TEMPORARY GUARDRAIL SUMMARY
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PARCEL INDEX SHEET

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TMP-1 THRU TMP-60 TRANSPORTATION MANAGEMENT PLANS

PLAN SHEETS

EC-1 THRU EC-39 EROSION CONTROL PLANS

SIGN-1 THRU SIGN-17 SIGNING PLANS

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CU_6-1 THRU CU_6-15

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X-1A THRU X-1G CROSS SECTION SUMMARY SHEETS

X-1 THRU X-466 CROSS-SECTIONS

W-1 THRU W-3 WALL PLANS
S-1 THRU S-6 HEADWALL PLANS
CU_4-1 THRU CU_4-8 CULVERT PLANS 4

EFF. 01-16-2018 REV. 2018 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, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO. TITLE
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
310.02 Parallel Pipe End Section - Precast Concrete Section for 15" to 24" Pipe
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
815.02 Subsurface Drain

815.03 Pipe Underdrain and Blind Drain
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 Reinforced Concrete Endwall - for Single 60" Pipe 90 Skew Reinforced Concrete Endwall - for Single 66" Pipe 90 Skew Reinforced Concrete Endwall - for Single 72" Pipe 90 Skew Notes for Reinforced Concrete Endwall - Std. Dwg 838.21 thru 838.40

838.51 Reinforced Brick Endwall - for Single 54" Pipe 90 Skew
838.57 Reinforced Brick Endwall - for Single 60" Pipe 90 Skew
838.63 Reinforced Brick Endwall - for Single 66" Pipe 90 Skew
838.69 Reinforced Brick Endwall - for Single 72" 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

840.15 Brick Drop Inlet - 12" thru 30" Pipe
840.16 Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.17 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

840.25 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

840.45 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
846.02 Drop Inlet Installation in Expressway 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
 857.01 Precast Reinforced Concrete Barrier - 41" Single Faced
 862.01 Guardrail Placement

862.02 Guardrail Installation
862.04 Anchoring End of Guardrail - B-77 and B-83 Anchor Units

866.01 Chain Link Fence - 4', 5' and 6' High Fence 876.01 Rip Rap in Channels

876.02 Guide for Rip Rap at Pipe Outlets876.04 Drainage Ditches with Class 'B' Rip Rap

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

SUBSURFACE DRAINS:

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

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 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.

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 BLUE RIDGE MOUNTAIN EMC,

TVA TRANSMISSION, FRONTIER COMMUNICATIONS, BALSAM WEST COMMUNICATIONS,

MURPHY CABLE, AND TOWN OF MURPHY

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 THE STATIONS BELOW. BLASTING MAY BE REQUIRED FOR EXCAVATION ON THE PROJECT. SEE SECTION 220 OF THE STANDARD SPECIFICATIONS AND IF APPLICABLE, ROCK BLASTING PROVISION.

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PROJECT REFERENCE NO.

R-5861

R/W SHEET NO.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SHEET NO.

/Α

ROADWAY DESIGN

ENGINEER