PROJECT REFERENCE NO. SHEET NO. BR-0109 ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL **UNLESS ALL SIGNATURES COMPLETED** 

1 TITLE SHEET  1A INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS  1B CONVENTIONAL SYMBOLS  2A-1 PAVEMENT SCHEDULE AND TYPICAL SECTIONS	SHEET NUMBER	SHEET
1B CONVENTIONAL SYMBOLS	1	TITLE SHEET
	1 A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
2A-1 PAVEMENT SCHEDULE AND TYPICAL SECTIONS	1B	CONVENTIONAL SYMBOLS
	2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS

#### DETAIL FOR GUARDRAIL SYSTEM PARTS 2C-1DETAIL FOR GUARDRAIL ANCHOR UNIT, TYPE III 2C-2 3B-1 SUMMARIES OF EARTHWORK, PAVEMENT REMOVAL, SHOULDER BERM GUTTER, AND GUARDRAIL

PLANS

3D-1	DRAINAGE SUMMARY
3G-1	GEOTECHNICAL SUMMARIES

3G-1	GEOTECHNICAL SUMMARIES
4	PLAN AND PROFILE SHEET
RW01 THRU RW04	RIGHT-OF-WAY PLANS

TMP-1 TH	RU TMP-2	TRANSPORTATION N	MANAGEMENT
PMP-1 TH	RU PMP-2	PAVEMENT MARKING	3 PLANS

UO-1 THRU UO-2	UTILITIES BY OTHERS PLANS
X-0	CROSS-SECTION SUMMARY SHEET

EROSION CONTROL PLANS

X-1 THRU X-4	CROSS-SECTIONS
S-1 THRU S-14	STRUCTURE PLANS

EC-1 THRU EC-5

2018 SPECIFICATIONS GENERAL NOTES: EFFECTIVE: 01-16-2018

#### GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

REVISED:

#### CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

#### SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

#### SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

#### SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

## SUBSURFACE DRAINS:

SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD, NO, 815,02 AT LOCATIONS DIRECTED BY THE ENGINEER.

## GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

## TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

## END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

# UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE FRONTIER NATURAL GAS COMPANY.

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

## RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

2018 ROADWAY ENGLISH STANDARD DRAWINGS

EFF. 01-16-2018 REV.

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch -N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

#### STD.NO. TITLE

DIVISION	2 - EARTHWORK
200.03	Method of Clearing - Method III

225.02 Guide for Grading Subgrade - Secondary and Local

225.04 Method of Obtaining Superelevation - Two Lane Pavement

DIVISION 3 - PIPE CULVERTS

300.01 Method of Pipe Installation

310.10 Driveway Pipe Construction

DIVISION 4 - MAJOR STRUCTURES 422.02 Bridge Approach Fills - Type II Modified Approach Fill

DIVISION 5 - SUBGRADE, BASES AND SHOULDERS

560.01 Method of Shoulder Construction - High Side of Superelevated Curve - Method I

DIVISION 8 - INCIDENTALS

815.02 Subsurface Drain

840.00 Concrete Base Pad for Drainage Structures

840.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe

840.24 Frames and Narrow Slot Sag Grates

840.25 Anchorage for Frames - Brick or Concrete or Precast

840.27 Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe

840.29 Frames and Narrow Slot Flat Grates 840.35 Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates

840.45 Precast Drainage Structure

840.46 Traffic Bearing Precast Drainage Structure

840.66 Drainage Structure Steps

846.01 Concrete Curb, Gutter and Curb & Gutter

846.04 Drop Inlet Installation in Shoulder Berm Gutter 862.01 Guardrail Placement

862.02 Guardrail Installation (Special Detail for Sheet 6 of 8)

862.03 Structure Anchor Units

866.04 Barbed Wire Fence with Wood Posts (2 - 7 Strands)

876.01 Rip Rap in Channels