STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

February 18, 2014

U. S. Army Corps of Engineers
Regulatory Field Office
3331 Heritage Trade Drive Suite 105
Wake Forest, NC 27587

ATTN: Mr. Andrew Williams
NCDOT Coordinator

Subject: **Application for Modification to Individual Section 404 Permit and 401 Certification** for the widening of US 321 from SR 1500 (Blackberry Road) to US 221 at Blowing Rock; Watauga and Caldwell Counties; State Project No. 6.739001T; NCDOT Division 11; TIP No. R-2237C, WBS Element No. 34402.2.6 Debit $570.00

Reference:
- Individual 404 Permit Modification (July 24, 2012) and 401 Water Quality Certification Modification (July 10, 2012)
- Individual 404 Permit (May 26, 2011) (Action ID: SAW-2002-31262) and 401 Certification (March 9, 2011) (NCDWQ Project No. 20100752)

Dear Mr. Williams:

This Modification request is being submitted due to the need for construction revisions at Site XII. The previous modification (authorized in 404 Permit Modification dated July 24, 2012 and 401 WQC Modification dated July 10, 2012) involved putting a "dog leg" in the pipe alignment. This current modification involves an alignment of the 84-inch pipe that more closely follows the original alignment and was determined by the contractor to be a better option. The additional stream and wetland impacts are incurred from the need to construct a bore pit for the installation of the 84-inch pipe. This modification application package consists of the cover letter, a revised EEP acceptance letter, revised Permit Sheets (including a revised Wetland Permit Impact Summary sheet that includes the modified impacts for Site XII), and the associated roadway plan sheet.

Jurisdictional Impacts at Site XII

The currently permitted impacts are:
- Permanent stream impacts: 45 lf
- Temporary stream impacts: 21 lf or <0.01 ac
- Temporary wetland impact: <0.01 ac

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

The proposed Modification impacts are:

- Permanent stream impacts: 56 lf (increase of 11 lf)
- Temporary stream impacts: 84 lf (increase of 63 lf) or 0.01 ac
- Permanent wetland impact: 0.02 ac (increase of 0.02 ac)
- Temporary wetland impact: 0.00 ac (removal of <0.01 ac)

Mitigation at Site XII

Additional mitigation has been obtained from EEP for the additional permanent stream impacts and permanent wetland impacts (EEP acceptance letter attached).

A copy of this permit modification application and its distribution list will be posted on the NCDOT website at https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx

If you have any questions or need additional information please contact Mr. Bill Barrett by telephone at (919) 707-6103 or by e.mail at wabarrett@ncdot.gov.

Sincerely,

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

cc: NCDOT Permit Application Standard Distribution List

Ecosystem Enhancement PROGRAM

February 11, 2014

Mr. Richard Hancock
Project Development and Environmental Analysis Unit
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Hancock:

Subject: EEP Mitigation Acceptance Letter:

R-2237C, US 321 from SR 1500 (Blackberry Road) to US 221 at Blowing Rock, Watauga and Caldwell Counties

References: USACE 404 Individual Permit issued May 25, 2011 (USACE Action ID 2002-31262) and 404 Individual Permit Modification issued July 24, 2012

NCDWQ 401 Water Quality Certification issued March 9, 2011 with Correction issued May 26, 2011 (NCDWQ Project ID 2010-0752) and 401 WQC Modification issued on July 10, 2012

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the additional stream and riparian wetland mitigation for the subject project. Based on the information supplied by you on February 6, 2014, the additional impacts are located in CU 05050001 of the New River basin in the Northern Mountains (NM) Eco-Region, and are as follows:

Table 1 – Additional Impacts (feet / acres)

New 05050001 NM	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1 (3:1)	Zone 2 (1.5:1)
Impacts (feet/acres)	**11.0**	0	0	**0.02**	0	0	0	0

These impacts and associated mitigation needs were not projected by the NCDOT in the 2014 impact data. EEP is currently providing stream and riparian wetland mitigation for the impacts associated with this project located in New 05050001 and Yadkin 03040101 as required by the 404 and 401 permits that were issued in 2011 and 2012, as shown in the below table (in mitigation credits):

Table 2 – Total Revised Impacts and Mitigation Credits Provided from EEP

Impact Type	Permitted Impacts	Mitigation Provided by EEP per Issued Permits (Credits)	Additional Impact (for approval)	Revised Total Impacts
New 05050001				
Stream	670.0	1,340.0	**11.0 (Cold)**	681.0
Riparian Wetland	0.06	0.12	**0.02**	0.08
Yadkin 03040101				
Stream	955.0	1,910.0	0	955.0
Riparian Wetland	0.13	0.26	0	0.13

EEP commits to providing the additional compensatory stream and riparian wetland mitigation credits to offset all of the impacts located in the New River basin (CU 05050001) associated with this project as determined by the regulatory agencies in accordance with the N.C. Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-707-8420.

Sincerely,

James B. Stanfill
EEP Asset Management Manager

Cc: Mr. Andrew Williams, USACE – Raleigh Regulatory Field Office
Ms. Amy Chapman, NC Division of Water Quality
File: R-2237C Additional 2

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)
I	385+70 TO	24" CSP						0.02	<0.01	294	36	
	389+45 -L-											
II	403+30 -L-	36" CSP						0.01	<0.01	119	33	
III	442+00 TO	54" RCP	0.01			0.02		0.01	0.01	150	43	
	444+00 -L-	BANK STABILIZATION								10		
		FILL IN STREAM						<.01		53		
IV	444+65 TO		0.07		0.02	0.01		0.03	0.01	317	46	
	449+50 -L-											
V	451+40 -L-							<0.01	<0.01	22	6	
		BANK STABILIZATION								10		
VI	495+20 TO		0.01					0.03		294		
	498+15 -L-											
VII	523+33.5 -L-	2 @ 11'X8' RCBC			0.01			0.04	0.01	128	26	
		BANK STABILIZATION								32		
VIII	528+40 TO	30" RCP	NON-JURISDICTIONAL									
	530+50 -L-	15" CSP										
TOTALS:			0.09		0.03	0.03		0.15	0.04	1429	190	

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CALDWELL/WATAUGA COUNTIES
WBS - 34402.1.1 (R-2237C)

ATN Revised 3/31/05

SHEET 2/6/2014

MODIFICATION (February 2014)
Permit Drawing Sheet 1 of 5

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)
IX	540+20 -l-	42" WELDED						0.01	<0.01	133	10	
		STEEL PIPE										
X	553+50 -L-	30" RCP						0.01	<0.01	59	19	
								<0.01	<0.01	25	19	
XI	555+50 -L-	15" RCP	0.04									
XII	561+85 -L-	84" WELDED	0.02					<0.01	0.01	56	84	
		STEEL PIPE										
TOTALS:			0.06					0.03	0.01	273	132	
GRAND TOTALS			0.15		0.03	0.03		0.17	0.05	1702	322	

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CALDWELL/WATAUGA COUNTIES
WBS - 34402.1.1 (R-2237C)

SHEET 2/11/2014

ATN Revised 3/31/05

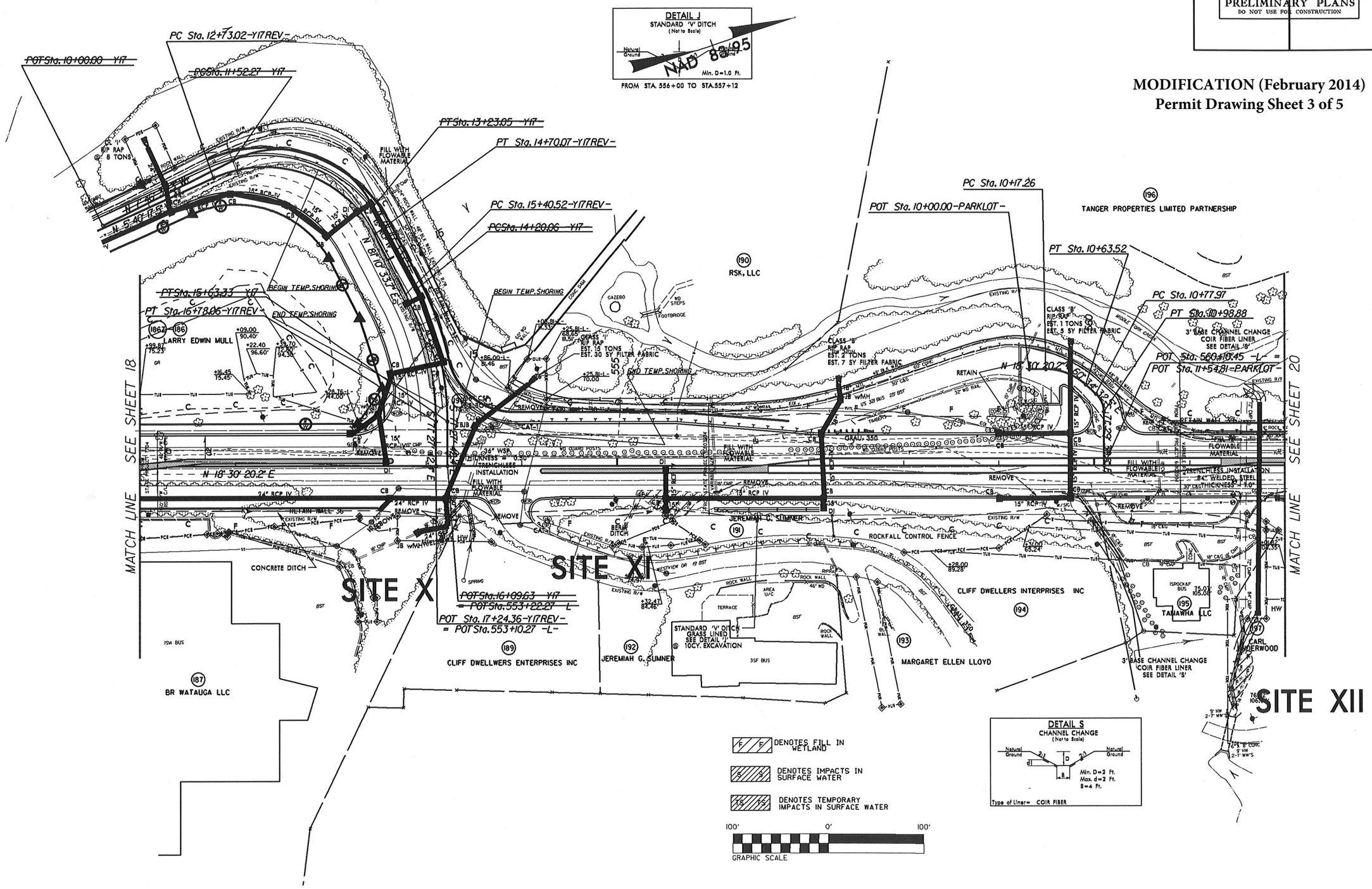
MODIFICATION (February 2014)
Permit Drawing Sheet 2 of 5

PROJECT REFERENCE NO.	SHEET NO.
R-2237C	19
R/W SHEET NO.	
19	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NOTE: SEE SHEET 29 FOR -L- PROFILE
SEE SHEET 33 FOR -Y17- PROFILE
SEE SHEET 2-I FOR -Y17-/-L- INTERSECTION DETAIL

MODIFICATION (February 2014)
Permit Drawing Sheet 3 of 5

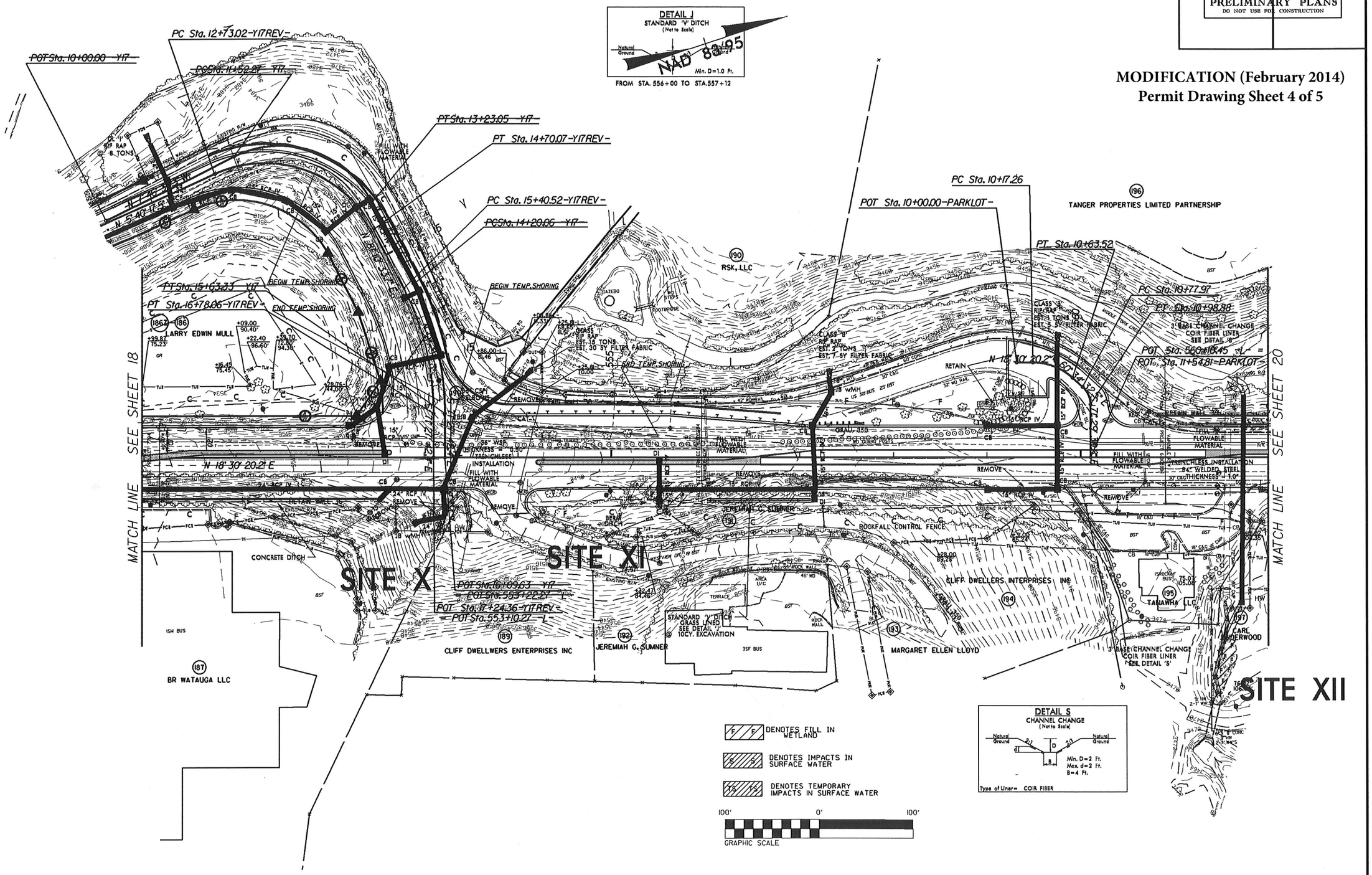


PROJECT REFERENCE NO.	SHEET NO.
R-2237C	19
R/W SHEET NO.	19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

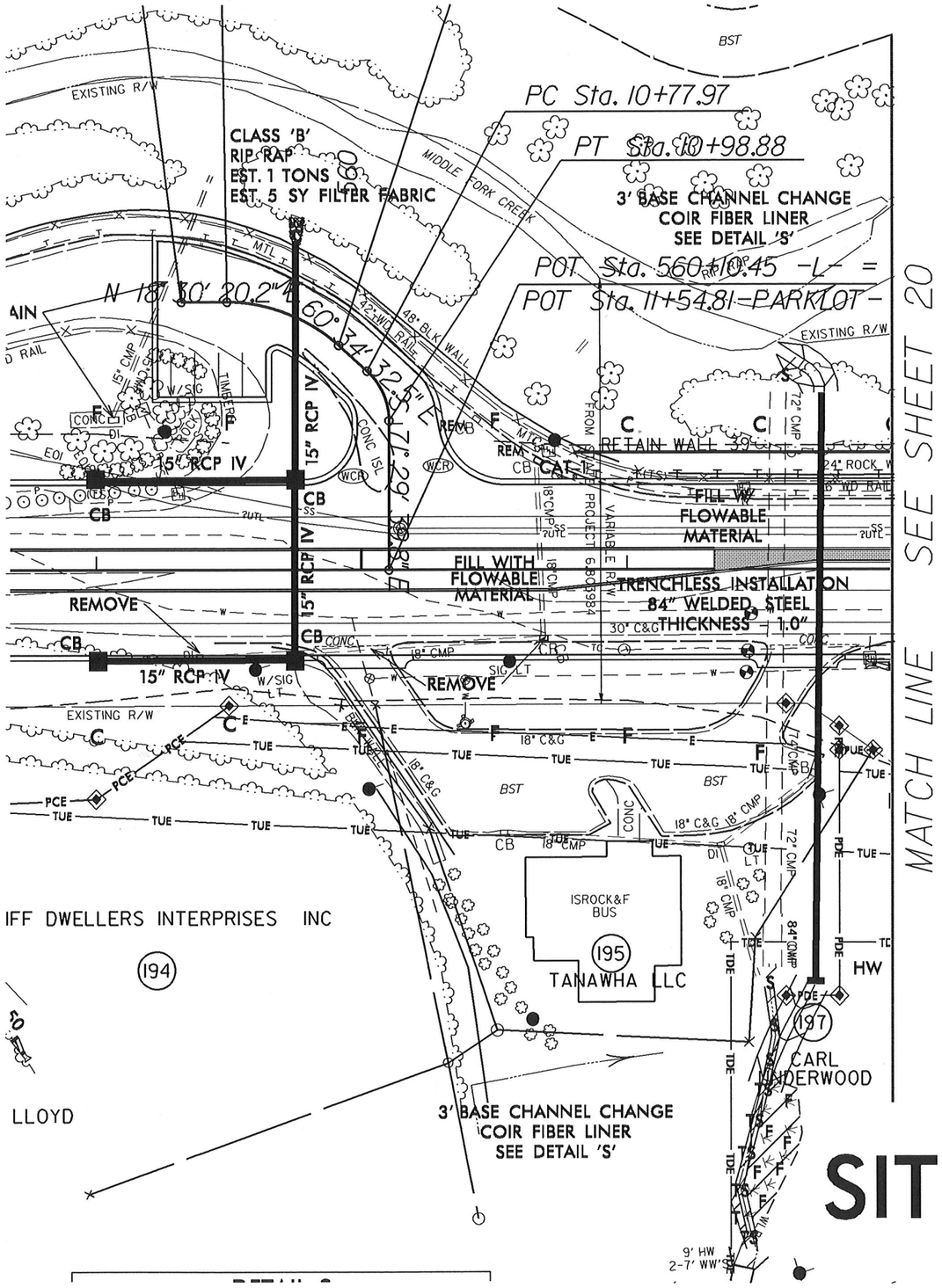
NOTE: SEE SHEET 29 FOR -L- PROFILE
SEE SHEET 33 FOR -Y17- PROFILE
SEE SHEET 2-1 FOR -Y17-/-L- INTERSECTION DETAIL

MODIFICATION (February 2014)
Permit Drawing Sheet 4 of 5



PROJECT REFERENCE NO.	SHEET NO.
R-2237C	19
R/W SHEET NO.	19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MODIFICATION (February 2014)
Permit Drawing Sheet 5 of 5



PROJECT REFERENCE NO.	SHEET NO.
R-2237C	19
R/W SHEET NO.	19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: SEE SHEET 29 FOR -L- PROFILE
SEE SHEET 33 FOR -Y17- PROFILE
SEE SHEET 2-M FOR -Y17-/-L- INTERSECTION DETAIL
SEE PAVEMENT MARKING PLANS FOR CURB RAMP LOCATIONS

-Y17-

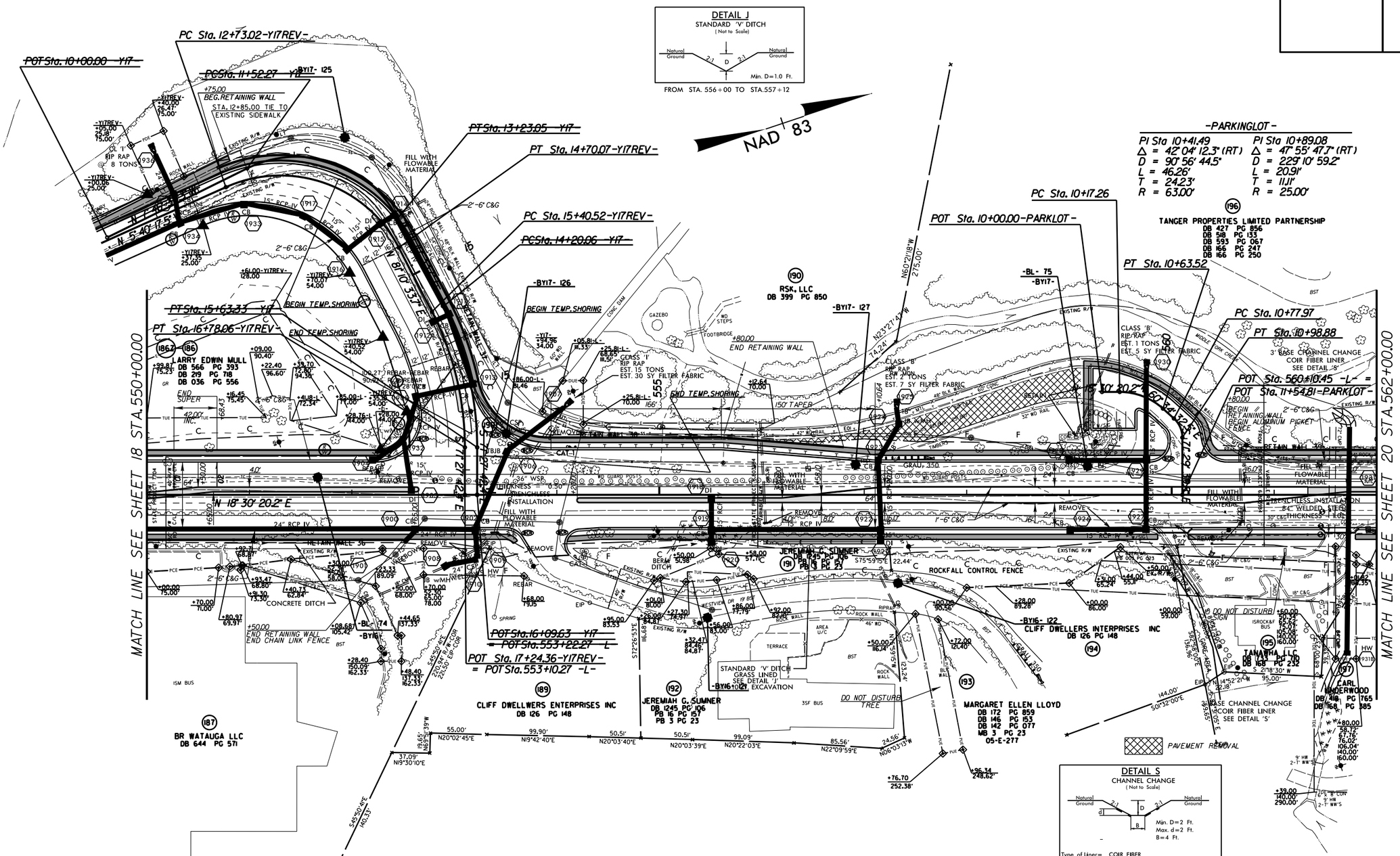
~~PI Sta 12+60.28~~	~~PI Sta 14+93.08~~
~~Δ = 88° 57' 09.9" (RT)~~	~~Δ = 27° 21' 43.9" (RT)~~
~~D = 52° 05' 13.5"~~	~~D = 19° 05' 54.9"~~
~~L = 170.78'~~	~~L = 143.27'~~
~~T = 108.01'~~	~~T = 73.03'~~
~~R = 110.00'~~	~~R = 300.00'~~

-Y17REV-

PI Sta 13+96.06	PI Sta 16+10.63
Δ = 86° 50' 51.1" (RT)	Δ = 27° 21' 43.9" (RT)
D = 44° 04' 25.2"	D = 19° 53' 39.7"
L = 197.05'	L = 137.54'
T = 123.04'	T = 70.11'
R = 130.00'	R = 288.00'

-PARKINGLOT-

PI Sta 10+41.49	PI Sta 10+89.08
Δ = 42° 04' 12.3" (RT)	Δ = 47° 55' 47.7" (RT)
D = 90° 56' 44.5"	D = 229° 10' 59.2"
L = 46.26'	L = 20.91'
T = 24.23'	T = 11.11'
R = 63.00'	R = 25.00'



SEE W-79 THRU W-81 FOR RETAINING WALL 36
SEE W-82 THRU W-85 FOR RETAINING WALLS 37 & 38
SEE W-86 THRU W-88 FOR RETAINING WALL 39

REVISIONS
R/W Revision: Revised PUE, TUE, PDE, and TDE on Parcel 195, 197 due drainage pipe revision. WTB 2/4/2014

5/14/99

03-FEB-2014 14:52
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$$$$USERNAME$$$$