



# HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS

## HEALTH DEPARTMENT- HVAC UPGRADE AND ADA RESTROOM/SHOWER. PROJECT # 16065

7205 S GEORGE BLVD.  
SEBRING, FLORIDA, 33870



SWEET | SPARKMAN  
ARCHITECTS

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**OWNER**

HIGHLANDS COUNTY BOARD OF  
COUNTY COMMISSIONERS  
7205 S GEORGE BLVD  
SEBRING, FL, 33870  
MS. SUZANNE HUNNICUTT  
CAPITAL PROJECTS MANAGER  
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FAX

**ARCHITECT**

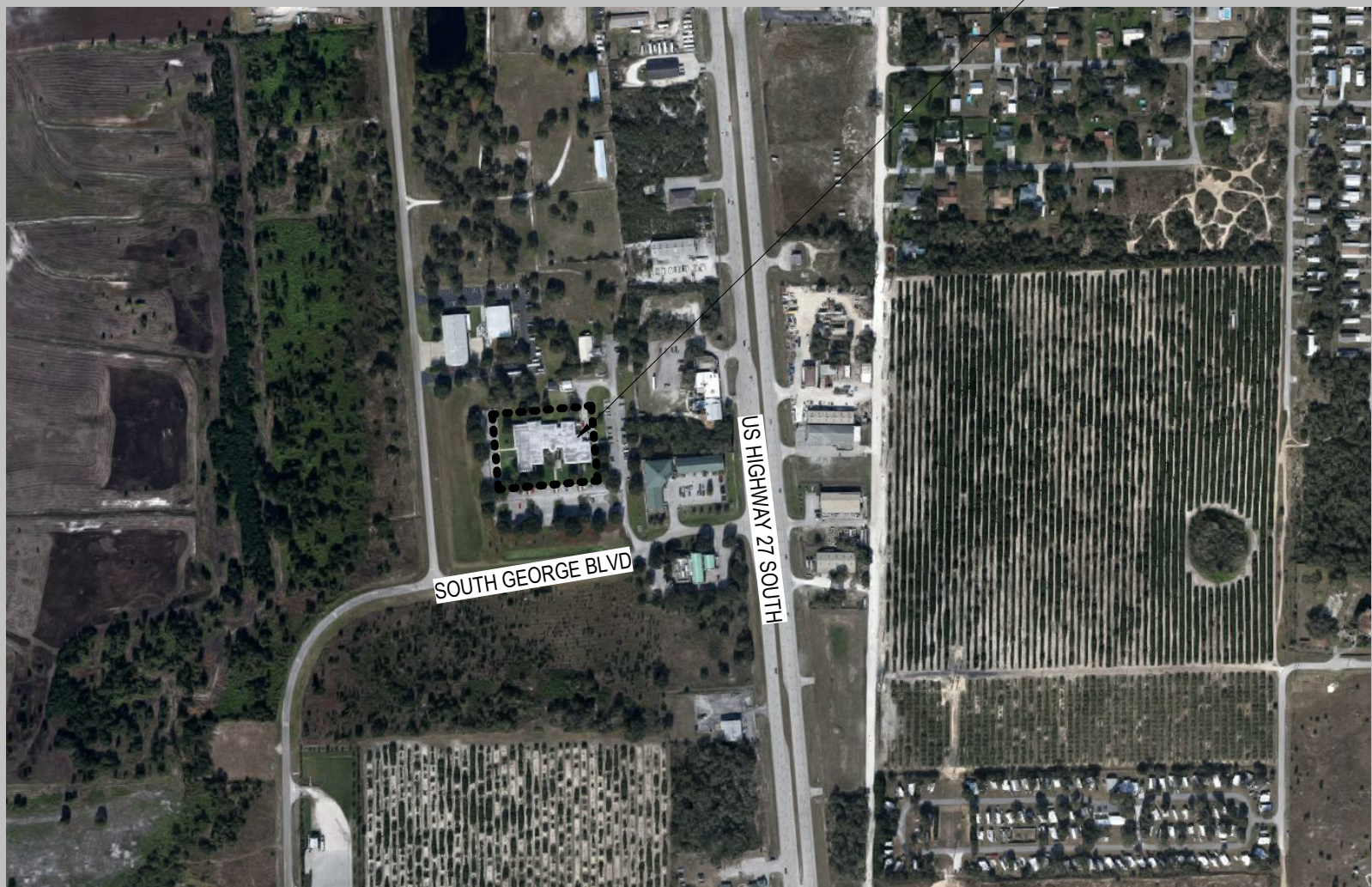
SWEET SPARKMAN ARCHITECTS  
2168 MAIN STREET  
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PRINCIPAL & PROJECT MANAGER  
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**MEP ENGINEER**

PYRAMID ENGINEERING  
5596 RIO VISTA DRIVE  
CLEARWATER, FLORIDA, 33760  
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**SITE LOCATION MAP**

7205 S GEORGE BLVD.  
SEBRING, FLORIDA, 33870



NOTE: THE SCALE OF THESE PLANS MAY HAVE  
CHANGED DUE TO REPRODUCTION

HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS - HEALTH DEPARTMENT- HVAC  
UPGRADE AND ADA RESTROOM/SHOWER. PROJECT # 16065  
18498 - 100% CONSTRUCTION DOCUMENTS - 09/18/18



CODE ANALYSIS

RENOVATION SCOPE

THE WORK INCLUDES :  
A. ONE FOR ONE REPLACEMENT OF EXISTING MECHANICAL CONDENSERS AND SELECT VAV'S. EXISTING DUCTWORK TO REMAIN.  
B. MINOR INTERIOR RENOVATION AS SHOWN TO ACCOMMODATE (1) NEW ACCESSIBLE RESTROOM WITH SHOWER AND (1) NEW OFFICE.  
C. (1) NEW TANK MOUNTED STANDBY DIESEL GENERATOR WITH AUTOMATIC TRANSFER SWITCH ON CONCRETE PAD.  
D. EXISTING FINISHES TO REMAIN EXCEPT FOR RENOVATION SCOPE AREA

GROSS BUILDING AREA

TOTAL BUILDING GROSS SF 25,300 GSF  
INTERIOR RENOVATION AREA 255 SF (1%) MECH RENOVATIONS THROUGHOUT

APPLICABLE CODES

BUILDING CODE: FLORIDA BUILDING CODE FBC 2017 WITH APPLICABLE AMENDMENTS  
MECHANICAL CODE: FBC, MECHANICAL 2017 WITH APPLICABLE AMENDMENTS  
ENERGY CONSERVATION: FBC, ENERGY CONSERVATION 2017 WITH APPLICABLE AMENDMENTS  
ELECTRICAL CODE: FBC- CHAPTER 27; NFPA 70 (N.E.C.) WITH APPLICABLE AMENDMENTS  
PLUMBING CODE: FBC, PLUMBING 2017 WITH APPLICABLE AMENDMENTS  
FUEL GAS CODE: FBC, FUEL GAS 2017 WITH APPLICABLE AMENDMENTS  
ACCESSIBILITY CODE: 2017 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION  
FIRE SAFETY CODE: FLORIDA FIRE PREVENTION CODE, 5TH EDITION WITH APPLICABLE AMENDMENTS  
OTHER: FBC, EXISTING BUILDING CODE 2017

BUILDING CATEGORIZATION & PHYSICAL PROPERTIES

OCCUPANCY CLASSIFICATION	FLORIDA BUILDING CODE		FLORIDA FIRE PREVENTION CODE	
	CHAPTER 3, SECTION 302		CHAPTER 6	
	GROUP BUSINESS [B]		BUSINESS	
CONSTRUCTION TYPE	CHAPTER 6		TABLE A8.2.1.2	
	IIIB		III (200)	
EX. BUILDING CODE - ALTERATION LEVEL	LEVEL 2 ALTERATIONS - RECONFIGURATION OF SPACE			
WIND LOADS (FBC CHAPTER 16)	FBC CHAPTER 16	RISK CATEGORY TABLE 1604.5	N/A	
	150 MPH	III		
BUILDING PHYSICAL PROPERTIES	CHAPTER 5 - TABLE 503		NFPA 101, PER OCCUPANCY TYPE (CHAPTERS 12-43)	PROVIDED
MAXIMUM HEIGHT IN FEET	75 FEET		--	~12 FEET ±
MAXIMUM NUMBER OF STORIES	3 STORIES		--	1 STORY
ALLOWABLE BUILDING AREA	69,000 SQ FT		N/A	25,300 GSF
SPRINKLER SYSTEM	EXISTING FIRE SPRINKLER PROVIDED.			

EXITING REQUIREMENTS

EXITING COMPONENT	FLORIDA BUILDING CODE	FLORIDA FIRE PREVENTION CODE NFPA 101 - LIFE SAFETY CODE	PROVIDED
COMMON PATH OF TRAVEL TO AN EXIT	75 FEET	75 FEET	< 60 FEET
MAXIMUM DEAD END CORRIDOR	20 FEET	20 FEET	N/A
MAXIMUM TRAVEL DISTANCE TO EXIT	250 FEET	250 FEET	< 80 FEET
MINIMUM CORRIDOR WIDTH	44 INCHES	44 INCHES	> 44"
MINIMUM CLEAR OPENING OF EXIT DOORS	32 INCHES	32 INCHES	> 32"

OCCUPANCY LOAD AND EGRESS WIDTH CALCULATIONS

FBC CHP 10 - TABLE 1004.1.2 NFPA101 CHP 7 - TABLE 7.3.1.2				NON-STAIR EGRESS	
AREA(SF)	OCCUPANT USE	AREA PER OCCUPANT (SF)	OCCUPANT LOAD	REQ'D EGRESS WIDTH	EGRESS WIDTH PROVIDED
SEE LIFE SAFETY PLAN (TYP FOR ALL)				< 49	34" NO CHANGE

PLUMBING FIXTURE CALCULATION

FIXTURE COUNT	OCC. LOAD	WC REQUIRED	WC PROVIDED	LAV REQUIRED	LAV PROVIDED	MOP SINK REQUIRED	MOP SINK PROVIDED	DRINKING FOUNTAIN REQ'D	DRINKING FOUNTAIN PROVIDED
OCCUPANCY GROUP [B]	NO CHANGE TO EXISTING								

REMARKS:  
1. NO DECREASE IN EXISTING FIXTURES (1) ADDED LAV (1) ADDED WC.

FIRE EXTINGUISHER REQUIREMENTS

FIRE EXTINGUISHER COMPONENT	FLORIDA BUILDING CODE	NFPA 10, TABLE 5.2.1 PER HAZARD OCCUPANCY	PROVIDED
MAXIMUM FLOOR AREA PER UNIT OF A	1500 SQ FT	1500 SQ FT	REMARK 1
MAXIMUM FLOOR AREA PER EXTINGUISHER	11,250 SQ FT	11,250 SQ FT	--
MAXIMUM TRAVEL DISTANCE	75 FEET	75 FEET	<75 FEET

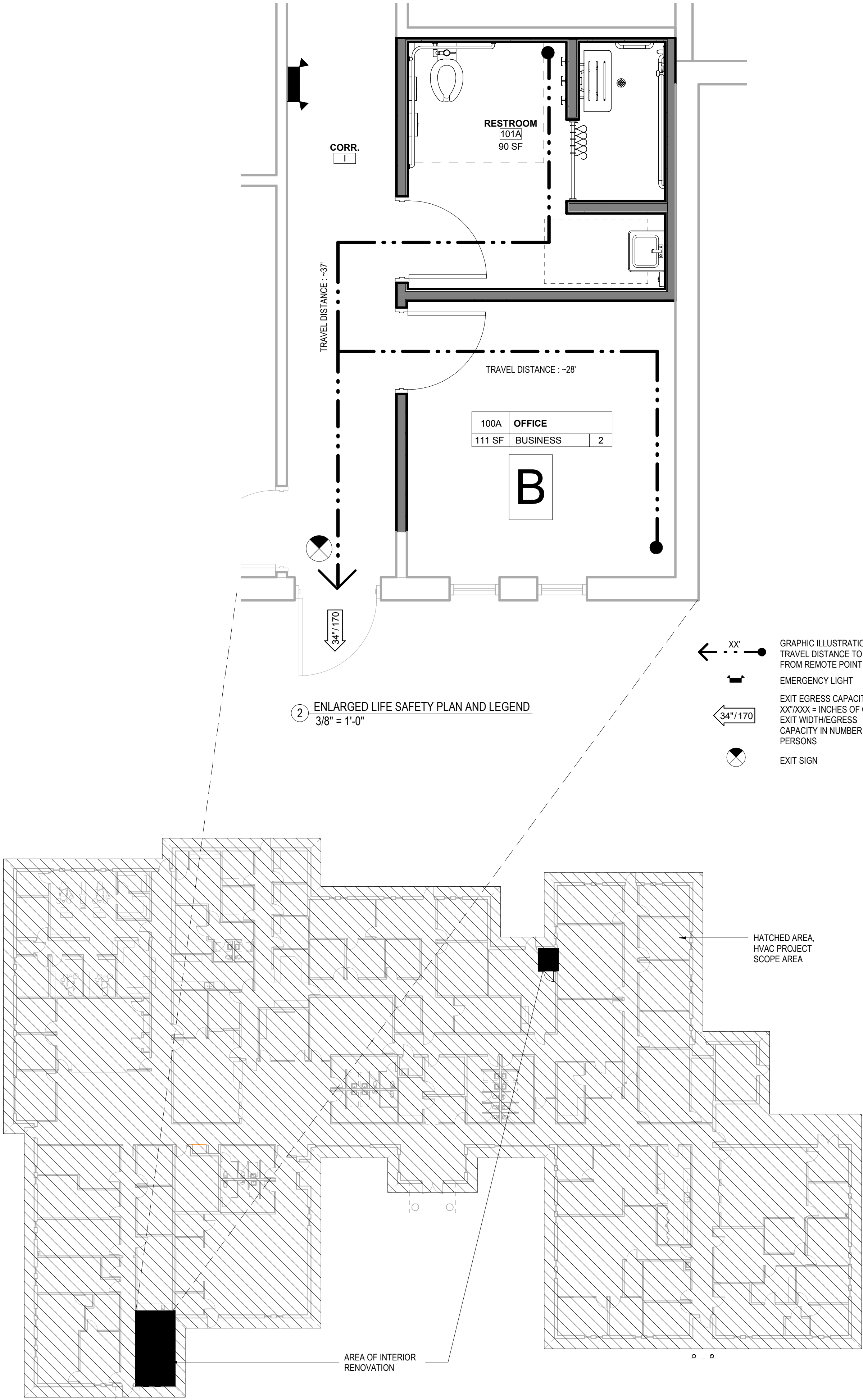
REMARKS:  
1. NO CHANGE TO EXISTING

ABBREVIATIONS

ABV	ABOVE	MECH	MECHANICAL
AC, A/C	AIR CONDITIONING	MO	MASONRY OPENING
ACT	ACOUSTIC CEILING TILE	MR	MOISTURE-RESISTANT
AF	ACCESS FLOORING	MUA	MAKE-UP AIR
AFF	ABOVE FINISHED FLOOR	N	NOSING
BOD	BOTTOM OF DECK	NIC	NOT IN CONTRACT
BOF	BOTTOM OF FOOTING	NR	NONE REQUIRED
BOS	BOTTOM OF STEEL	NS	NEAR SIDE
BS	BOTH SIDES	NTS	NOT TO SCALE
BSE	BRICK SHELF ELEVATION	OC	ON CENTER
C	CHANNEL	PA	PUBLIC ADDRESS
CB	COVE BASE	PAF	POWER-ACTUATED FASTENER
CEM BD	CEMENTITIOUS BACKER BOARD	PC	PRECAST CONCRETE
CFM	CUBIC FEET PER MINUTE	PCP	PORTLAND CEMENT PLASTER
CJ	CONTROL JOINT; CONSTRUCTION JOINT	PL	PLATE
CMU	CONCRETE MASONRY UNIT	PLAM	PLASTIC LAMINATE
COL	COLUMN	PLF	POUNDER PER LINEAR FOOT
CONC	CONCRETE	PNT	PAINTPAINTED
CRPT	CARPET	PP	POWER PANEL
CT	CERAMIC TILE	PROT	PROTECT
CT-S	CERAMIC SHOWER TILE	PSF	POUNDS PER SQUARE FOOT
CU	AIR CONDITIONING CONDENSER UNIT	PSI	POUNDS PER SQUARE INCH
CUH	CABINET UNIT HEATER	PT	PRESSURE-TREATED; PORCELAIN TILE
DF	DRINKING FOUNTAIN	PTD	PAPER TOWEL DISPENSER
EF	EXHAUST FAN; EACH FACE	PVC	POLYVINYL CHLORIDE
EJ	EXPANSION JOINT	R	RISER, RADIUS
ELEC	ELECTRICAL	RAF	RESILIENT ATHLETIC FLOORING
EP	EPOXY PAINT	RB	RUBBER BASE
ESS	EXTERIOR SOFFIT SYSTEM	RBF	RUBBER FLOORING
EW	EACH WAY	RD	ROOF DRAIN
EWC	ELECTRIC WATER COOLER	RES	RESILIENT
EX	EXISTING	RO	ROUGH OPENING
EXP	EXPOSED	RTU	ROOF TOP UNIT (HVAC)
FAAP	FIRE ALARM ANNUNCIATOR PANEL	SC	SEALED CONCRETE
FACP	FIRE ALARM CONTROL PANEL	SF	SQUARE FOOT; SUPPLY FAN
FB	FLAT BAR	SN	SANITARY NAPKIN (DISPENSER)
FBO	FURNISHED BY OTHERS	SS	STAINLESS STEEL
FCO	FLOOR CLEAN-OUT	STR	STRUCTURAL
FD	FLOOR DRAIN	ULPP	UNDER LAVATORY PIPE PROTECTION
FEC	FIRE EXTINGUISHER CABINET	UNO	UNLESS NOTED OTHERWISE
GB	GRAB BAR	V	VENT PIPE
GC	GENERAL CONTRACTOR	VB	VAPOR BARRIER
GV	GRAVITY VENT	VCT	VINYL COMPOSITION TILE
GYP	GYPSUM WALL BOARD	VIF	VERIFY IN FIELD
HOR	HORIZONTAL	VTR	VENT THROUGH THE ROOF
HM	HOLLOW METAL	VWC	VINYL WALL COVERING
HR	HOUR	W	WIDE, WASHER
HRU	HEAT RECOVERY UNIT	WC	WATER CLOSET
H&V	HEATING AND VENTILATING	WH	WATER HEATER
HVAC	HEATING, VENTILATING AND AIR CONDITIONING		

SYMBOLS

	SECTION
	DETAIL
	INTERIOR ELEVATION
	LEVEL LINE
	DRAWING NOTE
	WALL TAG
	DOOR TAG
	ROOM NAME
	ROOM NUMBER
	TOILET ACCESSORY TAG
	DIRECTION OF SLOPED SURFACE



1 FIRST FLOOR KEY PLAN  
1" = 20'-0"

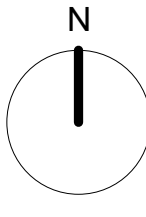
2 ENLARGED LIFE SAFETY PLAN AND LEGEND  
3/8" = 1'-0"



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HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS  
HEALTH DEPARTMENT- HVAC UPGRADE AND ADA  
RESTROOM SHOWER, PROJECT # 16085  
SEBRING, FLORIDA, 33870

100% CONSTRUCTION DOCUMENTS  
09/18/18

REV DESCRIPTION DATE

GRAPHIC SCALE:

0' 1'

SCALE: As indicated

PROJECT MANAGER: TMS

DRAWN BY: CKF

A/E OF RECORD: TMS

PROJECT NO: 18498

SHEET TITLE:

CODE ANALYSIS,  
LIFE SAFETY PLAN &  
LEGENDS

SHEET No.:

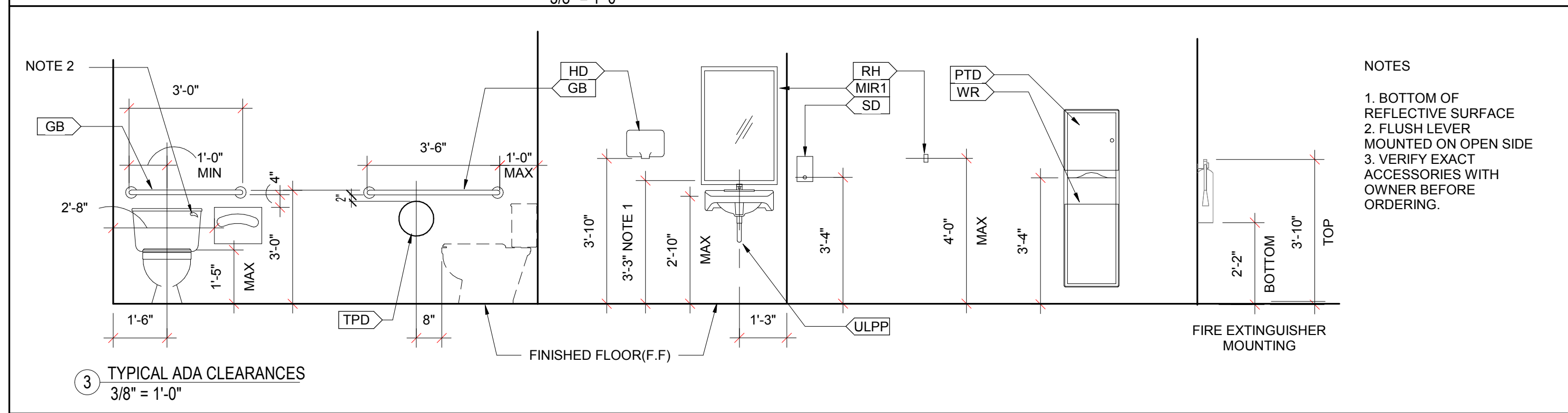
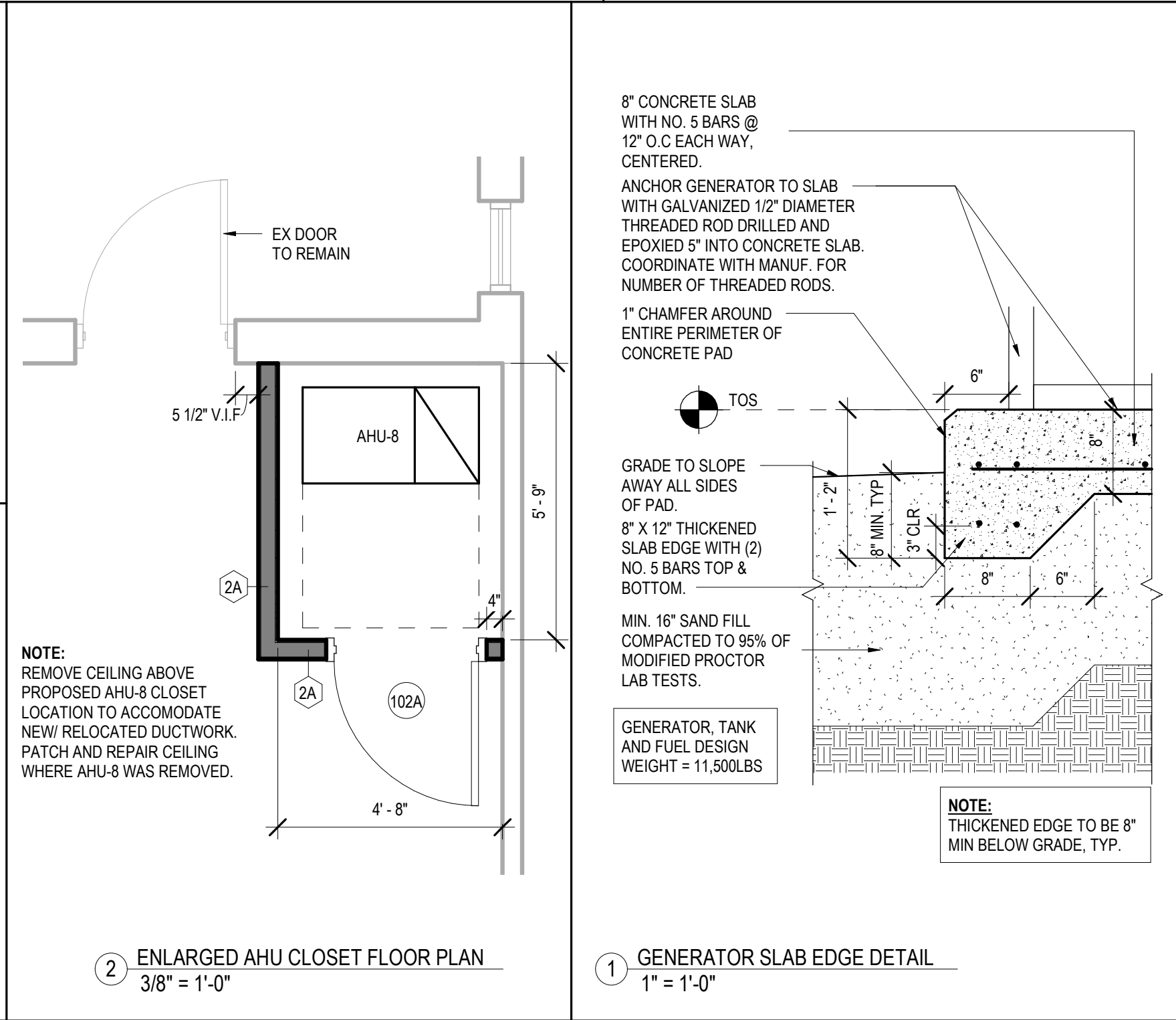
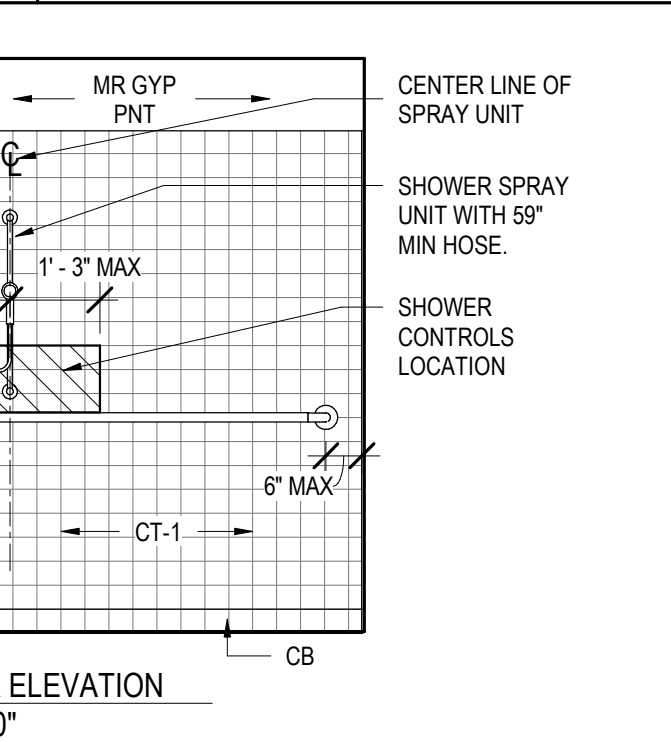
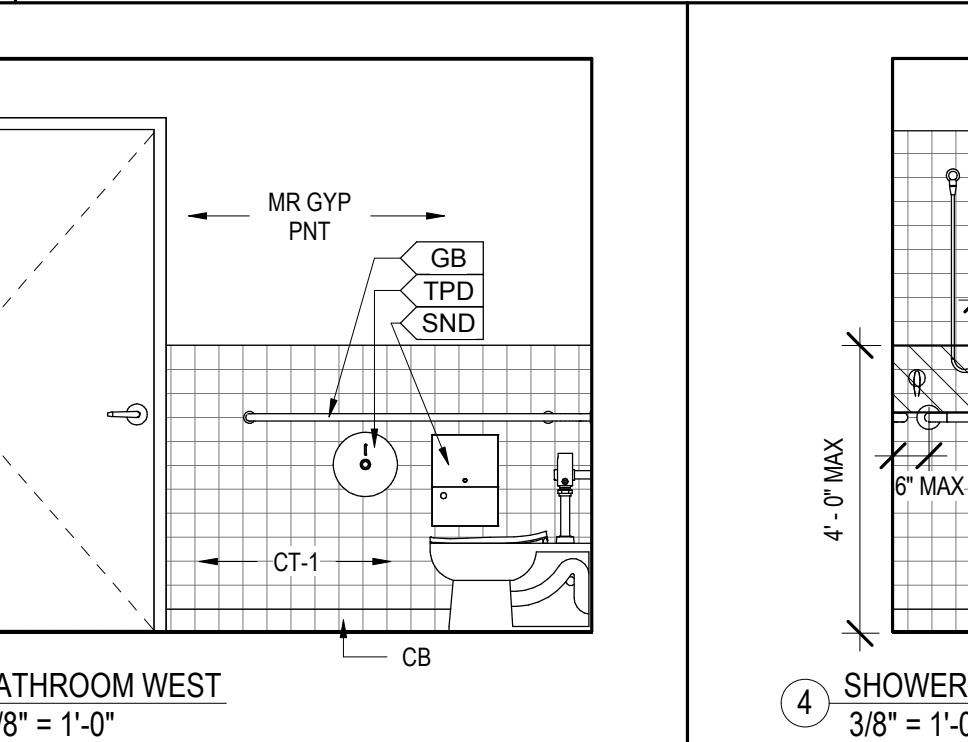
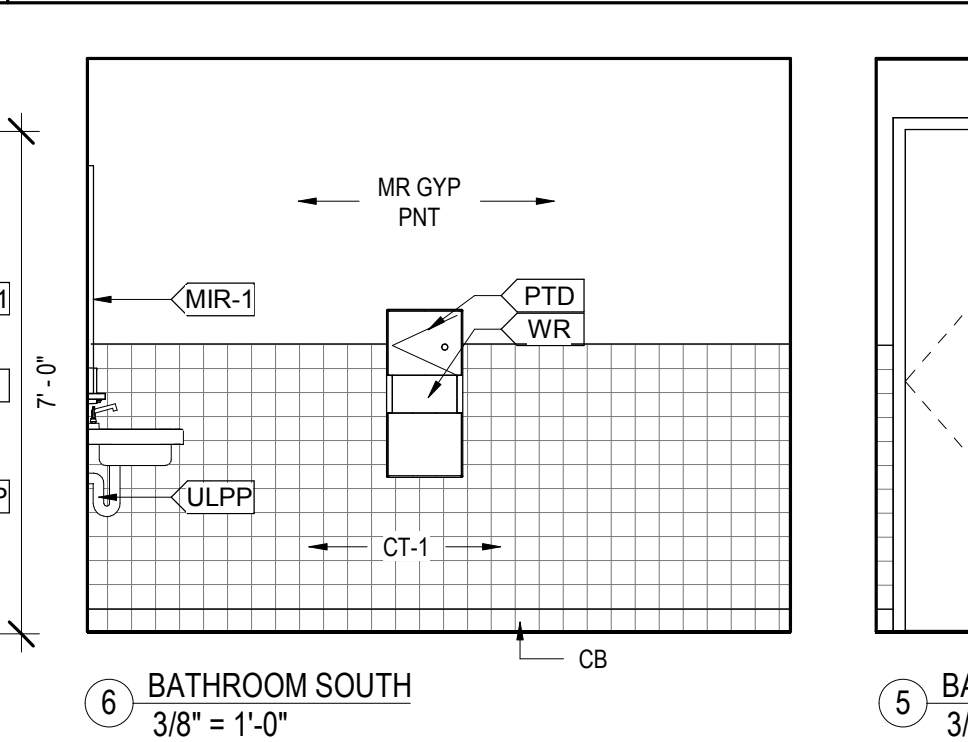
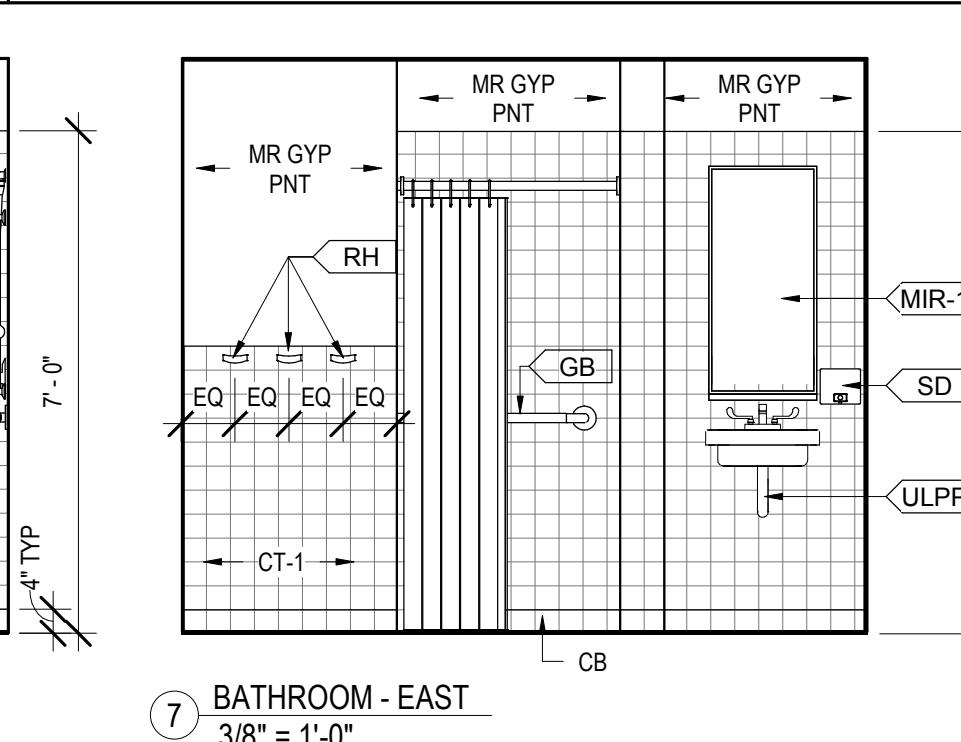
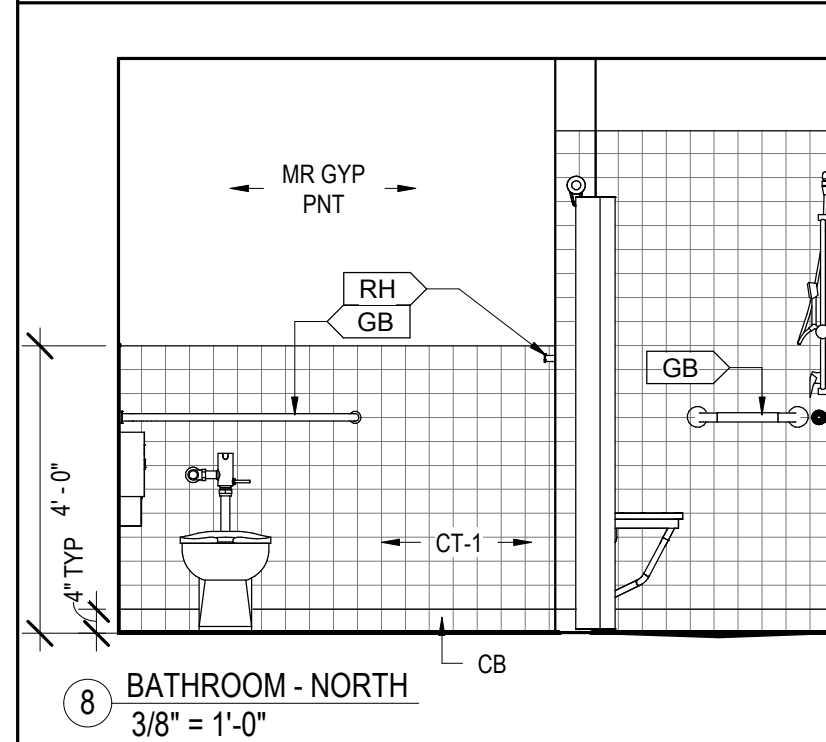
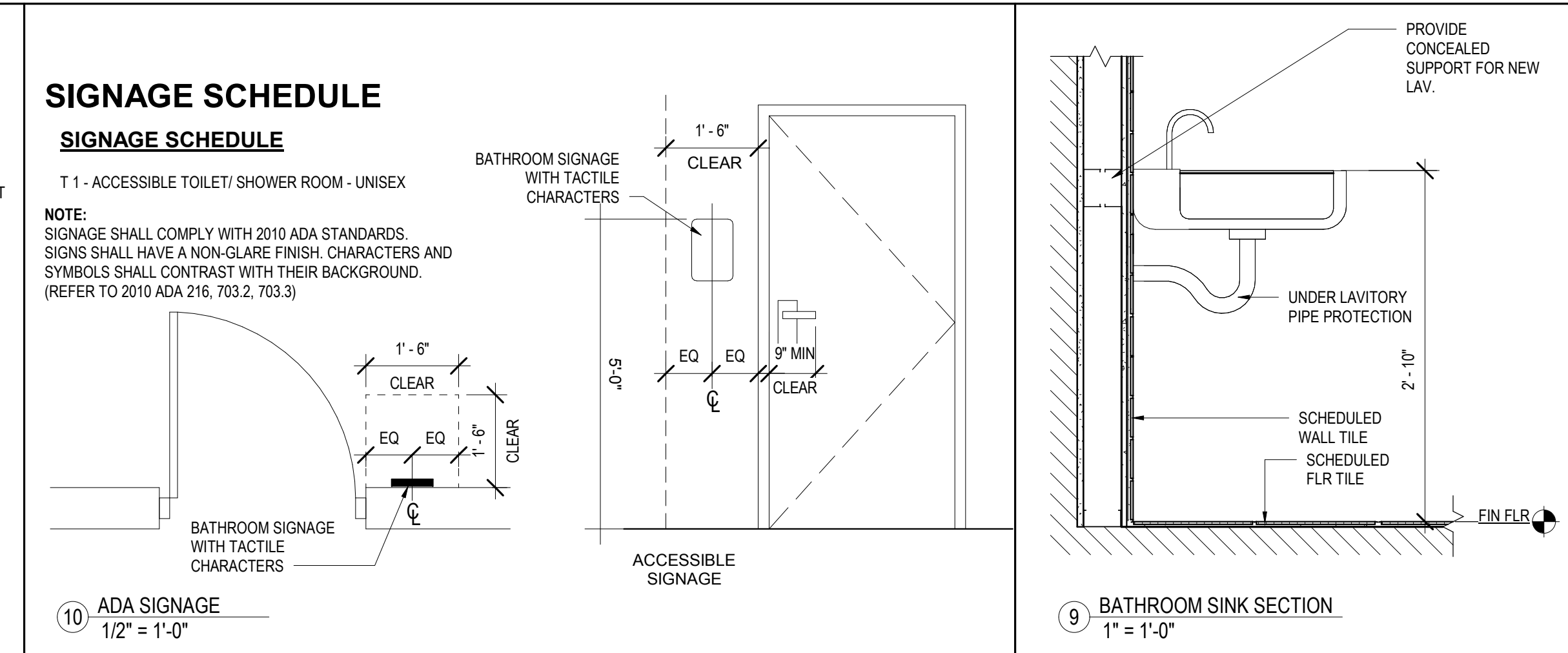
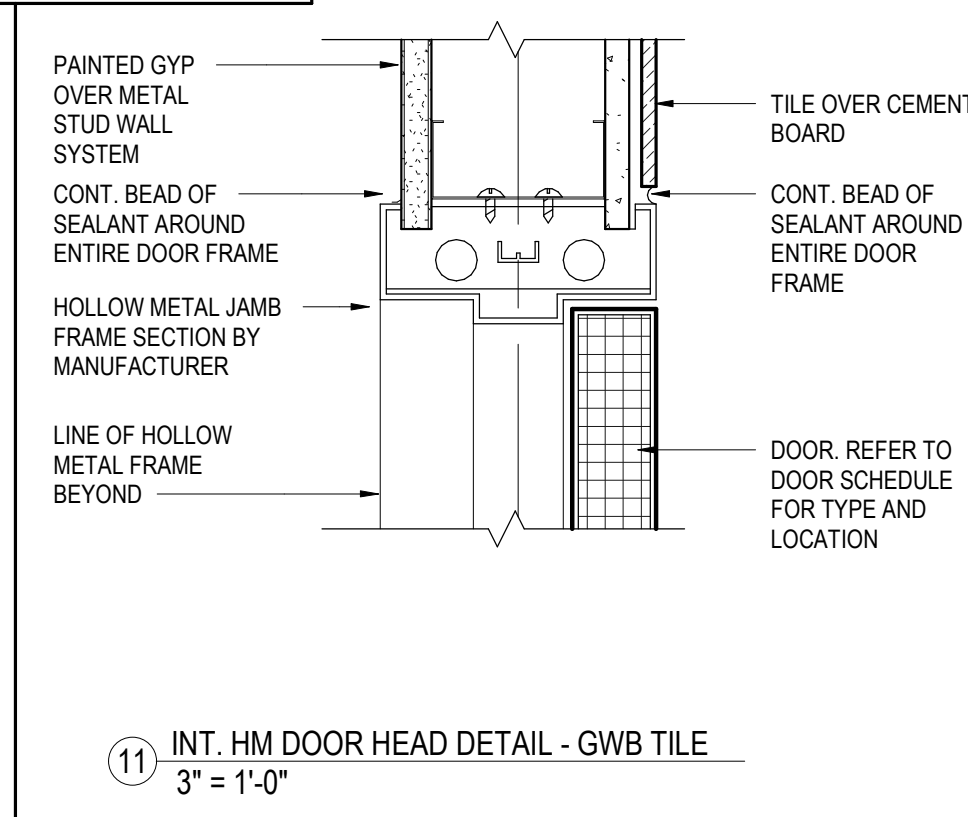
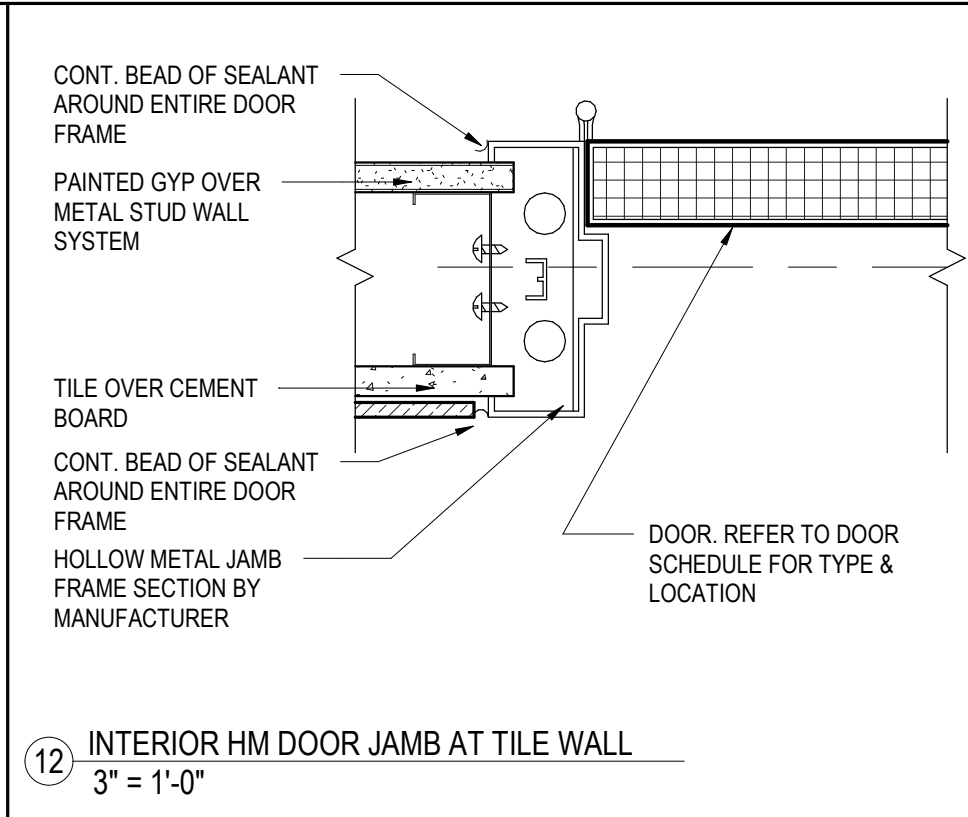
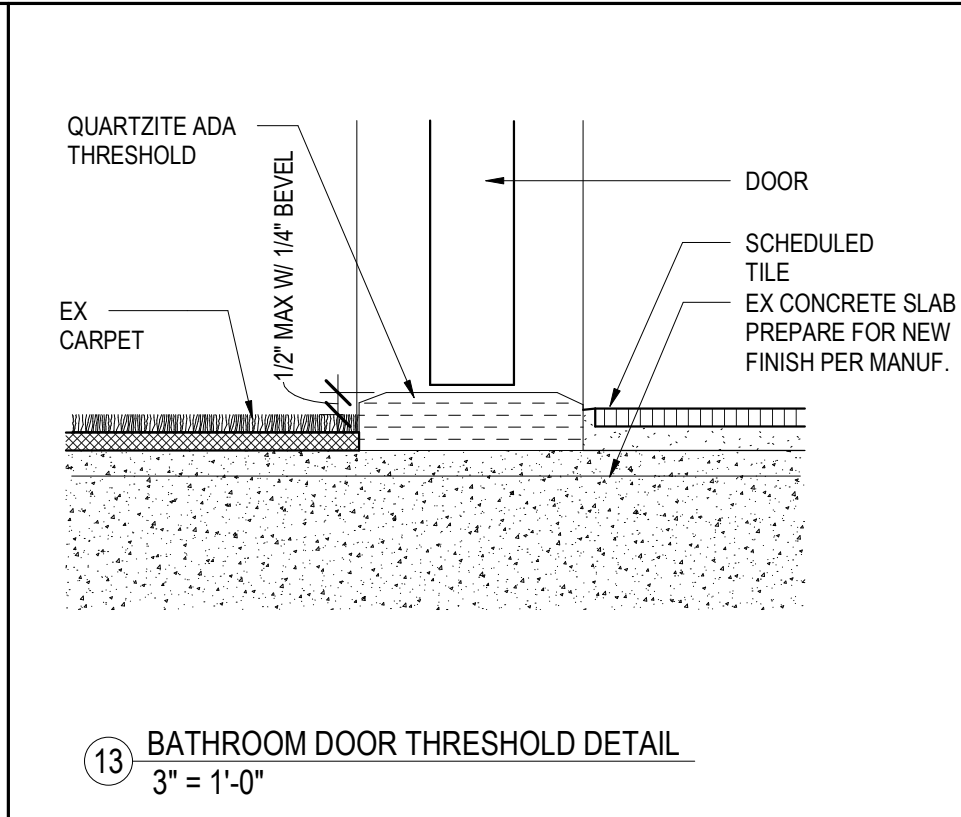
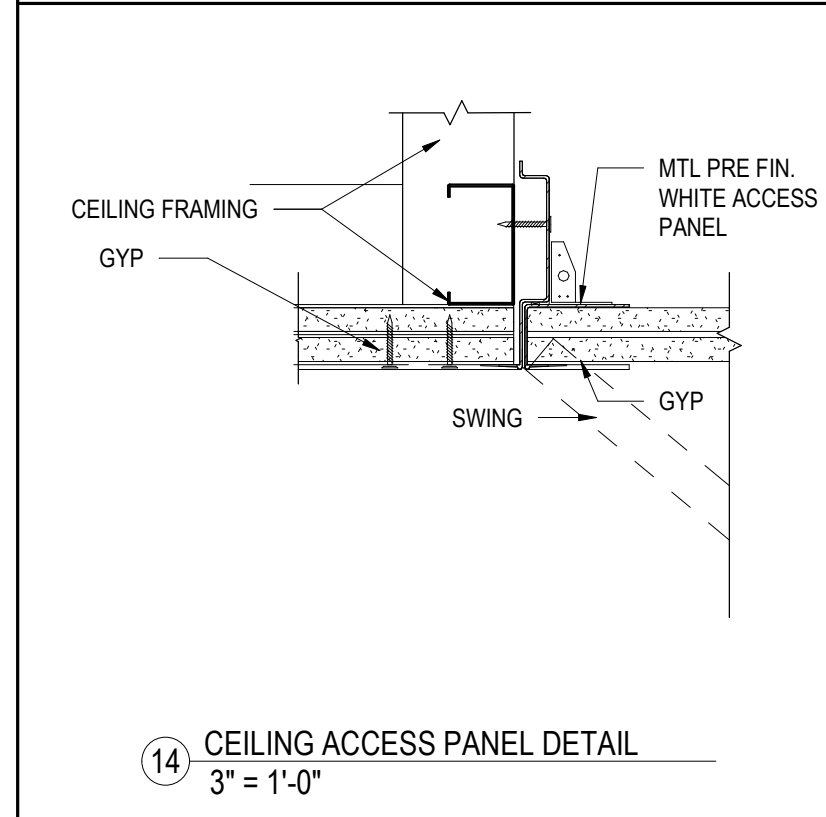
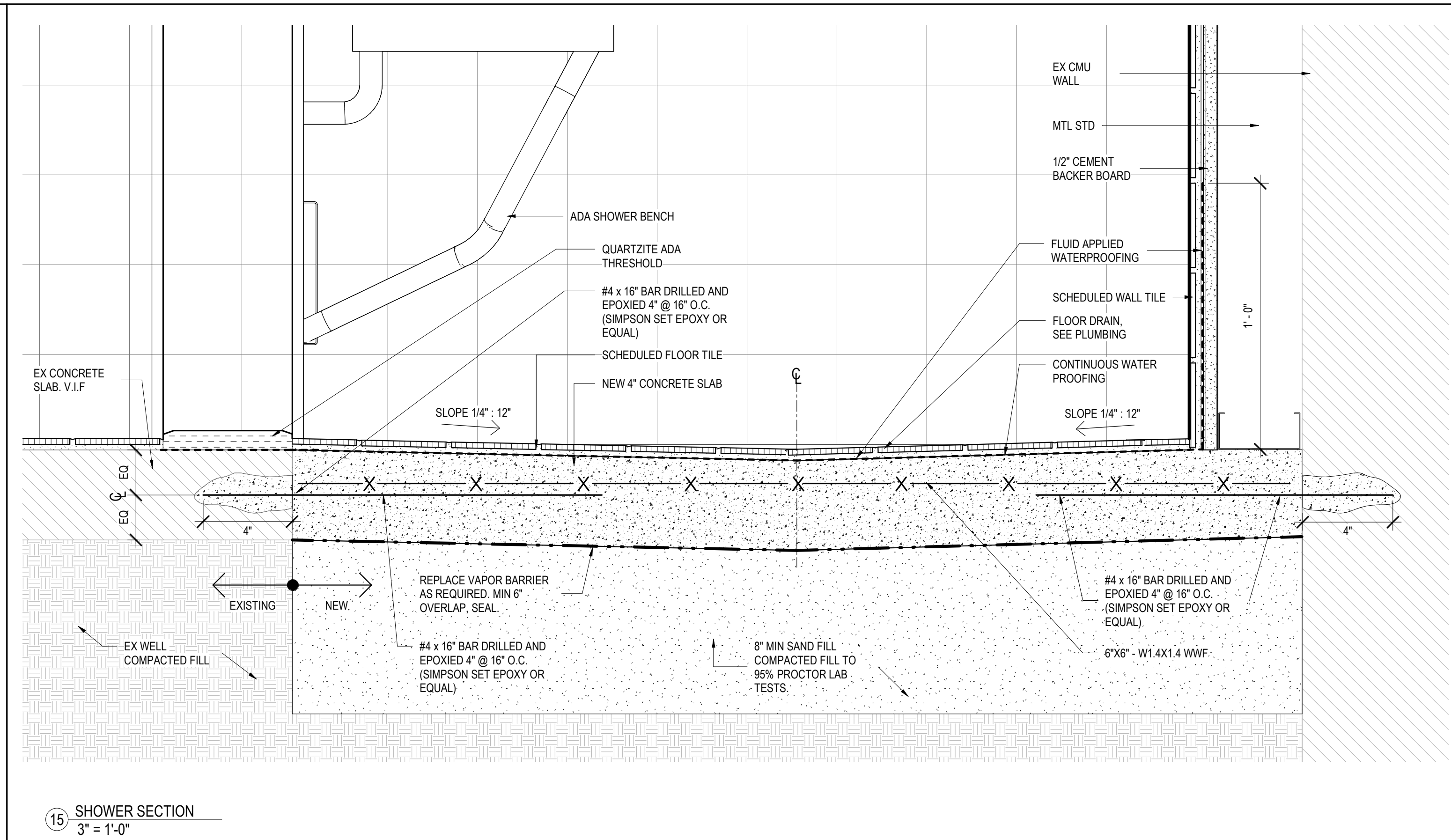
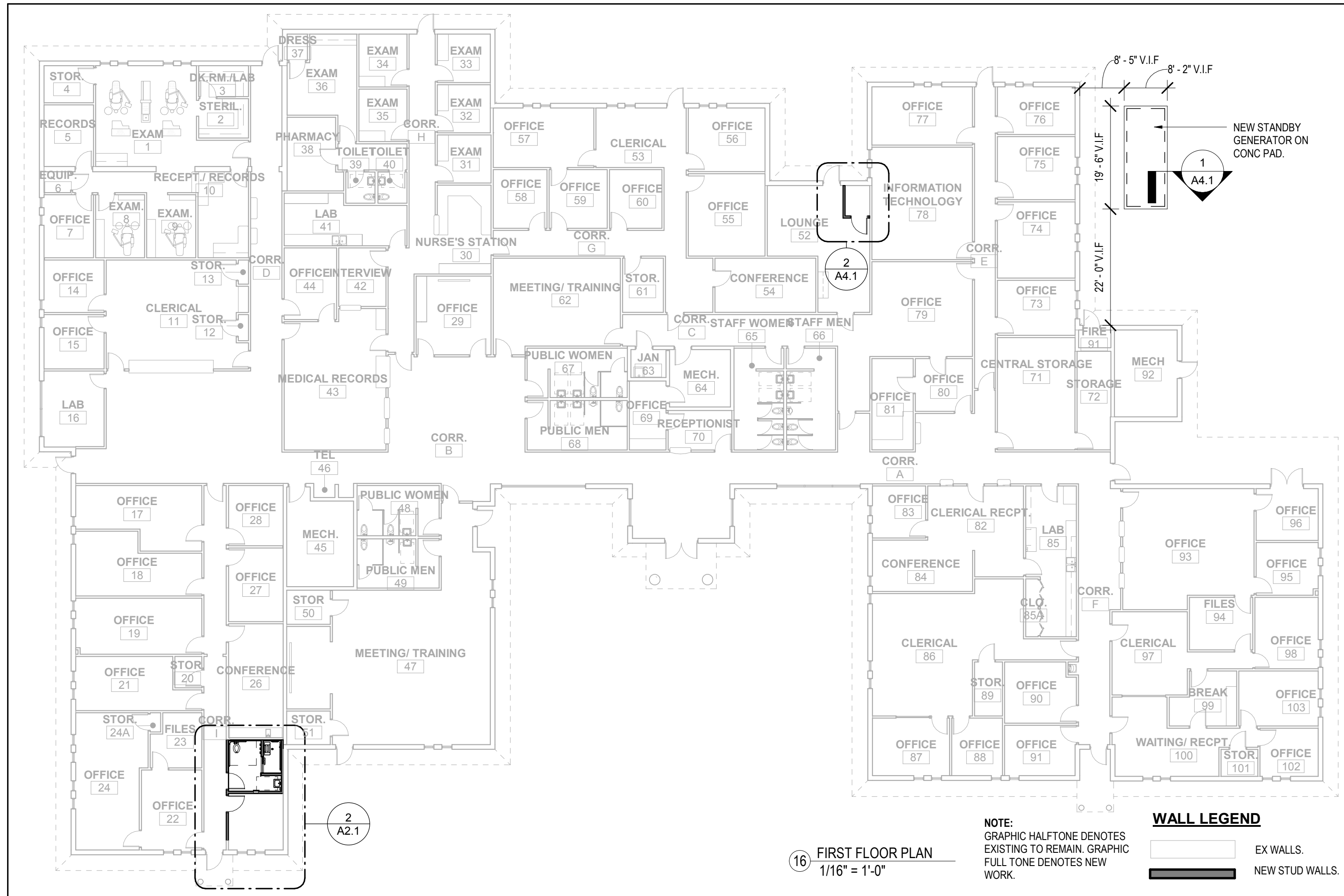
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ITEM	DESCRIPTION	BY
GB	GRAB BAR	CFCI
MIR1	MIRROR	CFCI
PTD	PAPER TOWEL DISPENSER/ WASTE RECEPTACLE (WR)	OFCI
SD	SOAP DISPENSER	OFCI
SND	SANITARY NAPKIN DISPOSAL	CFCI
TPD	TOILET PAPER DISPENSER	OFCI
RH	ROBE HOOK	CFCI
ULPP	UNDER LAVATORY PIPE PROTECTION	CFCI

NOTES:  
1. CONTRACTOR TO FURNISH AND INSTALL CONCEALED WOOD/METAL BLOCKING (WITHIN WALLS) AS REQUIRED TO FIRMLY SECURE WALL-MOUNTED EQUIPMENT AND/OR ACCESSORIES. ALL WOOD BLOCKING IN CONTACT WITH MASONRY IS TO BE PRESSURE TREATED.

CFCI: CONTRACTOR FURNISH AND INSTALL  
OFCI: OWNER FURNISH AND CONTRACTOR INSTALL

ACCESSORIES SCHED N.T.S

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FL AA26000857  
SARASOTA, FL 34237

TODD SWEET, AIA, LEED AP  
FL LIC # 1015932

HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS  
HEALTH DEPARTMENT- HVAC UPGRADE AND ADA RESTROOM SHOWER. PROJECT # 16065  
SEBRING, FLORIDA, 33870

100% CONSTRUCTION DOCUMENTS  
09/18/18

REV	DESCRIPTION	DATE
0	GRAPHIC SCALE: 0"	
SCALE: As indicated		
PROJECT MANAGER: TMS		
DRAWN BY: CKF		
A/E OF RECORD: TMS		
PROJECT NO: 18498		
SHEET TITLE: DETAILS, INTERIOR ELEVATIONS & NOTES		
SHEET No.: A4.1		

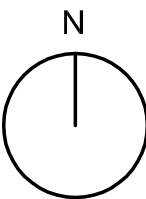
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2165 MAIN STREET  
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HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS  
HIGHLANDS COUNTY HEALTH DEPARTMENT- HVAC UPGRADE  
AND ADA RESTROOM/SHOWER  
GEORGE B. DAKE  
SEBRING, FLORIDA 33870

100% CONSTRUCTION DOCUMENTS  
09/17/18

PROJECT  
TITLE:

ISSUED FOR:

REV DESCRIPTION DATE

GRAPHIC SCALE:

0" 1"

SCALE:

PROJECT MANAGER: TMS

DRAWN BY: RAC

A/E OF RECORD: TMS

PROJECT NO: 18498

SHEET TITLE:

MECHANICAL NOTES,  
SCHEDULES AND  
LEGEND

SHEET No.:

M1.0

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MECHANICAL GENERAL NOTES:

- IN GENERAL, PLANS AND DIAGRAMS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- THE INTENT OF THE MECHANICAL NOTES ON THESE DRAWINGS IS TO CLARIFY THE SCOPE OF WORK AND ALERT THE CONTRACTOR OF EXISTING CONDITIONS. THE CONTRACTOR TO VISIT SITE AND VERIFY ALL CLEARANCES BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSET AND/OR CHANGES IN DUCT SIZES TO MEET FIELD CONDITIONS AND COORDINATE WITH ELECTRICAL, PLUMBING AND FIRE PROTECTION SUBCONTRACTOR BEFORE ANY CONSTRUCTION WORK.
- BIDDERS SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS INVOLVING THE WORK.
- SHOULD ANY CONFLICTS ARISE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE CONFLICT BEFORE ANY CHANGES ARE MADE. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL BEFORE PROCEEDING WITH ANY CHANGES.
- DEVIATIONS FROM THE CONTRACT DOCUMENTS MAY REQUIRED AS-BUILT DRAWINGS. IF REQUIRED, DURING FIELD INSPECTIONS AS-BUILT DRAWINGS PRODUCED BY OUR OFFICE WILL BE BILLED HOURLY.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL TRADES INSTALLATION SCHEDULES. FIXED WORK SUCH AS DUCTWORK AND PLUMBING SHALL BE INSTALLED PRIOR TO ANY TRADE WORK THAT CAN BE EASILY RELOCATED OR OFFSET SUCH AS ELECTRICAL CONDUITS, AND SMALL WATER LINES ETC.
- ALL AIR CONDITIONING WORK SHALL NOT INTERFERE WITH CLEARANCES REQUIRED FOR GENERAL AND MECHANICAL CONSTRUCTION. SHOULD AIR CONDITIONING WORK BE INSTALLED WHICH INTERFERES WITH THE WORK OF OTHER CONTRACTORS. SUCH WORK SHALL BE CHANGED AT NO ADDITIONAL COST.
- ALL WORK COVERED IN THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST PUBLISHED STANDARDS OF ASHRAE, AND NFPA.
- ALL MECHANICAL WORK SHALL MEET ALL THE REQUIREMENTS OF THE "FLORIDA BUILDING CODE 2017, 6TH EDITION.
- IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE CODE, THE CODE SHALL TAKE PRECEDENCE. THE MECHANICAL CONTRACTOR SHALL STUDY THE CONTRACT DOCUMENTS AND SUBMIT A BID BASED ON WORK WHICH COMPLIES WITH ALL CODE REQUIREMENTS. ANY CONFLICTS BETWEEN THE CONTRACTOR DOCUMENTS AND THE CODE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BID. THE COST OF ANY WORK WHICH ARISES OUT OF ANY CHANGES DUE TO CODE REQUIREMENTS SHALL BE PAID BY THE MECHANICAL CONTRACTOR.
- THE MECHANICAL CONTRACTOR SHALL CHECK ALL EQUIPMENT FOR CORRECT VOLTAGE RATING BEFORE INSTALLATION.
- IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR FOR THE ADVANCE ORDERING OF LONG LEAD ITEMS SO AS NOT TO DELAY OTHER TRADES RESULTING IN ANY DOWN OR LAG TIME.
- THE MECHANICAL CONTRACTOR SHALL THOROUGHLY CLEAN ALL AIR CONDITIONING EQUIPMENT.
- MECHANICAL CONTRACTOR SHALL ARRANGE TO PAY FOR ALL NECESSARY PERMITS, LICENSES AND INSPECTIONS AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
- ALL NEW MECHANICAL EQUIPMENT, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE.
- TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.
- DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
- UNLESS OTHERWISE NOTED, INSTALL DUCTWORK AS HIGH AS POSSIBLE, TIGHT TO BOTTOM OF STRUCTURE. COORDINATE DUCT ELEVATION WITH RAIN LEADERS, WATER PIPING, SANITARY DRAINS AND MAJOR ELECTRICAL CONDUITS.
- ALL WALL MOUNTED THERMOSTATS AND/OR TEMPERATURE SENSORS SHALL BE INSTALLED AT AN ELEVATION OF 44" ABOVE FINISHED FLOOR TO THE TOP UNLESS OTHERWISE NOTED ON DRAWINGS. LOCATION OF THE WALL MOUNTED THERMOSTAT SHALL BE COORDINATED WITH OTHER TRADES FOR A NEAT APPEARANCE. FINAL LOCATION OF THERMOSTAT SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER OR HIS REPRESENTATIVE IN THE FIELD.
- CONDENSATE DRAIN PIPING SHALL BE SCHEDULE 40 PVC. PROVIDE TRAP AT THE PACKAGE UNIT. ROUTE CONDENSATE TO DRYWELL.
- LOCATIONS OF DUCT MOUNTED SMOKE DETECTORS SHOWN ON THE DRAWINGS ARE REFERENCE LOCATIONS ONLY. THE FINAL PLACEMENT OF THE DETECTORS IN THE DUCTWORK SHALL MEET THE REQUIREMENTS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE READILY ACCESSIBLE DUCT ACCESS DOOR FOR INSPECTING AND SERVICING THE DETECTOR. EXISTING DUCT DETECTORS TO BE REUSED. DIVISION 15 CONTRACTOR SHALL INSTALL IN DUCTWORK.
- ALL NEW SUPPLY AND RETURN DUCTWORK SHALL BE EXTERNALLY INSULATED SHEET METAL CONSTRUCTION IN ACCORDANCE WITH LATEST SMACNA STANDARDS. ALL JOINTS & SEAMS SHALL BE DURABOND CMC-10-104.
- ALL INSULATION SHALL HAVE A MINIMUM FLAME SPREAD/SMOKE DEVELOPED RATING OF 25/50.
- DUCT WRAP INSULATION SHALL BE 2.2" THICK FLEXIBLE FIBERGLASS, 0.75 PCF DENSITY.

SPLIT SYSTEM A/C SCHEDULE

AIR HANDLING UNIT DATA								
MARK	-	AHU-1	AHU-2	AHU-3	AHU-4	AHU-5	AHU-6	AHU-7
TOTAL CAPACITY	BTUH	102,600	174,900	146,500	81,700	75,800	192,200	39,800
SENSIBLE CAPACITY	BTUH	68,700	119,200	98,800	56,300	51,600	118,300	28,200
SUPPLY AIR	CFM	2585	4660	3785	2305	1970	4545	1225
OUTSIDE AIR	CFM	400	700	600	350	300	700	200
ENTERING AIR TEMP DB/WB	F/F	78.0/65.5	78.1/65.6	78.2/65.7	78.3/65.8	78.0/65.5	78.1/65.6	78.3/65.8
LEAVING AIR TEMP DB/WB	F/F	54.0/53.8	54.0/53.8	54.0/53.8	54.0/53.8	54.0/53.8	54.0/53.8	54.0/53.8
EXT. STATIC PRESSURE	IN. H <sub>2</sub> O	1.0	1.25	1.0	1.25	1.0	1.5	0.5
MOTOR	H.P.	3.0	5.0	5.0	1.5	1.5	5.0	1/2
ELECTRICAL	V/ø/Hz	208/3/60	208/3/60	208/3/60	208/3/60	208/3/60	208/3/60	208/1/60
FILTER TYPE	-	2"-MERV 8	2"-MERV 8	2"-MERV 8	2"-MERV 8	2"-MERV 8	2"-MERV 8	1"-MERV 8
WEIGHT	LBS.	1311	1639	1399	1279	1321	1631	150
MANUFACTURER	-	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL NO.	-	39MN06W	39MN10W	39MN08W	39MN06W	39MN06W	39MN10W	FB4ANB042
CONDENSING UNIT DATA								
MARK	-	CU-1	CU-2	CU-3A,3B	CU-4	CU-5	CU-6	CU-7
OUTDOOR TEMP.	F	95	95	95	95	95	95	95
LIQUID LINE (SIZE)	IN. O.D.	③	③	③	③	③	③	③
SUCTION LINE (SIZE)	IN. O.D.	③	③	③	③	③	③	③
ELECTRICAL	V/ø/Hz	208/3/60	208/3/60	N/A	208/3/60	208/3/60	208/3/60	208/3/60
SEER/EER	-	11.2	12.5	N/A	12.9	12.5	13.6	13.0
M.C.A.	A	39.0	60.8	N/A	33.0	25.0	73.7	18.4
WEIGHT	LBS.	489	525	N/A	353	328	645	140
MANUFACTURER	-	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER
MODEL NO.	-	38AUD012	38AUD016	EXISTING	38AUZ008	38AUZ007	38AUD025	24ACC442A
NOTES	⑥	①②	①②	①②	①②	①②	①②	④⑤

- ① VERTICAL DRAW-THRU WITH FAN SECTION, VERTICAL COIL SECTION AND FLAT FILTER SECTION. ALL SECTIONS SHALL BE DOUBLE WALL CONSTRUCTION.
  - ② PROVIDE WITH STAINLESS STEEL DRAIN PAN.
  - ③ VERIFY WITH UNIT MANUFACTURER.
  - ④ PROVIDE AND INSTALL IN HORIZONTAL CONFIGURATION.
  - ⑤ PROVIDE WITH FACTORY INSTALLED ELECTRIC HEATER, SINGLE POINT POWER CONNECTION AND FACTORY THERMOSTAT. DUAL POINT POWER CONNECTION WILL NOT BE ACCEPTED.
- \* APPROVED EQUALS SHALL BE JCI/YORK, TRANE AND DAIKEN.

ELECTRIC DUCT HEATER SCHEDULE

MARK	-	EDH-1	EDH-2	EDH-3	EDH-4	EDH-5	EDH-6
FLOW	CFM	2585	4660	3785	2305	1970	4545
CAPACITY	KW	25	30	36	15	18	36
STEPS	-	2	2	2	2	2	2
ELECTRICAL	V/ø/HZ	208/3/60	208/3/60	208/3/60	208/3/60	208/3/60	208/3/60
DUCT SIZE	WIDTH/DEPTH	①	①	①	①	①	①
MAX PRESSURE DROP	IN. H <sub>2</sub> O	0.20	0.20	0.20	0.20	0.20	0.20
MANUFACTURER	-	WARREN	WARREN	WARREN	WARREN	WARREN	WARREN
NOTES	⑥	②③	②③	②③	②③	②③	②③

- ① FIELD VERIFY DUCT DIMENSIONS PRIOR TO ORDERING.
  - ② UNIT PROVIDED WITH DOOR INTERLOCKED DISCONNECT, AIR FLOW SWITCH AND MAGNETIC CONTACTORS.
  - ③ UNIT TO BE REFD FROM EXISTING ELECTRICAL CIRCUIT.
- \* APPROVED EQUALS SHALL BE NEPTRONIC, REDD-1 AND ENVIRO-TEC.

AIR DEVICE SCHEDULE

MARK	TYPE	MATERIAL	FINISH	MANUFACTURER AND MODEL	REMARKS
AD-1	CEILING SUPPLY	ALUMINUM	WHITE BAKED ENAMEL	MATCH EXISTING	①

- ① PROVIDE 12x12 MODULE WITH 6"ø NECK.
- \* APPROVED EQUALS SHALL BE METALAIR AND NAILOR.

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	NEW DUCTWORK, PIPING, OR EQUIPMENT
	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO REMAIN
	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO BE REMOVED
	SUPPLY OR OUTSIDE AIR DUCT SECTION
	RETURN DUCT SECTION
	DUCT DETECTOR

FAN SCHEDULE

MARK	-	EF-1
SERVICE	-	EXHAUST
AREA SERVED	-	TOILET ROOM
AIR QUANTITY	CFM	95
EXT. STATIC PRESS.	IN. H <sub>2</sub> O	0.50
FAN TYPE	-	CEILING VENT
DRIVE	-	DIRECT
SONES	-	2.7
MOTOR	H.P./WATTS	80.2W
MOTOR SPEED	RPM	950
ELECTRICAL	V/ø/HZ	120/1/60
CONTROL	-	INTERLOCK W/ LIGHTS
MANUFACTURER	-	GREENHECK
MODEL	-	SP-B110
NOTES	⑥	①②③

- ① PROVIDE AND INSTALL WITH DISCONNECT, BACKDRAFT DAMPER AND WHITE EXHAUST GRILLE.
  - ② PROVIDE WITH WALL CAP.
  - ③ PROVIDE AND INSTALL SOLID STATE SPEED CONTROL AT FAN FOR BALANCING.
- \* APPROVED EQUALS SHALL BE COOK AND PENN.

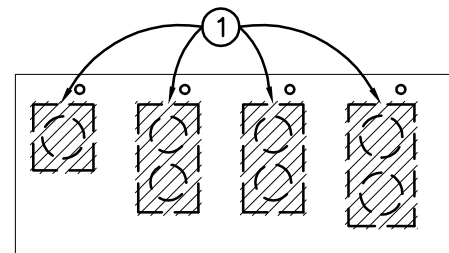
HVAC CONTROLS SCOPE OF WORK

THIS FACILITY IS CURRENTLY CONTROLLED BY A VARIABLE VOLUME 'DX' SYSTEM WITH ZONE DAMPERS AND BY-PASS DAMPERS. THE SCOPE OF WORK FOR THIS PROJECT INCLUDES AN UPGRADE OF THE EXISTING CONTROL SYSTEM. THIS UPGRADE SHALL INCLUDE ALL COMPONENTS, WIRING, PROGRAMMING AND TRAINING REQUIRED FOR A FULLY FUNCTIONAL "TURN-KEY" INSTALLATION. THE EXISTING ZONE DAMPERS MAY BE REUSED, HOWEVER, THE EXISTING ACTUATORS, THERMOSTATS AND ELEMENTS REQUIRED FOR THE BY-PASS DAMPERS SHALL BE REPLACED. THE NEW SYSTEM SHALL BE WEB-BASES AND ACCESSIBLE BY HIGHLANDS COUNTY'S STAFF.

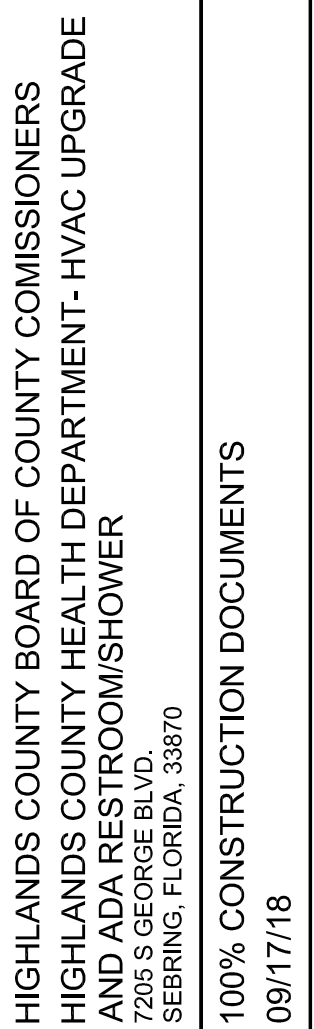
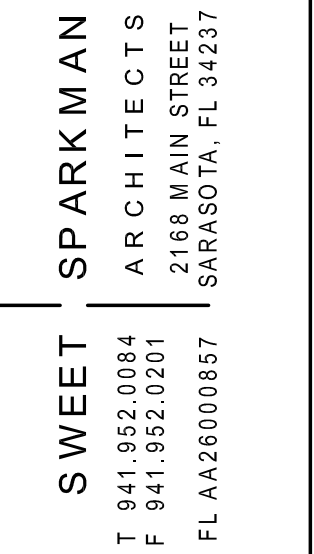
DUCT CLEANING:

1. PROVIDE AN ALTERNATE PRICE TO CLEAN ALL DUCTWORK IN THIS FACILITY. THIS DUCT IS INTERNALLY INSULATED.
2. REPAIR AND RESEAL ALL TEARS IN THE EXISTING DUCT INSULATION, BOTH INTERNAL AND EXTERNAL.
3. CONTACT VACUUMING AND MECHANICAL AGITATION. REMOVE ALL DEBRIS FROM INSIDE SURFACE AREAS OF DUCTWORK THRU A COMBINATION OF MECHANICAL AGITATION AND HIGH PRESSURE VACUUMING. SEAL ALL INTERNAL DUCT LINER SURFACES WITH FOSTER'S FULL DEFENSE FUNGICIDAL PROTECTIVE COATING 40-25.





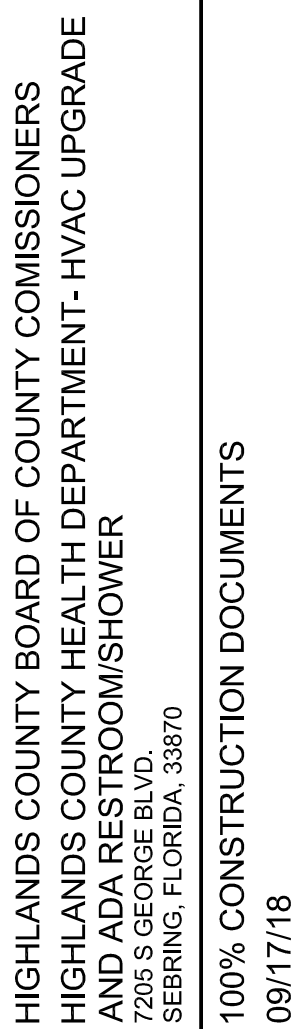
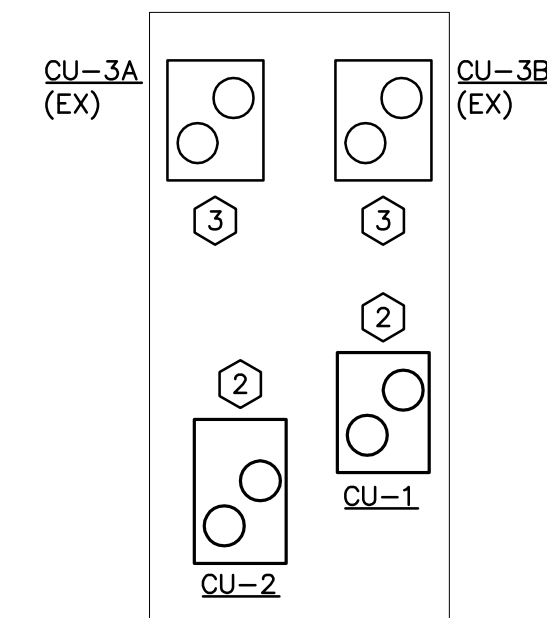




- 1 EXISTING ZONE DAMPER TO BE REUSED. UPGRADE THERMOSTAT AND ACTUATOR TO FUNCTION WITH NEW CONTROL SYSTEM.
- 2 REPLACE EXISTING AIR HANDLER AND CONDENSING UNIT WITH NEW. RECONNECT TO EXISTING DUCTWORK AND CONDENSATE DRAIN LINES.
- 3 EXTEND NEW DUCT TO EXISTING DUCT/AIR DEVICE. CAP PREVIOUS CONNECTION POINT AIR TIGHT AND REINSULATE.
- 4 REPLACE EXISTING THERMOSTAT WITH NEW TO FUNCTION WITH NEW CONTROL SYSTEM.
- 5 NEW CONDENSING UNITS. ROUTE NEW REFRIGERANT LINES BELOW GRADE IN PVC TO ABOVE CEILING AND TO UNITS. EXISTING SLEEVES MAY BE REUSED, IF FEASIBLE OTHERWISE REMOVE OLD SLEEVES AND PROVIDE NEW.
- 6 EXTEND NEW DUCT AND 12x12 AD-1 (TO MATCH EXISTING) FROM EXISTING DUCT SYSTEM.
- 7 NEW EXHAUST FAN EXTEND DUCT TO NEW WALL CAP.





[illegible]

SCALE: 1/8"=1'-0" /4070-M2.2

- ① EXISTING ZONE DAMPER TO BE REUSED. UPGRADE THERMOSTAT AND ACTUATOR TO NEW CONTROL SYSTEM AS REQUIRED.
- ② NEW CONDENSING UNIT. TRENCH BELOW GRADE TO MECHANICAL ROOM 92 AND ROUTE NEW REFRIGERANT LINES IN PVC SLEEVE. EXISTING SLEEVE MAY BE UTILIZED IF POSSIBLE. REPAIR AND PATCH ALL DAMAGED SIDEWALKS AND DRIVEWAYS.
- ③ EXISTING CONDENSING UNIT TO BE REUSED.
- ④ RELOCATE EXISTING AIR HANDLER TO POSITION INDICATED. EXTEND DUCTWORK AND REFRIGERANT PIPING TO NEW LOCATION. REPLACE EXISTING THERMOSTAT WITH NEW UNIT COMPATIBLE WITH NEW CONTROL SYSTEM.

NOTE:

INCLUDE ALL COSTS TO REVISE FIRE PROTECTION SYSTEM TO  
ACCOMMODATE NEW FLOOR PLAN.

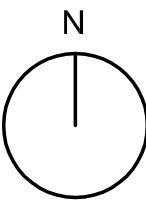






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2165 MAIN STREET  
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HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS  
HIGHLANDS COUNTY HEALTH DEPARTMENT- HVAC UPGRADE  
AND ADA RESTROOM/SHOWER  
2200 GOLFVIEW BLVD  
SEBRING, FLORIDA 33870

100% CONSTRUCTION DOCUMENTS  
09/17/18

REV	DESCRIPTION	DATE
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GRAPHIC SCALE:

0" 1"

SCALE:

PROJECT MANAGER: TMS

DRAWN BY: RC

A/E OF RECORD: TMS

PROJECT NO: 18498

SHEET TITLE:

ENLARGED  
MECHANICAL FLOOR  
PLANS

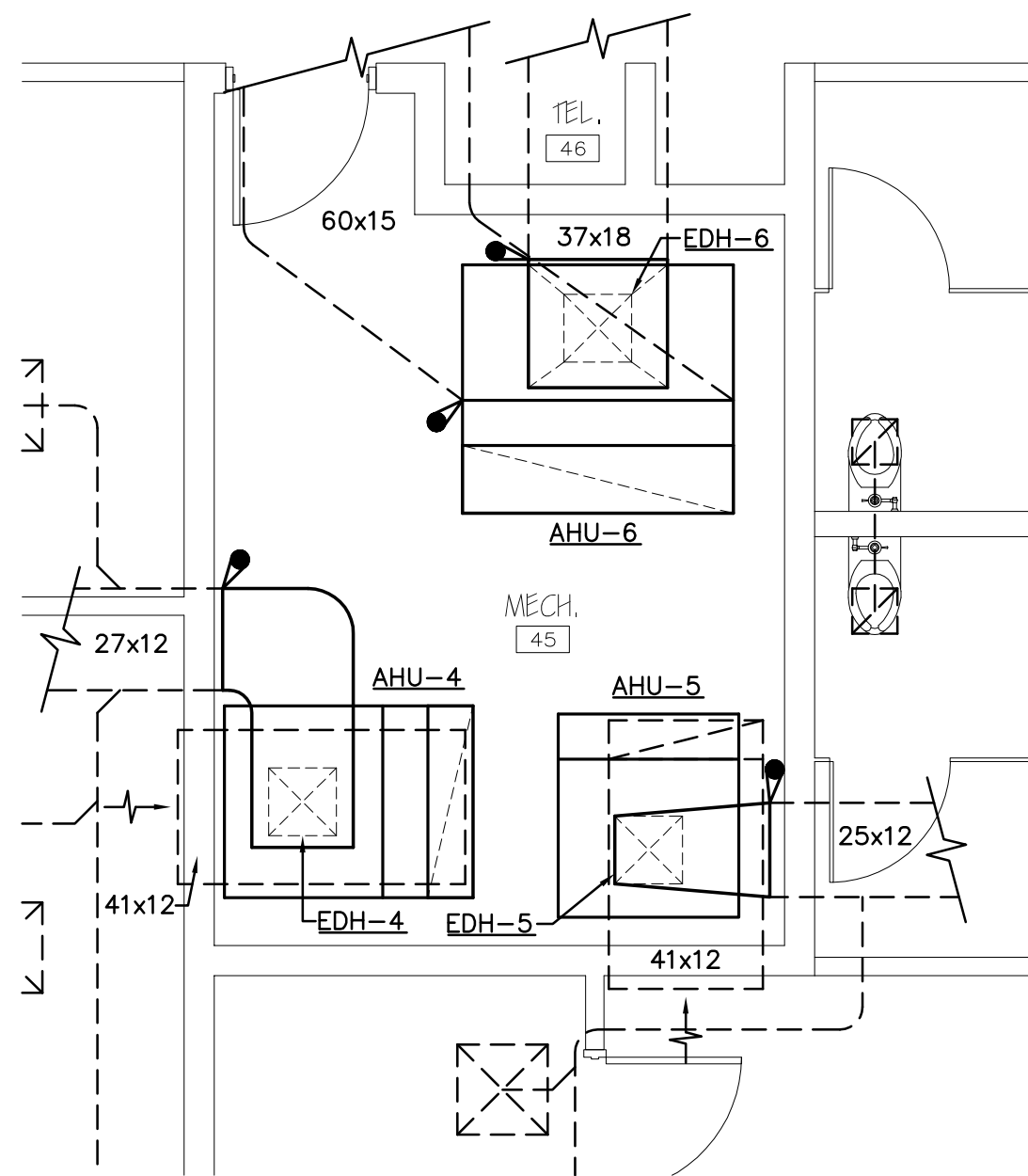
SHEET No.:

M2.3

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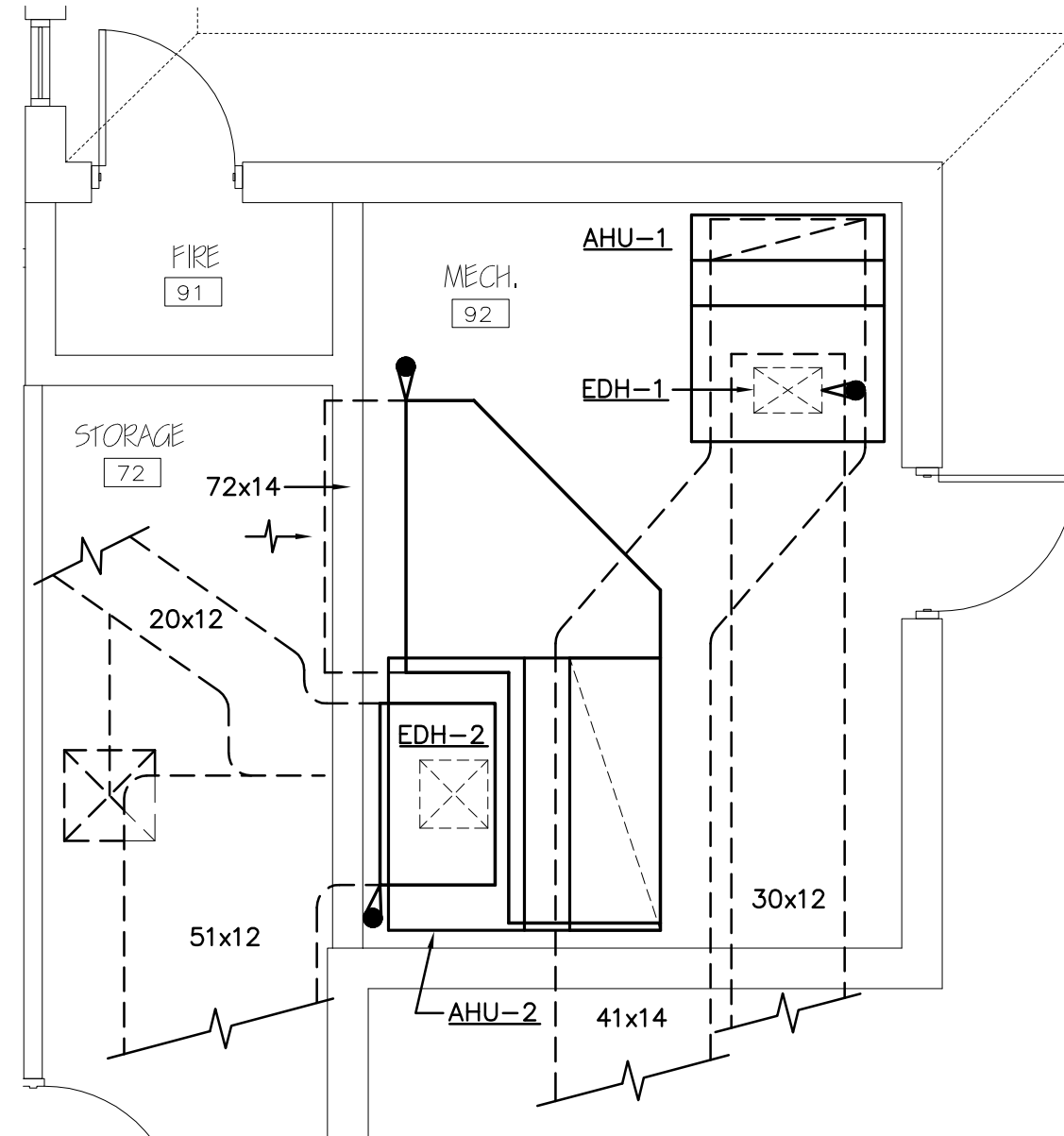
GENERAL MECHANICAL NOTES:

- REPLACE EXISTING AIR HANDLER AND DUCT HEATER WITH NEW UNITS. RECONNECT TO EXISTING DUCTWORK AND CONDENSATE DRAINAGE SYSTEMS. PROVIDE NEW DUCT TRANSITIONS AS REQUIRED TO CONNECT TO NEW UNITS.
- ROUTE NEW REFRIGERANT LINES TO NEW CONDENSING UNITS. PIPING TO BE SLEEVED WITH PVC SLEEVES. THE SITE'S EXISTING PVC SLEEVES MAY BE UTILIZED TO THE GREATEST EXTENT POSSIBLE. INCLUDE ALL COSTS FOR ALL TRENCHING AND DEMOLITION AND ALL REPAIR WORK TO REPLACE SIDEWALKS, DRIVEWAYS, SOD AS REQUIRED.



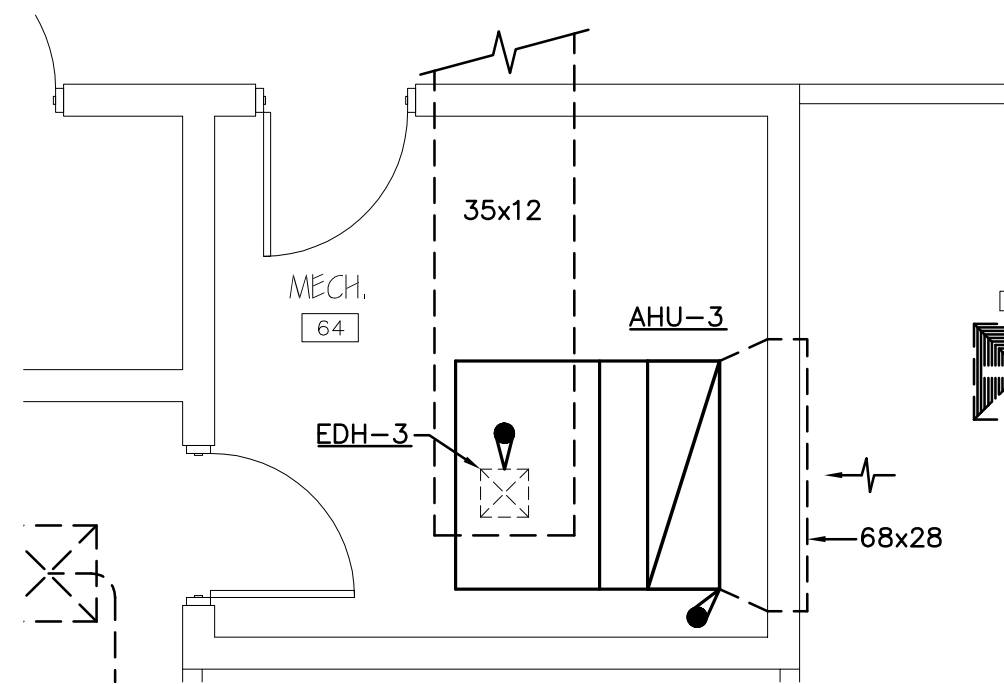
ENLARGED FLOOR PLAN  
- MECHANICAL ROOM 45

SCALE: 1/4"=1'-0" /4070-M2.3



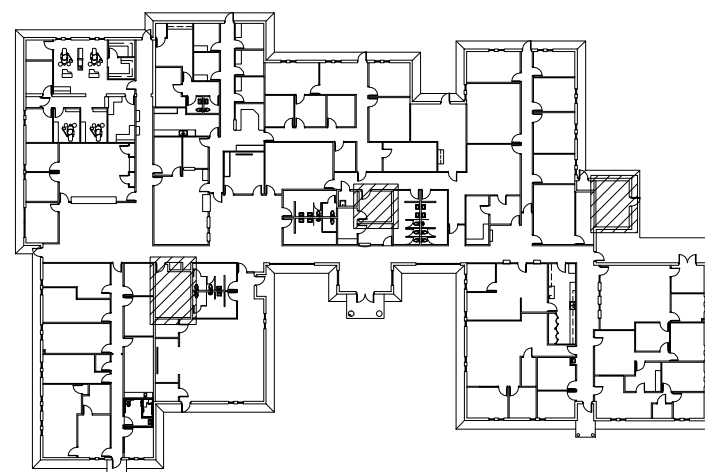
ENLARGED FLOOR PLAN  
- MECHANICAL ROOM 92

SCALE: 1/4"=1'-0" /4070-M2.3



ENLARGED FLOOR PLAN  
- MECHANICAL ROOM 64

SCALE: 1/4"=1'-0" /4070-M2.3



KEY PLAN

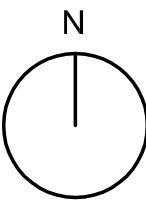
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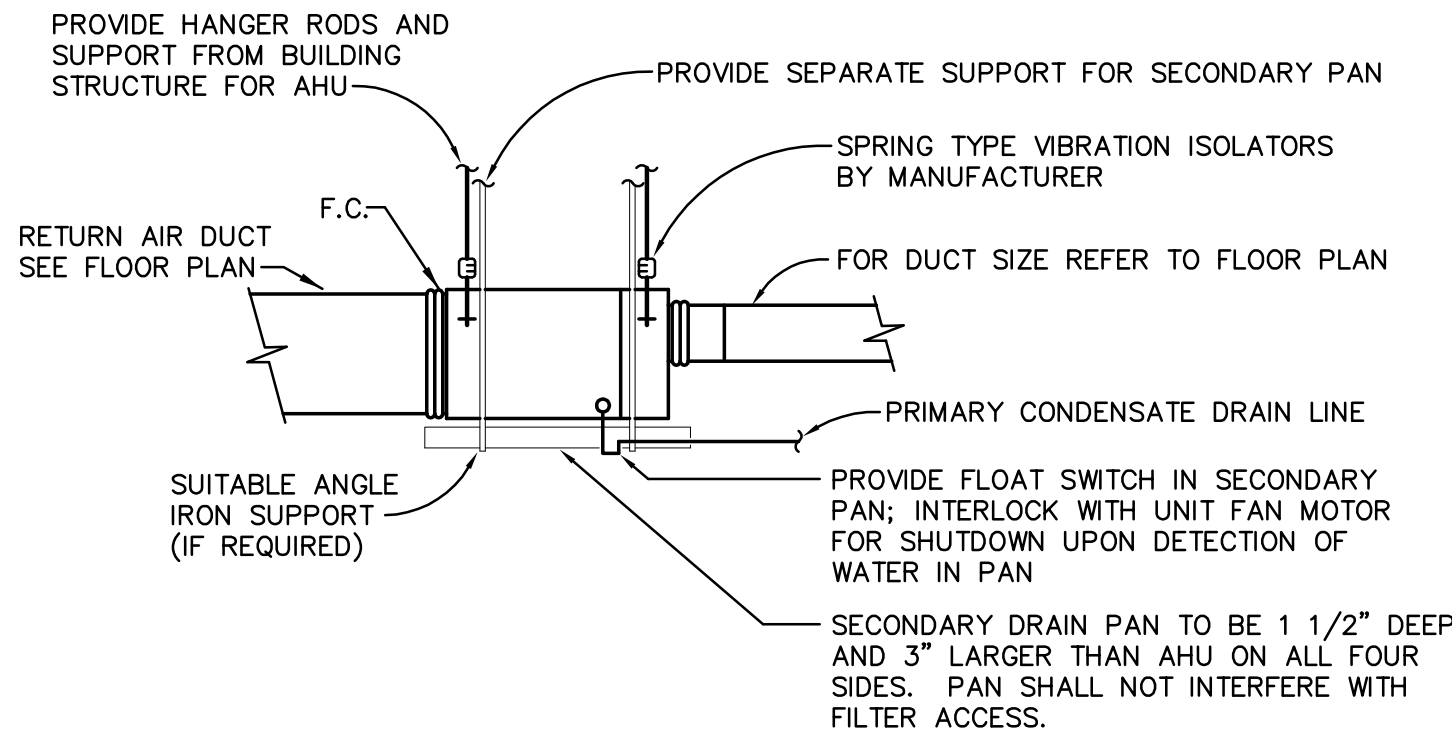
100% CONSTRUCTION DOCUMENTS  
09/17/18

REV	DESCRIPTION	DATE
GRAPHIC SCALE:		
0" 1"		
SCALE:		
PROJECT MANAGER: TMS		
DRAWN BY: RAC		
A/E OF RECORD: TMS		
PROJECT NO: 18498		
SHEET TITLE:		

MECHANICAL DETAILS

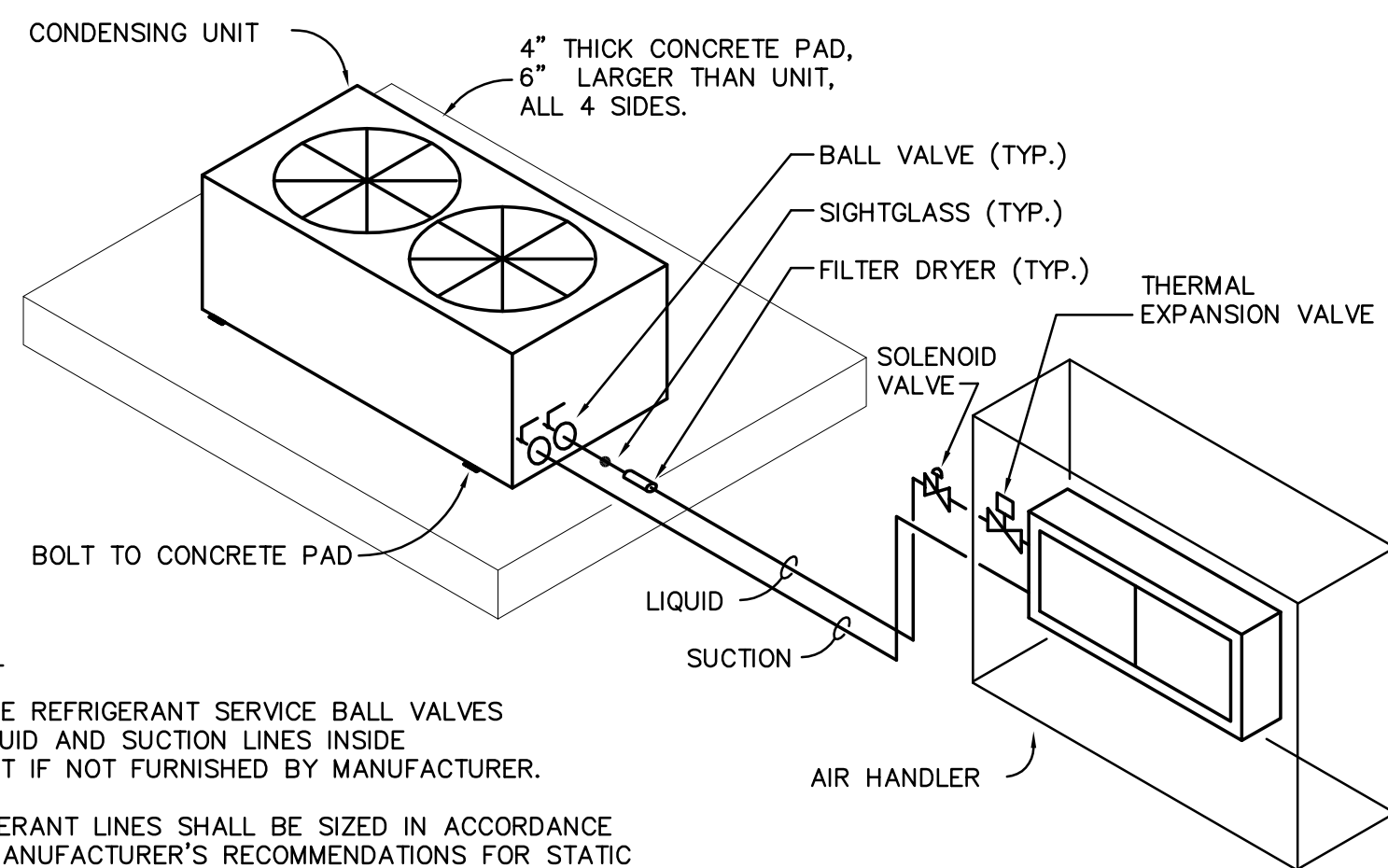
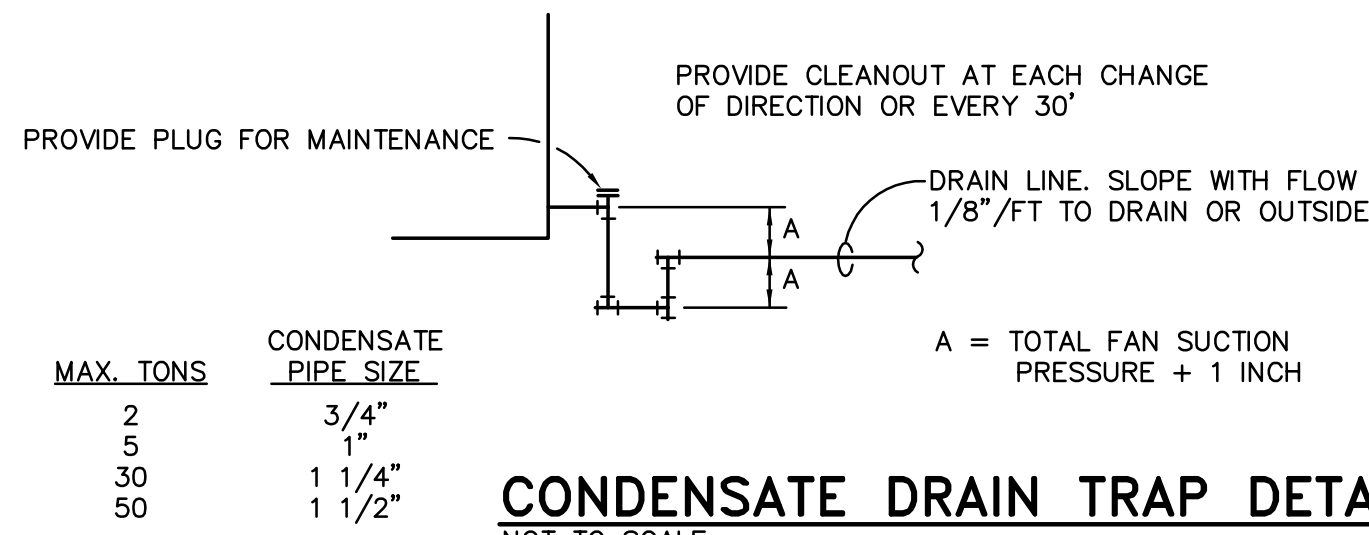
SHEET No.:  
**M3.0**

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### AIR HANDLING UNIT MOUNTING DETAIL

NOT TO SCALE

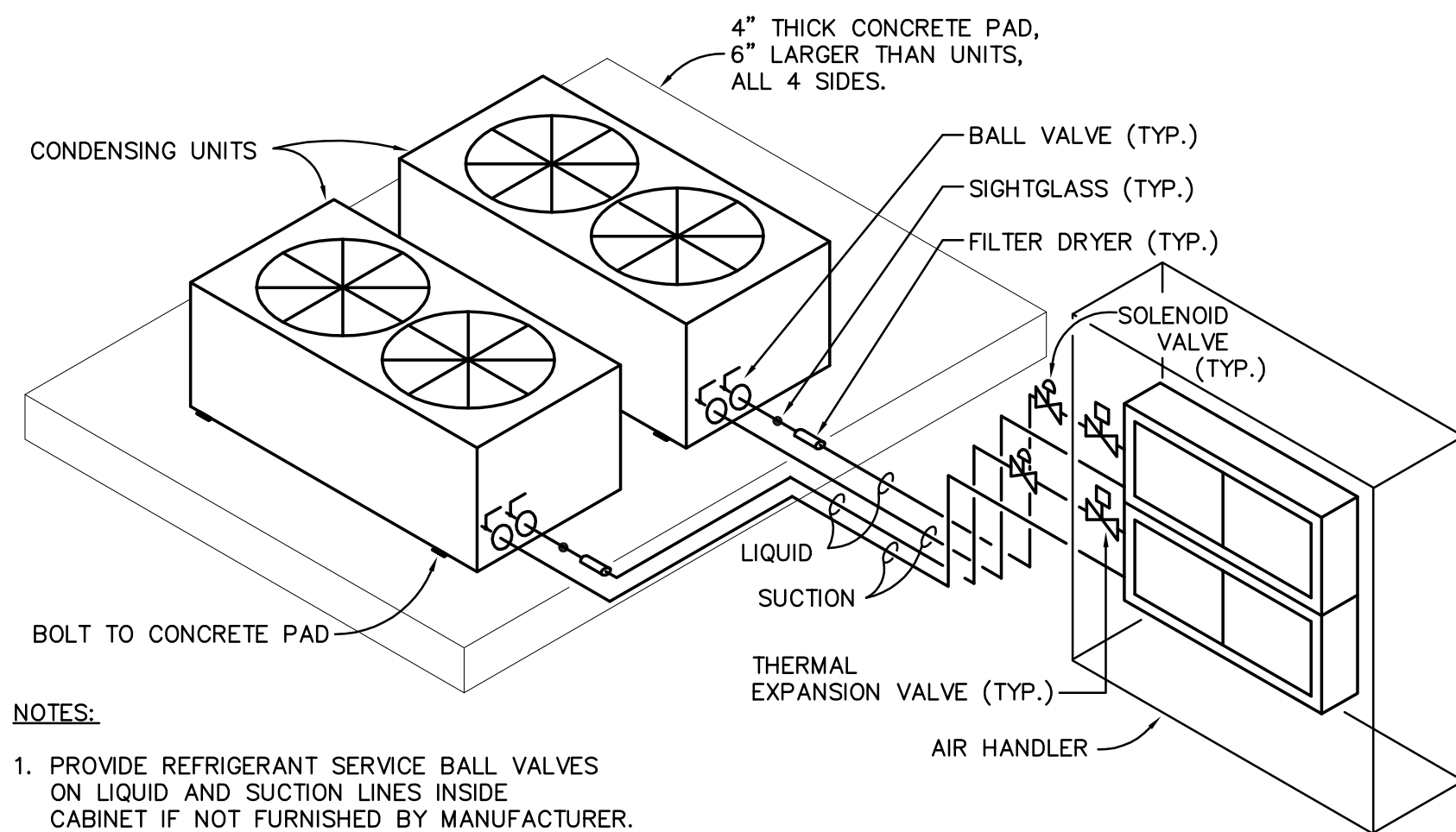


#### NOTES:

1. PROVIDE REFRIGERANT SERVICE BALL VALVES ON LIQUID AND SUCTION LINES INSIDE CABINET IF NOT FURNISHED BY MANUFACTURER.
2. REFRIGERANT LINES SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR STATIC LIFTS AND TOTAL LENGTHS REQUIRED.

### REFRIGERANT PIPING ISOMETRIC

NOT TO SCALE



#### NOTES:

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2. REFRIGERANT LINES SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR STATIC LIFTS AND TOTAL LENGTHS REQUIRED.

### REFRIGERANT PIPING ISOMETRIC

NOT TO SCALE



GENERAL NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE AND THE 2014 NATIONAL ELECTRICAL CODE. WORK SHALL ALSO COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF LOCAL LAWS AND ORDINANCES.
- CONTRACTOR SHALL MAKE A THOROUGH EXAMINATION OF THE SITE AND THE CONTRACT DOCUMENTS. NO CLAIM FOR EXTRA COMPENSATION WILL BE RECOGNIZED IF DIFFICULTIES ARE ENCOUNTERED WHICH AN EXAMINATION OF SITE CONDITIONS AND CONTRACT DOCUMENTS PRIOR TO EXECUTING CONTRACT WOULD HAVE REVEALED.
- ELECTRICAL CONTRACTOR SHALL ARRANGE FOR ALL NECESSARY PERMITS, LICENSES, UTILITY COORDINATION, AND INSPECTIONS AS REQUIRED BY THE CITY OR UTILITY COMPANY. CONTRACTOR IS RESPONSIBLE FOR ALL EQUIPMENT REQUIRED BY UTILITY COMPANY AND SHOULD INCLUDE NECESSARY COSTS IN BID.
- CONTRACTOR SHALL LEGIBLY MARK-UP A SET OF 24"x36" DRAWINGS TO REFLECT AS-BUILT CONDITIONS, AND TURN OVER TO ARCHITECT WITHIN 30 DAYS AFTER THE DATE OF PROJECT ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION SHALL BE PROVIDED TO THE BUILDING OWNER.
- AN OPERATING MANUAL AND MAINTENANCE MANUAL BE PROVIDED TO THE BUILDING OWNER PER FBC ENERGY CODE §405.6.4.2. THE MANUALS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:
  - SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
  - OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
  - NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY.
- ALL EQUIPMENT INSTALLED SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) AND/OR LISTED AND LABELED AS AN ASSEMBLY BY AN NRTL PER NEC ARTICLE 90.7.

WIRE/RACEWAY:

- ALL CONDUCTORS SHALL BE COPPER. CONDUCTOR INSULATION SHALL BE DUAL TYPE THHN/THWN 75°C (167°F) FOR DRY, DAMP, AND WET LOCATIONS. CONDUCTOR INSULATION WITH SINGLE TYPE MARKING THHN 90°C (194°F) MAY BE USED FOR DRY LOCATIONS ONLY. ALL CONDUCTORS SHALL BE COLOR CODED AS REQUIRED BY NEC AND FURTHER IDENTIFIED AND CODED AS SPECIFIED HEREINAFTER. COLOR CODING SHALL BE BY MEANS OF COLORED INSULATING MATERIAL, COLORED BRAID OR JACKET OVER THE INSULATION OR BY MEANS OF SUITABLE COLORED, PERMANENT, NON-AGING, INSULATING TAPE APPLIED TO CONDUCTORS AT EACH CABINET OR JUNCTION POINT. THE COLOR CODING SHALL BE ACCOMPLISHED AS THE CONDUCTORS ARE INSTALLED. THE FOLLOWING SYSTEMS OF COLOR CODING SHALL BE STRICTLY ADHERED TO:

- A) GROUND LEADS: GREEN  
B) 120/208 VOLT UNGROUNDED PHASE WIRES:  
    PHASE A: BLACK  
    PHASE B: RED  
    PHASE C: BLUE  
    NEUTRAL: WHITE

THE COLOR CODE ASSIGNED TO EACH PHASE WIRE SHALL BE CONSISTENTLY CONSISTENTLY FOLLOWED THROUGHOUT.

- THE CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS COMBINED SHALL BE SIZED FOR A MAXIMUM OF 5 PERCENT VOLTAGE DROP TOTAL PER FBC §405.6.3.
- ALL INTERIOR BUILDING CONDUCTORS SHALL BE RUN IN THIN WALL CONDUIT AND THIN WALL CONDUIT SHALL BE UNDERWRITERS' APPROVED GALVANIZED ELECTRICAL METALLIC TUBING. COUPLINGS AND CONNECTORS SHALL BE STEEL COMPRESSION TYPE, ZINC OR CADMIUM PLATED. BELOW GRADE CONDUITS SHALL BE SCHEDULE 40 PVC WITH RIGID METAL ELBOWS AND RISERS. RIGID METAL CONDUIT BELOW GRADE OR IN CONCRETE SHALL BE COATED WITH BITUMASTIC OR OR SLEEVED WITH 10 MIL POLYETHYLENE. SITE CONDUITS SHALL BE ROUTED AT 24" BELOW GRADE AND CONDUITS ROUTED BELOW BUILDINGS SHALL BE AT 36". EXTERIOR CONDUITS SHALL BE RIGID GALVANIZED STEEL.

PENDING OWNER APPROVAL METAL CLAD CABLE (TYPE MC) IS ACCEPTABLE PROVIDED CABLE IS SUPPLIED WITH AN INSULATED GREEN EQUIPMENT GROUND CONDUCTOR AND MAY ONLY BE USED UNDER THE FOLLOWING CONDITIONS:

- A) SHORT RUNS IN WALLS.  
B) BETWEEN OUTLET BOXES IN HUNG OR FURRED CEILINGS, AND FLUSH TYPE LIGHTING FIXTURES AND TROUGH UNITS.  
C) CONNECTION TO EQUIPMENT IN SHELVING AND SHALL NOT BE USED FOR ANY CIRCUIT WITH OVER A 20 AMP CIRCUIT BREAKER.  
D) HOME-RUNS OF MULTI-CONDUCTOR CABLE WILL BE ALLOWED. CABLING MUST BE PROPERLY SUPPORTED AND COMPLY WITH ALL NEC CODES. MAXIMUM OF 9 CIRCUITS OR 13 CONDUCTORS IN A HOME-RUN.  
E) SHALL BE APPROVED FOR BRANCH CIRCUIT WIRING (20 AMPS & UNDER ONLY) IN CEILING SPACES AND WITHIN WALLS.

METAL CLAD CABLE IS NOT ACCEPTABLE UNDER THE FOLLOWING CONDITIONS:

- A) BRANCH CIRCUITS OVER 20 AMPS.  
B) WHERE CABLING WILL BE EMBEDDED IN CONCRETE.  
C) WHERE CABLING WILL BE EXPOSED TO MOISTURE.  
D) WHERE PROHIBITED BY LOCAL CODE.

- COMBINING OF CIRCUITS IN SAME RACEWAY, OTHER THAN THOSE INDICATED ON DRAWINGS, WILL NOT BE PERMITTED.
- ALL RACEWAYS SHALL BE PROPERLY ALIGNED, GROUPED, AND SUPPORTED BY MECHANICAL TYPE "CADDY" CLIPS AT INTERVALS NOT EXCEEDING 8 FEET.
- ALL RACEWAYS WITH NO. 10 OR 12 AWG PHASE CONDUCTORS FOR RECEPTACLES, LIGHTING FIXTURES AND SIMILAR CIRCUITS SHALL BE PROVIDED WITH A PARITY SIZED GREEN EQUIPMENT GROUND CONDUCTOR. GROUND CONDUCTOR SHALL BE INSTALLED IN ENTIRE RACEWAY SYSTEM INCLUDING WALL SWITCHES AND FLEXIBLE CONDUIT TO LIGHT FIXTURES. EQUIPMENT GROUND CONDUCTOR SIZES FOR CIRCUITS WITH PHASE CONDUCTORS LARGER THAN NO. 12 AWG ARE INDICATED ON DRAWINGS. GROUND CONDUCTORS SHALL BE CONNECTED TO GROUND BUSS IN PANELBOARDS.
- RACEWAY PENETRATIONS OF FIRE RATED WALLS AND/OR FLOORS SHALL BE SEALED TO MAINTAIN INTEGRITY OF CONSTRUCTION. ALL PRODUCTS, MATERIALS AND METHODS OF INSTALLATION SHALL BE UL APPROVED AND MEET NFPA.

FIRE ALARM:

- THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL APPLICABLE SECTIONS OF NFPA 72 & 101.
- THE FIRE ALARM SYSTEM CONDUCTORS WILL BE ROUTED IN CONDUIT.
- FIRE ALARM CONTRACTOR SHALL SUBMIT COMPLETE FIRE ALARM PLANS TO THE BUILDING DEPARTMENT AND ENGINEER FOR APPROVAL. THE PLANS SHALL INCLUDE:
  - BATTERY CALCULATIONS
  - COMPLETE FLOOR PLANS SHOWING EACH DEVICE WITH ITS ASSOCIATED NUMBER/LABEL AND MANUFACTURE'S MODEL NUMBER
  - COMPLETE RISER AND/OR WIRING DIAGRAMS SHOWING ALL TERMINATION DEVICES, CONDUCTOR TYPES AND QUANTITIES, AND DEVICE NUMBERS/LABELS.
  - COMPLETE FLOOR PLANS SHOWING EACH STROBE DEVICE WITH ITS ASSOCIATED CANDELA RATING
  - ALL MANUFACTURE'S LITERATURE SHOWING DEVICE POWER REQUIREMENTS AND THE CLASS/STYLE OF EACH DEVICE.
- ALL FIRE ALARM DEVICES/COMPONENTS SHALL BE UL LABELED FOR FIRE SERVICE USE.
- PROVIDE SURGE DEVICES FOR SIGNAL AND INITIATION CIRCUITS, 120V POWER, AND INCOMING/OUTGOING COMMUNICATIONS LINES PER MANUFACTURE'S RECOMMENDATIONS.

GROUNDING:

- THE ENTIRE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED AS REQUIRED BY NATIONAL ELECTRICAL CODE. ALL METALLIC RACEWAYS SHALL BE MECHANICALLY AND ELECTRICALLY SECURE AT ALL JOINTS AND AT ALL BOXES, CABINETS, FITTINGS AND EQUIPMENT.

OUTLET BOXES/DEVICES:

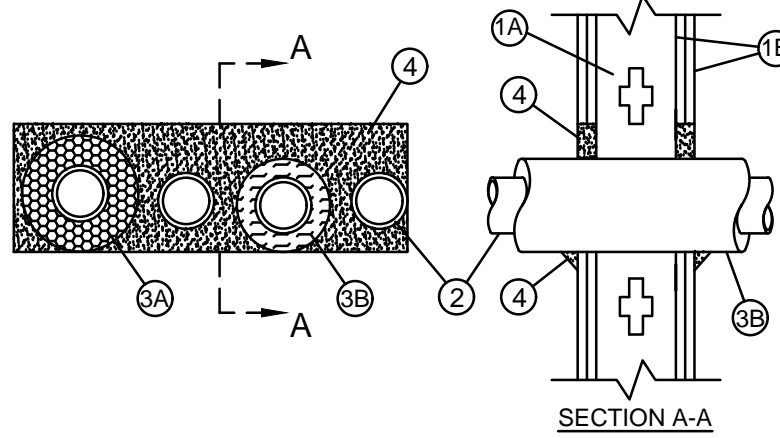
- ALL OUTLET BOXES SHALL BE RIGIDLY MOUNTED AND SHALL BE EQUIPPED WITH SUITABLE SCREW FASTENED COVERS. OPEN KNOCKOUTS OR HOLES IN BOXES SHALL BE PLUGGED WITH SUITABLE BLANKING DEVICE.
- OUTLET BOXES SHALL BE 4 INCH SQUARE x 2-1/8" DEEP. OUTLET BOXES LOCATED ABOVE THE CEILING SHALL BE LEGIBLY IDENTIFIED WITH BRANCH CIRCUIT NUMBER OF CIRCUIT TERMINATED WITHIN BY MEANS OF BLACK PERMANENT MARKER.

SWITCHGEAR:

- PANELBOARDS SHALL BE MANUFACTURED BY SQUARE 'D' COMPANY, TYPE AS SHOWN ON DRAWINGS OR APPROVED EQUALS: EATON & SIEMENS. FURNISH WITH COPPER BUS BARS, COPPER EQUIPMENT GROUND BUS AND BOLT-ON CIRCUIT BREAKERS.
- DISCONNECT SWITCHES SHALL BE HEAVY-DUTY TYPE AND MANUFACTURED MANUFACTURED BY SQUARE 'D' COMPANY OR APPROVED EQUAL: EATON OR SIEMENS. FUSES SHALL BE DUAL ELEMENT, CARTRIDGE TYPE. FUSES SHALL BE BY ONE MANUFACTURER: BUSSMAN "FUSE-TON" OR CHASE-SHAMMUT "TRIONIC."
- INSTALL ENGRAVED PLASTIC-LAMINATE LABELS ON EACH MAJOR UNIT OF ELECTRICAL EQUIPMENT IDENTIFYING PANELBOARD NAME OR EQUIPMENT SERVING. EXAMPLES ARE: PANELBOARDS, DISCONNECT SWITCHES, AND MOTOR STARTERS, I.E. LABELS SHALL BE 1/16" THICK BLACK PLASTIC LAMINATE WITH 3/8" WHITE CORE PLIE LETTERS.
- PANELBOARD DIRECTORY CARDS SHALL BE TYPEWRITTEN WITH ACCURATE AND CURRENT INFORMATION BY THE CONTRACTOR AT THE END OF CONSTRUCTION.
- ALL MULTI-WIRE BRANCH CIRCUIT BREAKERS ARE TO BE TIED TOGETHER BY AN IDENTIFIED HANDLE-TIE OR BY A COMMON TRIP CIRCUIT BREAKER PER 2014 NEC SECTION 210.4(B).
- EACH MULTI-WIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH A MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES PER NEC ARTICLE 210.4(B).

RATED THRU WALL PIPE PENETRATION

System No. W-L-8010  
May 19, 2005  
F Ratings - 1 & 2 Hr (See Item 1)  
T Ratings - 1/4, 3/4, 1, 1-1/2 and 1-3/4 Hr (See Items 2 & 3)



1. Wall Assembly - The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

- A. Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. by 4 in. (51 mm to max 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC.  
B. Gypsum Board - Nom 5/8 in. (16 mm) thick gypsum wallboard, as specified in the individual Wall and Partition Design. Max area of opening is 65-1/4 sq in. (421 cm2) with max dimension of 14-1/2 in. (368 mm).

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly.

2. Through Penetrants - A max of four pipes, conduits or tubing to be installed within the opening. The space between pipes, conduits or tubing shall be min 1/2 in. to max 1-5/16 in. (13 mm to max 33 mm). The space between pipes, conduits or tubing and periphery of opening shall be min 1-3/16 in. (30 mm) for uninsulated copper tubes and copper pipes (Items 2C and 2D) and 0 in. (point contact) for insulated copper tubes and copper pipes and uninsulated steel pipes and conduit (Item 2B). The space between pipes, conduits or tubing and periphery of opening shall be max 1-5/16 in. (33 mm). Pipes, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

- A. Steel Pipe - Nom 2 in. (51 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.  
B. Conduit - Nom 2 in. (51 mm) diam (or smaller) steel electrical metallic tubing or steel conduit.  
C. Copper Tubing - Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing.  
D. Copper Pipe - Nom 2 in. (51 mm) diam (or smaller) Regular (or heavier) copper pipe.

When uninsulated steel pipe or conduit is used, T Rating is 3/4 hr and 1-1/2 hr for 1 and 2 hr rated assemblies, respectively.  
When uninsulated copper tubing or pipe is used, T Rating is 1/4 hr for both 1 and 2 hr rated assemblies.

- 3A. Pipe Covering\* (Optional) - Nom 1 in. (25 mm) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.

See Pipe and Equipment Covering - Materials\* (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

When pipe covering is used on all through penetrants, T Rating is 1 hr and 1-3/4 hr for 1 and 2 hr rated assemblies, respectively.

- 3B. Tube Insulation - Plastics# (Optional) - Nom 3/4 in. (19 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing.

See Plastics (QMF22) category in the Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.

When tube insulation is used on all through penetrants, T Rating is 3/4 hr and 1-1/2 hr for 1 and 2 hr rated assemblies, respectively.

4. Fill/Void or Cavity Material\* - Caulk or Sealant - Min 5/8 in. or 1-1/4 in. (16 mm or 32 mm) thickness of fill material, for 1 or 2 hr walls, respectively, applied within the annulus, flush with both surfaces of wall. At point contact locations, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the wall/pipe and wall/pipe insulation interface on both surfaces of wall.

3M COMPANY - CP 25WB+, IC 15WB+ caulk or FB-3000 WT sealant

5. Fill/Void or Cavity Materials\* - Wrap Strip (Not Shown) - Min one layer of 2 in. (51 mm) wide, nom 1/4 in. (6 mm) thick intumescent elastic material faced on one side with aluminum foil, required only when tube insulation (Item 3B) is used in 2 hr rated assemblies. Wrap strip tightly wrapped around tube insulation (foil side exposed) within the opening on both sides of the wall, flush with both surfaces of the wall assembly.

3M COMPANY - FS-195+

#Bearing the UL Recognized Component Mark  
\*Bearing the UL Classification Marking

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
	2'x4' LED FIXTURE	SEE FIXTURE SCHEDULE
	6" RECESSED DOWNLIGHT	SEE FIXTURE SCHEDULE
	EXTERIOR RATED BATTERY POWERED EMERGENCY LIGHTING UNIT	SEE FIXTURE SCHEDULE
	BATTERY POWERED EMERGENCY LIGHTING UNIT	SEE FIXTURE SCHEDULE
	BATTERY POWERED EXIT LIGHT	SEE FIXTURE SCHEDULE
	BATTERY POWERED EXIT LIGHT WITH EMERGENCY LIGHTING UNIT	SEE FIXTURE SCHEDULE
	WALL MOUNTED DUAL RELAY OCCUPANCY SENSOR. CONTROL ZONES AS SHOWN ON PLANS.	FLUSH IN WALL M.H. 48" TO CENTERLINE
	DUPLEX RECEPTACLE (20A., 125V.)	M.H. 18" TO CENTERLINE
	DENOTES TELEPHONE/DATA 4" SQ. RECESSED OUTLET BOX WITH (1) 3/4" CONDUIT STUBBED UP ABOVE CEILING AND TERMINATED WITH INSULATING BUSHING.	M.H. 18" TO CENTERLINE UNLESS OTHERWISE NOTED
EX	DENOTES DEVICE EXISTING TO REMAIN	
ER	DENOTES DEVICE EXISTING TO BE RELOCATED AS SHOWN	
CRS	'CRS' DENOTES SPLIT CONTROLLED RECEPTACLE. ONLY BOTTOM OUTLET TO BE CONTROLLED AND HAVE 'CONTROLLED' ENGRAVED.	
GFI	DENOTES GROUND FAULT INTERRUPTER TYPE RECEPTACLE	
WR	DENOTES WEATHER-RESISTANT RECEPTACLE	
WP	DENOTES RECEPTACLE WITH DIECAST ALUMINUM 'IN-USE' COVER.	
	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX UNLESS OTHERWISE NOTED	ABOVE CEILING / WALL
	120/208V. POWER PANELBOARD	M.H. 6'-6" MAX. TO TOP
	RACEWAY CONCEALED IN WALL OR CEILINGS	SEE GENERAL NOTES
	RACEWAY CONCEALED UNDER FLOOR OR BENEATH GRADE	SEE GENERAL NOTES
	RACEWAY SURFACE MOUNTED ON WALL OR CEILING	SEE GENERAL NOTES
	HOMERUN TO PANEL, LETTERS INDICATE PANEL, NUMBERS INDICATE CIRCUIT. NOTE: ANY CIRCUIT WITHOUT FURTHER DESIGNATION INDICATES A TWO WIRE & EQUIP. GROUND CIRCUIT. A GREATER NUMBER OF WIRES IS INDICATED AS SHOWN:  (3 WIRES & EQUIPMENT GROUND),  (4 WIRES & EQUIPMENT GROUND), ETC.  (3 WIRES, EQUIPMENT GROUND, & ISOLATED GROUND).	AS NOTED

MECHANICAL EQUIPMENT SCHEDULE													
DESCRIPTION	ELECTRICAL CHARACTERISTICS					CIRCUIT DESIGNATION	BREAKER		FEEDER	EQUIP. GROUND	CONDUIT	DISCONNECT SWITCH	REMARKS
	VOLTS	PHASE	KW	HP	MCA		AMPS	POLES					
AHU-1	208	3		3		E-27,29,31	25	3	(3)#12	#12	3/4"	NEMA 1 COMB. STARTER/DISCONNECT	
AHU-2	208	3		5		B-37,39,41	40	3	(3)#10	#10	3/4"	NEMA 1 COMB. STARTER/DISCONNECT	
AHU-3	208	3		5		C-22,24,26	40	3	(3)#10	#10	3/4"	NEMA 1 COMB. STARTER/DISCONNECT	
AHU-4	208	3		1.5		D-23,25,27	15	3	(3)#12	#12	3/4"	NEMA 1 COMB. STARTER/DISCONNECT	
AHU-5	208	3		1.5		D-24,26,28	15	3	(3)#12	#12	3/4"	NEMA 1 COMB. STARTER/DISCONNECT	
AHU-6	208	3		5		J-8,10,12	40	3	(3)#10	#10	3/4"	NEMA 1 COMB. STARTER/DISCONNECT	
AHU-7	208	1				EXISTING	45	2	(2)#8	#10	1/2"	30A/2P/NF/NEMA-1	NOTE #3
CU-1	208	3			39.0	MDP-1,3,5	50	3	(3)#6	#10	1"	60A/3P/F/NEMA-3R	NOTE #2
CU-2	208	3			60.8	MDP-2,4,6	80	3	(3)#4	#8	1 1/4"	100A/3P/F/NEMA-3R	NOTE #2
CU-3	208	3										EXISTING	
CU-4	208	3			33.0	G-19,21,23	50	3	(3)#6	#10	1"	60A/3P/F/NEMA-3R	NOTE #2
CU-5	208	3			25.0	G-2,4,6	30	3	(3)#10	#10	3/4"	30A/3P/F/NEMA-3R	NOTE #2
CU-6	208	3			73.7	G-7,9,11	100	3	(3)#3	#8	1"	100A/3P/F/NEMA-3R	NOTE #2
CU-7	208	3				EXISTING	25	3	(3)#6	#10	1"	60A/3P/F/NEMA-3R	NOTES #2 & #3
EDH-1	208	3			25.0	MDP-44,46,48	90	3	(3)#3	#8	1"	100A/3P/NF/NEMA-1	
EDH-2	208	3			30.0	B-38,40,42	110	3	(3)#2	#6	1 1/4"	200A/3P/NF/NEMA-1	
EDH-3	208	3			36.0	C-41	125	3	(3)#1	#6	1 1/2"	200A/3P/NF/NEMA-1	
EDH-4	208	3			15.0	D-33,35,37	60	3	(3)#6	#10	1"	60A/3P/NF/NEMA-1	
EDH-5	208	3			18.0	D-32,34,36	70	3	(3)#4	#8	1 1/4"	60A/3P/NF/NEMA-1	
EDH-6	208	3			36.0	J-42	125	3	(3)#1	#6	1 1/2"	200A/3P/NF/NEMA-1	
EF-1	120	1	0.0802			NOTE #1			(2)#12	#12	1/2"	TOGGLE DISCONNECT	

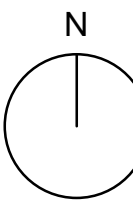
NOTES:

- INTERLOCK WITH SWITCHED LEG OF ROOM LIGHTING CIRCUIT.
- FUSE DISCONNECT PER UNIT NAMEPLATE MFS OR MOCP.
- CONNECT NEW HVAC UNIT TO EXISTING CIRCUIT.



SPARKMAN  
ARCHITECTS  
2160 MAIN STREET  
SARASOTA, FL 34237

T 941.952.0084  
F 941.952.0201  
FL 4426000857



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HIGHLANDS COUNTY HEALTH DEPARTMENT- HVAC UPGRADE  
AND ADA RESTROOM/SHOWER  
1606 S. GEORGE BLVD.  
SEBRING, FLORIDA 33870

100% CONSTRUCTION DOCUMENTS  
09/17/18

PROJECT TITLE:

ISSUED FOR:

REV DESCRIPTION DATE

GRAPHIC SCALE:

0' 1"

SCALE: As indicated

PROJECT MANAGER: DJN

DRAWN BY: DTN

A/E OF RECORD: DJN

PROJECT NO: 18498

SHEET TITLE:

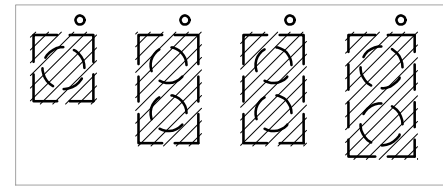
ELECTRICAL  
NOTES &  
SCHEDULES

SHEET No.:

E1.0

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ELECTRICAL  
DEMOLITION  
FLOOR PLAN


SHEET No.:

**E2.0**

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- REMOVE FROM GENERATION NATURAL SERVICE.

- REMOVE EXISTING  
ATS


AH-1  
(EX) 

CU-2  
(FX)CU-  
(FX)

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HIGHLANDS COUNTY HEALTH DEPARTMENT- HVAC UPGRADE  
AND ADA RESTROOM/SHOWER  
7205 S GEORGE BLVD.  
SEBRING, FLORIDA, 33870

## 100% CONSTRUCTION DOCUMENTS

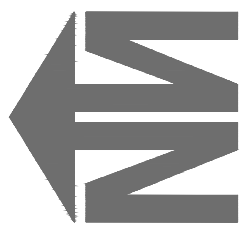
**ISSUED FOR:**

REV	DESCRIPTION	DATE
GRAPHIC SCALE:		
		
SCALE:		As indicated
PROJECT MANAGER:		DJN
DRAWN BY:		DTN
A/E OF RECORD:		DJN
PROJECT NO:		18498
SHEET TITLE:		

ELECTRICAL  
DEMOLITION  
FLOOR PLAN

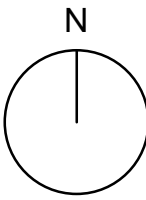
SHEET No.: **E2.0**

**NEWPOWER**  
CONSULTING, INC.  
13520 HIGH BELL PL., BRADENTON FL 34212  
PH: 813.489.9850, COA #32011  
ENGINEERING

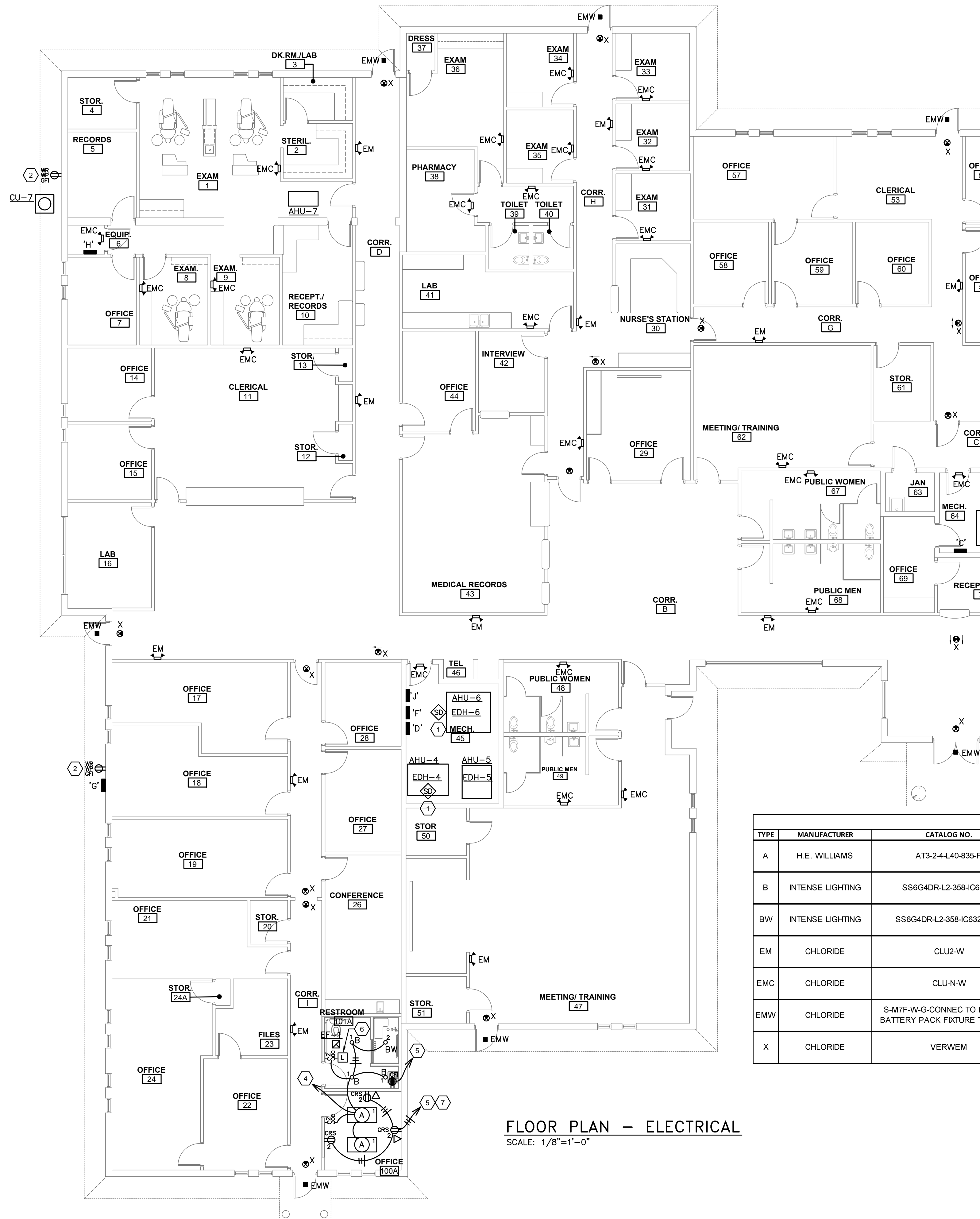


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SARASOTA, FL 34237

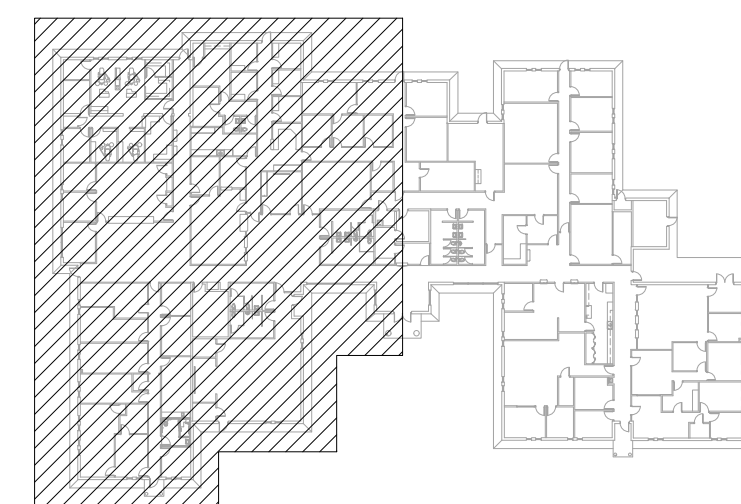
**SWEET**  
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F 941.952.0201  
FL AA26000857







TYPE	MANUFACTURER	CATALOG NO.	MOUNTING	VOLT	LAMP	REMARKS	SELECTION
A	H. E. WILLIAMS	AT3-24-L40-835-P	LAY-IN	120	43W LED	2X4 ARCHITECTURAL TROFFER	EE
B	INTENSE LIGHTING	SS6G4DR-L2-358-IC630-C	RECESSED	120	13W LED	6" DIA DOWNLIGHT	EE
BW	INTENSE LIGHTING	SS6G4DR-L2-358-IC632-C-SB	RECESSED	120	13W LED	WET LOCATION 6" DIA DOWNLIGHT	EE
EM	CHLORIDE	CLU2-W	WALL MOUNT 7'-5" TO CENTERLINE AFF	120	LED	EMERGENCY LIGHTING WALL PACK	EE
EMC	CHLORIDE	CLU-N-W	WALL MOUNT 7'-5" TO CENTERLINE AFF	120	LED	COMPAC EMERGENCY LIGHTING WALL PACK	EE
EMW	CHLORIDE	S-M7F-W-G-CONNEC TO INTERIOR BATTERY PACK FIXTURE TYPE 'EM'.	SURFACE MOUNT TO SOFFIT	120	LED	EXTERIOR RATED SINGLE HEAD EMERGENCY LIGHTING UNIT	EE
X	CHLORIDE	VERWEM	CEILING SURFACE	120	LED	EXIT LIGHT WITH BATTERY	EE



**GENERAL NOTES:**

1. SEE MECHANICAL EQUIPMENT SCHEDULE ON SHEET E.T.O FOR ALL NEW EXHAUST FAN, AHU, CU AND DUCT HEATER POWER REQUIREMENTS.
2. ALL EMERGENCY LIGHTING WALL PACKS (EM, EMC & EMW TYPES) SHOWN ARE NEW. INSTALL RECESSED OUTLET BOX WITH MC CABLE CONNECTION TO UNSWITCHED LEG OF LIGHTING CIRCUIT ABOVE CEILING.
3. ALL EXIT LIGHTS (X TYPE) SHOWN ARE NEW TO REPLACE EXISTING. CONNECT TO UNSWITCHED LEG OF LOCAL LIGHTING CIRCUIT WITH MC CABLE.

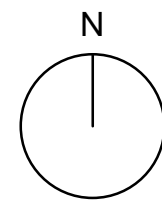
### DRAWING NOTES:

1. REMOVE AND REINSTALL EXISTING FIRE ALARM SMOKE DUCT DETECTOR. COORDINATE EXACT DUCT LOCATION WITH MECHANICAL CONTRACTOR.
2. CONTRACTOR TO CONFIRM LOCATION OF EXISTING SERVICE RECEPTACLE WITHIN 25FT. OF CONDENSING UNITS. IF NOT PRESENT, SUPPLY/INSTALL NEW GFI, WEATHER-RESISTANT DUPLEX RECEPTACLE WITH "IN-US" DIE-CAST ALUMINUM COVER. CONNECT TO LOCAL 120V. GENERAL PURPOSE RECEPTACLE CIRCUIT.
3. EXISTING AHU IS BEING ROTATED. DISCONNECT AND EXTEND EXHUST BRANCH CIRCUIT TO NEW LOCATION AND RECONNECT.
4. CONNECT TO EXISTING 120V. LIGHTING CIRCUIT CIRCUIT MADE AVAILABLE BY DEMOLITION.
5. CONNECT TO EXISTING 120V. RECEPTACLE CIRCUIT MADE AVAILABLE BY DEMOLITION.
6. FIRE ALARM DEVICE SHOWN SHALL BE COMPATIBLE WITH EXISTING SYSTEM AND BE ABLE TO SYNCHRONIZE WITH EXISTING DEVICES. CONTRACTOR SHALL VERIFY EXISTING SYSTEM HAS THE CAPACITY TO ADD ADDITIONAL DEVICES AS SHOWN OR TO ADD ADDITIONAL SIGNAL AND ZONE EXPANDERS TO PROVIDE A PROPERLY FUNCTIONING FIRE ALARM SYSTEM.
7. ROUTE CONTROLLED PORTION OF RECEPTACLE CIRCUIT VIA WALL MOUNTED OCCUPANCY SENSOR.



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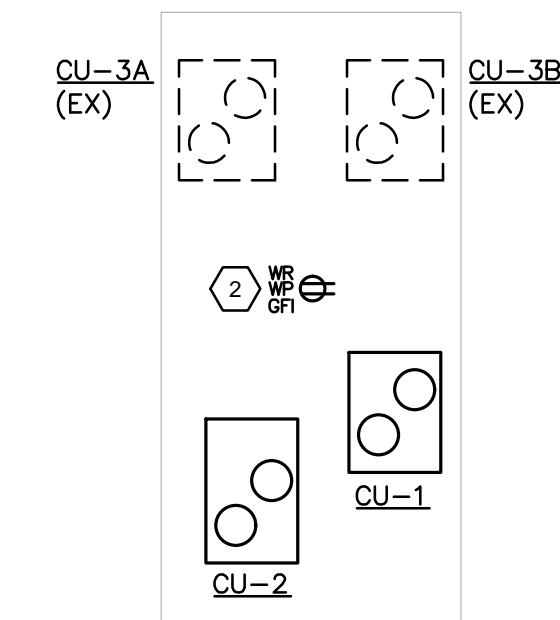


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HIGHLANDS COUNTY HEALTH DEPARTMENT- HVAC UPGRADE  
AND ADA RESTROOM/SHOWER  
7205 S GEORGE BLVD.  
SEBRING, FLORIDA, 33870

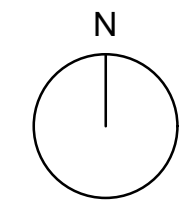
100% CONSTRUCTION DOCUMENTS  
09/17/18

	PROJECT NO. & TITLE:	ISSUED FOR:
REV	DESCRIPTION	DATE
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SCALE:		As indicated
PROJECT MANAGER:		D.J.N
DRAWN BY:		DTN
A/E OF RECORD:		D.J.N
PROJECT NO:		18498
SHEET TITLE:		
<p><b>ELECTRICAL FLOOR PLAN - WEST</b></p>		
SHEET No.:		
<p><b>E3.1</b></p>		
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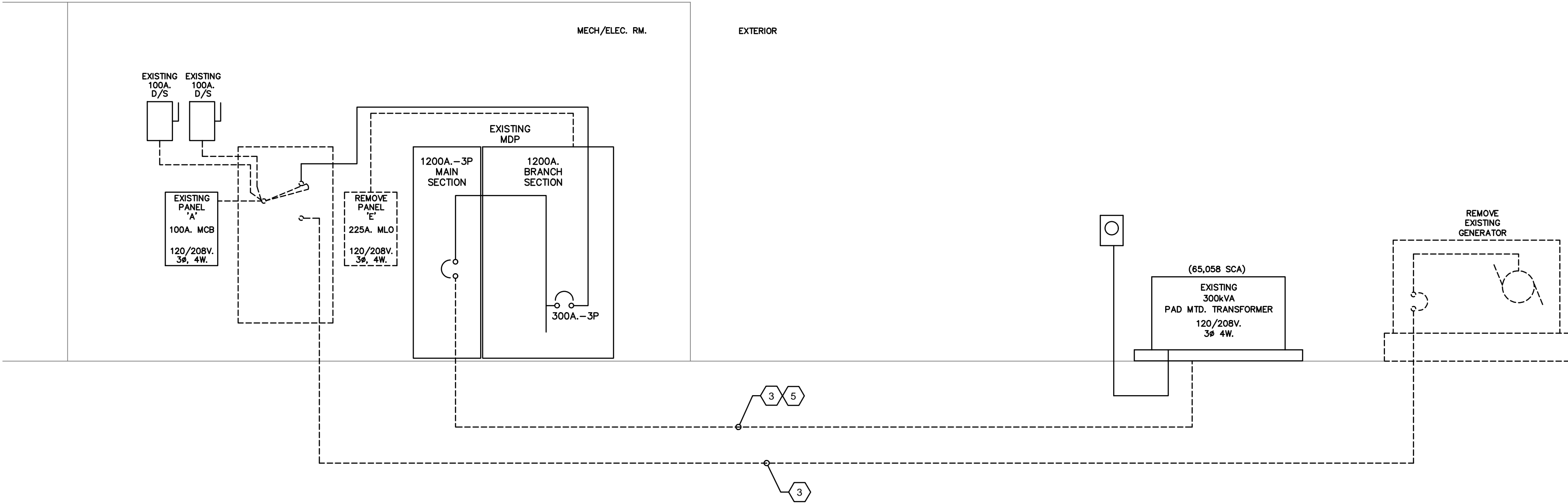




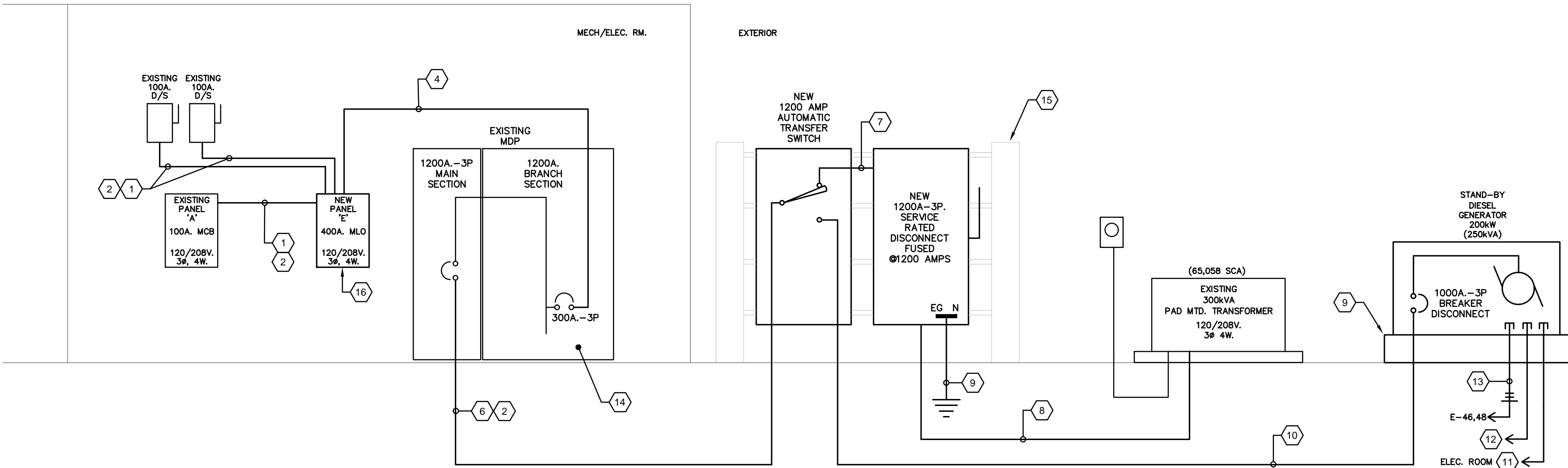
SEE SHEET E3.1 FOR GENERAL AND DRAWING NOTES.

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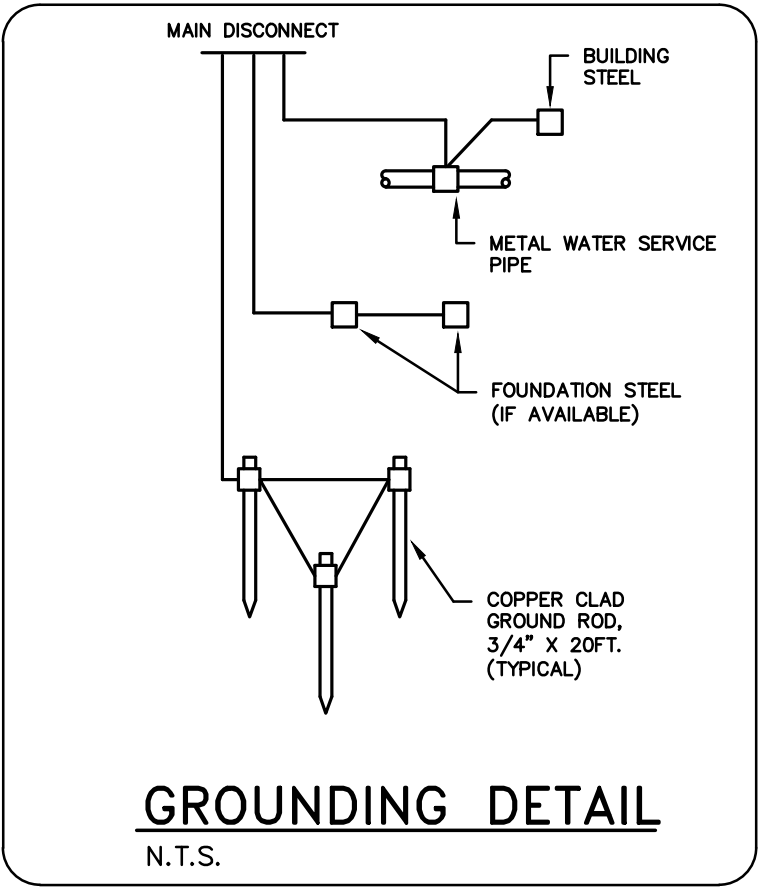


DEMOLITION POWER RISER DIAGRAM  
N.T.S.



POWER RISER DIAGRAM  
N.T.S.

- POWER RISER DIAGRAM NOTES:
- NEW: 4 NO. 3 AND 1 NO. 8 E.G. – 1 1/4" C.
  - PRICE THIS WORK AS SEPARATE LINE ITEM.
  - REMOVE EXISTING FEEDERS AND CONDUIT.
  - DISCONNECT FEEDER AND EXTEND TO REPLACED PANEL 'E': 4 NO. 350 KCMIL AND 1 NO. 2 E.G. – 3" C.
  - SEE POWER RISER DIAGRAM FOR REUSE OF CONDUCTORS/CONDUIT.
  - REDIRECT EXISTING 1200 AMP FEEDERS AND CONDUIT TO NEW AUTOMATIC TRANSFER SWITCH. REPLACE/EXTEND EXISTING CONDUITS AS REQUIRED.
  - NEW: (4) PARALLEL RUNS OF 4 NO. 350 KCMIL AND 1 NO. 3/0 E.G. – 3" C.
  - NEW: (4) PARALLEL RUNS OF 4 NO. 350 KCMIL – 3" C.
  - NEW: NO. 3/0 COPPER GROUNDING ELECTRODE CONDUCTOR CONNECTED TO REQUIRED ELECTRODES. SEE GROUNDING DETAIL THIS SHEET.
  - NEW: (3) PARALLEL RUNS OF 4 NO. 400 KCMIL AND 1 NO. 2/0 E.G. – 3" C.
  - 3/4" CONDUIT WITH CONDUCTORS TO NEW REMOTE MONITORING PANEL IN EXISTING MECH./ELEC. RM.
  - 1" CONDUIT TO NEW ATS.
  - 3 NO. 10 AND 1 NO. 10 E.G. – 3/4" CONDUIT FOR BATTERY CHARGER AND BLOCK HEATER CIRCUITS.
  - REMOVE EXISTING BOND BETWEEN NEUTRAL AND EQUIPMENT GROUND BARS.
  - 6" SQ CONCRETE POST AND WEATHER-RESISTANT UNI-STRUT FOR EQUIPMENT MOUNTING.
  - REPLACE EXISTING PANEL WITH NEW.



GROUNDING DETAIL  
N.T.S.

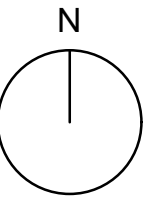
FAULT STUDY

XFMR AFC VOLTAGE	65058	208
	MDP	E
I <sub>SCA</sub>	65058	56476
length	30	3
wire size	500	3
C VALUE	26706	19704
sets	4	1
f	0.1520	0.0715
M	0.8681	0.9333
FAULT	56476	52706



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HIGHLANDS COUNTY HEALTH DEPARTMENT- HVAC UPGRADE  
AND ADA RESTROOM/SHOWER  
1666 S. GERRARD BLVD.  
SEBRING, FLORIDA 33870

PROJECT TITLE:

ISSUED FOR: 100% CONSTRUCTION DOCUMENTS

09/17/18

REV	DESCRIPTION	DATE
GRAPHIC SCALE:		
0' 1'		
SCALE: As indicated		
PROJECT MANAGER: DJN		
DRAWN BY: DTN		
A/E OF RECORD: DJN		
PROJECT NO: 18498		
SHEET TITLE:		

POWER  
RISER  
DIAGRAM

SHEET No.:  
**E4.0**

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EXISTING PANEL																		
			D		VOLTAGE		120 / 208		V		SIZE 200A. MLO		CABINET		SURFACE		NEMA-1	
					PHASE		3		PH		200A. BUS		RATING		EXISTING		AIC RATED	
			4															
NOTES	REMARKS	CKT.BKR		VA PHASE LOAD					BUS			VA PHASE LOAD			CKT.BKR		REMARKS	NOTES
		AMPS	P	A	B	C	# CT	A	B	C	# CT	A	B	C	AMPS	P		
	EXISTING LTG.	20	1	1200				1	X		2	1200			20	1	EXISTING LTG.	
	EXISTING LTG.	20	1		1200			3		X			1200		20	1	EXISTING LTG.	
	EXISTING LTG.	20	1			1200		5			X			900	20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1		900			7	X		8	900			20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1			900		9		X	10		900		20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1				900	11	X		12			900	20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1		900			13	X		14	900			20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1			900		15		X	16		900		20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1				900	17	X		18			1500	30	2	EXISTING WATER HEATER	
	EXISTING RECEPTS.	20	1		900			19	X		20	1500			20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1			900		21	X		22		900		20	1	EXISTING RECEPTS.	
NB	AHU-4	15	3	690				23	X		24		690		15	3	AHU-5	NB
					690			27	X		28		690					
	EXISTING RECEPTS.	20	1			900		29		X	30			800	20	1	EXISTING EWC	
	EXISTING RECEPTS.	20	1		900			31	X		32	6000			70	3	EDH-5	NB
EB	EDH-4	60	3			5000		33	X		34		6000					
							5000	35	X		36		6000					
					5000			37	X		38	900			20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1		900			39	X		40		900		20	1	EXISTING RECEPTS.	
	EXISTING RECEPTS.	20	1			900		41		X	42		900		20	1	EXISTING RECEPTS.	
		TOTAL		10490	10490	10490							12090	11490	11690	TOTAL		

NB = NEW BREAKER SHALL BE COMPATIBLE WITH EXISTING PANELBOARD AND SHALL MATCH PANELBOARD AIC RATING.  
EB = REUSE EXISTING BREAKER.

TABULATION	TOTAL LOAD	DEMAND FACTOR	DEMAND LOAD
MEASURED			
LIGHTING	6000	1.25	7500
COOLING	4140		
HEATING	37140	1.00	37140
RECEPTACLE	19800	0.75	14900
MISCELLANEOUS	3800	1.00	3800
KITCHEN EQUIP			
LARGEST MOTOR			
TOTAL DEMAND LOAD		63340 VA	
TOTAL DEMAND AMPS		175.8 A	

NOTE:  
CONTRACTOR IS RESPONSIBLE FOR UPDATING ALL PANEL SCHEDULES WITH CURRENT DESCRIPTIONS OF ALL BRANCH CIRCUIT DESIGNATIONS.

NEW PANEL		E VOLTAGE 120 / 208 V SIZE 400A. MLO CABINET SURFACE NEMA-1										PHASE 3 PH 4 W 400A. BUS RATING 65,000 AIC RATED										
NOTES	REMARKS	CKT.BKR.		VA PHASE LOAD			# CT			BUS			# CT			VA PHASE LOAD			CKT.BKR.		REMARKS	NOTES
		AMPS	P	A	B	C	A	B	C	A	B	C	A	B	C	AMPS	P					
	EXISTING LTG.	20	1	1200			1	X		2	1200			20	1	EXISTING LTG.						
	EXISTING LTG.	20	1		1200		3		X	4		1200		20	1	EXISTING LTG.						
	EXISTING LTG.	20	1			1200	5			X	6		1200		20	1	EXISTING LTG.					
	EXISTING LTG.	20	1	1200			7	X			8	1200		20/20	1	EXISTING LTG.						
	EXISTING LTG.	20	1		1200		9	X		10		1200		20	1	EXISTING LTG.						
	EXISTING LTG.	20	1			1200	11		X	12			1200	20	1	EXISTING LTG.						
	EXISTING RECEPTS.	20	1	900			13	X		14	900			20	1	EXISTING RECEPTS.						
	EXISTING RECEPTS.	20	1		900		15		X	16		900		20	1	EXISTING RECEPTS.						
	EXISTING RECEPTS.	20	1			900	17	X		18		900		20	1	EXISTING RECEPTS.						
	EXISTING RECEPTS.	20	1	900			19	X		20	900			20	1	EXISTING RECEPTS.						
	EXISTING RECEPTS.	20	1		900		21	X		22		900		20	1	EXISTING RECEPTS.						
	EXISTING RECEPTS.	20/20	1			900	23	X		24		900		20	1	EXISTING RECEPTS.						
	EXISTING RECEPTS.	20/20	1	900			25	X		26	900			20	1	EXISTING RECEPTS.						
					1273		27	X		28												
	AHU-1	25	3			1273	29		X	30				60	3	SPARE						
					1273		31	X		32												
	EXISTING RECEPTS.	20	1		900		33	X		34		900		20	1	EXISTING RECEPTS.						
	EXISTING RECEPTS.	20	1			900	35		X	36			1400	20	1	EX. LIFT STATION						
	EXISTING	60	2	4992			37	X		38	1400			20	1	EX. LIFT STATION						
	FREEZER CONDENSER				4992		39	X		40		1200		20	1	EX. IRRIGATION						
	EXISTING RECEPTS.	20	1			900	41		X	42		1200		20	1	EX. A/C PANEL						
	100A DISCONNECT LOAD CENTER	100	3		3000		43	X		44						1 SPACE						
					3000		45	X		46		2000		20	1	BLOCK HEATER						
						3000	47	X		48		300		20	1	BATTERY CHG.						
							49	X		50	7840											
	100A DISCONNECT SPARE	100	3				51		X	52		11860										
							53			X	54			100	3	PANEL 'A'						
	TOTAL			14365	14365	10273					14340	20160	18700	TOTAL								

TABULATION	TOTAL LOAD	DEMAND FACTOR	DEMAND LOAD
MEASURED			
LIGHTING	20800	1.25	26000
COOLING	3819		
HEATING	3819	1.00	3819
RECEPTACLE	27180	0.68	18590
MISCELLANEOUS	40404	1.00	40404
KITCHEN EQUIP			
LARGEST MOTOR			
TOTAL DEMAND LOAD		88813 VA	
TOTAL DEMAND AMPS		246.5 A	

EXISTING PANEL																												
		B		VOLTAGE		120 / 208		V		SIZE 200A. MLO		CABINET		SURFACE		NEMA-1												
				PHASE		3		PH		200A. BUS		RATING		EXISTING		AIC RATED												
				4																								
REMARKS		CKT.BKR		VA PHASE LOAD						# CT		BUS			# CT		VA PHASE LOAD						CKT.BKR		REMARKS		NOTES	
		AMPS P		A		B		C				A			B			C		AMPS P								
EXISTING LTG.		20 1		1200						1		X						1200		20 1		EXISTING LTG.						
EXISTING LTG.		20 1				1200				3		X								20 1		EXISTING LTG.						
EXISTING LTG.		20 1						1200		5					X			6		1200		1		EXISTING LTG.				
EXISTING LTG.		20 1		1200						7		X						8		1200		20 1		EXISTING LTG.				
EXISTING LTG.		20 1				1200				9		X						10		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1						900		11		X						12		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1				900				13		X						14		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1						900		15		X						16		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1						900		17		X						18		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1		900						19		X						20		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1				900				21		X						22		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1						900		23		X						24		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1		900						25		X						26		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1				900				27		X						28		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1						900		29		X						30		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1		900						31		X						32		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1				900				33		X						34		900		20 1		EXISTING RECEPTS				
EXISTING RECEPTS		20 1						900		35		X						36		900		20 1		EXISTING RECEPTS				
AHU-2		40 3		2017						37		X						38		10000		110 3		EDH-2		NB		
				2017						39		X						40		10000								
						2017		41				X			42													
TOTAL				8017		8017		7717												16000		15700		15700		TOTAL		

NB = NEW BREAKER SHALL BE COMPATIBLE WITH EXISTING PANELBOARD AND SHALL MATCH PANELBOARD AIC RATING.  
EB = REUSE EXISTING BREAKER.

TABULATION	TOTAL LOAD	DEMAND FACTOR	DEMAND LOAD
MEASURED			
LIGHTING	10800	1.25	13500
COOLING	8051		
HEATING	36051	1.00	36051
RECEPTACLE	24300	0.71	17150
MISCELLANEOUS			
KITCHEN EQUIP			
LARGEST MOTOR			
TOTAL DEMAND LOAD		66701 VA	
TOTAL DEMAND AMPS		185.1 A	

NOTE:  
CONTRACTOR IS RESPONSIBLE FOR UPDATING ALL PANEL SCHEDULES WITH CURRENT DESCRIPTIONS OF ALL BRANCH CIRCUIT DESIGNATIONS.

EXISTING PANEL		C VOLTAGE 120 / 208 V SIZE 200A. MLO CABINET SURFACE NEMA-1										PHASE 3 PH 4 W 200A. BUS RATING EXISTING AIC RATED									
		CKT.BKR.		VA PHASE LOAD			CT	BUS			CT	VA PHASE LOAD			CKT.BKR.		REMARKS		NOTES		
AMPS	P	A	B	C	A	B	C	A	B	C	AMPS	P	REMARKS	NOTES							
EXISTING LTG.	20	1	1200			1	X		2	1200			20	1	EXISTING LTG.						
EXISTING LTG.	20	1		1200		3		X	4		1200			20	1	EXISTING LTG.					
EXISTING LTG.	20	1			1200	5			X	6			1200	20	1	EXISTING LTG.					
EXISTING LTG.	20	1	1200			7	X		8	1200				20	1	EXISTING LTG.					
EXISTING LTG.	20	1		1200		9	X		10		900			20	1	EXISTING RECEPTS					
EXISTING RECEPTS.	20	1			900	11	X		12			900		20	1	EXISTING RECEPTS					
EXISTING RECEPTS.	20	1	900			13	X		14	900				20	1	EXISTING RECEPTS.					
EXISTING RECEPTS.	20	1		900		15	X		16		900			20	1	EXISTING RECEPTS					
EXISTING RECEPTS.	20	1			900	17	X		18			900		20	1	EXISTING RECEPTS					
EXISTING RECEPTS.	20	1	900			19	X		20	900				20	1	EXISTING RECEPTS					
EXISTING RECEPTS.	20	1		900		21	X		22		2017										
EXISTING RECEPTS.	20	1			900	23	X		24			2017		40	3	AHU-3	NB				
EXISTING RECEPTS.	20	1	900			25	X		26	2017											
SPACE	1					27	X		28							1 SPACE					
SPACE	1					29	X		30							1 SPACE					
SPACE	1					31	X		32							1 SPACE					
SPACE	1					33	X		34							1 SPACE					
SPACE	1					35	X		36							1 SPACE					
SPACE	1					37	X		38							1 SPACE					
EDH-3						39	X		40							1 SPACE					
SUB-FEED BKR.						41		X	42							1 SPACE					
TOTAL				17100	16200	15900					6217	5017	5017	TOTAL							







PLUMBING FIXTURE AND PIPE SIZING SCHEDULE							
MARK	FIXTURE	TRAP	VENT	COLD	HOT	DESCRIPTION	APPROVED MANUFACTURERS
P-1	WATER CLOSET BARRIER FREE	INTEGRAL	AS SHOWN ON PLANS	1"	----	WATER CLOSET: FLOOR MOUNTED, FLUSH VALVE, ELONGATED, WHITE VITREOUS CHINA, SIPHON JET, 1 1/2" TOP SPUD, BOLT CAPS, 1.28 GPF, 16 1/2" HIGH (MIN.) FLUSH VALVE: NON-HOLD OPEN, LOW FORCE, ADA COMPLIANT HANDLE, EXPOSED DIAPHRAGM, 1" IPS SCREWDRIVER ANGLE STOP WITH PROTECTIVE CAP, VACUUM BREAKER FLUSH CONN., ADJUSTABLE TAILPIECE, 1 1/2" TOP SPUD, CAST WALL FLANGE WITH SET SCREW AND SWEAT SOLDER ADAPTER CONTROLS FOR FLUSH VALVE SHALL BE MOUNTED ON WIDE SIDE OF TOILET AREAS. SEAT: FINISH WHITE, EXTRA HEAVY DUTY PLASTIC FOR ELONGATED BOWL, OPEN FRONT LESS COVER, SELF- SUSTAINING STAINLESS STEEL CHECK HINGE, TOP OF SEAT 17 1/2" (MIN.)	AMERICAN STANDARD MADERA NO. 3043.001 KOHLER HIGHLINE NO. K-4405  SLOAN-ROYAL NO. 111-1.28 ZURN AQUAVANTAGE NO. Z6000AV-HET  OLSONITE NO. 95SSCT BEMIS NO. 1655SSC
P-2	LAVATORY BARRIER FREE	1 1/4"		1/2"	1/2"	LAVATORY: WALL HUNG, 20x18, WHITE VITREOUS CHINA, FRONT OVERFLOW AND HOLES ON 8" CENTERS, RIM 34" AFF  TRIM: LAVATORY FAUCET, WITH 8" CENTERS, 5"+, GOOSENECK SPOUT, 4" WRIST BLADE HANDLES, PERFORATED GRID DRAIN w/OFFSET 1 1/4" TAIL PIECE. PROVIDE STOPS, SUPPLIES, TRAP, ETC. TO MAKE A COMPLETE INSTALLATION. PROVIDE WITH 0.5 FLOW CONTROL AERATOR. CARRIER: DURA-COATED RECTANGULAR STEEL UPRIGHTS WITH WELDED FEET, ADJUSTABLE TOP SUPPORT PLATE, MOUNTING FASTENERS, CONCEALED ARMS, STEEL SLEEVES & ALIGNMENT TRUSS	AMERICAN STANDARD LUCERNE NO. 0356.015 KOHLER KINGSTON NO. K-2006  DELTA NO. 3579-WFHD CHICAGO NO. 786-E3CP  ZURN NO. Z-1231 WATTS NO. TCA-411 J. R. SMITH NO. 700
P-3	SHOWER BARRIER FREE	2" FD		1/2"	1/2"	SHOWER: PRESSURE BALANCING MIXING VALVE WITH INTEGRAL VOLUME CONTROL AND ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN, INTEGRAL CHECK STOPS, IN-LINE VACUUM BREAKER, SINGLE BLADE LEVER HANDLE, WALL/HAND SHOWER WITH FLEXIBLE METAL HOSE, WALL CONNECTION AND FLANGE. SLIDE BAR FOR HAND SHOWER	SYMMONS NO. 96-500-B30-L-V-X (TEMP-TROL) LEONARD NO. 4505-H-06





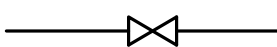

PLUMBING FIXTURE NOTES:

- MOUNTING HEIGHT AS PER ARCHITECT.
- TRAPS, SUPPLIES AND ALL OTHER EXPOSED PIPING SHALL BE CAST BRASS WITH A POLISHED CHROME FINISH. ACCEPTABLE MANUFACTURERS INCLUDE MCGUIRE OR APPROVED EQUAL.
- ALL EXPOSED PIPING BELOW BARRIER FREE FIXTURES SHALL BE INSTALLED WITH ADA COMPLIANT PIPE WRAP KIT. SYSTEM SHALL BE PVC RESIN SEAMLESS CONSTRUCTION MFG BY PRO-WRAP OR APPROVED EQUAL.
- FAUCETS WITH WRIST BLADE HANDLES SHALL PROVIDE 1/4 TURN FULL OPEN TO FULL CLOSED OPERATION.
- MAINTAIN 1 1/2" (MIN) CLEAR FROM THE BOTTOM OF GRAB BAR AND TOP OF FLUSH VALVE.
- LAVATORIES SHALL BE INSTALLED WITH FLOOR MOUNTED CARRIERS AT STUD WALLS ATTACHED DIRECTLY TO BLOCK WALLS.
- PROVIDE FLUSH CONTROLS ON THE WIDE SIDE OF TOILETS.

PLUMBING ACCESSORY SCHEDULE			
MARK	FIXTURE	DESCRIPTION	APPROVED MANUFACTURERS
ECO	EXTERIOR CLEANOUT	EXTERIOR CLEANOUT: HEAVY DUTY DURA-COATED CAST IRON BODY WITH ROUND CAST IRON SCORIATED TOP, ADJUSTABLE GAS AND WATER TIGHT BRONZE THREADED PLUG	ZURN-LC NO. C02510-P04 WATTS NO. C05-2-NH
FD	FLOOR DRAIN (SHOWERS)	FLOOR DRAIN: 4" ROUND STAINLESS STEEL STRAINER, PVC BODY, ADJUSTABLE TOP & CLAMPING COLLAR. PROVIDE WITH DEEP SEAL TRAP.	ZURN-LC NO. FD2254-PV2-FMT WATTS NO. SD-PVC

PLUMBING GENERAL NOTES:

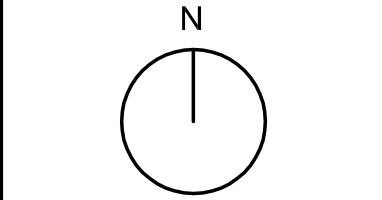
- CONTRACTOR SHALL PROVIDE COMPLETE PLUMBING SYSTEMS AS DETAILED. WORK CONSISTS OF FURNISHING ALL MATERIALS, EQUIPMENT, AND SERVICES REQUIRED FOR COMPLETE SYSTEMS.
- FLOOR PLANS SHOW APPROXIMATE LOCATION AND LAYOUT OF EXISTING PIPING ETC. CONTRACTOR SHALL VERIFY THE LOCATION OF THE SANITARY, WATER SERVICE AND VENTING SYSTEM PRIOR TO STARTING WORK.
- CONTRACTOR SHALL COORDINATE ALL PIPING LOCATIONS AND INVERT ELEVATIONS WITH FOOTINGS AND FOUNDATIONS BEFORE INSTALLING AND ADJUST AS REQUIRED.
- ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER PLUMBING DRAWINGS WITH REFERENCE TO BUILDING CONSTRUCTION. PLUMBING DRAWINGS (PLANS, DIAGRAMS, ETC.) ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED. THE CONTRACTOR SHALL COORDINATE ALL WORK UNDER THIS CONTRACT.
- COORDINATE WORK WITH OTHER TRADES TO AVOID CONFLICTS.
- IF ANY DISCREPANCIES SHOULD EXIST THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO BIDDING.
- NECESSARY REQUIRED PLUMBING ITEMS THAT ARE NOT SHOWN ON THE DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITY TO INSTALL A COMPLETE OPERATING PLUMBING SYSTEM.
- PROVIDE ALL CUTTING REQUIRED FOR THE INSTALLATION OF PLUMBING WORK. FINISH PATCHING SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR.
- WATER PIPING ABOVE GRADE SHALL BE: CHLORINATED POLYVINYL CHLORIDE (CPVC), SDR 11, ASTM D-2846, RATED AT A CONTINUOUS WORKING PRESSURE OF 100 PSI AT 180°F. FITTING SHALL BE SOLVENT WELDED WITH AN ASTM APPROVED SOLVENT SYSTEM. DO NOT BEND PIPE WITH OVER A 45° ANGLE.
- INSULATE ALL HOT WATER AND HOT WATER RETURN PIPING WITH 1" THICK HIGH DENSITY FIBERGLASS INSULATION WITH, FACTORY APPLIED VAPOR BARRIER ALL SERVICE JACKET.
- ALL SOIL, WASTE, AND VENT PIPING SHALL BE SCHEDULE 40 PVC.
- ALL HORIZONTAL SOIL AND WASTE PIPING 2 1/2" IN DIAMETER AND LESS SHALL HAVE A SLOPE OF 1/4" PER ONE FOOT LENGTH OF PIPE. ALL PIPING 3" IN DIAMETER AND LARGER SHALL HAVE A SLOPE OF 1/8" PER ONE FOOT LENGTH OF PIPE.
- UNLESS OTHERWISE NOTED ALL PIPING SHALL BE RUN IN CONCEALED SPACES.
- IDENTIFY ALL PIPING WITH PERMANENT MARKERS.
- ALL PIPING SHALL BE SUPPORTED RIDGIDLY AND IN LINE FROM BUILDING STRUCTURE. OFFSET PIPING TO AVOID STRUCTURAL MEMBERS, CANTS, FLASHING, MECHANICAL AND ELECTRICAL EQUIPMENT, ETC.
- FINAL PIPING ROUTING SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR.
- ALL FIXTURES AND EQUIPMENT SHALL HAVE SHUT-OFF VALVES AT OR NEAR EQUIPMENT.
- PROVIDE CHROME PLATED STOPS AND SUPPLIES AT ALL WATER CLOSETS AND LAVATORIES.
- CHROME PLATED ESCUTCHEONS AND NIPPLES ARE REQUIRED AT ALL FLOOR AND WALL PENETRATIONS.
- ALL FIXTURES AND EQUIPMENT SHALL HAVE SHUT-OFF VALVES AT OR NEAR EQUIPMENT.
- GATE VALVES SHALL BE #125 BRONZE WITH UNION BONNET.
- PROVIDE AND INSTALL HAMMER ARRESTORS AT FIXTURE GROUPS. INSTALL AIR CHAMBERS AT INDIVIDUAL FIXTURES.
- PLUMBING CONTRACTOR SHALL ARRANGE TO PAY FOR ALL NECESSARY PERMITS, LICENSES, AND INSPECTIONS AS REQUIRED BY THE CITY.
- ALL NEW PLUMBING EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE.
- MAINTAIN AS-BUILT DRAWINGS, DAILY. SUBMIT TO ARCHITECT/OWNER AFTER COMPLETION OF ALL WORK.
- AT THE COMPLETION OF THE INSTALLATION OF THE NEW POTABLE WATER SYSTEM, THE ENTIRE SYSTEM SHALL BE DISINFECTED IN COMPLIANCE WITH SECTION 610 OF THE STANDARD PLUMBING CODE.
- THOROUGHLY FLUSH & TEST EXISTING UNDERGROUND SANITARY PIPING. TEST TO INCLUDE A VISUAL INSPECTION OF FLOW.
- ALL WORK SHALL COMPLY WITH ALL LOCAL AND STATE CODES, INCLUDING THE FLORIDA BUILDING CODE, 2017 EDITION.
- TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.

PLUMBING LEGEND		
DESCRIPTION	ABBREV.	SYMBOL
SANITARY PIPING	SS	_____
VENT PIPING	V	_____
COLD WATER PIPING	CW	_____
HOT WATER PIPING	HW	_____
HOT WATER RETURN PIPING	HWR	_____
EXISTING PIPING TO REMAIN	-	==/==/==/==
VENT THRU ROOF	VTR	_____
EXTERIOR CLEAN OUT	ECO	 
FLOOR DRAIN	FD	
BALANCING VALVE	-	
SHUT-OFF VALVE	-	
NEW CONNECTION	-	



SPARKMAN  
ARCHITECTS  
2163 MAIN STREET  
SARASOTA, FL 34237

SWEET  
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F 941.952.0201  
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HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS  
HIGHLANDS COUNTY HEALTH DEPARTMENT- HVAC UPGRADE  
AND ADA RESTROOM/SHOWER  
125 GENESEE BLK  
SEBRING, FLORIDA 33870

PROJECT  
TITLE:

ISSUED FOR:  
100% CONSTRUCTION DOCUMENTS  
09/17/18

REV DESCRIPTION DATE

GRAPHIC SCALE:

0" 1"

SCALE:

PROJECT MANAGER: TMS

DRAWN BY: TAC

A/E OF RECORD: TMS

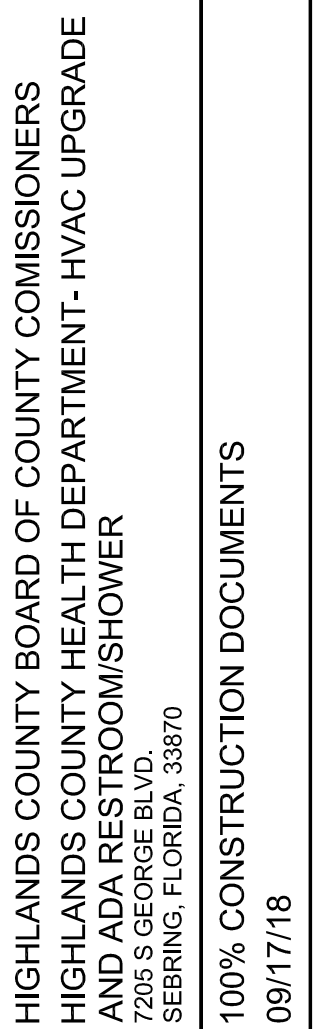
PROJECT NO: 18498

SHEET TITLE:

PLUMBING NOTES,  
SCHEDULES AND  
LEGEND

SHEET No.:  
**P1.0**



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