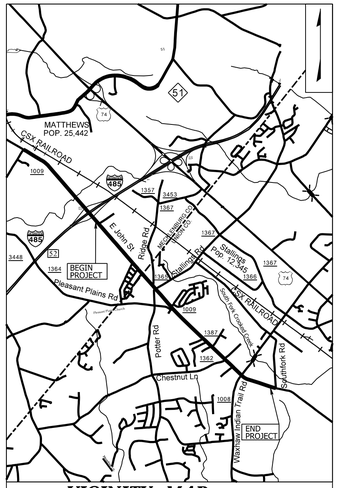
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CONTRACT: C205184 TIP PROJECT: U-4714AC /U-4714BA

SEE SHEET 1A FOR INDEX OF SHEETS
SEE SHEET 1B FOR CONVENTIONAL SYMBOLS



VICINITY MAP N.T.S.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

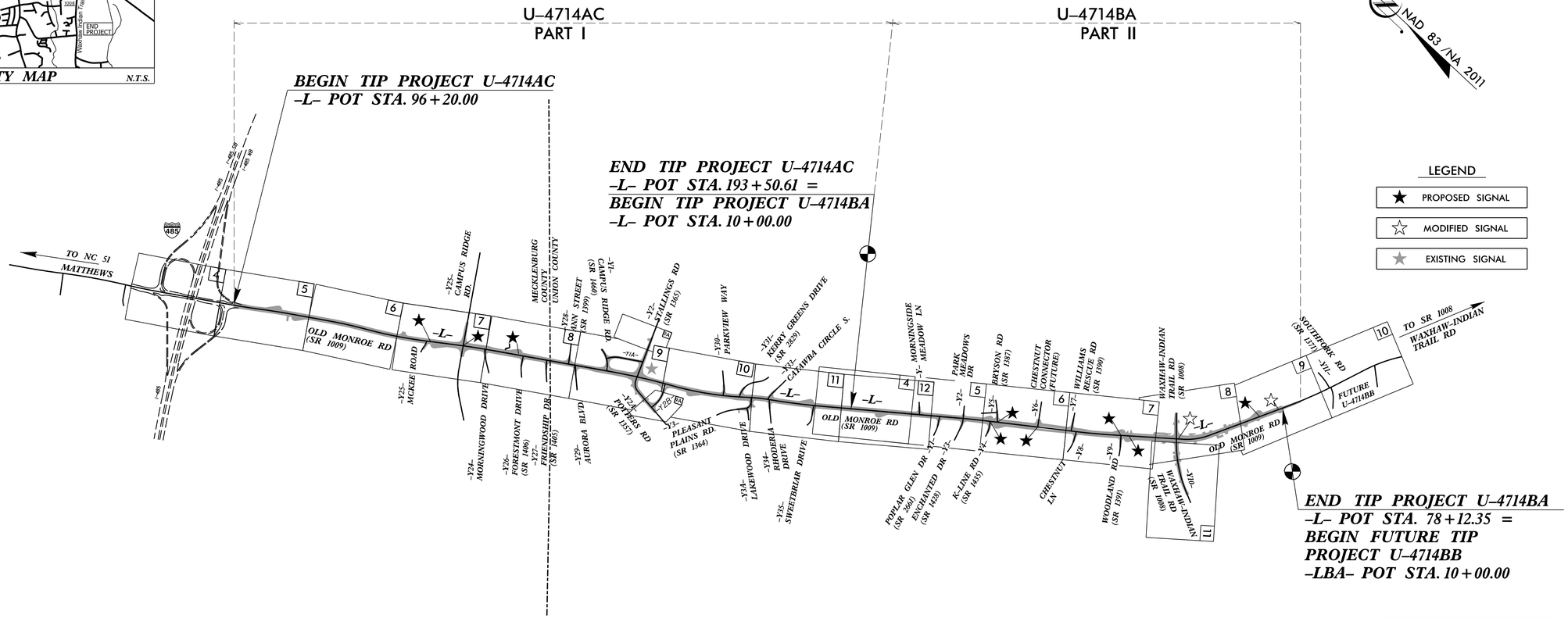
MECKLENBURG & UNION COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4714AC / U-4714BA	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
39078.1.8		P.E. (U-4714AC)
39078.2.10		R/W & UTIL. (U-4714AC)
39078.3.9		CONST. (U-4714AC)
39078.1.9		P.E. (U-4714BA)
39078.2.6	STPDA-1009(18)	R/W (U-4714BA)
39078.2.11	STPDA-1009(18)	UTIL. (U-4714BA)
39078.3.10		CONST. (U-4714BA)

LOCATION: SR 1009 (JOHN STREET\OLD MONROE ROAD)
FROM EAST OF I-485 INTERCHANGE TO
SR 1371 (SOUTHFOLK RD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, CULVERTS, AND WALLS



NOTE:
1. THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF MATTHEWS, STALLINGS AND INDIAN TRAIL.
2. THIS IS A PARTIAL CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS SHOWN ON THE PLANS.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

PLANS: 50 25 0 50 100
PROFILE (HORIZONTAL): 50 25 0 50 100
PROFILE (VERTICAL): 10 5 0 10 20

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-4714AC = 1.843 MILES
TOTAL LENGTH OF TIP PROJECT U-4714AC = 1.843 MILES

LENGTH ROADWAY TIP PROJECT U-4714BA = 1.437 MILES
TOTAL LENGTH OF TIP PROJECT U-4714BA = 1.437 MILES

GRAND TOTAL LENGTH OF TIP PROJECT U-4714AC/U-4714BA = 3.280 MILES

PLANS PREPARED FOR THE NCDOT BY:

KCI Associates of N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609
Phone (919) 783-9214
NC Firm License No: C-0764

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

SUNGATE DESIGN GROUP
5400 Etta Burke Ct., STE. 100 • Raleigh, North Carolina 27606
Phone: (919) 859-2243 • Eng Firm License No. C-890

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
U-4714AC JULY 25, 2019

RIGHT OF WAY DATE:
U-4714BA MAY 24, 2021

LETTING DATE:
JANUARY 19, 2027

BARRY C. SMITH, PE
PROJECT ENGINEER

SEAN C. STEPHENS, PE
PROJECT ENGINEER

TYLER L. CAREY, PE
PROJECT DESIGN ENGINEER

WESTON D. MURPHY, PE
PROJECT DESIGN ENGINEER

NCDOT CONTACT: RADHA ATTALURI, PE
PROJECT MANAGER – NCDOT

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

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8/17/99

INDEX OF SHEETS

SHEET NUMBER	SHEET DESCRIPTION
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
PART I - U-4714AC	
1	TITLE (U-4714AC)
2A-1 THRU 2A-10	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1 THRU 2B-4	ROADWAY INTERSECTION DETAILS
2B-5 THRU 2B-12	ROADWAY DETAILS WITH RIGHT OF WAY CALLOUTS AND PROPERTY OWNER INFORMATION.
2C-1 THRU 2C-18	SPECIAL DETAILS
2D-1	DRAINAGE DETAILS
3B-1 THRU 3B-2	ROADWAY SUMMARIES
3D-1 THRU 3D-16	DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
3P-1	PARCEL INDEX SHEET
4 THRU 22	PLAN AND PROFILE SHEET
RW-1 THRU RW-12	SURVEY CONTROL, EXISTING CENTERLINES, RIGHT OF WAY, EASEMENT AND PROPERTY TIES
TMP-1 THRU TMP-31	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-11	PAVEMENT MARKING PLANS
EC-1 THRU EC-23	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-13	SIGNING PLANS
SIG-1 THRU SIG-M9	SIGNAL PLANS
SCP-1	SIGNAL COMMUNICATION PLANS
UC-1 THRU UC-25	UTILITIES CONSTRUCTION PLANS (CAROLINA WATER SERVICE, INC OF NC & UNION COUNTY)
UC-1 THRU UC-10	UTILITIES CONSTRUCTION PLANS (CHARLOTTE WATER)
UO-1 THRU UO-11	UTILITIES BY OTHERS PLANS
X-1	CROSS-SECTION INDEX
X-1A THRU X-1C	CROSS-SECTION SUMMARY SHEET
X-2 THRU X-88	CROSS-SECTIONS
C-1 THRU SN	CULVERT PLANS
PART II - U-4714BA	
1	TITLE (U-4714BA)
2A-1 THRU 2A-3	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1	ALIGNMENT CURVE DATA SHEET
2B-2 THRU 2B-3	INTERSECTION DETAILS
2C-1 THRU 2C-7	SPECIAL DETAILS
2G-1 THRU 2G-4	GEOTECHNICAL DETAILS
3B-1	ROADWAY SUMMARIES
3D-1 THRU 3D-13	DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
3P-1	PARCEL INDEX SHEET
4 THRU 18	PLAN AND PROFILE SHEETS
RW-1 THRU RW-11	SURVEY CONTROL, EXISTING CENTERLINES, RIGHT OF WAY, EASEMENT AND PROPERTY TIES
TMP-1 THRU TMP-26	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-10	PAVEMENT MARKING PLANS
EC-1 THRU EC-19	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-11	SIGNING PLANS
SIG-1 THRU SIG-M9	SIGNAL PLANS
SCP-1 THRU SCP-3	SIGNAL COMMUNICATIONS PLANS
UC-1 THRU UC-66	UTILITIES CONSTRUCTION PLANS
UO-1 THRU UO-9	UTILITIES BY OTHERS PLANS
X-1	CROSS-SECTION INDEX
X-1A THRU X-1B	CROSS-SECTION SUMMARY SHEET
X-2 THRU X-44	CROSS-SECTIONS

GENERAL NOTES

GENERAL NOTES: 2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
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 ROTATED AT CENTERLINE AS 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.

UNDER DRAINS:

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 AT THE CONTRACT PRICE FOR "TEMPORARY SHORING".

SUBSURFACE PLANS:

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

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY (POWER), PIEDMONT NATURAL GAS (GAS), AT&T (COMM), MCNC (COMM), WINDSTREAM (COMM), CHARTER (COMM), LUMEN (COMM), SEGRA (COMM), AND MCI/VERIZON (COMM).

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 848.06.

ROCK:

ROCK IS ANTICIPATED BETWEEN U-4714AC -L- 105+75 TO 107+25 LEFT. BLASTING MAY BE REQUIRED FOR EXCAVATION ON THE PROJECT. SEE SECTION 220 OF THE STANDARD SPECIFICATIONS AND IF APPLICABLE, ROCK BLASTING PROVISION.

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC/U-4714BA	1A

U-4714AC ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH

DocuSigned by: Barry Smith 10/9/2026
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U-4714BA ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 043891 ENGINEER SEAN G STEPHENS

DocuSigned by: 10/12/2026
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

KCI ASSOCIATES OF N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609
Phone (919) 783-9214
NC Firm License No: C-0764

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

LIST OF STANDARD DRAWINGS

EFF. 01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

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:

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
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	
806.03	Concrete Control Of Access Marker
815.02	Subsurface Drain
815.03	Pipe Under Drain and Blind 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
838.27	Reinforced Concrete Endwall - for Single 60" Pipe 90 Skew
838.33	Reinforced Concrete Endwall - for Single 66" Pipe 90 Skew
838.45	Notes for Reinforced Concrete Endwall - Std. Dwg 838.21 thru 838.40
838.57	Reinforced Brick Endwall - for Single 60" Pipe 90 Skew
838.63	Reinforced Brick Endwall - for Single 66" 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
840.04	Concrete Open Throat Catch Basin - 12" thru 48" Pipe
840.05	Brick Open Throat Catch Basin - 12" thru 48" Pipe
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
840.19	Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.20	Frames and Wide Slot Flat Grates
840.24	Frames and Narrow Slot Sag Grates
840.25	Anchorage for Frames - Brick or Concrete or Precast
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
840.51	Brick Manhole - 12" thru 36" Pipe
840.52	Precast Manhole - 4', 5' and 6' Diameter 12" thru 48" Pipe
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
848.01	Concrete Sidewalk (Use Detail in Lieu of Standard for Sheet 1 of 1)
848.02	Driveway Turnout - Radius Type
848.04	Street Turnout
848.06	Curb Ramp (Use Details in Lieu of Standards for Sheets 9 and 10 of 13)
848.07	Concrete Sidepath/ Shared Use Path / Greenway Construction
852.01	Concrete Islands
852.04	Method for Placement of Drop Inlets in Grassed Median - Using 1'-6" Curb and Gutter
852.06	Method for Placement of Drop Inlets in Concrete Islands
852.07	Median Curb for Traffic Bearing Grated Drop Inlet for Use with 2'-9" Curb and Gutter (Use Detail in Lieu of Standard for Sheet 1 of 1)
852.10	Median Construction - with Curb and Gutter
862.01	Guardrail Placement (Use Details in Lieu of Standards for Sheets 4, 6, 12, and 14 of 15)
862.02	Guardrail Installation
876.01	Rip Rap in Channels
876.02	Guide for Rip Rap at Pipe Outlets
876.03	Drainage Ditches with Class 'A' Rip Rap
876.04	Drainage Ditches with Class 'B' Rip Rap

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STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

PROJECT REFERENCE NO. U-4741AC/U-4714BA | SHEET NO. 1B

Note: Not to Scale

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP)
- Computed Property Corner
- Existing Concrete Monument (ECM)
- Parcel / Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream
- Buffer Zone 1
- Buffer Zone 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:

- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Secondary Horiz and Vert Control Point
- Vertical Benchmark
- Existing Right of Way Monument
- Proposed Right of Way Monument (Rebar and Cap)
- Proposed Right of Way Monument (Concrete)
- Existing Permanent Easement Monument
- Proposed Permanent Easement Monument (Rebar and Cap)
- Existing C/A Monument
- Proposed C/A Monument (Rebar and Cap)
- Proposed C/A Monument (Concrete)
- Existing Right of Way Line
- Proposed Right of Way Line
- Existing Control of Access Line
- Proposed Control of Access Line
- Proposed ROW and CA Line
- Existing Easement Line
- Proposed Temporary Construction Easement
- Permanent Construction Easement — PE
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage/Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole
- Storm Sewer

UTILITIES:

** SUE - Subsurface Utility Engineering*
LOS - Level of Service - A,B,C or D (Accuracy)

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- U/G Power Line Test Hole (SUE - LOS A)*
- U/G Power Line (SUE - LOS B)*
- U/G Power Line (SUE - LOS C)*
- U/G Power Line (SUE - LOS D)*

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole
- Telephone Pedestal
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole
- U/G Telephone Test Hole (SUE - LOS A)*
- U/G Telephone Cable (SUE - LOS B)*
- U/G Telephone Cable (SUE - LOS C)*
- U/G Telephone Cable (SUE - LOS D)*
- U/G Telephone Conduit (SUE - LOS B)*
- U/G Telephone Conduit (SUE - LOS C)*
- U/G Telephone Conduit (SUE - LOS D)*
- U/G Fiber Optics Cable (SUE - LOS B)*
- U/G Fiber Optics Cable (SUE - LOS C)*
- U/G Fiber Optics Cable (SUE - LOS D)*

WATER:

- Water Manhole
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line Test Hole (SUE - LOS A)*
- U/G Water Line (SUE - LOS B)*
- U/G Water Line (SUE - LOS C)*
- U/G Water Line (SUE - LOS D)*
- Above Ground Water Line — A/G Water

TV:

- TV Pedestal
- TV Tower
- U/G TV Cable Hand Hole
- U/G TV Test Hole (SUE - LOS A)*
- U/G TV Cable (SUE - LOS B)*
- U/G TV Cable (SUE - LOS C)*
- U/G TV Cable (SUE - LOS D)*
- U/G Fiber Optic Cable (SUE - LOS B)*
- U/G Fiber Optic Cable (SUE - LOS C)*
- U/G Fiber Optic Cable (SUE - LOS D)*

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line Test Hole (SUE - LOS A)*
- U/G Gas Line (SUE - LOS B)*
- U/G Gas Line (SUE - LOS C)*
- U/G Gas Line (SUE - LOS D)*
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- SS Force Main Line Test Hole (SUE - LOS A)*
- SS Force Main Line (SUE - LOS B)*
- SS Force Main Line (SUE - LOS C)*
- SS Force Main Line (SUE - LOS D)*

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box
- Utility Unknown U/G Line (SUE - LOS B)*
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

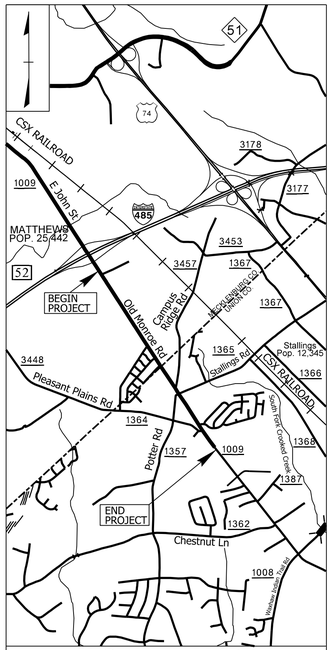
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09/08/99

TIP PROJECT: U-4714AC

CONTRACT: C205184

SEE SHEET 1A FOR INDEX OF SHEETS
SEE SHEET 1B FOR CONVENTIONAL SYMBOLS



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MECKLENBURG & UNION COUNTY

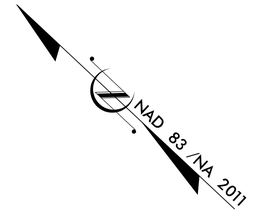
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4714AC	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
39078.1.8		P.E.
39078.2.10		R/W & UTIL.
39078.3.9		CON

LOCATION: SR 1009 (JOHN STREET\OLD MONROE ROAD)
FROM EAST OF I-485 INTERCHANGE TO
WEST OF MORNINGSIDE MEADOW LANE

TYPE OF WORK: GRADING, PAVING, DRAINAGE, SIGNALS, AND CULVERTS

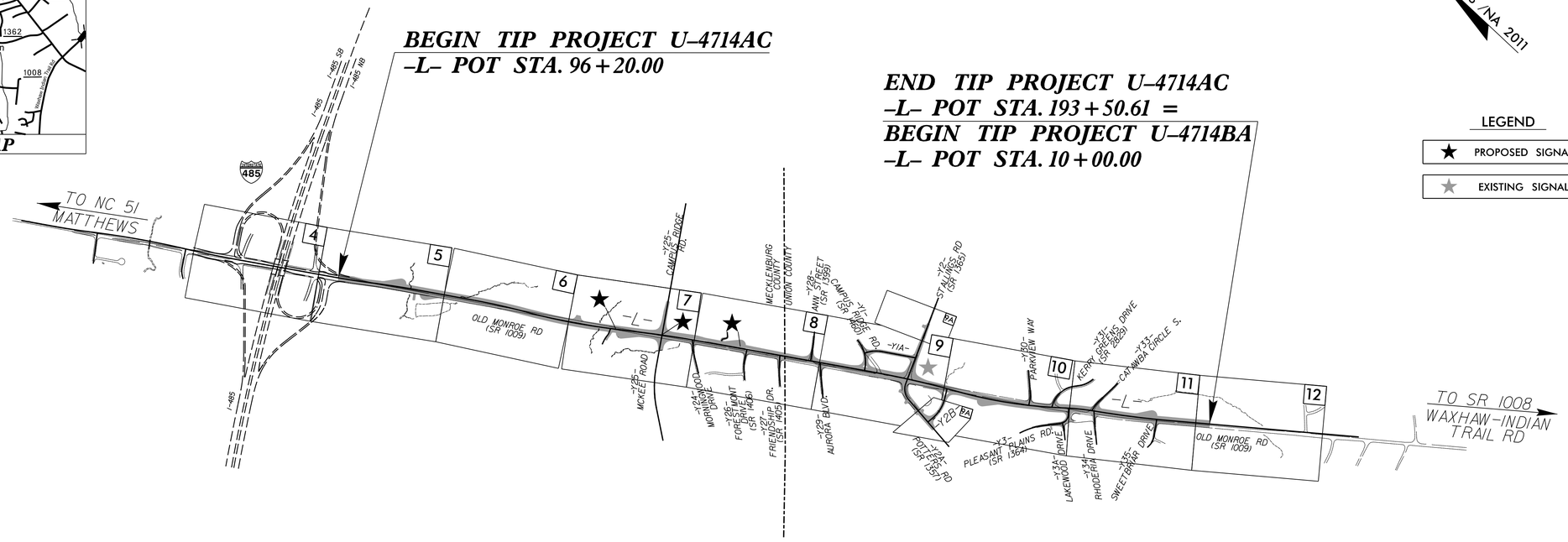
PART I OF II



LEGEND
★ PROPOSED SIGNAL
★ EXISTING SIGNAL

BEGIN TIP PROJECT U-4714AC
-L- POT STA. 96+20.00

END TIP PROJECT U-4714AC
-L- POT STA. 193+50.61 =
BEGIN TIP PROJECT U-4714BA
-L- POT STA. 10+00.00

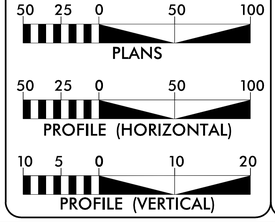


NOTE:
1. THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF MATTHEWS, STALLINGS AND INDIAN TRAIL.
2. THIS IS A PARTIAL CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS SHOWN ON THE PLANS.

SUNGATE DESIGN GROUP
5400 Etta Burke Ct., STE. 100 • Raleigh, North Carolina 27606
Phone: (919) 859-2243 • Eng Firm License No. C-890

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2026 = 50,600
ADT 2046 = 51,300
K = 7 %
D = 55 %
T = 6 % *
V = 40 MPH
* TTST = 2% DUAL 4%
FUNC CLASS = MINOR ARTERIAL
REGIONAL TIER

PROJECT LENGTH

TOTAL LENGTH OF TIP PROJECT U-4714AC = 1.843 MILES

Prepared In the Office of:
KCI Associates of N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609
Phone (919) 783-9214
NC Firm License No: C-0764

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JULY 25, 2019

LETTING DATE:
JANUARY 19, 2027

NCDOT CONTACT: ***RADHA ATTALURI, PE***
PROJECT MANAGER - NCDOT

Plans Prepared For:
DIVISION OF HIGHWAYS

BARRY C. SMITH, PE
PROJECT ENGINEER

TYLER L. CAREY, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
Signed by: JOSHUA DALTON 10/19/2026
1089ADBC14994C3...
P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER
DocuSigned by: Barry Smith 10/19/2026
827104 1D8676493...
P.E.
SIGNATURE:

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA C. DALTON
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH
STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

16-OCT-2026 15:24
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6/2/99

PAVEMENT SCHEDULE
FINAL PAVEMENT DESIGN

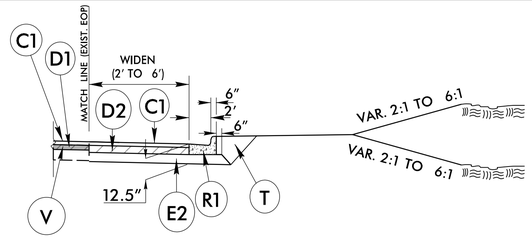
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE,TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF 2 LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
C3	PROP. APPROX. 1 ½" ASPHALT CONCRETE SURFACE COURSE,TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C4	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE,TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D3	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
D4	PROP. APPROX. 2 ½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 3.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E2	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
E3	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT GREATER THAN 5½" IN DEPTH OR LESS THAN 3" IN DEPTH.
J1	6" AGGREGATE BASE COURSE
J2	8" AGGREGATE BASE COURSE
K	PROP. 8" CLASS IV SUBGRADE STABILIZATION TYPE II
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2'-6" CONCRETE CURB AND GUTTER
R2	2'-9" CONCRETE CURB AND GUTTER
R3	1'-6" CONCRETE CURB AND GUTTER
R4	5" MONOLITHIC CONCRETE ISLAND (KEYED IN)
R5	9" X 12" CONCRETE CURB
S1	4" CONCRETE SIDEWALK
S2	4" CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3" MILLING
V1	INCIDENTAL MILLING
V2	VARIABLE DEPTH MILLING (0" TO 3")
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL ON THIS SHEET)

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE

NOTES:
1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.
3. WHERE –L– WIDENING IS 6' OR LESS, SEE NARROW WIDENING DETAIL SHEET 2A–1.
4) IF EXISTING DRIVEWAY IS ASPHALT, USE 3" S9.5C AND 6" ABC UNLESS OTHERWISE NOTED

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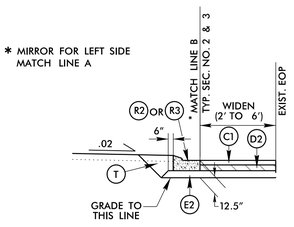
DETAIL SHOWING METHOD OF NARROW WIDENING



LEFT:
–L– STA. 96+20.00 TO STA. 97+80.00
–L– STA. 123+00.00 TO STA. 124+50.00
–L– STA. 164+12.00 TO STA. 165+25.00

RIGHT:
–L– STA. 96+20.00 TO STA. 102+75.00
–L– STA. 107+35.00 TO STA. 114+38.00
–L– STA. 137+75.00 TO STA. 140+50.00
–L– STA. 147+00.00 TO STA. 158+34.00
–L– STA. 178+50.00 TO STA. 193+50.61

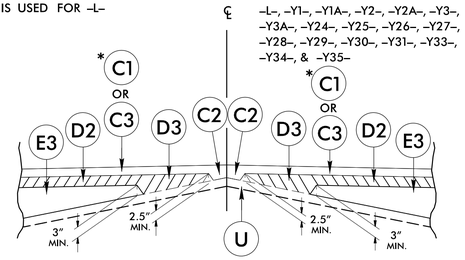
DETAIL SHOWING METHOD OF MEDIAN NARROW WIDENING



* MEDIAN LEFT:
–L– STA. 131+10.00 TO STA. 132+20.00
–L– STA. 162+50.00 TO STA. 165+25.00

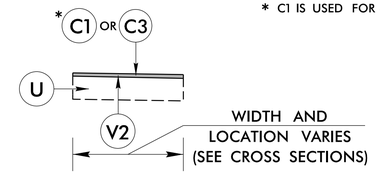
MEDIAN RIGHT:
–L– STA. 110+50.00 TO STA. 116+75.00
–L– STA. 131+10.00 TO STA. 133+75.00
–L– STA. 162+50.00 TO STA. 164+75.00
–L– STA. 176+44.00 TO STA. 177+52.00
–L– STA. 193+00.00 TO STA. 193+50.61

* C1 IS USED FOR –L–



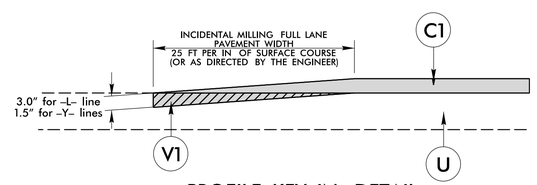
DETAIL SHOWING METHOD OF WEDGING

* C1 IS USED FOR –L–

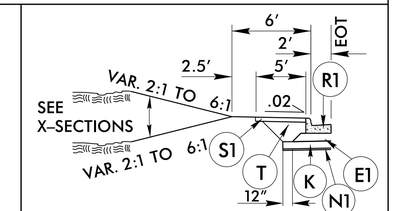


DETAIL SHOWING MILLING LOCATIONS

* –L– STA. 130+50.00 TO STA. 132+00.00 RT
* –L– STA. 164+50.00 TO STA. 165+00.00 LT
* –L– STA. 179+00.00 TO STA. 180+00.00 RT
–Y2– STA. 14+00.00 TO STA. 14+50.00 LT



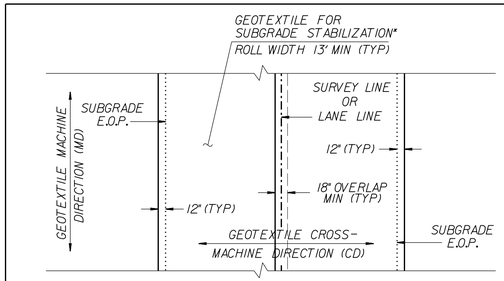
PROFILE KEY–IN DETAIL
TO BE USED AT ALL TIE–IN LOCATIONS



–L– STA. 116+50.00 TO STA. 117+50.00 LT

GEOTEXTILE FOR SUBGRADE STABILIZATION PLACEMENT (PLAN VIEW)

(100% COVERAGE REQUIRED)



* INSTALL GEOTEXTILE FOR SUBGRADE STABILIZATION WITH MINIMUM ROLL WIDTH UNDER ROADWAY EDGES AND SHOULDERS ADJACENT TO FILL SLOPES

PROJECT REFERENCE NO.	SHEET NO.
U–4714AC	2A–1

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH
Docusigned by: Barry Smith 10/21/2026
827104106B0433...

PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T. HOLLAND
Signed by: Joseph T Holland 10/21/2026
DE511F8D6E134FE...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Docusign Envelope ID: 987E694B-1C1B-8B21-8063-CDB512A2F2DA

6/2/99

FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
J2	8″ ABC
K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
R2	2′-9″ C&G
R3	1′-6″ C&G
R4	5″ KEYED IN MONO. ISLAND
R5	9″ X 12″ CONCRETE CURB
S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

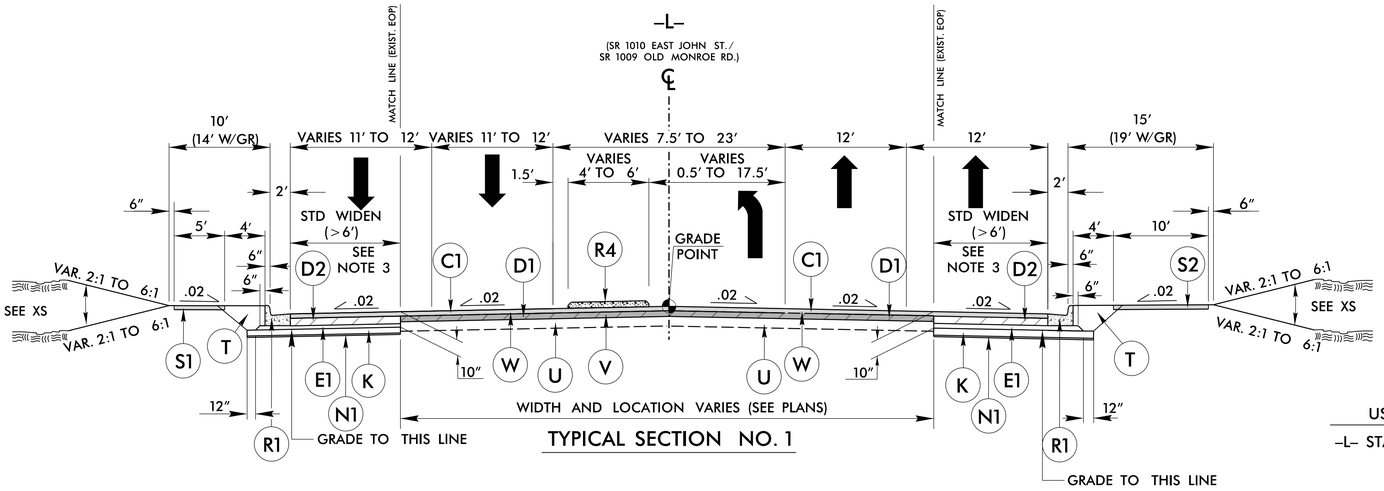
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2A-2

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH
DocuSigned by: Barry Smith 10/21/2026

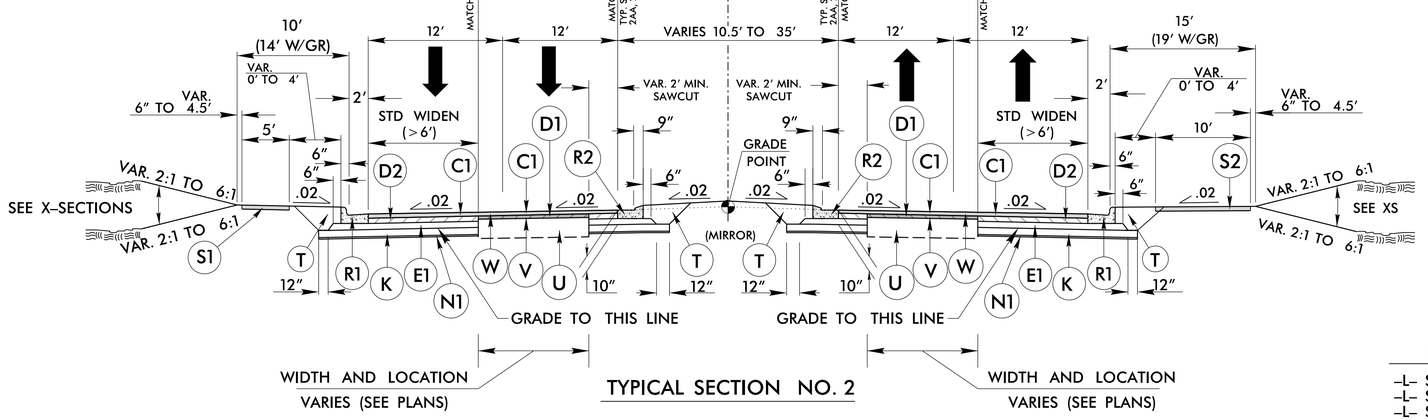
PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T HOLLAND
Signed by: Joseph T Holland 10/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1
–L– STA. 96+20.00 TO STA. 102+50.00



TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2
–L– STA. 102+50.00 TO STA. 103+25.00
–L– STA. 106+75.00 TO STA. 116+75.00
–L– STA. 122+25.00 TO STA. 125+25.00
–L– STA. 127+75.00 TO STA. 142+25.00
–L– STA. 145+75.00 TO STA. 165+25.00
–L– STA. 176+00.00 TO STA. 193+50.61

NOTES:
1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.
3. WHERE –L– WIDENING IS 6′ OR LESS, SEE NARROW WIDENING DETAIL ON SHEET 2A–1.
4) IF EXISTING DRIVEWAY IS ASPHALT, USE 3″ S9.5C AND 6″ ABC UNLESS OTHERWISE NOTED

06-JUL-2026 09:48
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6/2/99

FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
J2	8″ ABC
K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
R2	2′-9″ C&G
R3	1′-6″ C&G
R4	5″ KEYED IN MONO. ISLAND
R5	9″ X 12″ CONCRETE CURB
S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2A-3

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH

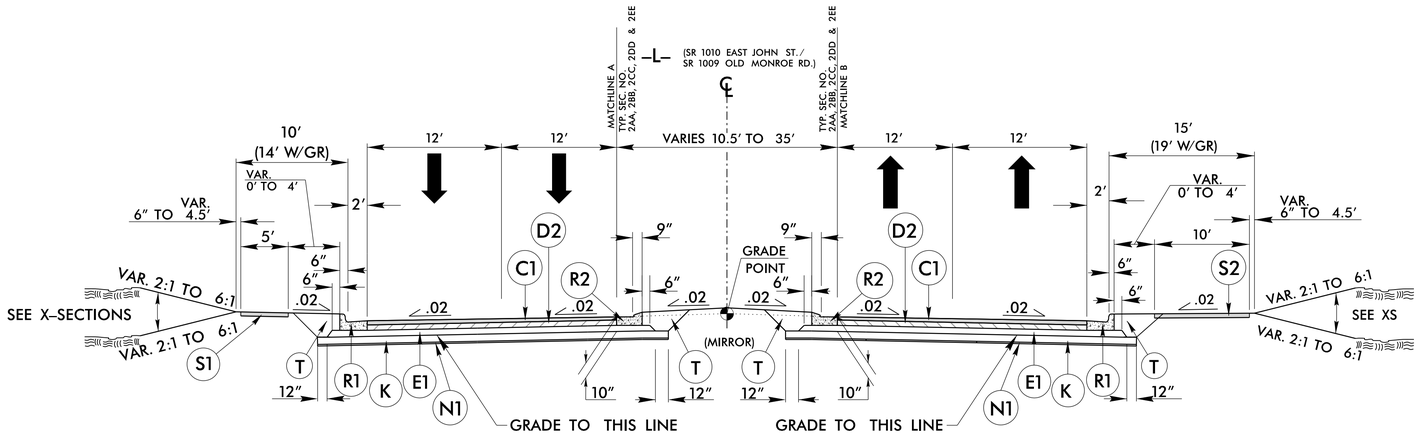
DocuSigned by: Barry Smith 10/21/2026

PAVEMENT DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T HOLLAND

Signed by: Joseph T Holland 10/21/2026

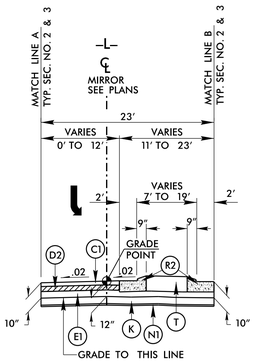
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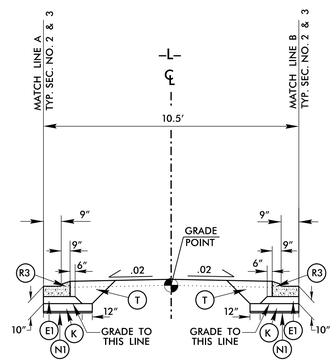
USE TYPICAL SECTION NO. 3

–L– STA. 103+25.00 TO STA. 106+75.00
–L– STA. 116+75.00 TO STA. 122+25.00
–L– STA. 125+25.00 TO STA. 127+75.00
–L– STA. 142+25.00 TO STA. 145+75.00
–L– STA. 165+25.00 TO STA. 176+00.00



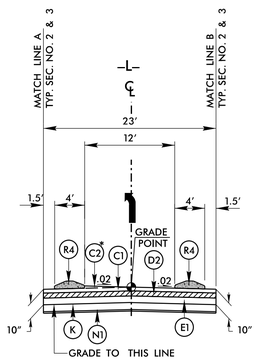
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–L– STA. 119+40.00 TO STA. 121+12.00
–L– STA. 131+09.00 TO STA. 132+09.00
–L– STA. 135+50.00 TO STA. 137+50.00
–L– STA. 170+00.00 TO STA. 172+75.57
–L– STA. 192+62.55 TO STA. 193+41.84



TYPICAL SECTION NO. 2BB

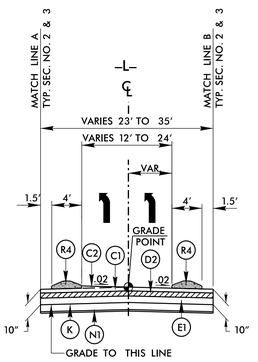
–L– STA. 147+84.13 TO STA. 164+57.50



TYPICAL SECTION NO. 2CC

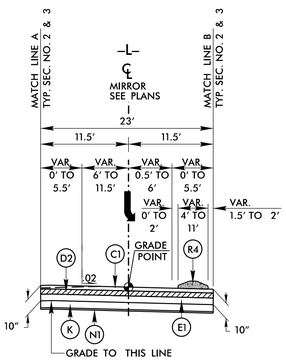
–L– STA. 102+50.00 TO STA. 103+62.50
–L– STA. 105+35.00 TO STA. 106+62.00
* –L– STA. 122+12.00 TO STA. 123+30.00
–L– STA. 127+35.00 TO STA. 128+63.00
* –L– STA. 167+85.00 TO STA. 169+00.00
* –L– STA. 175+36.69 TO STA. 176+44.25
* –L– STA. 177+52.50 TO STA. 178+57.50
–L– STA. 186+38.33 TO STA. 188+41.00

* WEDGING NOT NEEDED IN FULL SUPER SECTIONS



TYPICAL SECTION NO. 2DD

–L– STA. 140+33.65 TO STA. 141+62.00



TYPICAL SECTION NO. 2EE

–L– STA. 106+62.00 TO STA. 110+49.62
–L– STA. 121+12.00 TO STA. 122+12.00
–L– STA. 128+63.00 TO STA. 131+09.00
–L– STA. 137+50.00 TO STA. 140+33.65
–L– STA. 169+00.00 TO STA. 170+00.00
–L– STA. 172+75.57 TO STA. 175+36.69
–L– STA. 178+57.50 TO STA. 186+38.30
–L– STA. 188+41.00 TO STA. 190+62.55

NOTES:

1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.
3. WHERE –L– WIDENING IS 6′ OR LESS, SEE NARROW WIDENING DETAIL ON SHEET 2A–1.

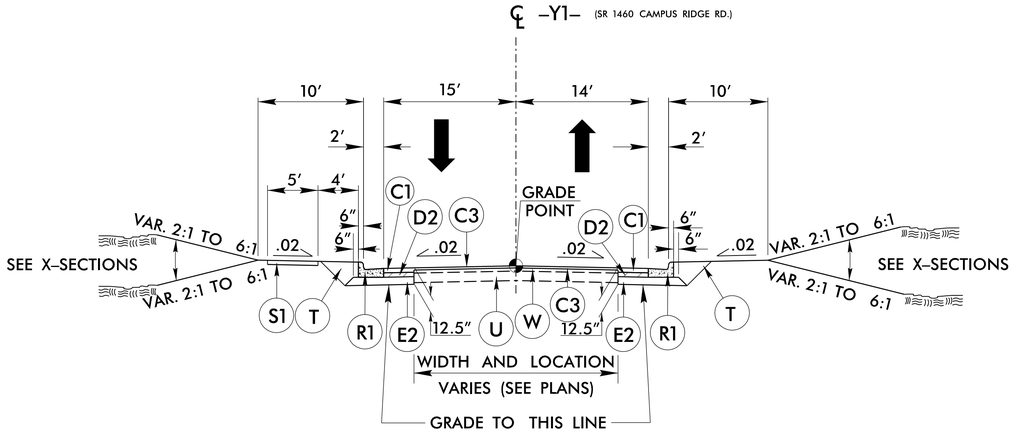
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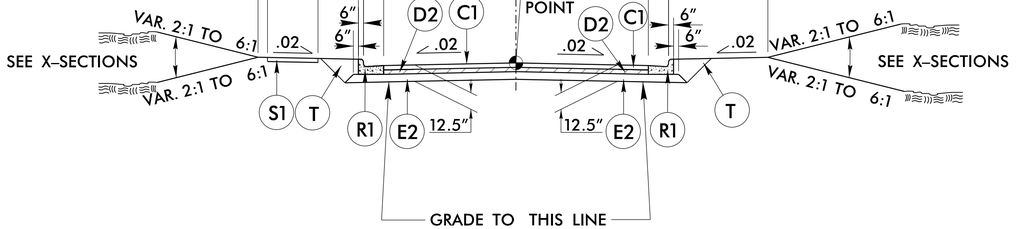
FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
J2	8″ ABC
K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
R2	2′-9″ C&G
R3	1′-6″ C&G
R4	5″ KEYED IN MONO. ISLAND
R5	9″ X 12″ CONCRETE CURB
S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



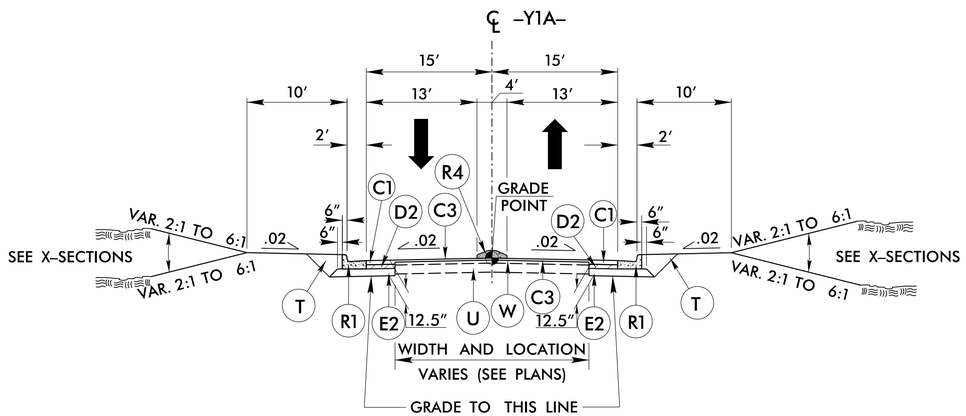
TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4
–Y1– STA. 10+00.00 TO STA. 11+75.00



TYPICAL SECTION NO. 5

USE TYPICAL SECTION NO. 5
–Y1– STA. 11+75.00 TO STA. 13+30.04



TYPICAL SECTION NO. 6

USE TYPICAL SECTION NO. 6
–Y1A– STA. 10+15.00 TO STA. 12+62.53

NOTES:
1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.

PROJECT REFERENCE NO.	SHEET NO.
U–4714AC	2A–4

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH
DocuSigned by: Barry Smith 10/21/2026
827104D8076483...

PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T. HOLLAND
Signed by: Joseph T Holland 10/21/2026
DE911F9DBE134FE...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

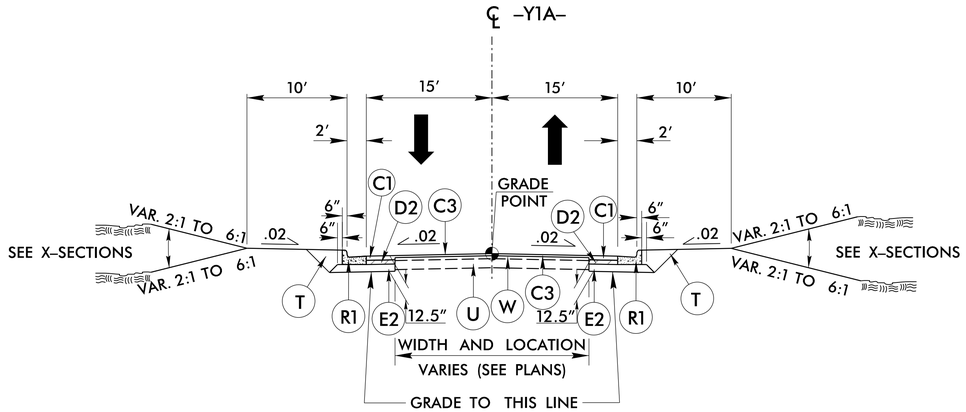
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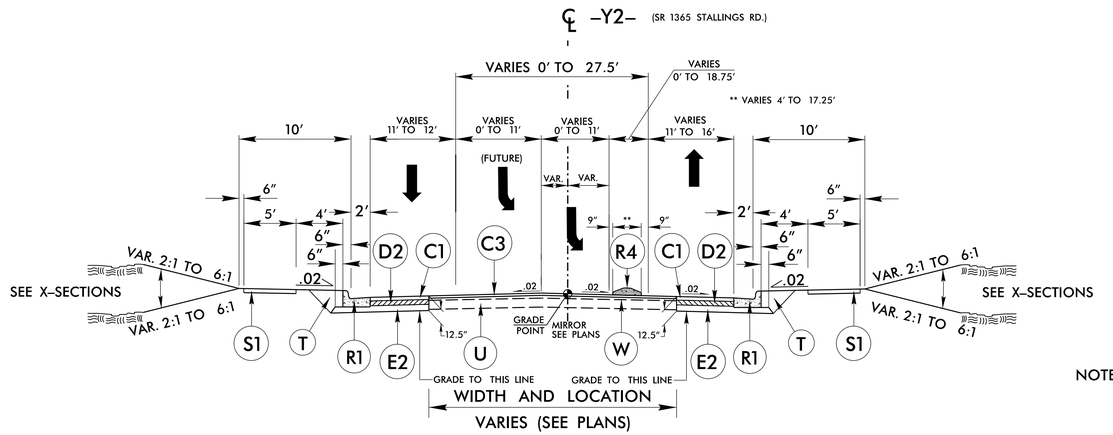
FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
J2	8″ ABC
K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
R2	2′-9″ C&G
R3	1′-6″ C&G
R4	5″ KEYED IN MONO. ISLAND
R5	9″ X 12″ CONCRETE CURB
S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



TYPICAL SECTION NO. 7

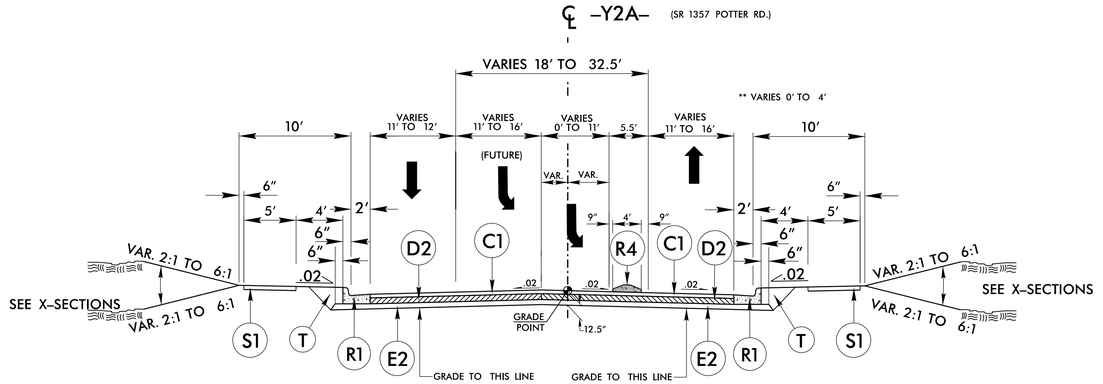
USE TYPICAL SECTION NO. 7
–Y1A– STA. 12+62.53 TO STA. 15+48.22



TYPICAL SECTION NO. 8

USE TYPICAL SECTION NO. 8
–Y2– STA. 10+41.70 TO STA. 16+56.16

NOTE: 1.5″ MILLING AND 1.5″ RESURFACING ON STALLINGS ROAD FROM –Y2– STA. 16+56.16 TO –Y2– 18+80.00.



TYPICAL SECTION NO. 9

USE TYPICAL SECTION NO. 9
–Y2A– STA. 10+41.70 TO STA. 13+26.13

NOTES:
1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.

PROJECT REFERENCE NO.	SHEET NO.
U–4714AC	2A–5

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH
DocuSigned by: Barry Smith 10/21/2026

PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T HOLLAND
Signed by: Joseph T Holland 10/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

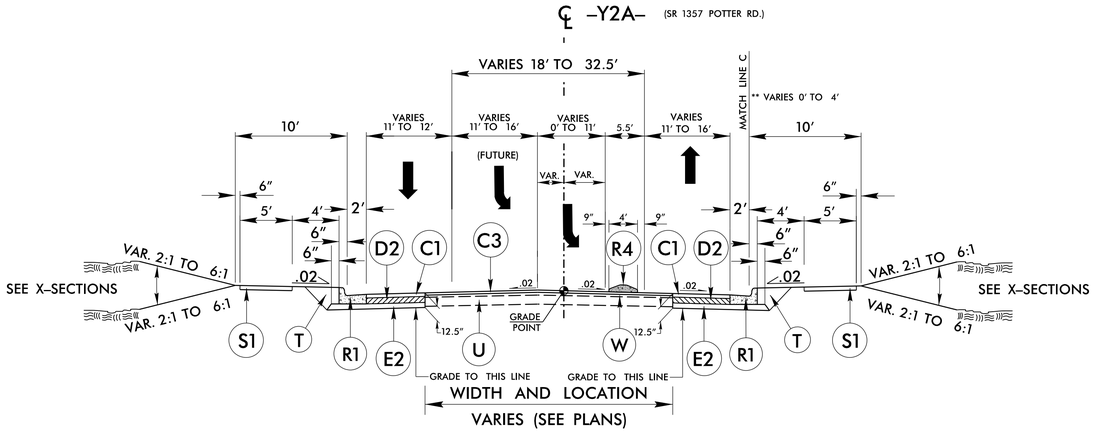
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6/2/99

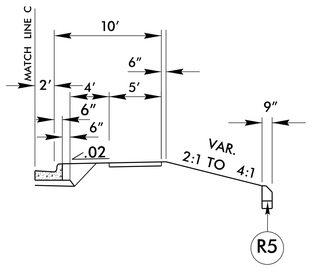
FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
J2	8″ ABC
K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
R2	2′-9″ C&G
R3	1′-6″ C&G
R4	5″ KEYED IN MONO. ISLAND
R5	9″ X 12″ CONCRETE CURB
S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE

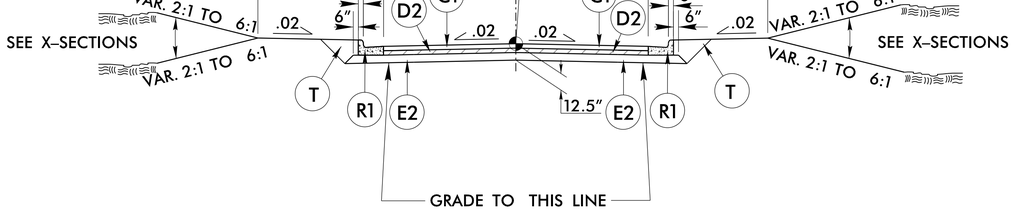


TYPICAL SECTION NO. 10

USE TYPICAL SECTION NO. 10
–Y2A– STA. 13+26.13 TO STA. 16+65.00

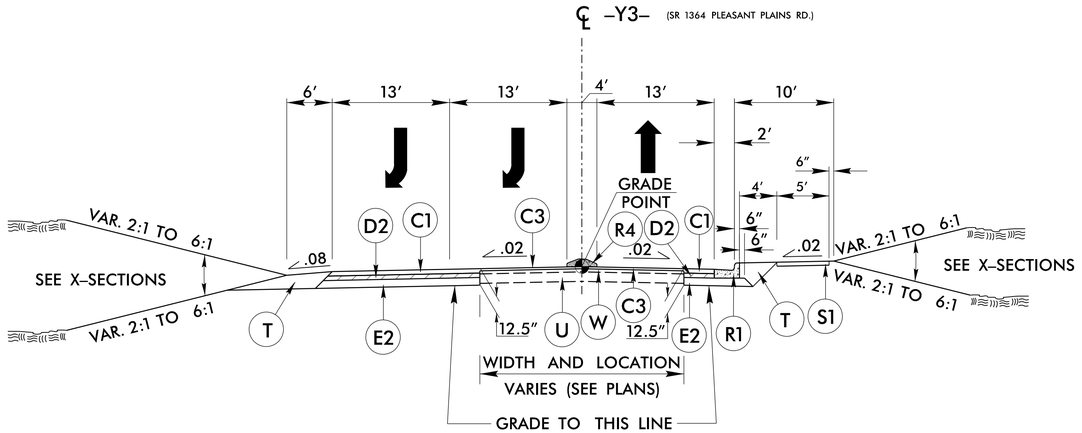


9″ CONCRETE CURB INSET
–Y2A– STA. 14+41.40 TO STA. 14+98.54 RT
–Y2A– STA. 15+10.62 TO STA. 15+23.96 RT



TYPICAL SECTION NO. 11

USE TYPICAL SECTION NO. 11
–Y2B– STA. 10+23.28 TO STA. 14+07.20



TYPICAL SECTION NO. 12

USE TYPICAL SECTION NO. 12
–Y3– STA. 10+35.50 TO STA. 12+08.64

NOTES:
1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.

PROJECT REFERENCE NO.	SHEET NO.
U–4714AC	2A–6

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH
DocuSigned by: Barry Smith 10/21/2026
B2710A1D8078492...

PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T. HOLLAND
Signed by: Joseph T Holland 10/21/2026
DE3117 9D9E1 24FE...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

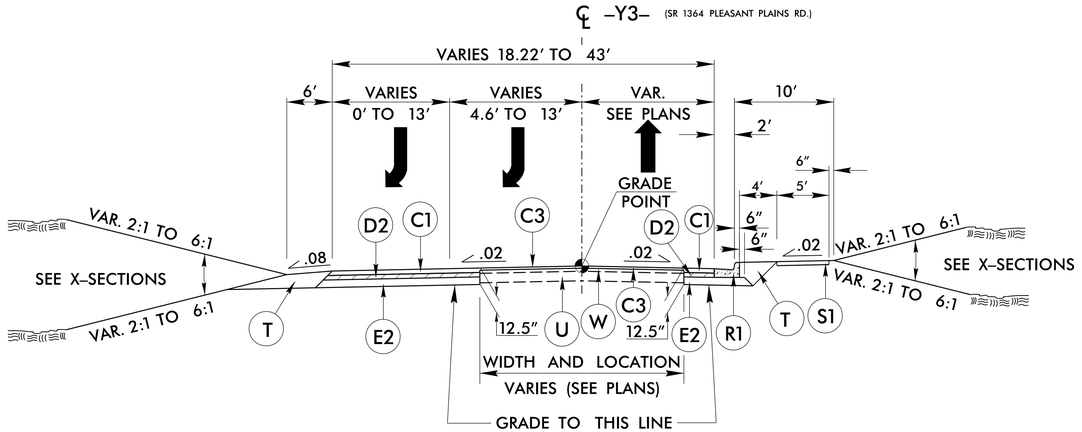
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6/2/99

FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
J2	8″ ABC
K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
R2	2′-9″ C&G
R3	1′-6″ C&G
R4	5″ KEYED IN MONO. ISLAND
R5	9″ X 12″ CONCRETE CURB
S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

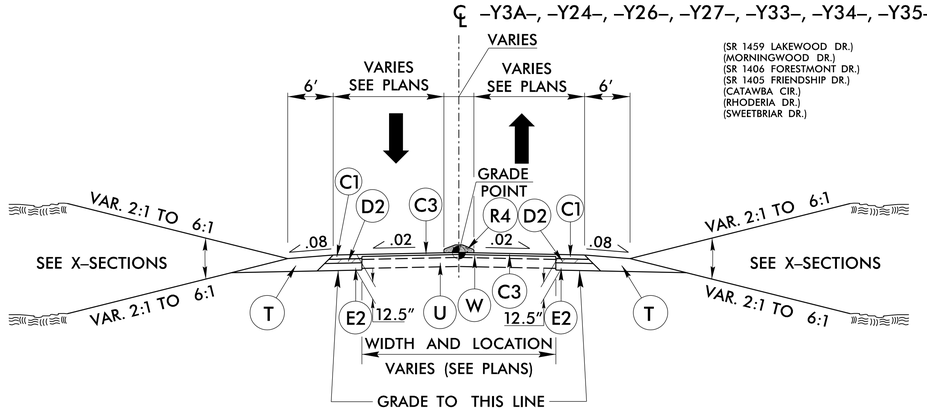
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



TYPICAL SECTION NO. 13

USE TYPICAL SECTION NO. 13

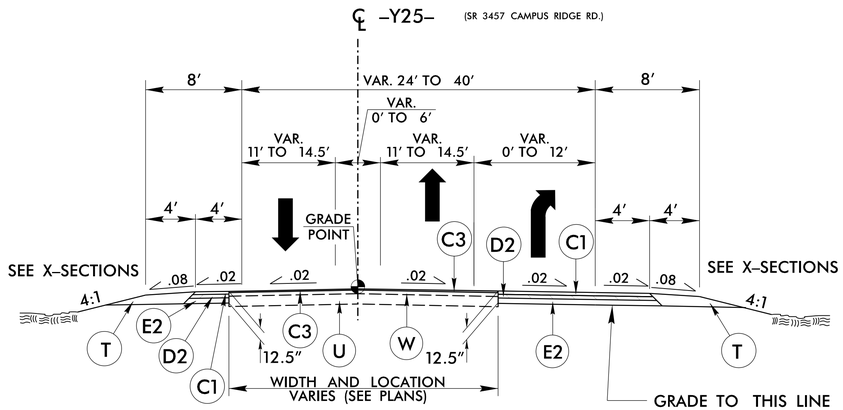
–Y3– STA. 12+08.64 TO STA. 13+50.00



TYPICAL SECTION NO. 14

USE TYPICAL SECTION NO. 14

–Y3A– STA. 10+28.01 TO STA. 10+85.00
–Y24– STA. 10+39.38 TO STA. 11+45.00
–Y26– STA. 10+41.53 TO STA. 11+62.96
–Y27– STA. 10+33.87 TO STA. 11+43.00
–Y33– STA. 12+30.00 TO STA. 12+75.00
–Y34– STA. 12+27.00 TO STA. 13+36.32
–Y35– STA. 10+35.59 TO STA. 11+35.00



TYPICAL SECTION NO. 15

USE TYPICAL SECTION NO. 15

–Y25– STA. 21+00.00 TO STA. 22+92.00

NOTES:
1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.

PROJECT REFERENCE NO.	SHEET NO.
U–4714AC	2A–7

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH
DocuSigned by: Barry Smith 10/21/2026
B27104A1D8674A9...

PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T HOLLAND
Signed by: Joseph T Holland 10/21/2026
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

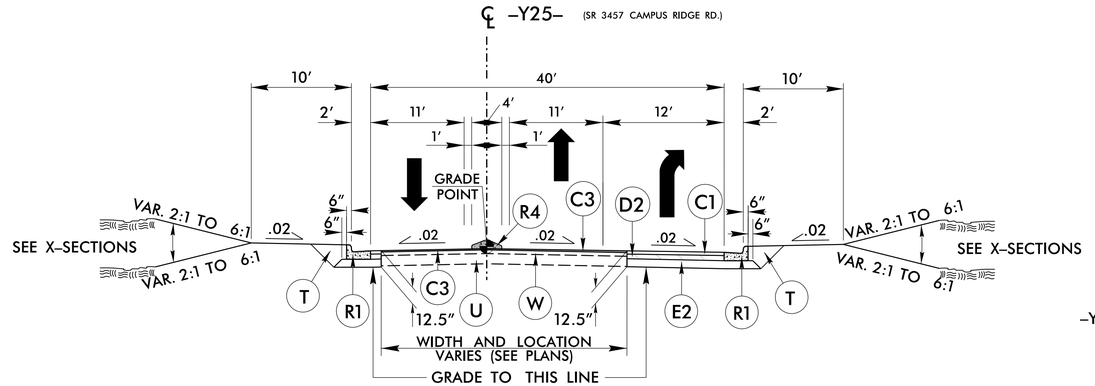
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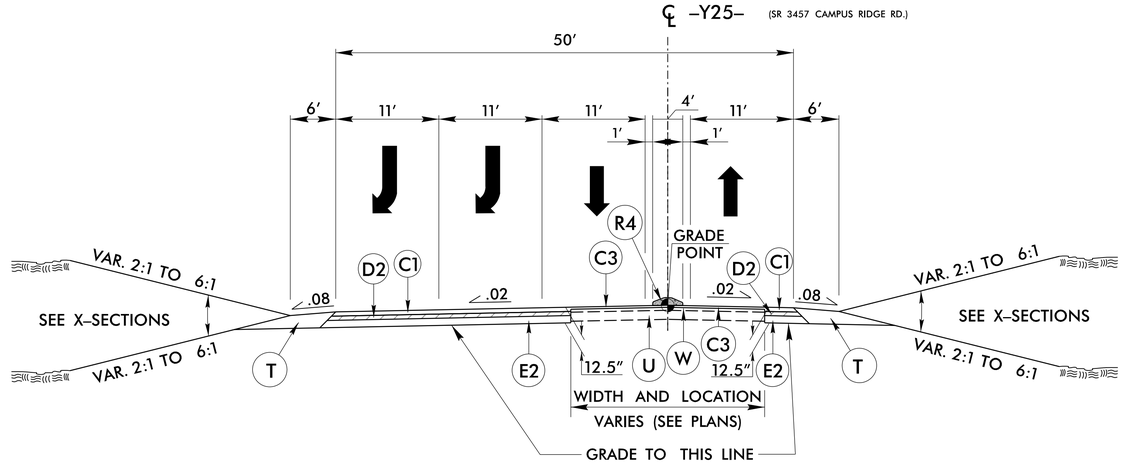
FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
J2	8″ ABC
K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
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R4	5″ KEYED IN MONO. ISLAND
R5	9″ X 12″ CONCRETE CURB
S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



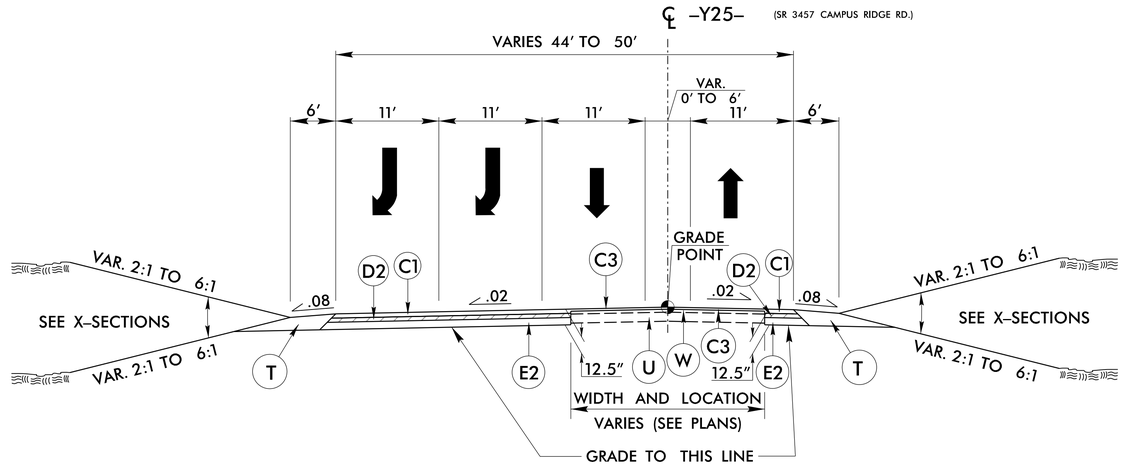
TYPICAL SECTION NO. 16

USE TYPICAL SECTION NO. 16
–Y25– STA. 22+92.00 TO STA. 24+40.05



TYPICAL SECTION NO. 17

USE TYPICAL SECTION NO. 17
–Y25– STA. 25+11.11 TO STA. 25+71.53



TYPICAL SECTION NO. 18

USE TYPICAL SECTION NO. 18
–Y25– STA. 25+71.53 TO STA. 26+40.00

NOTES:
1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.

PROJECT REFERENCE NO.	SHEET NO.
U–4714AC	2A–8

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH
Docusigned by: Barry Smith 10/21/2026

PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T. HOLLAND
Signed by: Joseph T Holland 10/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

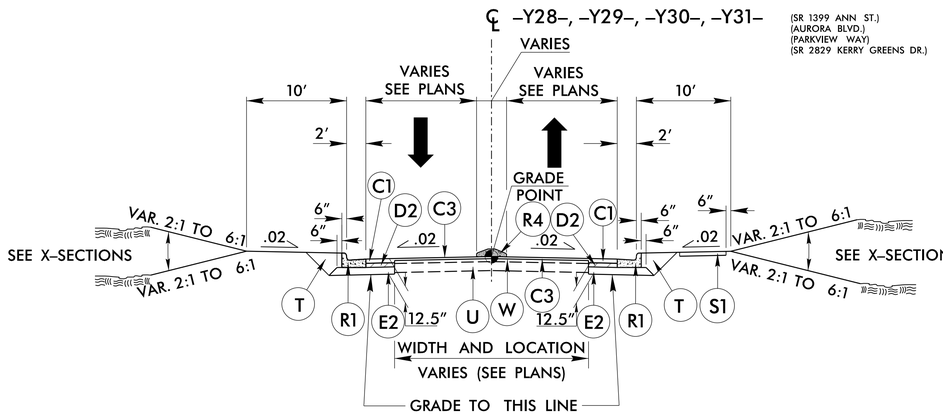
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6/2/99

FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
J2	8″ ABC
K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
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S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

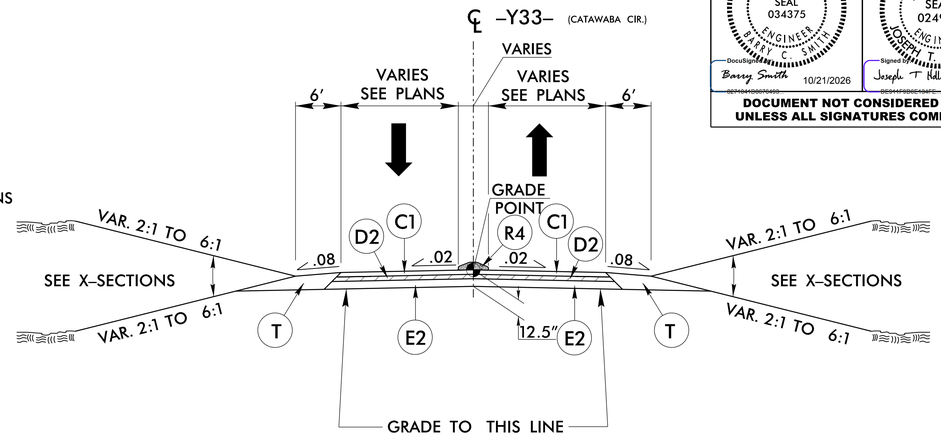
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



TYPICAL SECTION NO. 19

USE TYPICAL SECTION NO. 19

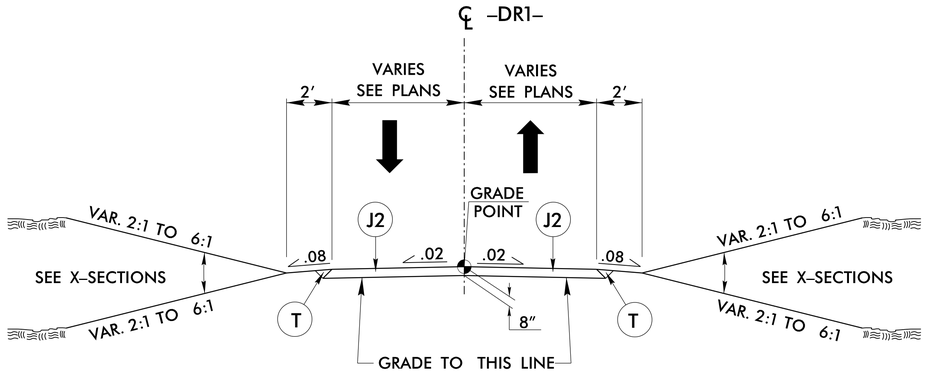
–Y28– STA. 12+04.00 TO STA. 12+96.40
–Y29– STA. 10+29.97 TO STA. 11+50.00
–Y30– STA. 12+22.00 TO STA. 13+55.32
–Y31– STA. 14+15.00 TO STA. 15+52.77



TYPICAL SECTION NO. 20

USE TYPICAL SECTION NO. 20

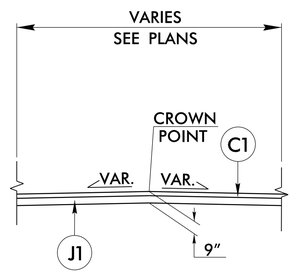
–Y33– STA. 12+75.00 TO STA. 13+79.02



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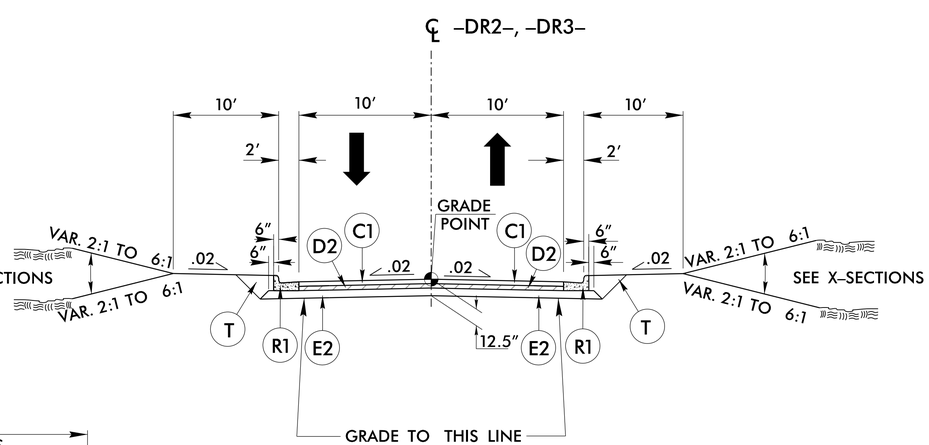
USE TYPICAL SECTION NO. 21

–DR1– STA. 10+50.06 TO STA. 11+43.72



TYPICAL SECTION NO. 23

APPLY TO ALL EXISTING ASPHALT DRIVEWAYS ALONG:
–L– (EAST JOHN ST./OLD MONROE RD.)



TYPICAL SECTION NO. 22

USE TYPICAL SECTION NO. 22

* –DR2– STA. 10+35.50 TO STA. 11+15.00
–DR3– STA. 10+36.35 TO STA. 10+90.00

* –DR2– IS BEING COORDINATED WITH PROPOSED DEVELOPMENTS (CURRENTLY A PLACE HOLDER)

NOTES:
1. SEE PLANS FOR MULTI–USE PATH & SIDEWALK LOCATIONS
2. SEE PLANS FOR ISLAND LOCATIONS AND WIDTHS.

PROJECT REFERENCE NO.	SHEET NO.
U–4714AC	2A–9

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH
DocuSigned by: Barry Smith 10/21/2026

PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T HOLLAND
Signed by: Joseph T Holland 10/21/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

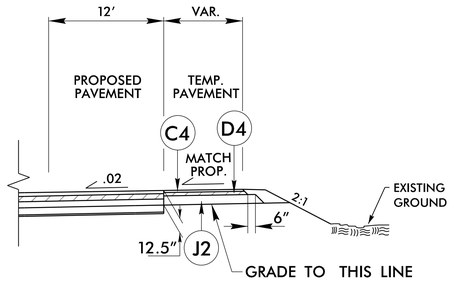
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Docusign Envelope ID: 987E694B-1C1B-8B21-8063-CDB512A2F2DA

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FINAL PAVEMENT SCHEDULE	
C1	3″ TYPE S9.5C
C2	VAR. TYPE S9.5C
C3	1.5″ TYPE S9.5C
C4	2″ TYPE S9.5C
D1	3″ TYPE I19.0C
D2	4″ I19.0C
D3	VAR. I19.0C
D4	2.5″ I19.0C
E1	3″ TYPE B25.0C
E2	5.5″ TYPE B25.0C
E3	VAR. TYPE B25.0C
J1	6″ ABC
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K	PROP. 8″ CLASS IV SUBGRADE STABILIZATION
N1	GEOTEXTILE FOR SUBGRADE STABILIZATION
R1	2′-6″ C&G
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S1	4″ CONC. SIDEWALK
S2	4″ CONC. WITH WIRE MESH MULTI-USE PATH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	3″ MILLING
V1	INCIDENTAL MILLING
V2	VAR. MILLING (0″ TO 3″)
W	WEDGING DETAIL

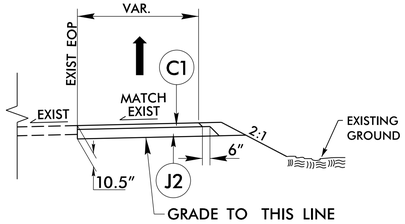
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



TEMPORARY WIDENING

–L– STA. 103+62.00 TO 105+35.00 LT
–L– STA. 132+80.00 TO 134+45.00 LT
–L– STA. 151+85.00 TO 156+30.00 LT
–L– STA. 173+15.00 TO 174+45.00 LT

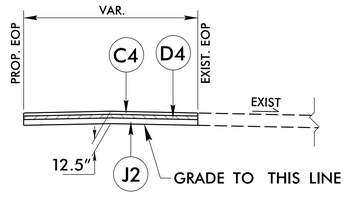
SEE TMP PLANS FOR MORE INFORMATION



TEMPORARY WIDENING

–Y2A– STA. 10+66.00 TO 13+82.00 RT

SEE TMP PLANS FOR MORE INFORMATION



TEMPORARY PAVEMENT TIE TO DRIVEWAY

–L– STA. 141+36.00 TO STA. 142+29.00
–L– STA. 144+94.00 TO STA. 146+21.00
–L– STA. 149+66.00 TO STA. 150+63.00

SEE TMP PLANS FOR MORE INFORMATION

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2A-10

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH

DocuSigned by: Barry Smith 10/21/2026
92710A1DB0764A0...

PAVEMENT DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 024964 ENGINEER JOSEPH T HOLLAND

Signed by: Joseph T Holland 10/21/2026
DE911F8D9E124FE...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-1
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

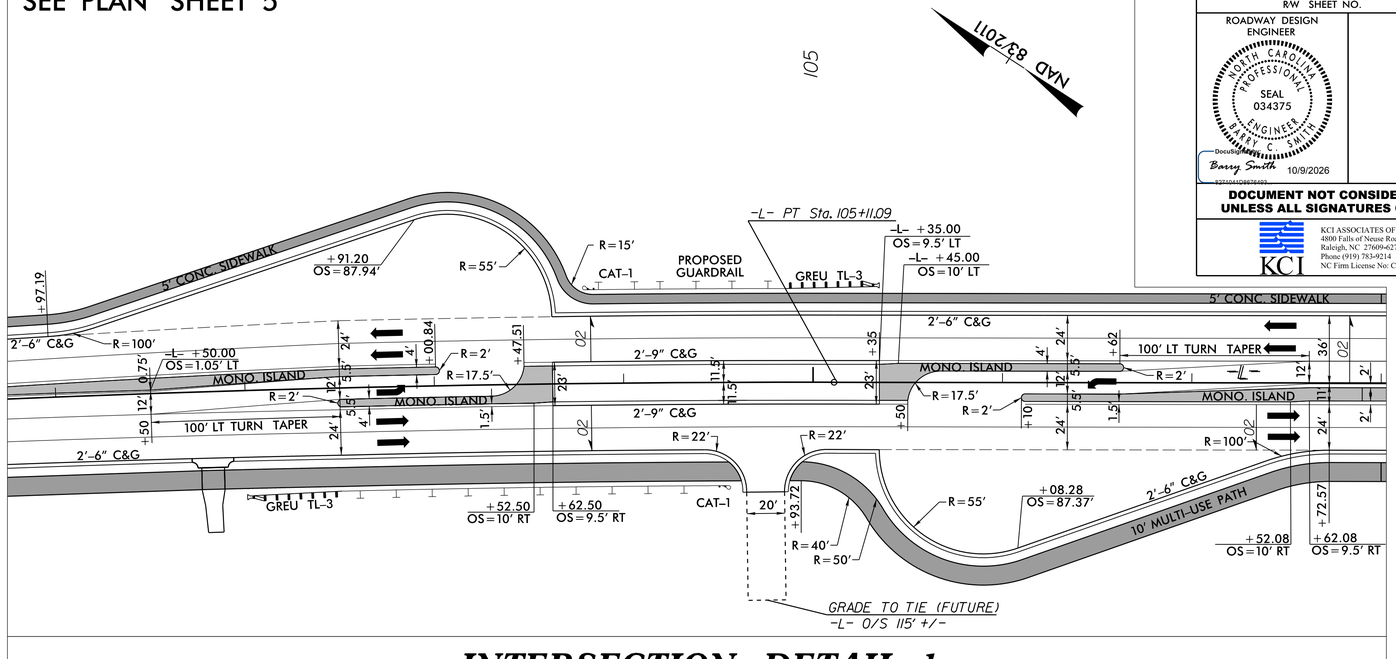
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH

DocuSigned by: Barry Smith 10/9/2026

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KCI ASSOCIATES OF N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609-6270
Phone (919) 783-9214
NC Firm License No: C-0764

SEE PLAN SHEET 5



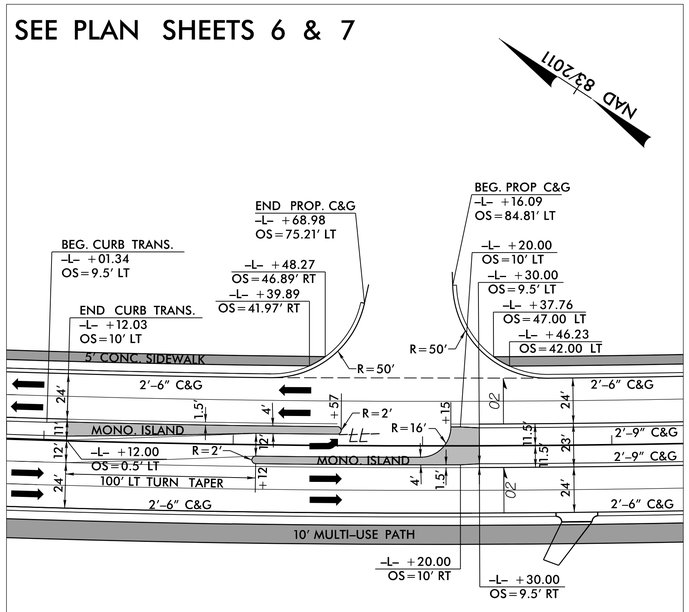
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(GRAPHIC SCALE)

CONCRETE MONOLITHIC ISLAND
SIDEWALK

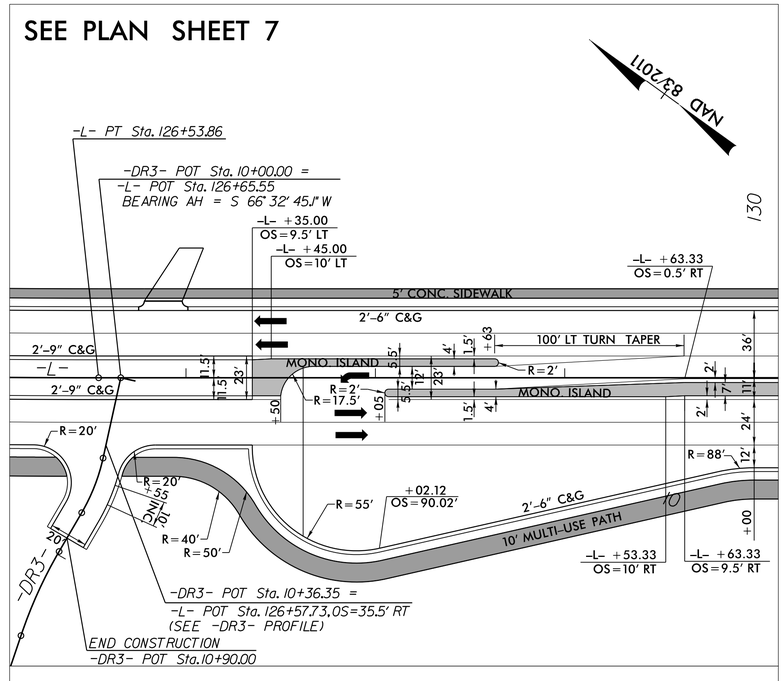
INTERSECTION DETAIL 1 -L-

SEE PLAN SHEETS 6 & 7



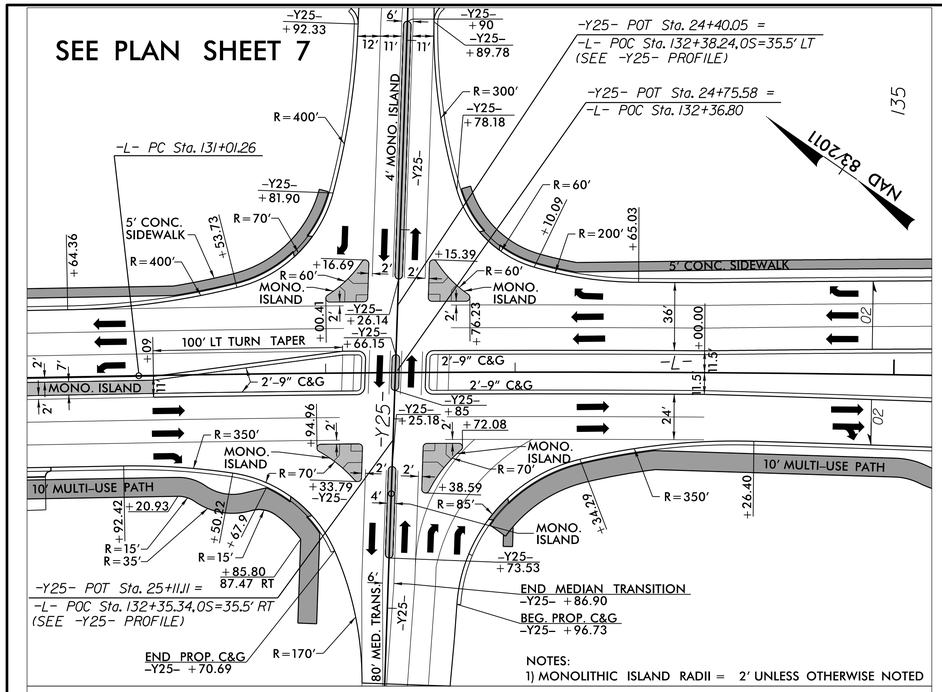
INTERSECTION DETAIL 2 -L- AT STA. 122+00

SEE PLAN SHEET 7

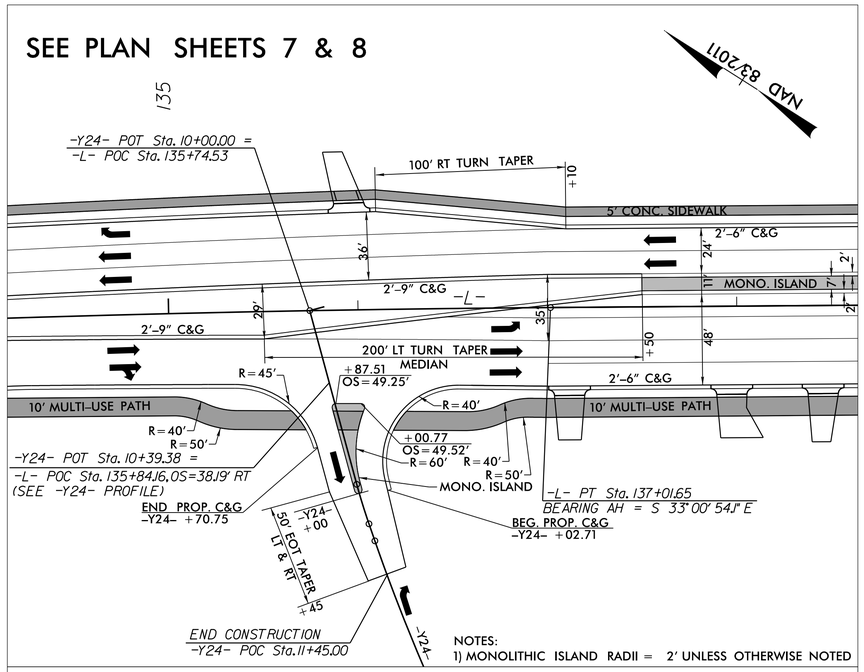


INTERSECTION DETAIL 3 -L- AT STA. 128+00

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INTERSECTION DETAIL 4
-L- AND -Y25-



INTERSECTION DETAIL 5
-L- AND -Y24-

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-2
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH

Docusigned by: Barry Smith 10/9/2026
827104120676493

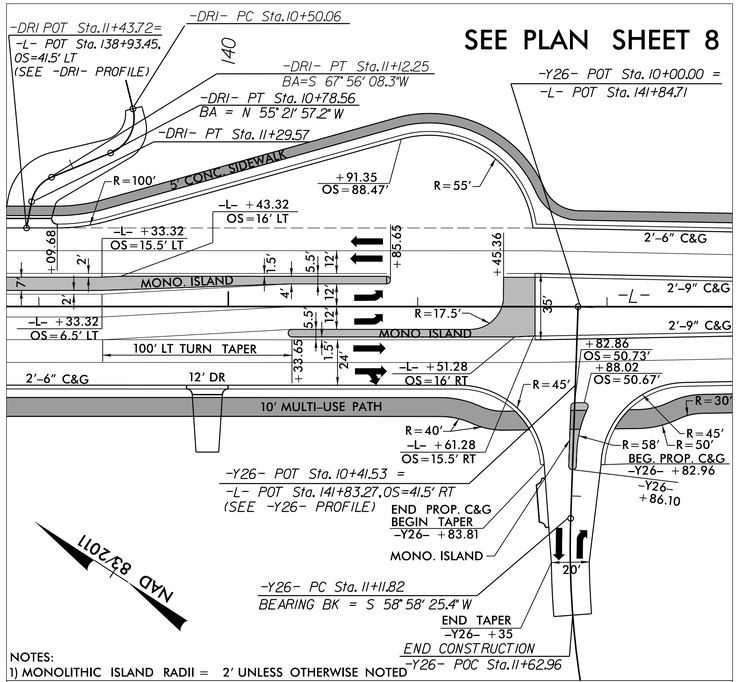
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

KCI ASSOCIATES OF N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609-6270
Phone (919) 783-9214
NC Firm License No: C-0764

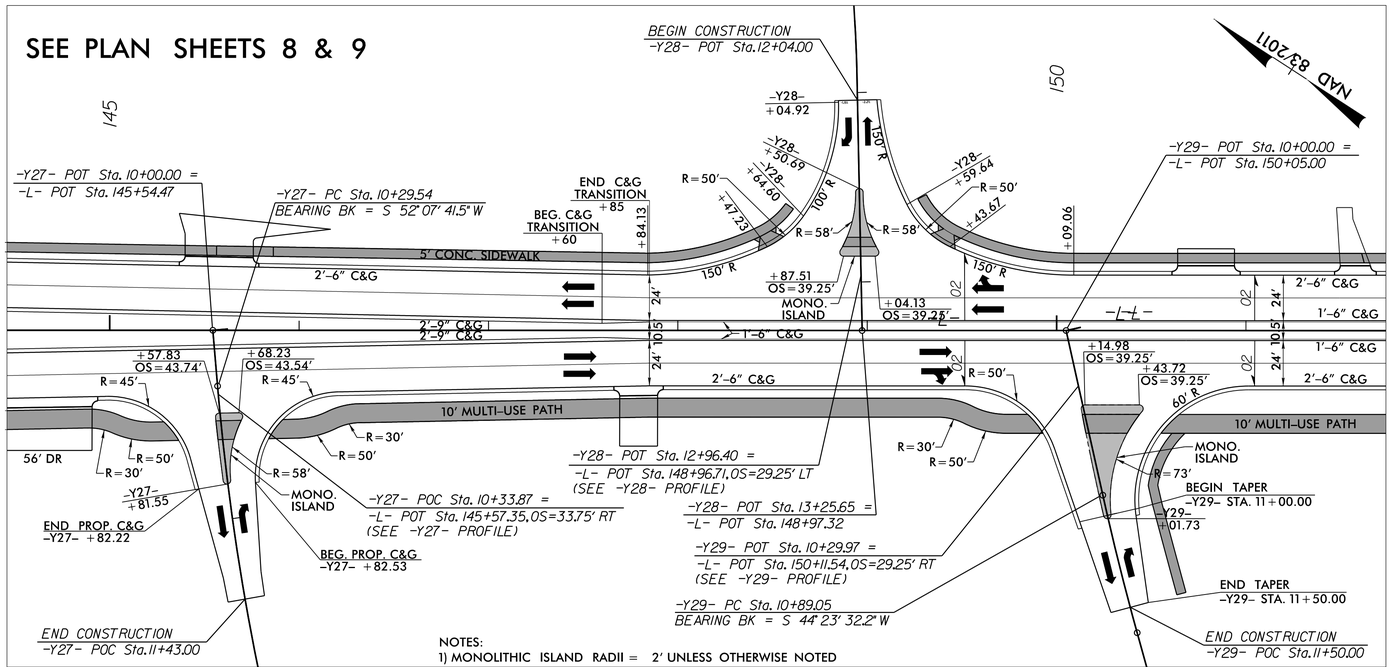
40 20 0 40 80

(GRAPHIC SCALE)

CONCRETE MONOLITHIC ISLAND
SIDEWALK



INTERSECTION DETAIL 6
-L- AND -Y26-



INTERSECTION DETAIL 7
-L- AND -Y27-, -Y28-, -Y29-

Docusign Envelope ID: 6357D2FC-2C87-8BA2-817F-95736C4CB0CF

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-3
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH

Docusigned by: Barry Smith 10/9/2026 827104108676493

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

KCI ASSOCIATES OF N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609-6270
Phone (919) 783-9214
NC Firm License No: C-0764

NAD 83/2011

-Y1A- POC Sta. 10+15.00 =
-Y1- POC Sta.11+65.42,OS= 15' LT
(SEE -Y1A- PROFILE)

-Y1A- PT Sta. 12+01.94

-Y1A- PC Sta. 10+11.67

-L- PC Sta. 155+81.28

-Y1A- POT Sta. 15+73.38 =
-Y2- POT Sta.12+49.40

-Y2- POT Sta. 10+41.70 =
-L- POC Sta.159+88.62,OS= 41.25' LT
(SEE -Y2- PROFILE)

-Y2B- POT Sta. 14+36.46 =
-L- POC Sta.164+31.27

-Y1- POT Sta. 13+59.29 =
-L- POT Sta. 155+00.00

-Y1- POT Sta. 13+30.04 =
-L- POT Sta. 155+00.00,OS=29.25' LT
(SEE -Y1- PROFILE)

-Y2A- POT Sta. 10+41.70 =
-L- POC Sta.159+76.38,OS= 41.25' RT
(SEE -Y2A- PROFILE)

-Y2B- POT Sta. 14+07.20 =
-L- POC Sta.164+32.16,OS= 29.25' RT
(SEE -Y2B- PROFILE)

-Y2B- PT Sta. 13+26.06

-Y2A- PT Sta. 12+38.13

-Y2B- PC Sta. 10+74.63
BEARING BK = S 83° 46' 27.8" E

END CONSTRUCTION
-Y2A- POT Sta.16+65.00
(TIE TO PROJECT U-5112)

-Y2B- POT Sta. 10+00.00 =
-Y2A- POT Sta.15+65.58

NOTES:
1) MONOLITHIC ISLAND RADII = 2' UNLESS OTHERWISE NOTED

40 20 0 40 80
(GRAPHIC SCALE)

CONCRETE MONOLITHIC ISLAND
SIDEWALK

NOTE: SEE SHEET NO. 9 AND 9A

INTERSECTION DETAIL 8
-L- AND -Y1-, -Y2-, -Y2A-, -Y2B-

Docusign Envelope ID: B71AA02A-FD75-88E3-80DC-E0413480B25D

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

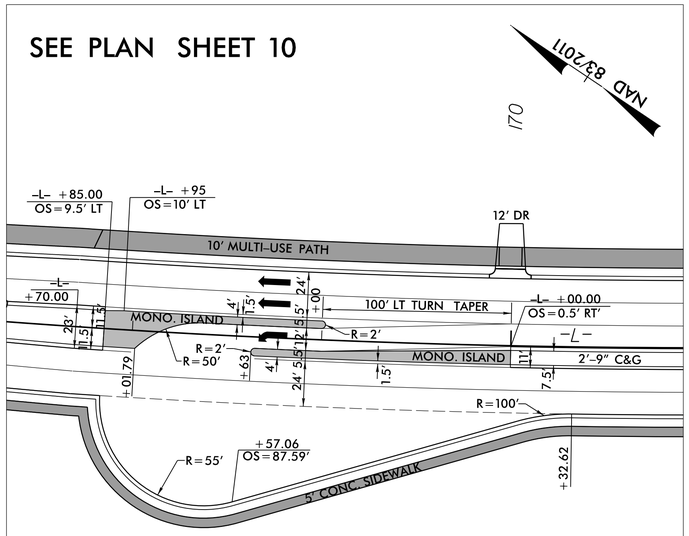
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH

Docusigned by: Barry Smith 10/9/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

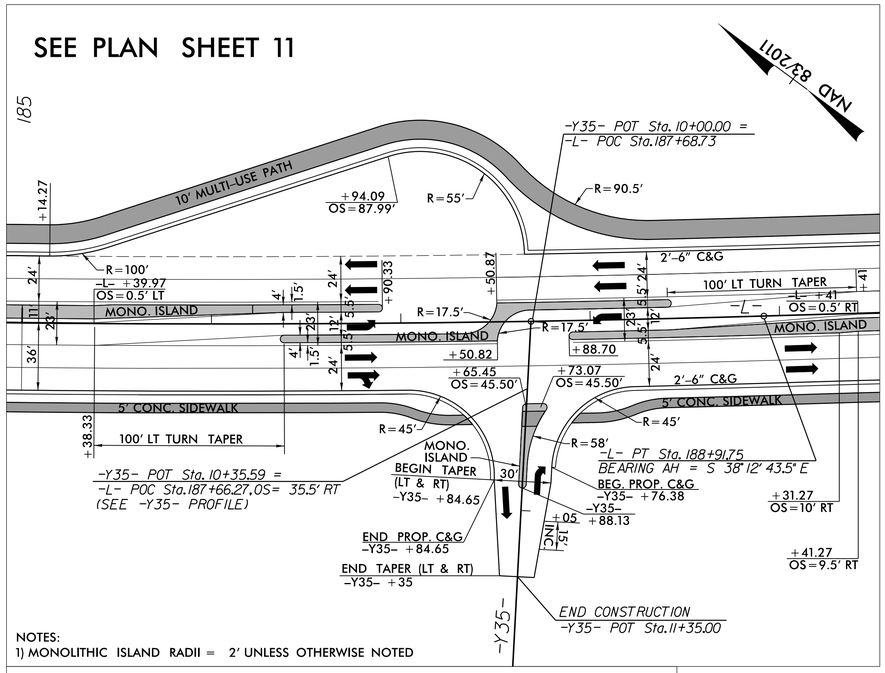
KCI ASSOCIATES OF N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609-6270
Phone (919) 783-9214
NC Firm License No: C-0764

SEE PLAN SHEET 10



INTERSECTION DETAIL 9
–L– STA. 170 + 00.00

SEE PLAN SHEET 11



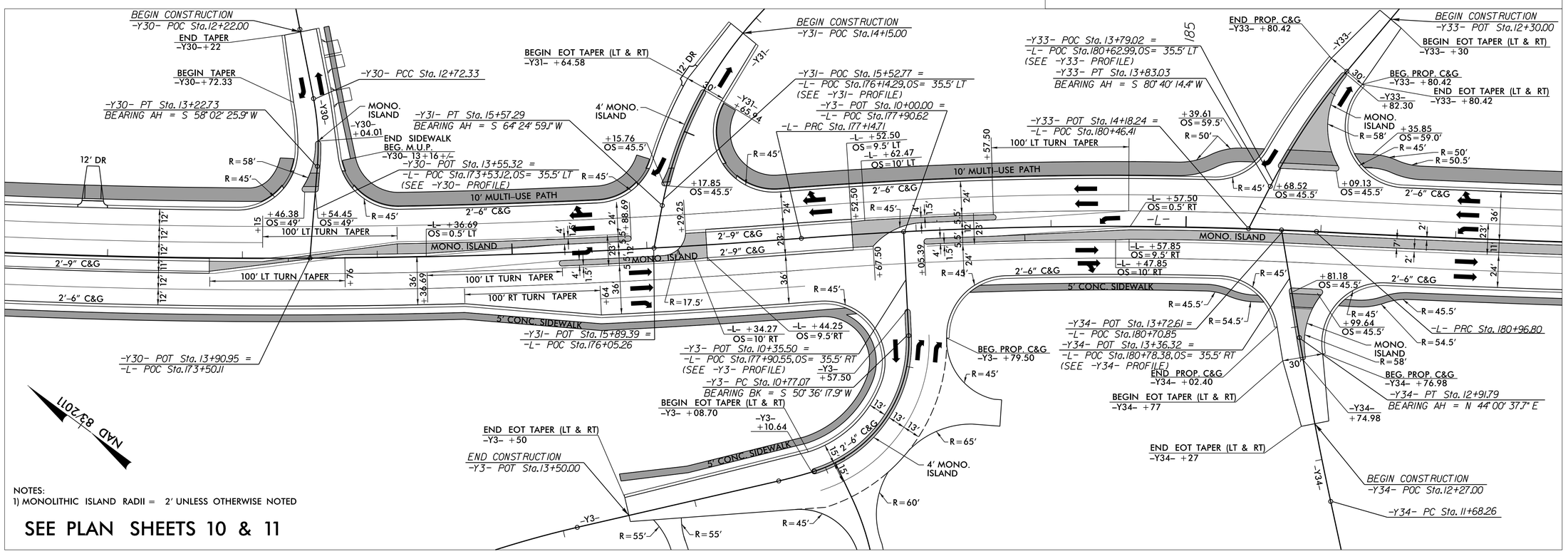
NOTES:
1) MONOLITHIC ISLAND RADII = 2′ UNLESS OTHERWISE NOTED

INTERSECTION DETAIL 10
–L– AND –Y35–



CONCRETE MONOLITHIC ISLAND
SIDEWALK

INTERSECTION DETAIL 11
–L– AND –Y30–, –Y31–, –Y3–, –Y33–, –Y34–



NOTES:
1) MONOLITHIC ISLAND RADII = 2′ UNLESS OTHERWISE NOTED

SEE PLAN SHEETS 10 & 11

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-5
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH

Docusigned by: Barry Smith 9374041C9674492... 10/9/2026

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON

Signed by: JOSHUA DALTON 10F89ADBC1499AC3... 10/9/2026

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KCI ASSOCIATES OF N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609
Phone (919) 783-9214
NC Firm License No: C-0764

SUNGATE DESIGN GROUP
5400 Etta Burke Ct., STE. 100 • Raleigh, North Carolina 27606
Phone: (919) 859-2243 • Eng Firm License No. C-890

NAD 83/NA 2011

LESTER AND MARY YANDLE, LLC
DB 14396 PG 692

89
ASPEN ASSETT GROUP LLC
DB 8909 PG 829

ASPEN ASSET GROUP LLC
DB 8786 PG 789

88

95 100 105

-L- 94+30.22 225.01' MON

-L- 95+10.47 150.66' MON

-L- 94+79.79 139.83' MON

-L- 97+07.46 141.30' MON

-L- 94+30.46 332.27' MON

48" WW/SSW INV=709.81

INV=690.71

INV=689.41

WOODS SOIL ISBKD CONC GR

60.00'

-L- +00.00 83.22' LT BEGIN C/A

-L- +40.00 119.85' LT 190.00' LT

-L- +00.00 134.97' LT 190.00' LT

-L- +00.00 95.00' LT END C/A

-L- +49.50 69.53' LT 135.00' LT

-L- +64.00 135.00' LT

-L- +04.00 135.00' LT

-L- +49.50 95.00' LT

-L- +85.00 51.50' LT

-L- +37.00 52.66' LT

-L- +85.00 47.50' LT

-L- +95.00 47.50' LT 95.00' LT

RW CA

PDE

DUE

GREU TL-3

CAT-1

-L- +57.76 100.42' RT EX.R/W

-L- +40.00 109.00' RT E/ST. R/W 113.00' RT

-L- +89.50 105.51' RT 120.55' RT

-L- +35.50 121.00' RT

-L- +27.00 122.00' RT

-L- +34.00 119.99' RT

-L- +90.00 75.13' RT EX.R/W END C/A

-L- +21.00 124.00' RT

-L- +00.00 91.27' RT EX.R/W BEGIN C/A

84
PAUL H. TROTTER
6058 - 295

TDE

-L- +00.00 123.32' RT 303.00' RT

-L- +50.21 303.00' RT

N 62°25'28" E 250.13'

N 33°34'13" W 167.36'

N 08°03'11" E 199.26'

S 64°58'17" W 757.48'

+27.03 124.50'

I-5507 PROP. ROW

LESTER AND MARY YANDLE, LLC

BEGIN PROJECT U-4714AC
-L- STA. 96+20.00 =
END PROJECT I-5507
-Y6- STA. 108+79.49, OS = 5.27' RT

170
EDWIN LAWRENCE TENHENGEL
DB 1918 PG 155

--- PROP. I-5507 PROJECT
FOR DESIGN, SEE SHEET 5

MATCHLINE -L- 108+00.00
SEE SHEET 2B-6

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-6
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH

Docusigned by: Barry Smith 10/9/2026

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G DALTON

Signed by: JOSHUA DALTON 10/9/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

KCI ASSOCIATES OF N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609
Phone (919) 783-9214
NC Firm License No: C-0764

SUNGATE DESIGN GROUP
5400 Etta Burke Ct., STE. 100 • Raleigh, North Carolina 27606
Phone: (919) 859-2243 • Eng Firm License No. C-890

NAD 83/NA 2011

MATCHLINE -L- 108+00.00
SEE SHEET 2B-5

MATCHLINE -L- 122+00.00
SEE SHEET 2B-7

89 ASPEN ASSETT GROUP LLC
DB 8909 PG 829

87 DUKE POWER CO
4147 - 921

86 J & M INVESTMENTS LLC
DB 19082 PG 796

85 FOUR MORE INVESTMENTS LLC
DB 19420 PG 508
TRACT A

FOUR MORE INVESTMENTS LLC
DB 19420 PG 508

CHARLESTON VENTURE LLC
DB 10765 PG 668

JEFFREY WAYNE SPARKS
AND RICHARD ALAN SPARKS
DB 33348 PG 935

DUKE POWER CO
4147 - 915

SR 1009 E JOHN ST 25' BST

DUE

TDE

PUE

CL 'B' RIPRAP
EST. 2 TONS
EST. 7 SY. GF

FOR DESIGN, SEE SHEET 6

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PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-7
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH

Docusigned by: Barry Smith 10/9/2026

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON

Signed by: JOSHUA DALTON 10/9/2026

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SUNGATE DESIGN GROUP
5400 Ella Burke Ct., STE. 100 • Raleigh, North Carolina 27606
Phone: (919) 859-2243 • Eng Firm License No. C-890

8/17/99

NAD 83/NA 2011

MATCHLINE -L- 122+00.00 SEE SHEET 2B-6

MATCHLINE -L- 136+00.00 SEE SHEET 2B-8

87 DUKE POWER CO 4147 - 921

97 CYNTHIA SEWELL GARDNER DB 2165 PG 534

98 2217 EAST JOHN ST LLC DB 19636 PG 619

99 2217 EAST JOHN ST LLC DB 19636 PG 619

91 INDIAN TRAIL PLAZA DB 26739 PG 894

92 TROTTER PROPERTIES LLC DB 19840 PG 566

93 HAWTHORNE'S HOLDING GROUP LLC DB 31916 PG 417

95 MARCELLA MCINTYRE WITHROW DB 36014 PG 297

96 MARCELLA MCINTYRE WITHROW DB 36014 PG 294

97A MARCELLA MCINTYRE WITHROW DB 36014 PG 303 MB 14 PG 217 LOT 1

171 MARCELLA MCINTYRE WITHROW DB 36014 PG 422 MB 14 PG 217 LOT 2

SR 1009 E JOHN ST 24' BST

U-4713A PROP. ROW

U-4713A PROP. TCE

U-4713A PROP. PDE

--- PROP. U-4713A PROJECT
FOR DESIGN, SEE SHEET 7

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PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-8
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH

Docusigned by: Barry Smith 10/9/2026

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON

Signed by: JOSHUA DALTON 10/9/2026

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5400 Ellis Burke Ct., STE. 100 • Raleigh, North Carolina 27606
Phone: (919) 859-2243 • Eng Firm License No. C-890

NAD 83/NA 2011

MATCHLINE –L– 136+00.00
SEE SHEET 2B-7

MATCHLINE –L– 150+00.00
SEE SHEET 2B-9

110 2309 EAST JOHN ST LLC
DB 19543 PG 628

COUCHELL FAMILY PROPERTIES LLC
DB 16898 PG 439 — 118

JERRY MAC PRESSLEY & LYNDA PRESSLEY
DB N/F PG N/F

BERBICE ENTERPRISE LLC
DB 27406 PG 288
TRACT 2 — 113

BERBICE ENTERPRISE
DB 27406 PG 288
TRACT 1 — 113

2425 EAST JOHN ST LLC
DB 19185 PG 280
PARCEL 1 — 115

2425 EAST JOHN ST LLC
DB 19185 PG 280
PARCEL 2

ROKTAL PROPERTY DEVELOPMENT LLC
DB 28706 PG 193 — 117

BELTWAY INDUSTRIAL PARK LLC
DB 8402 PG 645

JEFFREY R. CARROLL AND WIFE TERESA A. CARROLL
DB 367 PG 326 — 121

AJC LLC
DB 5472 PG 276

F & B LLC
DB 5398 PG 407 — 120

2309 EAST JOHN ST LLC
DB 19543 PG 628
TRACT 1 — 99

2309 EAST JOHN ST LLC
DB 19543 PG 628
TRACT 2

JOSEPH C MARTIN
DB 17493 PG 938
MB 14 PG 217
LOT 74 — 100

SHIRLEY HAUNG
DB 34441 PG 415
MB 14 PG 217
LOT 75 — 101

HAROLD JOSEPH TENNANT
DB 19822 PG 726
MB 14 PG 217
LOT 73

RICKY LEE KLUTZ AND WIFE RAYMOUTH JEAN KLUTZ
DB 6139 PG 151
MB 14 PG 217
LOT 72

AMY C MCNABB
DB 26721 PG 890
MB 14 PG 217
LOT 82 — 102

RM MATTHEWS LLC
DB 20588 PG 809
MB 14 PG 217
LOT 76 — 103

RM MATTHEWS LLC
DB 18103 PG 509
MB 14 PG 217
LOT 77

RM MATTHEWS LLC
DB 32300 PG 553
MB 14 PG 217
LOT 81

RM MATTHEWS LLC
DB 18103 PG 512
MB 14 PG 217
LOT 78 — 104

TNW PROPERTIES INC
DB 18626 PG 264
MB 14 PG 217
LOT 80

JEFFREY CLEGG PRESSLEY & EDWARD EARL SUGGS
DB 35962 PG 539
MB 14 PG 217
LOT 79 — 181

EAST JOHN SYSTEMS, L.L.C.
DB 29672 PG 501
MB 14 PG 217
LOT 154 — 105

EAST JOHN SYSTEMS, L.L.C.
DB 29672 PG 501
MB 14 PG 217 — 106

JEFFREY C PRESSLEY
DB 4750 PG 90
MB 14 PG 217
LOT 153

JEFFREY C PRESSLEY
DB 4750 PG 90
MB 14 PG 217

EAST JOHN SYSTEMS, L.L.C.
DB 29672 PG 501
MB 14 PG 217 — 107

CAROLINA WATER SERVICE INC OF NC
DB 17493 PG 938
MB 14 PG 217
LOT 3

VICTORIA T MCPHATTER
DIANNE T GALLOWAY
PHYLLIS T BRYOM
ALICE T NICHOLS
DB 3736 PG 864
MB 14 PG 217

CRYSTAL BC PROPERTIES, LLC.
DB 8432 PG 15 — 108

EASTWOOD FOREST BAPTIST CHURCH
DB N/F PG N/F — 109

WELDON D. POWELL
DB 914 PG 033 — 182

WELDON D. POWELL
DB 935 PG 099

EASTWOOD FOREST BAPTIST CHURCH
DB N/F PG N/F

SR 1009 OLD MONROE RD

SR 3556 ORMWOOD PL

SR 1009 E JOHN ST (3' EXIST.)

SR 1009 E JOHN ST (ENDS)

24' BST (BEGINS)

-L- STA 136+00.00

-L- STA 150+00.00

-Y24- -Y25- -Y26- -Y27- -Y28-

FOR DESIGN, SEE SHEET 8

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PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-9
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH

Docusigned by: Barry Smith 10/9/2026

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON

Signed by: JOSHUA DALTON 10/9/2026

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Phone: (919) 859-2243 • Eng Firm License No. C-890

8/17/99

NAD 83/NA 2011

MATCHLINE -Y2- 14+50.00
SEE SHEET 2B-9A

MATCHLINE -L- 150+00.00
SEE SHEET 2B-8

MATCHLINE -L- 164+00.00
SEE SHEET 2B-10

MATCHLINE -Y2B- 13+00.00
SEE SHEET 2B-9A

MATCHLINE -Y2A- 14+00.00
SEE SHEET 2B-9A

179 METROLINA MEDICAL PROPERTIES LLC
DB 4307 PG 225

180 TOWN OF STALLINGS
DB 8353 PG 245

173 STARNES CAROLE, ET AL
DB 20E PG 575

SAFELITE ELECTRIC, INC
DB 169 PG 171

MARK S. SIMPSON AND WIFE CAROL L. SIMPSON
DB 5837 PG 550

MARIA COPSIS TASOPOULOS AND HUSBAND, ANOTHY TASOPOULOS A ONE-HALF UNDIVIDED INTEREST AS TENANTS BY THE ENTIRETY AND PETER NICHOLAS COPSIS THE OTHER ONE-HALF UNDIVIDED INTEREST AS TENANTS BY THE ENTIRETY
DB 792 PG 860

JOHNSON WALTON CURTIS & HESTA T
DB N/F PG N/F

130 KIMBERLY B. CROWE
DB 659 PG 042

131

132

133A CAROLINA CONCRETE, INC.
DB 4540 PG 652
DB J PG 970

133 LR & FR, LLC
DB 3409 PG 898

134 TIMOTHY & RANDALL DUCKWORTH
DB N/F PG N/F

135 STALLINGS TOAD 209, LLC
DB 7054 PG 569

122

123 THE POINTE AT CAMPUS RIDGE, LLC
DB 7098 PG 810

124 WASH ONE, LLC
C/O THE MOSER GROUP
DB 3364 PG 087

125 RAINBOW TROUT PROPERTIES, LLC
C/O THOMAS B MCELWEE
DB 1579 PG 65
TRACT I

126

JANET GUION GRAHAM
DB 4979 PG 6769

174 GUION FAMILY LP
DB N/F PG N/F

127

129

EDWARD R. SQUIRES
DB 8007 PG 462

STEGALL AND COMPANY INC.
DB N/F PG N/F

GILBERTO HERNANDEZ AND WIFE MARICELA CASTILLO MORAN
DB 5353 PG 523

★ PROPOSED SIGNAL

FOR DESIGN, SEE SHEET 9

09-OCT-2026 12:45
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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-9A
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH

DocuSigned by: Barry Smith 10/9/2026

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON

Signed by: JOSHUA DALTON 10/9/2026

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KCI ASSOCIATES OF N.C., P.A.
4800 Falls of Neuse Road, Suite 200
Raleigh, NC 27609
Phone (919) 783-9214
NC Firm License No: C-0764

SUNGATE DESIGN GROUP
5400 Ellis Burke Ct., STE. 100 • Raleigh, North Carolina 27606
Phone: (919) 859-2243 • Eng Firm License No. C-890

NAD 83/NA 2011

TOWN OF STALLINGS DB N/F PG N/F

172A

S 17°15'43" E 65.17'

20' UTILITY EASMENT DB 1466 PG 737

S 17°N'37" E 189.95'

N 66°53'38" E 199.04'

N 51°07'00" E 175.39'

S 21°48'55" E 160.22'

-Y2- +78.00 52.00' RT

-Y2- +85.00 30.00' RT EXIST.R/W

-Y2- +68.00 49.00' RT

-Y2- +73.00 30.00' RT EXIST.R/W

-Y2- +56.16 30.00' LT EXIST.R/W 60.00' LT

-Y2- +98.00 60.00' LT

-Y2- +78.00 30.00' LT 53.00' LT

-Y2- +55.00 30.00' LT 50.00' LT

-Y2- +50.00 55.00' LT

-Y2- +89.96 30.00' LT EXIST.R/W

-Y2- +56.16 30.00' RT EX.R/W

-Y2- +56.16 55.00' RT

-Y2- +19.00 30.00' RT EXIST.R/W

-Y2- +02.00 41.00' RT 55.00' RT 68.00' RT 95.00' RT

-Y2- +75.00 30.00' RT EXIST R/W 50.00' RT 68.00' RT 95.00' RT

-Y2- +62.00 58.00' RT 68.00' RT

-Y2- +86.02 30.00' RT EX.R/W

TOWN OF STALLINGS DB 6874 PG 421

172

173

180

S 22°16'23" E 200.00'

S 67°43'37" W 150.00'

N 22°16'23" W 200.00'

N 22°23'04" W 203.11'

-Y2- PC Sta. 10+74.63

-Y2- POT Sta. 10+23.28 = -Y2A- POT Sta.15+65.58,OS= 23.28' LT (SEE -Y2B- PROFILE)

-Y2- POT Sta. 19+23.67

MATCHLINE -Y2- 14+50.00 SEE SHEET 2B-9

FOR DESIGN, SEE SHEET 9A

MATCHLINE -Y2B- 13+00.00 SEE SHEETS 2B-9 & 2B-10

MATCHLINE -Y2A- 14+00.00 SEE SHEET 2B-9

-Y2B- +00.00 58.00' RT

-Y2B- +47.85 27.50' LT

-Y2B- +50.00 55.00' RT

-Y2B- +00.34 27.96' LT

-Y2A- +68.00 61.50' LT 74.00' LT

-Y2B- +50.00 55.00' RT

-Y2A- +87.00 63.00' LT 74.00' LT

-Y2A- +55.00 36.75' RT

-Y2A- +05.00 34.88' RT

-Y2A- +13.70 50.00' RT

-Y2A- +16.00 54.00' RT

-Y2A- +24.00 50.00' RT

-Y2A- +34.00 69.00' RT

-Y2A- +38.18 52.94' RT

-Y2A- +34.00 45.00' RT

-Y2A- +43.00 33.45' RT 41.00' RT

-Y2A- +58.77 53.90' RT

-Y2A- +99.75 34.00' RT 30.25' RT EXIST.R/W

-Y2A- +61.00 68.00' RT

-Y2A- +73.00 71.00' RT

-Y2A- +89.05 35.26' RT

-Y2A- +84.00 67.00' RT

-Y2B- +62.61 DIP

-Y2B- +72.35 27.50' RT

-Y2B- +05.00 69.00' RT 81.00' RT

-Y2B- +96.00 69.00' RT 81.00' RT

-Y2B- +50.05 27.50' RT

-Y2B- +00.68 43.00' LT

-Y2B- +80.53 58.96' LT

-Y2A- +97.00 62.11' LT

-Y2A- +06.00 56.00' LT

-Y2A- +17.22 51.11' LT

-Y2A- +60.00 55.00' LT

-Y2A- +64.16 53.11' LT

-Y2A- +74.00 30.00' LT EXIST.R/W

-Y2A- +52.22 37.71' RT

-Y2B- POT Sta. 10+00.00 = -Y2A- POT Sta.[illegible]

129

127

175

176

177

178

4390 POTTER RD, LLC DB 7262 PG 321

T & Y MATTHEWS, LLC DB 7245 PG 884

H & J PROPERTIES OF UNION COUNTY LLC DB 3894 PG 354

STALLINGS TOWNCENTER, LLC DB 7269 PG 292

RANDALL B. DUKEWORTH AND BONNIE H. DUKEWORTH DB 926 PG 72

COLLEEN B. TEETER AND HUSBAND, HOWARD O. TEETER DB 761 PG 428

HOWARD ODELL TEETER DB 0139 PG 1230

PAUL KATOPODIS & LOULA KATOPODIS DB 7291 PG 909

PAUL KATOPODIS & LOULA KATOPODIS DB 7292 PG 025

MARGUERITE ADELE MAHAN DB 4632 PG 697

MONA-T, LLC DB 4862 PG 239

ALL AMERICAN DEVELOPMENT, INC. DB 4188 PG 869

FOR DESIGN, SEE SHEET 9A

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PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-10
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH
Docusigned by: Barry Smith 10/9/2026

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON
Signed by: JOSHUA DALTON 10/9/2026

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KCI ASSOCIATES OF N.C., P.A.
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NC Firm License No: C-0764

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Phone: (919) 859-2243 - Eng Firm License No. C-890

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HPB HISTORIC PROPERTY

S 34°37'13" E 421.63'

N 33°12'36" W 238.52'

S 43°58'42" E 440.49'

S 57°07'08" W 360.45'

HISTORIC PROPERTY

(143) FUNDERBURK FOUR, LLC DB 5945 PG 334 TRACT 1

(144) CAROLYN M. FUNDERBURK DB 792 PG 742

(135) ALLINGS TOAD 209, LLC DB 7054 PG 569

(136) ALPHA OMEGA LAND DEVELOPMENT INC. DB 488 PG 869

(137) CAROLYN M. FUNDERBURK DB 792 PG 742

(138) VIVIAN T. SHECKLER DB N/F PG N/F

(140) JUSTIN M. COLE AND WIFE, KELLY A. COLE DB 8448 PG 822 PB 4 PG 189 LOT 1

JUSTIN M. COLE AND WIFE, KELLY A. COLE DB 8448 PG 822 PB 4 PG 189 LOT 2

(142) GLORIA WILLIAMS SHERIN AND HUSBAND DAVID MICHAEL SHERIN DB 5265 PG 804

GLORIA WILLIAMS SHERIN AND HUSBAND DAVID MICHAEL SHERIN DB 5265 PG 804 TRACT 2

(145) JUSTIN TAYLOR WHISNANT AND ALYSSA WHISNANT DB 7889 PG 540

(145A) GAGIK GASPARYAN DB 7377 PG 252

(146) AIDA CAPELLA DB 4555 PG 152

(147) CONNIE H. THORNTON DB 1597 PG 150

(148) AARON D. KYLE AND SPOUSE KYLE JUDITH RAE DB 6411 PG 694

(149) ASHLEY N. JACKSON AND WIFE VICKY L. JACKSON DB 4166 PG 082

(161) APRIL L. RUST DB 4467 PG 535

(161A) DMITRIJS SELPACKIS AND WIFE MARIYA SELPACKIS DB 6688 PG 319

CLAUDIA SUE KOZLOWSKI DB 7900 PG 428

DENNIS W. SCHILL AND WIFE, GRACE V. SCHILL DB 6674 PG 0002

PETER V. PASQUA DB 7161 PG 685

YAMASA CO., LTD DB 7517 PG 228

COLLEEN B. TEETER AND HUSBAND, HOWARD O. TEETER DB 761 PG 428

MONA-T, LLC DB 4862 PG 239

KATOPODIS & A KATOPODIS 729 PG 909

E. MAHAN

MATCHLINE -L- 164+00.00 SEE SHEET 2B-9

MATCHLINE -Y2B- 13+00.00 SEE SHEET 2B-9A

MATCHLINE -L- 178+00.00 SEE SHEET 2B-11

FOR DESIGN, SEE SHEET 10

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-11
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH
Docusigned by: Barry Smith 10/9/2026
9274A1D9E7E499...

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G DALTON
Signed by: JOSHUA DALTON 10/9/2026
1098ADBC1499AC3...

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Phone: (919) 859-2243 • Eng Firm License No. C-890

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MATCHLINE -L- 178+00.00
SEE SHEET 2B-10

MATCHLINE -L- 192+00.00
SEE SHEET 2B-12

IGOR JURIC AND SAMANTHA JURIC AKA SAMANTHA M. JUIC, HUSBAND AND WIFE DB 6699 PG 427

M. BRENT HUFFMAN AND WIFE, KIMBERLY G. HUFFMAN DB 1005 PG 501

KIMBERLY M. DELGADO DB 7260 PG 872

JOSEPH G. LANE AND WIFE, WENDY T. LANE DB 1836 PG 450

WILLIAM A. LAUSTSEN & ALICIA M. LAUSTSEN DB 1674 PG 400

CASSANDRA J MAKOWSKI & DENNIS JAMES MAKOWSKI JR. DB 7494 PG 490

ANDREY LASHTUR DB 7392 PG 817

HISTORIC PROPERTY CAROLYN M FUNDERBURK DB 3119 PG 212

HOMESALES INC. DB 5208 PG 205 PB 4 PG 189 LOT 2

BONNIE FAYE MARTIN AND KIMBERLY DAWN SIETMANN DB 6082 PG 0734 PB 4 PG 189 LOT 3

HOMESALES INC. DB 5208 PG 205 PB 4 PG 189 LOT 1

BONNIE FAYE MARTIN AND KIMBERLY DAWN SIETMANN DB 6082 PG 0734 PB 4 PG 189 LOT 5

BONNIE FAYE MARTIN AND KIMBERLY DAWN SIETMANN DB 6082 PG 0734 PB 4 PG 189 LOT 6

RONALD LEE ALLED SEPERATED DB 1825 PG 109 PB 4 PG 189 LOT 19

RONALD LEE ALLED SEPERATED DB 1825 PG 109 PB 4 PG 189 LOT 20

REMOVE BONNIE FAYE MARTIN AND KIMBERLY DAWN SIETMANN DB 6082 PG 0734 PB 4 PG 189 LOT 4

TAE KYU PARK AND WIFE, OH SEON PARK DB 1317 PG 658

IME INVESTMENTS GROUP, INC DB 5405 PG 917 PB 4 PG 189 LOT 1

IME INVESTMENTS GROUP, INC DB 5405 PG 917 PB 4 PG 189 LOT 2

IME INVESTMENTS GROUP, INC DB 5405 PG 917 PB 4 PG 189 LOT 3

IME INVESTMENTS GROUP, INC DB 5405 PG 917 PB 4 PG 189 LOT 4

COUCHELL PETER JR PB 4 PG 189 LOT 5

COUCHELL PETER JR PB 4 PG 189 LOT 6

COUCHELL PETER JR PB 4 PG 189 LOT 7

COUCHELL PETER JR PB 4 PG 189 LOT 8

DAVID M SMITH & DEBBIE H SMITH PB 4 PG 189 LOT 101

DAVID M SMITH & DEBBIE H SMITH PB 4 PG 189 LOT 102

B.E. THOMPSON AND DEWEY THOMAS PRIEST DB 6450 PG 855 PB 4 PG 189 LOT 12

B.E. THOMPSON AND DEWEY THOMAS PRIEST DB 6450 PG 855 PB 4 PG 189 LOT 13

B.E. THOMPSON AND DEWEY THOMAS PRIEST DB 6450 PG 855 PB 4 PG 189 LOT 14

DB 3025 PG 664 PB 4 PG 189 LOT 1

DB 3025 PG 664 PB 4 PG 189 LOT 2

TIMOTHY L. SHERIN DB 3025 PG 664 PB 4 PG 189 LOT 3

TIMOTHY L. SHERIN

RZR LOVE LLC DB 8081 PG 558 PB 7 PG 37A LOT 6

TIMOTHY L. SHERIN AND WIFE, DAWN M. SHERIN DB 0916 PG 792 PB 7 PG 37A LOT 5

NJV ENTERPRISES, LLC DB 8429 PG 866 PB 4 PG 189 LOT 19

NJV ENTERPRISES, LLC DB 8429 PG 866 PB 4 PG 189 LOT 18

NJV ENTERPRISES, LLC DB 8429 PG 866 PB 4 PG 189 LOT 17

NJV ENTERPRISES, LLC DB 8429 PG 866 PB 4 PG 189 LOT 20

-Y31- -Y33- -Y34- -Y35- -Y36-

-L- -L- -L- -

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PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2B-12
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C SMITH
Docusigned by: Barry Smith 10/9/2026

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G DALTON
Signed by: JOSHUA DALTON 10/9/2026

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NC Firm License No: C-0764

SUNGATE DESIGN GROUP
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Phone: (919) 859-2243 • Eng Firm License No. C-690

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END TIP PROJECT U-4714AC
-L- POT STA. 193+50.61 =
BEGIN TIP PROJECT U-4714BA
-L- POT STA. 10+00.00

MATCHLINE -L- 192+00.00
SEE SHEET 2B-11

SIKES VAN HENERY AND LYNETTE G
PB A PG 50B LOT 10

LUKENS JUDY E
DB 6706 PG 257
PB A PG 50B LOT 11

RUSSELL DANNY K AND VIRGINIA
DB N/F PG N/F
PB A PG 50B LOT 12

PHIFER BRENDA E
DB N/F PG N/F
PB A PG 50B LOT 13

FREDERICK M. BUNICK AND WIFE PATRICIA G. GABRIEL-BURNICK
DB 1639 PG 0293
PB A PG 50B LOT 14

KRISTIN AREY
DB 6975 PG 677
PB A PG 50B LOT 15

ERIK K ROWLETT AND WIFE ISABEL RUEDA ABAD
DB 6005 PG 222

ROBERT M. SULLIVAN AND WIFE SHARON L. SULLIVAN
DB 1653 PG 327

MATTHEW SMITH
DB 7247 PG 709
PB F PG 844

JACEK RUDZIEWICZ
DANKA RUDZIEWICZ
DB 3792 PG 326
PB F PG 844

DAVID L RAY
SUSAN A RAY
DB 1925 PG 671
PB F PG 844

KORRY L. HUMPHREY
DB 6018 PG 858
PB F PG 844

KIMBERLY A ELSASSER
DB 3681PG 307
PB F PG 844

CHRISTINE S GOODSON
DAVIS A GOODSON
DB 3187 PG 441
PB F PG 844

MORNINGSIDE MEADOWS HOMEOWNERS ASSOCIATION, INC
DB 1414 PG 136
PB F PG 844
COS

MARK DAVID BROOME
DB 7235 PG 204

STALLINGS POINTE, LLC
DB 7094 PG 100

JAMES HAMILTON TURNER, JR
DB 3524 PG 722

ANTONIOS K. PANOU
DB 911PG 697

ANTONIOS K. PANOU
DB 858 PG 500

RICHARD P. BROOME
DB 365 PG 477

DAWN M. SHERIN
DB 4555 PG 131
PB 7 PG 37A
LOT 4

317 PROPERTIES, LLC
DB 5887 PG 181
PB 7 PG 37A
LOT 3

ALLEN POLE
DB 141PG 344
PB 7 PG 37A
LOT 2

DANNY F. DUNN AND WIFE JENNIFER J DUNN
DB 4142 PG 876
PB 7 PG 37A
LOT 1

BRUCE R. MARX AND SPOUSE, LINDA L MARX
DB 5944 PG 570

WILLIAM LARRY ALEXANDER
DB 7503 PG 411

DAMON S. BUTCHER AND WIFE, TIFFANY M. BUTCHER
DB 1349 PG 699

WILLIAM F. DEMOSS AND NANCY B. DEMOSS
DB 7131PG 678

LINA M. ALEXANDER
DB 1169 PG 823

HAZEL FOSTER
DB N/F PG N/F

MAXWELL RICHARD MCWATERS
DB 7436 PG 537

FULCRUM PROPERTY MANAGEMENT LLC
DB 4772 PG 275

YAMASA CO., LTD.
DB 7531PG 455

ERIC W. CARTON AND WIFE TARA A. CARTON

-L- +79.00
94.00' LT
103.00' LT

-L- +91.00
104.00' LT

-L- +12.00
54.50' LT (U-4714B R/W)
82.00' LT

END U-4714AC -L- +50.61
BEGIN U-4714B
54.50' LT

U-4714B PROP. ROW

-L- +90.97
53.27' RT
EXIST. R/W

-L- +90.98
69.39' RT

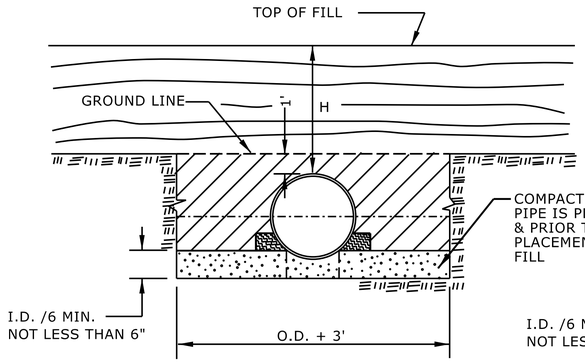
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FOR DESIGN, SEE SHEET 12

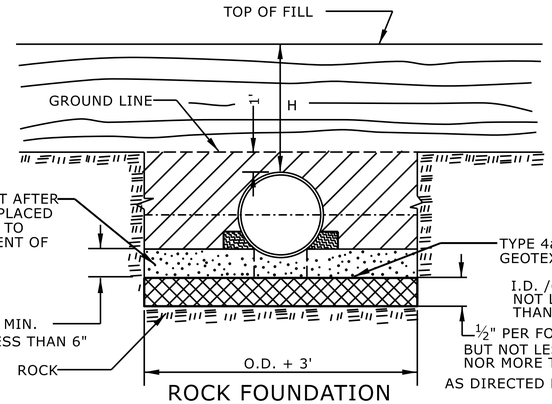
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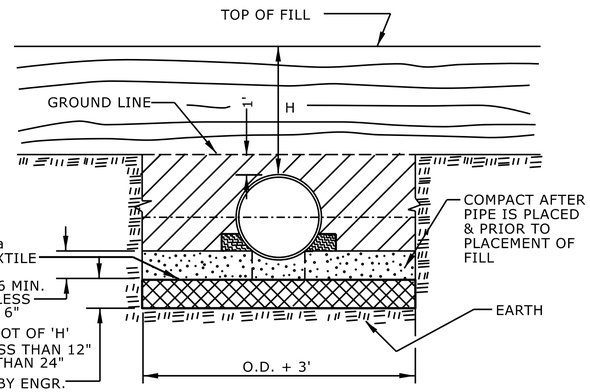
PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-1



NORMAL EARTH FOUNDATION

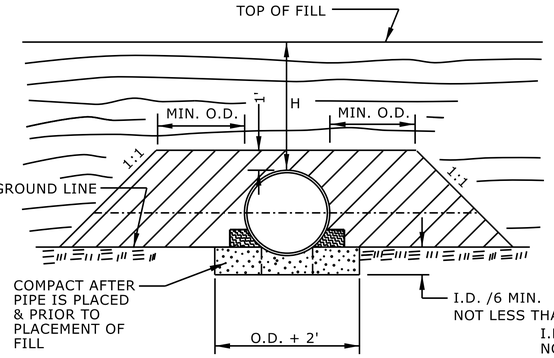


ROCK FOUNDATION

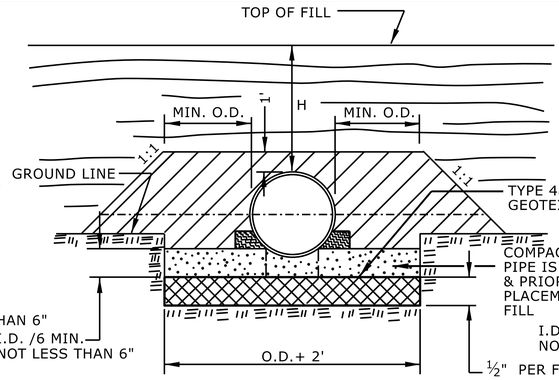


UNSUITABLE MATERIAL FOUNDATION

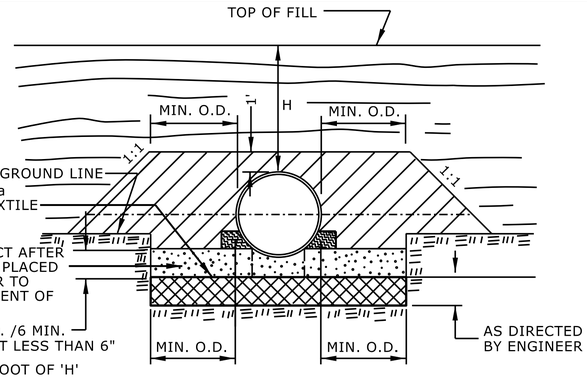
PIPE IN TRENCH



NORMAL EARTH FOUNDATION



ROCK FOUNDATION



UNSUITABLE MATERIAL FOUNDATION

PIPE ABOVE GROUND

GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.

O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.

H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

APPROVED SUITABLE LOCAL MATERIAL.

TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

SPRINGLINE OF PIPE

SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE 1 ABOVE AND BELOW SPRINGLINE.

UNDISTURBED EARTH MATERIAL

SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

METHOD OF PIPE INSTALLATION

FLEXIBLE PIPE

SHEET 1 OF 2

300.01

NORTH CAROLINA PROFESSIONAL SEAL 033144 ENGINEER NICOLE M. HACKLER

10/9/2026

Signed by: Nicole M Hackler 5884323D34164C5...

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CONTRACTS STANDARDS AND DEVELOPMENT UNIT

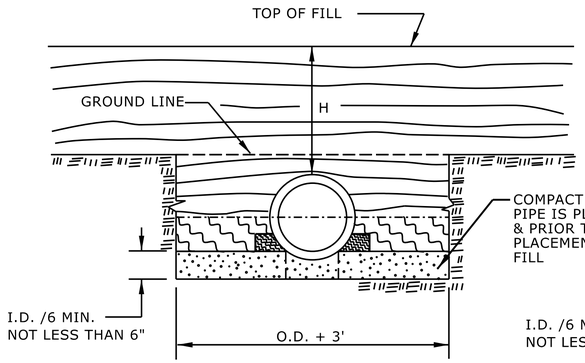
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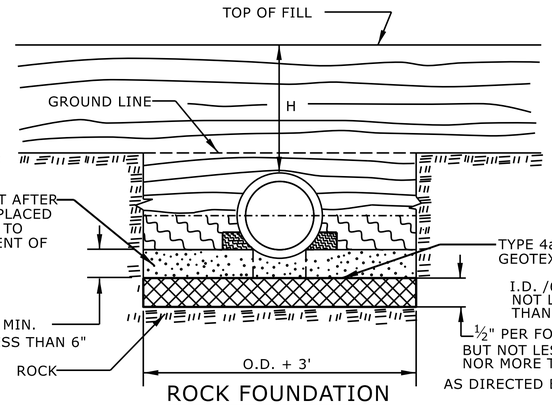
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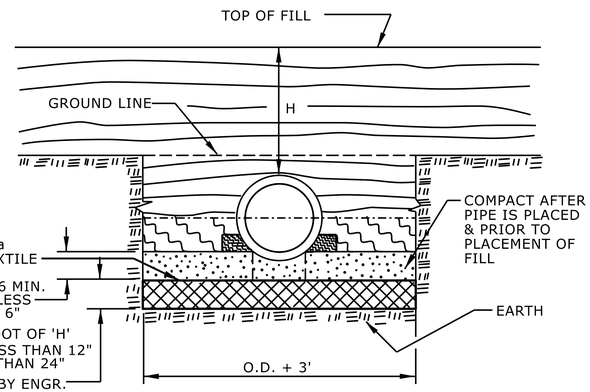
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NORMAL EARTH FOUNDATION

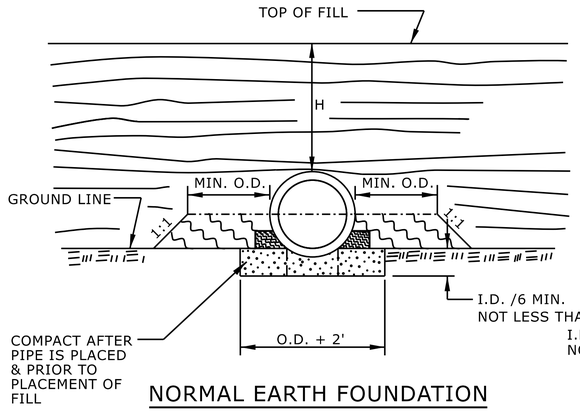


ROCK FOUNDATION

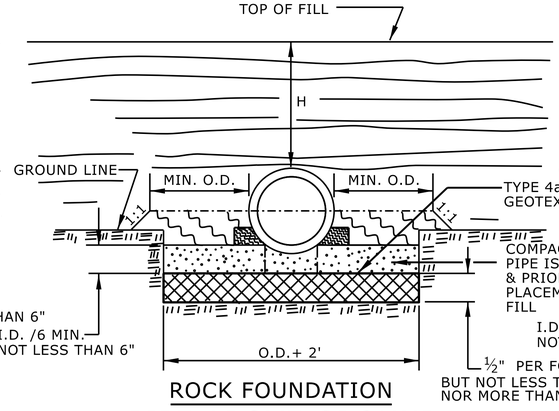


UNSUITABLE MATERIAL FOUNDATION

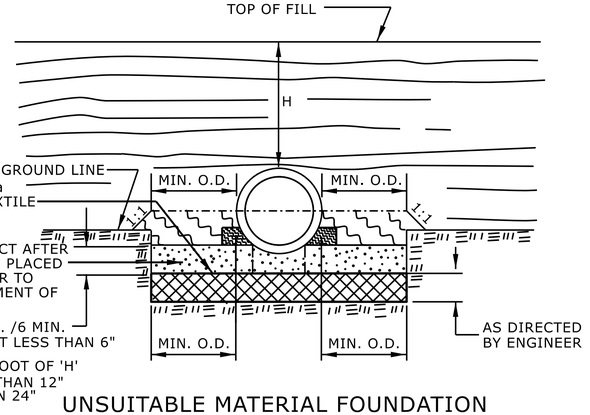
PIPE IN TRENCH



NORMAL EARTH FOUNDATION



ROCK FOUNDATION



UNSUITABLE MATERIAL FOUNDATION

PIPE ABOVE GROUND

GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.

O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.

H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

APPROVED SUITABLE LOCAL MATERIAL.

TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

SPRINGLINE OF PIPE

SELECT BACKFILL MATERIAL CLASS III OR CLASS II, BELOW SPRINGLINE.

UNDISTURBED EARTH MATERIAL

SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

METHOD OF PIPE INSTALLATION

RIGID PIPE

SHEET 2 OF 2

300.01

NORTH CAROLINA PROFESSIONAL SEAL 033144 ENGINEER NICOLE M. HACKLER

10/9/2026

Signed by: Nicole M Hackler
5884323D34164C5...

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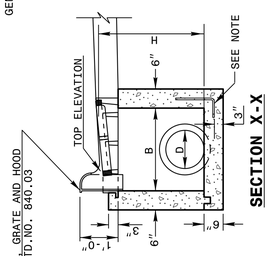
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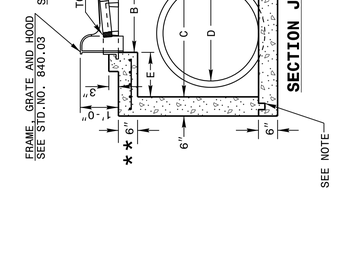
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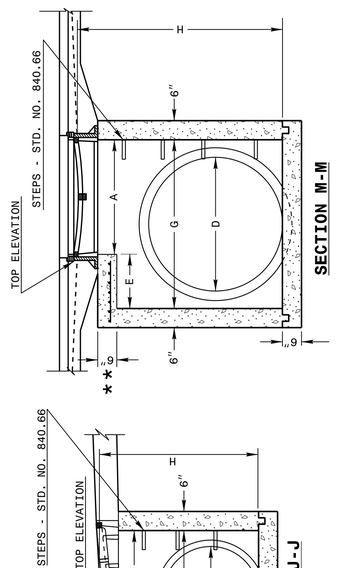
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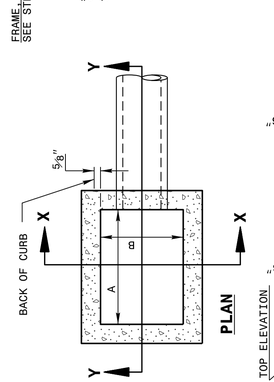
PROJECT REFERENCE NO.	SHEET NO.
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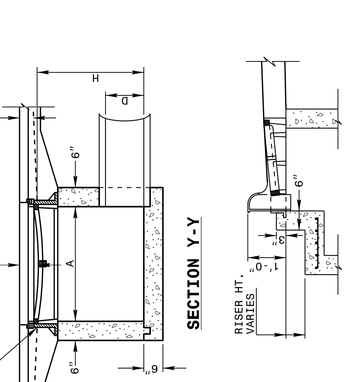
GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.
FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
CONSTRUCT WITH PIPE CROWNS MATCHING.
CHAMFER ALL EXPOSED CORNERS 1".
** FOR STRUCTURES WITH PIPE LARGER THAN 54", MAKE THE TOP SLAB 8" THICK.









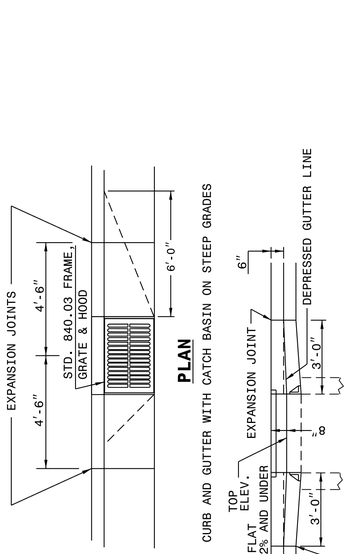


STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR **MINIMUM DEPTH CONCRETE CATCH BASIN** 12" THRU 84" PIPE	SHEET 1 OF 2 **840D02**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR **MINIMUM DEPTH CONCRETE CATCH BASIN** 12" THRU 84" PIPE

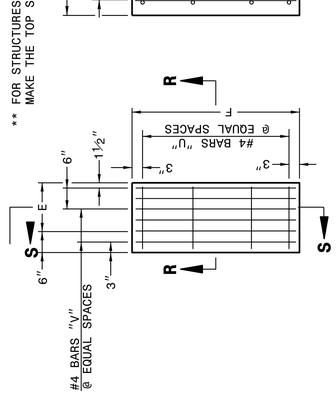
SHEET 1 OF 2 **840D02**



* RISER HAS .228 CUBIC YARDS OF CONCRETE PER FOOT HEIGHT

MINIMUM DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN(BASED ON MIN. HEIGHT, H, WITH NO RISER) *

PIPE D	DIMENSIONS OF BOX AND PIPE SPAN A	WIDTH B	WIDTH C	SPAN G	MIN. HEIGHT H	COVER DIMENSION E	COVER DIMENSION F	BARS-U NO.	BARS-U LENGTH	BARS-W NO.	BARS-W LENGTH	TOTAL LBS.	CU.YDS. CONC. IN BOX TOP SLAB	CU.YDS. CONC. IN BOX BOTTOM SLAB	CU.YDS. CONC. IN BOX TOT. CONC. FOR MINIMUM HEIGHT H	DEDUCTIONS ONE PIPE C.M.	DEDUCTIONS ONE PIPE R.C.
12"	3'-0"	2'-2"	--	--	2'-0"	--	--	--	--	--	--	--	--	0.235	0.772	0.015	0.026
15"	3'-0"	2'-2"	--	--	2'-3"	--	--	--	--	--	--	--	--	0.235	0.829	0.023	0.036
18"	3'-0"	2'-2"	--	--	2'-6"	--	--	--	--	--	--	--	--	0.235	0.887	0.033	0.049
24"	3'-0"	2'-2"	--	--	3'-1"	--	--	--	--	--	--	--	--	0.235	1.001	0.059	0.085
30"	3'-0"	2'-2"	3'-4"	3'-4"	3'-10"	1'-2"	4'-4"	4	1'-6"	2	4'-1"	39	0.123	0.347	1.433	0.092	0.127
36"	3'-0"	2'-2"	3'-10"	3'-10"	4'-4"	1'-8"	4'-10"	4	1'-11"	3	4'-7"	43	0.161	0.432	1.714	0.132	0.178
42"	3'-0"	2'-2"	4'-5"	4'-5"	4'-11"	2'-2"	5'-5"	5	2'-5"	3	5'-2"	47	0.200	0.543	1.738	0.160	0.243
48"	3'-0"	2'-2"	5'-0"	5'-0"	5'-6"	2'-10"	6'-0"	5	3'-1"	4	5'-9"	51	0.235	0.667	2.052	0.235	0.317
54"	3'-0"	2'-2"	5'-7"	5'-7"	6'-0"	3'-5"	6'-7"	6	3'-8"	5	6'-4"	56	0.289	0.802	2.387	0.297	0.401
60"	3'-0"	2'-2"	6'-3"	6'-3"	6'-6"	4'-1"	7'-3"	6	4'-4"	5	7'-0"	61	0.340	0.973	2.722	0.363	0.546
66"	3'-0"	2'-2"	6'-11"	6'-11"	7'-0"	4'-9"	7'-11"	7	5'-0"	6	7'-8"	66	0.391	1.160	3.057	0.440	0.655
72"	3'-0"	2'-2"	7'-6"	7'-6"	7'-6"	5'-3"	8'-6"	7	5'-6"	6	8'-3"	72	0.442	1.340	3.392	0.524	0.774
78"	3'-0"	2'-2"	8'-1"	8'-1"	8'-0"	5'-11"	9'-1"	8	6'-2"	7	8'-10"	78	0.493	1.530	3.727	0.615	0.893
84"	3'-0"	2'-2"	8'-9"	8'-9"	8'-6"	6'-7"	9'-9"	8	6'-10"	7	9'-6"	84	0.544	1.760	4.062	0.713	1.010



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR **MINIMUM DEPTH CONCRETE CATCH BASIN** 12" THRU 84" PIPE	SHEET 2 OF 2 **840D02**

ENGLISH DETAIL DRAWING FOR **MINIMUM DEPTH CONCRETE CATCH BASIN** 12" THRU 84" PIPE

SHEET 2 OF 2 **840D02**

NORTH CAROLINA PROFESSIONAL SEAL 33144 ENGINEER NICOLE M HACKLER
10/9/2026
Signed by: Nicole M Hackler
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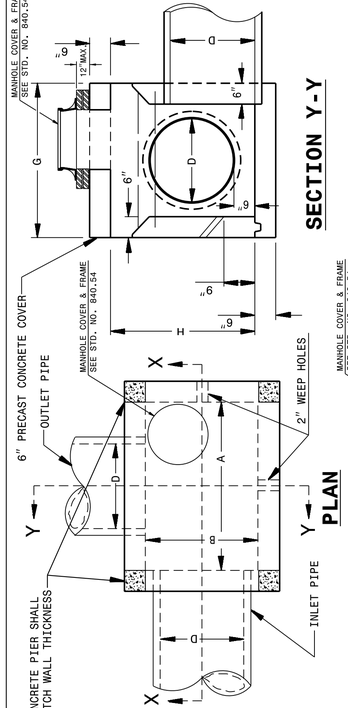
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U-4714AC	2C-4

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
CONCRETE CATCH BASIN
(3 OR 4 SIDE OPEN THROAT)
(MANHOLE OPTIONAL)

SHEET 1 OF 2 — 840D04

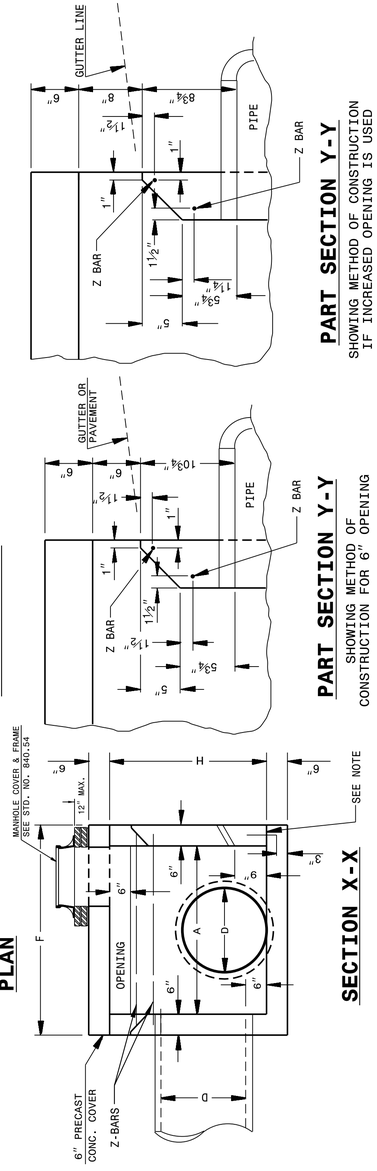
GENERAL NOTES:
ALL CATCH BASINS OVER 3'-6" IN DEPTH TO BE PROVIDED WITH STEPS 12" ON CENTERS. STEPS SHALL BE IN ACCORDANCE WITH STD. 840.66.
ALL EXPOSED CORNERS TO BE CHAMFERED 1".
CLASS "B" CONCRETE TO BE USED THROUGHOUT.
2" PIPE WEEPHOLES TO BE PLACED AS DIRECTED BY ENGINEER.
THE 6" OPENING SHOWN MAY BE INCREASED TO 8" MAXIMUM IF DEEMED TO BE NECESSARY BY THE ENGINEER.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #5 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STD. DWG. 840.00.
A STONE DRAIN CONSISTING OF 1 CUBIC FOOT OF NO. 78M STONE CONTAINED IN A BAG OF POROUS FABRIC SHALL BE PLACED AT EACH WEEP HOLE.
FOR 8' IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB.
OVER 8' IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. QUANTITIES TO BE ADJUSTED ACCORDINGLY.
DIMENSIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.



SECTION Y-Y

PLAN

SECTION X-X



PART SECTION Y-Y
SHOWING METHOD OF CONSTRUCTION FOR 6" OPENING

PART SECTION Y-Y
SHOWING METHOD OF CONSTRUCTION IF INCREASED OPENING IS USED

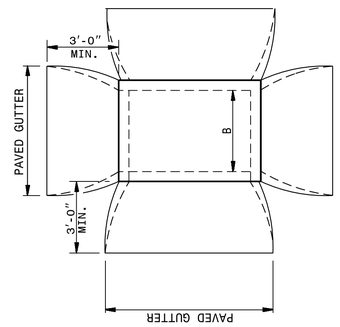
DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN (BASED ON MIN. HEIGHT, H)

DIM'S OF BOX & PIPE				*MIN. DIMENSIONS AND REINFORCING*						*CU. YDS. CONC. IN BOX*		*TOTAL QUANTITIES BOX & SLABS*		*DEDUCTION ONE PIPE*		*DED. ONE (1) THROAT OPENING*
PIPE	*SPAN*	*WIDTH*	*HEIGHT*	*BARS - X*		*BARS - Y*		*BARS - Z*								
D	A	B	H	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	TOP SLAB	BOT. SLAB	WALL/FT.	HT.	LBS. REINF.	YD³ CONC.	C.S. R.C.	YD³
12"	3'-6"	2'-3"	1'-10"	4	3'-0"	6	4'-3"	2	4'-3"	0.181	0.271	0.250	27	1,046	0.015	0.032	0.046
15"	3'-6"	2'-3"	2'-1"	4	3'-0"	6	4'-3"	2	4'-3"	0.181	0.271	0.250	27	1,108	0.023	0.036	0.046
18"	4'-0"	2'-8"	2'-4"	5	3'-5"	7	4'-9"	2	4'-9"	0.226	0.340	0.284	35	1,379	0.033	0.049	0.053
24"	4'-0"	2'-8"	2'-10"	5	3'-5"	7	4'-9"	2	4'-9"	0.226	0.340	0.284	35	1,521	0.059	0.085	0.053
30"	4'-0"	3'-6"	3'-4"	5	4'-3"	9	4'-3"	2	4'-3"	0.278	0.417	0.315	43	1,916	0.092	0.127	0.053
36"	4'-6"	4'-0"	3'-10"	5	4'-9"	10	5'-3"	2	5'-3"	0.340	0.510	0.352	51	2,390	0.132	0.178	0.059
42"	5'-0"	4'-6"	4'-4"	5	5'-3"	12	5'-9"	2	5'-9"	0.407	0.611	0.389	64	2,914	0.180	0.243	0.066
48"	5'-0"	5'-0"	4'-10"	5	5'-9"	13	5'-9"	2	5'-9"	0.444	0.666	0.407	68	3,298	0.235	0.317	0.066

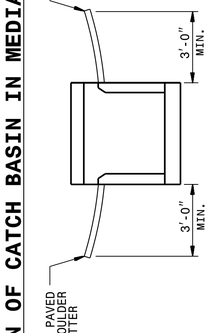
STATE OF
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DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
CONCRETE CATCH BASIN
(3 OR 4 SIDE OPEN THROAT)
(MANHOLE OPTIONAL)

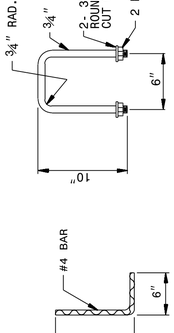
SHEET 2 OF 2 — 840D04



PLAN OF CATCH BASIN IN MEDIAN STRIP

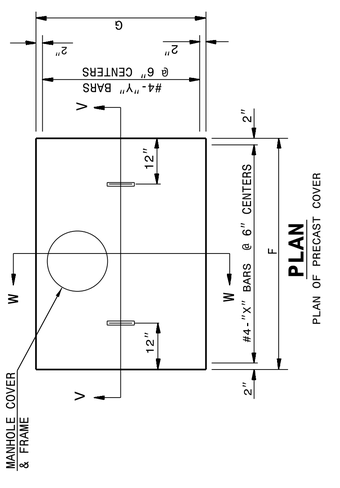


SECTION OF CATCH BASIN MEDIAN STRIP
DETAIL SHOWING METHOD OF PLACING CATCH BASIN AND PAVED SHOULDER GUTTER

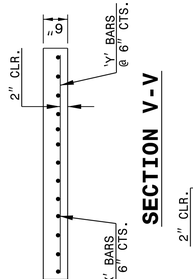


DOWEL

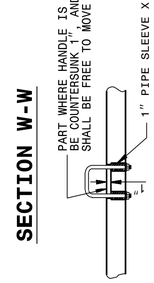
DETAIL OF HANDLE



PLAN
PLAN OF PRECAST COVER



SECTION V-V



SECTION W-W

PART SECTION
THRU COVER SHOWING HANDLE

NORTH CAROLINA PROFESSIONAL SEAL 33144 ENGINEER NICOLE M HUCKLE
10/9/2026
Signed by: Nicole M Huckle
5884323D34164C5...
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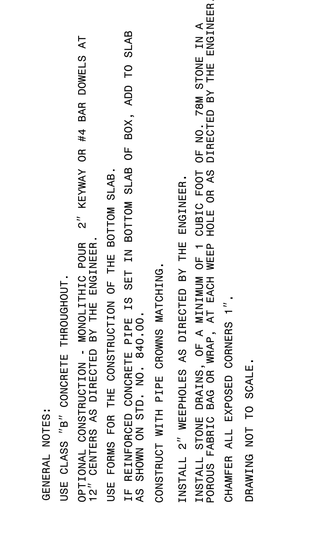
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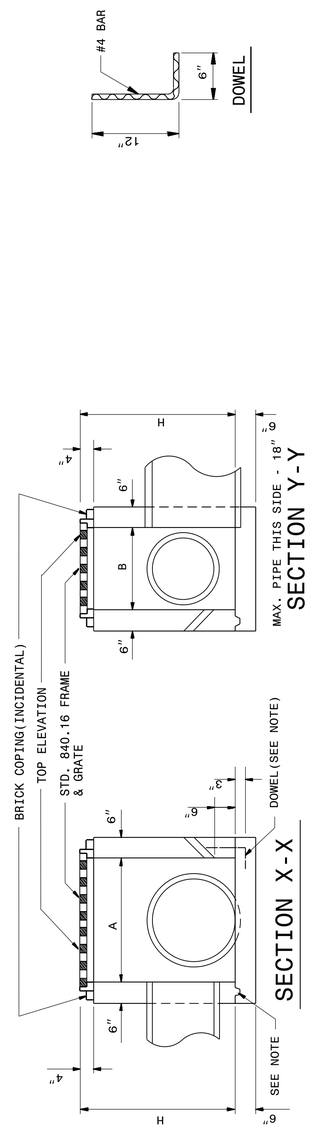
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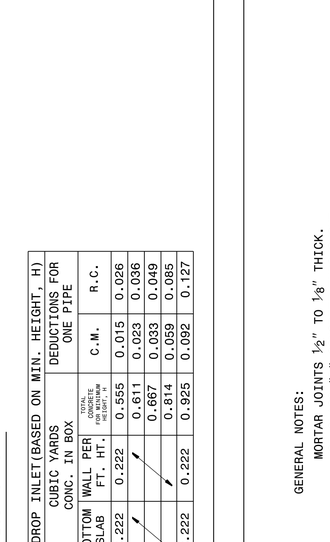
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GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR
12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB
AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CROWNS MATCHING.
INSTALL 2" WEEPHOLES AS DIRECTED BY THE ENGINEER.
INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 78M STONE IN A
POROUS FABRIC BAG OR WRAP, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.





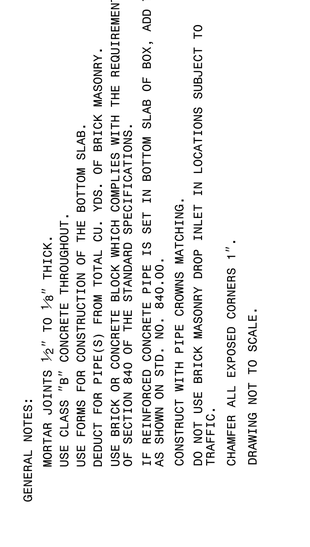


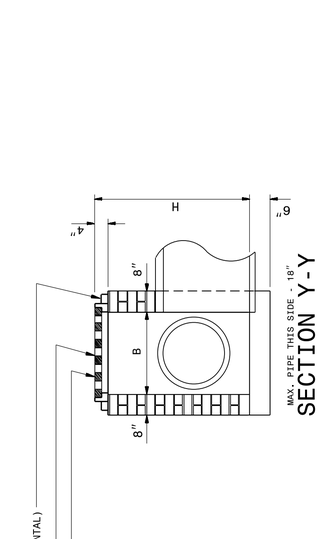
DIMENSIONS AND QUANTITIES FOR DROP INLET(BASED ON MIN. HEIGHT, H)

DIMENSIONS OF BOX & PIPE				CUBIC YARDS CONC. IN BOX		DEDUCTIONS FOR ONE PIPE	
PIPE	SPAN	WIDTH	MIN. HEIGHT	BOTTOM SLAB	WALL PER FT. HT.	TOTAL CONCRETE FOR MINIMUM HEIGHT, H	C.M.	R.C.
D	A	B	H					
12"	3'-0"	2'-0"	1'-8"	0.222	0.222	0.555	0.015	0.026
15"			1'-11"			0.611	0.023	0.036
18"			2'-1"			0.667	0.033	0.049
24"			2'-9"			0.814	0.059	0.085
30"	3'-0"	2'-0"	3'-2"	0.222	0.222	0.925	0.092	0.127

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR **MINIMUM DEPTH CONCRETE DROP INLET** 12" THRU 30" PIPE	SHEET 1 OF 1 **840D14**

GENERAL NOTES:
MORTAR JOINTS ½" TO ⅛" THICK.
USE CLASS "B" CONCRETE THROUGHOUT.
USE FORMS FOR CONSTRUCTION OF THE BOTTOM SLAB.
DEDUCT FOR PIPE(S) FROM TOTAL CU. YDS. OF BRICK MASONRY.
USE BRICK OR CONCRETE BLOCK WHICH COMPLIES WITH THE REQUIREMENTS
OF SECTION 840 OF THE STANDARD SPECIFICATIONS.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB
AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CROWNS MATCHING.
DO NOT USE BRICK MASONRY DROP INLET IN LOCATIONS SUBJECT TO
TRAFFIC.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.





DIMENSIONS AND QUANTITIES FOR DROP INLET(BASED ON MIN. HEIGHT, H)

DIMENSIONS OF BOX & PIPE				CUBIC YARDS CONCRETE	CUBIC YARDS BRICK MASONRY		DEDUCTIONS FOR ONE PIPE	
PIPE	SPAN	WIDTH	MIN. HEIGHT	BOTTOM SLAB	WALL PER FOOT HT.	TOTAL BRICK MASONRY FOR MIN. HEIGHT, H	C.S.	R.C.
D	A	B	H					
12"	3'-0"	2'-0"	1'-8"	0.268	0.313	0.470	0.020	0.032
15"			1'-11"	0.268	0.313	0.548	0.031	0.047
18"			2'-1"	0.268	0.313	0.626	0.044	0.065
24"			2'-9"	0.268	0.313	0.835	0.078	0.113
30"	3'-0"	2'-0"	3'-2"	0.268	0.313	0.991	0.122	0.170

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR **MINIMUM DEPTH BRICK DROP INLET** 12" THRU 30" PIPE	SHEET 1 OF 1 **840D15**

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 33144 MICHAEL K. WALKER
10/9/2026
Signed by: Nicole M Hyckler
5884323D34164C5...

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CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE PLATE FOR TITLE

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MODIFIED BY: E.E. WARD DATE: 3-4-02
CHECKED BY: DATE:
FILE SPEC.:

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PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-6

GENERAL NOTES:

USE CLASS "B" CONCRETE THROUGHOUT.

PROVIDE ALL GRATED DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.

OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.

USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. 840.02.

CONSTRUCT WITH PIPE CROWNS MATCHING.

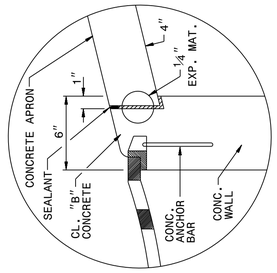
USE STANDARD FRAMES AND GRATES 840.22 (SHOWN), 840.24(SHOWN), 840.20 (NOT SHOWN) OR 840.29 (NOT SHOWN).

SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES.

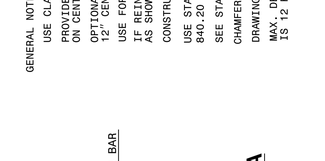
CHAMFER ALL EXPOSED CORNERS 1".

DRAWING NOT TO SCALE.

MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.

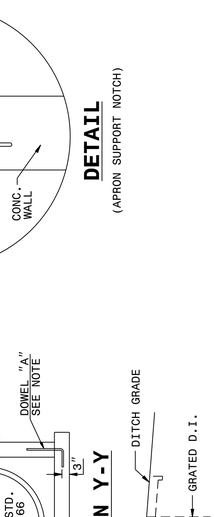


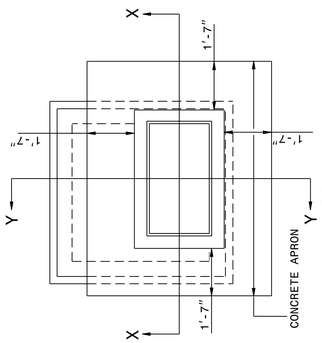
DETAIL
(APRON SUPPORT NOTCH)



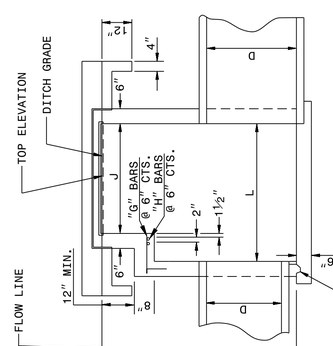
DOWEL-A

SECTION Y-Y





PLAN



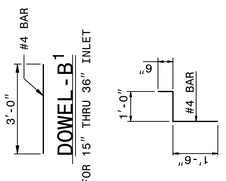
SECTION X-X

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ENGLISH DETAIL DRAWING FOR **CONCRETE GRATED DROP INLET TYPE 'A' MINIMUM DEPTH** 12" THRU 72" PIPE	SHEET 1 OF 2 **840d17**

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

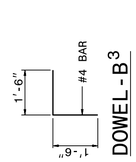
ENGLISH DETAIL DRAWING FOR **CONCRETE GRATED DROP INLET TYPE 'A' MINIMUM DEPTH** 12" THRU 72" PIPE

SHEET 1 OF 2 **840d17**



DOWEL-B^1
FOR 15" THRU 36" INLET

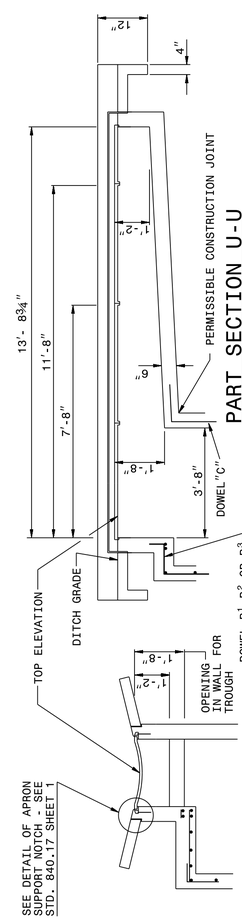
DOWEL-B^2
FOR 42" INLET



DOWEL-B^3

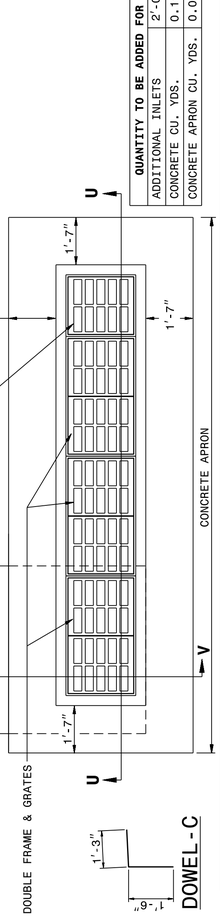
QUANTITY TO BE ADDED FOR EACH 2' INCREMENT INLET OPENING

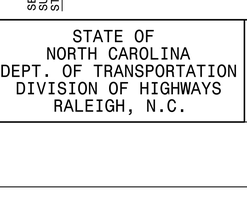
	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"
ADDITIONAL INLETS						
CONCRETE CU. YDS.	0.191	0.417	0.665	0.897	1.145	1.380
CONCRETE APRON CU. YDS.	0.074	0.148	0.222	0.296	0.370	0.444



PART SECTION U-U

PART SECTION V-V





DOWEL-C

MIN. DIMENSIONS AND QUANTITIES FOR CONCRETE GRATED DROP INLET(BASED ON MIN. HEIGHT, H)

DIMENSIONS OF BOX AND PIPE					REINFORCING STEEL - NO. 4 BARS								CU YDS CONC. IN BOX			DEDUCTIONS FOR ONE PIPE	TOTAL BOTTOM SLAB LBS.
PIPE	SPAN	WIDTH	SPAN	WIDTH	HEIGHT	BARS E		BARS F		BARS G		BARS H						
						NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	H TOTAL	H PER FT HT	APRON	TOTAL	C.S.	R.C.	
D	J	K	L	M	H															
12"	3'-8"	2'-0"	3'-8"	2'-0"	2'-3"	—	—	—	—	—	—	—	—	0.926	0.247	0.395	1.683	0.015	0.024	—
15"	3'-8"	2'-0"	3'-8"	2'-0"	2'-5"	—	—	—	—	—	—	—	—	0.988	0.247	0.395	1.745	0.023	0.036	—
18"				2'-0"	2'-8"	—	—	—	—	—	—	—	—	1.050	0.247		1.807	0.033	0.049	—
24"				2'-10"	3'-3"	8	1'-5"	6	4'-9"	—	—	—	—	1.362	0.278		2.201	0.059	0.085	27
30"			3'-8"	3'-5"	3'-10"	8	2'-0"	7	4'-9"	—	—	—	—	1.644	0.288		2.541	0.092	0.127	33
36"			4'-0"	4'-0"	4'-4"	8	2'-5"	8	4'-11"	4	0'-9"	2	4'-11"	1.931	0.321		2.920	0.132	0.178	47
42"			4'-10"	4'-10"	5'-0"	10	3'-1"	9	5'-7"	4	1'-5"	3	5'-7"	2.500	0.370		3.677	0.180	0.243	67
48"			5'-4"	5'-4"	5'-6"	11	3'-7"	10	6'-1"	4	1'-11"	4	6'-1"	3.013	0.407		4.315	0.235	0.317	87
54"			6'-0"	6'-0"	6'-0"	12	4'-1"	11	6'-7"	—	2'-5"	5	6'-7"	3.589	0.444		5.072	0.297	0.401	107
60"			6'-6"	6'-6"	6'-7"	13	4'-9"	12	7'-3"	—	3'-1"	6	7'-3"	4.539	0.494		6.170	0.367	0.495	135
66"			7'-2"	7'-2"	7'-1"	14	5'-4"	14	7'-10"	—	3'-7"	7	7'-10"	5.061	0.537		6.901	0.444	0.599	168
72"	3'-8"	2'-0"	7'-8"	7'-8"	7'-8"	15	5'-11"	15	8'-5"	4	4'-3"	8	8'-5"	5.860	0.580	0.395	7.868	0.528	0.713	199

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR **CONCRETE GRATED DROP INLET TYPE 'A' MINIMUM DEPTH** 12" THRU 72" PIPE

SHEET 2 OF 2 **840d17**

NORTH CAROLINA PROFESSIONAL SEAL 33144 ENGINEER NICOLE M HACKLER
Signed by: Nicole M Hackler 58843203D34164C5...
10/9/2026

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ORIGINAL BY: J. Howerton DATE: 1/22/14
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PROJECT REFERENCE NO.	SHEET NO.
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DIVISION OF HIGHWAYS
RALEIGH, N.C.

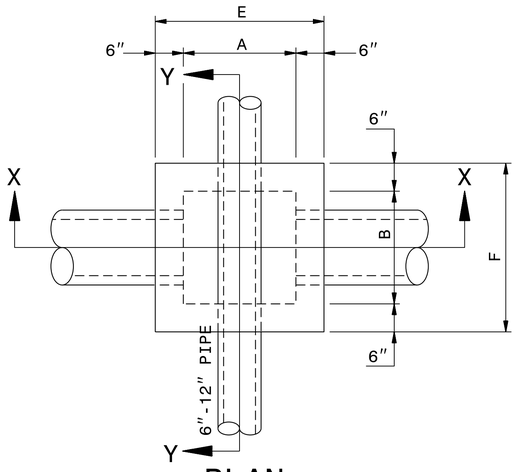
ENGLISH DETAIL DRAWING FOR

6″-12″ CONCRETE JUNCTION BOX WITH 12″ THRU 66″ UTILITY PIPE PASSING THRU

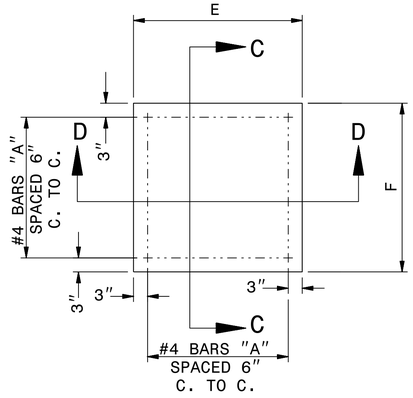
12″ THRU 66″ PIPE

SHEET 1 OF 1

840D31



PLAN



GENERAL NOTES:

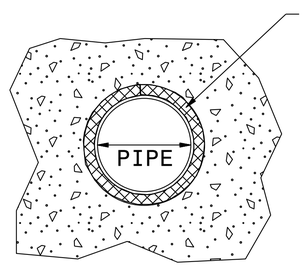
USE CLASS "B" CONCRETE THROUGHOUT.

OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2″ KEYWAY, OR #4 BAR DOWELS AT 12″ CENTERS AS DIRECTED BY THE ENGINEER.

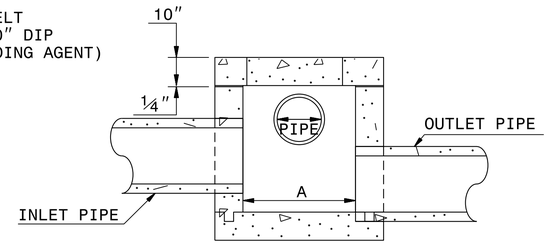
USE FORMS TO CONSTRUCT THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840.00.

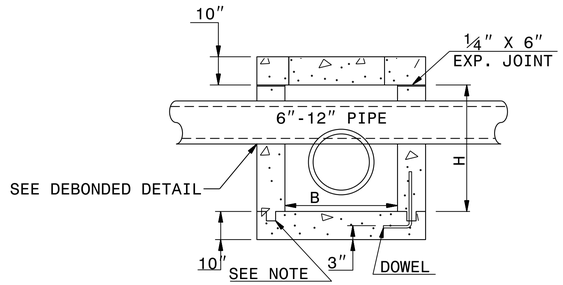
REFER TO R.S.D.N. 840.31 FOR PLACEMENT OF MANHOLE COVER IN JUNCTION BOX.



DEBONDED DETAIL

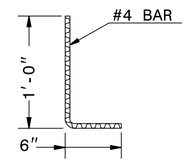


SECTION X-X



SECTION Y-Y

DIMENSIONS AND QUANTITIES FOR CONCRETE JUNCTION BOXES														
DIMENSIONS OF BOX AND PIPE				REINFORCEMENT BARS "A"		COVER DIMENSIONS		CUBIC YARDS IN BOX			TOTAL QUANTITIES BOX AND COVER		DEDUCTIONS FOR ONE PIPE CU.YDS.	
PIPE	SPAN	WIDTH	HEIGHT											
D	A	B	H	NO.	LENGTH	E	F	COVER	FLOOR	WALL/ FT. OF HT.	LBS. REINF	CU. YDS. MIN. "H"	C.S.	R.C.
12″	2′-0″	2′-0″	2′-3″	12	2′-9″	3′-0″	3′-0″	0.222	0.222	0.185	22	0.750	0.015	0.024
15″	2′-3″	2′-3″	2′-6″	12	3′-0″	3′-3″	3′-3″	0.261	0.261	0.204	24	0.902	0.023	0.036
18″	2′-6″	2′-6″	2′-9″	14	3′-3″	3′-6″	3′-6″	0.302	0.302	0.222	30	1.065	0.033	0.049
24″	3′-0″	3′-0″	3′-3″	16	3′-9″	4′-0″	4′-0″	0.395	0.395	0.259	40	1.434	0.059	0.091
30″	3′-6″	3′-6″	3′-9″	18	4′-3″	4′-6″	4′-6″	0.500	0.500	0.296	51	1.860	0.092	0.138
36″	4′-0″	4′-0″	4′-3″	20	4′-9″	5′-0″	5′-0″	0.617	0.617	0.333	64	2.341	0.132	0.196
42″	4′-6″	4′-6″	4′-9″	22	5′-3″	5′-6″	5′-6″	0.747	0.747	0.370	77	2.878	0.180	0.284
48″	5′-0″	5′-0″	5′-3″	24	5′-9″	6′-0″	6′-0″	0.889	0.889	0.407	92	3.471	0.235	0.364
54″	5′-6″	5′-6″	5′-9″	26	6′-3″	6′-6″	6′-6″	1.043	1.043	0.444	109	4.283	0.297	0.440
60″	6′-0″	6′-0″	6′-3″	28	6′-9″	7′-0″	7′-0″	1.210	1.210	0.481	127	5.090	0.367	0.546
66″	6′-6″	6′-6″	6′-9″	30	7′-3″	7′-6″	7′-6″	1.389	1.389	0.518	146	5.917	0.444	0.655



DOWEL

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR

6″-12″ CONCRETE JUNCTION BOX WITH 12″ THRU 66″ UTILITY PIPE PASSING THRU

12″ THRU 66″ PIPE

SHEET 1 OF 1

840D31

NORTH CAROLINA PROFESSIONAL SEAL 33144 ENGINEER NICOLE M. HACKLER
10/9/2026
Signed by: Nicole M Hackler
58843233D34164C8...

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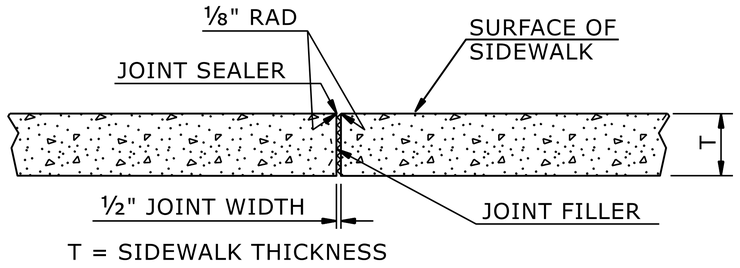
PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-8

NOTES:

CONSTRUCT STANDARD SIDEWALK 5' WIDE AND 4" THICK UNLESS OTHERWISE DENOTED ON PLANS.

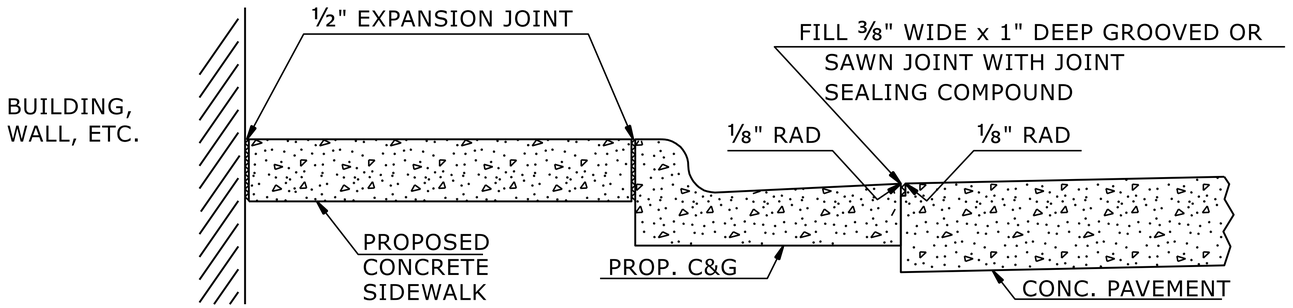
PLACE A GROOVE JOINT 1" DEEP WITH ⅛" RADII IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE ½" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A ½" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.

SEE STD. DWG. 848.06 FOR CURB RAMP LOCATION REQUIREMENTS AND CONSTRUCTION GUIDELINES.



T = SIDEWALK THICKNESS

TRANSVERSE EXPANSION JOINT IN SIDEWALK



DETAILS SHOWING JOINTS IN CONCRETE SIDEWALK

STATE OF
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RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

CONCRETE SIDEWALK

SHEET 1 OF 1

848D01

SEAL
033144
NORTH CAROLINA PROFESSIONAL ENGINEER
NICOLE M. HACKLER
10/9/2026

Signed by:
Nicole M Hackler
588432303416 4C5...

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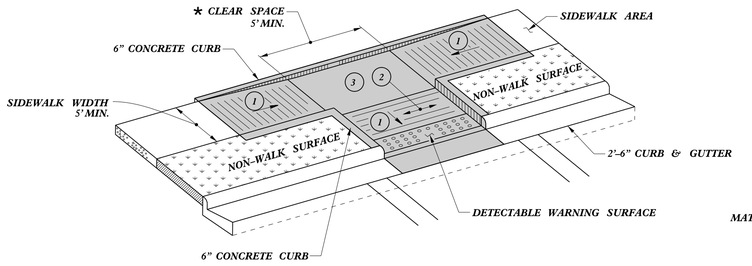
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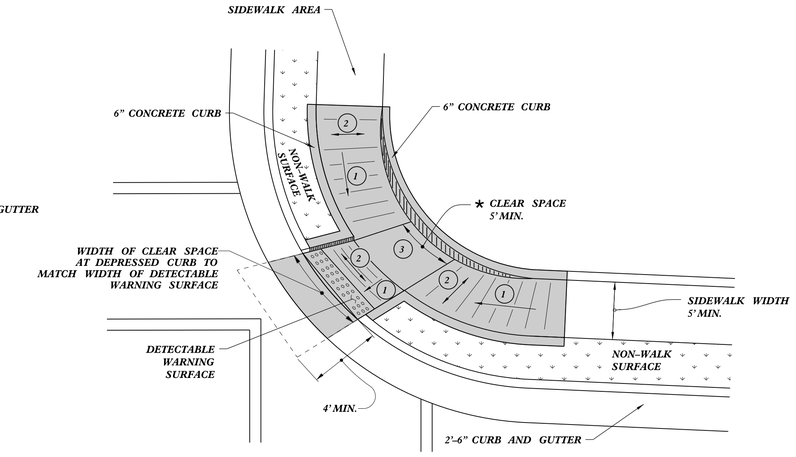
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PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-9

* – *WHERE CLEAR SPACE IS CONSTRAINED ON TWO OR MORE SIDES, THE CLEAR SPACE SHALL BE 4'MINIMUM X 5'MINIMUM, WITH 5' PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.*



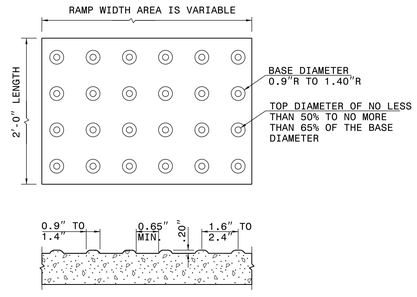
TYPE 3



TYPE 3 MODIFIED
INSTALLATION IN A RADIUS

NOTES:
DETECTABLE WARNING SURFACE SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.

DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



DETECTABLE WARNING SURFACE

(1) *8.33% (12:1) MAX RAMP SLOPE*

(2) *CROSS SLOPE: 2.00%*

(3) *MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00%.*

PAY LIMITS FOR 1 CURB RAMP

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

CURB RAMP

PARALLEL RAMP

SHEET 9 OF13

848D06

NORTH CAROLINA PROFESSIONAL SEAL 033144 ENGINEER NICOLE M HACKLER

10/9/2026

Signed by:
Nicole M Hackler
5884323D34164C5...

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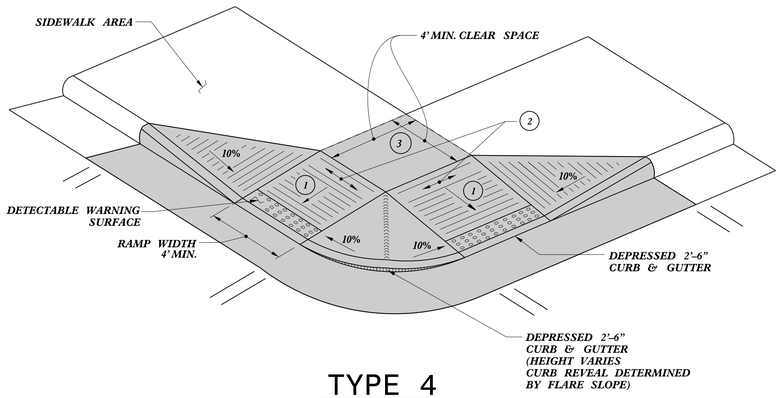
CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

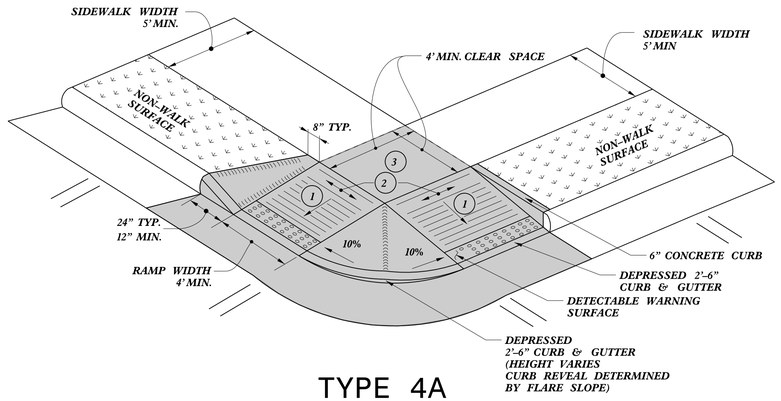
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MODIFIED BY: _____ DATE: _____
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Docusign Envelope ID: 6357D2FC-2C87-8BA2-817F-95736C4CB0CF

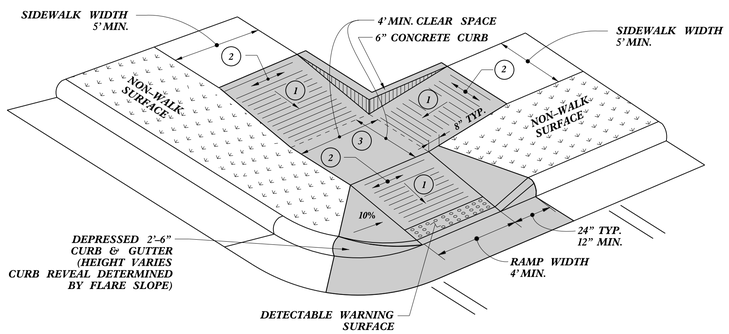
PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-10



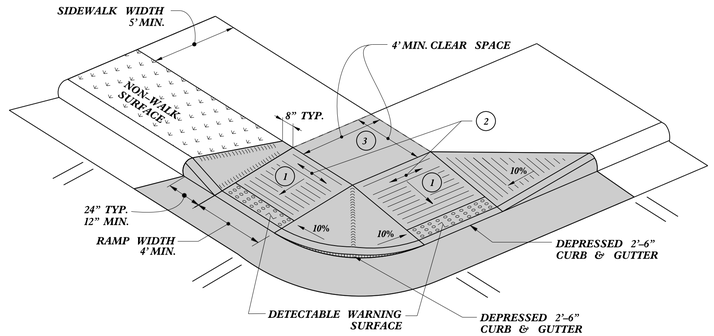
TYPE 4



TYPE 4A



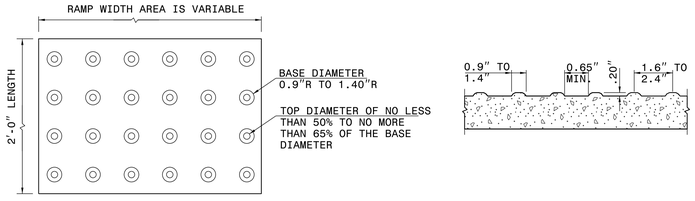
TYPE 4B



TYPE 4C

NOTES:
DETECTABLE WARNING SURFACE SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.

DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



DETECTABLE WARNING SURFACE

1. *8.33% (12:1) MAX RAMP SLOPE*
2. *CROSS SLOPE: 2.00%*
3. *MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00%.*

PAY LIMITS FOR 1 OR 2 CURB RAMPS (CALCULATE BASED ON NUMBER OF SETS OF DETECTABLE WARNING SURFACES

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

CURB RAMP

SHARED LANDING

SHEET 10 OF 13

848D06

NORTH CAROLINA PROFESSIONAL SEAL 033144 ENGINEER NICOLE M. HACKLER
10/9/2026

Signed by:
Nicole M Hackler
58B4323D34164C5...

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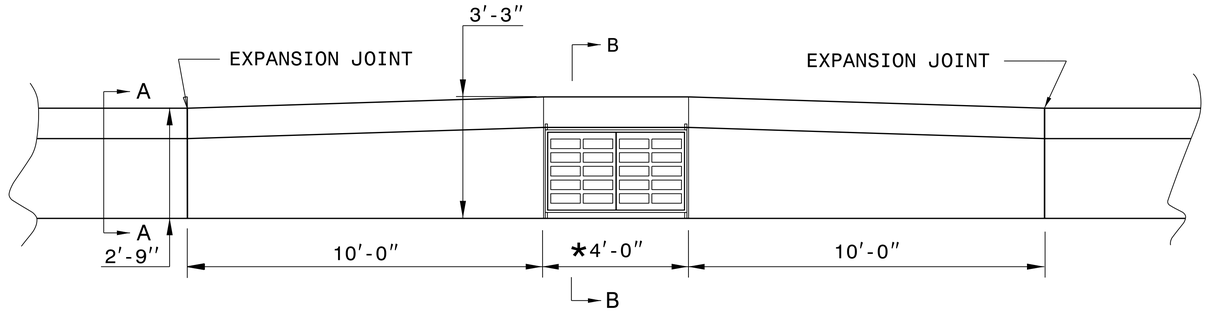
CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

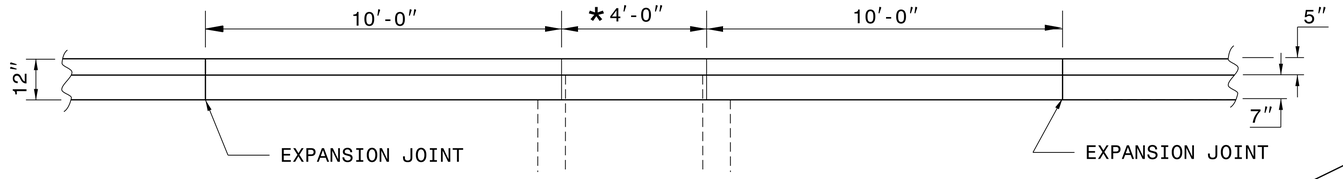
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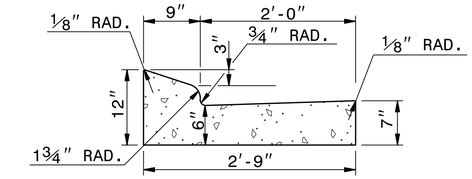
PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-11



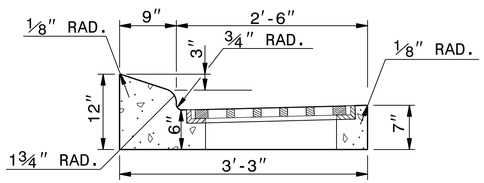
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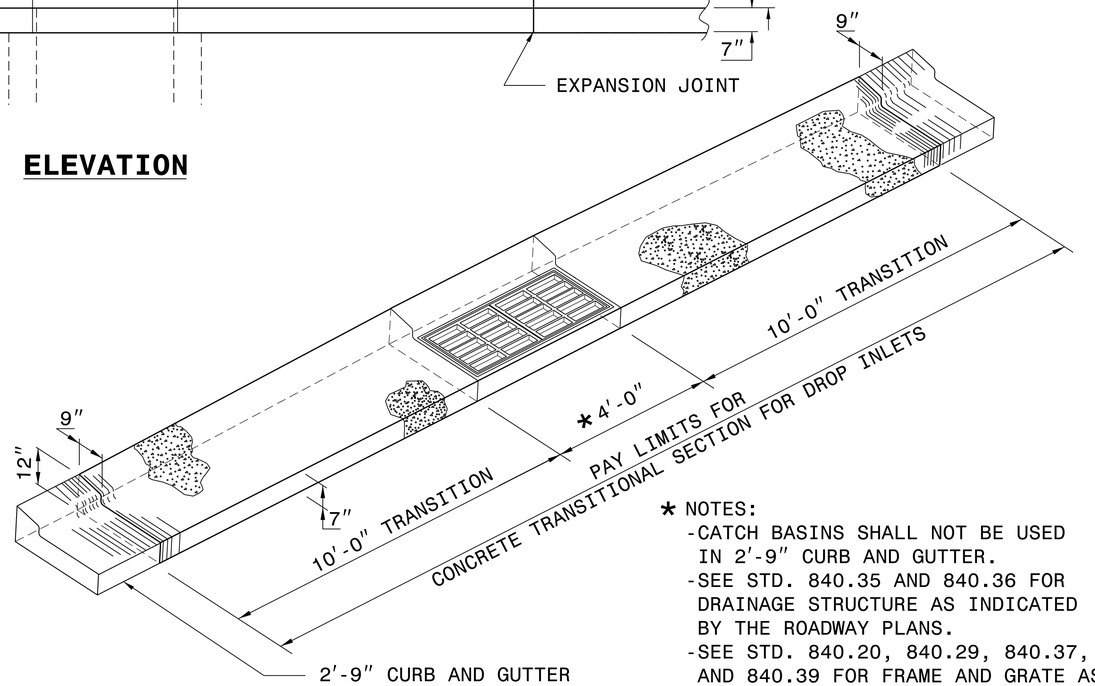
ELEVATION



SECTION - AA



SECTION - BB



* NOTES:
- -CATCH BASINS SHALL NOT BE USED IN 2′-9″ CURB AND GUTTER.
- -SEE STD. 840.35 AND 840.36 FOR DRAINAGE STRUCTURE AS INDICATED BY THE ROADWAY PLANS.
- -SEE STD. 840.20, 840.29, 840.37, AND 840.39 FOR FRAME AND GRATE AS INDICATED BY THE ROADWAY PLANS.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

MEDIAN CURB FOR TRAFFIC BEARING GRATED DROP INLET

(FOR USE WITH 2′-9″ CURB AND GUTTER)

SHEET 1 OF 1

852D07

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033144 NICOLE M. HACKLER

10/9/2026

Signed by:
Nicole M Hackler
5884323D34164C5...

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CONTRACT STANDARDS
AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

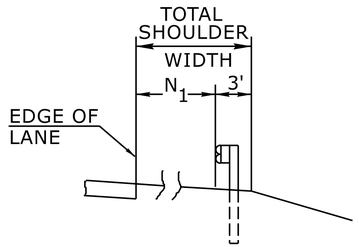
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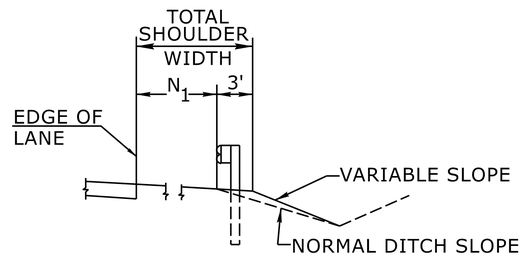
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U-4714AC	2C-12

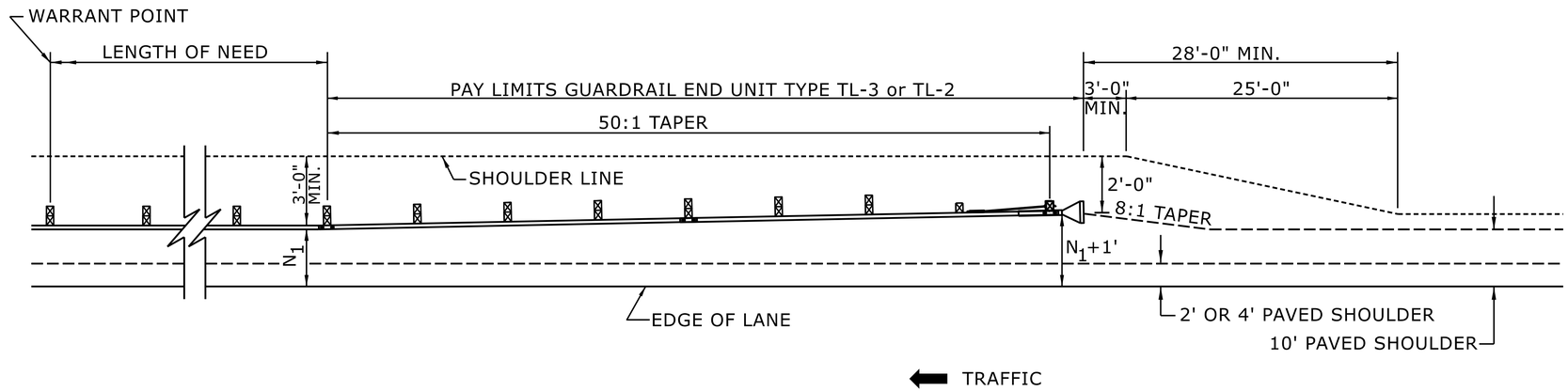


FILL SECTION



CUT SECTION

"N_1"= DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL WHERE GUARDRAIL IS PARALLEL TO LANE.



FOR POSTED SPEEDS ≥ 45mph USE GREU TYPE TL-3
FOR POSTED SPEEDS < 45mph USE GREU TYPE TL-2

DETAIL OF BEGINNING OF GUARDRAIL IN CUT OR FILL SECTION

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL PLACEMENT

SHEET 6 OF 15

862D01

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033144 NICOLE M. HACKLER
10/9/2026
Signed by: Nicole M Hackler 5884323D34164C5...

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Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

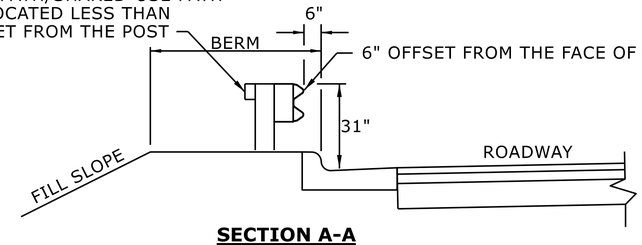
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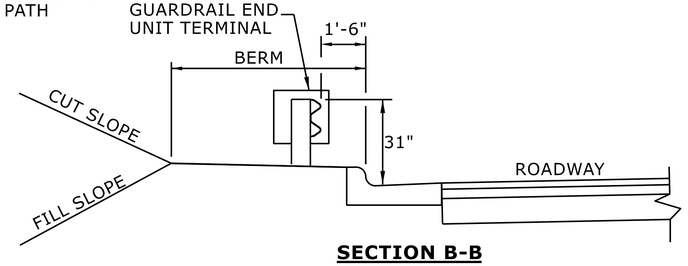
PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-13

PLACE APPROVED BICYCLE FRIENDLY RAILINGS, FENCE, OR RUB RAILS IF SIDEPATH/SHARED-USE PATH IS LOCATED LESS THAN 4 FEET FROM THE POST

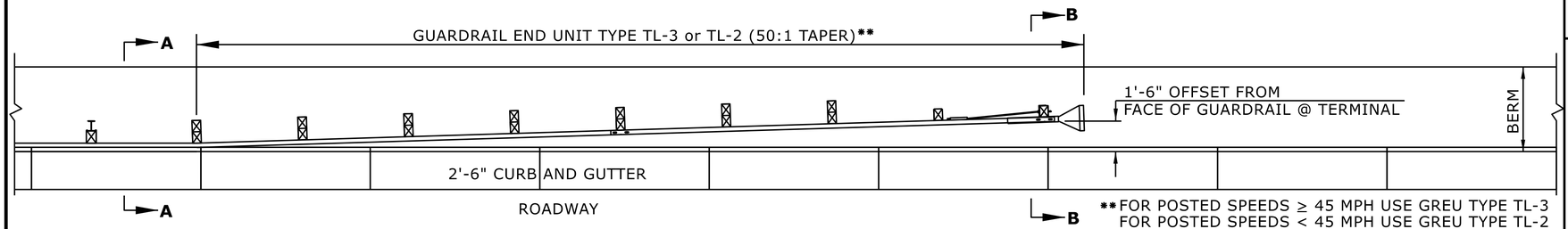
SEE THE ROADWAY DESIGN MANUAL (PART I CHAPTER 4 SECTION 4.14) FOR OFFSET DISTANCES FROM FACE OF GUARDRAIL AND BACK OF GUARDRAIL TO SIDEWALK OR SIDEPATH/SHARED-USE PATH



SECTION A-A



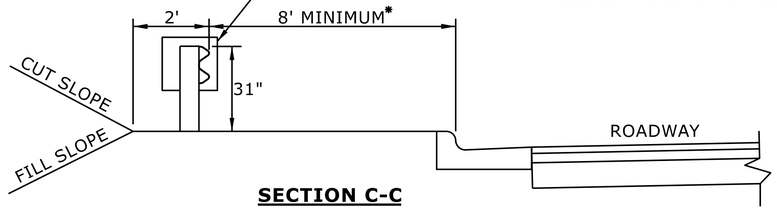
SECTION B-B



GUARDRAIL 6" FROM THE FACE OF CURB

** FOR POSTED SPEEDS ≥ 45 MPH USE GREU TYPE TL-3
FOR POSTED SPEEDS < 45 MPH USE GREU TYPE TL-2

BICYCLE FRIENDLY RAILINGS, FENCE OR RUB RAIL SHOULD NOT BE PLACED WITHIN THE LIMITS OF THE STRUCTURAL ANCHOR OR END UNITS



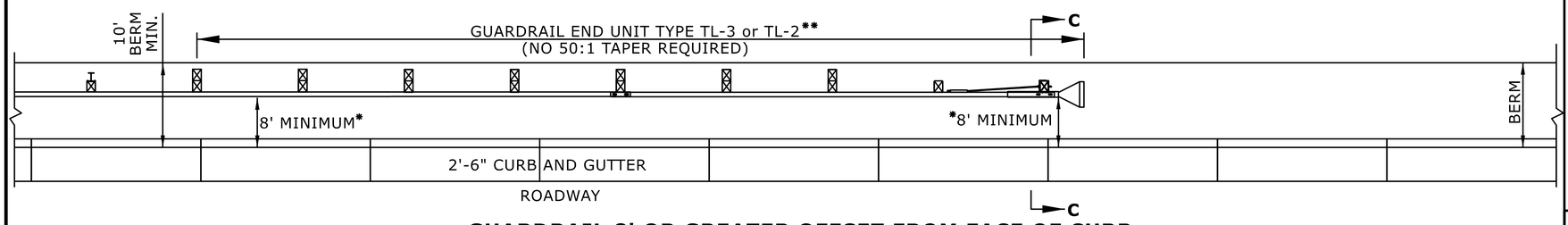
SECTION C-C

* FOR POSTED SPEED ≥ 40 MPH USE 13' MINIMUM OFFSET

SEE THE ROADWAY DESIGN MANUAL (PART I CHAPTER 4 SECTION 4.14) FOR OFFSET DISTANCES FROM FACE OF GUARDRAIL AND BACK OF GUARDRAIL TO SIDEWALK OR SIDEPATH/SHARED-USE PATH

** FOR POSTED SPEEDS ≥ 45 MPH USE GREU TYPE TL-3
FOR POSTED SPEEDS < 45 MPH USE GREU TYPE TL-2

BICYCLE FRIENDLY RAILINGS, FENCE OR RUB RAIL SHOULD NOT BE PLACED WITHIN THE LIMITS OF THE STRUCTURAL ANCHOR OR END UNITS



GUARDRAIL 8' OR GREATER OFFSET FROM FACE OF CURB

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

GUARDRAIL PLACEMENT

GUARDRAIL TREATMENT AT CURB AND GUTTER

SHEET 12 OF 15

862D01

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033144 NICOLE M. HACKLER

10/9/2026

Signed by: Nicole M Hackler
588A323D34164C5...

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Office 919-707-6950 FAX 919-250-4119

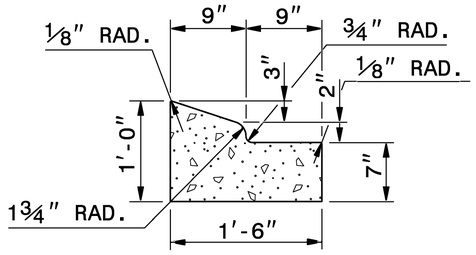
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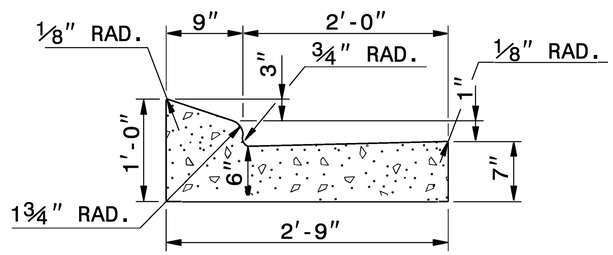
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5/14/99

PROJECT REFERENCE NO.	SHEET NO.
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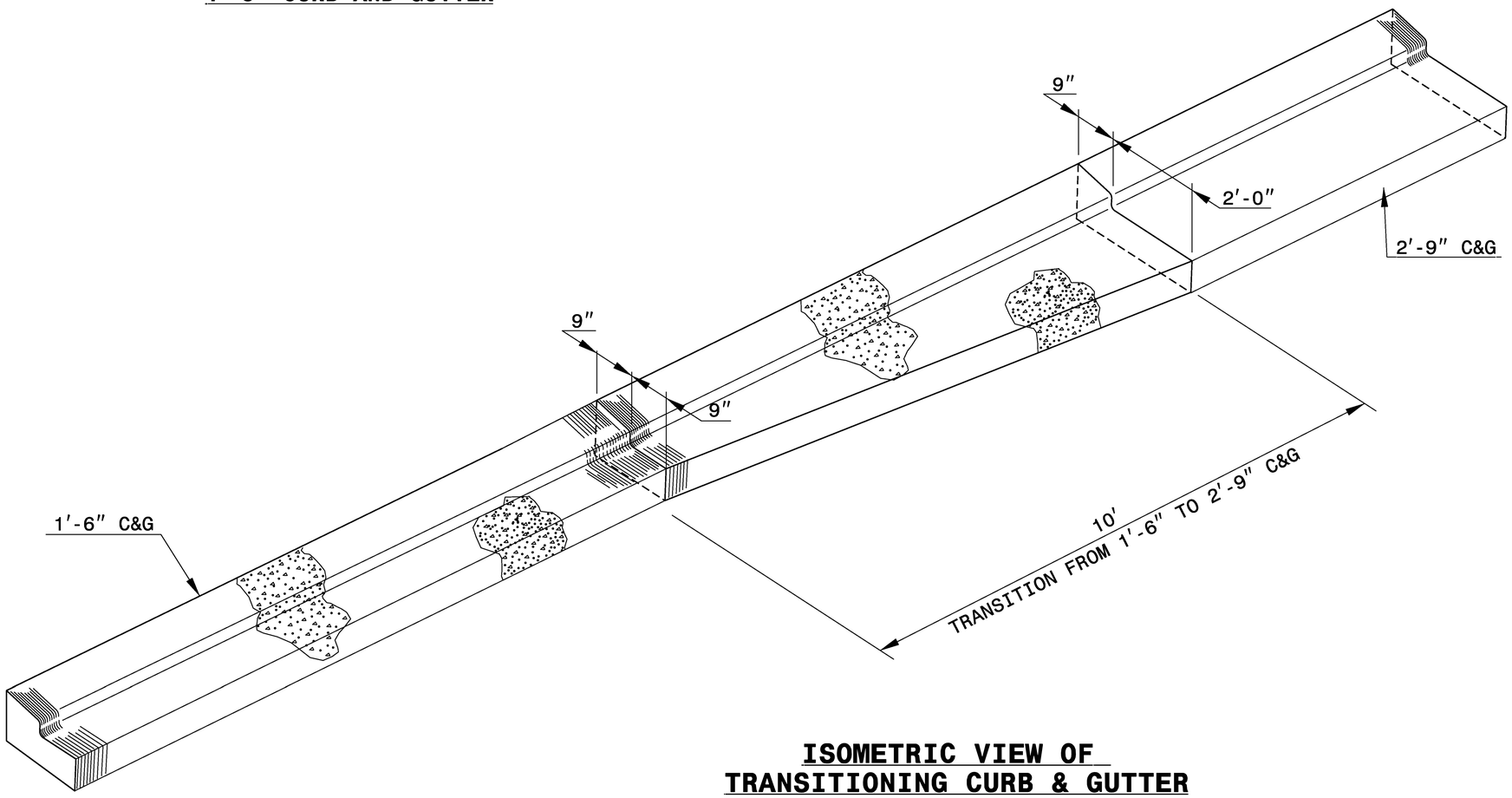
1'-6" CURB AND GUTTER



2'-9" CURB AND GUTTER

NOTE: SEE STD. DWG. 846.01 FOR ADDITIONAL CURB AND GUTTER INFORMATION.

SEE ROADWAY PLANS FOR LOCATION OF CURB TRANSITION.



ISOMETRIC VIEW OF TRANSITIONING CURB & GUTTER

NORTH CAROLINA PROFESSIONAL ENGINEER NICOLE M. HACKLER SEAL 33144

10/9/2026

Signed by: Nicole M Hackler 5884323D34164C5...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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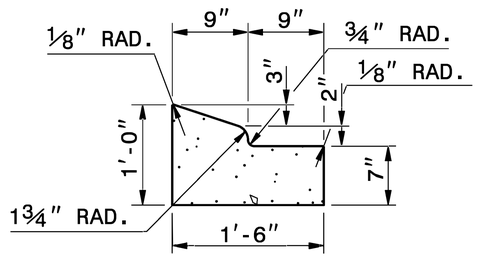
DETAIL OF 1'-6" TO 2'-9" CURB & GUTTER TRANSITION SECTION

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CHECKED BY: DATE:
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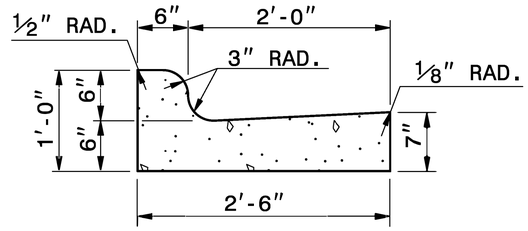
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5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-15



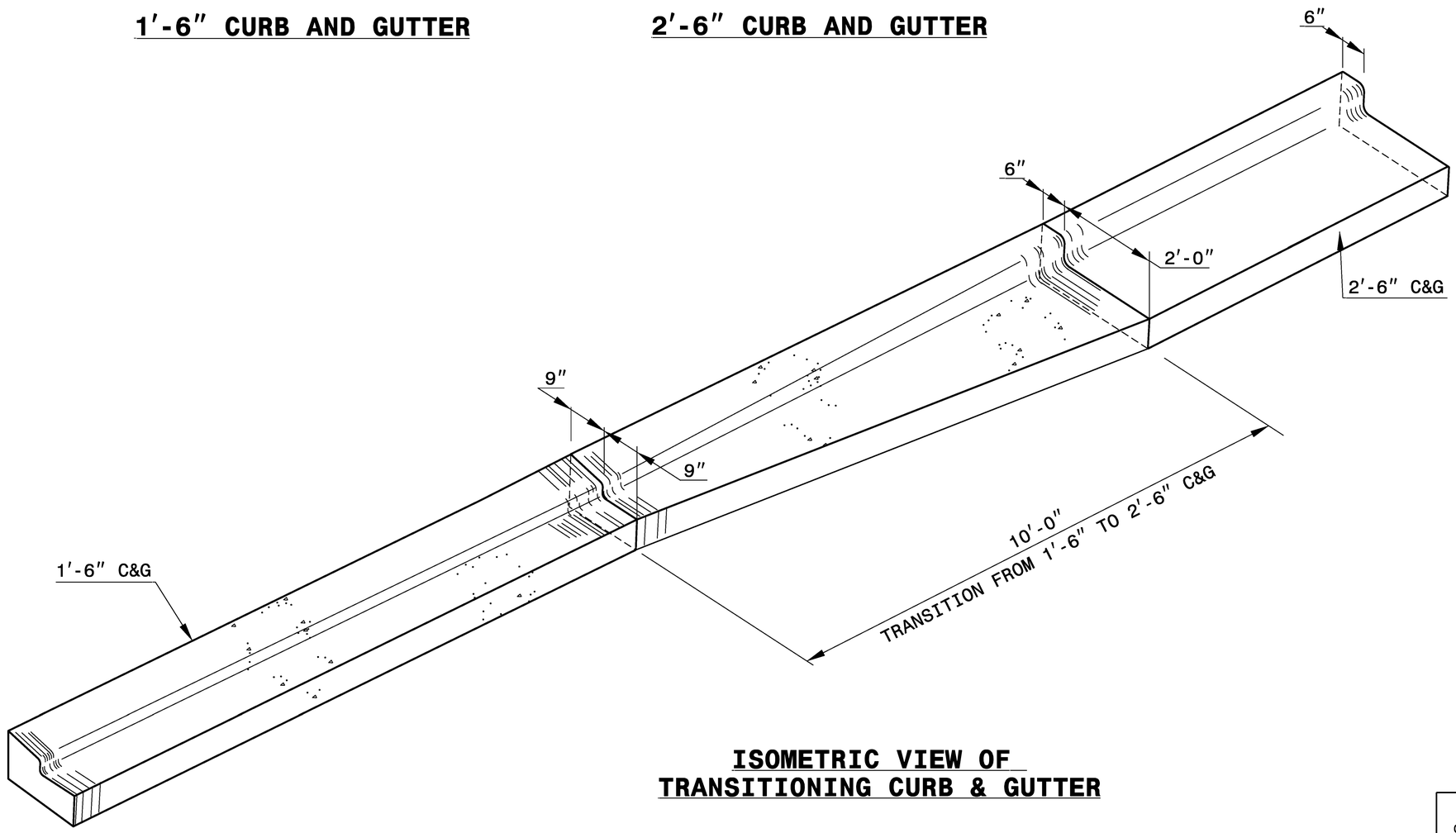
1'-6" CURB AND GUTTER



2'-6" CURB AND GUTTER

NOTE: SEE STD. DWG. 846.01 FOR ADDITIONAL CURB AND GUTTER INFORMATION.

SEE ROADWAY PLANS FOR LOCATION OF CURB TRANSITION.



ISOMETRIC VIEW OF TRANSITIONING CURB & GUTTER

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 33144 NICOLE M. HAYLER

10/9/2026

Signed by: Nicole M Hayler 5884323D34164C5...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Office 919-707-6950 FAX 919-250-4119

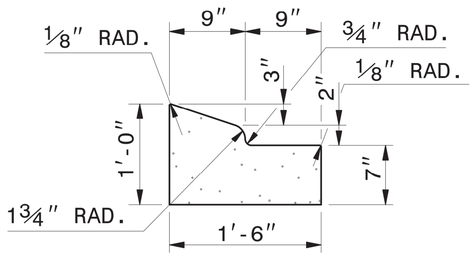
DETAIL OF 1'-6" TO 2'-6" CURB & GUTTER TRANSITION SECTION

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5/14/99

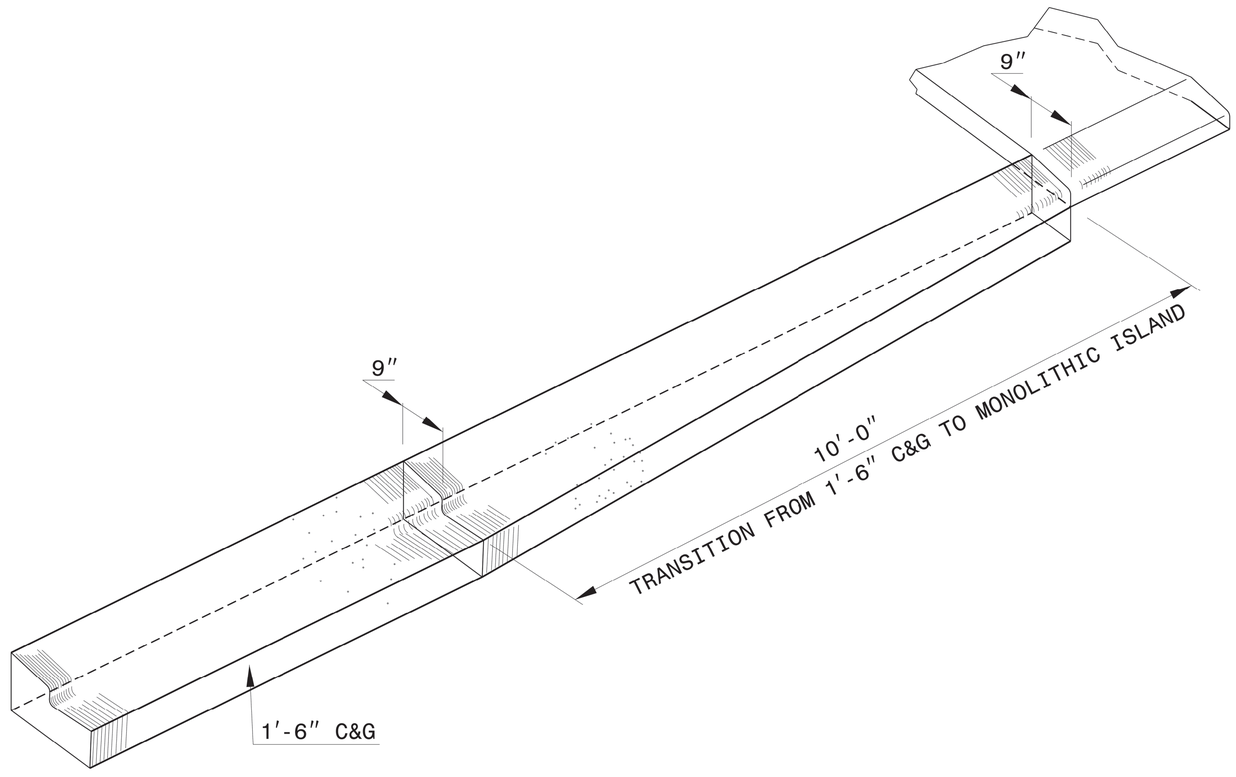
PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-16



1′-6″ CURB AND GUTTER

NOTE: SEE STD. DWG. 846.01 FOR ADDITIONAL CURB AND GUTTER INFORMATION.

SEE ROADWAY PLANS FOR LOCATION OF CURB TRANSITION.



ISOMETRIC VIEW OF TRANSITIONING CURB & GUTTER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL SEAL 33144 ENGINEER NICOLE M HACKLER

10/9/2026

Signed by: Nicole M Hackler
5884323D34164C5...

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Office 919-707-6950 FAX 919-250-4119

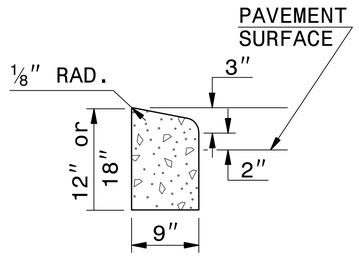
DETAIL OF 1′-6″ CURB & GUTTER TRANSITION SECTION

ORIGINAL BY: _____ DATE: _____
MODIFIED BY: KKEMPF DATE: 09-24-14
CHECKED BY: _____ DATE: _____
FILE SPEC.: kkempf/english/curb gutter tansition.dgn

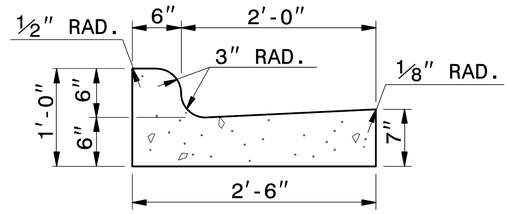
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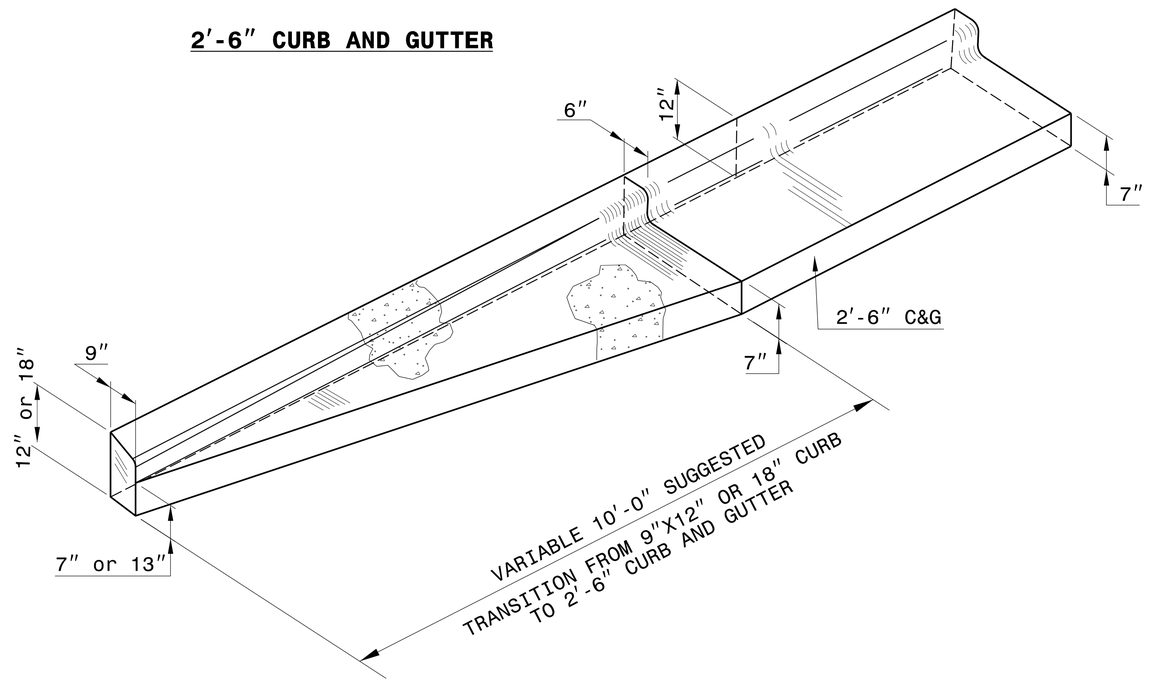
*NOTE: SEE STD. DWG. 846.01
FOR GENERAL NOTES



9" X 12" or 18" CONCRETE CURB



2'-6" CURB AND GUTTER



ISOMETRIC VIEW OF TRANSITION

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NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH
10/9/2026

DocuSigned by:
Barry Smith
827104 1D8676493...

DETAIL OF 9"x 12"or 18" CURB TO 2'-6" CURB & GUTTER TRANSITION SECTION

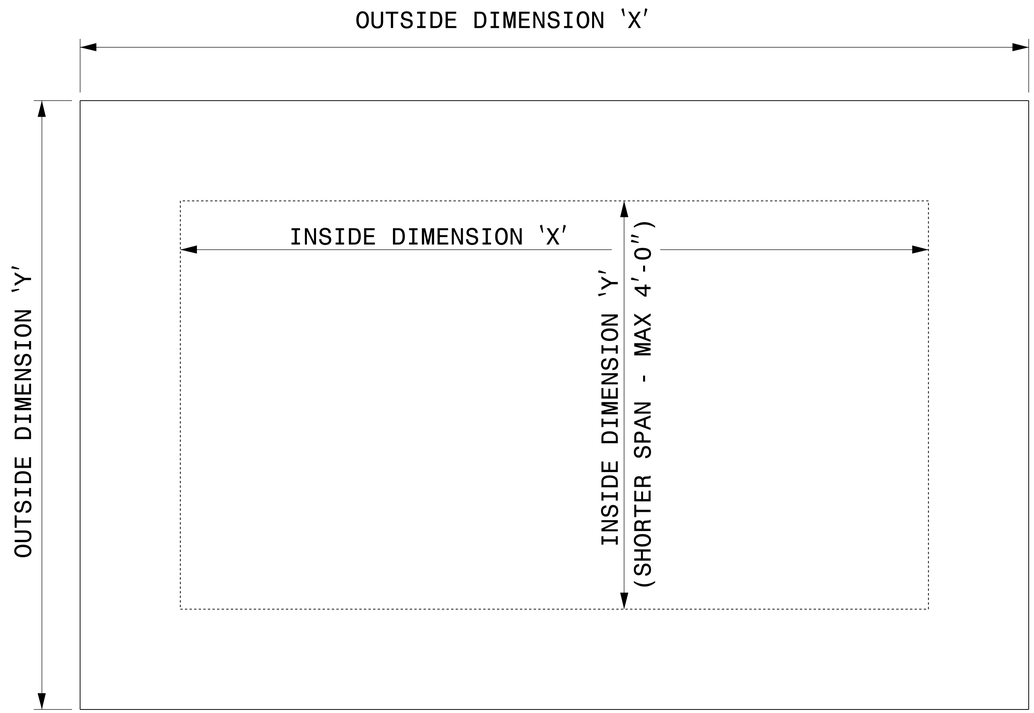
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MODIFIED BY: T.CAREY DATE: 12-11-25
CHECKED BY: _____ DATE: _____
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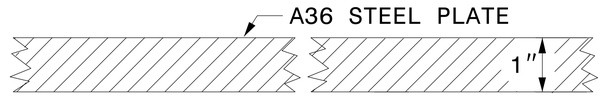
PROJECT REFERENCE NO.	SHEET NO.
U-4714AC	2C-18



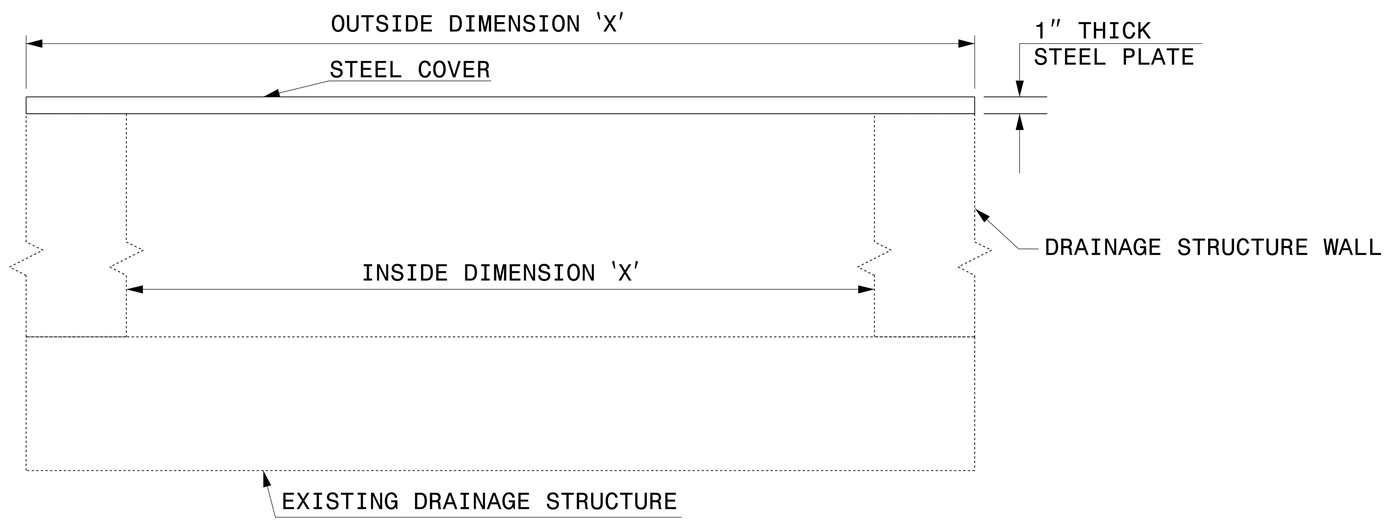
PLAN VIEWS

GENERAL NOTES:

-USE GRADE A36 STEEL
-STEEL COVERS ARE FOR TEMPORARY USE DURING PHASE CONSTRUCTION.
-FILL SHALL BE PLACED DIRECTLY OVER THE STEEL PLATES.
-SEE ROADWAY PLANS AND PROVISIONS FOR LOCATIONS
-QUANTITES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.



SECTION VIEW OF STEEL TOP PLATE



ELEVATION VIEWS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 33144 NICOLE M HUCKLER
10/9/2026
Signed by: Nicole M Huckler
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CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

DETAIL OF TEMPORARY 1" STEEL COVER OVER DRAINAGE STRUCTURE

ORIGINAL BY: E.E. WARD DATE: 2-2-98
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: eric:/usr/details/metric/stand/stlcvr2.dgn

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