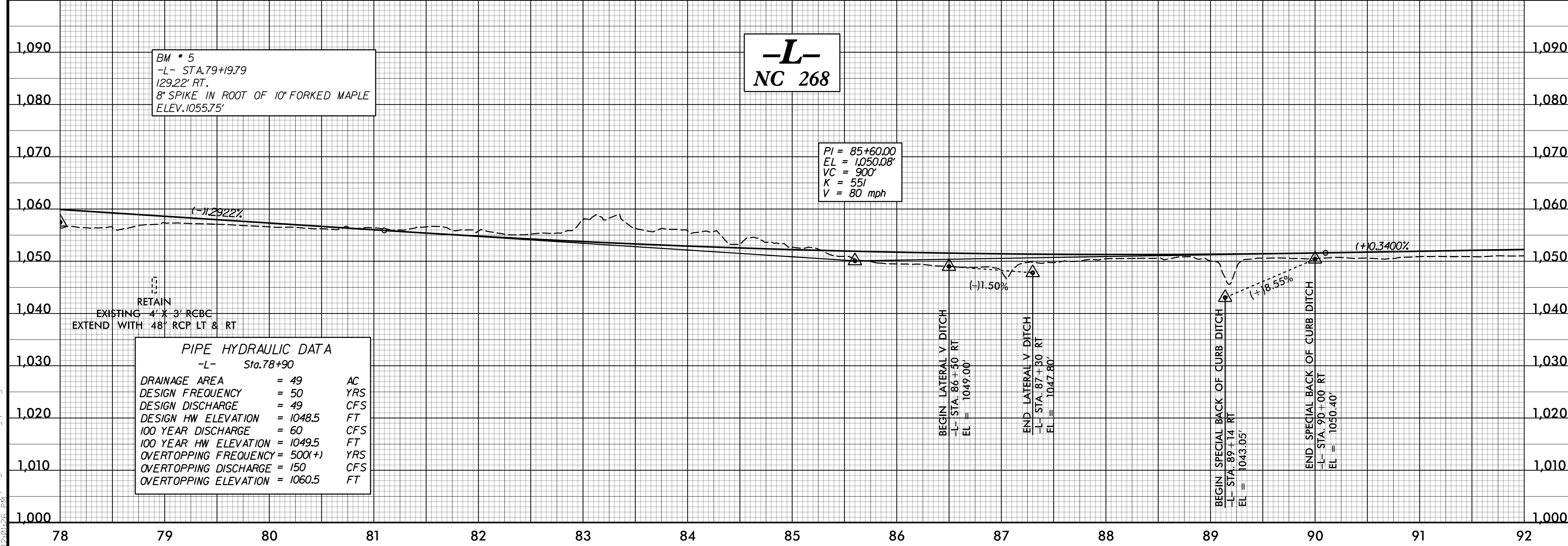
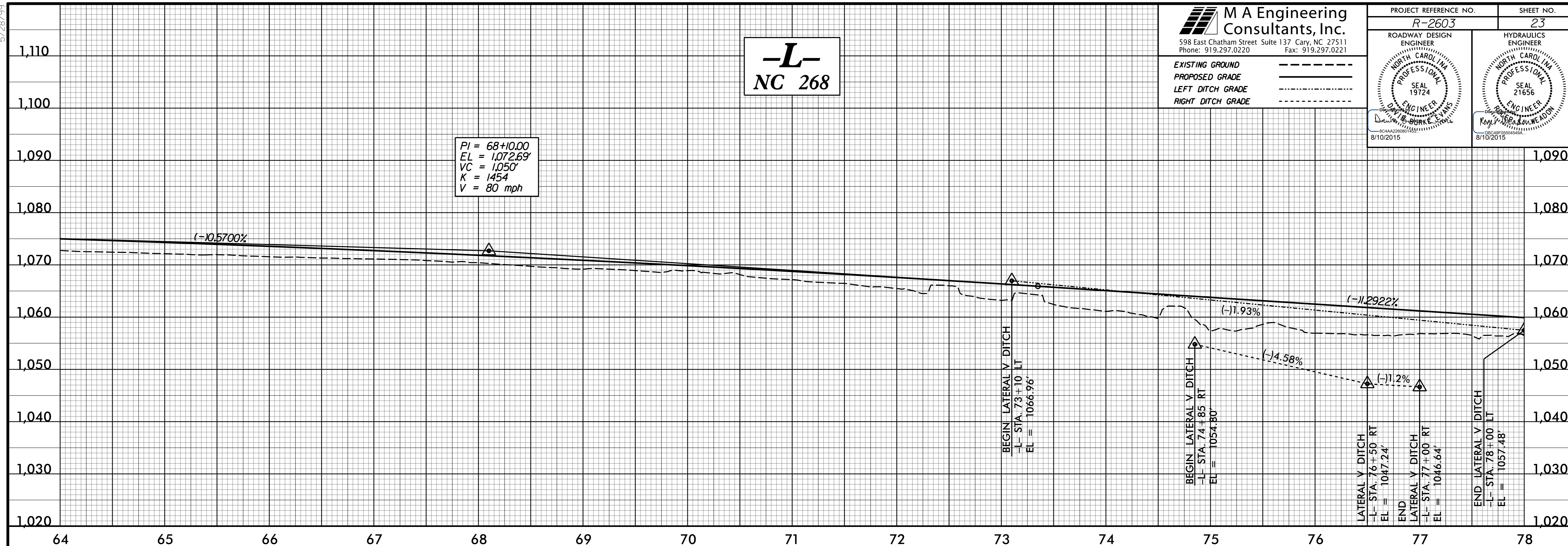


5/28/99

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. 23
ROADWAY DESIGN ENGINEER DAVID BURKE ELANS PROFESSIONAL SEAL 19724 8/10/2015	HYDRAULICS ENGINEER ROY W. HERRMAN ADONIS PROFESSIONAL SEAL 21656 8/10/2015



PIPE HYDRAULIC DATA
 -L- Sta. 78+90

DRAINAGE AREA	= 49	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 49	CFS
DESIGN HW ELEVATION	= 1048.5	FT
100 YEAR DISCHARGE	= 60	CFS
100 YEAR HW ELEVATION	= 1049.5	FT
OVERTOPPING FREQUENCY	= 500(+)	YRS
OVERTOPPING DISCHARGE	= 150	CFS
OVERTOPPING ELEVATION	= 1060.5	FT

RETAIN
 EXISTING 4' x 3' RCBC
 EXTEND WITH 48' RCP LT & RT

7/2/2015
 1:50:30 PM
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