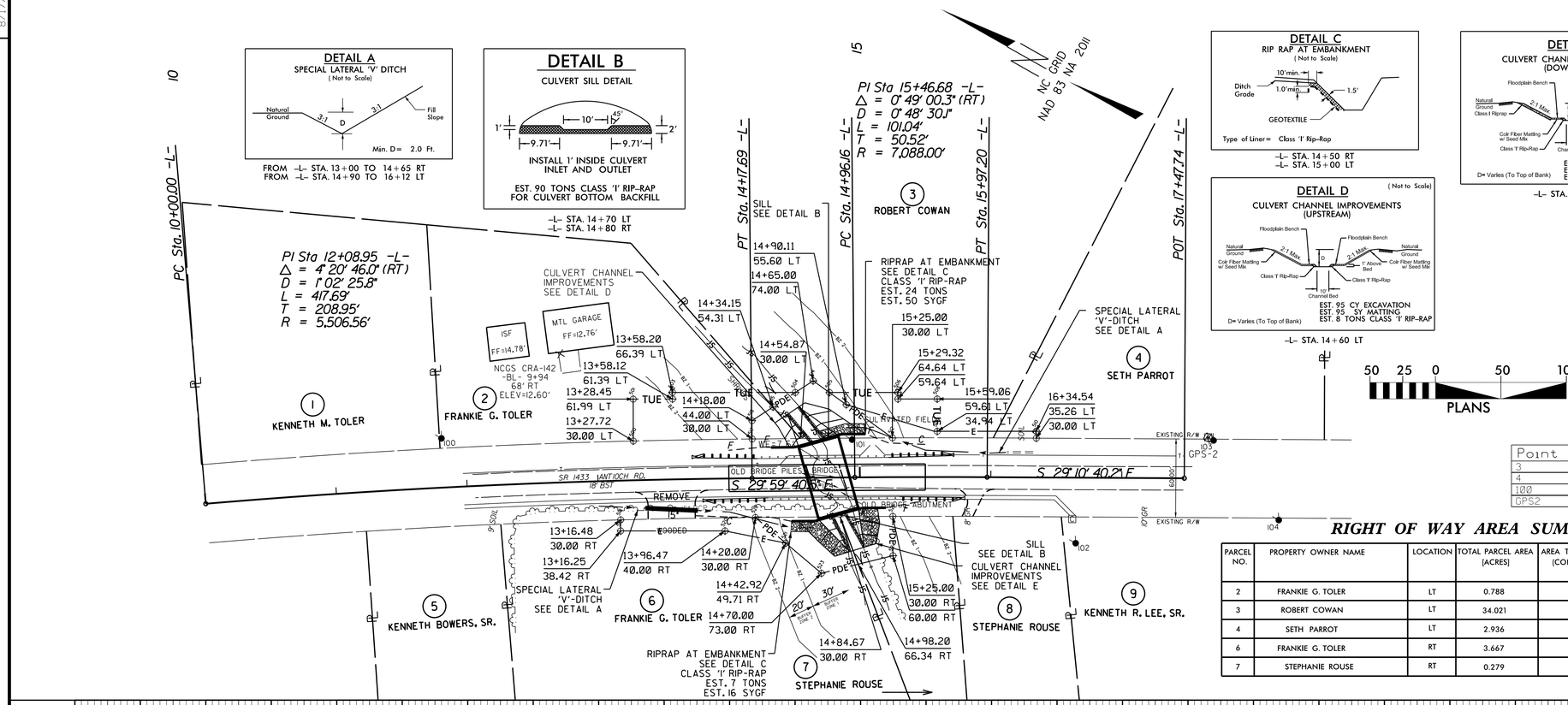
PROJECT REFERENCE NO.	SHEET NO.
17BP.2.R.56	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER BRIAN EDWARD EATMON 11327 — 3/30/2016



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS-2" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 524930.153(ft) EASTING: 2581612.336(ft) ELEVATION: 14.47(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987857
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-2" TO -L- STATION 10+00 IS N 32° 01' 50" W 747.3211'
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

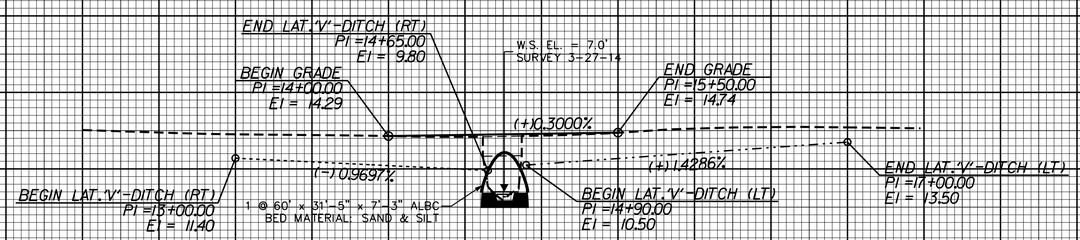
Point	North	East	Elevation	Description
3	525152.425	2581486.132	13.640	BL-3
4	525399.057	2581339.970	14.320	BL-4
100	525384.553	2581448.782	12.600	NCGS "CRA-142"
GPS2	524930.153	2581612.336	14.470	GPS-2

RIGHT OF WAY AREA SUMMARY

PARCEL NO.	PROPERTY OWNER NAME	LOCATION	TOTAL PARCEL AREA (ACRES)	AREA TO BE DEDICATED (CONST. EASEMENT) (ACRES)	AREA TO BE DEDICATED (TEMP. UTIL. EASEMENT) (ACRES)	AREA TO BE PURCHASED (PERM. UTIL. EASEMENT) (ACRES)	PARCEL AREA REMAINING (ACRES)
2	FRANKIE G. TOLER	LT	0.788		0.0766	0.0129	0.699
3	ROBERT COWAN	LT	34.021	0.033	0.0184	0.0487	33.921
4	SETH PARROT	LT	2.936	0.0037			2.932
6	FRANKIE G. TOLER	RT	3.667	0.0276		0.0447	3.595
7	STEPHANIE ROUSE	RT	0.279			0.0259	0.253

-L- PROFILE

SCALE: 1" = 50' HORIZ.
1" = 10' VERT.



CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 460	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 12.5	FT
BASE DISCHARGE	= 700	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 13.66	FT
OVERTOPPING DISCHARGE	= 800	CFS
OVERTOPPING FREQUENCY	= 200	YRS
OVERTOPPING ELEVATION	= 14.3	FT
DATE OF SURVEY	= 03/27/14	
W.S. ELEVATION AT DATE OF SURVEY	= 7.0	FT

1. INSTALL RIP-RAP ALONG LEFT AND RIGHT SIDES ONLY FOR THE ENTIRE CULVERT LENGTH TO FORM THE LOW FLOW CHANNEL. PLACE NATIVE MATERIAL ON TOP OF RIP-RAP TO FILL VOIDS AND PROVIDE A FLAT SURFACE FOR ANIMAL PASSAGE.

2. NATIVE MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM BED OR FLOODPLAIN AT THE PROJECT SITE DURING CULVERT CONSTRUCTION. NATIVE MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.

REVISIONS

8/17/99

28-MAR-2016 12:08
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