


6/09/09

DITCH LEGEND	
LEFT DITCH	-----
RIGHT DITCH	-----

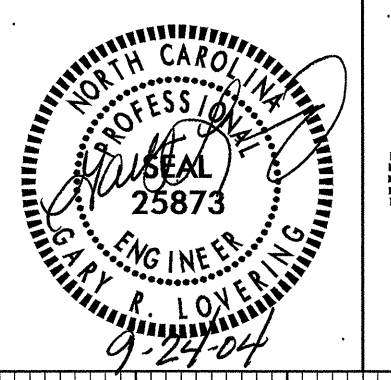
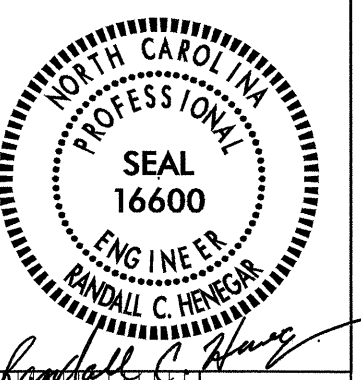


5 0 10

CONST. REV.

R / W REV.

PROJECT REFERENCE NO.	SHEET NO.
R-0513BA	29
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

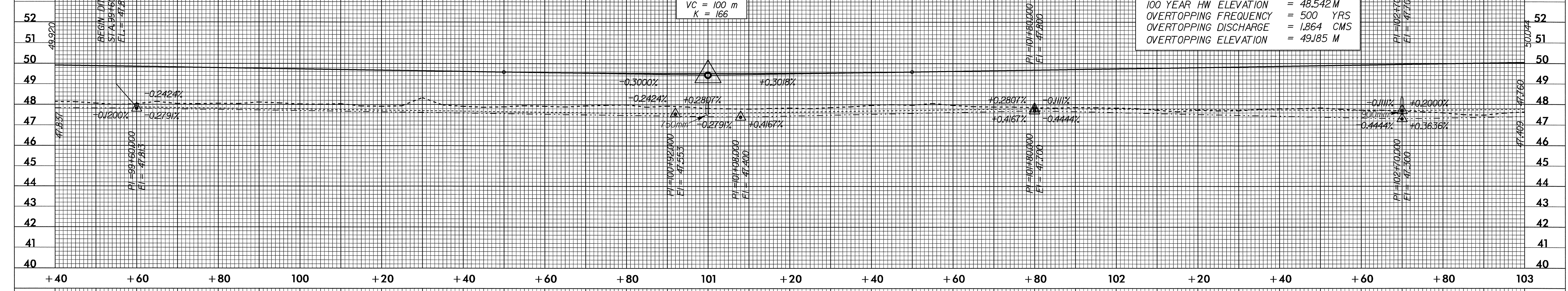



**PIPE HYDRAULIC DATA**  
DRAINAGE STRUCTURE NO.21

DRAINAGE AREA = 10.2547HA  
 DESIGN FREQUENCY = 50 YRS  
 DESIGN DISCHARGE = 0.8043CMS  
 DESIGN HW ELEVATION = 48.394M  
 100 YEAR DISCHARGE = 0.9179 CMS  
 100 YEAR HW ELEVATION = 48.499 M  
 OVERTOPPING FREQUENCY = 200 YRS  
 OVERTOPPING DISCHARGE = 1.1280 CMS  
 OVERTOPPING ELEVATION = 49.185 M

**PIPE HYDRAULIC DATA**  
DRAINAGE STRUCTURE NO.22

DRAINAGE AREA = 14.474 HA  
 DESIGN FREQUENCY = 50 YRS  
 DESIGN DISCHARGE = 0.8391 CMS  
 DESIGN HW ELEVATION = 48.473 M  
 100 YEAR DISCHARGE = 0.9624CMS  
 100 YEAR HW ELEVATION = 48.542M  
 OVERTOPPING FREQUENCY = 500 YRS  
 OVERTOPPING DISCHARGE = 1.864 CMS  
 OVERTOPPING ELEVATION = 49.185 M



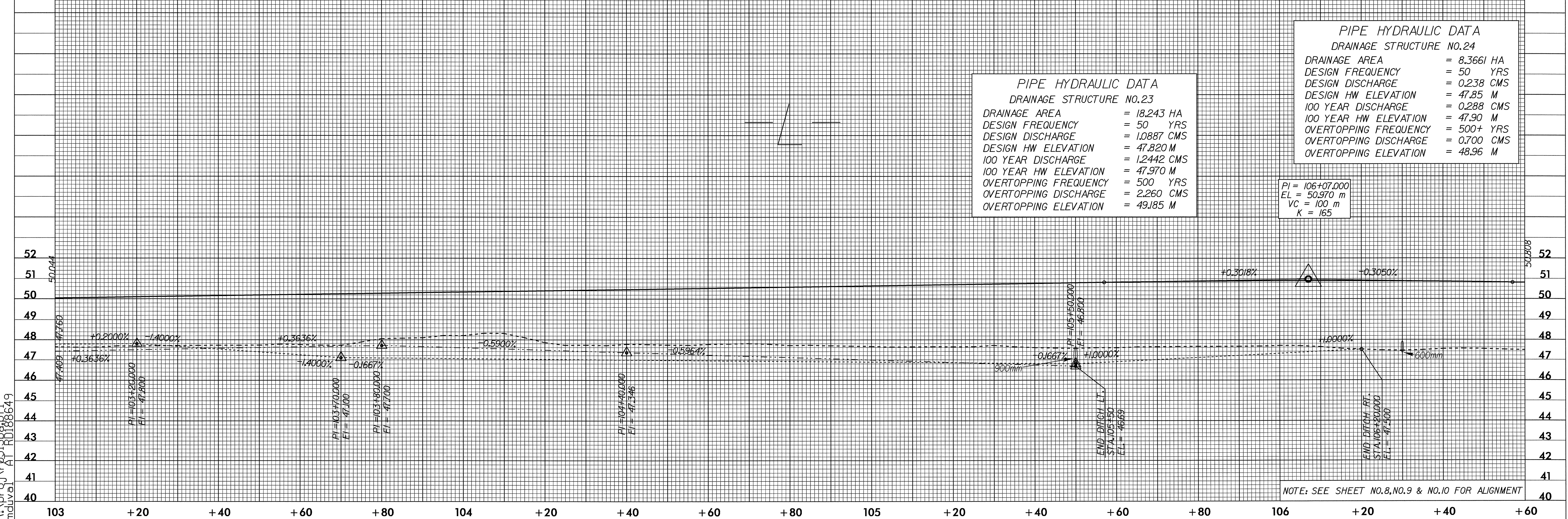
**PIPE HYDRAULIC DATA**  
DRAINAGE STRUCTURE NO.23

DRAINAGE AREA = 18.243 HA  
 DESIGN FREQUENCY = 50 YRS  
 DESIGN DISCHARGE = 1.0887 CMS  
 DESIGN HW ELEVATION = 47.820 M  
 100 YEAR DISCHARGE = 1.2442 CMS  
 100 YEAR HW ELEVATION = 47.970 M  
 OVERTOPPING FREQUENCY = 500 YRS  
 OVERTOPPING DISCHARGE = 2.260 CMS  
 OVERTOPPING ELEVATION = 49.185 M

**PIPE HYDRAULIC DATA**  
DRAINAGE STRUCTURE NO.24

DRAINAGE AREA = 8.3661 HA  
 DESIGN FREQUENCY = 50 YRS  
 DESIGN DISCHARGE = 0.238 CMS  
 DESIGN HW ELEVATION = 47.85 M  
 100 YEAR DISCHARGE = 0.288 CMS  
 100 YEAR HW ELEVATION = 47.90 M  
 OVERTOPPING FREQUENCY = 500+ YRS  
 OVERTOPPING DISCHARGE = 0.700 CMS  
 OVERTOPPING ELEVATION = 48.96 M

PI = 106+07.000  
 EL = 50.970 m  
 VC = 100 m  
 K = 165



NOTE: SEE SHEET NO.8, NO.9 & NO.10 FOR ALIGNMENT

20-SEP-2004 13:35  
 R:\proj\1051388649\1  
 mduvel AT RD188649