ADDENDUM #1

Project Name: Currituck Community Park Signage

Location: Barco, NC

Owner: County of Currituck

Date: 08/13/2013

BIDDERS MUST ACKNOWLEDGE RECEIPT OF ADDENDUM #1 ON BID FORM.

- 1. A pre-bid meeting was held on August 6th at the Cooperative Extension Center. The questions from that meeting are addressed in this addendum. The sign-in sheet is attached.
- 2. All questions shall be submitted to <u>Michelle.Perry@CurrituckCountyNC.gov</u> by August 15th.
- 3. The contractor shall flag or stake all signs for County approval.
- 4. The plans state that College Way entrance sign and COA sign shall be constructed first this is no longer the case the signs can be constructed in any order.
- 5. A building permit is required, although the fee is waived. The sign foundations shall be designed and sealed by an engineer.
- 6. All soil and vegetative debris shall be hauled offsite.
- 7. In the specs, it is mentioned that the landscaping is by Owner, but in the scope of work, landscaping is included. If landscaping is included, what all needs to be on the bid form?
 - -Landscaping is included in the bid. The bid is lump sum.
- 8. For the Directional/Building identification signs, what is the depth of those signs?

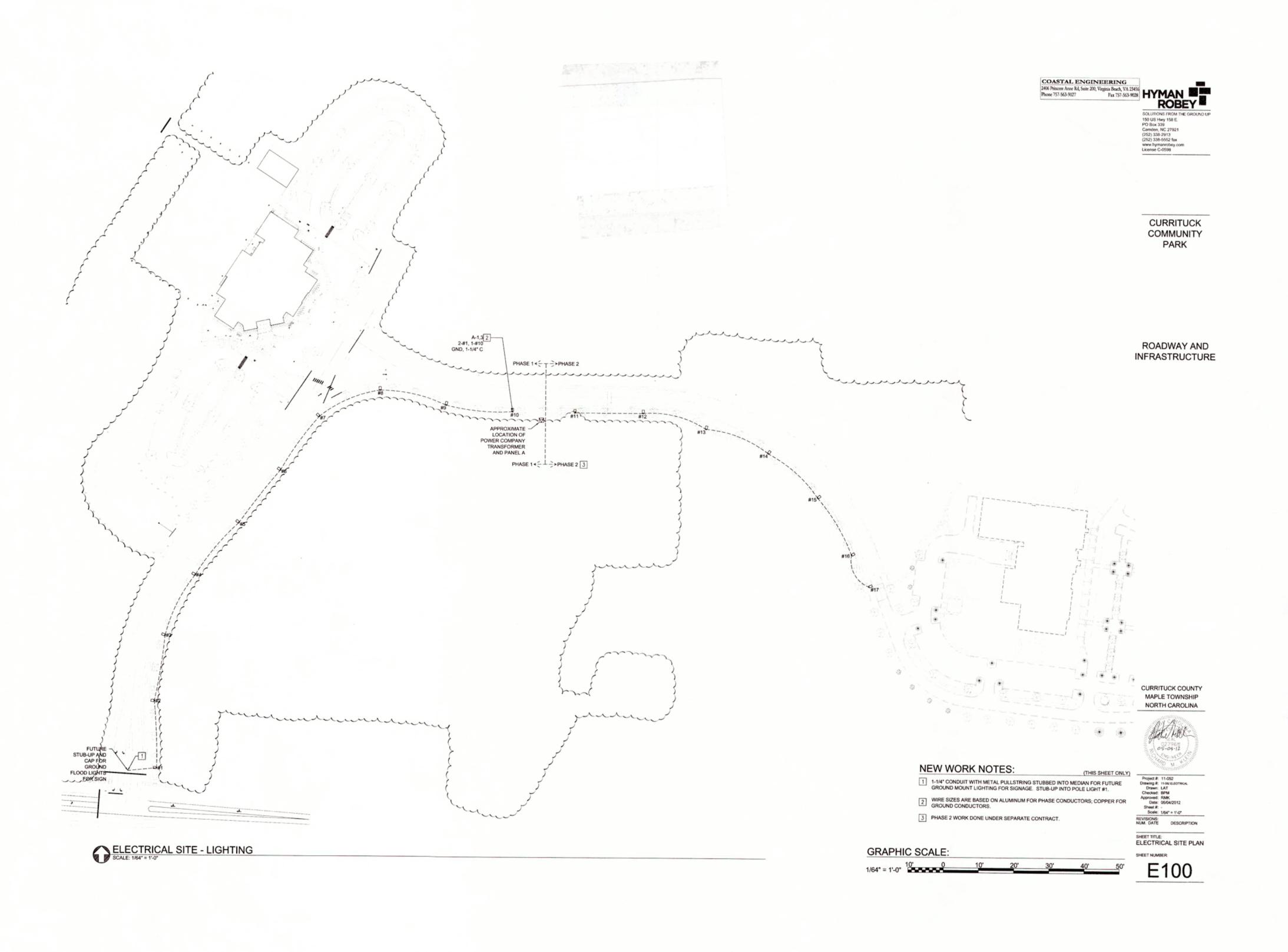
 -Use the same section view for the Building Signs as is shown for the Entrance signs.
- 9. For the Building/Facility identification signs, are the faces panels or cabinets?

 -Use the same section view for the Building signs as is shown for the Entrance signs.
- 10. Are we responsible for all the masonry walls and bases as well?
 -Yes

- 11. Aviation Parkway Entrance Sign: #6 wire, 120/208v, single phase power is provided in median at existing sign. Contractor shall supply breaker adequately sized for sign. 20amp spare is available if determined it is of adequate size.
- 12. College Way Entrance Sign: Empty 1½" conduit is provided at median. Provide #8 solid copper wire THHN. Connect to existing terminal block in light pole #1. See attached sheets E100 & E200 from Currituck Community Park Roads & Infrastructure project. Power is 240v. Provide High Pressure Sodium, Flood Lights. Provide 1 photocell per sign All four flood lights to be controlled by 1 photocell.

End of Addendum #1

COMPANY EMAIL Julie Collenberg Sussex Development 42270400 de Ronnie Cooper Narrow Shores 207-6605 jcollenberg @sussex development.com oyahoo.com ROGER @ ARCHESSON, CON 338-9171 ROGER STEELE AR CHESSON



TOTAL CONNECTED AMPS A: 8.2 B: 8.2

PHASE CONDUCTORS SIZES ARE BASED ON ALUMINUM CONDUCTORS; GROUNDS ARE COPPER PROVIDE TYPE WRITTEN PANEL DIRECTORY
MINIMUM SERVICE SIZE FOR UNDERGROUND SERVICE IS 200AMP PER DOMINION POWER CO.
*LOAD INCLUDES FUTURE SIGNAGE LIGHTING. PHASE 2 WORK DONE UNDER SEPARATE CONTRACT

LEGEND

NOTE: ALL SYMBOLS BELOW MAY NOT BE USED ON PLANS, SYMBOLS NOT SHOWN BELOW

SITE LIGHTING, SEE LIGHTING FIXTURE SCHEDULE

CONDUIT HOMERUN WITH PANELBOARD & CIRCUIT DESIGNATIONS BRANCH CIRCUIT OF FEEDER WIRING IN CONDUIT. PROVIDE SIZE AND QUANTITY OF CONDUCTORS AS REQUIRED TO FACILITATE CIRCUIT CONFIGURATION ANDIOR SWITCHING INDICATED. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG (OR AS INDICATED), MINIMUM CONDUIT SIZE SHALL BE 1/2*.

TRANSFORMER, DRY TYPE

NOTE SYMBOL

LIGHTING FIXTURE TYPE SYMBOL. SEE "LIGHTING FIXTURE SCHEDULE"

BRANCH CIRCUIT OR FEEDER WIRING IN CONDUIT. NO TICK MARKS INDICATE 2 CONDUCTORS & 1 GROUND IN CONDUIT UON. TICK MARKS, WHEN SHOWN, INDICATE QUANTITY OF CONDUCTORS IF OTHER THAN THREE; (-1) INDICATES GROUND, (-1) INDICATES INSULATED ISOLATED GROUND. FOR CONDUIT AND WIRE SIZES

LP-1,3 HOMERUNS TO PANEL. PANEL & CIRCUIT DESIGNATIONS AS INDICATED.

REFER TO PANELBOARD SCHEDULES.

ABBREVIATIONS

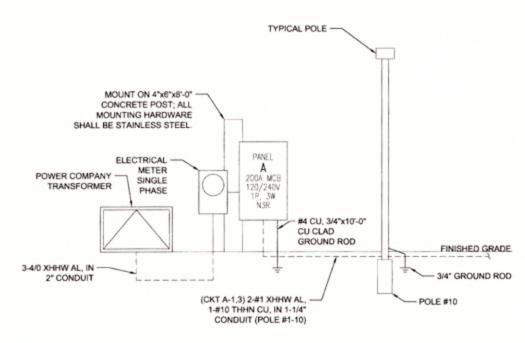
Ø, PH	PHASE	NTS	NOT TO SCALE	
JB	JUNCTION BOX	С	CENTERLINE	
A, AMP	AMPERE	P	POLE	
KVA	KILOVOLT AMPERES	EF	EXHAUST FAN	
AFF	ABOVE FINISHED FLOOR	RTU	ROOF TOP UNIT	
KW	KILOWATT	EQUIP	EQUIPMENT TYP TYPICAL	
AFG	ABOVE FINISHED GRADE	EXIST	EXISTING	
MLO	MAIN LUGS ONLY	UON	UNLESS OTHERWISE NOTED	
AIC	AMPERE INTERRUPTING	F	FUSE	
	CAPACITY	v	VOLT, VOLTAGE	
MT	MOUNT (RMS SYMMETRICAL)	FLEX	FLEXIBLE	
MTD	MOUNTED ALTERNATE ALT	w	WIRE	
MTG	MOUNTING	GFI	GROUND FAULT INTERRUPTER	
MCB	MAIN CIRCUIT BREAKER	WP	WEATHERPROOF	
APPROX	APPROXIMATELY	GND	GROUND	
NF	NONFUSIBLE	HP	HORSE POWER	
G.	CONDUIT			

GENERAL NOTES

- THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, DEVICES AND FIXTURES SHALL CONFORM TO ALL LOCAL CODES, ORDINANCES, NATIONAL ELECTRIC CODE, AND UTILITY COMPANY REQUIREMENTS.
- THE ELECTRICAL DRAWINGS ARE GENERALLY DIAGRAMMATIC. THE ELECTRICAL INSTALLATION SHALL BE COORDINATED WITH ALL OTHER TRADES SO THAT INTERFERENCES WILL BE AVOIDED.
- ALL FINAL CONNECTIONS SHOWN ON THE DRAWINGS ARE ACTUAL REQUIREMENTS OF THE EQUIPMENT AND ARE SHOWN IN THEIR APPROXIMATE LOCATION.
- 4. ALL EXTERIOR EQUIPMENT AND DEVICES SHALL BE WEATHERPROOF AND RAIN TIGHT.

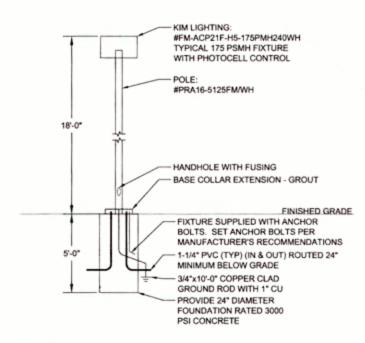
GENERAL SPECIFICATIONS:

- THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO DETERMINE THE EXTENT OF THE WORK. LACK OF KNOWLEDGE OF EXISTING CONDITIONS WILL NOT BE CONSIDERED A BASIS FOR CHANGE ORDERS. THIS WILL INCLUDE A SATISFACTORY EFFORT BY THE CONTRACTOR TO FIELD VERIFY PROPER FIT. EXPENSE INCURRED BY THE CONTRACTOR, WHICH COULD HAVE BEEN AVOIDED BY THIS STEP SHALL NOT BE A BASIS FOR CHANGE ORDER.
- CONTRACTOR TO SUBMIT SPECIFICATIONS AND DETAIL FOR EQUIPMENT AND FABRICATED MATERIALS
 FOR OWNER'S APPROVAL PRIOR TO ISSUING PURCHASE ORDER. OWNER'S APPROVAL DOES NOT
 RELIEVE CONTRACTOR OF ANY RESPONSIBILITY FOR PERFORMANCE AND OPERATION.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS FOR A COMPLETE INSTALLATION IN ALL RESPECTS READY OF INTENDED USE AND THE STRICT ACCORDANCE WITH STATE AND LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PAY NECESSARY FEES AND OBTAIN PERMITS. INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROCEDURES.
- EQUIPMENT AND MATERIALS SHALL BE OF THE TYPE, SIZE AND MANUFACTURERS INDICATED ON THE DRAWINGS OR AN APPROVED EQUIVALENT.
- 5. THE CONTRACTOR SHALL SUPPLY AND INSTALL THE MATERIALS AND EQUIPMENT COVERED BY THE PLANS AND SPECIFICATIONS TO THE OWNER COMPLETE AND IN FIRST CLASS CONDITION IN EVERY RESPECT. HE SHALL GUARANTEE THAT THE MATERIAL, EQUIPMENT, AND WORKMANSHIP SUPPLIED AND INSTALLED BY HIM SHALL BE ENTIRELY FREE FROM DEFECTS AND THAT HE WILL REPAIR OR REPLACE AT HIS OWN EXPENSE, ANY MATERIALS, EQUIPMENT, AND WORKMANSHIP IN WHICH DEFECTS ARE FOUND.
- PROVIDE WARRANTY FOR A PERIOD OF 12 MONTHS AGAINST DEFECTIVE WORKMANSHIP AND MATERIALS AFTER FINAL ACCEPTANCE AT NO ADDITIONAL COST TO THE OWNER.
- 7. WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE LOCAL AND STATE CODES.
- 8. CONDUITS UNDER ROADWAYS OR PARKING LOTS SHALL BE A MINIMUM 36" BELOW FINISHED GRADE.
- 9. UNDERGROUND CONDUIT SHALL BE PVC SCH 40 UNLESS OTHERWISE NOTED.
- 10. ALL WIRING SHALL BE IN CONDUIT.



POWER RISER DIAGRAM

NO SCALE



COASTAL ENGINEERING
2406 Princess Anne Rd, Suite 200, Virginia Beach, VA 2345

Phone 757-563-9027

EXTERIOR POLE BASE DETAIL

NO SCALE

ROADWAY AND INFRASTRUCTURE

Fax 757-563-9028 HYMAN

PO Box 339 Camden, NC 27921

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(252) 338-5552 fax

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ROBEY *

SOLUTIONS FROM THE GROUND I 150 US Hwy 158 E.

CURRITUCK

COMMUNITY

PARK

ELECTRICAL SPECIFICATIONS

- GENERAL CONDITIONS
- WORK UNDER THIS DIVISION SHALL BE SUBJECT TO THE AIA GENERAL AND SPECIAL CONDITIONS.
- SCOF
- 2.a. THE WORK REQUIRED FOR THIS SECTION INCLUDES LABOR, MATERIALS, EQUIPMENT, APPURTENANCES, SERVICE AND SUPERVISION TO PROVIDE COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS.
- SPECIFICATIONS, CODES AND STANDARDS
- 3.a. THE LATEST EFFECTIVE PUBLICATIONS OF THE FOLLOWING STANDARDS, CODES, ETC. FORM A PART OF THESE SPECIFICATIONS:
 - 3.a.a. NATIONAL ELECTRICAL CODE (NEC)
 3.a.b. STANDARD RULES OF THE INSTITUTE OF ELECTRICAL AND ELECTRONIC
 - ENGINEERS.

 3.a.c. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
 - 3.a.d. INTERNATIONAL BUILDING CODE 3.a.e. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
- 3.b. THIS CONTRACTOR SHALL GIVE REQUIRED NOTICES, OBTAIN NECESSARY PERMITS, AND PAY PERMIT FEES.
- 4. DRAWINGS
- 4.a. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE EXTENT OF THE WORK. MINOR VARIATIONS IN LOCATION OF EQUIPMENT SHALL BE MADE UPON WRITTEN APPROVAL OF THE DESIGNER AT NO ADDITIONAL CHARGE.
- 5. COORDINATION
- 5.a. COOPERATE AND COORDINATE THE WORK OF THIS DIVISION WITH OTHER TRADES.
- 6. MATERIAL AND EQUIPMENT
- ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW, LISTED, AND LABELED BY AN APPROVED TESTING AGENCY.
 8.a.a. INSTALL MATERIALS AND EQUIPMENT IN A FIRST CLASS AND WORKMANLIKE
 - 6.a.a. INSTALL MATERIALS AND EQUIPMENT IN A FIRST CLASS AND WORKMANLIKE MANNER AND RUN CONCEALED THROUGHOUT THE BUILDING, EXCEPT AS INDICATED.
- MATERIAL AND EQUIPMENT SHALL BE PROPERLY STORED AND PROTECTED AT THE PROJECT SITE.
- 6.c. SIX COMPLETE SCHEDULES OF MATERIALS AND EQUIPMENT PROPOSED FOR INSTALLATION SHALL BE SUBMITTED TO THE DESIGNER WITHIN 30 DAYS AFTER AWARD OF THE CONTRACT. THE SCHEDULES SHALL INCLUDE CATALOG CUTS, DIAGRAMS AND SUCH OTHER DESCRIPTIVE DATA AND/OR SAMPLES AS MAY BE REQUIRED BY THE DESIGNER. LIGHTING FIXTURE SUBMITTALS SHALL INCLUDE PHOTOMETRIC REPORTS BY INDEPENDENT TESTING LABORATORIES FOR EACH FIXTURE INDICATED BASED ON ITS PUBLISHED PROCEDURES.
- 6.d. SUBMITTALS THAT DO NOT BEAR THE GENERAL CONTRACTORS STAMP OF APPROVAL THEREON WILL BE REJECTED WITHOUT REVIEW.
- 7. SUBSTITUTION OF MATERIAL AND EQUIPMENT
- 7.a. THE NAME OF A CERTAIN BRAND, MAKE, MANUFACTURER OF DEFINITE SPECIFICATION IS TO DENOTE THE QUALITY STANDARD OF ARTICLE DESIRED. SUBSTITUTION OF ANY OTHER BRAND, MAKE, OR MANUFACTURER, WHICH IN THE OPINION OF THE ENGINEER IS RECOGNIZED THE EQUAL OF THAT SPECIFIED, MAY BE ACCEPTED.
- WHERE THREE OR MORE MANUFACTURERS ARE SPECIFIED, THERE WILL BE NO SUBSTITUTIONS
- 8. RECORD DRAWINGS
- 8.a. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUBMIT SEPIAS AND/OR MARKED UP DRAWINGS AND SKETCHES TO THE DESIGNER.
- 9. CONDUIT
- 9.a. CONDUIT AND FITTINGS SHALL CONFORM TO THE FOLLOWING:
 - 9.a.a. RIGID STEEL ANSI C80.1
 - 9.a.b. INTERMEDIATE METAL CONDUIT UL 1242 9.a.c. FLEXIBLE METAL CONDUIT - UL-1
 - 9.a.d. PLASTIC CONDUIT (PVC) NEMA TC-2 AND TC-3
- 9.b. INTERMEDIATE METAL CONDUIT SHALL BE PERMITTED IN LIEU OF RIGID WHERE

- ALLOWED IN ARTICLE 345 OF THE NEC
- 9.c. MINIMUM SIZE CONDUIT SHALL BE ONE-HALF INCH WITH LARGER SIZES AS REQUIRED BY THE NATIONAL ELECTRICAL CODE FOR NUMBER OF WIRES CONTAINED THEREIN.
- RIGID CONDUIT FITTINGS SHALL BE THREADED, EXCEPT WHERE RIGID CHANGES TO EMT ABOVE SLAB, FITTING MAY BE THREADLESS TYPE.
- 9.e. FLEXIBLE CONDUIT SHALL BE GALVANIZED, SINGLE STRIP TYPE. IN AREAS SUBJECT TO MOISTURE, OR WHERE CALLED FOR ON THE DRAWINGS, FLEXIBLE CONDUIT SHALL HAVE PLASTIC COVERING IN ACCORDANCE WITH NEC, ARTICLE 351-A. FITTINGS SHALL BE STANDARD UL APPROVED WITH GROUND CONNECTOR. WATERTIGHT CONNECTORS SHALL BE USED WITH PLASTIC COVERED CONDUIT, FLEXIBLE CONDUIT, MINIMUM 18 INCHES IN LENGTH, SHALL BE USED FOR CONNECTIONS TO MOTORS AND OTHER EQUIPMENT SUBJECT TO VIBRATION, AND FOR CONNECTIONS TO RECESSED OR SEMI-RECESSED FIXTURES.
- EXPOSED CONDUITS BE SUPPORTED AS HEREINAFTER SPECIFIED AND IN ACCORDANCE WITH NEC. THE METHODS OF INSTALLATION SHALL BE REVIEWED BY THE DESIGNER PRIOR TO INSTALLATION.
- 9.g. CONDUIT SUPPORTS SHALL BE APPROVED WALL BRACKETS, TRAPEZE, STRAP HANGER OR PIPE STRAPS SECURED TO HOLLOW MASONRY WITH TOGGLE BOLTS; TO METAL SURFACES WITH MACHINE SCREWS; AND TO WOOD WITH WOOD SCREWS. ANY FORM OF TIE WIRE IS UNACCEPTABLE.
- 9.h. PROVIDE O.Z. TYPE "AX" EXPANSION FITTINGS WHERE CONDUITS CROSS EXPANSION JOINTS
- 9.i. PROVIDE O.Z. TYPE "M" CABLE SUPPORTS AS REQUIRED BY NEC.
- 9.j. CONDUIT TERMINATIONS ONE AND ONE-QUARTER INCH AND LARGER AND CONDUIT STUBS SHALL HAVE O.Z. TYPE "B" INSULATING BUSHINGS. RIGID CONDUIT TERMINATIONS ONE INCH AND SMALLER SHALL HAVE O.Z. TYPE "A" INSULATING BUSHINGS.

10. FUSES

- 10.a. FUSES FOR PROTECTION OF MECHANICAL AND PLUMBING EQUIPMENT SHALL BE "FUSETRON" UL CLASS "RK5" SIZED PER MANUFACTURERS RECOMMENDATION, UNLESS OTHERWISE INDICATED.
- 11. WIRE AND CABLE
- 11.a. WIRE AND CABLE SHALL BE INSTALLED IN CONDUIT.
- WIRE AND CABLE SHALL BE GENERAL ELECTRIC, ANACONDA, ROME, GENERAL CABLE, OR PHELPS DODGE.
- 11.c. WIRE AND CABLE SHALL BE COPPER 600 VOLT INSULATION, MINIMUM SIZE NO. 12, TYPE "THW", "THWN" OR "THHN" AS APPLICABLE, UNLESS OTHERWISE INDICATED ON DRAWINGS.
- 11.d. BRANCH CIRCUIT WIRING AND WIRING SHALL BE TYPE "THHN".
- 11.e. WIRES NO. 10 AND 12 AWG SHALL BE CONNECTED WITH COIL SPRING INSERT "WIRE- NUT" OR "WING-NUT" CONNECTORS MANUFACTURED BY IDEAL INDUSTRIES OR APPROVED EQUAL. CONNECTORS SHALL BE RATED 600 VOLTS. COPPER WIRES NO. 8 AND LARGER SHALL BE JOINED OR TERMINATED WITH PRESSURE TYPE COPPER CONNECTORS.
- 11.f. WIRE SHALL BE COLOR CODED AS FOLLOWS:
 - 11.f.a. 120/240 VOLT SYSTEM 11.f.a. PHASE A - BLACK
 - 11.f.b. PHASE B RED
 - 11.f.c. NEUTRAL WHITE 11.f.d. GROUND - GREEN
- ELECTRICAL DESIGNS ARE BASED ON ALUMINUM WIRE FOR PHASE CONDUCTORS AND COPPER WIRE FOR GROUND CONDUCTORS.
- 12. LIGHTING FIXTURES
- LIGHTING FIXTURES SHALL BE PROVIDED COMPLETE WITH LAMPS, MOUNTING HARDWARE AND ACCESSORIES.
- 12.b. LAMPS SHALL BE AS INDICATED UNLESS OTHERWISE NOTED.

13. CUTTING AND PATCHING

13.a. CUTTING, DRILLING, AND CHANNELING REQUIRED FOR THIS WORK SHALL BE DONE UNDER THIS SECTION BY SKILLED MECHANICS OF TRADE INVOLVED.

- EQUIPMENT MARKING AND PAINTING
- 14.a. SAFETY SWITCHES, CABINETS, ETC., SHALL BE PROVIDED WITH PERMANENTLY ATTACHED (ADHESIVES NOT ACCEPTABLE) ENGRAVED BAKELITE DESIGNATION PLATES
- TO INDICATE EQUIPMENT OR CIRCUIT CONTROLLED.

 14.b. EXPOSED CONDUIT, SUPPORTS, HANGERS, AND UNFINISHED EQUIPMENT SHALL RECEIVE A MINIMUM OF TWO COATS OF PAINT SUITABLE FOR SERVICE INTENDED. COLORS SHALL BE AS SELECTED OR APPROVED BY THE DESIGNER.
- 14.a. PROVIDE A PULL BOX FOR CIRCUITS OVER 150LF BETWEEN POLE LIGHTS.
- 15. SUBSTANTIAL COMPLETION
- 15.a. UPON COMPLETION OF THE ENTIRE WORK, THE CONTRACTOR SHALL PERFORM SUCH TESTS AS REQUIRED BY THE DESIGNER. THE DESIGNER SHALL BE GIVEN 48 HOURS NOTICE BEFORE TESTS ARE MADE. THE CONTRACTOR SHALL FURNISH THE DESIGNER A CERTIFICATE OF APPROVAL FROM THE LOCAL INSPECTION AUTHORITY HAVING HUBISPICTION.
- 16. WARRANTY
- 16.a. CONTRACTOR SHALL FURNISH WRITTEN WARRANTY, COUNTERSIGNED, AND GUARANTEED BY THE GENERAL CONTRACTOR, STATING THAT THE WORK EXECUTED UNDER THIS DIVISION OF THE SPECIFICATIONS SHALL BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF 12 MONTHS FROM DATE OF FINAL ACCEPTANCE. DEFECTS DEVELOPING DURING THAT PERIOD SHALL BE CORRECTED WITHOUT COST TO THE OWNER.

CURRITUCK COUNTY

MAPLE TOWNSHIP



Project #: 11-052
Drawing #: 1s-os discrimical.
Drawn: LAT
Checked: BPM
Approved: RMK
Date: 0504/2012
Sheet #:
Scale: NTS
REVISIONS:
NUM. DATE
DESCRIPTION

SHEET TITLE: ELECTRICAL NOTES & DETAILS SHEET NUMBER:

E200