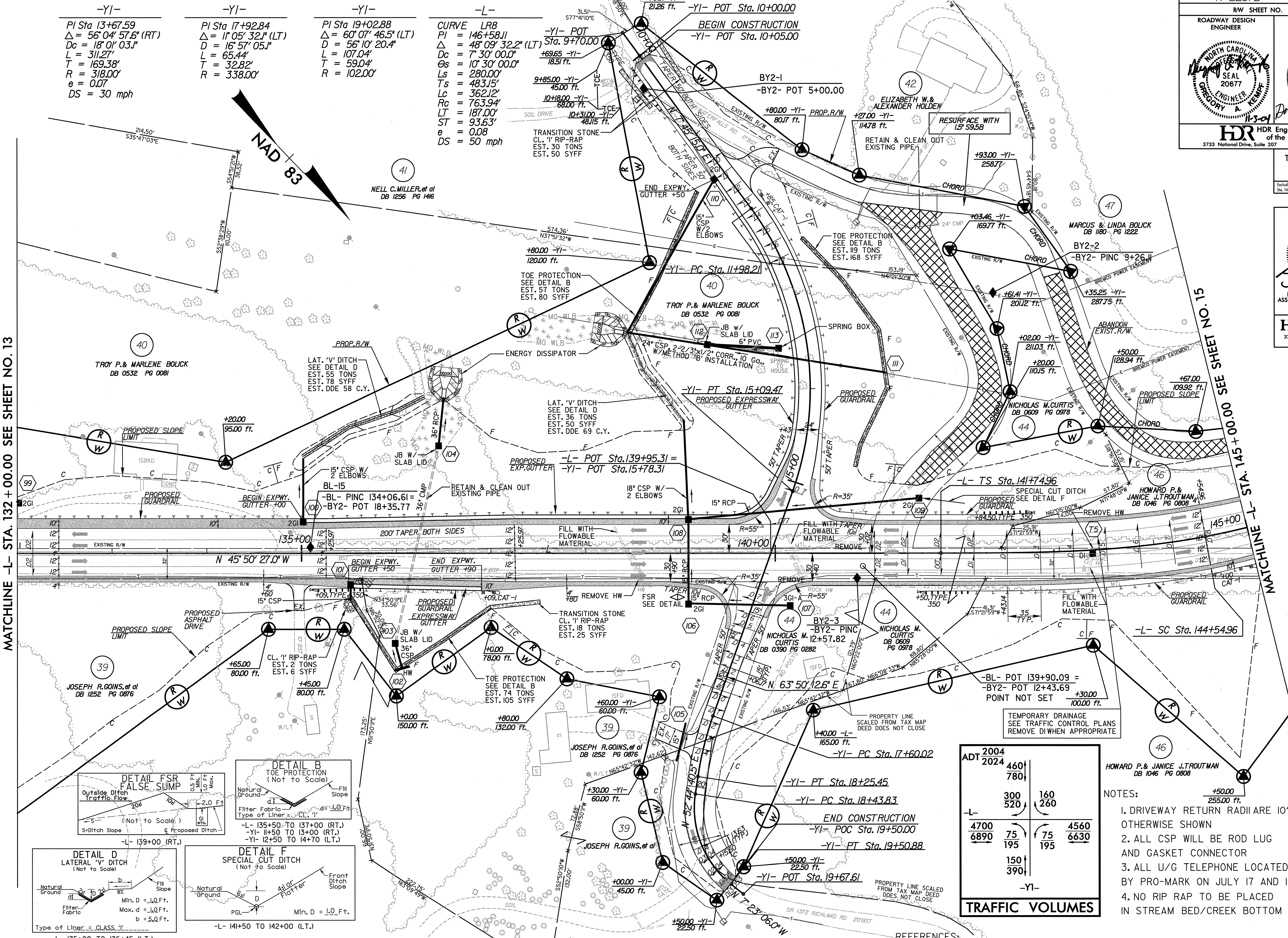


TRAN SITE CONSULTING ENGINEERS, INCORPORATED  
 1300 Piedmont Drive, Suite G-10 Raleigh, N.C. 27609  
 Including Temporary Drainage Structure Number 15 Sta. 143+30 +/-, DI

FOR HYDRAULIC DESIGN ASSOCIATED WITH TEMPORARY DRAINAGE STRUCTURE NUMBER 15  
 HDR Engineering, Inc. of the Carolinas  
 3733 National Drive, Suite 207 Raleigh, N.C. 27612



-YI- PI Sta 13+67.59  
 $\Delta = 56' 04" 57.6"$  (RT)  
 $D = 18' 01" 03.1"$   
 $L = 311.27'$   
 $T = 169.38'$   
 $R = 318.00'$   
 $e = 0.07$   
 $DS = 30$  mph

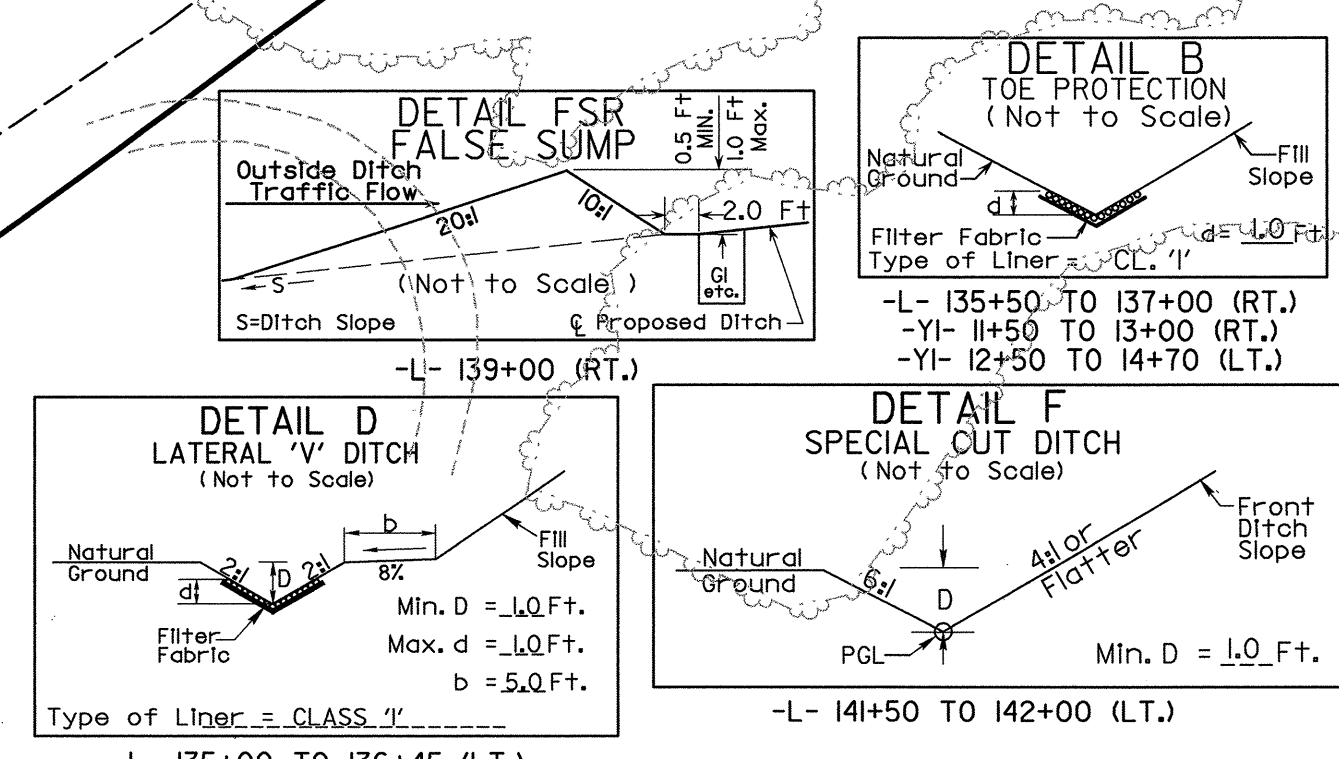
-YI- PI Sta 17+92.84  
 $\Delta = 1' 05' 32.1"$  (LT)  
 $D = 16' 57' 05.1"$   
 $L = 65.44'$   
 $T = 32.82'$   
 $R = 338.00'$

-YI- PI Sta 19+02.88  
 $\Delta = 60' 07' 46.5"$  (LT)  
 $D = 56' 10' 20.4"$   
 $L = 107.04'$   
 $T = 59.04'$   
 $R = 102.00'$

-L- CURVE LR8  
 $PI = 146+58.11$   
 $\Delta = 48' 09' 32.2"$  (LT)  
 $D = 7' 30' 00.0"$   
 $\Delta s = 10' 30' 00.0"$   
 $Ls = 280.00'$   
 $Ts = 483.15'$   
 $Lc = 362.12'$   
 $Rc = 763.94'$   
 $LT = 187.00'$   
 $ST = 93.63'$   
 $e = 0.08$   
 $DS = 50$  mph

MATCHLINE -L- STA. 132 + 00.00 SEE SHEET NO. 13

MATCHLINE -L- STA. 145 + 00.00 SEE SHEET NO. 15



ADT 2004			
460	160	4560	6630
780	260	75	195
300	160	75	195
520	260	150	390
6890	195	150	390
-YI-			

- NOTES:
1. DRIVEWAY RETURN RADI ARE 10' UNLESS OTHERWISE SHOWN
  2. ALL CSP WILL BE ROD LUG AND GASKET CONNECTOR
  3. ALL U/G TELEPHONE LOCATED AS MARKED BY PRO-MARK ON JULY 17 AND 18,2000
  4. NO RIP RAP TO BE PLACED IN STREAM BED/CREEK BOTTOM

REFERENCES:  
 FOR -L- PROFILE SEE SHEET 42  
 FOR -YI- PROFILE SEE SHEET 60

ROADWAY TO BE OBLITERATED

REVISIONS

8/17/99  
1/6/03/2004  
1/6/03/2004 FM  
1/6/03/2004 FM