# HIDDEN LAKES EQUIPMENT SHED REPLACEMENT DuPage County Wheaton, Illinois

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### ARCHITECTURAL

A1.101 EQUIPMENT SHED DEMOLITION AND NEW WORK PLAN

## **99% DESIGN DEVELOPMENT**



### ELECTRICAL

E0.001	GENERAL ELECTRICAL SYMBOLS
E0.002	GENERAL ELECTRICAL NOTES
E0.003	GENERAL ELECTRICAL DETAILS
E1.101	EQUIPMENT SHED POWER PLANS
E2.101	ONE-LINE DIAGRAM AND DETAILS



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99% DESIGN DEVELOPMENT

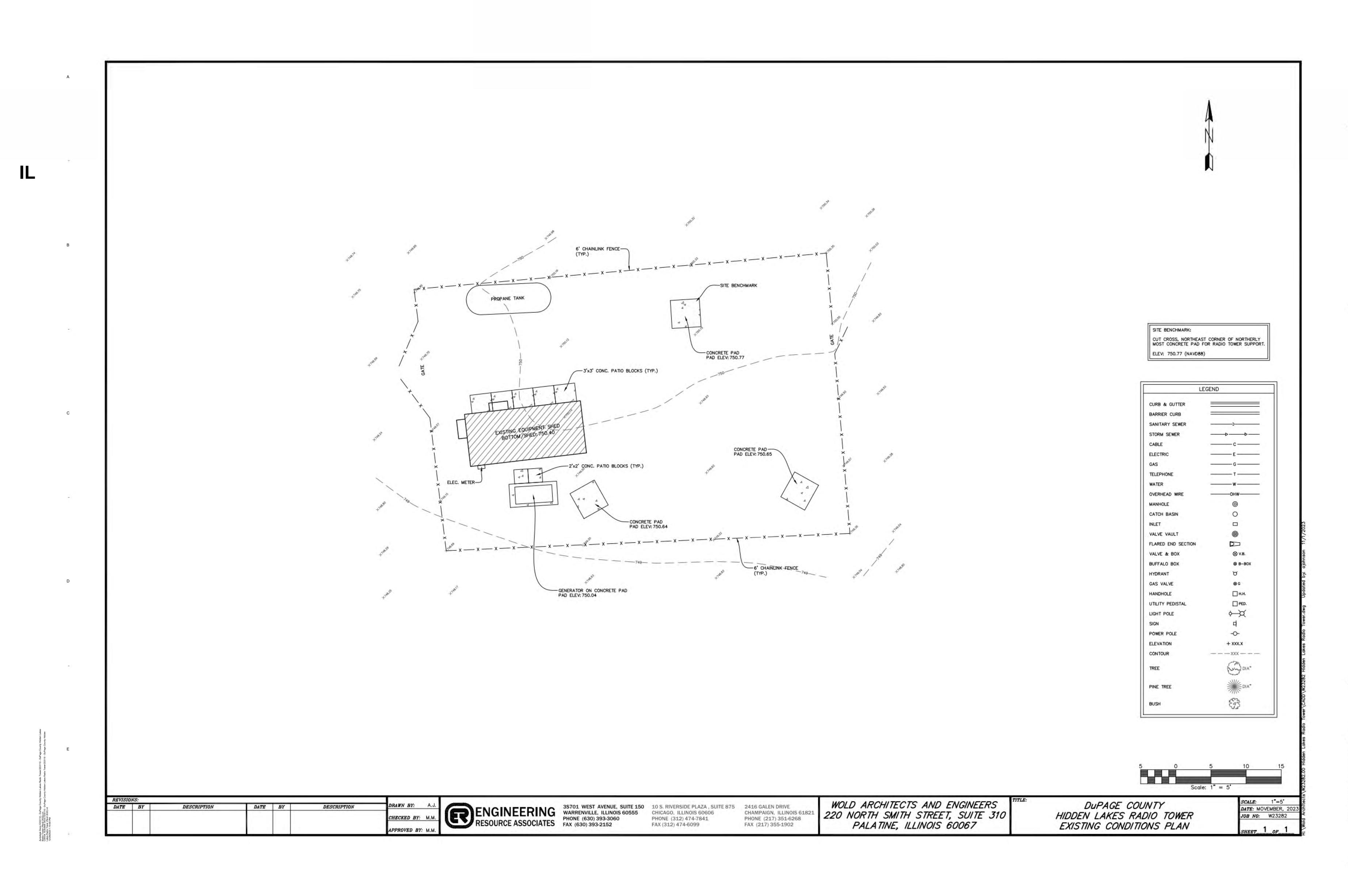
**DuPage County** 421 N County Farm Road Wheaton, Illinois



WOLD ARCHITECTS AND ENGINEERS 220 North Smith Street, Suite 310 Palatine, Illinois 60067

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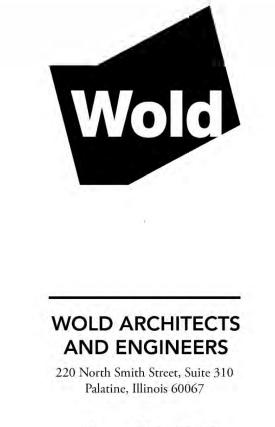
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99% DESIGN DEVELOPMENT

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TLC ENGINEERING © Copyright 2023 1301 W. 22nd St, Suite 210 Oak Brook, IL 60523 P 630.472.0918 6246-526-3 www.tlc-engineers.com TLC No: THINK. LISTEN. CREATE.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed **ARCHITECT** under the laws of the State of **ILLINOIS** 

 MATT BICKEL

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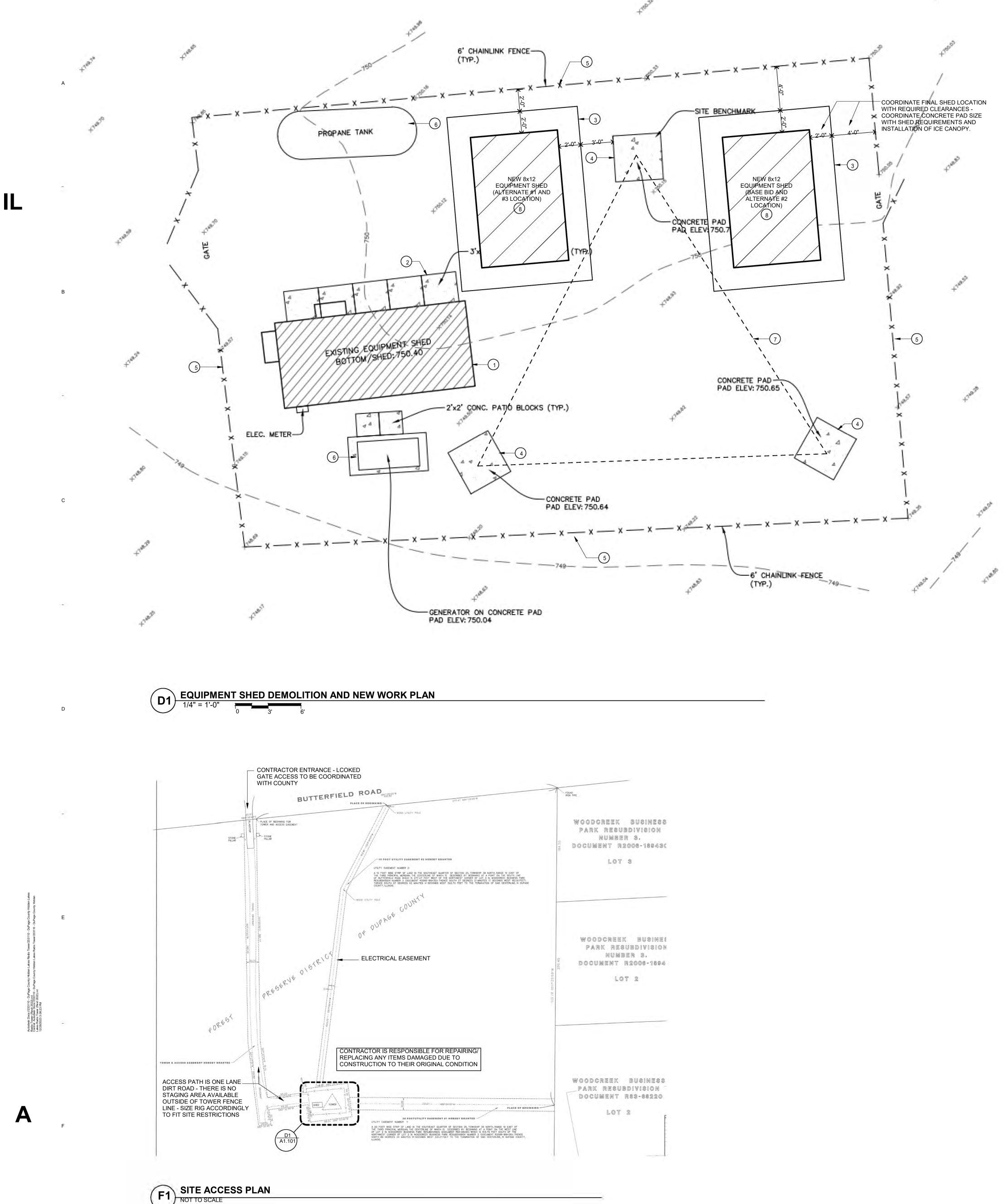
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SURVEY

Scale: **1" = 20'-0"** 



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#### PLAN GENERAL NOTES

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1. CONSTRUCTION ACCESS TO AND FROM THE PROJECT SITE SHALL BE LIMITED TO ONE CONNECTION AS DIRECTED BY THE COUNTY.

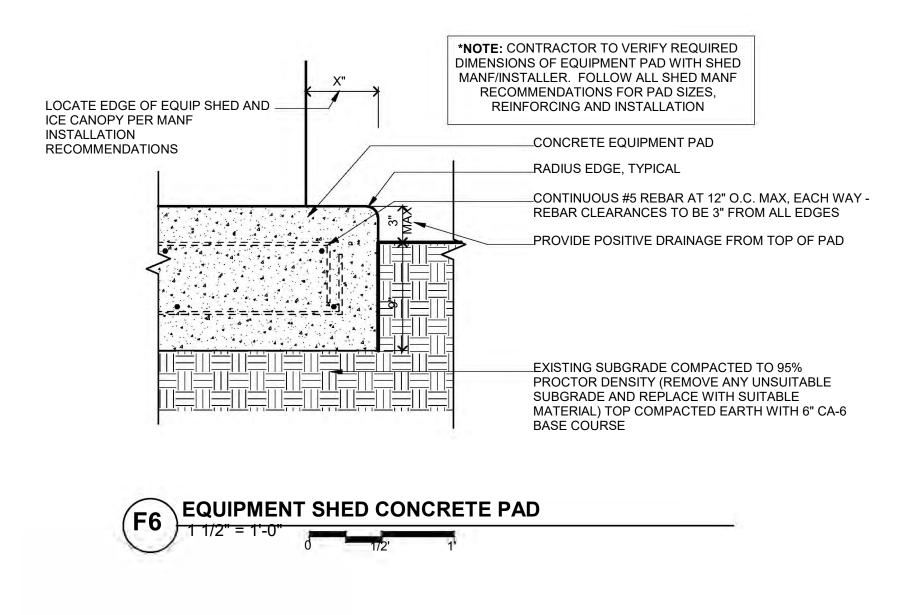
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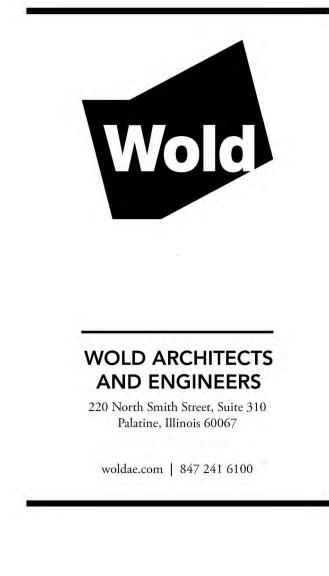
- 2. THE CONTRACTOR SHALL FIELD CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.
- 3. EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELEVATION FROM THE OWNERS OF THE UTILITIES. CONTRACTOR TO LOCATE ALL PRIVATE AND PUBLIC UTILITIES PRIOR TO BEGINNING ANY WORK.
- 4. ANY DAMAGE CAUSED BY THE CONTRACTOR TO ADJACENT PROPERTY AND STRUCTURES SHALL BE REPAIRED OR REPLACED AT THEIR EXPENSE AND TO THE SATISFACTION OF THE OWNER.
- 5. THE LOCATIONS AND EXTENTS OF AREAS USED FOR CONSTRUCTION STAGING PURPOSES AS EQUIPMENT PARKING AND MATERIAL STORAGE AREAS ARE SUBJECT TO APPROVAL OF THE COUNTY.
- 6. ALL DISTURBED AREAS TO BE REPLACED TO MATCH ORIGINAL GRADES. 7. EXISTINGL SHELTER TO REMAIN IN PLACE AND FUNCTIONAL UNTIL NEW SHELTER IS INSTALLED AND READY FOR SWITCHOVER AND TO BE BROUGHT ONLINE. CONTRACTOR MUST PROVIDE THE COUNTY 72 HOURS NOTICE PRIOR TO SHUT DOWN OF THE
- EXISTING SHELTER. 8. CONTRACTOR TO PROVIDE CERTIFICATES OF INSURANCE TO THE DUPAGE COUNTY FOREST PRESERVE FOR ANY/ALL CONTRACTORS WORKING ON THE SITE.
- 9. REFURBISHED CONCRETE SHELTER TO MEET TECHNICAL/SYSTEMS REQUIREMENTS OF BASE BID FIBERGLASS SHELTER AND TO BE PROCURED THROUGH TOWER WORKS (630) 557-2221 FOR ALTERNATES #2 AND #3
- 10. NOT USED

PLAN DEMOLITION AND NEW WORK KEY NOTES:

- 1 REMOVE/DECOMMISSION EXISTING EQUIPMENT SHED SEE ELECTRICAL
- 2 REMOVE PATIO BLOCKS AT EXISTING EQUIPMENT SHED
- 3 PROVIDE NEW CONCRETE PAD AT LOCATION OF NEW EQUIPMENT SHED SEE DETAIL F6/A1.101
- 4 PROTECT EXISTING RADIO TOWER CONCRETE PADS/FOUNDATIONS TO REMAIN. CONTRACTOR
- RESPONSIBLE FOR SHORING AS REQUIRED FOR NEW WORK. 5 PROTECT EXISTING FENCING TO REMAIN INCLUDING ALL GATES, LOCKS, FOUNDATIONS, ETC
- 6 PROTECT EXISTING GENERATOR AND PROPANE TANK TO REMAIN. REFER TO ELECTRICAL FOR
- CONNECTION TO NEW SHED. TRENCH PATHWAYS TO NEW SHED AND FILL TO MEET EXISTING GRADES. (7) LINE OF TOWER STRUCTURE ABOVE. LOCATION OF SHELTER TO BE SITED OUTSIDE OF STRUCTURE
- LINES. (8) NEW FIBERGLASS SHELTER WITH ICE CANOPY LOCATED EAST OF EXISTING TOWER (BASE BID), NEW FIBERGLASS SHELTER WITH ICE CANOPY LOCATED WEST OF EXISTING TOWER (ALTERNATE #1), REFURBISHED CONCRETE SHELTER LOCATED EAST OF TOWER (ALTERNATE #2), REFURBISHED CONCRETE SHELTER LOCATED WEST OF TOWER (ALTERNATE #3).



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HIDDEN LAKES

REPLACEMENT

DuPage County

Wheaton, Illinois

421 N County Farm Road

Downers Grove, Illinois 60515

EQUIPMENT SHED

99% DESIGN DEVELOPMENT

ARCHITECT

under the laws of the State of ILLINOIS

me or under my direct supervision and that I am a duly Licensed

I hereby certify that this plan, specification or report was prepared by

MATT BICKEL

License Number: Arch Num Date 12/2023

Comm: 223018

Date: 12/2023

Drawn: TS Check: KE

Scale: As indicated A1.101

**EQUIPMENT SHED** 

**DEMOLITION AND** 

**NEW WORK PLAN** 

North

ELECTRICAL SYMBOL LEGEND							
BASIC MATERIALS FIRE ALARM / DETECTION SYSTEM VOICE AND DATA RACEWAY SYSTEM TELEVISION RACEWAY DISTRIBUTION SYSTEM ABBREVIATIONS (CONT.)							
SYMBOL	DESCRIPTION	SYMBOL DESCRIPTION	SYMBOL DESCRIPTION	SYMBOL DESCRIPTION			
	LTAGS: THRU WITH 6" CORE DRILL	MH MANHOLE	NEPA	SINGLE-GANG 2-1/8"D ELECTRICAL BOX WITH BLANK COVER FOR VOICE/DATA OUTLET WITH 1" CONDUIT STUBBED UP AND INTO NEAREST		IBC INTERNATIONAL BUILDING CODE	GENERAL NOTES:
8C POKE-T	THE WITH & CORE DRILL THEU WITH & CORE DRILL GANG FLOOR BOX	PB PULLBOX	CEILING SMOKE DETECTOR, PHOTOELECTRIC TYPE	ACCESSIBLE CEILING UNLESS OTHERWISE NOTED; PROVIDE WITH NYLON PULL STRING & SMOOTH BUSHING	TWO GANG BOX RECEPTACLE/ CONTROL/ ANTENNA	ICU INTENSIVE CARE UNIT IECC INTERNATIONAL ENERGY CONSERVATION CODE	1. SEE THE ELECTRICAL DEMOLITION NOTES ON THIS DRAWING.
6G SIX-GAN	GANG FLOOR BOX GANG FLOOR BOX	HH HANDHOLE	UNLESS OTHERWISE NOTED E = ELEVATOR WITH RECALL CONTACTS I = IONIZATION	C = ABOVE COUNTER SINGLE-GANG 2-1/8"D ELECTRICAL BOX WITH BLANK COVER FOR	TV TV DISTRIBUTION SYSTEM RACEWAY	IEEE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS IES ILLUMINATING ENGINEERING SOCIETY	2. CIRCUIT NUMBERS ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT CIRCUITS TO UTILIZE AT THE SITE.
	E DUPLEX RECEPTACLE WITH DEDICATED CIRCUIT FOR AV RACK		DUCT SMOKE DETECTOR	TELEPHONE WALL OUTLET WITH 1" CONDUIT STUBBED UP AND INTO NEAREST ACCESSIBLE CEILING UNLESS OTHERWISE NOTED; PROVIDE		IMC INTERMEDIATE METAL CONDUIT IN INCHES	3. SEE ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT MOUNTING
C PACK F	TACLE CONTROLLED PER ASHRAE 90.1 (2010); PROVIDE POWER OR RECEPTACLE CIRCUIT, TO BE CONTROLLED THROUGH	AUTOMATIC TRANSFER SWITCH	R = RETURN S = SUPPLY	WITH NYLON PULL STRING & SMOOTH BUSHING W = WALL MOUNTED AT 52" AFF FOR HOUSE PHONE		IPCEA INSULATED POWER CABLE ENGINEERS ASSOCIATION IT INSTANTANEOUS TRIP JB OR J-BOX JUNCTION BOX	HEIGHTS AND LOCATIONS OF ALL ELECTRICAL DEVICES, PRIOR TO ROUGH-IN.
	ROOM OCCUPANCY SENSOR(S); PROVIDE DEVICE WITH BLUE R UNIVERSAL POWER SYMBOL	<u>30AR</u> 3R NON-FUSED DISCONNECT SWITCH, RATING AS NOTED NF = NON-FUSED AR = AMPERE RATING OF SWITCH	BEAM SMOKE DETECTOR BR OR R = BEAM DETECTOR RECEIVER BT OR T = BEAM DETECTOR TRANSMITTER	W, ADA = WALL MOUNTED AT 44" AFF FOR ADA ACCESSIBLE PAY PHONE	PAGING SYSTEM & BACKGROUND MUSIC	JB OR J-BOX JUNCTION BOX KCMIL ONE THOUSAND CIRCULAR MILS KV KILOVOLT	4. PROVIDE A SEPARATE GROUND WIRE, RUN WITH ALL NEW CIRCUITS. THE GROUND WIRE CAN BE SHARED FOR MULTIPLE CIRCUITS.
	NG TO REMAIN TAL GRADE	4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE	(F) HEAT DETECTOR 135°F FIXED TEMPERATURE, UNLESS	ELV = WALL MOUNTED @ 52" AFF FOR TELEPHONE IN ELEVATOR MACHINE ROOM		KV KILOVOLT AMPERES KW KILOWATT	5. ALL CIRCUITS SHALL BE RUN WITH DEDICATED NEUTRALS. SHARED NEUTRA ARE NOT ALLOWED. THE NEUTRAL IS CONSIDERED A CURRENT CARRYING
IG ISOLAT RL RELOC/	ED GROUND (ORANGE DEVICE) ATED	NEMA RATING; NEMA 1 UNLESS OTHERWISE NOTED	OTHERWISE NOTED, CEILING MOUNTED  SUPERVISED ADDRESSABLE FIRE ALARM CONTROL RELAY	TELEPHONE OUTLET CEILING MOUNTED	(S) LOUDSPEAKER/ TRANSFORMER/ BAFFLE/ SUPPORT TRUSS. (CEILING MOUNTED)	KWH KILOWATT HOURS LBS POUNDS	CONDUCTOR AND THE MAXIMUM NUMBER OF CURRENT CARRYING CONDUCT ALLOWED IN A RACEWAY IS EIGHT (8).
TR TAMPE	R RESISTANT TACLE MOUNTED ADJACENT TO TV OUTLET, COORDINATE	AF = AMPERE RATING OF FUSE AR = AMPERE RATING OF SWITCH 4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE	DUCT SMOKE DETECTOR REMOTE TEST SWITCH WITH INDICATING LAMP. WALL MOUNTED AT 48" AFF. UNLESS		W = WALL MOUNTED	LED LIGHT EMITTING DIODE LP LIGHTNING PROTECTION	6. ALL 120V HOMERUNS OVER 75 FEET SHALL BE RUN WITH A MINIMUM OF #10
HEIGHT	T W/ ARCHITECT X RECEPTACLE WITH (2) USB PORTS	MCP — # OF POLES	OTHERWISE NOTED COMBINATION HORN/STROBE, WALL MOUNTED, 75CD UNLESS	WIRELESS ACCESS POINT OUTLET, CEILING MOUNTED; ACTUAL QUANTITY AND LOCATIONS SHALL BE BASED ON SIGNAL SURVEY BY OWNER'S WI AN VENDOR	PAGING SYSTEM EQUIPMENT CABINET	LT LIGHT LTG LIGHTING	AND ALL 120V HOMERUNS OVER 100 FEET SHALL BE RUN WITH A MINIMUM OF WIRE.
WP WEATH		AMPERE RATING NEMA RATING; NEMA 1 UNLESS OTHERWISE NOTED	XXCD OTHERWISE NOTED CD = CANDELA RATING	MULTI-SERVICE FLOOR BOX WITH RECEPTACLE AND TECHNOLOGY	PAGING SYSTEM TERMINAL CABINET	LSIG LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND LSIA LONG TIME, SHORT TIME, INSTANTANEOUS, ALARM	7. ALL LOW VOLTAGE WIRING RUN IN THE CEILING SPACE SHALL BE PLENUM F
	-WAY SWITCH	COMBINATION MAGNETIC MOTOR STARTER, SIZE AS NOTED, 3-POLE UNLESS OTHERWISE NOTED 4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE	HORN ONLY, WALL MOUNTED	DEVICES (REFER TO OWNER'S VENDOR DRAWINGS FOR DEVICES); PROVIDE RACEWAY(S) AS INDICATED ON FLOOR PLANS	P PAGING SYSTEM CONDUIT AND WIRING	LSI LONG TIME, SHORT TIME, INSTANTANEOUS MAX MAXIMUM MCA MINIMUM CIRCUIT AMPS	INCLUDING LIGHTING CONTROL WIRING, STRUCTURED CABLING, ETC.
-4	NAY SWITCH POLE KEY SWITCH	NEMA STARTER SIZE	XXCD STROBE, CEILING MOUNTED, 75 CD UNLESS OTHERWISE NOTED CD = CANDELA RATING	MULTI-SERVICE FLOOR BOX WITH FURNITURE FEED CONNECTION; PROVIDE RACEWAY(S) AS INDICATED ON FLOOR PLANS	-VOLUME CONTROL	MCA MINIMOM CINCOLL AND S MCB MAIN CIRCUIT BREAKER MCC MOTOR CONTROL CENTER	
S <sub>T</sub> DIGITAL	L TIMER SWITCH W/ 5 MIN. WARNING FLASH IOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH,	SWITCHBOARD/ SWITCHGEAR/ DISTRIBUTION PANEL	COMBINATION <u>HORN/STROBE</u> , CEILING MOUNTED, 75CD UNLESS OTHERWISE NOTED	2-GANG 2-1/8"D ELECTRICAL BOX WITH BLANK COVER FOR WALL MOUNTED FURNITURE FEED DATA CONNECTION; PROVIDE RACEWAY(S)		MDP MAIN SERVICE DISTRIBUTION PANEL MIC MICROPHONE	DEMOLITION NOTES: 1. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS TO
<sup>S</sup> OSab DUAL R		BRANCH CIRCUIT PANELBOARD, OVER 240 VOLTS, SURFACE MOUNTED	CD = CANDELA RATING SPEAKER ONLY, CEILING MOUNTED	AS INDICATED ON FLOOR PLANS MULTI-SERVICE POKE-THRU WITH RECEPTACLES AND TECHNOLOGY	ABBREVIATIONS	MIN MINIMUM MLO MAIN LUGS ONLY	FAMILIARIZE HIMSELF WITH EXTENT OF REMODELING / ALTERATION WORK AN MORE SPECIFICALLY TO NOTE WHERE NEW PARTITIONING IS BEING INSTALLE
SOS SWITCH		BRANCH CIRCUIT PANELBOARD, OVER 240 VOLTS, FLUSH MOUNTED	SPEAKER ONLY, WALL MOUNTED	DEVICES (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS), OR FURNITURE FEED	A/C AIR CONDITIONING	MOCP MAXIMUM OVERCURRENT PROTECTION MSB MAIN SERVICE SWITCHBOARD	WHERE EXISTING PARTITIONING IS BEING REMOVED AND WHERE CEILINGS AR BEING REMOVED AND/OR REPLACED. ETC.
S <sub>D,OS</sub> WALL M SWITCH	IOUNTED DUAL TECHNOLOGY DIMMING/OCCUPANCY SENSOR	BRANCH CIRCUIT PANELBOARD, UNDER 240 VOLTS, SURFACE MOUNTED	STROBE, WALL MOUNTED, 75CD UNLESS OTHERWISE NOTED	CONNECTION; REFER TO POKE-THRU DETAILS AND FLOOR PLANS FOR RACEWAY INFORMATION	AC ALTERNATING CURRENT ABV CLG ABOVE CEILING ADA AMERICANS WITH DISABILITIES ACT	MTD MOUNTED MTG MOUNTING	2. RACEWAY, CONDUCTORS, BOXES, AND SUPPORTING DEVICES SHALL BECOM
EM.	DLTAGE SWITCH DLTAGE OVERRIDE SWITCH	BRANCH CIRCUIT PANELBOARD, UNDER 240 VOLTS, FLUSH MOUNTED	FIREMAN'S PHONE JACK VS SPRINKLER TAMPER SWITCH CONNECTION	POWER POLE WITH POWER & DATA FURNITURE FEED POWER 印 CONNECTIONS (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S	ADA AMERICANS WITH DISABILITIES ACT AF AMPERE FRAME AFF ABOVE FINISHED FLOOR	MTR MOTOR MTS MANUAL TRANSFER SWITCH MUX MULTIPLEX (TRANSPONDER) PANEL	THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SIT AND DISPOSED OF BY THE CONTRACTOR.
K/n	DLTAGE OVERRIDE SWITCH WITH DIMMING	CONDUIT CONCEALED ABOVE CEILING OR IN WALL	Image: WS         SPRINKLER TAMPER SWITCH CONNECTION           WS         SPRINKLER WATERFLOW SWITCH CONNECTION	VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS); REFER TO FLOOR PLANS FOR RACEWAY INFORMATION	AFG ABOVE FINISHED GRADE AHU AIR HANDLING UNIT	MUX MULTIPLEX (TRANSPONDER) PANEL MVA MEGA VOLT AMPS N NEUTRAL	3. CONTRACTOR SHALL TOUR DEMOLITION AREAS WITH THE OWNER TO
SF FAN SW			PRESSURE SWITCH CONNECTION	3/4"THICK X 8' HIGH A/C PLYWOOD BACKBOARD MOUNTED 6" AFF FROM BOTTOM, PAINTED WITH GRAY FIRE-RETARDANT PAINT, WIDTH AS	AIC AMPERE INTERRUPTING CAPACITY AL ALUMINUM	N NEUTRAL NC NORMALLY CLOSED NEC NATIONAL ELECTRICAL CODE	DETERMINE THE STATUS OF EQUIPMENT TO BE REMOVED DURING DEMOLITION ALL EQUIPMENT THAT IS TO BE SALVAGED FOR REUSE BY THE OWNER SHALL B
IVI	RATED SWITCH R SWITCH, LINE VOLTAGE	CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDER FLOOR	DH         ELECTROMAGNETIC DOOR HOLD OPEN DEVICE	INDICATED ON FLOOR PLAN THITTITTTT CABLE TRAY FOR HORIZONTAL LOW VOLTAGE CABLE, 12"W X 4"	AMP AMPERE ANSI AMERICAN NATIONAL STANDARDS INSTITUTE	NEC         NATIONAL ELECTRICAL CODE           NEMA         NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION           NFPA         NATIONAL FIRE PROTECTION ASSOCIATION	REMOVED BY THE CONTRACTOR AND TRANSPORTED TO AN OWNER DESIGNAT STORAGE AREA ON THE SITE.
SENSOI	IOUNTED DUAL TECHNOLOGY OCCUPANCY R	CONDUIT HOMERON TO ELECTRICAL PANEL	FACP     FIRE ALARM CONTROL PANEL       FATC     FIRE ALARM TERMINAL CABINET	HIGH UNLESS OTHERWISE NOTED; LADDER TYPE IN IDF/MDF/IT ROOMS, BASKET/MESH TYPE IN OTHER AREAS, UNLESS OTHERWISE	ASA AMERICAN STANDARDS ASSOCIATION AT AMPERE TRIP	NIC NOT IN CONTRACT NF NON-FUSED	4. CERTAIN EXISTING ELECTRICAL EQUIPMENT AND MATERIAL NOT INDICATED BE RETAINED AND/OR RELOCATED SHALL REMAIN THE PROPERTY OF THE OWN
	G MOUNTED DUAL TECHNOLOGY OCCUPANCY R		FAA       FIRE ALARM ANNUNCIATOR PANEL - FLUSH MOUNTED         EVAC       VOICE EVACUATION PANEL	NOTED	ATS AUTOMATIC TRANSFER SWITCH AUX AUXILIARY	NL NON-LINEAR NO NORMALLY OPEN OR NUMBER	AND SHALL BE STORED WHERE DIRECTED BY THE OWNER. EXISTING ELECTRIC EQUIPMENT BEING REMOVED THAT THE OWNER DOES NOT WISH TO RETAIN SI
	GHT SENSOR CEILING MOUNTED	CONDUIT STUBBED OUT OR UP	MNS MASS NOTIFICATION SYSTEM PANEL		AWG     AMERICAN WIRE GAUGE       BC     BARE COPPER       BIL     BASIC IMPULSE LEVEL	OL OVERLOAD OSHA OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION	BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PREMISES.
0	CY SENSOR CEILING MOUNTED		DACT MASS NOTIFICATION SYSTEM PANEL	4-POST DATA RACK	BAS BUILDING AUTOMATION SYSTEM BMS BUILDING MANAGEMENT SYSTEM	P POLE PB PULLBOX PF POWER FACTOR	5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN DEMOLIT
VACANO	CY SENSOR WALL MOUNTED	FLEXIBLE CONDUIT	AUDIO/VIDEO RACEWAY SYSTEM		BRKR OR BKR BREAKER C CONDUIT OR RACEWAY	PIV POST INDICATOR VALVE PNL PANEL	REMOVAL, CAPPING, STORING, ABANDONING, DISCONNECTING, RELOCATING RECONNECTING OF EXISTING ELECTRICAL EQUIPMENT AND MATERIAL. ALL
Q.	CELL, MOUNTED ON ROOF FACING NORTH DIAGONAL MARKS INDICATED ON ANY DEVICE	GROUND OR GROUND ROD AS NOTED			CAB CABINET CKT CIRCUIT	PR PAIR PRI PRIMARY	CUTTING, PATCHING, REPAIRING, REPLACING AND REFINISHING OF EXISTING CONSTRUCTION AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW WO
REPRES	SENTS DEVICE CONNECTED ON ANY DEVICE SENTS DEVICE CONNECTED TO EMERGENCY CIRCUIT EVICE FOR RECEPTACLE); TYPICAL FOR ANY DEVICE IN		TELEVISION SIGNAL WALL OUTLET, MOUNTED ADJACENT TO DUPLEX RECEPTACLE IDENTIFIED WITH "TV" ADJACENT TO DEVICE; REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT		CB CIRCUIT BREAKER CBM CERTIFIED BALLAST MANUFACTURERS	PT POTENTIAL TRANSFORMER PVC POLYVINYLCHLORIDE	OR DEMOLITION AND/OR REMOVAL OF EXISTING ELECTRICAL EQUIPMENT SHA BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. ALL PATCHING, REPAIRING, REPLACING AND REFINISHING SHALL MATCH THE EXISTING
LEGEN	,,	EXISTING TO REMAIN (LIGHT, SOLID LINE)	(S) CEILING MOUNTED SPEAKER	NURSE CALL SYSTEMS	CATV CABLE TELEVISION CCTV CLOSED CIRCUIT TELEVISION	PWR POWER REC, RECEPT RECEPTACLE	CONSTRUCTION AS NEARLY AS POSSIBLE.
	X RECEPTACLE	NEW (HEAVY, SOLID LINE)	X = ZONE TO BE CONTROLLED WALL MOUNTED SPEAKER	-N SINGLE PATIENT STATION	CLEC CLOCK EQUIPMENT CABINET CLG CEILING CO CONDUIT OR RACEWAY ONLY	REF REFRIGERATOR RGS, GRC RIGID GALVANIZED STEEL CONDUIT RLA RUNNING LOAD AMPERES	6. PROTECT ADJACENT MATERIALS INDICATED TO REMAIN. INSTALL AND MAINT DUST AND NOISE BARRIERS TO KEEP DIRT, DUCT, AND NOISE FROM BEING
п	UPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE X RECEPTACLE MOUNTED ABOVE COUNTER	LIGHTING	WALL-MOUNTED VOLUME CONTROL; PROVIDE 3/4" C. STUBBED UP ABOVE CEILING AND SINGLE STANDARD ELECTRICAL BOX AT 48" AFF	-N2 DUAL PATIENT STATION	COAX COAXIAL CABLE COND CONDUCTOR	RLA ROMINING LOAD AMPERES RMS ROOT-MEAN-SQUARE RPM REVOLUTIONS PER MINUTE	TRANSMITTED TO ADJACENT AREAS. REMOVE PROTECTIVE AND BARRIERS AF DEMOLITION OPERATIONS ARE COMPLETE.
two du	UPLEX RECEPTACLES (QUAD) WITH COMMON COVER MOUNTED COUNTER		WALL-MOUNTED MASTER VOLUME CONTROL; PROVIDE 3/4" C. STUBBED UP ABOVE CEILING AND SINGLE STANDARD ELECTRICAL BOX AT 48" AFF	DUTY STATION	CONN CONNECTION CPU CENTRAL PROCESSING UNIT	RTU ROOF TOP UNIT SCA SHORT CIRCUIT AMPERES	7. IT IS MANDATORY THAT THE EXISTING BUILDING REMAIN IN CONTINUOUS AN
	X RECEPTACLE; EACH RECEPTACLE ON SEPARATE CIRCUIT	► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ►	X = ZONE TO BE CONTROLLED	-S STAFF STATION	CRT CATHODE RAY TERMINAL (VIDEO DISPLAY TERMINAL) CT CURRENT TRANSFORMER	SD SMOKE DETECTOR SEC SECONDARY	NON-INTERRUPTED OPERATION DURING REMODELING/ALTERING OF THE EXIST BUILDING. THE SPECIFIC AREA(S) BEING REMODELED/ALTERED AT ANY
	DE BREAKER WITH 2-POLE COMMON TRIP HANDLE) VIRED CONTROLLED DUPLEX RECEPTACLE	A LED OR FLUORESCENT FIXTURE, RECESSED, PENDANT OR SURFACE CEILING	-RCA WALL-MOUNTED DUAL RCA JACKS FOR MP3 CONNECTION	-SP STAFF EMERGENCY STATION	CU COPPER CW COLD WATER	S/N SOLID NEUTRAL SPD SURGE PROTECTIVE DEVICE	SCHEDULED TIME ARE OBVIOUSLY EXCLUSIVE OF THIS STATEMENT. SERVICES EXISTING BUILDING SHALL BE KEPT IN CONTINUOUS OPERATION INCLUDING POWER, LIGHTING, TELEPHONE, FIRE ALARM, ETC. ANY ABSOLUTELY NECESSA
	ECEPTACLE; "WP" INDICATES CAST METAL "IN-USE" ERPROOF COVER, WEATHER-RESISTANT LISTED	2 a LOWER CASE LETTER INDICATES CONTROLLING SWITCH ZX- CIRCUIT NUMBER	AUDIO/VISUAL CABINET OR RACK	-SA STAFF EMERGENCY ANNUNCIATOR	DC DIRECT CURRENT DDC DIRECT DIGITAL CONTROL	SPKR SPEAKER SPST SINGLE POLE SINGLE THROW	INTERRUPTION OF THESE SERVICES TO ACCOMPLISH PROJECT CONSTRUCTION SHALL BE ARRANGED WITH THE OWNER THROUGH THE GENERAL CONTRACTOR
11	FCI DUPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE	X LIGHTING CONTROL ZONE NUMBER	AREA OF RESCUE ASSISTANCE SYSTEM	EMERGENCY STATION	DEG DEGREE DF DEMAND FACTOR DISC DISCONNECT	SS STAINLESS STEEL SST SOLID STATE TRIP STD SHORT TIME TRIP	MINIMUM OF TWO (2) WEEKS IN ADVANCE. TEMPORARY SERVICES SHALL BE FURNISHED AND INSTALLED WHERE NECESSARY TO ACCOMPLISH THIS PURPO
	ECEPTACLE MOUNTED ABOVE COUNTER X RECEPTACLE, CEILING MOUNTED	LED OR FLUORESCENT FIXTURE RECESSED, PENDANT OR SURFACE CEILING DIAGONAL HALF SHADING INDICATE FIXTURE CONNECTED TO EMERGENCY CIRCUIT OR PROVIDED WITH INTEGRAL EMERGENCY	AREA OF RESCUE ASSISTANCE STOTEIN	TOILET EMERGENCY STATION	DISC DISCONNECT DISC SW DISCONNECT SWITCH DO DRAW OUT	SW SWITCH SWBD SWITCHBOARD	TEMPORARIES SHALL BE REMOVED ONLY AFTER NEW PERMANENT SERVICES INSTALLED AND FULLY OPERATIONAL.
	UPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE, G MOUNTED	BATTERY PACK; "E" AFTER FIXTURE TYPE TAG INDICATES INTEGRAL BATTERY PACK UNLESS OTHERWISE NOTED ON LIGHT FIXTURE	AO	SHOWER EMERGENCY STATION	DN DOWN DPST DOUBLE POLE SINGLE THROW	SWGR SWITCHGEAR TEL TELEPHONE	8. NOTE THAT EVEN IN REMODELED/ALTERED AREAS, ANY FEEDERS, CONDUIT
- Carl 1	TAL MOUNTED DUPLEX RECEPTACLE	SCHEDULE (TYPICAL FOR ALL LIGHT FIXTURE SYMBOLS)	R AREA OF RESCUE ASSISTANCE RECEIVER, WALL, FLUSH MOUNTED	CODE BLUE EMERGENCY STATION	EDH ELECTRIC DUCT HEATER EMT ELECTRIC METALLIC TUBING	TTB TELEPHONE TERMINAL BOARD TTC TELEPHONE TERMINAL CABINET	BRANCH CIRCUITS, SIGNAL AND TELEPHONE CIRCUITS, ETC. PASSING THROUG THE REMODELED AREAS TO SERVE (OR BE SERVED FROM) EXISTING ADJACEN REMOTE OR SURROUNDING AREAS (THAT ARE TO REMAIN) SHALL BE RETAINED
INC/	BOX WITH DUPLEX RECEPTACLE WITH APPROPRIATE FLANGE BOX, TWO DUPLEX RECEPTACLES (QUAD) WITH APPROPRIATE		R AREA OF RESCUE ASSISTANCE POWER SUPPLY	DUAL STAFF PRESENCE INDICATOR STATION	EOELECTRICALLY OPERATEDEOLEND OF LINE	TVECTELEVISION EQUIPMENT CABINETTYPTYPICAL	AND KEPT OPERATIONAL AND SHALL BE REROUTED IN ALL CASES WHERE THEY INTERFERE WITH ANY NEW WORK OR NEW USAGE TO BE ACCOMPLISHED IN TH
FLANGE MULTI-S	E SERVICE FLOOR BOX WITH DUPLEX RECEPTACLE,	LED OR FLUORESCENT FIXTURE, WALL MOUNTED	AREA OF RESCUE ASSISTANCE ILLUMINATED SIGNAGE	CORRIDOR DOME LIGHT WALL MOUNTED	EOR     ENGINEER OF RECORD       ETR     EXISTING TO REMAIN	UG UNDERGROUND UON UNLESS OTHERWISE NOTED	REMODELED AREAS.
	DATA/AV DEVICES (REFER TO TECHNOLOGY DRAWINGS OR R'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS)	O LED, FLUORESCENT, HID, RECESSED, PENDANT OR SURFACE CEILING		CORRIDOR ZONE LIGHT	EWC     ELECTRIC WATER COOLER       EXR     EXISTING DEVICE TO BE RELOCATED       FA     FIRE ALARM	UL UNDERWRITERS LABORATORIES UTIL UTILITY	9. EXCEPT WHERE OTHERWISE NOTED ON DRAWING TO BE RETAINED, RELOCA OR HEREINAFTER NOTED, (SEE NOTE 10) ALL EXISTING ELECTRICAL EQUIPMEN
	SERVICE FLOOR BOX WITH TWO DUPLEX RECEPTACLES (QUAD) , DATA/AV DEVICES (REFER TO TECHNOLOGY DRAWINGS OR	Image: Work of the second s	ACCESS CONTROL / CCTV RACEWAY SYSTEM	CODE BLUE ANNUNCIATOR PANEL WALL MOUNTED	FA FIRE ALARM FAAP FIRE ALARM ANNUNCIATOR PANEL FATC FIRE ALARM TERMINAL CABINET	V VOLT VA VOLTAMPERE VAR VOLT AMPERE REACTIVE	AND MATERIAL IN AREAS TO BE REMODELED/ALTERED SHALL BE REMOVED AS FOLLOWS WHERE THEY SERVE NO FURTHER PURPOSE AND WHERE THEY
OWNER	R'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS) SERVICE POWER & DATA FLOOR BOX WITH FURNITURE FEED	LANDSCAPING TREE ACCENT LIGHT, FACADE LIGHT	ACP ACCESS CONTROL SYSTEM PANEL		FBC FLORIDA BUILDING CODE FCU FAN COIL UNIT	VAR VOLT AMPERE REACTIVE VAV VARIABLE AIR VOLUME VFD VARIABLE FREQUENCY DRIVE	INTERFERE WITH PROPOSED CONSTRUCTION AND/OR INTERFERE WITH PROPOSED USAGE OF SPACE BY OWNER.
CONNE	CTION (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S R DRAWINGS FOR LOW VOLTAGE REQUIREMENTS)	TRACK WITH TRACK LIGHT FIXTURE (TRIANGLES INDICATE QUANTITY OF TRACK HEADS)	CCTV CAMERA; PROVIDE FACEPLATE & DOUBLE GANG JUNCTION BOX,		FLAFULL LOAD AMPERESFMFACTORY MUTUAL	W WIRE WP WEATHER PROOF	A. REMOVE ANY CONDUITS PROTRUDING ABOVE FINISHED FLOOR AND CAP AN
SPECIA SPECIA	L PURPOSE RECEPTACLE, NEMA CONFIGURATION AS NOTED	EMERGENCY TWIN-HEAD LIGHT WITH INTEGRAL BATTERY PACK, WALL MOUNTED	NOTED OTHERWISE	NURSE CALL MASTER STATION	FPUFAN POWERED UNITFTFEET	XFMR TRANSFORMER XFR TRANSFER	FINISH OVER WITH FLOOR MATERIAL TO MATCH EXISTING. B. REMOVE ALL LIGHTING FIXTURES, RECEPTACLES, SWITCHES, ETC. AND
Q JUNCTI	ON BOX WALL MOUNTED	LINEAR FLUORESCENT, LED, RECESSED, PENDANT OR SURFACE CEILING	FIX = FIXED CCTV CAMERA PAN = PAN/TIL/ZOON CCTV CAMERA	NURSE CALL SYSTEM CONDUIT AND WIRING	GF GROUND FAULT GFA GROUND FAULT ALARM		ASSOCIATED WIRING.
	ON BOX MOUNTED IN OR ABOVE CEILING OR IN STRUCTURE	EXTERIOR POLE-MOUNTED AREA LIGHT FIXTURE, ARMS AS INDICATED	DOOR POSITION SWITCH		GFCI GROUND FAULT CIRCUIT INTERRUPTER GFR GROUND FAULT RELAY GND G GROUND		C. REMOVE ALL SURFACE MOUNTED CONDUIT, BOXES AND THEIR ASSOCIATED WIRING.
5	IOUNTED FURNITURE FEED POWER CONNECTION	EXTERIOR PEDESTRIAN SIDEWALK BOLLARD OR POST-TOP LIGHT	-CR       CARD READER, WALL MOUNTED, MOUNTED AT 48" AFF         -KP       KEY PAD, WALL MOUNTED, MOUNTED AT 48" AFF		GND, G GROUND HP HORSEPOWER HOA HAND-OFF-AUTOMATIC		D. REMOVE ALL CONCEALED RACEWAYS, BOXES AND WIRING FROM PARTITION
	R POLE WITH POWER & DATA FURNITURE FEED POWER	FIXTURE     EXIT LIGHT, LED, CEILING OR PENDANT MOUNTED; DIRECTIONAL     ARROWS AS INDICATED: SHADED OLIADRANT INDICATES FACE(S) OF	-CK COMBINED CARD READER/KEY PAD, WALL MOUNTED, MOUNTED AT 48"	INTERCOM SYSTEM	HOA HAND-OFF-AUTOMATIC HORIZ HORIZONTAL		BEING DEMOLISHED.
P POWER	R POLE WITH POWER & DATA OUTLETS SERVICE POKE-THRU WITH TWO INTEGRAL DUPLEX	ARROWS AS INDICATED; SHADED QUADRANT INDICATES FACE(S) OF FIXTURE	ES ELECTRIC STRIKE				E. REMOVE ALL EXISTING WIRING/CABLING FROM ALL CONCEALED RACEWAYS PARTITIONS THAT ARE TO REMAIN.
RECEP	SERVICE POKE-THRU WITH TWO INTEGRAL DUPLEX TACLES AND VOICE/DATA/AV DEVICES (REFER TO TECHNOLOGY NGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE	EXIT LIGHT, LED, WALL MOUNTED		-IC MASTER STATION			F. PROVIDE BLANK COVER PLATES FOR ALL EXISTING FLUSH MOUNTED BOXES
REQUIF	REMENTS), OR FURNITURE FEED CONNECTION; REFER TO POKE- DETAILS	LIGHTNING PROTECTION SYSTEM	ELECTRIC LATCH     MAGNETIC LOCK	C = COUNTER D = DESK			EXISTING WALLS THAT ARE TO REMAIN. FINISH OF PLATES SHALL MATCH THO SPECIFIED FOR NEW SWITCHES AND RECEPTACLES.
MULTI-S	SERVICE RACEWAY WITH 5-20R RECEPTACLES, 18" O.C.		DELAYED EGRESS	W = WALL MOUNTED H = HAND SET TYPE			10. CONTRACTOR SHALL REMOVE THE RECEPTACLES AND ASSOCIATED WIRI TO THE SOURCE PANEL. IN CASE OF EXISTING WALLS THAT WILL NOT BE
UNLESS	S OTHERWISE NOTED RECEPTACLE, WALL MOUNTED	CII-CII-CLASS II MAIN CONDUCTOR CABLE	R REMOTE DOOR RELEASE BUTTON	HF = HANDS FREE WP = WEATHER PROOF			DEMOLISHED THE ASSOCIATED CONDUITS SHALL STAY AND BE CUT AND CAPF 6" ABOVE CEILING. WHERE THE REMOVED RECEPTACLE AND LIGHTING FIXTUR
т	ID BUS BAR, COPPER	TEE SPLICE DOWN CONDUCTOR	ASSOCIATED DOOR DETAIL REFERENCE				CIRCUITS FEEDING THE OTHER RECEPTACLES AND LIGHTING FIXTURES CONTRACTOR SHALL MAKE SURE THE POWER IS NOT DISCONNECTED TO THE
	PROTECTIVE DEVICE	FOUR-WAY SPLICE		W = WALL MOUNTED			OTHER RECEPTACLES AND LIGHTING FIXTURES.
	-TRIP PUSHBUTTON; SEMI-FLUSH WALL MOUNTED UNLESS WISE NOTED: NEMA 3R FOR EXTERIOR LOCATIONS	BONDING PLATE					11. ALL LOW VOLTAGE TELE/DATA CABLING TO BE REMOVED SHALL BE REMO ALL THE WAY TO TELE/DATA ROOM AND REMOVED OFF THE BLOCKS.
ет	ENCY POWER OFF SHUNT-TRIP PUSHBUTTON, RED	PIPE CLAMP FOR PLUMBING VENT THRU ROOF.					
	UUVIII HEAD, ULLAN LEAAN FRUIEUTIVE UUVEK	AIR TERMINAL; PROVIDE PARAPET TYPE BASE WHERE MOUNTED ON PARAPET; PROVIDE FLAT BASE FOR MECHANICAL EQUIPMENT OR		IC INTERCOM SYSTEM CONDUIT AND WIRING			
-EPO OTHER MUSHR	EAD DOOR PUSHBUTTON CONTROL STATION						
-EPO EMERG MUSHR		ROOF PERIMETER WITH NO PARAPET; PROVIDE BLUNT TIP WHERE MOUNTED ON INTERIOR OF ROOF, UNLESS OTHERWISE NOTED ON		SSEC			SHEET DESCRIPTION
	EAD DOOR PUSHBUTTON CONTROL STATION UTTON STATION & CONNECTION	MOUNTED ON INTERIOR OF ROOF, UNLESS OTHERWISE NOTED ON LIGHTNING PROTECTION PLANS		SOUND SYSTEM EQUIPMENT CABINET			E0.001 GENERAL ELECTRICAL SYMBOLS
	UTTON STATION	MOUNTED ON INTERIOR OF ROOF, UNLESS OTHERWISE NOTED ON LIGHTNING PROTECTION PLANS PARAPET MOUNTED AIR TERMINAL		SSTC SOUND SYSTEM TERMINAL CABINET			
SI     OTHER       -EPO     EMERG       MUSHR     OVERHI       Image: Simple state     PUSHBU       Image: Simple state     MOTOR       Image: Simple state     MOTOR       Image: Simple state     VARIAB	UTTON STATION R CONNECTION RIZED DAMPER CONNECTION BLE FREQUENCY DRIVE	MOUNTED ON INTERIOR OF ROOF, UNLESS OTHERWISE NOTED ON LIGHTNING PROTECTION PLANS PARAPET MOUNTED AIR TERMINAL FLAT ROOF MOUNTED OR MECHANICAL		SOUND SYSTEM TERMINAL CABINET			E0.001 GENERAL ELECTRICAL SYMBOLS E0.002 GENERAL ELECTRICAL NOTES
SI     OTHER       EPO     EMERG       MUSHR     OVERHI       OVERHI     PUSHBU       MOTOR     MOTOR       VFI     VARIAB       DDD     DIRECT	UTTON STATION R CONNECTION RIZED DAMPER CONNECTION BLE FREQUENCY DRIVE	MOUNTED ON INTERIOR OF ROOF, UNLESS OTHERWISE NOTED ON LIGHTNING PROTECTION PLANS PARAPET MOUNTED AIR TERMINAL		SSTC SOUND SYSTEM TERMINAL CABINET			E0.001GENERAL ELECTRICAL SYMBOLSE0.002GENERAL ELECTRICAL NOTESE0.003GENERAL ELECTRICAL DETAILSE1.101EQUIPMENT SHED POWER PLANS

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### ELECTRICAL SYMBOL LEGEND

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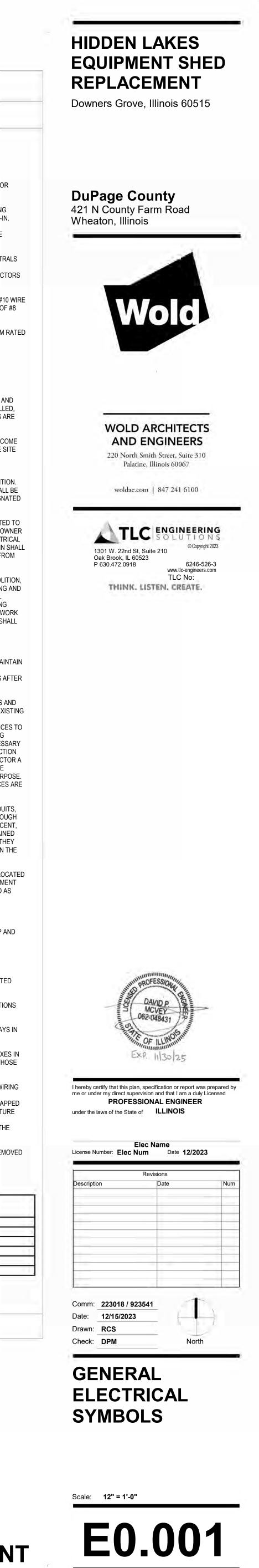
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NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT.

- J -

### 99% DESIGN DEVELOPMENT



1.	THE DRAWINGS AND APPLICABLE SPECIFICATIONS SHALL BE CONSIDERED SUPPLEMENTARY, ONE TO THE OTHER AND ARE CONSIDERED THE "CONTRACT DOCUMENTS". ALL WORKMANSHIP, METHODS AND/OR MATERIALS DESCRIBED OR IMPLIED BY ONE AND NOT DESCRIBED OR IMPLIED BY THE OTHER SHALL BE PROVIDED, FURNISHED OR PERFORMED AS IF IT HAD APPEARED IN BOTH SECTIONS. THE TERM "CONTRACT DOCUMENTS" DESCRIBED HEREIN IS NOT LIMITED SOLELY TO THE ELECTRICAL PORTION OF THE DRAWINGS AND SPECIFICATIONS, BUT ENCOMPASSES THE DRAWINGS AND	1.	
2.	SPECIFICATIONS OF ALL DIVISIONS AS A WHOLE. PROVIDE AN OPERATING AND MAINTENANCE MANUAL TO OWNER PRIOR TO THE FINAL ACCEPTANCE. THE MANUAL SHALL INCLUDE, AS A MINIMUM, (1) SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. ALSO PROVIDE TWO OPERATIONS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS AND METHOD OF OPERATION FOR EQUIPMENT SHALL BE CLEARLY IDENTIFIED, AND THE NAME, PHONE NUMBER AND ADDRESS OF AT LEAST ONE QUALIFIED	3.	
3.	SERVICE AGENCY. INCLUDE ALL COSTS FOR EXCAVATION, SAW CUTTING, DIRECTIONAL BORING, CORE DRILLING, BACKFILLING, SURFACE RESTORATION, REPAIR OF FINISHES, ETC. THAT IS REQUIRED IN ORDER TO MEET THE PROJECT REQUIREMENTS.		
4.	REQUIREMENTS. INCLUDE IN BID THE TRANSPORT AND DISPOSAL OR RECYLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL RULES, REGULATIONS AND GUIDELINES APPLICABLE. COMPLY FULLY WITH STATE STATUTES REGARDING MERCURY-CONTAINING DEVICES, AND WITH ALL DEP AND EPA APPLICABLE GUIDELINES AT THE TIME OF DISPOSAL. PROVIDE OWNER WITH WRITTEN CERTIFICATION OF ACCEPTED DISPOSAL.		
1.	<u>COORDINATION:</u> VERIFY AND COORDINATE LOCATIONS OF ANY MISCELLANEOUS EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (I.E., COPIERS, FAX MACHINES, PRINTERS, KITCHEN APPLIANCES, LAUNDRY APPLIANCES, PROJECTION SCREENS, SHOP TOOLS, MACHINE, ELEVATORS, ETC.) WITH APPROVED SHOP DRAWINGS, OWNER-PROVIDED CUT SHEETS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY		
2.	ELECTRICAL REQUIRED. VERIFY AND COORDINATE LOCATIONS AND EXACT ELECTRICAL REQUIREMENTS FOR ALL MECHANICAL, PLUMBING AND FIRE PROTECTION EQUIPMENT PRIOR TO SUBMITTAL OF SHOP DRAWINGS OF ELECTRICAL EQUIPMENT. PROVIDE ALL NECESSARY RACEWAYS, CONDUCTORS, BOXES, EQUIPMENT, ACCESSORIES, ASSOCIATED DISCONNECT SWITCHES, CIRCUIT BREAKERS, CONTROL TRANSFORMERS, FIRE ALARM SHUTDOWN, ETC. REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH APPROPRIATE TRADE'S APPROVED SHOP DRAWINGS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT		
3.	NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL REQUIRED, UNLESS OTHERWISE NOTED. THIS PROJECT REQUIRES COORDINATION DRAWINGS BY THE CONTRACTOR. PARTICIPATE IN THE COORDINATION DRAWING	4.	
4.	PREPARATION PROCESS AND PROVIDE ALL NECESSARY INFORMATION REQUIRED TO COORDINATE ALL TRADE INFORMATION. ALL WORK ON THE ELECTRICAL SYSTEM REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER DIVISIONS/TRADES PRIOR TO COMMENCEMENT OF WORK. AVOID INTERFERENCES WITH THE	5.	
5.	PROGRESS OF OTHER DIVISIONS/TRADES. LOCATIONS OF VFD'S, DISCONNECTS, MOTOR STARTERS, ETC. FOR HVAC EQUIPMENT ARE DIAGRAMMATIC ON THE PLAN DRAWINGS. EXACT LOCATIONS ARE TO BE COORDINATED WITH CONTRACTOR'S COORDINATION DRAWINGS PRIOR TO ROUGHING IN TO ENSURE PROPER NEC CLEARANCES AND APPROPRIATE MOUNTING SURFACE.	6. 7.	
6.	COORDINATE RECEPTACLE LOCATIONS WITH TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS SO THAT A 120V 20A 5-20R RECEPTACLE IS LOCATED ADJACENT TO EACH VOICE/DATA OUTLET AND TV OUTLET INDICATED ON PLANS. RECEPTACLE IS TO BE CONNECTED TO NEAREST 120V RECEPTACLE CIRCUIT, UNLESS OTHERWISE NOTED ON PLANS.	8. 9.	
7. 8.	REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, AND INTERIOR DESIGN DRAWINGS FOR RELATED INFORMATION AND ADDITIONAL INSTALLATION REQUIREMENTS TO BE PERFORMED AS PART OF THE WORK. WHERE A DISCREPANCY OR CONFLICT IS FOUND BETWEEN ONE DRAWING AND ANOTHER, OR BETWEEN A DRAWING AND	10.	
	APPLICABLE SPECIFICATIONS, NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IN WRITTEN FORM. IN GENERAL, THE MOST STRINGENT REQUIREMENT SHALL GOVERN UNLESS THE DISCREPANCY CONFLICTS WITH APPLICABLE CODES OR OWNER'S DESIGN STANDARDS, WHEREIN THE CODE OR OWNER'S DESIGN STANDARDS SHALL GOVERN.		
9.	CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND/OR SITE AFFECTED BY THIS WORK PRIOR TO SUBMITTAL BID PRICE, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK. SUBMISSION OF A BID PRICE SHALL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT AND/OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED THAT COULD HAVE BEEN REASONABLY OBSERVED WILL NOT BE RECOGNIZED.	1. 2.	
10.	COORDINATE ALL PROJECT SCHEDULING AND PHASING REQUIREMENTS WITH ARCHITECT/ENGINEER AND OWNER PRIOR TO SUBMITTING BID PRICE. THIS PROJECT MAY REQUIRE PHASING SEQUENCES AND POTENTIAL PREMIUM TIME WORK AND ALL COSTS FOR SUCH SHALL BE INCLUDED IN THE BID PRICE. PROVIDE ADEQUATE WORK FORCE AND EQUIPMENT, AND INCLUDE PREMIUM TIME AS MAY BE REQUIRED IN ORDER TO ADHERE TO THE PROJECT SCHEDULE. ADDITIONALLY, ENSURE THAT LONG LEAD ITEMS DO NOT IMPACT THE PROJECT'S SCHEDULE OR PHASING.	3. 4. 5.	
11.	COORDINATE THE LOCATION OF ALL LIGHT FIXTURES, DEVICES AND BOXES WITH WINDOWS, MIRRORS, MILLWORK, CABINETS, GLASS CURTAIN WALLS, AND GLASS WALLS PRIOR TO INSTALLATION OF CONDUITS OR BOXES. REVIEW ALL CONTRACT DRAWINGS TO ASCERTAIN ANY CONFLICTS PRIOR TO BIDDING. OBTAIN CLARIFICATION FROM A/E PRIOR TO BID. CONTRACTOR SHALL NOT BE ENTITLED TO ADDITIONAL COMPENSATION FOR WORK REQUIRED TO RELOCATE OUTLET BOXES OR RACEWAYS FOR COORDINATION WITH OTHER TRADE'S WORK.	6. 7.	
1.	ELECTRICAL EQUIPMENT: TERMINATION PROVISIONS FOR ALL ELECTRICAL EQUIPMENT (PANELBOARDS, SWITCHBOARD, TRANSFORMERS, DISCONNECT SWITCHES, MOTOR CONTROLLERS, AUTOMATIC TRANSFER SWITCHES, ENCLOSED CIRCUIT BREAKERS, WIREWAYS, ETC.) SHALL BE LISTED AND IDENTIFIED FOR USE WITH MINIMUM 75 DEG. F CONDUCTORS IN ACCORDANCE WITH	8. 9.	
2. 3.	NEC. WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC. THE EXCLUSIVELY DEDICATED SPACE EXTENDING FROM FLOOR TO 6' ABOVE EQUIPMENT OR STRUCTURAL CEILING, WHICHEVER DISTANCE IS LOWER, WITH A WIDTH AND DEPTH OF THE PANELBOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING, DUCTS, EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES IN ACCORDANCE WITH NEC.	10.	
4.	PROVIDE HACR RATED CIRCUIT BREAKER FOR ALL HVAC EQUIPMENT.	11. 12.	
1.	IDENTIFICATION: PROVIDE TYPED PANEL DIRECTORIES FOR ALL NEW PANELBOARDS, AND EXISTING PANELBOARDS AFFECTED BY THIS PROJECT. DIRECTORIES SHALL REFLECT PROJECT AS- BUILT CONDITIONS FOR ALL BRANCH CIRCUITS. DIRECTORIES SHALL INCLUDE WHERE EACH PANEL IS FED FROM. ADDITIONALLY, EACH BRANCH CIRCUIT LOAD DESCRIPTION SHALL INCLUDE THE ROOM NUMBER(S) FOR EACH LOAD SERVICE (I.E., RECEPTACLES-RMS 501,503). ROOM NUMBERS SHALL BE BASED ON ACTUAL ROOM SIGNAGE INSTALLED IN FIELD. COORDINATE EXACT ROOM NUMBERS WITH A/E AND OWNER PRIOR TO COMPLETION OF PANEL DIRECTORIES.	13.	
2.	PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS ON EACH SWITCHBOARD, SWITCHGEAR, DISTRIBUTION PANEL, PANELBOARD, MOTOR CONTROL CENTER, SAFETY SWITCH, ENCLOSED CIRCUIT BREAKER, CABINET, STEP-DOWN TRANSFORMER, TRANSFER SWITCH, ETC., AND ANY OTHER MAJOR COMPONENT OF THE ELECTRICAL SYSTEM.		
3.	PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS FOR EACH DISTRIBUTION BREAKER OR BRANCH CIRCUIT BREAKER IN SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS AND OTHER DISTRIBUTION EQUIPMENT. NAME TAG SHALL INCLUDE LOAD DESCRIPTION AND ROOM NUMBER FOR EACH LOAD SERVICE.		
4. 5.	ARC FLASH DANGER/WARNING LABELS SHALL BE APPLIED TO SWITCHBOARD, PANELBOARDS, AND EQUIPMENT CONTROLLERS PER NEC. PROVIDE LABELS ON THE INSIDE OF EACH DEVICE COVERPLATE, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) DEVICE IS CONNECTED TO.		
6. 7.	PROVIDE NEATLY, HANDWRITTEN IDENTIFICATION ON THE EXTERIOR COVER OF ALL JUNCTION BOXES, PULLBOXES AND WIREWAYS, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) CONTAINED WITHIN. PROVIDE A PERMANENT SIGN ON THE MAIN ELECTRICAL ROOM DOOR TO THE BUILDING STATING THAT THE MAIN SERVICE DISCONNECTING MEANS IS LOCATED INSIDE.		
8. 9.	PROVIDE A PERMANENT LABEL ON ALL PANELBOARDS, SWITCHBOARDS, SWITCHGEAR, MOTOR CONTROLS CENTERS AND DISTRIBUTION PANELS STATING "DO NOT WORK ON EQUIPMENT WHILE ENERGIZED. LOCK-OUT TAG-OUT REQUIRED". PROVIDE REQUIRED IDENTIFICATION PER ANSI STANDARDS, NEC REQUIREMENTS, AND OWNER'S PUBLISHED DESIGN STANDARDS WHERE AND LOAD F		
	STANDARDS WHERE APPLICABLE.		

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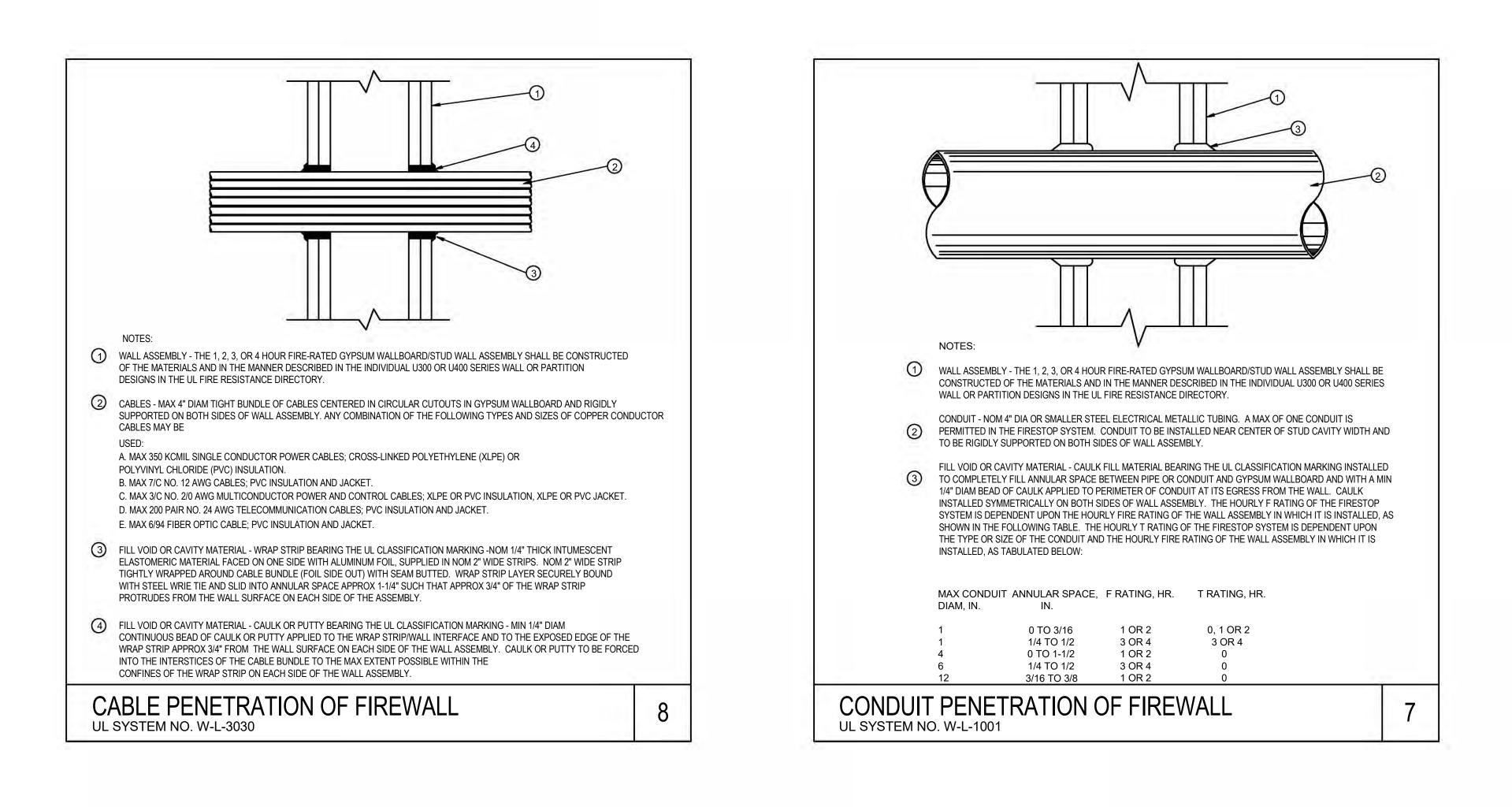
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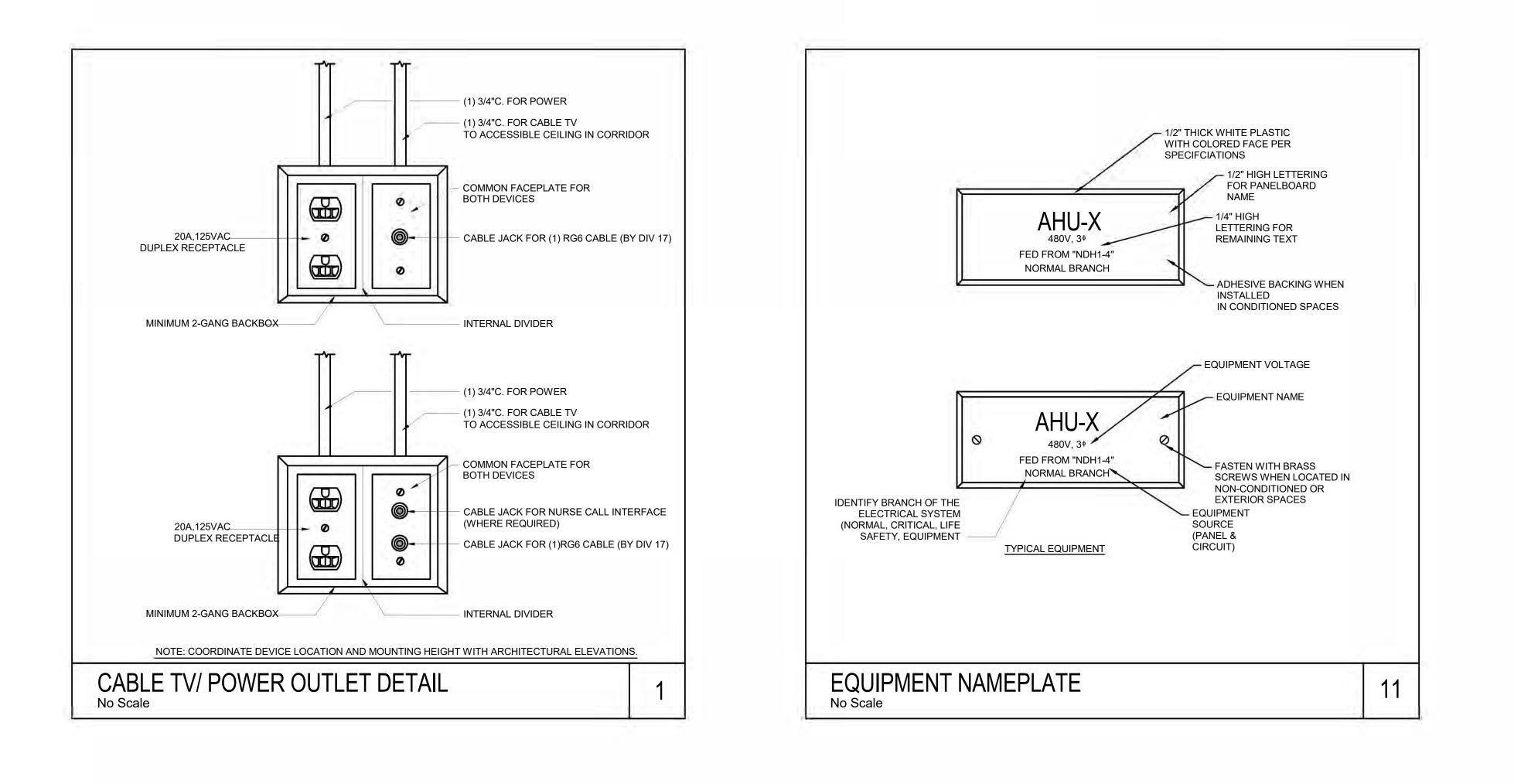
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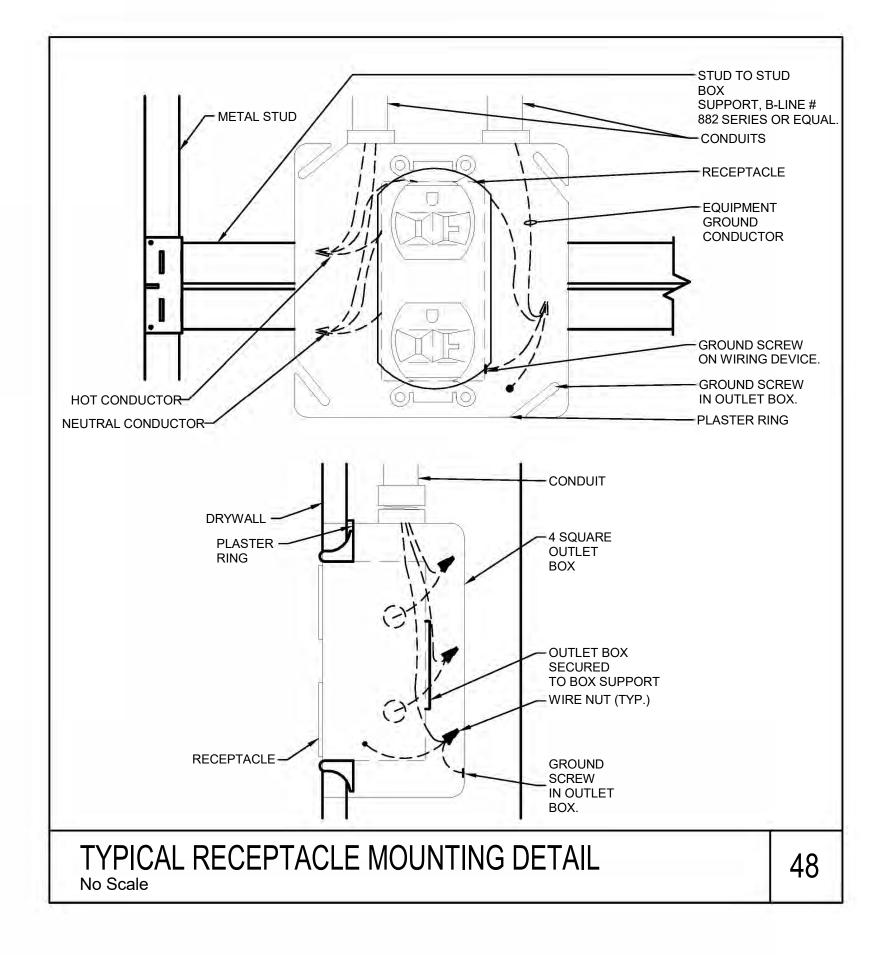
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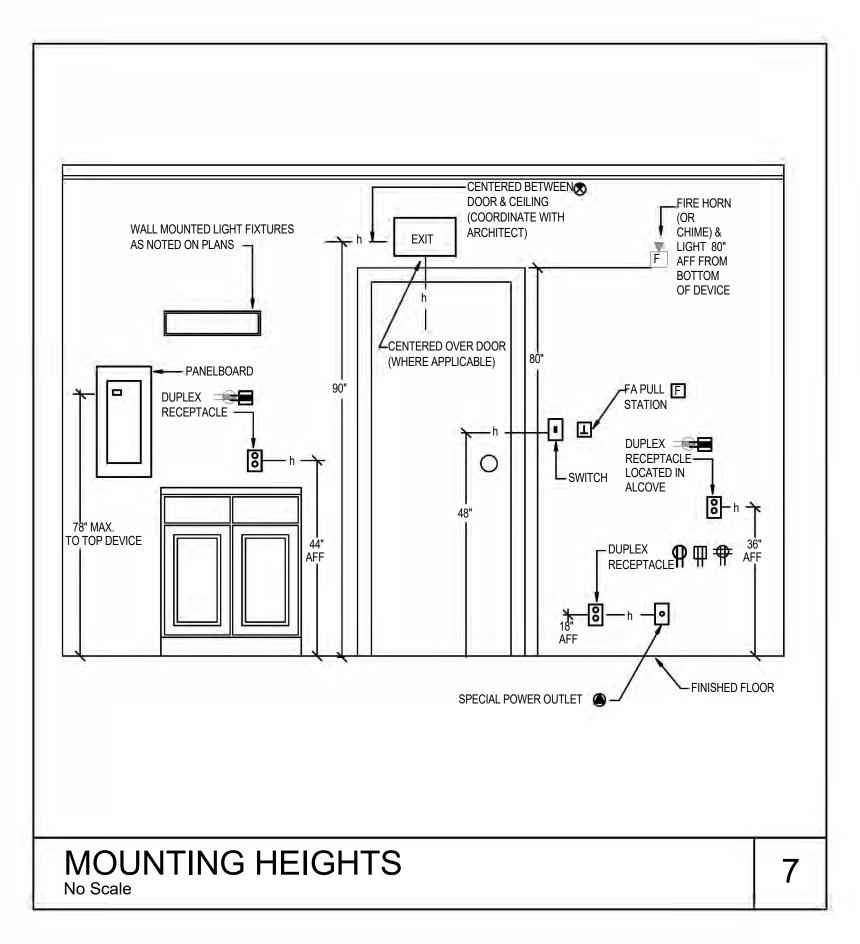
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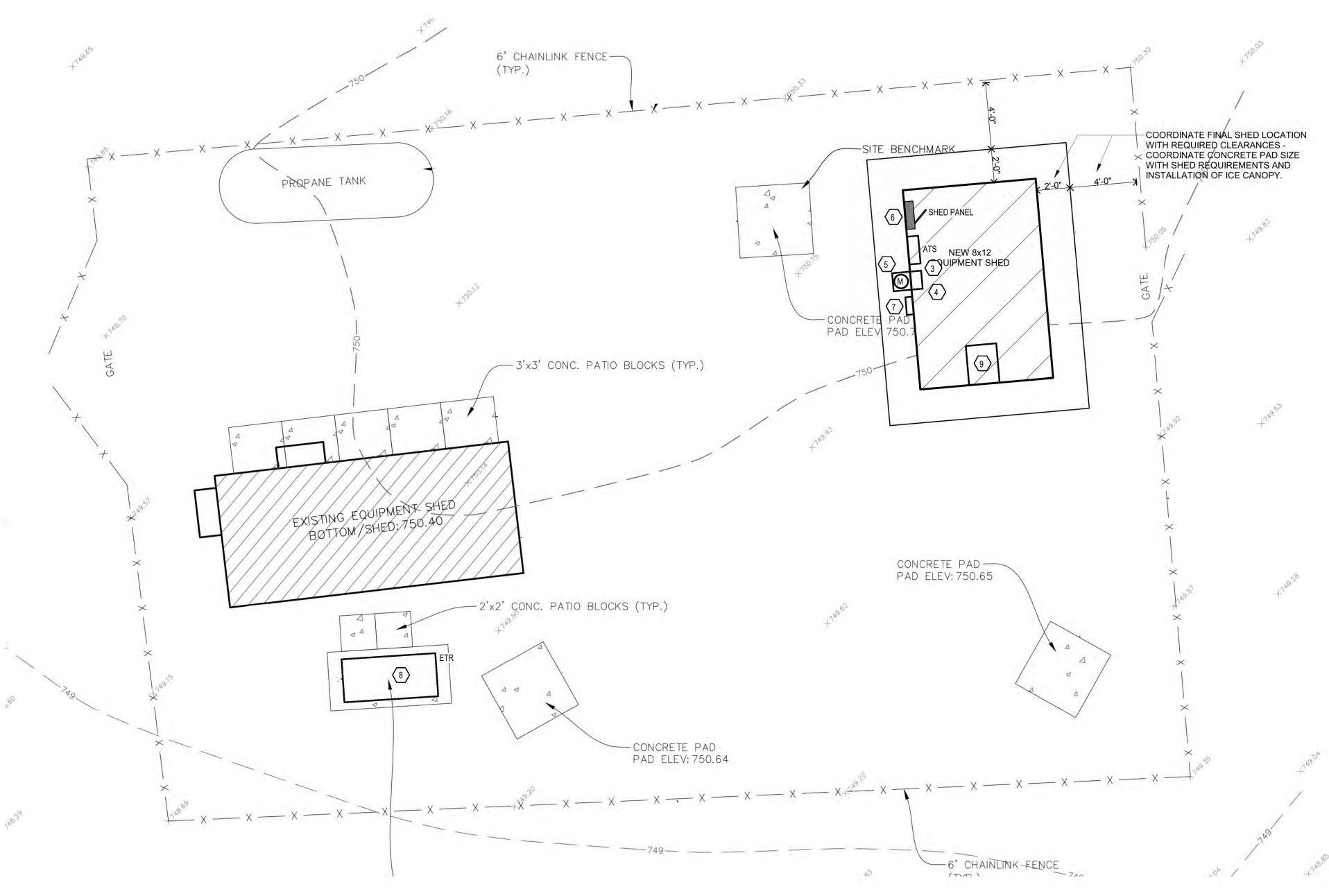
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### 1 EQUIPMENT SHED POWER PLAN 1/4" = 1'-0"

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#### **KEY NOTES**

1. AFTER THE NEW SHED IS OPERATIONAL AND ALL EQUIPMENT HAS BEEN REMOVED FROM THE EXISTING SHED, DEMOLISH THE EXISTING METER SOCKET AND FEEDER. SEE THE ONE LINE DIAGRAM – DEMO.

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AFTER THE NEW SHED IS OPERATIONAL AND ALL EQUIPMENT HAS BEEN REMOVED FROM THE EXISTING SHED, DEMOLISH THE EXISTING TRANSFER SWITCH, BYPASS CABINET AND ASSOCIATED FEEDER TO THE GENERATOR. SEE THE ONE LINE DIAGRAM – DEMO.

PROVIDE A NEW 100A,2P,240V AUTOMATIC TRANSFER SWITCH AND ALL ENGINE START WIRING TO THE GENERATOR.

4. PROVIDE A NEW SERVICE ENTRANCE RATED 100/2 CIRCUIT BREAKER IN NEMA 1 ENCLOSURE.

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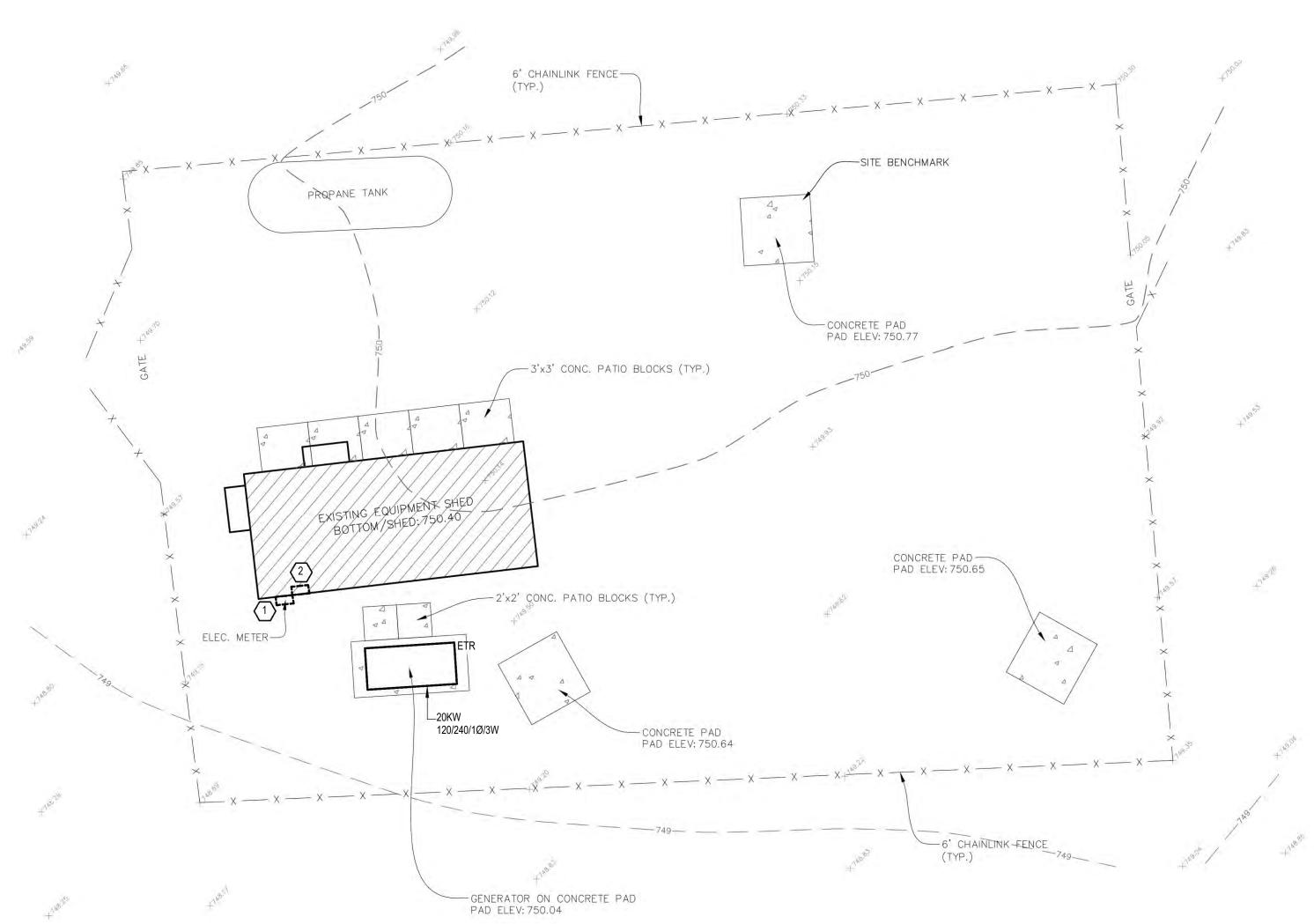
5. PROVIDE A NEW COMED APPROVED 100A METER SOCKET.

6. FEED THE SHED PANEL, PER THE ONE LINE DIAGRAM – NEW. THE SHED PANEL IS FURNISHED AND INSTALLED BY THE SHED MANUFACTURER AND WIRED BY THE ELECTRICIAN.

7. PROVIDE A GROUND BAR. SEE THE GROUNDING ONE LINE DIAGRAM.

8. CONNECT THE (2) CIRCUITS FOR THE BLOCK HEATER AND BATTERY CHARGER TO SPARE 20/1 BREAKERS IN THE NEW SHED PANEL. DEMO THE EXISTING CIRCUITS TO THE SHED PANEL BEING DEMOLISHED.

9. ????? RACK POWER ?????

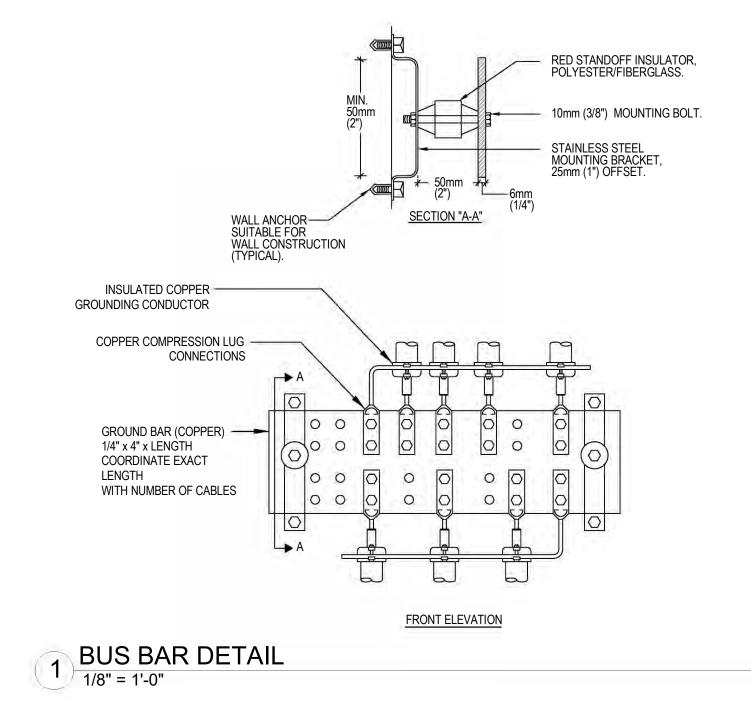


2 EQUIPMENT SHED DEMOLITION PLAN

### 99% DESIGN DEVELOPMENT



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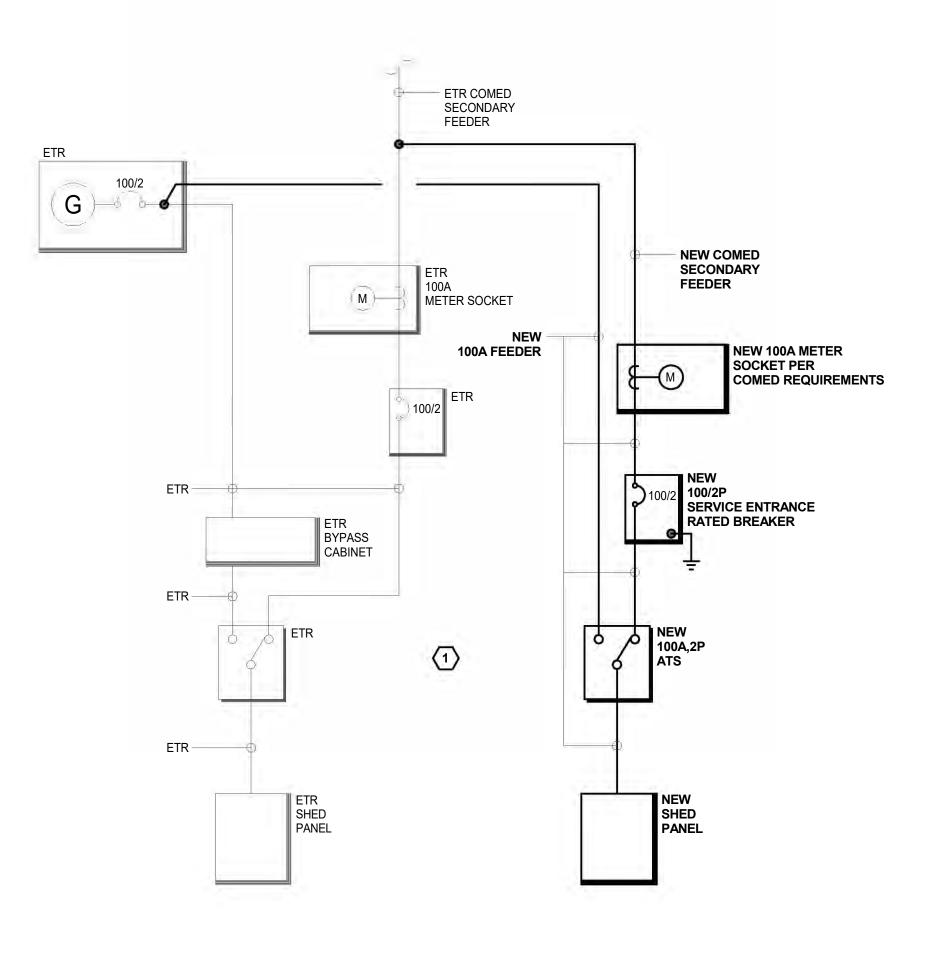
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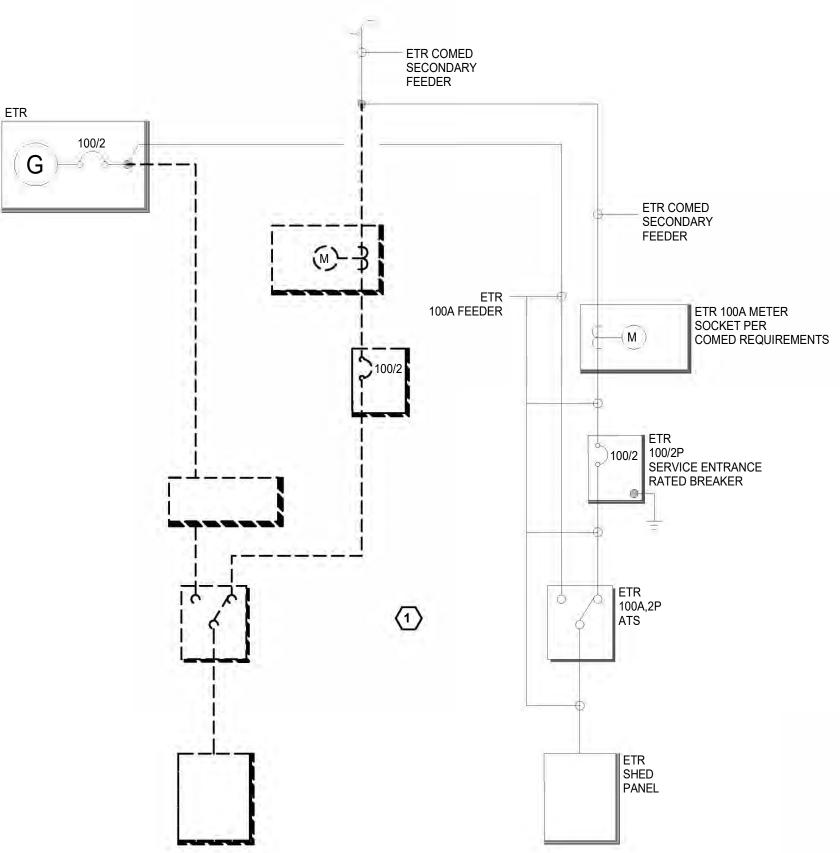
- 1. COORDINATE ALL SHUTDOWNS WITH THE OWNER. ALL SHUTDOWNS SHALL BE ON AN OVERTIME BASIS.
- 2. PROVIDE A LABEL ON EACH ELECTRICAL PANEL WITH THE FOLLOWING INFORMATION:
  - PANEL NAME
    SYSTEM VOLTAGE
  - WHERE PANEL IS FED FROM (PANEL NAME, FEEDER SIZE AND CIRCUITS FED FROM)
     FEEDER OVERCURRENT PROTECTION DEVICE
- 3. PROVIDE TYPED PANEL DIRECTORY FOR ALL PANELS AFFECTED BY THIS PROJECT. EACH CIRCUIT SHALL IDENTIFY THE LOAD IT SERVES AND ITS RESPECTIVE LOCATION. REFER TO PANELBOARD SCHEDULES FOR CIRCUIT

DESCRIPTIONS.

3 ONE-LINE DIAGRAM

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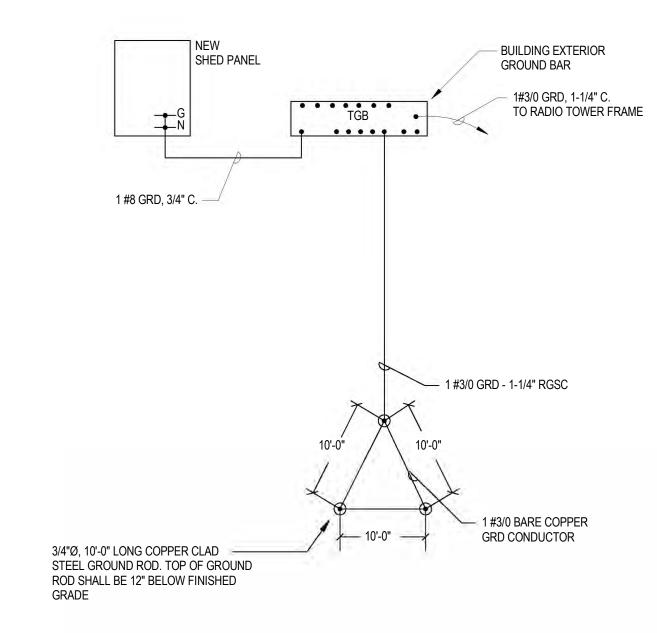
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ONE LINE DIAGRAM - PHASE 2

#### ONE LINE DIAGRAM KEYNOTES:

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1 THE CONTRACTOR SHALL KEEP THE EXISTING AND NEW SHEDS OPERATIONAL UNTIL THE EXISTING SHED IS DEMOLISHED. KEEP ALL SHUTDOWNS TO A MINIMUM UTILIZING THE GENERATOR WHILE THE NORMAL SERVICE IS BEING SHUT DOWN TWO TIMES.



2 GROUNDING DIAGRAM

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