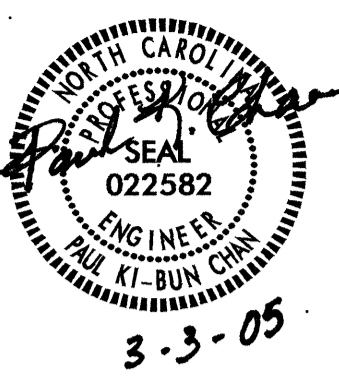


PLANS AND DETAILS FOR PROPOSED LIGHTING /ELECTRICAL CONSTRUCTION



NOTES

- 1 DAVIT-STYLE POLE ROADWAY LIGHT
POLE SETBACK 6', POLE ARM 6',
MOUNTING HEIGHT 35', POLE SPACING 125'
- 2 DAVIT-STYLE POLE ROADWAY LIGHT
POLE SETBACK 15', POLE ARM 6',
MOUNTING HEIGHT 35', POLE SPACING 180'
- 3 DARK-SKY FRIENDLY HADCO POST-TOP LIGHT (100W HPS)
POLE ON BREAKAWAY BASE, VISCO SIDE-ARM BRACKET
MOUNTING HEIGHT 15'
- 4 REPLACE CIRCUITRY ON FLINT ST BRIDGE AND REPLACE LUMINAIRE
FOR LIGHT STADARDS #5, #6, #7, #8
SCHEMATIC SHOWN BASED ON BEST AVAILABLE INFORMATION.
- 5 REMOVE EXPOSED CONDUIT CONNECTED TO THE EXIST. PB ON THE
WING WALL. INSTALL NEW RGC 1.5" CONDUIT AND TIE TO
EXIST. PB. USE REDUCING BUSHINGS AS REQUIRED.
- 6 INSTALL FOUNDATION COVER AFTER TWIN-ARM STANDARD IS REMOVED.
- 7 LOCATE ALL JUNCTION BOXES OUTSIDE CLEAR ZONE AND IN AN AREA
UNLIKELY TO BE USED BY TRAFFIC.
LOCATE ALL BORE PITS OUTSIDE CLEAR ZONE AS DEFINED BY THE
2002 AASHTO ROADSIDE DESIGN GUIDE OR AS DIRECTED BY ENGINEER.
- 8 REPLACE LUMINAIRE FOR LIGHT STANDARD #9 (250W HPS).
LIGHT STANDARD #9 IS CONNECTED TO LIGHT CONTROL SYSTEM
WEST OF FLINT ST.
- 9 REPLACE EXIST. PB AT STA 28+50 -L- LT WITH PROPOSED JB6,
AND RECONNECT TO THE EXIST. CONDUIT THAT LEAD TO THE PB
IN THE MEDIAN BARRIER.
- 10 REPLACE LUMINAIRES ON MEDIAN TWIN-ARM STANDARDS (2@250W HPS).
REPLACE CONDUCTORS INSIDE THE STANDARDS AND IN THE MEDIAN BARRIER.
- 11 SPLICE NEW CONDUCTORS TO EXISTING SIGN CIRCUITRY CONDUCTORS
INSIDE EXISTING PB.
- 12 REPAIR BRICK LINED DITCH AS NEEDED.

SCOPE OF WORK

PROVIDE ROADWAY LIGHTING BY PROVIDING AND INSTALLING HIGH PRESSURE SODIUM LUMINAIRES ON 80' HIGH MOUNT STANDARDS, SINGLE-ARM, TWIN-ARMS LIGHT STANDARDS, AND POST-TOP LIGHT STANDARDS, INCLUDING UNDERGROUND CIRCUITRY, CONTROL SYSTEM AND JUNCTION BOXES.

DESIGN CRITERIA

- 1984 AASHTO "AN INFORMATIONAL GUIDE FOR ROADWAY LIGHTING"
- 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS
- 2002 NATIONAL ELECTRICAL CODE

ROADWAY STANDARDS

THE FOLLOWING ROADWAY ENGLISH STANDARDS AS APPEAR IN "NCDOT ROADWAY STANDARD DRAWINGS - ENGLISH", ROADWAY DESIGN UNIT-N.C. DEPARTMENT OF TRANSPORTATION RALEIGH, N.C., DATED JANUARY 2002 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD NO.	TITLE
1401.01	HIGH MOUNT STANDARD
1402.01	HIGH MOUNT FOUNDATION
1403.01	HIGH MOUNT LUMINAIRE
1404.01	LIGHT STANDARDS
1405.01	STANDARD FOUNDATION
1406.01	LIGHT STANDARD LUMINAIRES
1407.01	ELECTRIC SERVICE POLE AND LATERAL
1408.01	LIGHT CONTROL SYSTEM
1409.01	ELECTRICAL DUCT
1410.01	FEEDER CIRCUITS
1411.01	ELECTRICAL JUNCTION BOXES

ALL WORK SHALL BE IN CONFORMANCE WITH DIVISION 14 OF THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, DATED JANUARY 2002.

LEGEND

- 4 PROPOSED 80' HIGH MAST STANDARD
W/ HM FOUNDATION
& 4 HM LUMINAIRES 400W HPS
WITH GLARE SHIELDS
SYMMETRICAL LIGHT DISTRIBUTION
90 MPH WIND SPEED.
- DAVIT-STYLE SA LGT STD
W/ STD FOUNDATION TYPE R1
& BREAKAWAY BASE,
& 250W HPS ROADWAY LUMINAIRE
IES DISTRIBUTION:
MEDIUM, CUTOFF, TYPE II
- EXISTING SINGLE-ARM LIGHT STANDARD
REPLACE LUMINAIRE 250W HPS
IES DISTRIBUTION:
MEDIUM, CUTOFF, TYPE II
- EXISTING TWIN-ARM LIGHT STANDARD
REPLACE LUMINAIRES 2 X 250W HPS
IES DISTRIBUTION:
MEDIUM, CUTOFF, TYPE III
- PROPOSED POST-TOP LIGHT STANDARD
WITH BREAKAWAY BASE
AND DECORATIVE "GLOBE" LUMINAIRE 100W HPS
DARK-SKY FRIENDLY.
SEE SPECIAL PROVISIONS
- PROPOSED CONTROL SYSTEM. BREAKER SIZE
SHOWN IN LOAD SCHEDULE, SHEET E3
- JB1 PROPOSED ELECTRICAL JUNCTION BOX
TYPE PC18 AND 18" L X 12' W X18' H
LOCATION: SEE TABLE B, THIS SHEET
- PB EXISTING PULL BOX
- REFERENCE TO CORRESPONDING NOTE
AS NUMBERED
- PROPOSED FEEDER CIRCUIT
CONTROL SYSTEM(A), CIRCUIT(1)
PLAN SYMBOL (6)
LOCATION: SEE TABLE A, THIS SHEET

TABLE "A"
CIRCUITRY CONDUCTOR CONDUIT TYPE & SIZE

PLAN SYMBOL	DESCRIPTION	CONTRACT ITEM	
2	2#2 Ø 1#4G 1.5" P	2 AWG SIZE 2 CONDUCTOR (BK & RD) 1 AWG SIZE 4 GROUNDING CONDUCTOR 1.5" PVC CONDUIT	2 #2 W/G FEEDER CIRCUIT IN 1.5" CONDUIT
*2	2#2 Ø 1#4G	2 AWG SIZE 2 CONDUCTOR (BK & RD) 1 AWG SIZE 4 GROUNDING CONDUCTOR	2 #2 W/G FEEDER CIRCUIT
4	2#4 Ø 1#6G 1.5" P	2 AWG SIZE 4 CONDUCTOR (BK & RD) 1 AWG SIZE 6 GROUNDING CONDUCTOR 1.5" PVC CONDUIT	2 #4 W/G FEEDER CIRCUIT IN 1.5" CONDUIT
*4	2#4 Ø 1#6G	2 AWG SIZE 4 CONDUCTOR (BK & RD) 1 AWG SIZE 6 GROUNDING CONDUCTOR	2 #4 W/G FEEDER CIRCUIT
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#8G	2 AWG SIZE 6 CONDUCTOR (BK & RD) 1 AWG SIZE 8 GROUNDING CONDUCTOR	2 #6 W/G FEEDER CIRCUIT
8	2#8 Ø 1#10G 1.5" P	2 AWG SIZE 8 CONDUCTOR (BK & RD) 1 AWG SIZE 10 GROUNDING CONDUCTOR 1.5" PVC CONDUIT	2 #8 W/G FEEDER CIRCUIT IN 1.5" CONDUIT
*8	2#8 Ø 1#10G	2 AWG SIZE 8 CONDUCTOR (BK & RD) 1 AWG SIZE 10 GROUNDING CONDUCTOR	2 #8 W/G FEEDER CIRCUIT

TABLE "C"
ELECTRICAL DUCT SUMMARY

LOCATION	RACEWAY	SHEET	TYPICAL LENGTH IN FEET						
			BURIED (BD)			*JACKED (JA)			
			SIZE 2"	SIZE 3"	SIZE 4"	SIZE 2"	SIZE 3"	SIZE 4"	
28+30 -L- LT	CS"A" - JB6	E3	70						
28+30 -L- LT		E3							40
EXIT RMP WBL	JB6 - JB1	E3	230						
EXIT RMP WBL		E3							35
ENTRY RMP WBL		E3						35	
15+00 -Y1-		E3						110	
BROADWAY ST		E3						65	
18+55 -L- LT		E2						25	
26+45 -L-		E3						90	
6+40 -LPD-		E3						45	
6+95 -RPD-		E3						50	
11+30 -RPD-		E3						110	
TOTALS			300					530	75

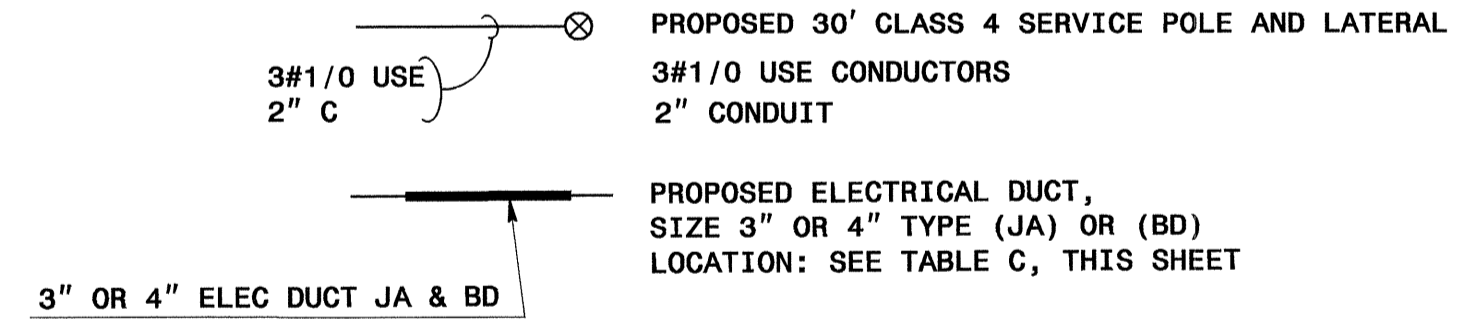
*TRAFFIC CONTROL WILL BE REQUIRED TO PREVENT BORE & JACK OPERATION FROM ENCRDACHING INTO THE CLEAR RECOVERY AREA

TABLE "B"
JUNCTION BOX SUMMARY

NUMBER	LOCATION	TYPE	SHEET
JB1	26+45 -L- LT	PC18	E3
JB2	12+95 -Y1- LT	PC18	E3
JB3	15+00 -Y1- LT	PC18	E3
JB4	15+00 -Y1- RT	PC18	E3
JB5	18+55 -L- LT	PC18	E2
JB6	28+30 -L- LT	PC18	E3
JB7	26+45 -L- RT	PC18	E3
JB8	9+50 -LPD- RT	PC18	E3
JB9	11+30 -RPD- RT	PC18	E3
TOTALS		9	

ABBREVIATIONS

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



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