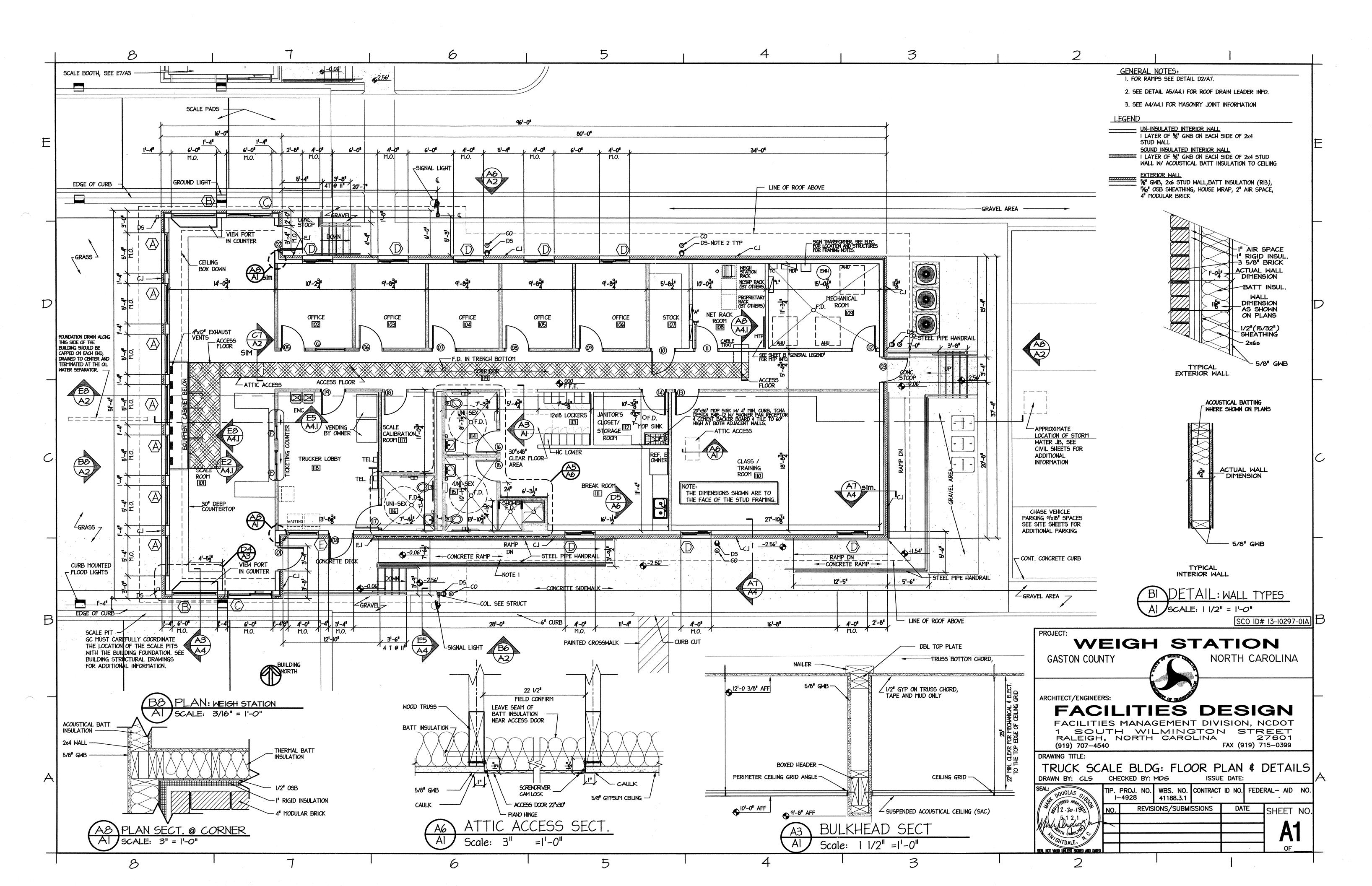
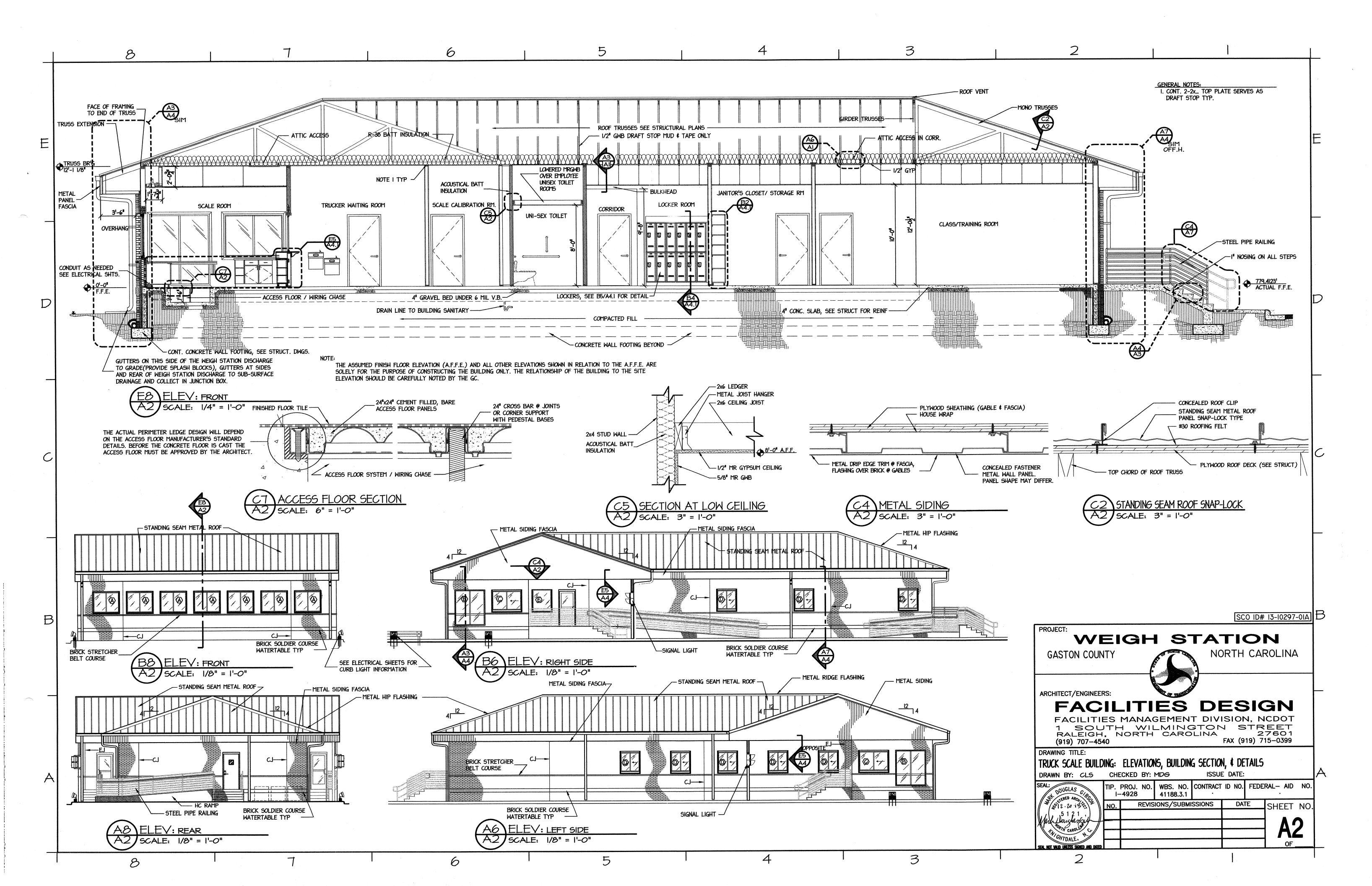
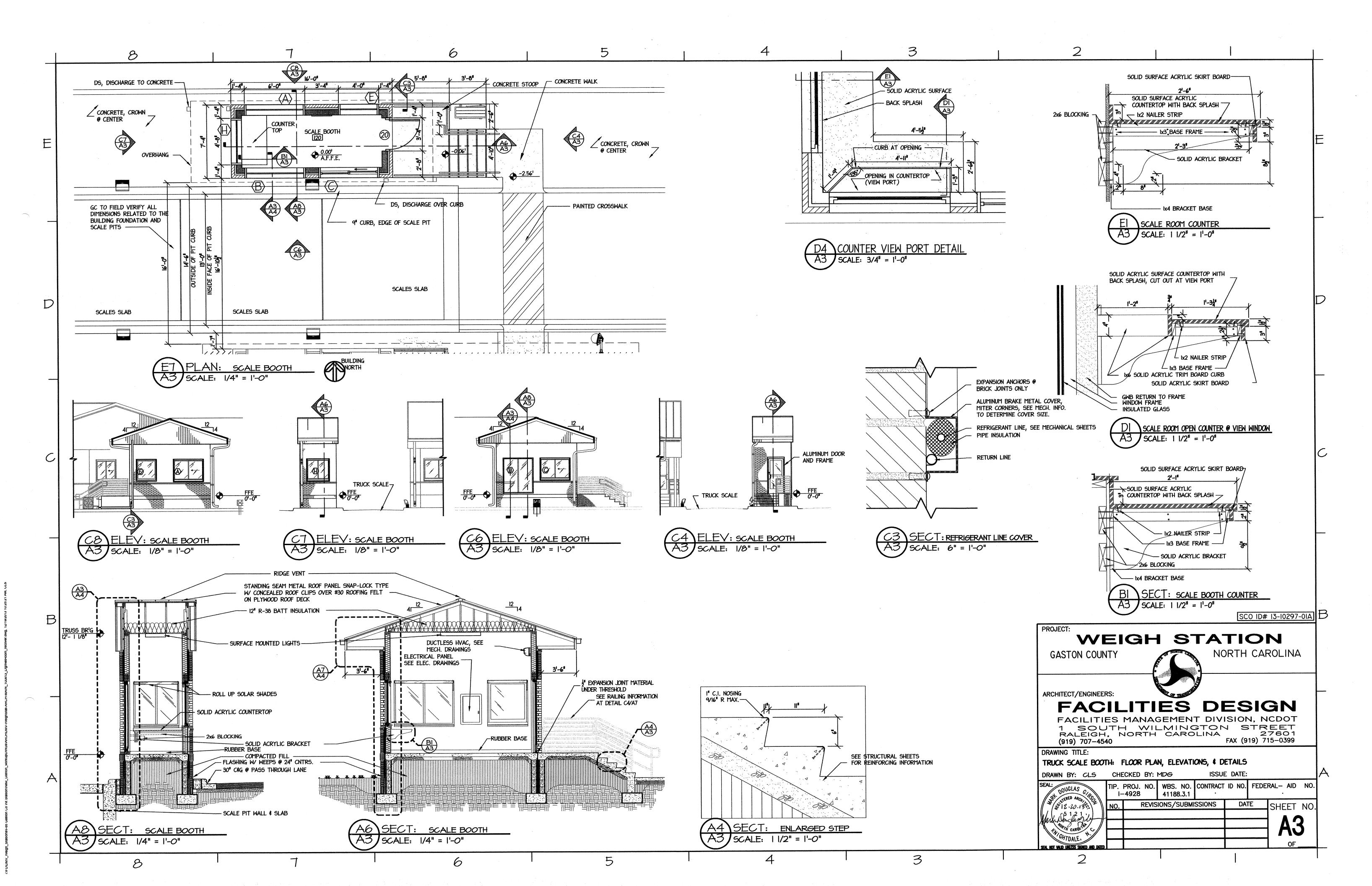
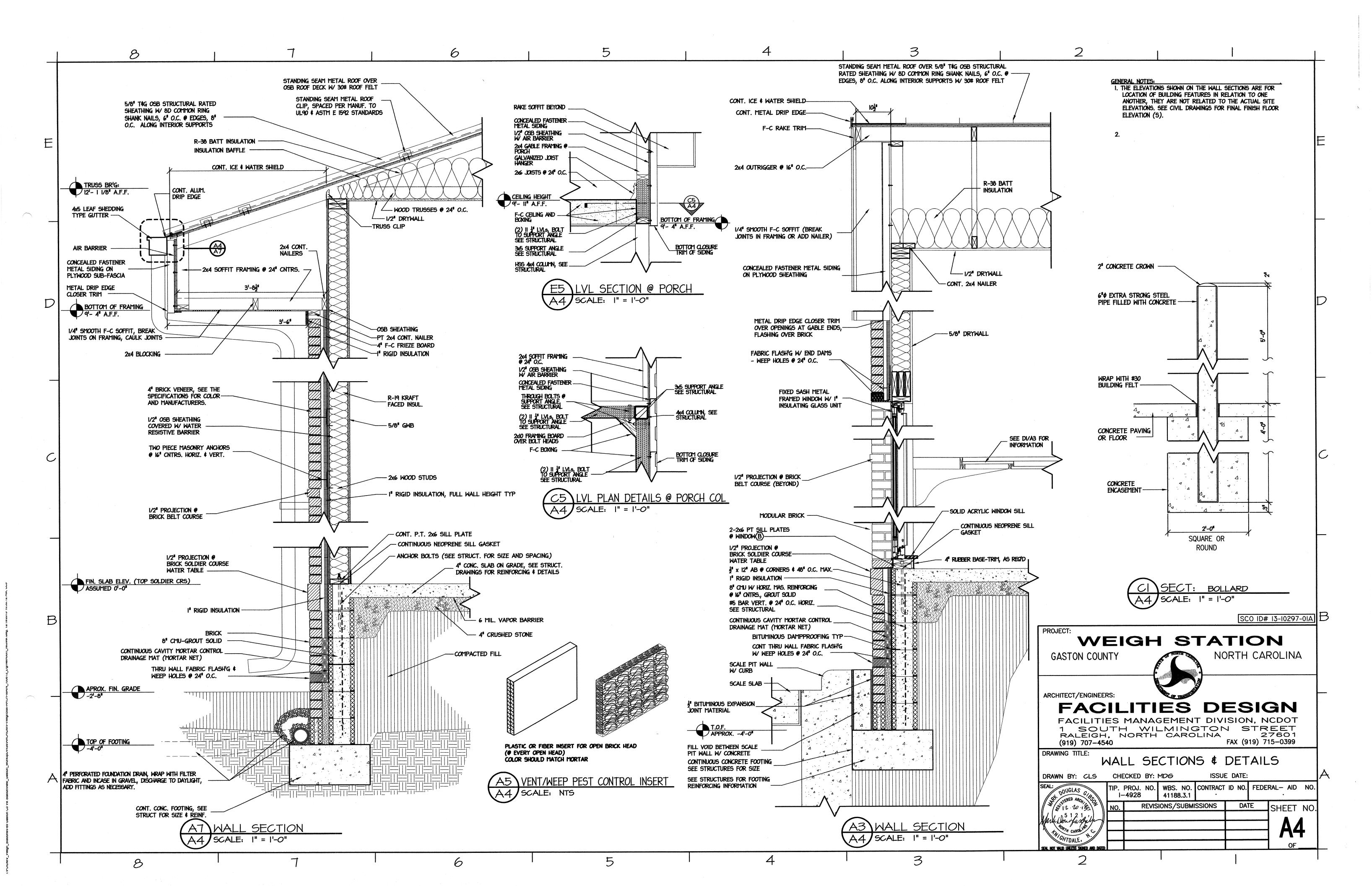


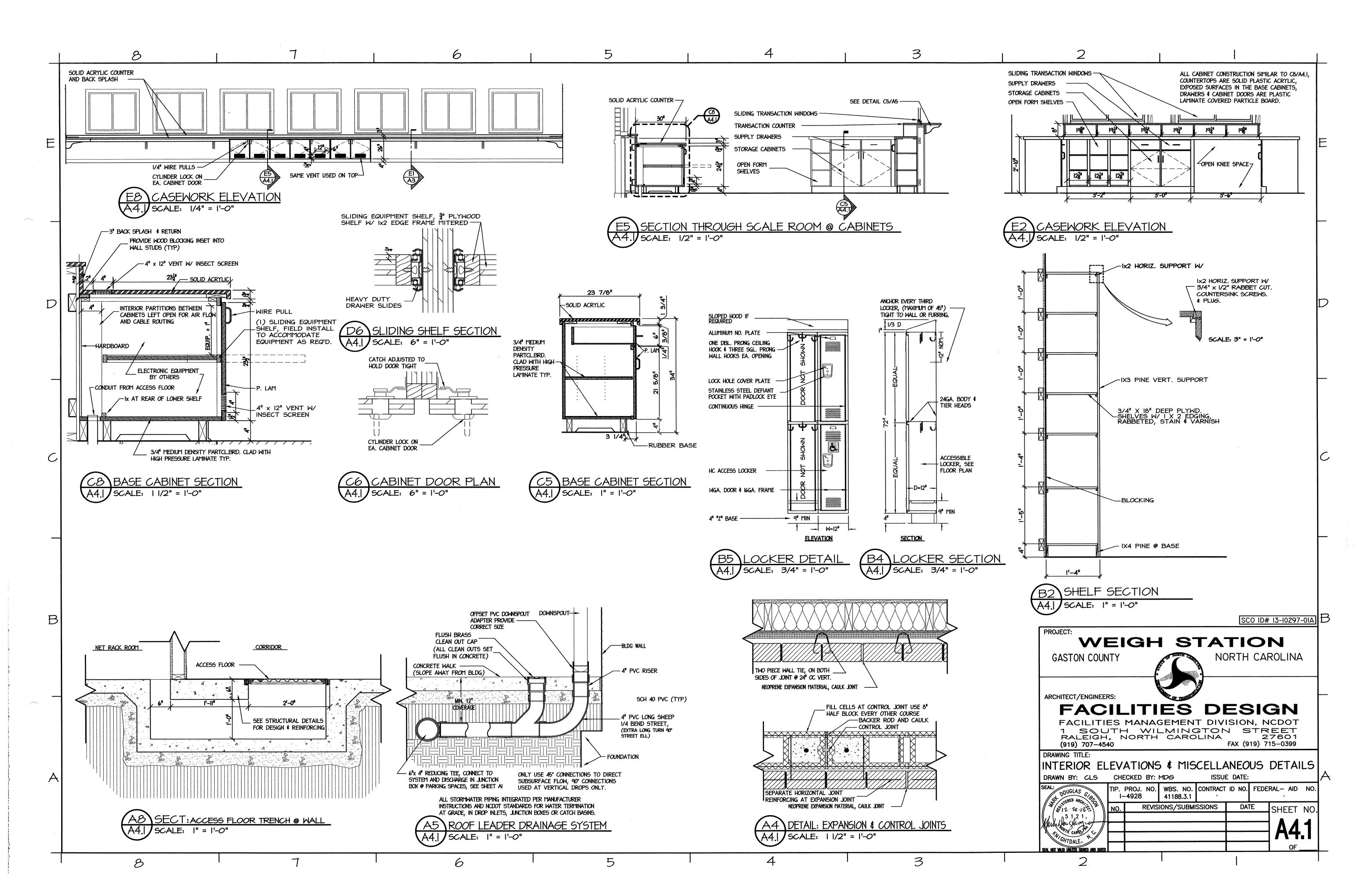
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	2012 APPENDIX B	Non-Separated Use (508.3)	Location of doors equipped with hold-open devices	Exterior Walls (each assembly)  Description of assembly:  4" BRICK VENEER,8" CMU	
	BUILDING CODE SUMMARY	The required type of construction for the building 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	☐ Location of emergency escape windows (1029) ☐ The square footage of each fire area (902)	U-Value of total assembly: 0.562	
	FOR ALL COMMERCIAL PROJECTS	construction, so determined, shall apply to the entire building.  Separated Use (508.4) - See below for area calculations	The square footage of each smoke compartment (407.4)	R-Value of insulation: <u>0</u> Openings (windows or doors with glazing)	
	(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)  (Reproduce the following data on the building plans sheet 1 or 2)	For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.	Note any code exceptions or table notes that may have been utilized regarding the items above  Section/Table/Note  Title	U-Value of assembly:  Solar heat gain coefficient:	
		Actual Area of Occupancy A + Actual Area of Occupancy B < 1		Projection factor: Door R-Values:	
	Name of Project: GASTON COUNTY 1-85 WEIGH STATION  Address: OFF OF 1-85 APPROX. 5.4 MILES WEST OF 321 IN GASTONIA \$ 2 MILES SOUTH OF BESSEMBED CITY de	Allowable Area of Occupancy A Allowable Area of Occupancy B		Walls below grade (each assembly)	
F	Proposed Use: TRUCK INSPECTION BUILDING	+ = ≤1.00	ACCESSIBLE DWELLING UNITS	U-Value of total assembly:	E
	Owner/Authorized Agent: Phone # () E-Mail	STORY NO. DESCRIPTION (A) (B) (C) (D) (E) (F) AND USE BLDG AREA TABLE 5035 AREA FOR AREA FOR ALLOWABLE MAXIMUM	(SECTION 1107)  TOTAL ACCESSIBLE ACCESSIBLE TYPE A TYPE B TYPE B TOTAL	R-Value of insulation:  Floors over unconditioned space (each assembly)	
	Owned By: City/County Private State  Code Enforcement Jurisdiction: City County State	PER STORY AREA FRONTAGE SPRINKLER AREA OR BUILDING	TOTAL ACCESSIBLE ACCESSIBLE TYPE A TYPE B TOTAL UNITS UNITS UNITS UNITS UNITS UNITS UNITS UNITS ACCESSIBLE UNITS REQUIRED PROVIDED REQUIRED PROVIDED PROVIDED PROVIDED	Description of assembly: U-Value of total assembly:	
	LEAD DESIGN PROFESSIONAL:	(ACTUAL)   INCREASE   INCREASE   UNLIMITED   AREA	REQUIRED TROVIDED REQUIRED TROVIDED REQUIRED TROVIDED TROVIDED	R-Value of insulation:	
	DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL		ACCESSIBLE PARKING	Floors slab on grade  4" CONCRETE SLAB ON GRADE, 6 MIL VAPOR BARRIER,  Description of assembly:  4" CRUSHED STONE, VERT RIGID INSULATION	
	Architectural NCDOT/FAC DESIGN MARK GIBSON 5121 (919)707-4550 mdgibsonl@ncdot.gov	<sup>1</sup> Frontage area increases from Section 506.2 are computed thus:	(SECTION 1106)  LOT OR PARKING TOTAL # OF PARKING SPACES # OF ACCESSIBLE SPACES PROVIDED TOTAL #	U-Value of total assembly: 0.097  R-Value of insulation: 10.0	
	Electrical Burke Design Group Ben Burke 22038 (919 )771-1916 benburke@nc.rr.com  Fire Alarm	a. Perimeter which fronts a public way or open space having 20 feet minimum width =(F)	AREA REQUIRED PROVIDED REGULAR WITH VAN SPACES WITH ACCESSIBLE  5' ACCESS 132" ACCESS 8' ACCESS PROVIDED	Horizontal/vertical requirement: 20 <sup>st</sup> Slab heated: NA	
	Plumbing Burke Design Group Ben Burke 22038 (919)771-1916 benburke@nc.rr.com  Mechanical Burke Design Group Ben Burke 22038 (919)771-1916 benburke@nc.rr.com	b. Total Building Perimeter =(P) c. Ratio (F/P) =(F/P) d. W = Minimum width of public way = (W)	AISLE AISLE AISLE	MECHANICAL SUMMARY	
	Sprinkler-Standpipe (	e. Percent of frontage increase $I_f = 100 [\overline{F/P} - 0.25] \times W/30 = $ (%)		MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT	
	Retaining Walls >5' High () Other	<ul> <li>The sprinkler increase per Section 506.3 is as follows:</li> <li>a. Multi-story building I<sub>s</sub> = 200 percent</li> </ul>	TOTAL	Thermal Zone winter dry bulb: SEE MECHANICAL DRAWINGS	
	2012 EDITION OF NC CODE FOR: New Construction Addition Upfit	b. Single story building $I_s = 300$ percent  Unlimited area applicable under conditions of Section 507.	STRUCTURAL DESIGN DESIGN LOADS:	summer dry bulb:	and to construct the state of t
	EXISTING: Reconstruction Alteration Repair Renovation	<ul> <li>Maximum Building Area = total number of stories in the building x E (506.4).</li> <li>The maximum area of open parking garages must comply with Table 406.3.5. The maximum area of air traffic</li> </ul>	Importance Factors: Wind (I <sub>w</sub> ) 1.0	Interior design conditions	
	CONSTRUCTED: (date) ORIGINAL USE(S) (Ch. 3):  RENOVATED: (date) CURRENT USE(S) (Ch. 3):	control towers must comply with Table 412.1.2.	$\begin{array}{ccc} \text{Snow} & (I_S) & \underline{1.0} \\ \text{Seismic} & (I_E) & \underline{1.0} \end{array}$	winter dry bulb:summer dry bulb:	
	PROPOSED USE(S) (Ch. 3):	ALLOWABLE HEIGHT	Live Loads: Roof <u>20</u> psf	relative humidity:	D
	BASIC BUILDING DATA	ALLOWABLE INCREASE FOR SPRINKLERS SHOWN ON PLANS CODE (TABLE 503) REFERENCE	Mezzanine psf Floor psf	Building heating load:	
	Construction Type: I-A III-A III-A IV V-A	Type of Construction         Type III-B         Type III-B         602.5	Ground Snow Load: 10 psf	Building cooling load:  Mechanical Spacing Conditioning System	
	(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☐ V-B  Sprinklers: ☐ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D	Building Height in Feet $55^1$ Feet = $H + 20^1$ = $24^1$ T.503	Wind Load: Basic Wind Speed 90 mph (ASCE-7)	Unitary ·	
	Standpipes: No Yes Class I III Wet Dry	Building Height in Stories   Stories + 1 =   T.503	Exposure Category B	description of unit: heating efficiency:	
	Fire District: No Yes (Primary) Flood Hazard Area: No Yes  Building Height: (feet)	FIRE PROTECTION REQUIREMENTS	Wind Base Shears (for MWFRS) $Vx = $ $Vy = $	cooling efficiency: size category of unit:	
	Gross Building Area:	BUILDING ELEMENT FIRE RATING DETAIL# DESIGN# DESIGN#	Provide the following Seismic Design Parameters:  Occupancy Category (Table 1604.5)	Boiler Size category. If oversized, state reason.:	
	FLOOR EXISTING (SQ NEW (SQ FT) RENO/ALTER SUB-TOTAL  FT) (SQ.FT)  6th Floor	SEPARATION REQ'D PROVIDED AND FOR RATED FOR DISTANCE (W/* SHEET # RATED PENETRATION RATED	Spectral Response Acceleration S <sub>S</sub> 31.4 %g S <sub>1</sub> 10.4 %g Site Classification (Table 1613.5.2)  A B C D E F	Chiller Size category. If oversized, state reason.:	
	5 <sup>th</sup> Floor	(FEET) REDUCTION) ASSEMBLY JOINTS	Data Source: Field Test Presumptive Historical Data  Basic structural system (check one)	List equipment efficiencies:	
	4 <sup>th</sup> Floor 3 <sup>rd</sup> Floor	including columns, girders, trusses	Bearing Wall  Dual w/Special Moment Frame Building Frame Dual w/Intermediate R/C or Special Steel	ELECTRICAL SUMMARY	
	2 <sup>nd</sup> Floor  Mezzanine	Bearing Walls NA Exterior	Moment Frame Inverted Pendulum	ELECTRICAL SYSTEM AND EQUIPMENT  Method of Compliance:  SEE ELECTRICAL DRAWINGS	
	1 <sup>st</sup> Floor 3,422 SF 3,422 SF Basement	North	Analysis Procedure: Simplified Equivalent Lateral Force Dynamic	Energy Code: Prescriptive Performance  ASHRAE 90.1: Prescriptive Performance	
	TOTAL 3,422 SF 3,422 SF ALLOWABLE AREA	East West	Architectural, Mechanical, Components anchored? Yes No  LATERAL DESIGN CONTROL: Earthquake Wind	Lighting schedule (each fixture type) lamp type required in fixture	10
	Occupancy:	South Interior		number of lamps in fixture ballast type used in the fixture	
	Assembly A-1 A-2 A-3 A-4 A-5 Business	Nonbearing Walls and Partitions	SOIL BEARING CAPACITIES: Field Test (provide copy of test report) psf	number of ballasts in fixture	
	Educational F-1 Moderate F-2 Low	Exterior walls  North >30¹ 0 0 A8/AI0	Presumptive Bearing capacity 2,000 psf Pile size, type, and capacity	total wattage per fixture total interior wattage specified vs. allowed (whole building or space by space)	
	Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM	East >301 0 0 A8/AI0	SPECIAL INSPECTIONS REQUIRED: Yes No	total exterior wattage specified vs. allowed  Additional Prescriptive Compliance	
	Institutional	West         >30¹         0         0         A8/AIO           South         >30¹         0         0         A8/AIO		☐ 506.2.1 More Efficient Mechanical Equipment ☐ 506.2.2 Reduced Lighting Power Density	
	Residential R-1 R-2 R-3 R-4 Storage S-1 Moderate S-2 Low High-piled	Interior walls and partitions Floor Construction	PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)	506.2.3 Energy Recovery Ventilation Systems 506.2.4 Higher Efficiency Service Water Heating	
	Parking Garage Open Enclosed Repair Garage Utility and Miscellaneous	Including supporting beams  O  O  A8/AIO	USE WATERCLOSETS URINALS LAVATORIES SHOWERS/ DRINKING FOUNTAINS MALE FEMALE MALE FEMALE TUBS REGULAR ACCESSIBLE	☐ 506.2.5 On-Site Supply of Renewable Energy ☐ 506.2.6 Automatic Daylighting Control Systems	
	Accessory Occupancies:	Roof Construction Including supporting beams  O  O  A8/AIO	MALE FEMALE MALE FEMALE TUBS REGULAR ACCESSIBLE  SPACE EXISTING		MERCHALL
	Assembly A-1 A-2 A-3 A-4 A-5 Business	and joists	NEW         2         1         2         1         1         1           REQUIRED         1         1            1         1		
	Educational F-1 Moderate F-2 Low	Shaft Enclosures - Exit NA Shaft Enclosures - Other NA	SPECIAL APPROVALS		
	Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM Institutional I-1 I-2 I-3 I-4 I-3 Condition I 2 3 4 5	Corridor Separation NA	SPECIAL APPROVALS  Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)		
	Mercantile	Occupancy Separation NA  Party/Fire Wall Separation NA	Special approval: (Local Jurisdiction, Department of Insulance, SCO, DF1, DAHS, ICC, etc., describe below)		
В	Residential R-1 R-2 R-3 R-4 Storage S-1 Moderate S-2 Low High-piled	Smoke Barrier Separation NA Tenant Separation NA		SCO ID# 13-10297-01A	AB
	Parking Garage Open Enclosed Repair Garage Utility and Miscellaneous	Incidental Use Separation NA  * Indicate section number permitting reduction	ENERGY SUMMARY	PROJECT:	7
	Incidental Uses (Table 508.2.5):  Furnace room where any piece of equipment is over 400,000 Btu per hour input		ENERGY REQUIREMENTS:  The following data shall be considered minimum and any special attribute required to meet the North Carolina	WEIGH STATION	
	Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	LIFE SAFETY SYSTEM REQUIREMENTS	Energy Conservation 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	GASTON COUNTY NORTH CAROLINA	
	☐ Refrigerant machine room ☐ Hydrogen cutoff rooms, not classified as Group H	Emergency Lighting: No Yes Exit Signs: No Yes	design vs annual energy cost for the proposed design.		
	☐ Incinerator rooms	Fire Alarm:  No Yes  Smoke Detection Systems:  No Yes Partial	Climate Zone: 3 4 5 NOTE: PER NCECC SECTION 101.5.2 NOTE 2, THIS BUILDING IS EXEMPT FROM INSULATION		
	☐ 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-2 occupancy	Panic Hardware: No Yes	Method of Compliance:  REQUIREMENTS.	ARCHITECT/ENGINEERS:	
	☐ Laundry rooms over 100 square feet ☐ Group I-3 cells equipped with padded surfaces	LIFE SAFETY PLAN REQUIREMENTS	Performance (Energy Code)	FACILITIES DESIGN	
	Group I-2 waste and linen collection rooms	Life Safety Plan Sheet #: T-I  Fire and/or smoke rated wall locations (Chapter 7)	Prescriptive (ASHRAE 90.1)  Performance (ASHRAE 90.1)	FACILITIES MANAGEMENT DIVISION, NCDOT	
	<ul><li>☐ Waste and linen collection rooms over 100 square feet</li><li>☐ Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-</li></ul>	Assumed and real property line locations  Exterior wall opening area with respect to distance to assumed property lines (705.8)	THERMAL ENVELOPE	1 SOUTH WILMINGTON STREET RALEIGH, NORTH CAROLINA 27601	
	ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies	Existing structures within 30' of the proposed building	Roof/ceiling Assembly (each assembly) METAL ROOF ON "Z" PURLINS W/ REINFORCED	(919) 707-4540 FAX (919) 715-0399	
	Rooms containing fire pumps	Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)  Occupant loads for each area	Description of assembly: VINYL FACED BATT INSULATION CEILING U-Value of total assembly: 0.025	DRAWING TITLE:	
	☐ Group I-2 storage rooms over 100 square feet ☐ Group I-2 commercial kitchens	Exit access travel distances (1016)  Common path of travel distances (1014.3 & 1028.8)	R-Value of insulation: 38.0 Skylights in each assembly: N/A	INSPECTION BUILDING: BUILDING CODE SUMMARY  DRAWN BY: CLS CHECKED BY: MDG ISSUE DATE:	
A	Group I-2 laundries equal to or less than 100 square feet	Dead end lengths (1018.4)	U-Value of skylight:  Total square footage of skylights in each assembly:	SEAL SEAL WAS AUGUSTED AND SECRETARY AND AND AND	J( )
	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	Clear exit widths for each exit door  Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)	Exterior Walls (each assembly)  METAL CORRUGATED SIDING ON GIRTS,	0000000 I-4928 41188.3.1 · · ·	
	☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421 ☐ 422 ☐ 423 ☐ 424 ☐ 425 ☐ 426 ☐ 427	Actual occupant load for each exit door  A separate reduced scaled plan indicating where fire rated floor/ceiling and/or roof structure is provided for	U-Value of total assembly: 0.047	NO. REVISIONS/SUBMISSIONS DATE SHEET NO	0.
	Special Provisions: 509.2 509.3 509.4 509.5 509.6 509.7 509.8 509.9	purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier. (707.5.1, 709.4 &710.4).	R-Value of insulation:  Openings (windows or doors with glazing)  LL Value of assembly:  O EE	War ilouzlas illuf	
	Mixed Occupancy: No  Yes Separation: Hr. Exception: Hr. Exception:	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)	U-Value of assembly: 0.55  Solar heat gain coefficient: 0.33	TANICHTDALE,	Heryalezako
	This separation is not exempt as a Non-Separated Use (see exceptions).	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)	Projection factor: 0.34  Door R-Values: II.77	SEAL NOT WHID UNIESS SIGNED AND DATED OF 4	
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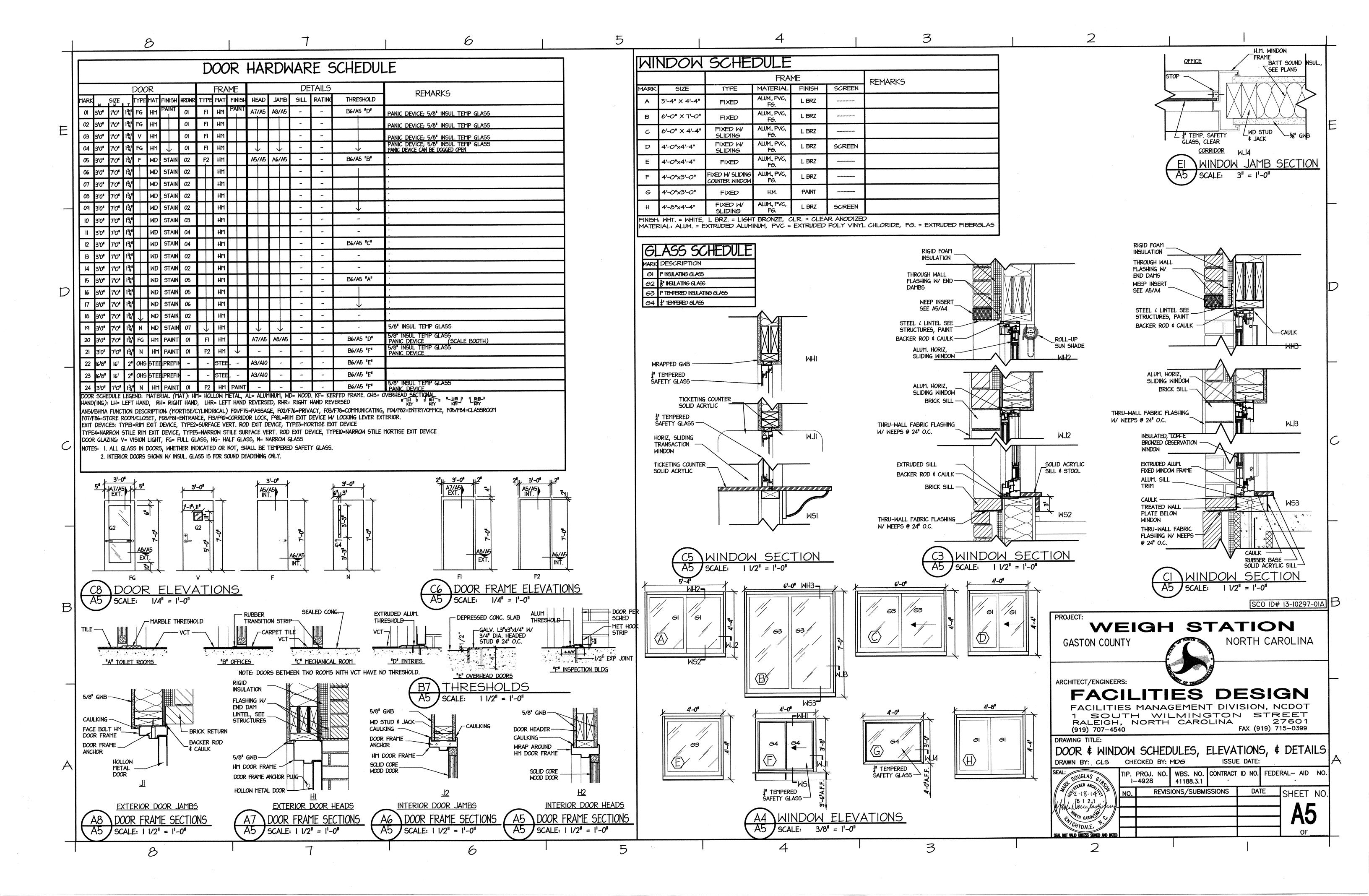


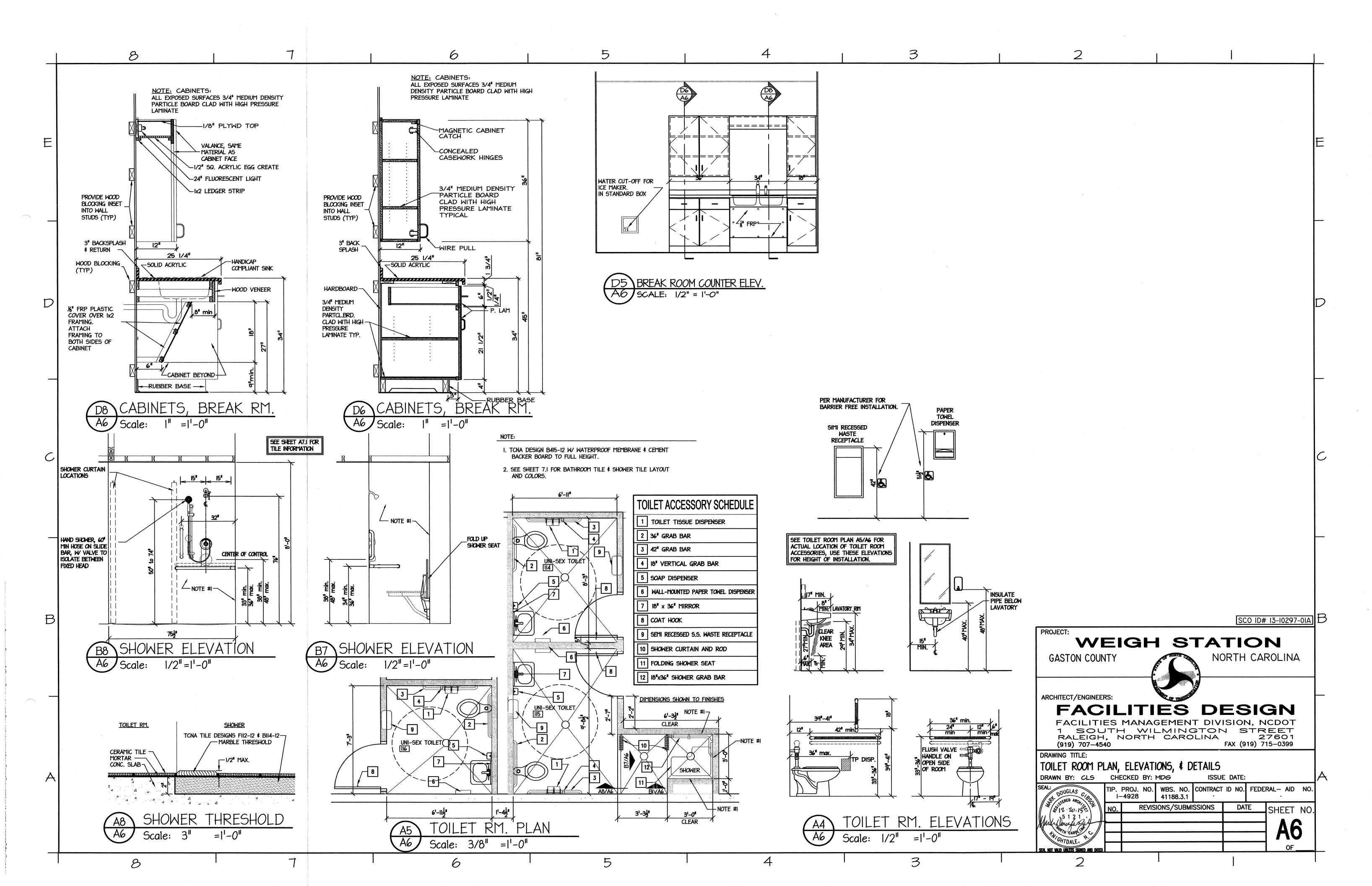


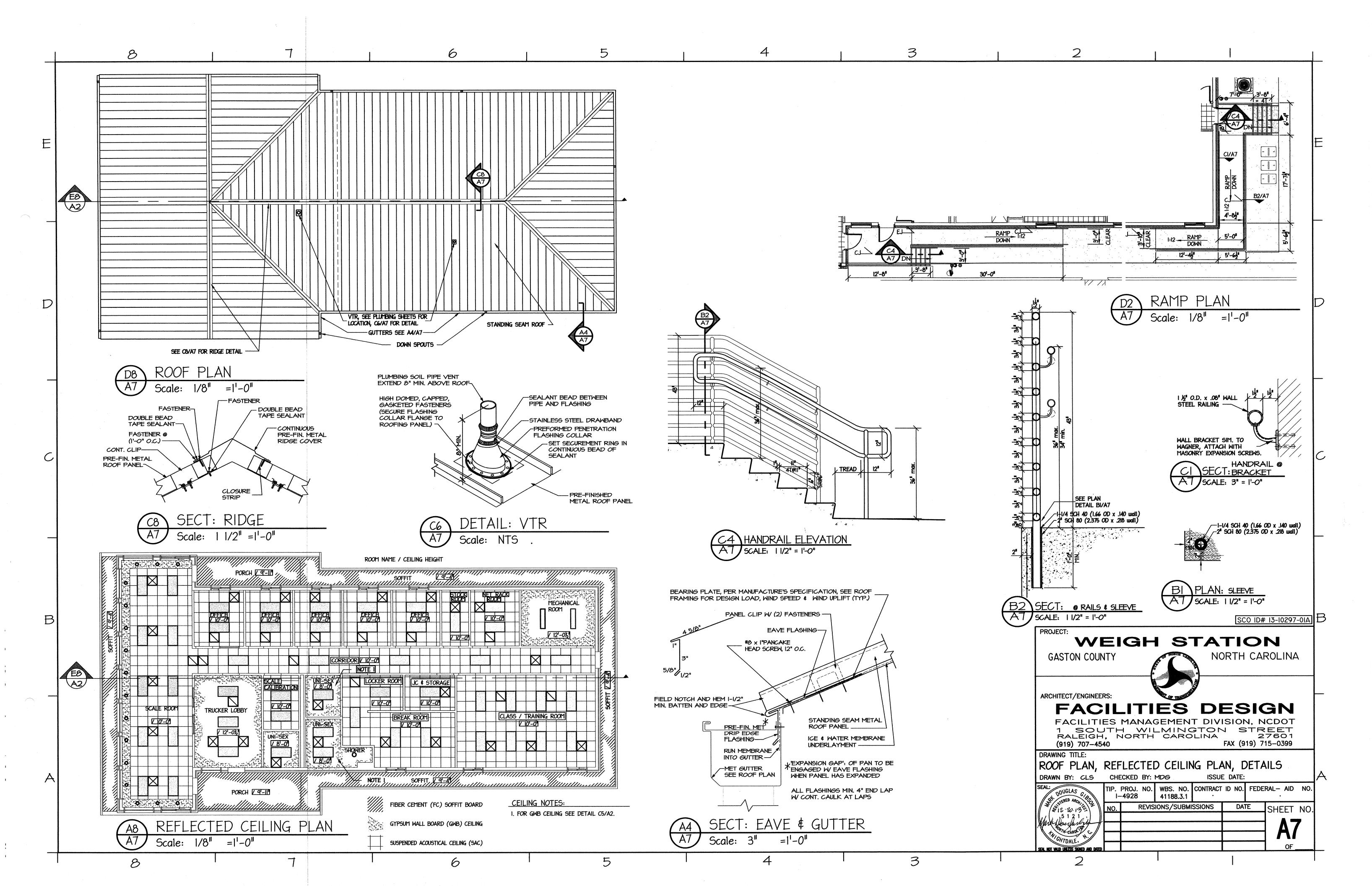


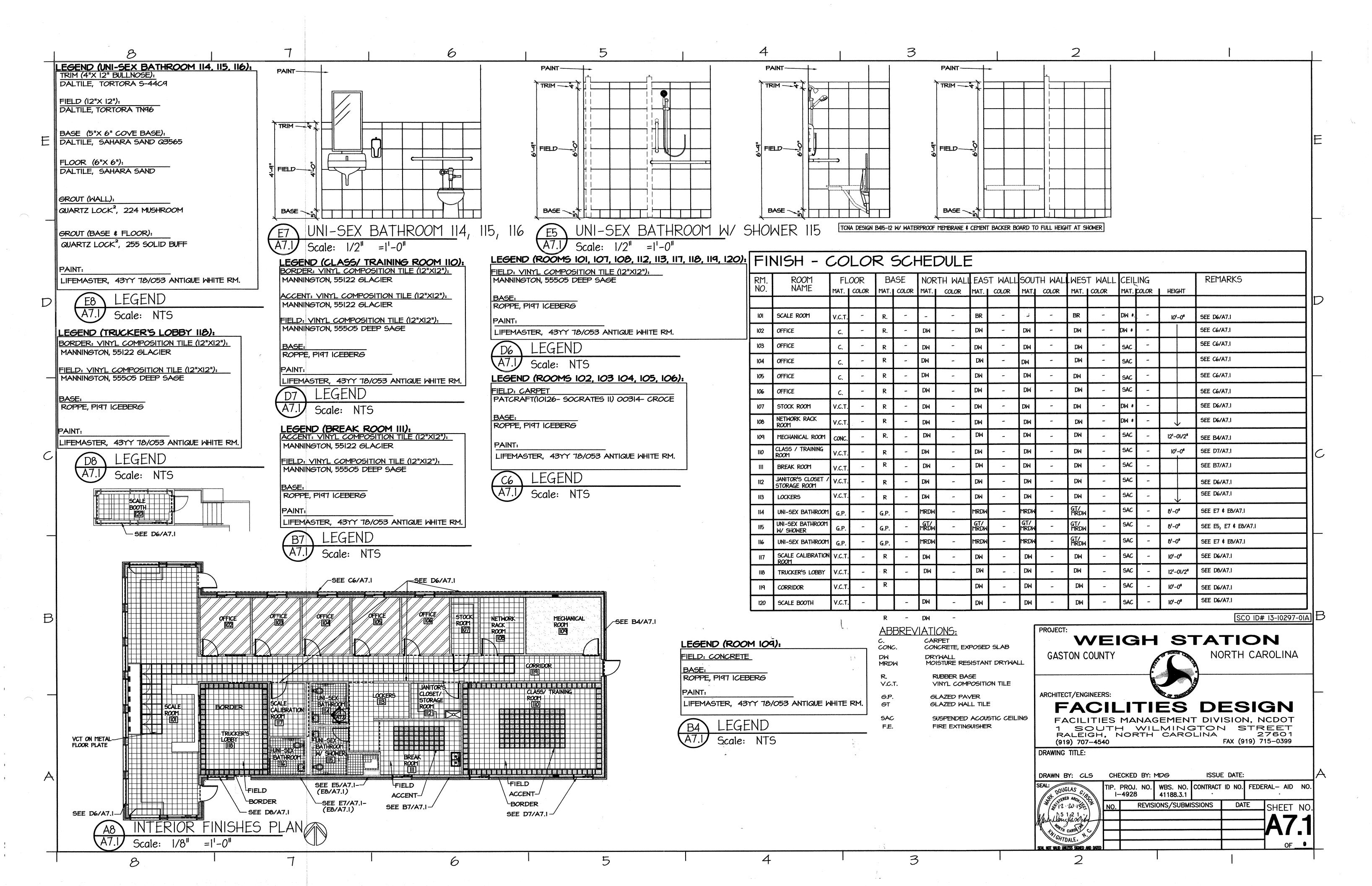


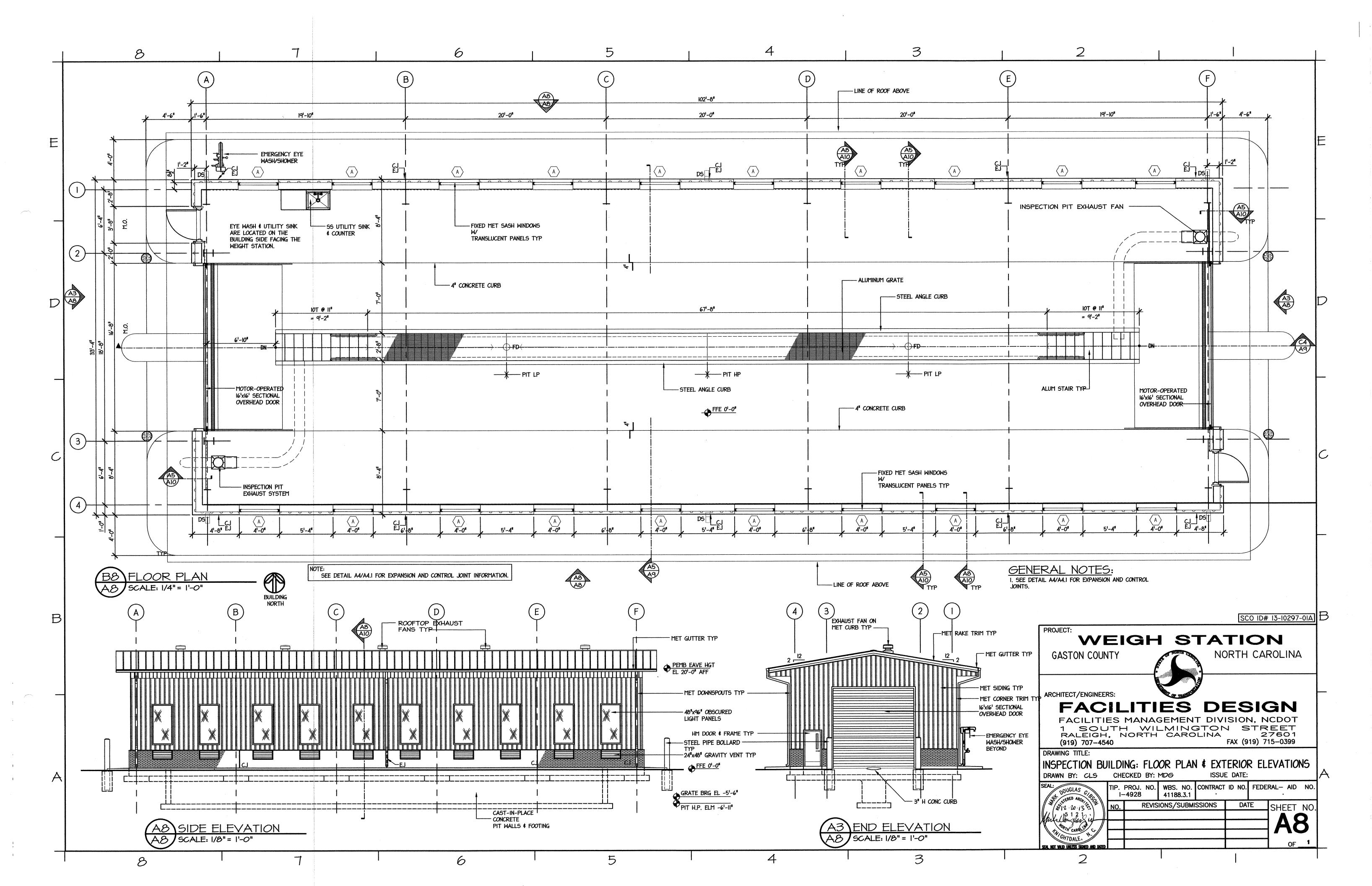


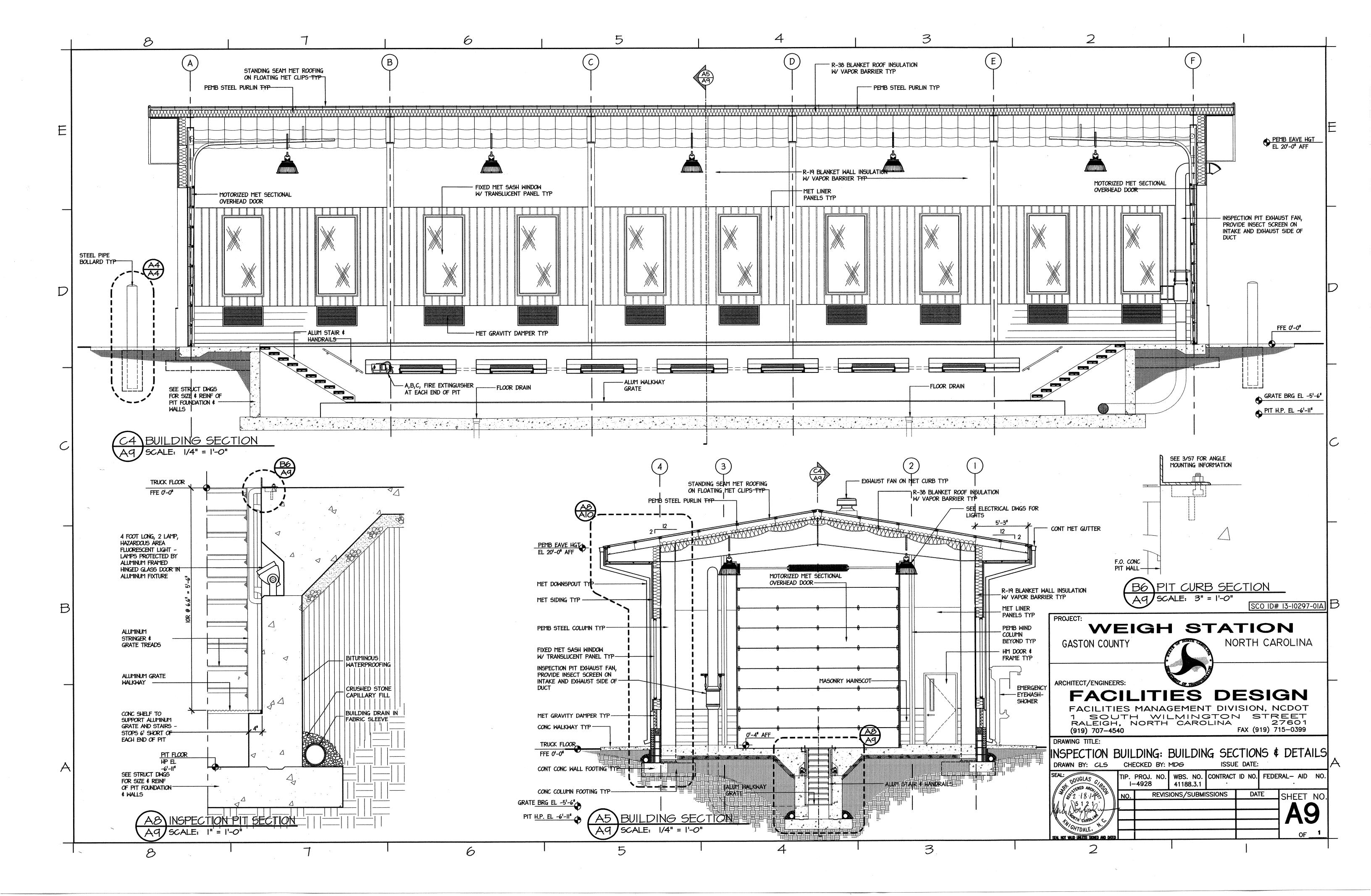


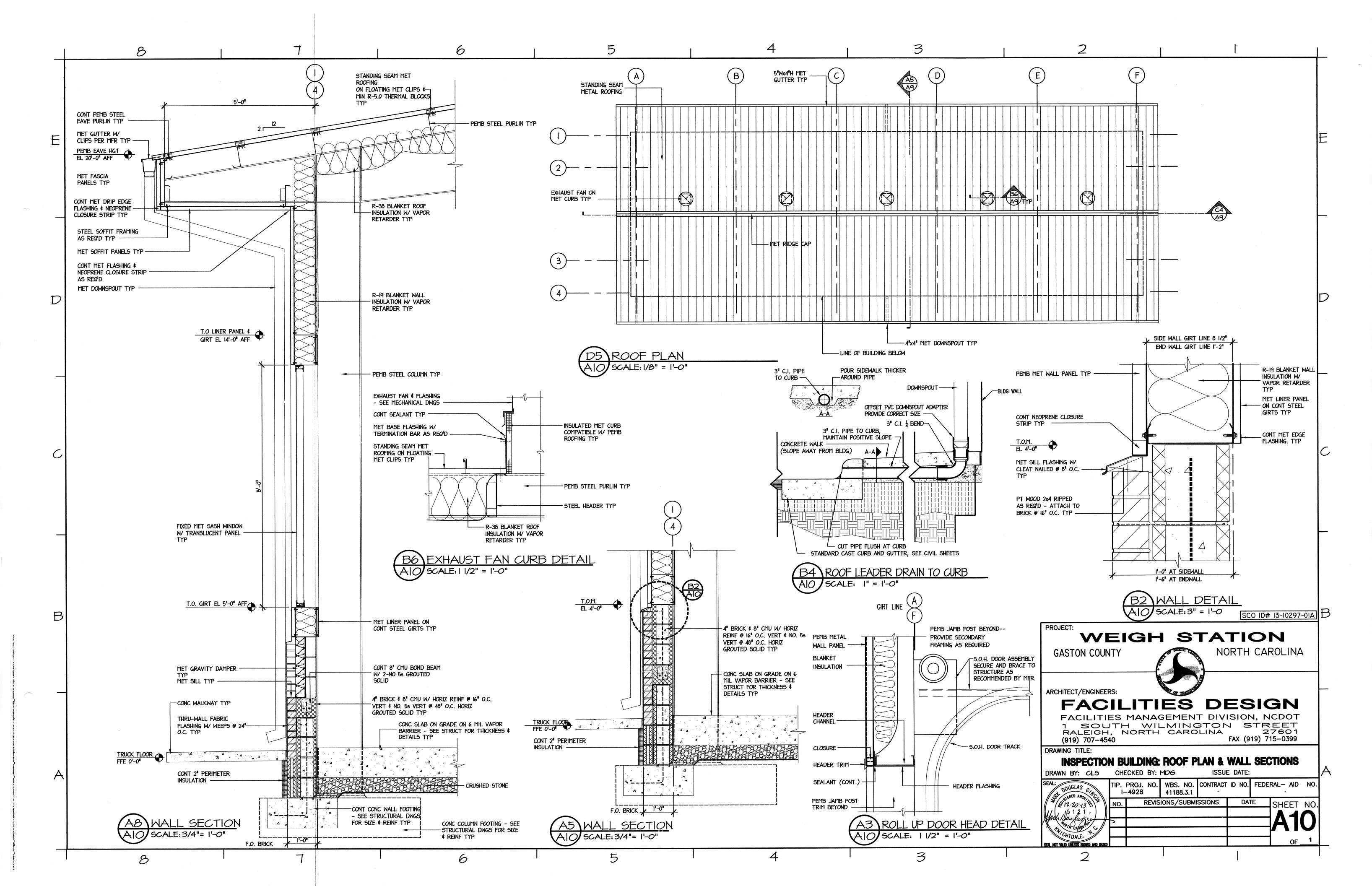


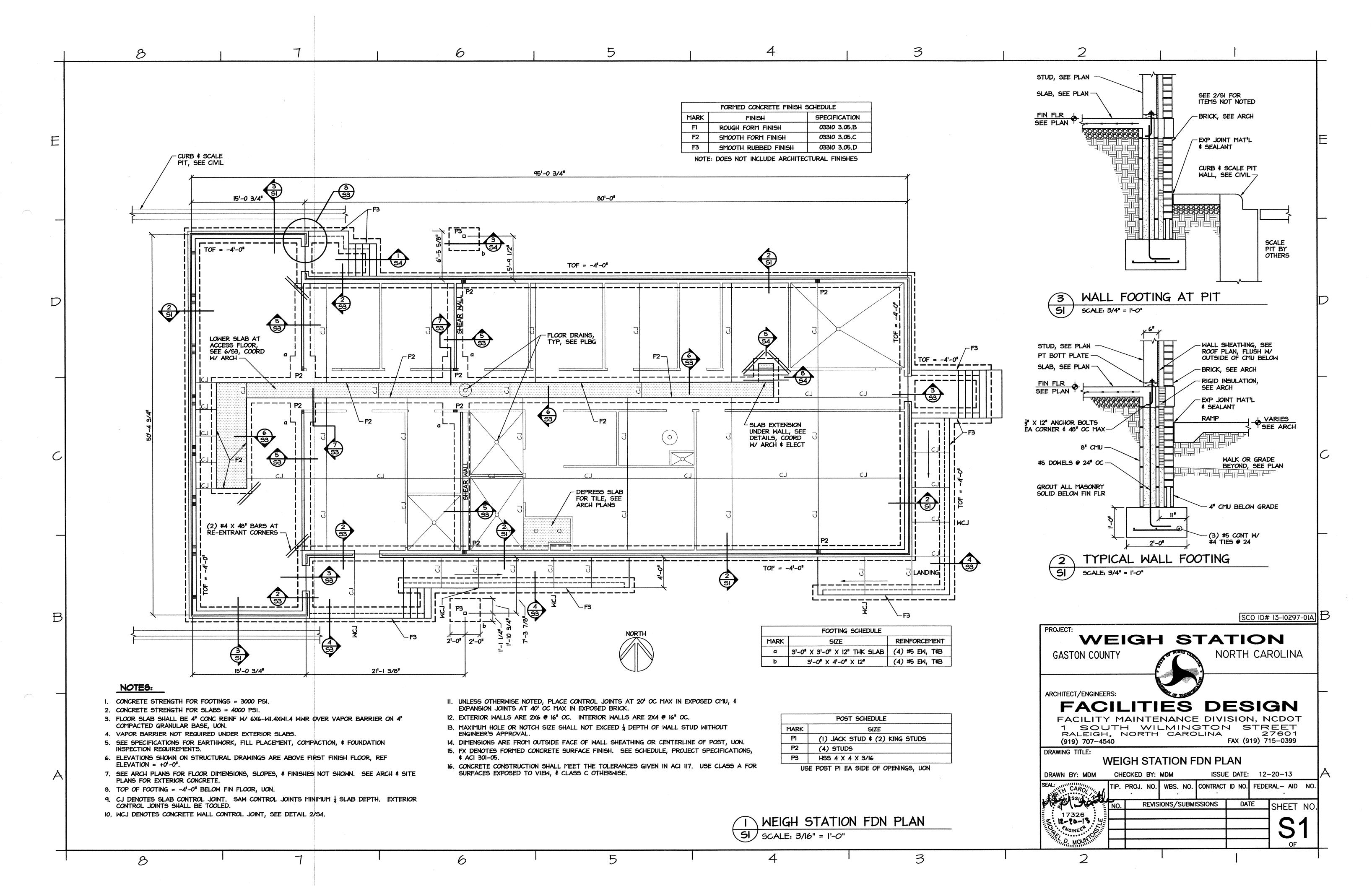


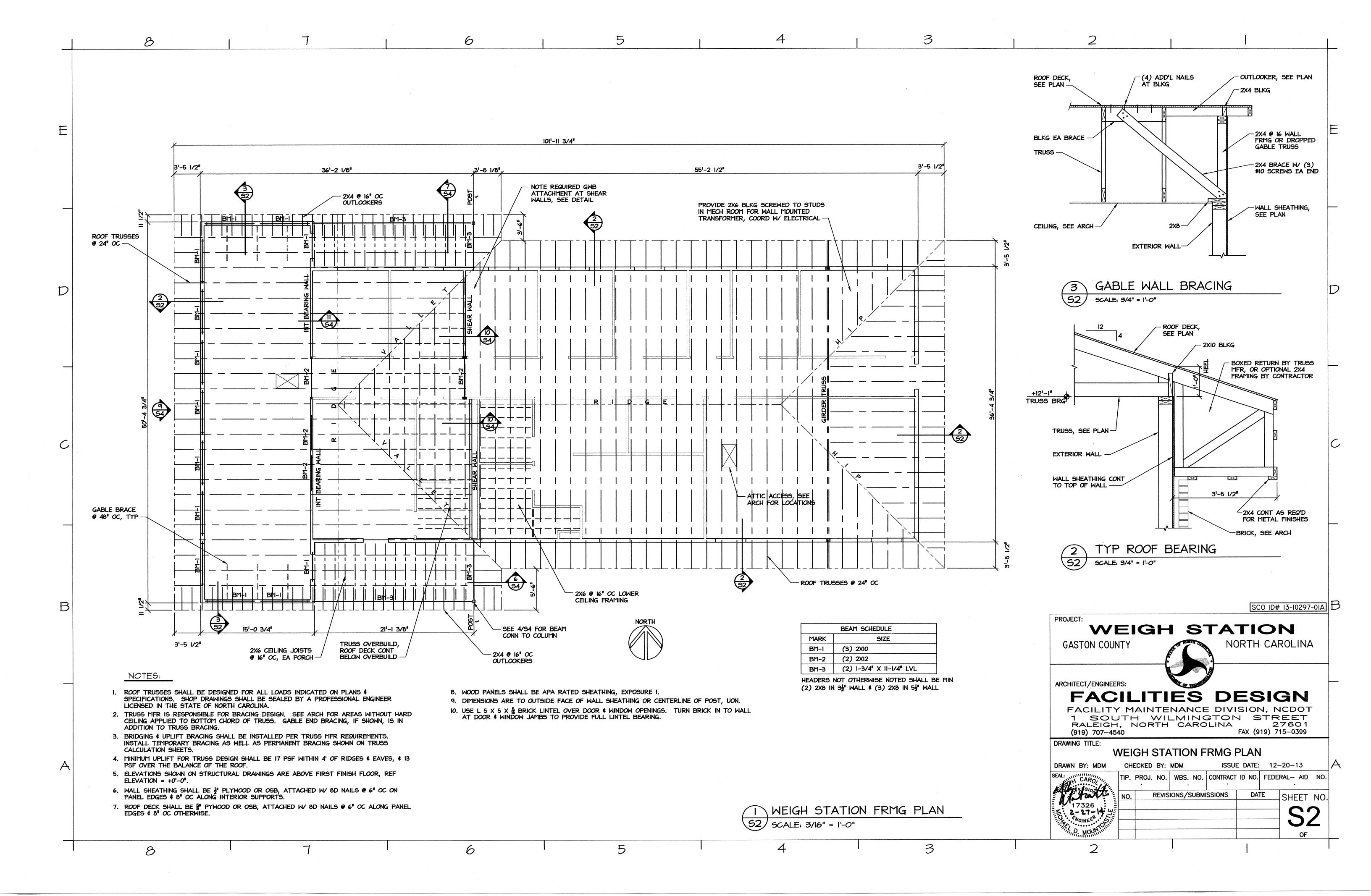


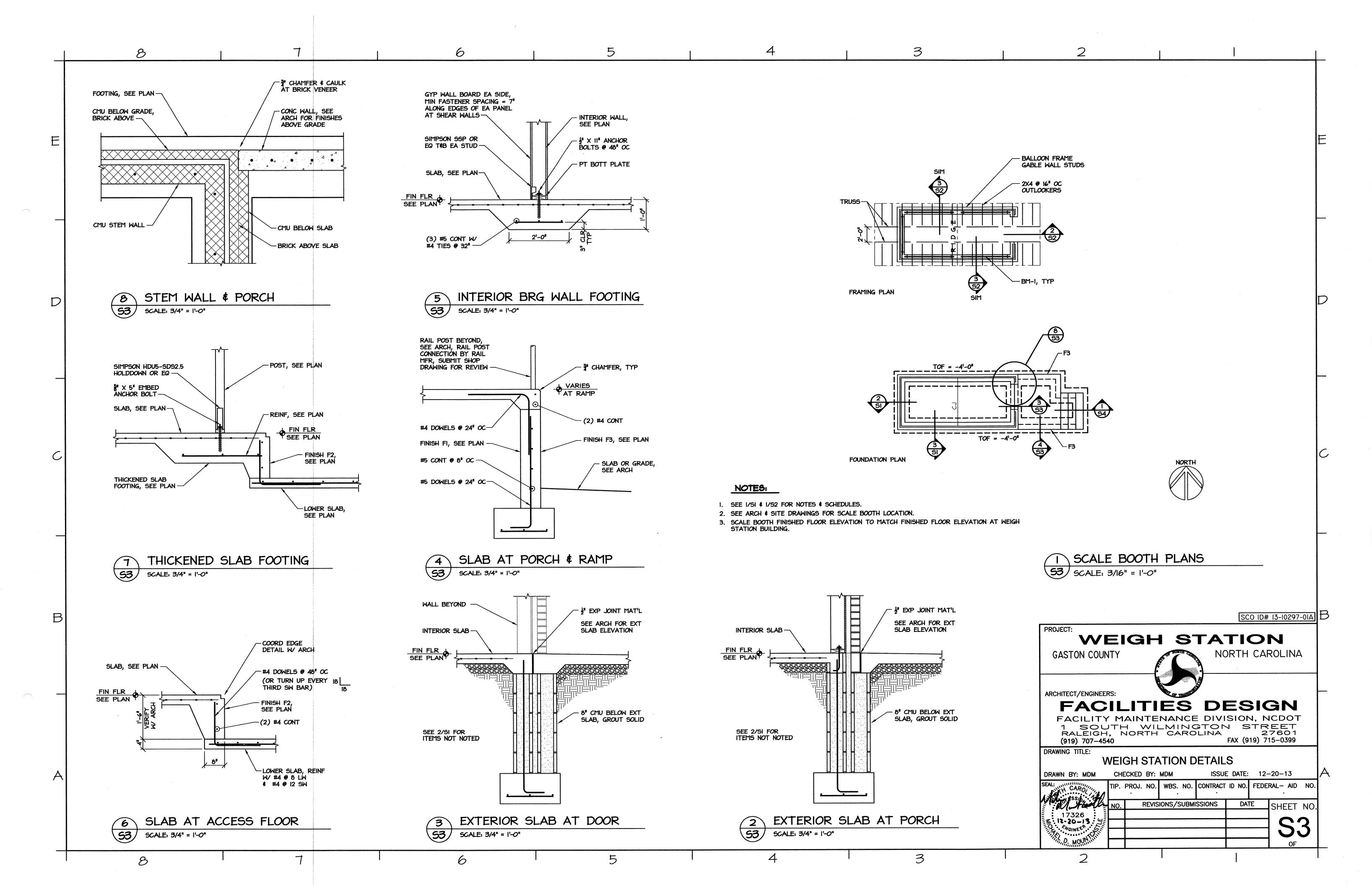


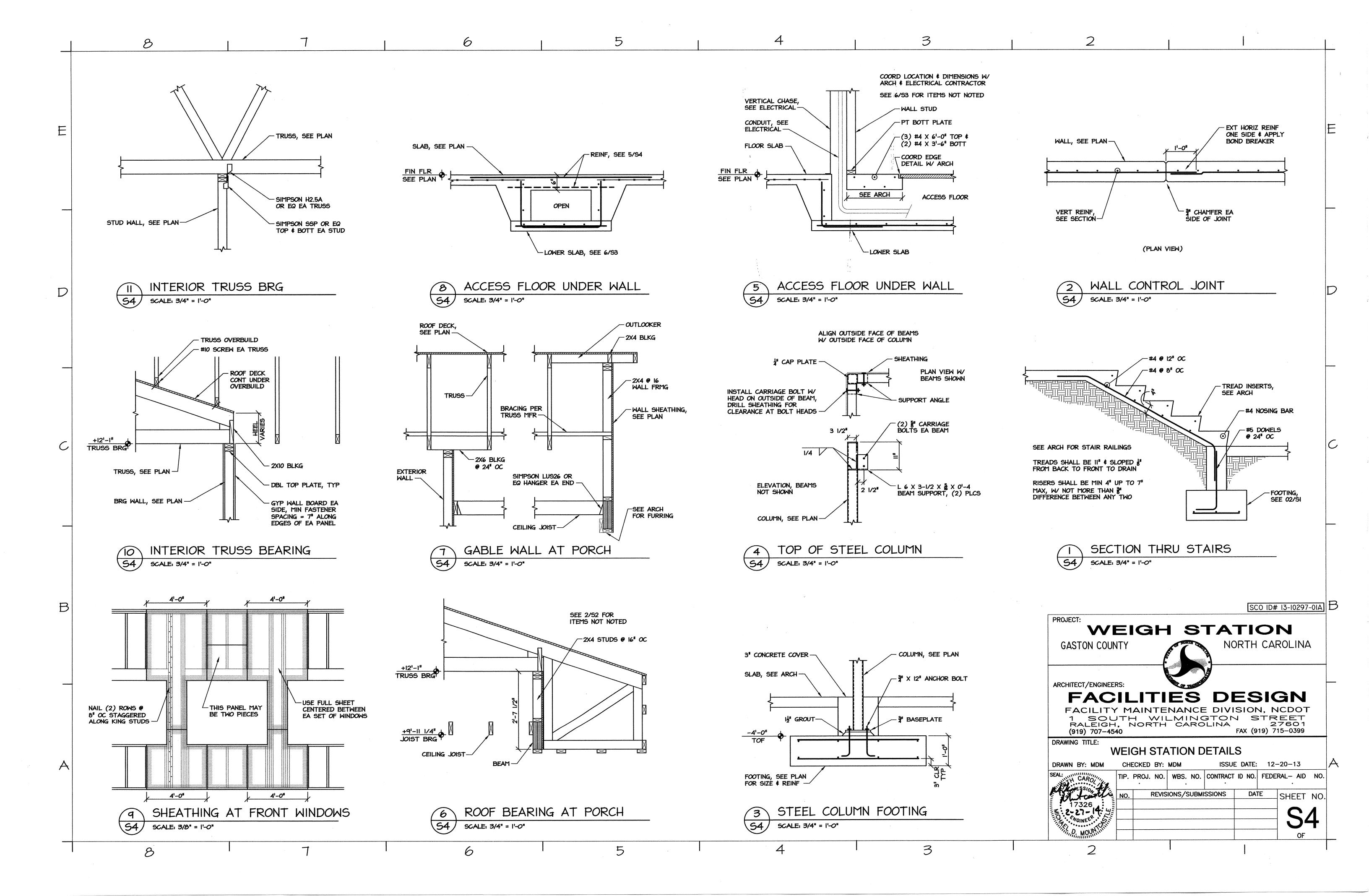


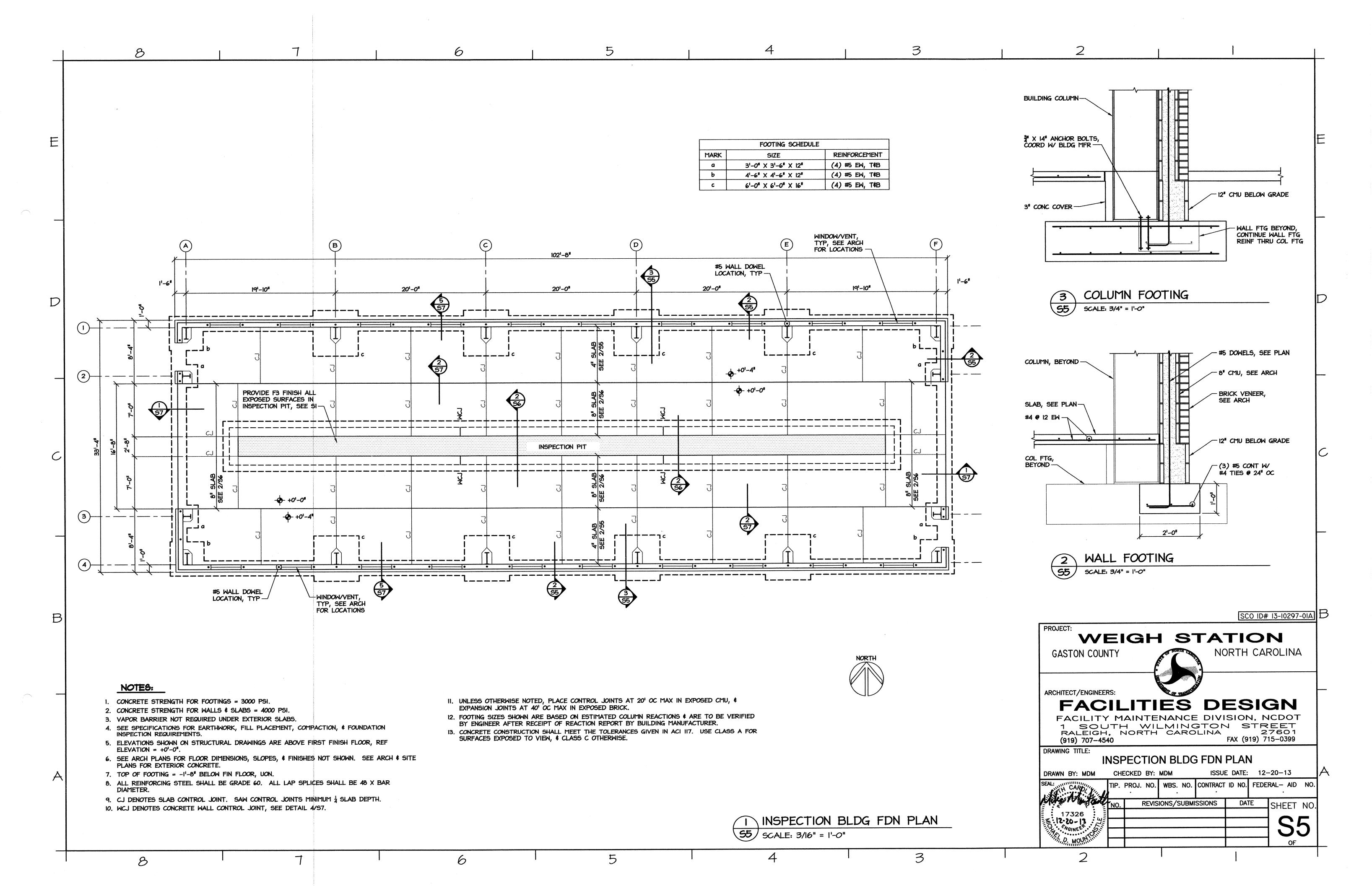


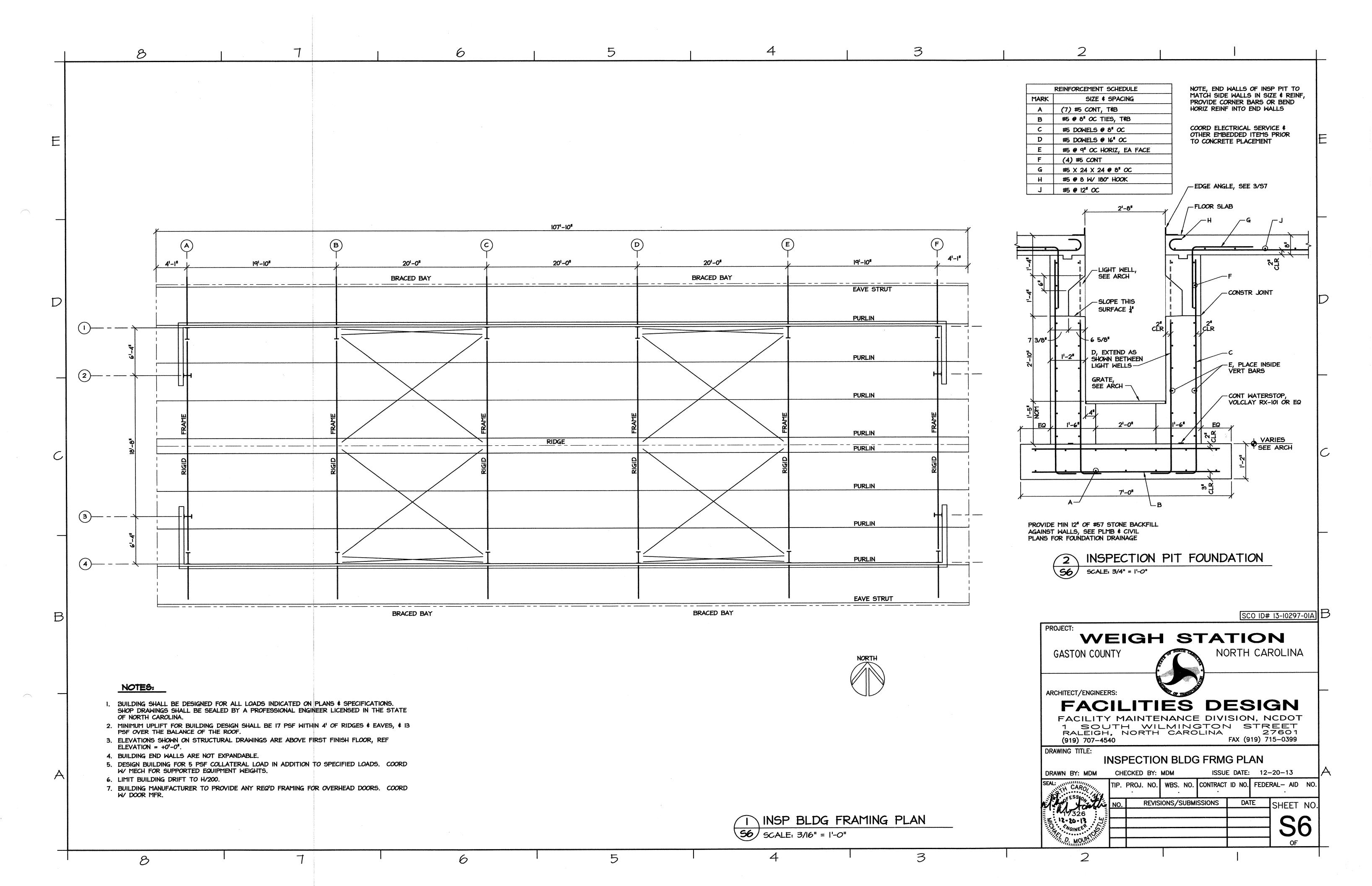












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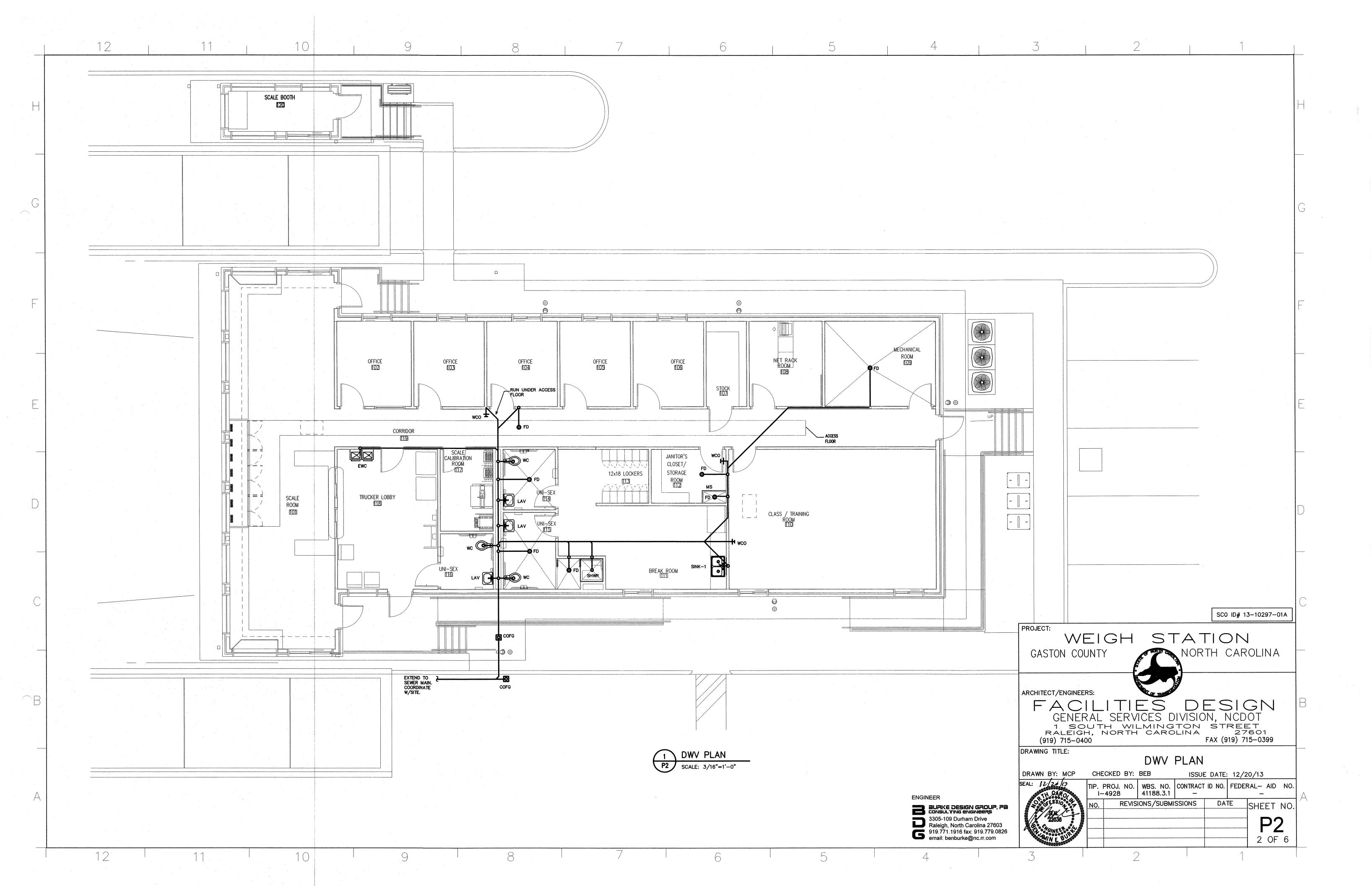
	PLUMBING FIXTURE S	CHEDULE	
MARK	DESCRIPTION	ALTERNATE MANUFACTURER/MODEL	ALTERNATE MANUFACTURER/MODEL
wc	WATER CLOSET (ADA) AMERICAN STANDARD "MADERA FLOWISE 1.28 GPF" #3461.128, ELONGATED BOWL, VITREOUS CHINA, AND 1 1/2" TOP SPUD. PROVIDE OPEN FRONT SEAT, AND SENSOR W/ MANUAL OVERRIDE FLUSH VALVE SLOAN #8111-1.28 (BATTERY POWERED). ADA COMPLIANT.	ZURN #Z5665 WITH ZURN #ZTS6200EV FLUSH VALVE.	TOTO #CT705EL WITH TOTO #TET1LN32 FLUSH VALVE.
LAV	LAVATORY (ACCESSIBLE, WALL HUNG) AMERICAN STANDARD "LUCERNE" # 0355.012 WHITE WITH CONCEALED ARM CARRIER AND DRAIN ASSEMBLY (7723.018). ADA COMPLIANT. FURNISH WITH SLOAN OPTIMA PLUS #EBF-187 BATTERY SENSOR FAUCET. COORDINATE TRIM AND SINK FAUCET DRILLING FOR 4" SPACING.	KOHLER GREENWICH #K-2032 WITH AMERICAN STANDARD BATTERY SENSOR FAUCET #6055.205.	ELJER MURRAY II #051-0244 WITH ZURN BATTERY SENSOR FAUCET #Z6915.
MS	MOP SINK FAUCET  FAUCET: ACORN MODEL KFC CHROME PLATED SERVICE FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK AND 3/4" HOSE THREAD ON SPOUT. HOSE & HOSE BRACKET: ACORN MODEL KH36 LONG FLEXIBLE 5/8" RUBBER HOSE, CLOTH REINFORCED.	CRANE #830—AA FAUCET.	SPEAKMAN #MR-371 FAUCET.
EWC	ELECTRIC WATER COOLER HAWS HWUACP8L BARRIER FREE HI-LO WALL MOUNT ELECTRIC WATER COOLER.	HALSEY TAYLOR #HAC8BL-Q.	ELKAY #EZSTL8LC.
RPZ	2" REDUCED PRESSURE BACKFLOW PREVENTER WATTS MODEL #009QT-3" REDUCED PRESSURE BACKFLOW PREVENTER, BRONZE CONSTRUCTION.	ZURN #375, 2".	FEBCO #860, 2".
СР	CIRCULATING PUMP BELL & GOSSET, SERIES NBF-12 IN-LINE CIRCULATOR PUMP, 55 WATT, 115 VAC, FLA=0.4 1 Ph., 3/4" CONN., WITH A MAXIMUM OF 18 GPM AND 12' TDH. PUMP TO BE ALL BRONZE CONSTRUCTION, COORDINATE WITH ELEC. CONTRACTOR FOR POWER FEED. PROVIDE DISCONNECT SWITCH. PROVIDE FOR AUTO SHUT-OFF WHEN HW NOT IN USE.	TACO MODEL #110.	ARMSTRONG MODEL #S-25.
FD	FLOOR DRAIN  ZURN ZN-415-P. PROVIDE WITH DEEP SEAL P-TRAP, AND TYPE "B" STRAINER.  TRAP PRIMER CONNECTION REQUIRED ONLY FOR FLOOR DRAINS AS SHOWN ON SHEET P3.	JOSAM #30000A.	JAY R. SMITH #2005-A.
SINK-1	BREAK ROOM DOUBLE BASIN SINK ELKAY LR3319 SINGLE BASIN STAINLESS STEEL SINK (MODEL LRAD3319 IF ADA COMPLIANCE REQUIRED), 18 GA., SELF—RIMMING, FURNISHED WITH THREE FAUCET HOLES AND CENTER DRAIN. PROVIDE ELKAY KITCHEN FAUCET MODEL LK810HA08T4 WITH TWO LEVER HANDLES, CHROME PLATED BRASS P—TRAP AND SHUT—OFF VALVES. COORDINATE EXACT UNIT WITH OWNER AND GENERAL CONTRACTOR. COORDINATE SIZE WITH CABINETRY PRIOR TO ORDERING.	MOEN #22866.	STERLING #11400.
SINK-2	INSPECTION BLDG. SINK AMERICAN STANDARD AKRON #7695.008 ENAMELED CAST IRON SERVICE SINK. PROVIDE FAUCET #8350.243 WITH #7798.030 3" TRAP W/STRAINER.	GERBER #12-918.	KOHLER #K-6714.
TPV	TRAP PRIMER VALVE PPP INC. MODEL# PR-500, 1/2" INLET, 1/2" OUTLET	JOSAM #88300.	WATTS #A200.
НВ	HOSE BIBB  ZURN Z-1330-C, 3/4" WALL HYDRANT WITH VANDAL RESISTANT VACUUM BREAKER.	WATTS #HY-330.	JAY R. SMITH #5509QT.
FPHB	FREEZE PROOF HOSE BIBB  ZURN Z-1320-C, 3/4" NON FREEZE WALL HYDRANT WITH VANDAL RESISTANT VACUUM BREAKER. ENCASED WITH KEY LOCK.	JAY R. SMITH #5509QT.	WATTS HY-725.
EWH	ELECTRIC WATER HEATER  STATE WATER # P6-52-20RT-2, 50 GALLONS, 4500W, 3/4" INLET AND OUTLET, ELECTRIC, 240V, 1 PHASE, MODEL# ETC-2X EXPANSION TANK.	AO SMITH #DEL-50. AO SMITH PMC-2 EXPANSION TANK.	BRADFORD WHITE #LD-50S3-3. AMTROL ST-5-C EXPANSION TANK.
VB	ICE MAKER VALVE BOX WM HARVEY ICE MAKER BOX WITH 3/8" BRONZE SHUT-OFF VALVE, FLUSH TO WALL.	OATEY MODEL 38607.	PUREFLOW MODEL 57000.
SHWR	ACCESSIBLE STALL, SHOWER HEAD/FAUCET/ADA ACCESSORIES  AQUATIC BATHWARE 1363BFSC PRE—FABRICATED FIBERGLASS SHOWER STALL. PROVIDE  SYMMONS TEMPTROL 96-500-B30-L-V SHOWER AND HAND SHOWER SYSTEM. PROVIDE  ALL OTHER COMPONENTS REQUIRED FOR ADA COMPLIANCE, GRAB BAR, SEAT, CURTAIN  OR DOOR, ETC. COORDINATE HANDING WITH OWNER AND ROUTE PLUMBING AS REQUIRED.	KOHLER FREEWILL MODEL.	BARRIER FREE ARCHITECTURALS MODEL.
EES	EXTERIOR EMERGENCY EYEWASH/SHOWER BRADLEY S19-300 HEAT TRACE COMBO SHOWER/EYEWASH. VERIFY TOP OR BOTTOM INLET.	NORTHERN SAFETY MODEL.	ENCON SAFETY MODEL.
TD	TRENCH DRAIN  J. R. SMITH MODEL #9930 TRENCH DRAIN SYSTEM, 4", POLYPROPYLENE CONSTRUCTION, 1 METER SECTIONS, COORDINATE GRATE MODEL W/OWNER. PROVIDE CHANNEL SECTIONS AS REQUIRED BY LENGTH NEEDED FOR EACH TRENCH DRAIN. FIELD TRIM AT SHALLOW END OF CHANNEL AS NEEDED. PROVIDE STRAINER OR SEDIMENT BASKET IF REQUIRED. INSTALL PER MFR'S SPECS.	ZURN MODEL.	WATTS MODEL.
OSI	OIL/SEDIMENT INTERCEPTOR STAY-RIGHT 300 GALLON OIL/SEDIMENT INTERCEPTOR. PROVIDE VENTING AS REQUIRED.	EC BABBERT MODEL.	OLDCASTLE MODEL.

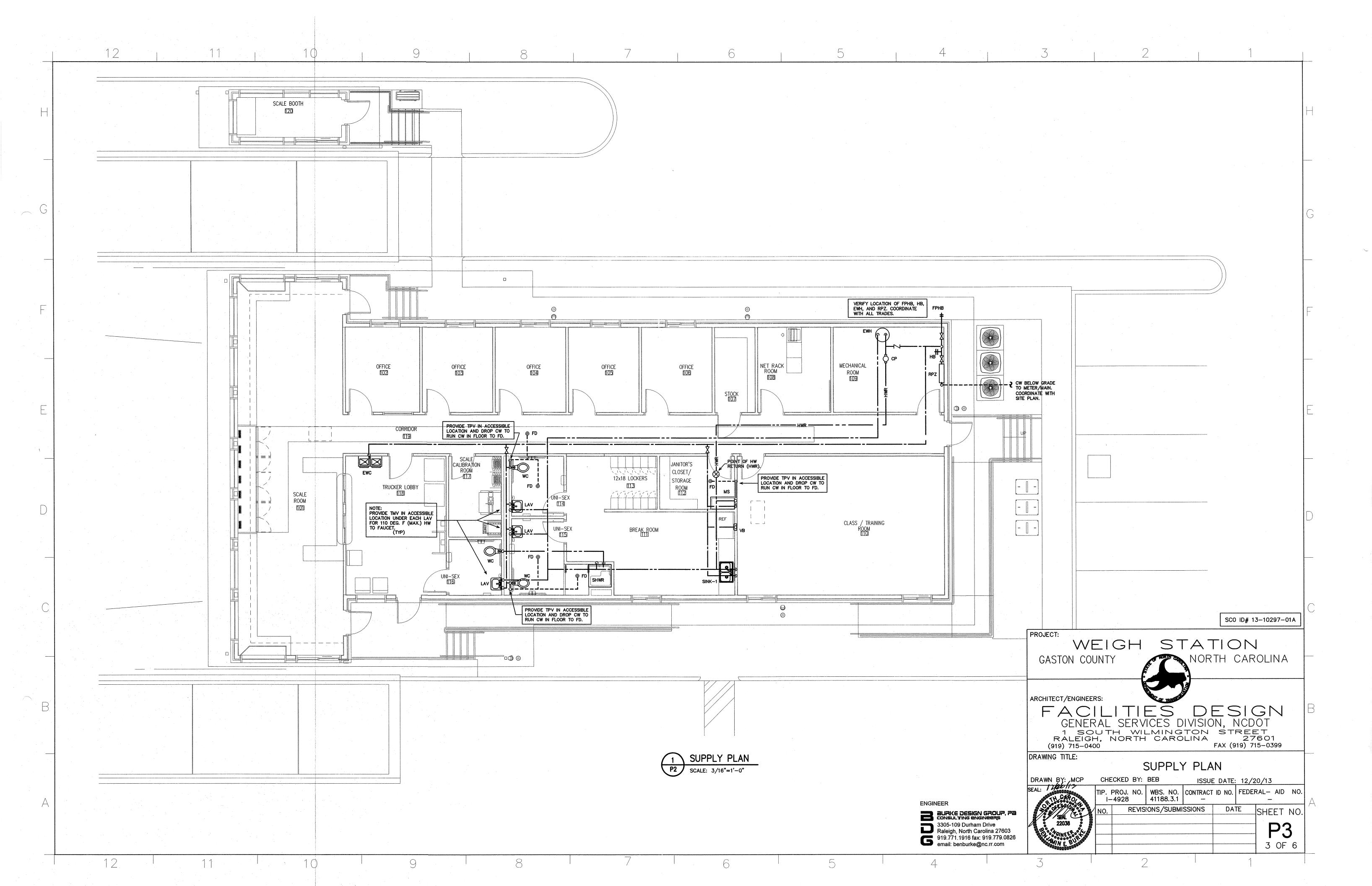
## SYMBOL LEGEND - PLUMBING SYMBOL DESCRIPTION WASTE PIPING (W) VENT PIPING (V) COLD WATER PIPING (CW) HOT WATER PIPING (HW) CLEANOUT FINISH FLOOR / WALL CLEANOUT CLEANOUT FINISH GRADE—PROVIDE FLUSH CONCRETE COLLAR AND BRONZE COVER DIELECTRIC UNION SHUT-OFF VALVE VENT THRU ROOF (VTR) FREEZE PROOF, HOSE BIBB (FPHB/HB) A.F.F. ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED U.O.N. POINT OF NEW CONNECTION TO EXISTING CHECK VALVE BALANCING VALVE CIRCULATION PUMP LOAD SUMMARY - PLUMBING WATER DEMAND (GPM) WATER DEMAND (FU) 47.3 43.5 SC0 ID# 13-10297-01A WEIGH STATION NORTH CAROLINA GASTON COUNTY ARCHITECT/ENGINEERS: ACILITIES DESIGN GENERAL SERVICES DIVISION, NCDOT 1 SOUTH WILMINGTON STREET RALEIGH, NORTH CAROLINA 27601 (919) 715-0400 FAX (919) 715-0399 DRAWING TITLE: PLUMBING SPECIFICATIONS CHECKED BY: BEB ISSUE DATE: 12/20/13 TIP. PROJ. NO. WBS. NO. CONTRACT ID NO. FEDERAL— AID NO. — REVISIONS/SUBMISSIONS DATE SHEET NO.

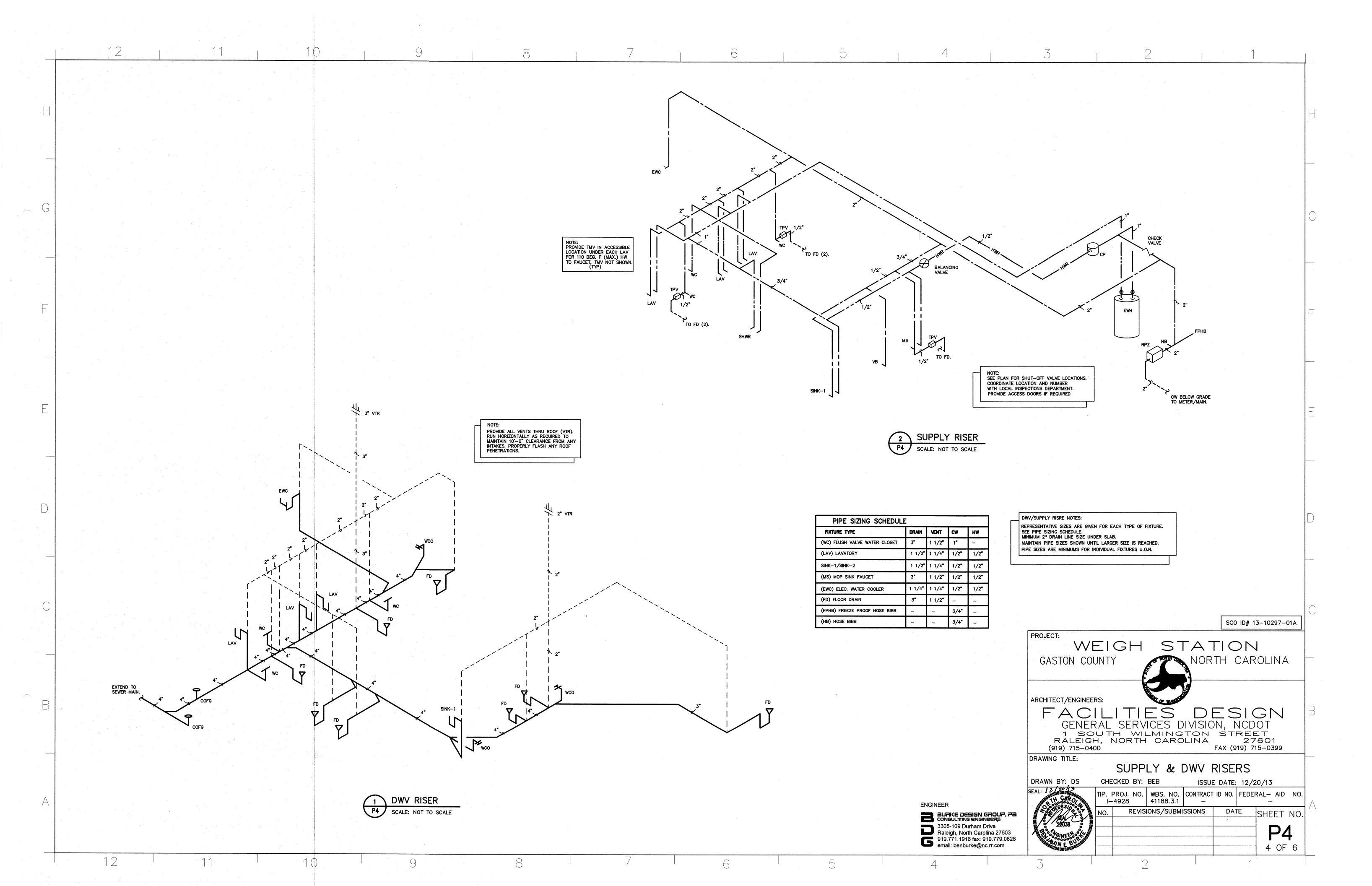
BURICE DESIGN GROUP, Pa CONSULTING ENGINEERS 3305-109 Durham Drive Raleigh, North Carolina 27603 919.771.1916 fax: 919.779.0826 email: benburke@nc.rr.com

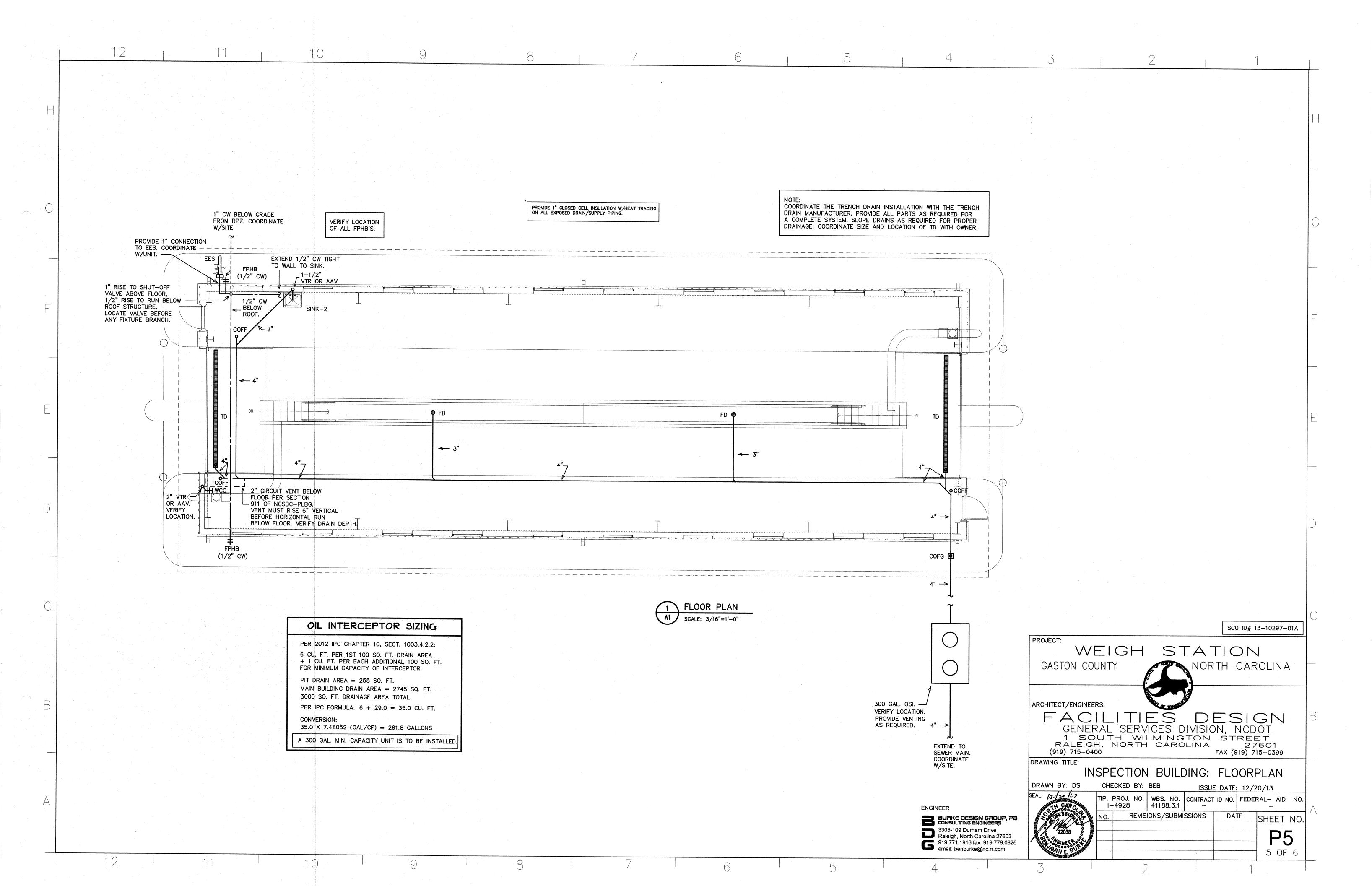
**ENGINEER** 

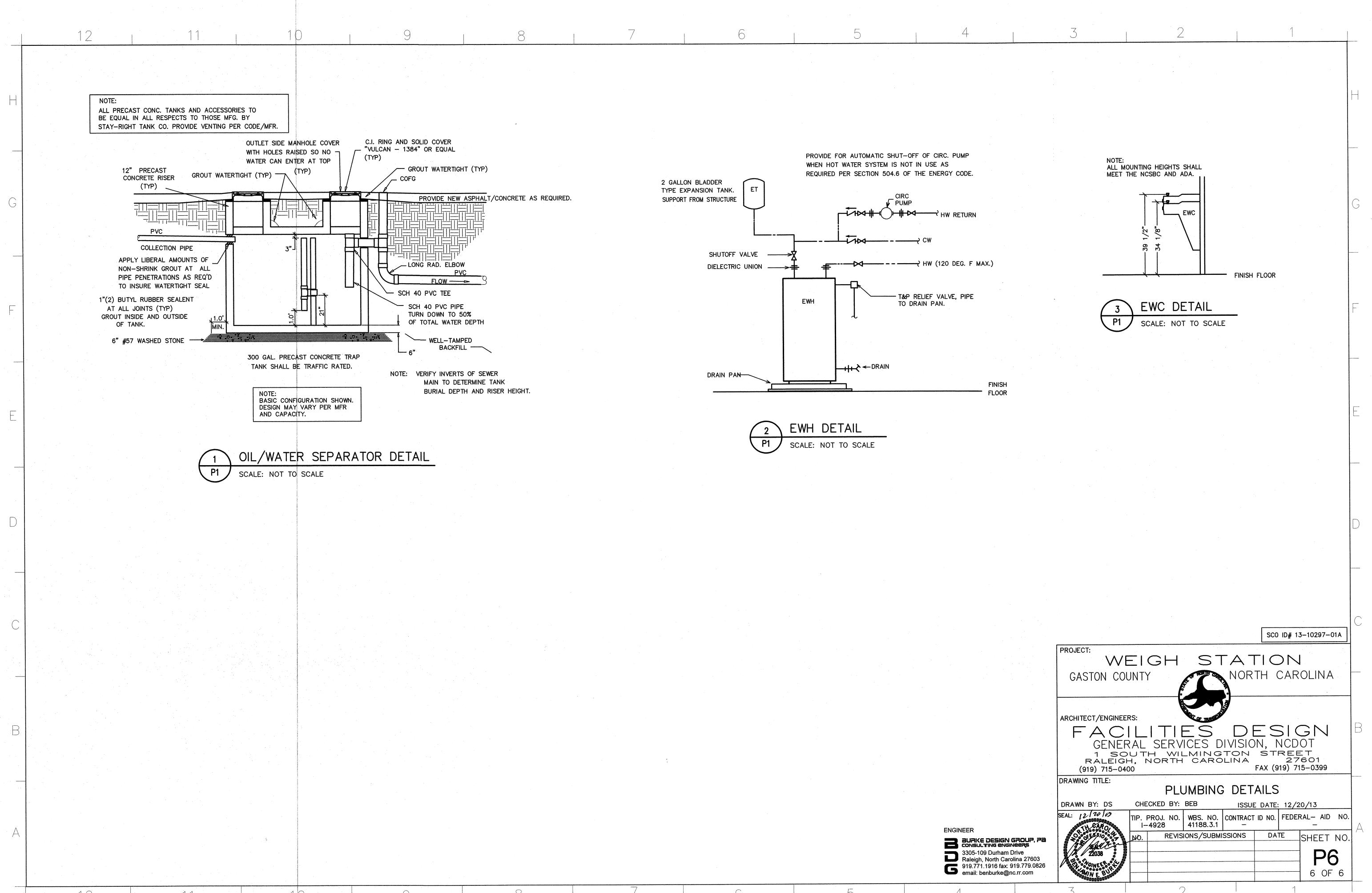
1 OF 6











\* OR APPROVED EQUAL BY TRANE OR YORK. NOTE: AHU HEATER KW RATINGS ARE AT 208 VOLTS.

		· ·	
EXHAUS	T FAN EQUIPMEN	T SCHEDUL	E
EF-1		A COLLAND	
EXHAUST FAN #1 (EF-1)	* CARNES MODEL# VCDD010C EXHAUST FATHE ELECTRICAL CONTRACTOR SHALL PROVIDE UNIT, 6" FLOCATE EXHAUST TERMINATION A MINIMU	ROVIDE THE SWITCH AND WRIGID DUCT ROOF EXHAUST	IRE THE UNIT. THE HVAC CAP
EF-2			
EXHAUST FAN #2 (EF-2)	* CARNES MODEL# VCDD010C EXHAUST FA THE ELECTRICAL CONTRACTOR SHALL PR CONTRACTOR SHALL PROVIDE UNIT, 6" F LOCATE EXHAUST TERMINATION A MINIMU	ROVIDE THE SWITCH AND WIRIGID DUCT ROOF EXHAUS!	MRE THE UNIT. THE HVAC CAP.
EF-3			
EXHAUST FAN #3	* CARNES MODEL# VCDD020C EXHAUST FA THE ELECTRICAL CONTRACTOR SHALL PR CONTRACTOR SHALL PROVIDE UNIT, 8" R LOCATE EXHAUST TERMINATION A MINIMU	OVIDE THE SWITCH AND WI NGID DUCT TO ROOF EXH	RE THE UNIT. THE HVAC AUST CAP.
EF-4			
EXHAUST FAN #4 (EF-4)	* CARNES MODEL# VIDK12M2 IN—LINE EXHATHE ELECTRICAL CONTRACTOR SHALL PROVIDE UNIT. PROVIDE TACTORY SPEED CONTROLLER. LOCATE SAIR FLOW ONLY. PROVIDE CARBON MONO	OVIDE THE SWITCH AND WI MDE VIBRATION ISOLATION PEED CONTROLLER AT FAN	RE THE UNIT. THE HVAC DISCONNECT SWITCH ON FAN HOUSING, AND I SWITCH. SPEED CONTROLLER IS FOR BALANCING
EF-5			
EXHAUST FAN #5 (EF-5)	* CARNES MODEL# VIDK12M2 IN-LINE EXHA THE ELECTRICAL CONTRACTOR SHALL PR CONTRACTOR SHALL PROVIDE UNIT. PROV FACTORY SPEED CONTROLLER. LOCATE S AIR FLOW ONLY. PROVIDE CARBON MONO	OVIDE THE SWITCH AND WI VIDE VIBRATION ISOLATION PEED CONTROLLER AT FAN	IRE THE UNIT. THE HVAC DISCONNECT SWITCH ON FAN HOUSING, AND N SWITCH. SPEED CONTROLLER IS FOR BALANCING

\* OR APPROVED EQUAL BY GREENHECK OR COOK.

1	AIR DIS	TRIBUT	ION S	CHED	JLE	
MARK	* MANUFACTURER	MODEL NO.	FACE SIZE	MATERIAL	SERVICE	NOTES
A	CARNES	SPAB224	24" X 24"	STEEL	SUPPLY	WHITE LAY-IN CEILING
В	CARNES	RTDAH	12" X 4"	STEEL	SUPPLY	WHITE DUCT MOUNTED
RA	CARNES	SPRB22	24" X 24"	STEEL	RETURN	WHITE LAY-IN CEILING

COORDINATE BORDER TYPE WITH THE CEILING TYPE. SEE ARCH SHEETS PROVIDE CUT SHEETS TO OWNER/ARCH. PRIOR TO ORDERING. \* OR APPROVED EQUAL BY TITUS OR METALAIRE.

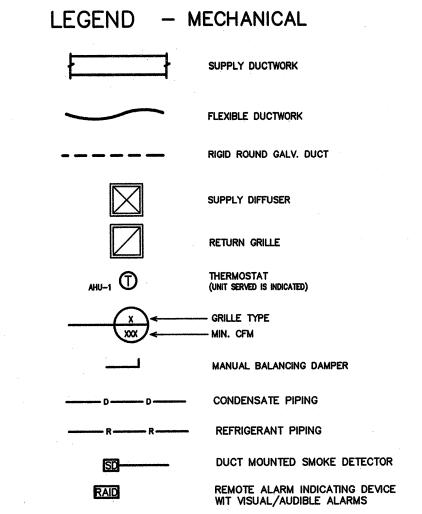
DUCTLES	SS SPLIT SYSTEM HEAT PUMP SCHEDULE
DFC-1 DIRECT EXPANSION FAN COIL UNIT  DHP-1 OUTDOOR HEAT PUMP UNIT	CARRIER MODEL #40GXQ009-1-01 FAN COIL UNIT. NET COOLING CAPACITY = 8,600 BTUH, 290 CFM.  3/4 TON NOMINAL. PROVIDE PROGRAMMABLE THERMOSTAT.  0.6A FAN MOTOR FLA, 115 VOLT SINGLE PHASE. PROVIDE CONDENSATE PUMP. POWER FOR INDOOR UNIT COMES FROM OUTDOOR UNIT VIA FIELD SUPPLIED CONNECTING CABLE. THE POWER CABLE IS ROUTED WITH—IN THE REFRIGERANT LINE SET. PROVIDE THE OPTIONAL MC CABLE SET SOUTHWIRE "EZ IN Mini—Split Cable".  CARRIER MODEL #38GXQ009-1-01 3/4 TON OUTDOOR HEAT PUMP UNIT, 16 SEER.  * 115 VOLT, 1 PHASE, COMP 4.0A RLA, HEAT PUMP 20A MCA, 25A MOCP. PROVIDE LOW AMBIENT KIT, CRANKCASE HEATER, AND FIELD INSTALLED WIND BAFFLE.
DFC-2 DIRECT EXPANSION FAN COIL UNIT  DHP-2 OUTDOOR HEAT PUMP UNIT	* CARRIER MODEL #40GXQ009-1-01 FAN COIL UNIT. NET COOLING CAPACITY = 8,600 BTUH, 290 CFM.  3/4 TON NOMINAL. PROVIDE PROGRAMMABLE THERMOSTAT.  0.6A FAN MOTOR FLA, 115 VOLT SINGLE PHASE. PROVIDE CONDENSATE PUMP.  POWER FOR INDOOR UNIT COMES FROM OUTDOOR UNIT VIA FIELD SUPPLIED CONNECTING CABLE.  THE POWER CABLE IS ROUTED WITH-IN THE REFRIGERANT LINE SET. PROVIDE THE OPTIONAL MC CABLE SET SOUTHWIRE "EZ IN Mini-Split Cable".  ** CARRIER MODEL #38GXQ009-1-01 3/4 TON OUTDOOR HEAT PUMP UNIT, 16 SEER.  ** 115 VOLT, 1 PHASE, COMP 4.0A RLA, HEAT PUMP 20A MCA, 25A MOCP.  PROVIDE LOW AMBIENT KIT, CRANKCASE HEATER, AND FIELD INSTALLED WIND BAFFLE.

\* OR APPROVED EQUAL BY TRANE OR MITSUBISHI.

	N AIR PROVIDED PER TABLE 403.3	NCSBC MECHANICAL CODE.
APPLICATION	ESTIMATED OCCUPANCY	CFM/PERSON
OFFICE	5/1000 SQ.FT.	5
1179 SQ. FT. X 5 PEOF	PLE/1000 SQ. FT = 6 PEOPLE	
OFFICE AREA - 1179 S	R.F. AREA OUTDOOR AI	R RATE - 0.06 CFM/SF
1179 SQ. FT. X 0.6 CFN	//SQ. FT = 71 CFM	
6 PEOPLE X 5 CFM/P	PERSON = 30 CFM	
TOTAL OFFICE OUTD	OOR AIR REQUIRED: 71 +43 = 101 C	CFM
APPLICATION	ESTIMATED OCCUPANCY	CFM/PERSON
CLASSROOM	35/1000 SQ.FT.	7.5
510 SQ. FT. X 30 PEC	PLE/1000 SQ. FT = 18 PEOPLE	
CLASSEROOM AREA -	- 510 S.F. AREA OUTDO	OOR AIR RATE - 0.12 CFM/SF
510 SQ. FT. X 01.2 CFN	M/SQ. FT = 71 CFM	
18 PEOPLE X 7.5 CFM	/PERSON = 135 CFM	
TOTAL OFFICE OUT	OOOR AIR REQUIRED: 71 +135 = 196	CFM
APPLICATION	ESTIMATED OCCUPANCY	CFM/PERSON
WAITING	30/1000 SQ.FT.	5
245 SQ. FT. X 30 PEC WAITING AREA - 245		AIR RATE - 0.06 CFM/SF
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P	S.F. AREA OUTDOOR AFM/SQ. FT = 15 CFM PERSON = 35 CFM	
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P	S.F. AREA OUTDOOR A	
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT APPLICATION	S.F. AREA OUTDOOR AS AREA OUTDOOR AS AREA OUTDOOR AS CFM DOOR AIR REQUIRED: 15 + 35 = 50	CFM/SQ.FT.
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATION	S.F. AREA OUTDOOR AS IN SQ. FT = 15 CFM PERSON = 35 CFM POOOR AIR REQUIRED: 15 + 35 = 50  ION AREAS	D CFM
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF	S.F. AREA OUTDOOR AS IN SQ. FT = 15 CFM PERSON = 35 CFM POOOR AIR REQUIRED: 15 + 35 = 50  ION AREAS	CFM/SQ.FT. 0.06 CFM/SQ.FT.
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF	S.F. AREA OUTDOOR AS IN SQ. FT = 15 CFM PERSON = 35 CFM POOOR AIR REQUIRED: 15 + 35 = 50  ION AREAS	CFM/SQ.FT.  0.06 CFM/SQ.FT.  CFM/SQ.FT.
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF	S.F. AREA OUTDOOR AM/SQ. FT = 15 CFM PERSON = 35 CFM POOR AIR REQUIRED: 15 + 35 = 50 POOR AREAS PM/SQ.FT. = 24 CFM	CFM/SQ.FT. 0.06 CFM/SQ.FT.
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF  APPLICATION STORAGE 240 SQ. FT. X 0.12 CFM	S.F. AREA OUTDOOR AM/SQ. FT = 15 CFM PERSON = 35 CFM POOR AIR REQUIRED: 15 + 35 = 50 POOR AREAS PM/SQ.FT. = 24 CFM	CFM/SQ.FT.  0.06 CFM/SQ.FT.  CFM/SQ.FT.
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF  APPLICATION BTORAGE 240 SQ. FT. X 0.12 CFM  APPLICATION	S.F. AREA OUTDOOR AM/SQ. FT = 15 CFM PERSON = 35 CFM POOR AIR REQUIRED: 15 + 35 = 50 POOR AREAS PM/SQ.FT. = 24 CFM	CFM/SQ.FT.  0.06 CFM/SQ.FT.  CFM/SQ.FT.  0.12 CFM/SQ.FT.
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF  APPLICATION BTORAGE 240 SQ. FT. X 0.12 CFM  APPLICATION FOILETS	S.F. AREA OUTDOOR AM/SQ. FT = 15 CFM PERSON = 35 CFM POOR AIR REQUIRED: 15 + 35 = 50 POOR AREAS PM/SQ.FT. = 24 CFM	CFM/SQ.FT.  0.06 CFM/SQ.FT.  CFM/SQ.FT.  0.12 CFM/SQ.FT.
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF  APPLICATION BTORAGE 240 SQ. FT. X 0.12 CFM  APPLICATION FOILETS SHOWERS 3 FLUSHING FIXTURES 3	S.F. AREA OUTDOOR AS M/SQ. FT = 15 CFM PERSON = 35 CFM POOOR AIR REQUIRED: 15 + 35 = 50  HON AREAS PM/SQ.FT. = 24 CFM  X 70 CFM = 210 CFM	CFM/SQ.FT.  0.06 CFM/SQ.FT.  CFM/SQ.FT.  0.12 CFM/SQ.FT.  CFM/PERSON  70 CFM/FLUSHING FIXTURE
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF  APPLICATION BTORAGE 240 SQ. FT. X 0.12 CFM  APPLICATION FOILETS SHOWERS 3 FLUSHING FIXTURES X I SHOWER HEAD X 50 C	S.F. AREA OUTDOOR AS M/SQ. FT = 15 CFM PERSON = 35 CFM POOOR AIR REQUIRED: 15 + 35 = 50  HON AREAS PM/SQ.FT. = 24 CFM  X 70 CFM = 210 CFM	CFM/SQ.FT.  0.06 CFM/SQ.FT.  CFM/SQ.FT.  0.12 CFM/SQ.FT.  CFM/PERSON  70 CFM/FLUSHING FIXTURE 50 CFM/SHOWER HEAD
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF  APPLICATION BTORAGE 240 SQ. FT. X 0.12 CFM  APPLICATION FOILETS SHOWERS 3 FLUSHING FIXTURES X 1 SHOWER HEAD X 50 CEXHAUST PROVIDED BY	S.F. AREA OUTDOOR AM/SQ. FT = 15 CFM PERSON = 35 CFM PDOOR AIR REQUIRED: 15 + 35 = 50  HON AREAS PM/SQ.FT. = 24 CFM  X 70 CFM = 210 CFM CFM = 50 CFM  THREE EXHAUST FANS, MAKE UF	CFM/SQ.FT.  0.06 CFM/SQ.FT.  CFM/SQ.FT.  0.12 CFM/SQ.FT.  CFM/PERSON  70 CFM/FLUSHING FIXTURE 50 CFM/SHOWER HEAD
WAITING AREA - 245 245 SQ. FT. X 0.06 CF 7 PEOPLE X 5 CFM/P TOTAL WAITING OUT  APPLICATION CORRIDOR / CIRCULATI 400 SQ. FT. X 0.06 CF  APPLICATION STORAGE 240 SQ. FT. X 0.12 CFM  APPLICATION TOILETS SHOWERS 3 FLUSHING FIXTURES X I SHOWER HEAD X 50 CEXHAUST PROVIDED BY  TOTAL OA REQUIRED = TOTAL OA REQUIRED =	S.F. AREA OUTDOOR AM/SQ. FT = 15 CFM PERSON = 35 CFM PDOOR AIR REQUIRED: 15 + 35 = 50  HON AREAS PM/SQ.FT. = 24 CFM  X 70 CFM = 210 CFM CFM = 50 CFM  THREE EXHAUST FANS, MAKE UF	CFM/SQ.FT.  0.06 CFM/SQ.FT.  CFM/SQ.FT.  0.12 CFM/SQ.FT.  CFM/PERSON  70 CFM/FLUSHING FIXTURE 50 CFM/SHOWER HEAD

## GENERAL NOTES MECHANICAL

- 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE AND ALL LOCAL AND OTHER APPLICABLE CODES.
- 2. PERMITS AND INSPECTION FEES ARE NOT REQUIRED FOR STATE PROJECTS. COORDINATE ALL ELECTRICAL INSPECTIONS WITH THE STATE CONSTRUCTION OFFICE. OTHER INSPECTIONS WILL BE CONDUCTED BY THE DESIGNER.
- 3. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN. THE MC SHALL COORDINATE ALL OF HIS WORK WITH THE GENERAL CONTRACTOR (GC) AND OTHER TRADES.
- 4. THE LOCATION OF ALL DUCT, PIPING AND EQUIPMENT SHALL BE ADJUSTED TO ACCOMMODATE ANTICIPATED OR ENCOUNTERED INTERFERENCES.
- 5. THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS REFER TO THE ARCHITECTURAL PLANS.
- 6. THE MC SHALL BE RESPONSIBLE FOR ALL ELECTRICAL STARTERS INTERLOCKS, CONTROL WIRING CONDUIT AND POWER WIRING FROM DISCONNECTS TO HIS EQUIPMENT, USING A LICENSED
- 7. THE MC SHALL USE FIRE DAMPERS FOR PROTECTION OF THE OPENING IN ACCORDANCE WITH STATE AND LOCAL CODES IN ALL LOCATIONS WHERE PENETRATIONS OF RATED WALLS AND FLOORS OCCUR. SEE ARCHITECTURAL PLANS FOR RATED WALL AND FLOOR LOCATIONS. PROVIDE ACCESS DOORS AT ALL DAMPER LOCATIONS. LOCATE DOORS FOR EASY ACCESS. THERE ARE NO RATED WALLS PENETRATED IN THIS PROJECT.
- INSTALL FLEXIBLE CONNECTORS ON SUPPLY AND RETURN DUCTWORK AHU. ALL MECHANICAL EQUIPMENT SHALL OPERATE FREE OF OBJECTIONAL NOISE AND VIBRATION.
- INSTALL TURNING VANES IN SUPPLY DUCTS AT ALL ELBOWS AND SPLITTER DAMPERS. PROVIDE BALANCING DAMPERS IN ALL DUCTS WHERE SHOWN OR REQUIRED FOR SYSTEM BALANCING.
- 10. DUCT DIMENSIONS ARE SHOWN INSIDE CLEAR.
- 11. THE MC SHALL KEEP THE PREMISES CLEAR OF DEBRIS FROM HIS WORK DURING CONSTRUCTION AND LEAVE THE AREA AND BUILDING CLEAN AT THE COMPLETION OF HIS WORK. HE SHALL ALSO LEAVE CLEAN ALL EXPOSED EQUIPMENT IN HIS CONTRACT.
- PROVIDE ALL REQUIRED ROOF PENETRATIONS FOR THE INSTALLATION OF THE NEW EQUIPMENT. ALL FLASHINGS ARE BY THE GENERAL CONTRACTOR. ALL ROOFING WORK SHALL BE DONE BY A LICENSED ROOFING CONTRACTOR SO AS TO MAINTAIN ORIGINAL WARRANTY.
- 13. THE M.C. SHALL COORDINATE WITH AND PROVIDE EQUIPMENT SPEC. SHEETS TO THE GENERAL AND ELECTRICAL CONTRACTORS FOR REVIEW PRIOR TO ORDERING EQUIPMENT.
- 14. PROPERLY SUPPORT ALL DUCT WORK, AND EQUIP FROM STRUCTURE. PROVIDE ALL STRUCTURAL SUPPORTS FOR THE LOADS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.



## MECHANICAL SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE:

X **Energy Cost Budget** 

Thermal Zone

**Exterior Design Conditions** 

summer dry bulb 94 F

Interior Design Conditions

relative humidity

winter dry bulb 75 F summer dry bulb

64,700 BTU/hr Building Heating Load

Building Cooling Load

Mechanical Spacing Conditioning System

Unitary - The building is served by the following systems: (1) one new 5 ton split system heat pump. (2) two new 3.5 ton split system heat pumps.

Efficiencies and outputs are listed on equipment schedules — See drawings.

Equipment schedules with motors.

Motors used on this project are included in the efficiency rating of the unit. See drawings for efficiencies.

DESIGNER STATEMENT:

mechanical system and equipment requirements of the 2012 North Carolina State Building, Code: Energy Conservation Code.

|SCO ID# 13-10297-01A|

PROJECT: WEIGH STATION NORTH CAROLINA GASTON COUNTY

ARCHITECT/ENGINEERS:

FACILITIES DESIGN GENERAL SERVICES DIVISION, NCDOT 1 SOUTH WILMINGTON STREET RALEIGH, NORTH CAROLINA FAX (919) 715-0399 (919) 715-0400

DRAWING TITLE:

HVAC SCHEDULES

DRAWN BY: BEB

CHECKED BY: BEB

ISSUE DATE: 12/20/13

1-4928

TIP. PROJ. NO. WBS. NO. CONTRACT ID NO. FEDERAL AID NO. 41188.3.1

REVISIONS/SUBMISSIONS DATE SHEET NO.

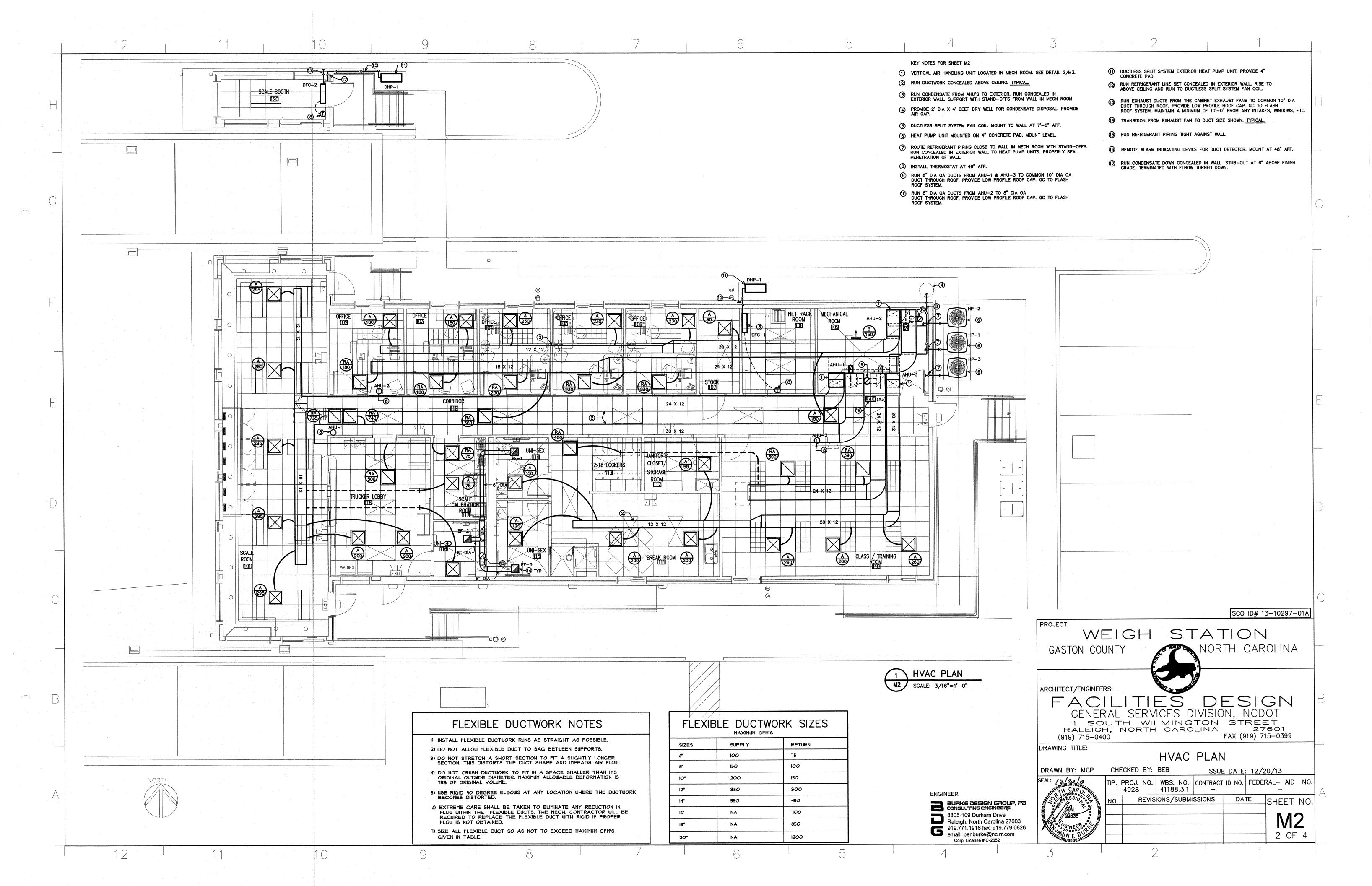
BURIKE DESIGN GROUP, Pa CONSULTING ENGINEERS 3305-109 Durham Drive Raleigh, North Carolina 27603 919.771.1916 fax: 919.779.0826 email: benburke@nc.rr.com Corp. License # C-2652

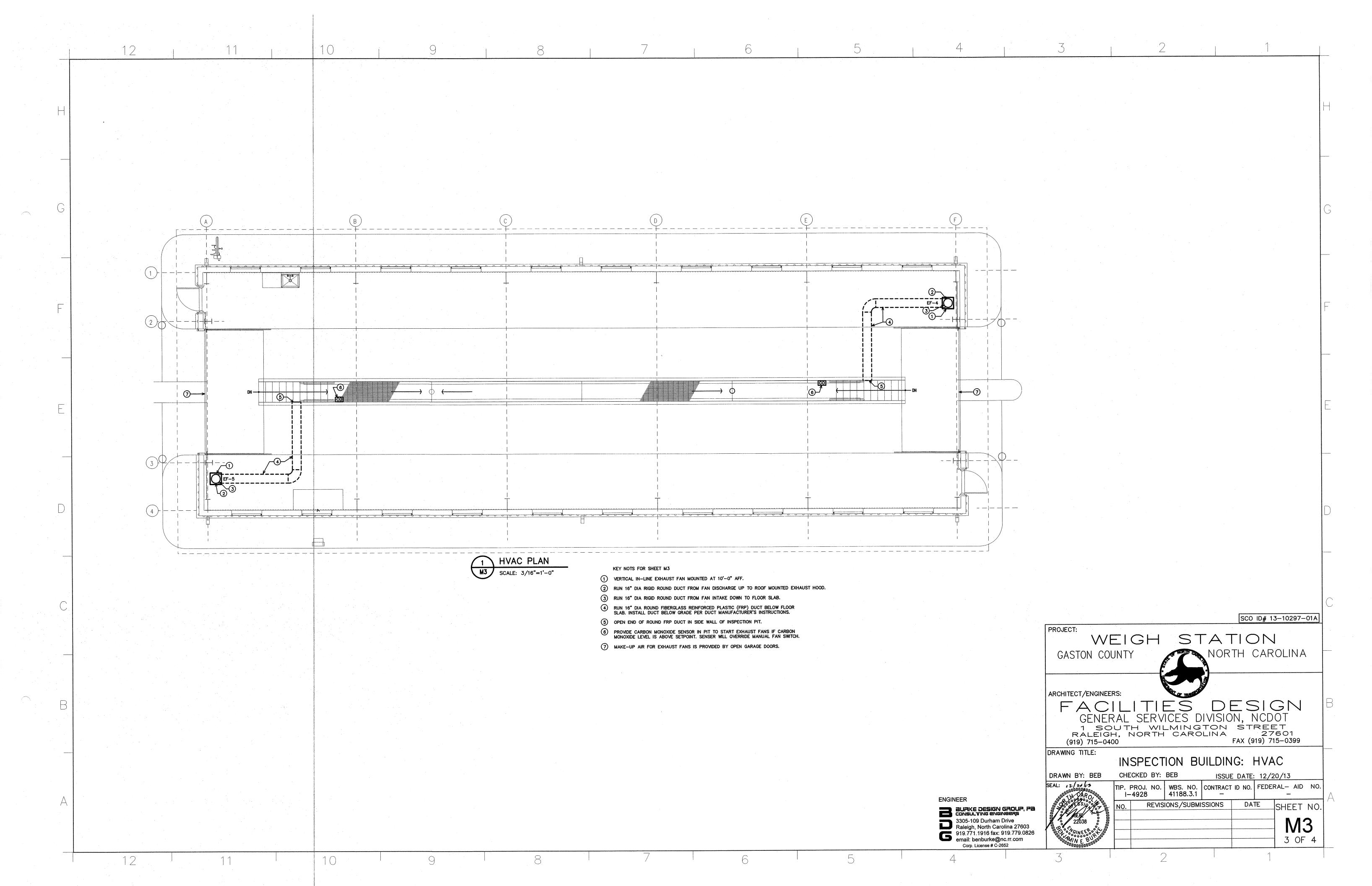
**ENGINEER** 

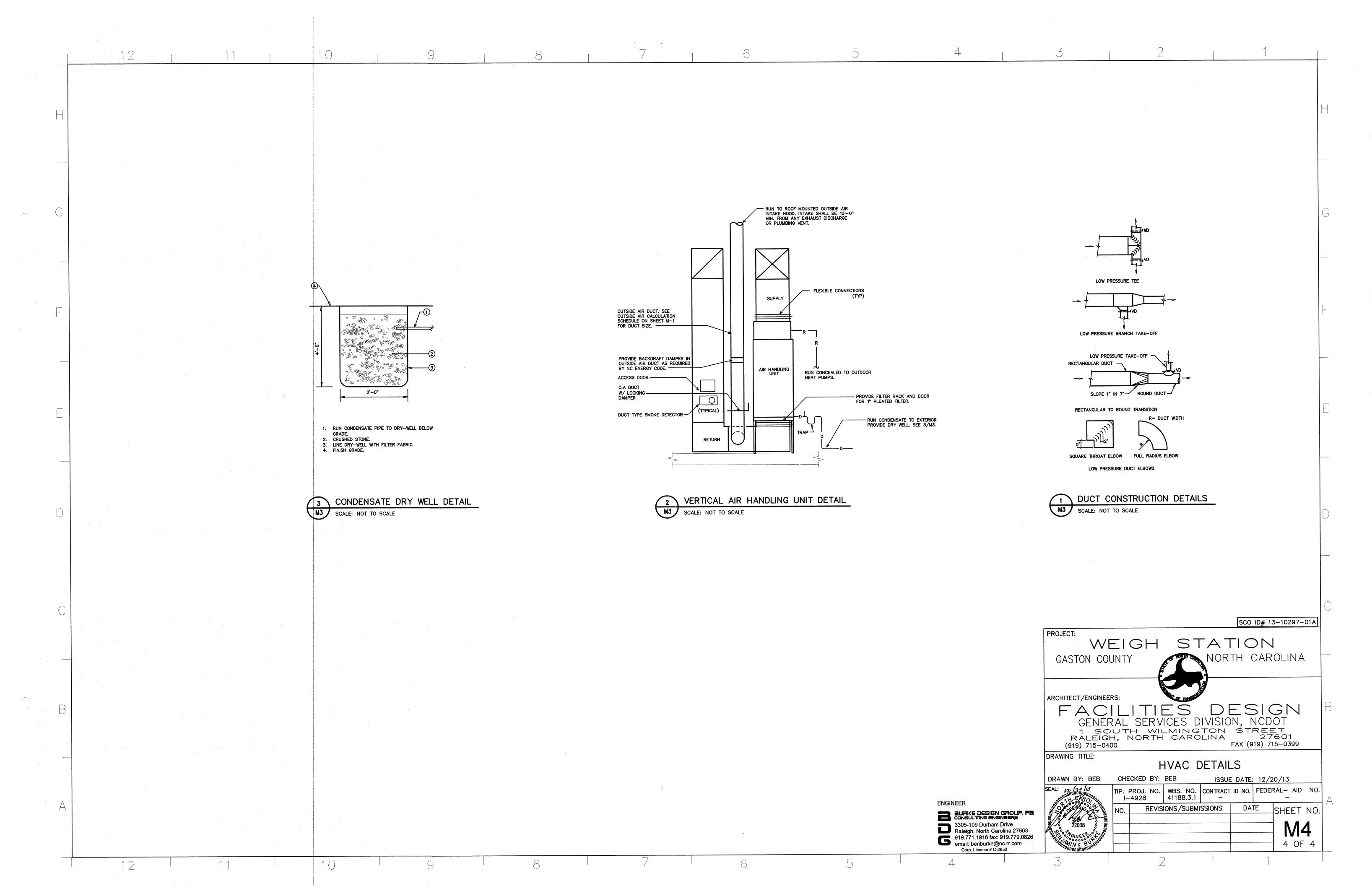
122,400 BTU/hr

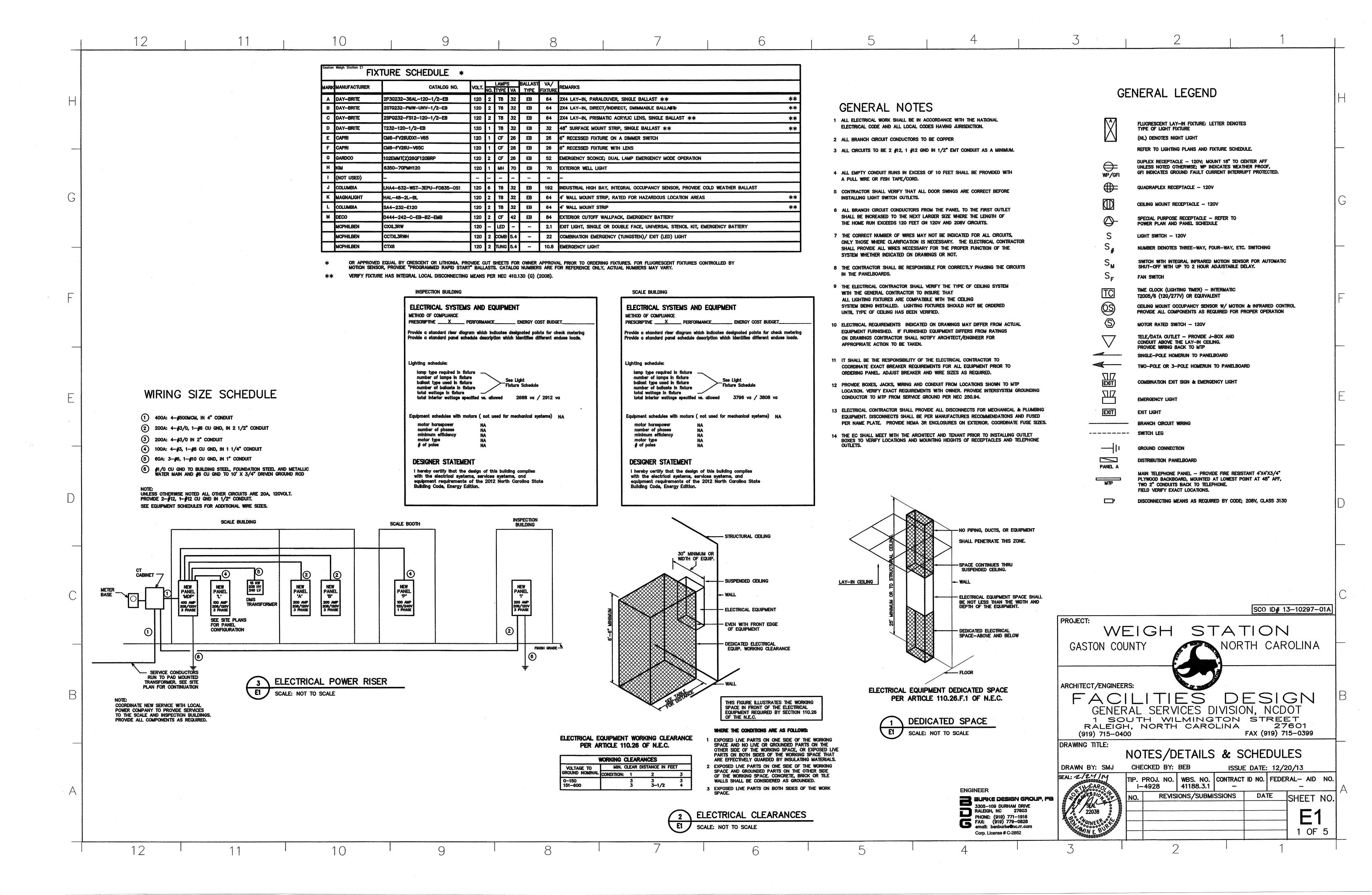
To the best of my knowledge and belief, the design of this building complies with the

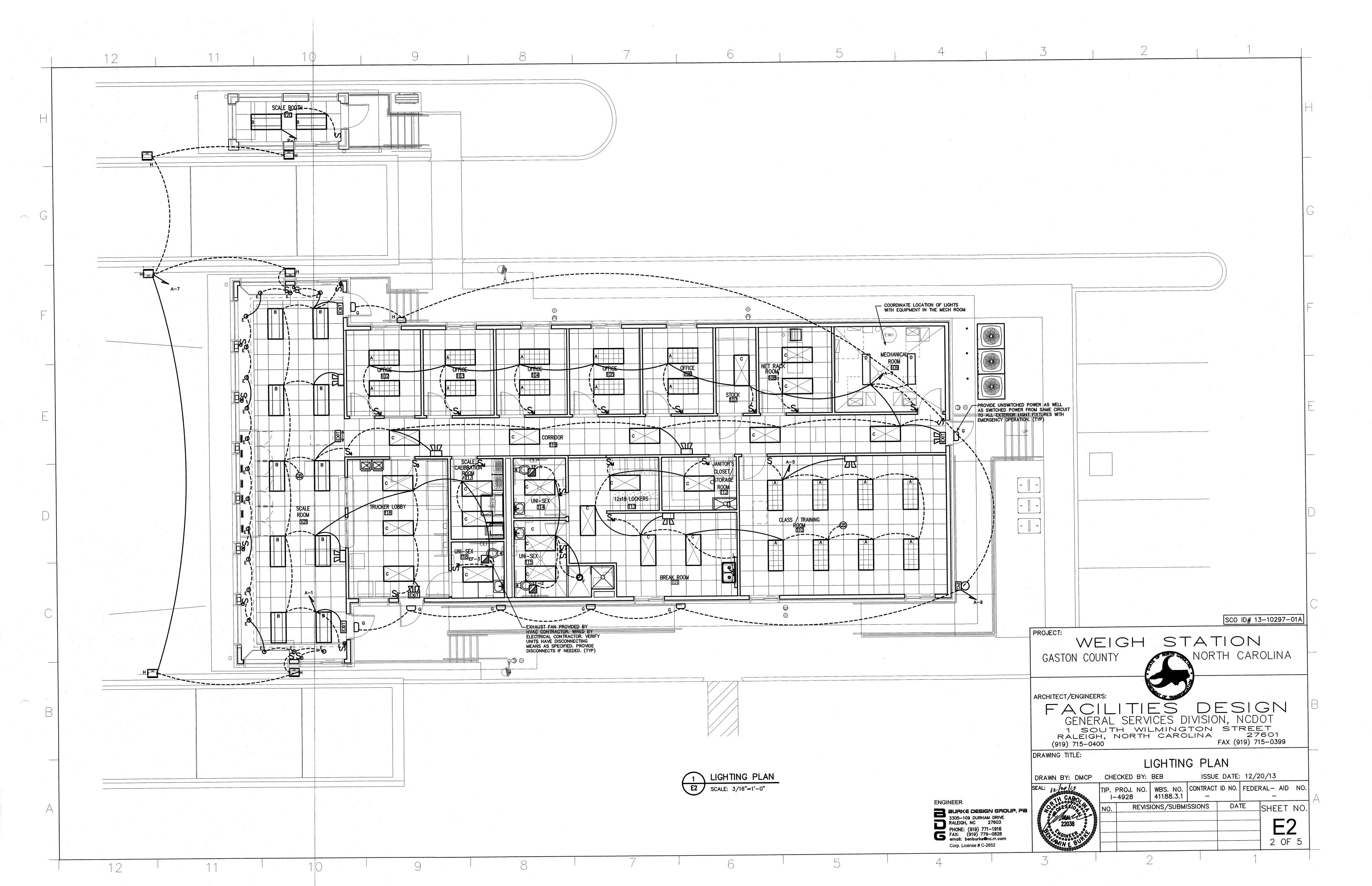
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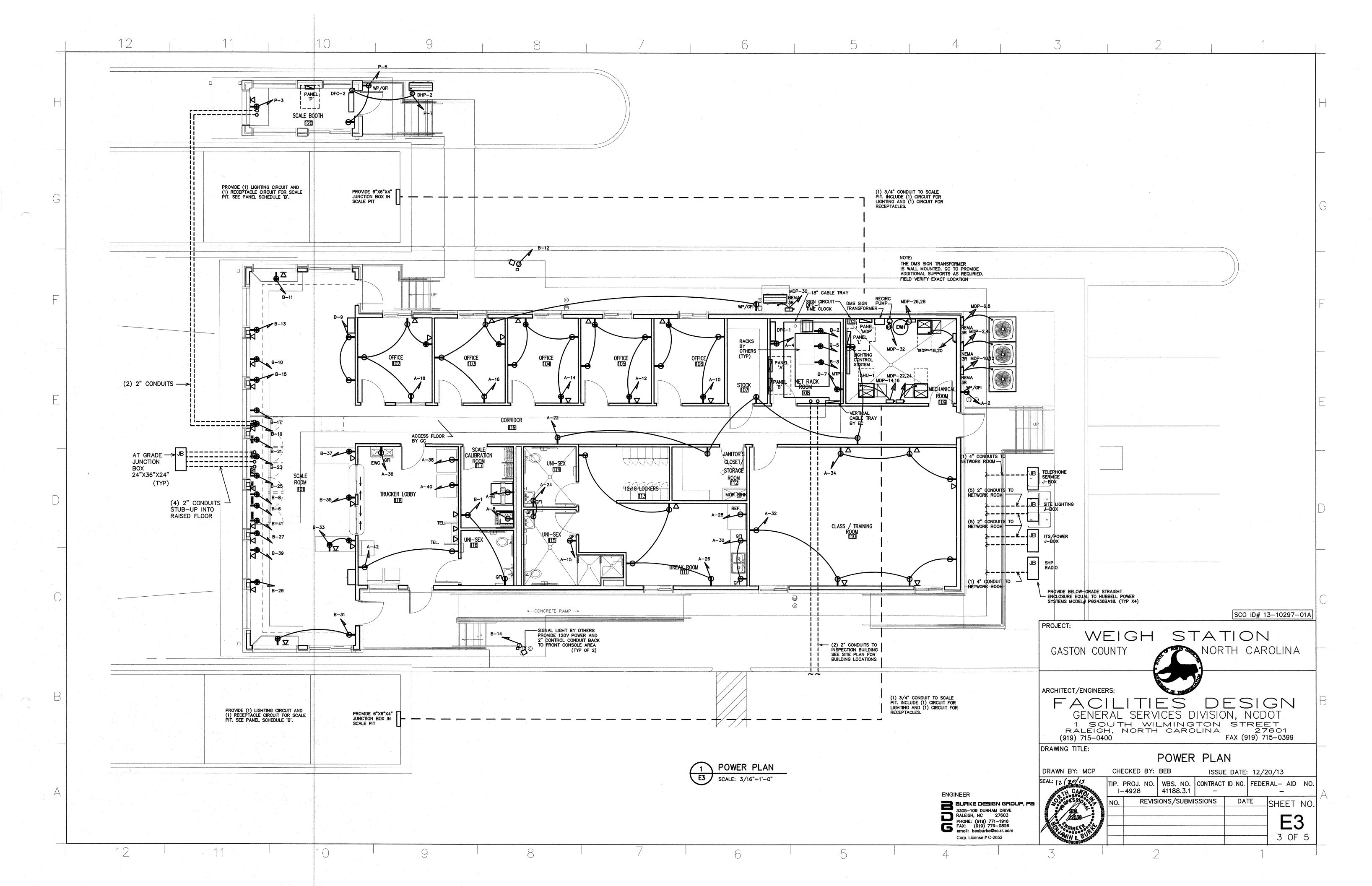


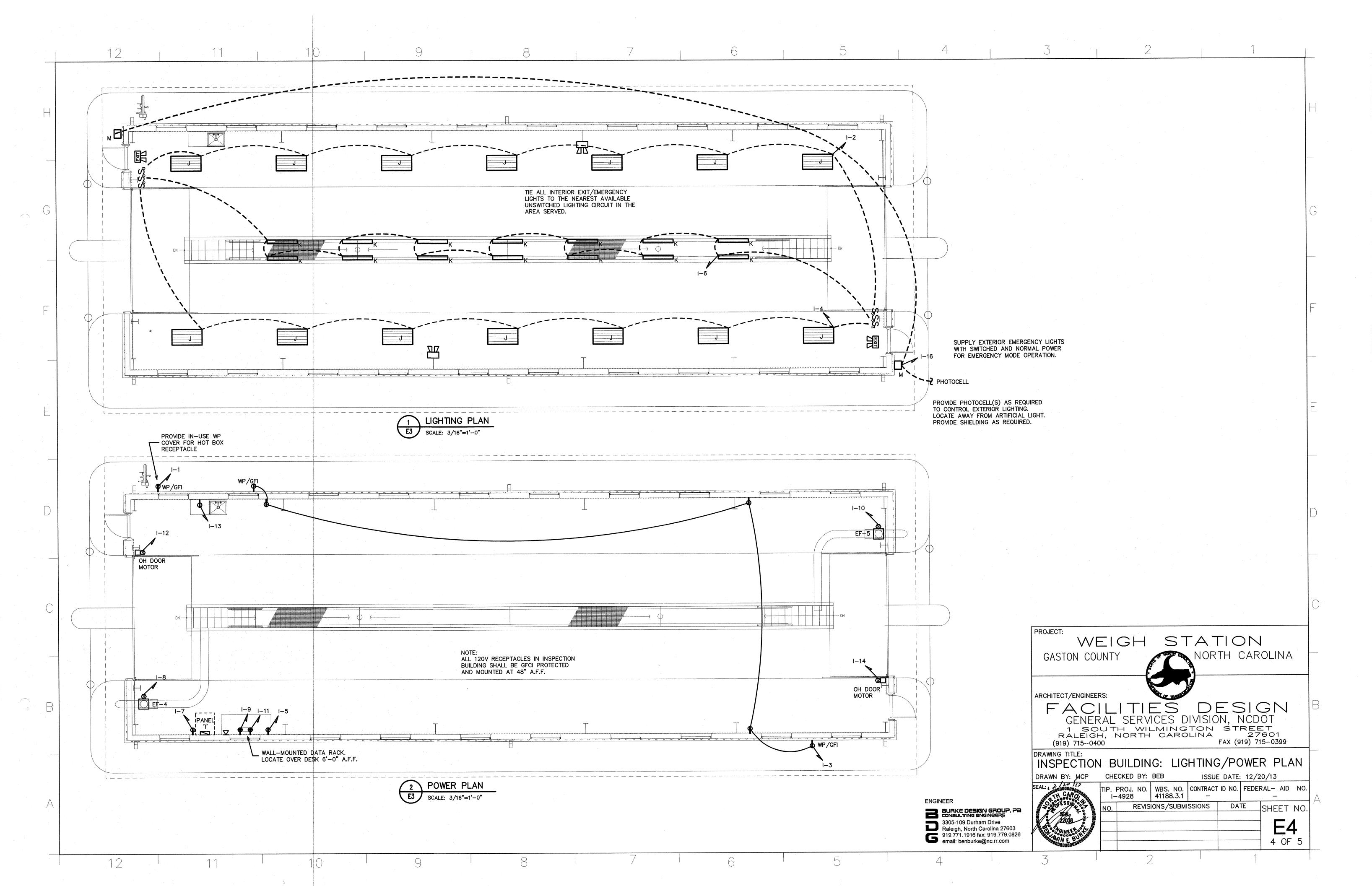












FED FROM:

SERVICE

NEC ALLOWABLE DEMAND FACTORS

1) DEMAND FACTORS PER NEC 220 2) LARGEST OF: NEC TABLE 220.12 OR

5 NEC 220.43A, 200 VA/LINEAR FT 6 NON-COINCIDENT LOADS, LARGEST OF THE TWO LOADS IS COUNTED

CONNECTED LOAD 3 NEC TABLE 220.56 4 NEC 220.51

NEW BOOTH PANEL-P' MAKE: CUTLER HAMMER RATING: 120/240V 1 PHASE 3 WIRE 100A MAIN CIRCUIT BREAKER MOUNTING: SUBFACE EQUIPMENT GROUND BUS \_\_\_\_\_ XYES □NO CKT WATTS PER PHASE CKT NEUTRAL CKT WATTS PER PHASE CKT BRKR A B NO A B BRKR SERVICE --- SPACE SUB-TOTALS 'B' 488 912 XX 100A BUS --- SUB-TOTALS 'A' 100A LUGS 488 912 SUB-TOTALS 'B'
100A FEED 488 912 GRAND TOTAL

	IVVA					
	#3	SIZE	4A	8A	AMPS/PHASE	
DIVERSIFIED	LOAD S	JMMARY				
LOAD TYP	E	DEMAND FACTOR①	A	В	TOTAL DIVERSIFIE	D LOAD
GENERAL LIGHTING	3 @	125%	160		160	
TRACK LIGHTING	Address	125%				
GENERAL USE		≤10KVA@100%	360	360	720	
RECEPTACLES		>10KVA@50%				,
MOTORS AND L	ARGEST	125%		600	600	
EQUIPMENT	LL OTHERS	100%		48	48	
WATER HEATERS	· ·	125%				
KITCHEN EQUIPME	NT 3	100%		<u></u>		
FIX. ELEC. SPACE	HEAT. @	100%				

100% --- ---PHASE (TOTAL VA) 520 1008 1528

8

OR APPROVED EQUAL MINIMUM AIC: VERIFY

--- 11 12

20A 128

20A 360

NEW PANEL— 'B'			JTLER 1 LOAD				<u>208/120V</u>	PHASI	<u>4</u> WF					REAKER (FRAME) JS⊠YES □NO
	['"	ı L. —¥	· LYAL				AIC: <u>22.00</u>	O AM	IPS					
LOAD	WATTS	PER I	PHASE	FR	CKT	CKT	NEUTRAL	CKT	CKT	FR	WATTS	PER F	PHASE	LOAD
SERVICE	Α	В	С	SIZE	BRKR	NO	ABC	NO	BRKR	SIZE	Α	В	С	SERVICE
REC- DATA RM	360			70A	20A	1		2	20A	70A	360			REC- DATA RACK
REC- DATA RACK		360				3		4				360		REC- DATA RACK
REC- DATA RACK			360			5		6					360	REC- SCALE ROOM
REC- DATA RACK	360					7		8			360			REC- SCALE ROOM
REC- SCALE ROOM		360				9		10			·	360		REC- SCALE ROOM
REC- SCALE ROOM			360			11		12					100	SIGNAL LIGHTS
REC- SCALE ROOM	360					13		14			100			SIGNAL LIGHTS
REC- SCALE ROOM		360				15		16				360		REC- SCALE PIT
REC- SCALE ROOM			360			17		18					360	REC- SCALE PIT
REC- SCALE ROOM	360			*		19		20			200			LIGHTS- SCALE PIT
REC- SCALE ROOM		360				21		22				200		LIGHTS- SCALE PIT
REC- SCALE ROOM			360			23		24				,		SPARE
REC- SCALE ROOM	360					25		26						SPARE
REC- SCALE ROOM		360				27		28						SPARE
REC- SCALE ROOM			360			29		30						SPARE
REC- SCALE ROOM	540			П		31		32						SPARE
REC- SCALE ROOM		720		П		33		34						SPARE
REC- SCALE ROOM			360			35		36						SPARE
REC- SCALE ROOM	360					37		38						SPARE
REC- SCALE ROOM		360				39		40						SPARE
REC- SCALE ROOM			360	V	V	41		42	V	¥				SPARE
			2520	SUB	-TOTA	LS 'B'	150A BUS	SUB-	-TOTAL	S 'A'	720	720	360	,
NOTES	2700	2880	2020											
NOTES	2700	2880	1 2020	<b></b>			150A LUGS		-TOTAL	S 'B'	2700	2880	2520	TOTAL CONNECTED LOAD
NOTES	2700	2880	2020				LUCC	SUB-	-TOTAL ID TOT		2700 3420	2880 3600	2520 2880	TOTAL CONNECTED LOAD
NOTES	2700	2880	72020				150A LUGS	SUB- GRAN		AL	1		<del>                                     </del>	TOTAL CONNECTED LOAD  29A 30A 24A
NEC ALLOWABLE DEM						Di	150A LUGS 150A S/N	SUB- GRAN AMP:	ID TOT S/PHAS	AL SE	3420 29A	3600	2880	
NEC ALLOWABLE DEM  1 DEMAND FACTORS PER	MAND FA	CTOR				Di	150A LUGS 150A S/N <u>VERIFY</u> FEED	SUB- GRAN AMPS	ID TOT S/PHAS SUMI	AL SE	3420 29A	3600	2880	
NEC ALLOWABLE DEM  1 DEMAND FACTORS PER 2 LARGEST OF: NEC TAI	MAND FA	CTOR				GEN	150A LUGS 150A S/N MERIFY FEED  VERSIFIED  LOAD TYPI NERAL LIGHTING	SUB- GRAN AMP: LOAD	ID TOTOS/PHASSONIA	AL  MARY  C DEM  ACTOR 1  125%	3420 29A A 250	3600 30A B 250	2880 24A C	29A 30A 24A  TOTAL DIVERSIFIED LOAD 500
1 DEMAND FACTORS PER 2 LARGEST OF: NEC TAI CONNECTED LOAD	MAND FA	CTOR				GEN TRA	150A LUGS 150A S/N VERIFY FEED VERSIFIED LOAD TYPE VERAL LIGHTING ACK LIGHTING	SUB- GRAN AMP: LOAD	SUMI	AL  MARY  CODEM  ACTOR	3420 29A A 250	3600 30A B 250	2880 24A C	29A 30A 24A  TOTAL DIVERSIFIED LOAD  500
NEC ALLOWABLE DEM  1) DEMAND FACTORS PER 2) LARGEST OF: NEC TAI CONNECTED LOAD 3) NEC TABLE 220.56	MAND FA	CTOR				GEN TRA GEN REC	150A LUGS 150A S/N VERIFY FEED  IVERSIFIED  LOAD TYPI VERAL LIGHTING ACK LIGHTING VERAL USE DEPTACLES	SUB- GRAN AMP: LOAD	SUMI NE SI	AL  BE MARY  C DEM  ACTOR (1)  125%  125%	3420 29A A 250	3600 30A B 250	2880 24A C	29A 30A 24A  TOTAL DIVERSIFIED LOAD 500
1 DEMAND FACTORS PER 2 LARGEST OF: NEC TAI CONNECTED LOAD 3 NEC TABLE 220.56 4 NEC 220.51	MAND FA	CTOR		***************************************		GEN TRA GEN REC	150A LUGS 150A S/N VERIFY FEED  VERSIFIED  LOAD TYPI VERAL LIGHTING ACK LIGHTING VERAL USE DEPTACLES TORS AND	SUB- GRAN AMPS LOAD	SUMI NE S100	AL  C DEM ACTOR (1 25% KVAG100X KVAG50X 125%	3420 29A A 250  3420 	3600 30A B 250  3600 	2880 24A C  2880 	29A 30A 24A  TOTAL DIVERSIFIED LOAD  500 9900
NEC ALLOWABLE DEM  ① DEMAND FACTORS PER ② LARGEST OF: NEC TAI CONNECTED LOAD ③ NEC TABLE 220.56 ④ NEC 220.51 ⑤ NEC 220.43A, 200 VA	MAND FA R NEC 220 BLE 220.12	CTOR O OR				GEN TRA GEN REC MO EQU	150A LUGS 150A S/N VERIFY FEED  VERSIFIED  LOAD TYPI VERAL LIGHTING ACK LIGHTING VERAL USE DEPTACLES TORS AND	SUB- GRAN AMPS LOAD	SUMI NE \$10	AL  MARY  C DEM  ACTOR (1)  125%  KVA@100%  KVA@50%	3420 29A A 250  3420	3600 30A B 250  3600	2880 24A C  2880	29A 30A 24A  TOTAL DIVERSIFIED LOAD  500 9900
1 DEMAND FACTORS PER 2 LARGEST OF: NEC TAI CONNECTED LOAD 3 NEC TABLE 220.56 4 NEC 220.51	MAND FA	CTOR O O O O O O O O O O O O O O O O O O				GEN TRA GEN REC MO EQU WA	150A LUGS 150A S/N VERIFY FEED  IVERSIFIED  LOAD TYPE  NERAL LIGHTING ACK LIGHTING NERAL USE CEPTACLES TORS AND LIGHTING TIER HEATERS CHEN EQUIPMENT	SUB- GRAN AMPS LOAD E	SUMI SID TOT	AL SE MARY CO DEM ACTOR (1 25% 25% KVA@100% KVA@100% 125% 100%	3420 29A A 250  3420  	3600 30A B 250  3600 	2880 24A C  2880  	29A 30A 24A  TOTAL DIVERSIFIED LOAD  500 9900
NEC ALLOWABLE DEM  ① DEMAND FACTORS PER ② LARGEST OF: NEC TAI CONNECTED LOAD ③ NEC TABLE 220.56 ④ NEC 220.51 ⑤ NEC 220.43A, 200 VA ⑥ NON—COINCIDENT LOAD	MAND FA	CTOR O O O O O O O O O O O O O O O O O O				GEN TRA GEN REC MO EQI WA KIT	150A LUGS 150A S/N VERIFY FEED  IVERSIFIED  LOAD TYPE  NERAL LIGHTING ACK LIGHTING	SUB- GRAN AMPS LOAD LOAD E	SUMI SID TOT	AL  EC DEM ACTOR (1  25%  KVA@100%  KVA@100%  125%	3420 29A A 250  3420 	3600 30A B 250  3600 	2880 24A C  2880 	29A 30A 24A  TOTAL DIVERSIFIED LOAD  500 9900
NEC ALLOWABLE DEM  ① DEMAND FACTORS PER ② LARGEST OF: NEC TAI CONNECTED LOAD ③ NEC TABLE 220.56 ④ NEC 220.51 ⑤ NEC 220.43A, 200 VA ⑥ NON—COINCIDENT LOAD	MAND FA	CTOR O O O O O O O O O O O O O O O O O O				GEN TRA GEN MO EQU WA KIT FIX SHG	150A LUGS 150A S/N 15	SUB- GRAN AMPS LOAD LOAD E	SUMI SUMI SING SUMI SING SING SING SING SING SING SING SIN	AL SE MARY C DEM ACTOR (1 25% 25% (25% 100% 100% 125% 125% 125% 125% 125% 125% 125% 125	3420 29A 250  3420    	3600 30A B 250  3600   	2880 24A C  2880    	29A 30A 24A  TOTAL DIVERSIFIED LOAD  500 9900
NEC ALLOWABLE DEM  ① DEMAND FACTORS PER ② LARGEST OF: NEC TAI CONNECTED LOAD ③ NEC TABLE 220.56 ④ NEC 220.51 ⑤ NEC 220.43A, 200 VA ⑥ NON—COINCIDENT LOAD	MAND FA	CTOR O O O O O O O O O O O O O O O O O O				GEN TRA GEN REG MO EQU WA KIT FIX	150A LUGS 150A S/N 15	SUB- GRAN AMPS LOAD LOAD E	SUMI SUMI SING SIGN SUMI SING SIGN SIGN SIGN SIGN SIGN SIGN SIG	AL SE MARY C DEM ACTOR (1 25% 25% KVA@100% KVA@100% L25% 100% 100% 100%	3420 29A 250  3420    	3600 30A B 250  3600  	2880 24A C  2880  	29A 30A 24A  TOTAL DIVERSIFIED LOAD  500 9900

Soston Weigh Stotion E5 NEW PANEL— 'MDP'								20V 3		E <u>4</u> W		100A M			REAKER (	FRAME) XYES □N	
		PE:	LUAL	CLINI	1			22.00		1PS		ERVICE				XYES DI	
LOAD	WATTS	PER I	PHASE	FR	CKT	СКТ	NEU	JTRAL	CKT	CKT	FR	WATTS	PER F	PHASE		LOAD	
SERVICE	A	В	C	SIZE	BRKR	NO	A	BC	NO	BRKR	SIZE	Α	В	С	S	ERVICE	
PANEL 'A'	5372					1	$\overline{\Box}$	+	2	504	70A	2860			HP-1		
208/120V		7276			200A	3	$\cap$		4	50A			2860	·	27.5 FLA		
3 PHASE			5214			5	$\cap$	$\overline{\Box}$	6	404				2194	HP-2		
PANEL 'B'	3420					7	$\cap$	+	8	40A		2194			21.1 FLA		
208/120V		3600			200A	9	7	$H \cap$	10	404			2194		HP-3		
3 PHASE	1		2880			11	$\bigcap$	$\overline{H}$	12	40A				2194	21.1 FLA		
BOOTH PANEL 'P'	488				100A	13	$\cap$	++	14	604		4389			AHU-1		
120/240V 1 PHASE		912			IUUA	15	$\cap$	+	16	60A			4389		42.2 FLA		
PANEL 'L'			4500			17	$\cap$	++	18	604				4389	AHU-2	•	
208/120V	4500				100A	19	$\cap$	++	20	60A		4389			42.2 FLA		
3 PHASE		4500	-			21	$\overline{\Box}$	+	22	604			4389		AHU-3		
RAMP WIM SORTER			2160	70A	25A	23	$\cap$	$\overline{\Box}$	24	60A				4389	42.2 FLA		
COMPLIANCE LOCATION	2040			70A	25A	25		+	26	30A		2250			EWH		
LANE USE CONTROL SIGNAL 1		2160		70A	25A	27	1	+	28	JUA			2250		4.5 KW		
STANDALONE CCTV-2			2040	70A	25A	29		1	30	20A				900	DHP-1		
STANDALONE CCTV-3	2040			70A	25A	31	$\cap$	+	32	20A		250			RECIRC F	PUMP	
LANE USE CONTROL SIGNAL 2		2160		70A	25A	33	$\cap$	$\prod$	34						SPARE		
DMS SIGN			2760	704	60A	35	$\bigcap$	110	36						SPARE		
TRANSFORMER	2760			70A	Joon	37		+	38						SPARE		
STANDALONE CCTV-5&6		4080		70A	50A	39	$\overline{\Box}$		40		V				SPARE	·	
SPACE						41			42						SPACE	,	,
NOTES	20324	24136	19554	SUB-	-TOTAL	S 'B'	400A	BUS	SUB	-TOTA	LS 'A'	16332	16082	14066		.,	
2	20027	124100	1000				400A	LUGS		-TOTA			24136		TOTAL	CONNECTE	D LOAD
HACR TYPE BREAKER SEE SITE PLANS FOR SITE RELA	TEN CIP	CHIT W	DE 9171	NG			400A	C/AL	+	ND TO			40218	1	1		D COND
SEE SHE PLANS FOR SHE RELA	IED OIN	0011 111	INC SIZI	110				FEED	<del> </del>	S/PHA			335A	<del> </del>	305A	335A	280A
NEC ALLOWABLE DEMA	ND FA	CTOR	S		•	T <sub>DI</sub>	<u> </u>	IFIED	<u> </u>				1	1===::			
1) DEMAND FACTORS PER I	<del></del>							TYP		1	EC DEM	T ,	В	С	TOTAL	DIVERSIFIED	LOAD
(2) LARGEST OF: NEC TABLE						CEN		LIGHTING			FACTOR (125%	5553	1	1	TOTAL	16660	LOAD
CONNECTED LOAD					•		CK LIG				125%						
③ NEC TABLE 220.56							IERAL I		*	<u> </u>	IOKVA@100					10000 3642	
4 NEC 220.51							EPTAC		ARGEST	>1	125%	1124 3419			<b> </b>	9425	
5 NEC 220.43A, 200 VA/L						EQL	JIPMEN'	TA	LL OTHERS		100%	4261	5367			14983	
6 NON-COINCIDENT LOADS							TER HE	QUIPME	NT	<u> </u>	125% 100%	2813	2813			5626	
OF THE TWO LOADS IS (	JUNIEU	,				FIX.	ELEC.	SPACE	HEAT.	<b>(</b>	100%	7530				22590	
						SHO		DOW LIG	HTS	<u> </u>	100% 125%	<del> </del>	<del>  ===</del>				,
							POWE	R			100%	11340	12900	11460		35700	
									PHAS	E (TC		39373		36672		118626	TATAL
@ 3808 SQ.FT. X 3.5 W/SQ.FT.	X 125%	= 166	60 VA					•			TOTAL	- 328A	356A	306A	VOLTS X	MPS - 33	OA <b>TOTAI</b>

NEW PANEL— '1'					IER M	OUNTIN	208/120V G: FLUSH			EQ	UIPMEN	T GRO	und bi	JSD	X(YES □	
					М	INIMUM	AIC: 22.00	00 AM	<u>IPS</u>	_ SE	RVICE I	ENTRY	RATED		XYES 🗆	NO
LOAD	WATTS	PER F	PHASE	FR	CKT	CKT	NEUTRAL	CKT	CKT	FR	WATTS	PER F	PHASE		LOAD	
SERVICE	Α	В	С	SIZE	BRKF	NO	ABC	NO	BRKR	SIZE	Α	В	С	SE	RVICE	
REC: HOT BOX	180			70A	20A	1	$\sim$	2	20A	70A	1344			LIGHTS		
REC		900				3		4				1344		LIGHTS		
REC			180			5		6					896	LIGHTS		
REC	180	·	·		TT	7		8			864			EF-4; 1/	3 HP	
EC: DATA RACK		360	*			9		10				864		EF-5; 1/	<del></del>	
REC: DATA RACK			360		$\Box$	11		12	·				1656	OH DOOR		/4 HP
REC	180	7				13		14			1656			<del></del>	MOTOR; 3	<del></del>
SPACE					TT	15		16		TT		168		LIGHTS: E		, , , , ,
SPARE					11	17		18		TT				SPARE		
SPARE		,			H	19		20		$\Box$				SPARE		
SPARE					11	21		22		IIII				SPARE		
SPARE				$\vdash \uparrow \vdash$	††	23		24		H				SPARE		
SPARE			·	<del>                                     </del>	$\dagger \dagger$	25		26	<del></del>					SPARE	<del></del>	·····
SPARE			· · · · · ·		++-	27		28	$\vdash$	f-f-				SPARE		
SPARE	<del></del>				++-	29		30		ff				SPARE		
SPARE		<b></b>			╁┼╌	31		32	<b></b>	<del>      -   -     -     -     -     -     -       -  </del>				SPARE		
SPARE					++-	33		34		$\vdash \vdash$			-	SPARE	:	
	<del>-   </del>			$\vdash$	++-	35		36		╁┼╌				SPARE		
SPARE					++-	37		38	$\vdash$	╁┼				<del> </del>		
SPARE					++	39		40		╂┼┼╌				SPARE		
SPARE	_		<b></b>	<del>- √</del> -	╁╅╴			42	<del>- √-</del>	<del>                                     </del>			<u> </u>	SPARE		
SPARE	-					41								SPARE		
NOTES	540	1260	540	SUB	-TOTA	LS 'B'	200A BUS	<del></del>	-TOTAL		3864	2376	2552	ļ ·		
							200A LUGS		-TOTAL		540	1260	540	TOTAL C	CONNECTI	ED LOA
							200A S/N		ID TOT		4404	3636	3092			·
							#3/0FEED	AMPS	S/PHAS	SE	37A	30A	26A	37A	30A	26A
NEC ALLOWABLE DEM	AND FA	CTOR	S			D	VERSIFIED	LOAD	SUM	MARY						
				<u>-</u>			LOAD TYP			EC DEM	T			TOTAL F	W.EDOIEIE	
(1) DEMAND FACTORS PER (2) LARGEST OF: NEC TAB										<b>ACTOR</b>		В	C	<u> </u>	DIVERSIFIE	LUAD
CONNECTED LOAD	LL 220.12	. Oit					IERAL LIGHTIN CK LIGHTING	G		125% 125%	1680	1680	1120		4480	
3 NEC TABLE 220.56						GEN	IERAL USE		≤10	XVA <b>0</b> 100%	540	1260	540		2340	
4 NEC 220.51							CEPTACLES	ARGEST		**************************************	2070	1080	2070		5220	
(5) NEC 220.43A, 200 VA/	LINEAR F	T						LL OTHERS		100%	864				864	
6 NON-COINCIDENT LOAD							TER HEATERS	XIT.		125%						
OF THE TWO LOADS IS	COUNTED						CHEN EQUIPME ELEC: SPACE			100% 100%				<del> </del>		
						SHO	OW WINDOW LI		<b>⑤</b>	100%						
						SIG				125% 100%				-		
						MIS	<del>-   -   -   -   -     -                </del>	PHASE		TAL VA)	1	4020	3730	<del> </del>	12904	**************************************
														VOLT A		

NEW PANEL— 'A'	•				1		<u>208/120V</u>	PHASI	- 4						BREAKER (F JS)	RAME)	
					MI	MUMIN	AIC: 22,00	O AM	1PS		SERV	ICE E	NTRY	RATED		JYES ⊠(	10
LOAD	WATTS	PER I	PHASE	FR	CKT	CKT	NEUTRAL	CKT	СК	T FI	2 W/	ATTS	PER P	HASE		_OAD	
SERVICE	Α	В	C	SIZE	BRKR	NO	ABC	NO	BR		-	4	В	С		RVICE	
TS- SCALE,LOBBY,NET RACK	1598			70A	20A	1		2	20	A 70	A 1	80			REC- EXT	ERIOR	
.TS- OFFICE, CORRIDOR, MECH		1280				3		4	П				180		REC- MTF	>	
TS- TRAINING, BREAK, TOILETS			1510			5		6	П					360	REC- SCA	ALE RM	
.TS- GROUND	450					7		8	П		3	60			REC- SCA	ALE RM	
TS- EXTERIOR		416				9		10	П				720		REC- OFF	ICE	
SPARE						11		12	П					720	REC- OFF	ICE	
SPARE						13		14			7	20			REC- OFF	ICE	
REC- SHOWER ROOM		180				15		16	П				900		REC- OFF	ICE	
SPARE						17		18						720	REC- OFF	ICE	
SPARE						19		20			4	44			SPARE		
SPARE				$\Box$		21		22	$\Box$				900		REC- COF	RRIDOR	
SPARE						23		24	П	11				360	REC- TOI	LETS	
SPARE						25		26	П		7	20			REC- BRE	EAK RM	
SPARE					T 🔻	27		28	П				1800		REC- REF	RIG	
SPACE						29		30	П					360	REC- BRE	EAK RM	
SPACE						31		32	П		7:	20			REC- TRA	AINING RM	
SPACE				$\Pi$		33		34					720		REC- TRA	AINING RM	
SPACE			<b> </b>			35		36	$\Box$					888	REC- EW	c's	
SPACE						37		38			1:	80			REC- VEN	NDING	
SPACE						39		40	$\Box$				180		REC- VEN	NDING	
SPACE			<b> </b>	\		41		42	₩	<b>-   V</b>				360	REC- TRU	JCKER LOB	BY
NOTES	2048	1876	1510	SUB	-TOTAL	s 'B'	200A BUS	SUB-	-TO	TALS 'A	' 3	524	5400	3768			<del></del>
	2010	11070	11010				200A LUGS			ALS 'B		)48		1510	TOTAL C	ONNECTE	D LO
							200A S/N	GRAN				572		5278			
							VERIFY FEED	AMP				5A	61A	44A	45A	61A	44/
NEC ALLOWABLE DEMA	ND FA	CTOR	S			To	VERSIFIED				RY	1				<u> </u>	
1) DEMAND FACTORS PER I							LOAD TYPI			NEC DE	М	Α	В	С	TOTAL	IVERSIFIED	LOAD
(2) LARGEST OF: NEC TABLE						CEN	IERAL LIGHTING			FACTO 125%	<u> </u>	560	2120	1808		6488	LUAD
CONNECTED LOAD							CK LIGHTING	·		125%					<u> </u>		<del></del>
3 NEC TABLE 220.56							IERAL USE CEPTACLES			≤10KVA@1		880	3780	2880		9540 	
4 NEC 220.51								VRGEST		>10KVA		55	2250	1110	1	3915	
5 NEC 220.43A, 200 VA/L								l others		100%							
(6) NON-COINCIDENT LOADS, OF THE TWO LOADS IS (							TER HEATERS CHEN EQUIPMEN	TV	<b>3</b>	125% 100%					<b></b>		
OF THE THO LOADS IS (	JOHILD					FIX.	ELEC. SPACE	HEAT.	0	100%				<u> </u>	ļ		
						SHO	OW WINDOW LIG N	HIS	ூ	100% 125%					ļ		
						MIS				100%	-						
								PHAS	E (	TOTAL Y	<b>VA)</b>   5	995	8150	5798		19943 MPS - 55	

EQUIPMEN	4 I A	VITAIN	16 5		
EQUIPMENT	МСА	МОСР	VOLTS	PH	WIRE SIZE
AHU-1	53.8A	60A	208V	1	3-#6, 1-#10 GND IN 1" CONDUIT
HP-1	34.1A	50A	208V	1	3-#8, 1-#10 GND IN 3/4" CONDUIT
AHU-2	53.8A	60A	208V	1	3-#6, 1-#10 GND IN 1" CONDUIT
HP-2	26.0A	40A	208V	1	3-#8, 1-#10 GND IN 3/4" CONDUIT
AHU-3	53.8A	60A	208V	1	3-#6, 1-#10 GND IN 1" CONDUIT
HP-3	26.0A	40A	208V	1	3-#8, 1-#10 GND IN 3/4" CONDUIT
EWH	(4.5kW)	30A	208V	1	2-#10, 1-#10 GND IN 1/2" CONDUIT
DUCTLESS SPLIT SYSTEM #1 & #2	20.0A	25A	120V	1	2-#10, 1-#10 GND IN 1/2" CONDUIT

THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN AND RELEASING GEAR. ADJUST BREAKER, WIRE SIZES, ETC. AS REQUIRED.

SCO ID# 13-10297-01A WEIGH STATION NORTH CAROLINA GASTON COUNTY ARCHITECT/ENGINEERS: ACILITIES DESIGNI GENERAL SERVICES DIVISION, NCDOT DESIGN 1 SOUTH WILMINGTON STREET RALEIGH, NORTH CAROLINA 2760 27601 FAX (919) 715-0399 (919) 715-0400 DRAWING TITLE: PANEL SCHEDULES & RISER DRAWN BY: SMJ CHECKED BY: BEB ISSUE DATE: 12/20/13 SEAL: n/20/13 TIP. PROJ. NO. WBS. NO. CONTRACT ID NO. FEDERAL- AID NO. 1-4928 41188.3.1 REVISIONS/SUBMISSIONS DATE SHEET NO.

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FAX: (919) 779-0826
email: benburke@nc.rr.com Corp. License # C-2652

5 OF 5

