09/08/99

See Sheet 1A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

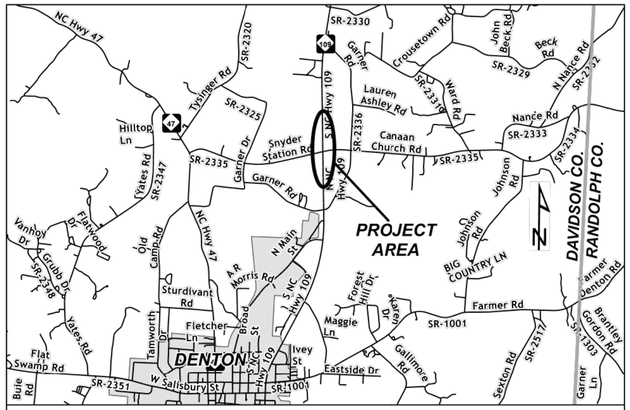
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HS–2009K	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
49321.1.12	4932120	PE
49321.3.12	4932120	CONST.

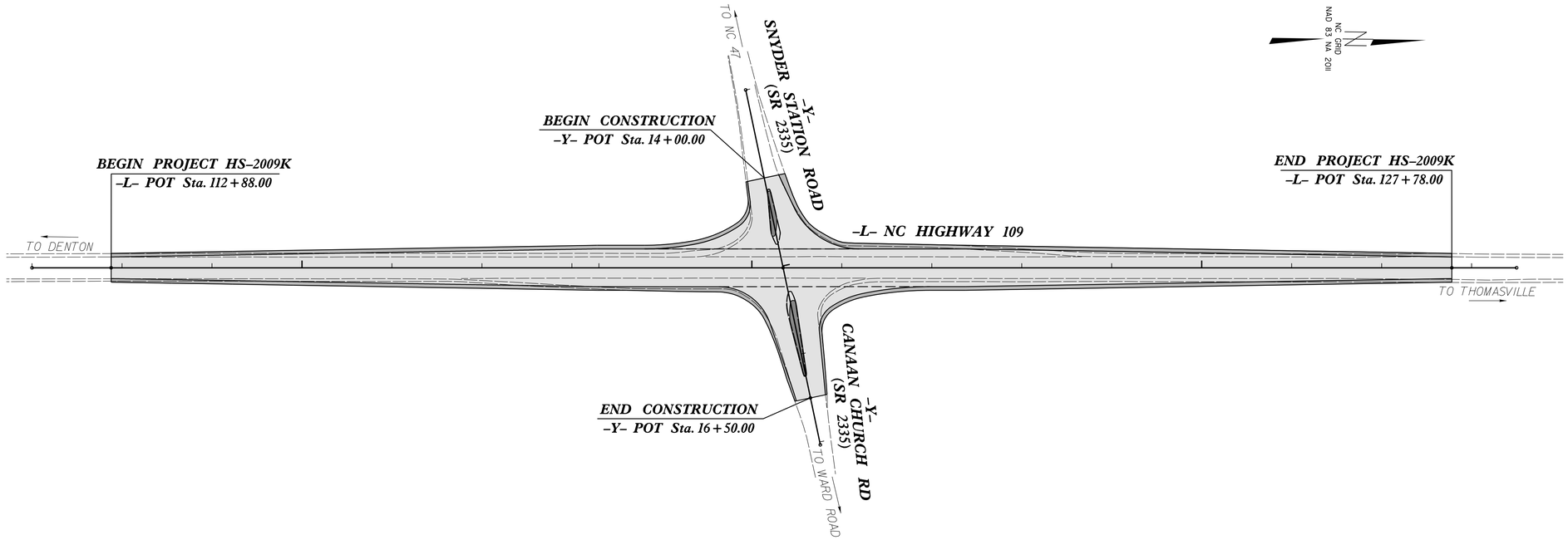
DAVIDSON COUNTY

LOCATION: NC HWY 109 AT SR 2335 (SNYDER STATION RD /CANAAN CHURCH RD)

TYPE OF WORK: GRADING, PAVING



VICINITY MAP (NOT TO SCALE)



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GRAPHIC SCALES

60 30 0 60 120
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2024 = 7500

ADT 2034 = 7890

DESIGN SPEED = 60 MPH

POSTED SPEED = 55 MPH

FUNC CLASS = MINOR ARTERIAL

PROJECT LENGTH

TOTAL LENGTH ROADWAY PROJECT HS–2009K: 0.282 MILES

Prepared In the Office of:
DIVISION OF HIGHWAYS
Ninth Division Design / Construct
375 Silas Creek Parkway., Winston-Salem NC, 27127

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: N/A

LETTING DATE: AUGUST 28,2024

JEREMY. L. KEATON PE,PLS
PROJECT ENGINEER

JEREMY. L. KEATON PE,PLS
PROJECT DESIGN ENGINEER

ROADWAY DESIGN ENGINEER

DocuSigned by: Jeremy Keaton 717D7F9640A4499...
07/15/2024
P.E.
SIGNATURE:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 057979 JEREMY L. KEATON

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

TIP PROJECT: HS–2009K

CONTRACT: DI00351

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	1A

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 057979 ENGINEER JEREMY L. KEATON

DocuSigned by: Jeremy Keaton 07/15/2024

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INDEX OF SHEETS

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 REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE WINDSTREAM, ENERGY UNITED, DAVIDSON COUNTY SCHOOLS (FORCE MAIN), TOWN OF DENTON, DUKE ENERGY, HANDY SANITARY DISTRICT

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
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 8 - INCIDENTALS	
852.01	Concrete Islands

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9/10/2021

PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	1B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP) — EIP
- Computed Property Corner
- Existing Concrete Monument (ECM) — ECM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Existing Historic Property Boundary — HPB
- Known Contamination Area: Soil — S
- Potential Contamination Area: Soil — S
- Known Contamination Area: Water — W
- Potential Contamination Area: Water — W
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- 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 — RW
- Existing Control of Access Line — CA
- Proposed Control of Access Line — CA
- Proposed ROW and CA Line — RW CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- 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 — S
- Storm Sewer — S

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 — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H–Frame Pole
- U/G Power Line Test Hole (SUE – LOS A)*
- U/G Power Line (SUE – LOS B)* — P
- U/G Power Line (SUE – LOS C)* — P
- U/G Power Line (SUE – LOS D)* — P

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

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

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line (SUE – LOS B)* — ?UTL
- 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.

6/2/99

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	D2	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 PLACE IN LAYERS NOT LESS THAN 2½″ IN DEPTH OR GREATER THAN 4″ IN DEPTH.	T	EARTH MATERIAL
C2	PROP. APPROX. 3″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	E1	PROP. APPROX. 4½ ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 513 LBS. PER SQ. YD.	U	EXISTING PAVEMENT
C3	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.	E2	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 LESS THAN 3″ IN DEPTH OR GREATER THAN 5.5″ IN DEPTH.	V	MILLING ASPHALT PAVEMENT (0″ - 1.5″ DEPTH)
D1	PROP. APPROX. 4″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I9.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	R	5″ MONOLITHIC CONCRETE ISLAND (KEYED-IN).	W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)

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

PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	2A-1

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 057979 ENGINEER JEREMY L. KEATON

DocuSigned by: Jeremy Keaton 07/15/2024

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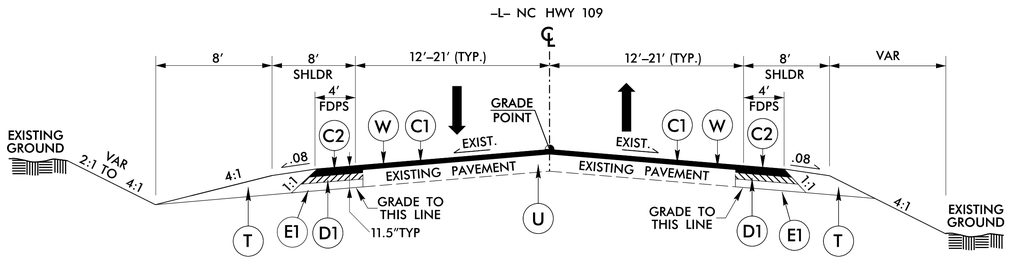
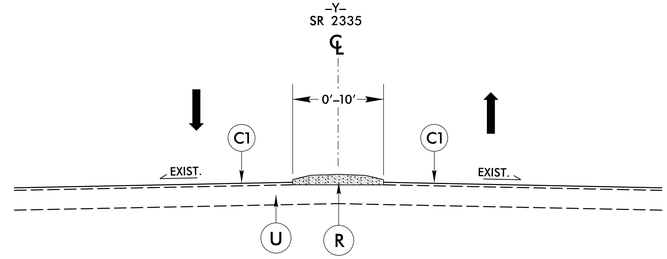


TYPICAL SECTION #1

USE TYPICAL SECTION NO. 1 AS FOLLOWS:
FROM –L– STA. 112+88 TO –L– STA. 127+78

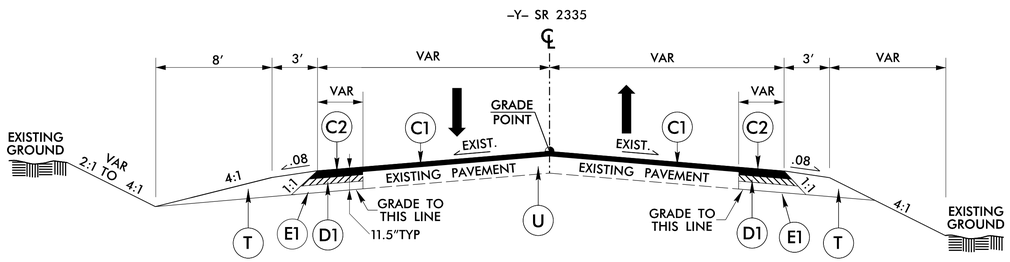
NOTES: 1) ACTUAL SLOPES AND DIMENSIONS VARY SEE XSC SHEETS FOR DETAILS

2) DURING WIDENING, WEDGE EXISTING PAVED SHOULDERS AS NEEDED TO PROJECT (& RETAIN) EXISTING TRAVEL LANE CROSS SLOPE



CONCRETE ISLAND DETAIL

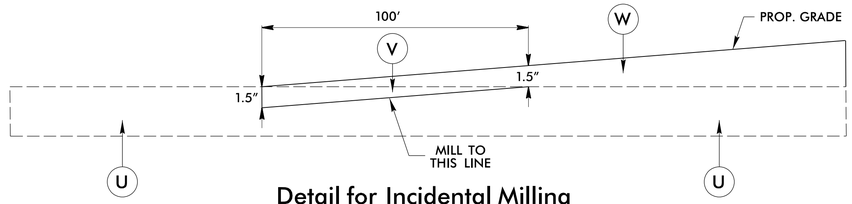
USE IN CONJUNCTION WITH TYPICAL SECTION #2
–Y– STA. 14+16 TO STA. 14+66
–Y– STA. 15+40 TO STA. 16+25



TYPICAL SECTION #2

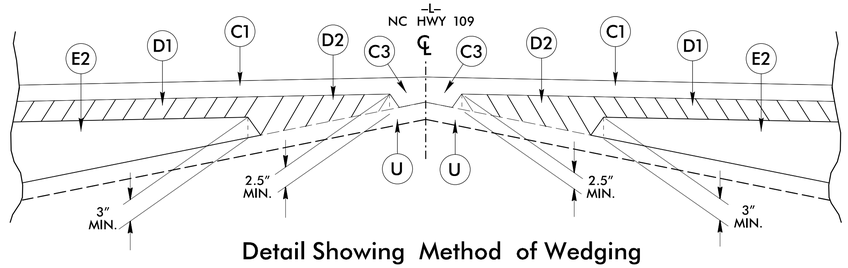
USE TYPICAL SECTION NO. 1 AS FOLLOWS:
FROM –Y– STA. 14+00 TO –Y– STA. 14+80+/–
FROM –Y– STA. 15+24+/– TO –Y– STA. 16+50

NOTES: 1) ACTUAL SLOPES AND DIMENSIONS VARY SEE XSC SHEETS FOR DETAILS



Detail for Incidental Milling of Existing Pavement

USE AT PROJECT LIMITS CONJUNCTION WITH TYPICAL SECTION #1 & #2



Detail Showing Method of Wedging

12/06/07

COMPUTED BY: JLK DATE: 07/11/2024
CHECKED BY: DATE:

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	3B

SUMMARY OF EARTHWORK
IN CUBIC YARDS

STATION	STATION	UNCL. EXCAV.	UNDERCUT (CONTINGENCY)	EMBANK. +20%	BORROW	WASTE
112+88	127+78	260		1150	1000	150
SHALLOW UNDERCUT (CONTINGENCY)			100			100
SUBTOTAL		260	100	1150	1040	250
10% CONTINGENCY						
GRAND TOTALS		286	110	1265	1144	275
SAY		290	110	1270	1150	280

NOTE: APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, BORROW EXCAVATION, CLEARING & GRUBBING AND REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR GRADING.

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PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	4

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 057979 ENGINEER JEREMY L KEATON

DocuSigned by: Jeremy Keaton 07/15/2024

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REVISIONS

8/17/99

NC GRID NAD 83 NA 2011

STEVEN W. ABERCROMBIE DB 2441 PG 1884

DAVID T. SKEEN DB 479 PG 639

DAVID T. SKEEN DB 479 PG 639

DAVID T. SKEEN DB 479 PG 639

115 120 125 15

-Y- POT Sta.13+00.00

N 77° 20' 06.1" E

BEGIN CONSTRUCTION -Y- POT Sta.14+00.00

-L- POT Sta.120+34.74= -Y- POT Sta.15+02.11

BEGIN PROJECT HS-2009K -L- POT Sta.112+88.00

-L- POT Sta.112+00.00

END PROJECT HS-2009K -L- POT Sta.127+78.00

-L- POT Sta.128+50.00

5' MONOLITHIC CONCRETE ISLAND

+17.98-Y- 22.21' +43.23-Y- 40.75'

+36.51-L- 30.29'

+80.80-L- 25.00'

+20.21-L- 25.30'

R=296' R=126' R=35' R=366' R=96' R=28'

PROP. EOP=EXIST. EOP

4" P.S. (TYP.)

TO DENTON

TO THOMASVILLE

NC HIGHWAY 109 24' PAVED W/ 4" P.S.

N 0° 47' 55.9" W

HS2009K-1

HS2009K-2

HS2009K-3

+24.39-L- 32.45'

+59.19-Y- 44.88'

+60.51-L- 25.00'

+81.91-Y- 27.49'

+91.85-L- 25.00'

540' TAPER

END CONSTRUCTION -Y- POT Sta.16+50.00

-Y- POT Sta.17+03.32

5' MONOLITHIC CONCRETE ISLAND DETAILS

NOT TO SCALE

R 2.0' -Y- 14+17.49 2.03'LT +17.24 0.05'LT +17.43 4.03'LT +38.27 4.64'LT R 55.0' +56.54 4.81'RT R 35.0' +63.79 4.94'RT +64.52 1.16'RT R 2.0' -Y- 14+63.62 2.95'RT

R 3.0' -Y- 15+42.68 5.84'LT +41.77 0.04'LT R 55.0' +42.84 2.84'LT +48.73 5.82'LT R 75.0' +71.78 4.71'RT +22.21 2.48'RT +22.24 1.51'LT R 2.0' -Y- 16+22.12 0.49'RT

NOTE: STATIONING & RW FROM HWY PROJ.#6.601001.9

NOTE: SEE SHEET 5 FOR -L- & -Y- PROFILE

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PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	5

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 057979 ENGINEER JEREMY L. KEATON

DocuSigned by: Jeremy Keaton 07/15/2024

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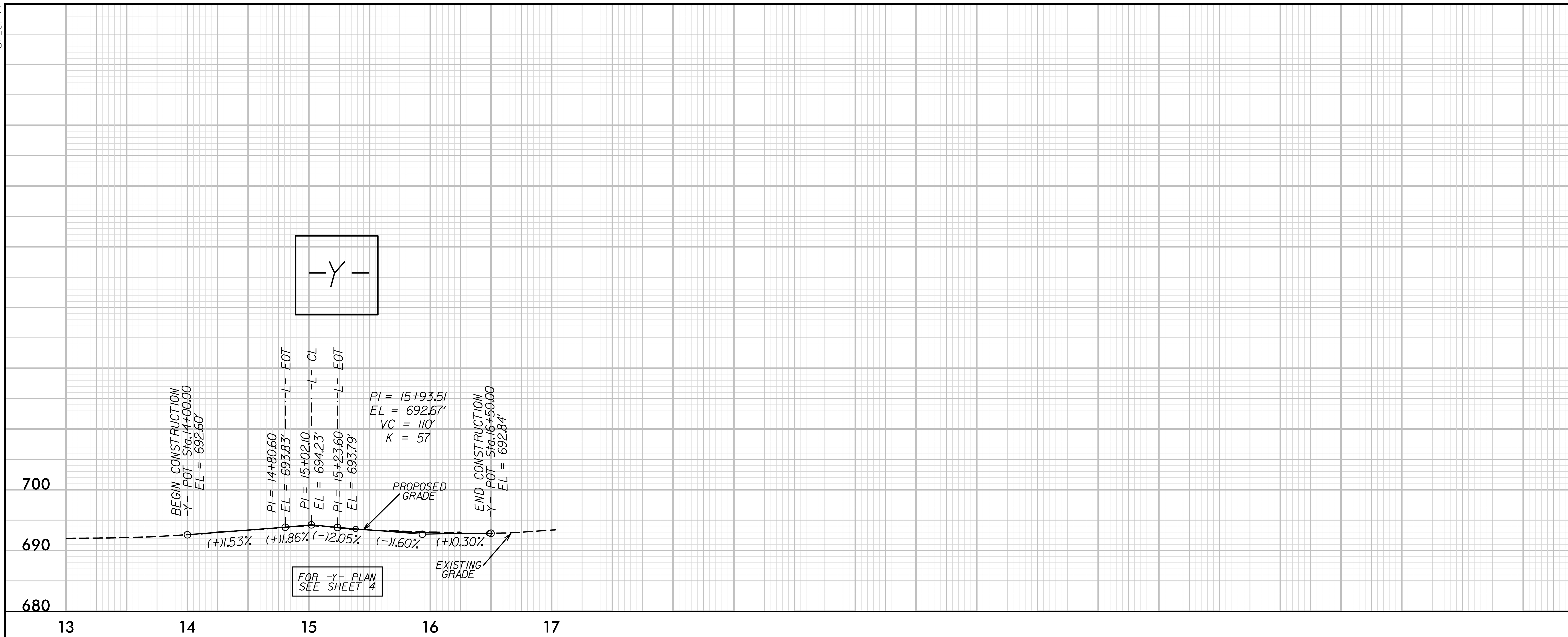

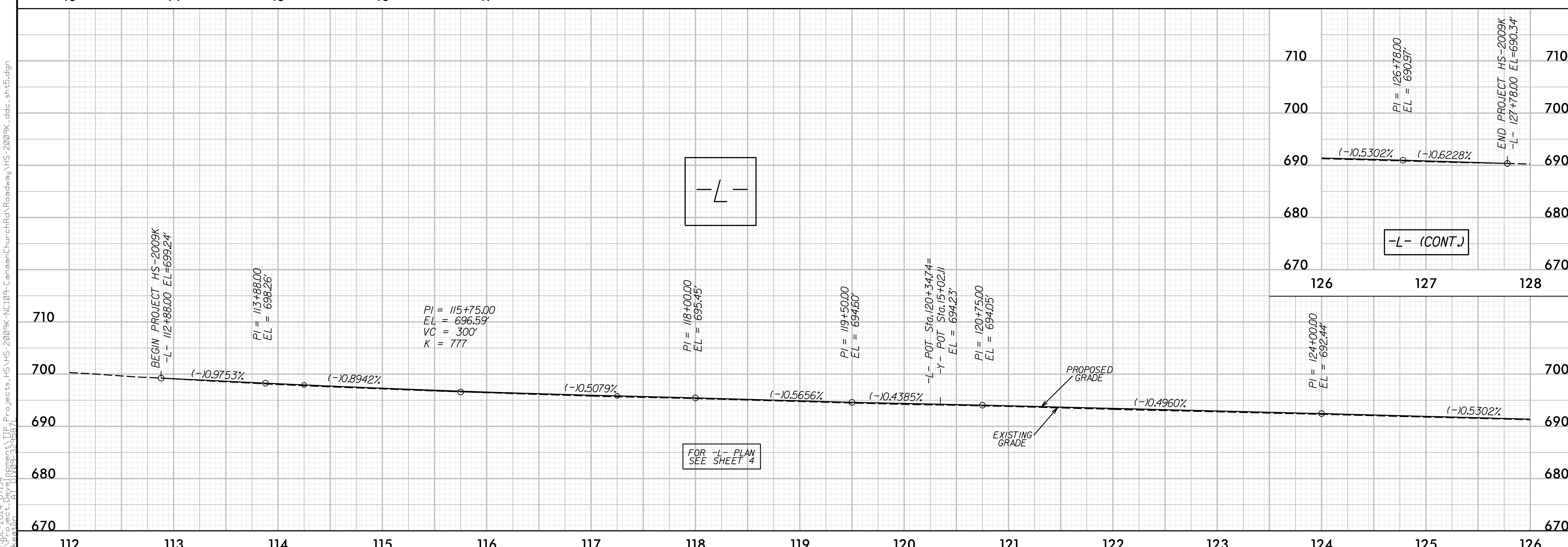

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jlkeaton AT DIV09-329587L

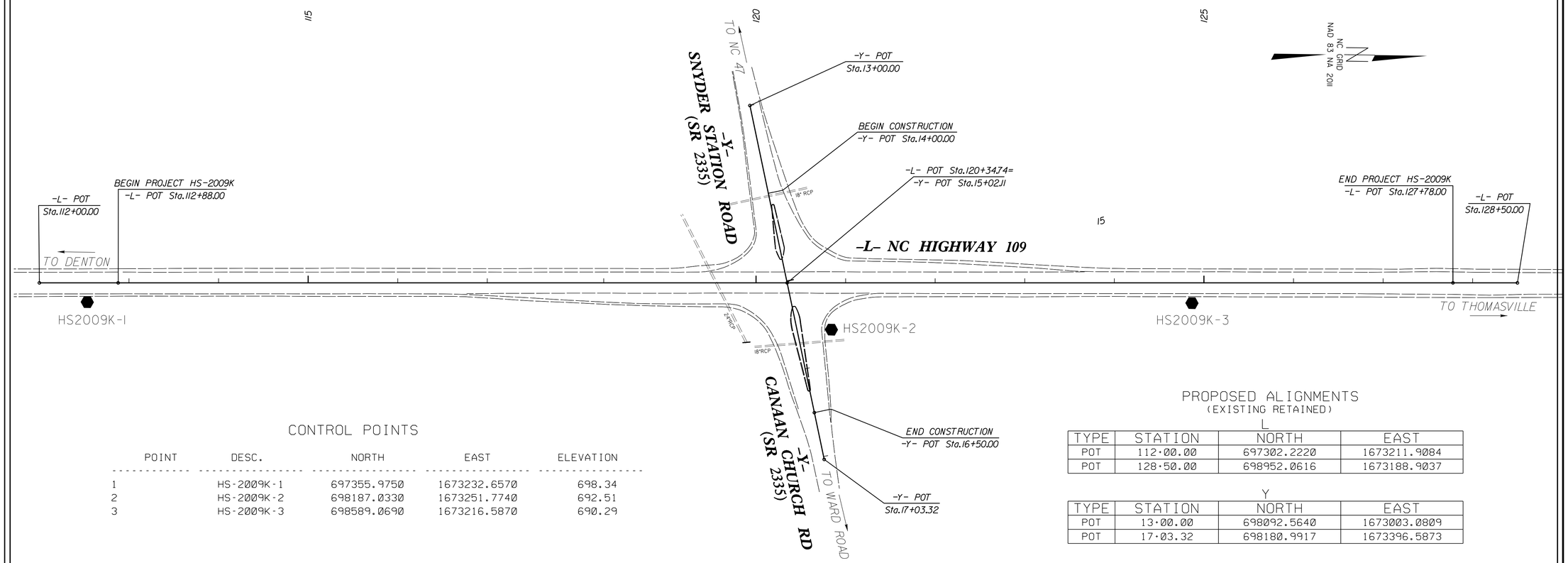
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HS-2009K	RW-1	1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURVEY CONTROL,
EXISTING / PROPOSED CENTERLINES

DAVIDSON COUNTY

TIP PROJECT: HS-2009K



CONTROL POINTS

POINT	DESC.	NORTH	EAST	ELEVATION
1	HS-2009K-1	697355.9750	1673232.6570	698.34
2	HS-2009K-2	698187.0330	1673251.7740	692.51
3	HS-2009K-3	698589.0690	1673216.5870	690.29

PROPOSED ALIGNMENTS
(EXISTING RETAINED)

L

TYPE	STATION	NORTH	EAST
POT	112+00.00	697302.2220	1673211.9084
POT	128+50.00	698952.0616	1673188.9037

Y

TYPE	STATION	NORTH	EAST
POT	13+00.00	698092.5640	1673003.0809
POT	17+03.32	698180.9917	1673396.5873

GRAPHIC SCALE

60 30 0 60 120
PLANS

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "HS-2009K" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 698187.033(ft) EASTING: 1673251.774(ft) ELEVATION: 692.51(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99996678 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "HS-2009K" TO -L- STATION 112+00.00 IS S 02°34'47" W 885.71(ft) ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

DIVISION OF HIGHWAYS
NINTH DIVISION DESIGN\CONSTRUCT
375 SILAS CREEK PARKWAY WINSTON-SALEM, N.C. 27127

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	*LETTING DATE:*
N/A	*AUGUST 28, 2024*

PROFESSIONAL LAND SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4487 LAND SURVEYOR JEREMY T. KEATON

DocuSigned by: Jeremy Keaton
SIGNATURE:

07/15/2024
Date:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

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09/08/99

TIP NO.	SHEET NO.
HS-2009K	PMP-1

APPROVED: DocuSigned by: William A. Blanton CC3B37181BF0482...

DATE: 07/15/2024

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025499 ENGINEER WILLIAM A. BLANTON

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN

DAVIDSON COUNTY

LOCATION: INTERSECTION OF NC 109 & SR 2335 (SNYDER STATION RD/CANAAN CHURCH RD)

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING TYPE	MARKERS
NC-109 (-L-) and -Y- Lines	Thermoplasic w/Highly Reflective Elements	SNOW- PLOWABLE (L ONLY)

(All Stop Bars, Arrow Symbols, and Diagonal lines shall be Thermoplastic)

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.(*)

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

D) PASSING ZONES WILL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY THE ENGINEER.

E) STOPBAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

F) REMOVE ALL RESIDUE AND SURFACE LAITANCE BY ACCEPTABLE METHODS ON THE BRIDGE DECK(s) PRIOR TO PLACING POLYUREA PAVEMENT MARKING.

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - ARROW SYMBOLS
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1251.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING

FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAY ITEM
T20	WHITE EDGELINE (6")	THERMOPLASTIC
T23	3 FT. - 9 FT./SP WHITE MINISKIP (6")	THERMOPLASTIC
T24	2 FT. - 6 FT. /SP WHITE MINISKIP (6")	THERMOPLASTIC
T33	YELLOW DOUBLE CENTER (6")	THERMOPLASTIC
T50	WHITE GORELINE (12", 90 MIL)	THERMOPLASTIC
T51	WHITE DIAGONAL (12", 90 MIL)	THERMOPLASTIC
T52	YELLOW DIAGONAL (12", 90 MIL)	THERMOPLASTIC
T61	WHITE STOPBAR (24", 120 MIL)	THERMOPLASTIC
T70	LEFT TURN ARROW (90 MIL)	THERMOPLASTIC
T74	COMBO. RIGHT/ STRAIGHT ARROW (90 MIL)	THERMOPLASTIC

FINAL PAVEMENT MARKING QUANTITIES

SYMBOL	DESCRIPTION	QUANTITY
T20	WHITE EDGELINE (6")	3200 LF
T23	3 FT. - 9 FT./SP WHITE MINISKIP (6")	360 LF
T24	2 FT. - 6 FT. /SP WHITE MINISKIP (6")	470 LF
T33	YELLOW DOUBLE CENTER (6")	2700 LF
T50	WHITE GORELINE (12", 90 MIL)	700 LF
T51	WHITE DIAGONAL (12", 90 MIL)	80 LF
T52	YELLOW DIAGONAL (12", 90 MIL)	310 LF
T61	WHITE STOPBAR (24", 120 MIL)	110 LF
T70	LEFT TURN ARROW (90 MIL)	2 EA
T74	COMBO. RIGHT/ STRAIGHT ARROW (90 MIL)	2 EA

PLAN PREPARED BY: N.C.D.O.T. DIVISION 9 DDC

WILLIAM A. BLANTON — DIVISION 9 PROJECT TEAM LEAD

INDEX

REVISIONS

8/17/99

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TIP NO.	SHEET NO.
HS-2009K	PMP-2

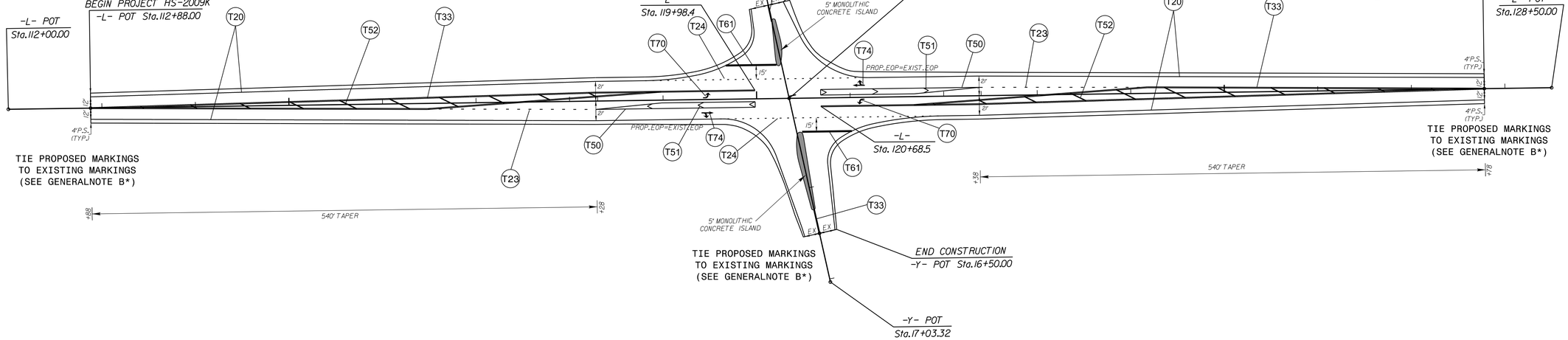
APPROVED: DocuSigned by: William A. Blanton CC0837B19FC44D...

DATE: 07/15/2024

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025499 ENGINEER WILLIAM A. BLANTON

REVISIONS



GRAPHIC SCALE

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PLAN

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PROJECT: HS-2009K

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

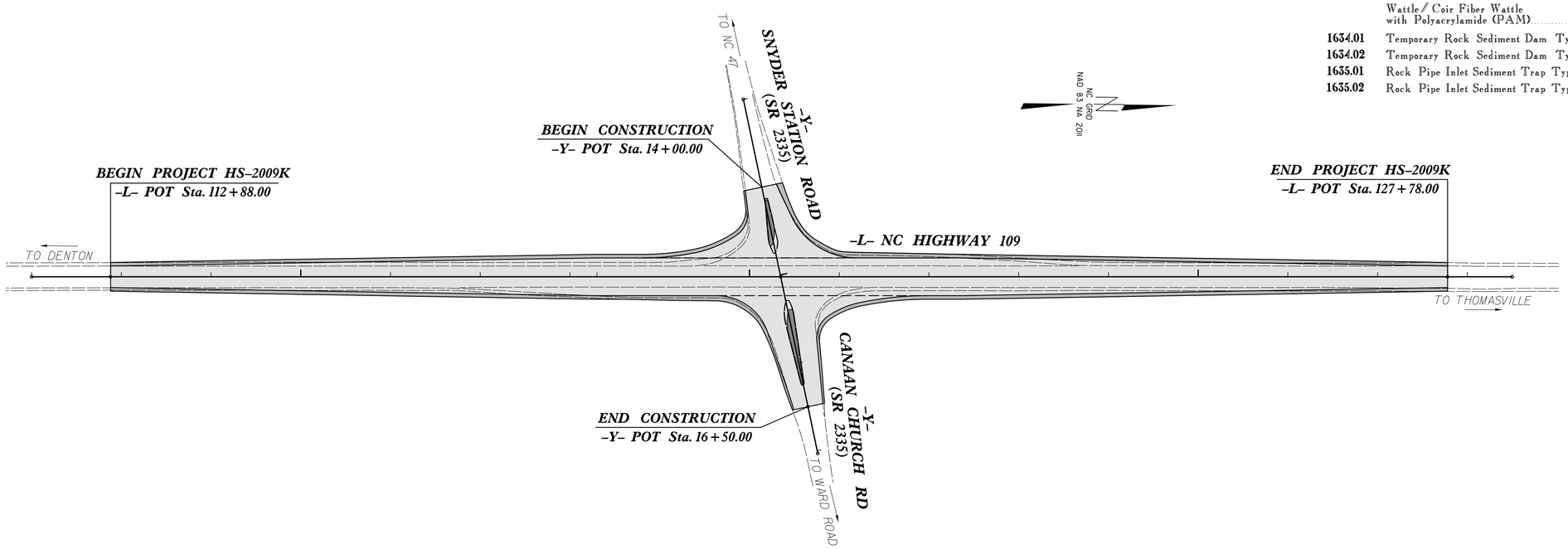
DAVIDSON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HS-2009K	EC-1	4

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	EW CFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	



GRAPHIC SCALE

60 30 0 60

PLANS

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:

DIVISION 9 DDC

375 Silas Creek Parkway

Winston-Salem, NC 27127

2024 STANDARD SPECIFICATIONS

Designed by:

Jeremy L. Keaton, PE, PLS *3497*

NAME *LEVEL III CERTIFICATION NO.*

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type B	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1636.01	Wattle Check
1630.06	Special Stilling Basin	1636.02	Silt Fence Wattle Break
1631.01	Matting Installation	1640.01	Coir Fiber Baffle
		1645.01	Temporary Stream Crossing

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PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	EC-3A

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	116+00	120+00	LT	1000
4	-L-	120+78	121+50	RT	150
			SUBTOTAL		1150
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					230, OR 20%
				TOTAL	1380
				SAY	1400

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	EC-3B

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO.	SHEET NO.
HS-2009K	EC-4

COMBINED CLEARING AND GRUBBING AND FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 4

NC GRID NAD 83 NA 2011

STEVEN W. ABERCROMBIE
DB 2441 PG 1884

DAVID T. SKEEN
DB 479 PG 639

115 120 125

-Y- POT Sta.13+00.00

N 77° 20' 06.1" E

BEGIN CONSTRUCTION -Y- POT Sta.14+00.00

-L- POT Sta.120+34.74= -Y- POT Sta.15+02.11

5' MONOLITHIC CONCRETE ISLAND

BEGIN PROJECT HS-2009K -L- POT Sta.112+88.00

-L- POT Sta.112+00.00

END PROJECT HS-2009K -L- POT Sta.127+78.00

-L- POT Sta.128+50.00

TO DENTON

TO THOMASVILLE

N 0° 47' 55.9" W

NC HIGHWAY 109
24' PAVED W/ 4' P.S.

PROP EOP=EXIST EOP

HS2009K-1

HS2009K-2

HS2009K-3

4' P.S. (TYP.)

EW

+80.80-L- 25.00'

+36.51-L- 30.29'

+17.98-Y- 22.21'

+43.23-Y- 40.15'

R=296'

R=128'

R=366'

R=96'

R=28'

+60.51-L- 25.00'

+20.01-L- 25.00'

+57.85-L- 25.00'

+59.19-Y- 44.88'

+81.91-Y- 27.49'

540' TAPER

+38

+88

EOI

EXISTING R/W

72' CHL

5' MONOLITHIC CONCRETE ISLAND

END CONSTRUCTION -Y- POT Sta.16+50.00

-Y- POT Sta.17+03.32

DAVID T. SKEEN
DB 479 PG 639

DAVID T. SKEEN
DB 479 PG 639

NOTE: STATIONING & RW FROM HWY PROJ.#6.601001.9

REVISIONS

8/17/99

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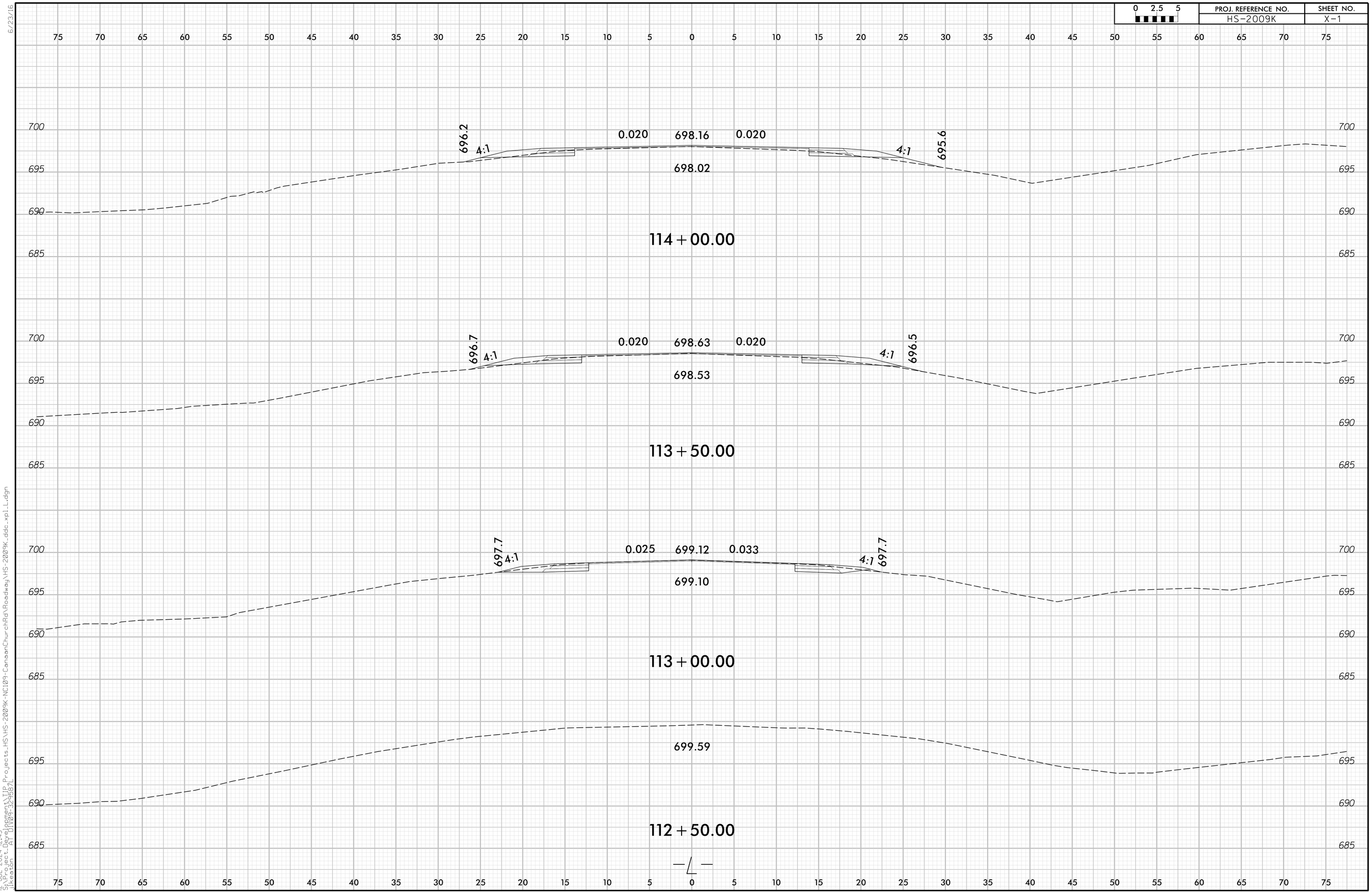

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jkeaton
AT D1701-32587L

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	HS-2009K	X-2

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

700 695 690 685

694.4 4:1 0.020 696.56 0.020 4:1 693.2

696.45

116+00.00

700 695 690 685

694.8 4:1 0.020 696.92 0.020 4:1 694.0

696.78

115+50.00

700 695 690 685

695.3 4:1 0.020 697.30 0.020 4:1 694.7

697.18

115+00.00

700 695 690 685

695.7 4:1 0.020 697.71 0.020 4:1 694.8

697.57

114+50.00

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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6/23/16

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	HS-2009K	X-3

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695 690 685 700

0.020 695.17 0.020

695.05

4:1 688.3 4:1 693.3

118+50.00

0.020 695.45 0.020

695.32

4:1 688.5 4:1 693.2

118+00.00

0.020 695.70 0.020

695.56

4:1 690.1 4:1 693.4

117+50.00

0.020 695.96 0.020

695.80

4:1 691.7 4:1 692.9

117+00.00

0.020 696.25 0.020

696.12

4:1 692.9 4:1 692.8

116+50.00

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jlkeaton AT DIV09-329587L

6/23/16

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	HS-2009K	X-5

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695 690 685

691.0 4:1 0.020 692.94 0.020 4:1 689.5

692.79

123+00.00

691.2 4:1 0.020 693.18 0.020 4:1 689.3

693.02

122+50.00

691.4 4:1 0.020 693.43 0.020 4:1 689.7

693.26

122+00.00

691.8 4:1 0.020 693.68 0.020 4:1 690.1

693.53

121+50.00

692.4 4:1 0.020 693.93 0.020 4:1 688.9

693.82

121+00.00

EXIST. 18"RCP
INV=687.01'
(120+99)

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Ikeaton AT DIV09-32-9587L

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jlkeaton AT DIV09-329587L

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HS-2009K	X-7

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PROJ. REFERENCE NO.	SHEET NO.
HS-2009K	X-8

6/23/16

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6/23/16

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695
690
685

EXIST
(0.025)

692.83

EXIST
(0.035)

692.83
16+50.00

—Y—

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