PROJECT REFERENCE NO.	SHEET NO.
R-2707C	44

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 15869 ENGINEER TIMOTHY R REID

DocuSigned by: Timothy R. Reid

4/12/2017

moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
(919) 781-4626 FAX (919) 781-4865
PE-F-0105

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G DALTON

DocuSigned by: Joshua G. Dalton

4/12/2017

Sungate Design Group, P.A.
Engineering · Landscape Architecture · Environmental
919-A Jones Franklin Rd.
Raleigh, N.C. 27606

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L- US 74 (SHELBY BYPASS)

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.0606

DRAINAGE AREA	= 67 AC
DESIGN FREQUENCY	= 50 YRS
DESIGN DISCHARGE	= 175 CFS
DESIGN HW ELEVATION	= 736.0 FT
100 YEAR DISCHARGE	= 205 CFS
100 YEAR HW ELEVATION	= 737.0 FT
OVERTOPPING FREQUENCY	= +100 YRS
OVERTOPPING DISCHARGE	= +205 CFS
OVERTOPPING ELEVATION	= 759.0 FT

EXISTING GROUND

PROPOSED GRADE

(+)1.878 3%

66"

FOR -L- PLAN SEE SHEET 5

800 790 780 770 760 750 740 730 720 710

394 395 396 397 398 399 400 401 402 403 404 405 406

-L- US 74 (SHELBY BYPASS)

BM # 19
EL.= 743.84
N = 581644.2 E = 1238547.5
8 INCH NAIL IN BASE OF 15 INCH WHITE OAK
-L- STA. 406+30.34 85.93' (LT.)

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.0612

DRAINAGE AREA	= 16 AC
DESIGN FREQUENCY	= 50 YRS
DESIGN DISCHARGE	= 48 CFS
DESIGN HW ELEVATION	= 769.6 FT
100 YEAR DISCHARGE	= 56 CFS
100 YEAR HW ELEVATION	= 770.05 FT
OVERTOPPING FREQUENCY	= +100 YRS
OVERTOPPING DISCHARGE	= +56 CFS
OVERTOPPING ELEVATION	= 777.8 FT

PI = 418+00.00
EL = 787.00'
VC = 600'
K = 719
DS = 80 MPH

EXISTING GROUND

PROPOSED GRADE

(+)1.878 3%

(+)1.878 3%

36"

FOR -L- PLAN SEE SHEET 6

810 800 790 780 770 760 750 740 730 720

406 407 408 409 410 411 412 413 414 415 416 417 418