PROJECT REFERENCE NO. SHEET NO. U-5748 /A

ROADWAY DESIGN ENGINEER

2018 ROADWAY ENGLISH STANDARD DRAWINGS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED EFF. 01-16-2018

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STRUCTURE PLANS TITLE SHEET

STRUCTURE PLANS (NBL BRIDGE)

STRUCTURE PLANS (SBL BRIDGE)

STRUCTURE PLANS STANDARD NOTES

STRUCTURE PLANS SOUND BARRIER WALLS

S1-01 THRU S1-61

S2-01 THRU S2-58

SBW-1 THRU SBW-3

GENERAL NOTES

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 III.

SUPERELEVATION:

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

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.

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS 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 AS THE CONTRACT PRICE FOR "TEMPROARY SHORING".

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 (POWER DISTRIBUTION), WAKE EMC (POWER DISTRIBUTION), CHARTER (CATV), AT&T (TELECOM), DOMINION ENERGY (NATURAL GAS), AND THE CITY OF RALEIGH (WATER AND SANITARY SEWER).

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.

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.

ROCK

ROCK IS ANTICIPATED BETWEEN -L- 70+50 AND -L- 77+70. 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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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
225.01 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
225.06 Method of Grading Sight Distance at Intersections
DIVISION 3 - PIPE CULVERTS
300.01 Method of Pipe Installation
310.10 Driveway Pipe Construction
DIVISION 4 - MAJOR STRUCTURES
422.03 Reinforced Bridge Approach Fills - Type A Alternate Approach Fill for Integral Abutment
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
806.01 Concrete Right-of-Way Marker
806.03 Concrete Control of Access Marker
        Pipe Underdrain and Blind Drain
838.01
        Concrete Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90 Skew
        Concrete 'L' Endwall for Single Pipe Culverts - 15" thru 48" Pipe
838.11 Brick Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90 Skew
838.15 Brick 'L' Endwall for Single Pipe Culverts - 15" thru 48" Pipe
838.39 Reinforced Concrete Endwall - for Single 72" Pipe 90 Skew
838.45 Notes for Reinforced Concrete Endwall - Std. Dwg 838.21 thru 838.40
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
         Concrete Drop Inlet - 12" thru 30
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
840.20 Frames and Wide Slot Flat Grates
840.22 Frames and Wide Slot Sag Grates
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
840.37 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
840.72 Pipe Collar
846.01 Concrete Curb, Gutter and Curb & Gutter
848.01 Concrete Sidewalk
848.02 Driveway Turnout - Radius Type
848.04 Street Turnout
848.05 Curb Ramp - Proposed Curb & Gutter
848.06 Curb Ramp - Existing Curb & Gutter
852.01 Concrete Islands
852.05 Median Curb for Catch Basin - for Use with 1'-6" Curb and Gutter
852.06 Method for Placement of Drop Inlets in Concrete Islands
852.10 Median Construction - with Curb and Gutter
857.01 Precast Reinforced Concrete Barrier - 41" Single Faced
862.01 Guardrail Placement
862.02 Guardrail Installation
862.03 Structure Anchor Units
862.04 Anchoring End of Guardrail - B-77 and B-83 Anchor Units
866.02 Woven Wire Fence - with Wood Post
876.01 Rip Rap in Channels
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876.02 Guide for Rip Rap at Pipe Outlets

876.04 Drainage Ditches with Class 'B' Rip Rap