

GEOTECHNICAL ENGINEER

LANDSCAPE ARCHITECT

.

RCHITECTS, INC.
TECTURAL CONSULTANTS, CONSTRUCTION MANAGERS

Environmental Technical Consultang & ARCHITT

EMERGENCY DISPATCH CENTER 28 Southpointe Dr.

STAMPS

Issue / Date

10/27/16 Construction Documents

12/02/16 Addendum 3, Revision 1

Project No.:

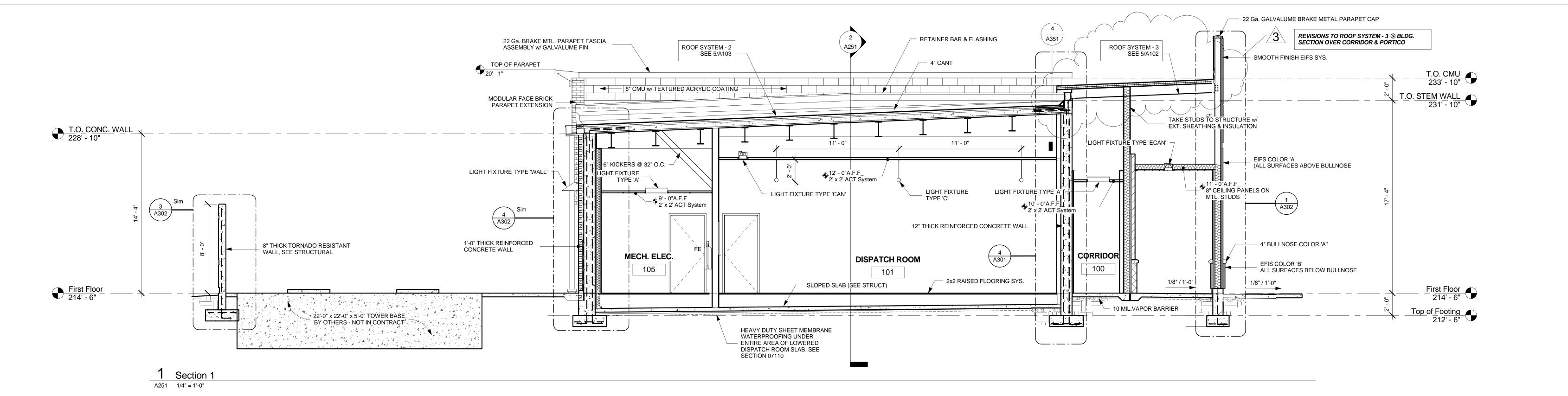
150303CPAG

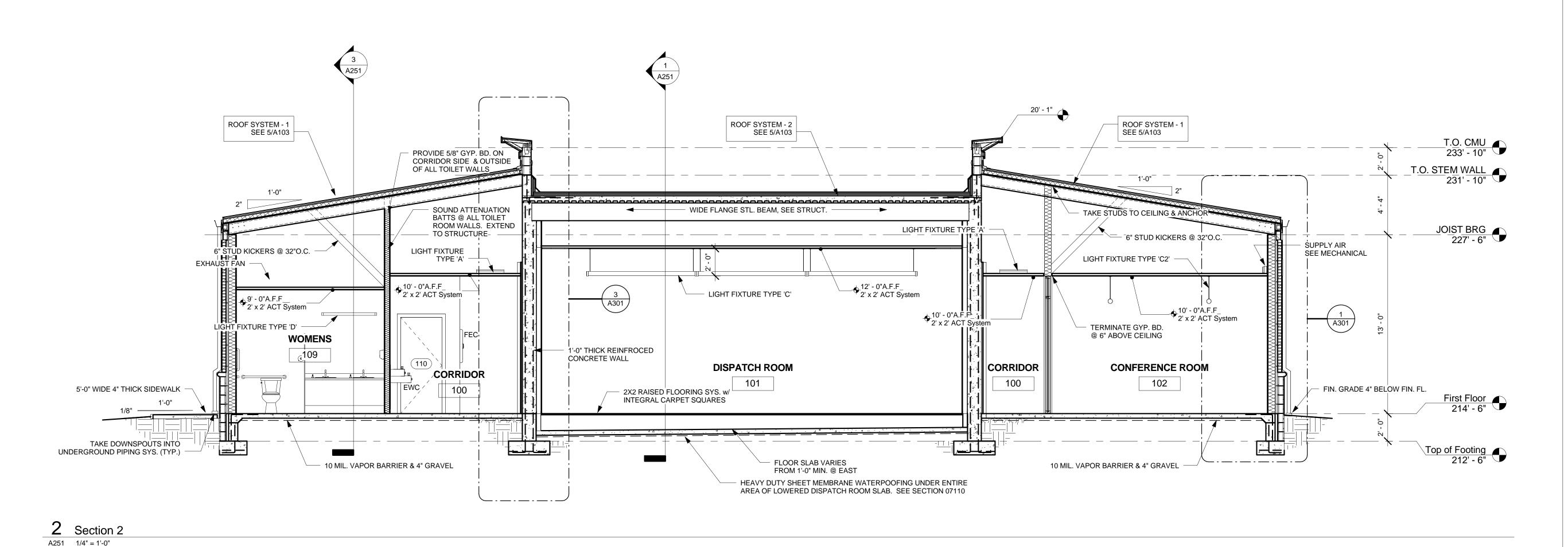
Project No.:
150303CPAG

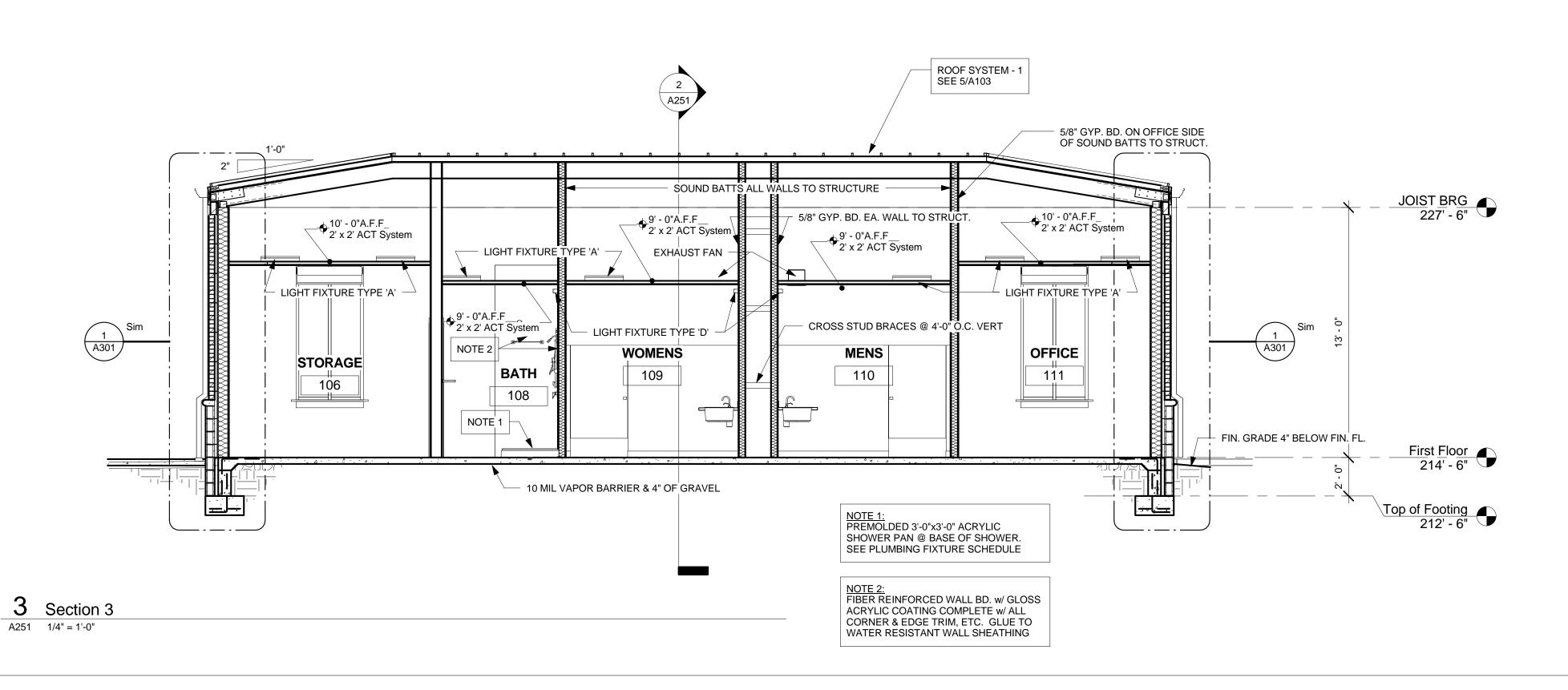
Project Phase:
Construction Documents

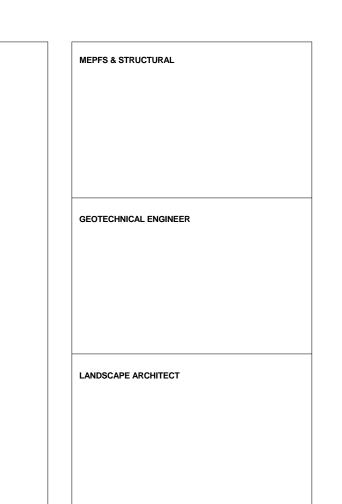
ROOF PLAN

A102





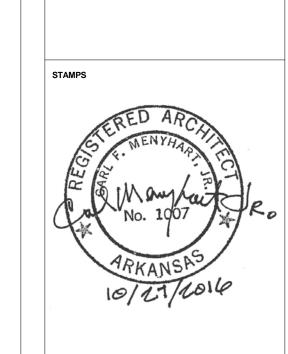




TC ENGINEERS &
RCHITTECTS, INC.
ECTURAL CONSULTANTS, CONSTRUCTION MANAGERS

DISPATCH CENTER outhpointe Dr.

EMERGENCY DI



ISSUE / Date	
Issue / Date 10/27/16 Construction Documents 12/02/16 Addendum 3, Revision 4 Project No.: 150303CPAG	
12/02/16	Addendum 3, Revision 1
	3CPAG
Project Phase:	
Conotrue	tion Documents

Construction Documents

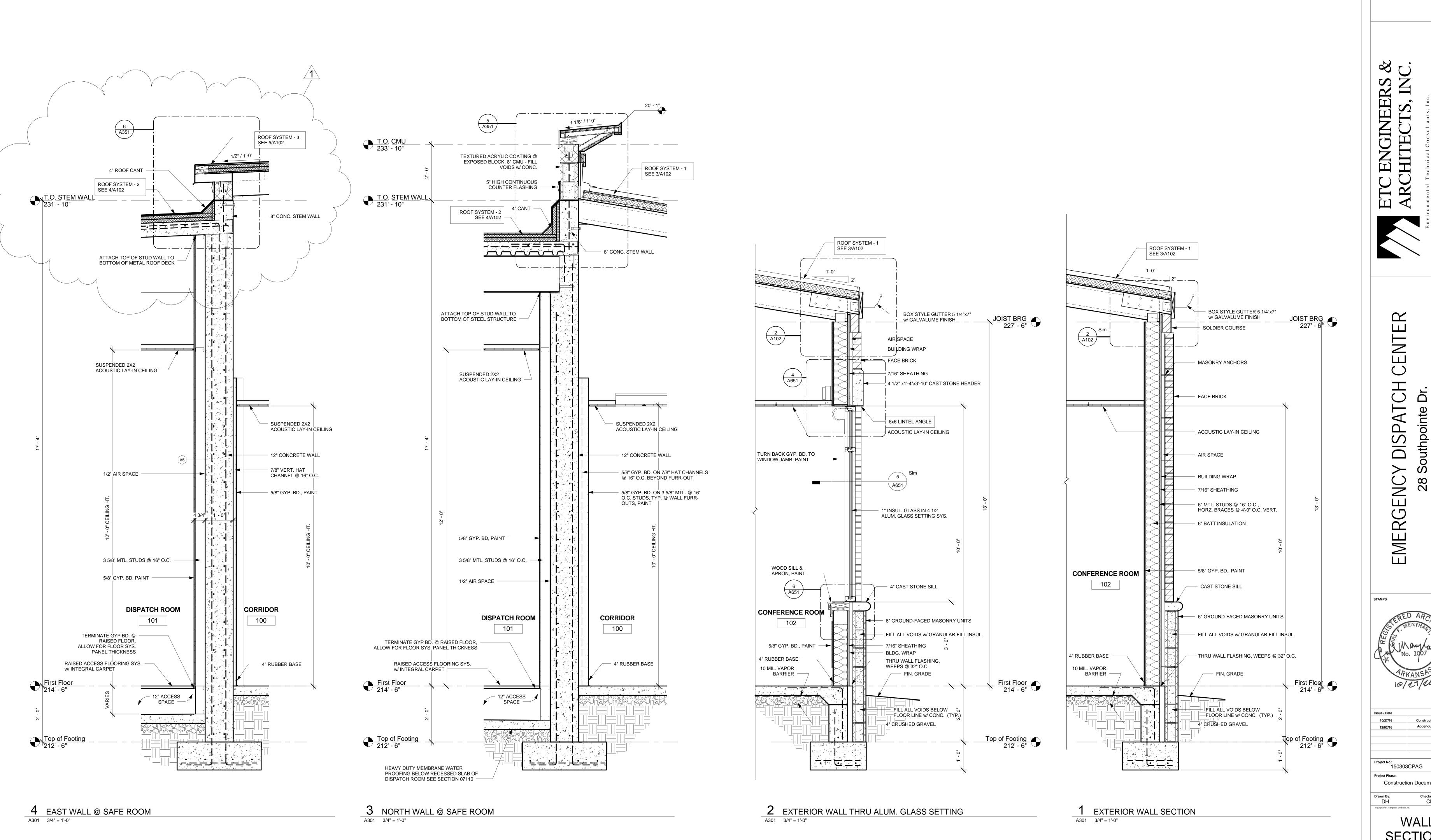
Drawn By: Checked By: CM

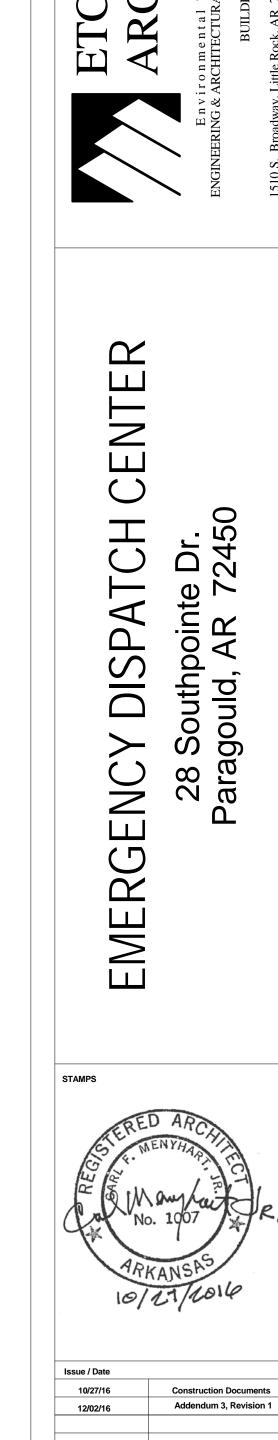
CM

Copyright 2016 ETC Engineers & Architects. Inc.

BUILDING
SECTIONS

A251





Project Phase:

Drawn By: DH

Construction Documents

WALL

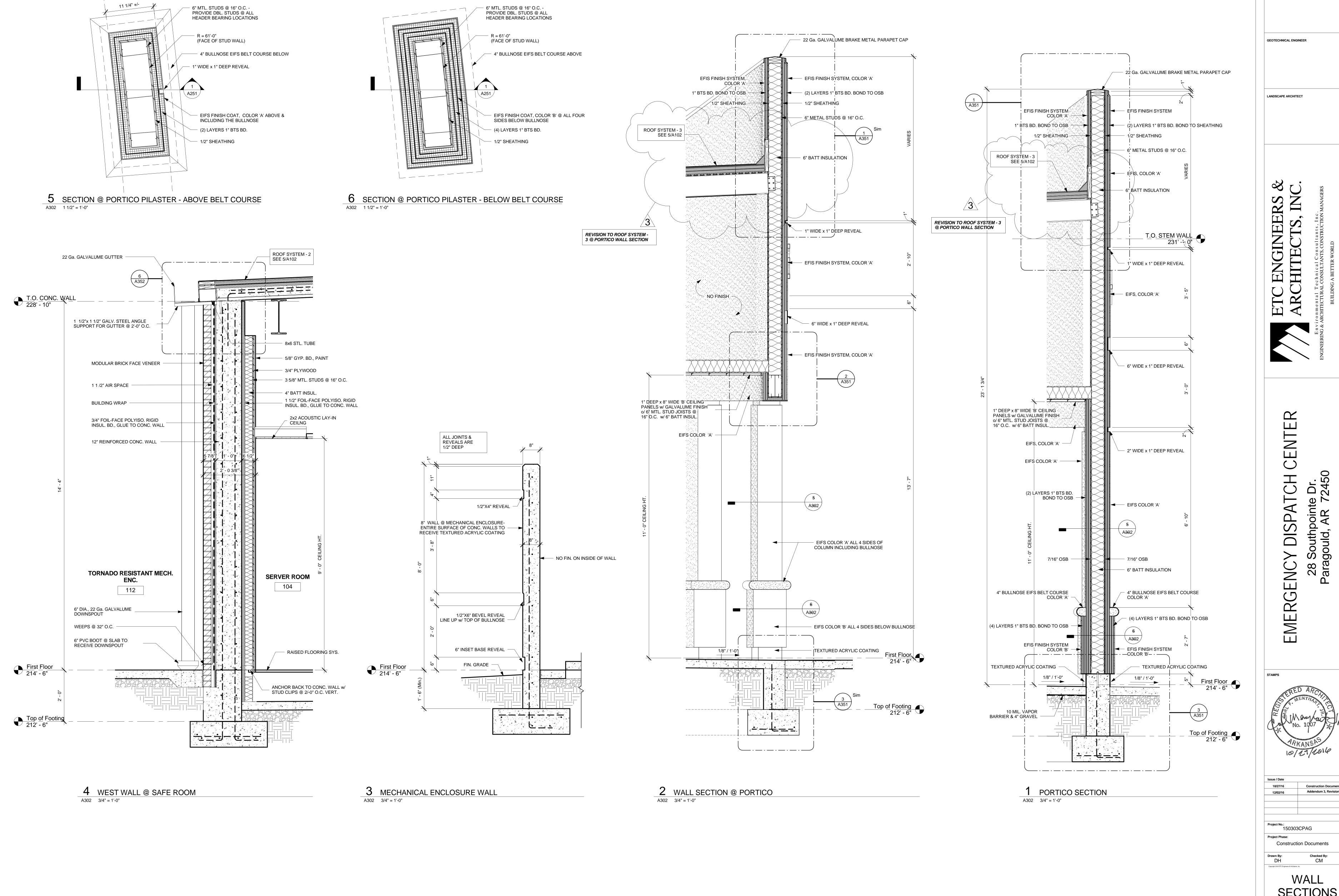
SECTIONS

A301

MEPFS & STRUCTURAL

GEOTECHNICAL ENGINEER

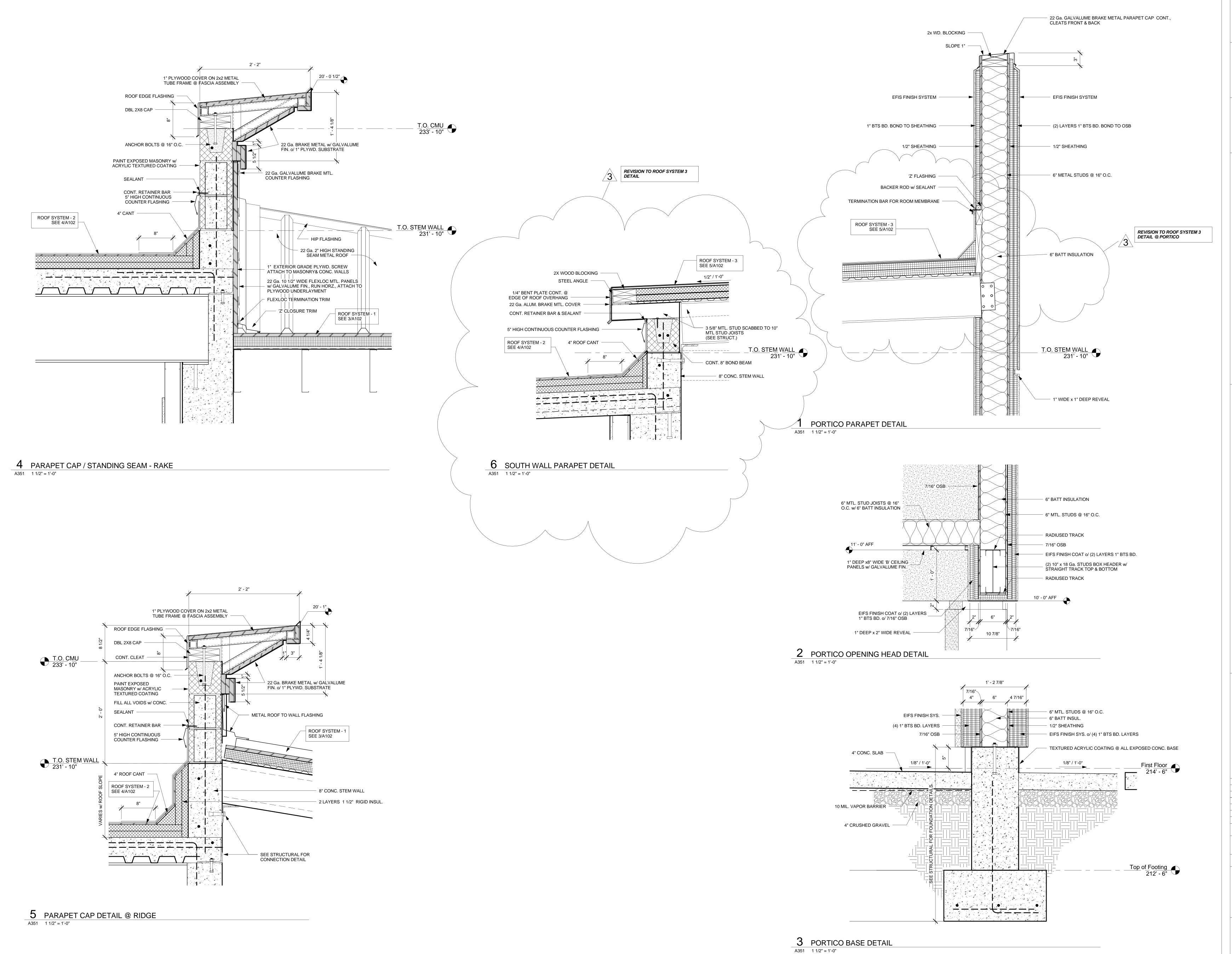
LANDSCAPE ARCHITECT



MEPFS & STRUCTURAL

Construction Documents Addendum 3, Revision 1

SECTIONS



GEOTECHNICAL ENGINEER

LANDSCAPE ARCHITECT

CONSULTANTS, INC.

CONSULTANTS, INC.

ANTS, CONSTRUCTION MANAGERS

R WORLD

Environmental Technical Consultants, Incending & Architectural Consultants, Incending & Building A Better World

EMERGENCY DISPATCH CENTER 28 Southpointe Dr.

STAMPS

STAMPS

STAMPS

RED ARCHITECTURE

No. 1007

ARKANSAS

10/11/1016

Issue / Date

10/27/16 Construction Documents

12/02/16 Addendum 3, Revision 1

Project No.:
150303CPAG

Project Phase:
Construction Documents

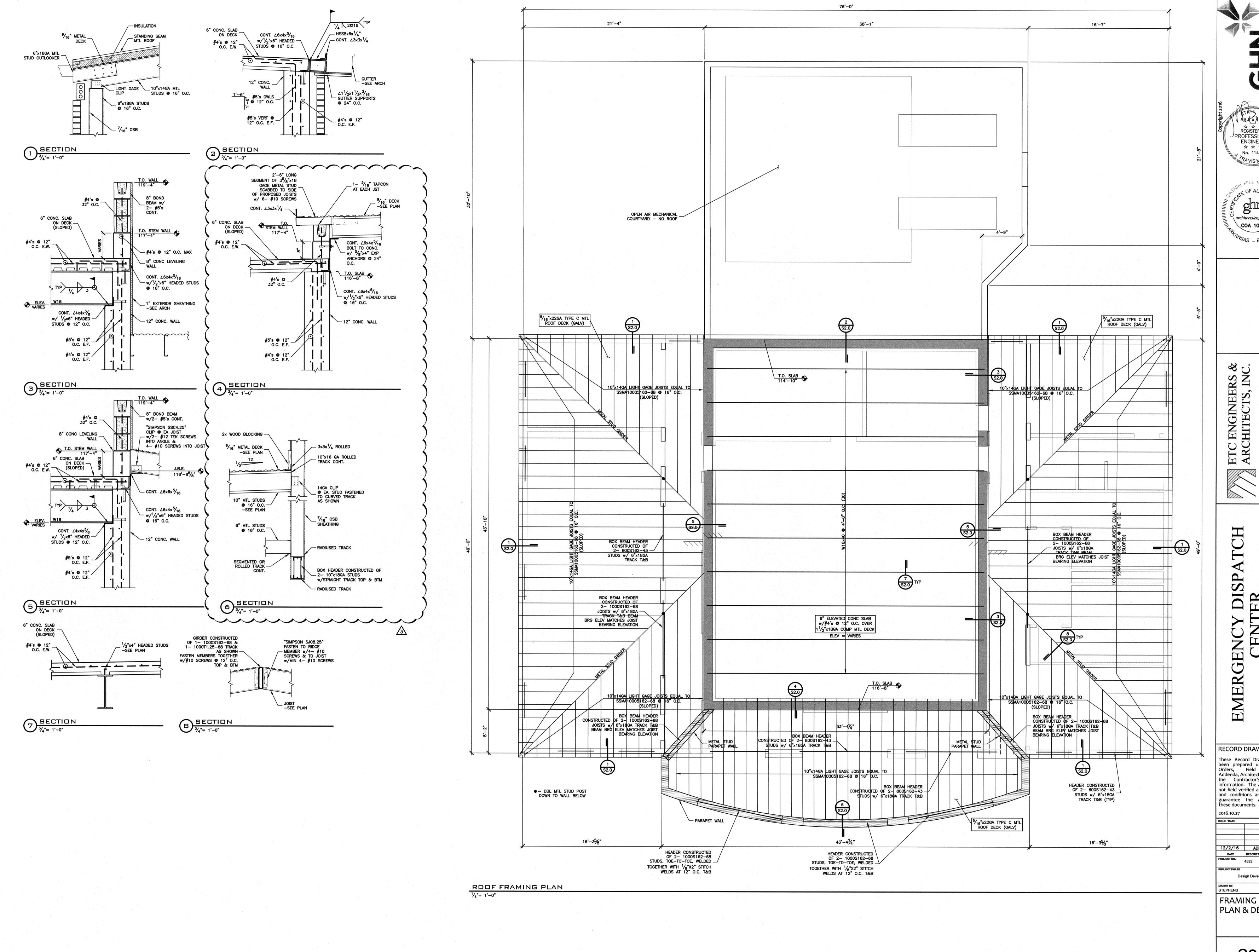
oject No.:
150303CPAG
oject Phase:
Construction Documents

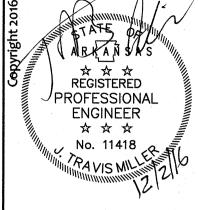
awn By:
Checked By:
CM

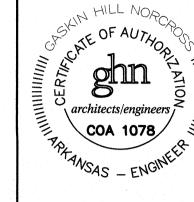
yrgys 2016 ETC Engineers & Architects, Inc.

DETAILS

A351





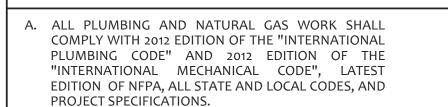


RECORD DRAWINGS These Record Drawings have been prepared using Change Orders, Field Changes, Addenda, Architect's notes, and the Contractor's 'As-Built' information. The Architect has not field verified all dimensions and conditions and does not guarantee the accuracy of

12/2/16 ADDENDUM 3 DATE DESCRIPTION
PROJECT NO. 4500 Design Development

CHECKED BY: MILLER PLAN & DETAILS

S2.0



- B. VISIT THE SITE AND VERIFY CONDITIONS PRIOR TO BIDDING.
- C. VERIFY UTILITY LOCATIONS AND INVERTS, PRIOR TO ROUTING SERVICES. COORDINATE ALL BUILDING WASTE, SANITARY SEWER, STORM DRAINS, FIRE AND DOMESTIC WATER LINES AND NATURAL GAS LINES WITH CIVIL PLANS, REFER TO THE CIVIL PLANS FOR CONTINUATION OF ALL UTILITY LINES.
- D. PAY ALL UTILITY FEES AND CHARGES AS PART OF BASE BID IN THE CONTRACT.
- E. ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. DO NOT SCALE DRAWINGS. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE-VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH. SUBMIT A REQUEST FOR INFORMATION (RFI) IF INFORMATION CONFLICTS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND OTHER DRAWINGS FOR ADDITIONAL INFORMATION.
- F. THE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS, THE SELECTION OF WHICH HAS IMPACTED THE DESIGNS OF OTHER TRADES (HVAC, ELECTRICAL, STRUCTURAL, ETC.). IF ALTERNATE MANUFACTURERS, FUEL SOURCES, SIZES, OR MODEL NUMBERS ARE

SUBMITTED OR BID, IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO COORDINATE ALL DIFFERENCES PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR CHANGES REQUIRED TO OTHER TRADES IF ALTERNATE EQUIPMENT IS BID OR INSTALLED AT THE CONTRACTORS OPTION.

PLUMBING GENERAL NOTES

- G. EXCEPT WHERE MODIFIED BY SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS OR SPECIFICATIONS OR BOTH, CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION.
- H. COORDINATE WORK WITH THE WORK OF ALL TRADES ON THE PROJECT.
- J. REFER TO SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS OF PLUMBING FIXTURES AND EQUIPMENT, AND PROPER APPLICATIONS OF SAME.
- K. ALL PIPING PENETRATIONS OF THE FLOOR, RATED CEILING AND WALL MUST BE MADE WITH A METAL PIPE OR UL LISTED APPROVED DEVICES. FIRE STOP ALL PIPE PENETRATIONS THRU RATED WALLS. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS, RATINGS AND FIRE STOPPING DETAILS.
- L. PROVIDE STOP VALVES ON EVERY FIXTURE ON BOTH HOT AND COLD WATER SUPPLY LINES. ESCUTCHEONS, FITTINGS, ETC. SHALL BE CHROME PLATED WHERE EXPOSED.
- M. DO NOT ROUTE ANY PIPING OVER ELECTRIC ROOMS, COMPUTER ROOMS, OR ELECTRIC PANELS.
- N. PROVIDE A LINTEL AT ALL NEW OPENINGS (EXCEEDING 12" WIDE) IN NEW OR EXISTING WALLS.
- O. ALL VENT PIPING SHALL BE 1-1/2" UNLESS OTHERWISE NOTED.

- P. SLOPE 2-1/2" AND SMALLER BUILDING WASTE LINES AT MINIMUM OF 1/4" FALL PER FT. AND 3" AND LARGER SANITARY SEWER LINES AT MINIMUM 1/8" FALL PER FT. VERIFY INVERTS WITH SITE UTILITY PLANS AND COORDINATE INSTALLATION TO ASSURE PROPER
- Q. PROVIDE CLEAN OUTS IN ALL WASTE, SANITARY, STORM DRAINAGE AND OVERFLOW LINES WHETHER SHOWN OR NOT, AT INTERVALS NOT TO EXCEED 100 FEET, AT EACH CHANGE OF DIRECTION GREATER THAN AS DEGREES AND ON ALL VERTICAL RISERS AT HEIGHT
- 45 DEGREES, AND ON ALL VERTICAL RISERS AT HEIGHT
 OF 30" A.F.F. AT THE BASE OF EACH STACK.

 Y. PRO
 ANT
 R. FLOOR DRAINS IN MECHANICAL ROOMS ARE SHOWN
 CON
- FOR GENERAL LOCATION ONLY. FLOOR DRAINS SHALL BE ACCESSIBLE AND SHALL BE COORDINATED WITH MECHANICAL EQUIPMENT LAYOUT. ALL FLOOR DRAINS SHALL HAVE A 4" DEEP SEAL TRAP MINIMUM.

 S. AN APPROVED TRAP GUARD PRODUCT CONFORMING
- TO NSF-14, CSAB602-99 AND CSAB79-94) SHALL BE INSTALLED AT ALL FLOOR AND HUB DRAINS. INSTALL TRAP GUARD DEVICES PER MANUFACTURER'S INSTRUCTIONS.

ALL STORM DRAIN, CONDENSATE DRAIN, WASTE,

SEWER AND VENT PIPING SHALL BE RODDED AND

- CLEANED AT END OF CONSTRUCTION. ALL TRAPS SHALL BE CLEANED AND PRIMED AT END OF CONSTRUCTION.
- U. MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKES, OPERABLE WINDOWS AND FLUES AND PLUMBING VENTS.
- V. BUILDING WASTE OR THE SANITARY SEWER AND DOMESTIC WATER SHALL BE SEPARATED BY 10 FEET, OR THE DOMESTIC WATER SERVICE SHALL BE 12 INCHES ABOVE THE TOP OF THE SEWER LINE AT ITS HIGHEST POINT, IF PLACED IN THE SAME TRENCH.

- W. EACH FIXTURE GROUP OR BATTERY OF FIXTURES
 SHALL BE PROVIDED WITH A SHUTOFF VALVE IN THE
 DOMESTIC HOT AND COLD WATER SUPPLY LINES
 ABOVE CEILING. VALVES SHALL BE ACCESSIBLE FROM
 BELOW. ACCESS PANELS SHALL BE COORDINATED
 WITH ARCHITECT PRIOR TO CONSTRUCTION.
- X. PROVIDE WATER HAMMER ARRESTORS IN FIXTURE BRANCHES WHERE QUICK CLOSING VALVES ARE INSTALLED; i.e., FLUSH VALVES, ICE MAKERS, DISHWASHERS, ETC. PROVIDE WATER HAMMER ARRESTORS IN FIXTURE BRANCHES AS REQUIRED.
- Y. PROVIDE BACK FLOW PREVENTION OR AN ANTI-SIPHON DEVICE AT ALL FIXTURES THAT COULD CONTAMINATE THE POTABLE WATER SYSTEM.
- Z. INSULATE ALL ABOVE GRADE SUPPLY PIPING AND ALL ABOVE GRADE STORM DRAIN PIPING.
- AA. PROVIDE INSULATION AT ALL EXPOSED HOT WATER AND DRAIN PIPING FOR HANDICAPPED FIXTURES PER ANSI A117.1 AND ADA REQUIREMENTS.
- AB. ALL DOMESTIC WATER AND SPRINKLER PIPING ROUTED IN AREAS SUBJECT TO FREEZING TEMPERATURES SHALL BE ROUTED ON THE INTERIOR OF THE INSULATION AND WITHIN THE HEATED ENVELOPE OF THE BUILDING. REFER TO THE ARCHITECTURAL DRAWINGS FOR INSULATION PLACEMENT AND DETAILS. UNLESS OTHERWISE INDICATED DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS. WHEN ROUTED IN EXTERIOR WALLS, CAREFULLY POSITION WATER PIPING ON THE HEATED SIDE (INTERIOR SIDE) OF THE WALL INSULATION.
- AC. ALL PIPE DROPS FROM CEILING PLENUM TO FLOOR SHALL BE MADE IN FURROUTS AT COLUMNS, IN WEB OF BEAMS AT COLUMNS OR IN WALLS. PIPING SHALL BE CONCEALED UNLESS APPROVED BY ARCHITECT.

1 WASTE PIPING PLAN

PLUMBING SYMBOLS LEGEND NOTE: ALL SYMBOLS MAY NOT APPEAR ON EVERY PLAN — — BELOW GRADE WASTE PIPING ——G— NATURAL GAS PIPING HOSE BIBB ABOVE GRADE WASTE PIPING BACKFLOW PREVENTER —LPG — PROPANE GAS PIPING — SS — SANITARY SEWER PIPING ——CA—— COMPRESSED AIR PIPING REDUCED PRESSURE BACKFLOW PREVENTER —BW— BUILDING WASTE AND DRAIN PIPING ——A—— MEDICAL COMPRESSED AIR PIPING GAS METER ——AW—— ACID WASTE PIPING —O— OXYGEN PIPING ——GW—— GREASE WASTE PIPING ——V— VACUUM PIPING WATER METER -OW OIL LADENT WASTE PIPING ——N—— NITROGEN GAS PIPING NEW PLUMBING EQUIPMENT —NO— NITROUS OXIDE GAS PIPING NEW PLUMBING FIXTURE PROVIDED BY THE PIPING DOWN (TEE DOWN TO ELBOW, ELBOW DOWN — RD — ROOF DRAIN PIPING -g--ō--so--to-tee, elbow, tee) CONTRACTOR -OD OVERFLOW ROOF DRAIN PIPING —o→o PIPING UP (TEE, ELBOW) CLEANOUT AT THE END OF PIPE ———— VENT PIPING FINISH FLOOR CLEANOUT — - AV - — ACID VENT PIPING WATER HAMMER ARRESTOR (WHA) CLEANOUT TO (FINISH) GRADE (COTG) — FPM — FIRE SPRINKLER MAIN PIPING ───── DIELECTRIC UNION 3"V.T.R. VENT THROUGH THE ROOF ———— COLD WATER SUPPLY PIPING ──**V**ALVE ———— HOT WATER SUPPLY PIPING **────** CHECK VALVE ———— HOT WATER RETURN PIPING NEW PLUMBING EQUIPMENT **────** GAS PLUG VALVE ---DI--- DEIONIZED COLD WATER SUPPLY PIPING GAS PRESSURE REGULATOR EXISTING PLUMBING EQUIPMENT → FD → FRENCH DRAIN PIPING

			PLUMBIN	IG FIXTURE SCHI	EDULE					
MARK	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES	FAUCET	WASTE	VENT	CON	N. SIZE COLD	REMARKS
<u>WC</u>	ADA FLUSH TANK WATER CLOSET	ZURN	Z5550	SEAT	-	4"	2"	-	1/2"	1
LAV	OVAL COUNTERTOP DROP-IN LAVATORY	KOHLER	SERIF K-2075-1-0	OFFSET GRID STRAINER,	KOHLER K-7516	2"	1-1/2"	1/2"	1/2"	4
<u>MB</u>	STONE MOP BASIN	FIAT	MSB-24x24	HANGER, GUARD, HOSE	FIAT #830-AA	3"	1-1/2"	1/2"	1/2"	3
SHW	SHOWER	AMERICAN STANDARD	3636S1.ST.020	BARS, CURTAIN, HEAD	ZURN Z7300-SS-MT-WF	2"	1-1/2"	1/2"	1/2"	8
<u>IMB</u>	ICE MAKER VALVE BOX	GUY GRAY	BIM875QT	QUARTER TURN VALVE	-	-	-	-	1/2"	6
<u>SK</u>	DOUBLE COMPARTMENT STAINLESS STEEL SINK	ELKAY		GARBAGE	ELKAY LK1000	2"	1-1/2"	1/2"	1/2"	7
<u>DF</u>	ADA COMPLIANT WATER COOLER	ELKAY	EZSTL8LC	WALL HANGING KIT	-	2"	1-1/2"	-	1/2"	2
<u>HY</u>	FREEZE-PROOF ANTI- SIPHON WALL HYDRANT	ZURN	Z1321-WC	ANTI-SIPHON, VACUUM BREAKER	-	-	-	-	3/4"	5
<u>FD</u>	CAST-IRON BODY FLOOR DRAIN	ZURN	ZN-Z415B	-	-	3"	1-1/2"	-	-	-
COTG	CLEANOUT TO GRADE	ZURN	Z1474	-	-	4"	-	-	-	-
<u>TEA</u>	THERMAL EXPANSION ABSORBER	AMTROL	ST-12	-	-	-	-	-	-	-
DN	NICKEL BRONZE BODY DOWNSPOUT NOZZLE	ZURN	Z199	-	-	-	-	-	-	2, 9
<u>OD</u>	CAST-IRON BODY & DOME ROOF OVERFLOW DRAIN	ZURN	ZC-Z121-C-89	CLAMP 2" HIGH EXTERNAL WATER DAM	-	-	-	-	-	9
<u>RD</u>	CAST-IRON BODY & DOME ROOF DRAIN	ZURN	ZC-Z121-C	DECK CLAMP	-	-	-	-	-	9

ACCESSORIES:

AERATOR - 0.5 GPM VANDAL-RESISTANT STRAINER
BARS - SHOWER CURTAIN AND ADA COMPLIANT GRAB BARS
CURTAIN - ANTIBACTERIAL CLOTH SHOWER CURTAIN
GARBAGE - GARBAGE DISPOSAL EQUAL TO IN-SINK-ERATOR BADGER 5
HANGER - FIAT MOP HANGER #889-CC
HEAD - CHROME PLATED SHOWER HEAD AND ESCUTCHEON

HOSE - FIAT HOSE AND HOSE BRACKET #832-AA

GUARD - FIAT STAINLESS STEEL WALL GUARD #MSG2424

SH-SEAT - REMOVABLE FOLD-UP SEAT

SEAT - ZURN #Z5956SS-EL (HEAVY DUTY) OPEN FRONT WHITE SEAT

REMARKS:

- HANDLE ON THE WIDE SIDE OF THE STALL.
 REFER TO THE ARCHITECTURAL PLANS FOR THE MOUNTING HEIGHT.
- FAUCET SHALL HAVE A VACUUM BREAKER.
 INSULATE THE SUPPLY AND DRAIN PIPING WITH A WHITE INSULATION DEVICE EQUAL TO McGUIRE MODEL NO. PW-2150-WC AND PROVIDE A THERMOSTATIC MIXING VALVE ON THE
- SUPPLIES EQUAL TO WATTS MODEL NO. USG-B.
 5. VERIFY WALL THICKNESS REQUIREMENTS, REFER TO THE ARCHITECTURAL PLANS.
 6. VALVE BOX MOUNTED WITH THE BOTTOM AT 12" ABOVE THE FINISH FLOOR.
- 7. NO QUICK CLIPS ALLOWED.

 8. SEAT AND VALVE ORIENTATION PER THE PLAN
- 8. SEAT AND VALVE ORIENTATION PER THE PLAN.9. REFER TO THE PLAN FOR THE SIZE.

			PU	JMP SC	CHEE	DUL	.E						
AAADV	AAANI IEACTI IDED	MODEL	WATER FLOW RATE	TOTAL HEAD	PUMP	МО	TOR	ELEC	CTRICA	L	ACCESSORIES	DEMADUC	
MAKK	MANUFACTURER	MODEL	GPM	FT. OF H ₂ O	RPM	BHP	MHP	V/PH	MCA	MOCP	ACCESSORIES	KEIVIAKKS	
<u>P-1</u>	BELL & GOSSETT	e3-6V/B_XRC	1	9	-	-	28W	120/1	<1	20	ЕСМ,ТН,ТМ	1	

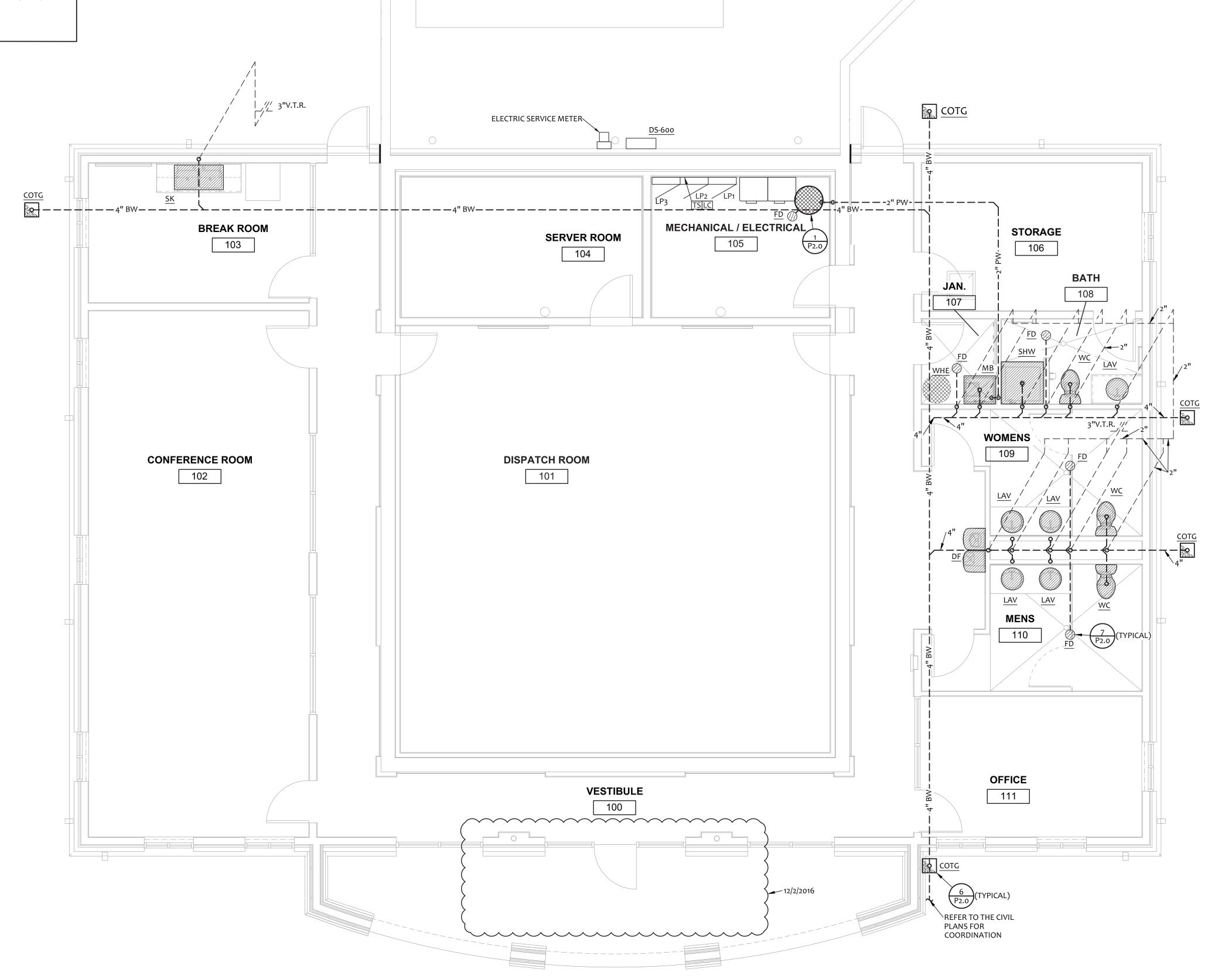
ACCESSORIES:

ECM - ADJUSTABLE SPEED ECM MOTOR
TH - ADJUSTABLE THERMOSTAT

TH - ADJUSTABLE THERMOST
TM - ADJUSTABLE TIMER

REMARKS:

1. CONNECTIONS AS REQUIRED BY PIPING TYPE..



TORNADO RESISTANT

MECHANICAL ENCLOSURE

112

D1 Λ

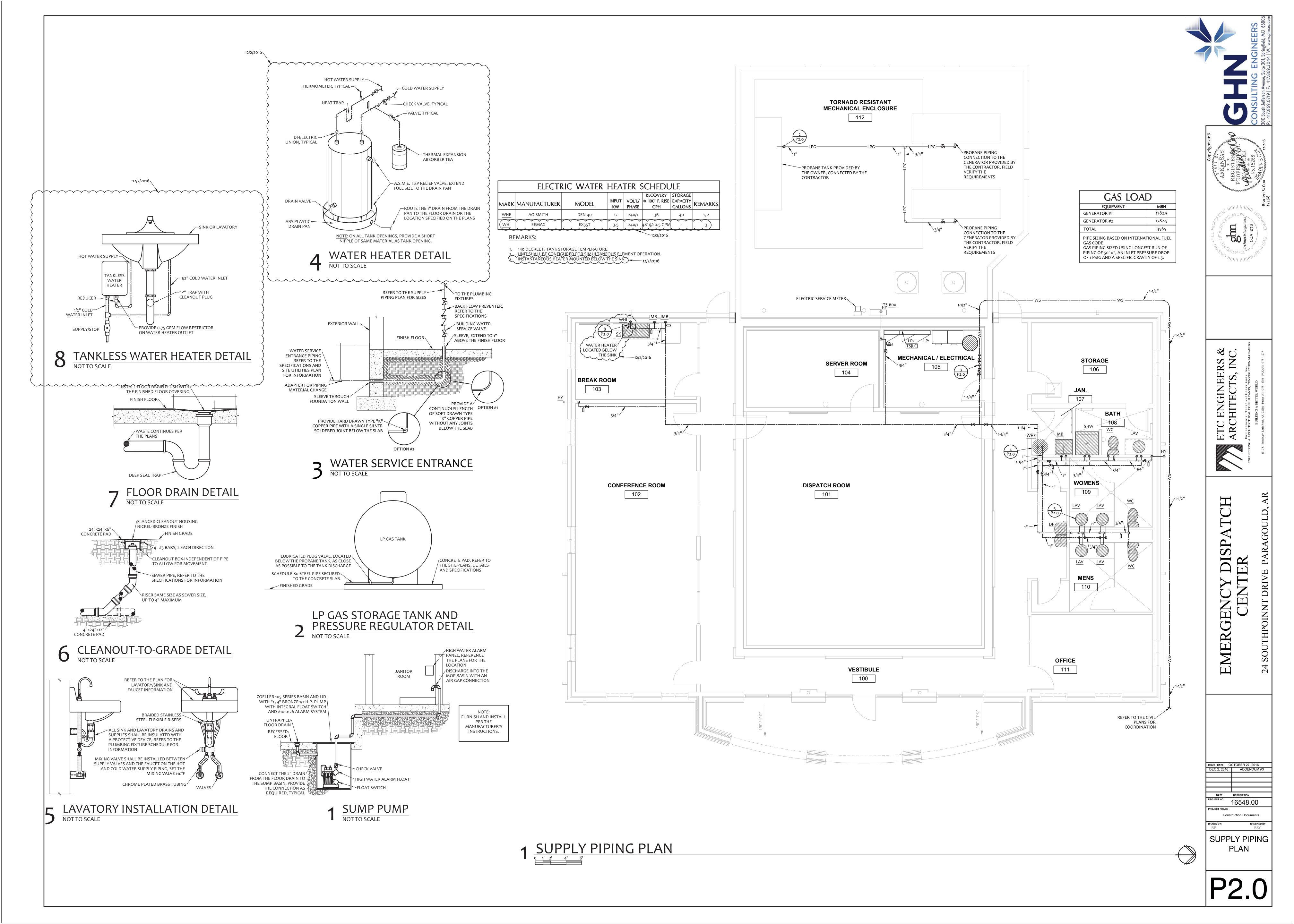
ISSUE / DATE OCTOBER 27, 2016

16548.00

Construction Documents

WASTE & VENT

PIPING PLAN





- REFRIGERANT LINE SETS ROUTED TO THE INDOOR COIL, FIELD VERIFY THE ROUTE.
- 2 ROUTE CONDENSATE DRAIN DOWN TO THE CONCRETE FLOOR, OVER TO THE FLOOR DRAIN AND TURN DOWN.

MECHANICAL SYMBOLS LEGEND

SUPPLY AIR CEILING GRILLE

RETURN AIR CEILING GRILLE

EXHAUST AIR CEILING GRILLE

MECHANICAL EQUIPMENT

MEDIUM PRESSURE DUCT

DUCT-WIDTHxDEPTH

SUPPLY DUCT DOWN

RETURN/EXHAUST DUCT UP

ROUND DUCT DOWN

UP/DN SLOPING IN DIRECTION OF AIR FLOW

FLEXIBLE DUCT (MAX. 5'-0" LONG)

SIDEWALL SUPPLY/RETURN GRILLES

ROUND DUCT UP

FITTING WITH A DAMPER

RETURN/EXHAUST DUCT DOWN

ROUND DUCT DOWN TO A BELLMOUTH

MANUAL OPPOSED BLADE DAMPER

MOTORIZED OPPOSED BLADE DAMPER

FLEX CONNECTION IN DUCT

MANUAL BUTTERFLY DAMPER W/ LOCKING

RADIUS ELBOW R/D = 1.5

SQUARE TO SQUARE TRANSITION

SQUARE TO ROUND TRANSITION ROUND DUCT

AIR EXTRACTOR

—DAMPER (IF SHOWN)

DAMPER (IF SHOWN)
HIGH EFFICIENCY TAKE-OFF

____ CONICAL/BELLMOUTH TEE

45 DEG.° ENTRY TAP

FIRE SMOKE DAMPER

DUCT ACCESS DOOR, VERTICAL OR

WALL ACCESS PANEL

CEILING ACCESS PANEL

HUMIDISTAT

CO2 SENSOR

THERMOSTAT

─ON THE BOTTOM OF THE DUCT

THERMOSTAT WITH LOCKING COVER

NON-ADJUSTABLE ROOM SENSOR

ADJUSTABLE ROOM SENSOR

CONICAL 45° DEG. LATERAL

ELBOW W/ TURNING VANES

QUADRANT

RECTANGULAR DUCT

45° DEG.° LATERAL

12X10Ø FLAT OVAL DUCT-WIDTHXDEPTH

SUPPLY DUCT UP

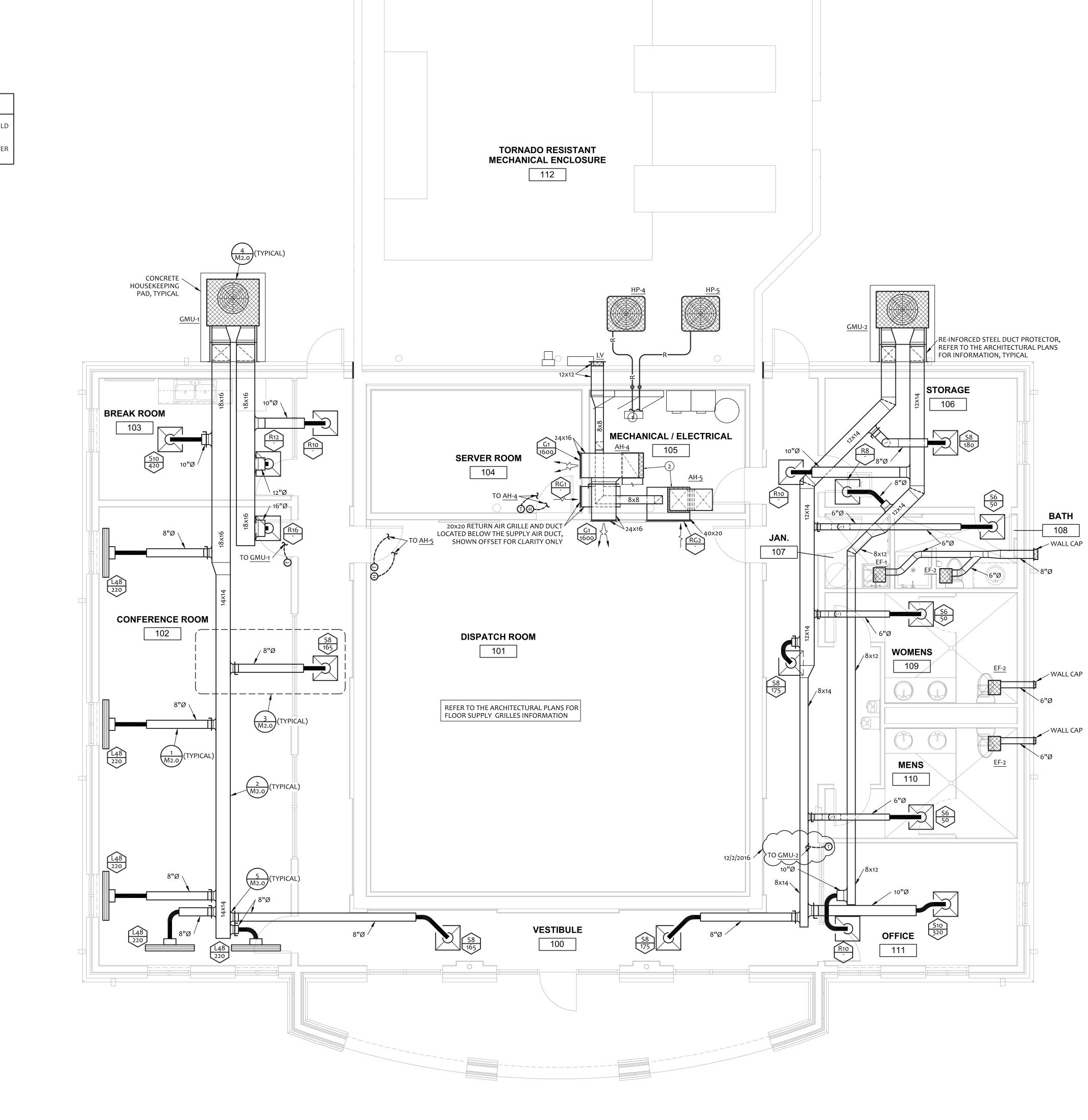
NOTE: ALL SYMBOLS MAY NOT APPEAR ON EVERY PLAN.

MECHANICAL GENERAL NOTES

- A. COMPLY WITH LOCAL, STATE AND NATIONAL CODES.
- B. COORDINATE WORK WITH THE WORK OF ALL TRADES ON THE PROJECT.
- C. FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO BIDDING.
- D. ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. DO NOT SCALE THE DRAWINGS. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE-VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH. SUBMIT A REQUEST FOR INFORMATION (RFI) IF INFORMATION CONFLICTS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND OTHER DRAWINGS FOR ADDITIONAL INFORMATION.
- E. THE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS, THE SELECTION OF WHICH HAS IMPACTED THE DESIGNS OF OTHER TRADES (HVAC, ELECTRICAL, STRUCTURAL, ETC.). IF ALTERNATE MANUFACTURERS, FUEL SOURCES, SIZES, OR MODEL NUMBERS ARE SUBMITTED OR BID, IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO COORDINATE ALL DIFFERENCES PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR CHANGES REQUIRED TO OTHER TRADES IF ALTERNATE EQUIPMENT IS BID OR INSTALLED AT THE CONTRACTORS OPTION.
- INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS OR SPECIFICATIONS OR BOTH, CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION.

EXCEPT WHERE MODIFIED BY SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE

- G. PROVIDE REQUIRED MODIFICATIONS TO THE NEW AND EXISTING SYSTEMS TO FACILITATE THE INSTALLATION OF THE NEW SYSTEMS AND FOR THE PROPER OPERATION OF ALL SYSTEMS.
- H. ALL DUCT DIMENSIONS REPRESENT INTERIOR FREE DIMENSIONS, ADJUST DUCT CONSTRUCTION FOR THE INSULATION SPECIFIED, REFER TO THE SPECIFICATIONS.
- I. LOW PRESSURE FLEXIBLE DUCT SHALL HAVE A MAXIMUM LENGTH OF 5'-0", BE PROPERLY SUPPORTED WITH NO KINKS OR HARD BENDS. ELBOWS SHALL HAVE AN R/D NOT LESS THAN 1.0.
- J. LOW PRESSURE DUCT FITTINGS: BRANCH SUPPLY DUCT TO CEILING SUPPLY DIFFUSERS TO BE HIGH EFFICIENCY TAP WITH A DAMPER OR BELLMOUTH FITTING WITH A DAMPER. ALL 90 DEGREE ROUND ELBOWS SHALL HAVE A R/D = 1.5. ALL 90 DEGREE RECTANGULAR ELBOWS SHALL HAVE TURNING VANES UNLESS OTHERWISE NOTED.
- K. CLOSELY COORDINATE THE LOCATION OF INSTALLED EQUIPMENT TO ACHIEVE THE GREATEST ACCESSIBILITY FOR MAINTENANCE PURPOSES.
- L. REFER TO ARCHITECTURAL PLANS FOR CEILING GRILLE LOCATIONS AND CEILING TYPE.
- M. SEAL ALL DUCT JOINTS WITH LIQUID SEALER. DUCT TAPE IS NOT ACCEPTABLE.
- N. PROVIDE A LINTEL AT ALL NEW OPENINGS (EXCEEDING 12" WIDE) IN NEW OR EXISTING WALLS.O. EXHAUST DUCT SHALL NOT BE INSULATED UNLESS NOTED OTHERWISE IN THE CONSTRUCTION DOCUMENTS.
- P. INSULATE AND SECURE THE TOP OF ALL SUPPLY AIR DIFFUSERS WITH 1" THICK FIBERGLASS DUCT WRAP.
- Q. COORDINATE LOCATION OF DUCTS AND DIFFUSERS WITH STRUCTURAL FRAMING MEMBERS. OFFSET DUCTS, AS REQUIRED, TO CLEAR STRUCTURAL MEMBERS.
- R. PROVIDE A SLEEVE, FOR ALL PIPE AND DUCTS, THROUGH FIRE RATED PARTITIONS AND SLABS AND SEAL WITH FIRE RATED SEALANT.
- S. PATCH ALL WALLS, FLOORS, AND CEILINGS TO MATCH THE SURROUNDING SURFACE FOR ALL OPENINGS CREATED BY DEMOLITION WORK. REPLACE AND/OR PATCH TO MATCH THE EXISTING SURFACE ANY PIPE AND/OR DUCT INSULATION THAT SHALL REMAIN AND IS DAMAGED OR REMOVED DURING CONSTRUCTION.
- T. REFER TO THE ARCHITECTURAL PLANS FOR WALL AND ROOF PENETRATIONS AND EQUIPMENT MOUNTING DETAILS.



1 MECHANICAL PLAN

Construction Documents

WN BY: CHECKED BY
BB BSC

HVAC PLAN

16548.00

ISSUE / DATE OCTOBER 27, 2016

M1.0

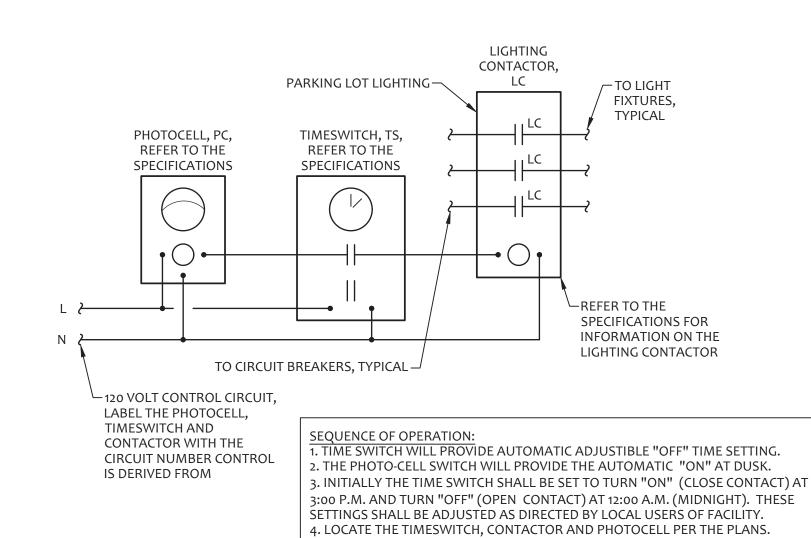
	LIGHT FIXTURE SCHEDULE													
MARK	MANUFACTURER	MODEL	DESCRIPTION	FINISH	MOUNTING	LAMP	VOLTAGE	REMARKS						
А	CREE	ZR22-32L-40K-10V	2'x2' LED TROFFER	WHITE	RECESSED	3,200 LUMEN 35W, 4,000K LED	120	-						
В	CREE	LS4-40L-40K	LED SURFACE AMBIENT LUMINAIRE	WHITE	SURFACE	4,000 LUMEN 44W, 4,000K LED	120	-						
С	WILLIAMS	LX4UD-12-L8/840U-S- A-ACF/96-DIM-120	r' CONTINUOUS SUSPENDED	WHITE	SUSPENDED	9,600 LUMEN 93W, 4,000K LED	120	1,3						
C2	WILLIAMS	AX2D-8-L66/840-F/J/S-DIM-120	8' CONTINUOUS SUSPENDED	WHITE	SUSPENDED	6,600 LIMEN 83W, 4,000K LED	120	2,3						
D	TERON LIGHTING	VCY48-L24-120-UDL-TE350-SM-40K	LINEAR ARCHITECTURAL VANITY	SILVER	SURFACE/WALL	2,916 LUMEN 28W, 4,000K LED	120	4						
F	AXIS	WBWLED-B3-MF-500-80- 40-S-4-W-120-D-1	WALL DIRECT LED	WHITE	SURFACE/WALL	2,000 LUMEN 22W, 4,000K LED	120	4						
CAN	WILLIAMS	L60-L30C/840-SG/M-MWT-DIM-120	6" ROUND LED DOWNLIGHT	WHITE	RECESSED	3,000 LUMEN 36W, 4,000K LED	120	3						
ECAN	WILLIAMS	L60-L40C/840-SG/M-MWT-DRV-120	6" DAMP LOCATION RATED ROUND LED DOWNLIGHT	WHITE	RECESSED	4,000 LUMEN 39W, 4,000K LED	120	3						
WALL	TERON LIGHTING (TLI)	CDL-L48.0-120-CGL-TB-40K	EXTERIOR LED WALL PACK	BLACK	SURFACE/WALL	5,368 LUMEN 48W, 4,000K LED	120	4						
SL3	COOPER LIGHTING	GLEON-AF-04-LED-E1-SL3-BZ	ARCHITECTURAL LED POLE MOUNTED SITE FIXTURE	BRONZE	POLE	24,013 LUMEN 225W, 5,000K LED	120	5						
SL4	COOPER LIGHTING	GLEON-AF-04-LED-E1-SL4-BZ	ARCHITECTURAL LED POLE MOUNTED SITE FIXTURE	BRONZE	POLE	22,816 LUMEN 225W, 5,000K LED	120	5						
X1	WILLIAMS	EXIT/EL/RECESSED-SF/DF-R-CP/MP- WHT-EM-SDT	LED EXIT LIGHT FIXTURE	WHITE	RECESSED	LED	120	-						

GENERAL NOTES:

- A. COORDINATE AND VERIFY THE COLORS AND FINISHES OF ALL FIXTURES WITH THE ARCHITECT AND/OR OWNER.
- B. PROVIDE ALL NECESSARY FRAMING KITS FOR FIXTURES MOUNTED IN CEILINGS.
 C. PROVIDE ALL NECESSARY STEMS, ACCESSORIES, HARDWARE AND ASSOCIATED EQUIPMENT AND MATERIAL FOR A COMPLETE INSTALLATION.
 D. COORDINATE THE EXACT MOUNTING HEIGHT, LOCATION AND DETAILS WITH THE SITE CONDITIONS AND THE ARCHITECTURAL PLANS PRIOR TO ROUGHING IN.

E. ALL INTERIOR FIXTURES SHALL HAVE COLOR TEMPERATURE OF 4000K UNLESS NOTED OTHERWISE. REMARKS:

- SUSPEND WITH THE BOTTOM OF THE FIXTURE AT 9'-0" ABOVE THE FINISH FLOOR.
 SUSPEND WITH THE BOTTOM OF THE FIXTURE AT 9'-3" ABOVE THE FINISH FLOOR.
- 3. 0-10 VOLT DIMMABLE, REFER TO THE SPECIFICATIONS FOR 0-10 VOLT DIMMER INFORMATION.
- 4. COORDINATE WITH THE ARCHITECTURAL PLANS FOR THE FIXTURE MOUNTING LOCATION.
 5. 25'-0" TALL STRAIGHT SQUARE STEEL DARK BRONZE POLE.



2 EXTERIOR LIGHTING CONTROL DETAIL NOT TO SCALE

ELECTRICAL GENERAL NOTES

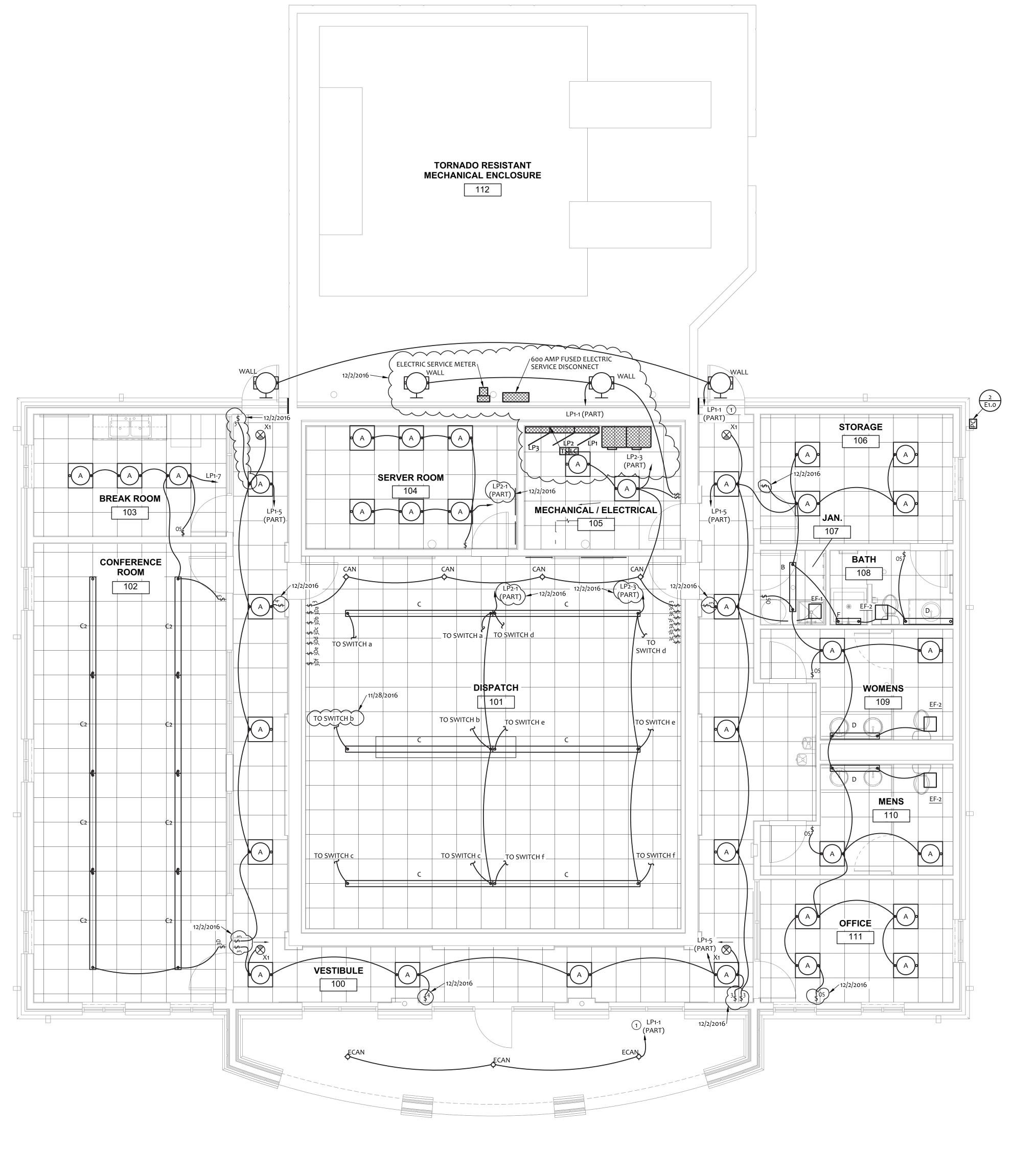
TIMER SWITCH

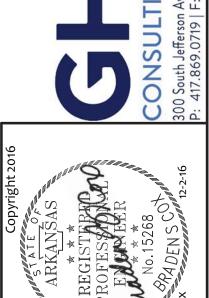
- A. WORK SHALL COMPLY WITH THE N.E.C. AND ALL LOCAL, STATE AND NATIONAL CODES.
- B. COORDINATE WORK WITH THE WORK OF ALL TRADES ON THE
- C. FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO BIDDING.
- D. LIGHT FIXTURES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE, PROVIDE NEW LAMPS IN ALL FIXTURES AT THE END OF CONSTRUCTION PRIOR TO SUBSTANTIAL COMPLETION.
- E. SINGLE PHASE BRANCH CIRCUITS SHALL NOT SHARE NEUTRALS.
- F. PROVIDE THE DATA CONDUITS AND BOXES AS SHOWN, THE DATA CABLING SHALL BE FURNISHED AND INSTALLED BY THE OWNER, UNLESS NOTED OTHERWISE.
- G. FIELD VERIFY THE ROUGH-IN DIMENSIONS OF ALL FLOOR BOXES, DATA OUTLETS, TV OUTLETS AND TV RECEPTACLES PRIOR TO ANY INSTALLATION. ANY CHANGE OF LOCATION OF A BOX THAT WAS NOT VERIFIED WITH THE OWNER PRIOR TO INSTALLATION SHALL BE RELOCATED, TO THE OWNER'S SATISFACTION, AT THE CONTRACTOR'S EXPENSE.
- H. PROVIDE THE REQUIRED POWER FOR ALL MECHANICAL OR PLUMBING EQUIPMENT SPECIFIED IN THE CONTRACT DOCUMENTS, EVEN IF NOT SHOWN ON THE POWER PLANS.
- I. THE CONTRACTOR SHALL VERIFY THE POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT AND PLUMBING EQUIPMENT, WITH THE EQUIPMENT SUPPLIERS, PRIOR TO PREPARING SUBMITTALS OR ORDERING ANY SWITCHGEAR OR EQUIPMENT. SUPPLIED PLUMBING AND/OR MECHANICAL EQUIPMENT MAY VARY FROM THE EQUIPMENT SPECIFIED IN THE PLANS.
- J. ALL RACEWAYS SHALL BE CONCEALED WHERE POSSIBLE, WHERE CONDITIONS REQUIRE EXPOSED ROUTING, ROUTE CONDUITS IN A NEAT MANNER PARALLEL WITH THE BUILDING LINES AND AS HIGH AS POSSIBLE.
- K. PROVIDE A GROUNDING CONDUCTOR IN RACEWAYS, SIZED PER THE N.E.C.
- L. PROVIDE CONCRETE HOUSEKEEPING PADS FOR ALL FLOOR/GROUND MOUNTED EQUIPMENT. PADS SHALL BE 6" LARGER THAN THE EQUIPMENT, REFER TO THE SPECIFICATIONS FOR CONCRETE REQUIREMENTS.
- M. REFER TO THE SPECIFICATIONS FOR MORE INFORMATION.
- N. EMERGENCY ILLUMINATION UNITS SHALL BE CONNECTED TO THE LOCAL NORMAL LIGHTING CIRCUIT AHEAD OF ANY LOCAL SWITCHING, REFER TO N.E.C. SECTION 700-12(e) FOR INFORMATION.

1 LIGHTING PLAN

KEY NOTES

1) HOMERUN CIRCUITRY ROUTED THROUGH LIGHTING CONTACTOR LC.









ETC ENGINEERS &
ARCHITECTS, INC.

Environmental Technical Consultants, Inc.

BEACHITECTURAL CONSULTANTS, CONSTRUCTION MANAGE

CY DISPATCH

CENTI
24 SOUTHPOINNT DRIVE

DEC 2, 2016 ADDENDUM #3

DATE DESCRIPTION

PROJECT NO. 16548.00

PROJECT PHASE

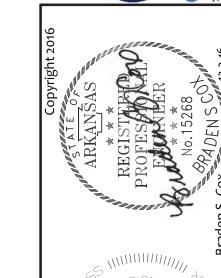
Construction Documents

DRAWN BY: CHECKED
BB BSC

LIGHTING PLAN

F1 0







S & **V V C V WANAGERS**

ETC ENGINEERRS &

ARCHITECTS, INC.

BUILDING A BETTER WORLD

ETC ENGINEERING & ARCHITECTURAL CONSULTANTS, CONSTRUCTION MANAGERS

BUILDING A BETTER WORLD

CY DISPATCH INTER

EMERGENCY DI CENTER

DATE DESCRIPTION
PROJECT NO. OCTOBER 27, 2016
ADDENDUM #3

DATE DESCRIPTION
PROJECT NO. 16548.00

PROJECT PHASE

Construction Documents

DRAWN BY: CHECKEI

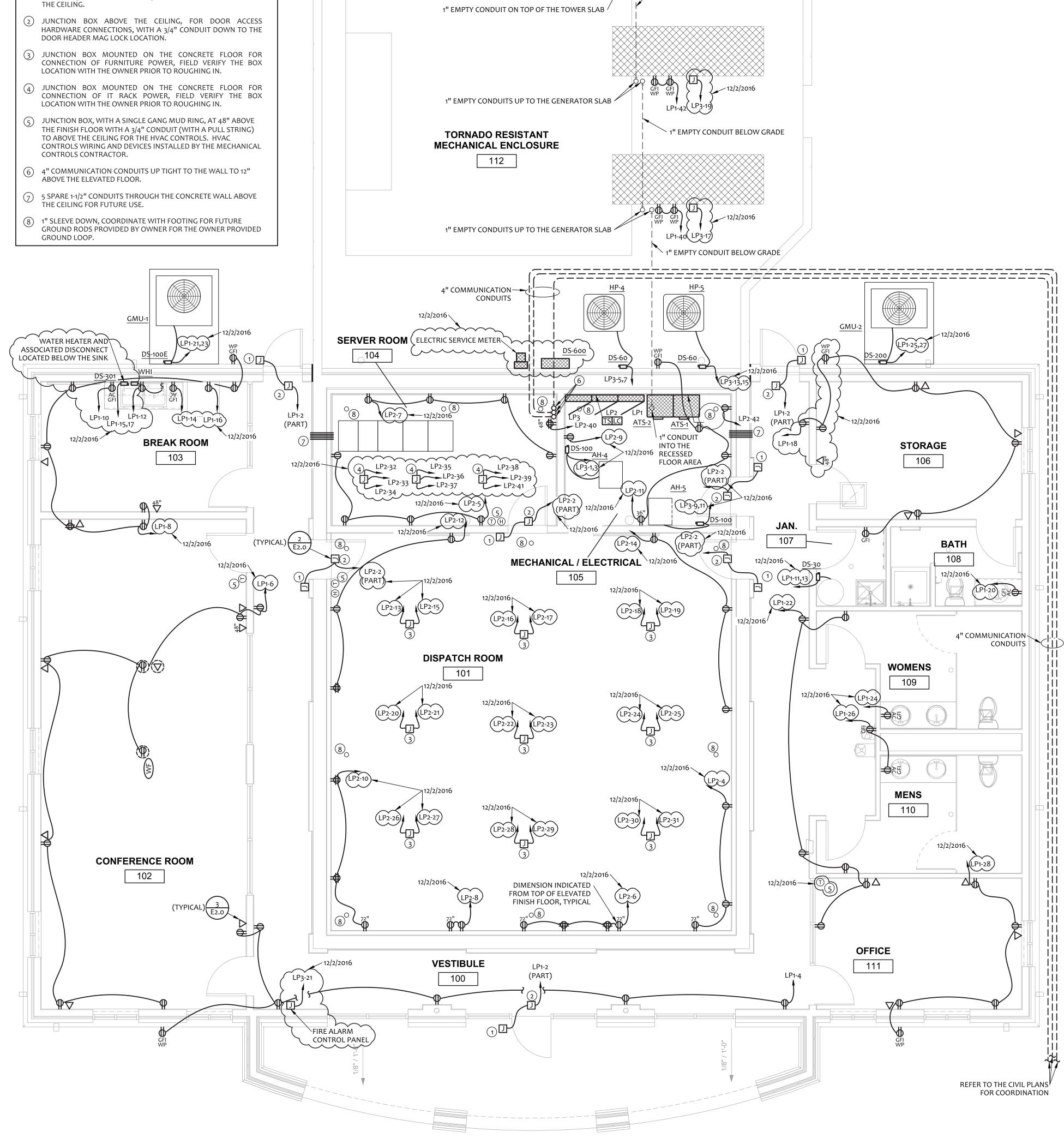
BB BSC

POWER PLAN

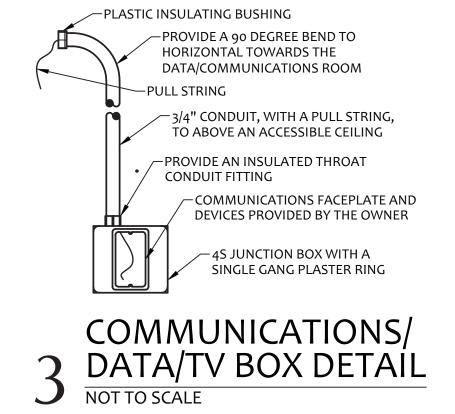
E2.0

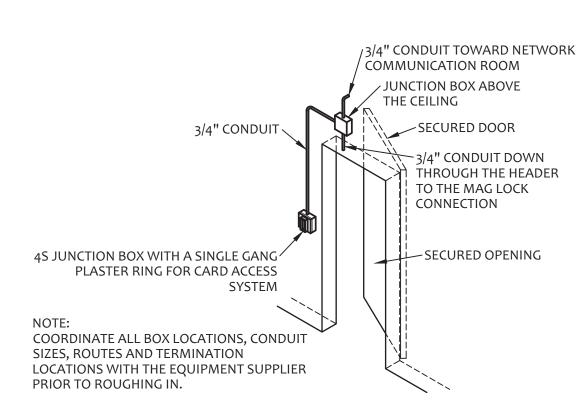


JUNCTION BOX AT 48" ABOVE THE FINISH FLOOR WITH A 3/4" CONDUIT (WITH A PULL STRING) TO THE JUNCTION BOX ABOVE



1" EMPTY CONDUIT BELOW GRADE

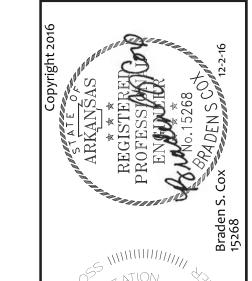


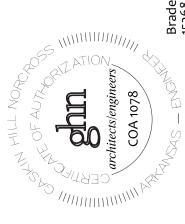


2 DOOR ACCESS DETAIL NOT TO SCALE

	DISCO	NNEC	CT SW	ITC/	H S	CHE	DULE		
MARK	LOAD			WITCH	20153		FUSE	NEMA	REMARKS
	EQUIPMENT SERVED	VOLTS	DUTY	AMP	POLES	AMP	TYPE		
<u>DS-30</u>	SQUARE D 12/2/2016	240	GENERAL	30	2	-	-	1	-
DS-301	SQUARE D	240	GENERAL	30	2	· ·		1	(-)
<u>DS-60</u>	SQUARE D	240	GENERAL	60	2	-	-	3R	-
<u>DS-100</u>	SQUARE D	240	GENERAL	100	2	-	-	1	-
DS-100E	SQUARE D	240	GENERAL	100	2	-	-	3R	-
<u>DS-200</u>	SQUARE D	240	GENERAL	200	2	-	-	3R	-
DS-600	SQUARE D	240	GENERAL	600	2	600	LPN-RK	3R	-







PANEL LP2 SCHEDULE

WIRE LOAD (VA) WIRE

, PHASE PHASE ,

3000

3000

3000

PANEL LP1 SCHEDULE

WIRE 3

20/1 | 12 | 12 | 1940 |

SPACES 42

LOAD CKT. Z

720

1500

1500

1500

1500

1500

TOTAL DIVERSIFIED AMPS WITH A 10% SAFETY FACTOR

1500 20/1

1500 20/1

TOTAL CONNECTED (VA

TOTAL CONNECTED AMPS

TOTAL DIVERSIFIED AMPS

TOTAL PER PHASE (VA) 27194 23409

PHASE

SPACES 42

LOAD CKT. Z

769 20/1

20/1

450

11340

S (VA) BRKR. A

20/1

20/1 | 12 | 12 | 2550 |

0 6 11700

TOTAL PER PHASE (VA) 32131 30659

62790

262

TOTAL CONNECTED (VA

TOTAL CONNECTED AMPS

TOTAL DIVERSIFIED AMPS

TOTAL DIVERSIFIED AMPS WITH A 10% SAFETY FACTOR

NORTH WALL, MECH./ELEC. 105 SOUTH | R | 180 | 20/1 | 12 | 12 | 1150 |

BRKR. A

20/1

20/1

AMP RATING 225

200 AMP MAIN BREAKER

LOAD DESCRIPTION

LIGHTING-SOUTH- DISPATCH 101 8

SERVER RM 104

LIGHTING-NORTH-DISPATCH 101 8

RECEPTICALE SERVER RM 104 EAST WAI

RECEPTICALE SERVER RM 104 SOUTH

RECEPT. SERVER RM 104 WEST WALL

RECEPT. MECH 105, MECH ENCLOSURE

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

RACK POWER

RACK POWER

RACK POWER

GF-GROUND FAULT PROTECTED BREAK

AMP RATING 400

VOLTAGE 120/240

300 AMP MAIN BREAKER

LOAD DESCRIPTION

LIGHTING-EXTERIOR

LIGHTING-PARKING LOT

LIGHTING-VESTIBULE 100, NORTH-STOP

106, JAN. 107, BATH 108, WOMEN 109

MEN 110, OFFICE 111

LIGHTING-SOUTH-CONFERENCE RM 102

BREAK RM 103

SPARE

WATER HEATER WHE

WATER HEATER WHI

GROUND MOUNTED UNIT GMU-1

GROUND MOUNTED UNIT GMU-2

SPACE

SPACE

SPACE

SPACE

SPACE

SURGE SUPPRESSION

GF-GROUND FAULT PROTECTED BREAKE

AF-ARC FAULT PROTECTED BREAKER

HL-HANDLE LOCK ON/OFF DEVICE

ACCESSORIES:

GENERAL NOTES:

AF-ARC FAULT PROTECTED BREAKER

HL-HANDLE LOCK ON/OFF DEVICE

CCESSORIES:

GENERAL NOTES:

MECH./ELEC. 105

VOLTAGE 120/240

MIN. INT. AMP 22 KAIC

MOUNTING SURF.

CKT. LOAD

BRKR. (VA)

2 20/1 610

12 12 20/1 970 R

20/1 720

20/1 1500

20/1 1500

20/1 1500

20/1 1500

20/1 1500

20/1 1500

20/1 1500

20/1

MIN. INT. AMP 22 KAIC

MOUNTING SURF.

Z CKT. LOAD

20/1 180

12 20/1 180 R

12 | 12 | 20/1 | 1260 | 1

12 | 12 | 20/1 | 360

12 12 20/1 360 R

NEMA CONFIG. NEMA 1

1150 12 12 20/1 430

20/1 1220

NEMA CONFIG. NEMA

MANUFACTURER SQUARE D

BUS ALUM.

LOAD DESCRIPTION

DOOR ACCESS MAG LOCKS DISPATCH 10:

SERVER RM 104, MECH RM 105

RECEPT. DISPATCH 101 NORTH EAST

RECEPT. DISPATCH 101 EAST 1

RECEPT. DISPATCH 101 EAST 2

RECEPT. DISPATCH 101 SOUTH EAST

RECEPT. DISPATCH 101 SOUTH WEST

RECEPT. DISPATCH 101 NORTH WEST

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

WORK STATION POWER

RACK POWER

RACK POWER

RACK POWER

RACK POWER

RECEPT. COMMUNICATION BOARD SERVER

RECEPT. SUMP PUMP MECH RM 105

MANUFACTURER SQUARE D

TYPE NQ

LOAD DESCRIPTION

DOOR ACCESS MAG LOCK VEST. 100

RECEPT. VESTIBULE 100, NORTH EAST CON

RECEPT. CONFERENCE ROOM 201,

BREAKROOM 103 & EXTERIOR

RECEPT. BREAKROOM 103 COUNTER

RECEPT. BREAKROOM 103 GARBAGE

RECEPT. BREAKROOM 103 ICEMAKER

RECEPT. BREAKROOM 103 REFRIGERATOR

RECEPT. STOR. 106, JAN. 107, WEST

WOMENS 109, VEST 100 MID. NORTH

OUTSIDE NORTH WEST

RECEPT. BATH 108

RECEPT. WOMENS 109

RECEPT. DRINK FOUNTAIN, MENS 110

RECPT. MENS 110 EAST, OFFICE 111 SOUT

WEST, VEST. 100 NORTH EAST

RECEPT. OFFICE 111, EXTERIOR

SPACE

SPACE

SPACE

SPACE

SPACE

RECEPT. GENERATOR

RECEPT. GENERATOR

MOTORS 'M' 0

MISC. 'MC' 875

KITCHEN 'K' 0

LOAD PER CATEGORY (VA)

COOLING 'C' 19440 LARGEST MOTOR 'LM' 0

LIGHTING 'L' 3155

HEATING 'H' 19440

RECEPTACLES 'R' 11880

WATER HEATER 'W' 4000

BUS ALUM.

MOTORS 'M'

MISC. 'MC' 0

KITCHEN 'K' 0

LOAD PER CATEGORY (VA)

COOLING 'C' 0 LARGEST MOTOR 'LM'

LIGHTING 'L' 838

RECEPTACLES 'R' 49765

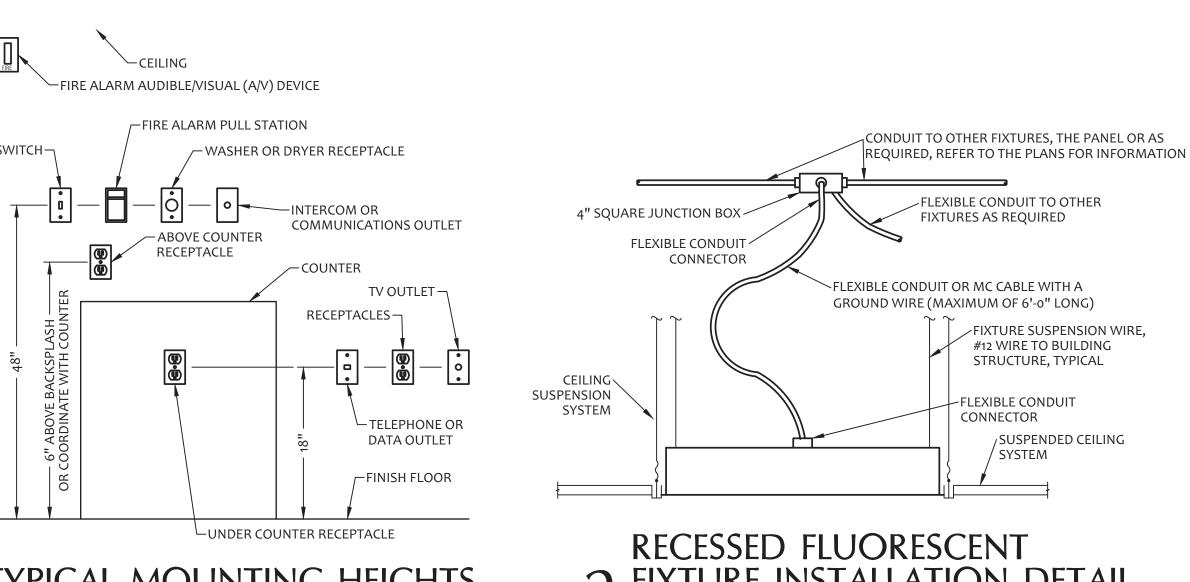
WATER HEATER 'W' 0

HEATING 'H' 0

ISSUE / DATE OCTOBER 27, 2016

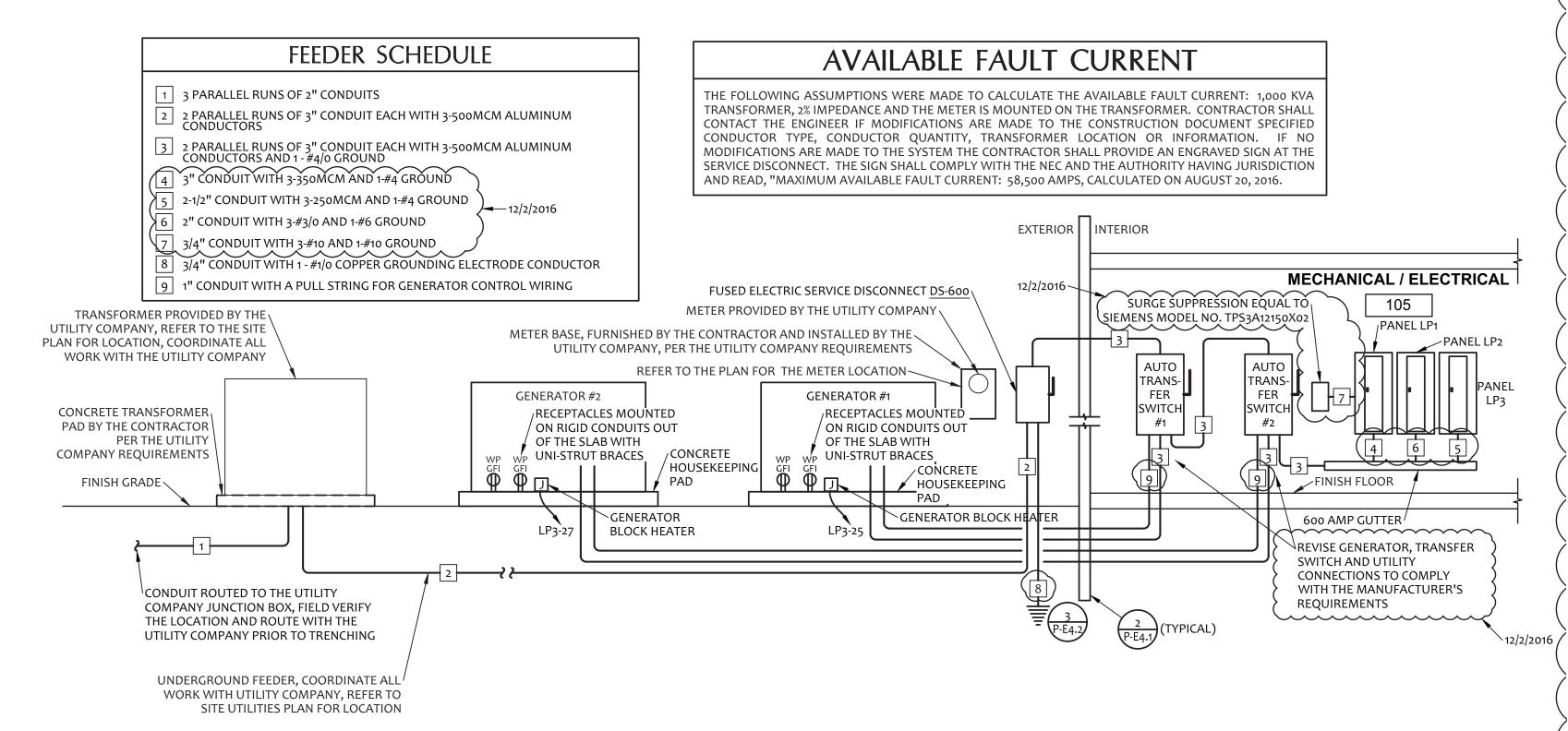
DATE DESCRIPTION 16548.00 Construction Documents

ELECTRICAL SCHEDULES & DETAILS



2 TYPICAL MOUNTING HEIGHTS

RECESSED FLUORESCENT 7 FIXTURE INSTALLATION DETAIL



SECTION A-A ELEVATED POLE BASE FOR 5 UNDERGROUND CONDUIT DETAIL NOT TO SCALE

CONCRETE A FOOTING

TO THE ELECTRIC SERVICE, BOND ALL NON-CURRENT

ELEVATION

POLE

HEIGHT

10'-0"

15'-0"

20'-0"

30'-0"

→BOND GROUND CONDUCTOR TO POLE

METAL POLE FURNISHED ~

INSULATED CONDUIT BUSHINGS >

FULL CONTACT OF POLE AND

TOP 3 TIES AT 6" ON-

CONCRETE BASE

PACK HIGH STRENGTH NON-SHRINK

GROUT UNDER POLE TO PROVIDE

CHAMFER EXPOSED CORNERS -

SMOOTH RUB CONCRETE FINISH~

CONDUIT(S) WITH BRANCH

CONDUIT WITH A PULL—

STRING FOR FUTURE

COMMUNICATIONS

1" RIGID STEEL CONDUIT

1" RIGID STEEL CONDUIT \

CIRCUIT WIRING AS

WITH LIGHT FIXTURE

HAND HOLE \

, MAIN DISCONNECT OR FIRST CARRYING PARTS OF THE SERVICE EQUIPMENT AS OVERCURRENT DEVICE REQUIRED BY THE NEC SECTIONS 250.66 THROUGH BOND METALLIC HOT AND COLD WATER PIPING AT THE / WATER WATER HEATER(S) WITH A #2 SUPPLY **GROUND WIRE** BOND WITH A #6 GROUND WIRE TO THE NEAREST CLAMP THE GREEN METALLIC GAS PIPE (DO INSULATED BONDING GROUND BAR, NOT BOND TO JUMPER TO THE PIPE, UNDERGROUND GAS PIPING) NEUTRAL BAR BOND, WITH A #2 GROUND WIRE TO AN INTERIOR COLD WATER PIPE WITHIN 5'-0" OF THE SERVICE ENTRANCE, N.E.C. SECTION 250.52 #6 GROUND WIRE TO THE OWNER PROVIDED GROUND LOOP PROVIDE AN INSULATED CONDUCTOR, #6 GROUND WIRE TO THE TELEPHONE SIZE PER N.E.C. TABLE 250.66 EQUIPMENT BACKBOARD BOND WITH A #3/0 REFER TO THE N.E.C. AND THE ELECTRICAL RISER GROUND WIRE TO THE \ DIAGRAM FOR GROUNDING ELECTRODE WIRE AND **BUILDING STEEL** CONDUIT SIZE ∠PVC SLEEVE (SIZE AS REQUIRED)

DIAMETER

18"

18"

24"

24"

LENGTH "L"

7'-6"

8'-0"

8'-6"

FOUR (4) HIGH STRENGTH STEEL ANCHOR

COORDINATE THE PATTERN OF THE BOLTS

FINISH GRADE

#6 BARE COPPER GROUND

∕5/8"Ø x 8'-o"

GROUND ROD

INSULATED BUSHING

4 - #5 VERTICAL REINFORCEMENT RODS FULL

LENGTH OF BASE

CADWELD GROUND

BOLTS BY POLE MANUFACTURER,

WITH THE POLE REQUIREMENTS

4 GROUNDING DETAIL

NOT TO SCALE

N.E.C. 250-50 AND 250-52

2" MINIMUM 🖳 🖵 2" MINIMUM

COORDINATE THE LOCATION WITH THE CONCRETE CONTRACTOR

~30' OF BARE COPPER GROUNDING ELECTRODE CONDUCTOR PER

1 ELECTRICAL RISER DIAGRAM NOT TO SCALE

	AMP RATING 400 200 AMP MAIN BREAKER VOLTAGE 120/240			١	HASE VIRE ACES	3		<u> </u>	N	MIN. I	OUNTING	22 KAIC SURF.		MANI	UFACTURER SQUARE D TYPE NQ BUS ALUM.	
CIRCUIT NO.	LOAD DESCRIPTION	CATEGORY	LOAD (VA)	CKT. BRKR.	♦&N A	IRE DE		PHASE B	5.644	IRE N& Φ	CKT. BRKR.	LOAD (VA)	CATEGORY		LOAD DESCRIPTION	
1	ELECTRIC FURNACE AH-4	Н	6850	80/2	4	8	6850		- 1	-	-	0	-		SPACE	
3	ELECTRIC FORNACE ATT-4	Н	6850]	4	-2		6850	-	2	-	0	12		SPACE	
5	CONDENSING UNIT HP-4	С	3204	60/2	6	10	3204		-	2	41	0	121		SPACE	
7	CONDENSING ONT ITF-4	С	3204		6	-		3204	-	-	-	0	-		SPACE	
9	ELECTRIC FURNACE AH-5	Н	8040	90/2	3	8	8040		-	-	-	0	-		SPACE	
11	ELLETTIC FORWACE ATT-5	Н	8040		3	-		8040	-	-	-	0	-		SPACE	
13	ELECTRIC FURNACE AH-5	С	3123	60/2	6	10	3123		-	-	-	0	-		SPACE	
15	ELLETTIC FORWACE ATT-5	С	3123	00/2	6	-		3123	-	-	-	0	-	6	SPACE	
17	GENERATOR #1 BLOCK HEATER	Н	1800	20/1	12	12	1800		-	-	-	0	-		SPACE	
19	GENERATOR #2 BLOCK HEATER	Н	1800	20/1	12	12		1800	-	-	2	0	-		SPACE	
21	FIRE ALARM PANEL	MC	500	20/1	12	12	500		-	-	-	0	-		SPACE	
23	SPACE		0	-	-	-		0	-	-	-	0	:=:		SPACE	
25	SPACE	-	0	-	-	-	0		-	-	-	0	-		SPACE	
27	SPACE	-	0	7.5	20-0	1.0		0	-	-	-	0	-		SPACE	
29	SPACE	-	0	-		1-1	0		-	-	-	0	-	-	SPACE	
31	SPACE		0	.=	175	-		0	-	-	-	0	275		SPACE	
33	SPACE	(70)	0	1-	-5%	7	0		-	-	-	0	(-)		SPACE	
35 37	SPACE SPACE		0	-	-	-	0	0	-			0	-		SPACE SPACE	
39	SPACE	1	0	15	-	-	U	0	-	-	-	0			SPACE	
41	SPACE	-	0	12	-		0		-	-		0	-		SPACE	
HEAT FOREST COLLEGE	contention at legg =	t						2224							317102	
	SSORIES:	_		L PER PH		2 3			l							
	F-GROUND FAULT PROTECTED BREAKE	_		CONNEC		·		534	ł					,	TEGORY (VA)	17-1
	F-ARC FAULT PROTECTED BREAKER	-		ONNECT				94	-		100,000	LIGHTIN		0	MOTORS 'M'	0
Н	IL-HANDLE LOCK ON/OFF DEVICE			IVERSIFI				07	-		RE	CEPTACL		0	MISC. 'MC'	500
I	TOTAL DIVERSIFIED AM	PS W	ITH A 109	% SAFETY	FAC	TOR	2	28	I			HEATIN	IG 'H'	33380	KITCHEN 'K'	0