

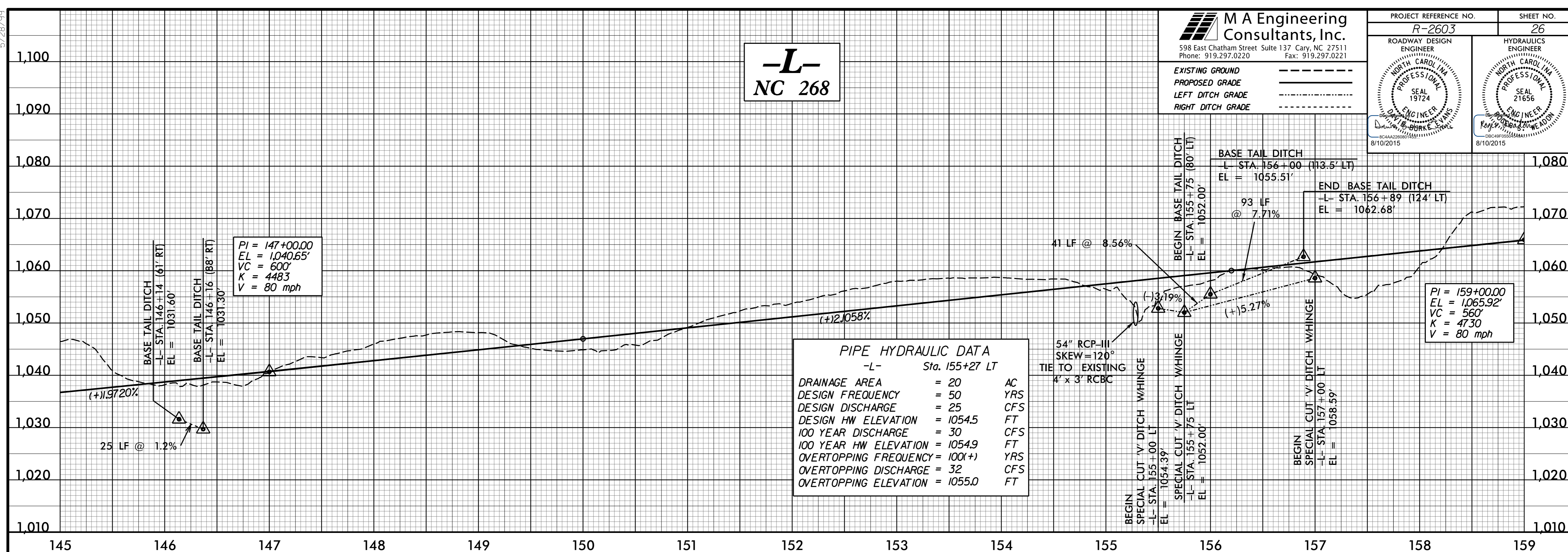
5/28/99

M A Engineering Consultants, Inc.
 598 East Chatham Street Suite 137 Cary, NC 27511
 Phone: 919.297.0220 Fax: 919.297.0221

EXISTING GROUND -----
 PROPOSED GRADE -----
 LEFT DITCH GRADE -----
 RIGHT DITCH GRADE -----

PROJECT REFERENCE NO. R-2603	SHEET NO. 26
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 19724 D. BURKE, E. LANS	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 21656 R. BURKE, E. LANS
8/10/2015	8/10/2015

-L- NC 268



PIPE HYDRAULIC DATA
 -L- Sta. 155+27 LT

DRAINAGE AREA	= 20	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 25	CFS
DESIGN HW ELEVATION	= 1054.5	FT
100 YEAR DISCHARGE	= 30	CFS
100 YEAR HW ELEVATION	= 1054.9	FT
OVERTOPPING FREQUENCY	= 100(+)	YRS
OVERTOPPING DISCHARGE	= 32	CFS
OVERTOPPING ELEVATION	= 1055.0	FT

PI = 147+00.00
 EL = 1,040.65'
 VC = 600'
 K = 4483
 V = 80 mph

PI = 159+00.00
 EL = 1,065.92'
 VC = 560'
 K = 4730
 V = 80 mph

PIPE HYDRAULIC DATA
 -L- Sta. 159+97 CL

DRAINAGE AREA	= 3.4	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 11	CFS
DESIGN HW ELEVATION	= 1064.7	FT
100 YEAR DISCHARGE	= 12	CFS
100 YEAR HW ELEVATION	= 1064.8	FT
OVERTOPPING FREQUENCY	= 500(+)	YRS
OVERTOPPING DISCHARGE	= 15	CFS
OVERTOPPING ELEVATION	= 1065.1	FT

PIPE HYDRAULIC DATA
 -L- Sta. 164+89 CL

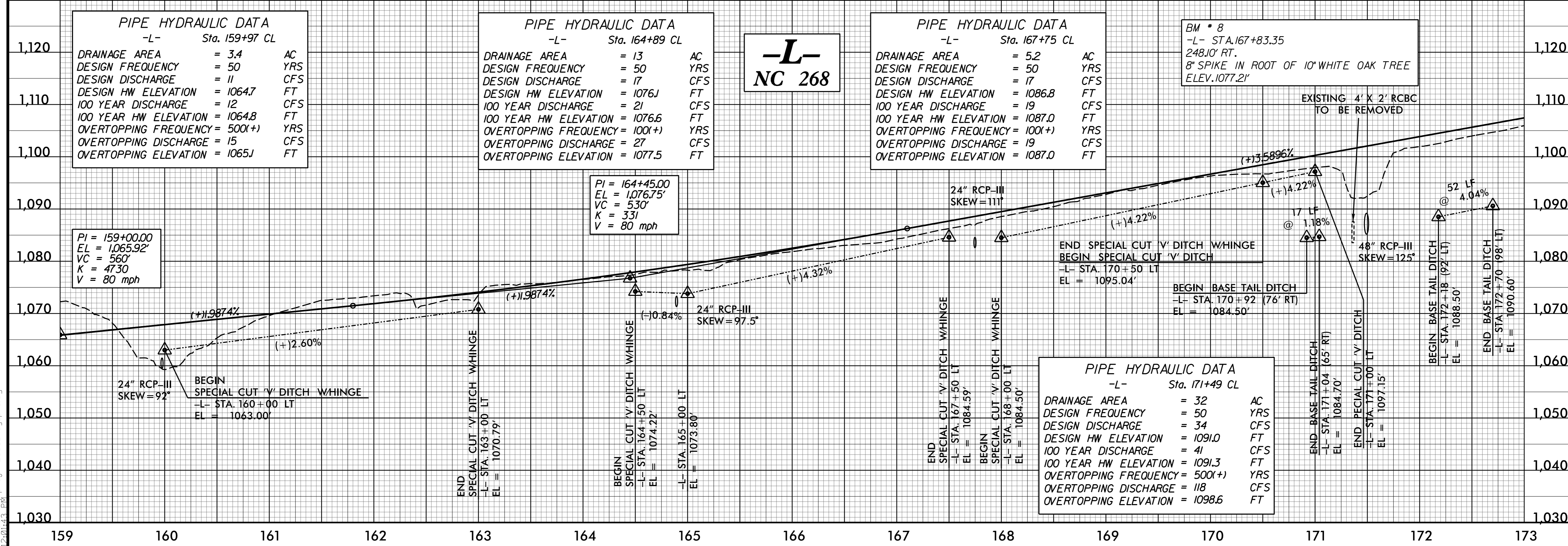
DRAINAGE AREA	= 13	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 17	CFS
DESIGN HW ELEVATION	= 1076.1	FT
100 YEAR DISCHARGE	= 21	CFS
100 YEAR HW ELEVATION	= 1076.6	FT
OVERTOPPING FREQUENCY	= 100(+)	YRS
OVERTOPPING DISCHARGE	= 27	CFS
OVERTOPPING ELEVATION	= 1077.5	FT

-L- NC 268

PIPE HYDRAULIC DATA
 -L- Sta. 167+75 CL

DRAINAGE AREA	= 5.2	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 17	CFS
DESIGN HW ELEVATION	= 1086.8	FT
100 YEAR DISCHARGE	= 19	CFS
100 YEAR HW ELEVATION	= 1087.0	FT
OVERTOPPING FREQUENCY	= 100(+)	YRS
OVERTOPPING DISCHARGE	= 19	CFS
OVERTOPPING ELEVATION	= 1087.0	FT

BM * 8
 -L- STA. 167+83.35
 248.10' RT.
 8" SPIKE IN ROOT OF 10' WHITE OAK TREE
 ELEV. 1,077.2'



PI = 159+00.00
 EL = 1,065.92'
 VC = 560'
 K = 4730
 V = 80 mph

PI = 164+50.00
 EL = 1,076.75'
 VC = 530'
 K = 331
 V = 80 mph

PIPE HYDRAULIC DATA
 -L- Sta. 171+49 CL

DRAINAGE AREA	= 32	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 34	CFS
DESIGN HW ELEVATION	= 1091.0	FT
100 YEAR DISCHARGE	= 41	CFS
100 YEAR HW ELEVATION	= 1091.3	FT
OVERTOPPING FREQUENCY	= 500(+)	YRS
OVERTOPPING DISCHARGE	= 118	CFS
OVERTOPPING ELEVATION	= 1098.6	FT

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