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Polk County

PROJECT REFERENCE NO.	SHEET NO.
15614.1075010	EC-12/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TGS ENGINEERS
706 HILLSBOROUGH ST
SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

ORANGE SAFETY FENCE

IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C, UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN AREAS WHERE WATER MAY POND ON ROAD OPEN TO LIVE TRAFFIC AND ON JUNCTION BOXES INSTALLED ON STEEP SLOPES.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

-HGR- CURVE DATA

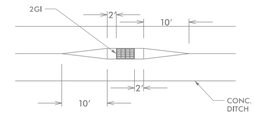
PI Sta 45+86.42	PI Sta 50+90.24	PI Sta 53+74.76	PI Sta 56+52.71
△ = 24° 00' 28.0" (LT)	△ = 10° 08' 44.8" (LT)	△ = 13° 18' 26.3" (RT)	△ = 12° 50' 07.5" (LT)
D = 19° 45' 25.8"	D = 5° 06' 56.5"	D = 6° 44' 26.4"	D = 5° 37' 02.0"
L = 121.51'	L = 198.33'	L = 197.42'	L = 228.50'
T = 61.66'	T = 99.42'	T = 99.16'	T = 114.73'
R = 290.00'	R = 1,120.00'	R = 850.00'	R = 1,020.00'

NOTE: ALL CSP GASKETS ARE TO BE SLEEVE GASKETS.

-I26- CURVE DATA

PIs Sta 466+13.01	PI Sta 469+36.39	PIs Sta 472+59.68
Θs = 0° 38' 00.0"	△ = 2° 34' 00.0" (LT)	Θs = 0° 30' 00.0"
Ls = 200.00'	D = 0° 30' 00.0"	Ls = 200.00'
LT = 133.33'	L = 513.33'	LT = 133.33'
ST = 66.67'	T = 256.71'	ST = 66.67'
	R = 11,459.16'	

DETAIL 2
INSTALLATION OF 2GI IN CONCRETE DITCH



MATCH LINE STA. -HGR- 46+00
MATCH TO SHEET NO. 5

MATCH LINE STA. -HGR- 58+70
MATCH TO SHEET NO. 7

MATCH LINE STA. -I26- 462+00
MATCH TO SHEET NO. 5

MATCH LINE STA. -I26- 475+00
MATCH TO SHEET NO. 7

NAD 83/2011

ELIZABETH F. HORNE
DAVID W. FOSTER

CONTRACTOR TO INSTALL SAFETY FENCE AROUND ALLOWABLE WORKING AREA AND/OR AS DIRECTED BY THE ENGINEER.

-HGR- PT 46+46.27
-HGR- PC 49+90.82
-HGR- PT 51+89.15
-HGR- PC 52+75.61
-HGR- PT 54+73.02
-HGR- PC 55+37.98
-HGR- PT 57+66.48
-I26- TS 464+79.68
-I26- SC 466+79.68
-I26- CS 471+93.01
-I26- ST 473+93.01

RIP-RAP AT EMBANKMENT
CLASS "II" RIP-RAP
EST. 40 TONS
L=35' FT

VAR. WIDTH BASE DITCH
SEE DETAIL SHEET 2D-13
CLASS "II" RIP-RAP
EST. 120 TONS
EST. 170 CY DDE
L=60' FT
S=20.0%

CONTRACTOR TO REMOVE AND REPLACE APPROX. 125 LF OF GUARDRAIL FOR DRAINAGE PIPE INSTALLATION AS DIRECTED BY THE ENGINEER.

SEE DETAIL SHEET 2D-35 FOR PIPE PROFILE

CONTRACTOR TO INSTALL CONCRETE BARRIER AROUND DUKE ENERGY TRANSMISSION STRUCTURES (NO CLOSER THAN 10') WHENEVER CONSTRUCTION EQUIPMENT IS WITHIN 25' OF STRUCTURE AND/OR TO THE LIMITS AS DIRECTED BY THE ENGINEER.

CONTRACTOR TO REMOVE AND RESET APPROX. 50 LF OF CONTROL OF ACCESS FENCE AS DIRECTED BY THE ENGINEER.

SEE DETAIL SHEET 2D-36 FOR PIPE PROFILE

CONTRACTOR TO REMOVE AND RESET APPROX. 50 LF OF CONTROL OF ACCESS FENCE AS DIRECTED BY THE ENGINEER.

Place Matting for Erosion Control on Slope as Work Allows.
-L- Sta. 471+50 to 475+00 RT
EST. 2966 SY

PROP. 12' CONC. DITCH
PROP. 14' FDPS
PROP. FOREBAY ACCESS
FOREBAY #3 SEE DETAIL SHEET 2D-21 EST. 130 SY CONC. EST. 115 CY DDE
FOREBAY #4 SEE DETAIL SHEET 2D-24 EST. 443 SY CONC. EST. 450 CY DDE
REMOVE EX. CONC. DITCH -I26- 463+80 TO 465+00 RT
REMOVE EX. CONC. DITCH -I26- 469+75 TO 470+50 RT
REPLACE CONC. DITCH L=50'
REPLACE CONC. DITCH (-I26- STA. 472+55 TO 475+00 RT) L=245' EST. 65 CY DDE
RETAIN CONC. DITCH (CLEAR 15' EASEMENT NORTH SIDE)
PROP. 12' CONC. DITCH
PROP. 14' FDPS
PROP. SBG
PROP. GUARDRAIL (EXTRA DEPTH)
PROP. FDPS (2' MIN. SAWCUT)
REMOVE 10' EX. PIPE, PLUG, & ABANDON
PLUG & ABANDON
RETAIN
RETAIN & LINE W/CIPP
FLOWABLE FILL
54" (TRENCHLESS CONSTRUCTION, 0.750" THICK)
PIPE IS SEPERATED NEAR RW FENCE

30" CSP (10 GAGE) ROD & LUG W/ GASKETS S=1.0%
30" CSP (10 GAGE) ROD & LUG W/ GASKETS S=8.9%
30" CSP (10 GAGE) ROD & LUG W/ GASKETS S=57.7%
30" CSP (10 GAGE) ROD & LUG W/ GASKETS & 2 ELBOWS S=57.7%
36" CSP (10 GAGE) ROD & LUG W/ GASKETS & 2 ELBOWS S=46.6%
30" CSP (10 GAGE) ROD & LUG W/ GASKETS & ELBOW S=36.4%
24" CSP (12 GAGE) ROD & LUG W/ GASKETS & ELBOW S=17.6%
30" CSP (10 GAGE) ROD & LUG W/ GASKETS S=7.2%
PLUG PIPE
ENERGY DISSIPATOR JB
SPC DSN JB W/MH
SPC DSN JB W/MH
OTCB-4
BDO
CONC. DITCH