS - ALTERNATES		

PROJECT NUMBER	13283.01
DRAWING NUMBER	A901

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FINISH PLAN GENERAL NOTES:

1. ALL HOLLOW METAL DOORS, DOOR FRAMES AND WINDOW FRAMES SHALL BE PAINTED EPT-2, ENAMEL FINISH.
2. ALL LOUVERS, VENTS, GRILLES AND OTHER MISCELLANEOUS MECHANICAL AND ELECTRICAL DEVICES ARE TO BE PAINTED TO MATCH THE SURFACE ON WHICH THEY APPEAR, UNLESS OTHERWISE NOTED.
3. REFER TO A600 SERIES DRAWINGS FOR CEILING TYPES AND SOFFIT FINISHES.
4. REFER TO A700 SERIES INTERIOR ELEVATIONS FOR MILLWORK FINISHES.
5. UNDERSIDE OF SOFFITS TO MATCH FACE OF SOFFIT. SEE A600 SERIES FOR PAINT ACCENT SPECIFICATIONS.
6. ALL EXPOSED CONCRETE FLOORS TO BE SEALED A MINIMUM OF TWO TIMES PRIOR TO COMPLETION.
7. FLOOR FINISH TO CONTINUE UNDER ALL MODULAR & BUILT-IN MILLWORK.
8. ALL LAMINATE GRAIN ON VERTICAL SURFACES SHALL RUN VERTICALLY, UNLESS NOTED OTHERWISE.
9. ALL CUSTOM MILLWORK SHALL RECEIVE LAM-1 ON FACE OF CABINETS & SSM-1 ON COUNTERTOPS, U.N.O. SEE FINISH PLAN NOTES FOR SPECIFICATIONS.

FINISH SYMBOLS LEGEND AND ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	LVT	LUXURY VINYL TILE
ACT	ACoustICAL CEILING TILE	PF	PANEL FABRIC
AGL	ART GLASS	PT	PAIN
CC	CUBICAL CURTAIN	PTM	PAINT TO MATCH
CG	CORNER GUARD	QT	QUARTZ
CHR	CHAIR RAIL	RB	RESILIENT BASE
CONC	SEALED CONCRETE	RP	RESIN PANEL
CP	CEILING CANOPY	RS	RUBBER SHEET FLOORING
CPT	CARPET	RST	RUBBER STAIR TREAD
CR	CRASH RAIL	RT	RUBBER TILE FLOORING
CS	CULTURED STONE	SC	STAINED CONCRETE
CT	CERAMIC TILE	SS	STAINLESS STEEL
DS	DIVIDER STRIP	SSM	SOLID SURFACE
EPT	EPOXY PAINT	SST	SIMULATED STONE
ERF	EPOXY RESIN FLOORING	SV	SHEET VINYL
ETR	EXISTING TO REMAIN	TS	TRANSITION STRIP
FT	FILM TINT	TER	TERRAZZO
GR	GROUT	VCT	VINYL COMPOSITION TILE
GWB	GYPsum WALL BOARD	VWC	VINYL WALL COVERING
HR	HAND RAIL	WG	WALL GUARD
HPL	HIGH PRESSURE LAMINATE	WOM	WALL-OFF MAT
INT	INTEGRAL BASE	WP	WALL PROTECTION
		WR	WELDING ROD



FINISH PLAN KEY NOTES:

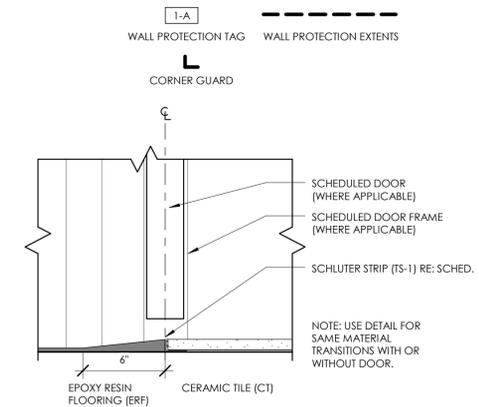
1. WALL TILE TO BE INSTALLED AROUND MOP SINK. SEE 9/A701 & 10/A701 FOR ELEVATION DETAILS.
2. STEEL BAR JOISTS & METAL DECKING TO BE PAINTED PT-3.
3. CT-2 SHALL BE LAID IN HALF HEIGHT BRICK STACK PATTERN ON WET WALLS. SEE A701 FOR DETAILS.
4. CT-1 TO BE INSTALLED PRIOR TO ERF-1. ONCE CT-1 IS INSTALLED, ERF-1 SHALL BE POURED & TROWELED UP TO SCHLUTER AT TRANSITION TO CT-1, PER DETAIL 2/200 & 1900. TYPICAL FOR ALL TRANSITIONS.
5. ERF-1 SHALL HAVE INTEGRAL BASE AT 4" A.F.F.
6. CONTRACTOR TO APPLY BLOCK FILLER TO CONCRETE BLOCK THROUGHOUT PRIOR TO APPLYING PAINT.

FLOOR PATTERNING GENERAL NOTES:

1. ALL FLOOR FINISHES SHALL TRANSITION AT THE CENTERLINE OF THE DOOR, UNLESS OTHERWISE NOTED. INSTALL TRANSITION STRIPS PER DETAILS.
2. ALL AREAS WITH INTEGRAL BASE SHALL BE AT 4" A.F.F. BASE SHALL BE THE SAME COLOR AS THE ADJACENT FLOORING MATERIAL, UNLESS OTHERWISE NOTED.
3. ALL GROUT TO BE SEALED A MINIMUM OF TWO TIMES PRIOR TO COMPLETION.
4. WHERE KICKSPACES OCCUR AT MILLWORK, FLOOR FINISH SHOWN ON PLANS SHALL RUN UNDERNEATH KICKSPACE AS WELL.

WALL PROTECTION GENERAL NOTES:

1. DO NOT INSTALL HANDRAILS ON WALLS LESS THAN 1'-0" WIDE OR BEHIND DOORS. DO NOT INSTALL WALL GUARDS ON WALLS LESS THAN 6" WIDE OR BEHIND DOORS.
2. AREAS WITHOUT WALL PROTECTION NOTES SHALL NOT RECEIVE WALL PROTECTION.
3. ALL CORNER GUARDS SHOULD BE INSTALLED WITH THE TOP AT 7'-2" AFF, UNLESS OTHERWISE NOTED.



2
1200
TS DETAIL - CPT TO TILE
3" = 1'-0"

1
1200
FIRST FLOOR FINISH PLAN, FLOOR PATTERNING PLAN & WALL PROTECTION PLAN
1/4" = 1'-0"



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CLAY COUNTY
DESIGN DEVELOPMENT

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SHEET TITLE	FIRST FLOOR FINISH PLAN, FLOOR PATTERNING PLAN & WALL PROTECTION PLAN	

PROJECT NUMBER	13283.01
DRAWING NUMBER	1200

HVAC SYMBOLS LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
A	COMPRESSED AIR	V	VENT		DUCT SECTION - SUPPLY (FIRST FIGURE TOP)		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS		ELECTRIC/PNEUMATIC SWITCH OR RELAY
AAC	DUCTLESS SPLIT A.C. SYSTEM (CONDENSING UNIT)	W/W ENCL.	WALL TO WALL FIN TUBE ENCLOSURE		DUCT SECTION - RETURN (FIRST FIGURE TOP)		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS		PNEUMATIC/ELECTRIC SWITCH OR RELAY
AD	ACCESS DOOR		CONNECTION - TOP		ROUND DUCT IN INCHES		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS	CT	CURRENT TRANSDUCER
AFF	ABOVE FINISHED FLOOR		CONNECTION - BOTTOM		FLEXIBLE DUCTWORK		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS		OPEN/CLOSED
AHU	AIR HANDLING UNIT		DIRECTION OF FLOW		FLEXIBLE CONNECTION		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS		START/STOP
BBD	BOILER BLOW DOWN		REDUCER		FIRE DAMPER - VERTICAL (WALL)		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS		ENABLE/DISABLE
CD	CONDENSING UNIT IF SHOWN AS EQUIPMENT TAG; COOLING COIL CONDENSATE DRAIN PIPE IF SHOWN CONNECTED TO A/C EQUIPMENT; STEAM COIL CONDENSATE DRAIN PIPE IF SHOWN CONNECTED TO STEAM EQUIPMENT		CAP OR PLUG		FIRE DAMPER - HORIZONTAL (FLOOR)		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS		TEMPERATURE SENSOR (DUCT OR PIPE MOUNTED)
			ELBOW DOWN		SMOKE DAMPER - VERTICAL (WALL)		CONICAL TEE		HUMIDITY SENSOR (DUCT MOUNTED)
			ELBOW UP / TOP CONNECTION		SMOKE DAMPER - HORIZONTAL (FLOOR)		LATERAL		FLOW TRANSMITTER
CFM	CUBIC FEET PER MINUTE		TEE OUTLET - UP		COMBINATION FIRE AND SMOKE DAMPER - VERTICAL (WALL)		PRESSURE TRANSMITTER		ELECTRIC/PNEUMATIC TRANSDUCER
CHWR	CHILLED WATER RETURN		TEE OUTLET - DOWN		COMBINATION FIRE AND SMOKE DAMPER - HORIZONTAL (FLOOR)		ELECTRIC/ELECTRONIC TRANSDUCER		DUCT SMOKE DETECTOR
CHWS	CHILLED WATER SUPPLY		UNION		VOLUME DAMPER		SPACE THERMOSTAT		SPACE TEMPERATURE SENSOR
CP	CONDENSATE PUMP DISCHARGE		GATE VALVE		AUTOMATIC AIR DAMPER		SPACE CARBON DIOXIDE SENSOR		SPACE NATURAL GAS SENSOR
CR	CONDENSER WATER RETURN		BALL VALVE		SUPPLY, RETURN, OR EXHAUST AIR DUCT (FIRST FIGURE IS DUCT WIDTH/TOP, SECOND FIGURE IS DUCT DEPTH)		SPACE CARBON MONOXIDE SENSOR		SPACE SENSOR REQUIRING GUARD
CS	CONDENSER WATER SUPPLY		BALANCING VALVE		SUPPLY, RETURN, OR EXHAUST AIR DUCT (FIRST FIGURE IS DUCT DEPTH, SECOND FIGURE IS DUCT WIDTH/TOP)		MOTOR VARIABLE SPEED DRIVE		SPACE HUMIDSTAT
CW	DOMESTIC COLD WATER		STRAINER W/ BLOW DOWN		MULTI-BLADE AIR EXTRACTOR		WATER FLOW SENSOR		PNEUMATIC ACTUATOR
D	DRAIN		BUTTERFLY VALVE		TURNING VANE		ELECTRIC ACTUATOR		VARIABLE SPEED DRIVE
EA	EXHAUST AIR		BUTTERFLY VALVE, PNEUMATIC 2-WAY		TRANSITION SQUARE TO ROUND		COOLING COIL		ELECTRIC ACTUATOR
EC	ELECTRICAL CONTRACTOR		BUTTERFLY VALVE, ELECTRIC ACTUATOR		SQUARE CEILING DIFFUSER (4 WAY)		ELECTRIC ACTUATOR		HEATING COIL
EF	EXHAUST FAN		GLOBE VALVE		SQUARE OR RECTANGULAR CEILING RETURN OR EXHAUST GRILLE		ALARM		STATUS
EH	ELECTRIC HEATER		CHECK VALVE		SUPPLY REGISTER OR RETURN REGISTER SUPPLY, RETURN OR EXHAUST AIR GRILLE		FLOW SWITCH		DIFFERENTIAL STATIC PRESSURE SWITCH
ETR	EXISTING TO REMAIN		TRIPLE DUTY VALVE		SUPPLY DIFFUSER, REGISTER OR GRILL		RELAY		PRESSURE GAUGE
FCU	FAN COIL UNIT		GAS COCK, PLUG VALVE		CEILING DIFFUSER WITH NECK SIZE, TYPE, & CFM		FREEZE-STAT		MAIN CONTROL AIR (TEMP CONTROL)
FPM	FEET PER MINUTE		UNDERCUT DOOR 1"		CEILING RETURN OR EXHAUST GRILLE WITH SIZE, TYPE, & CFM		ELECTRONIC INTERFACE		HUMIDIFIER
GC	GENERAL CONTRACTOR		LOUVERED DOOR W/ SQ. FT. OF FREE AREA		RETURN OR EXHAUST GRILLE WITH SIZE, TYPE, & CFM		DIFFERENTIAL STATIC PRESSURE TRANSMITTER		GAS BURNER
HC	HVAC CONTRACTOR		AIR VENT - MANUAL		BACK DRAFT DAMPER		DIGITAL INPUT (GENERAL)		DIGITAL OUTPUT (GENERAL)
MBH	THOUSAND BTU/HR		AIR VENT - AUTOMATIC		AUTOMATIC AIR DAMPER		ELECTRICAL INTERFACE		ANALOG OUTPUT (GENERAL)
NC	NORMALLY CLOSED		FLANGE		AIR FLOW		ANALOG INPUT (GENERAL)		SPEED FEED BACK
NO	NORMALLY OPEN		CONTROL/SOLENOID VALVE, ELECTRIC 2-WAY						
NTS	NOT TO SCALE		CONTROL VALVE, ELECTRIC 3-WAY						
OA	OUTSIDE AIR		CONTROL VALVE, PNEUMATIC 2-WAY						
PC	PLUMBING CONTRACTOR		CONTROL VALVE, PNEUMATIC 3-WAY						
RA	RETURN AIR		PRESSURE REDUCING VALVE						
RD	REFRIGERANT DISCHARGE		PIPING						
RL	REFRIGERANT LIQUID PIPE								
RS	REFRIGERANT SUCTION PIPE								
RTU	ROOFTOP UNIT								
RV	ROOF VENT								
SA	SUPPLY AIR								
SSI	SPLIT SYSTEM INDOOR SECTION (EVAPORATIVE UNIT FOR DUCTLESS SPLIT SYSTEM)								
SSO	SPLIT SYSTEM OUTDOOR SECTION (CONDENSING UNIT FOR DUCTLESS SPLIT SYSTEM)								
TC	TEMPERATURE CONTRACTOR								
UH	UNIT HEATER								
OED	OPEN ENDED DUCT								

HVAC CONTRACTOR GENERAL NOTES:

- A. ALL DUCTWORK, PIPING AND CONDUIT PENETRATIONS THROUGH RATED WALLS AND/OR FLOORS SHALL BE PROVIDED WITH FIRE/SMOKE STOPPINGS PER SPECIFICATION. REFER TO DRAWING CODE ANALYSIS DRAWING FOR ALL RATED WALL LOCATIONS. ALL FLOORS SHALL BE CONSIDERED RATED.
- B. ALL NEW PENETRATIONS SHALL BE PROVIDED FOR INSTALLATION OF MECHANICAL SYSTEMS INCLUDING, BUT NOT LIMITED TO, EQUIPMENT, CURBING, DUCTWORK, PIPING, ETC. PROVIDE LINTELS PER LINTEL SCHEDULE.
- C. DESIGN CONDITIONS DERIVED FROM ASHRAE 90.1 AND ARE BASED ON THE FOLLOWING:
 - OUTDOOR TEMPERATURE: SUMMER = 92°F DB/ 73°F WB; WINTER = 11°F DB/ 8.4°F WB;
 - INDOOR OCCUPIED TEMPERATURE SETPOINT: SUMMER = 75°F DB; WINTER = 70°F
- D. BUILDING IS LOCATED IN SEISMIC DESIGN CATEGORY C. REFER TO STRUCTURAL PLANS FOR ADDITIONAL SEISMIC DESIGN CATEGORY INFORMATION. REFER TO MECHANICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



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02/10/16	AMT	GAK

SCALE: N.T.S.
 SHEET TITLE:
 HVAC SYMBOLS
 LEGEND, NOTES &
 SYSTEM DIAGRAMS

PROJECT NUMBER	13283.01
DRAWING NUMBER	H000



COMcheck Software Version 4.0.2.5 Mechanical Compliance Certificate

Section 1: Project Information

Energy Code: 2012 North Carolina Energy Conservation Code
Project Title: NC DOT - Division 14 Office Assembly and Maintenance Shop
Project Type: New Construction

Construction Site: Hayesville, North Carolina
Owner/Agent: Designer/Contractor:

Section 2: General Information

Building Location (for weather data): Hayesville, North Carolina
Climate Zone: 4a

Section 3: Mechanical Systems List

Quantity	System Type & Description
1	FC-1 (Single Zone) : Split System Heat Pump Heating Mode: Capacity = 24 kBtu/h, Proposed Efficiency = 9.00 HSPF, Required Efficiency = 7.70 HSPF Cooling Mode: Capacity = 23 kBtu/h, Proposed Efficiency = 15.50 SEER, Required Efficiency = 13.00 SEER Fan System: FC-1 Mechanical Room 109 - Compliance (Motor nameplate HP method) : Passes Fans: FAN 7 Supply, Constant Volume, 700 CFM, 0.5 motor nameplate hp FAN 8 Exhaust, Constant Volume, 200 CFM, 0.0 motor nameplate hp
1	FC-2 (Single Zone) : Split System Heat Pump Heating Mode: Capacity = 17 kBtu/h, Proposed Efficiency = 8.20 HSPF, Required Efficiency = 7.70 HSPF Cooling Mode: Capacity = 17 kBtu/h, Proposed Efficiency = 15.50 SEER, Required Efficiency = 13.00 SEER Fan System: FC-2 Restrooms 102 and 106 - Compliance (Motor nameplate HP method) : Passes Fans: FAN 2 Exhaust, Constant Volume, 300 CFM, 0.1 motor nameplate hp FAN 9 Supply, Constant Volume, 525 CFM, 0.5 motor nameplate hp
1	FC-3 (Single Zone) : Split System Heat Pump Heating Mode: Capacity = 14 kBtu/h, Proposed Efficiency = 10.00 HSPF, Required Efficiency = 7.70 HSPF Cooling Mode: Capacity = 12 kBtu/h, Proposed Efficiency = 15.00 SEER, Required Efficiency = 13.00 SEER Fan System: FC-3 Equipment Shop 110 - Compliance (Motor nameplate HP method) : Passes Fans: FAN 3 Exhaust, Constant Volume, 3360 CFM, 0.8 motor nameplate hp FAN 10 Supply, Constant Volume, 380 CFM, 0.1 motor nameplate hp
1	IR-1 (Single Zone) : Heating: 1 each - Radiant Heater, Propane, Capacity = 50 kBtu/h No minimum efficiency requirement applies Fan System: None
1	IR-2 (Single Zone) : Heating: 1 each - Radiant Heater, Propane, Capacity = 90 kBtu/h No minimum efficiency requirement applies Fan System: None

Project Title: S:\Projects\NCDOT\Clay_Co Maint\03 Job Info_Mechanical\Clay County DOT jcbck
Data File Name: S:\Projects\NCDOT\Clay_Co Maint\03 Job Info_Mechanical\Clay County DOT jcbck
Report date: 01/11/16
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1 IR-3 (Single Zone) :
Heating: 1 each - Radiant Heater, Propane, Capacity = 90 kBtu/h
No minimum efficiency requirement applies
Fan System: None

Section 4: Requirements Checklist

Requirements Specific To: FC-1 :

- 1. Equipment minimum efficiency: Heat Pump: 7.70 HSPF 13.00 SEER
- 2. In systems with a cooling capacity of less than 65,000 Btu/h, a heat strip outdoor temperature lockout is provided to prevent supplemental heat operation in response to the thermostat being changed to a warmer setting. The lockout is set no lower than 35°F and no higher than 40°F.

Requirements Specific To: FC-2 :

- 1. Equipment minimum efficiency: Heat Pump: 7.70 HSPF 13.00 SEER
- 2. In systems with a cooling capacity of less than 65,000 Btu/h, a heat strip outdoor temperature lockout is provided to prevent supplemental heat operation in response to the thermostat being changed to a warmer setting. The lockout is set no lower than 35°F and no higher than 40°F.

Requirements Specific To: FC-3 :

- 1. Equipment minimum efficiency: Heat Pump: 7.70 HSPF 13.00 SEER
- 2. In systems with a cooling capacity of less than 65,000 Btu/h, a heat strip outdoor temperature lockout is provided to prevent supplemental heat operation in response to the thermostat being changed to a warmer setting. The lockout is set no lower than 35°F and no higher than 40°F.

Requirements Specific To: IR-1 :

None

Requirements Specific To: IR-2 :

None

Requirements Specific To: IR-3 :

None

Generic Requirements: Must be met by all systems to which the requirement is applicable:

- 1. Plant equipment and system capacity no greater than needed to meet loads
Exception(s):
 - Standby equipment automatically off when primary system is operating
 - Multiple units controlled to sequence operation as a function of load
- 2. Minimum one temperature control device per system
- 3. Minimum one humidity control device per installed humidification/dehumidification system
- 4. Load calculations per ASHRAE/ACCA Standard 183.
- 5. Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day dock, 2-hour occupant override, 10-hour backup
Exception(s):
 - Continuously operating zones
- 6. Outside-air source for ventilation; system capable of reducing OSA to required minimum
- 7. R-5 supply and return air duct insulation in unconditioned spaces
R-8 supply and return air duct insulation outside the building
R-8 insulation between ducts and the building exterior when ducts are part of a building assembly
Exception(s):
 - Ducts located within equipment
 - Ducts with interior and exterior temperature difference not exceeding 15°F.
- 8. Mechanical fasteners and sealants used to connect ducts and air distribution equipment
- 9. Ducts sealed - longitudinal seams on rigid ducts; transverse seams on all ducts; UL 181A or 181B tapes and mastics
- 10. Hot water pipe insulation: 1.5 in. for pipes <= 1.5 in. and 2 in. for pipes > 1.5 in.
Chilled water/refrigerant/brine pipe insulation: 1.5 in. for pipes <= 1.5 in. and 1.5 in. for pipes > 1.5 in.
Steam pipe insulation: 1.5 in. for pipes <= 1.5 in. and 3 in. for pipes > 1.5 in.
Exception(s):
 - Piping within HVAC equipment.
 - Fluid temperatures between 55 and 105°F.
 - Fluid not heated or cooled with renewable energy.

Project Title: S:\Projects\NCDOT\Clay_Co Maint\03 Job Info_Mechanical\Clay County DOT jcbck
Data File Name: S:\Projects\NCDOT\Clay_Co Maint\03 Job Info_Mechanical\Clay County DOT jcbck
Report date: 01/11/16
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- Piping within room fan-coil (with AHR440 rating) and unit ventilators (with AHR840 rating).
- Runouts < 4 ft in length.
- 11. Operation and maintenance manual provided to building owner
- 12. Balancing devices provided in accordance with IMC 603.17
- 13. Ventilation systems in buildings over 10,000 ft² of conditioned area have demand controls. DCV systems are capable of reducing outside supply air to at least 50% below design ventilation rates. In all buildings, spaces larger than 500 ft² with a maximum occupant load of 40 or more people per 1,000 ft² of floor area control ventilation supply air flow by monitoring indoor air quality conditions.
Exception(s):
 - Systems with heat recovery.
 - Building spaces where the primary ventilation needs are for process loads, including laboratories and hospital.
 - Individual units with less than 65 kBtu/h of cooling capacity.
- 14. Motorized, automatic shutoff dampers required on exhaust and outdoor air supply openings
Exception(s):
 - Gravity dampers acceptable in buildings < 3 stories
- 15. Automatic controls for freeze protection systems present
- 16. Exhaust air heat recovery included for systems 5,000 cfm or greater with more than 70% outside air fraction or specifically exempted
Exception(s):
 - Hazardous exhaust systems, commercial kitchen and clothes dryer exhaust systems that the International Mechanical Code prohibits the use of energy recovery systems.
 - Systems serving spaces that are heated and not cooled to less than 60°F.
 - Where more than 60 percent of the outdoor heating energy is provided from site-recovered or site solar energy.
 - Heating systems in climates with less than 3600 HDD.
 - Cooling systems in climates with a 1 percent cooling design wet-bulb temperature less than 64°F.
 - Systems requiring dehumidification that employ energy recovery in series with the cooling coil.
 - Laboratory fume hood exhaust systems that have either a variable air volume system capable of reducing exhaust and makeup air volume to 50 percent or less of design values or, a separate make up air supply meeting the following makeup air requirements: a) at least 75 percent of exhaust flow rate, b) heated to no more than 2°F below room setpoint temperature, c) cooled to no lower than 3°F above room setpoint temperature, d) no humidification added, e) no simultaneous heating and cooling.

Section 5: Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2012 North Carolina Energy Conservation Code requirements in COMcheck Version 4.0.2.5 and to comply with the mandatory requirements in the Requirements Checklist.

Andrew M. Tripp
Name - Title: Signature Date: 1/11/2016

Section 6: Post Construction Compliance Statement

- HVAC record drawings of the actual installation, system capacities, calibration information, and performance data for each equipment provided to the owner.
- HVAC O&M documents for all mechanical equipment and system provided to the owner by the mechanical contractor.
- Written HVAC balancing and operations report provided to the owner.

The above post construction requirements have been completed.

Principal Mechanical Designer-Name: Signature: Date:

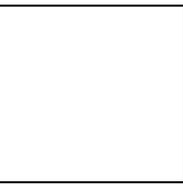
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Data File Name: S:\Projects\NCDOT\Clay_Co Maint\03 Job Info_Mechanical\Clay County DOT jcbck
Report date: 01/11/16
Page 3 of 3



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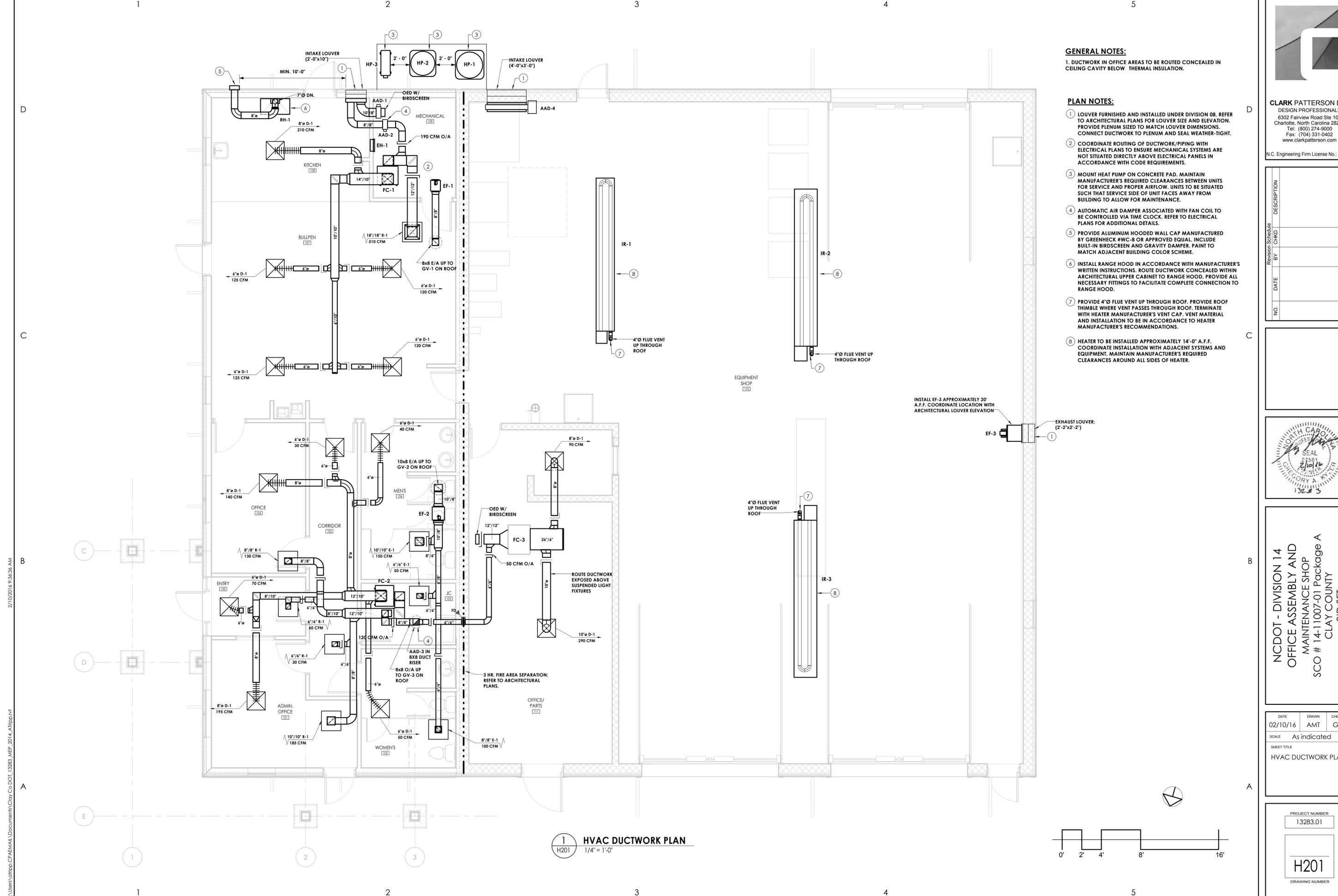


NCDOT - DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
02/10/16	AMT	GAK

SCALE:
SHEET TITLE:
ENERGY CODE
COMPLIANCE

PROJECT NUMBER
13283.01
H001
DRAWING NUMBER



GENERAL NOTES:

1. DUCTWORK IN OFFICE AREAS TO BE ROUTED CONCEALED IN CEILING CAVITY BELOW THERMAL INSULATION.

PLAN NOTES:

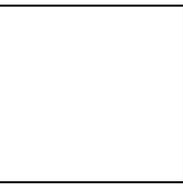
- ① LOUVER FURNISHED AND INSTALLED UNDER DIVISION 08. REFER TO ARCHITECTURAL PLANS FOR LOUVER SIZE AND ELEVATION. PROVIDE PLENUM SIZED TO MATCH LOUVER DIMENSIONS. CONNECT DUCTWORK TO PLENUM AND SEAL WEATHER-TIGHT.
- ② COORDINATE ROUTING OF DUCTWORK/PIPING WITH ELECTRICAL PLANS TO ENSURE MECHANICAL SYSTEMS ARE NOT SITUATED DIRECTLY ABOVE ELECTRICAL PANELS IN ACCORDANCE WITH CODE REQUIREMENTS.
- ③ MOUNT HEAT PUMP ON CONCRETE PAD. MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES BETWEEN UNITS FOR SERVICE AND PROPER AIRFLOW. UNITS TO BE SITUATED SUCH THAT SERVICE SIDE OF UNIT FACES AWAY FROM BUILDING TO ALLOW FOR MAINTENANCE.
- ④ AUTOMATIC AIR DAMPER ASSOCIATED WITH FAN COIL TO BE CONTROLLED VIA TIME CLOCK. REFER TO ELECTRICAL PLANS FOR ADDITIONAL DETAILS.
- ⑤ PROVIDE ALUMINUM HOODED WALL CAP MANUFACTURED BY GREENHECK #WC-8 OR APPROVED EQUAL. INCLUDE BUILT-IN BIRDSCREEN AND GRAVITY DAMPER. PAINT TO MATCH ADJACENT BUILDING COLOR SCHEME.
- ⑥ INSTALL RANGE HOOD IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. ROUTE DUCTWORK CONCEALED WITHIN ARCHITECTURAL UPPER CABINET TO RANGE HOOD. PROVIDE ALL NECESSARY FITTINGS TO FACILITATE COMPLETE CONNECTION TO RANGE HOOD.
- ⑦ PROVIDE 4" Ø FLUE VENT UP THROUGH ROOF. PROVIDE ROOF THIMBLE WHERE VENT PASSES THROUGH ROOF. TERMINATE WITH HEATER MANUFACTURER'S VENT CAP. VENT MATERIAL AND INSTALLATION TO BE IN ACCORDANCE TO HEATER MANUFACTURER'S RECOMMENDATIONS.
- ⑧ HEATER TO BE INSTALLED APPROXIMATELY 14'-0" A.F.F. COORDINATE INSTALLATION WITH ADJACENT SYSTEMS AND EQUIPMENT. MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES AROUND ALL SIDES OF HEATER.



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NO.	DATE	BY	CHKD	DESCRIPTION



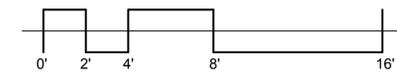
NC DOT - DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
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SCO # 14-11007-01 Package A
CLAY COUNTY
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DATE	DRAWN	CHECKED
02/10/16	AMT	GAK
SCALE: As indicated		
SHEET TITLE: HVAC DUCTWORK PLAN		

PROJECT NUMBER	13283.01
DRAWING NUMBER	H201

1 HVAC DUCTWORK PLAN
 H201 1/4" = 1'-0"



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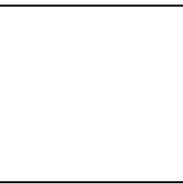
PLAN NOTES:
 ① PROVIDE 4"Ø FLUE VENT UP THROUGH ROOF. TERMINATE WITH HEATER MANUFACTURER'S VENT CAP MINIMUM OF 24" ABOVE ROOF. INSTALL IN ACCORDANCE WITH ALL APPLICABLE CODES AND HEATER MANUFACTURER'S RECOMMENDATIONS. REFER TO DETAIL 5/H800.



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NO.	DATE	Revision Schedule	
		BY	DESCRIPTION

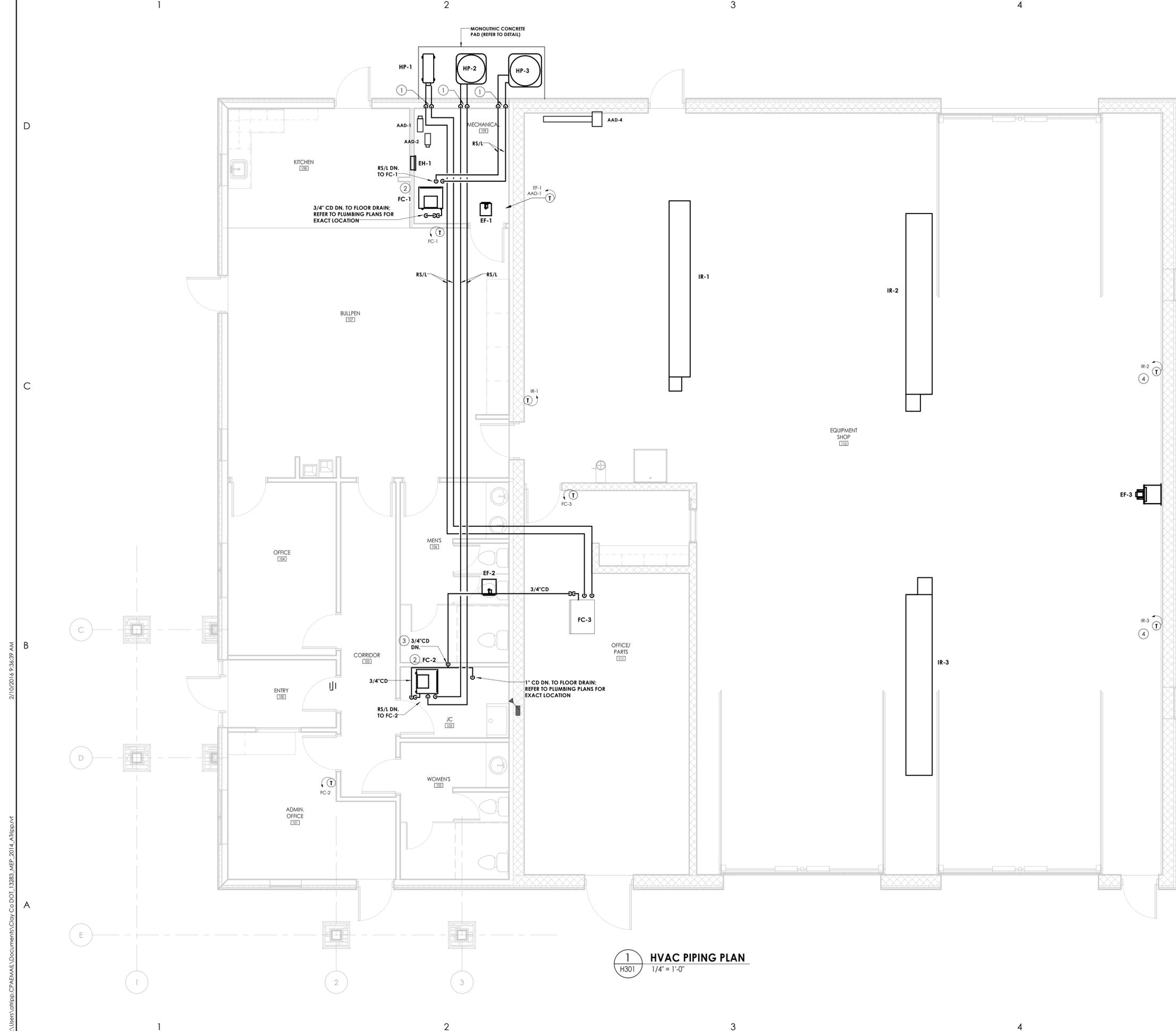


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 CLAY COUNTY
 BID SET

DATE	DRAWN	CHECKED
02/10/16	AMT	GAK
SCALE: As indicated		
SHEET TITLE		
HVAC ROOF PLAN		

PROJECT NUMBER	13283.01
DRAWING NUMBER	H202

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GENERAL NOTES:
 1. REFRIGERANT PIPING TO BE SIZED AND INSTALLED IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL ACCESSORIES TO FACILITATE SYSTEM OPERATION. PROVIDE LONG LINE APPLICATION ACCESSORIES FOR UNITS INDICATED ON SCHEDULE.
 2. ALL REFRIGERANT PIPING IN OFFICE AREAS TO BE ROUTED CONCEALED IN CEILING CAVITY BELOW THERMAL INSULATION.

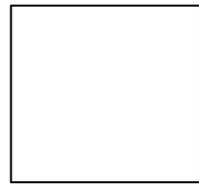
PLAN NOTES:
 ① ROUTE REFRIGERANT PIPING DOWN CONCEALED WITHIN WALL. COORDINATE EXTERIOR WALL PENETRATIONS FOR PIPING WITH UNIT ELEVATION PRIOR TO INSTALLATION.
 ② PROVIDE CONCRETE HOUSEKEEPING PAD FOR FAN COIL. REFER TO FAN COIL DETAIL.
 ③ ROUTE COOLING CONDENSATE PIPING DOWN CONCEALED WITHIN WALL.
 ④ PROVIDE INSULATED THERMOSTAT WALL PLATE FOR HEATER THERMOSTAT LOCATED ON EXTERIOR WALL.



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NO.	DATE	BY	CHKD	DESCRIPTION

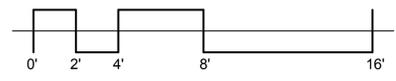


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SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

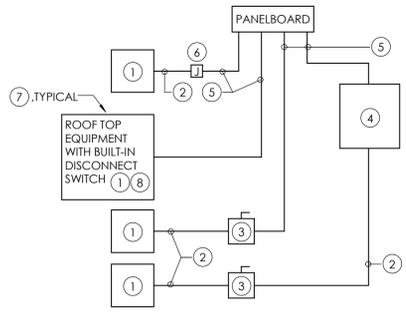
DATE: 02/10/16
 DRAWN: AMT
 CHECKED: GAK
 SCALE: As indicated
 SHEET TITLE: HVAC PIPING PLAN

PROJECT NUMBER: 13283.01
 DRAWING NUMBER: H301

1 HVAC PIPING PLAN
 H301 1/4" = 1'-0"

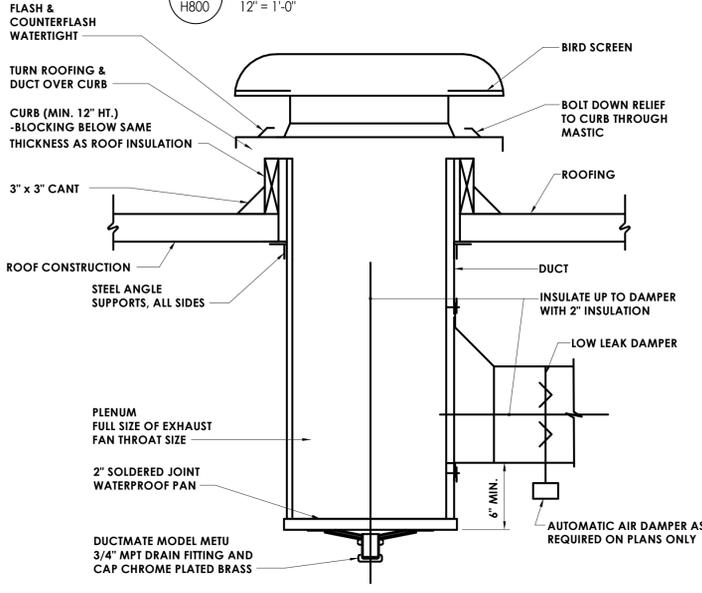


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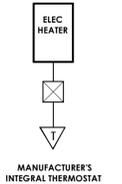


IN A SINGLE PRIME CONTRACT, IT IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR TO COORDINATE BETWEEN THE ELECTRICAL AND THE OTHER TRADES.

16 MECHANICAL/ELECTRICAL EQUIPMENT CONNECTION COORDINATION DETAIL
H800 12' = 1'-0"

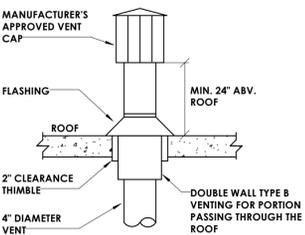


13 ROOF AIR INTAKE/RELIEF (GRAVITY) DETAIL
H800 N.T.S.



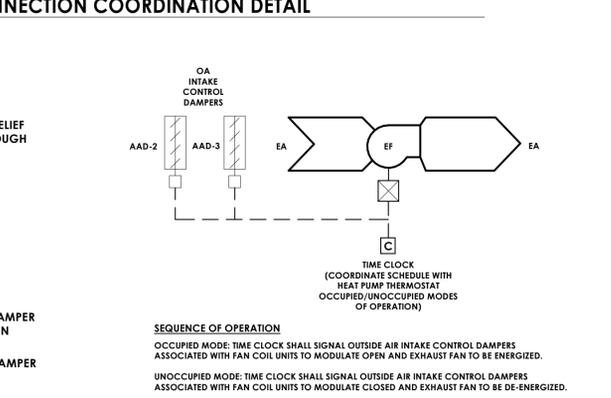
SEQUENCE OF OPERATION
ON A FALL IN SPACE TEMPERATURE BELOW 70°F (ADJ.) AS SELECTED ON MANUFACTURER'S INTEGRAL THERMOSTAT, HEATER FAN SHALL BE ACTIVATED AND ELECTRIC HEATING SHALL BE ENABLED. ON A RISE IN SPACE TEMPERATURE ABOVE SETPOINT, THE REVERSE SHALL OCCUR.

9 ELECTRIC HEATER CONTROL DIAGRAM
H800 N.T.S.

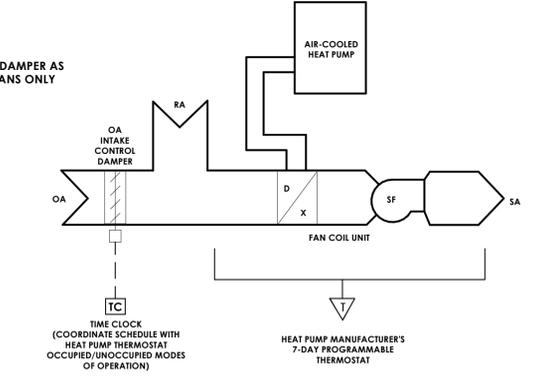


5 VENT TERMINATION DETAIL
H800 N.T.S.

- KEY NOTES:**
- EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.
 - CONDUIT AND WIRING BY HVAC, PLUMBING CONTRACTOR, OR OTHER TRADES.
 - IF AN ADDITIONAL DISCONNECT IS REQUIRED BY THE NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
 - A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
 - BRANCH CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK. SEE PANELBOARD AND MECHANICAL EQUIPMENT CONNECTION SCHEDULES FOR BREAKER AND WIRE SIZES.
 - JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING SHALL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
 - IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
 - IF THE ROOF TOP FAN IS NOT PROVIDED WITH BUILT-IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH.

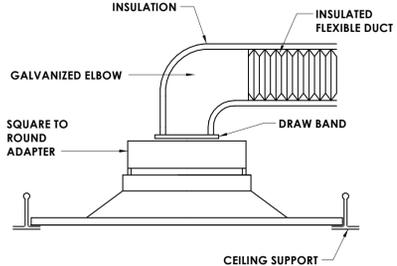


12 BATHROOM EXHAUST FAN CONTROL DIAGRAM
H800 N.T.S.

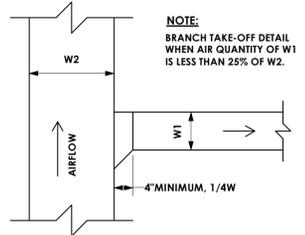


SEQUENCE OF OPERATION
OCCUPIED MODE: COOLING: INDOOR UNIT FAN SHALL RUN CONTINUOUSLY. ON A RISE IN SPACE TEMPERATURE ABOVE 75°F (ADJ.), OUTDOOR HEAT PUMP SHALL BE ACTIVATED AND REVERSING VALVE SHALL BE ENERGIZED. ON A FALL IN SPACE TEMPERATURE BELOW SETPOINT, THE REVERSE SHALL OCCUR.
HEATING: INDOOR UNIT FAN SHALL RUN CONTINUOUSLY. ON A FALL IN SPACE TEMPERATURE BELOW 70°F (ADJ.), OUTDOOR HEAT PUMP SHALL BE ACTIVATED. IF THE PRESENT ROOM TEMPERATURE FALLS 3°F BELOW SETPOINT, SUPPLEMENTAL HEATING SHALL BE ACTIVATED IN CONJUNCTION WITH HEAT PUMP OPERATION. ON A RISE IN SPACE TEMPERATURE ABOVE SETPOINT, THE REVERSE SHALL OCCUR.
UNOCCUPIED MODE: INDOOR UNIT FAN SHALL REMAIN OFF AND SHALL ONLY BE ENABLED ON A CALL FOR COOLING OR HEATING. UNIT SHALL ACTIVATE COOLING MODE IF THE SPACE TEMPERATURE RISES ABOVE SETBACK SETTING. UNIT SHALL ACTIVATE HEATING MODE IF THE SPACE TEMPERATURE DROPS BELOW SETBACK SETTING.

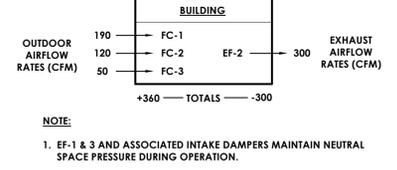
8 FAN COIL UNIT CONTROL SCHEMATIC
H800 N.T.S.



4 DIFFUSER DETAIL
H800 N.T.S.



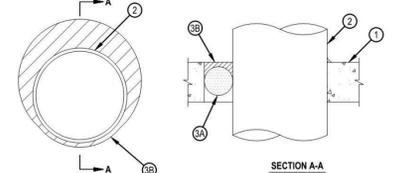
3 BRANCH TAKE-OFF DETAIL
H800 N.T.S.



15 BUILDING AIRFLOW DIAGRAM
H800 N.T.S.

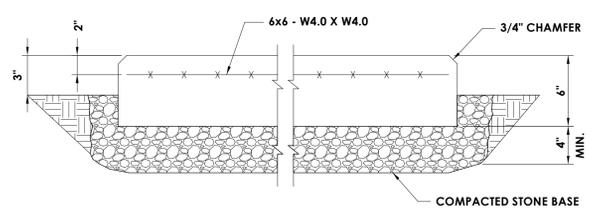
System No. C-AJ-1154

ANULUS 1479 (W/ST/EBR)	CANULC 5115
F Rating — 3 HR	F Rating — 3 HR
T Rating — 14 HR	FT Rating — 14 HR
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 14 HR
L Rating At 400 F — 4 CFM/sq ft	FTH Rating — 14 HR
	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — 4 CFM/sq ft



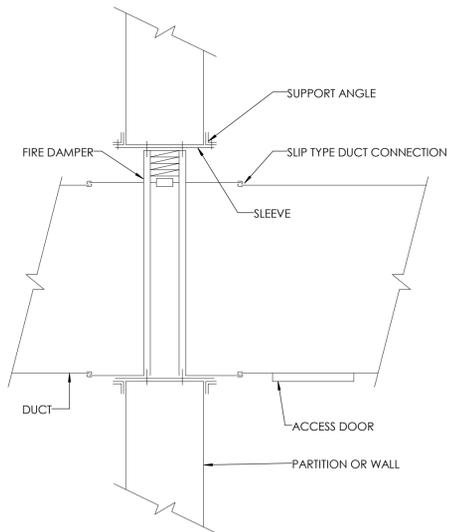
- Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocker. Max. diam of opening is 14 in. (356 mm). See Concrete Blocks (CBZ) Category in the Fire Resistance Directory for names of manufacturers.
- Through-Pipe/Floor — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the fire-resisting system. The annular space shall be min 1/2 in. to max 3/4 in. (13 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - Steel Pipe — Nom 1/2 in. (12.7 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - Conduit — Nom 1/2 in. (12.7 mm) diam (or smaller) steel electrical metallic tubing or steel conduit.
 - Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type K (or heavier) copper tubing.
 - Copper Pipe — Nom 1/2 in. (12.7 mm) diam (or smaller) Regular (or heavier) copper pipe.
- Firestop System — The firestop system shall consist of the following:
 - Packing Material — Mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall to accommodate the required thickness of fill material. As an option to the above, backer rod and/or foamed plastic backer material may be used.
 - Fill, Void or Cavity Material — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus. Flush with top surface of floor or with both surfaces of wall. At the joint contact location between pipe and concrete, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the concrete/pipe interface on the top surface of floor and on both surfaces of wall.

11 DETAIL OF PIPE THRU RATED WALL
H800 NOT TO SCALE

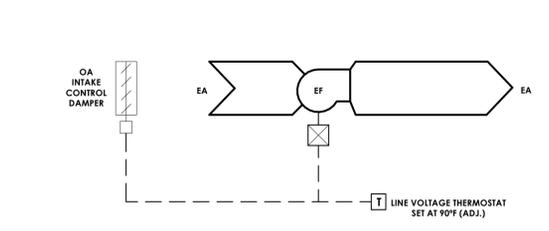


EXTERIOR PAD DETAIL FOR LOCATION ON GROUND
NOTE: COORDINATE PAD DIMENSIONS WITH EQUIPMENT SELECTED.

7 CONCRETE PAD DETAIL
H800 N.T.S.

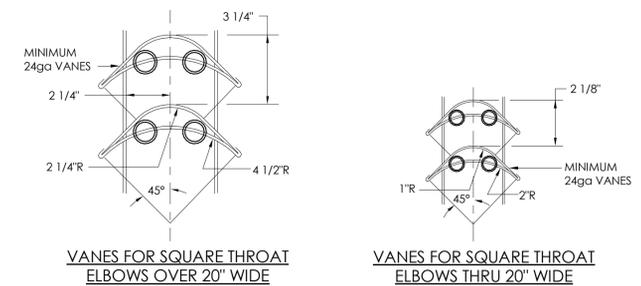


2 VERTICAL FIRE DAMPER
H800 N.T.S.

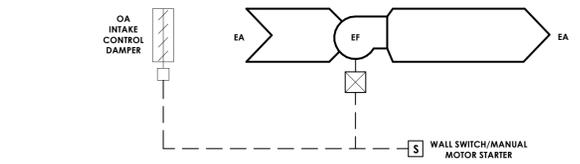


SEQUENCE OF OPERATION
ON A RISE IN SPACE TEMPERATURE ABOVE 90°F SETPOINT (ADJ.), OUTSIDE AIR INTAKE CONTROL DAMPER SHALL MODULATE OPEN AND EXHAUST FAN SHALL BE ENERGIZED. UPON A FALL IN SPACE TEMPERATURE BELOW SETPOINT, THE REVERSE SHALL OCCUR.

14 MECHANICAL RM. EXHAUST FAN CONTROL DIAGRAM
H800 N.T.S.

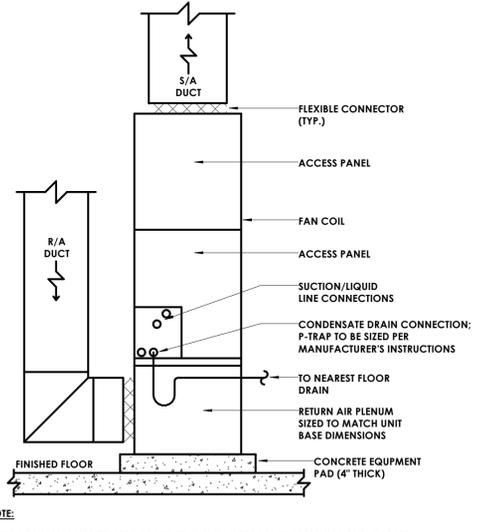


10 TURNING VANE DETAIL
H800 N.T.S.



SEQUENCE OF OPERATION
OCCUPIED MODE: SWITCH SHALL BE PLACED IN "ON" POSITION. OUTSIDE AIR INTAKE CONTROL DAMPER SHALL MODULATE OPEN AND EXHAUST FAN SHALL BE ENERGIZED.
UNOCCUPIED MODE: SWITCH SHALL BE PLACED IN "OFF" POSITION. OUTSIDE AIR INTAKE CONTROL DAMPER SHALL MODULATE CLOSED AND EXHAUST FAN SHALL BE DE-ENERGIZED.

6 EQUIPMENT SHOP EXHAUST FAN CONTROL DIAGRAM
H800 N.T.S.



NOTE:
1. MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES FOR UNIT SERVICE AND ACCESS.

1 FAN COIL DETAIL
H800 N.T.S.



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SCO # 14-11007-01 Package A
CLAY COUNTY
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DATE	DRAWN	CHECKED
02/10/16	AMT	GAK

SCALE: 12" = 1'-0"
SHEET TITLE:
HVAC DETAILS & CONTROL DIAGRAMS

PROJECT NUMBER 13283.01
H800 DRAWING NUMBER

DIFFUSER/GRILLE SCHEDULE					
MARK	APPLICATION	MATERIAL	FINISH	DESIGN EQUIPMENT	REMARKS
D-1	SUPPLY DIFFUSER	STEEL	WHITE	TITUS, TMS	1,3,4
E/R-1	EXHAUST/RETURN GRILLE	STEEL	WHITE	TITUS, 355RL	2,3,4

REMARKS

- PROVIDE 24"x24" MODULE. COORDINATE WITH SPACE CEILING TYPE FOR LAY-IN OR SURFACE MOUNTING.
- FOR GRILLES MOUNTED IN LAY-IN CEILING SYSTEM, PROVIDE MANUFACTURER'S 24"x24" STANDARD ADAPTOR MODULE TO FIT IN GRID.
- PROVIDE HANGERS AND MOUNTING ACCESSORIES SUITABLE FOR CEILING TYPE. COORDINATE DIFFUSERS/GRILLES WITH ARCHITECTURAL CEILING AND LIGHTING PLANS.
- SEE PLANS FOR NECK SIZE AND AIRFLOW RATE.

GRAVITY VENTILATOR SCHEDULE							
MARK	MANUFACTURER	MODEL	TYPE	CFM	STATIC PRESSURE DROP	THROAT AREA	REMARKS
GV-1	GREENHECK	GRSR-8	RELIEF	200	0.030" W.C.	0.37 SQ. FT.	1,2,3
GV-2	GREENHECK	GRSR-8	RELIEF	300	0.068" W.C.	0.37 SQ. FT.	1,2,3
GV-3	GREENHECK	GRSI-10	INTAKE	170	0.015" W.C.	0.57 SQ. FT.	1,2,3

REMARKS

- PROVIDE MANUFACTURER'S GRAVITY-OPERATED BACKDRAFT DAMPER.
- PROVIDE MANUFACTURER'S 12" HIGH ROOF CURB.
- PROVIDE MANUFACTURER'S ALUMINUM MESH INSECT SCREEN.

RANGE HOOD SCHEDULE									
MARK	MANUFACTURER	MODEL	CFM	WIDTH	MATERIAL	CONFIGURATION	VOLT/PHASE	MCA	REMARKS
RH-1	BROAN	QS130SS	220	30"	STAINLESS STEEL	UNDER CABINET	120/1	1.8	1,2

REMARKS

- FAN OPERATION TO BE CONTROLLED BY ADA COMPLIANT WALL SWITCH.
- PROVIDE MANUFACTURER'S INTEGRAL FAN, BACKDRAFT DAMPER, AND DUCT CONNECTION.

LOW INTENSITY INFRARED HEATER SCHEDULE										
MARK	MANUFACTURER	MODEL	TWO STAGE HEATING		FLUE VENT DIAMETER	MOUNTING HEIGHT A.F.F.	GAS TYPE	GAS SUPPLY PRESSURE	VOLT/PHASE	REMARKS
			HIGH INPUT (MBH)	LOW INPUT (MBH)						
IR-1	SPACE-RAY	LTU-50	50.0	31.5	4"	14'	PROPANE	11-14" W.C.	120/1	1,2
IR-2	SPACE-RAY	LTU-90	90.0	57.0	4"	14'	PROPANE	11-14" W.C.	120/1	1,2
IR-3	SPACE-RAY	LTU-90	90.0	57.0	4"	14'	PROPANE	11-14" W.C.	120/1	1,2

REMARKS

- PROVIDE MANUFACTURER'S ALUMINUM ROOF VENT CAP.
- PROVIDE MANUFACTURER'S CHAIN KIT, SUSPENSION SPACING TO BE IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS.

EXHAUST FAN SCHEDULE											
MARK	MANUFACTURER	MODEL	SPACE SERVED	AIRFLOW (CFM)	External Static Pressure (in.wc.)	FAN RPM	FAN HP	DRIVE TYPE	CONFIGURATION	VOLTAGE/ PHASE	REMARKS
EF-1	Greenheck	SQ-75-D	MECHANICAL RM 109	200	0.30"	1550	1/30	DIRECT	INLINE	120/1	1,2,3,5
EF-2	Greenheck	SQ-80-D	RESTROOMS 102 & 106	300	0.32"	1550	1/12	DIRECT	INLINE	120/1	1,3,4
EF-3	Greenheck	SE2-20-415	EQUIPMENT SHOP 110	3360	0.54"	1750	3/4	DIRECT	SIDEWALL	208/3	1,4,7

REMARKS

- PROVIDE WITH FACTORY MOUNTED AND WIRED DISCONNECT SWITCH AND MANUFACTURER'S SPEED CONTROLLER.
- PROVIDE WITH MANUFACTURER'S INLET GUARD, FAN TOTAL STATIC PRESSURE TO INCLUDE INLET GUARD PRESSURE LOSS OF 0.054" W.C.
- PROVIDE WITH MANUFACTURER'S SPRING ISOLATION HANGER KIT.
- FAN OPERATION TO BE CONTROLLED BY TIME CLOCK.
- FAN OPERATION TO BE CONTROLLED BY WALL-MOUNTED LINE VOLTAGE THERMOSTAT.
- PROVIDE WITH MANUFACTURER'S WALL HOUSING, GUARD AND GRAVITY BACKDRAFT DAMPER.
- FAN OPERATION TO BE CONTROLLED BY WALL-MOUNTED MANUAL MOTOR STARTER.

AIR-COOLED HEAT PUMP SCHEDULE												
MARK	MANUFACTURER	MODEL	TOTAL COOLING CAPACITY	SEER	HEATING CAPACITY @ 47°F (MBH)	HSPF	REFRIGERANT	VOLTAGE/ PHASE	MCA (A)	MOP (A)	WEIGHT (LBS)	REMARKS
HP-1	CARRIER	25HCC5-24	22.7	15.5	24.0	9.0	R-410A	208/1	16.5	25	200	1,2
HP-2	CARRIER	25HCC5-18	14.9	15.5	17.4	8.2	R-410A	208/1	11.8	20	170	1,3
HP-3	MITSUBISHI	SUZ-KA12NA	11.5	16.0	13.6	10.0	R-410A	208/1	13.0	15	80	1,4

REMARKS

- PROVIDE DISCONNECT SWITCH AND CRANKCASE HEATER.
- PROVIDE MANUFACTURER'S LOW AMBIENT CONTROLLER KIT AND ACCESSORIES.
- PROVIDE MANUFACTURER'S LONG LINE APPLICATION KIT AND ACCESSORIES.
- PROVIDE MANUFACTURER'S DRAIN SOCKET AND DRAIN PAN HEATER.

FAN COIL SCHEDULE												
MARK	MANUFACTURER	MODEL	FAN MOTOR HP	EXTERNAL STATIC PRESSURE (IN. WC.)	AIRFLOW (CFM)	OUTSIDE AIRFLOW (CFM)	TOTAL COOLING CAPACITY (MBH)	HEATING CAPACITY @ 47°F (MBH)	ELECTRIC AUXILIARY HEATING KW	REFRIGERANT	VOLTAGE/PHASE	REMARKS
FC-1	CARRIER	FV4CN002	1/2	0.50	700	190	22.8	24.0	8.0	R-410A	208/1	1
FC-2	CARRIER	FV4CN002	1/2	0.50	525	120	16.9	17.4	8.0	R-410A	208/1	1
FC-3	MITSUBISHI	SEZ-KD12NA4	96 WATTS	0.20	380	50	11.5	13.6	-	R-410A	208/1	1,2

REMARKS

- PROVIDE MANUFACTURER'S DISCONNECT SWITCH KIT.
- PROVIDE MANUFACTURER'S FILTER BOX ACCESSORY WITH FILTER.

ELECTRIC HEATER SCHEDULE SCHEDULE								
MARK	MANUFACTURER	MODEL	KW	CONFIGURATION	VOLT/PHASE	MCA	REMARKS	
EH-1	QMARK	AWH3150F	1.5	FULLY RECESSED	120/1	12.5	1,2	

REMARKS

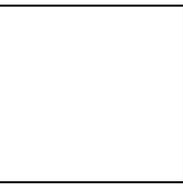
- PROVIDE MANUFACTURER'S DISCONNECT.
- PROVIDE MANUFACTURER'S INTEGRAL THERMOSTAT.



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02/10/16	AMT	GAK

SCALE: N.T.S.

SHEET TITLE
 HVAC SCHEDULES

PROJECT NUMBER
 13283.01

H900
 DRAWING NUMBER

PLUMBING FIXTURE & EQUIPMENT SCHEDULE							
SYM.	DESCRIPTION	CONNECTIONS (IN.)				SPECIFICATION	REMARKS
		W	V	CW	HW		
WC-1	TOILET, A.D.A. COMPLIANT HET-1.28 GAL. MANUAL FLUSH VALVE TANK TYPE FLOOR MOUNTED BOTTOM OUTLET WHITE VITREOUS CHINA	3"	2"	3/4"	-	FIXTURE: ZURN # Z5555-HET-1.28 SEAT: CHURCH # 29355	INSTALL PER ADA REQUIREMENTS
WC-2	TOILET, STANDARD HET-1.28 GAL. MANUAL FLUSH VALVE TANK TYPE FLOOR MOUNTED BOTTOM OUTLET WHITE VITREOUS CHINA	3"	2"	3/4"	-	FIXTURE: ZURN # Z5535-HET-1.28 SEAT: CHURCH # 29355	
UR-1	URINAL, A.D.A. COMPLIANT "THE PINT" 1/8 GPF LOW CONSUMPTION WALL HUNG, WHITE VITREOUS CHINA	2"	2"	3/4"	-	FIXTURE & FLUSHOMETER VALVE: ZURN # Z5798.207.00	INSTALL PER ADA REQUIREMENTS
LAV-1	COUNTERTOP LAVATORY, ACCESSIBLE 20"x17" 4" CENTERS, SELF-RIMMING WHITE VITREOUS CHINA SINGLE LEVER, 0.50 GPM AERATOR	11/2"	11/2"	1/2"	1/2"	LAV: ZURN # Z5110 FAUCET: ZURN # Z81000-XL-3M (0.5 GPM AERATOR) GRID DRAIN W/ OFFSET: MCGUIRE # 155LAT P-TRAP: MCGUIRE # 8902 11/4" x 1 1/2" SUPPLIES & STOPS: MCGUIRE # 175LK (LOOSE KEY)	PROVIDE INSULATION KIT FOR EXPOSED TRIM: TRUEBRO "LAV-GUARD" OR APPROVED EQUAL. INSTALL PER ADA REQUIREMENTS
SK-1	SINGLE BOWL SINK, ACCESSIBLE	1 1/2"	1 1/2"	1/2"	1/2"	ELKAY - GOURMET SINK # LR1919PD FS-1-FAUCET: ZURN # Z812H6-XL-21F (1.0 GPM AERATOR) COUNTER MOUNT, SINGLE BOWL, STAINLESS STEEL SINK, OD 31"x22", 7-5/8" DEEP, 4" CENTERS GOOSENECK FAUCET WITH WRISTBLADES GRID DRAIN W/ OFFSET: MCGUIRE # 155LAT P-TRAP: MCGUIRE # 8902 11/4" x 1 1/2" SUPPLIES & STOPS: MCGUIRE # 175LK (LOOSE KEY)	INSTALL PER ADA REQUIREMENTS
EW-1	ELECTRIC WATER COOLER, A.D.A. COMPLIANT DUAL UNIT (HI/LO TYPE) WALL MOUNTED, STANDARD FINISH	11/2"	11/2"	1/2"	-	FIXTURE: ELKAY # E2TL8C, 8.0 GPH, 4.0 FLA, 370 W P-TRAP: MCGUIRE # 8902 11/4" x 1 1/2" SUPPLY & STOP: MCGUIRE # 175LK (LOOSE KEY)	INSTALL PER ADA REQUIREMENTS FLEXIBLE BUBBLER GUARDS.
MR-1	MOP RECEPTOR	3"	2"	3/4"	3/4"	FIAT / TSB-3002-MSG, FIAT / 830-AA, FIAT / 832-AA, FIAT / 833-AA FLUSH TO WALL, FLOOR MOUNTING, MOLDED TERRAZZO BASIN 36"x36" SQUARE, 12" HIGH, WALL MOUNT FAUCET W/PAIL HOOK & WALL BRACE 30" LONG HOSE, HOSE BRACKET, MOP HANGER	
SS-1	STAINLESS STEEL FLOOR MOUNTED SERVICE SINK	3"	2"	3/4"	3/4"	JUST MFG. #J-127, SINGLE COMPARTMENT STAINLESS STEEL SINK WITH MOUNTING LEGS; JUST MFG. #JVB-1200 WALL MTD. FAUCET, WITH P-TRAP, SUPPLIES AND STOPS TO SUIT.	
ESH-1	EMERGENCY SHOWER/EYEWASH COMBO UNIT	3"	2"	-	-	BRADLEY #S19-314-DCBF, BARRIER-FREE DRENCH SHOWER AND EYE/FACE WASH UNIT, HINGED DUST COVER, HALO EYE/FACE SPRAY AND STAINLESS STEEL BOWL. PROVIDE WITH ANSI REQUIRED SIGNAGE. PROVIDE AUTOMATIC AUDIBLE AND VISUAL ALARM SYSTEM. BRADLEY MODEL # S19-320, 6'-0" CORD 120V.	INSTALL PER ANSI Z358.1-2009 REQUIREMENTS. ANSI Z358.1-2009 APPROVED.
NFHB-1	NON-FREEZE HOSE BIBB	-	-	3/4"	-	JOSAM # 71000 KEY OPERATED, NON-FREEZE, CONCEALED OUTLET, FLUSH MOUNTING BOX WITH COVER, INTEGRAL VACUUM BREAKER W/HOSE CONNECTION	
HB-1	HOSE BIB - INDOOR	-	-	3/4"	-	WOODFORD, MODEL 40 SERIES WITH VACUUM BREAKER AND POLYCARBONATE WHEEL HANDLE.	
TPV-1	TRAP PRIMER VALVE	-	-	1/2"	-	MIFAB # MR-500 PRESSURE DROP ACTIVATED TRAP SEAL PRIMER, 1/2" INLET/OUTLET, PRIMES UP TO 6 DRAINS. PROVIDE MI-GAP AIR GAP FITTING.	
TMV-1	THERMOSTATIC MIXING VALVE POINT-OF-USE	-	-	1/2"	1/2"	BRADLEY #S59-4008, MIN. FLOW 0.5 GPM, 1/2" TW OUTLET SET AT 105 DEGREES. LOCATE UNDER SINKS AND LAVATORY AS SHOWN ON DRAWINGS.	ASSE 1017 APPROVED.
TMV-2	THERMOSTATIC MIXING VALVE EMERG. SHOWER/EYE WASH	-	-	1"	1"	BRADLEY NAVIGATOR #S19-2250 EFX50 EMERGENCY VALVE, SURFACE MOUNTED STAINLESS STEEL CABINET, 1-1/4" TW TEPID WATER OUTLET SET AT 85 DEGREES.	ANSI Z358.1-2009 APPROVED. ASSE 1071 APPROVED. SEE REMARKS # 4

REMARKS

- ALL ACCESSIBLE EQUIPMENT/FIXTURES TO BE INSTALLED PER NC ACCESSIBILITY CODE.
- ALL PLUMBING FIXTURES SHALL BE WHITE.
- SIZED PER PLAN.
- EMERGENCY SHOWER / EYE WASH COLD AND HOT WATER SUPPLY SHUT OFF VALVES TO TMV-2 SHALL BE LOCKED IN THE OPEN POSITION.

GENERAL PLUMBING EQUIPMENT & FIXTURE COMMENT

- PLUMBING CONTRACTOR SHALL PROVIDE ALL RISERS, CARRIERS, P-TRAPS, STOPS, STRAINERS, TAIL PIECES, DRAINS, ETC. REQUIRED TO HAVE A COMPLETE INSTALLATION.
- OWNER SHALL PROVIDE PROPER FLUSHING ON A WEEKLY BASIS OF EMERGENCY SHOWER/EYE WASH AS PER ANSI Z358.1-2009, SECTIONS 4.6.2 AND SECTION 6.5.2 TO PREVENT EMERGENCY FIXTURE LOOP FROM BECOMING STAGNANT OR AMBIENT.

DRAIN SCHEDULE			
SYM	DESCRIPTION	MODEL	SPECIFICATION
FD-1	FLOOR DRAIN	ZURN ZN-415-BZ-P SEE NOTE 3	FLOOR DRAIN WITH DURA-COATED CAST IRON BODY, BOTTOM OUTLET, AND TRAP PRIMER CONNECTION. COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH "TYPE B" POLISHED NICKEL BRONZE STRAINER WITH TRAP PRIMER CONNECTION.
TD-1	TRENCH DRAIN (HEAVY DUTY)	ACO DRAIN SERIES S300K	TRENCH DRAIN 14" WIDE, NON-SLOPED WITH END OUTLET CONNECTION, OUTLET END CAPS, HEAVY DUTY COMMERCIAL SLOTTED IRON GRATES CLASS F.
FCO	FLOOR CLEANOUT	ZURN ZN-1400	ADJUSTABLE, CAST IRON BODY, POLISHED NICKEL BRONZE TOP, GAS/WATER TIGHT BRASS PLUG
WCO	WALL CLEANOUT TEE	ZURN ZN-1447	CAST IRON BODY, STAINLESS STEEL SQUARE WALL ACCESS COVER, GAS/WATER TIGHT

NOTE: 1. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING THE CORRECT OUTLET TYPE AND SIZE FOR EACH SPECIFIC SITUATION AND PROVIDE FOR INDIRECT WASTE CONNECTIONS AS REQUIRED
2. ALL FLOOR DRAINS AND TRENCH DRAINS SHALL HAVE WITH REMOVABLE STRAINERS / GRATES.
3. PROVIDE WITH TRAP PRIMER CONNECTIONS. CONNECTED TO TRAP PRIMER VALVE (TPV-1).

DOMESTIC WATER HEATER SCHEDULE								
MARK	MANUFACTURER	MODEL	ELECT.	KW INPUT	GALS STORAGE	GPH @ 100° F TEMP. RISE	WATER CONNECTION	REMARKS
EW-1	A.O. SMITH	DRE-120-18	208V/3PH	18	119	74	3/4"	1,2

REMARKS:

- PROVIDE 4" CONCRETE HOUSEKEEPING PAD.
- PROVIDE THREE 6 KW SIMULTANEOUS ELEMENTS.

GENERAL NOTES:

- ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODES.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND COMMENCEMENT OF ALL NEW WORK.
- ALL PIPING AND CONDUIT PENETRATIONS THRU FIRE RATED WALLS OR FLOORS SHALL BE PROVIDED WITH UL FIRE/SMOKE STOPPING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PATCH AND FINISH ALL PIPE PENETRATIONS AND TRENCHING THROUGH FLOORS AND WALLS. ALL NEW PENETRATIONS AND TRENCHING SHALL BE PROVIDED FOR INSTALLATION OF PLUMBING SYSTEMS INCLUDING, BUT NOT LIMITED TO EQUIPMENT, PIPING, ETC.
- BUILDING IS LOCATED IN SEISMIC DESIGN CATEGORY C. REFER TO STRUCTURAL PLANS FOR ADDITIONAL SEISMIC DESIGN CATEGORY INFORMATION. REFER TO PLUMBING SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

PIPING LEGEND

—XX—	PIPING
- - -XX- - -	PIPING BELOW GRADE
- - - -X- - - -	VENT PIPING
CA	COMPRESSOR AIR
CW	COLD WATER
CW (E)	COLD WATER EXISTING
HW	HOT WATER
HW (E)	HOT WATER EXISTING
HWR	HOT WATER RECIRCULATING
HWR (E)	HOT WATER RECIRCULATING EXISTING
SAN	SANITARY
SAN U/G	SANITARY UNDERGROUND
SAN (E)	SANITARY EXISTING
SAN U/G (E)	SANITARY UNDERGROUND EXISTING
ST	STORM
ST (E)	STORM EXISTING
ST2	STORM SECONDARY
ST2 (E)	STORM SECONDARY EXISTING
V	VENT
V (E)	EXISTING VENT
ETR	EXISTING TO REMAIN
////	EXISTING TO BE REMOVED / DEMOLISHED

FIXTURES & FITTINGS LEGEND

	TEE OUTLET - UP
	TEE OUTLET - DOWN
	CONNECTION - BOTTOM
	CONNECTION - TOP
	ELBOW - TURNED UP
	ELBOW - TURNED DOWN
	PIPE CAP
	UNION
	FLANGE
	BALL VALVE
	BALL VALVE WITH MEMORY STOP
	BALANCING VALVE
	CHECK VALVE
	BUTTERFLY VALVE
	CONTROL VALVE, PNEUMATIC 2-WAY
	GATE VALVE
	GLOBE VALVE
	PLUG VALVE
	PRESSURE RELIEF VALVE
	TEMPERATURE-PRESSURE RELIEF VALVE
	PRESSURE REDUCING VALVE
	COMBINATION VALVE (ISOLATION, CHECK, BALANCING)
	MOTOR OPERATED VALVE
	SOLENOID OPERATED VALVE
	GAS PRESSURE REGULATOR
ACW	AUTOMATIC CLOTHES WASHER
CO	CLEAN OUT
FCO / GCO	FLOOR CLEAN OUT / GRADE CLEAN OUT
WCO	WALL CLEAN OUT
HB	HOSE BIBB
NFHB	NON FREEZE HOSE BIBB
NFWH	NON FREEZE WALL HYDRANT
YH	YARD HYDRANT
HD	HUB DRAIN
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
FS	FLOOR SINK
RD	ROOF DRAIN
DS	DOWN SPOUT
	PIPE GUIDE
	PIPE ANCHOR
	FLEXIBLE PIPE CONNECTOR
	EXPANSION JOINT
	FLOW SWITCH
	PRESSURE SWITCH
	AQUASTAT
	PRESSURE GAUGE
	THERMOMETER
	STRAINER
	STRAINER WITH BLOWOFF
	VACUUM BREAKER
	INLINE PUMP
	WATER HAMMER ARRESTER
	REDUCED PRESSURE ZONE BACK FLOW PREVENTER
	DOUBLE CHECK VALVE ASSEMBLY
	SHOWER HEAD
	POINT OF CONNECTION
	POINT OF REMOVAL

OIL SEPARATOR SCHEDULE						
MARK	MANUFACTURER	MODEL	CAPACITY (GAL.)	FLOWRATE (GPM)	INLET AND OUTLET DIAMETER	REMARKS
OS-1	HIGHLAND TANK	HTC-550	550	55	4"	1,2,3

REMARKS:

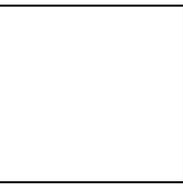
- PROVIDE CAST-IN-PLACE ANTI-BUOYANCY CONCRETE SLAB.
- PROVIDE HEAVY-DUTY MANWAY COVER RATED FOR CLASS F LOADING.
- PROVIDE HIGH LEVEL ALARM WIRED TO VISUAL AND AUDIBLE PANEL.



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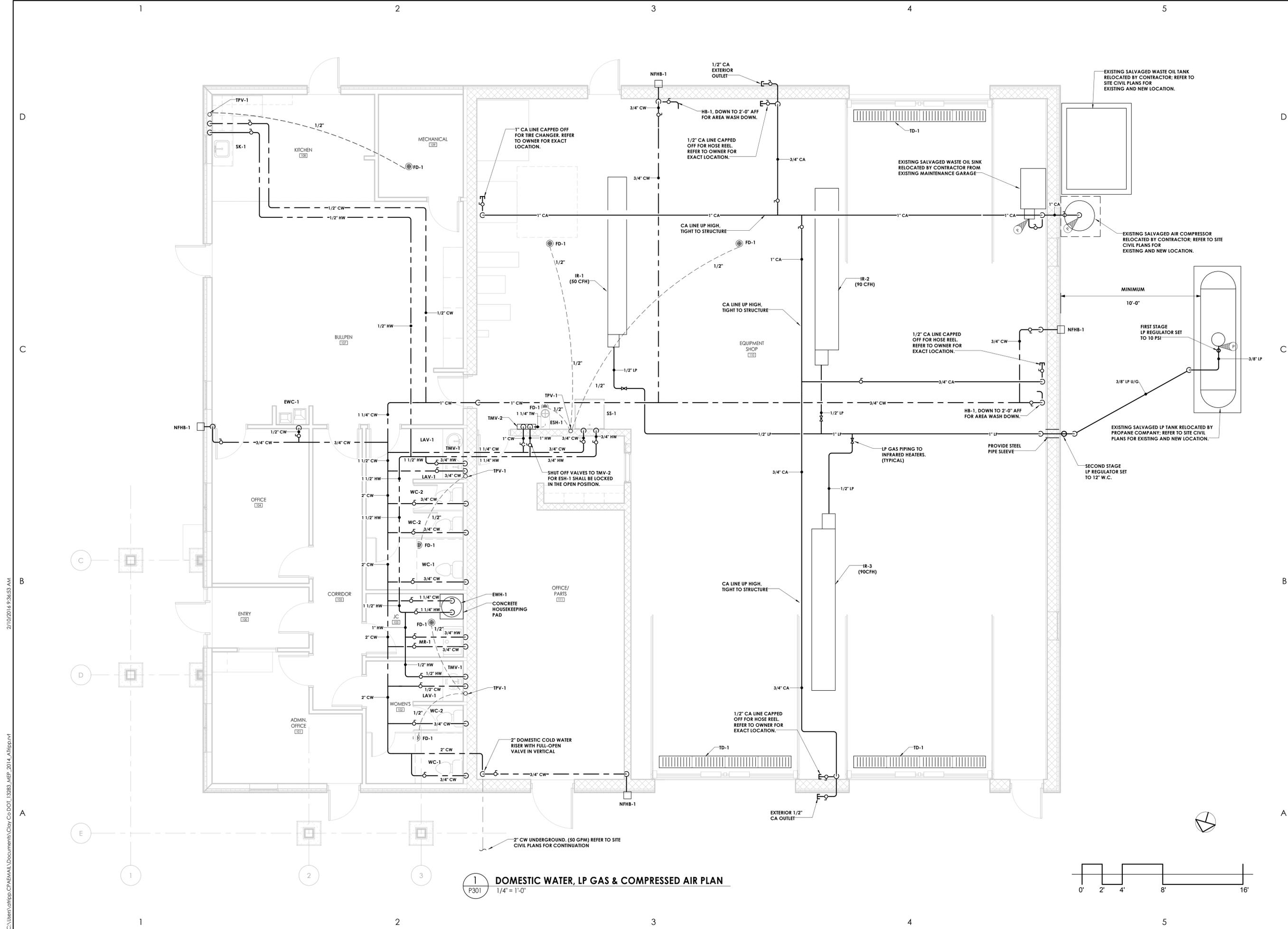


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SCO # 14-11007-01 Package A
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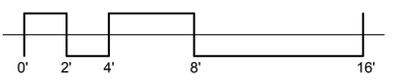
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02/10/16	AMT	GAK
SCALE: As indicated		
SHEET TITLE: PLUMBING LEGEND, NOTES, & SCHEDULES		

PROJECT NUMBER	13283.01
DRAWING NUMBER	P000

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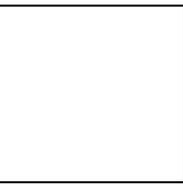
1 DOMESTIC WATER, LP GAS & COMPRESSED AIR PLAN
 1/4" = 1'-0"



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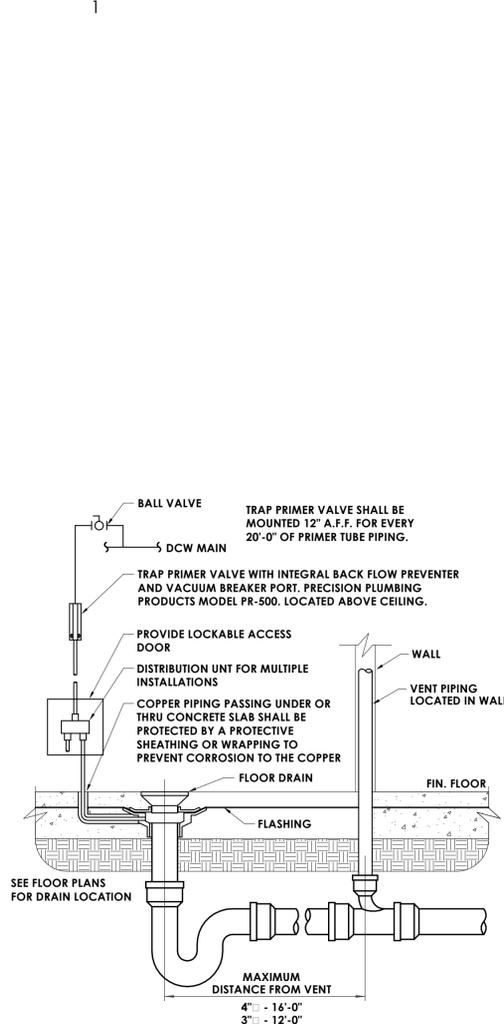
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BID SET

DATE	DRAWN	CHECKED
02/10/16	AMT	GAK
SCALE 1/4" = 1'-0"		
SHEET TITLE		
PLUMBING DOMESTIC WATER, LP GAS & COMPRESSED AIR PLAN		

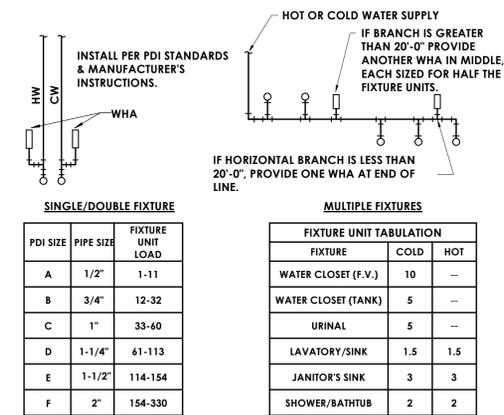
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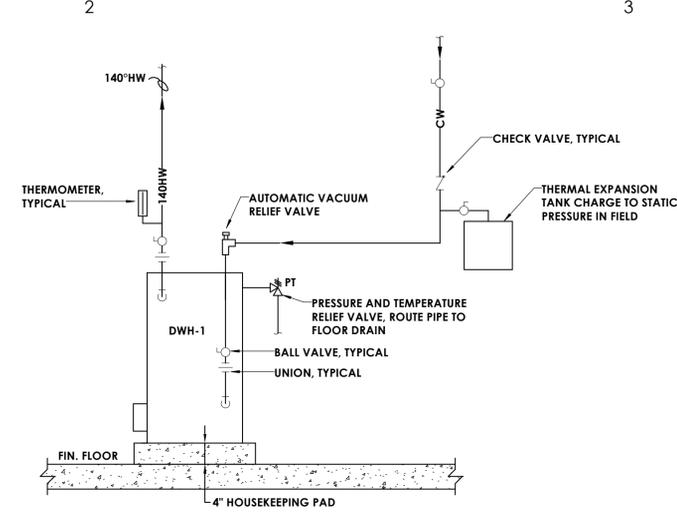
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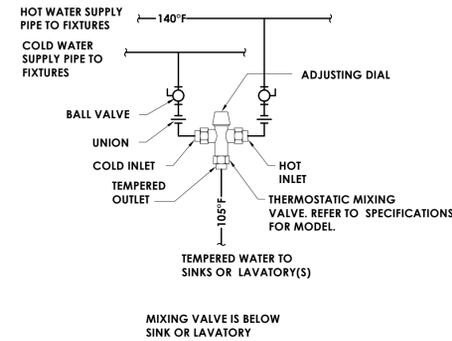
8 FLOOR DRAIN VENT & TRAP PRIMER DETAIL
P800 NOT TO SCALE



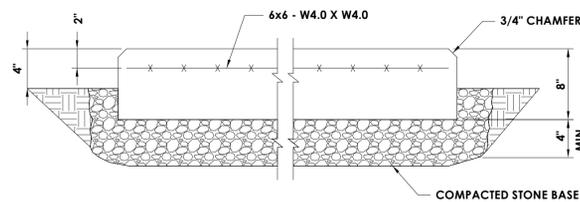
4 WATER HAMMER ARRESTERS DETAIL
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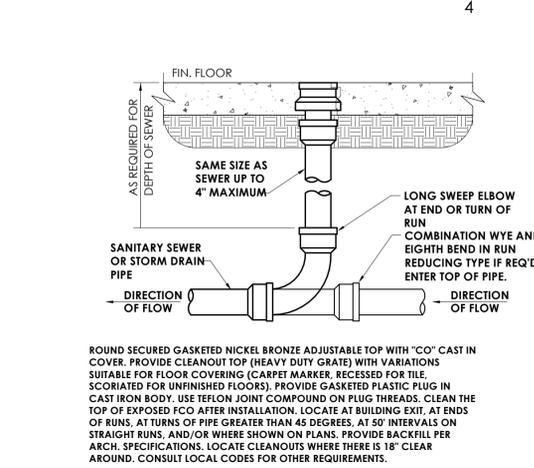
10 DOMESTIC WATER HEATER SCHEMATIC
P800 NOT TO SCALE



7 THERMOSTATIC MIXING VALVE DETAIL
P800 NOT TO SCALE

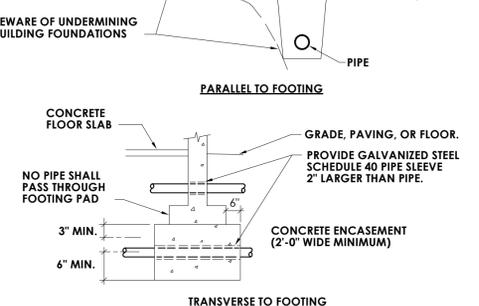


3 EXTERIOR CONCRETE PAD DETAIL
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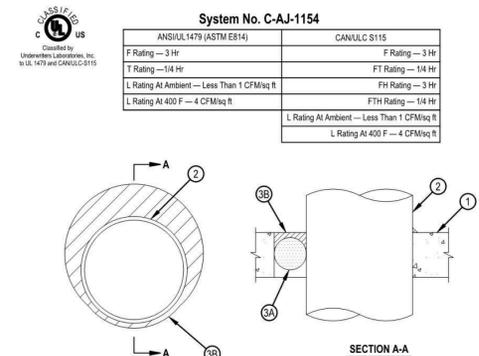


FLOOR CLEANOUT-FCO

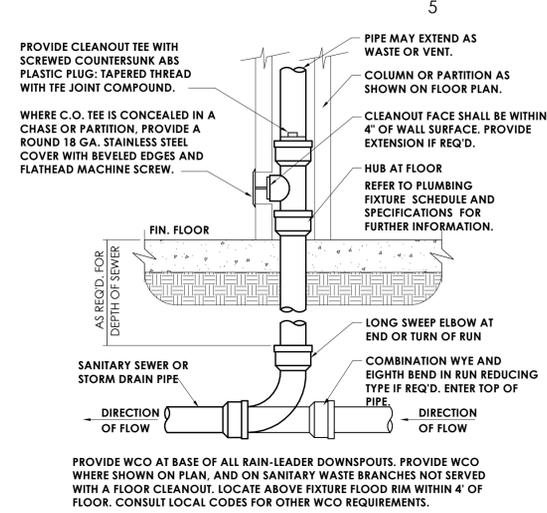
9 CLEAN OUT DETAILS
P800 NOT TO SCALE



6 PIPE AND TRENCH LOCATION DETAIL
P800 NOT TO SCALE

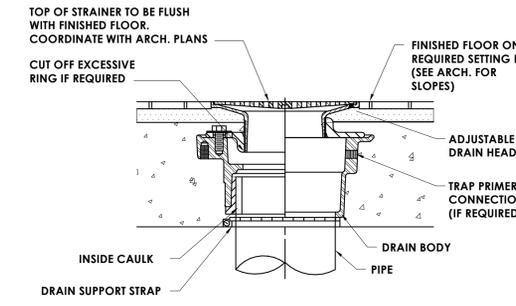


2 DETAIL OF PIPE THRU RATED WALL
P800 NOT TO SCALE



WALL CLEANOUT-WCO

5 FLOOR DRAIN DETAIL
P800 NOT TO SCALE



1 NON FREEZE-PROOF WALL HYDRANT DETAIL
P800 NOT TO SCALE



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PROJECT NUMBER
13283.01

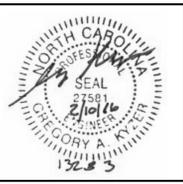
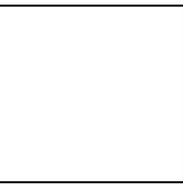
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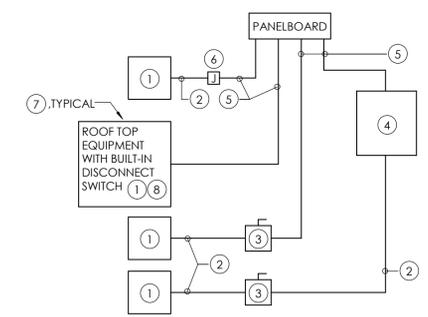
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SCALE: As indicated		
SHEET TITLE: PLUMBING DETAILS		

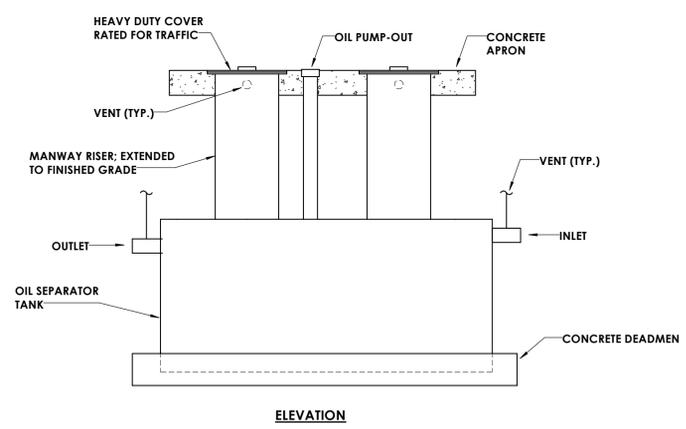
PROJECT NUMBER	13283.01
DRAWING NUMBER	P801



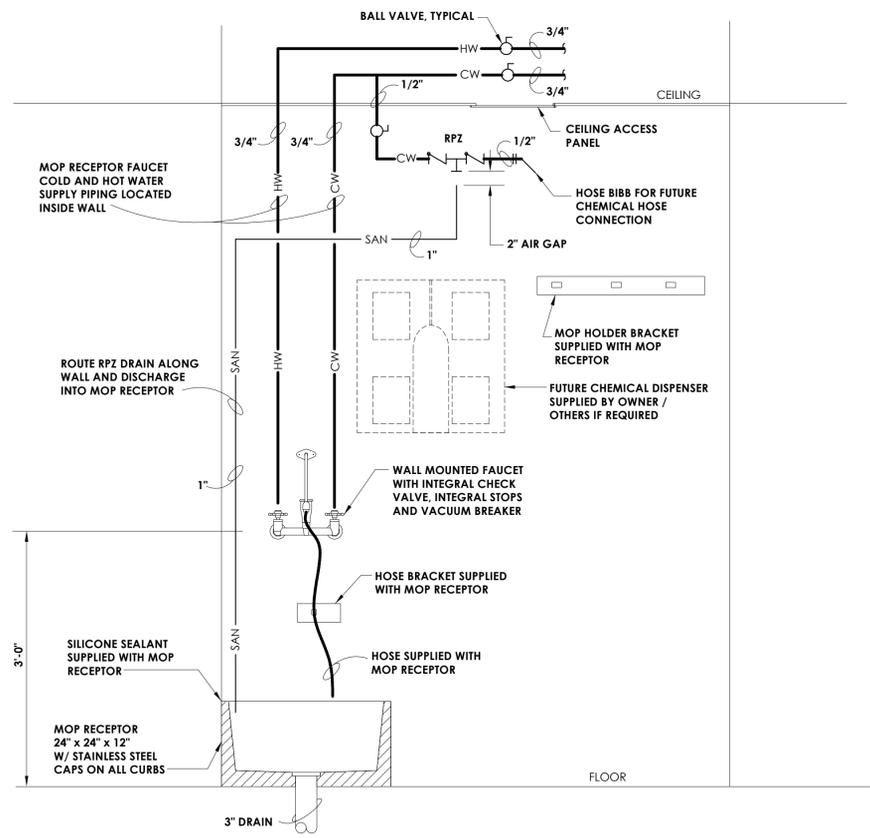
- KEY NOTES:**
- EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.
 - CONDUIT AND WIRING BY HVAC, PLUMBING CONTRACTOR, OR OTHER TRADES.
 - IF AN ADDITIONAL DISCONNECT IS REQUIRED BY THE NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
 - A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
 - BRANCH CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK. SEE PANELBOARD AND MECHANICAL EQUIPMENT CONNECTION SCHEDULES FOR BREAKER AND WIRE SIZES.
 - JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT, IF NO STARTER OR DISCONNECT IS SUPPLIED. A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING SHALL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
 - IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
 - IF THE ROOF TOP FAN IS NOT PROVIDED WITH BUILT-IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH.

IN A SINGLE PRIME CONTRACT, IT IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR TO COORDINATE BETWEEN THE ELECTRICAL AND THE OTHER TRADES.

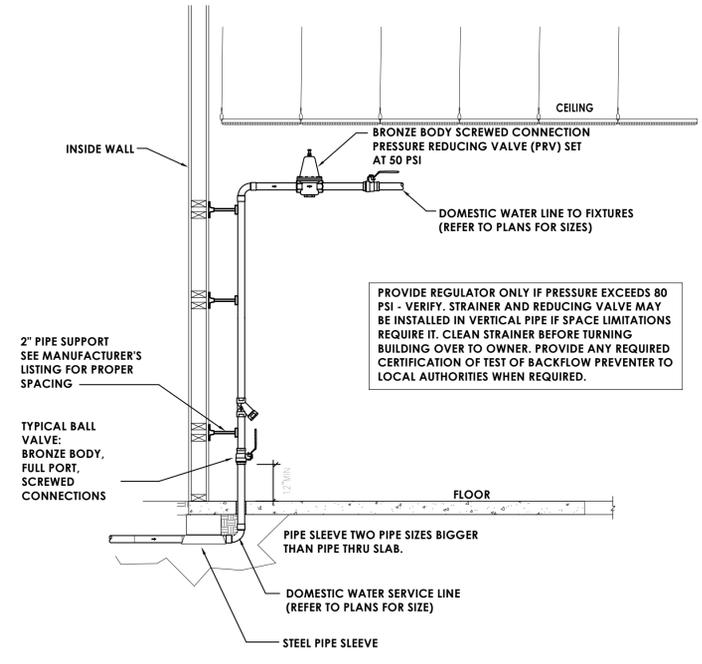
4 PLUMBING/ELECTRICAL EQUIPMENT CONNECTION COORDINATION DETAIL
 P801 12" = 1'-0"



3 OIL SEPARATOR DETAIL
 P801 NOT TO SCALE



2 MOP RECEPTOR DETAIL
 P801 NOT TO SCALE



1 DOMESTIC WATER SERVICE VERTICAL
 P801 NOT TO SCALE

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GENERAL NOTES:

- THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO OBSERVE THE EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ADVANCE NOTICE TO OWNER PRIOR TO DISCONNECTING EXISTING UTILITIES.
- VERIFY ALL ELECTRICAL REQUIREMENTS FOR EQUIPMENT WITH MANUFACTURER AND OTHER TRADES PRIOR TO ROUGH-IN OF ELECTRICAL. REFER TO PLUMBING AND HVAC DRAWINGS FOR EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS. COORDINATE EXACT LOCATION OF DEVICE OR JUNCTION BOX ROUGH-IN WITH ARCHITECTURAL ELEVATIONS OR OTHER TRADES.
- ALL CONDUITS FOR LOW VOLTAGE FIRE ALARM AND COMMUNICATION CABLES SHALL EXTEND FROM BACK BOX TO ABOVE ACCESSIBLE CEILING IN NEAREST CORRIDOR. COORDINATE PATH WITH INSTALLERS PRIOR TO ROUGH-IN.
- CONDUIT ROUTINGS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR SHALL VERIFY ALL ROUTES AND LOCATIONS WITH THE OWNER AND ARCHITECTS PRIOR TO ROUGH-IN.
- THE CONTRACTOR SHALL VERIFY ALL LIGHT FIXTURE VOLTAGES AND LENGTHS WITH THE DRAWINGS AND SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE SUITABLE TRIM AND APPURTENANCES TO MOUNT LIGHTING FIXTURES IN THE TYPE OF CEILING OR WALL AS SPECIFIED IN THE ARCHITECTURAL FINISH SCHEDULES REGARDLESS OF CATALOG NUMBER GIVEN. VERIFY BY REVIEWING ARCH. FINISH SCHEDULES PRIOR TO ORDERING FIXTURES.
- ALL LIGHTING FIXTURES INSTALLED UNDER THIS PROJECT SHALL BE INSTALLED TO MEET THE REQUIREMENTS OF ASTM C636. NOT LIMITED TO BUT INCLUDING WIRE SIZE, METHOD OF ATTACHMENT AND VERTICAL ALIGNMENT. EXISTING LIGHTING FIXTURES WITHIN THE LIMITS OF THIS CONSTRUCTION SHALL BE CORRECTED TO MEET THIS REQUIREMENT. AS A RESULT ALL LIGHTING FIXTURES NEW AND EXISTING WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C636.
- REFER TO ARCHITECTURAL DRAWINGS FOR DESCRIPTION OF PHASING FOR THIS PROJECT. COORDINATE THE INSTALLATION OF THE ELECTRICAL WORK TO COINCIDE WITH THE DESCRIPTION OF PHASING.
- ELECTRICAL OPERATING AND MAINTENANCE MANUAL SHALL INCLUDE THE MANUFACTURERS STANDARD MATERIALS (MANUALS OR WRITTEN DIRECTIONS) FOR OPERATION AND MAINTENANCE OF THE ELECTRICAL EQUIPMENT ON THE PROJECT. THE O&M MANUALS SHALL ALSO INCLUDE A COPY OF THE APPROVED SHOP DRAWINGS INCLUDING WIRING DIAGRAMS SPECIFIC FOR THIS PROJECT AND COPIES OF ALL CERTIFICATIONS OF INSTALLATION SUCH AS FOR FIRE ALARM, GENERATOR SYSTEMS, ETC. METHOD OF ASSEMBLY OF THE MANUAL SHALL FOLLOW SPECIFICATIONS SECTION 'CLOSEOUT SUBMITTALS'.
- FEEDER AND BRANCH CIRCUITS SHOWN ARE BASED ON 'EMT' CONDUIT AND THREE CURRENT CARRYING CONDUCTORS BASED ON 75 DEGREES CELSIUS INSULATION. ELECTRICAL CONTRACTOR SHALL ADJUST CONDUIT SIZE IF OTHER THAN 'EMT' CONDUIT IS USED. ELECTRICAL CONTRACTOR SHALL ADJUST WIRE SIZE FOR TERMINATIONS AND/OR EQUIPMENT THAT HAVE A LOWER TEMPERATURE RATING THAN 75 DEGREES CELSIUS. ELECTRICAL CONTRACTOR SHALL ADJUST WIRE SIZE FOR INSTALLATION IN SPACES WITH AN AMBIENT TEMPERATURE HIGHER THAN 30 DEGREES CELSIUS OR EXPOSED TO THE ELEMENTS SUCH AS ROOF TOPS. COORDINATE WITH THE EQUIPMENT INSTALLER TO DETERMINE THE TEMPERATURE RATING OF THE EQUIPMENT AND THE TERMINATION LUGS. BASE WIRE SIZE ON THE MORE STRINGENT TEMPERATURE RATING.

GENERAL ELECTRICAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2011 NATIONAL ELECTRICAL CODE (NFPA 70) AND WITH NORTH CAROLINA STATE BUILDING CODE.
- CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND COORDINATE WITH EXISTING EQUIPMENT PRIOR TO BIDDING.
- INSTALLATION HEIGHT TO CENTER OF EQUIPMENT ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED SHALL BE:
 RECEPTACLE = 18"
 CLOCK = 7'-6"
 SWITCH = 44"
 MODULAR JACK FOR WALL MOUNTED TELEPHONE = 52"
 MODULAR TELEPHONE JACK = 18"
 AUDIO/VISUAL FIRE ALARM INDICATORS = 80"
 FIRE ALARM PULL STATIONS = 44"
 TELEVISION OUTLET = 7'-0"
 COMPUTER OUTLET = 18"
 CALL SWITCH = 44"
 REMOTE TEST STATION FOR DUCT DETECTOR = 52"
 C = ABOVE COUNTER BACKSPLASH. COORDINATE WITH MILLWORK
- ALL CONDUIT AND WIRING SHALL BE CONCEALED IN WALLS OR ABOVE CEILINGS UNLESS OTHERWISE NOTED OR APPROVED BY THE ARCHITECT/ENGINEER. ALL DEVICE OUTLET BOXES SHALL BE RECESSED UNLESS OTHERWISE NOTED OR APPROVED BY THE ARCHITECT/ENGINEER.
- ALL CONDUIT ROUTES SHOWN ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY FINAL ROUTE.
- CONDUIT RUNS SHOWN ARE SCHEMATIC AND DO NOT INDICATE THE NECESSARY FITTINGS AND JUNCTION BOXES THAT ARE INCLUDED IN THE SCOPE OF THE WORK.

GROUNDING:

- ALL METAL RACEWAYS, INCLUDING CONDUIT, WIRE TROUGHS, WIREMOLD, ETC., SHALL BE GROUNDED. ALL CONNECTIONS IN METAL RACEWAYS SHALL BE COMPLETED IN SUCH A MANNER AS TO MAINTAIN A CONTINUOUS PATH TO GROUND THROUGHOUT THE ENTIRE LENGTH OF THE RACEWAY.

WIRING:

- UNLESS NOTED OTHERWISE ON THE DRAWINGS OR ON THE EQUIPMENT WIRING SCHEDULE, EACH BRANCH CIRCUIT SHALL BE 2# 12, 1# 12G; 3/4" CONDUIT. COMBINED NEUTRALS ARE NOT PERMITTED. PROVIDE #10 AWG FOR 120V BRANCH CIRCUITS LONGER THAN 100 FEET; INCREASE CONDUIT SIZE AS REQUIRED.

LIGHT FIXTURE LEGEND:

- LIGHTING FIXTURE (SEE LIGHTING FIXTURE SCHEDULE FOR LETTER DESIGNATION AND DESCRIPTION OF FIXTURES)
- EMERGENCY AND/OR NIGHT LIGHT LIGHTING FIXTURE
- EXIT LIGHTING FIXTURE UNIVERSAL MOUNT, SINGLE/DOUBLE FACE (WHERE USED, ARROW INDICATES CHEVRON DIRECTION)
- POWER PACK
- OCCUPANCY SENSOR - CEILING MOUNTED, WATTSTOPPER DT-300 OR EQUAL
- 2-WAY OCCUPANCY SENSOR - CEILING MOUNTED, WATTSTOPPER DT-300 OR EQUAL
- OCCUPANCY SENSOR - WALL MOUNTED, WATTSTOPPER DT-200 OR EQUAL
- LIGHTING CONTACTOR
- WALL SWITCH OCCUPANCY SENSOR
- WALL DIMMER, 0-10V LED, LUTRON #NTSTV-DV-WH OR EQUAL
- WALL DIMMER, 3-WAY, 0-10V LED, LUTRON #NTSTV-DV-WH OR EQUAL
- DIGITAL TIME SWITCH, WATTSTOPPER TS-400 OR EQUAL
- PHOTOCONTROL SWITCH

WIRING LEGEND:

- SWITCH
 - (NONE) SINGLE POLE TOGGLE SWITCH
 - 2 TWO POLE TOGGLE SWITCH
 - 3 THREE WAY TOGGLE SWITCH
 - 4 FOUR WAY TOGGLE SWITCH
 - K SINGLE POLE KEYPED SWITCH
 - K3 THREE WAY KEYPED SWITCH
- LOWER CASE LETTER DESIGNATES SWITCH LEG
- SINGLE RECEPTACLE
- PLUG MOLD
- DUPLEX RECEPTACLE
- QUADRUPLEX RECEPTACLE
- GROUND FAULT CIRCUIT INTERRUPTER
- WEATHER PROOF IN-USE COVER
- WEATHER RESISTANT
- COUNTER HEIGHT
- TAMPER RESISTANT, UL LISTED
- PROJECTOR OUTLET (84" AFF UNO)
- SPECIAL RECEPTACLE, NEMA NUMBER INDICATED ON PLAN
- POWER POLE
- RECESSED FLOOR MOUNTED DUPLEX RECEPTACLE
- SURFACE MOUNTED FLOOR RECEPTACLE
- CEILING MOUNTED DUPLEX RECEPTACLE
- CORD REEL/RECEPTACLE
- JUNCTION BOX
- FUTURE FAN LOCATION, PROVIDE JUNCTION BOX AND 3/4" CONDUIT TO PANEL 'EP-1'.
- DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH
- MANUAL STARTER
- COMBINATION VARIABLE SPEED DRIVE AND DISCONNECT
- VARIABLE SPEED DRIVE
- MOTOR WITH DESIGNATOR
- WATER HEATER
- OVERHEAD DOOR OPERATOR
- BRANCH CIRCUIT HOME RUN WITH PANEL NAME AND CIRCUIT NUMBER. QUANTITY OF ARROWHEADS DENOTES QUANTITY OF BRANCH CIRCUITS
- BRANCH CIRCUIT WIRING, PROVIDE QUANTITIES OF CONDUCTORS REQUIRED FOR CIRCUITING AND SWITCHING AS INDICATED
- LIGHTING PLANS: POWER LEG ONLY (NO SWITCH LEG BETWEEN ROOMS) OTHER PLANS: CONDUIT BELOW SLAB OR GRADE.
- DOOR RELEASE PUSHBUTTON
- ADA PUSHBUTTON
- GROUNDING ROD
- MOTORIZED DAMPER
- TIME SWITCH
- THERMOSTAT

SECURITY LEGEND:

- UNLESS NOTED OTHERWISE ON DRAWINGS, FOR EACH SECURITY DEVICE BELOW, PROVIDE TWO-GANG BOX WITH SINGLE-GANG MUDRING, WITH 3/4" CONDUIT WITH PULL STRING STUBBED TO 6" ABOVE NEAREST ACCESSIBLE CEILING. PROVIDE NYLON BUSHING ON CONDUIT END. SECURITY SYSTEM EQUIPMENT AND WIRING BY OWNER.
- CARD READER BY OWNER
- MAGNETIC DOOR SWITCH
- ELECTRIC STRIKE CONNECTION
- DOOR UNLOCK PUSHBUTTON
- CCTV CAMERA BY OWNER

COMMUNICATIONS LEGEND:

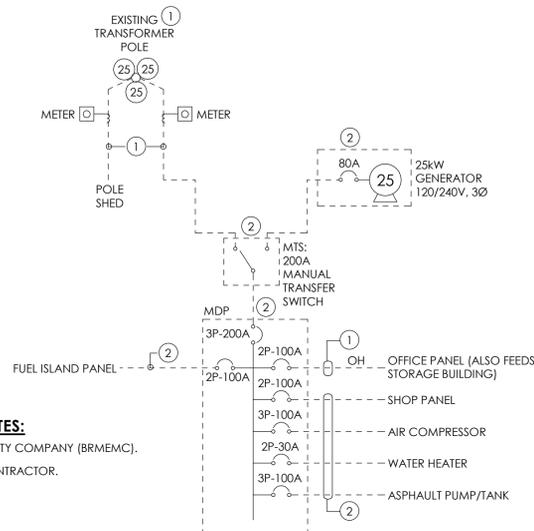
- UNLESS NOTED OTHERWISE ON DRAWINGS, FOR EACH COMMUNICATIONS OUTLET BELOW, PROVIDE TWO-GANG BOX WITH SINGLE-GANG MUDRING, WITH 3/4" CONDUIT WITH PULL STRING STUBBED TO 6" ABOVE NEAREST ACCESSIBLE CEILING. PROVIDE NYLON BUSHING ON CONDUIT END.
- DATA FLOOR OUTLET: (2) CAT6 CABLES IN SPECIFIED COMBINATION DATA/POWER FLOOR BOX
- TWO DATA OUTLETS IN DOUBLE GANG FLUSH MOUNTED BOX WITH FACEPLATE
 - C COUNTER HEIGHT MODULAR JACK
- TELEVISION OUTLET
- CEILING MOUNTED - TWO DATA OUTLETS IN DOUBLE GANG FLUSH MOUNTED BOX WITH FACEPLATE

PANEL LEGEND:

- ELECTRICAL PANEL
 - MSB MAIN SWITCH BOARD
- ELECTRICAL SYSTEMS PANEL
 - FACP FIRE ALARM CONTROL PANEL
 - FAAP FIRE ALARM ANNUNCIATOR PANEL
 - LCP LIGHTING CONTROL PANEL

NOTE:

SYMBOLS SHOWN ON THIS ELECTRICAL SYMBOLS LIST ARE FOR REFERENCE PURPOSES ONLY. ALL OF THESE SYMBOLS MAY NOT BE USED FOR THIS PROJECT.



REMOVAL NOTES:

- REMOVAL BY UTILITY COMPANY (BRMCMC).
- REMOVAL BY CONTRACTOR.

EXISTING

1 ONE-LINE DIAGRAM
E000 1/8" = 1'-0"

ELECTRICAL SYSTEM AND EQUIPMENT
 METHOD OF COMPLIANCE:
 ENERGY CODE: PRESCRIPTIVE PERFORMANCE
 ASHRAE 90.1: PRESCRIPTIVE PERFORMANCE

STANDARD RISER DIAGRAM WITH DESIGNATED METERING POINTS: DWG. THIS SHEET
 STANDARD PANEL SCHEDULE(S) WITH END USE LOADS IDENTIFIED: DWG. E900

LIGHTING SCHEDULE

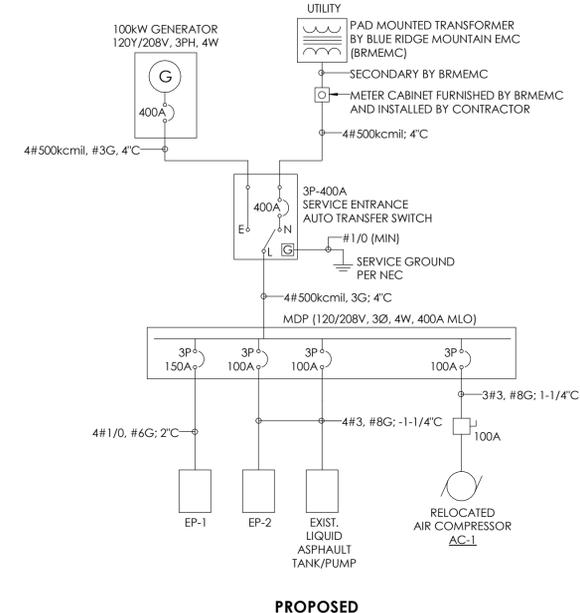
LAMP TYPE REQUIRED IN FIXTURE	SEE LIGHTING FIXTURE SCHEDULE SHEET E900
NUMBER OF LAMPS IN FIXTURE	SEE LIGHTING FIXTURE SCHEDULE SHEET E900
BALLAST TYPE USED IN THE FIXTURE	LED DRIVER
NUMBER OF BALLASTS IN FIXTURE	N/A
TOTAL WATTAGE PER FIXTURE	SEE LIGHTING FIXTURE SCHEDULE SHEET E900
TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED	3358 vs. 5640 (BUILDING AREA METHOD)
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED	NOT APPLICABLE

ADDITIONAL PRESCRIPTIVE COMPLIANCE

- 506.2.1 MORE EFFICIENT MECHANICAL EQUIPMENT
- 506.2.2 REDUCED LIGHTING POWER DENSITY
- 506.2.3 ENERGY RECOVERY VENTILATION SYSTEMS
- 506.2.4 HIGHER EFFICIENCY SERVICE WATER HEATING
- 506.2.5 ON-SITE SUPPLY OF RENEWABLE ENERGY
- 506.2.6 AUTOMATIC DAYLIGHTING CONTROL SYSTEMS
- NOT APPLICABLE

DESIGNER STATEMENT:
 TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEMS AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA STATE ENERGY CODE (2012 EDITION).

SIGNED: *Thomas G. Bucher*
 NAME: THOMAS G. BUCHER, P.E.
 TITLE: ELECTRICAL ENGINEER



PROPOSED

SHEET LIST:

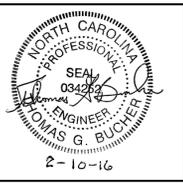
- E000 ELECTRICAL LEGEND, NOTES, AND RISER DIAGRAM
- E001 ELECTRICAL SITE PLAN AND DETAILS
- E201 ELECTRICAL POWER AND SYSTEMS PLAN
- E301 ELECTRICAL LIGHTING PLAN
- E800 ELECTRICAL DETAILS
- E900 ELECTRICAL SCHEDULES



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N.C. Engineering Firm License No. C-2194

NO.	DATE	BY	DESCRIPTION



NCDOT - DIVISION 14
 OFFICE ASSEMBLY AND
 MAINTENANCE SHOP
 SCO # 14-11007-01 Package A
 CLAY COUNTY
 BID SET

DATE	DRAWN	CHECKED
02/10/16	JMM	TGB
SCALE: As indicated		
SHEET TITLE: ELECTRICAL LEGEND, NOTES, AND RISER DIAGRAM		

PROJECT NUMBER	13283.01
DRAWING NUMBER	E000

ELECTRICAL SITE PLAN KEY NOTES:

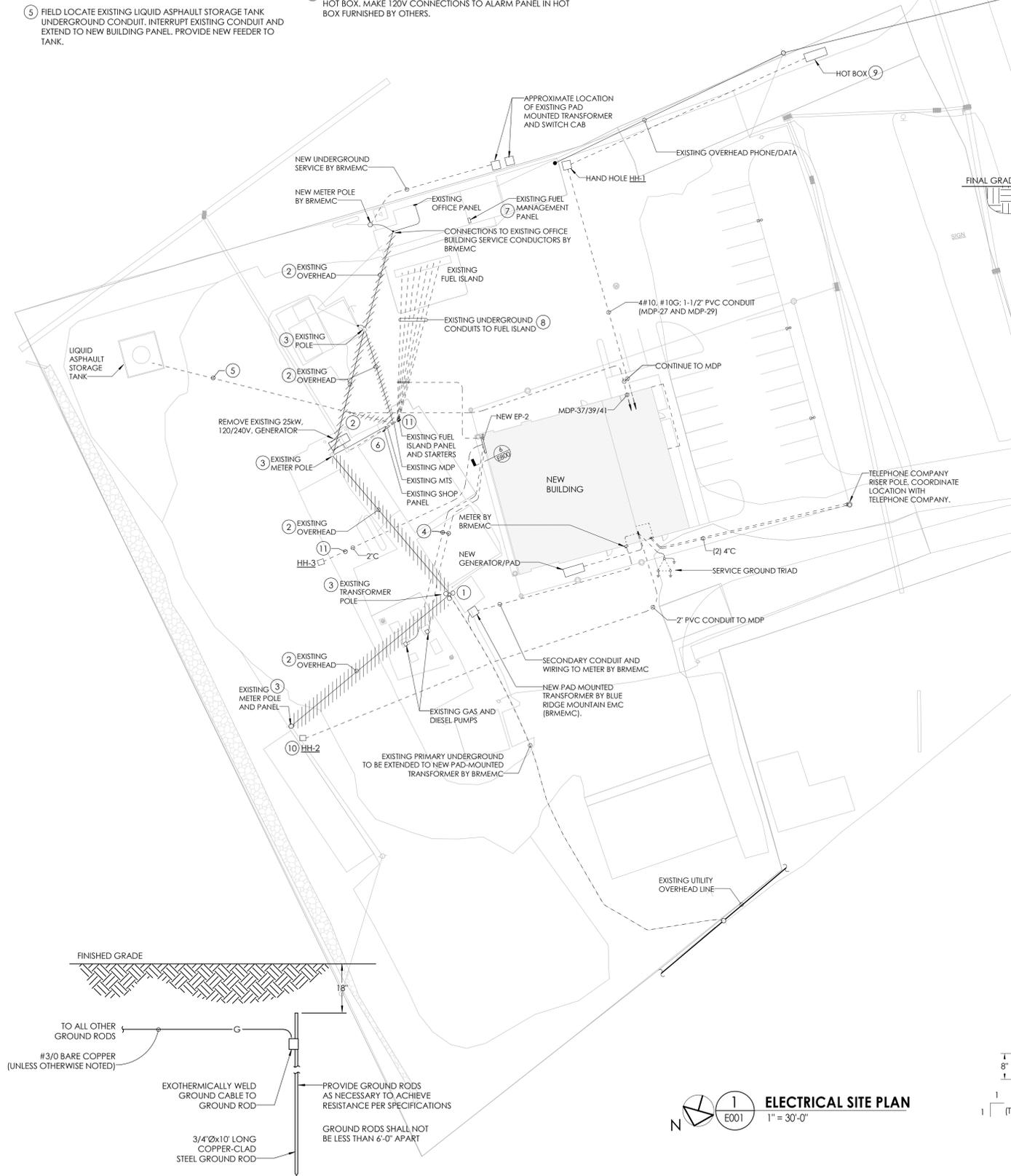
- 1 EXISTING TRANSFORMER POLE TO BE REMOVED BY BLUE RIDGE MOUNTAIN EMC (BRMEMC).
- 2 REMOVAL OF EXISTING OVERHEAD CONDUCTORS BY BRMEMC.
- 3 REMOVAL OF POLE BY BRMEMC.
- 4 FIELD LOCATE EXISTING GAS AND DIESEL PUMP UNDERGROUND CONDUIT AND WIRING. INTERRUPT EXISTING CONDUIT AND EXTEND TO NEW PANEL EP-2 LOCATION. PROVIDE NEW FEEDERS TO PUMPS.
- 5 FIELD LOCATE EXISTING LIQUID ASPHALT STORAGE TANK UNDERGROUND CONDUIT. INTERRUPT EXISTING CONDUIT AND EXTEND TO NEW BUILDING PANEL. PROVIDE NEW FEEDER TO TANK.
- 6 DISCONNECT AND REMOVE EXISTING MDP, MTS, SHOP PANEL, AND FUEL ISLAND PANEL. RELOCATE FUEL ISLAND STARTERS TO NEW BUILDING.
- 7 RELOCATE EXISTING FEEDER-ROOT FUEL MANAGEMENT SYSTEM TO NEW BUILDING.
- 8 ABANDON EXISTING FUEL ISLAND POWER AND CONTROL CIRCUITS AND CONDUITS. REMOVE WIRING FROM CONDUITS.
- 9 PROVIDE GFCI RECEPTACLE IN CAST BOX WITH WP COVER IN HOT BOX. MAKE 120V CONNECTIONS TO ALARM PANEL IN HOT BOX FURNISHED BY OTHERS.
- 10 DEAD END CONDUIT IN HAND HOLE.
- 11 PROVIDE 2" CONDUIT TO FUTURE FUEL ISLAND LOCATION. COORDINATE WITH OWNER.

D

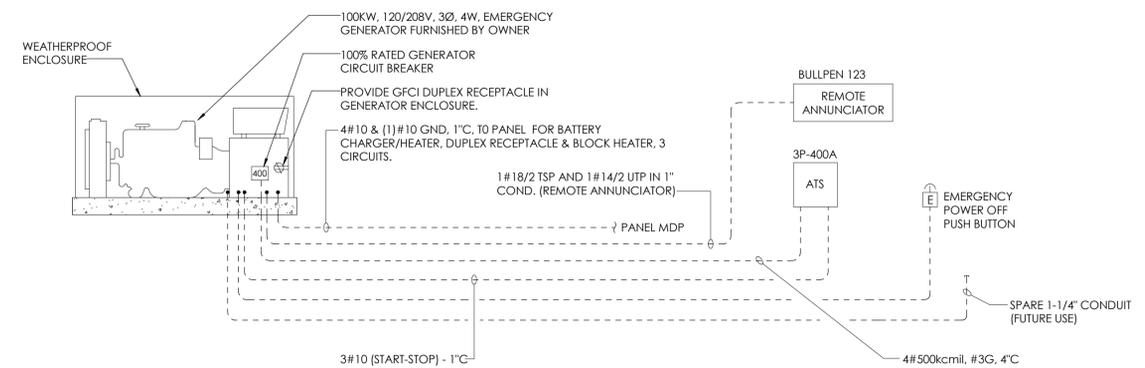
C

B

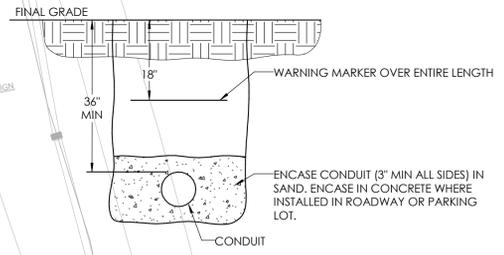
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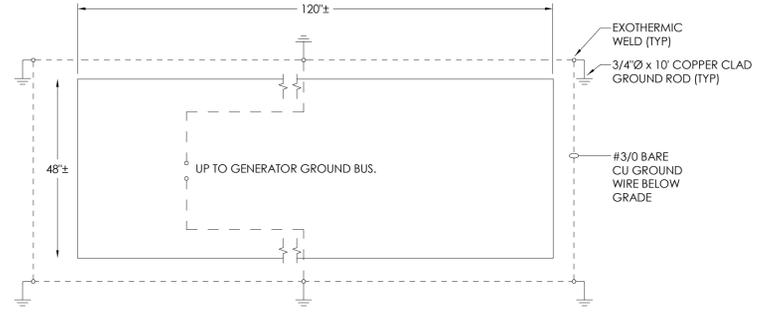
1 ELECTRICAL SITE PLAN
E001
1" = 30'-0"



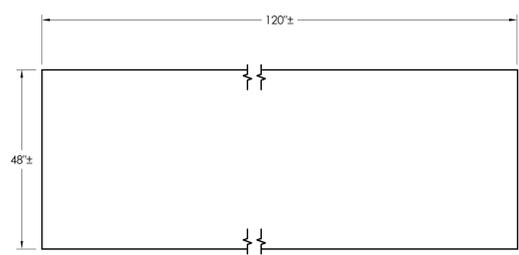
5 GENERATOR WIRING SCHEMATIC
E001
NOT TO SCALE



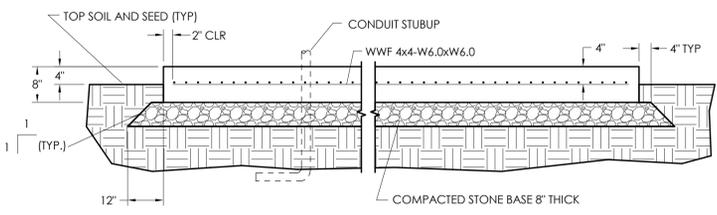
4 CONDUIT TRENCH DETAIL
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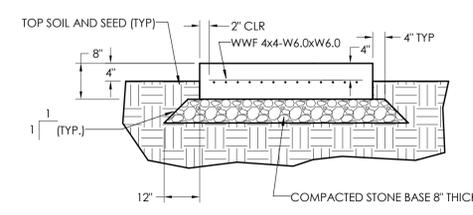
3 GENERATOR PAD GROUNDING DETAIL
E001
NOT TO SCALE



PLAN VIEW



LONGITUDINAL SECTION



TRANSVERSE SECTION

2 GENERATOR PAD DETAILS
E001
NOT TO SCALE

6 GROUNDING ROD DETAIL
E001
NOT TO SCALE

GENERATOR PAD NOTES:

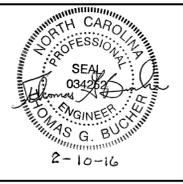
1. GENERATOR TO BE SET SYMMETRICAL ON GENERATOR PAD.
2. CONCRETE STRENGTH: USE CLASS B CONCRETE. GENERATOR SHALL NOT BE INSTALLED UNTIL CONCRETE HAS CURED FOR A MINIMUM OF 3 DAYS.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185, Fy=65,000 psi, AND SHALL BE HOT-DIPPED GALVANIZED OR EPOXY COATED AFTER FABRICATION TO PRODUCE A CLASS 2 COATING EQUAL TO THAT SPECIFIED IN ASTM A641, TABLE 1.
4. DRILL AND SET ANCHOR BOLTS IN FIELD AFTER INSTALLATION OF GENERATOR ON FOOTING AND AS PER MANUFACTURER'S SPECIFICATIONS.
5. LOCATION OF PAD SHALL BE APPROVED BY THE OWNER BEFORE CONSTRUCTION.
6. COMPACTED STONE SHALL BE AASHTO 57 COARSE AGGREGATE.
7. CONDUIT REQUIREMENTS SHALL BE PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE PLACED INTO POSITION BEFORE CASTING CONCRETE PAD.
8. ANCHOR BOLTS SHALL BE 1/2" DIA. HILTI HSE ADHESIVE ANCHOR RODS WITH 4-1/2" EMBEDMENT DEPTH OR APPROVED EQUAL.
9. REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.
10. VERIFY DIMENSIONS WITH THOSE ON GENERATOR SHOP DRAWINGS AND ADJUST ACCORDINGLY.



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NO.	DATE	BY	CHKD	DESCRIPTION

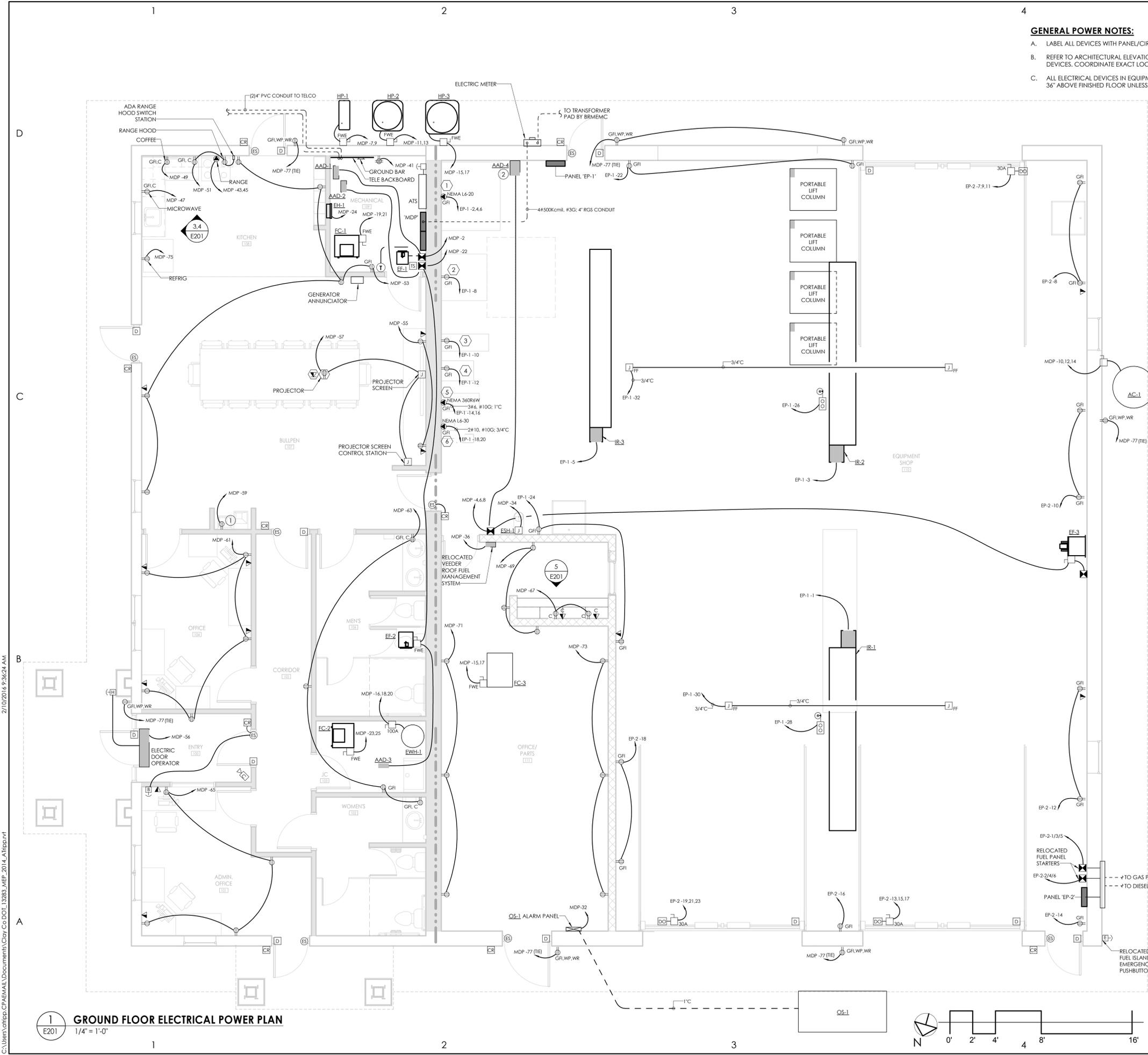


NC DOT - DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
02/10/16	JMM	TGB
SCALE: As indicated		
SHEET TITLE: SITE PLAN AND DETAILS		

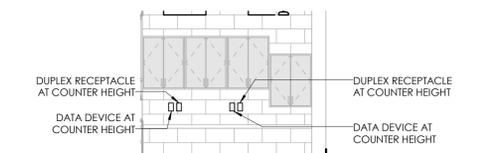
PROJECT NUMBER	13283.01
DRAWING NUMBER	E001

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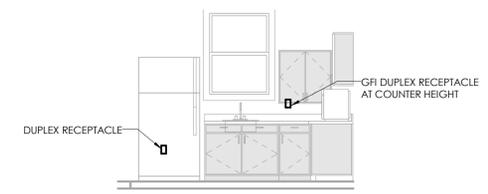


- GENERAL POWER NOTES:**
- A. LABEL ALL DEVICES WITH PANEL/CIRCUIT NUMBER.
 - B. REFER TO ARCHITECTURAL ELEVATIONS FOR LOCATIONS OF ALL DEVICES. COORDINATE EXACT LOCATIONS PRIOR TO ROUGH-IN.
 - C. ALL ELECTRICAL DEVICES IN EQUIPMENT SHOP SHALL BE MOUNTED 36" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.

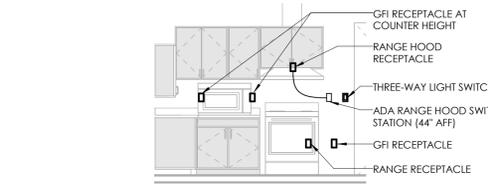
- KEY NOTES:**
- 1 PROVIDE GFI BREAKER AS INDICATED ON PANEL.
 - 2 INTERLOCK WITH EF-3.



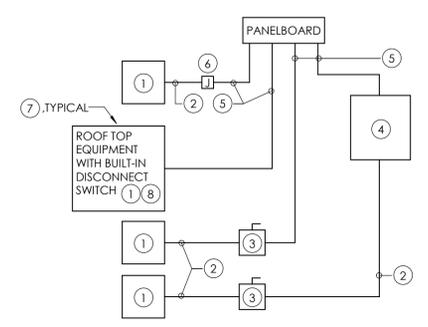
5 OFFICE PARTS 132
E201
1/4" = 1'-0"



4 KITCHEN 133 - EAST
E201
1/4" = 1'-0"



3 KITCHEN 133 - SOUTH
E201
1/4" = 1'-0"



IN A SINGLE PRIME CONTRACT, IT IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR TO COORDINATE BETWEEN THE ELECTRICAL AND THE OTHER TRADES.

ELECTRICAL EQUIPMENT CONNECTION DETAIL KEY NOTES:

- 1 EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.
- 2 CONDUIT AND WIRING BY HVAC, PLUMBING CONTRACTOR, OR OTHER TRADES.
- 3 IF AN ADDITIONAL DISCONNECT IS REQUIRED BY THE NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
- 4 A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
- 5 BRANCH CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK. SEE PANELBOARD AND MECHANICAL EQUIPMENT CONNECTION SCHEDULES FOR BREAKER AND WIRE SIZES.
- 6 JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING SHALL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
- 7 IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
- 8 IF THE ROOF TOP FAN IS NOT PROVIDED WITH BUILT-IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH.

2 ELECTRICAL EQUIPMENT CONNECTION DETAIL
E201
NOT TO SCALE

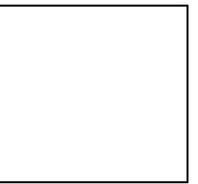
1 GROUND FLOOR ELECTRICAL POWER PLAN
E201
1/4" = 1'-0"



CLARK PATTERSON LEE
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NO.	DATE	BY	DESCRIPTION



THOMAS G. BUECHER
ENGINEER
2-10-16

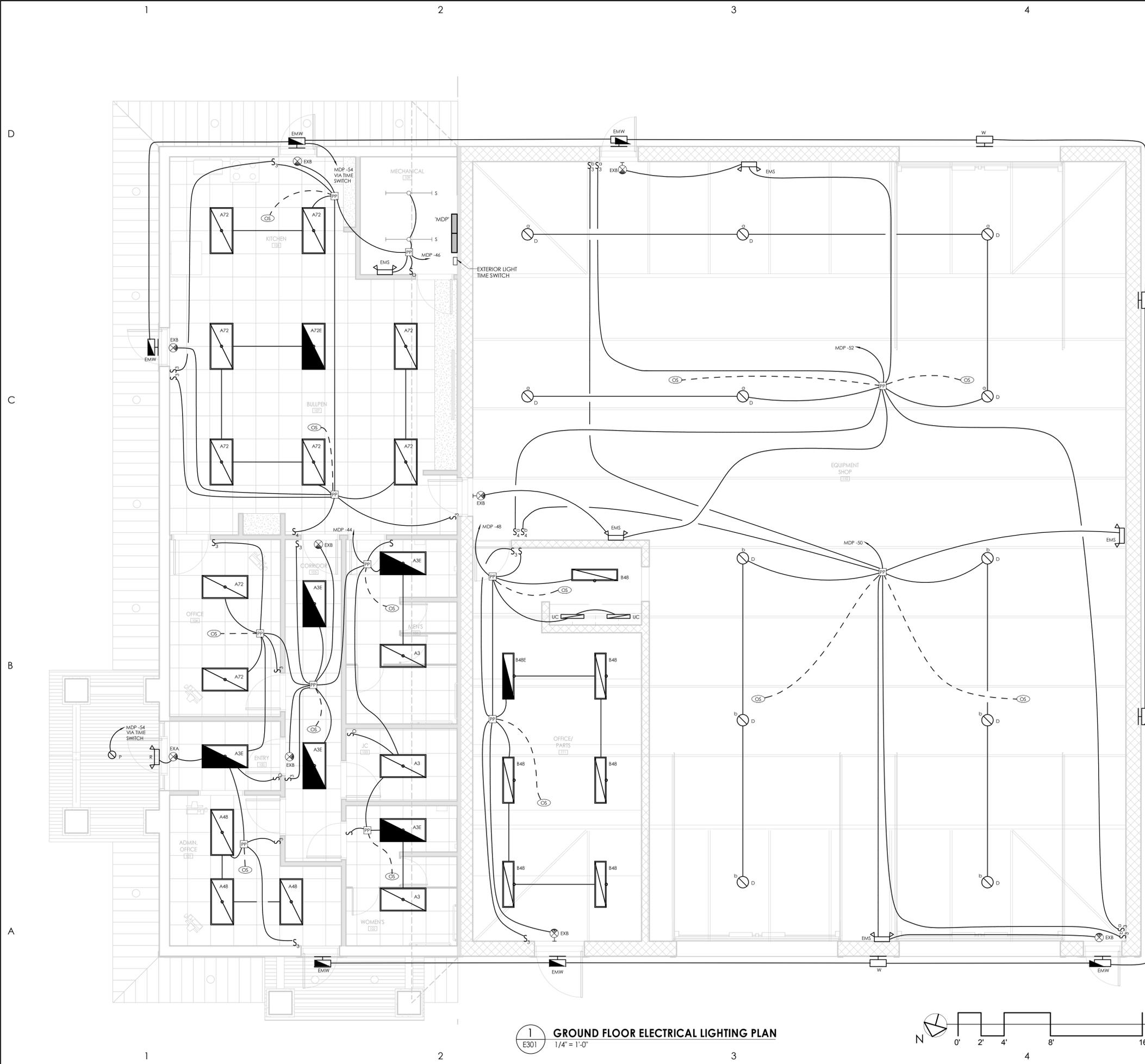
NCDOT - DIVISION 14
OFFICE ASSEMBLY AND
MAINTENANCE SHOP
SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
02/10/16	JMM	TGB
SCALE: As indicated		
SHEET TITLE: ELECTRICAL POWER AND SYSTEMS PLAN		

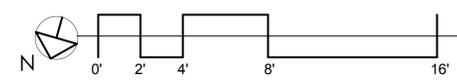
PROJECT NUMBER
13283.01
E201
DRAWING NUMBER

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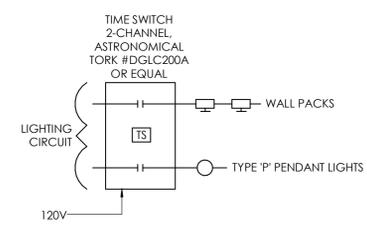


1
E301
GROUND FLOOR ELECTRICAL LIGHTING PLAN
1/4" = 1'-0"



- GENERAL LIGHTING NOTES:**
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATIONS FOR EXACT LIGHTING FIXTURE LOCATIONS.
 - CONNECT ALL EXIT SIGNS TO CONTINUOUSLY HOT CONDUCTOR OF CIRCUIT INDICATED AHEAD OF ANY SWITCHING OR OTHER CONTROL.
 - COORDINATE ALL LIGHT SWITCH/CONTROL LOCATIONS WITH DOOR SWINGS PRIOR TO ROUGH-IN, REGARDLESS OF HOW SHOWN ON PLAN. LIGHT SWITCHES IN ROOM CONTROLLING FIXTURES ON EMERGENCY POWER SHALL BE CLOSEST TO DOOR JAMB.

LOCATION	AVG
ADMIN. OFFICE	43.9
CORRIDOR	16.3
ENTRY	17.8
GARAGE	64.1
JANITOR CLOSET	17.9
KITCHEN/BULLPEN	47.8
MECHANICAL	29.1
MENS	20.3
OFFICE	48.3
OFFICE PARTS	41.1
WOMENS	20.3



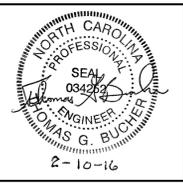
2
E301
OUTDOOR LIGHTING CONTROL SCHEMATIC
NOT TO SCALE



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NO.	DATE	BY	CHKD	DESCRIPTION



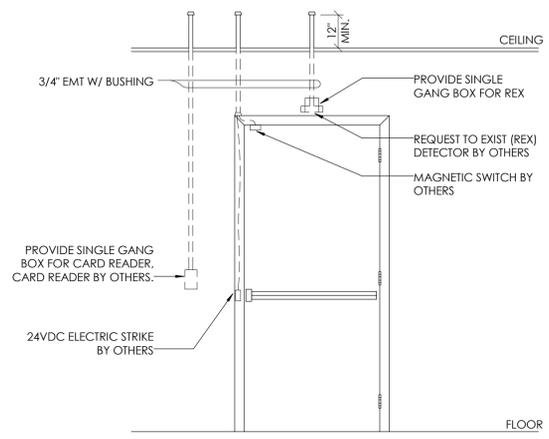
NC DOT - DIVISION 14
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SCO # 14-11007-01 Package A
CLAY COUNTY
BID SET

DATE	DRAWN	CHECKED
02/10/16	JMM	TGB

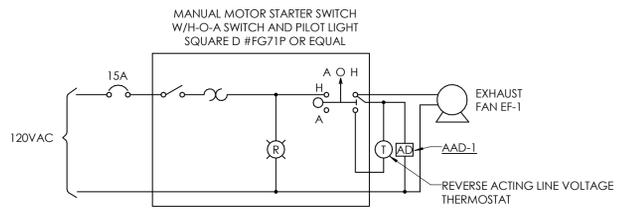
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SHEET TITLE:
ELECTRICAL LIGHTING PLAN

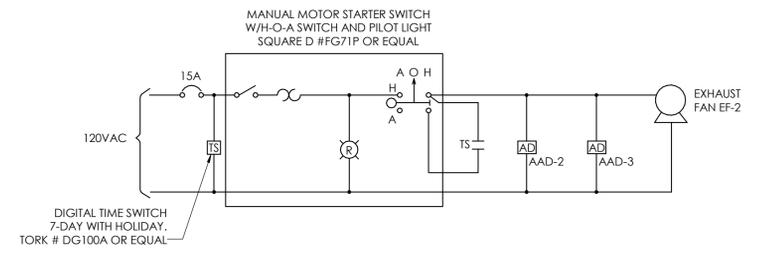
PROJECT NUMBER 13283.01
E301 DRAWING NUMBER



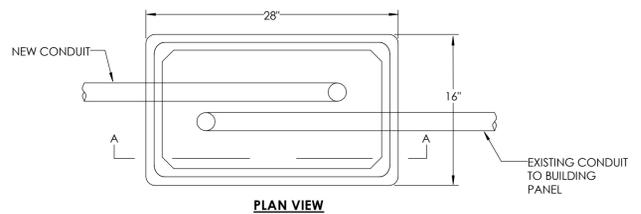
1 TYPICAL DOOR ACCESS CONTROL SYSTEM INSTALLATION DETAIL
E800 NOT TO SCALE



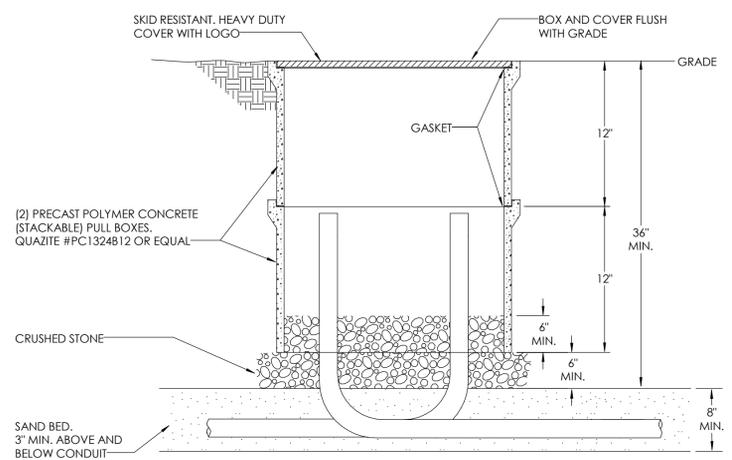
2 EXHAUST FAN (EF-1) CONTROL SCHEMATIC
E800 NOT TO SCALE



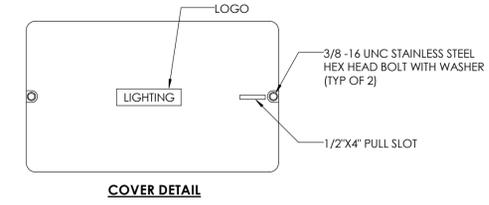
3 EXHAUST FAN (EF-2) CONTROL SCHEMATIC
E800 NOT TO SCALE



PLAN VIEW

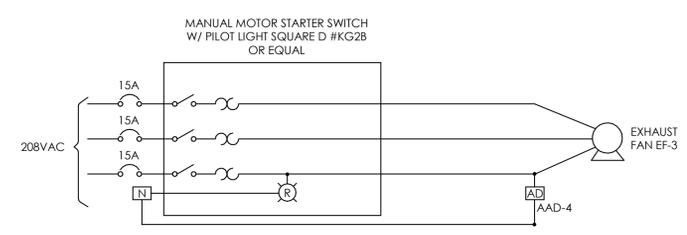


SECTION A-A

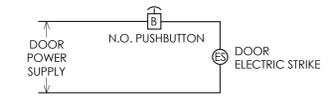


COVER DETAIL

6 HAND HOLE DETAIL
E800 NOT TO SCALE



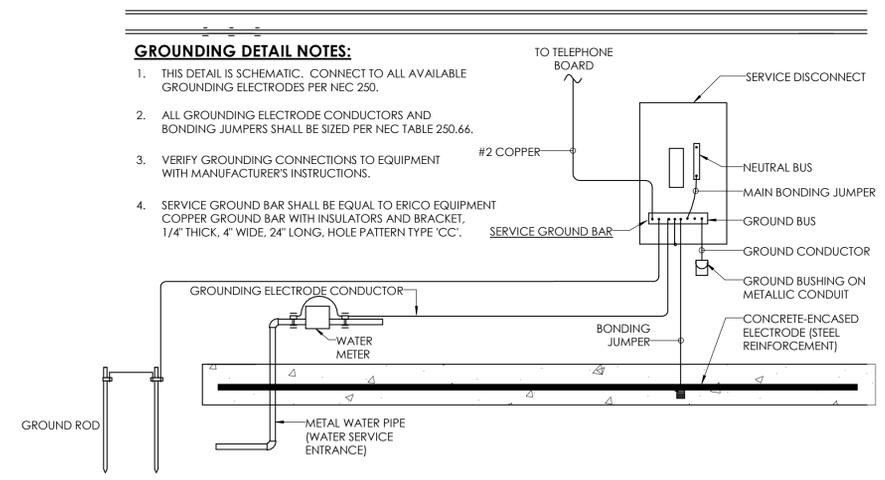
4 EXHAUST FAN (EF-3) CONTROL SCHEMATIC
E800 NOT TO SCALE



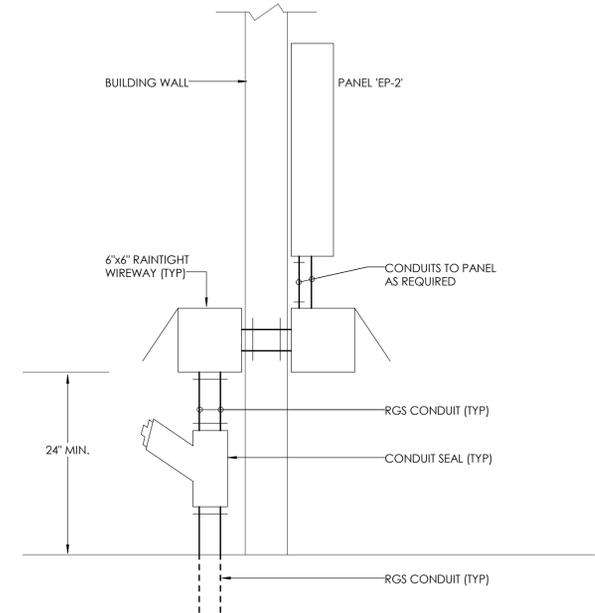
5 DOOR LOCK RELEASE SCHEMATIC
E800 NOT TO SCALE

GROUNDING DETAIL NOTES:

1. THIS DETAIL IS SCHEMATIC. CONNECT TO ALL AVAILABLE GROUNDING ELECTRODES PER NEC 250.
2. ALL GROUNDING ELECTRODE CONDUCTORS AND BONDING JUMPERS SHALL BE SIZED PER NEC TABLE 250.66.
3. VERIFY GROUNDING CONNECTIONS TO EQUIPMENT WITH MANUFACTURER'S INSTRUCTIONS.
4. SERVICE GROUND BAR SHALL BE EQUAL TO ERICO EQUIPMENT COPPER GROUND BAR WITH INSULATORS AND BRACKET, 1/4\"/>



7 SERVICE GROUNDING DETAIL
E800 NOT TO SCALE



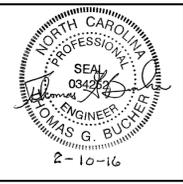
8 FUEL ISLAND PANEL DETAIL
E800 NOT TO SCALE



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NO.	DATE	BY	CHKD	DESCRIPTION



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SCO # 14-11007-01 Package A
CLAY COUNTY
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DATE	DRAWN	CHECKED
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SCALE: As indicated		
SHEET TITLE: ELECTRICAL DETAILS		

PROJECT NUMBER	13283.01
DRAWING NUMBER	E800

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PANEL MDP			VOLTAGE: 208/120 3 PH 4W		FEEDER AMP: 400		MLO		AIC RATING: -		MOUNTING: SURFACE		REMARKS:	
BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CTKT	VA	LOAD DESCRIPTION	NOTE	BKR				
150/3		PANEL EP-1	12069	1	A	2	50	EF-1 AND AAD-1	LO	15/1				
			10337	3	B	4	420	EF-3	LO	15/3				
			7177	5	C	6	420							
25/2		HP-1	1716	7	A	8	420							
			1716	9	B	10	8500	AC-1		100/3				
20/2		HP-2	1227	11	C	12	8500							
			1227	13	A	14	8500							
15/2		HP-3 AND FC-3	1352	15	B	16	6004	EW-1		70/3				
			1352	17	C	18	6004							
45/2		FC-1	4649	19	A	20	6004							
			4649	21	B	22	500	EF-2, AAD-2, AND AAD-3	LO	15/1				
45/2		FC-2	4649	23	C	24	1500	EH-1		20/1				
			4649	25	A	26	100	GENERATOR BATTERY CHARGER		20/1				
20/1		HOT BOX ALARM	25	27	B	28	180	GENERATOR RECEPTACLE		20/1				
20/1		HOT BOX HEATER	500	29	C	30	1000	GENERATOR BLOCK HEATER		20/1				
100/3		LIQUID ASPHALT TANK	5000	31	A	32	200	OS-1 ALARM PANEL		20/1				
			5000	33	B	34	100	ESH-1		15/1				
			5000	35	C	36	100	VEEDER ROOT FUEL MGT SYS		20/1				
20/1		SPARE	0	37	A	38	0	SPARE		20/1				
20/1		SPARE	0	39	B	40	0	SPARE		20/1				
20/1		RECEPT - 109	360	41	C	42	0	SPARE		20/1				
50/2		RANGE	4000	43	A	44	539	LIGHTING - 100-106		20/1				
			4000	45	B	46	636	LIGHTING - 107-109		20/1				
20/1		MICROWAVE	1500	47	C	48	331	LIGHTING - 111		20/1				
20/1		COFFEE	1000	49	A	50	960	LIGHTING - 110		20/1				
20/1		RECEPT - 108 AND RANGE HOOD	360	51	B	52	960	LIGHTING - 110		20/1				
20/1		RECEPT - 107,108,109	1080	53	C	54	530	EXTERIOR LIGHTING		20/1				
20/1		RECEPT COUNTERTOP - 107	360	55	A	56	200	HANDICAP DOOR OPERATOR		20/1				
20/1		PROJECTOR	100	57	B	58	0	SPARE		20/1				
20/1	G	EWV	180	59	C	60	0	SPARE		20/1				
20/1		RECEPT - 100,104	380	61	A	62	0	SPARE		20/1				
20/1		RECEPT - 102,103,105,106	380	63	B	64	0	SPARE		20/1				
20/1		RECEPT - 101	380	65	C	66	0	SPARE		20/1				
20/1		RECEPT COUNTERTOP - 111	360	67	A	68	0	SPARE		20/1				
20/1		RECEPT - 111	540	69	B	70	0	SPARE		20/1				
20/1		RECEPT - 111	540	71	C	72	0	SPARE		20/1				
20/1		RECEPT - 111	540	73	A	74	0	SPARE		20/1				
20/1		REFRIG	10	75	B	76	0	PREPARED SPACE						
20/1		EXTERIOR RECEPTACLES	180	77	C	78	0	PREPARED SPACE						
100/3		PANEL EP-2	3180	79	A	80	0	PREPARED SPACE						
			3180	81	B	82	0	PREPARED SPACE						
			3360	83	C	84	0	PREPARED SPACE						
Connected Load Per Phase			PH A:	56103	PH B:	48949	PH C:	45870						
Connected VA	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps					
Demand Factor	3956	32159	55042	8720	0	10510	40535	150922	418.9					
Demand VA	1.25	0.80	0.80	NEC	1.00	0.65	0.50	110525	306.8					

PANEL SCHEDULE NOTES:

- G PROVIDE GFI BREAKER
- LO PROVIDE HANDLE LOCK FOR BREAKER

PANEL EP-1			VOLTAGE: 208/120 3 PH 4W		FEEDER AMP: 150		MLO		AIC RATING: -		MOUNTING: SURFACE		REMARKS:	
BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CTKT	VA	LOAD DESCRIPTION	NOTE	BKR				
20/1		IR-1	312	1	A	2	793	WHEEL BALANCER - #1		20/3				
20/1		IR-2	312	3	B	4	793							
20/1		IR-3	312	5	C	6	793							
20/1		SPARE	0	7	A	8	1800	TIRE CHANGER - #2		20/1				
20/1		SPARE	0	9	B	10	1656	BAND SAW - #3		25/1				
20/1		SPARE	0	11	C	12	2400	DRILL PRESS - #4		35/1				
20/1		SPARE	0	13	A	14	4992	MIG WELDER - #5		60/2				
20/1		SPARE	0	15	B	16	4992							
20/1		SPARE	0	17	C	18	2808	PLASMA CUTTER - #6		30/2				
20/1		SPARE	0	19	A	20	2808							
20/1		SPARE	0	21	B	22	1080	RECEPTACLES 110		20/1				
20/1		SPARE	0	23	C	24	360	RECEPTACLES 110		20/1				
20/1		SPARE	0	25	A	26	500	CORD REEL		20/1				
20/1		SPARE	0	27	B	28	500	CORD REEL		20/1				
20/1		SPARE	0	29	C	30	1000	FUTURE FANS		20/1				
20/1		SPARE	0	31	A	32	1000	FUTURE FANS		20/1				
20/1		SPARE	0	33	B	34	0	PREPARED SPACE						
20/1		SPARE	0	35	C	36	0	PREPARED SPACE						
		PREPARED SPACE	0	37	A	38	0	PREPARED SPACE						
		PREPARED SPACE	0	39	B	40	0	PREPARED SPACE						
		PREPARED SPACE	0	41	C	42	0	PREPARED SPACE						
Connected Load Per Phase			PH A:	12205	PH B:	9333	PH C:	7673						
Connected VA	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps					
Demand Factor	0	2936	0	2440	0	0	23835	29211	81.1					
Demand VA	1.25	0.80	1.00	NEC	1.00	1.00	1.00	28624	79.5					

PANEL EP-2			VOLTAGE: 208/120 3 PH 4W		FEEDER AMP: 100		MLO		AIC RATING: -		MOUNTING: SURFACE		REMARKS:	
BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CTKT	VA	LOAD DESCRIPTION	NOTE	BKR				
20/3	LO	GAS PUMP	960	1	A	2	960	DIESEL PUMP	LO	20/3				
			960	3	B	4	960							
			960	5	C	6	960							
15/3		OVERHEAD DOOR	240	7	A	8	360	RECEPTACLE CIRCUIT 110		20/1				
			240	9	B	10	360	RECEPTACLE CIRCUIT 110		20/1				
			240	11	C	12	360	RECEPTACLE CIRCUIT 110		20/1				
15/3		OVERHEAD DOOR	240	13	A	14	180	RECEPTACLE CIRCUIT 110		20/1				
			240	15	B	16	180	RECEPTACLE CIRCUIT 110		20/1				
			240	17	C	18	360	RECEPTACLE CIRCUIT 110		20/1				
15/3		OVERHEAD DOOR	240	19	A	20	0	PREPARED SPACE						
			240	21	B	22	0	PREPARED SPACE						
			240	23	C	24	0	PREPARED SPACE						
20/1		SPARE	0	25	A	26	0	PREPARED SPACE						
20/1		SPARE	0	27	B	28	0	PREPARED SPACE						
20/1		SPARE	0	29	C	30	0	PREPARED SPACE						
20/1		SPARE	0	31	A	32	0	PREPARED SPACE						
20/1		SPARE	0	33	B	34	0	PREPARED SPACE						
20/1		SPARE	0	35	C	36	0	PREPARED SPACE						
		PREPARED SPACE	0	37	A	38	0	PREPARED SPACE						
		PREPARED SPACE	0	39	B	40	0	PREPARED SPACE						
		PREPARED SPACE	0	41	C	42	0	PREPARED SPACE						
Connected Load Per Phase			PH A:	3180	PH B:	3180	PH C:	3360						
Connected VA	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps					
Demand Factor	0	0	9720	0	0	0	0	9720	27.0					
Demand VA	1.25	0.80	1.00	NEC	1.00	1.00	1.00	9720	27.0					

LUMINAIRE SCHEDULE											
MARK	DESCRIPTION	DESIGN MAKE	MODEL #	ALTERNATE MANUFACTURERS	VOLTS	LAMP			MOUNTING	REMARKS	
						QTY	WATTS	TYPE			
A3	2'x4' RECESSED LENSED TROFFER, 0.125" PATTERN A12 ACRYLIC LENS, WHITE STEEL HOUSING, GRID MOUNT	LITHONIA	TL SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	32	3500K LED / 3000 LUMEN	RECESSED		
A3E	SAME AS TYPE 'A3' EXCEPT WITH INTEGRAL 2-LAMP 1400 LUMEN MINIMUM EMERGENCY BATTERY PACK	LITHONIA	TL SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	32	3500K LED / 3000 LUMEN	RECESSED		
A48	2'x4' RECESSED LENSED TROFFER, 0.125" PATTERN A12 ACRYLIC LENS, WHITE STEEL HOUSING, GRID MOUNT	LITHONIA	TL SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	47	3500K LED / 4800 LUMEN	RECESSED		
A72	2'x4' RECESSED LENSED TROFFER, 0.125" PATTERN A12 ACRYLIC LENS, WHITE STEEL HOUSING, GRID MOUNT	LITHONIA	TL SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	71	3500K LED / 7200 LUMEN	RECESSED		
A72E	SAME AS TYPE 'A72' EXCEPT WITH INTEGRAL 2-LAMP 1400 LUMEN MINIMUM EMERGENCY BATTERY PACK	LITHONIA	TL SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	71	3500K LED / 7200 LUMEN	RECESSED		
B48	4'x10' PENDANT MOUNT LED WRAPAROUND FIXTURE	LITHONIA	LBL4 SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	48	3500K LED / 4800 LUMEN	PENDANT TYPE 1B	3	
B48E	SAME AS TYPE 'B48' EXCEPT WITH INTEGRAL 2-LAMP 1400 LUMEN MINIMUM EMERGENCY BATTERY PACK	LITHONIA	LBL4 SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	48	3500K LED / 4800 LUMEN	PENDANT TYPE 1B	3	
EXA	LED EXIT SIGN, HIGH OUTPUT, UNIVERSAL MOUNTING, THERMOPLASTIC WHITE HOUSING, RED LETTERS, NI-CAD BATTERY, SELF-DIAGNOSTICS, UL924 LISTED, NO LAMP HEADS	LITHONIA	LHQM-S-W-3-R-HO RO-120/277-EL N SD	COOPER, HUBBELL, PHILIPS	120	--	3	LED	CEILING MOUNT OR WALL MOUNT AT 7'-6" AFF (OR BOTTOM OF FIXTURE 6" ABOVE DOOR FRAME) UNLESS NOTED OTHERWISE		
EXB	LED EXIT SIGN, UNIVERSAL MOUNTING, THERMOPLASTIC WHITE HOUSING, RED LETTERS, NI-CAD BATTERY, SELF-DIAGNOSTICS, UL924 LISTED	LITHONIA	LQM-S-R-120/277-EL N SD	COOPER, HUBBELL, PHILIPS	120	--	3	LED	CEILING MOUNT OR WALL MOUNT AT 7'-6" AFF (OR BOTTOM OF FIXTURE 6" ABOVE DOOR FRAME) UNLESS NOTED OTHERWISE		
D	16" LED HIGHWAY, 16" CLEAR ACRYLIC REFLECTOR, DROP LENS, 15A FACTORY INSTALLED TWIST LOCK PLUG, 5'-0" GALVANIZED SAFETY CABLE	CREE	CXB SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	160	3500K LED / 18000 LUMEN	HOOK AND CORD	1	
EMS	STEEL EMERGENCY LIGHTING UNIT, INCANDESCENT GLASS SEALED-BEAM LAMPS IN THERMOPLASTIC HOUSING, MAINTENANCE-FEE, LEAD-CALCIUM BATTERY	LITHONIA	ELT SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	2	24	PAR36 SEALED-BEAM	WALL MOUNT	1.2	
EMW	LED WALL PACK, DARK BRONZE, INTEGRAL EMERGENCY BATTERY	LITHONIA	WST SERIES	COOPER, HUBBELL, PHILIPS	120	--	47	3000K LED / 4000 LUMEN	WALL MOUNT	1	
P	PENDANT LED FIXTURE	CONTECH	CL6-127K-MVD2-P-X-W-CLR-B	COOPER, HUBBELL, PHILIPS	MVOLT	--	16	1900 LUMEN/2700K LED	PENDANT	3	
R	REMOTE EMERGENCY HEADS, DUAL, LED	LITHONIA	ELA-B-T-QWP-0304-SD	COOPER, HUBBELL, PHILIPS	120	--	1.5	LED	WALL		
S	4' FLUORESCENT STRIP FIXTURE, STEEL HOUSING, WIRE GUARD	LITHONIA	ZLN2 SERIES	COOPER, HUBBELL, PHILIPS	MVOLT	--	34	3500K LED / 2000 LUMEN	CHAIN-HUNG AT 9'-0" AFF		
UC	2" UNDER CABINET LIGHT W/ INTEGRAL ROCKER SWITCH, WHITE ACRYLIC LENS	LITHONIA	RAYZER SERIES	COOPER, HUBBELL, PHILIPS	120	--	13	3000K LED / 441 LUMEN	SURFACE		
W	LED WALL PACK, DARK BRONZE	LITHONIA	WST SERIES	COOPER, HUBBELL, PHILIPS	120	--	47	3000K LED / 4000 LUMEN	WALL MOUNT	1	

LUMINAIRE SCHEDULE REMARKS:

- VERIFY MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ORDERING PENDANT FIXTURES AND PRIOR TO WALL ROUGH-IN.
- VERIFY COLOR WITH ARCHITECT/OWNER PRIOR TO ORDERING.
- REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT MOUNTING HEIGHT.

SHOP AND MECHANICAL EQUIPMENT SCHEDULE											
TAG	DESCRIPTION	LOCATION	POWER SOURCE	MCA	VOLTS	PHASE	NEW CONDUCTORS	CIRCUIT BREAKER	SCOPE OF WORK REQUIRED		
									SCOPE OF WORK	SCOPE OF WORK	SCOPE OF WORK
SHOP EQUIPMENT											
1	WHEEL BALANCER	EQUIP. SHOP 110	EP-1	6.6	208	1	2#12, #12G, 3/4"	2P-20A		2	
2	TIRE CHANGER	EQUIP. SHOP 110	EP-1	15	120	1	2#12, #12G, 3/4"	1P-20A			
3	BAND SAW	EQUIP. SHOP 110	EP-1	13.8	120	1	2#12, #12G, 3/4"	1P-20A			