SHEET

CONVENTIONAL SYMBOLS

SURVEY CONTROL SHEETS

INTERSECTION DETAILS

SHEAR POINT DETAILS

CURB RAMP DETAILS

DRAINAGE DETAILS

SPECIAL CURB DETAILS

GEOTECHNICAL DETAILS

NOISE WALL ENVELOPES

TYPICAL SECTIONS

STRUCTURE DETAILS

INDEX OF SHEETS, GENERAL

NOTES, AND LIST OF STANDARDS

ALIGNMENT CURVE DATA SHEETS

TEMPORARY PAVEMENT DETAIL

GUARDRAIL PLACEMENT DETAILS

GUARDRAIL INSTATLLATION DETAILS

COAL COMBUSTION PRODUCT PLACEMENT DETAIL

EARTHWORK, GUARDRAIL, PAVEMENT REMOVAL,

STRUCTURE ANCHOR UNIT DETAILS

DRAINAGE STRUCTURE DETAILS

STOCKPILE CONTAINMENT DETAIL

AND FENCING SUMMARY SHEETS

DRAINAGE SUMMARY SHEETS

TRAFFIC MANAGEMENT PLANS

PAVEMENT MARKING PLANS

EROSION CONTROL PLANS

REFORESTATION PLAN

METAL POLE DETAILS

SIGNAL COMMUNICATIONS PLANS

UTILITY CONSTRUCTION PLANS

UTILITIES BY OTHERS PLANS

CROSS SECTION INDEX OF SHEETS

CROSS SECTION EW SUMMARY SHEETS

STRUCTURE PLANS (-L- OVER -Y1)

STRUCTURE PLANS (-L- OVER -Y2)

STRUCTURE PLANS (-L- OVER -Y8)

STRUCTURE PLANS (-Y8RPDB- OVER -Y8-)

SIGNING PLANS

CROSS SECTIONS

CULVERT PLANS

CULVERT PLANS

CULVERT PLANS

CULVERT PLANS

NOISE WALL PLANS

RETAINING WALL PLANS

GEOTECHNICAL SUMMARIES

PARCEL INDEX SHEETS

PLAN SHEETS

PROFILE SHEETS

GUIDERAIL, SHOULDER BERM GUTTER,

ROADWAY SPECIAL DETAILS

TITLE SHEET

SHEET NUMBER

1C-1 THRU 1C-9

2A-1 THRU 2A-11

2B-1 THRU 2B-4

2B-5 THRU 2B-7

2B-8 THRU 2B-9

2C-1 THRU 2C-7

2C-8 THRU 2C-13

2C-14 THRU 2C-17

2C-18 THRU 2C-21

2C-22 THRU 2C-26

2C-27 THRU 2C-28

2C-30 THRU 2C-32

2D-1 THRU 2D-4

2G-1 THRU 2G-5

2N-1 THRU 2N-14

3B-1 THRU 3B-4

3D-1 THRU 3D-28

3P-1 THRU 3P-2

TMP-1 THRU TMP-34

PMP-1 THRU PMP-39

SIGN-1 THRU SIGN-24

SIG.M1 THRU SIG.M8

SCP-1 THRU SCP-52

UC-1 THRU UC-29

UO-1 THRU UO-34

X-1B THRU X-1H

X-1 THRU X-278

S1-1 THRU S1-36

S2-1 THRU S2-30

S3-1 THRU S3-36

S4-1 THRU S4-36

C1-1 THRU C1-6

C2-1 THRU C2-4

C3-1 THRU C3-7

C4-1 THRU C4-4

NW-1 THRU NW-17

W-1 THRU W-13

X-1 A

SIG.1.0 THRU SIG.16.5 SIGNAL PLANS

EC-1 THRU EC-61

4 THRU 34

35 THRU 67

2B-10 THRU 2B-11

1 A

1B

2B-12

2C-29

2H-1

3G-1

GENERAL NOTES:

2012 SPECIFICATIONS EFFECTIVE: 01-17-2012 01-24-2017

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS, WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

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

DRIVEWAYS:

WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 900 MM RADII OR RADII AS SHOWN ON THE PLANS, LOCATIONS OF DRIVES

STREET TURNOUT:

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED ON PLANS.

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 CAPE FEAR PUBLIC UTILITY AUTHORITY, DUKE ENERGY PROGRESS, AT&T, LEVEL 3, CHARTER COMMUNICATIONS, MCNC, SPIRIT COMMUNICATIONS, PIEDMONT NATURAL GAS, TIME WARNER CABLE, AND CENTURY LINK. ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

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

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06.

STANDARD DRAWINGS

2012 ROADWAY ENGLISH STANDARD DRAWINGS EFF. 01-17-2012 REV. 05-24-2017

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO. TITLE

DIVISION 2 - EARTHWORK

225.01 Guide for Grading Subgrade - Interstate and Freeway

225.02 Guide for Grading Subgrade - Secondary and Local

225.03 Deceleration and Acceleration Lanes

225.04 Method of Obtaining Superelevation - Two Lane Pavement

Method of Obtaining Superelevation - Divided Highways 225.05 Method of Grading Sight Distance at Intersections 225.06

225.07 Grading for False Cut at Grade Separations

Guide for Shoulder and Ditch Transition at Grade Separations 225.09



U-4751 /A ROADWAY DESIGN **ENGINEER** Scain CiosASAlleins 043891

SHEET NO.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.

STANDARD DRAWINGS (CONT.)

```
DIVISION 3 - PIPE CULVERTS
       Method of Pipe Installation
         Driveway Pipe Construction
DIVISION 4 - MAJOR STRUCTURES
422.10 Reinforced Bridge Approach Fills
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS
         Method of Shoulder Construction - High Side of Superelevated Curve - Method I
         Method of Shoulder Construction - High Side of Superelevated Curve - Method II
         (Sheet 2 of 3 is no longer applicable)
DIVISION 6 - ASPHALT BASES AND PAVEMENTS
         Guide for Paving Shoulders Under Bridges - Method III
         Pavement Repairs
654.01
         Asphalt Shoulders - Milled Rumble Strips
DIVISION 8 - INCIDENTALS
         Subsurface Drain
         Concrete Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90 Skew
         Brick Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90 Skew
         Reinforced Concrete Endwall - for Single 54" Pipe 90 Skew
838.27
         Reinforced Concrete Endwall - for Single 60" Pipe 90 Skew
838.45
         Notes for Reinforced Concrete Endwall - Std. Dwg 838.21 thru 838.40
         Reinforced Brick Endwall - for Single 54" Pipe 90 Skew
         Reinforced Brick Endwall - for Single 60" Pipe 90 Skew
         Notes for Reinforced Brick Endwall - Std. Dwg 838.51 thru 838.70
         Precast Endwalls – 12" thru 72" Pipe 90 Skew
         Brick Catch Basin - 12" thru 54" Pipe
840.01
         Concrete Catch Basin - 12" thru 54" Pipe
840.02
         Frame, Grates and Hood - for Use on Standard Catch Basin
         Concrete Open Throat Catch Basin - 12" thru 48" Pipe
         Brick Open Throat Catch Basin – 12" thru 48" Pipe
         Concrete Drop Inlet - 12" thru 30" Pipe
         Brick Drop Inlet - 12" thru 30" Pipe
840.15
         Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
         Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
         Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.20
        Frames and Wide Slot Flat Grates
         Frames and Wide Slot Sag Grates
840.24
         Frames and Narrow Slot Sag Grates
         Anchorage for Frames - Brick or Concrete or Precast
840.25
         Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
840.26
         Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.27
840.29
         Frames and Narrow Slot Flat Grates
         Concrete Junction Box - 12" thru 66" Pipe
840.31
         Brick Junction Box - 12" thru 66" Pipe
840.32
         Traffic Bearing Junction Box - for Use with Pipes 42" and Under
840.34
         Traffic Bearing Grated Drop Inlet – for Cast Iron Double Frame and Grates
840.35
840.45
         Precast Drainage Structure
         Traffic Bearing Precast Drainage Structure
840.46
         Brick Manhole - 12" thru 36" Pipe
840.51
840.52
         Precast Manhole - 4', 5' and 6' Diameter
         Precast Manhole with Masonry Base - 12" thru 42" Pipe
840.53
         Manhole Frame and Cover
840.54
840.66
         Drainage Structure Steps
840.71
         Concrete and Brick Pipe Plug
840.72
         Pipe Collar
846.01
         Concrete Curb, Gutter and Curb & Gutter
         Drop Inlet Installation in Shoulder Berm Gutter
846.04
848.01
         Concrete Sidewalk
         Driveway Turnout - Radius Type
848.02
         Driveway Turnout - Drop Curb Type
848.03
848.04
         Street Turnout
848.05
         Curb Ramp - Proposed Curb & Gutter
852.01
         Concrete Islands
         Method for Placement of Drop Inlets in Grassed Median - Using 1'-6" Curb and Gutter
         Median Curb for Catch Basin - for Use with 1'-6" Curb and Gutter
852.05
         Method for Placement of Drop Inlets in Concrete Islands
852.10
         Median Construction - with Curb and Gutter
         Double Faced Concrete Barrier - Types 'T', 'T1' and 'T2'
854.02
         Precast Reinforced Concrete Barrier - 41" Single Faced
862.04
         Anchoring End of Guardrail - B-77 and B-83 Anchor Units
865.01
         Cable Guiderail
         Chain Link Fence - 4', 5' and 6' High Fence
866.01
866.02
         Woven Wire Fence - with Wood Post
         Rip Rap in Channels
876.01
876.02
         Guide for Rip Rap at Pipe Outlets
876.04
         Drainage Ditches with Class 'B' Rip Rap
```