

GENERAL NOTES

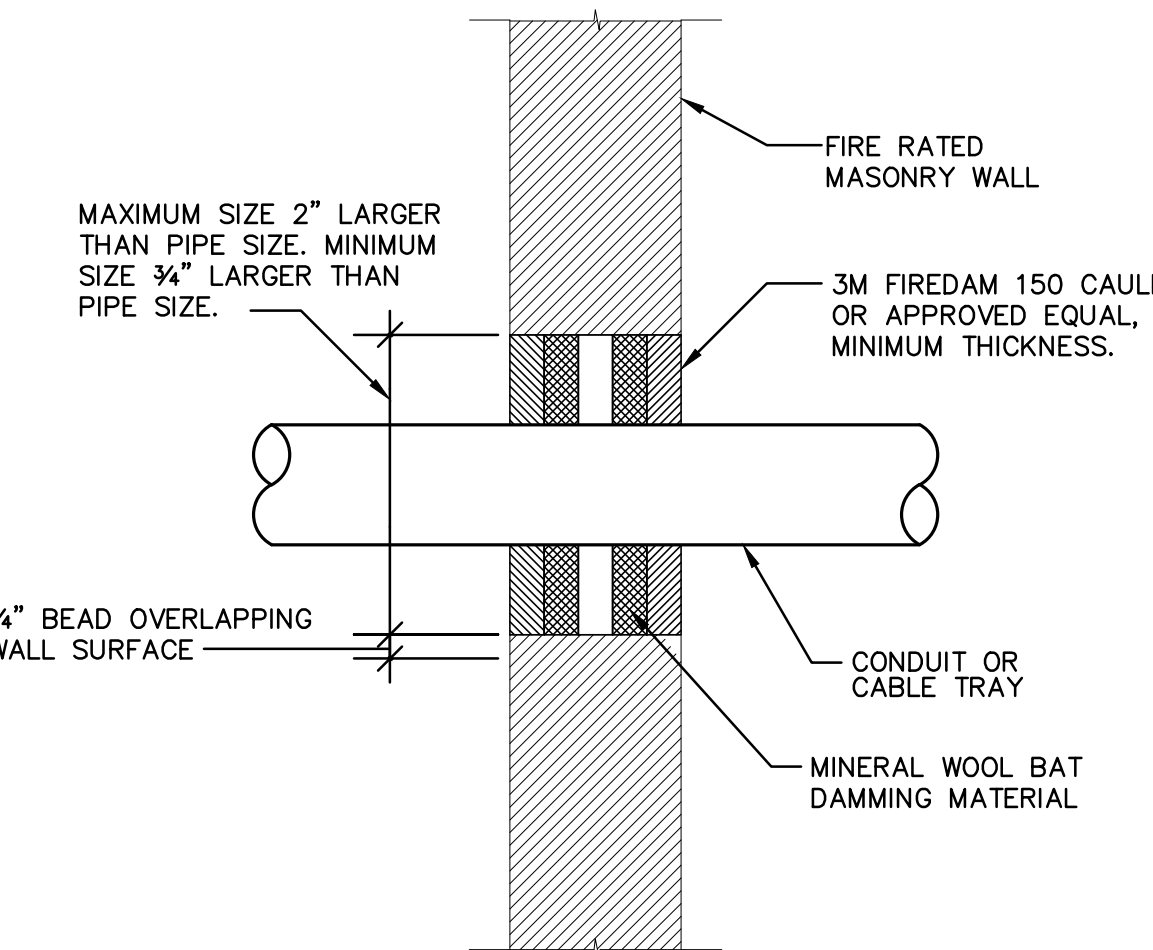
- ALL WORK SHALL BE PERFORMED, MONDAY THRU FRIDAY, DURING NORMAL BUSINESS HOURS OF 8:00AM – 4:30PM, EXCEPT SATURDAY, SUNDAY AND HOLIDAYS, EXCEPT AS APPROVED BY THE RESIDENT ENGINEER.
- THE CONTRACTOR SHALL BE REQUIRED TO WORK PRIME TIME AND OVERTIME TO COMPLETE OR CONSTRUCT PORTIONS OF THIS WORK. THIS SHALL BE AS DIRECTED BY THE RESIDENT ENGINEER AT NO ADDITIONAL COST TO THE GOVERNMENT.
- CONTRACTOR SHALL ABIDE BY THEIR OWN EXPENSE TO THE LATEST EDITIONS OF ALL OSHA REGULATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND ASCERTAIN IN THE FIELD, ALL EXISTING UTILITIES, EXISTING CONDITIONS, FIELD MEASUREMENTS, DIMENSIONS, QUANTITIES RELATED TO THE PROJECT.
- IT IS RECOMMENDED THAT THE CONTRACTOR PERFORM A DOCUMENTED SITE VISIT PRIOR TO BID.
- CONTRACTOR SHALL SUBMIT FOR APPROVAL ALL MATERIALS USED FOR CONSTRUCTION AND ALL EQUIPMENT INTENDED FOR INSTALLATION IN THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND ASCERTAIN THE LOCATION, DEPTH, DIRECTION AND SIZE, OF ANY AND ALL UTILITIES EXISTING IN THE GENERAL VICINITY OF THE WORK AREA.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY UTILITY DISRUPTED, BROKEN, OR OTHERWISE RENDERED NON-FUNCTIONABLE DUE TO THE WORK PERFORMED AT NO ADDITIONAL COST TO THE GOVERNMENT DURING THIS COURSE OF WORK.
- THE CONTRACTOR SHALL IDENTIFY ANY NON-FUNCTIONING UTILITY/SYSTEM, PRIOR TO THE START OF WORK TO THE RESIDENT ENGINEER. IDENTIFICATION OF SUCH AFTER THE START OF WORK SHALL BE DEEMED AS DISTURBED/DAMAGED BY THE CONTRACTOR AND SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY SUPPORT ANY UTILITY ENCOUNTERED IN THE COURSE OF THIS WORK.
- THE CONTRACTOR SHALL LEAVE THE WORK SITE CLEAN AND SECURED AT THE END OF EACH WORKING DAY. THE WORK SITE SHALL NOT BE LEFT UNATTENDED AT ANY TIME BY THE CONTRACTOR, UNLESS THE WORK AREA IS PROPERLY SECURED BY THE CONTRACTOR.
- THE CONTRACTOR IS ADVISED THAT THEY ARE SOLELY RESPONSIBLE FOR THE SAFETY OF THE WORKSITE AND TAKE ALL ACTIONS TO ELIMINATE ANY SAFETY HAZARDS THAT SHALL EXIST AND POSE A THREAT OF HARM TO PATIENTS, EMPLOYEES OF THE GOVERNMENT, EMPLOYEES OF THE CONTRACTOR OR OTHER(S). IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO TAKE IMMEDIATE ACTION TO ALLEVATE ANY SAFETY HAZARD THAT MAY EXIST WITHOUT DIRECTION FROM THE VA OR HIS DESIGNEE. THE CONTRACTOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION TO ALLEVATE ANY SAFETY HAZARD, CONDITION, ETC., AS INDICATED BY THE RESIDENT ENGINEER.
- ALL WORK SHALL BE AS DIRECTED BY REPRESENTATIVES OF THE DEPARTMENT OF VETERANS AFFAIRS (VA).
- THERE SHALL BE NO CLAIMS AGAINST THE VA FOR WORK STOPPAGES DUE TO ACTS OF GOD, WEATHER CONDITIONS, STOP WORK ORDERS (VERBAL AND/OR WRITTEN), UNDERESTIMATION OF WORK, ESTIMATED QUANTITIES, MATERIALS, SUPPLIES, TOOLS, CORRECTION OF SAFETY PROBLEMS, OR ANY OTHER REASON.
- AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE TO THE VA AS CONSTRUCTED DRAWING FOR THE WORK. THIS DRAWING SHALL BE SUBMITTED AS A .DWG AUTOCAD FILE. THIS DRAWING SHALL BE TECHNICALLY CORRECT AND DRAWN ACCORDING TO SOUND ENGINEERING PRINCIPLES. THIS SHALL SHOW ALL ELEVATIONS, DISTANCES, DIAMETERS, SCHEDULES, MATERIALS INSTALLED AND SEQUENCE OF OPERATIONS OF ANY AND ALL ITEMS TO THE VA.
- CONTRACTOR IS ADVISED THAT THEY ARE RESPONSIBLE TO MAINTAIN ALL MEASUREMENTS DURING THE COURSE OF THIS PROJECT AND DIMENSIONS MISSING ON THE AUTOCAD DRAWINGS SHALL NOT BE ACCEPTABLE. FINAL PAYMENT SHALL NOT BE PROVIDED UNTIL THIS DRAWING IS SUBMITTED AND APPROVED. A COMPLETE, ACCEPTABLE, SEPARATE, ENGINEERING AS CONSTRUCTED DRAWING IS REQUIRED FOR EACH UTILITY.
- THE USE OF JACK HAMMERS IS PROHIBITED. CONTRACTOR SHALL SAW CUT WITH PROPER BLADE ANY CONCRETE ENCOUNTERED IN THE COURSE OF THIS WORK. ALL HOLES SHALL BE CORED DRILLED WITH DIAMOND CORE BITS.
- CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ANY AND ALL DEBRIS FROM THE MEDICAL CENTER DAILY AND DISPOSE OF SAME OFF THE BASE IN ACCORDANCE WITH ALL LOCAL AND STATE REGULATIONS.
- THE VA SHALL RETAIN THE RIGHT TO RETAIN ANY TOP SOIL, SOIL, REMOVED OR EXCAVATED DURING THE COURSE OF THIS PROJECT. THE CONTRACTOR SHALL MOVE THIS TO STORAGE AT THE MEDICAL CENTER TO A LOCATION AS DIRECTED BY THE DEPARTMENT OF VETERANS AFFAIRS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY SOIL, TOP SOIL DEEMED UNSUITABLE BY THE VA AND TO DISPOSE OF SAME PROPERLY FROM THE MEDICAL CENTER.
- CONTRACTOR SHALL PROVIDE FOR OWN STORAGE SPACE AND SECURITY FOR SAME. CONTRACTOR SHALL BE PROHIBITED FROM USING VA SPACE FOR STORAGE.
- ALL WORK SHALL BE PERFORMED BY THOSE WHO ARE SKILLED IN THEIR TRADE, JOURNEMEN MECHANICS, TO PRODUCE A FIRST CLASS JOB. THE CONTRACTOR IS ADVISED THAT WORK DEEMED.
- UNSATISFACTORY, UNACCEPTABLE, SECOND CLASS IN NATURE, BY THE DEPARTMENT OF VETERANS AFFAIRS SHALL BE DEEMED NON-ACCEPTABLE AND THE CONTRACTOR SHALL REMOVE, REPLACE, RE-DO, TO THE SATISFACTION OF THE VA, THE UNACCEPTABLE WORK AT NO ADDITIONAL COST TO THE GOVERNMENT. THERE SHALL BE NO ADDITIONAL CLAIMS AGAINST THE VA FOR THE ABOVE.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO REROUTE ANY UTILITY ENCOUNTERED IN THE COURSE OF THIS PROJECT. THE CONTRACTOR IS ADVISED THAT THE DEPARTMENT OF VETERANS AFFAIRS HAS MADE THE ATTEMPT TO IDENTIFY MAJOR UTILITIES TO BE REROUTED.
- ALL QUANTITIES SHOWN ON THE DRAWING ARE ESTIMATED QUANTITIES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY AND ASCERTAIN ALL EXISTING CONDITIONS, DIMENSIONS AND QUANTITIES.
- THE GOVERNMENT SHALL NOT BE LIABLE FOR EXTRA PAYMENT SHOULD THE CONTRACTOR UNDERESTIMATE QUANTITIES OF MATERIALS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS ADVISED THAT DRAWINGS ARE AVAILABLE FOR REVIEW FOR ALL UTILITIES. THE CONTRACTOR SHALL BE ADVISED THAT ALL UTILITIES ARE TO BE VERIFIED AND ASCERTAINED IN THE FIELD BY THE CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING PHONE SYSTEM, CAUSED BY CONSTRUCTION AND SHALL REPAIR ANY DAMAGE AT THE CONTRACTOR'S EXPENSE. ANY AND ALL TELEPHONE WORK SHALL BE COORDINATED WITH THE TELEPHONE COMPANY ON THE MEDICAL CENTER.
- CONTRACTOR SHALL INSTALL AND MAINTAIN DUST BARRIERS AS DIRECTED BY THE RESIDENT ENGINEER.
- THE GOVERNMENT SHALL NOT BE LIABLE TO THE CONTRACTOR FOR DELAYS DUE TO NON-DELIVERY OF MATERIALS, WEATHER DELAYS, MANPOWER SHORTAGE, SUBMITTAL DELAYS, SUBMITTAL RETURNS, WORK STOPPAGES BY REPRESENTATIVES OF THE GOVERNMENT, FOR ANY REASON, SAFETY DELAYS, REMOVAL AND REPLACEMENT OF WORK DEEMED NON-ACCEPTABLE BY THE GOVERNMENT.
- PRIOR TO ANY WELDING, CUTTING, BRAZING, SOLDERING, THE CONTRACTOR SHALL OBTAIN A HOT WORK PERMIT FROM THE VA FIRE DEPARTMENT. THE PERMIT IS ISSUED DAILY, AND MUST BE RETURNED TO THE FIRE DEPARTMENT AT THE COMPLETION OF THE DAYS WORK. WITHOUT THIS PERMIT, HOT WORK SHALL NOT BE PERMITTED.
- THE CONTRACTOR SHALL MAINTAIN SECURITY FOR THE WORK AREA VAMC TO RE-CORE LOOKS AS NECESSARY AND PROVIDE KEYS TO CONTRACTOR FOR ACCESS TO SECURE WORK AREA.
- THE CONTRACTOR SHALL PROVIDE STORAGE FOR MATERIALS. MATERIALS SHALL NOT BE STORED IN VA BUILDINGS.
- THE CONTRACTOR SHALL MAINTAIN THE WORK SITE IN A NEAT AND CLEAN CONDITION. THE WORK SITE SHALL BE BROOM CLEANED AT THE END OF EACH DAY.
- THE CONTRACTOR SHALL SECURE ALL EXTERIOR WORK AND STAGING AREAS WITH ACCEPTABLE FENCING AS PER VA SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT LEAVE THE WORK AREA UNATTENDED FOR ANY REASON, UNLESS SAFETY PARTITIONS, SAFETY FENCING ARE INSTALLED AND SECURED.
- THE CONTRACTOR SHALL PARK IN APPROVED PARKING SPACES ONLY.
- THE CONTRACTOR IS ADVISED THAT ANY RIGGING SHALL BE PERFORMED BY A LICENSED & INSURED PROFESSIONAL RIGGER AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE ADVISED THAT ASBESTOS MAY BE ENCOUNTERED AT ANY TIME ON THE SITE. WHEN A QUESTIONABLE MATERIAL IS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY ADVISE RESIDENT ENGINEER FOR FURTHER DIRECTION/DISPOSITION AND A CHANGE OF CONDITION IS RECORDED.
- THE CONTRACTOR SHALL TURN OVER, TO THE GOVERNMENT, AN END USER WASTE DISPOSAL MANIFEST.
- PRIOR TO PERFORMING ANY PENETRATIONS THE CONTRACTOR SHALL OBTAIN PENETRATION PERMIT FROM THE VA FIRE DEPARTMENT. THE PERMIT IS ISSUED PRIOR TO WORK AND MUST BE APPROVED BY THE FIRE DEPARTMENT AT THE COMPLETION OF THE WORK. WITHOUT THIS PERMIT NO PENETRATIONS WILL BE PERMITTED.

SEQUENCE OF WORK

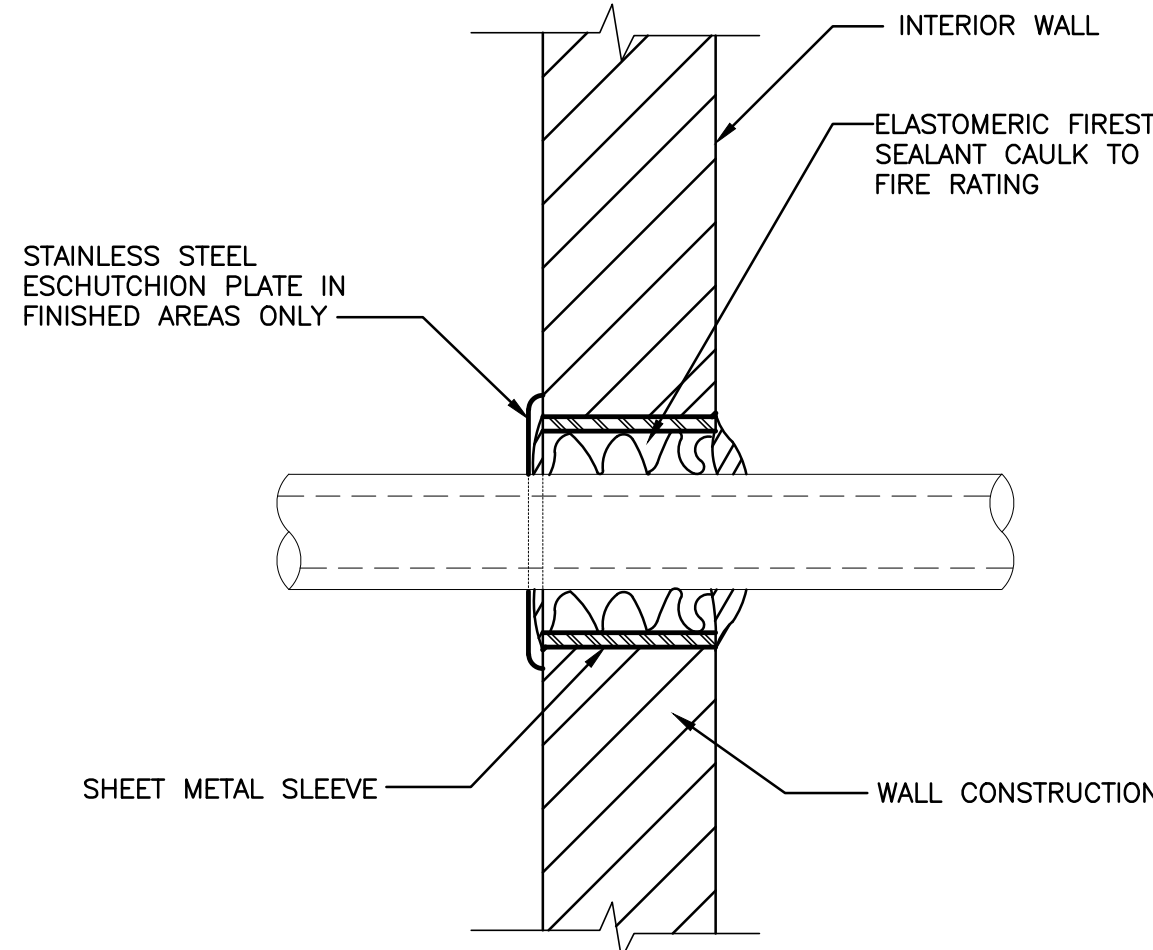
- AFTER AWARD OF CONTRACT CONTRACTOR SHALL MOBILIZE TO THE JOB SITE.
- ALL PRODUCT SUBMITTALS AND LONG LEAD TIME ITEMS ARE TO BE FORWARDED TO THE VAMC AND A/E FOR REVIEW AND APPROVAL IN ORDER TO ALLOW FOR ORDERING OF THESE CRITICAL ITEMS EARLY ON IN THE PROJECT. THESE ITEMS ARE REQUIRED TO BE ON-SITE BEFORE THE SYSTEM SHUTDOWN PERIOD. ALL CRITICAL ITEMS (SWITCHGEAR, TRANSFORMER, OTHERS APPLICABLE) NEED TO BE ON-SITE PRIOR TO ANY REQUEST FOR SYSTEM SHUTDOWN. THE START OF THE SYSTEM SHUTDOWN IS BASED ON EXTERIOR BUILDING TEMPERATURE CRITERIA.
- PROVIDE ALL LABOR AND MATERIALS REQUIRED TO PERFORM ALL ROUGH IN WORK IN ADVANCE OF THE POWER SHUTDOWN. INCLUDING BUT NOT LIMITED TO CONCRETE PADS, EXTENDING & PAINTING OF CONCRETE PADS, CONDUIT & CONDUCTORS, 4.76KV PAD MOUNT SWITCH, 4.18KV PAD MOUNT SWITCHGEAR, CONNECTIONS TO ALL NON-ENERGIZED EQUIPMENT. PERFORM ALL TESTING OF EQUIPMENT & CABLES AS REQUIRED.
- ALL WORK AND FINAL CONNECTIONS WHICH ARE REQUIRED TO BE PERFORMED DURING THE SYSTEM SHUTDOWN IS FORECASTED TO OCCUR BETWEEN THE PERIOD OF JANUARY 2013-FEBRUARY 2013; 5 DAYS MAXIMUM DURATION. WEATHER DEPENDENT CRITERIA MUST BE MET AND APPROVED BY THE VAMC PRIOR TO SYSTEM OUTAGE.
- PERFORM THE ELECTRICAL SHUTDOWN OF THE 15KV FEED TO EXISTING 600A PRIMARY DISCONNECT SWITCH & EXISTING 2000KVA TRANSFORMER. THE POWER SHUTDOWN AND RE-ENERGIZING SHALL BE PERFORMED ONLY BY A QUALIFIED HIGH/MEDIUM VOLTAGE ELECTRICAL CONTRACTOR. QUALIFICATIONS OF THE HIGH/MEDIUM VOLTAGE ELECTRICAL CONTRACTOR SHALL BE PRODUCED AND VERIFIED BY THE VA PRIOR TO THE START OF ANY WORK. THE SHUTDOWN OF THE POWER FEED TO THE CHILLERS SHALL ONLY BE ALLOWED WITH ADVANCED APPROVAL OF THE VA A/C SUPERVISOR AND VA FACILITIES ENGINEERING. THE CHILLERS CAN ONLY BE OFFLINE WHEN THE OUTDOOR TEMPERATURE IS LESS THAN 35°F. CONTRACTOR SHALL MONITOR WEATHER FORECAST AND PROPOSE A SCHEDULE FOR THE CHILLERS TO BE OFFLINE AT LEAST ONE WEEK IN ADVANCE OF SHUTDOWN. FORECAST SHALL SHOW TEMPERATURE OF LESS THAN 35°F FOR FIVE CONSECUTIVE DAYS.
- DURING THE SCHEDULED 5 DAY SHUTDOWN, CONTRACTORS WORK SHALL INCLUDE BUT NOT BE LIMITED TO REMOVAL OF EXISTING TRANSFORMER, REMOVAL AND INSTALLATION OF FUSES, DISCONNECTING FEEDERS AT EXISTING TRANSFORMER, DISCONNECTING FEEDS AT STARTERS, REMOVAL OF SPLICE BOX AND STARTER #1, MOVING STARTER #4, RIGGING STARTER #1 INTO PLACE, RIGGING NEW TRANSFORMER INTO PLACE AND MAKING ALL FINAL CONNECTIONS. THE ABOVE REFERENCED WORK SHALL TAKE PLACE CONCURRENTLY. THE CONTRACTOR IS REQUIRED TO APPROPRIATELY STAFF THE PROJECT SUCH THAT THE WORK CAN BE ACCOMPLISHED IN THE ALLOTTED TIME. IT IS EXPECTED THE CONTRACTOR SHALL WORK OUTSIDE OF THE NORMAL BUSINESS HOURS TO COMPLETE THESE TASKS USING EXTENDED DAYS; SHUTDOWN SHALL BE FOR 5 DAYS MAXIMUM. THIS SHALL BE AS DIRECTED BY THE RESIDENT ENGINEER AND AT NO ADDITIONAL COST TO THE GOVERNMENT.
- DEMO ALL EXISTING EQUIPMENT, CONDUIT, CONDUCTORS AND ALL APPURTENANCES.
- CLEANUP AND DEMOBILIZE.

ELECTRICAL GENERAL NOTES

- THE CONTRACTOR SHALL PERFORM ALL ELECTRICAL WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, DVA SPECIFICATIONS, FEDERAL, STATE AND LOCAL LAWS, REGULATIONS GUIDELINES AND ORDINANCES.
- MINIMUM SIZE OF CONDUIT SHALL BE 3/4" COUPLINGS AND CONNECTORS SHALL BE GLAND/RING COMPRESSION TYPE ONLY. ALL CONNECTORS SHALL CONTAIN INTEGRAL INSULATED NYLON BUSHINGS.
- ALL NEW CIRCUITS SHALL HAVE A SEPARATE GREEN GROUND CONDUCTOR, PROPERLY SIZED PER THE NEC, OR AS SPECIFIED.
- CONTRACTOR SHALL PROVIDE & INSTALL A NEW GROUND IN EXISTING CIRCUITS WHERE A GROUND DOES NOT EXIST.
- MINIMUM SIZE WIRE SHALL BE #12 AWG. INSULATION SHALL BE DUAL RATED THHN/THWN OR XHHW. CONTRACTOR SHALL SUBMIT FOR APPROVAL A PHYSICAL SAMPLE OF ALL WIRE USED ON THIS PROJECT.
- CIRCUITS SHALL BE DESIGNED FOR MINIMUM OF 20 AMPS.
- ANY EXTERIOR CONDUIT SHALL BE MINIMUM OF HOT DIPPED GALVANIZED, RIGID STEEL ONLY.
- ALL DEVICES SHALL BE UL APPROVED.
- ANY PENETRATIONS THRU THE BUILDING SHALL BE SLEEVED WITH GALVANIZED STEEL SLEEVE. THIS SHALL BE SEALED AGAINST WEATHER INFILTRATION PROPERLY AND TO THE SATISFACTION OF THE RESIDENT ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL BUSB DETAIL IF SAME IS NON-EXISTENT. ANY AND ALL BREAKERS ADDED TO THE PANEL SHALL BE BOLT ON, PROPERLY SIZED AND COMPATIBLE WITH THE PANEL. AS A MINIMUM, THE CONTRACTOR SHALL INSTALL BREAKERS WITH A MINIMUM RMS VALUE OF 22,000.
- CONTRACTOR SHALL BE PROHIBITED TO USE THE ELECTRICAL DISTRIBUTION PANEL AS A SPLICE BOX. THE CONTRACTOR IS PROHIBITED FROM MAKING ANY ELECTRICAL SPLICE IN THE PANEL BOX.
- THE CONTRACTOR SHALL LABEL ALL CIRCUITS IN J BOXES AND ON THE COVERS OF J BOXES. THIS SHALL BE COMPLETED AND LABELED WITH VOLTAGE, AMPERAGE, CIRCUIT NUMBER, PANEL AND BREAKER NUMBER AND WHETHER THE CIRCUIT IS A NORMAL, EMERGENCY, CRITICAL, OR OTHER CIRCUIT.
- THE CONTRACTOR SHALL LABEL ALL CIRCUITS IN THE PANEL, BOX AND EDIT THE PANEL LABEL ACCORDINGLY. THE CONTRACTOR SHALL PROVIDE A NEW TYPED PANEL DIRECTORY (4 COPIES) AS APPROVED BY THE RESIDENT ENGINEER.
- THE CONTRACTOR SHALL SUPPLY TO THE VA RESIDENT ENGINEER, PRIOR TO FINAL PAYMENT, A COMPLETE AUTOCAD "AS CONSTRUCTED DRAWINGS", 30" BY 42", INDICATING ALL NEW WORK; TO INCLUDE ALL NEW CIRCUITS (POWER AND CONTROL), BOXES, DEVICES, PANEL DIRECTORY, LIGHTS, HOME RUNS, SWITCHING, CONNECTIONS TO EXISTING BOXES, ETC.
- THE CONTRACTOR SHALL TURN OVER TO THE RESIDENT ENGINEER AND PROVIDE ALL CATALOGS, OPERATING INSTRUCTIONS, MAINTENANCE MANUALS FOR ANY SYSTEM.
- ALL SWITCHES SHALL BE MINIMUM OF HEAVY DUTY INDUSTRIAL TYPE, 20 AMP OR AS SPECIFIED ELSEWHERE IN THE DRAWINGS AND SPECIFICATIONS.
- CONTRACTOR SHALL DETERMINE AND INCLUDE IN THE WORK ALL FIELD CONDITIONS TO INCLUDE AND NOT LIMITED TO: PHYSICAL INTERFERENCE, EQUIPMENT TO BE MOVED, EQUIPMENT TO BE ELECTRICALLY DISCONNECTED, RELOCATED AND ELECTRICALLY RECONNECTED; CONDUIT, BOXES AND CABLES TO BE CUT, REMOVAL AND RELOCATION OF LIGHTS, RECEPTACLES, SWITCHES, ABANDONED DEVICES, ALL AT NO ADDITIONAL COST TO THE GOVERNMENT. UNLESS OTHERWISE NOTED, ABANDONED CONDUIT SCHEDULED TO BE REMOVED SHALL BE REMOVED BACK TO THE PANEL.
- ALL EQUIPMENT INDICATED TO BE DEMOLISHED, REMOVED, OR REPLACED SHALL BE DISPOSED OF BY THE VENDOR OR RETAINED BY THE GOVERNMENT AS DIRECTED BY THE RESIDENT ENGINEER, UNLESS OTHERWISE INDICATED IN THE DRAWINGS OR SPECIFICATIONS.
- THE CONTRACTOR SHALL BOND ALL EQUIPMENT DEVICES, BACKBOXES, JUNCTION BOXES, SPLICE AND PULL BOXES TO THE GROUNDING CONDUCTOR.
- ALL HIGH/MEDIUM VOLTAGE WORK INCLUDING BUT NOT LIMITED TO SWITCH OPERATION, TESTING, GROUNDING, ETC. SHALL BE PERFORMED BY A QUALIFIED HIGH/MEDIUM VOLTAGE CONTRACTOR AS ACCEPTABLE TO THE VA. ALL LOCK OUT TAG OUT PROCEDURES SHALL BE FOLLOWED.
- THE CONTRACTOR SHALL SUBMIT A COMPANY APPROVED SAFETY PROGRAM (SAFETY PLAN) TO INCLUDE SPECIALIZED ELECTRICAL WORK. IT IS TO PROVIDE DETAILS ON SPECIFIC HIGH/MEDIUM VOLTAGE WORKER TRAINING, WORK METHODS, TOOLS & SAFETY EQUIPMENT UTILIZED FOR LOCK OUT/TAG OUT DE-ENERGIZING AND APPLYING CONDUIT GROUNDS DURING CONSTRUCTION. ALL OSHA, NFPA 70E & VAMC LOCKOUT/TAGOUT PROCEDURES SHALL BE FOLLOWED.
- ALL NEW CONDUIT SHALL BE INSTALLED AS TIGHT TO CEILING AS POSSIBLE.

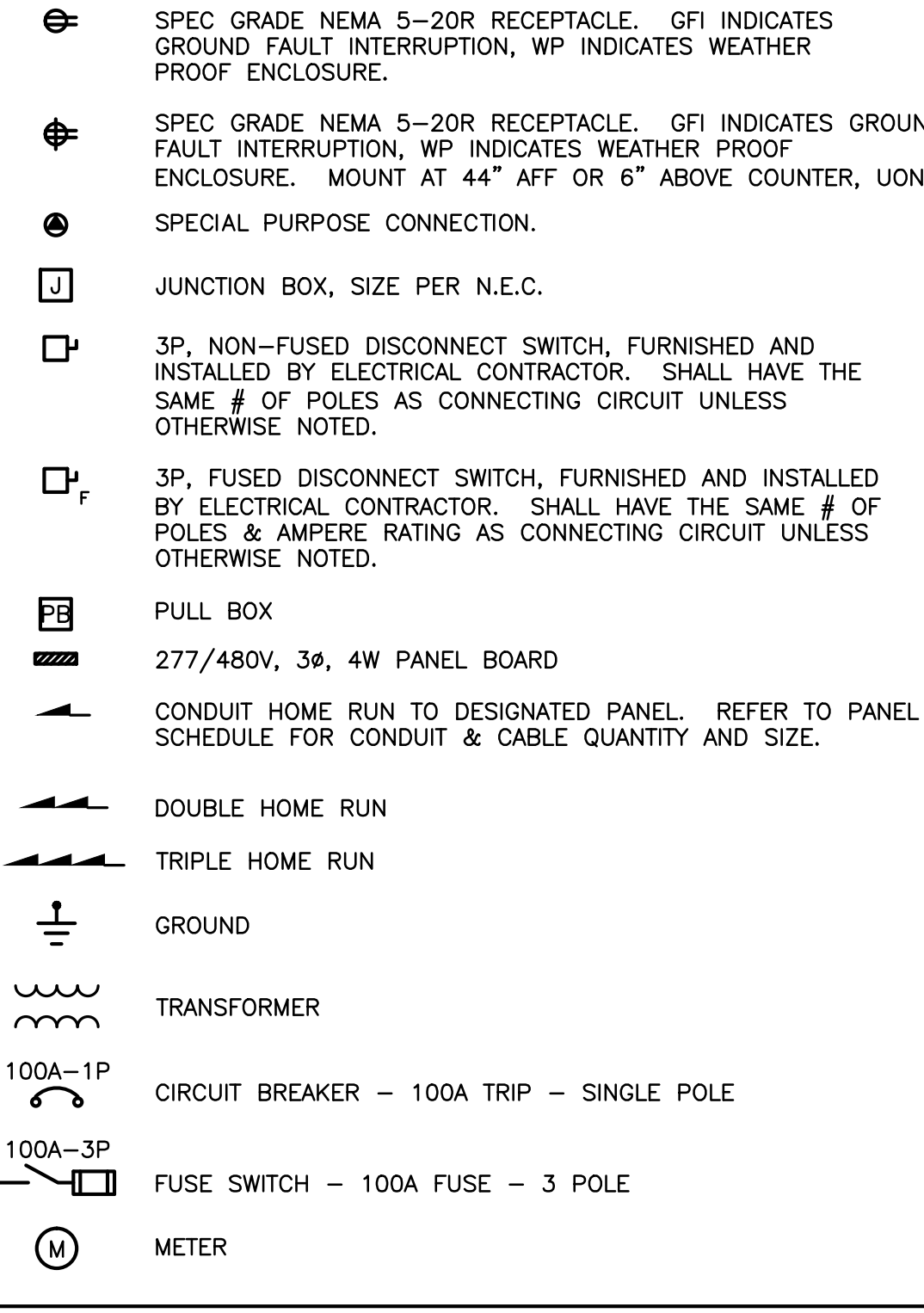


1 CONDUIT PENETRATION IN FIRE RATED MASONRY PARTITION N.T.S.

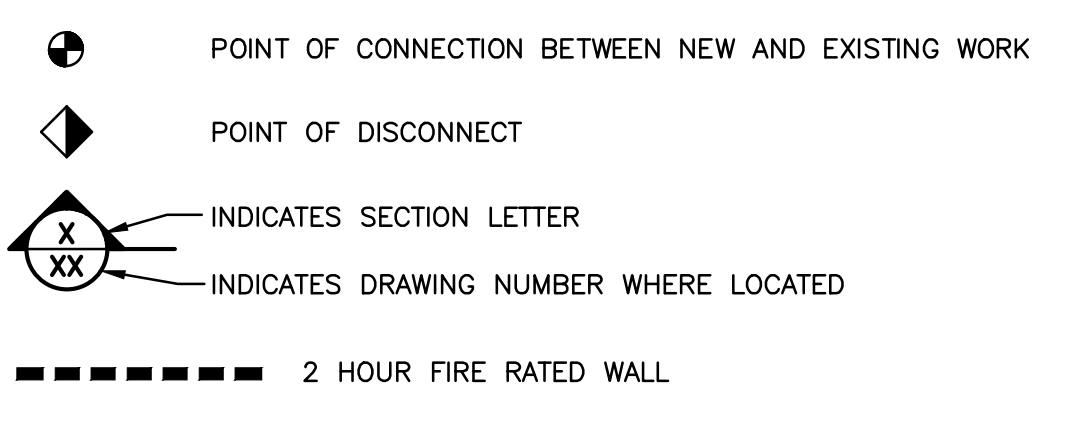


2 RATED WALL PENETRATION DETAIL N.T.S.

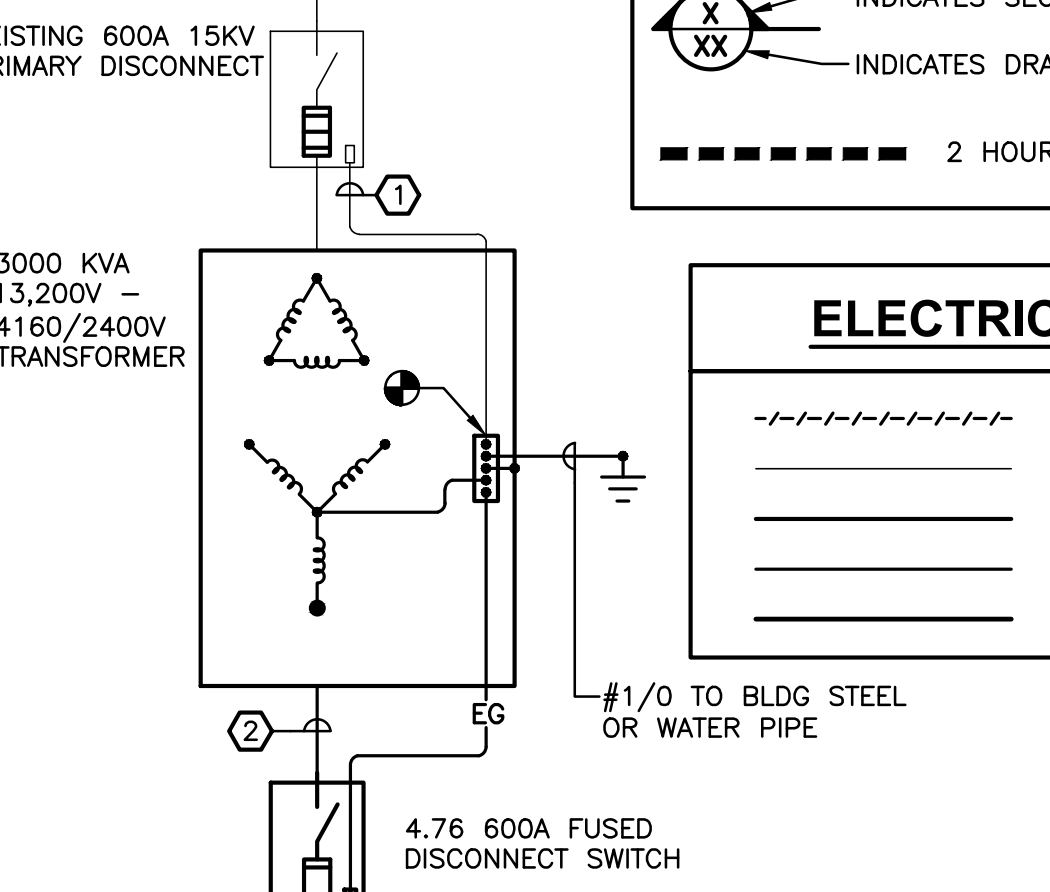
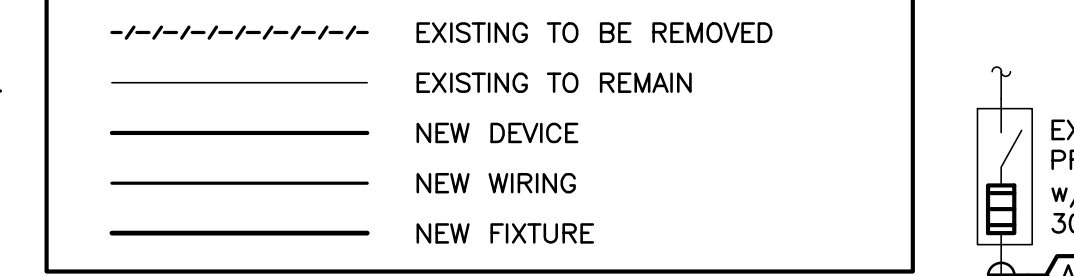
POWER SYMBOLS



GENERAL SYMBOLS



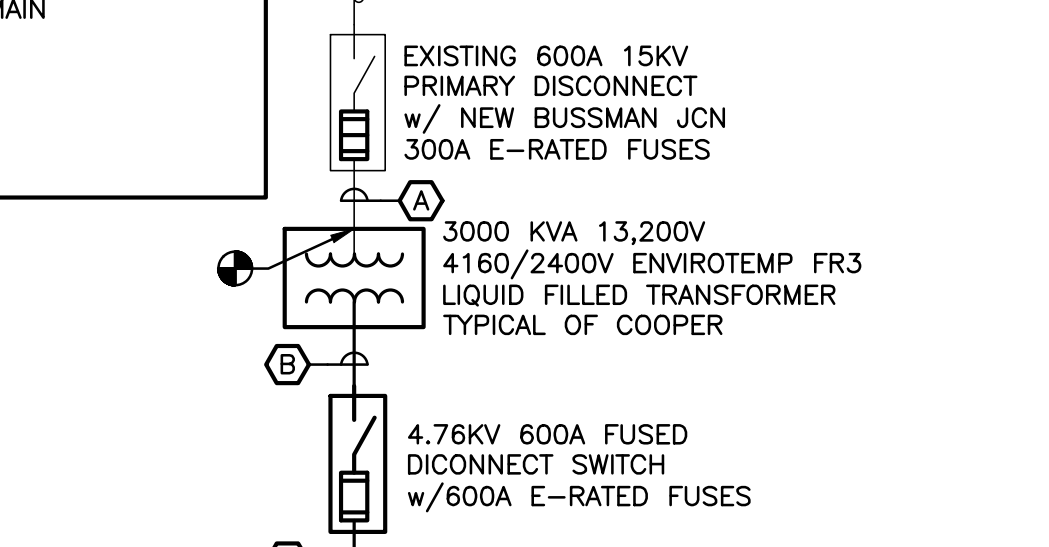
ELECTRICAL LINE TYPES



3 ONE-LINE GROUNDING DIAGRAM N.T.S.

- KEYED NOTES:
- EXISTING EQUIPMENT GROUNDING CONDUCTOR TO BE CONNECTED TO NEW TRANSFORMER.
  - THE SHIELDS OF ALL MEDIUM VOLTAGE CABLES SHALL BE RUN INDIVIDUALLY AND TERMINATED AT THE GROUND BUS TERMINAL OF EACH PIECE OF EQUIPMENT. THE SHIELDS AT BOTH ENDS OF EVERY MEDIUM VOLTAGE CABLE SHALL BE TERMINATED. PROVIDE TERMINATIONS AS RECOMMENDED BY CABLE & EQUIPMENT MANUFACTURERS.

- GENERAL NOTES:
- EQUIPMENT GROUNDING CONDUCTOR IS SHOWN SEPARATE FOR CLARITY PURPOSES ONLY. THE GROUNDING CONDUCTOR SHALL BE RUN IN CONDUIT WITH PHASE CONDUCTORS.
  - REFER TO ONE-LINE DIAGRAM FOR SIZES OF EQUIPMENT GROUNDING AND PHASE CONDUCTORS.

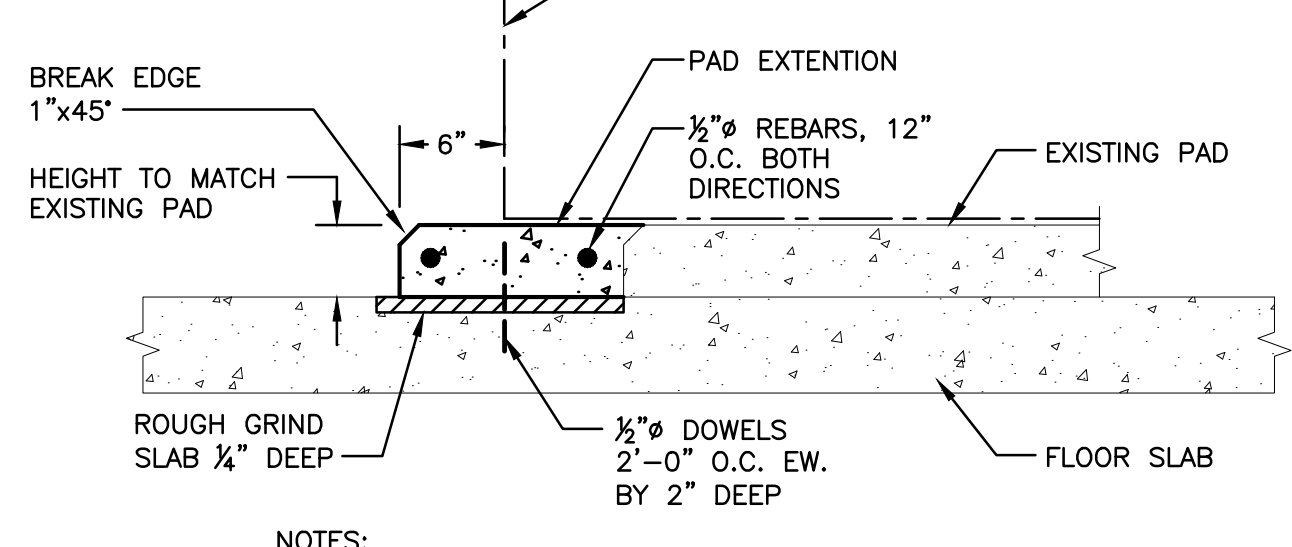


4 ONE-LINE DIAGRAM N.T.S.

WIRE AND CONDUIT SCHEDULE	
(A)	EXISTING BUSSING TO BE RECONNECTED TO NEW TRANSFORMER.
(B)	2 SETS EACH CONSISTING OF (3)#250 MCM & (1)#1/0 GND 5KV CABLE IN 4\"/>
(C)	(3)#2 & (1) #6 GND 5KV CABLE IN 3\"/>

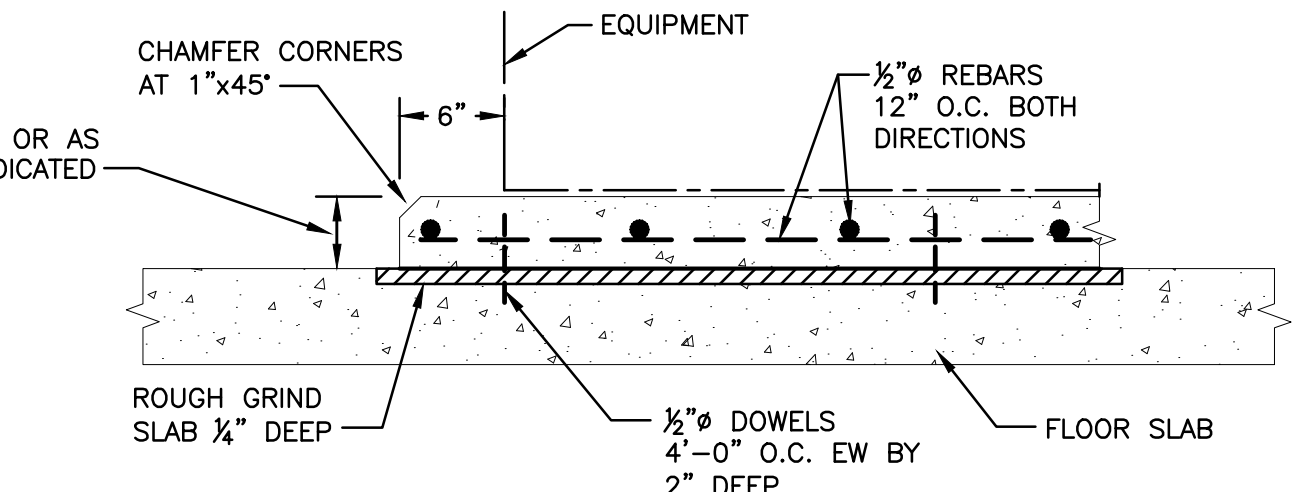
ABBREVIATIONS

A	AMPERE	JB	JUNCTION BOX
ACT	ACOUSTIC CEILING TILE	KV	KILO VOLT
AD	AUTOMATIC DAMPER	KVA	KILO VOLT AMP
AF	AMPERE FRAME	KW	KILO WATT
AFF	ABOVE FINISHED FLOOR	LP	LIGHTING PANEL
AIC	AMPERE INTERRUPTING CAPACITY	LTG	LIGHTING
AL	ALUMINUM	M.C.	MECHANICAL CONTRACTOR
ATS	AUTOMATIC TRANSFER SWITCH	MCC	MOTOR CONTROL CENTER
AUTO	AUTOMATIC	MCM	THOUSAND CIRCULAR MILS
AWG	AMERICAN WIRE GAUGE	MCB	MAIN CIRCUIT BREAKER
BCW	BARE COPPER WIRE	MECH	MECHANICAL
C	CONDUIT	MDP	MAIN DISTRIBUTION PANEL
CAT	CATALOG	MLO	MAIN LUGS ONLY
CB	CIRCUIT BREAKER	MTD	MOUNTED
CKT	CIRCUIT	MTG	MOUNTING
CLG	CEILING	NTS	MANUAL TRANSFER SWITCH
COTR	CONTRACTING OFFICER TECHNICAL REPRESENTATIVE	NEUTRAL	NEUTRAL
CT	CURRENT TRANSFORMER	NIC	NOT IN CONTRACT
CU	COPPER	NEC	NATIONAL ELECTRIC CODE
DP	DISTRIBUTION PANEL	NTS	NOT TO SCALE
DF	DRINKING FOUNTAIN	NM	NON-METALLIC CONDUIT
DV	DIVISION	P	POLE
DS	DISCONNECT (LOCKOUT) SWITCH	PB	PULL BOX
DWG	DRAWING	PH	PHASE
EA	EACH	PWR	POWER
EC	ELECTRICAL CONTRACTOR	RECEPT.	RECEPTACLE
EG	EQUIPMENT GROUND	RE	RESIDENT ENGINEER
ELEC.	ELECTRICAL	REQ.	REQUIRED
ELEV	ELEVATOR	RGS	RIGID GALVANIZED STEEL
E.P.O.	EMERGENCY POWER OFF	RM	ROOM
EQUIP.	EQUIPMENT	SCHED.	SCHEDULE
EMT	ELECTRICAL METALLIC TUBING	SECT.	SECTION
FA	FIRE ALARM	SPEC.	SPECIFICATION
FAP	FIRE ALARM PANEL	SPKR.	SPEAKER
FL	FLOOR	SV	SOLENOID VALVE
FLEX	FLEXIBLE	SW	SWITCH
FT	FEET OR FOOT	SWBD	SWITCH BOARD
FLUOR.	FLUORESCENT	SYS	SYSTEM
F.W.E.	FURNISHED WITH EQUIPMENT	TEL	TELEPHONE
G, GND	GROUND	TC	TIME CLOCK
GEN.	GENERATOR	TYP	TYPICAL
GFI	GROUND FAULT INTERRUPTER	U.N.O.	UNLESS NOTED OTHERWISE
G.C.	GENERAL CONTRACTOR	UPS	UN-INTERRUPTABLE POWER SUPPLY
HH	HAND HOLE	US	US ARMY CORPS OF ENGINEERS
HP	HORSE POWER	VFC	VARIABLE FREQUENCY CONTROLLER
HS	HAND SWITCH	VIF	VERIFY IN FIELD
HVAC	HEATING, VENTILATING & AIR CONDITIONING	VSD	VARIABLE SPEED DRIVE
HZ	HERTZ	WP	WEATHER PROOF
IC	INTERRUPTING CAPACITY	W	WATT
IG, I	ISOLATED GROUND	XFMR/ TRANSF.	TRANSFORMER
IMC	INTERMEDIATE METAL CONDUIT		



- NOTES:
- 1/2\"/>
  - ROUGH GRIND SIDE OF EXISTING PAD AND PROVIDE MORTAR TO FILL GAP BETWEEN EXISTING PAD AND NEW.
  - ROUGH GRIND EXISTING SLAB 1/2\"/>
  - PAINT ENTIRE PAD SAFETY YELLOW.

5 CONCRETE PAD EXTENSION DETAIL N.T.S.



- NOTES:
- 1/2\"/>
  - ROUGH GRIND EXISTING SLAB 1/2\"/>
  - PAINT ENTIRE PAD SAFETY YELLOW.

6 CONCRETE PAD DETAIL N.T.S.

100% CONSTRUCTION DOCUMENTS

Revisions		Date		MARK D. FELLENNER, P.E.		FELLENNER III ENGINEERING LLP		Drawing Title ELECTRICAL PROJECT NOTES, SYMBOLS, ABBREVIATIONS & DETAILS		Project Title UPGRADE POWER FOR CHILLER PLANT		Date 4/10/12		Office of Facilities Department of Veterans Affairs			
								Approved: Division Chief		Building Number 200		Checked --					
								Approved: Service Director		Location NORTHPORT, NY 11768		Drawing No. E-1					
												Dwg. 3 of 6					