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TIP PROJECT: B-5313

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5313	EC-1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION

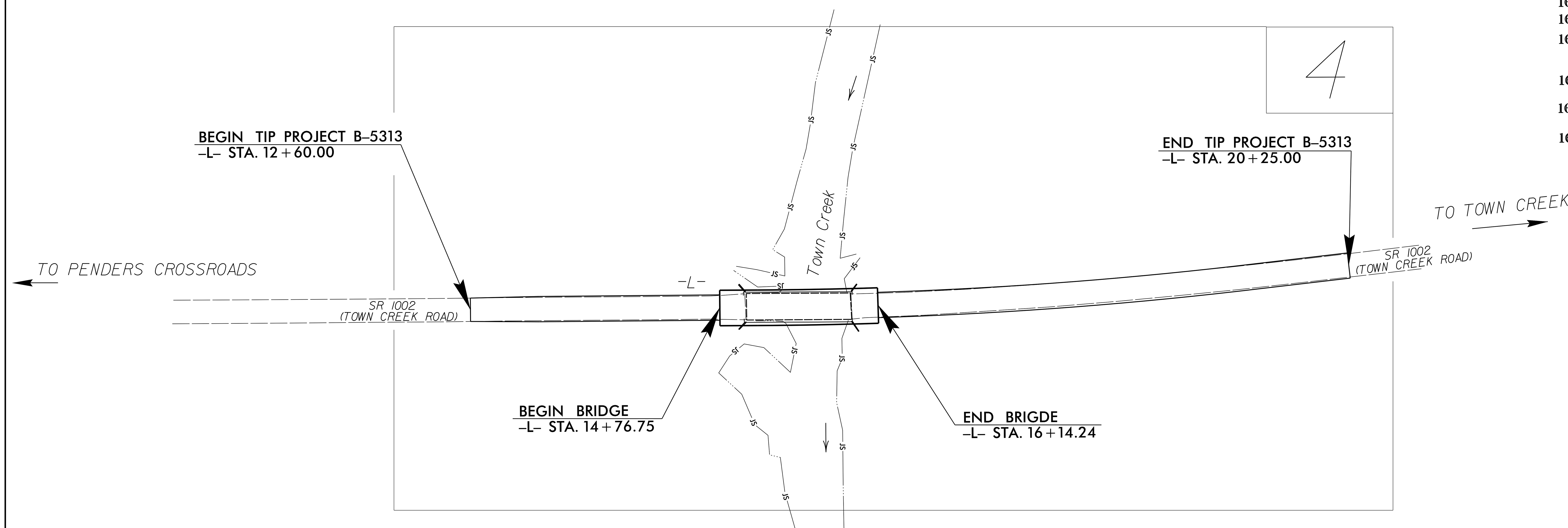
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

WILSON COUNTY

LOCATION: BRIDGE NO. 109 OVER TOWN CREEK ON SR 1002 (TOWN CREEK ROAD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle/ Coir Fiber Wattle	EW / CFW
	Wattle/ Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

Refer To E. C. Special Provisions for Special Considerations.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

GRAPHIC SCALE

0
PLANS

0
PROFILE (HORIZONTAL)

0
PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:

ROADSIDE ENVIRONMENTAL UNIT

1 South Wilmington St.
Raleigh, NC 27611

2012 STANDARD SPECIFICATIONS

Designed by:

Wes Chandler	*3374*
NAME	*LEVEL III CERTIFICATION NO.*

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail
1605.01 Temporary Silt Fence
1606.01 Special Sediment Control Fence
1607.01 Gravel Construction Entrance
1622.01 Temporary Berms and Slope Drains
1630.01 Riser Basin
1630.02 Silt Basin Type B
1630.03 Temporary Silt Ditch
1630.04 Stilling Basin
1630.05 Temporary Diversion
1630.06 Special Stilling Basin
1631.01 Matting Installation
1632.01 Rock Inlet Sediment Trap Type A
1632.02 Rock Inlet Sediment Trap Type B
1632.03 Rock Inlet Sediment Trap Type C
1633.01 Temporary Rock Silt Check Type A
1633.02 Temporary Rock Silt Check Type B
1634.01 Temporary Rock Sediment Dam Type A
1634.02 Temporary Rock Sediment Dam Type B
1635.01 Rock Pipe Inlet Sediment Trap Type A
1635.02 Rock Pipe Inlet Sediment Trap Type B
1640.01 Coir Fiber Baffle
1645.01 Temporary Stream Crossing

PROJECT REFERENCE NO.	SHEET NO.
B-5313	EC-2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO.	SHEET NO.
B-5313	EC-3/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DETAIL 'A'
STANDARD 'V' DITCH
(Not to Scale)
Natural Ground — 3:1 — D — 3:1 — Natural Ground
Min. D = VAR.
-L- STA. 13+80 LT
-L- STA. 16+80 LT

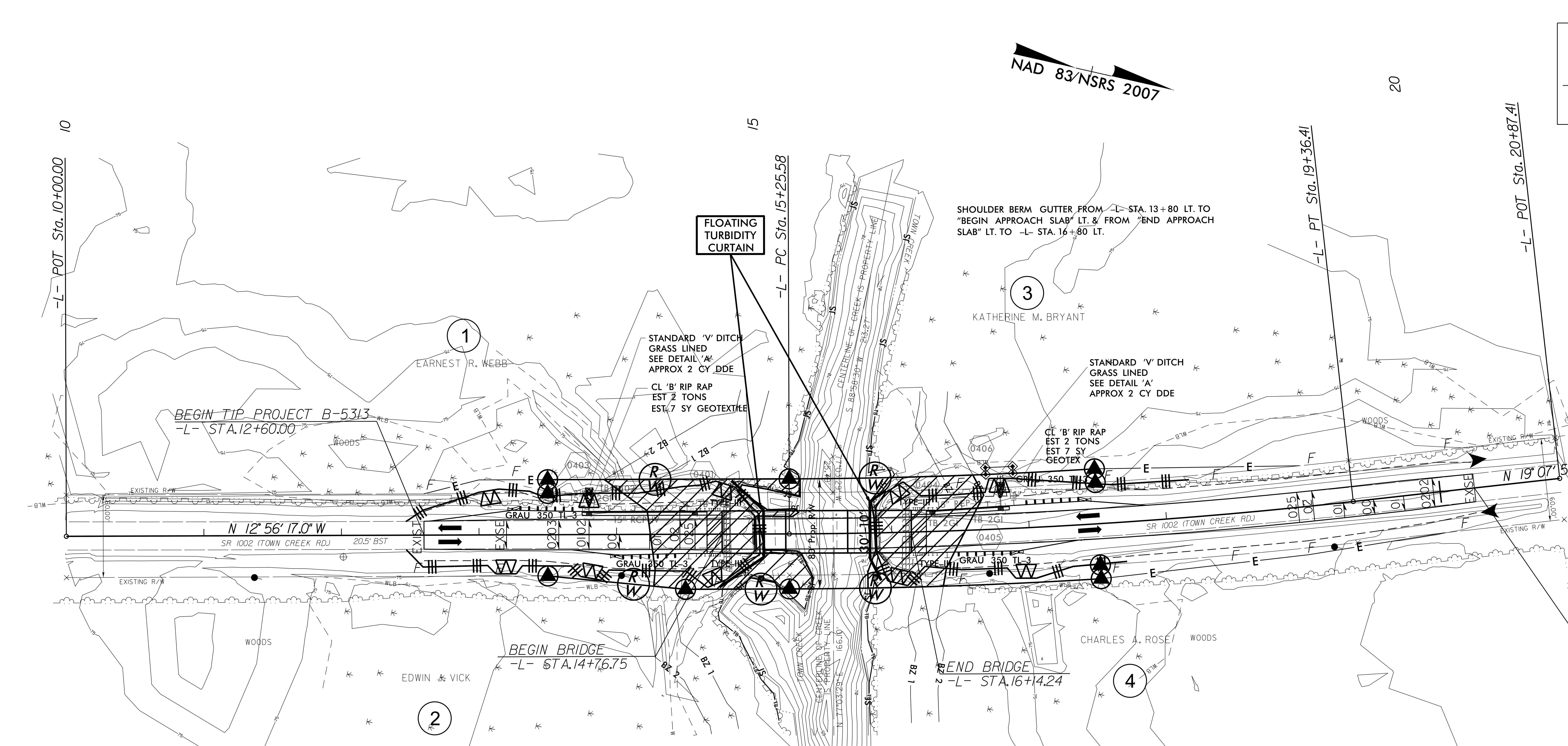
ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NOTE: UTILIZE SPECIAL STILLING BASIN(S) AS STILLING BASIN WHERE APPLICABLE.

BRIDGE APPROACH SLAB



NAD 83/NSRS 2007
-L- POT Sta. 10+00.00
-L- PC Sta. 15+25.58
-L- PT Sta. 19+36.41
-L- POT Sta. 20+87.41
FLOATING TURBIDITY CURTAIN
SHOULDER BERM GUTTER FROM -L- STA. 13+80 LT. TO "BEGIN APPROACH SLAB" LT. & FROM "END APPROACH SLAB" LT. TO -L- STA. 16+80 LT.
EARNEST R. WEBB
KATHERINE M. BRYANT
STANDARD 'V' DITCH GRASS LINED SEE DETAIL 'A' APPROX 2 CY DDE
CL 'B' RIP RAP EST 2 TONS EST 7 SY GEOTEXTILE
BEGIN TIP PROJECT B-5313 -L- STA.12+60.00
N 12° 56' 17.0" W
SR 1002 (TOWN CREEK RD)
N 19° 07' 56.9" W
SR 1002 (TOWN CREEK RD)
GRAU 350 TL-3
EXISTING R/W
WOODS
BEGIN BRIDGE -L- STA.14+76.75
END BRIDGE -L- STA.16+14.24
END TIP PROJECT B-5313 -L- STA.20+25.00
EDWIN & VICK
CHARLES A. ROSE

BM#1 ELEVATION = 78.82'
-BL- STATION 10+84.86 34.84' LT
R/R SPIKE IN BASE OF 38" GUM
BM#2 ELEVATION = 78.93'
-BL- STATION 15+49.58 39.12' LT
R/R SPIKE IN BASE OF 10" PINE
BRIDGE HYDRAULIC DATA
DESIGN DISCHARGE = 2191 CFS
DESIGN FREQUENCY = 10 YRS
DESIGN HW ELEVATION = 77.60 FT
BASE DISCHARGE = 4485 CFS
BASE FREQUENCY = 100 YRS
BASE HW ELEVATION = 79.36 FT
OVERTOPPING DISCHARGE = 2191 CFS
OVERTOPPING FREQUENCY = 10 +/- YRS
OVERTOPPING ELEVATION = 77.50 FT
DATE OF SURVEY = 10/06/2014
W.S.ELEVATION AT DATE OF SURVEY = 72.30 FT
BEGIN RESURFACING -L- STA.12+60.00
BEGIN GRADE -L- STA.13+20.00 ELEV. = 77.14'
PI = 14+00.00 EL = 78.13' VC = 140' K = 212
PI = 15+50.00 EL = 79.85' VC = 160' K = 76 (45 mph)
PI = 17+05.00 EL = 78.34' VC = 150' K = 102 (50 mph)
BEGIN WEDGING -L- STA.17+80.00
PI = 19+30.00 EL = 79.47' VC = 190' K = 230
END GRADE -L- STA.20+25.00 ELEV = 79.16'
STATION 15+45.5 -L- ELEV. 79.42' SKEW 90 1@45'-1½" 2@46'-2⅞" 21" CORED SLABS; W/4' END BENT CAPS
RESURF.
(+)0.4875% (+)1.1467% (+)1.1467% (-)0.9710% (-)0.9710% (+)0.5000% (+)0.5000% (-)0.3263%
3.5' 3.5'
CLASS 'II' RIP RAP (STRUCTURE PAY ITEM)
CLASS 'II' RIP RAP (STRUCTURE PAY ITEM)
90 80 70 60 50 40
12 13 14 15 16 17 18 19 20 21

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PROJECT REFERENCE NO.	SHEET NO.
B-5313	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DETAIL 'A'
STANDARD 'V' DITCH
(Not to Scale)
Natural Ground
3:1
D
Min. D = VAR.
-L- STA. 13+80 LT
-L- STA. 16+80 LT
NAD 83/NSRS 2007
-L- POT Sta. 10+00.00
-L- PC Sta. 15+25.58
-L- PT Sta. 19+36.41
-L- POT Sta. 20+87.41
FLOATING TURBIDITY CURTAIN
SHOULDER BERM GUTTER FROM -L- STA. 13+80 LT. TO "BEGIN APPROACH SLAB" LT. & FROM "END APPROACH SLAB" LT. TO -L- STA. 16+80 LT.
EARNEST R. WEBB
KATHERINE M. BRYANT
EDWIN & VICK
CHARLES A. ROSE
WOODS
STANDARD 'V' DITCH GRASS LINED SEE DETAIL 'A' APPROX 2 CY DDE
CL 'B' RIP RAP EST 2 TONS EST 7 SY GEOTEXTILE
CL 'B' RIP RAP EST 2 TONS EST 7 SY GEOTEX
BEGIN TIP PROJECT B-5313
-L- STA.12+60.00
END TIP PROJECT B-5313
-L- STA.20+25.00
BEGIN BRIDGE
-L- STA.14+76.75
END BRIDGE
-L- STA.16+14.24
N 12° 56' 17.0" W
N 19° 07' 56.9" W
SR 1002 (TOWN CREEK RD)
TOWN CREEK
CENTERLINE OF CREEK IS PROPERTY LINE
EXISTING R/W
GRAU 350 TL-3
NOTE:
UTILIZE SPECIAL STILLING BASIN(S) AS STILLING BASIN WHERE APPLICABLE.
BRIDGE APPROACH SLAB
BM#1 ELEVATION = 78.82'
-BL- STATION 10+84.86 34.84' LT
RR SPIKE IN BASE OF 38" GUM
BM#2 ELEVATION = 78.93'
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BEGIN GRADE -L- STA.13+20.00 ELEV. = 77.74'
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PI = 15+50.00 EL = 79.85' VC = 160' K = 76 (45 mph)
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END GRADE -L- STA.20+25.00 ELEV = 79.16'
STATION 15+45.5 -L-
ELEV. 79.42'
SKEW 90
1@45'-1½" 2@46'-2½" 21" CORED SLABS;
W/4' END BENT CAPS
RESURF.
(+)0.4875%
(+)1.1467%
(-)0.9710%
(+)0.5000%
(-)0.3263%
3.5'
CLASS 'II' RIP RAP (STRUCTURE PAY ITEM)
90
80
70
60
50
40
12
13
14
15
16
17
18
19
20
21

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	=	2191	CFS
DESIGN FREQUENCY	=	10	YRS
DESIGN HW ELEVATION	=	77.60	FT
BASE DISCHARGE	=	4485	CFS
BASE FREQUENCY	=	100	YRS
BASE HW ELEVATION	=	79.36	FT
OVERTOPPING DISCHARGE	=	2191	CFS
OVERTOPPING FREQUENCY	=	10 +/-	YRS
OVERTOPPING ELEVATION	=	77.50	FT
DATE OF SURVEY	=	10/06/2014	
W.S. ELEVATION AT DATE OF SURVEY	=	72.30	FT

8/17/99

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