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STD.NO.

The following Roadway Standards as appear in "Roadway Standard Drawings" Contracts Standards and Development Unit - N. C. Department of Transportation - Raleigh, N. C., Dated January 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:

**DIVISION 2 - EARTHWORK** 200.03 Method of Clearing - Method III 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 225.05 Method of Obtaining Superelevation - Divided Highways
225.09 Guide for Shoulder and Ditch Transition at Grade Separations

TITLE

240.01 Guide for Berm Ditch Construction **DIVISION 3 - PIPE CULVERTS** 310.10 Driveway Pipe Construction DIVISION 4 - MAJOR STRUCTURES

423.01 Bridge Approach Fills - Type 1 Approach Fill for Bridge Abutment 423.02 Bridge Approach Fills - Type 1A Alternate Approach Fill for Integral Bridge Abutment DIVISION 5 - SUBGRADE, BASES AND SHOULDERS

560.01 Method of Shoulder Construction - High Side of Superelevated Curve - Method I 560.02 Method of Shoulder Construction - High Side of Superelevated Curve - Method II DIVISION 6 - ASPHALT BASES AND PAVEMENTS

610.03 Guide for Paving Shoulders Under Bridges - Method III 654.01 Pavement Repairs

665.01 Asphalt Shoulders - Milled Rumble Strips 665.02 Limits for Asphalt Shoulders - Milled Rumble Strips DIVISION 8 - INCIDENTALS

806.01 Concrete Right-of-Way Marker 806.03 Concrete Contol of Access Marker 815.02 Subsurface Drain

816.01 Concrete Pads - for Shoulder Drain Installation 816.02 Aggregate Shoulder Drain 816.04 Markers for Drainage Structure and Concrete Pad

838.01 Concrete Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90 Skew 838.11 Brick Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90 Skew

838.21 Reinforced Concrete Endwall - for Single 54" Pipe 90 Skew 838.45 Notes for Reinforced Concrete Endwall - Std. Dwg 838.21 thru 838.40

838.51 Reinforced Brick Endwall - for Single 54" Pipe 90 Skew
838.75 Notes for Reinforced Brick Endwall - Std. Dwg 838.51 thru 838.70

838.80 Precast Endwalls - 12" thru 72" Pipe 90 Skew 840.00 Concrete Base Pad for Drainage Structures

840.01 Brick Catch Basin - 12" thru 54" Pipe 840.02 Concrete Catch Basin - 12" thru 54" Pipe

840.03 Frame, Grates and Hood - for Use on Standard Catch Basin

840.14 Concrete Drop Inlet - 12" thru 30" Pipe 840.15 Brick Drop Inlet - 12" thru 30" Pipe

840.16 Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15

840 18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe 840.20 Frames and Wide Slot Flat Grates

840.22 Frames and Wide Slot Sag Grates 840.24 Frames and Narrow Slot Sag Grates

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

840.29 Frames and Narrow Slot Flat Grates 840.31 Concrete Junction Box - 12" thru 66" Pipe 840.32 Brick Junction Box - 12" thru 66" Pipe

840.35 Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates

840.37 Steel Grate and Frame 840.45 Precast Drainage Structure

840.46 Traffic Bearing Precast Drainage Structure

840.54 Manhole Frame and Cover 840.66 Drainage Structure Steps 840.71 Concrete and Brick Pipe Plug

840.72 Pipe Collar

846.01 Concrete Curb, Gutter and Curb & Gutter

846.04 Drop Inlet Installation in Shoulder Berm Gutter 848 04 Street Turnout

850.01 Concrete Paved Ditches

850.10 Guide for Berm Drainage Outlet - 15" and 18" Pipe 850.11 Guide for Berm Drainage Outlet - 24" and 30" Pipe

852.01 Concrete Islands

852.06 Method for Placement of Drop Inlets in Concrete Islands

862.01 Guardrail Placement (Use Details in Lieu of Standards for Sheets 4, 6, 12, and 14 of 15)

862.02 Guardrail Installation

862.03 Structure Anchor Units (Use Detail in Lieu of Standard for Sheet 8 of 9) 862.04 Anchoring End of Guardrail - for B-77 and B-83 Anchor Units

866.02 Woven Wire Fence - with Wood Post

876.01 Rip Rap in Channels and Ditches 876.02 Guide for Rip Rap at Pipe Outlets

876.04 Drainage Ditches with Class 'B' Rip Rap

**GENERAL NOTES:** 

2024 SPECIFICATIONS EFFECTIVE: 01-16-2024 U-6187

FINAL

**REVISED:** 

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 METHOD III.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 AND 225.05 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 AND 560.02.

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.

**BERM DITCHES:** 

BERM DITCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 240.01 AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

TEMPORARY SHORING:

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

SUBSURFACE DRAINS:

SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

SHOULDER DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 816.02 AND DETAILS IN PLANS AT LOCATIONS DIRECTED BY THE ENGINEER.

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.

**SUBSURFACE PLANS:** 

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

**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: DUKE ENERGY, PIEDMONT NATURAL GAS, CHARTER, AND YADTEL

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 CONTRACT.