ELECTRICAL SPECIFICATIONS

ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ELECTRICAL CONSTRUCTION MATERIALS SHOWN OR REASONABLY IMPLIED ON THE DRAWINGS TO COMPLETE THE INSTALLATION IN A SATISFACTORY AND USABLE

ALL WORK SHALL BE IN A MANNER TO COMPLY WITH THE REQUIREMENTS OF THE CLIENT, BUILDING DEPARTMENT, AND ANY LOCAL OR STATE BODIES HAVING JURISDICTION.

ELECTRICAL CONTRACTOR SHALL OBTAIN A PERMIT AND PAY ALL PERMIT AND INSPECTION FEES FOR HIS WORK.

ALL MATERIALS SHALL BE NEW AND U.L. LISTED, THIS CONTRACTOR SHALL DO ALL CUTTING AND PATCHING

REQUIRED AND SHALL REMOVE DEBRIS FROM THE SITE.

EQUIPMENT MANUFACTURERS SHALL BE NOTED ON THE DRAWINGS AND IN THE SPECIFICATIONS, ANY SUBSTITUTIONS SHALL BE APPROVED BY THE ENGINEER.

ALL FEEDER RUNS TO HAVE NO MORE THAN 4-90 DEGREES BENDS, PROVIDE PULL BOXES FOR FEEDER RUNS WITH MORE THAN 4-90 DEGREES BENDS OR OVER 150' IN LENGTH, ALL PULL BOXES TO BE IN ACCESSIBLE LOCATIONS.

CONDUIT BENDS TO HAVE MINIMUM RADIUS OF 10 TIMES THE DIAMETER OF THE CONDUIT.

ALL DISTRIBUTION CONDUIT OR CONDUIT EXPOSED TO OUTDOOR WEATHER SHALL BE HEAVY WALL GALVANIZED STEEL CONDUIT. COUPLINGS SHALL BE COMPRESSION TYPE.

ALL DISCONNECT SWITCHES, POWER PANELS, AND CIRCUIT BREAKERS SHALL BE CLEARLY IDENTIFIED.

ALL ELECTRICAL EQUIPMENT AND WORK EXPOSED TO OUTSIDE WEATHER SHALL BE WEATHERPROOF (NEMA 4).

CONTRACTOR SHOULD NOTE THAT NO POWER INTERRUPTION SHALL BE ALLOWED DURING WORKING HOURS, POWER

CHANGEOVER ETC., SHALL BE MADE DURING WEEKEND OR AFTER OFFICE WORKING HOURS (IF NECESSARY).

CONTRACTOR SHALL PURCHASE AND MAINTAIN SUCH INSURANCE THAT WILL PROTECT THE OWNER AND ENGINEER FROM AND AGAINST ANY CLAIMS, LOSS, COST OR DAMAGE FOR INJURY OR DEATH TO PERSONS OR DAMAGE TO PROPERTY INCLUDING COST OF LITIGATION AND ATTORNEY'S FEES IN ANY MANNER ARISING FROM, INCIDENT TO, CONNECTED WITH, OR GROWING OUT OF THE WORK TO BE PERFORMED UNDER THIS CONTRACT, FURNISH CERTIFICATIONS OF INSURANCE IN THE AMOUNT REQUIRED BY THE OWNER AND LISTING THE OWNER AND THE ENGINEER TO BE HELD HARMLESS.

ALL POWER AND LIGHTING WIRE SHALL BE MINIMUM NO.12 AWG COPPER OR AS OTHERWISE INDICATED ON THE DRAWINGS, (TYPE "THWN" OR TYPE "G" AS INDICATED)

THIS CONTRACTOR SHALL SPECIFICALLY NOTE THAT THE ELECTRICAL DRAWINGS ARE INTENDED TO INDICATE THE EXTENT OF THE WORK DIAGRAMMATICALLY, THE GENERAL LOCATION AND CHARACTER OF THE WORK INCLUDED. WORK INTENDED BUT HAVING MINOR DETAILS OR NOT SHOWN IN THE DRAWINGS BUT REQUIRED FOR COMPLETE AND OPORABLE SYSTEMS SHALL BE INCLUDED AS PART OF THE WORK, THE BALANCING OF THE LOADS ON THE PANELS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

ALL SIZES REGARDING PROTECTION, FEEDERS, AND CONTROLS ARE BASED ON THE PRELIMINARY DESIGN DATA. ELECTRICAL CONTRACTOR TO REVIEW EXISTING AND NEW NAMEPLATE DATA, MOTOR RATINGS AND LOADS REQUIREMENTS AND PROVIDE ANY NEEDED ADJUSTMENTS.

THE CONTRACTOR SHALL VISUALLY SURVEY THE PREMISES BEFORE SUBMITTING HIS PROPOSAL AND IF THERE ARE ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL CONDITIONS HE SHALL CONSULT THE OWNER/ENGINEER FOR CLARIFICATION, ONCE A PROPOSAL IS SUBMITTED, IT SHALL BE AGREED BY ALL PERSONS INVOLVED THAT THE WORK CAN BE AND WILL BE INSTALLED AS SHOWN OR AS MODIFIED IN WIRING BY THE OWNER/ENGINEER, HE SHOULD FAMILIARIZE HIMSELF WITH THE SCHEDULE OF CONSTRUCTION, SHOP DRAWINGS FOR ALL SPECIFIED EQUIPMENT, MATERIAL, ETC. SHALL BE SUBMITTED FOR APPROVAL PRIOR TO THE PROCUREMENT.

PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITH ALL BRANCH CIRCUITS AND DISTRIBUTION POWER EQUIPMENT.

ALL CONDUIT SHALL BE SIZED ACCORDING TO CODE UNLESS OTHERWISE NOTED ON THE DRAWINGS, MINIMUM SIZE TO BE USED IS 1".

ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODES, AS WELL AS THE LATEST LOCAL ELECTRICAL CODE, LOCAL FIRE DEPARTMENT AND OSHA REQUIREMENTS.

ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND MANUFACTURERS EQUIPMENT DATA AND ALL OTHER DRAWINGS RELATED TO THE PERFORMANCE OF THE WORK.

THE CONTRACTOR SHALL GUARANTEE ALL OF HIS WORK FOR ONE YEAR AFTER THE DATE OF WRITTEN ACCEPTANCE BY THE OWNER AGAINST ALL DEFECTS IN MATERIAL AND WORKMANSHIP, ALL SUCH DEFECTS

ELECTRICAL AND MECHANICAL EQUIPMENT INSTALLATIONS SHALL BE GUARANTEED TO OPERATE SATISFACTORY.

THE CONTRACTOR MUST VERIFY EXISTING CONDITIONS AND LOCATIONS IN THE FIELD, PRIOR TO SUBMITTING A PROPOSAL. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING THE WORK REQUIRED

APPEARING WITHIN THE GUARANTEE PERIOD SHALL BE PROMPTLY REMEDIED WITHOUT COST TO THE OWNER. ALL

UNDER THIS CONTRACT.

THE CONTRACTOR SHALL ADJUST HIS WORK AS REQUIRED TO AVOID CONDITIONS NOT SHOWN ON PLANS WITHOUT ANY FURTHER COST TO THE OWNER.

THE CONTRACTOR AFTER INSPECTING THE PREMISES AND THE DRAWINGS SHALL CALL TO THE ATTENTION OF THE ENGINEER ANY LACK OF THE SPACE OR CLEARANCE REQUIRED BY THE VARIOUS EQUIPMENT BEFORE THE

THE CONTRACTOR SHALL REMOVE RUBBISH AND DEBRIS RESULTING FROM HIS WORK ON A DAILY BASIS. THE JOB SITE MUST BE LEFT CLEAN AND TIDY AT THE END OF EACH WORKDAY.

ALL CONDUIT, RACEWAY, AND ELECTRICAL APPARATUS SHALL BE INSTALLED AS NEATLY AS POSSIBLE AND IN SUCH A MANNER AS TO AFFORD MINIMUM INTERFERENCE WITH OTHER TRADES.

ALL CONDUIT AND CABLE SHOULD BE SUPPORTED A MINIMUM OF 6 FEET ON CENTER AND WITHIN 3 FEET OF

THE AMPACITY OF THE MULTIPLE CONDUCTORS IN ONE CONDUIT SHALL BE RATED PER NEC TABLE 310,15(B)(16). OF THE 2017 NEC.

ALL CIRCUIT BREAKERS SHALL BE THE BOLT-ON TYPE AND BE COMPATIBLE WITH THE EXISTING PANEL MANUFACTURER.

ALL RECEPTACLES SHALL BE RATED FOR 125 VOLT, 20-AMPS. (MINIMUM) UNLESS OTHERWISE NOTED.

ANY EQUIPMENT OR RECEPTACLES INSTALLED MUST BE IDENTIFIED ON THE DIRECTORY CARD WITH THE DATE IN THE ELECTRICAL AND POWER PANELS.

WHEN INSTALLING ELECTRICAL PANELS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY ALL THE CIRCUITS ON THE DIRECTORY CARD WITH THE DATE.

ONLY STEEL ANCHORS OR TOGGLE BOLTS SHALL BE USED FOR SUPPORTING EQUIPMENT, PIPE, AND LIGHTS FROM

COLOR CODE FOR CONDUCTORS FOR SECONDARY FEEDERS AND BRANCH CIRCUITS ARE TO BE AS INDICATED

PHASE 120/240 VOLT
A---- BLACK
B---- RED
NEUTRAL WHITE

GROUND-

COUPLINGS IN COMPLIANCE WITH CODE REQUIREMENTS.

THE CEILING, THE USE OF PLASTIC ANCHORS IS PROHIBITED.

GREEN

ELECTRICAL METALLIC CONDUIT ALONG WITH SET SCREW CONNECTORS AND COUPLINGS MAY BE USED IN DRY AREAS ONLY..

TO ASSURE EFFECTIVE GROUNDING, ALL CONDUIT, EQUIPMENT AND METAL ENCLOSURES SHALL HAVE A CONTINUOUS PATH TO GROUND BY USING EQUIPMENT GROUNDING CONDUCTORS WITH SUFFICIENTLY LOW IMPEDANCE TO LIMIT THE POTENTIAL ABOVE GROUND, AND TO FACILITATE THE OPERATION OF THE OVER CURRENT DEVICES IN THE CIRCUITS. USING CONDUIT AS A GROUND CONDUCTOR IS NOT ACCEPTABLE.

STANDARD WIRING SHALL BE OF THHN INSULATION AND THWN INSULATION FOR AREAS WITH HIGH MOISTURE, NO TW INSULATION IS PERMITTED.

THE PROJECT WILL NOT BE CONSIDERED COMPLETE UNTIL AS-BUILT DRAWINGS WITH HOME RUNS IDENTIFIED ARE RECEIVED BY THE OWNER.

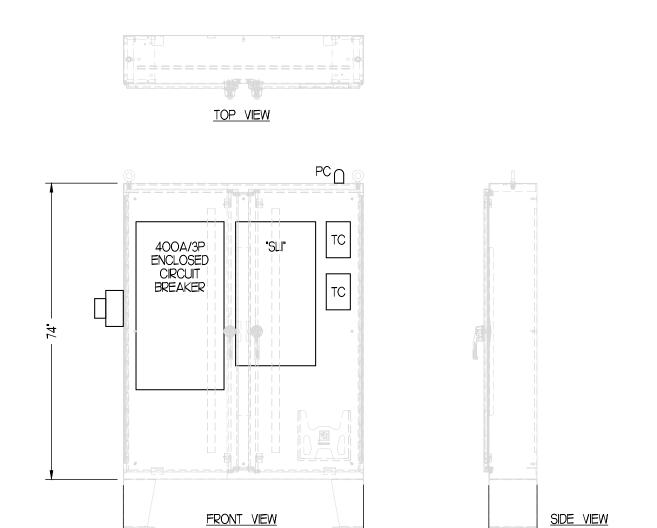
ALL CONTRACTORS MUST FOLLOW STANDARD OSHA LOCK-OUT AND TAG-OUT PROCEDURES,

WHERE A CONFLICT ARISES BETWEEN THE SPECIFICATIONS AND THE DRAWINGS THE WORST CASE SCENARIO SHALL

ALL NEW DISTRIBUTION EQUIPMENT AND PANELBOARDS SHALL BE MANUFACTURED BY EATON.

PREVAIL.

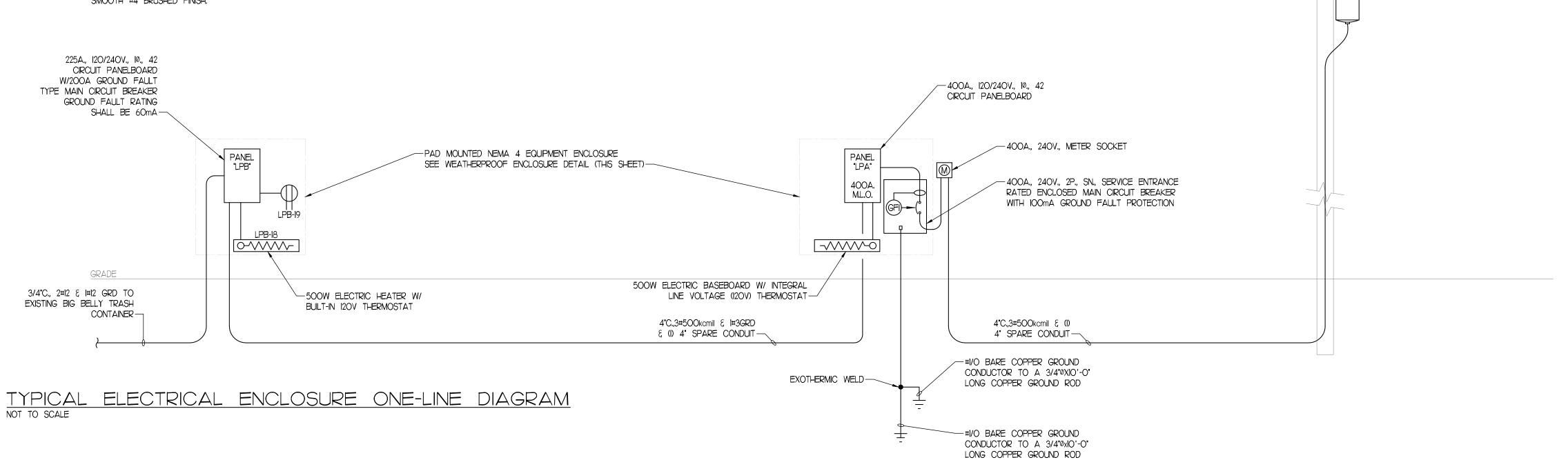
ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR A COORDINATION/ARC-FLASH STUDY AS PART OF THIS



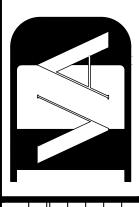
60"Wx72"HxI2"D WEATHERPROOF ENCLOSURE

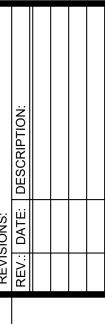
EXTERIOR ENCLOSURE NOTES:

- A. THE EXTERIOR ENCLOSURE SHALL BE PAD MOUNTED ON A CONCRETE PAD AND MANUFACTURED BY HOFFMAN. THE ENCLOSURE SHALL BE A TWO DOOR CONFIGURATION WITH A THREE-POINT LATCHING SYSTEM WITH PADLOCKING HANDLES AND A FOAM-IN-PLACE GASKET FOR SECURITY PURPOSES. THE ENCLOSURE SHALL BE NEMA 4, IP66 SUITED FOR USE IN OUTDOOR APPLICATIONS.
- B. THE ENCLOSURE SHALL BE MANUFACTURED FROM 12 GAUGE TYPE 304 OR 316L STAINLESS STEEL, BACK PANELS SHALL BE 10 GAUGE STAINLESS STEEL WITH X-FORM STIFFENERS, SEAMS SHALL BE CONTINUOUSLY WELDED AND GROUND SMOOTH, NO HOLES OR KNOCKOUTS WILL BE PERMITTED.
- C. A REMOVABLE CENTER-POST FOR EASY PANEL INSTALLATION SHALL BE PROVIDED ALONG WITH COLLAR STUDS FOR MOUNTING OPTIONAL PANELS. MOUNTING PANEL AND PANEL SUPPORTS SHALL BE INCLUDED.
- D. HEAVY-DUTY LIFTING EYES SHALL BE TYPE 316L STAINLESS STEEL.
- E. HEAVY-DUTY 3-POINT LATCHING MECHANISM OPERATED BY TYPE 316L STAINLESS STEEL POWERGLIDE PADLOCKING HANDLES SHALL BE INCLUDED.
- F. BODY FLANGE TROUGH COLLAR SHALL EXCLUDE LIQUIDS AND CONTAMINANTS
- G. HEAVY-DUTY STAINLESS STEEL CONTINUOUS HINGES SHALL SUPPORT EACH DOOR
- H. BONDING PROVISION ON DOORS ALONG WITH GROUNDING STUDS ON BODY SHALL BE PROVIDED.
- I. ACCESSORY MOUNTING CHANNEL SHALL BE PROVIDED IN ENCLOSURE TOP.
- J. DATA POCKET SHALL BE HIGH-IMPACT THERMOPLASTIC AND MOUNTED TO THE INSIDE OF THE DOORS.
- K. 12" REMOVABLE FLOOR STANDS SHALL BE BOLTED TO ENCLOSURE.
- L. SEAMLESS FOAM-IN-PLACE ONE-PIECE GASKET SHALL PROVIDE OIL-TIGHT AND DUST-TIGHT SEAL AGAINST CONTAMINANTS.
- M. EXTERNAL HARDWARE MANUFACTURED OF TYPE 316 STAINLESS STEEL AND THE ENCLOSURE SHALL BE UNPAINTED AND FRONT, SIDES, TOP AND BACK SHALL A HAVE SMOOTH #4 BRUSHED FINISH.



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MENEMSHA MARINA

-EXISTING UTILITY COMPANY FUSED

-EXISTING UTILITY COMPANY POLE

MOUNTED TRANSFORMER

CUT-OUT.

CLIENT

MENEMSHA FLOATING

RAWN: PES IN THECKED: VAD Jr CALE: NOT TO SCALE

ATE: MARCH 29, 2018

AWING NUMBER:
ROGRESS PRINT
T FOR CONSTRUCTION - DATE

