



EFF. 01-17-2012
REV. 10-30-2012

2012 ROADWAY ENGLISH STANDARD DRAWINGS

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 |
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| DIVISION 2 - EARTHWORK | |
| 200.02 | Method of Clearing - Method II |
| 225.02 | Guide for Grading Subgrade - Secondary and Local |
| 225.04 | Method of Obtaining Superelevation - Two Lane Pavement |
| 225.06 | Method of Grading Sight Distance at Intersections |
| 240.01 | Guide for Berm Ditch Construction |
| DIVISION 3 - PIPE CULVERTS | |
| 300.01 | Method of Pipe Installation |
| 310.10 | Driveway Pipe Construction |
| DIVISION 5 - SUBGRADE, BASES AND SHOULDERS | |
| 560.01 | Method of Shoulder Construction - High Side of Superelevated Curve - Method I |
| DIVISION 6 - ASPHALT BASES AND PAVEMENTS | |
| 654.01 | Pavement Repairs |
| DIVISION 8 - INCIDENTALS | |
| 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 |
| 838.80 | Precast Endwalls - 12" thru 72" Pipe 90 Skew |
| 840.00 | Concrete Base Pad for Drainage Structures |
| 840.17 | Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe |
| 840.18 | Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe |
| 840.19 | Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe |
| 840.24 | Frames and Narrow Slot Sag Grates |
| 840.25 | Anchorage for Frames - Brick or Concrete or Precast |
| 840.26 | Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe |
| 840.27 | Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe |
| 840.28 | Brick Grated Drop Inlet Type 'D' - 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 |
| 840.34 | Traffic Bearing Junction Box - for Use with Pipes 42" and Under |
| 840.35 | Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates |
| 840.41 | Spring Box - Concrete or Brick |
| 840.45 | Precast Drainage Structure |
| 840.46 | Traffic Bearing Precast Drainage Structure |
| 840.54 | Manhole Frame and Cover |
| 840.66 | Drainage Structure Steps |
| 846.01 | Concrete Curb, Gutter and Curb & Gutter |
| 846.02 | Drop Inlet Installation in Expressway Gutter |
| 846.04 | Drop Inlet Installation in Shoulder Berm Gutter |
| 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 |
| 862.01 | Guardrail Placement |
| 862.02 | Guardrail Installation |
| 862.03 | Structure Anchor Units |
| 866.02 | Woven Wire Fence - with Wood Post |
| 866.04 | Barbed Wire Fence with Wood Posts (2 - 7 Strands) |
| 876.01 | Rip Rap in Channels |
| 876.02 | Guide for Rip Rap at Pipe Outlets |
| 876.04 | Drainage Ditches with Class 'B' Rip Rap |

| SHEET NUMBER | SHEET |
|--------------------|---|
| 1 | TITLE SHEET |
| 1-A | INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS |
| 1-B | CONVENTIONAL SYMBOLS |
| 1C-1 THRU 1C-4 | SURVEY CONTROL SHEET |
| 2A-1 THRU 2A-2 | PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAILS |
| 2C-1 | TRAFFIC BEARING DROP INLET DETAIL |
| 2C-2 | GUIDE FOR BERM DRAINAGE OUTLET DETAIL |
| 2C-3 | PIPE COLLAR DETAIL |
| 2C-4 | 2-STRAND ELECTRIC WIRE FENCE DETAIL |
| 2C-5 | SLOTTED DRAIN DETAIL |
| 2G-1 THRU 2G-3 | STANDARD TEMPORARY WALL DETAIL SHEETS |
| 2H-1 | STOCKPILE CONTAINMENT DETAIL |
| 3B-1 | SUMMARY OF EARTHWORK & PAVEMENT REMOVAL SUMMARY |
| 3B-2 | GUARDRAIL SUMMARY, TEMPORARY GUARDRAIL SUMMARY |
| 3D-1 THRU 3D-5 | DRAINAGE SUMMARY |
| 3G-1 | GEOTECHNICAL SUMMARY SHEET |
| 3P-1 | PARCEL INDEX SHEET |
| 4 THRU 24 | PLAN AND PROFILE SHEETS |
| TMP-1 THRU TMP-17 | TRAFFIC MANAGEMENT PLANS |
| PMP-1 THRU PMP-4 | PAVEMENT MARKING PLANS |
| EC-1 THRU EC-23 | EROSION CONTROL PLANS |
| RF-1 | REFORESTATION DETAIL SHEET |
| SIGN-1 THRU SIGN-4 | SIGNING PLANS |
| UO-1 THRU UO-10 | UTILITIES BY OTHERS |
| X | CROSS-SECTION INDEX |
| X-A(1) THRU X-A(2) | CROSS-SECTION SUMMARY |
| X-1 THRU X-113 | CROSS-SECTIONS |
| S-0 THRU S-17 | STRUCTURE PLANS |

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012
REVISED: 10-31-2014

GRADING AND SURFACING:

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 AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED 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 II.

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.

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.

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 NOT SHOWN ON THE PLANS WILL BE PAID FOR AT THE CONTRACT PRICE FOR "TEMPORARY SHORING".

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE FRONTIER COMMUNICATIONS AND BLUE RIDGE MOUNTAIN EMC.

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

ROCK:

ROCK IS ANTICIPATED BETWEEN -L- 58+50-60+00, 64+50-68+00, & 78+50-82+50. BLASTING MAY BE REQUIRED FOR EXCAVATION ON THE PROJECT. SEE SECTION 220 OF THE STANDARD SPECIFICATIONS AND IF APPLICABLE, ROCK BLASTING PROVISION.

8/17/09