

5/28/19

PROJECT REFERENCE NO. 1-5986B	SHEET NO. 140
ROADWAY DESIGN ENGINEER SUSAN C. LANCASTER SEAL 027373 SOUTH CAROLINA PROFESSIONAL ENGINEER	HYDRAULICS ENGINEER JOSHUA G. DIXON SEAL 26971 SOUTH CAROLINA PROFESSIONAL ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Michael Baker Engineering, Inc. 8000 Regency Park Suite 600 Cary, NC 27518 NC License: E-1084	SUNGATE DESIGN GROUP, P.A. 100 JONES FRANKLIN ROAD RALEIGH, NORTH CAROLINA 27609 NC CDR No. C-2890

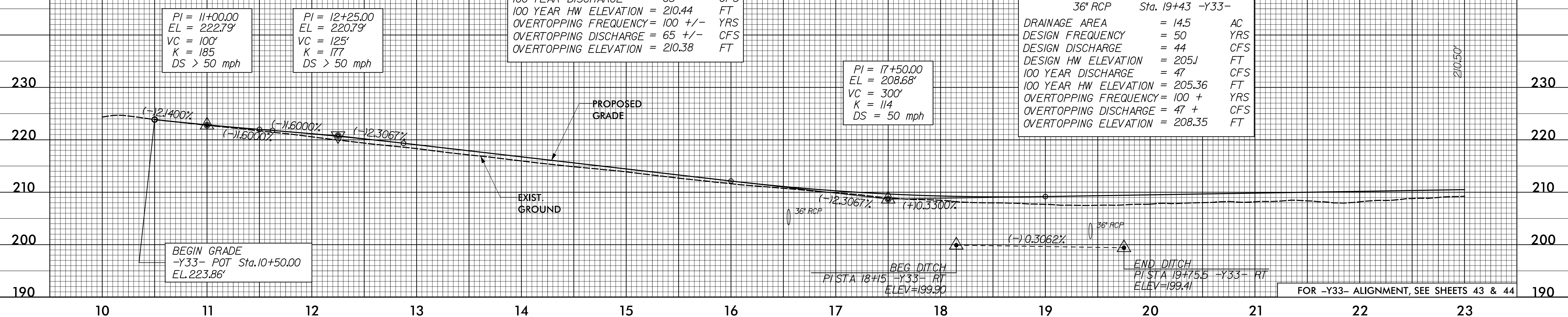
-Y33-

PIPE HYDRAULIC DATA
36" RCP Sta. 16+55 -Y33-

DRAINAGE AREA	= 19.9	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 55	CFS
DESIGN HW ELEVATION	= 209.5	FT
100 YEAR DISCHARGE	= 65	CFS
100 YEAR HW ELEVATION	= 210.44	FT
OVERTOPPING FREQUENCY	= 100 +/-	YRS
OVERTOPPING DISCHARGE	= 65 +/-	CFS
OVERTOPPING ELEVATION	= 210.38	FT

PIPE HYDRAULIC DATA
36" RCP Sta. 19+43 -Y33-

DRAINAGE AREA	= 14.5	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 44	CFS
DESIGN HW ELEVATION	= 205.1	FT
100 YEAR DISCHARGE	= 47	CFS
100 YEAR HW ELEVATION	= 205.36	FT
OVERTOPPING FREQUENCY	= 100 +	YRS
OVERTOPPING DISCHARGE	= 47 +	CFS
OVERTOPPING ELEVATION	= 208.35	FT



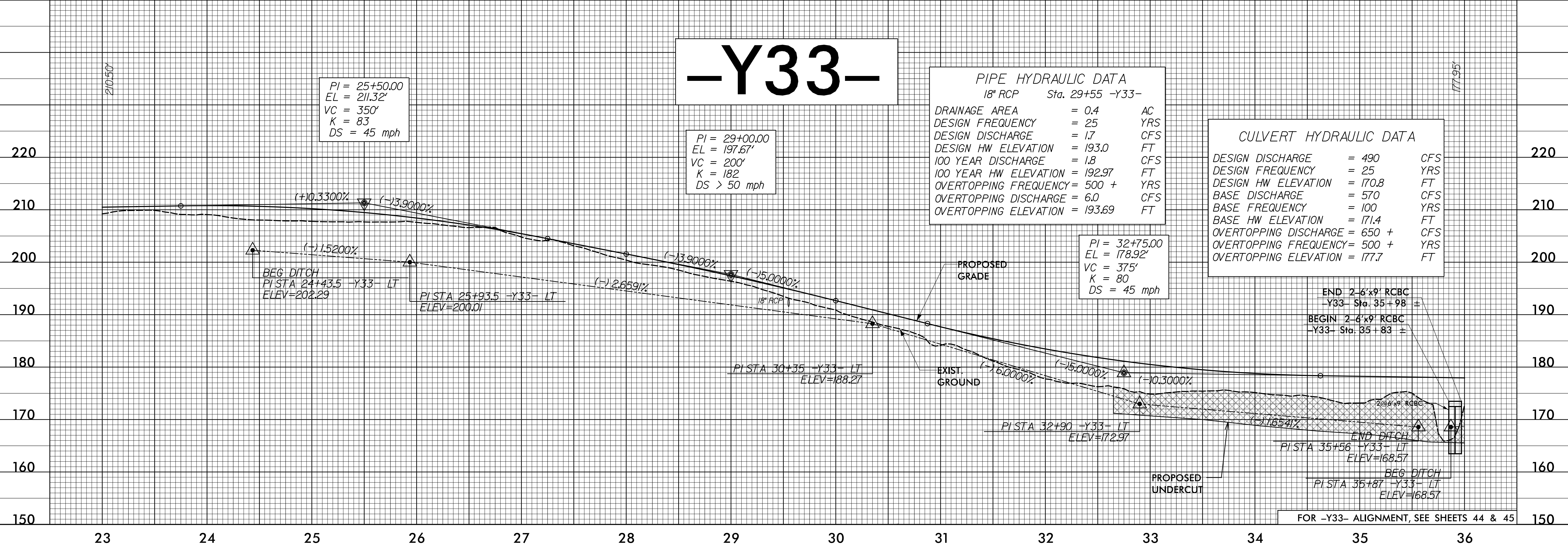
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PIPE HYDRAULIC DATA
18" RCP Sta. 29+55 -Y33-

DRAINAGE AREA	= 0.4	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 1.7	CFS
DESIGN HW ELEVATION	= 193.0	FT
100 YEAR DISCHARGE	= 1.8	CFS
100 YEAR HW ELEVATION	= 192.97	FT
OVERTOPPING FREQUENCY	= 500 +	YRS
OVERTOPPING DISCHARGE	= 6.0	CFS
OVERTOPPING ELEVATION	= 193.69	FT

CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 490	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 170.8	FT
BASE DISCHARGE	= 570	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 171.4	FT
OVERTOPPING DISCHARGE	= 650 +	CFS
OVERTOPPING FREQUENCY	= 500 +	YRS
OVERTOPPING ELEVATION	= 177.7	FT



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FOR -Y33- ALIGNMENT, SEE SHEETS 43 & 44

FOR -Y33- ALIGNMENT, SEE SHEETS 44 & 45