

5/28/19

BM2 ELEVATION = 38.14
N 361096 E 2442378
L STATION 10+00.00
S 05°07'37.38" E Dist 155.46
RR SPIKE IN 24" PINE

HNTB
HNTB NORTH CAROLINA, P.C.
REGISTERED PROFESSIONAL ENGINEERS
STATE OF NORTH CAROLINA EXPIRES 12/31/2020
REG. LICENSE NO. C-1054

PROJECT REFERENCE NO. R-5023B
SHEET NO. 18

ROADWAY DESIGN ENGINEER
SEAL 25474
W. CRAIG PARKER
Professional Engineer
North Carolina
No. 25474
Exp. 12/31/2019

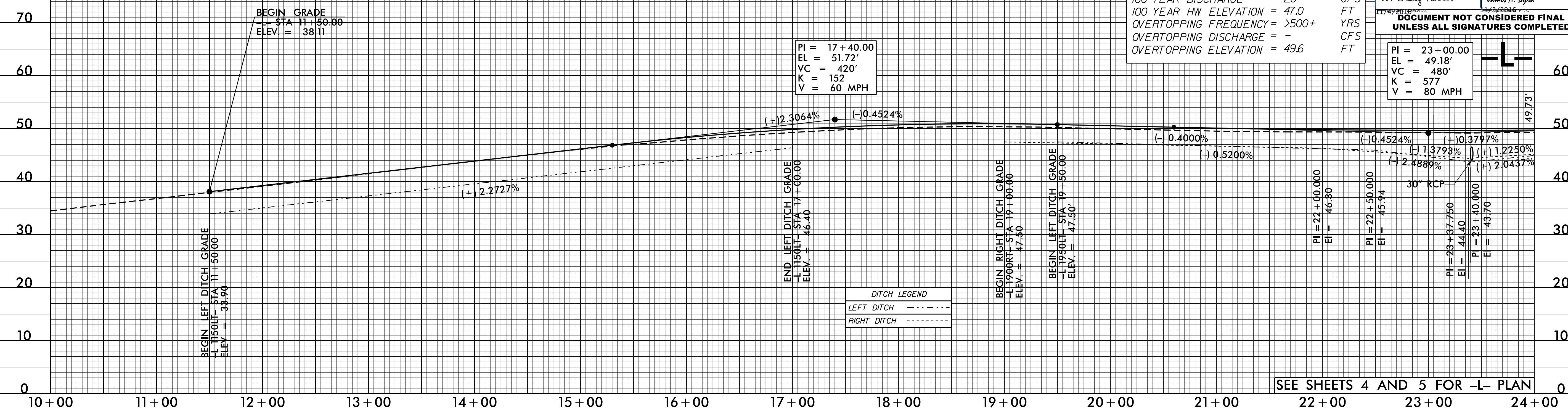
HYDRAULICS ENGINEER
SEAL 15764
JAMES A. BYRD
Professional Engineer
North Carolina
No. 15764
Exp. 12/31/2016

PIPE HYDRAULIC DATA
STR.0504, -L- Sta. 23+40

DRAINAGE AREA	= 7.2	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 24	CFS
DESIGN HW ELEVATION	= 46.9	FT
100 YEAR DISCHARGE	= 26	CFS
100 YEAR HW ELEVATION	= 47.0	FT
OVERTOPPING FREQUENCY	= >500+	YRS
OVERTOPPING DISCHARGE	= -	CFS
OVERTOPPING ELEVATION	= 49.6	FT

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PI = 23+00.00
EL = 49.18'
VC = 480'
K = 577
V = 80 MPH

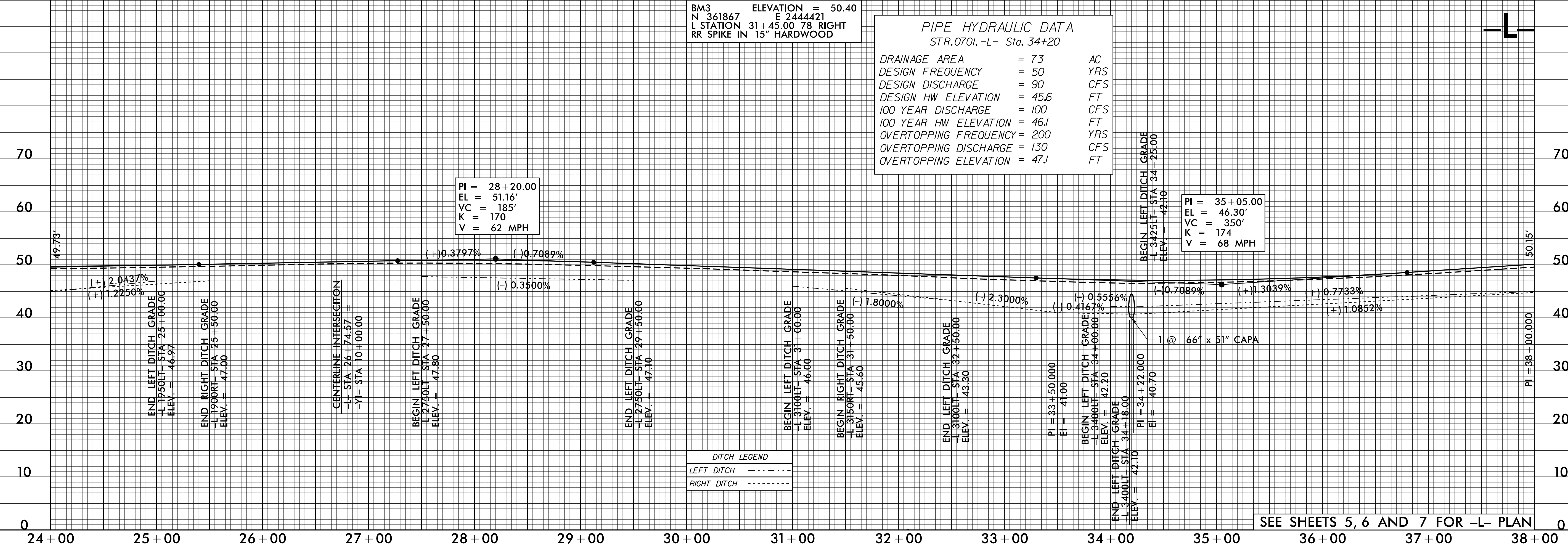


BM3 ELEVATION = 50.40
N 361867 E 2444421
L STATION 31+45.00 78 RIGHT
RR SPIKE IN 15" HARDWOOD

PIPE HYDRAULIC DATA
STR.0701, -L- Sta. 34+20

DRAINAGE AREA	= 73	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 90	CFS
DESIGN HW ELEVATION	= 45.6	FT
100 YEAR DISCHARGE	= 100	CFS
100 YEAR HW ELEVATION	= 46.1	FT
OVERTOPPING FREQUENCY	= 200	YRS
OVERTOPPING DISCHARGE	= 130	CFS
OVERTOPPING ELEVATION	= 47.1	FT

PI = 35+05.00
EL = 46.30'
VC = 350'
K = 174
V = 68 MPH



03-NOV-2016 12:03 V:\93533 Division 3 Environmental Outsourcing\Task Order 02 - NC 53\Roadway\Proj\RE023BC-RDY_PFL_PSH-18.dgn