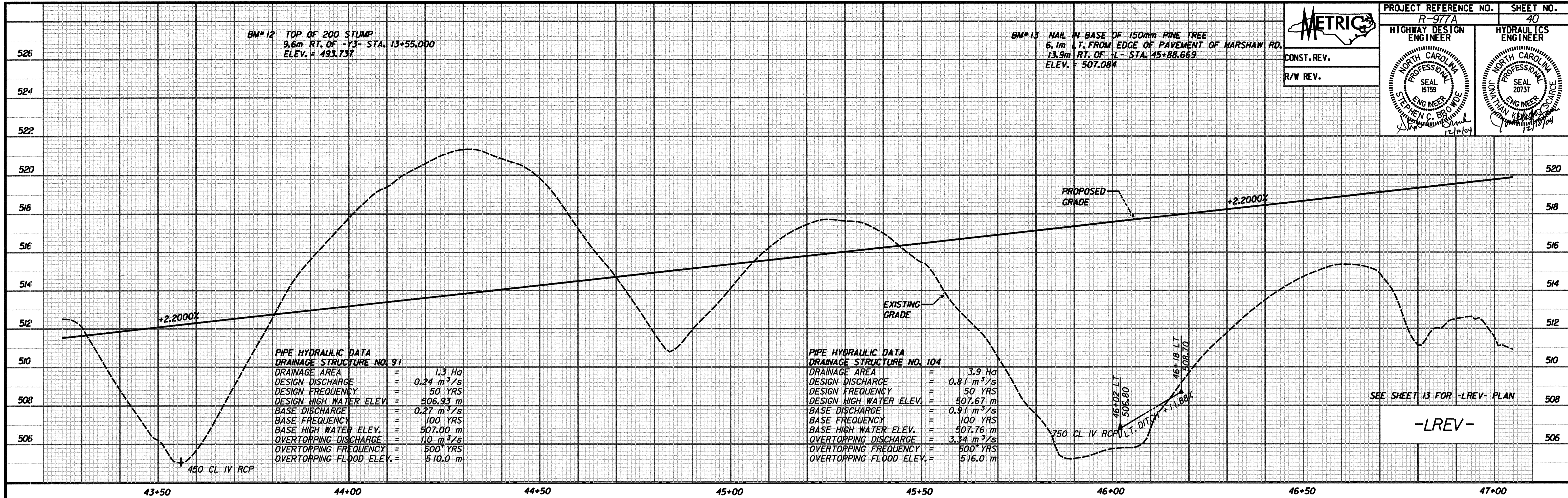


HIGHWAY DESIGN ENGINEER HYDRAULICS ENGINEER
CONST. REV.
R/W REV.

BM# 12 TOP OF 200 STUMP
9.6m RT. OF -Y3- STA. 13+55.000
ELEV. = 493.737

BM# 13 NAIL IN BASE OF 150mm PINE TREE
6.1m LT. FROM EDGE OF PAVEMENT OF HARSHAW RD.
13.9m RT. OF -L- STA. 45+88.669
ELEV. = 507.084



PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 91

DRAINAGE AREA	=	1.3 Ha
DESIGN DISCHARGE	=	0.24 m ³ /s
DESIGN FREQUENCY	=	50 YRS
DESIGN HIGH WATER ELEV.	=	506.93 m
BASE DISCHARGE	=	0.27 m ³ /s
BASE FREQUENCY	=	100 YRS
BASE HIGH WATER ELEV.	=	507.00 m
OVERTOPPING DISCHARGE	=	1.0 m ³ /s
OVERTOPPING FREQUENCY	=	500* YRS
OVERTOPPING FLOOD ELEV.	=	510.0 m

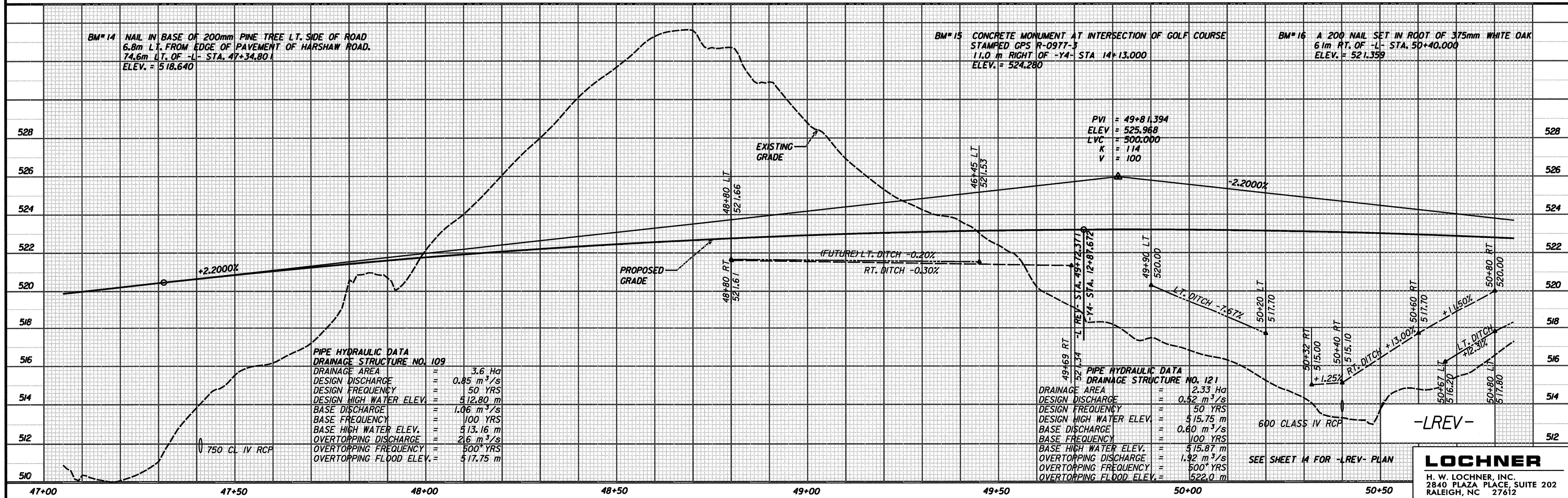
PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 104

DRAINAGE AREA	=	3.9 Ha
DESIGN DISCHARGE	=	0.81 m ³ /s
DESIGN FREQUENCY	=	50 YRS
DESIGN HIGH WATER ELEV.	=	507.67 m
BASE DISCHARGE	=	0.91 m ³ /s
BASE FREQUENCY	=	100 YRS
BASE HIGH WATER ELEV.	=	507.76 m
OVERTOPPING DISCHARGE	=	3.34 m ³ /s
OVERTOPPING FREQUENCY	=	500* YRS
OVERTOPPING FLOOD ELEV.	=	516.0 m

BM# 14 NAIL IN BASE OF 200mm PINE TREE LT. SIDE OF ROAD
6.8m LT. FROM EDGE OF PAVEMENT OF HARSHAW ROAD.
74.6m LT. OF -L- STA. 47+34.801
ELEV. = 518.640

BM# 15 CONCRETE MONUMENT AT INTERSECTION OF GOLF COURSE
STAMPED GPS R-0977-3
11.0 m RIGHT OF -Y4- STA 14+13.000
ELEV. = 524.280

BM# 16 A 200 NAIL SET IN ROOT OF 375mm WHITE OAK
6.1m RT. OF -L- STA. 50+40.000
ELEV. = 521.359



PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 109

DRAINAGE AREA	=	3.6 Ha
DESIGN DISCHARGE	=	0.85 m ³ /s
DESIGN FREQUENCY	=	50 YRS
DESIGN HIGH WATER ELEV.	=	512.80 m
BASE DISCHARGE	=	1.06 m ³ /s
BASE FREQUENCY	=	100 YRS
BASE HIGH WATER ELEV.	=	513.16 m
OVERTOPPING DISCHARGE	=	2.6 m ³ /s
OVERTOPPING FREQUENCY	=	500* YRS
OVERTOPPING FLOOD ELEV.	=	517.75 m

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 121

DRAINAGE AREA	=	2.33 Ha
DESIGN DISCHARGE	=	0.52 m ³ /s
DESIGN FREQUENCY	=	50 YRS
DESIGN HIGH WATER ELEV.	=	515.75 m
BASE DISCHARGE	=	0.60 m ³ /s
BASE FREQUENCY	=	100 YRS
BASE HIGH WATER ELEV.	=	515.87 m
OVERTOPPING DISCHARGE	=	1.92 m ³ /s
OVERTOPPING FREQUENCY	=	500* YRS
OVERTOPPING FLOOD ELEV.	=	522.0 m