

5/28/99

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ROADWAY DESIGN ENGINEER David J. O'Connell Professional Engineer 9/23/2017 SEAL 035683	HYDRAULICS ENGINEER Andrew R. Hittinger Professional Engineer 9/23/2017 SEAL 18533
---	---

CDM Smith CDM Smith Inc. 5400 Glenwood Avenue Suite 400 Raleigh, NC 27608 No. CDA No. E-1250	M Engineering, PLLC 1011 Schaub Drive Raleigh, NC 27608 No. CDA No. E-1250
--	--

PIPE HYDRAULIC DATA
Structure No.0528 To 0529 -Y- Sta.31+60

DRAINAGE AREA	= 13.8	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 44	CFS
DESIGN HW ELEVATION	= 121.2	FT
100 YEAR DISCHARGE	= 47	CFS
100 YEAR HW ELEVATION	= 121.5	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 54	CFS
OVERTOPPING ELEVATION	= 122.5	FT

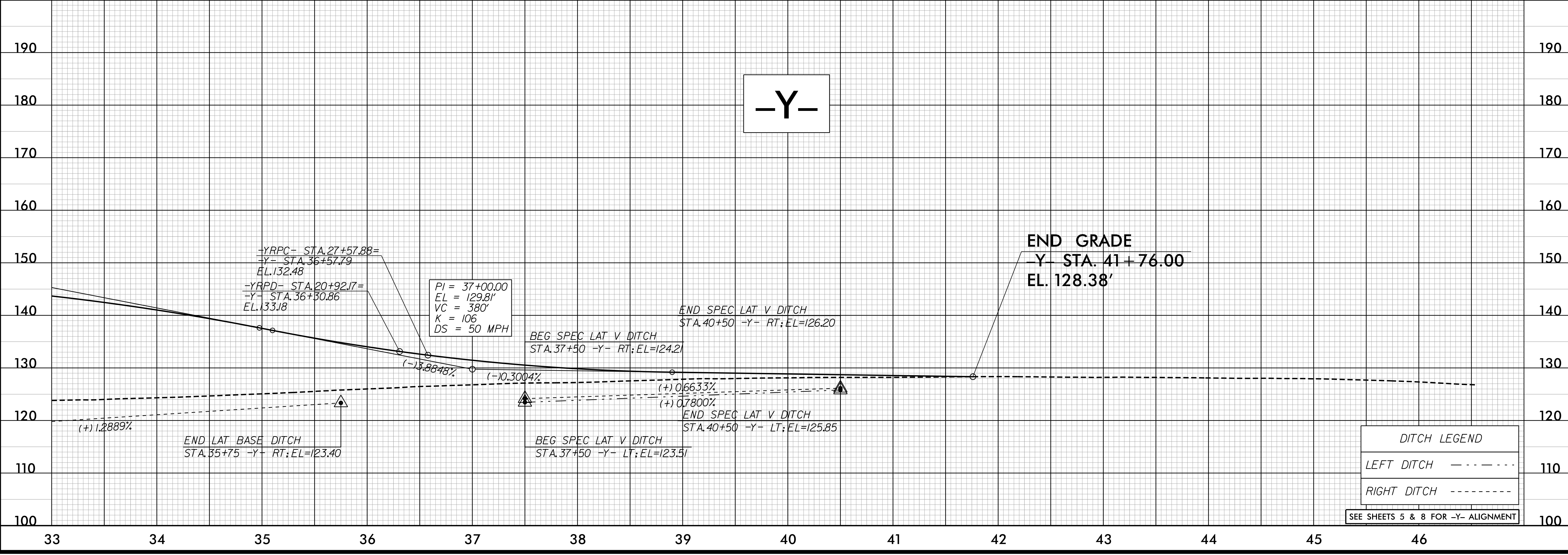
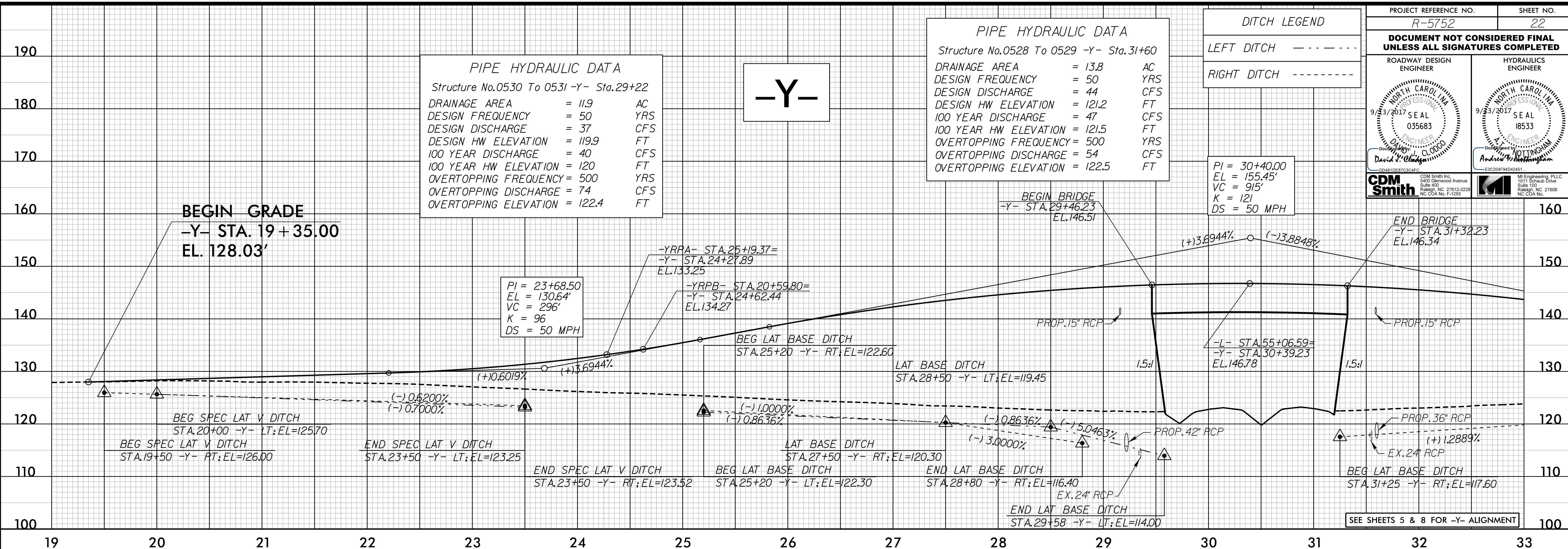
DITCH LEGEND
LEFT DITCH - - - - -
RIGHT DITCH - - - - -

PI = 30+40.00
EL = 155.45'
VC = 915'
K = 121
DS = 50 MPH

PIPE HYDRAULIC DATA
Structure No.0530 To 0531 -Y- Sta.29+22

DRAINAGE AREA	= 11.9	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 37	CFS
DESIGN HW ELEVATION	= 119.9	FT
100 YEAR DISCHARGE	= 40	CFS
100 YEAR HW ELEVATION	= 120	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 74	CFS
OVERTOPPING ELEVATION	= 122.4	FT

-Y-



-Y-

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

SEE SHEETS 5 & 8 FOR -Y- ALIGNMENT

invgrid_expansion
ITS:EP_C:\XRD\3122.dgn