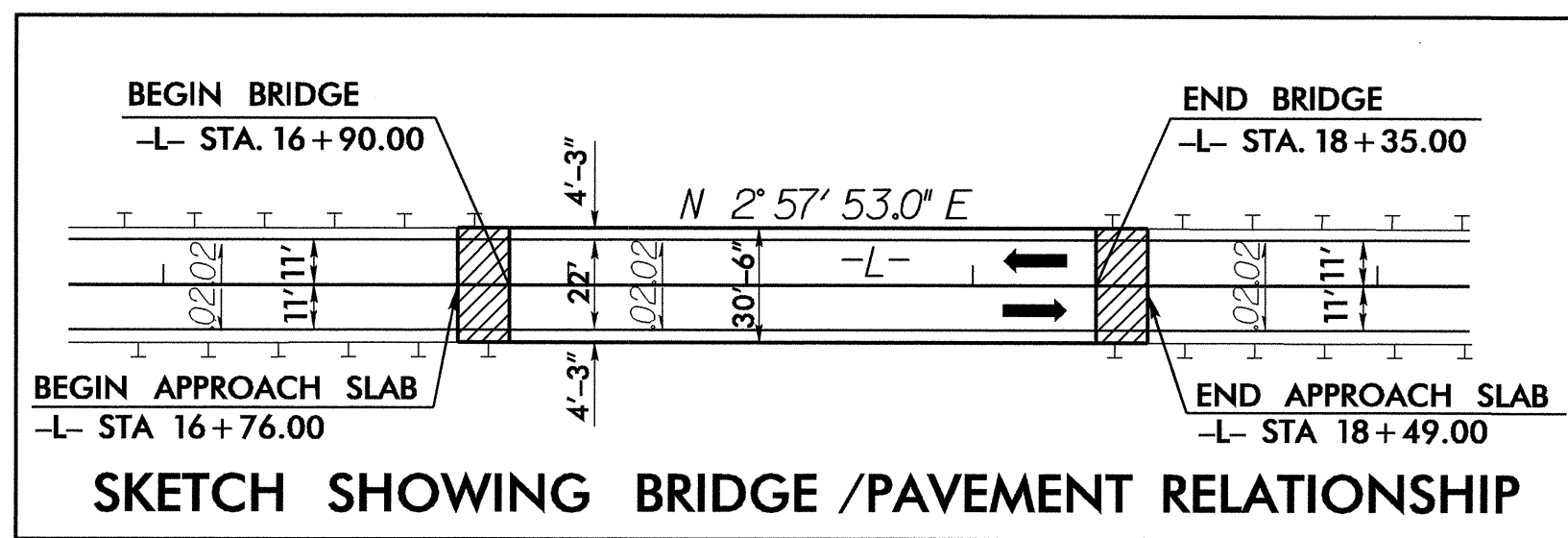
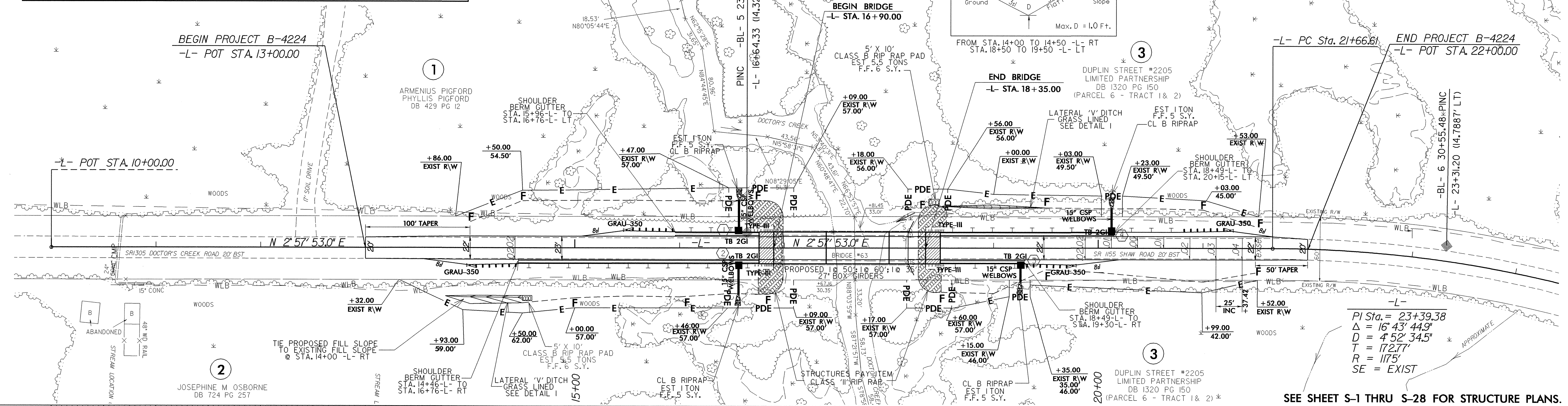
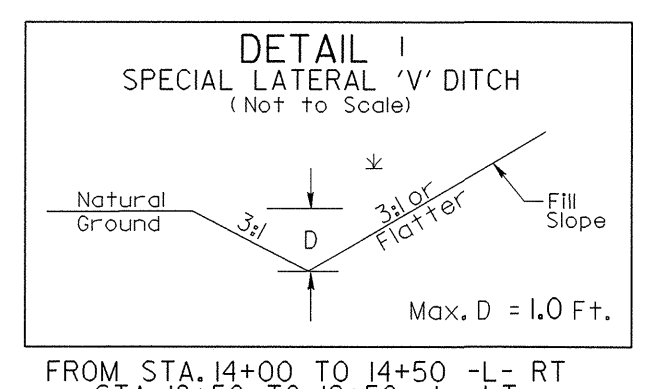
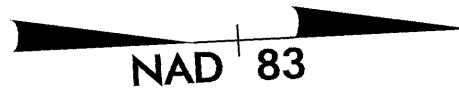


8/17/99

PROJECT REFERENCE NO. B-4224	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 28974 JAYAN, C. E.	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER REGISTRATION No. 024887 JON W. TWISDAL, J.



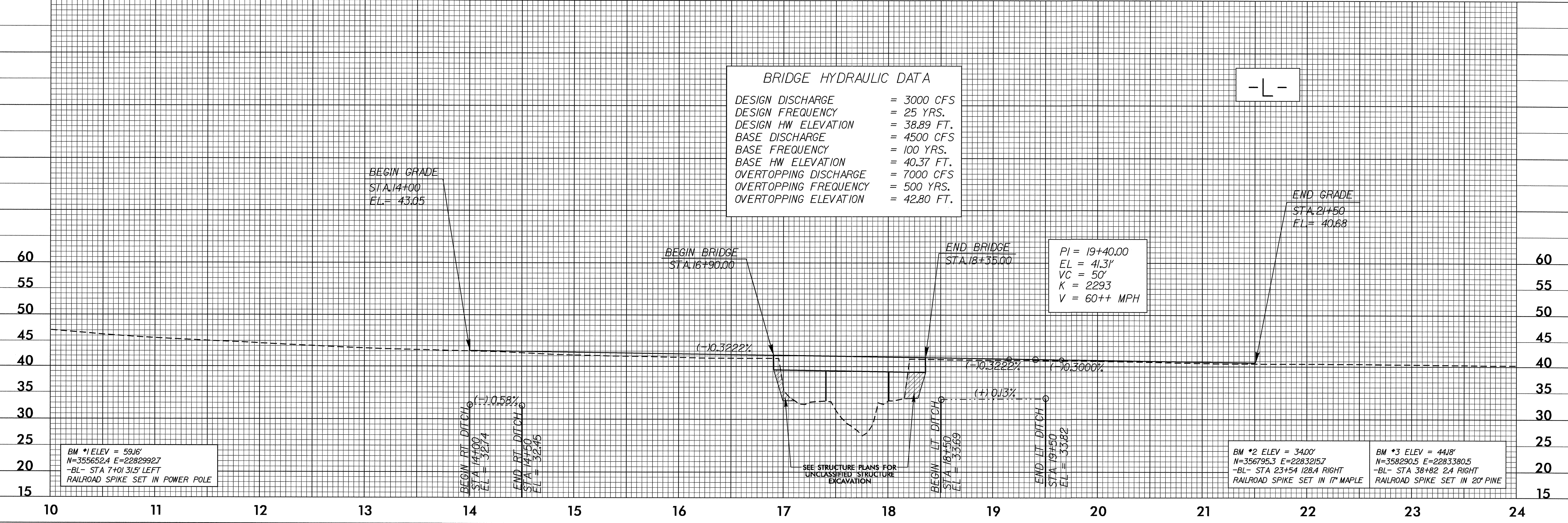
NOTE: ALL 15" CSP AND ELBOWS INSTALLED WITH ROD & LUG WITH SLEEVE GASKETS.



PI Sta. = 23+39.38
 $\Delta = 16^\circ 43' 44.9''$
 $D = 452' 34.5''$
 $T = 172.77'$
 $R = 1175'$
 SE = EXIST

SEE SHEET S-1 THRU S-28 FOR STRUCTURE PLANS.

BRIDGE HYDRAULIC DATA	
DESIGN DISCHARGE	= 3000 CFS
DESIGN FREQUENCY	= 25 YRS.
DESIGN HW ELEVATION	= 38.89 FT.
BASE DISCHARGE	= 4500 CFS
BASE FREQUENCY	= 100 YRS.
BASE HW ELEVATION	= 40.37 FT.
OVERTOPPING DISCHARGE	= 7000 CFS
OVERTOPPING FREQUENCY	= 500 YRS.
OVERTOPPING ELEVATION	= 42.80 FT.



BM #1 ELEV = 59.16'
 N=355652.4 E=228292.7
 -BL- STA 7+01 31.5' LEFT
 RAILROAD SPIKE SET IN POWER POLE

BM #2 ELEV = 34.00'
 N=356795.3 E=2283215.7
 -BL- STA 23+54 128.4 RIGHT
 RAILROAD SPIKE SET IN 17' MAPLE

BM #3 ELEV = 44.18'
 N=358290.5 E=2283380.5
 -BL- STA 38+82 2.4 RIGHT
 RAILROAD SPIKE SET IN 20' PINE

REVISIONS

27-JAN-2006 14:17
 F:\WORK\RD\p01\B4224_r.dwg psh4.dgn
 \$\$\$\$SUBSTRANIE\$\$\$\$