STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

January 8, 2014

U. S. Army Corps of Engineers
Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

ATTN: Ms. Lori Beckwith
NCDOT Coordinator

Subject: **Request for Permit Modification for Section 404 Regional General Permit 198200031 and Section 401 Water Quality Certification** for the proposed replacement of Bridge No. 85 over East Fork French Broad River on SR 1107 in Transylvania County, Federal Aid Project No. BRZ-1107(9); Division 14; TIP No. B-4288, $240.00 Debit Work Order WBS Element 33627.1.1.

Reference: Section 404 RGP 198200031, Action ID 2011-01201, dated August 2, 2011.
Section 401 WQC, DWQ Project No. 20110570, dated July 13, 2011.
NCDOT Permit Application, dated June 14, 2011.

Dear Madam:

Due to concerns expressed by adjacent affected landowners for this project, the NCDOT has reduced and shifted the footprint of the project to reduce impacts to the property of adjacent landowners. This shift places the bridge closer to the existing bridge, but in order to accommodate a larger turning radius, also impacts a UT to East Fork French Broad River.

A permit modification is hereby requested for two purposes:

1. This shift has resulted in a change to the drawings from what was previously provided in the original application, and has resulted in a change in impacts.
   Previously, the Department proposed a 76 foot long single span bridge resulting in 70 linear feet of bank stabilization and 60 linear feet of temporary impact for bridge removal.

   The Department now proposes to use a 60 foot long single span bridge (a shorter span, due to a lesser skew) resulting in 90 linear feet of bank stabilization and <0.01 acre (20 linear feet) of temporary impact to accommodate the installation of the bank stabilization.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000
FAX: 919-212-5785

WEBSITE:NCDOT.GOV

LOCATION:
CENTURY CENTER, BUILDING B
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

2. The previous permit (Regional General Permit No. 198200031) expired on October 31, 2013. Since there is no mechanism for renewal as of the date of this application, the NCDOT requests to modify the existing GP 31 to a Nationwide 13 and 33.

This project now calls for a letting date of April 15, 2014 and a review date of February 25, 2014.

A copy of this permit application and its distribution list will be posted on the NCDOT Website at: https://connect.ncdot.gov/resources/Environmental. If you have any questions or need additional information, please e-mail Michael Turchy at maturchy@ncdot.gov.

Sincerely,

for Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis Unit

The "cc" List:

NCDOT Permit Application Standard Distribution List.

See Sheet 1-A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSYLVANIA COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4288	1	

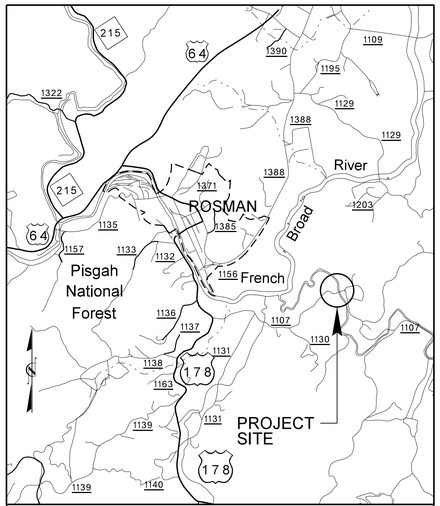
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
33627.1.1	BRZ-1107(9)	PE
33627.2.1	BRZ-1107(9)	R/W & UTIL
33627.3.FD1	BRZ-1107(9)	CONSTRUCTION

PERMIT DRAWING
SHEET 1 OF 6

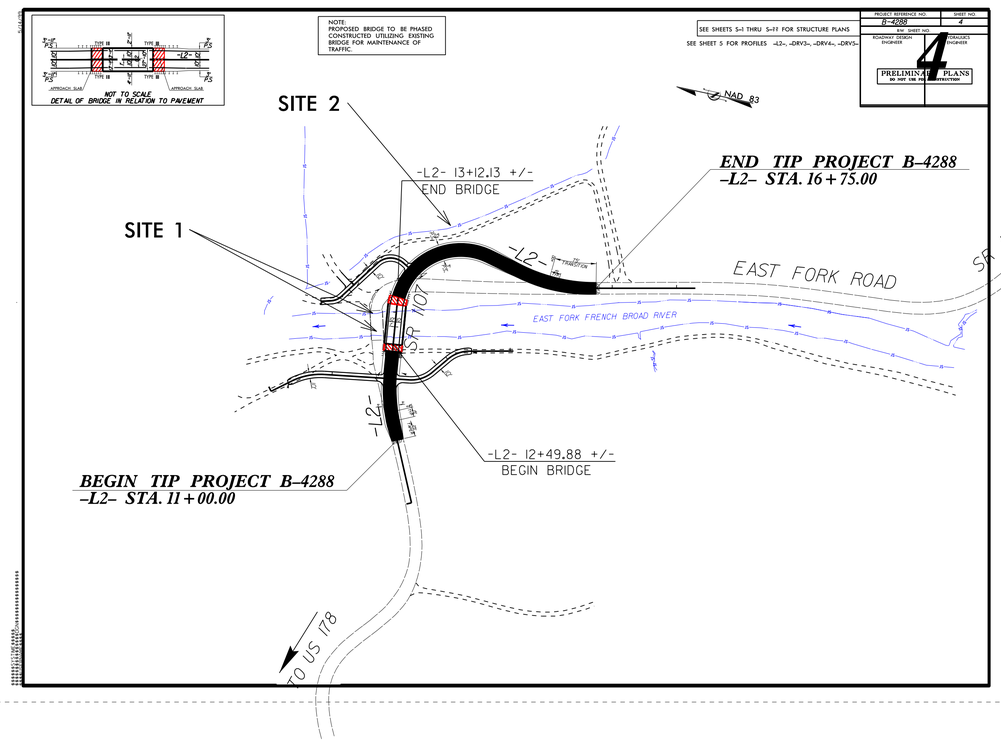
LOCATION: BRIDGE 85 AND APPROACHES ON SR 1107 OVER EAST FORK FRENCH BROAD RIVER

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

WETLAND AND SURFACE WATER IMPACTS PERMIT



VICINITY MAP



INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

NAD 83

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

***** USED SUB REGIONAL TIER DESIGN GUIDELINES***

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2014 = 715
ADT 2030 = 1000
K = 10 %
D = 60 %
T = 5 % *
**V = 20 MPH
* TTST 1% DUAL 4%

FUNCTIONAL CLASSIFICATION
RURAL MINOR COLLECTOR

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4288 = 0.097 MILES

LENGTH OF STRUCTURE TIP PROJECT B-4288 = 0.012 MILES

TOTAL LENGTH OF TIP PROJECT B-4288 = 0.109 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
AUGUST 06, 2013

LETTING DATE:
APRIL 15, 2014

G.E. BREW, PE
PROJECT ENGINEER

I.T. YOUNIS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

DIVISION OF HIGHWAYS

STATE OF NORTH CAROLINA

TIP PROJECT: B-4288

CONTRACT: C202778

R/W REVISION - REMOVED AND LABELED EXISTING R/W ON PARCELS 1 AND 3 ON PARCELS 1 AND 3 "NAD 83/2011"
PREVIOUS REVISIONS: REVISED TL, R/W & PARCEL 23 - 09/08/99

09/08/99

10/22/2013
cjlee
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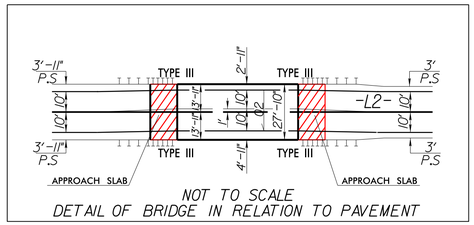
PROJECT REFERENCE NO.	SHEET NO.
B-4288	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NOTE:
PROPOSED BRIDGE TO BE PHASED CONSTRUCTED UTILIZING EXISTING BRIDGE FOR MAINTENANCE OF TRAFFIC.

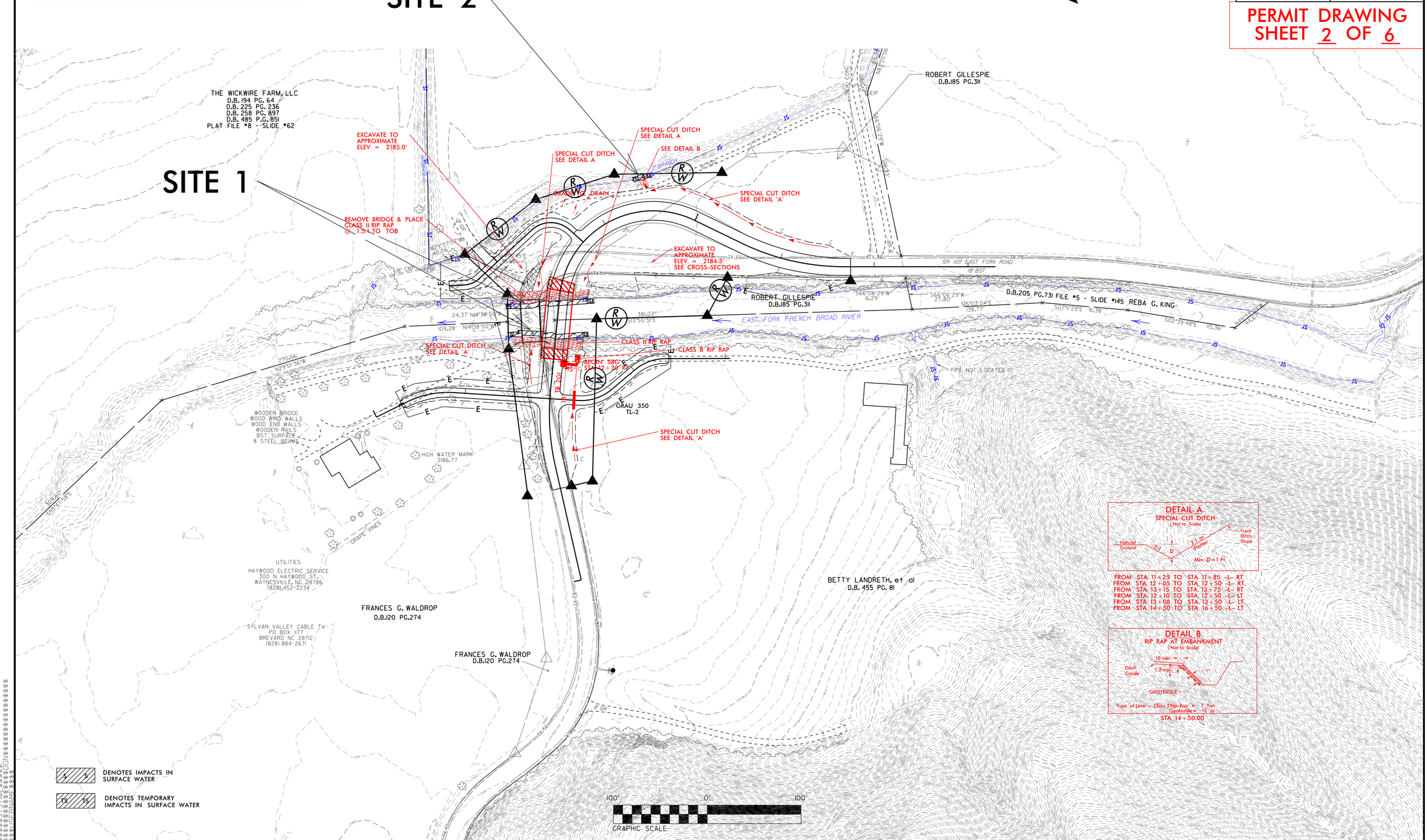
SEE SHEETS S-1 THRU S-?? FOR STRUCTURE PLANS

SEE SHEET 5 FOR PROFILES -L2-, -DRV3-, -DRV4-, -DRV5-



NOT TO SCALE
DETAIL OF BRIDGE IN RELATION TO PAVEMENT

PERMIT DRAWING
SHEET 2 OF 6



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10/2/2013
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PROJECT REFERENCE NO.	SHEET NO.
B-4288	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

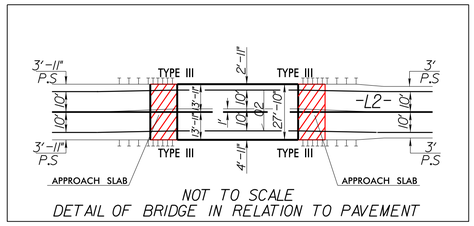
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 3 OF 6

NOTE:
PROPOSED BRIDGE TO BE PHASED CONSTRUCTED UTILIZING EXISTING BRIDGE FOR MAINTENANCE OF TRAFFIC.

SEE SHEETS S-1 THRU S-?? FOR STRUCTURE PLANS

SEE SHEET 5 FOR PROFILES -L2-, -DRV3-, -DRV4-, -DRV5-



NOT TO SCALE
DETAIL OF BRIDGE IN RELATION TO PAVEMENT

NAD 83

SITE 2

SITE 1

THE WICKWIRE FARM, LLC
D.B. 194 PG. 64
D.B. 225 PG. 236
D.B. 258 PG. 897
D.B. 485 P.G. 851
PLAT FILE #8 - SLIDE #62

EXCAVATE TO APPROXIMATE ELEV. = 2185.0'

REMOVE BRIDGE & PLACE CLASS II RIP RAP @ 1.5:1 TO TOB

SPECIAL CUT DITCH SEE DETAIL A

SPECIAL CUT DITCH SEE DETAIL A

SEE DETAIL B

SPECIAL CUT DITCH SEE DETAIL 'A'

EXCAVATE TO APPROXIMATE ELEV. = 2184.5' SEE CROSS-SECTIONS

SPECIAL CUT DITCH SEE DETAIL 'A'

SPECIAL CUT DITCH SEE DETAIL 'A'

CLASS II RIP RAP

CLASS B RIP RAP

BEGIN SBG STA. 12+38.82

GRAU 350 TL-2

ROBERT GILLESPIE D.B.185 PG.311

ROBERT GILLESPIE D.B.185 PG.311

D.B.205 PG.731 FILE #5 - SLIDE #145 REBA G. KING

SR 1107 EAST FORK ROAD

EAST FORK FRENCH BROAD RIVER

PIPE NOT LOCATED

WOODEN BRIDGE
WOOD WING WALLS
WOOD END WALLS
WOODEN RAILS
BST SURFACE
8 STEEL BEAMS

HIGH WATER MARK 2186.77

GRAPE VINES

UTILITIES
HAYWOOD ELECTRIC SERVICE
300 N HAYWOOD ST.
WAYNESVILLE, NC 28786
(828) 452-2234

SYLVAN VALLEY CABLE TV
PO BOX 1177
BREVARD NC 28712
(828) 884-2671

FRANCES G. WALDROP
D.B.120 PG.274

FRANCES G. WALDROP
D.B.120 PG.274

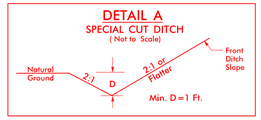
BETTY LANDRETH, et al
D.B. 455 PG. 81

S S DENOTES IMPACTS IN SURFACE WATER

TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER

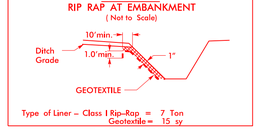
100' 0' 100'
GRAPHIC SCALE

DETAIL A
SPECIAL CUT DITCH
(Not to Scale)



FROM STA. 11+25 TO STA. 11+85 -L- RT
FROM STA. 12+05 TO STA. 12+50 -L- RT
FROM STA. 12+10 TO STA. 12+50 -L- LT
FROM STA. 13+08 TO STA. 13+50 -L- LT
FROM STA. 14+50 TO STA. 16+50 -L- LT

DETAIL B
RIP RAP AT EMBANKMENT
(Not to Scale)



Type of Liner = Class I Rip-Rap = 7 Ton
Geotextile = 15 sy
STA. 14+50.00

5/14/99

10/2/2013
dlhyles
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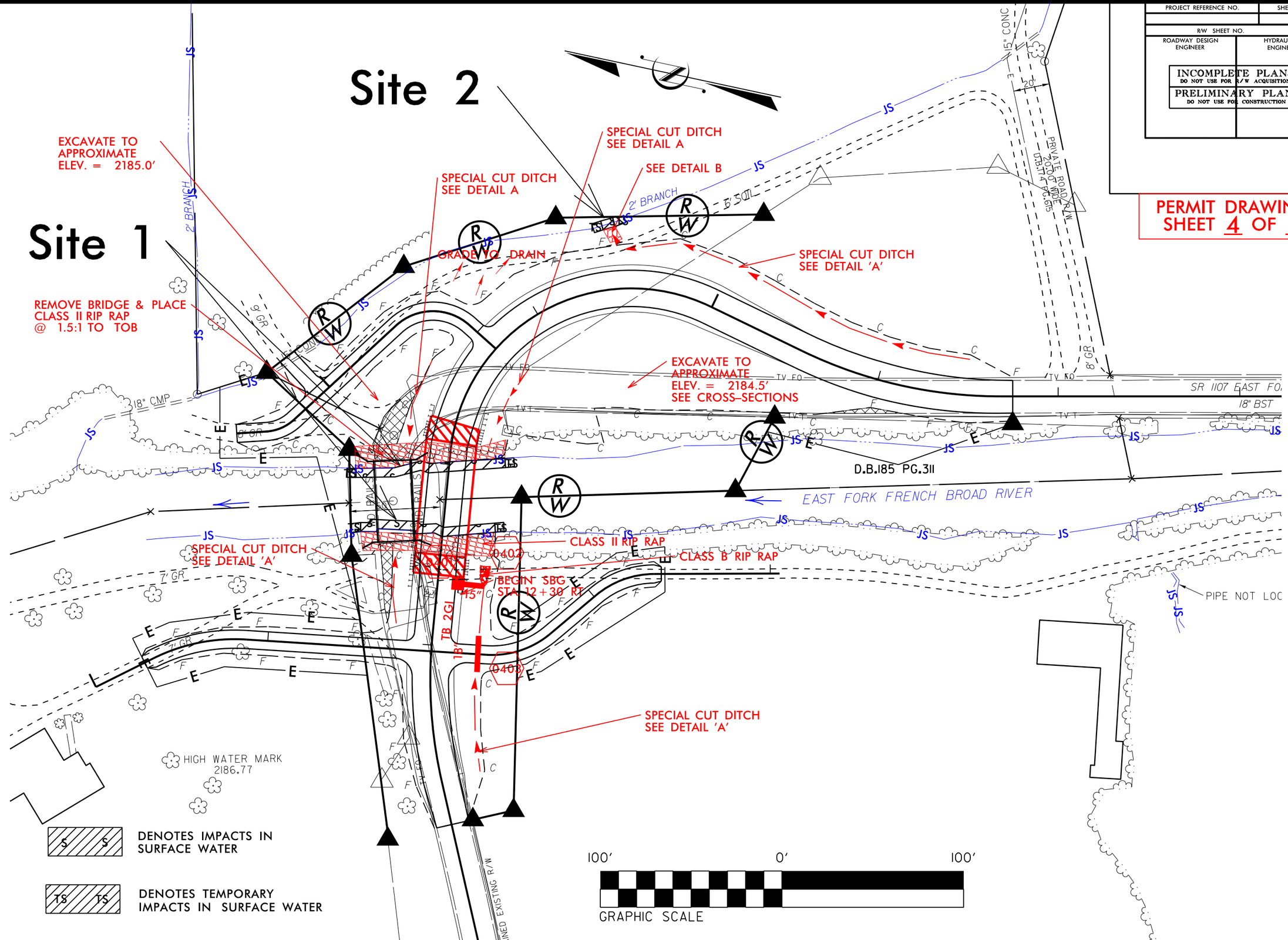
PROJECT REFERENCE NO.	SHEET NO.
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PERMIT DRAWING
SHEET 4 OF 6



REVISIONS

8/17/99

9/30/2013
cjlee
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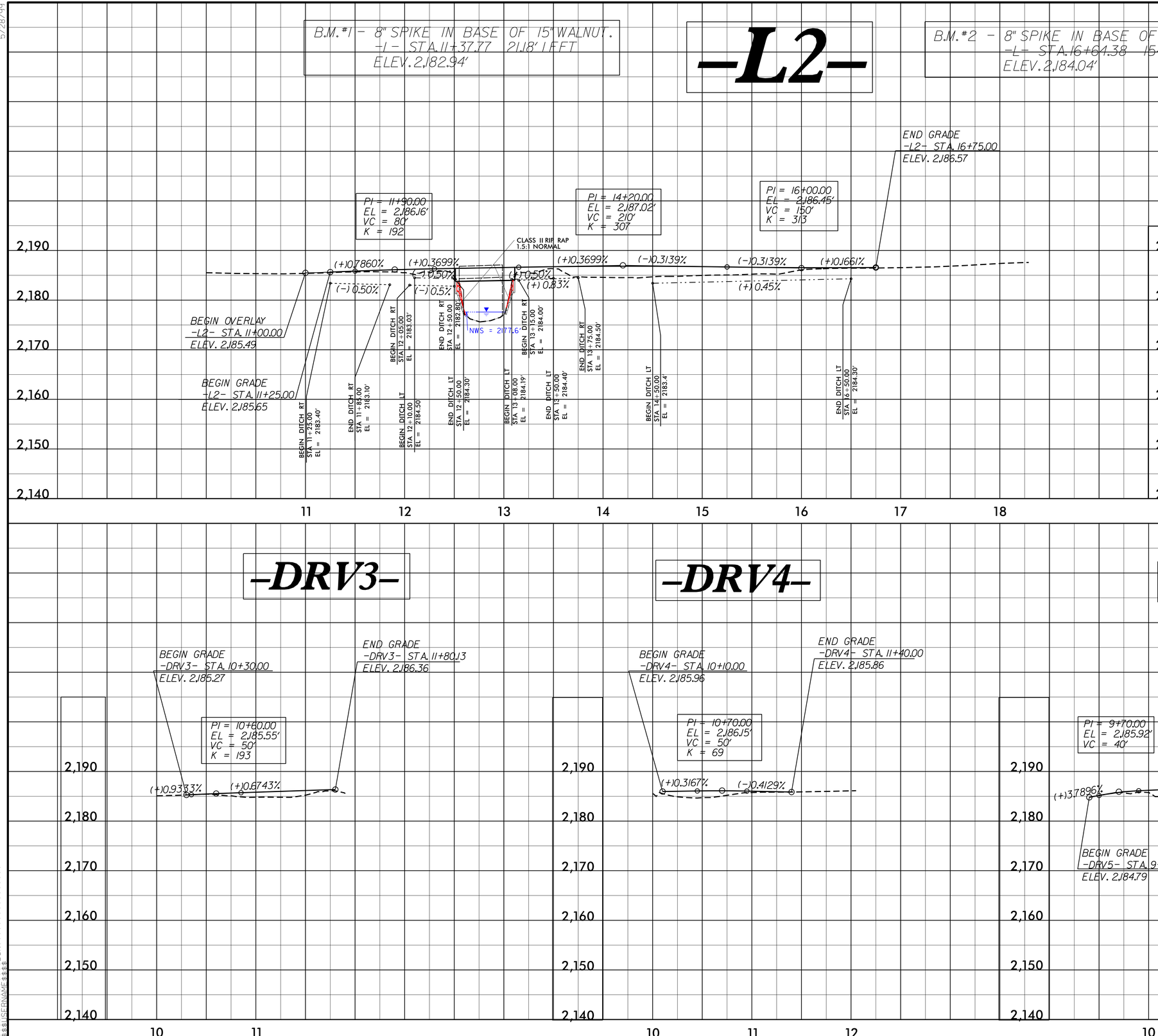
PROJECT REFERENCE NO.	SHEET NO.
B-4288	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

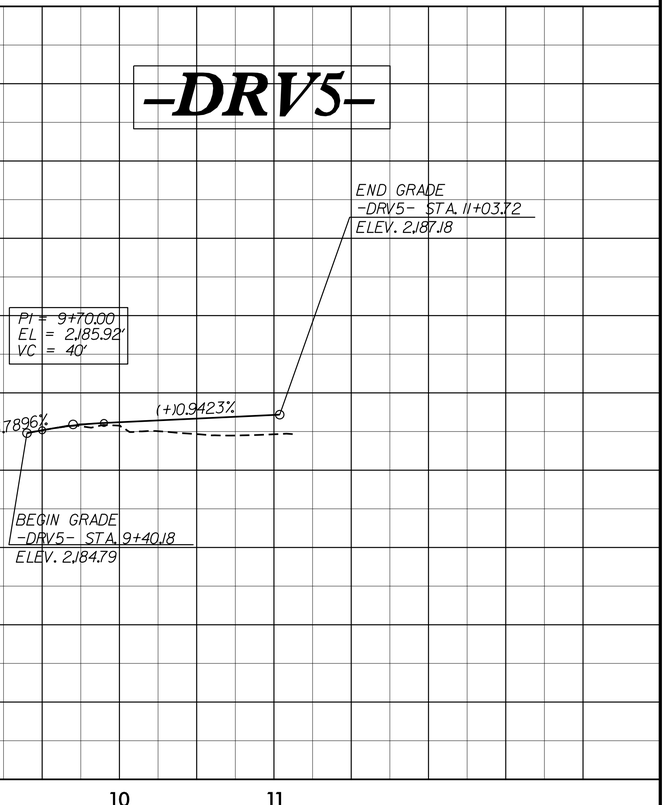
FOR PLANS SEE SHEET 4

PERMIT DRAWING
SHEET 5 OF 6



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1400	CFS
DESIGN FREQUENCY	= 2	YRS
DESIGN HW ELEVATION	= 2185.4	FT
BASE DISCHARGE	= 6982	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 2187.58	FT
OVERTOPPING DISCHARGE	= 1350	CFS
OVERTOPPING FREQUENCY	= 2	YRS
OVERTOPPING ELEVATION	= ×2185.3	FT
	=	FT
DATE OF SURVEY	= 12/01/2003	
W.S. ELEVATION AT DATE OF SURVEY	= 2177.6'	FT



5/28/99

9/30/2013
cjlee
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$$$$SYSTIME$$$$
$$$$DGN$$$$

WETLAND PERMIT IMPACT SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	12+60 to 13+00 -L2-	Bank Stabilization						0.02	<0.01	83	10	
2	14+40 to 14+50 -L2-	Bank Stabilization						<0.01	<0.01	7	10	
TOTALS:								0.02	<0.01	90	20	

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

TRANSYLVANIA COUNTY
WBS - 33627.1.1 (B-4288)

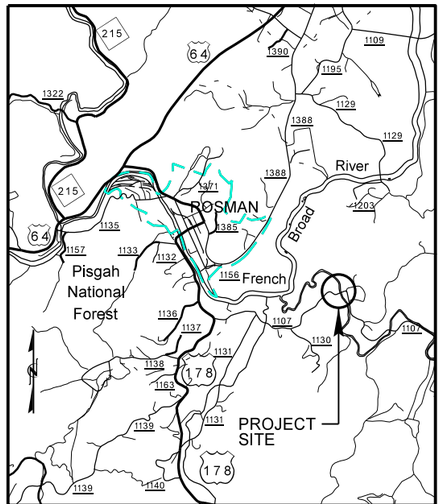
SHEET 6 of 6 9/30/2013

05/08/99

TIP PROJECT: B-4288

CONTRACT: C202778

See Sheet 1-A For Index of Sheets



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

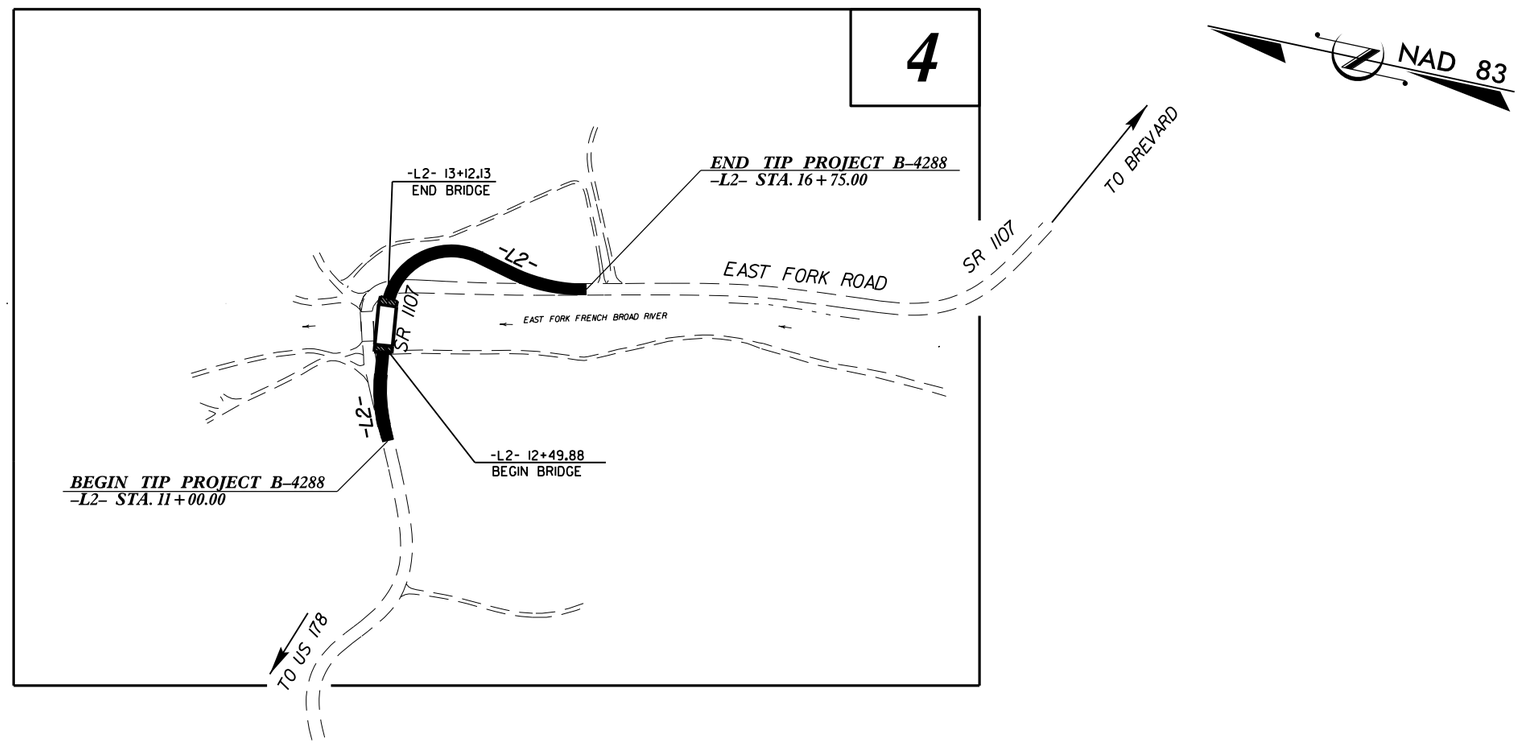
TRANSYLVANIA COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4288	1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
33627.1.1	BRZ-1107(9)	PE
33627.2.1	BRZ-1107(9)	R/W & UTIL
33627.3.FD1	BRZ-1107(9)	CONSTRUCTION

LOCATION: BRIDGE 85 AND APPROACHES ON SR 1107 OVER EAST FORK FRENCH BROAD RIVER

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE



** USED SUB REGIONAL TIER DESIGN GUIDELINES

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2014 = 715
ADT 2030 = 1000
K = 10 %
D = 60 %
T = 5 % *
**V = 20 MPH
* TTST 1% DUAL 4%

FUNCTIONAL CLASSIFICATION
RURAL MINOR COLLECTOR

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-4288 = 0.097 MILES

LENGTH OF STRUCTURE TIP PROJECT B-4288 = 0.012 MILES

TOTAL LENGTH OF TIP PROJECT B-4288 = 0.109 MILES

Prepared In the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
AUGUST 06, 2013

LETTING DATE:
APRIL 15, 2014

G.E. BREW, PE
PROJECT ENGINEER

I.T. YOUNIS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

DIVISION OF HIGHWAYS

STATE OF NORTH CAROLINA

17-DEC-2013 10:16
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$$$$USERNAME$$$$

12/05/11

PROJECT REFERENCE NO.	SHEET NO.
B-4288	1-B

Note: Not to Scale

**S.U.E. = Subsurface Utility Engineering*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite R/W Marker — RW
- Proposed Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

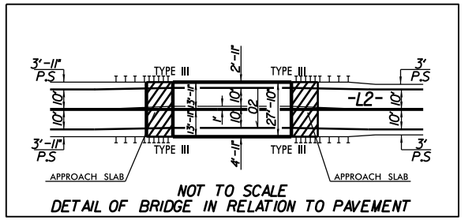
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?UTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

PROJECT REFERENCE NO.	SHEET NO.
B-4288	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

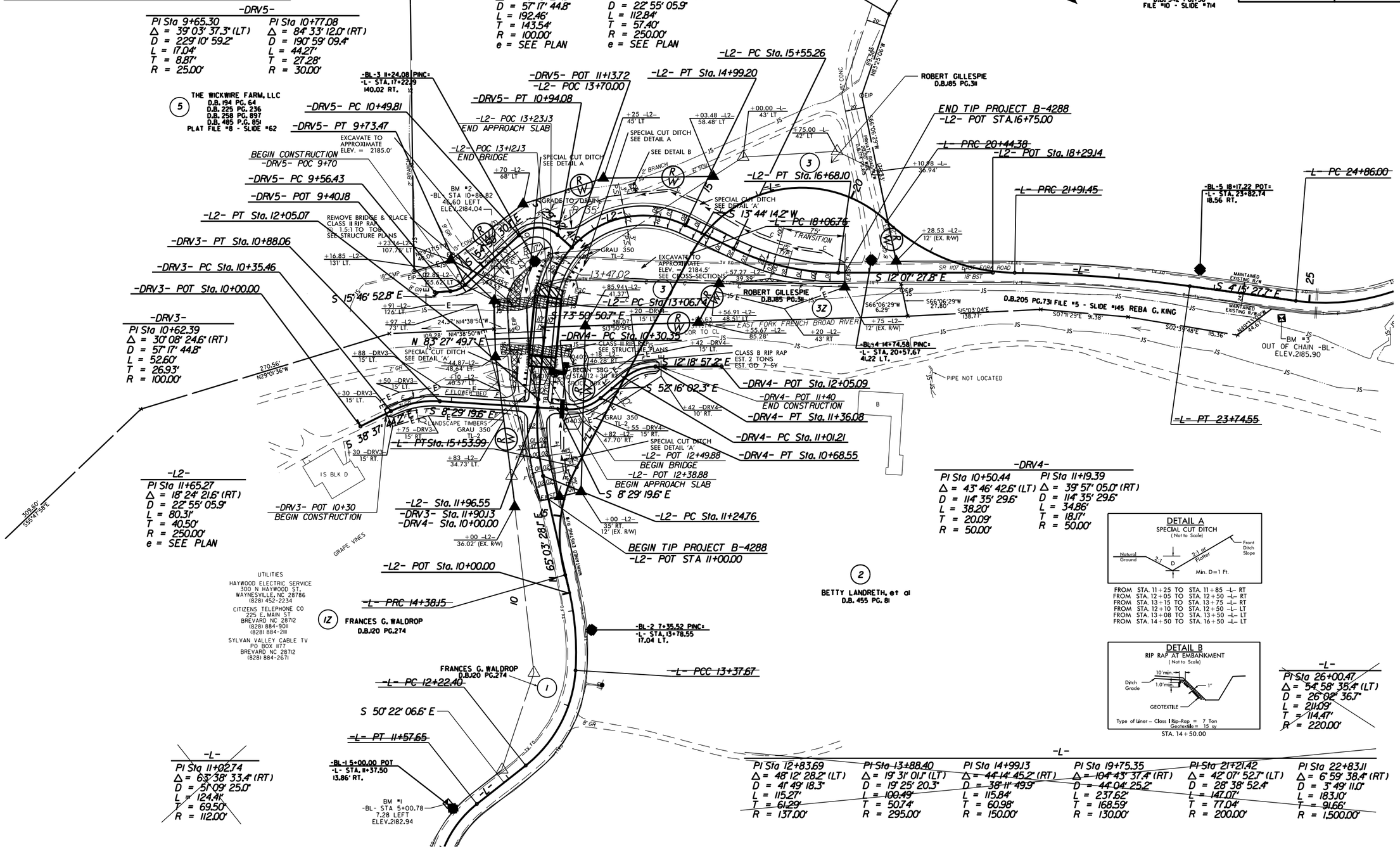
SEE SHEETS S-1 THRU S-?? FOR STRUCTURE PLANS

SEE SHEET 5 FOR PROFILES -L2-, -DRV3-, -DRV4-, -DRV5-

NOTE:
PROPOSED BRIDGE TO BE PHASED CONSTRUCTED UTILIZING EXISTING BRIDGE FOR MAINTENANCE OF TRAFFIC.



NOT TO SCALE
DETAIL OF BRIDGE IN RELATION TO PAVEMENT



DETAIL A
SPECIAL CUT DITCH
(Not to Scale)

FROM STA. 11+25 TO STA. 11+85 -L- RT
FROM STA. 12+05 TO STA. 12+50 -L- RT
FROM STA. 13+15 TO STA. 13+75 -L- RT
FROM STA. 12+10 TO STA. 12+50 -L- LT
FROM STA. 13+08 TO STA. 13+50 -L- LT
FROM STA. 14+50 TO STA. 16+50 -L- LT

DETAIL B
RIP RAP AT EMBANKMENT
(Not to Scale)

Type of Liner – Class I Rip-Rap = 7 Ton
Geotextile = 15 sy
STA. 14+50.00

R/W REVISIONS- UPDATED STATION AND OFFSET FLAGS FOR R/W MONUMENTS 10-15-2013 TT

5/14/99

17-DEC-2013 10:13
R:\Roadway\Proj\b4288_rdy_psh04.dgn
$$$$USERNAME$$$$