PLANS AND DETAILS FOR PROPOSED LIGHTING /ELECTRICAL CONSTRUCTION

\triangle NOTES

REMOVE EXISTING FOUNDATIONS AND REPLACE WITH NEW FOUNDATION

/1\ FOR ALL SINGLE ARM LIGHT STANDARDS ON THE MAINLAND AT MOREHEAD CITY.(LIGHT STANDARDS #7-#12)

INSTALL NEW CONDUCTORS USING EXISTING UNDERGROUND CONDUIT SYSTEM TO SERVE LIGHT STANDARD #7 THROUGH #12 FROM MOREHEAD CITY CONTROL SYSTEM "N". CONDUITS INSTALLED INSIDE THE NEW LIGHT FOUNDATIONS SHALL CONNECT TO EXISTING CONDUIT SYSTEM.

LIGHT STANDARDS #7 THROUGH #12 ARE ON THE MAINLAND AND /3\ REQUIRE IMPACT ATTENUATION DEVICES. (SEE DELTA NOTE #7 BELOW)

ALL LIGHT STANDARDS ON THE BRIDGE DO NOT REQUIRE IMPACT /4\ ATTENUATION DEVICES.

THE CONTRACTOR SHALL CONSULT WITH THE TOWN OF ATLANTIC BEACH 15\ ABOUT THE MOUNTING HEIGHT OF THE FIXED BANNER ARMS ON THE BRIDGE LIGHT STANDARD POLES.

ALL FIXED BANNER ARMS SHALL HAVE SPRING-LOADED MECHANISMS √6 \ TO RESPOND TO WIND LOADS.CONTACT MARC SCHULZE, PUBLIC SERVICES. DIRECTOR (252-726-1366), OF THE TOWN OF ATLANTIC BEACH FOR MOUNTING HEIGHT AND BRACKET ARM LENGTH.

MAINLAND LIGHT STANDARD #7 ON CONTROL SYSTEM "N" IS MISSING. /7\ LOCATE OLD FOUNDATION, REMOVE OLD FOUNDATION, REPLACE WITH NEW FOUNDATION AND MOUNT NEW LIGHT STANDARD WITH IMPACT ATTENUATION DEVICES.

SCOPE OF WORK

UPGRADE ROADWAY LIGHTING SYSTEM BY REMOVING EXISTING LIGHT STANDARDS WITH HPS LUMINAIRES, INSTALLING NEW LIGHT STANDARDS WITH LIGHT EMITTING DIODE LUMINAIRES AND NEW UNDERGROUND CIRCUITRY.

DESIGN CRITERIA

2005 AASHTO ROADWAY LIGHTING DESIGN GUIDE

2009 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 5TH EDITION AND LATEST INTERIM SPECIFICATIONS VALID AT THE TIME OF LETTING

FATIGUE CATEGORY II SHALL BE USED IN DESIGN

DESIGN LIGHT STANDARD MOUNT SUPPORT FOR BASIC WIND SPEED OF 110 MPH

2011 AASHTO ROADSIDE DESIGN GUIDE

ROADWAY STANDARDS

THE FOLLOWING ROADWAY ENGLISH STANDARDS AS APPEAR IN "NCDOT ROADWAY STANDARD DRAWINGS", ROADWAY DESIGN UNIT-N.C. DEPARTMENT OF TRANSPORTATION RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

TITLE STD NO. LIGHT STANDARDS 1404.01 STANDARD FOUNDATION 1409.01 ELECTRICAL DUCT FEEDER CIRCUITS 1410.01

ALL WORK SHALL BE IN CONFORMANCE WITH DIVISION 14 OF THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. DATED

LEGEND

EXISTING CONTROL SYSTEM.

PROPOSED MAINLAND SINGLE ARM LIGHT STANDARD TYPE MTLT 35' WITH 6' SINGLE ARM WITH IMPACT ATTENUATION DEVICE TO REPLACE EXISTING LIGHT STANADARD. REMOVE EXISTING LIGHT STANDARD AND FOUNDATION. (SEE NOTE 7 FOR EXCEPTION.) INCLUDES 220W MAX LED ROADWAY LUMINAIRE.

4000K COLOR TEMPERATURE IES DISTRIBUTION: TYPE II OR III AS REQUIRED. MAXIMUM BUG RATING 3-0-3.

PROPOSED BRIDGE LIGHT STANDARD TYPE MTLT 35' WITH 6' SINGLE ARM WITH BANNER BRACKET ARMS. (REPLACES EXISTING LIGHT STANDARD) INCLUDES 220W MAX LED ROADWAY LUMINAIRE. 4000K COLOR TEMPERATURE IES DISTRIBUTION: TYPE II OR III AS REQUIRED. MAXIMUM BUG RATING 3-0-3.

MISSING LIGHT STANDARD

REFERENCE TO CORRESPONDING NOTE AS NUMBERED

EXISTING FEEDER CIRCUIT(1) PLAN SYMBOL (6) ----SEE TABLE A THIS SHEET (EXISTING)

PROPOSED FEEDER CIRCUIT(1) PLAN SYMBOL (6) CKT1 SEE TABLE A THIS SHEET

TOTAL BILL OF MATERIAL FOR BRIDGE LIGHTING MOREHEAD CITY STANDARD FOUNDATION STANDARD FOUNDATION ALTERNATE OUTRIGGER MAINLAND LIGHT BRIDGE LIGHT ROADWAY LIGHTING REMOVE LIGHT STANDARD REMOVE LIGHT STANDARD REMOVE LIGHT LIGHTING SYSTEM FROM OUTRIGGER FROM FOUNDATION STANDARD FOUNDATION TYPE R1 TYPE R2 MOUNTIONG STANDARDS STANDARDS LUMINAIRES EΑ LS EΑ EΑ EΑ EΑ EΑ EΑ EΑ EΑ LS 15 15 15 21

ABBREVIATIONS

BD LT	BURIED LIGHT	PVC RGC	PVC SCHEDULE 40 CONDUIT RIGID GALVANIZED STEEL CONDUIT
JA	JACKED	С	CONDUIT
MH	MOUNTING HEIGHT	CKT	CIRCUIT
Ø	PHASE	N	NEUTRAL
SER LAT	SERVICE LATERAL	G HM	GROUND HIGH MAST

B-5938 PROJECT NO. _

CARTERET

COUNTY

SHEET 1 OF 6

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

LIGHTING LAYOUT

ATLANTIC BEACH BRIDGE BRIDGE # 68 ON SR 1182 OVER BOGUE SOUND

SHEET NO. REVISIONS DATE: NO. BY: TOTAL SHEETS

CIRCUITRY CONDUCTOR CONDUIT TYPE & SIZE

PLAN SYMBOL		DESCRIPTION		CONTRACT ITEM	
	6	2 #6 Ø 1 #8G 1.5" P	2 AWG SIZE 6 CONDUCTOR (BK & RD) 1 AWG SIZE 8 GROUNDING CONDUCTOR 1.5" PVC CONDUIT	2 - 6 W/G FEEDER CIRCUIT IN 1.5" CONDUIT	
	*6	2 #6 Ø 1 #10G	2 AWG SIZE 6 CONDUCTOR (BK & RD) 1 AWG SIZE 8 GROUNDING CONDUCTOR	2 - 6 W/G FEEDER CIRCUIT	

SEE PROJECT SPECIAL PROVISIONS TITLED "LIGHTING" FOR MATERIALS CONSTRUCTION METHODS AND PAYMENT.

1/20/2017

JANUARY 2012.

2014 NATIONAL ELECTRICAL CODE

Paul Chan

022582