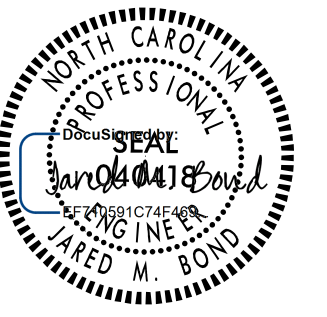



5/14/99

PROJECT REFERENCE NO. R-5751	SHEET NO. 18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

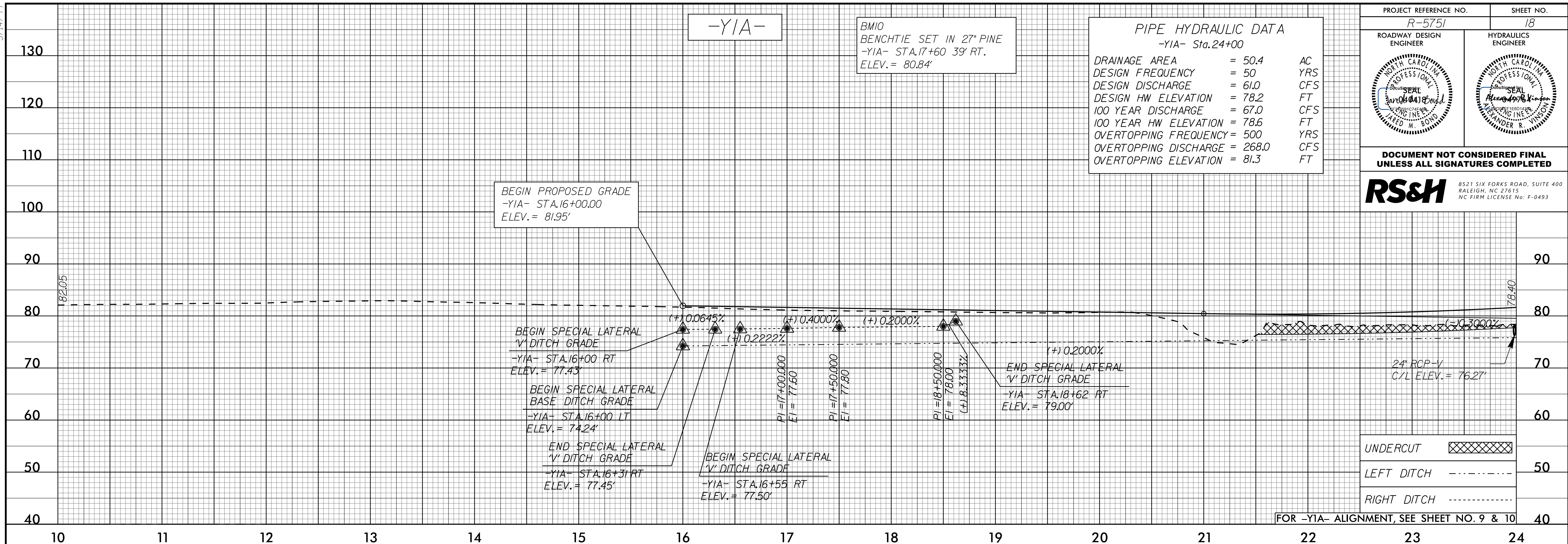
RS&H 8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
NC FIRM LICENSE No. F-0493

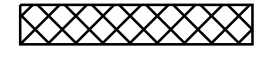
PIPE HYDRAULIC DATA
-YIA- Sta.24+00


DRAINAGE AREA	= 50.4	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 61.0	CFS
DESIGN HW ELEVATION	= 78.2	FT
100 YEAR DISCHARGE	= 67.0	CFS
100 YEAR HW ELEVATION	= 78.6	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 268.0	CFS
OVERTOPPING ELEVATION	= 81.3	FT


BM10
BENCHTIE SET IN 27" PINE
-YIA- STA.17+60 39' RT.
ELEV. = 80.84'

-YIA-



UNDERCUT 

LEFT DITCH 

RIGHT DITCH 

FOR -YIA- ALIGNMENT, SEE SHEET NO. 9 & 10

PIPE HYDRAULIC DATA
-YIA- Sta.24+00

DRAINAGE AREA	= 50.4	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 61.0	CFS
DESIGN HW ELEVATION	= 78.2	FT
100 YEAR DISCHARGE	= 67.0	CFS
100 YEAR HW ELEVATION	= 78.6	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 268.0	CFS
OVERTOPPING ELEVATION	= 81.3	FT

PIPE HYDRAULIC DATA
-YIA- Sta.25+00

DRAINAGE AREA	= 50.4	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 61.0	CFS
DESIGN HW ELEVATION	= 78.2	FT
100 YEAR DISCHARGE	= 67.0	CFS
100 YEAR HW ELEVATION	= 78.6	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 268.0	CFS
OVERTOPPING ELEVATION	= 81.3	FT

-YIA-

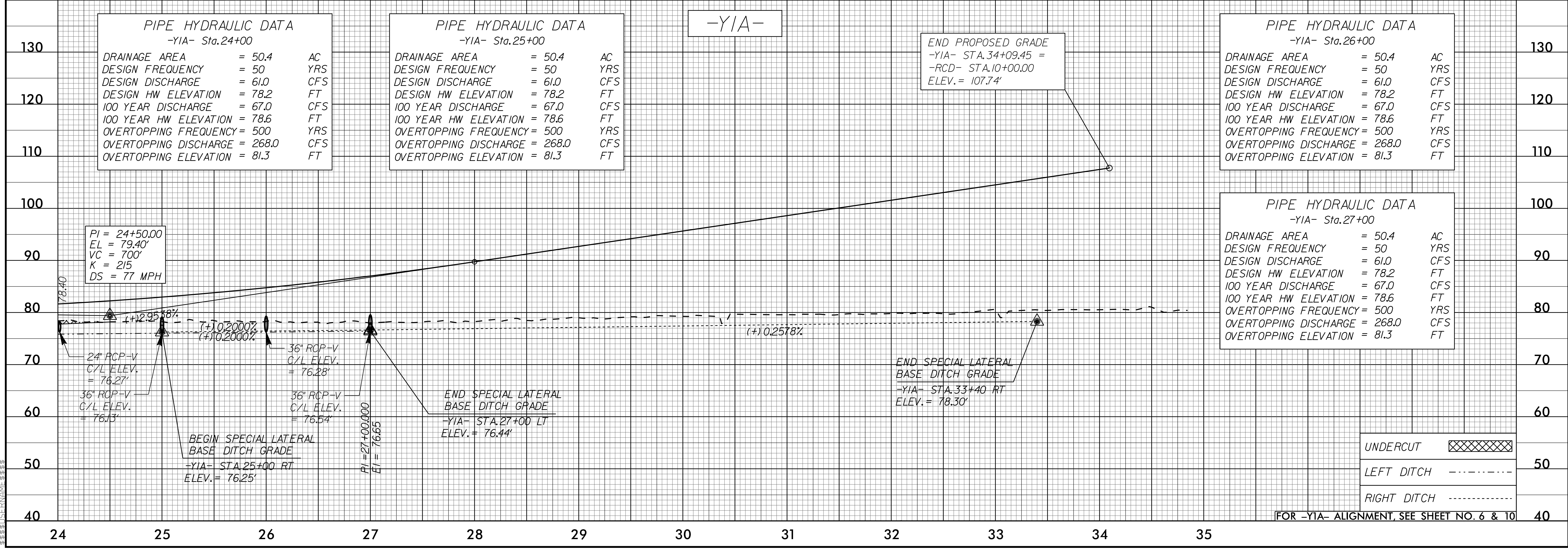
END PROPOSED GRADE
-YIA- STA.34+09.45 =
-RCD- STA.10+00.00
ELEV. = 107.74'

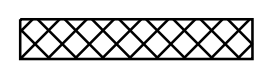
PIPE HYDRAULIC DATA
-YIA- Sta.26+00

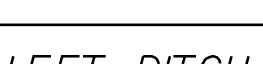
DRAINAGE AREA	= 50.4	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 61.0	CFS
DESIGN HW ELEVATION	= 78.2	FT
100 YEAR DISCHARGE	= 67.0	CFS
100 YEAR HW ELEVATION	= 78.6	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 268.0	CFS
OVERTOPPING ELEVATION	= 81.3	FT

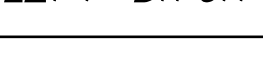
PIPE HYDRAULIC DATA
-YIA- Sta.27+00

DRAINAGE AREA	= 50.4	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 61.0	CFS
DESIGN HW ELEVATION	= 78.2	FT
100 YEAR DISCHARGE	= 67.0	CFS
100 YEAR HW ELEVATION	= 78.6	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 268.0	CFS
OVERTOPPING ELEVATION	= 81.3	FT



UNDERCUT 

LEFT DITCH 

RIGHT DITCH 

FOR -YIA- ALIGNMENT, SEE SHEET NO. 6 & 10

05-001-2002-10-42-R5751-Rdy-p1-18.dgn