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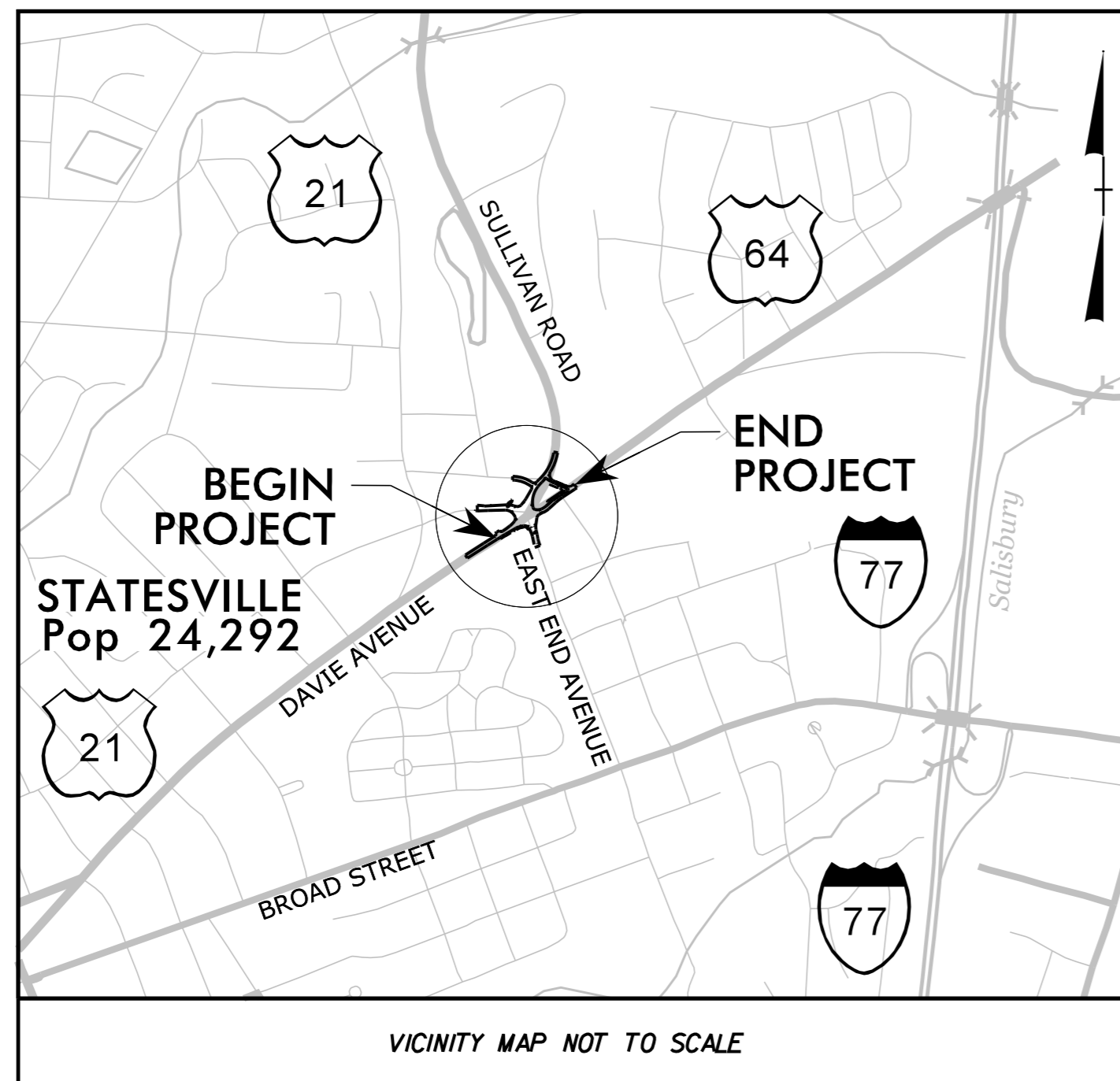
SEE SHEET 1A FOR INDEX OF SHEETS
SEE SHEET 1B FOR CONVENTIONAL PLAN SHEET SYMBOLS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

IREDELL COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5964	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45978.1.1		P.E.	
45978.2.1		R /W	
45978.2.2		UTILITIES	
45978.3.1		CONST.	

TIP PROJECT: U-5964



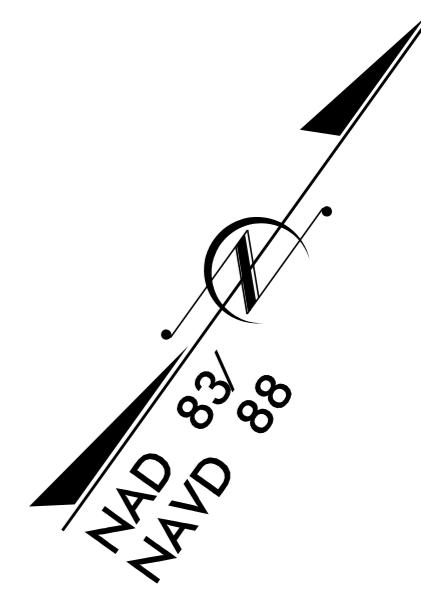
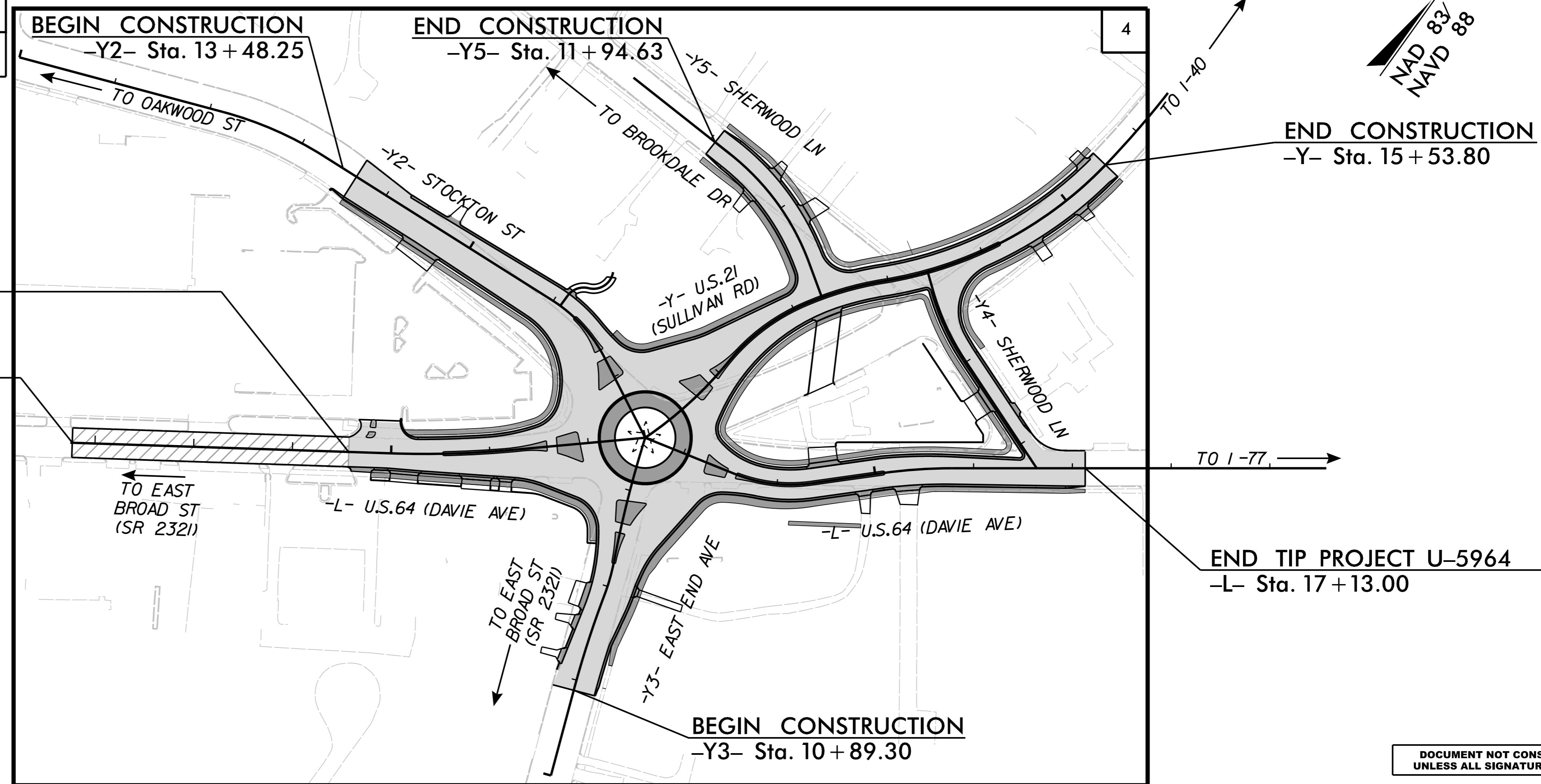
LOCATION: US 64 (DAVIE AVENUE) AND US 21 (SULLIVAN ROAD) CONVERT 5-APPROACH INTERSECTION TO A SINGLE LANE ROUNDABOUT

TYPE OF WORK: GRADING, PAVING & DRAINAGE

100% PLANS

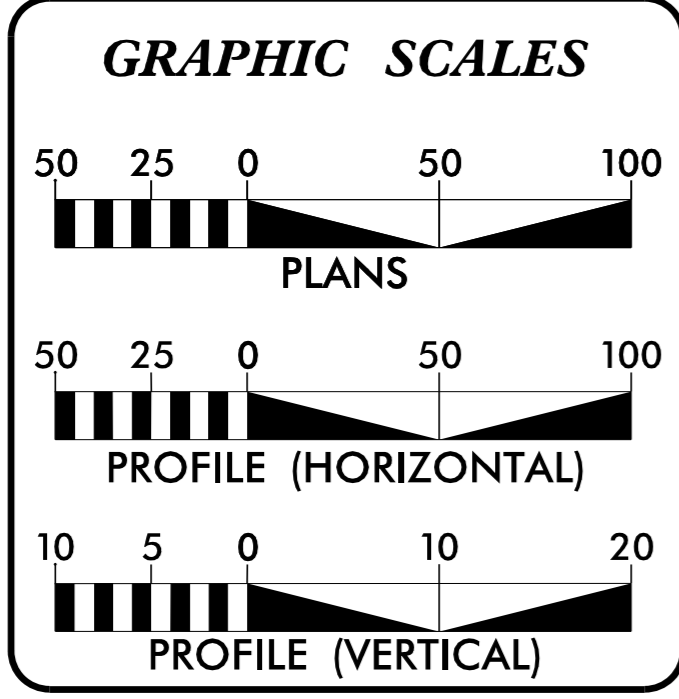
BEGIN TIP PROJECT U-5964
-L- Sta. 9+57.00

BEGIN MILL & INLAY
-L- Sta. 6+50.00



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT: DL00376



DESIGN DATA

AADT 2018	=	8100
AADT 2030	=	9700
K	=	10%
D	=	55%
T	=	2%*
V	=	35 MPH

CLASSIFICATION:
MINOR ARTERIAL

* 1% TTST 1% DUAL STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-5964	=	0.143 MILES
TOTAL LENGTH TIP PROJECT U-5964	=	0.143 MILES

PLANS PREPARED FOR THE NCDOT BY:

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
April 26, 2024

LETTING DATE:
April 14, 2026

Kimley»Horn
NC LICENSE #F-0102
200 SOUTH TRYON STREET, SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (704) 333-5131

FRANK MASTERSON, P.E.
PROJECT ENGINEER

ANDREW WEEKS, E.I.
PROJECT DESIGN ENGINEER

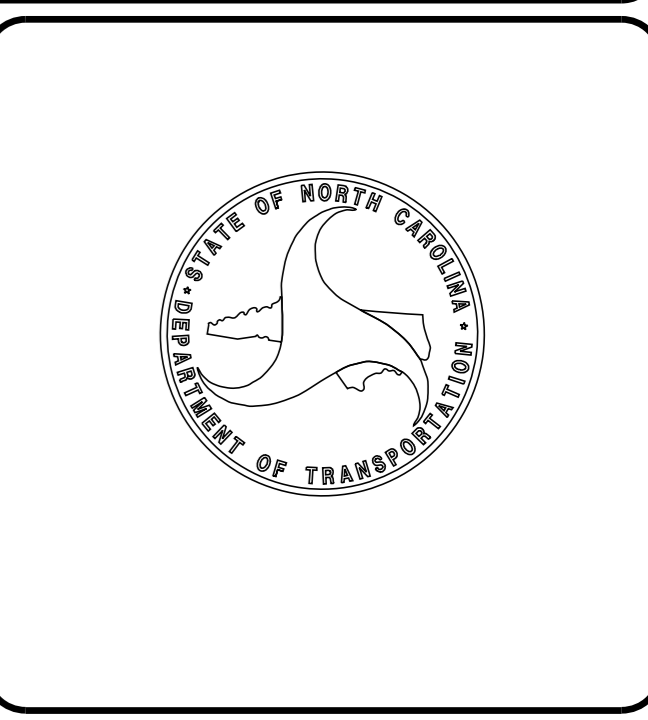
BRYAN SOWELL, P.E.
NCDOT CONTACT

HYDRAULICS ENGINEER

DocuSigned by:
Jason Lawing
03/26/2026
P.E.

ROADWAY DESIGN ENGINEER

DocuSigned by:
Frank Masterson
03/23/2026
P.E.



REVISIONS

PROJECT REFERENCE NO.		SHEET NO.	
U-5964		1A	
R/W SHEET NO.			
ROADWAY ENGINEER		HYDRAULICS ENGINEER	
<small>Documenting</small> <small>1/30/2026</small>		<small>Documenting</small> <small>1/30/2026</small>	
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INDEX OF SHEETS	
SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2A-1 THRU 2A-5	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1 THRU 2B-2	INTERSECTION DETAIL SHEETS
2C-1	DETAIL OF 8"X12"OR 18"CURB TO 2'6" CURB AND GUTTER TRANSITION SECTION
2C-2	DETAIL TO CONVERT EXISTING DROP INLET OR CATCH BASIN TO TBJB WITH STEEL PLATE
2D-1	DRAINAGE DETAILS
3B-1	SUMMARY OF PAVEMENT REMOVAL AND EARTHWORK SUMMARY SHEET
3D-1 THRU 3D-3	DRAINAGE SUMMARY
3G-1	GEOTECH RECCOMEENDATIONS
3P-1	PARCEL INDEX SHEET AND ROW DATA SHEET
4 THRU 4A	PLAN SHEETS
5 THRU 8	PROFILE SHEETS
RW-01 THRU RW-08	RIGHT OF WAY PLANS
TMP-01 THRU TMP-08	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-2	PAVEMENT MARKING PLAN SHEETS
EC-1 THRU EC-5	EROSION CONTROL PLAN SHEETS
SIGN-1 THRU SIGN-5	SIGNING PLAN SHEETS
SIG 1.0 THRU SIG 4.1	SIGNAL PLAN
UC-1 THRU UC-05	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-2	UTILITY BY OTHERS PLANS
X-01	CROSS-SECTION INDEX
X-01A THRU X01B	CROSS-SECTION SUMMARY SHEET
X-02 THRU X-034	CROSS-SECTIONS

GENERAL NOTES: 2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
REVISED:

CLEARING:
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

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

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.

DRIVEWAYS:
DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.03 AT LOCATIONS SHOWN ON 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.

TEMPORARY SHORING:
SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

UTILITIES:
UTILITY OWNERS ON THIS PROJECT ARE City of Statesville Power
Dominion (Gas), AT&T, Spectrm

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.

EFF. 08-11-2025
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	
200.03	Method of Clearing - Method III
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
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
815.02	Subsurface Drain
840.00	Concrete Base Pad for Drainage Structures
840.01	Brick Catch Basin - 12" thru 54" Pipe
840.02	Concrete Catch Basin - 12" thru 54" Pipe
840.03	Frame, Grates and Hood - for Use on Standard Catch Basin
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.15	Brick Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.19	Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.24	Frames and Narrow Slot Sag Grates
840.28	Brick Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.29	Frames and Narrow Slot Flat Grates
840.34	Traffic Bearing Junction Box - for Use with Pipes 42" and Under
840.51	Brick Manhole - 12" thru 36" Pipe
840.52	Precast Manhole - 4', 5' and 6' Diameter 12" thru 48" Pipe
840.53	Precast Manhole with Masonry Base - 12" thru 42" Pipe
840.54	Manhole Frame and Cover
846.01	Concrete Curb, Gutter and Curb & Gutter
848.02	Driveway Turnout - Radius Type
848.03	Driveway Turnout - Drop Curb Type
848.04	Street Turnout
848.06	Curb Ramp
852.01	Concrete Islands

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)	○
Computed Property Corner	×
Existing Concrete Monument (ECM)	□
Parcel/Sequence Number	(23)
Existing Fence Line	-x-x-x-
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	○
Well	○
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	---WLB---
Proposed Lateral, Tail, Head Ditch	-----
False Sump	▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○
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	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Drainage/Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Aerial Utility Easement	-----

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	-----
Single Tree	○
Single Shrub	○
Hedge	-----

VEGETATION:

Woods Line	-----
Orchard	-----
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)*	---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	⊙
	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)*	---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)*	---TFO---
	U/G Fiber Optics Cable (SUE - LOS C)*	---TFO---
	U/G Fiber Optics Cable (SUE - LOS D)*	---TFO---

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)*	---W---
U/G Water Line (SUE - LOS C)*	---W---
U/G Water Line (SUE - LOS D)*	---W---
Above Ground Water Line	-----

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)*	---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)*	---TVFO---
U/G Fiber Optic Cable (SUE - LOS C)*	---TVFO---
U/G Fiber Optic Cable (SUE - LOS D)*	---TVFO---

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	-----

SANITARY SEWER:

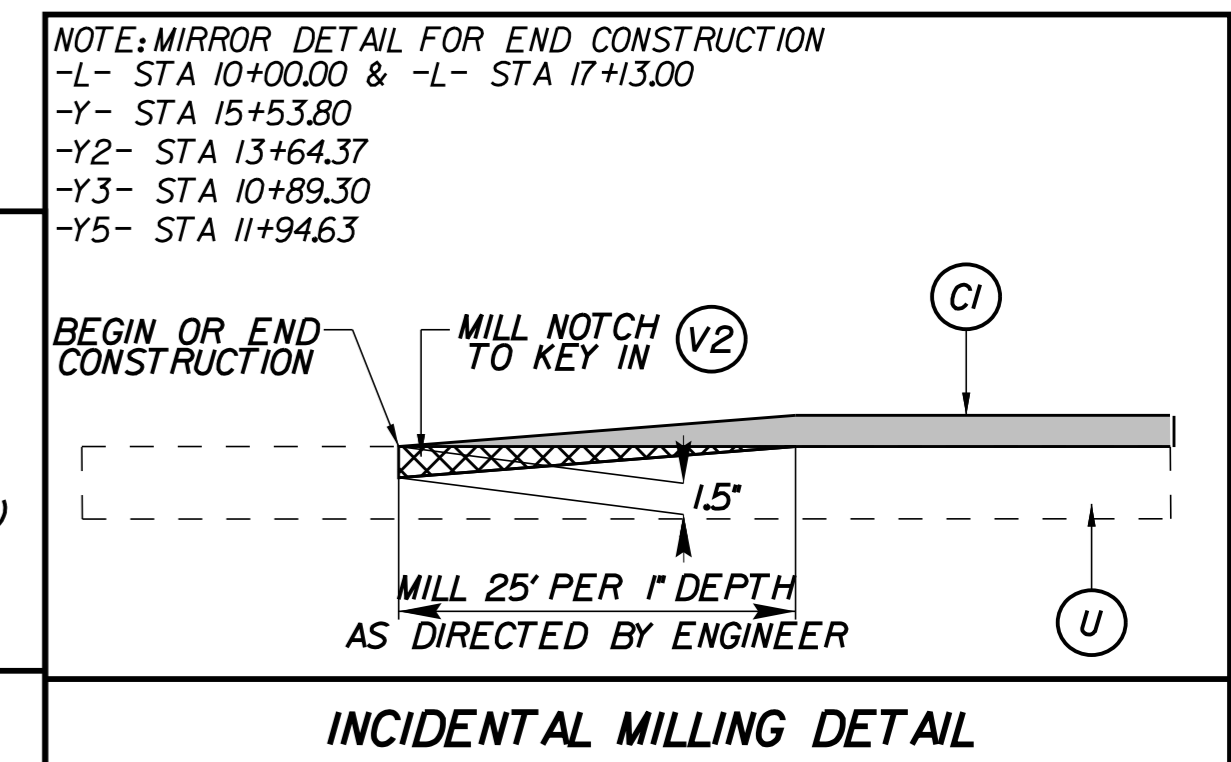
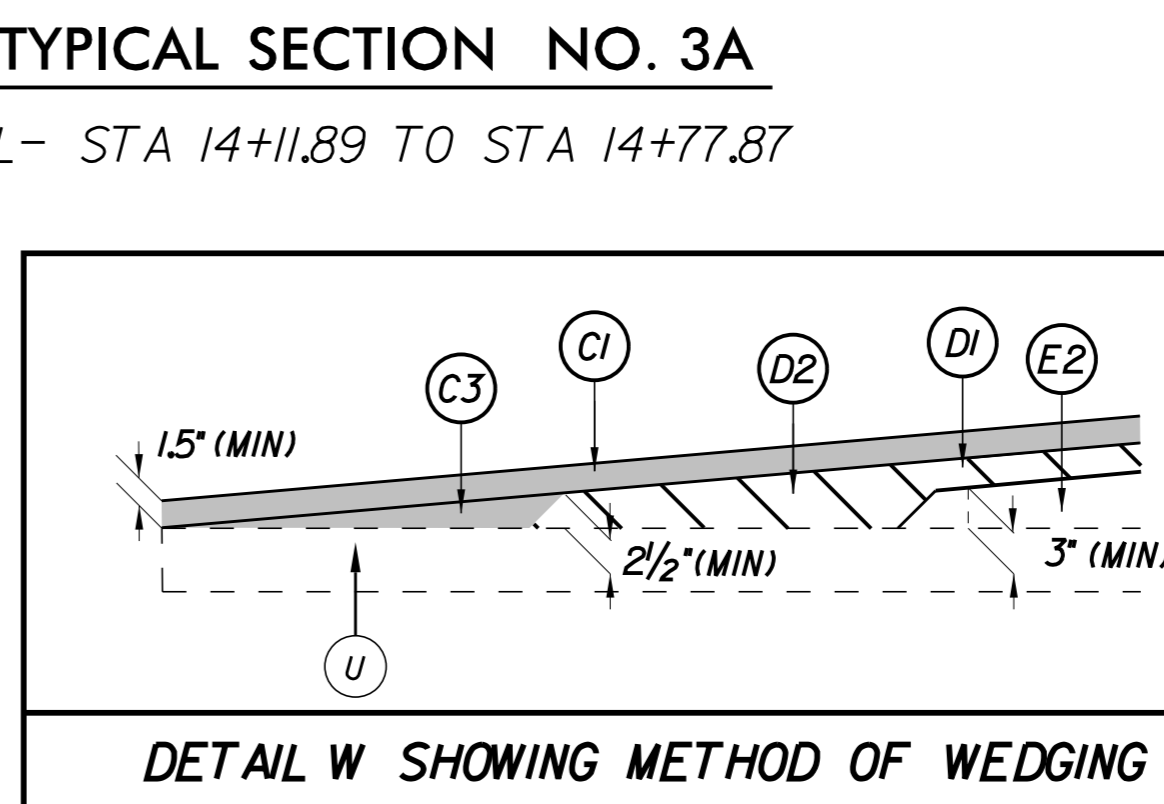
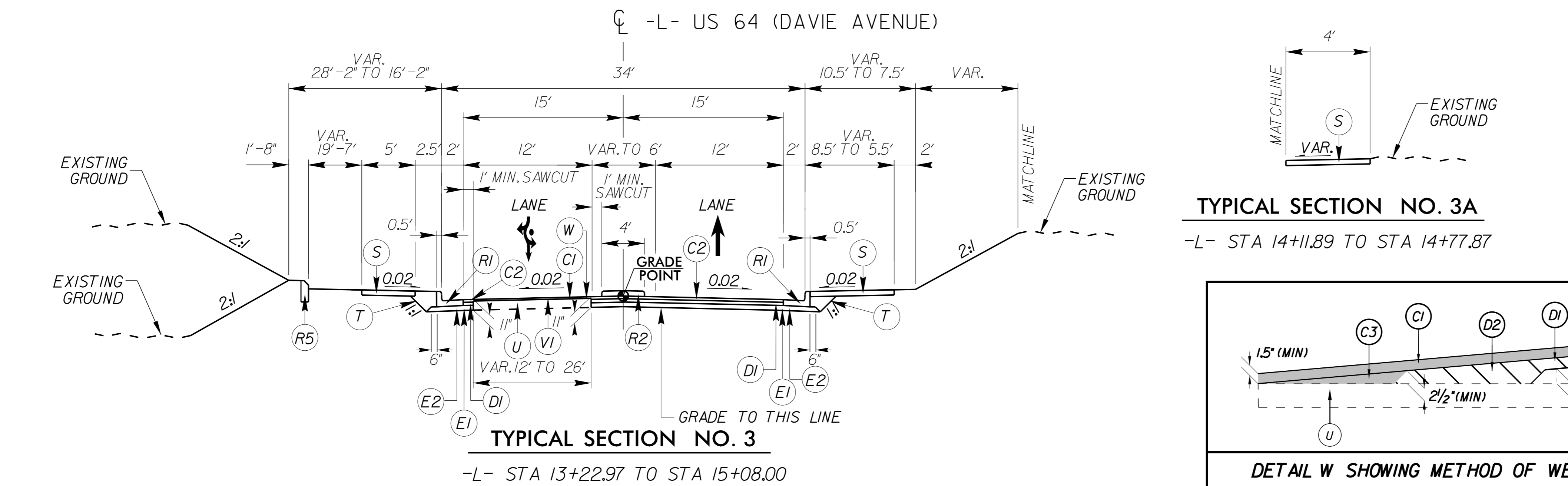
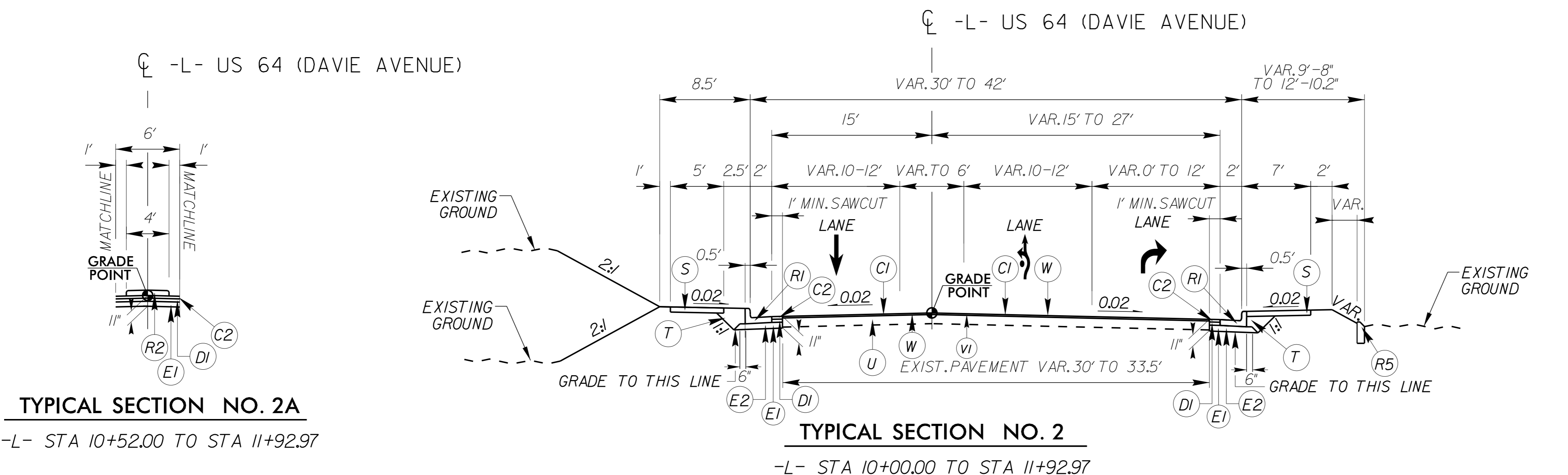
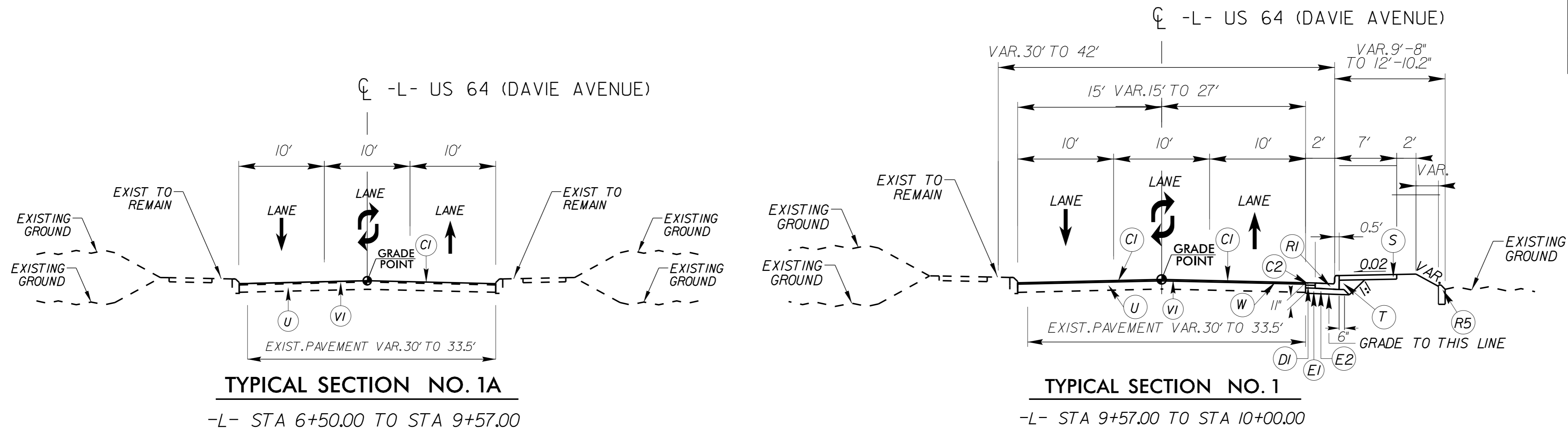
Sanitary Sewer Manhole	⊙
Sanitary Sewer Cleanout	⊙
U/G Sanitary Sewer Line	---SS---
Above Ground Sanitary Sewer	-----
SS Force Main Line Test Hole (SUE - LOS A)*	⊙
SS Force Main Line (SUE - LOS B)*	---FSS---
SS Force Main Line (SUE - LOS C)*	---FSS---
SS Force Main Line (SUE - LOS D)*	---FSS---

MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	⊠
Utility Located Object	○
Utility Traffic Signal Box	⊠
Utility Unknown U/G Line (SUE - LOS B)*	---TUL---
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.

09/10/2021
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1/28/2026

PROJECT REFERENCE NO. U-5964	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
Signed: Frank D. Masterson 1/30/2026	Signed: Joseph T. Holland 1/27/2026
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



FINAL PAVEMENT SCHEDULE

A1	12" CONCRETE TRUCK APRON, CLASS AA
A2	PROPOSED 6" PORTLAND CEMENT CONCRETE PAVEMENT
C1	PROPOSED APPROX 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROPOSED APPROX 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT TO EXCEED 15" IN DEPTH.
D1	PROPOSED APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROPOSED 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 2.5" OR GREATER THAN 4" IN DEPTH.
E1	PROPOSED APPROX. 4" ASPHALT CONCRETE BASE COURSE TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROPOSED 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" OR GREATER THAN 5.5" IN DEPTH.
R1	2'-6" CONCRETE CURB & GUTTER
R2	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
R3	8" x 18" CONCRETE CURB & GUTTER
R4	1'-6" CONCRETE CURB & GUTTER
R5	8" x 12" CONCRETE CURB & GUTTER
S	PROPOSED 4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	1.5" MILLING EXISTING PAVEMENT
V2	INCIDENTAL MILLING
W	WEDGING (SEE DETAIL)

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

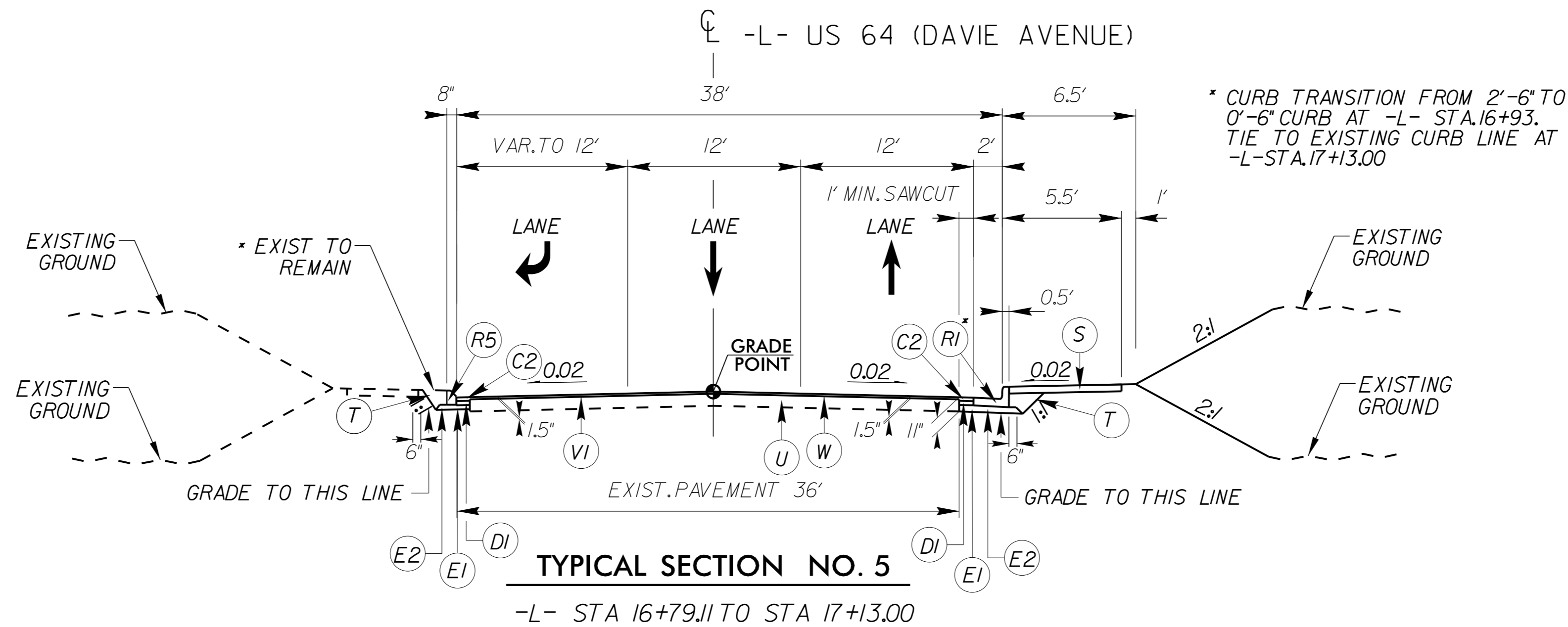
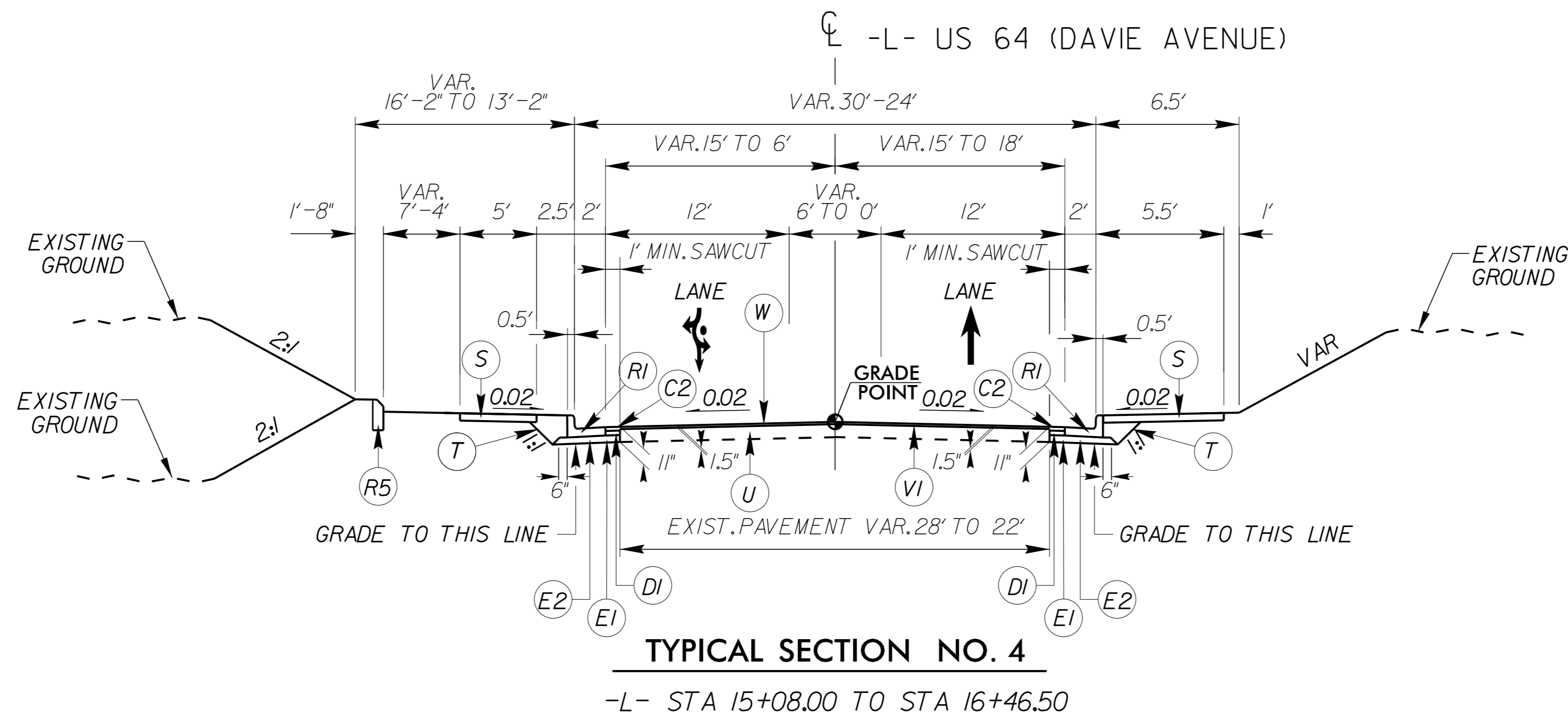
REVISIONS

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PROJECT REFERENCE NO. U-5964	SHEET NO. 2A-2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
Document No. 1/27/2026 Frank Masterson	Signed Joseph T. Holland 1/27/2026

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REVISIONS



FINAL PAVEMENT SCHEDULE

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C3	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
D1	PROPOSED APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROPOSED 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 2.5" OR GREATER THAN 4" IN DEPTH.
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R2	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
R3	8" x 18" CONCRETE CURB & GUTTER
R4	1'-6" CONCRETE CURB & GUTTER
R5	8" x 12" CONCRETE CURB & GUTTER
S	PROPOSED 4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	1.5" MILLING EXISTING PAVEMENT
V2	INCIDENTAL MILLING
W	WEDGING (SEE DETAIL)

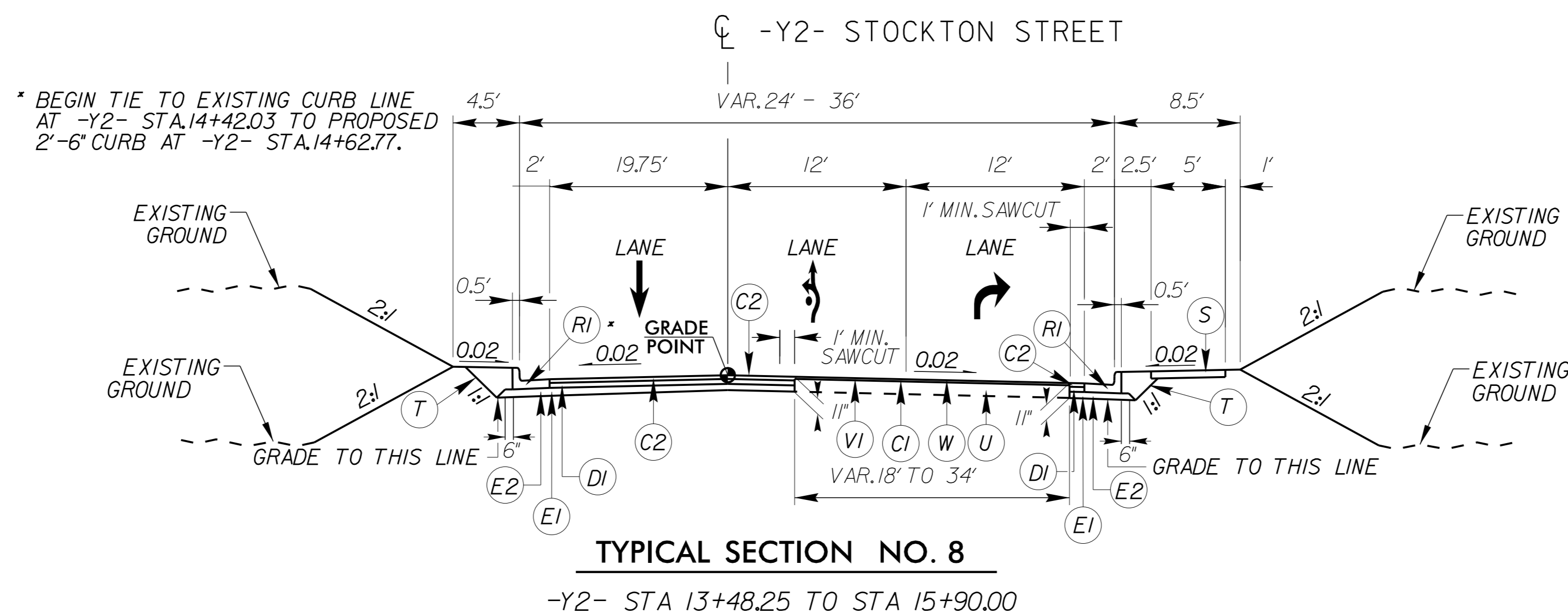
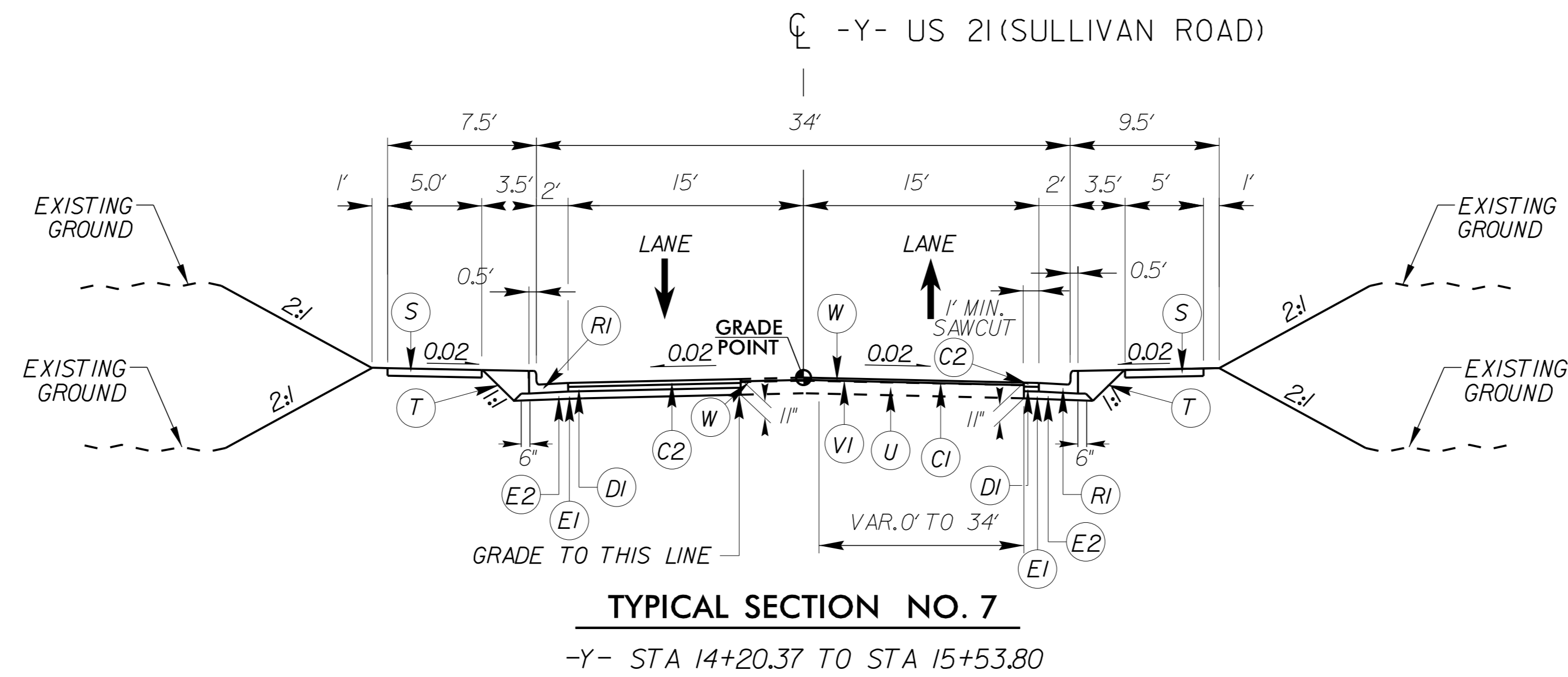
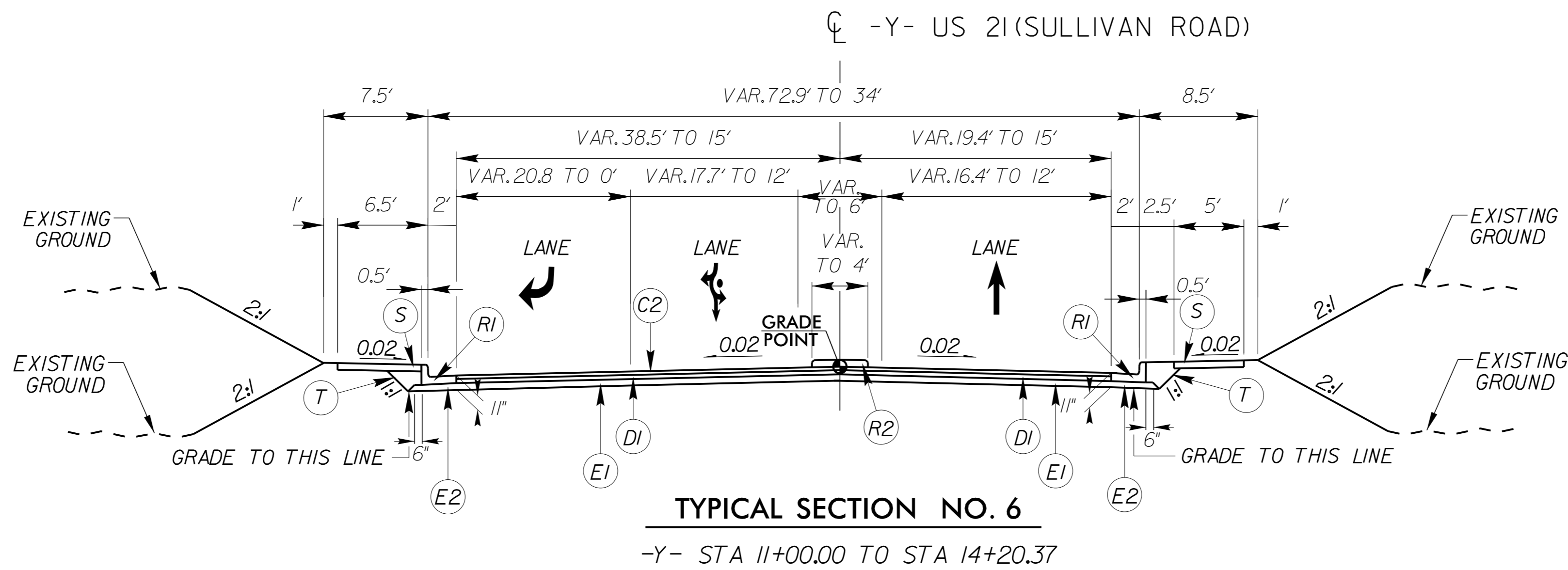
PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

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1/27/2026

PROJECT REFERENCE NO. U-5964	SHEET NO. 2A-3
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
DocuSign Frank D. Masterson 1/23/2026	Signed Joseph T. Hollander 1/27/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



* BEGIN TIE TO EXISTING CURB LINE AT -Y2- STA.14+42.03 TO PROPOSED 2'-6" CURB AT -Y2- STA.14+62.77.

A1	12" CONCRETE TRUCK APRON, CLASS AA
A2	PROPOSED 6" PORTLAND CEMENT CONCRETE PAVEMENT
C1	PROPOSED APPROX 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROPOSED APPROX 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
DI	PROPOSED APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROPOSED 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 2.5" OR GREATER THAN 4" IN DEPTH.
E1	PROPOSED APPROX. 4" ASPHALT CONCRETE BASE COURSE TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROPOSED VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 5.5" IN DEPTH.
RI	2'-6" CONCRETE CURB & GUTTER
R2	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
R3	8' x 18" CONCRETE CURB & GUTTER
R4	1'-6" CONCRETE CURB & GUTTER
R5	8' x 12" CONCRETE CURB & GUTTER
S	PROPOSED 4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
VI	1.5" MILLING EXISTING PAVEMENT
V2	INCIDENTAL MILLING
W	WEDGING (SEE DETAIL)

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

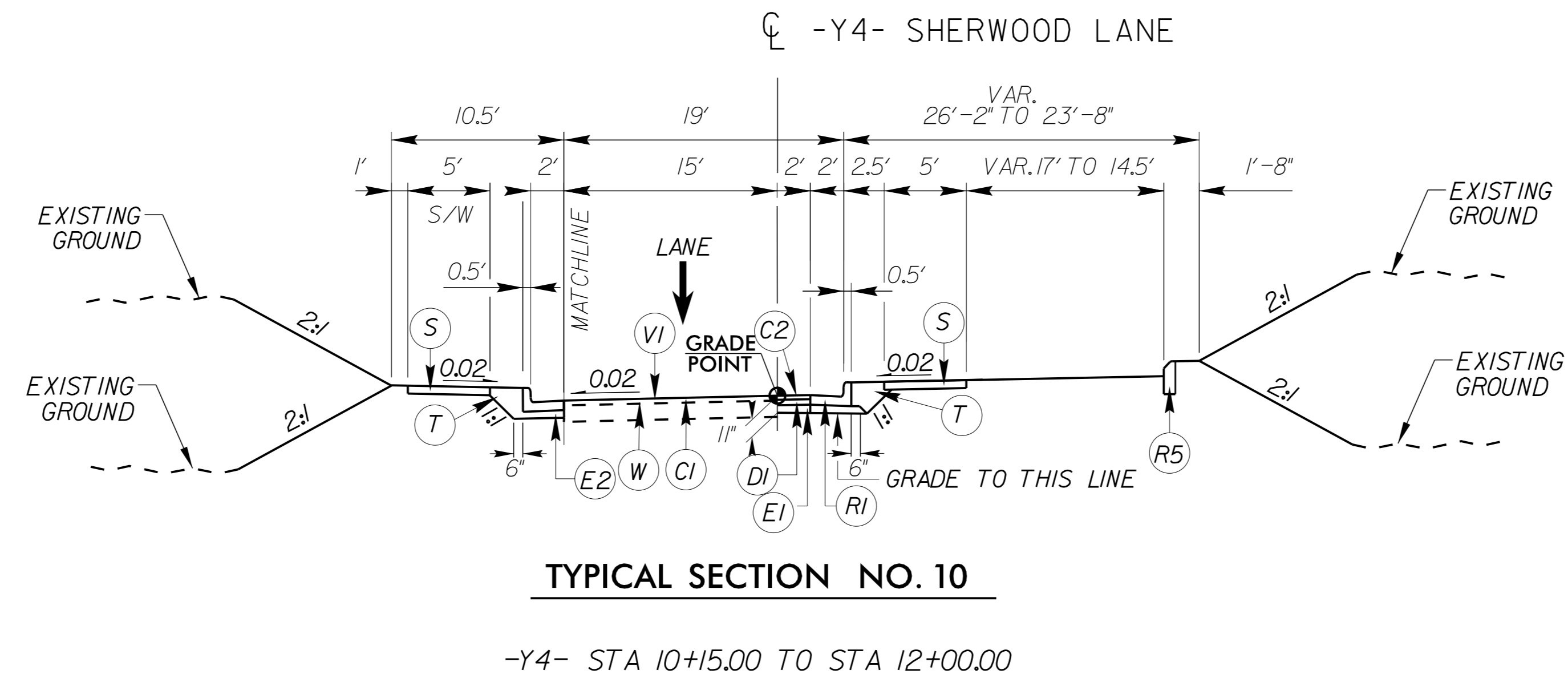
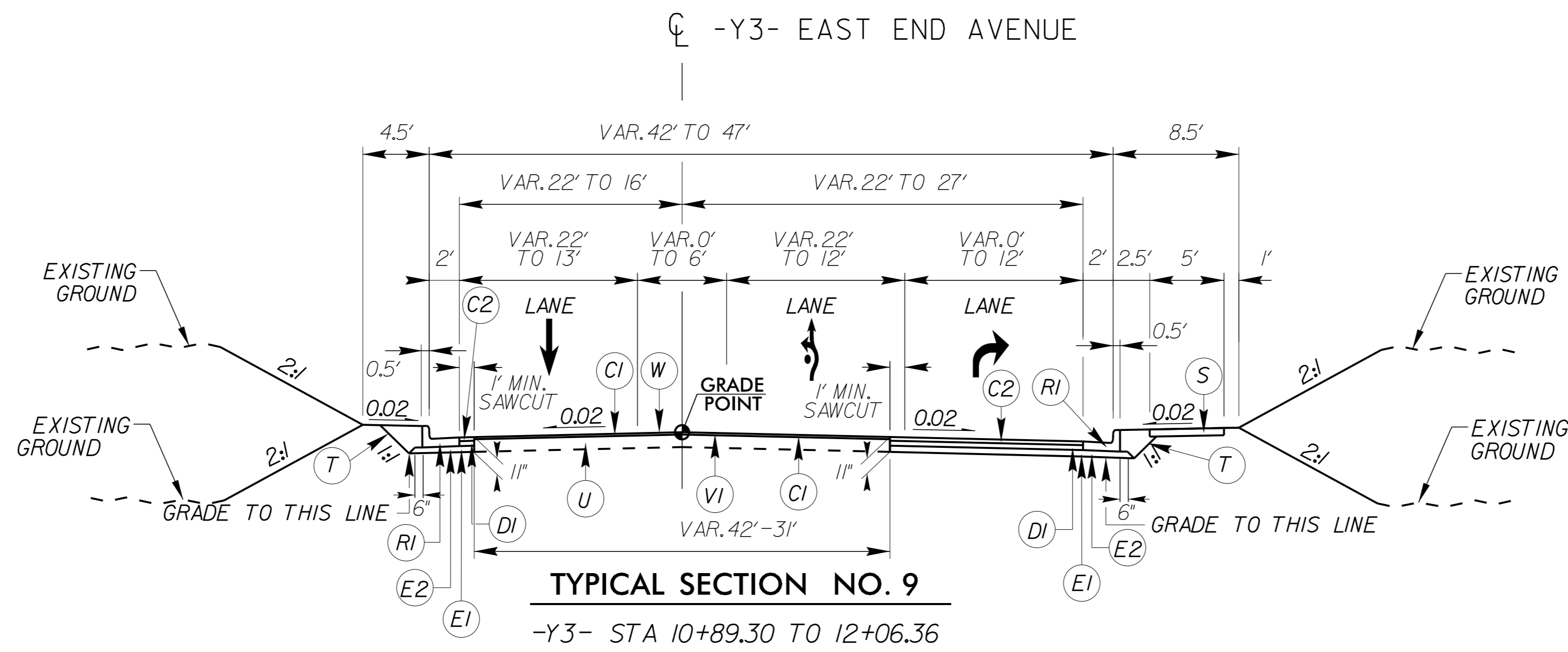
REVISIONS

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1/27/2026

PROJECT REFERENCE NO. U-5964	SHEET NO. 2A-4
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
Documented by: Frank Masterson Date: 1/27/2026	Signed: Joseph T. Holland Date: 1/27/2026

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED




A1	12" CONCRETE TRUCK APRON, CLASS AA
A2	PROPOSED 6" PORTLAND CEMENT CONCRETE PAVEMENT
C1	PROPOSED APPROX 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S95B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROPOSED APPROX 3" ASPHALT CONCRETE SURFACE COURSE TYPE S95B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S95B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
D1	PROPOSED APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE I190C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROPOSED VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I190C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2.5" OR GREATER THAN 4" IN DEPTH.
E1	PROPOSED APPROX. 4" ASPHALT CONCRETE BASE COURSE TYPE B250C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROPOSED VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B250C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 5.5" IN DEPTH.
RI	2'-6" CONCRETE CURB & GUTTER
R2	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
R3	8' x 18" CONCRETE CURB & GUTTER
R4	1'-6" CONCRETE CURB & GUTTER
R5	8' x 12" CONCRETE CURB & GUTTER
S	PROPOSED 4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
VI	1.5" MILLING EXISTING PAVEMENT
V2	INCIDENTAL MILLING
W	WEDGING (SEE DETAIL)

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

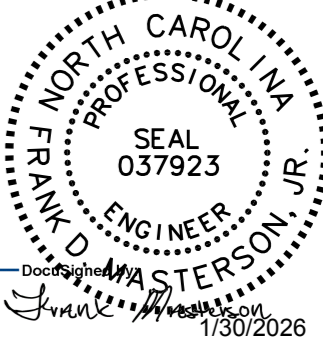

REVISIONS

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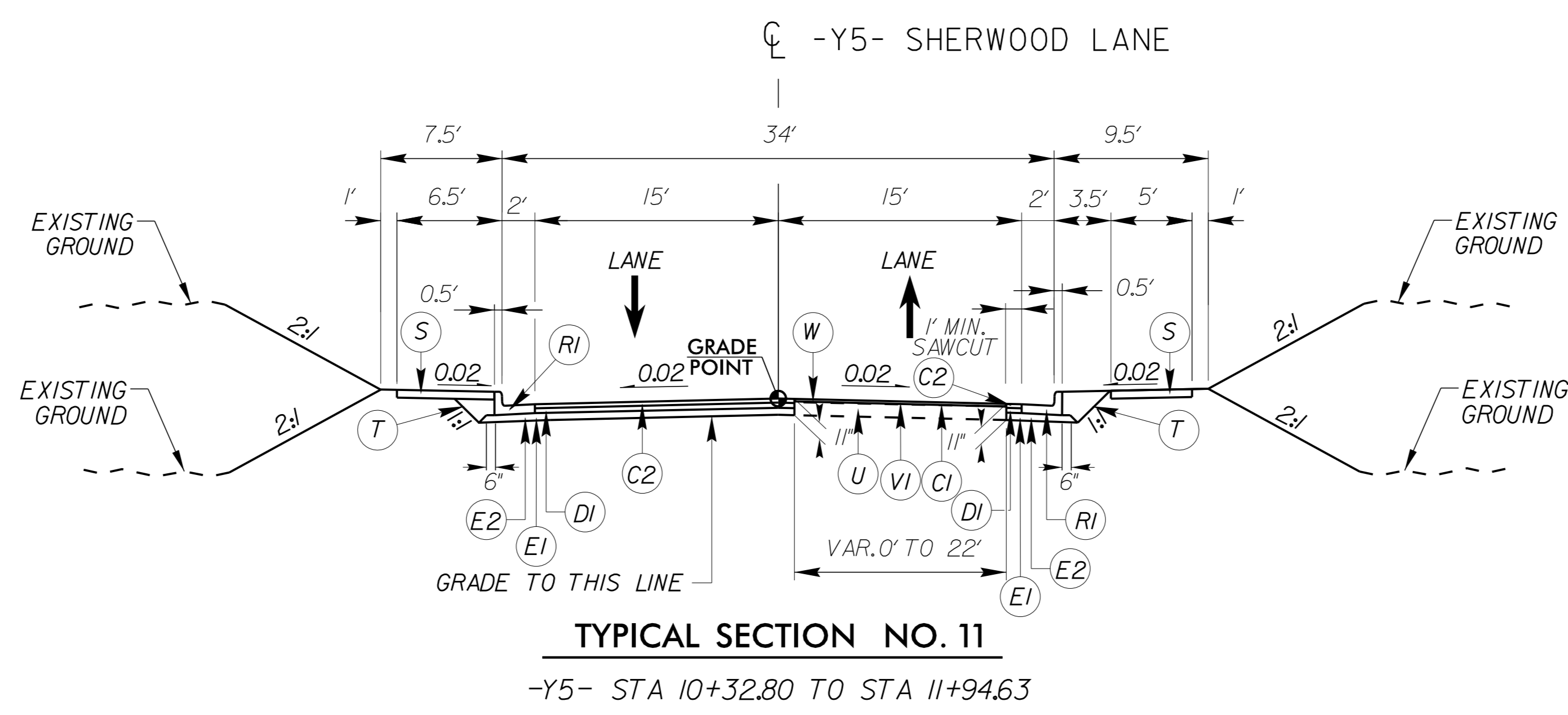
1/27/2026



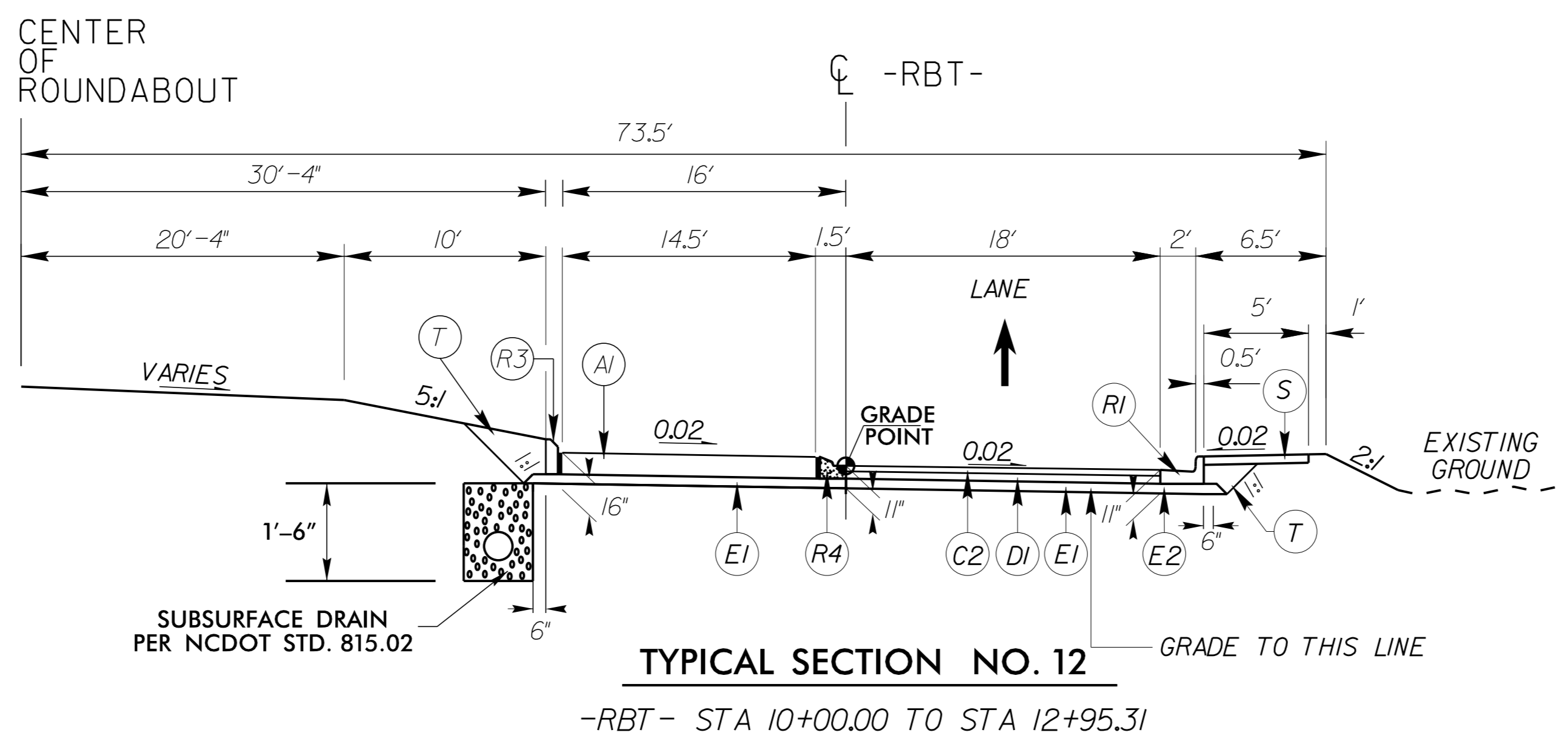
200 S. TRYON ST. • CHARLOTTE, NC 28202

PROJECT REFERENCE NO. U-5964	SHEET NO. 2A-5
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
	
1/30/2026 Frank Masterson	1/27/2026 Joseph T. Holland

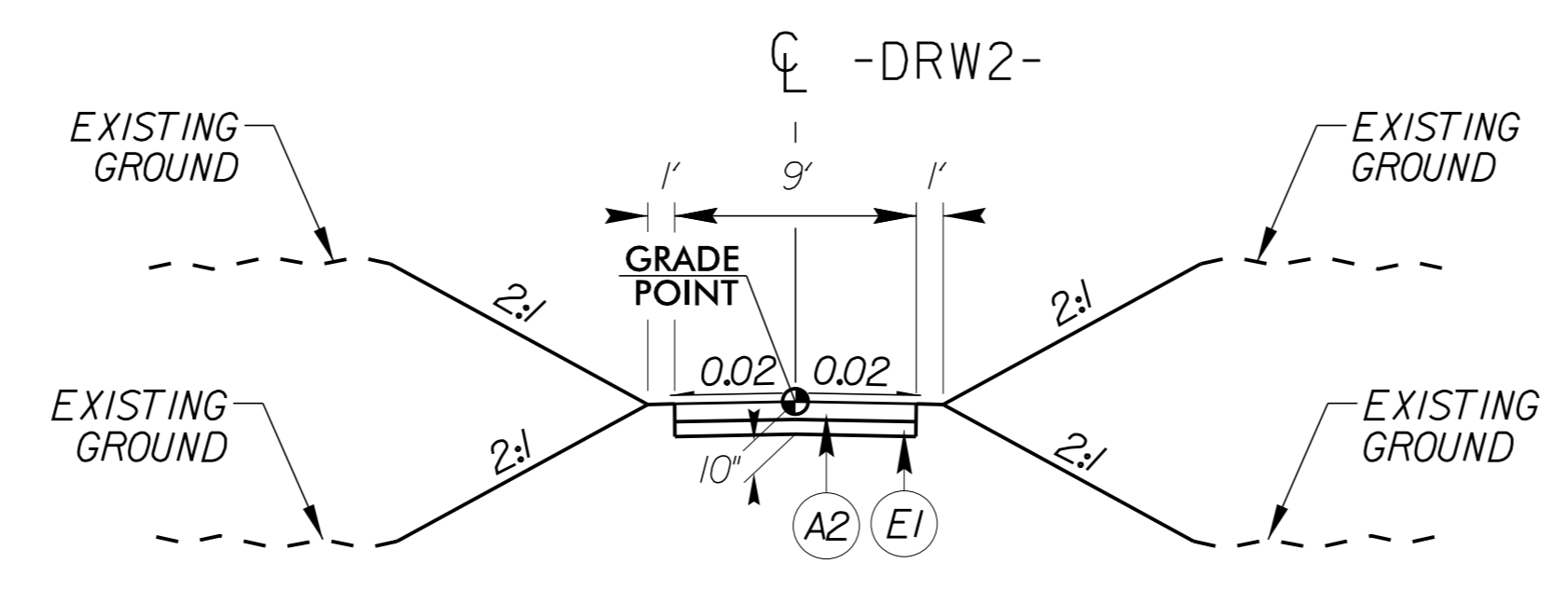
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION NO. 11
-Y5- STA 10+32.80 TO STA 11+94.63



TYPICAL SECTION NO. 12
-RBT- STA 10+00.00 TO STA 12+95.31



TYPICAL SECTION 14
-DRW2- STA 10+20.16 TO 10+64.39

FINAL PAVEMENT SCHEDULE	
A1	12" CONCRETE TRUCK APRON, CLASS AA
A2	PROPOSED 6" PORTLAND CEMENT CONCRETE PAVEMENT
C1	PROPOSED APPROX 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROPOSED APPROX 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
D1	PROPOSED APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE I9.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROPOSED VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I9.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 2.5" OR GREATER THAN 4" IN DEPTH.
E1	PROPOSED APPROX. 4" ASPHALT CONCRETE BASE COURSE TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROPOSED 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" OR GREATER THAN 5.5" IN DEPTH.
R1	2'-6" CONCRETE CURB & GUTTER
R2	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
R3	8' x 18" CONCRETE CURB & GUTTER
R4	1'-6" CONCRETE CURB & GUTTER
R5	8' x 12" CONCRETE CURB & GUTTER
S	PROPOSED 4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
VI	1.5" MILLING EXISTING PAVEMENT
V2	INCIDENTAL MILLING
W	WEDGING (SEE DETAIL)

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

REVISIONS

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1/27/2026

ROUNDBABOUT DETAIL SHEET

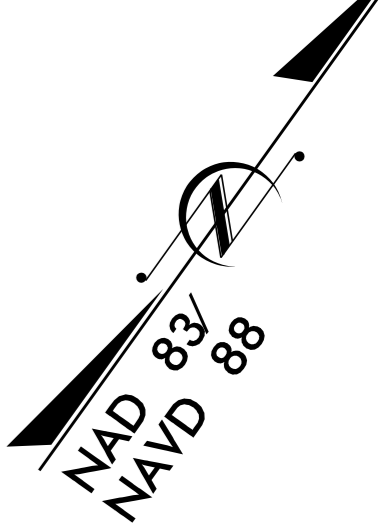
Kimley»Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

RIGHT-OF-WAY REV.
CONST. REV.



PROJECT REFERENCE NO.	SHEET NO.
U-5964	2B-1
RW SHEET NO.	
ROADWAY ENGINEER	
DocuSigned by: Frank Mashall	1/30/2026
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



-CURB_IA-

PI Sta 10+65.35 Δ = 73° 52' 34.0" (RT) D = 71.37' 11.0" L = 103.15' T = 60.15' R = 80.00'	PI Sta 11+26.23 Δ = 54° 06' 32.2" (RT) D = 163° 42' 08.0" L = 33.05' T = 17.88' R = 35.00'	PI Sta 11+58.82 Δ = 9° 57' 17.4" (RT) D = 28° 38' 52.4" L = 34.75' T = 17.42' R = 200.00'
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-DRW2-

PI Sta 10+26.33 Δ = 68° 18' 11.2" (RT) D = 286° 28' 44.0" L = 23.84' T = 13.57' R = 20.00'	PI Sta 10+58.69 Δ = 95° 39' 24.1" (LT) D = 286° 28' 44.0" L = 33.39' T = 22.08' R = 20.00'
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-RBT-

PI Sta 10+47.00 Δ = 90° 00' 00.0" (LT) D = 121° 54' 21.3" L = 73.83' T = 47.00' R = 47.00'	PI Sta 11+20.83 Δ = 90° 00' 00.0" (LT) D = 121° 54' 21.3" L = 73.83' T = 47.00' R = 47.00'
PI Sta 11+94.65 Δ = 90° 00' 00.0" (LT) D = 121° 54' 21.3" L = 73.83' T = 47.00' R = 47.00'	PI Sta 12+68.48 Δ = 90° 00' 00.0" (LT) D = 121° 54' 21.3" L = 73.83' T = 47.00' R = 47.00'

-CURB_IA-

PI Sta 11+94.65 Δ = 90° 00' 00.0" (LT) D = 121° 54' 21.3" L = 73.83' T = 47.00' R = 47.00'	PI Sta 12+68.48 Δ = 90° 00' 00.0" (LT) D = 121° 54' 21.3" L = 73.83' T = 47.00' R = 47.00'
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-CURB_IB-

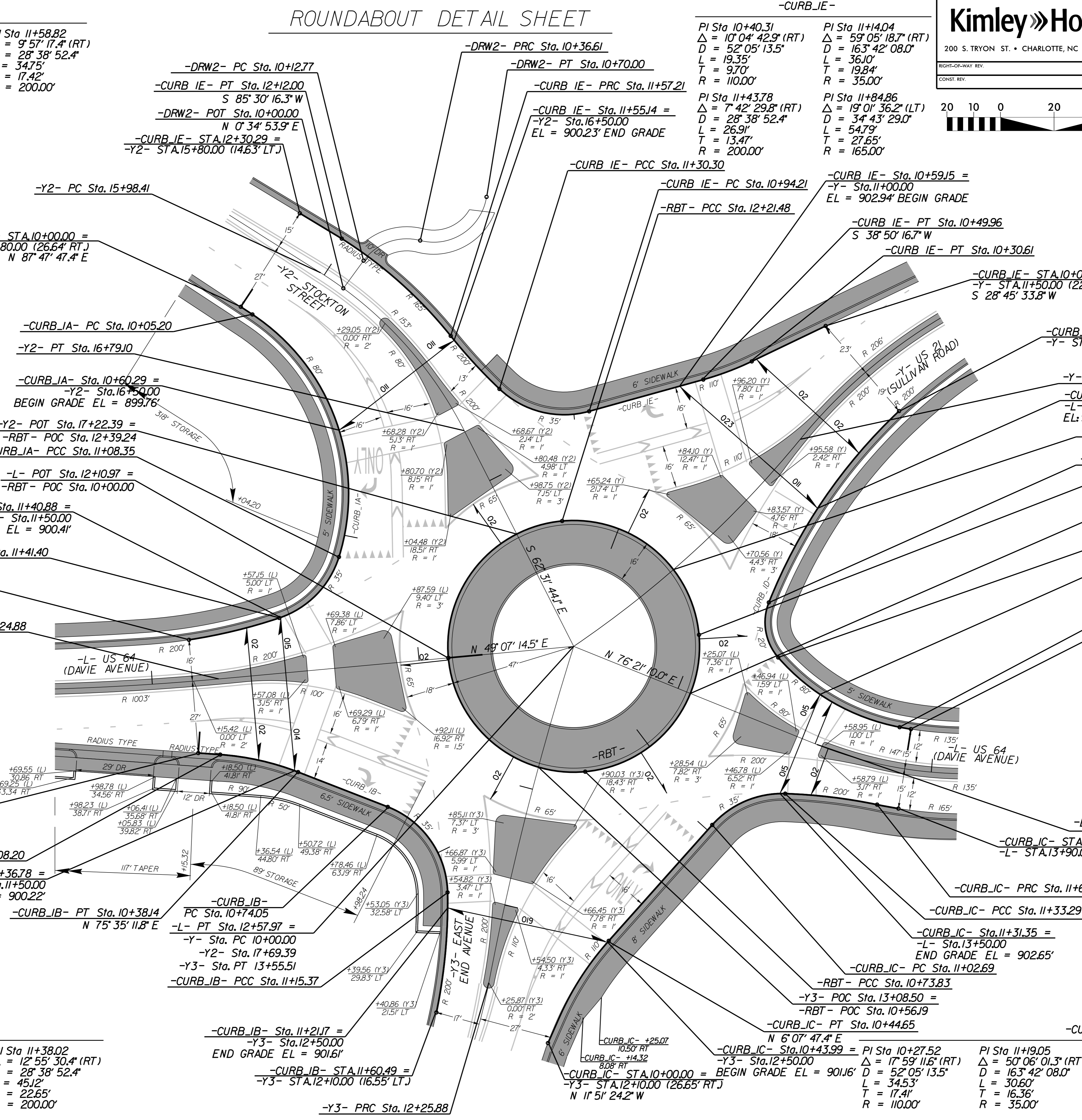
PI Sta 10+23.28 Δ = 17° 09' 06.5" (RT) D = 57° 17' 44.8" L = 29.94' T = 15.08' R = 100.00'	PI Sta 10+97.50 Δ = 67° 38' 08.2" (RT) D = 163° 42' 08.0" L = 41.32' T = 23.45' R = 35.00'	PI Sta 11+38.02 Δ = 12° 55' 30.4" (RT) D = 28° 38' 52.4" L = 45.12' T = 22.65' R = 200.00'
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-CURB_IC-

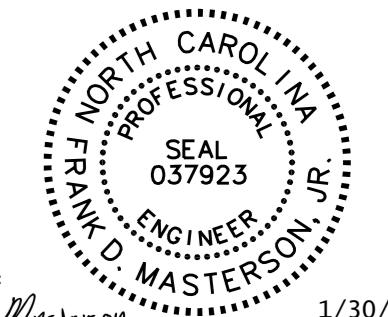
PI Sta 10+27.52 Δ = 17° 59' 11.6" (RT) D = 52° 05' 13.5" L = 34.53' T = 17.41' R = 110.00'	PI Sta 11+19.05 Δ = 50° 06' 01.3" (RT) D = 163° 42' 08.0" L = 30.60' T = 16.36' R = 35.00'	PI Sta 11+50.64 Δ = 9° 54' 49.0" (RT) D = 28° 38' 52.4" L = 34.61' T = 17.35' R = 200.00'	PI Sta 11+71.94 Δ = 2° 48' 36.1" (LT) D = 34° 43' 29.0" L = 8.09' T = 4.05' R = 165.00'
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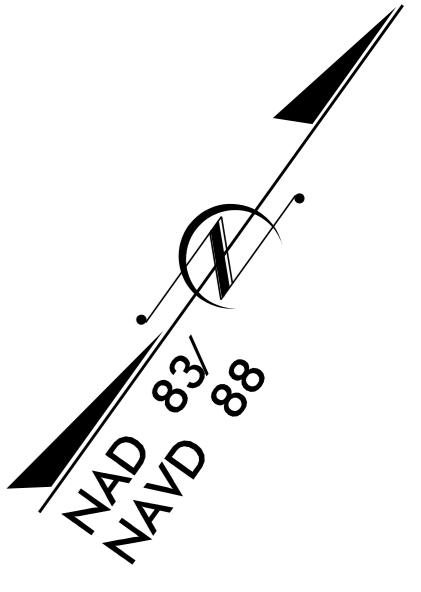
-CURB_ID-

PI Sta 10+02.15 Δ = 1° 49' 16.9" (RT) D = 42° 26' 28.7" L = 4.29' T = 2.15' R = 135.00'	PI Sta 10+31.95 Δ = 38° 08' 18.1" (RT) D = 71° 37' 11.0" L = 53.25' T = 27.65' R = 80.00'
PI Sta 10+69.76 Δ = 62° 49' 48.3" (RT) D = 286° 28' 44.0" L = 21.93' T = 12.22' R = 20.00'	PI Sta 11+23.74 Δ = 24° 57' 30.8" (RT) D = 28° 38' 52.4" L = 87.12' T = 44.26' R = 200.00'

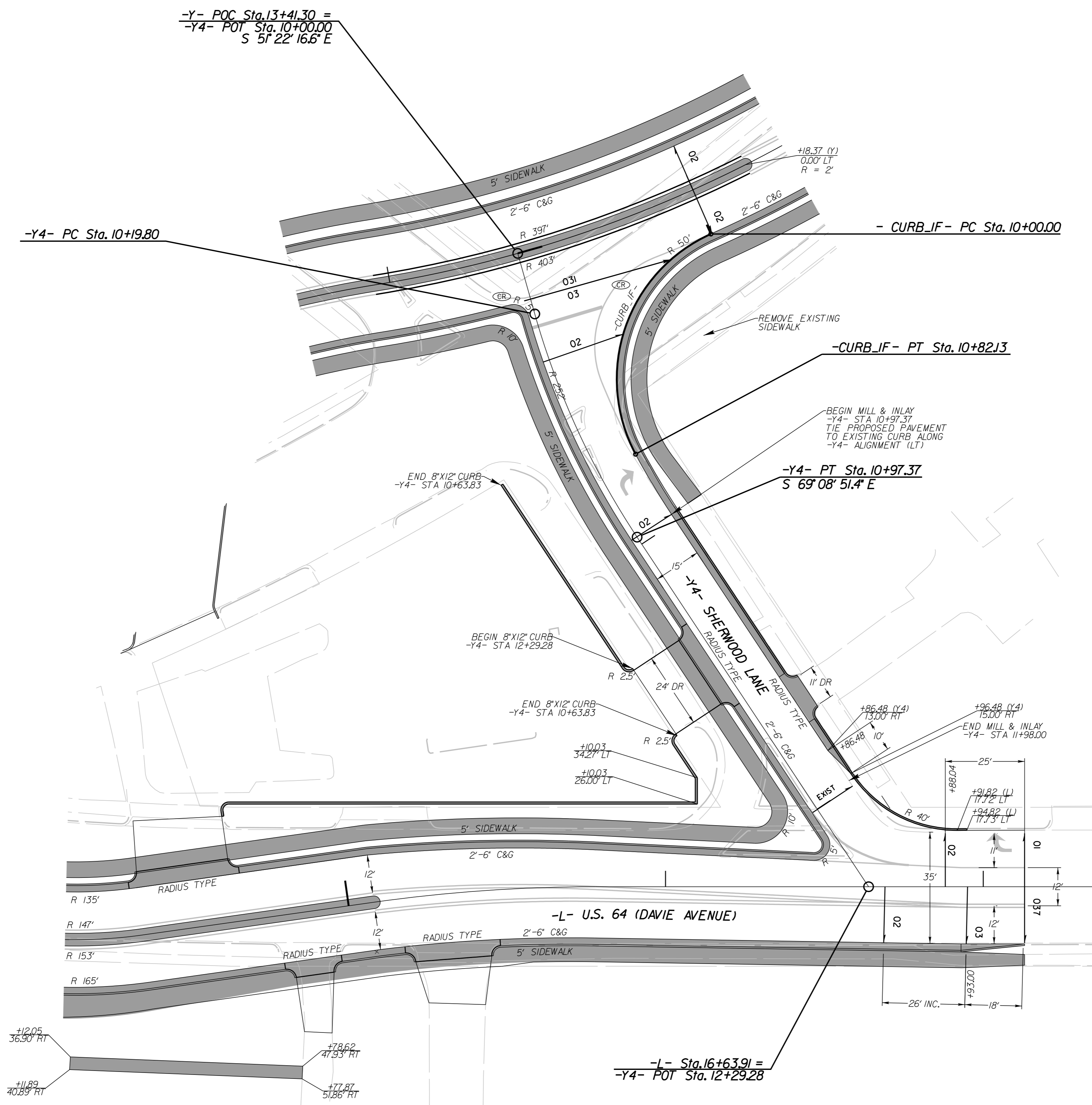


CURB DETAIL SHEET

PROJECT REFERENCE NO. U-5964	SHEET NO. 2B-2
R/W SHEET NO. ROADWAY ENGINEER	
	
DocuSigned by: Frank Masterson 1/30/2026	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



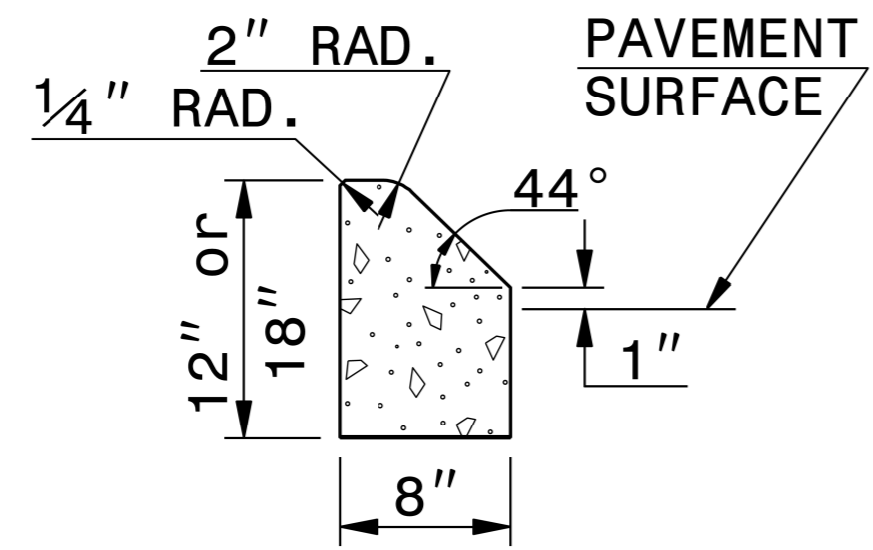
REVISIONS



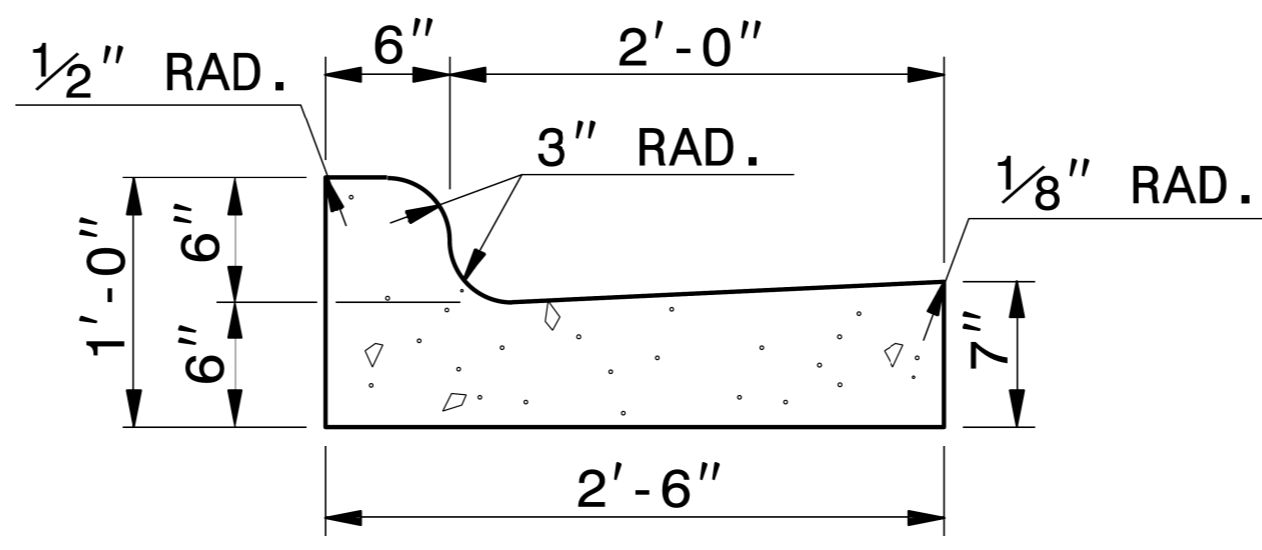
-CURB_IF-
 PI Sta 10+53.72
 $\Delta = 94^{\circ} 06' 30.4''$ (LT)
 $D = 114' 35' 29.6''$
 $L = 821.3'$
 $T = 53.72'$
 $R = 50.00'$

 PROPOSED C&G, SIDEWALK AND CONCRETE MONOLITHIC ISLAND

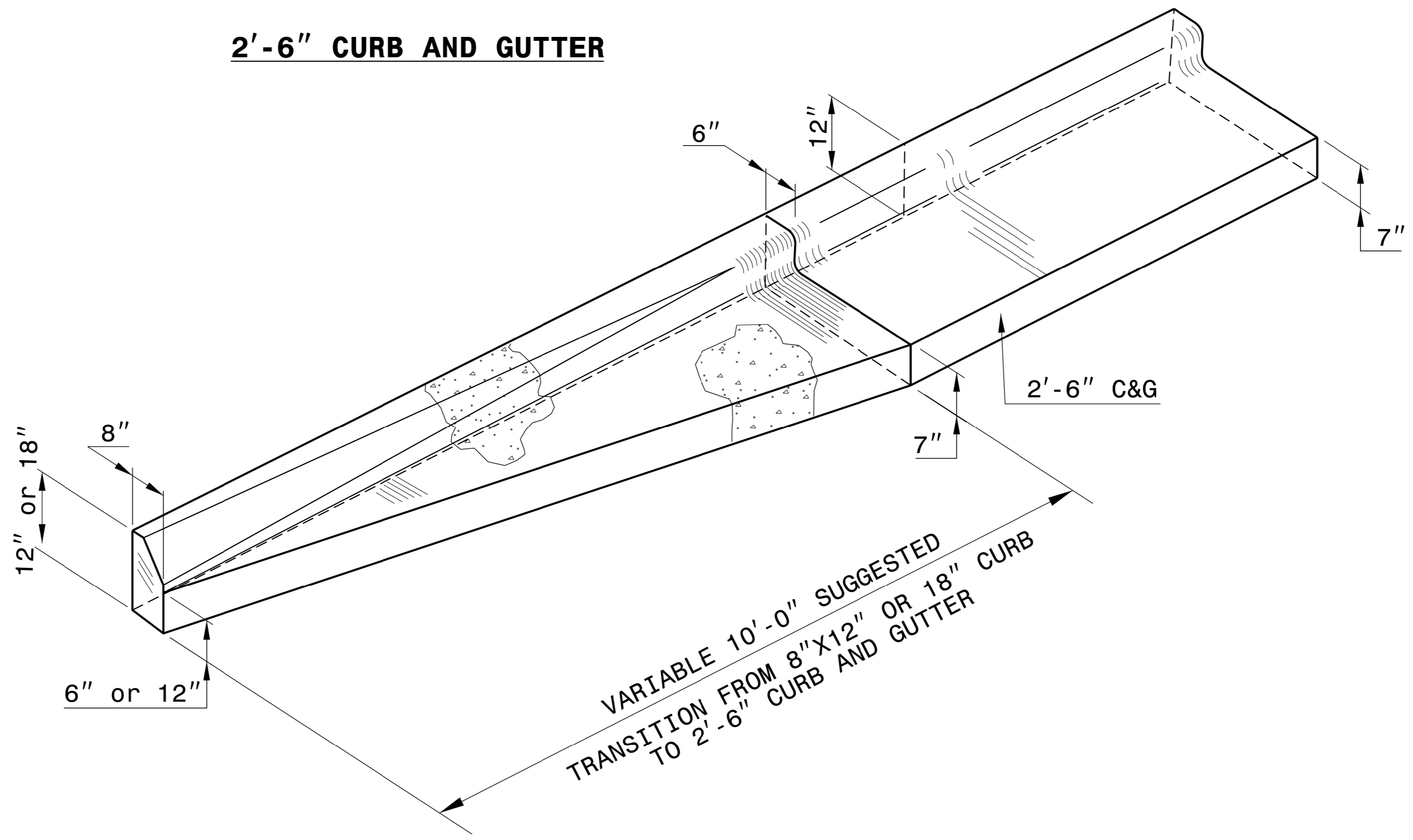
RADI DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED
 SEE SHEET 8 FOR -CURB_IF-



8" X 12" or 18" CONCRETE CURB



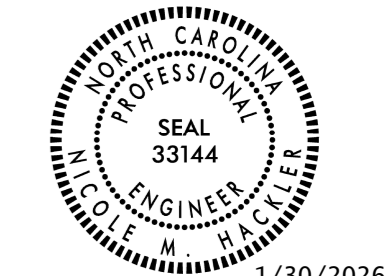
2'-6" CURB AND GUTTER



ISOMETRIC VIEW OF TRANSITION

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

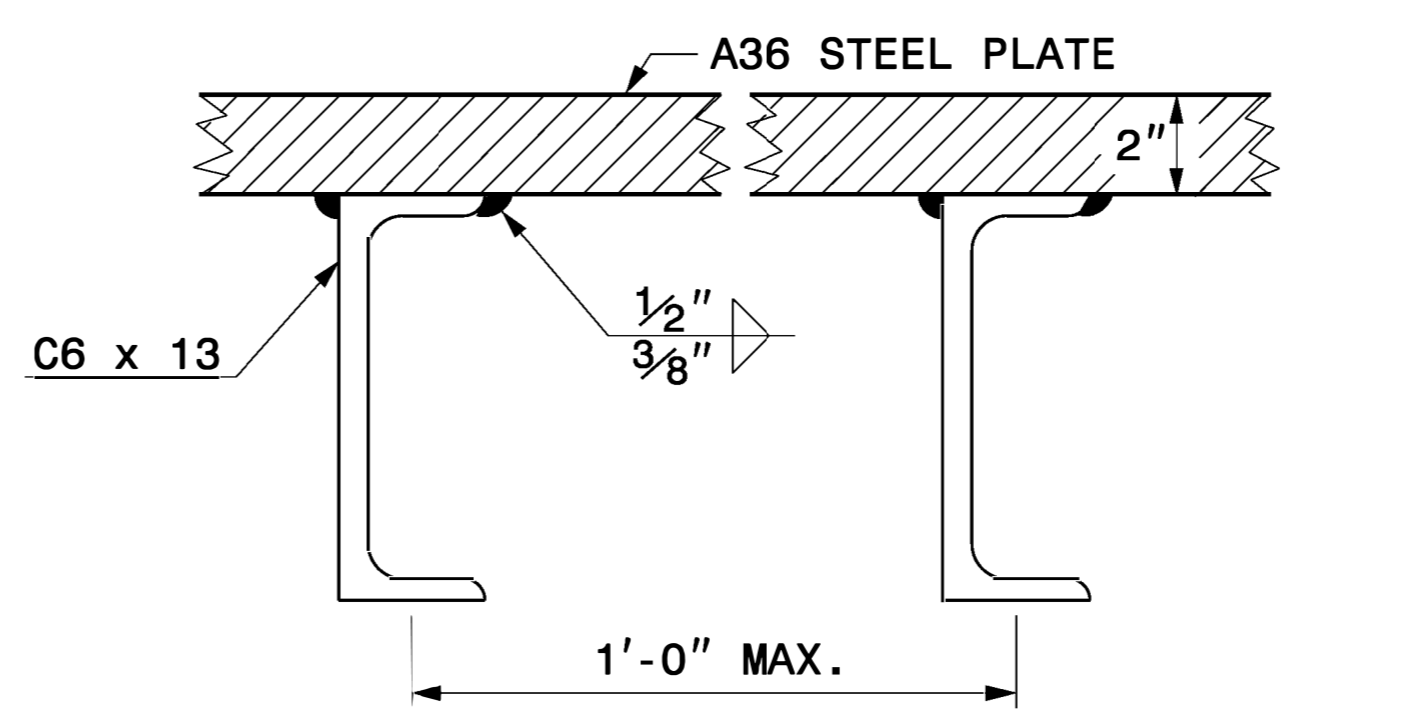
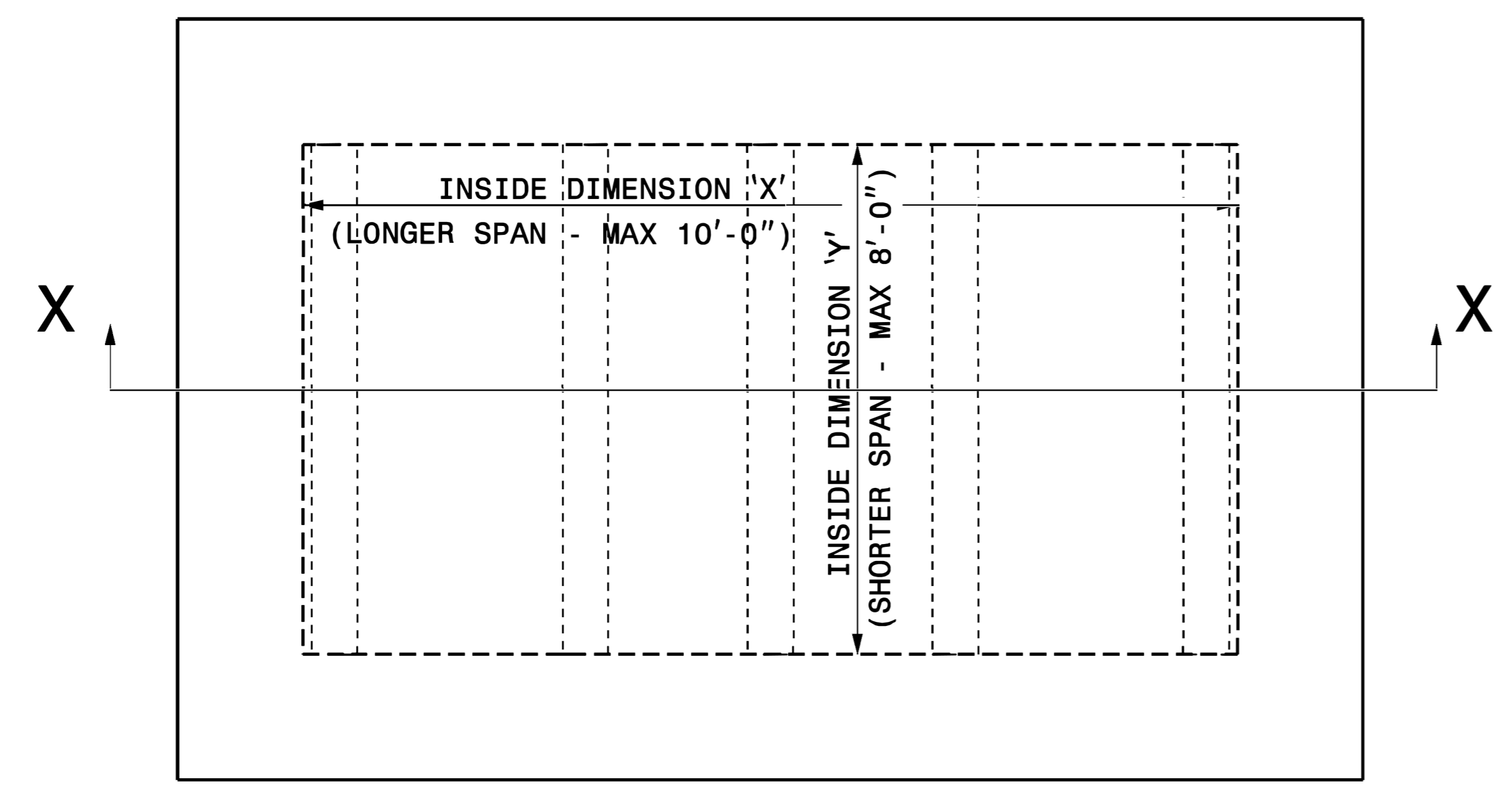
I:\MAR-2018\09450
S:\Contracts\Standards\Stand\c&g transition sections.dgn
JHowerton
CSD-292595



Signed by: *Nicole M. Heckler*
1/30/2026
5884323034164CS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
DETAIL OF 8" x 12" or 18" CURB TO 2'-6" CURB & GUTTER TRANSITION SECTION	
ORIGINAL BY: _____	DATE: _____
MODIFIED BY: K. KEMPF	DATE: 4-05-18
CHECKED BY: _____	DATE: _____
FILE SPEC.: details/ericward/usr/details/stand/cptransit.dgn	



SECTION VIEW OF STEEL TOP PLATE
WELDS SHALL BE AS SPECIFIED BY AWS

GENERAL NOTES:

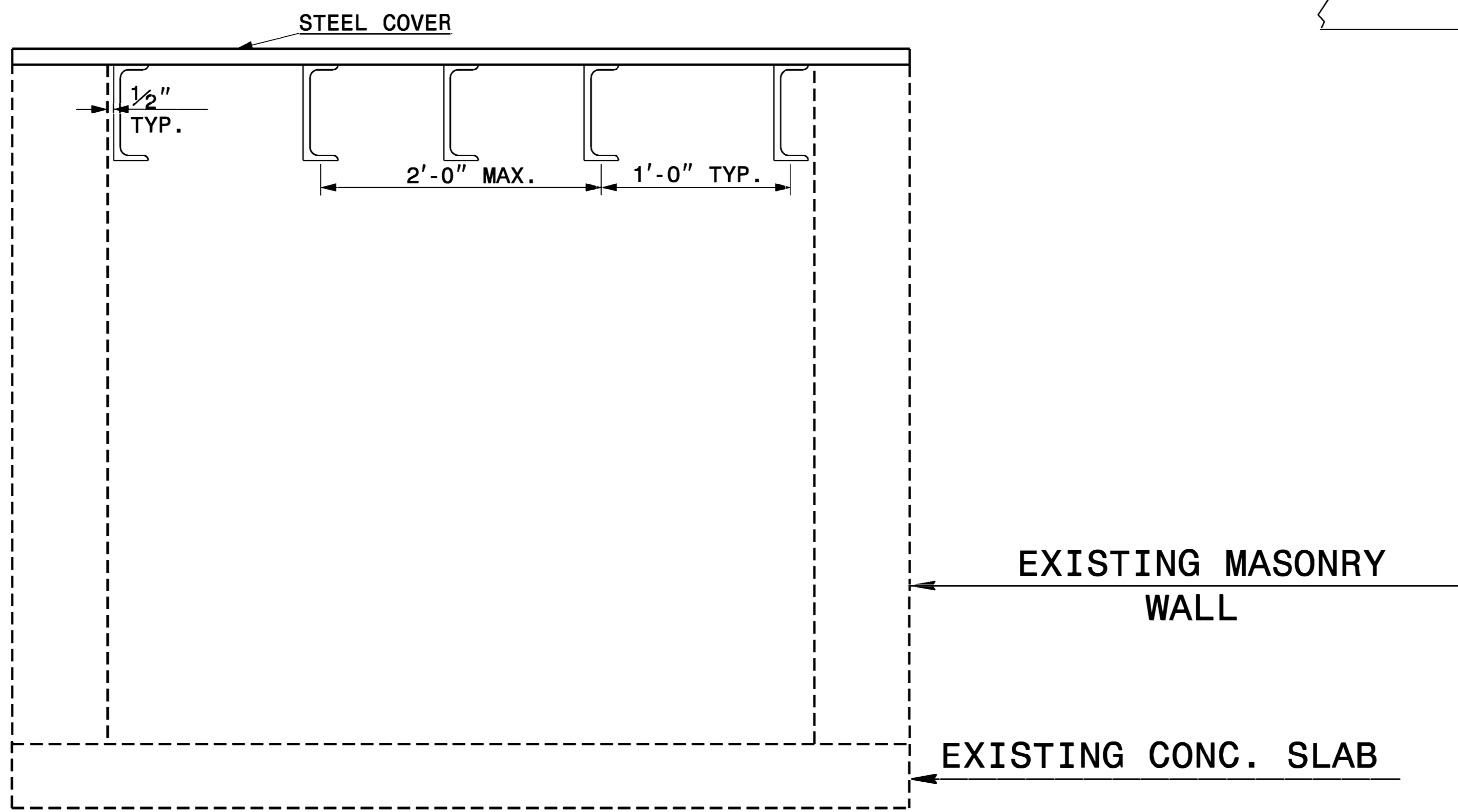
THE DIMENSIONS FOR THE EXISTING BOXES ARE APPROXIMATE AND MAY VARY SLIGHTLY.

ORIENT C CHANNELS TO RUN PERPENDICULAR TO TRAFFIC

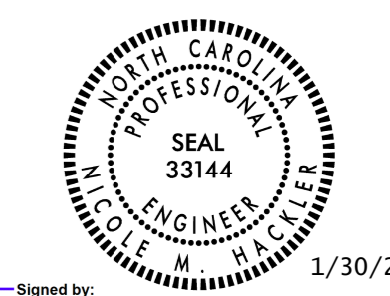
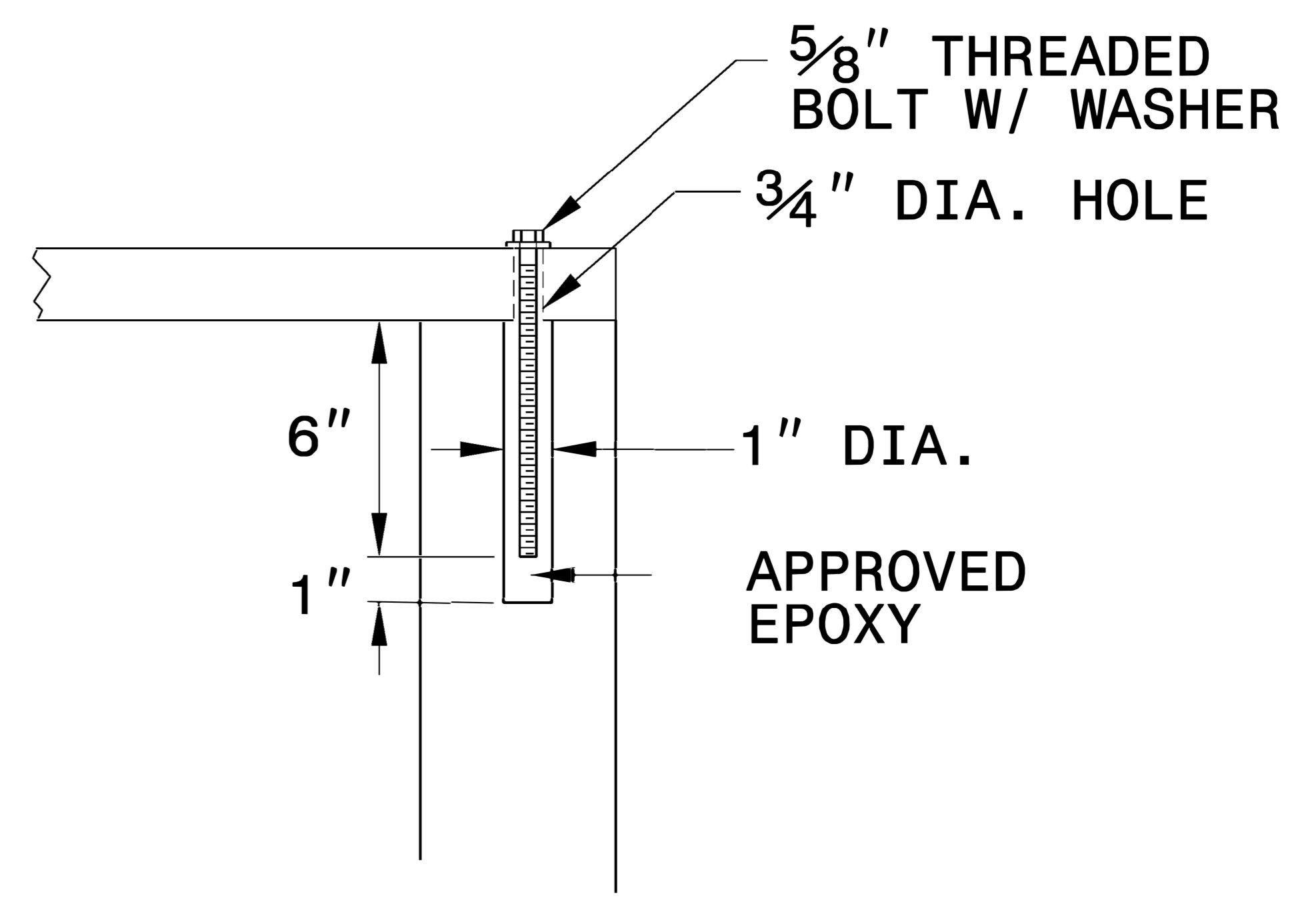
PLACE ANCHOR BOLTS IN ALL 4 CORNERS OF THE DRAINAGE STRUCTURE

ADD ANCHOR BOLTS IN THE MIDDLE OF WALLS AS DIRECTED BY THE ENGINEER

GALVANIZE STEEL PLATE, C CHANNELS AND ANCHOR BOLTS IN ACCORDANCE WITH SEC. 1076 OF THE STANDARD SPECS.



SECTION X-X



Signed by: *Nicole M. Hecker* 1/30/2026
588423034164C5

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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


DETAIL TO CONVERT EXISTING DROP INLET OR CATCH BASIN TO TBJB WITH STEEL PLATE

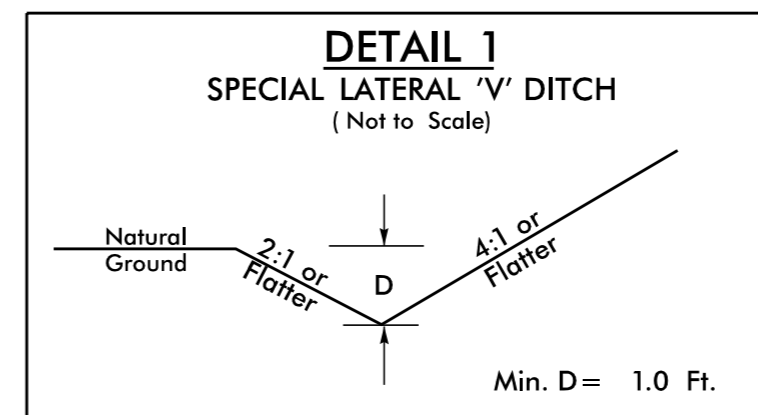
ORIGINAL BY: _____	DATE: _____
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC.: _____	

18-AUG-2017 10:05 SA:\Contracts\Special Details\Jhower-ton\Convert DI or CB to TBJB with Steel Cover.dgn Jhower-ton AT CSD-292595

REVISIONS

1/28/2026 K:\CHL_PR\01036487 - U-5964 (Five Points)\Roadway\Pro\U-5964_rdy_psh_2D-1.dgn

PROJECT REFERENCE NO.		SHEET NO.	
U-5964		2D-1	
R/W SHEET NO.			
ROADWAY ENGINEER		HYDRAULICS ENGINEER	
200 S. TRYON ST. • CHARLOTTE, NC 28202			
RIGHT-OF-WAY REV.			
CONST. REV.			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



FROM STA. 13+36 TO STA. 14+00 -L- (LT)
 FROM STA. 10+82 TO STA. 13+00 -Y- (RT)
 FROM STA. 14+80 TO STA. 15+78 -Y2- (RT)

REVISIONS

**SUMMARY OF EARTHWORK
IN CUBIC YARDS**

STATION TO STATION			UNCLASSIFIED (C.Y.)	UNDERCUT (C.Y.)	EMBANKMENT +% (C.Y.)	BORROW (C.Y.)	WASTE (C.Y.)
PHASE 1							
-Y- (LT)	10+65.07	15+53.79	1079		16	0	1063
-Y2- (LT)	14+42.03	16+00.00	32		53	21	0
-Y5- (RT)	10+15.00	11+50.00	584		0	0	584
-CURB 1E-	10+59.15	11+55.13	66		20	0	46
-Y3- (RT)	10+99.57	12+50.00	186		0	0	186
-L- (RT)	13+50.00	17+13.00	397		15	0	382
-CURB 1C-	10+43.98	11+31.35	59		10	0	49
-DRW2-	10+15.00	10+62.00	2		13	0	0
SUMMARY (PHASE 1)			2405	0	127	21	2310
PHASE 2							
-L- (RT)	10+00.00	11+50.00	22		13	0	9
-Y3- (LT)	10+89.00	12+50.00	26		5	0	21
-CURB 1B-	10+36.79	11+21.16	26		33	7	0
-Y- (RT)	10+65.07	15+53.79	970		92	0	878
-Y4- (RT)	10+15.00	12+00.00	27		24	0	3
SUMMARY (PHASE 2)			1071	0	167	7	911
PHASE 3							
-L- (LT)	10+00.00	11+50.00	18		26	8	0
-Y2- (RT)	13+50.00	16+50.00	111		44	0	67
-CURB 1A-	10+60.29	11+40.88	18		29	11	0
-L- (LT)	13+50.00	17+13.00	39		55	16	0
-CURB 1D-	10+36.64	11+19.13	27		18	0	9
-Y4- (LT)	10+15.00	12+00.00	29		40	11	0
-Y5- (LT)	10+15.00	11+50.00	18		29	11	0
SUMMARY (PHASE 3)			260	0	241	57	76
PHASE 4							
-RBT-	10+00.00	11+75.00	20		1508	1488	0
SUMMARY (PHASE 4)			20	0	1508	1488	0
PROJECT SUBTOTALS			3756	0	2043	1573	3297
UNDERCUT - CONTINGENCY				450		0	450
LOSS DUE TO CLEARING AND GRUBBING			-250			250	
PROJECT TOTAL			3506	450	2043	1823	3747
EST. 5% FOR REPLACING TOPSOIL ON BORROW PITS						91	
GRAND TOTALS			3506	450	2043	1914	3747
SAY			3550			1950	

EST. GEOTEXTILE FOR SUBGRADE STABILIZATION	300 CY	(CONTINGENCY, AS DIRECTED BY THE ENGINEER)
EST. SHALLOW UNDERCUT	100	(CONTINGENCY, AS DIRECTED BY THE ENGINEER)
EST. CLASS IV SUBGRADE STABILIZATION	200 TON	(CONTINGENCY, AS DIRECTED BY THE ENGINEER)
EST. STABILIZER AGGREGATE	250 TON	(CONTINGENCY, AS DIRECTED BY THE ENGINEER)
EST. QUANTITY OF SELECT GRANULAR MATERIAL	400 CY	(CONTINGENCY, AS DIRECTED BY THE ENGINEER)
EST. GEOTEXTILE FOR SOIL STABILIZATION	400 SY	(CONTINGENCY, AS DIRECTED BY THE ENGINEER)

**REMOVAL OF EXISTING
PAVEMENT SUMMARY**

SURVEY LINE	STATION	STATION	LOCATION L/R/T/CL	YD ²
-L-	STA 9+91.29	STA 14+81.00	RT	139
-L-	STA 12+13.56	STA 13+00.00	CL	691
-Y-	STA 10+56.79	STA 15+53.80	RT	3352
-Y2-	STA 13+69.79	STA 16+29.60	RT	364
-Y3-	STA 11+04.73	STA 12+64.32	LT	137
-Y5-	STA 10+06.20	STA 11+49.40	RT	338
TOTAL:				5021
SAY:				5030

**BREAKING OF EXISTING
PAVEMENT SUMMARY**

SURVEY LINE	STATION	STATION	LOCATION L/R/T/CL	YD ²
-L-	STA 12+13.56	STA 13+00.13	CL	691
TOTAL:				691
SAY:				700

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

LEB989

COMPUTED BY: SRG DATE: 09-29-25
CHECKED BY: JDL DATE: 01-30-26

PROJECT NO. U-5964 SHEET NO. 3D-1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Table with columns for Line & Station, Offset, Structure Number, Top Elevation, Invert Elevation, Side Drain Pipe, R.C. Pipe Class III, R.C. Pipe Class IV, Quantities for Drainage Structures, Frame, Grates, and Hood, Concrete Transitional Section, and Remarks. Includes sub-totals for SHEET TOTALS and PROJECT TOTALS.

**STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS**

SUMMARY OF SUBSURFACE DRAINAGE

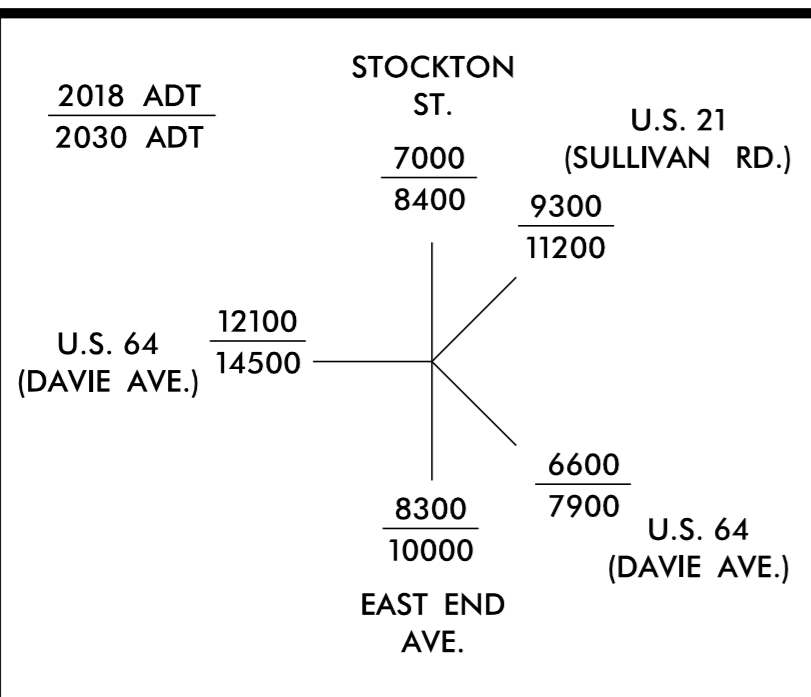
LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
	CONTINGENCY			SD	200
				TOTAL LF:	200

*UD = Underdrain
 *BD = Blind Drain
 *SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU(1/2)/ AST	Aggregate Thickness INCHES [8" for ASU(2)]	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Subgrade Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
	CONTINGENCY		ASU(1)		100	200	300		
			TOTAL CY/TONS/SY:		100	200**	300**	0	0

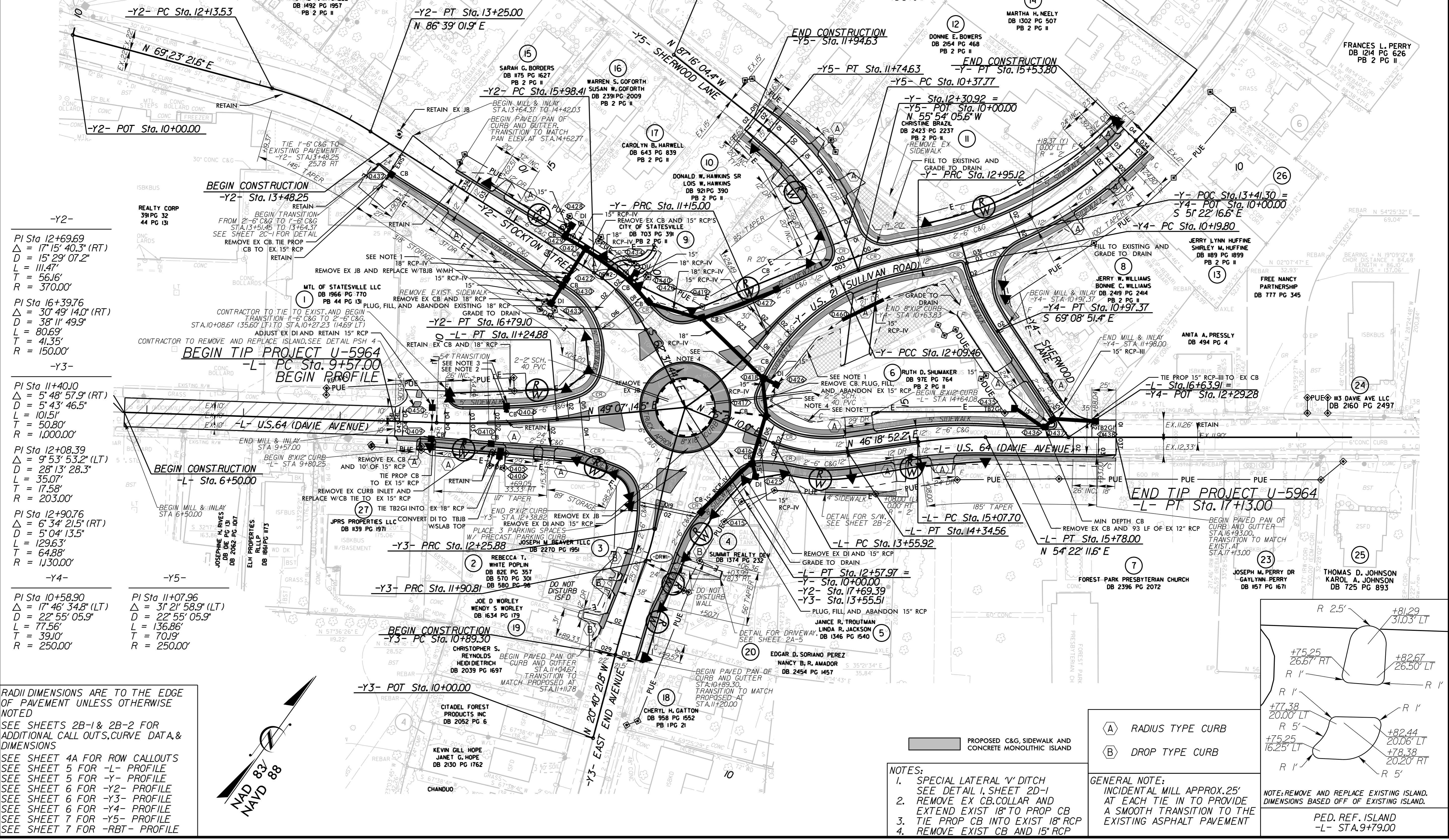
*ASU(1/2) = Aggregate Subgrade (Type 1 or 2)
 *AST = Aggregate Stabilization
 **Total tons of "Class IV Subgrade Stabilization" and total square yards of "Geotextile for Subgrade Stabilization" are only the estimated quantities for ASU(1/2)/AST and may only represent a portion of the subgrade stabilization and geotextile quantities shown in the Item Sheets of the Proposal.



Kimley»Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

PROJECT REFERENCE NO. U-5964		SHEET NO. 4	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY ENGINEER		ENGINEER	
DATE: 1/30/2026		DATE: 1/30/2026	



- Y2-**

PI Sta 12+69.69
 $\Delta = 17' 15" 40.3" (RT)$
 $D = 15' 29' 07.2"$
 $L = 111.47'$
 $T = 56.16'$
 $R = 370.00'$

PI Sta 16+39.76
 $\Delta = 30' 49' 14.0" (RT)$
 $D = 38' 11' 49.9"$
 $L = 80.69'$
 $T = 41.35'$
 $R = 150.00'$

-Y3-

PI Sta 11+40.10
 $\Delta = 5' 48' 57.9" (RT)$
 $D = 5' 43' 46.5"$
 $L = 101.51'$
 $T = 50.80'$
 $R = 1,000.00'$

PI Sta 12+08.39
 $\Delta = 9' 53' 53.2" (LT)$
 $D = 28' 13' 28.3"$
 $L = 35.07'$
 $T = 17.58'$
 $R = 203.00'$

PI Sta 12+90.76
 $\Delta = 6' 34' 21.5" (RT)$
 $D = 5' 04' 13.5"$
 $L = 129.63'$
 $T = 64.88'$
 $R = 1,130.00'$

-Y4-

PI Sta 10+58.90
 $\Delta = 17' 46' 34.8" (LT)$
 $D = 22' 55' 05.9"$
 $L = 77.56'$
 $T = 39.10'$
 $R = 250.00'$

-Y5-

PI Sta 11+07.96
 $\Delta = 31' 21' 58.9" (LT)$
 $D = 22' 55' 05.9"$
 $L = 136.86'$
 $T = 70.19'$
 $R = 250.00'$

RADI DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED

SEE SHEETS 2B-1 & 2B-2 FOR ADDITIONAL CALL OUTS, CURVE DATA, & DIMENSIONS

SEE SHEET 4A FOR ROW CALLOUTS

SEE SHEET 5 FOR -L- PROFILE

SEE SHEET 5 FOR -Y- PROFILE

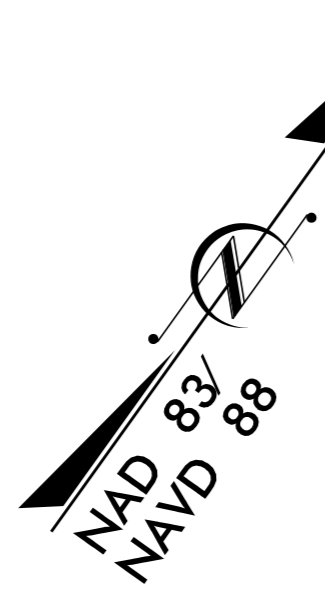
SEE SHEET 6 FOR -Y2- PROFILE

SEE SHEET 6 FOR -Y3- PROFILE

SEE SHEET 6 FOR -Y4- PROFILE

SEE SHEET 7 FOR -Y5- PROFILE

SEE SHEET 7 FOR -RBT- PROFILE



- NOTES:**
- SPECIAL LATERAL 'V' DITCH SEE DETAIL I, SHEET 2D-1
 - REMOVE EX CB COLLAR AND EXTEND EXIST 18" TO PROP CB
 - TIE PROP CB INTO EXIST 18" RCP
 - REMOVE EXIST CB AND 15" RCP

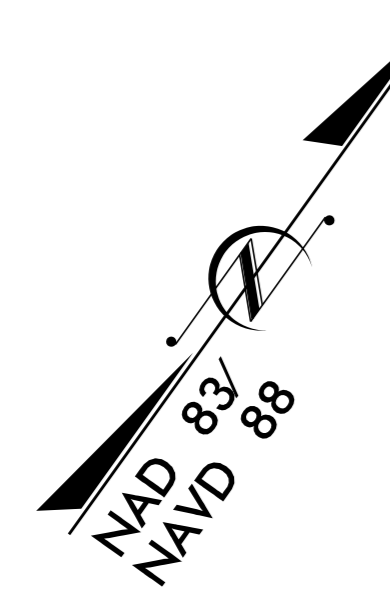
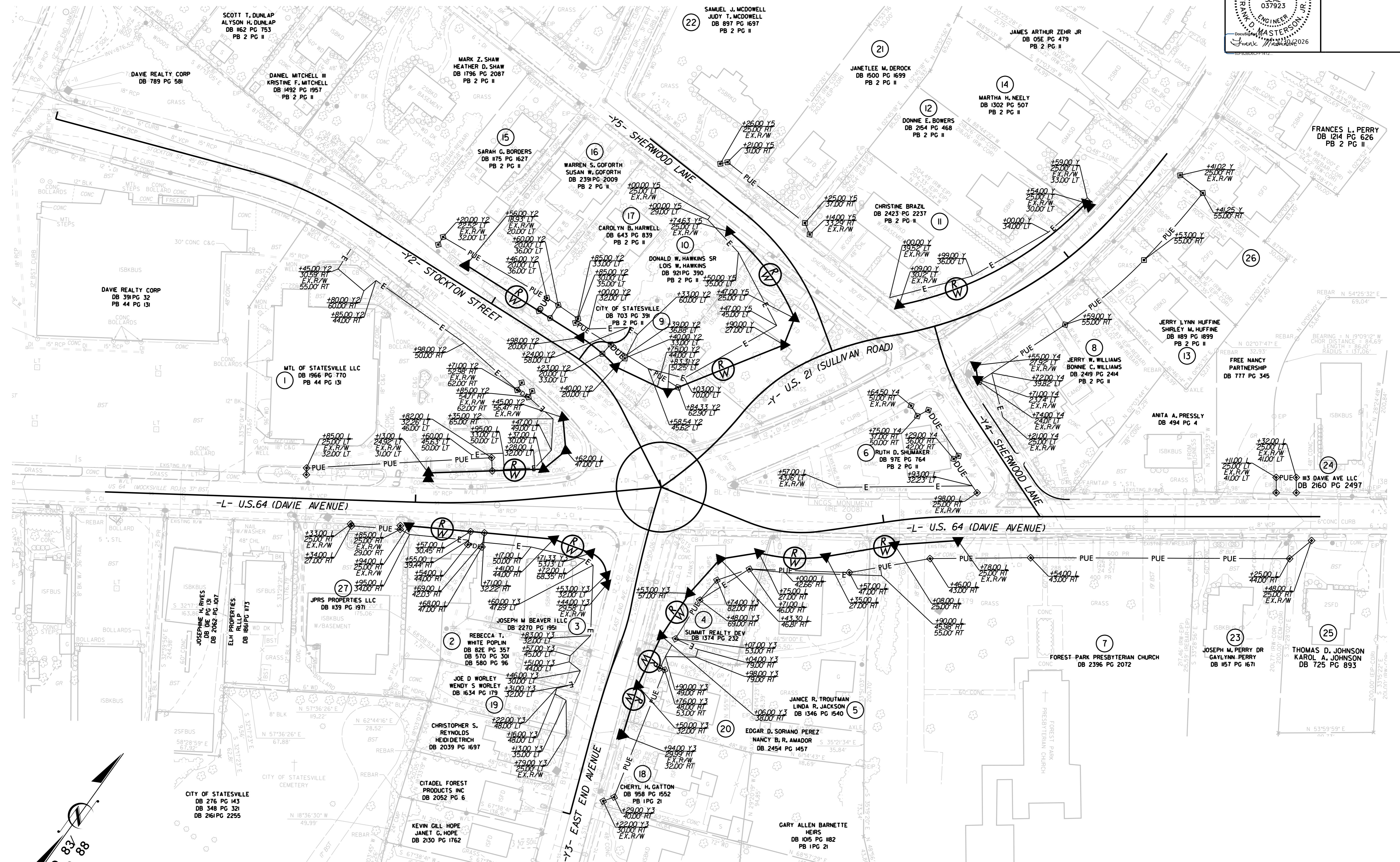
GENERAL NOTE:

INCIDENTAL MILL APPROX. 25' AT EACH TIE IN TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING ASPHALT PAVEMENT

NOTE: REMOVE AND REPLACE EXISTING ISLAND. DIMENSIONS BASED OFF OF EXISTING ISLAND.

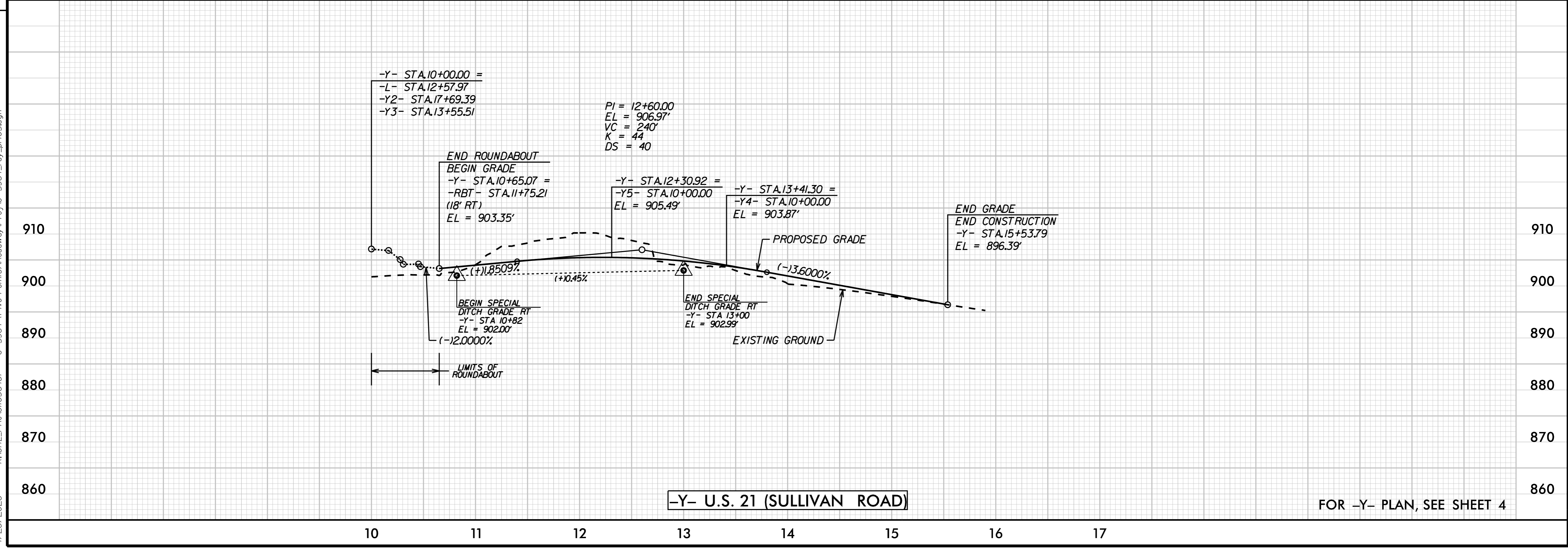
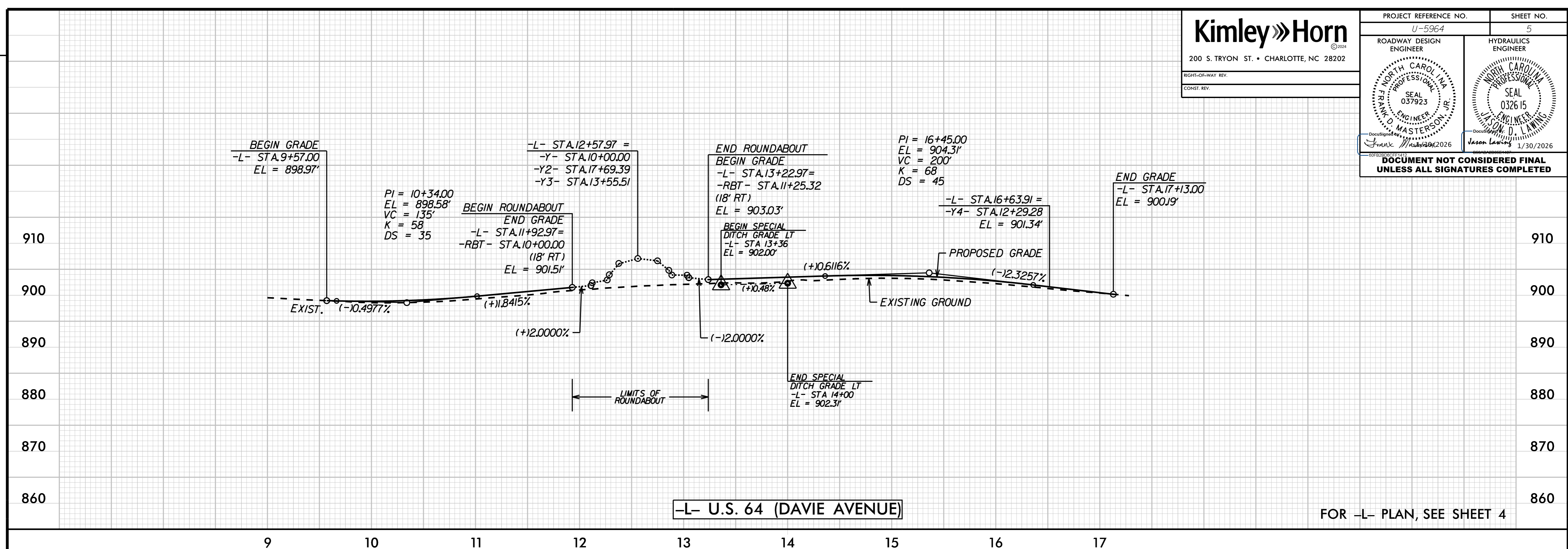
PED. REF. ISLAND
 -L- STA. 9+79.00

PROJECT REFERENCE NO.		SHEET NO.	
U-5964		4A	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY ENGINEER		ENGINEER	



PROJECT REFERENCE NO. U-5964	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<p>FRANK D. MASTERSON, JR. ENGINEER 1/30/2026</p>	<p>JASON LAWING ENGINEER 1/30/2026</p>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS

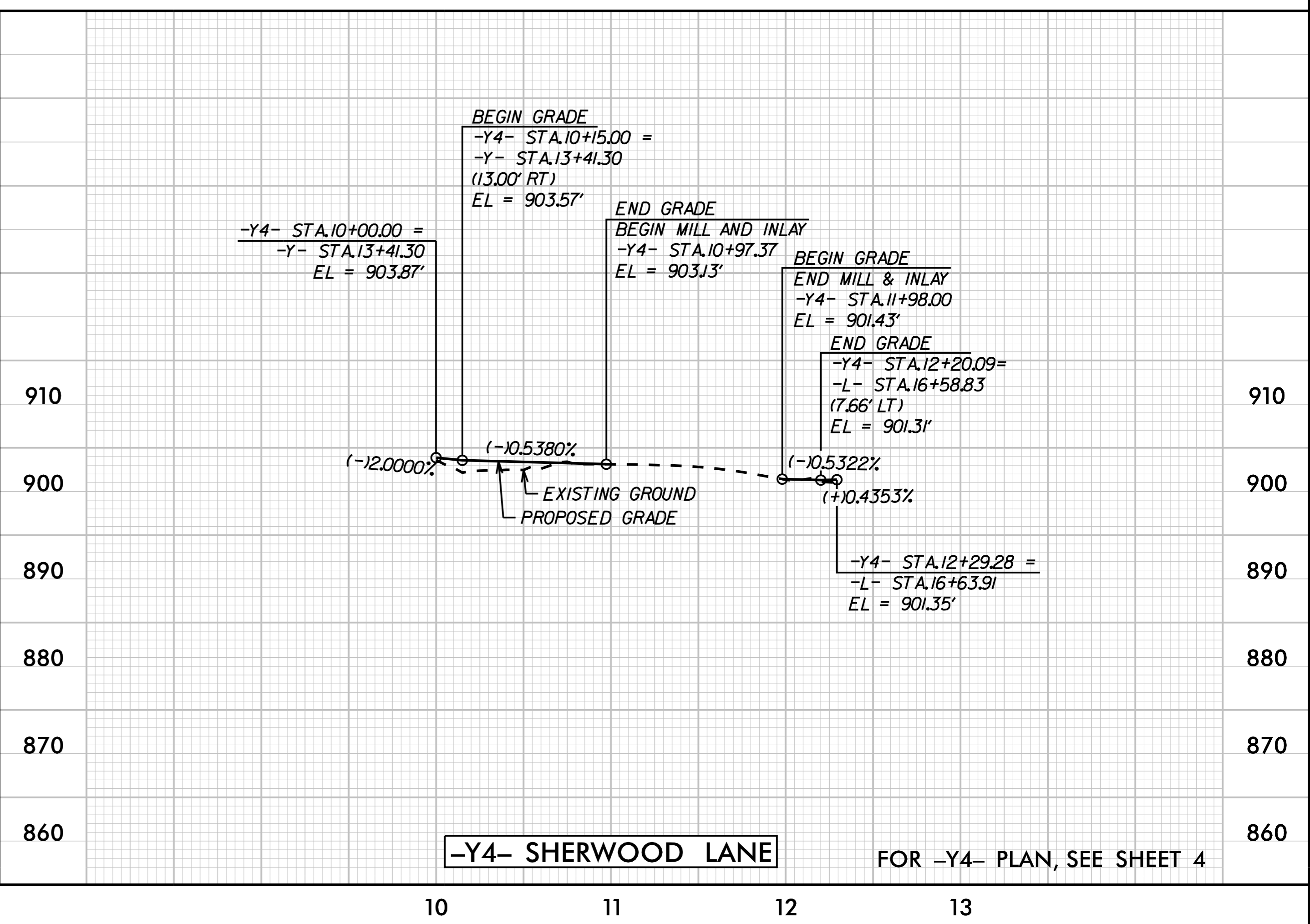
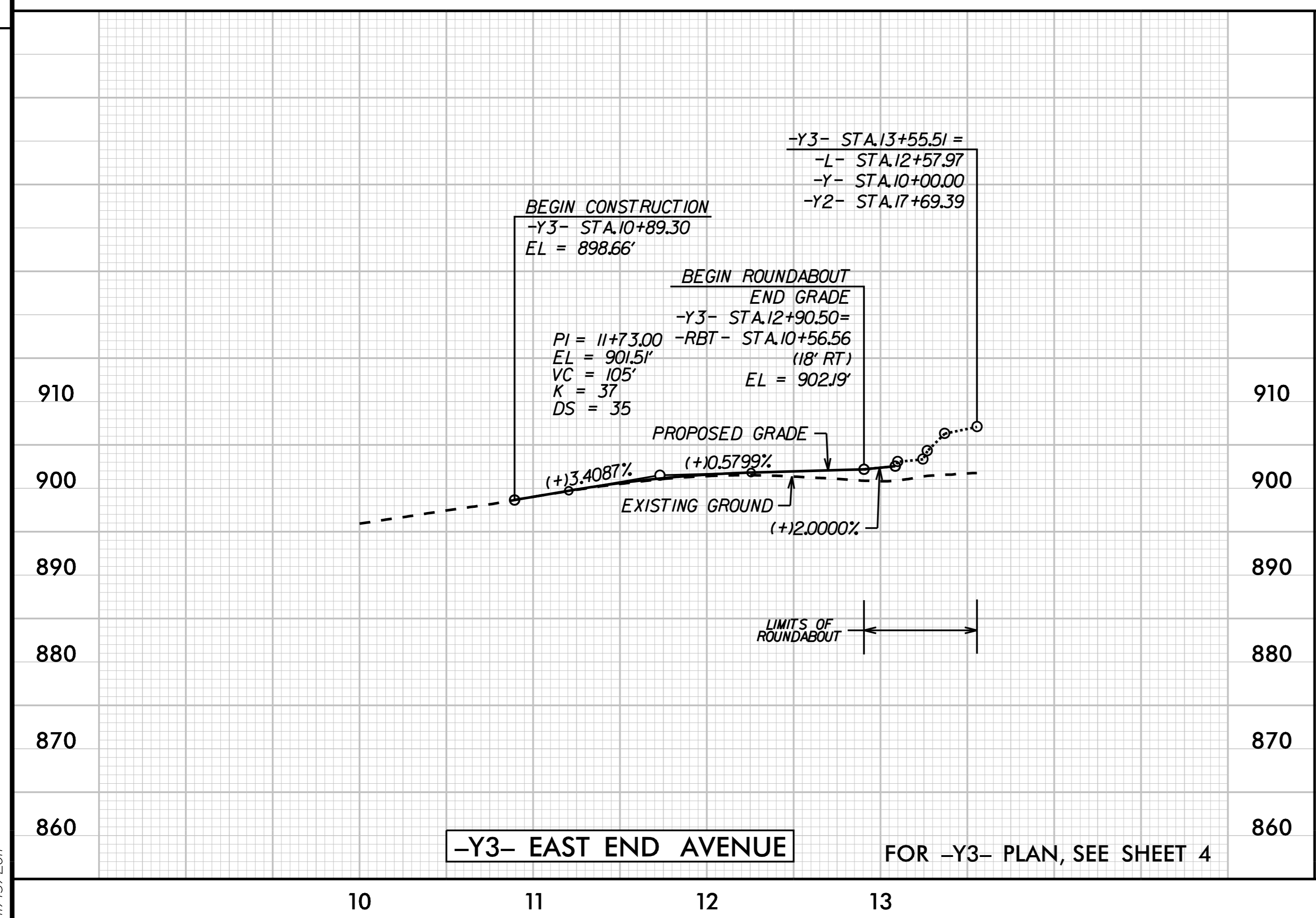
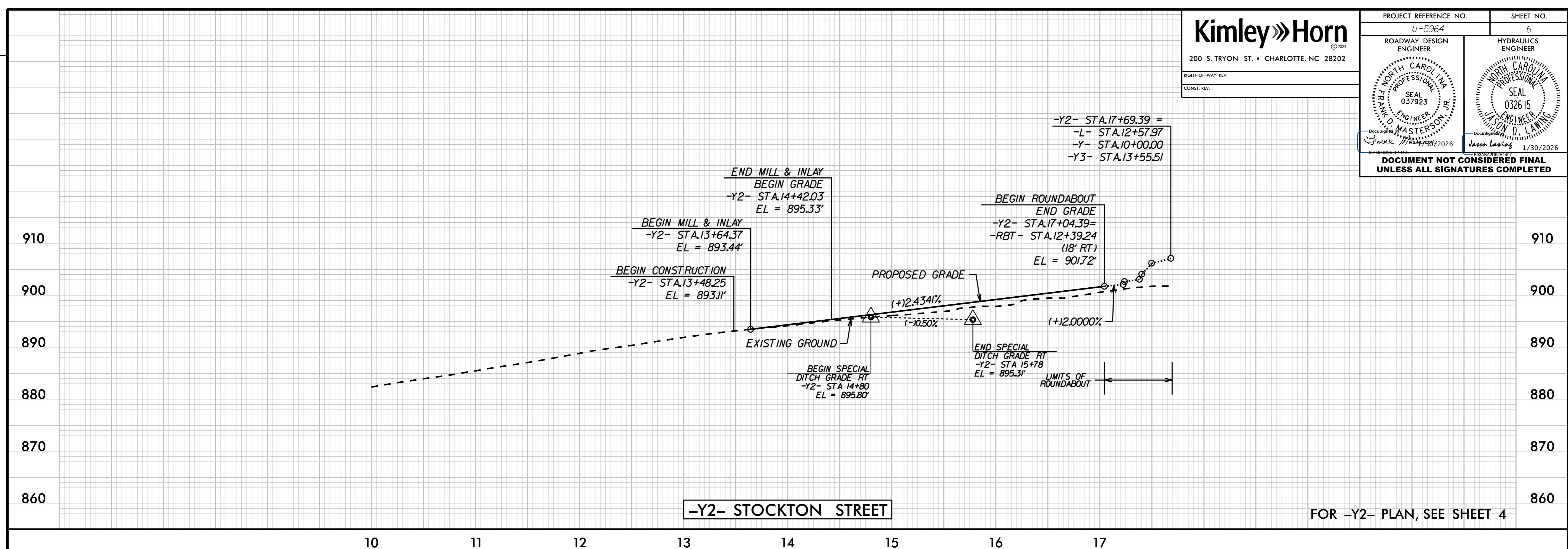


K:\CHL\PROJ\036487 - U-5964 (Five Points)\Roadway\Pro\U-5964_rdy_pf105.dgn 1/28/2026

PROJECT REFERENCE NO. U-5964	SHEET NO. 6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DocuSign Date: 1/30/2026	DocuSign Date: 1/30/2026

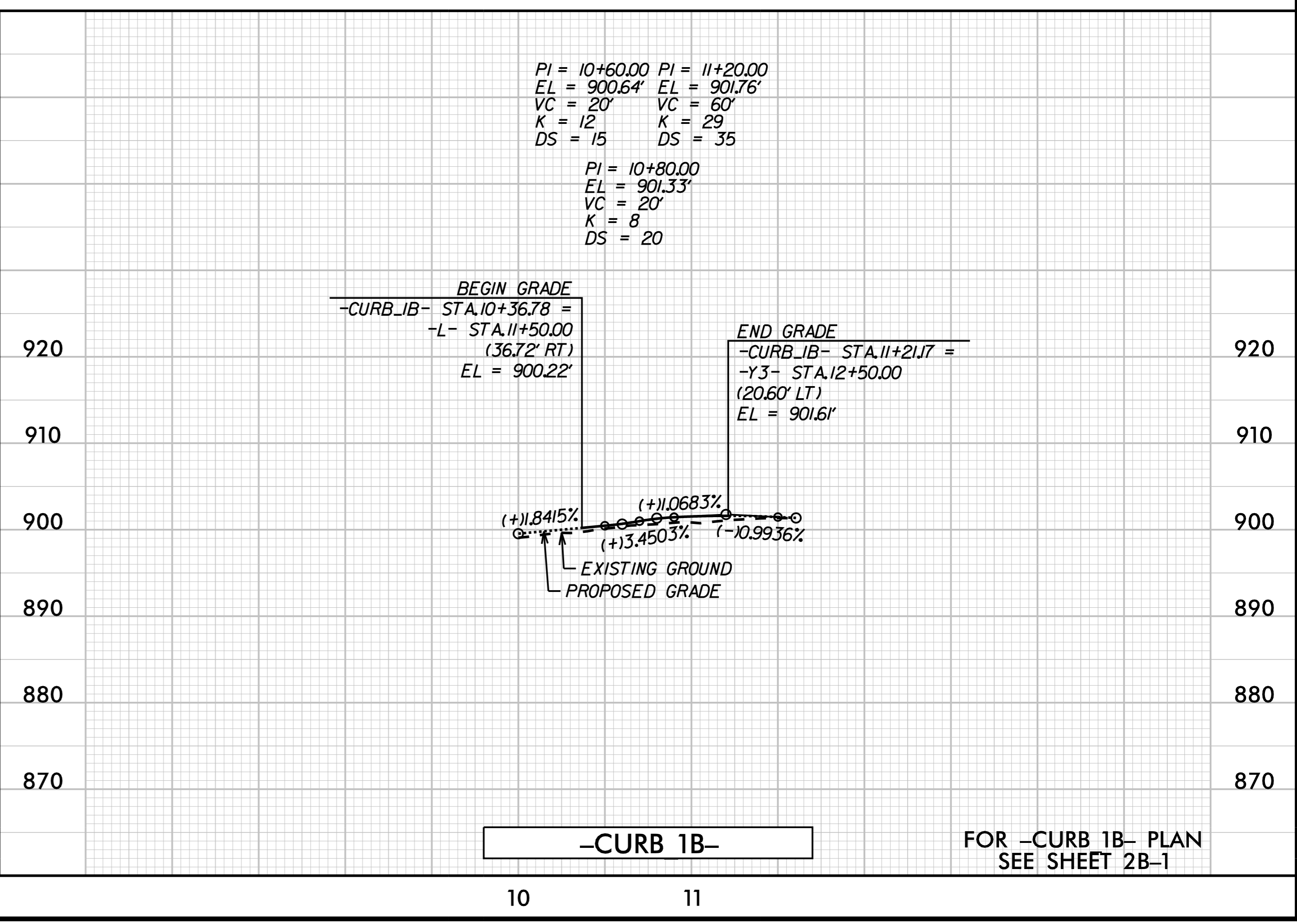
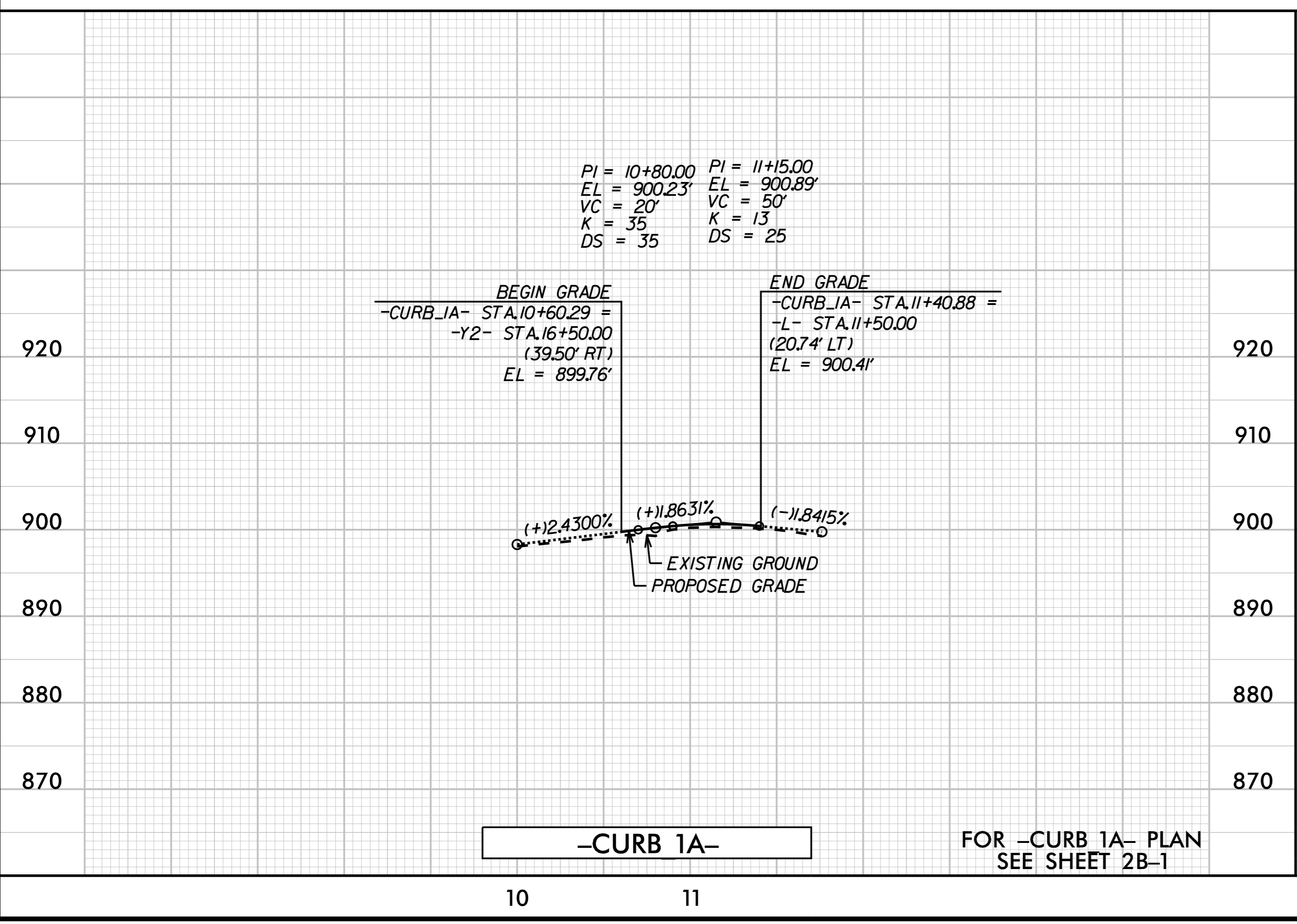
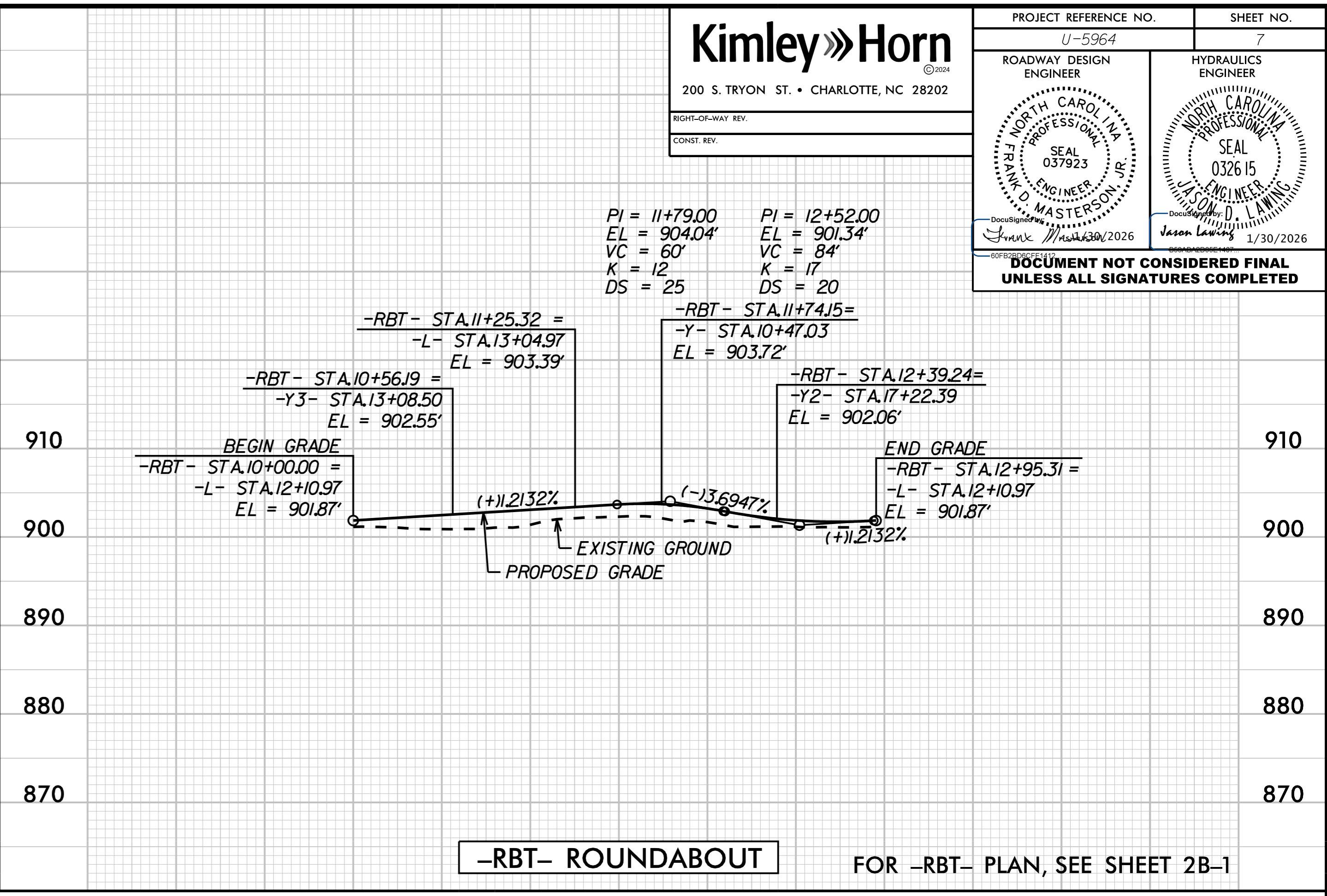
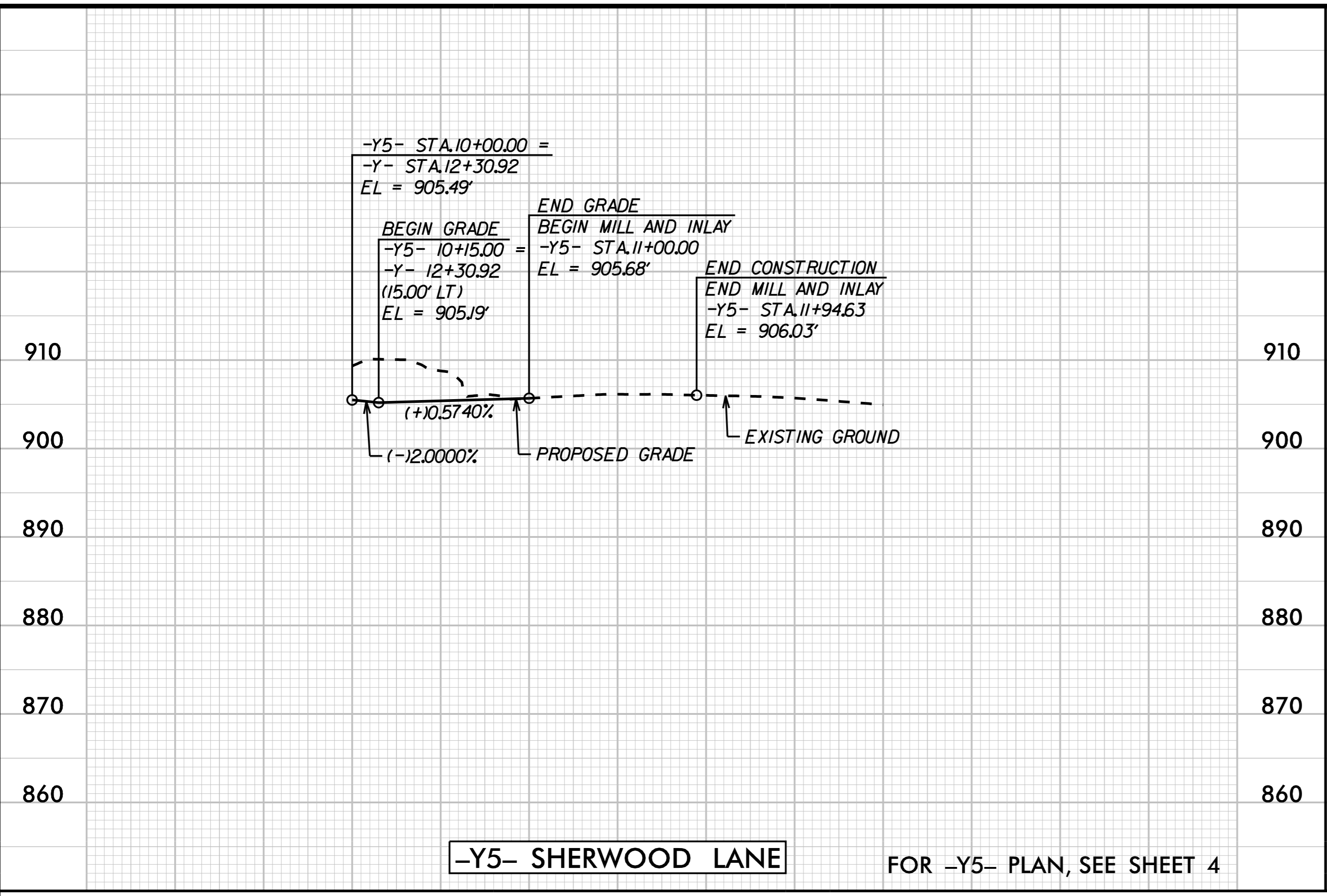
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

REVISIONS



11/13/2017

REVISIONS



11/13/2017

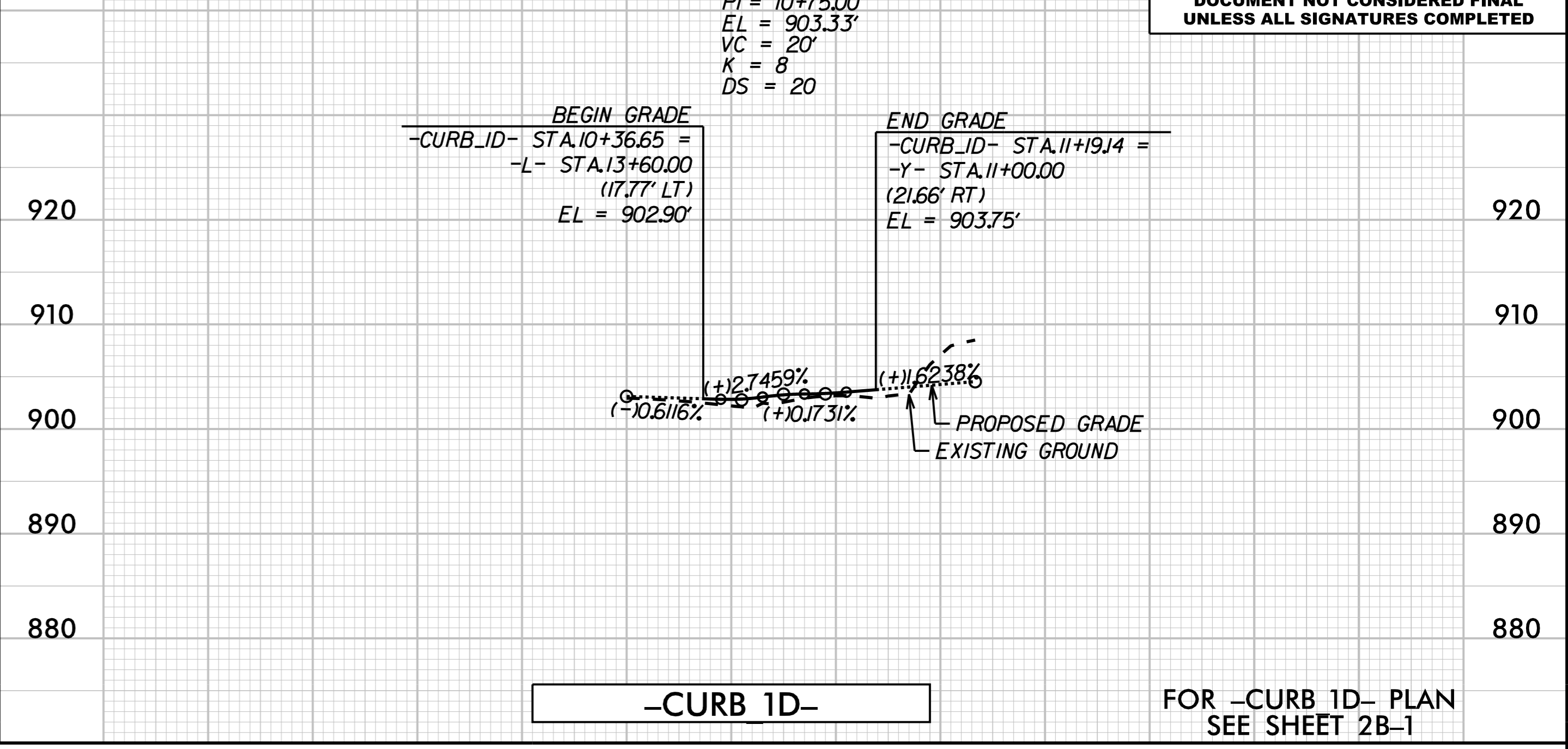
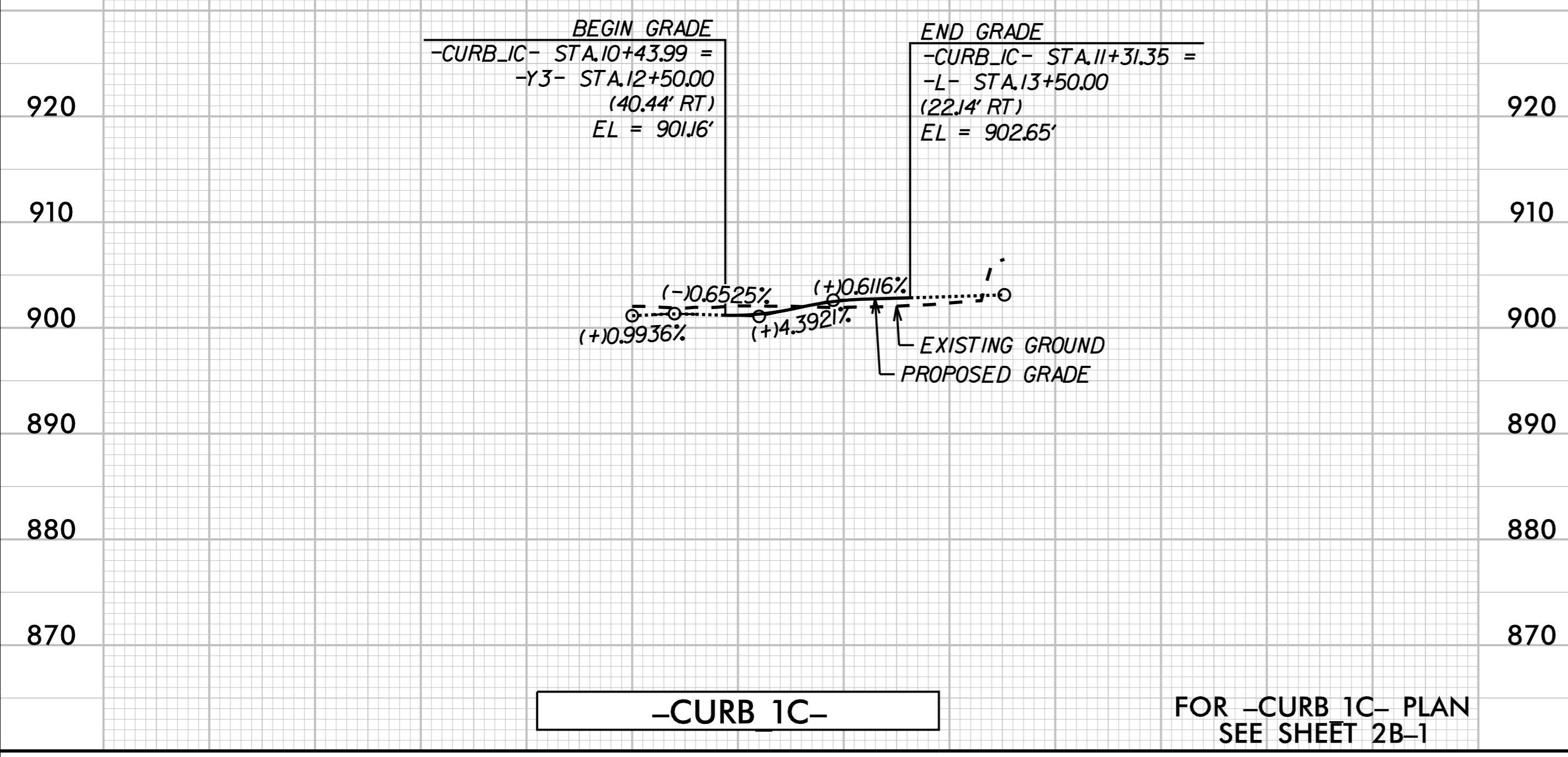
PI = 10+20.00 PI = 10+95.00
 EL = 901.26' EL = 902.61'
 VC = 30' VC = 30'
 K = 32 K = 8
 DS = 35 DS = 20

PI = 10+60.00
 EL = 901.09'
 VC = 35'
 K = 7
 DS = 15

PI = 10+55.00 PI = 10+95.00
 EL = 902.78' EL = 903.37'
 VC = 20' VC = 20'
 K = 6 K = 14
 DS = 15 DS = 15

PI = 10+75.00
 EL = 903.33'
 VC = 20'
 K = 8
 DS = 20

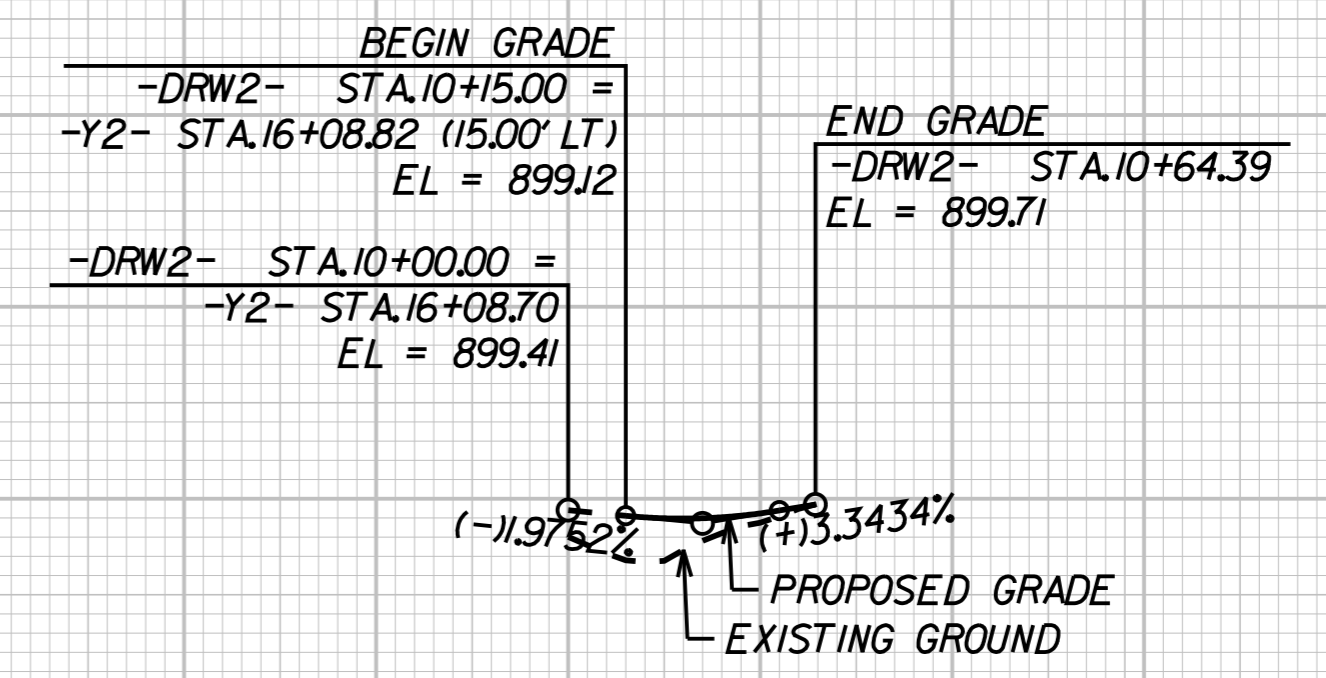
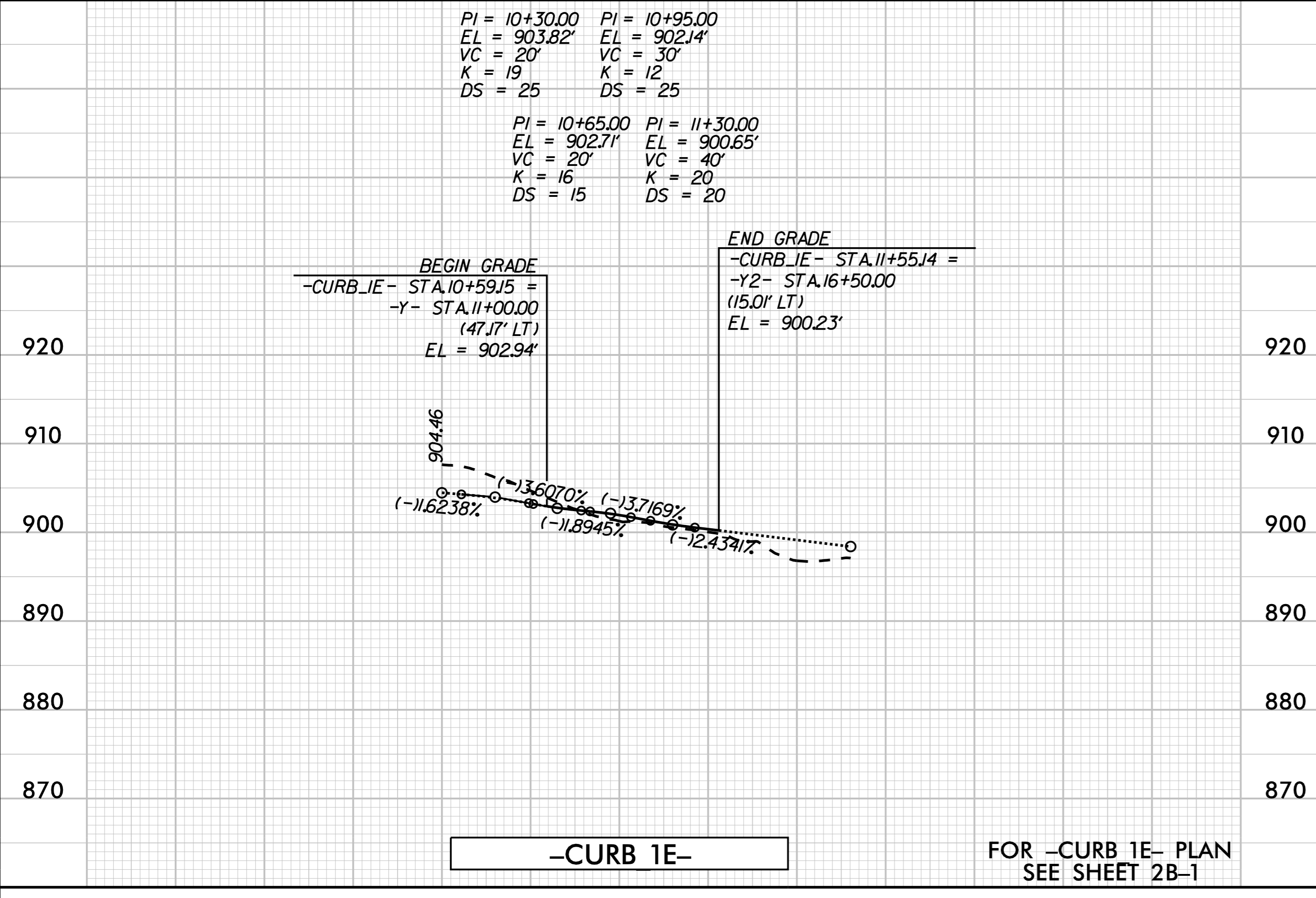
REVISIONS



PI = 10+30.00 PI = 10+95.00
 EL = 903.82' EL = 902.14'
 VC = 20' VC = 30'
 K = 19 K = 12
 DS = 25 DS = 25

PI = 10+65.00 PI = 11+30.00
 EL = 902.71' EL = 900.65'
 VC = 20' VC = 40'
 K = 16 K = 20
 DS = 15 DS = 20

PI = 10+35.00
 EL = 898.72'
 VC = 40'
 K = 8



11/13/2017

6/2/2024

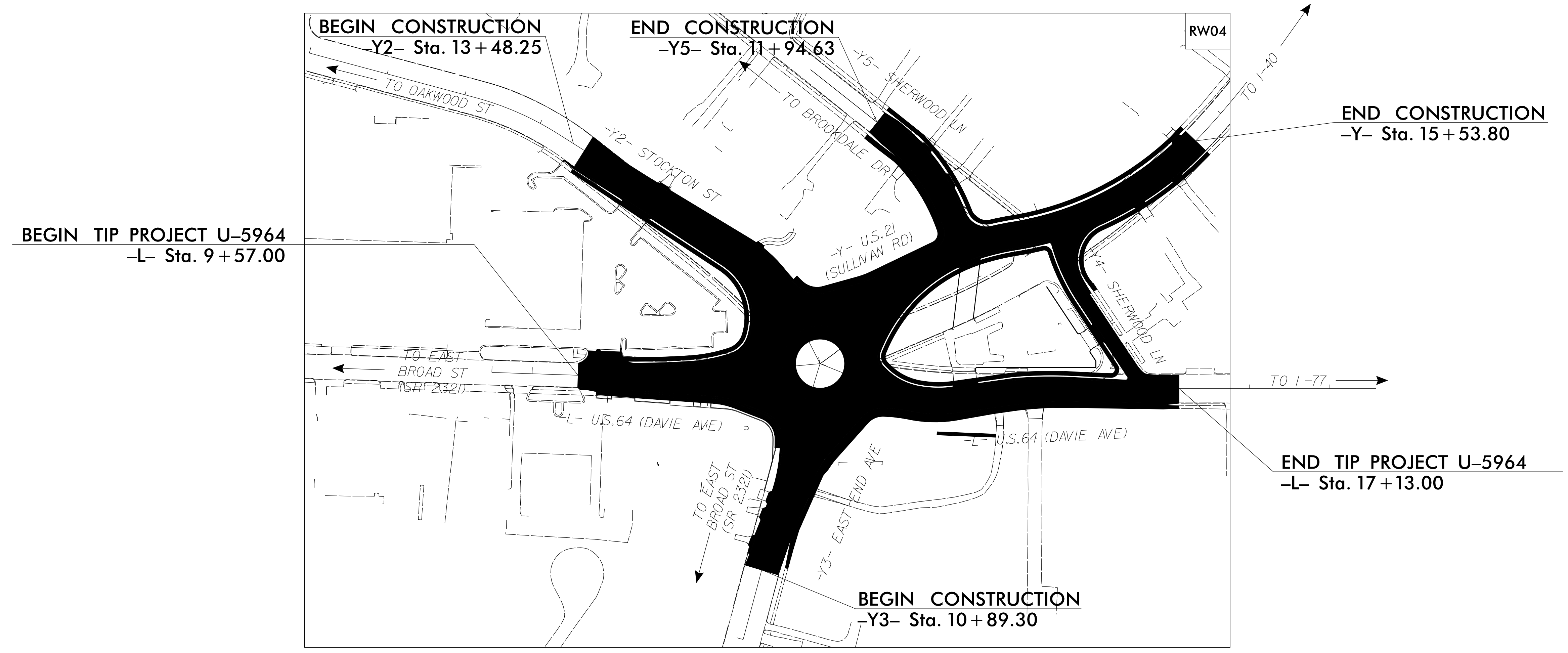
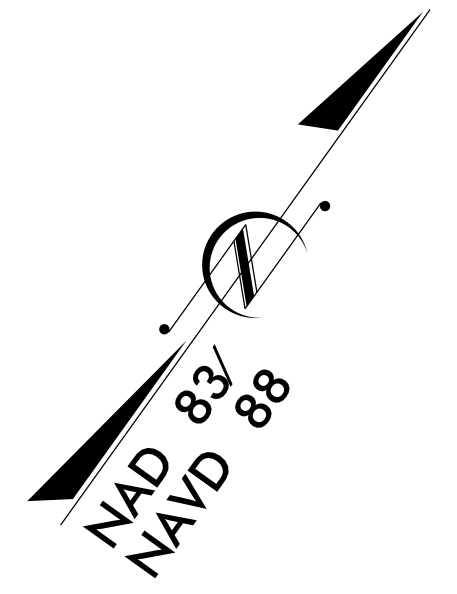
TIP PROJECT: U-5964

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5964	RW01	6

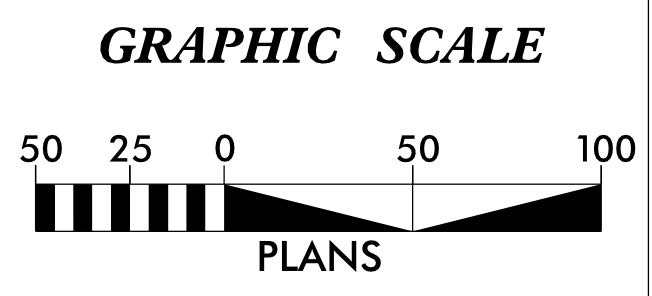
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

SURVEY CONTROL, EXISTING CENTERLINES,
 RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

IREDELL COUNTY



25-JUN-2024 11:04 SA:\surveyors\projects\ncdot\U-5964\2024 RW Staking\MTC\U5964\ls_rw01.dgn mcornewell AT M CORNEWELL AP TOP



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "I3819 BY-382" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 750,407.934(ft) EASTING: 1,445,552.894(ft) ELEVATION: 900.74(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999880

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "I3819 BY-382" TO -L- STATION 8+50.00 IS S 54°20'59.04" W 1,769.527(ft)

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

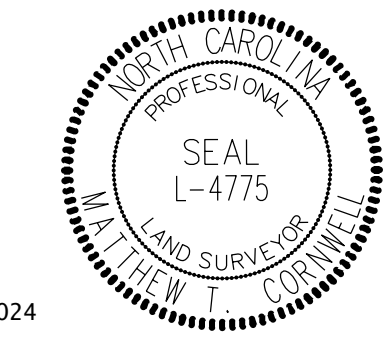
TGS ENGINEERS
 201 WEST MARION STREET
 SUITE 200
 SHELBY, NC 28150
 PH (704) 476-0003
 CORP. LICENSE NO.: C-0275

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
4/2/2024

LETTING DATE:
3/17/2026

PROFESSIONAL LAND SURVEYOR

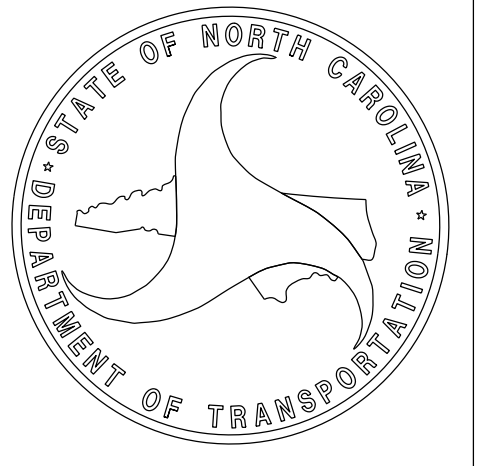


DocuSigned by:
 Matthew Cornwell
 EQ235F1472E475...

6/25/2024

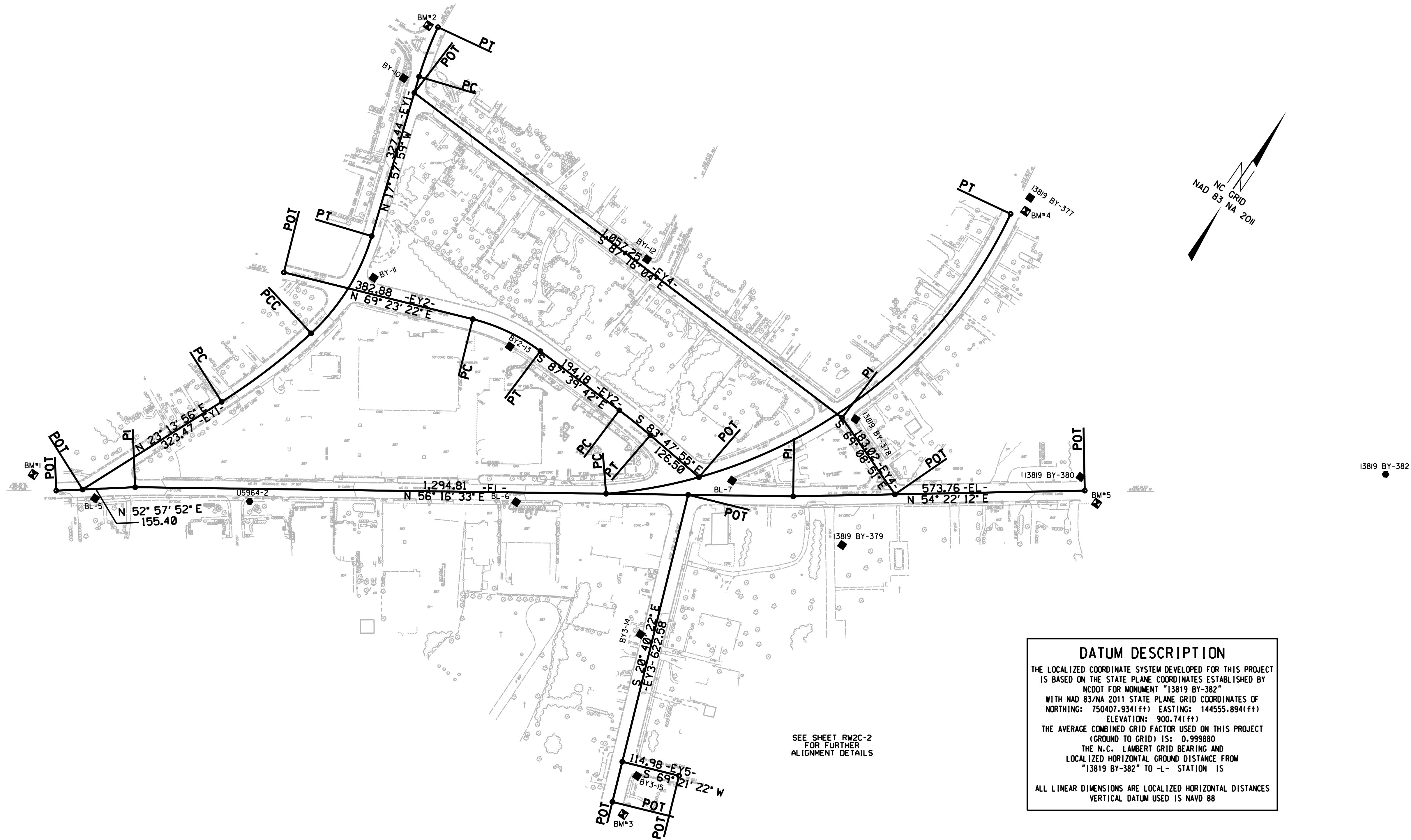
SIGNATURE:

Date:



SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "13819 BY-382" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 750407.934(±) EASTING: 144555.894(±) ELEVATION: 900.74(±)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999880

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "13819 BY-382" TO -L- STATION IS

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES

VERTICAL DATUM USED IS NAVD 88

SEE SHEET RW2C-2 FOR FURTHER ALIGNMENT DETAILS

- NOTES:**
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
 - THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

20 JUN-2018 08:45 S:\survey\proj\180620\U5964\as-submitted\180620\U5964_ls_rw02c-1.dgn
 6/20/18

SURVEY CONTROL SHEET

W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BASELINE

BL POINT	DESC.	NORTH	EAST	ELEVATION
1	U5964-1	748676.7870	1443000.5350	904.21
5	BL-5	748930.1230	1443487.7647	901.53
2	U5964-2	749097.3190	1443741.6960	905.35
6	BL-6	749393.5696	1444174.4066	899.01
7	BL-7	749669.0993	1444500.7486	902.27
8	13819 BY-379	749687.1424	1444750.9398	906.03
9	13819 BY-380	750063.5940	1445061.5018	896.44
3	13819 BY-382	750407.9340	1445552.8940	900.74
4	13819 BY10-176	751086.5260	1446640.5800	879.77

BY POINT	DESC.	NORTH	EAST	ELEVATION
10	BY-10	749955.8246	1443519.2425	893.52
11	BY-11	749598.5396	1443693.2176	882.17
E05	BL-5	748930.1230	1443487.7647	901.53

BY1 POINT	DESC.	NORTH	EAST	ELEVATION
E010	BY-10	749955.8246	1443519.2425	893.52
12	BY1-12	749933.0704	1444115.9141	903.12
E017	13819 BY-378	749906.4311	1444632.1760	902.62

BY2 POINT	DESC.	NORTH	EAST	ELEVATION
E011	BY-11	749598.5396	1443693.2176	882.17
13	BY2-13	749638.9533	1443990.7099	891.62
E07	BL-7	749669.0993	1444500.7486	902.27

BY3 POINT	DESC.	NORTH	EAST	ELEVATION
E07	BL-7	749669.0993	1444500.7486	902.27
14	BY3-14	749317.5249	1444523.6706	897.06
15	BY3-15	749084.0557	1444676.1382	890.36

BY4 POINT	DESC.	NORTH	EAST	ELEVATION
16	13819 BY-377	750460.3070	1444668.2293	885.88
17	13819 BY-378	749906.4311	1444632.1760	902.62
EX7	BL-7	749669.0993	1444500.7486	902.27

BENCHMARKS

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.....
BM1 ELEVATION - 901.01
N 748900 E 1443361
BL STATION 9+22.00 32 LEFT
CHISELED SQUARE IN CONC WALK
.....

BM2 ELEVATION - 898.29
N 750068 E 1443500
BY STATION 5+00.00
N 09+29+08.7 W DIST 114.13
CHISELED SQUARE IN CONC WALK
.....

BM3 ELEVATION - 887.20
N 749006 E 1444696
BY3 STATION 11+31.00
S 14+33+14.4 E DIST 80.16
CHISELED SQUARE IN CONC WALK
.....

BM4 ELEVATION - 886.77
N 750433 E 1444676
BY4 STATION 5+26.00 10 LEFT
CHISELED SQUARE IN CONC WALK
.....

BM5 ELEVATION - 896.47
N 750039 E 1445117
BL STATION 30+75.00 52 RIGHT
CHISELED SQUARE IN CONC WALK
.....

```

EXISTING ALIGNMENTS

EL POINT	N	E	BEARING	DIST
POT	748899.313	1443416.172		
LINE			N 52°57'52.2" E	155.40
POT	748992.910	1443540.219		
LINE			N 56°16'32.5" E	1294.81
POT	749711.787	1444617.141		
LINE			N 54°22'11.6" E	573.76
POT	750046.033	1445083.492		

EY POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	749507.389	1444310.939							
CURVE			N 20°47'40.6" E	967.99	60°12'17.3"(L.T)	05°56'14.6"	1013.99	559.44	965.00
PT	750412.319	1444654.592							

EY1 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	748930.528	1443457.541							
LINE			N 23°13'55.8" E	323.47					
PC	749227.768	1443585.136							
CURVE			N 18°01'06.0" E	221.73	10°25'39.8"(L.T)	04°41'47.0"	222.04	111.33	1220.00
PCC	749438.625	1443653.722							
CURVE			N 02°34'51.5" W	225.51	30°46'15.1"(L.T)	13°28'52.9"	228.25	116.95	425.00
PT	749663.910	1443643.567							
LINE			N 17°57'59.1" W	327.44					
PC	749975.379	1443542.567							
CURVE			N 13°41'41.5" W	104.28	08°32'35.1"(RT)	08°11'06.4"	104.37	52.28	700.00
PT	750076.691	1443517.879							

EY2 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	749507.106	1443541.639							
LINE			N 69°23'21.6" E	382.88					
PC	749641.885	1443900.011							
CURVE			N 80°51'49.8" E	147.21	22°56'56.5"(RT)	15°29'07.2"	148.20	75.11	370.00
PT	749665.259	1444045.354							
LINE			S 87°39'41.9" E	194.18					
PC	749657.337	1444239.377							
CURVE			S 85°43'48.5" E	78.20	03°51'46.9"(RT)	04°56'21.4"	78.21	39.12	1160.00
PT	749651.515	1444317.355							
LINE			S 83°47'55.0" E	126.50					
POT	749637.849	1444443.119							

EY3 POINT	N	E	BEARING	DIST
POT	749596.991	1444445.170		
LINE			S 20°40'21.8" E	622.58
POT	749014.502	1444664.957		

EY4 POINT	N	E	BEARING	DIST
POT	749943.944	1443552.760		
LINE			S 87°16'04.4" E	1057.25
POT	749893.549	1444608.807		
LINE			S 69°08'51.4" E	183.02
POT	749828.400	1444779.843		

EY5 POINT	N	E	BEARING	DIST
POT	749131.200	1444743.818		
LINE			S 69°21'21.7" W	114.98
POT	749090.663	1444636.220		

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

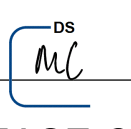
REVISIONS

6/20/18

11/15/18
 11/16/18
 11/17/18
 11/18/18
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NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED JUNE 2024.



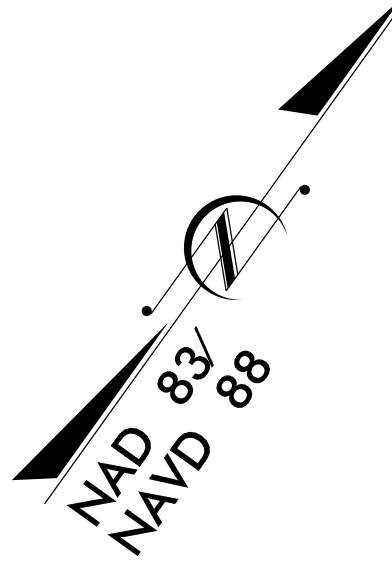
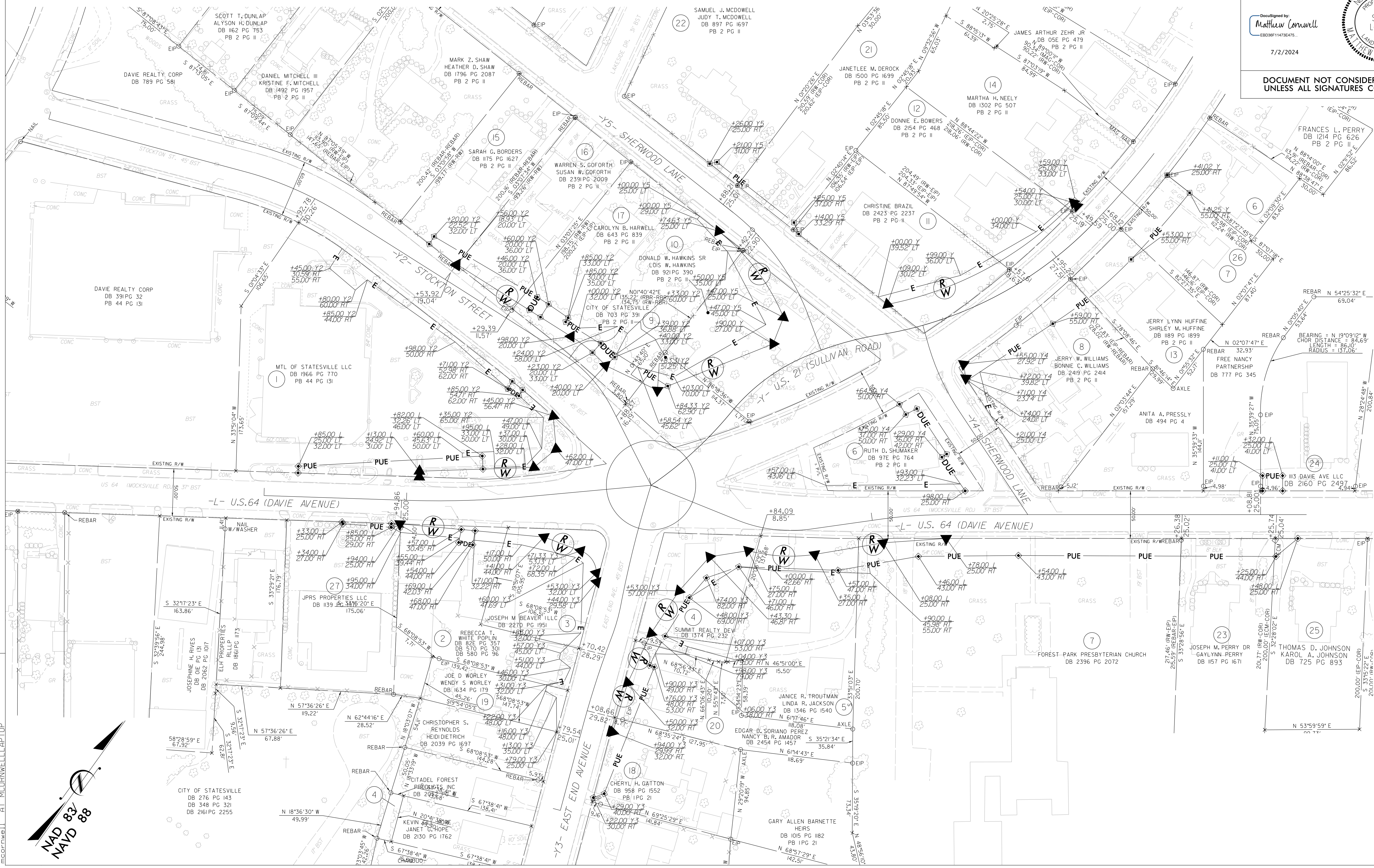
I, Matthew T. Cornwell, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed June 2024, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCA 56.1600 as applicable.

This 7/2/2024

DocuSigned by:
Matthew Cornwell
Professional Land Surveyor L-4775

PROJECT REFERENCE NO. U-5964	SHEET NO. RW04
Location and Surveys	
TGS ENGINEERS 201 WEST MARION STREET SUITE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275	
PROJECT SURVEYOR	
DocuSigned by: 	
7/2/2024	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS



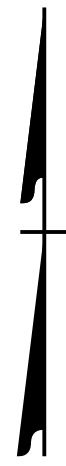
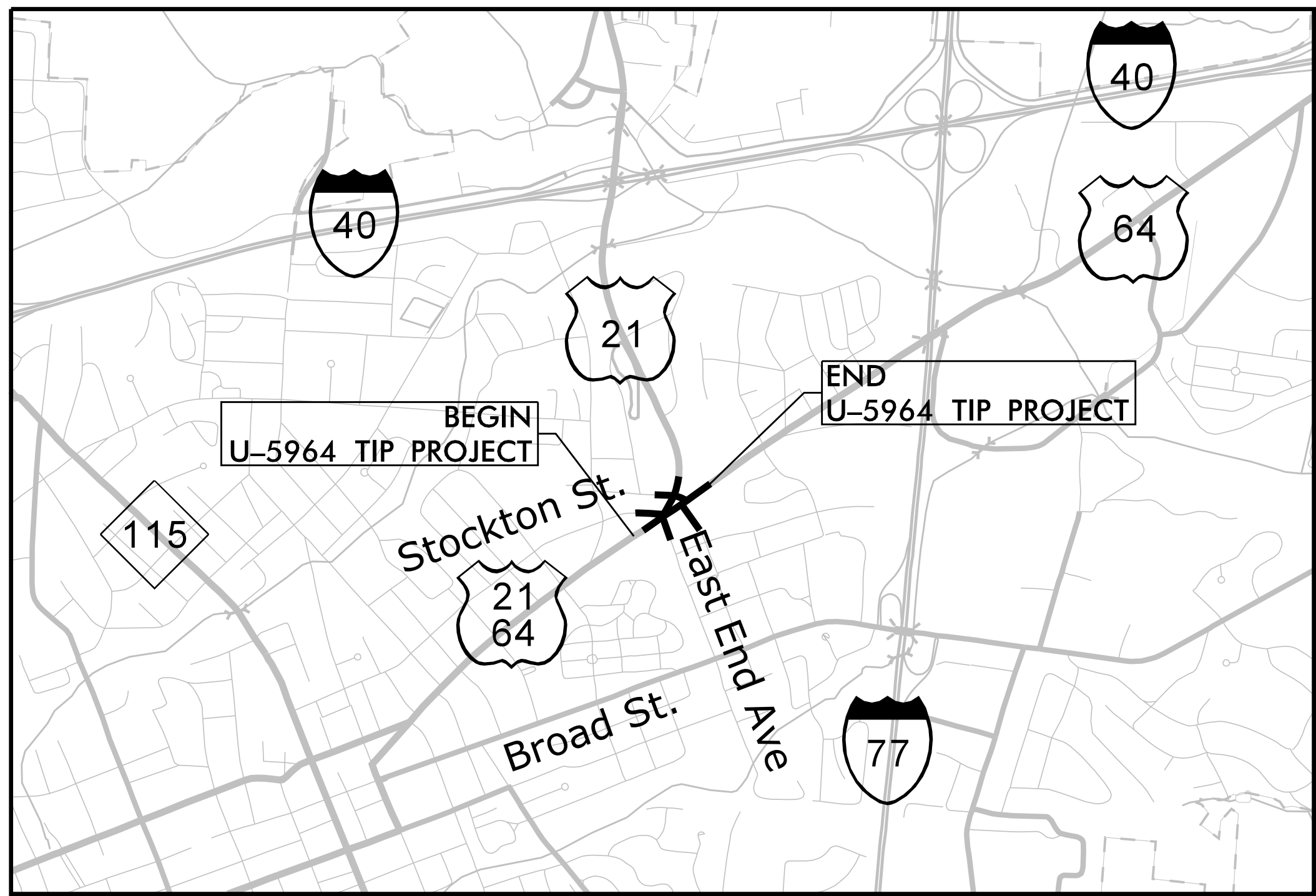
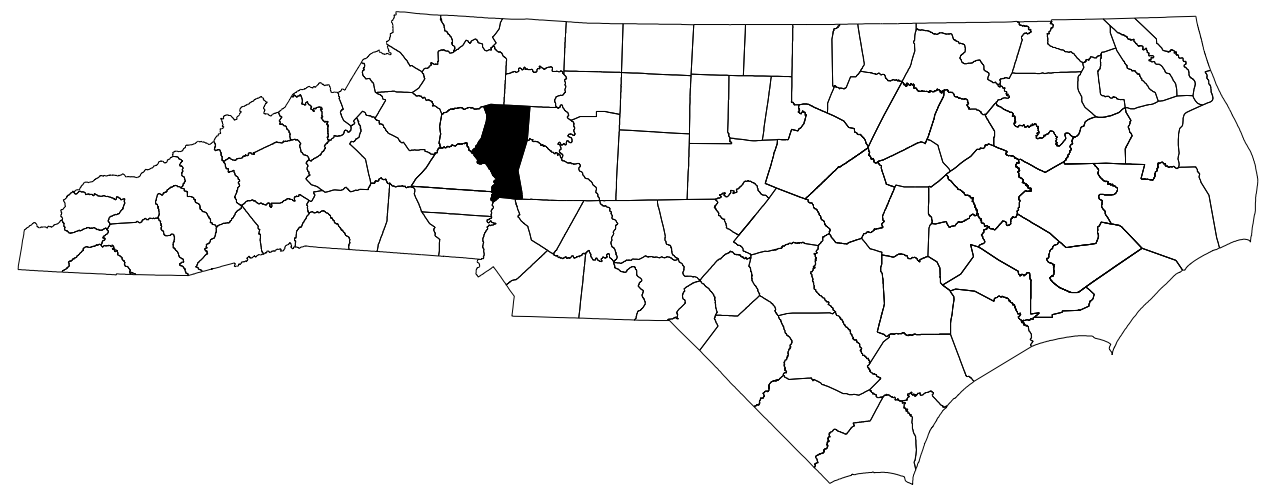
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

IREDELL COUNTY

LOCATION: INTERSECTION OF US 64 (DAVIE AVENUE), US 21 (SULLIVAN ROAD), STOCKTON STREET, AND EAST END AVENUE
TYPE OF WORK: GRADING, PAVING & DRAINAGE



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES)
TMP-1C	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES) CONTINUED
TMP-2A	OFFSITE DETOUR ROUTES
TMP-3	TRANSPORTATION OPERATIONS PHASING
TMP-3A	TRANSPORTATION OPERATIONS PHASING CONTINUED
TMP-4	TEMPORARY TRAFFIC CONTROL PHASE 1A DETAIL
TMP-5	TEMPORARY TRAFFIC CONTROL PHASE 1B DETAIL
TMP-6	TEMPORARY TRAFFIC CONTROL PHASE 2 DETAIL
TMP-7	TEMPORARY TRAFFIC CONTROL PHASE 3 DETAIL
TMP-8	TEMPORARY TRAFFIC CONTROL PHASE 4 DETAIL
TMP-9	TEMPORARY TRAFFIC CONTROL PHASE 5 DETAIL

01/09/26 DATE SUBMITTED

SUBMITTAL:


STAGING CONCEPT

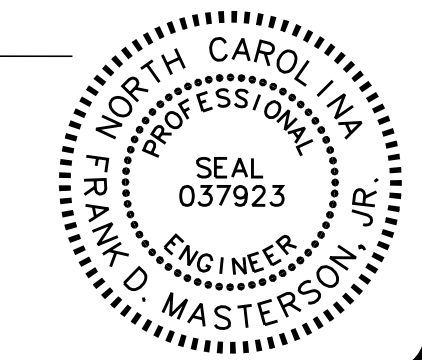
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PRE-FINAL

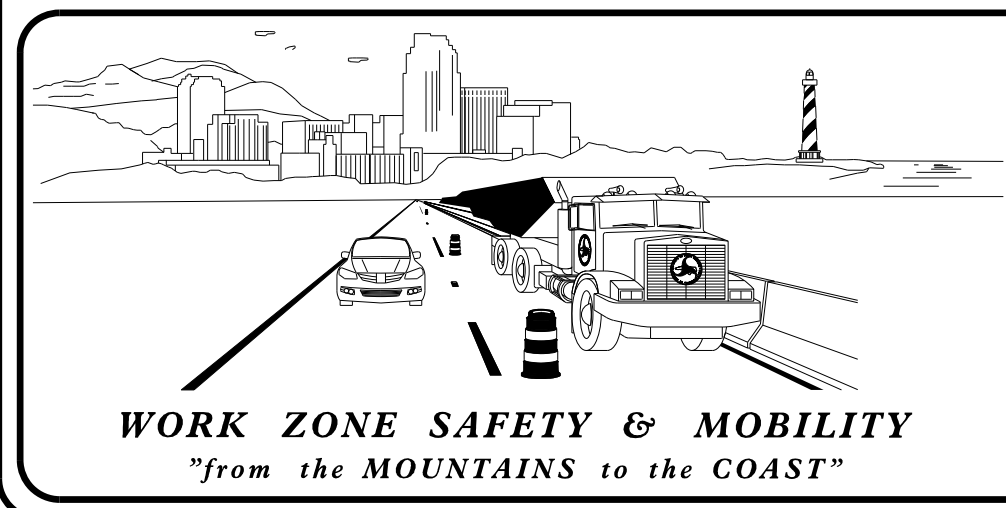
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APPROVED: 
DATE: 1/30/2026

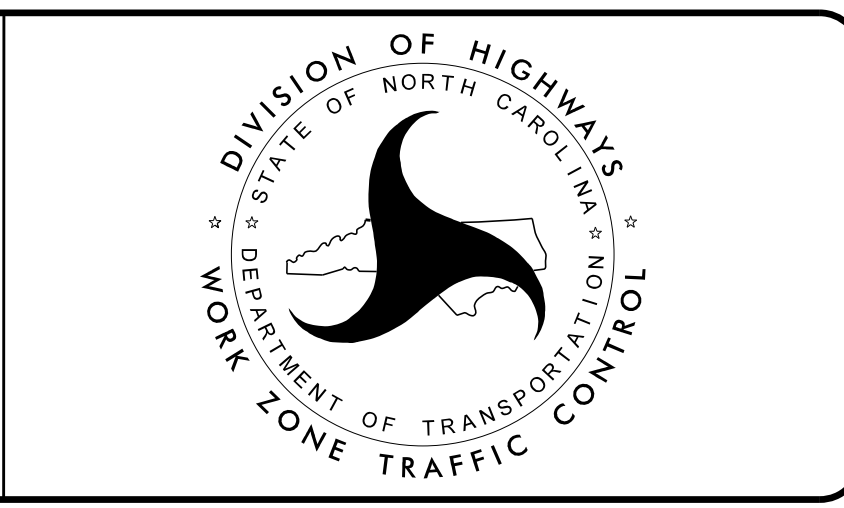


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PLANS PREPARED BY:
Kimley»Horn
NC LICENSE #F-0102
200 SOUTH TRYON STREET, SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (704) 333-5131

NCDOT CONTACTS:
BRYAN SOWELL, P.E.
PROJECT ENGINEER
FRANK MASTERSON, P.E.
PROJECT DESIGN ENGINEER



SHEET NO. TMP-1
CONTRACT: DL00376 TIP PROJECT: U-5964

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS

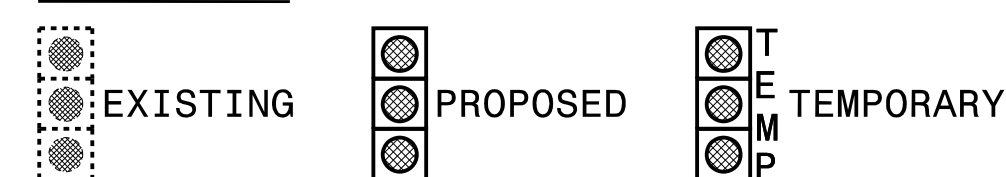
LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.



SIGNALS



PAVEMENT MARKINGS



TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

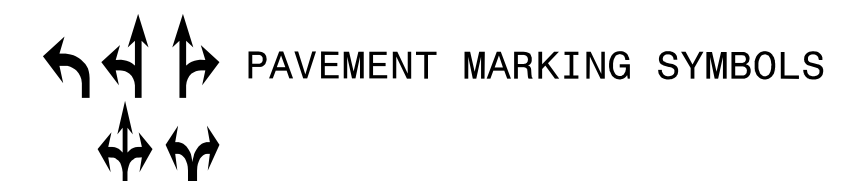
TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS



PEDESTRIAN ACCESS CONTROL (TYP)

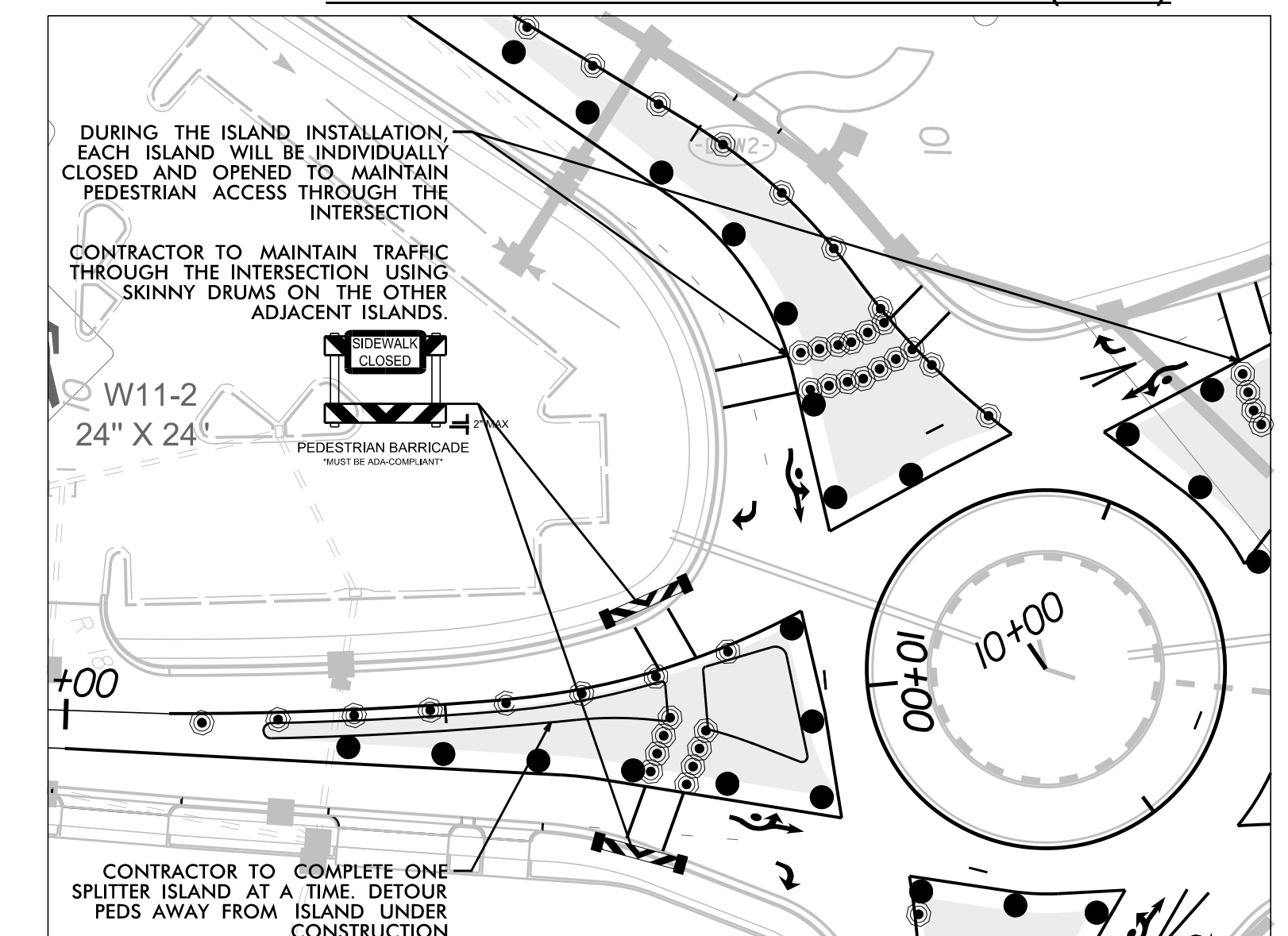
TEMPORARY PAVEMENT MARKING

PAVEMENT MARKING LINES

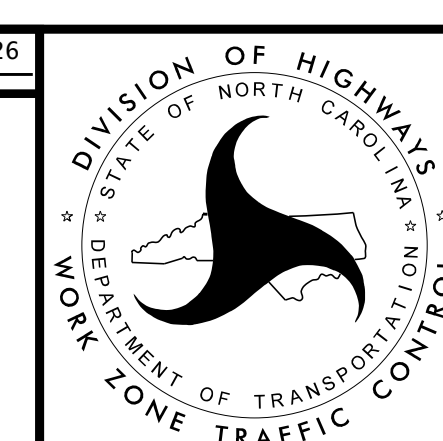
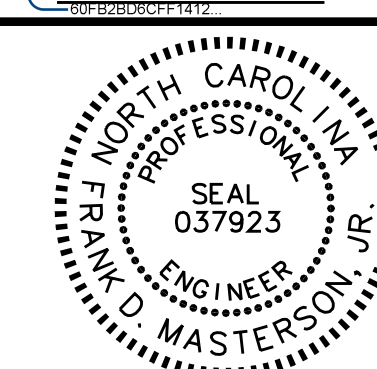
- P1 - PAINT (4" WHITE, 2X) WHITE EDGE LINE
- P2 - PAINT (4" WHITE, 2X) WHITE SOLID LANE LINE
- P4 - PAINT (4" WHITE, 2X) 3 FT. - 9. FT./SP WHITE MINISKIP
- P10 - PAINT (4" WHITE, 2X) YELLOW EDGE LINE
- P11 - PAINT (4" YELLOW, 2X) YELLOW SINGLE CENTER
- P13 - PAINT (4" YELLOW, 2X) YELLOW DOUBLE CENTER
- P46 - PAINT (8" WHITE, 2X) WHITE CROSSWALK LINE
- P61 - PAINT (24" WHITE, 2X) STOP BAR

PAVEMENT MARKING SYMBOLS

- P70 - PAINT 2X (LEFT TURN ARROW)
- P71 - PAINT 2X (RIGHT TURN ARROW)
- P72 - PAINT 2X (STRAIGHT ARROW)
- P73 - PAINT 2X (LEFT/STRAIGHT COMBO ARROW)
- P74 - PAINT 2X (RIGHT/STRAIGHT COMBO ARROW)
- P76 - PAINT 2X (LEFT/RIGHT/STRAIGHT COMBO ARROW)



APPROVED: DATE: 1/30/2026



ROADWAY STANDARD DRAWINGS & LEGEND

MANAGEMENT STRATEGIES

PROPOSED IMPROVEMENTS ALONG -L- U.S. 64 (DAVIE AVE), -Y1- SULLIVAN ROAD, -Y2- STOCKTON STREET, -Y3- EAST END AVENUE, -Y4- SHERWOOD LANE, AND -Y5- SHERWOOD LANE WILL BE CONSTRUCTED WHILE MAINTAINING TRAFFIC AND USING TEMPORARY TRAFFIC PATTERNS WITH TEMPORARY SIGNALS AND TEMPORARY LANE CLOSURES.

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

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.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
DAVIE AVENUE SULLIVAN ROAD STOCKTON STREET EAST END AVENUE SHERWOOD LANE	6:00 AM TO 9:00 AM 4:00 PM TO 7:00 PM MONDAY THRU FRIDAY

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME
DAVIE AVENUE SULLIVAN ROAD STOCKTON STREET EAST END AVENUE SHERWOOD LANE

C) PLACE TRAFFIC SIGNALS AT THE US 64 (DAVIE AVE) AND US 21 (SULLIVAN ROAD) ON FLASHING MODE WITH POLICE CONTROL DURING THE FLAGGING OPERATIONS BETWEEN THE HOURS OF 9am AND 4pm.

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.**
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 9:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.**
- FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. TO 7:00 P.M. SUNDAY.**
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. MONDAY.**
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY.**

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. MONDAY.**

TIME RESTRICTIONS (CONT.)

- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.**
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.**
- FOR ANNUAL CAROLINA BALOON FESTIVAL, BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE THE EVENT AND 7:00 P.M. THE FOLLOWING MONDAY AFTER THE EVENT.**

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
DAVIE AVENUE SULLIVAN ROAD STOCKTON STREET EAST END AVENUE	ANYTIME UNLESS OTHERWISE DIRECTED BY THE ENGINEER

D) DO NOT STOP TRAFFIC AS FOLLOWS, OR AS OTHERWISE DIRECTED BY THE ENGINEER:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATIONS
DAVIE AVENUE SULLIVAN ROAD STOCKTON STREET EAST END AVENUE	6:00 AM TO 8:00 PM MONDAY THRU FRIDAY	15 MINUTES TIE-IN WORK AND TRAFFIC SHIFT

E) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.**
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.**

LANE AND SHOULDER CLOSURE REQUIREMENTS (CONT.)

H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WITHIN 5 FT OF AN OPEN TRAVEL LANE ON AN UNDIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 10 FT OF AN OPEN TRAVEL LANE ON A DIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

I) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

J) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.



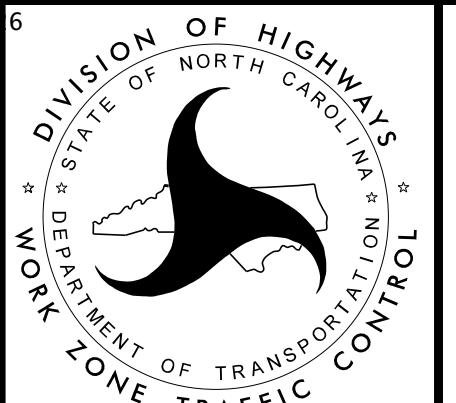
BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

K) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 ft IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

L) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

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APPROVED:  DATE: 1/30/2016 		<h2 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h2>
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GENERAL NOTES (CONT.)

SIGNING

- M) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- N) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- O) PROVIDE SIGNING REQUIRED FOR THE OFF-SITE SETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- P) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
- Q) COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- R) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- S) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- T) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- U) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

- V) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

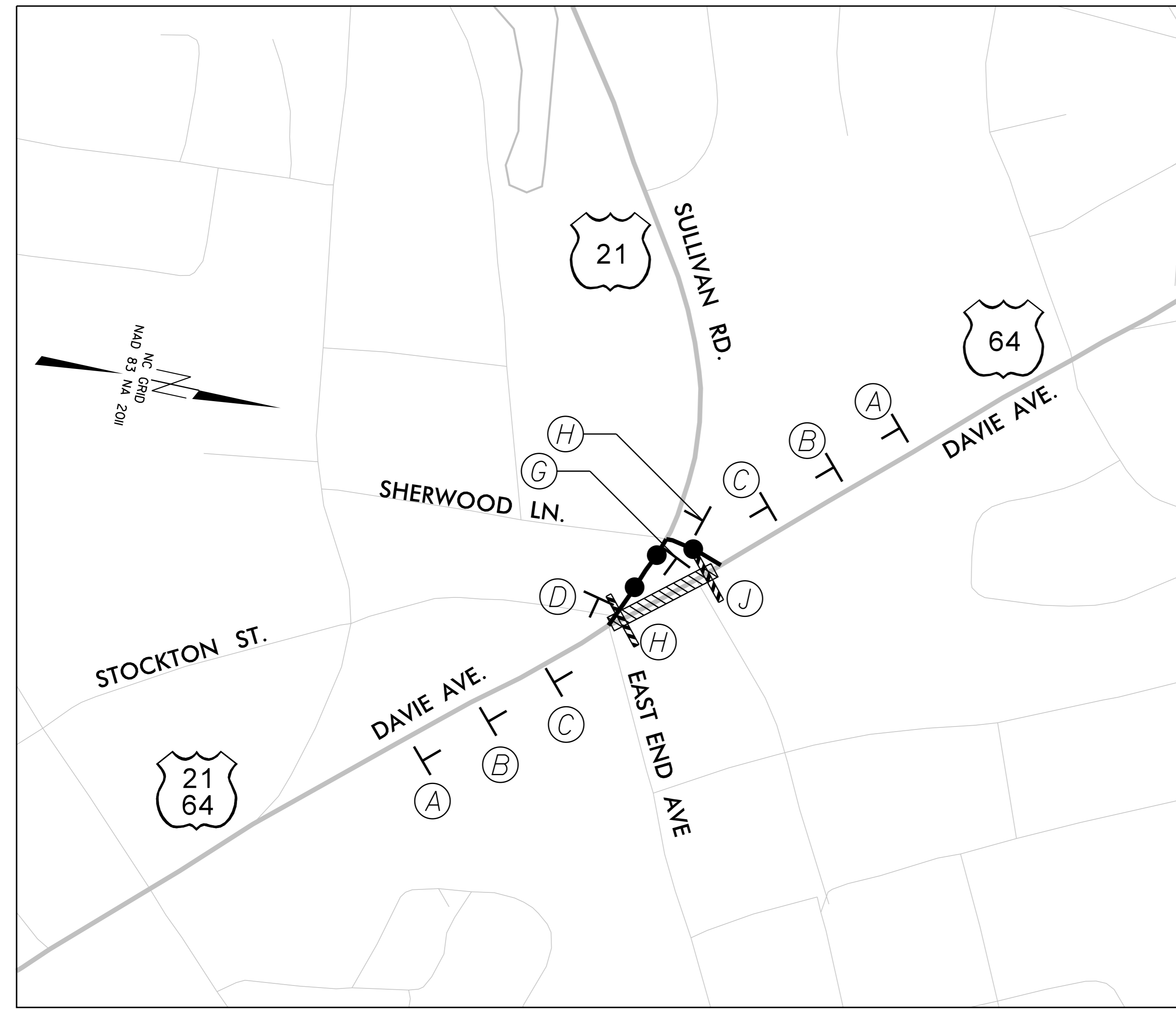
<u>ROAD NAME</u>	<u>MARKING</u>	<u>MARKER</u>
ALL ROADS	PAINT	NONE
- W) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- X) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Y) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- Z) TRACE THE PROPOSED MONOLITHIC ISLAND AND PEDESTRIAN REFUGE ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO REMOVAL AND INSTALLATION. PLACE DRUMS TO DELINEATE ANY EXISTING AND PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION

MISCELLANEOUS

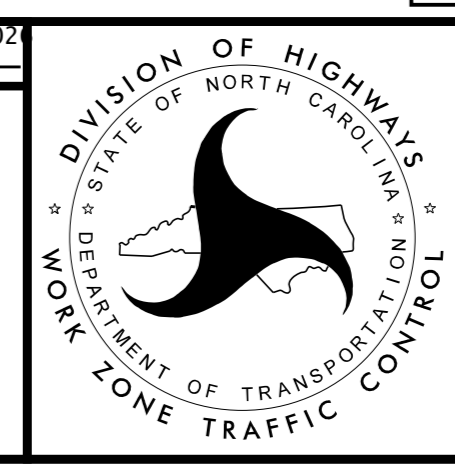
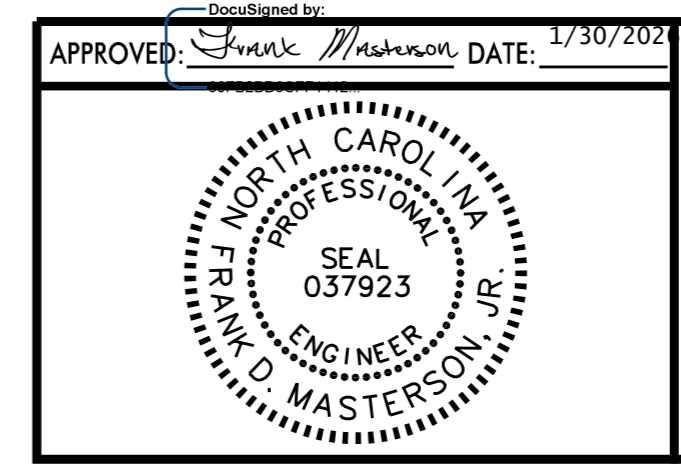
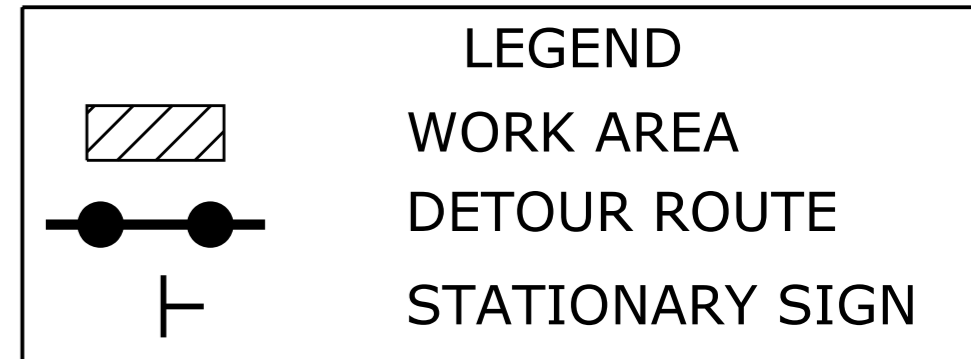
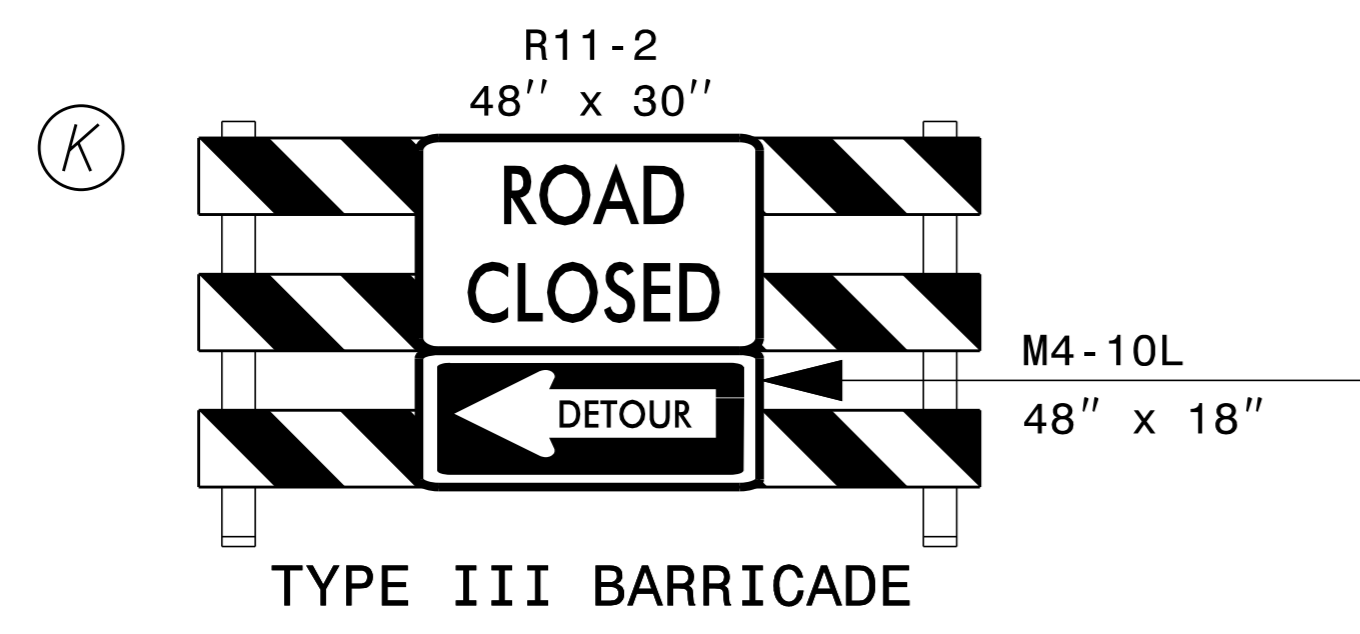
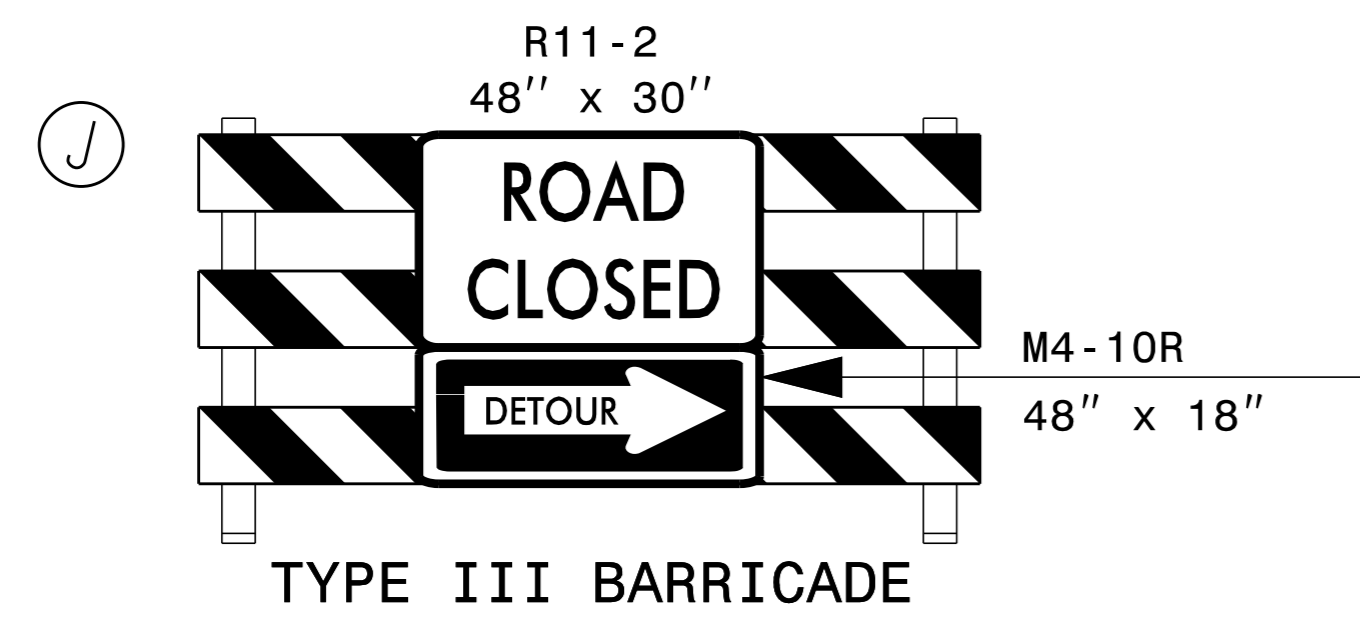
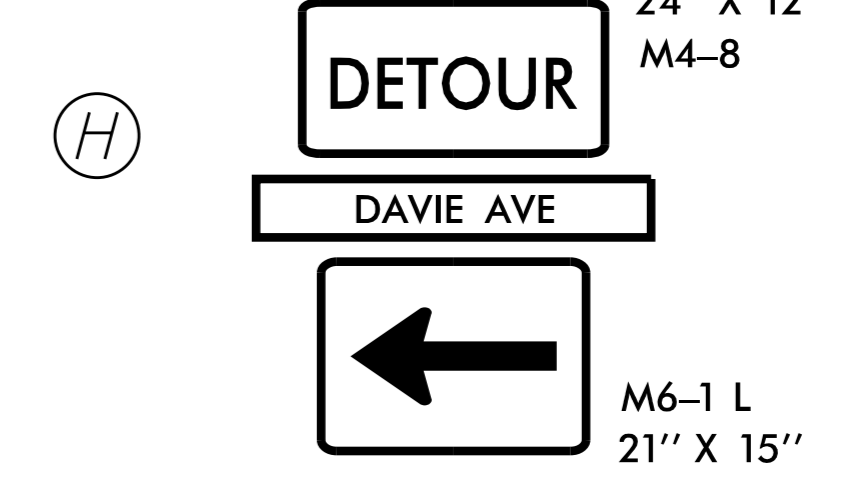
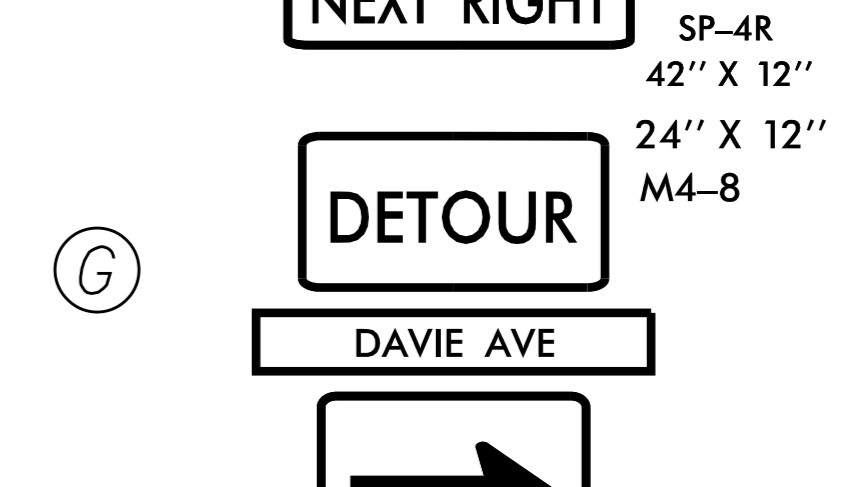
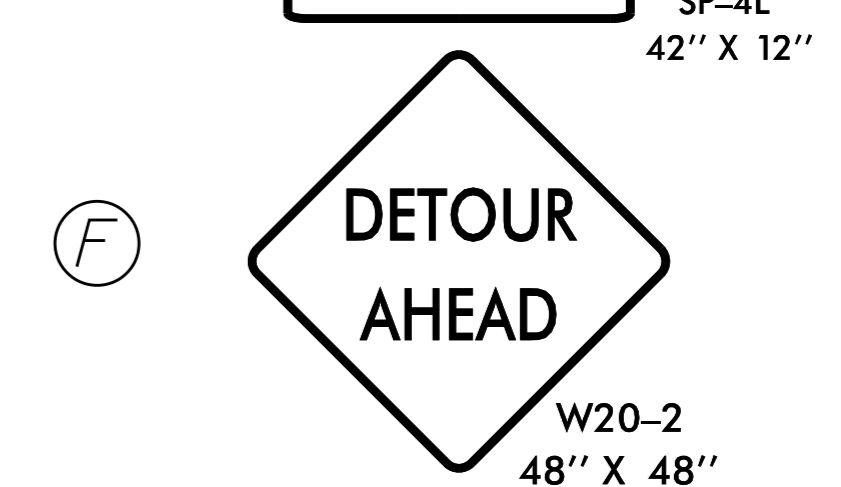
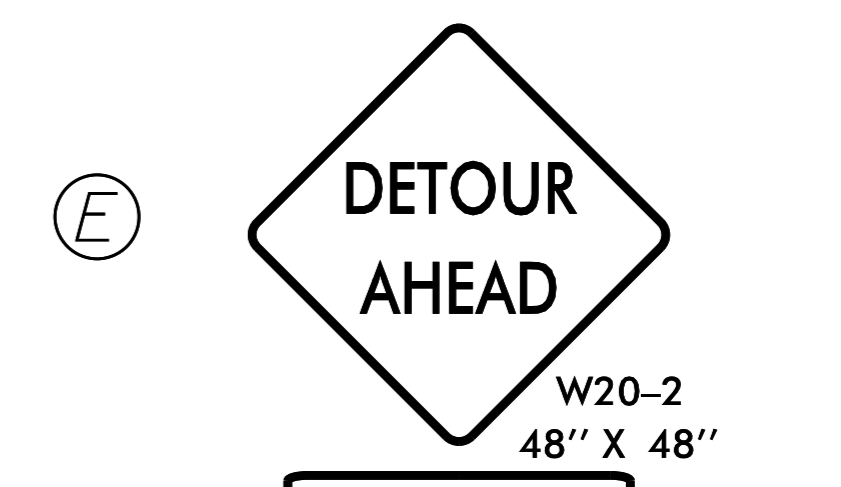
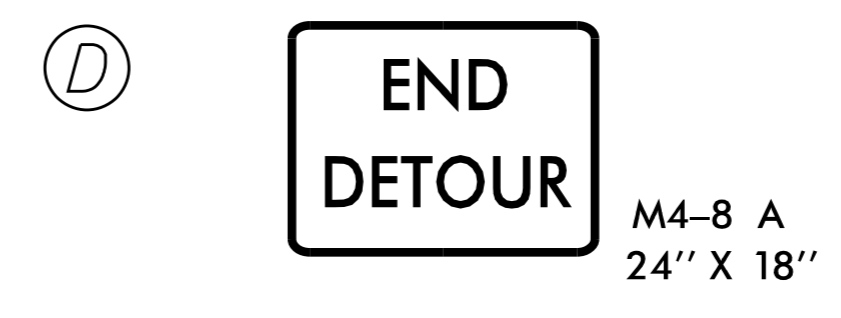
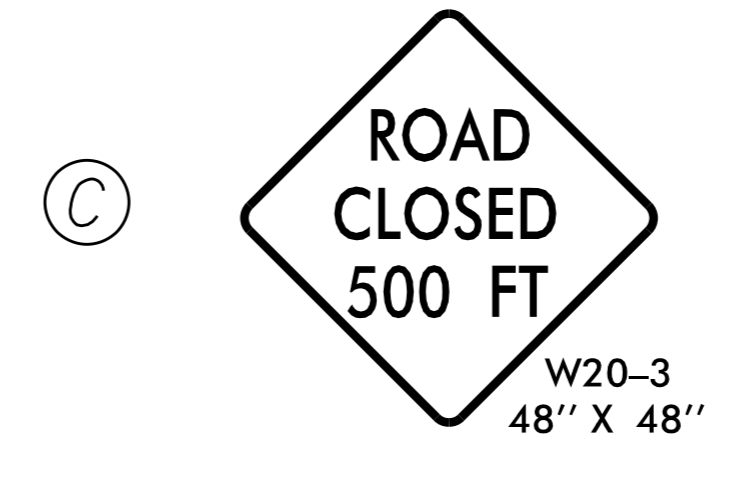
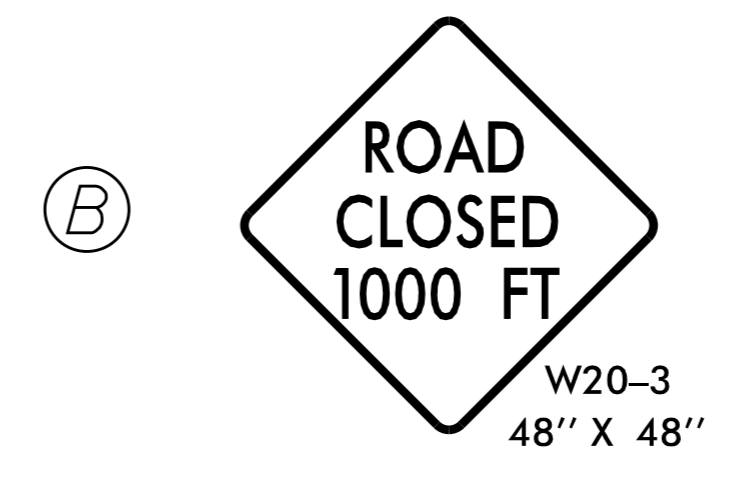
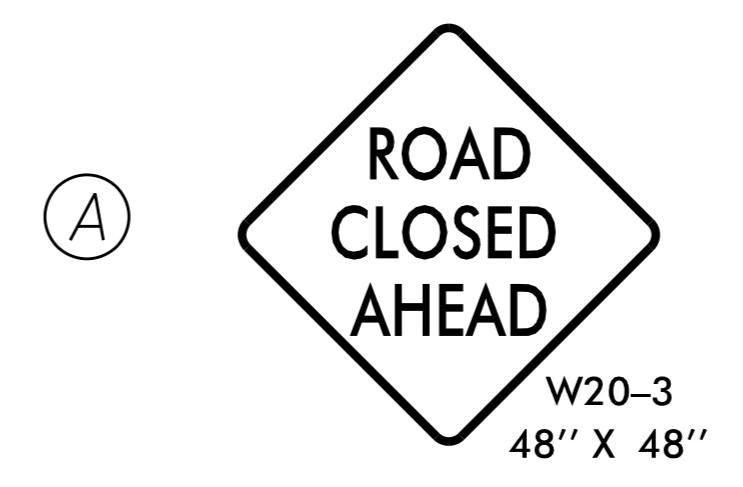
- AA) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- BB) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BE THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.)
- CC) CONTRACTOR SHALL ACCOMMODATE PEDESTRIAN TRAFFIC ACCORDING TO ADA COMPLIANCE.

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APPROVED:  DATE: 1/30/2026 		<h1 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h1>
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SCALE: 1" = 250'



DETOUR SHEET
DAVIE AVE
PHASE 4



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CONSTRUCTION PHASING

PRIOR TO BEGINNING ANY CONSTRUCTION THE CONTRACTOR SHALL INSTALL WORK ZONE ADVANCE WARNING SIGNS AS SHOWN IN THE NCDOT ROADWAY STANDARD DRAWING NO. 1101.01 THROUGHOUT CONSTRUCTION, CONTRACTOR TO MAINTAIN ACCESS TO ALL DRIVEWAYS UTILIZING DRUMS, WEDGING AND GRAVEL DEPENDING ON THE WORK PHASE LOCATIONS LISTED BELOW.

PHASE IA

WHILE MAINTAINING TRAFFIC AND USING RSD 1101.02, CONSTRUCT PROPOSED IMPROVEMENTS, ASSOCIATED DRAINAGE, MONOLITHIC ISLAND REMOVAL, AND WEDGING TO THE EXTENTS AS SHOWN ON SHEET TMP-4.

STEP 1:

INSTALL AND COVER DETOUR SIGNS AS SHOWN ON TMP-2A TO CLOSE US-64 (DAVIE AVE.) FOR FUTURE PHASE.

USING RSD 1101.02 AND LANE CLOSURES, INSTALL TEMPORARY SIGNAL AT THE INTERSECTION OF US 64/ US 21/ STOCKTON STREET AND EAST END AVE. SEE SIGNAL PLANS FOR LOCATIONS AND DETAILS. BAG SIGNAL HEAD UNTIL ACTIVATED.

AWAY FROM TRAFFIC INSTALL TEMPORARY PAVEMENT MARKINGS AND SHIFT TRAFFIC TO TEMPORARY PATTERN AND ACTIVATE SIGNAL.

STEP 2:

- CONSTRUCT TEMPORARY PEDESTRIAN RAMP AND CROSSING -Y- STA 15+50 AND CLOSE EXISTING SIDEWALK -Y- +/- STA 13+00 - 15+50 (LT)

- CONSTRUCT NEW LOCATION/ PROPOSED WIDENING ON -Y- US 21 (SULLIVAN ROAD) UP TO BUT NOT INCLUDING FINAL SURFACE COURSE FROM +/- STA. 10+60 TO +/- STA. 15+60 (LT) AND FROM +/- STA. 11+26 TO +/- STA. 12+90 (RT).

*** CONSTRUCT 18" PIPE FROM STRUCTURE # 0419 UP TO THE LIMITS SHOWN ON SHEET TMP-4. PLUG PIPE AND BURY.**
- CONSTRUCT PROPOSED WIDENING ON -CURB 1E- +/- STA. 10+59 TO +/- STA. 11+56.
- CONSTRUCT PROPOSED WIDENING ON -Y2- STOCKTON STREET +/- STA. 14+40 TO +/- STA. 16+00 (LT).

FOR CONSTRUCTION OF STRUCTURE 0418:

- USING RSD 1101.02 2 OF 19, CONSTRUCT TBJB # 0422. UTILIZE POSITIVE PROTECTION DURING CONSTRUCTION. COVER WITH STEEL PLATE

- CONSTRUCT PROPOSED WIDENING ON -Y5- SHERWOOD AVENUE +/- STA. 10+15 TO +/- STA. 12+00 (RT).
- REMOVE ISLANDS AT INTERSECTION OF -Y5- SHERWOOD LANE +/- 10+00 AND -Y- US 21 (SULLIVAN ROAD) +/- 17+38

- ALL ASSOCIATED DRAINAGE AS SHOWN ON TMP-4.

OPEN SIDEWALK ALONG -Y2- STOCKTON STREET, -Y- US 21 (SULLIVAN ROAD) AND -Y5-(SHERWOOD LANE) FOR PEDESTRIAN ACCESS PRIOR TO PROCEEDING TO PHASE 1B.

NOTES:

- PROVIDE WEDGING AS NECESSARY TO PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED GRADES.
- PROVIDE WEDGING AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE AND CONSTRUCTION OF ROUNDABOUT.
- MAINTAIN ACCESS OR PROVIDE TEMPORARY ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION.

PHASE IB

WHILE MAINTAINING TRAFFIC AND USING RSD 1101.02, CONSTRUCT PROPOSED IMPROVEMENTS AND ASSOCIATED DRAINAGE TO THE EXTENTS AS SHOWN ON SHEET TMP-5.

STEP 1:

- REMOVE ISLANDS AT INTERSECTION -Y4- SHERWOOD LANE +/- 10+60 AND -Y- US 21 (SULLIVAN ROAD) +/- 13+44
- REMOVE ISLANDS AT INTERSECTION -Y4- SHERWOOD LANE +/- 12+00 AND -L- US 64 (DAVIE AVE.) +/- 16+38.
CONSTRUCT TEMPORARY PEDESTRIAN RAMP AND CROSSING. CONSTRUCT TEMPORARY PATH -Y5- SHERWOOD LANE STA. 12+00 LT

WHILE MAINTAINING EXISTING SIDEWALK AND PEDESTRIAN TRAFFIC ALONG EAST END AVE. AND DAVIE AVE, CONSTRUCT PROPOSED SIDEWALK. UPON COMPLETION, CLOSE EXISTING SIDEWALK AND SWITCH PEDESTRIAN TRAFFIC TO PROPOSED SIDEWALK.

PHASE IB

STEP 2:

- CONSTRUCT PROPOSED WIDENING ON -L- US 64 (DAVIE AVENUE) STA +/- 13+50 TO +/- STA. 17+15 (RT).
- CONSTRUCT PROPOSED WIDENING ON -Y3- EAST END AVENUE +/- STA. 11+00 TO +/- STA. 12+50 (RT).
- CONSTRUCT PROPOSED WIDENING ON -CURB 1C- +/- STA. 10+44 TO +/- STA. 11+32.
- REMOVE TEMPORARY PAVEMENT MARKINGS FROM PHASE 1B THAT CONFLICT WITH PHASE 2 CONFIGURATION.
- INSTALL NEW TEMPORARY PAVEMENT MARKINGS.
- ADJUST TEMPORARY SIGNAL AND SHIFT TRAFFIC TO PHASE 2 CONFIGURATION.

NOTES:

- PROVIDE WEDGING AS NECESSARY TO PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED GRADES.
- PROVIDE WEDGING AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE AND CONSTRUCTION OF ROUNDABOUT.
- MAINTAIN ACCESS OR PROVIDE TEMPORARY ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION.

PHASE 2

WHILE MAINTAINING TRAFFIC AND USING RSD 1101.02, CONSTRUCT PROPOSED IMPROVEMENTS, ASSOCIATED DRAINAGE, MONOLITHIC ISLAND REMOVAL, AND WEDGING TO THE EXTENTS AS SHOWN ON SHEET TMP-6.

STEP 1:

CLOSE SIDEWALK APPROX. -L- STA 9+50.00 DAVIE AVE. AND CONSTRUCT TEMPORARY PEDESTRIAN RAMP AND CROSSING.

WHILE MAINTAINING TRAFFIC AND USING RSD 1101.02, CONSTRUCT PROPOSED IMPROVEMENTS, ASSOCIATED DRAINAGE AND WEDGING TO THE EXTENTS AS SHOWN ON SHEET TMP-6. COMPLETE STEP 1 PRIOR TO MOVING ON TO STEP 2.

STEP 1

- CONSTRUCT PROPOSED WIDENING -L- DAVIE AVENUE +/- STA. 9+50 TO +/- STA. 11+50 (RT). OPEN SIDEWALK UP TO PEDESTRIAN TRAFFIC.

STEP 2

- CONSTRUCT PROPOSED WIDENING -Y- SULLIVAN ROAD +/- STA. 10+50 TO +/- STA. 15+54 (RT). UNCOVER PREVIOUSLY BURIED 18" PIPE FROM STRUCTURE # 0419, REMOVE PLUG AND CONSTRUCT REMAINING 18" PIPE AND STRUCTURE # 0418. UTILIZE POSITIVE PROTECTION AS SHOWN ON TMP-6
- CONSTRUCT PROPOSED WIDENING -Y3- EAST END AVENUE +/- STA. 10+89 TO +/- STA. 12+50 (LT).
- CONSTRUCT PROPOSED WIDENING -Y4- SHERWOOD LANE +/- STA. 10+50 TO +/- STA. 12+30 (LT).
- CONSTRUCT PROPOSED WIDENING -CURB 1B- +/- STA. 10+79 TO +/- STA. 11+00.
- CONSTRUCT ALL ASSOCIATED DRAINAGE AS SHOWN ON SHEET TMP-6.

UPON COMPLETION, REOPEN SIDEWALK -L- DAVIE AVE. FOR PEDESTRIAN TRAFFIC. CLOSE SIDEWALK APPROX. -Y- STA 15+50.00 DAVIE AVE. AND CONSTRUCT TEMPORARY PEDESTRIAN RAMP AND CROSSING.

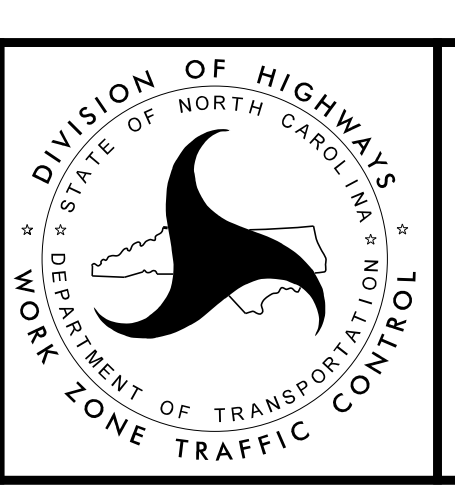
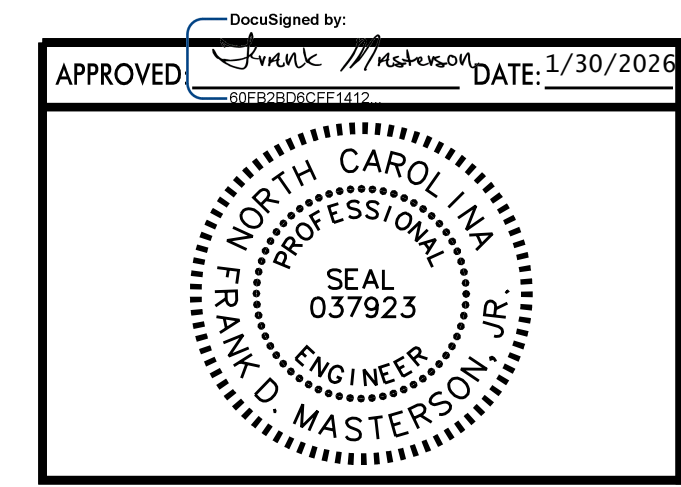
REMOVE TEMPORARY PAVEMENT MARKINGS FROM PHASE 2 THAT CONFLICT WITH PHASE 3 CONFIGURATION AND INSTALL NEW TEMPORARY PAVEMENT MARKINGS FOR PHASE 3 PATTERN.

ADJUST TEMPORARY SIGNAL AND SHIFT TRAFFIC ONTO PHASE 3 PATTERN.

NOTES:

- PROVIDE WEDGING AS NECESSARY TO PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED GRADES.
- PROVIDE WEDGING AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- MAINTAIN ACCESS OR PROVIDE TEMPORARY ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION.

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**TRANSPORTATION
OPERATIONS
PHASING**

CONSTRUCTION PHASING

PHASE 3

WHILE MAINTAINING TRAFFIC AND USING RSD 1101.02, CONSTRUCT PROPOSED IMPROVEMENTS, ASSOCIATED DRAINAGE TO THE EXTENTS AS SHOWN ON SHEET TMP-7.

STEP 1:

CLOSE SIDEWALK -L- DAVIE AVE STA. 9+50 LT AND -Y2- STOCKTON STREET 13+60 RT.

- CONSTRUCT PROPOSED WIDENING -L- DAVIE AVENUE +/- STA. 9+50 TO +/- STA. 17+15 (LT).
CONSTRUCT CB# 0404 UTILIZING POSITIVE PROTECTECTION AS SHOWN ON TMP-7
- CONSTRUCT PROPOSED WIDENING -Y2- STOCKTON STREET +/- STA. 13+50 TO +/- STA. 16+50 (RT).
- CONSTRUCT PROPOSED WIDENING -Y4- SHERWOOD LANE +/- STA. 10+20 TO +/- STA. 12+17 (RT).
- CONSTRUCT PROPOSED WIDENING -Y5- SHERWOOD LANE +/- STA. 10+40 TO +/- STA. 11+95 (RT).
- CONSTRUCT PROPOSED WIDENING -CURB 1A- +/- STA. 10+60 TO +/- STA. 11+41.
- CONSTRUCT PROPOSED WIDENING -CURB 1D- +/- STA. 10+37 TO +/- STA. 11+79.

REMOVE TEMPORARY PAVEMENT MARKINGS FROM PHASE 3 THAT CONFLICT WITH PHASE 4 CONFIGURATION AND INSTALL NEW TEMPORARY PAVEMENT MARKINGS.

REMOVE TEMPORARY SIGNAL AND SHIFT TRAFFIC ONTO NEW TRAFFIC PATTERN.

NOTES:

- PROVIDE WEDGING AS NECESSARY TO PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED GRADES.
- PROVIDE WEDGING AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- MAINTAIN ACCESS OR PROVIDE TEMPORARY ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION.

PHASE 4

COMPLETE THE WORK OF PHASE 4, STEP 1 WITHIN 45 CONSCUTIVE CALENDAR DAYS (SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES)

UNCOVER DETOUR SIGNINGS

STEP 1:

WHILE MAINTAINING TRAFFIC AND USING RSD 1101.02, CONSTRUCT PROPOSED IMPROVEMENTS, ASSOCIATED DRIANAGE TO THE EXTENTS AS SHOWN ON SHEET TMP-8, UP TO, BUT NOT INCLUDING FINAL LIFT:

THE CONTRACTOR IS TO EXECUTE WEEKEND ROAD CLOSURE ALONG -L- US 64 (DAVIE AVENUE) AS SHOWN IN THE INSET ON SHEET TMP-8. REFER TO ICT# 1.

STEP 1.1

- CONSTRUCT NEW SPLITTER ISLAND -L- US 64 (DAVIE AVENUE) +/- STA. 13+25 - 15+10.
- REMOVE OR COVER TEMPORARY DETOUR SIGNAGE AFTER COMPLETE.

STEP 1.2

- CONSTRUCT CONCRETE CENTER ISLAND.

REMOVE TEMPORARY PAVEMENT MARKINGS FROM PHASE 4 THAT CONFLICT WITH PHASE 5 CONFIGURATION AND INSTALL NEW TEMPORARY PAVEMENT MARKINGS.

NOTES:

- PROVIDE WEDGING AS NECESSARY TO PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED GRADES.
- PROVIDE WEDGING AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- MAINTAIN ACCESS OR PROVIDE TEMPORARY ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION.

PHASE 5

STEP 1:

WHILE MAINTAINING TRAFFIC AND USING RSD 1101.02, CONSTRUCT PROPOSED MONOLITHIC ISLANDS AS SHOWN ON SHEET TMP-9.

USING PAINT MARKINGS, SKINNY DRUMS AND PEDESTRIAN BARRICADES TO CONTROL AND MAINTAIN ACCESS THROUGH THE INTERSECTION, CONTRACTOR TO COMPLETE THE CONSTRUCTION OF THE ISLANDS ONE AT A TIME.

CONTRACTOR TO USE THE PEDESTRIAN ACCESS CONTROL DETAIL, AS SHOWN ON TMP-1A, TO CLOSE EACH MONOLITHIC CROSSING UNDER CONSTRUCTION AND MAINTAIN PEDESTRIAN MOVEMENTS ON OTHER LEGS OF THE ROADWAY.

CONTRACTOR TO USE SKINNY DRUMS AND THE SUBSEQUENTLY COMPLETED MEDIANS TO KEEP PEDESTRIANS OUT OF TRAFFIC AND DETOUR PEDESTRIANS AS NECESSARY.

NOTE: COMPLETE WORK ON SPLITTER ISLAND BEFORE MOVING TO NEXT TO MAINTAIN PEDESTRIAN ACCESS.

STEP 1.1

- CONSTRUCT SPLITTER ISLAND AND REMAINING MONOLITHIC ISLAND ON -Y- SULLIVAN ROAD.



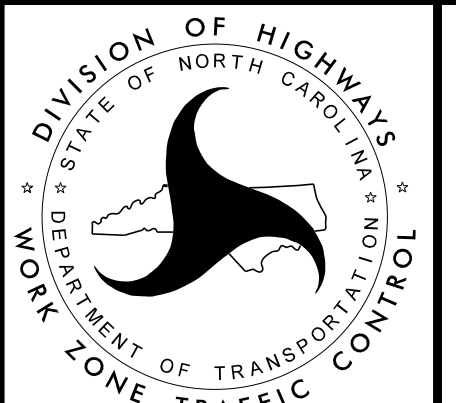
STEP 1.2

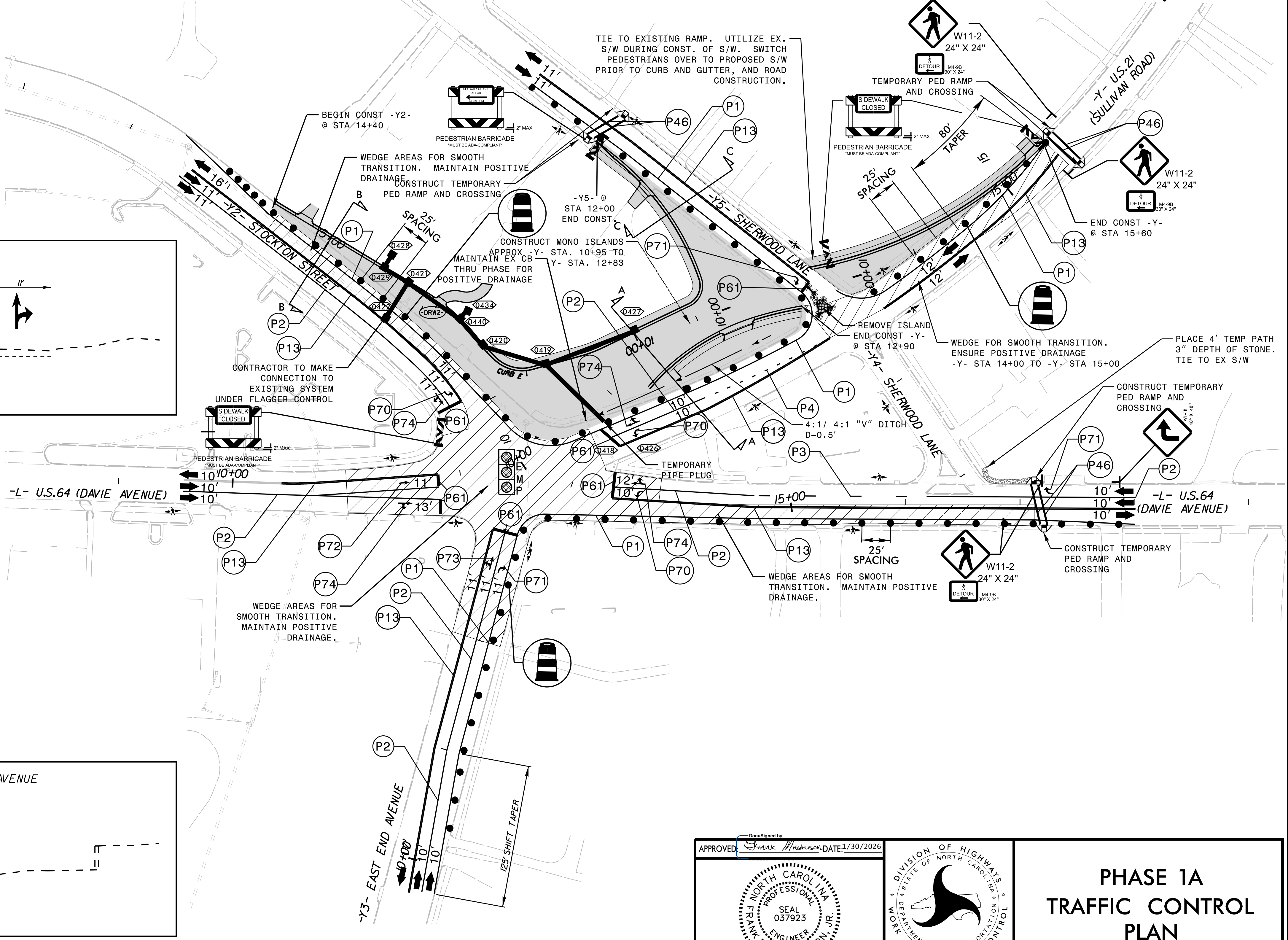
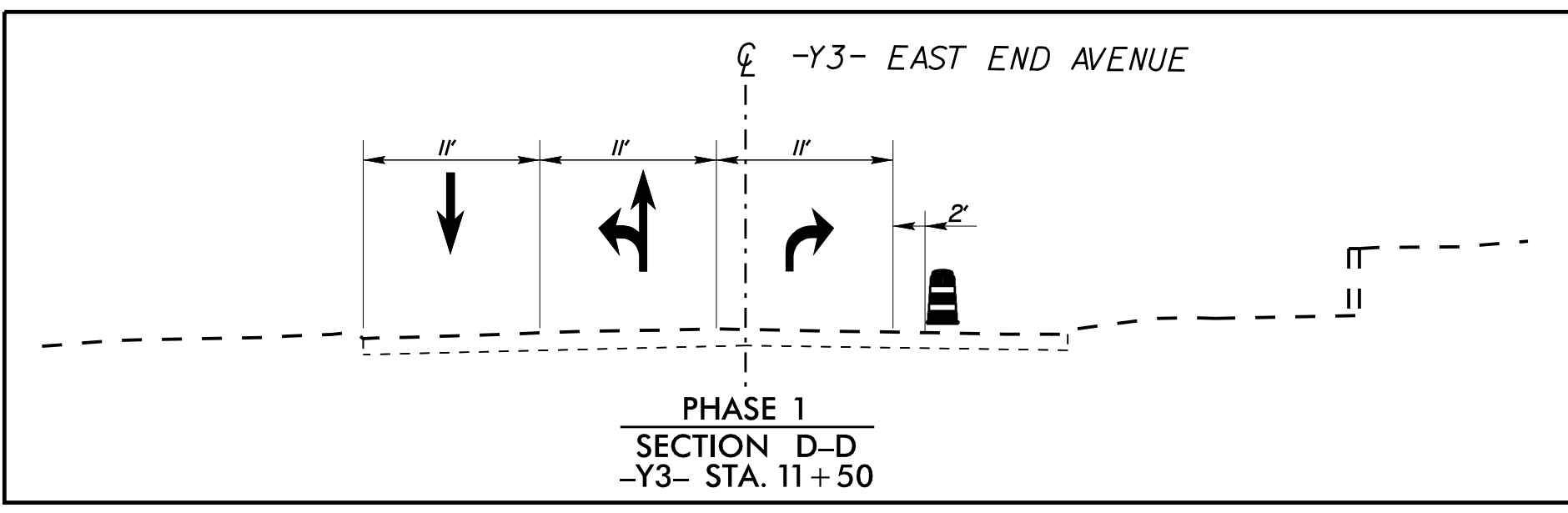
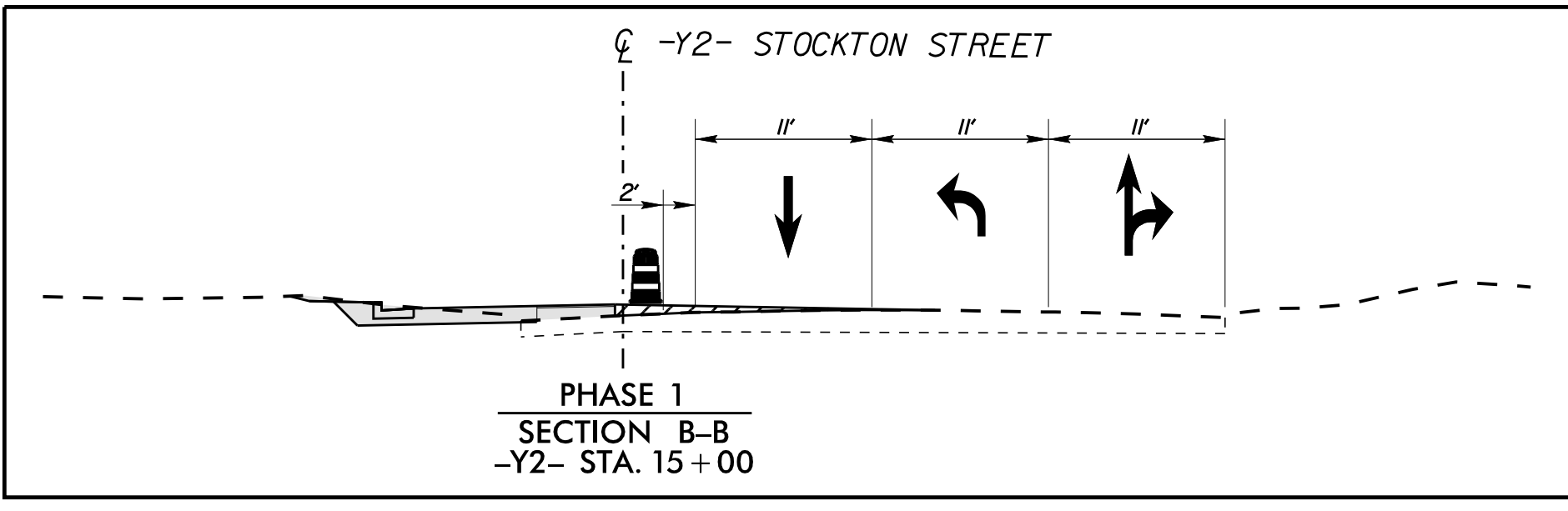
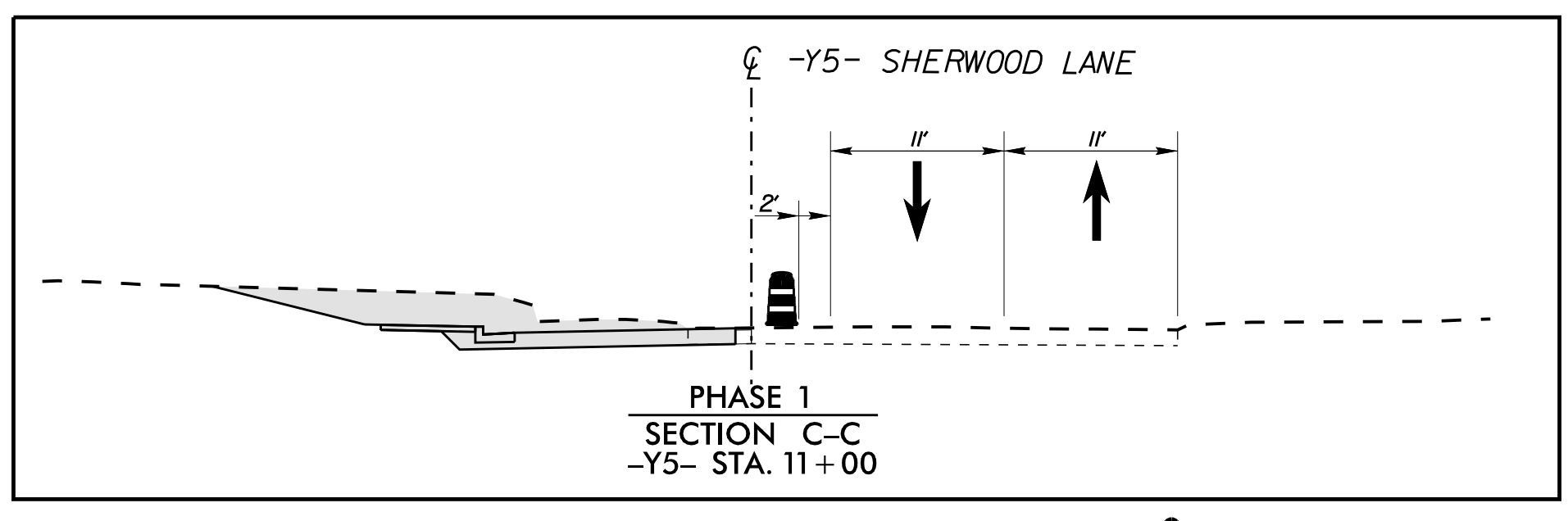
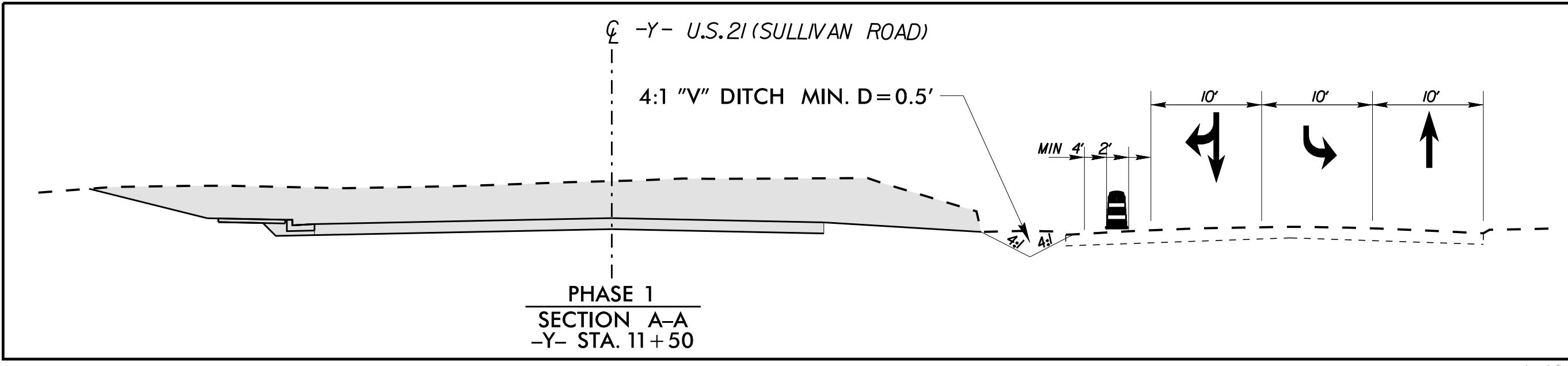
- CONSTRUCT SPLITTER ISLAND ISLAND ON -L- DAVIE AVENUE.
- CONSTRUCT SPLITTER ISLAND ISLAND ON -Y2- STOCKTON STREET.
- CONSTRUCT SPLITTER ISLAND ISLAND ON -Y3- EAST END AVENUE.

STEP 2:

- PLACE FINAL LAYER OF ASPHALT, FINAL PAVEMENT MARKINGS, MARKERS, AND SIGNAGE ON ANY REMAINING TIE-IN AREAS.
- REMOVE TRAFFIC CONTROL DEVICES AND OPEN ALL LANES TO TRAFFIC.

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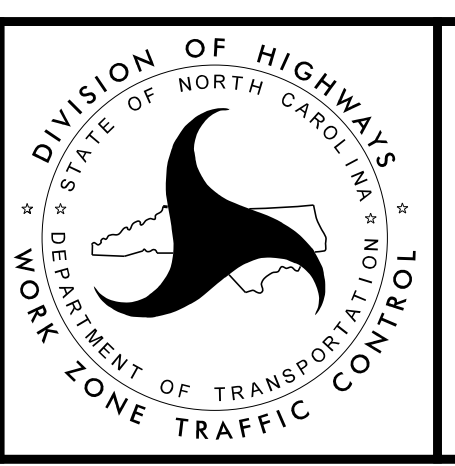
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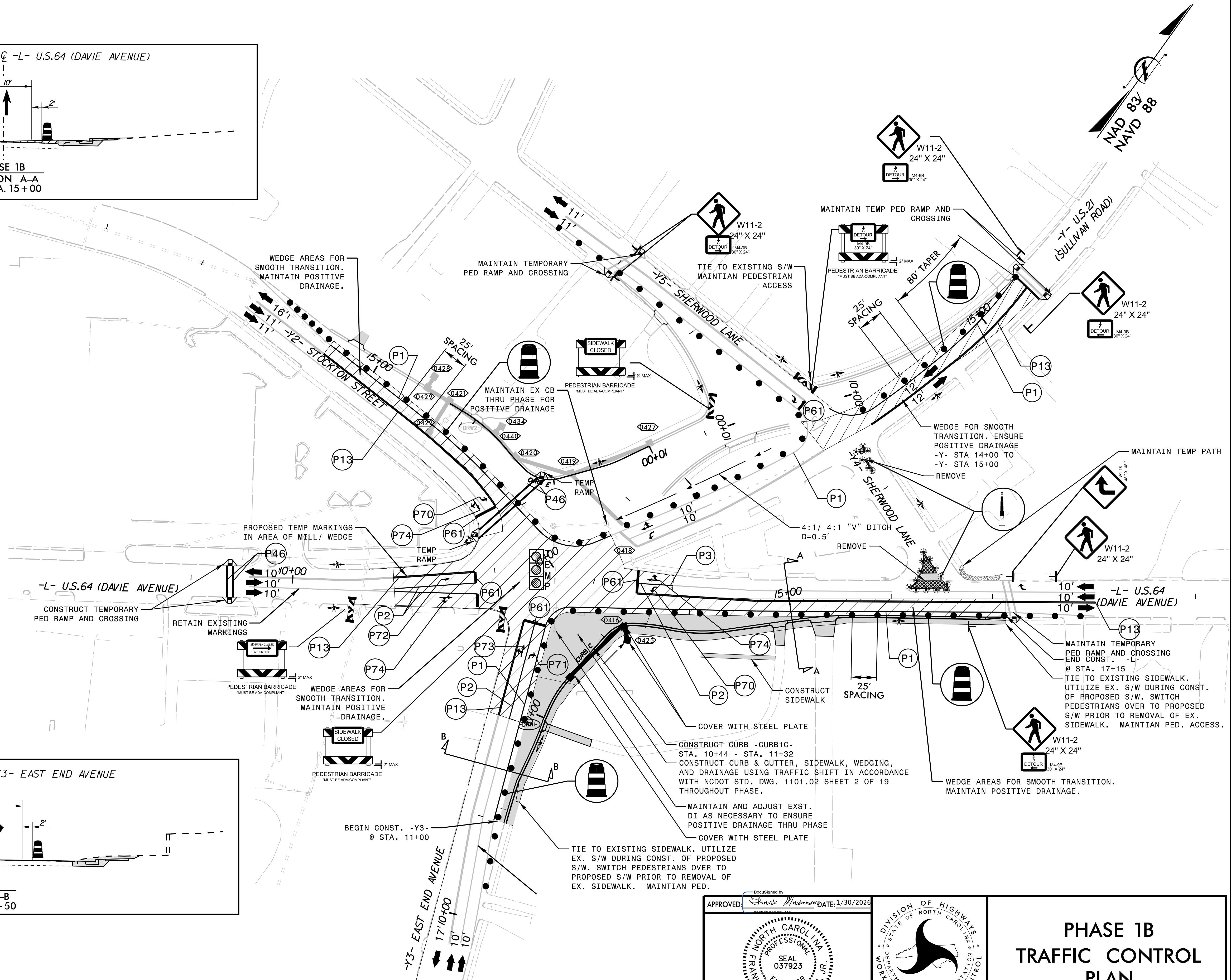
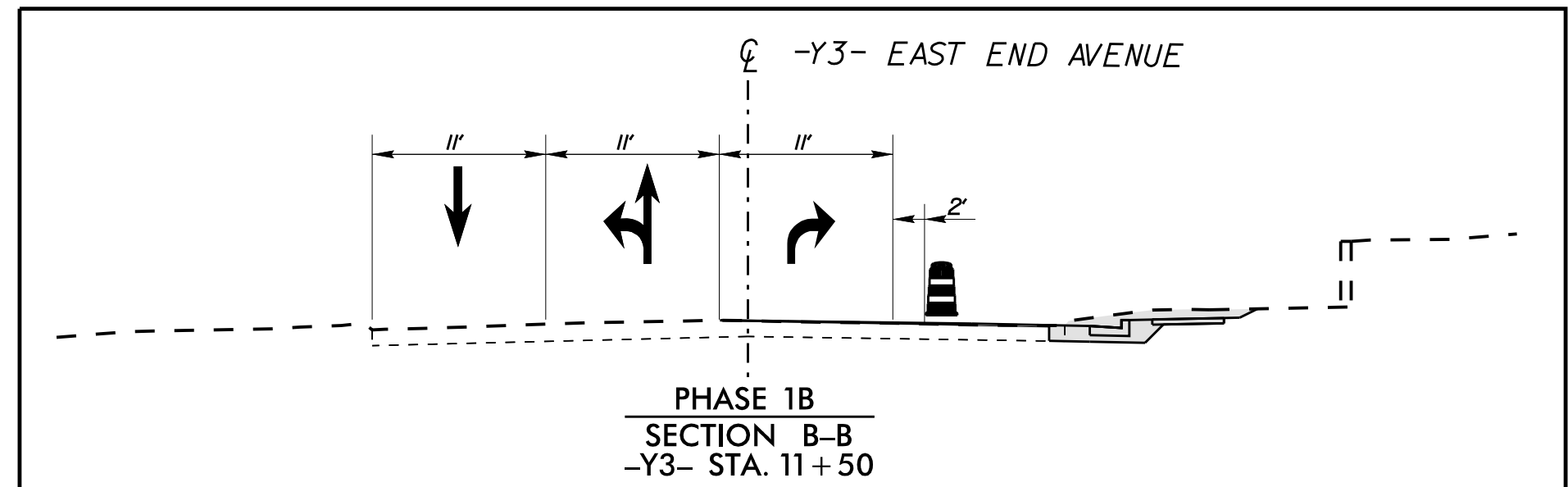
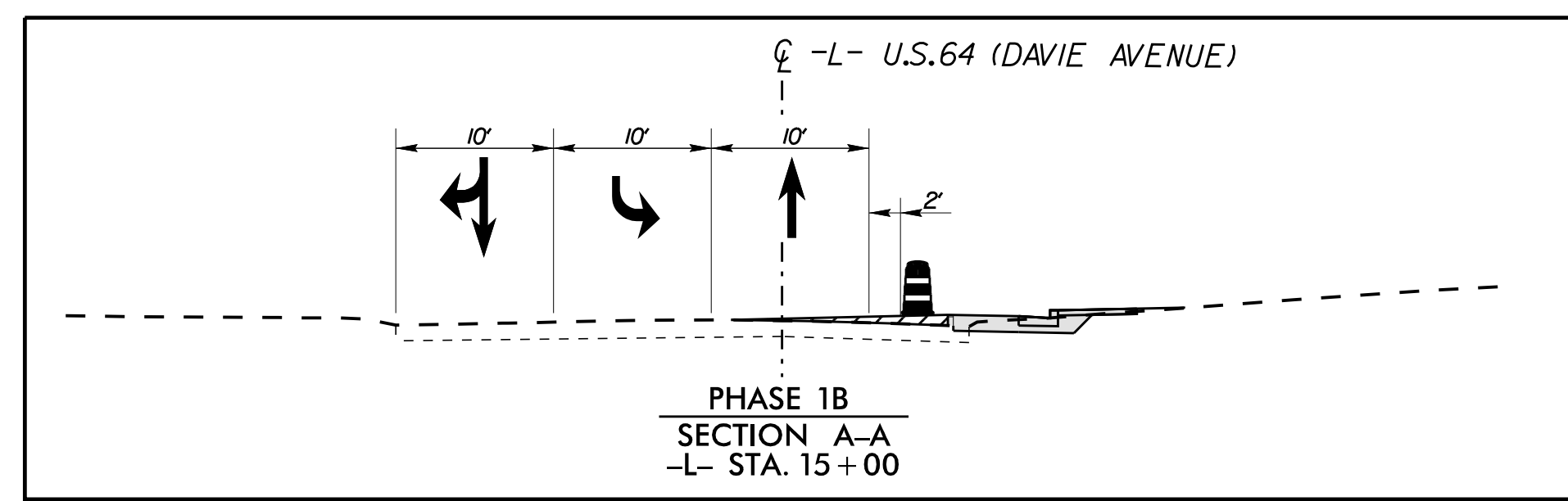
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APPROVED: *Frank D. Masterson* DATE: 1/30/2026

FRANK D. MASTERSON, JR.
SEAL 037923
ENGINEER



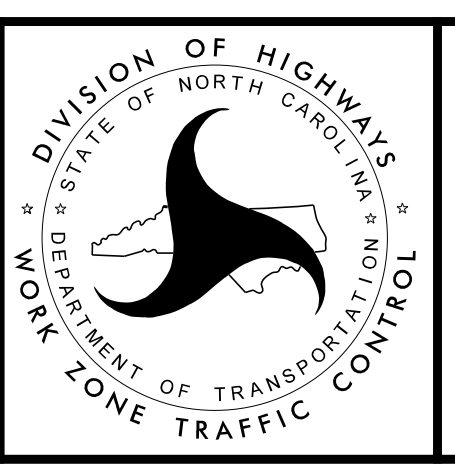
PHASE 1A TRAFFIC CONTROL PLAN



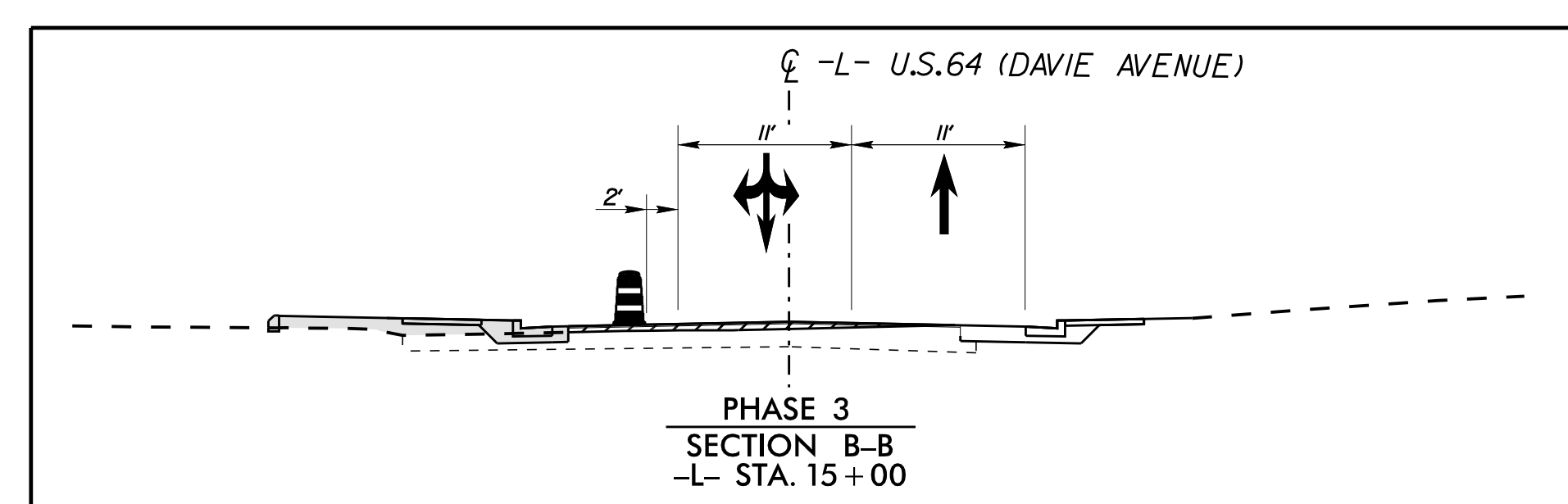
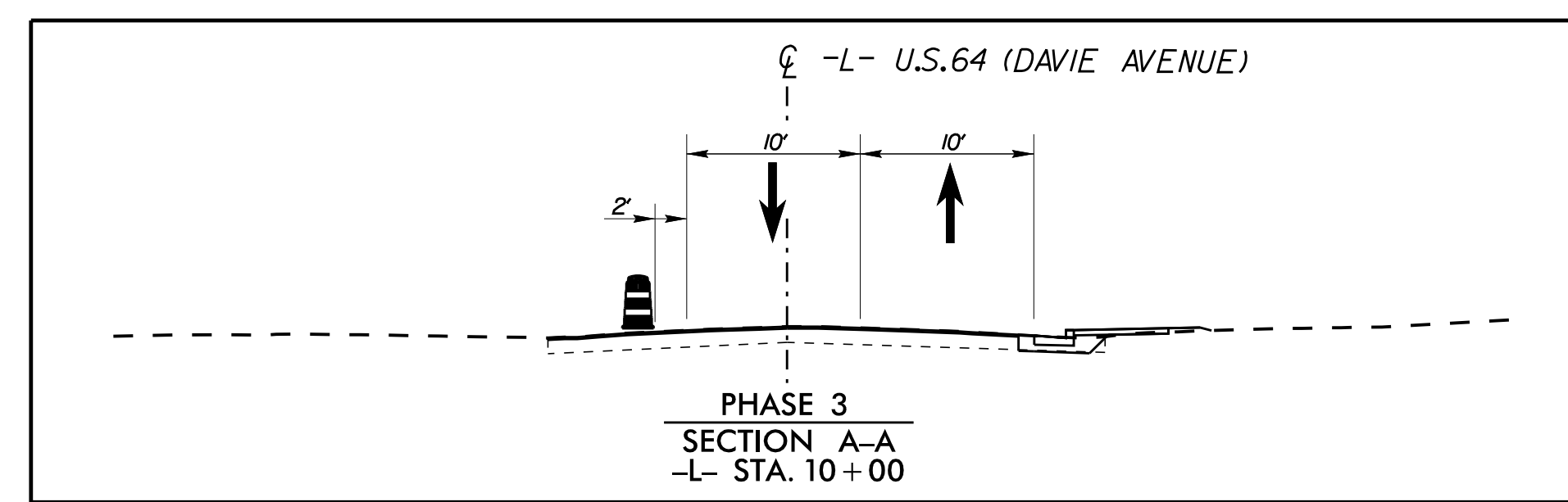
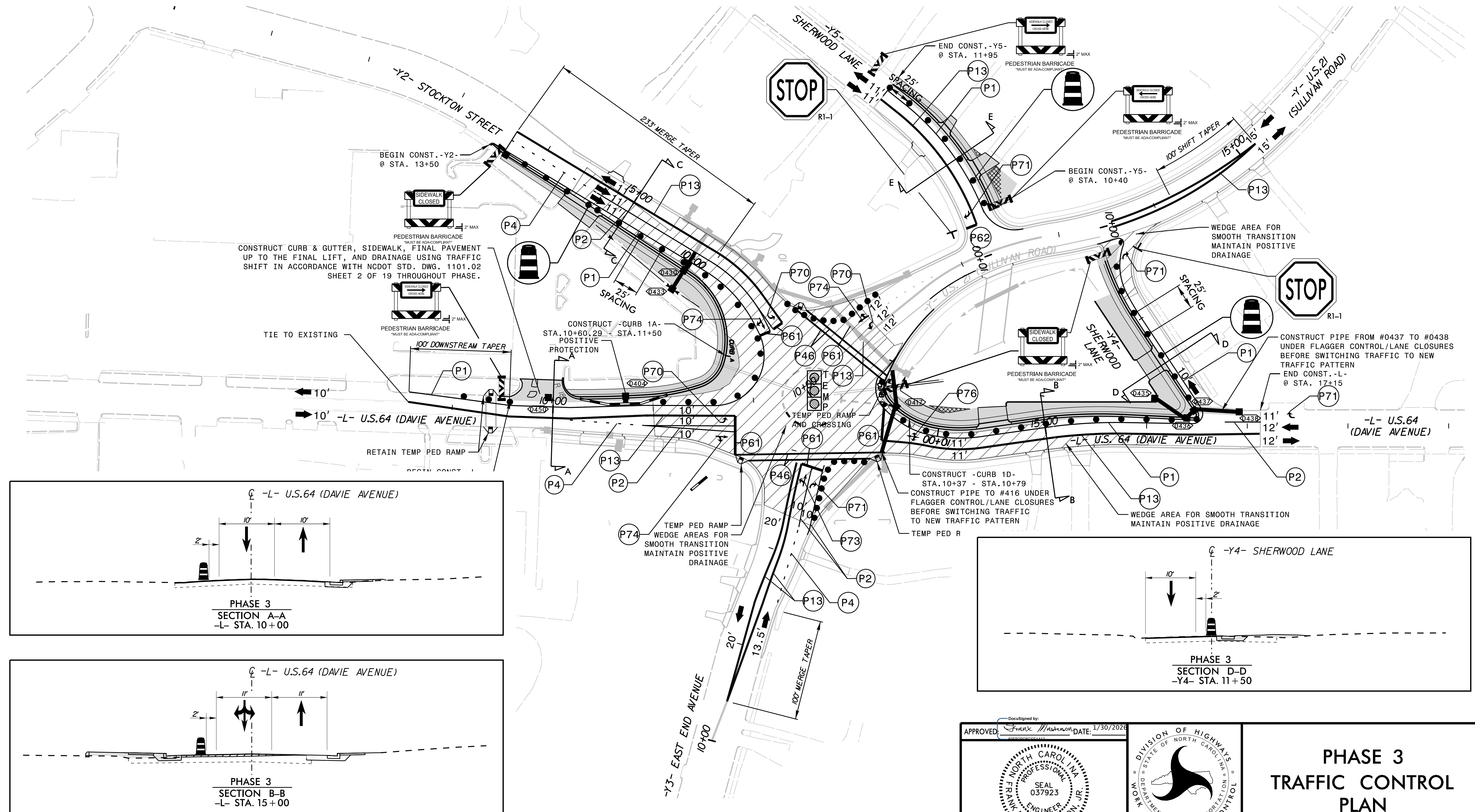
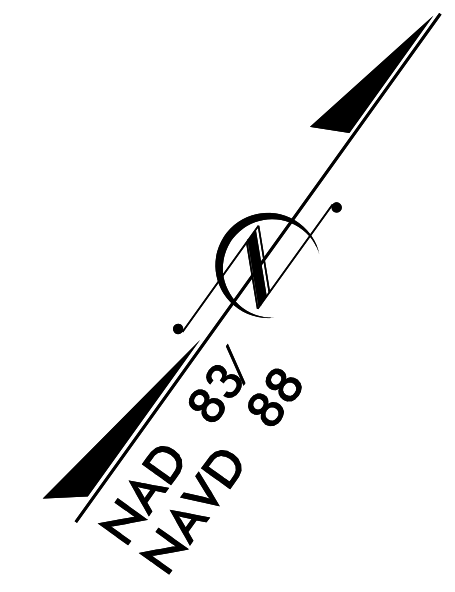
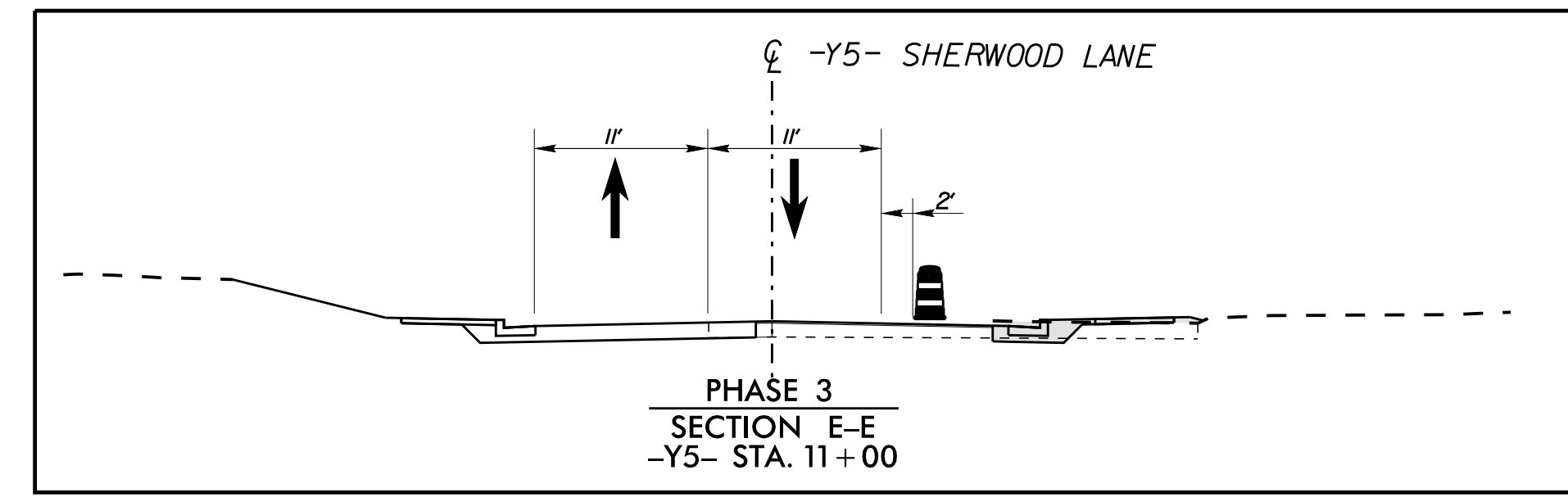
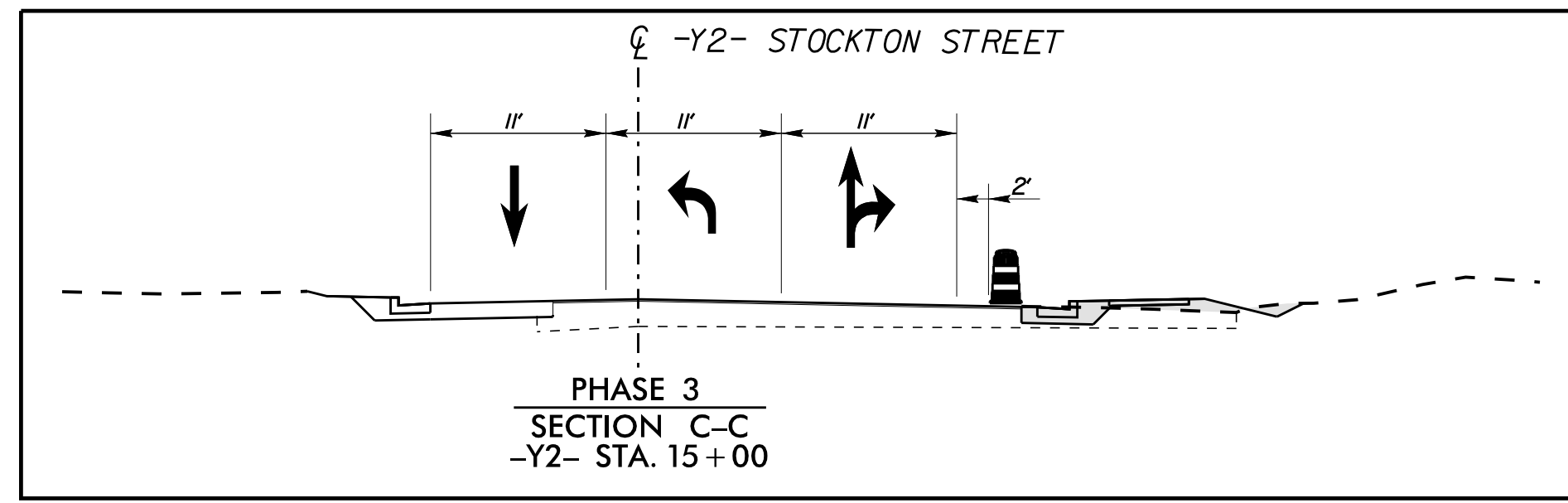
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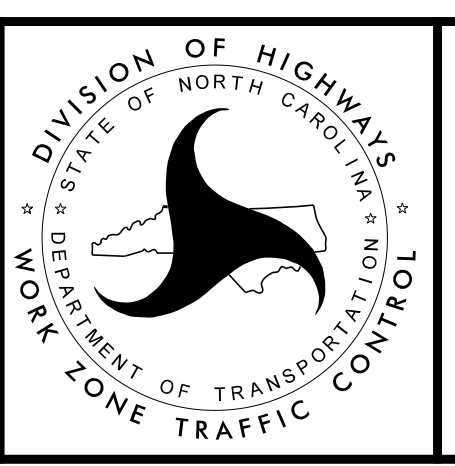
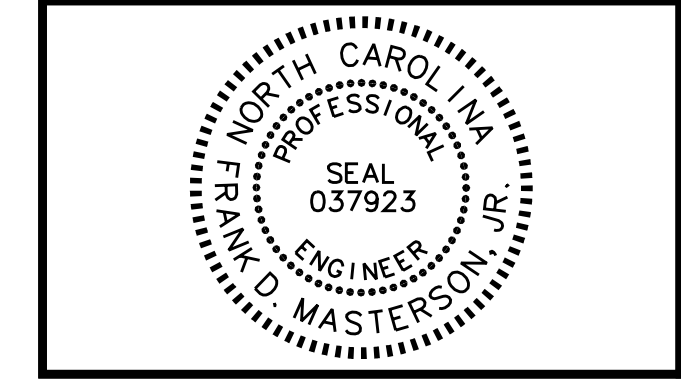
NORTH CAROLINA PROFESSIONAL ENGINEER
FRANK D. MASTERSON, JR.
SEAL 037923



PHASE 1B TRAFFIC CONTROL PLAN

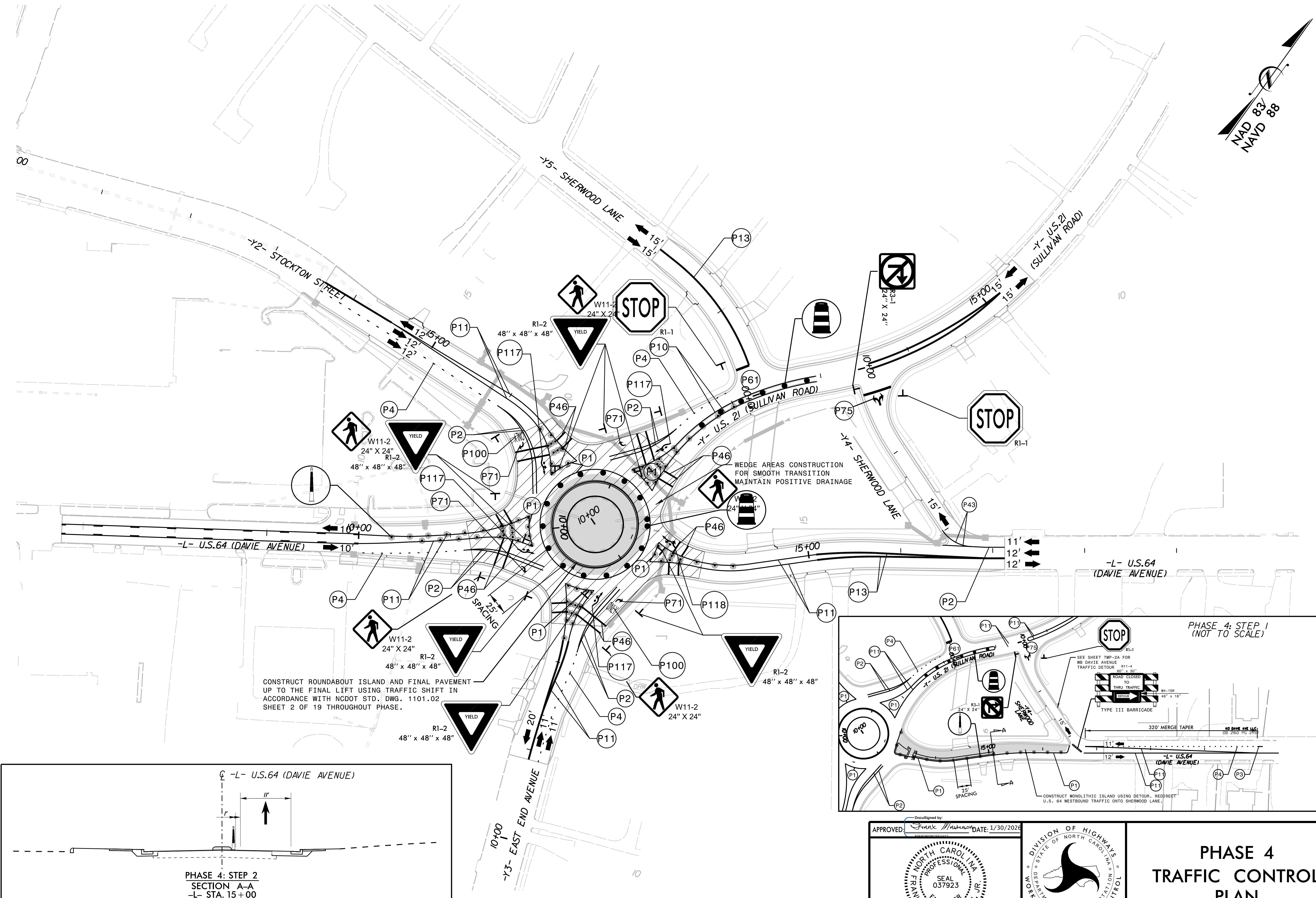
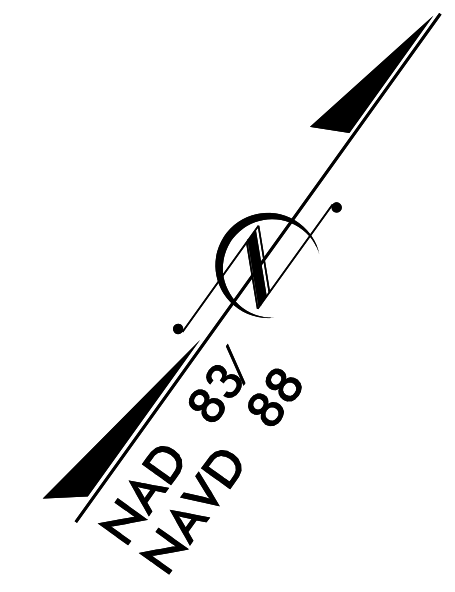


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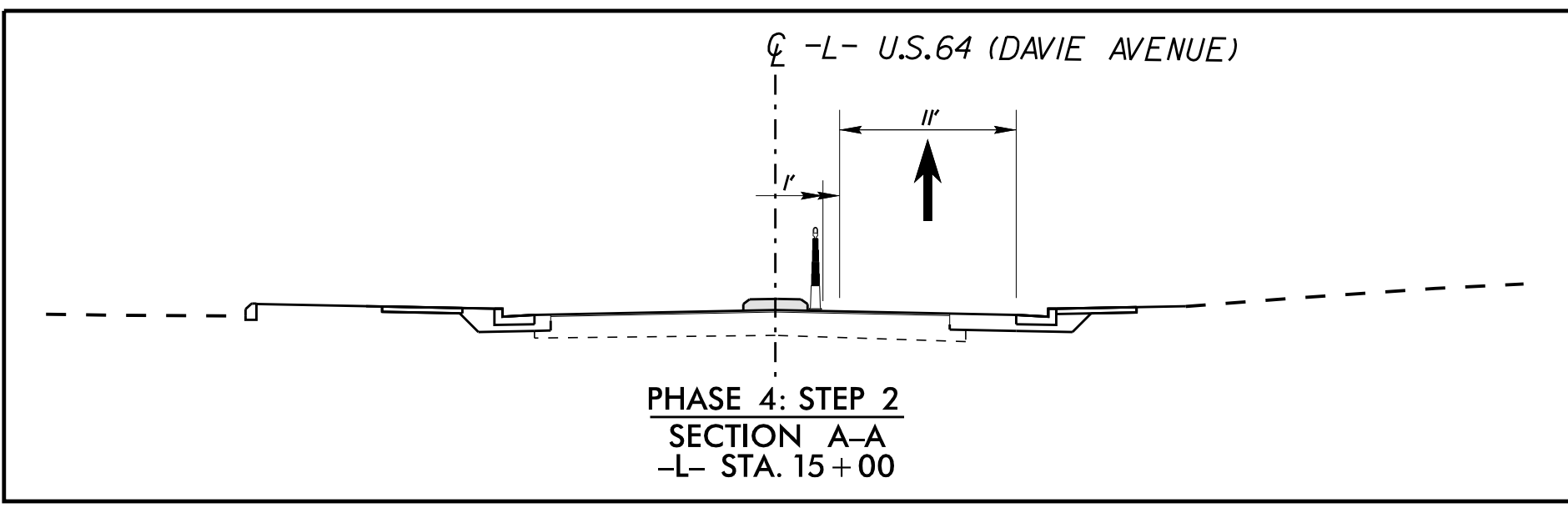
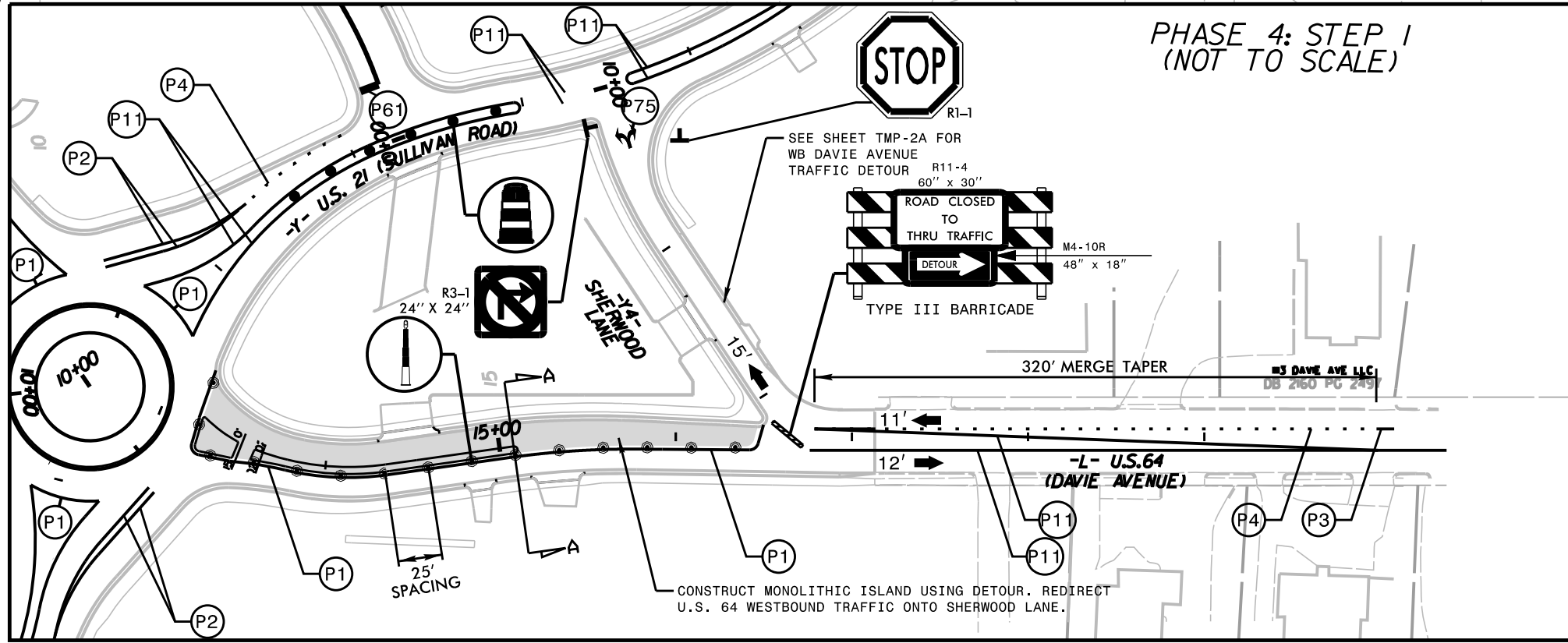
PHASE 3 TRAFFIC CONTROL PLAN

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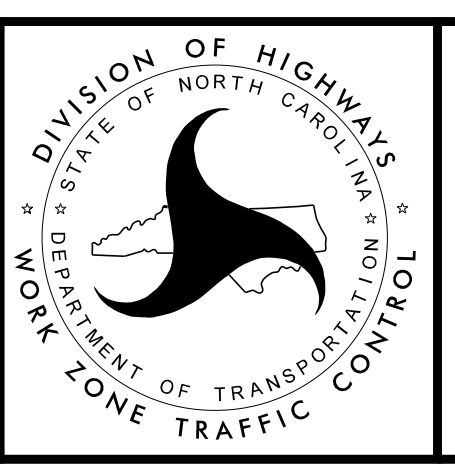


CONSTRUCT ROUNDABOUT ISLAND AND FINAL PAVEMENT UP TO THE FINAL LIFT USING TRAFFIC SHIFT IN ACCORDANCE WITH NCDOT STD. DWG. 1101.02 SHEET 2 OF 19 THROUGHOUT PHASE.

WEDGE AREAS CONSTRUCTION FOR SMOOTH TRANSITION MAINTAIN POSITIVE DRAINAGE

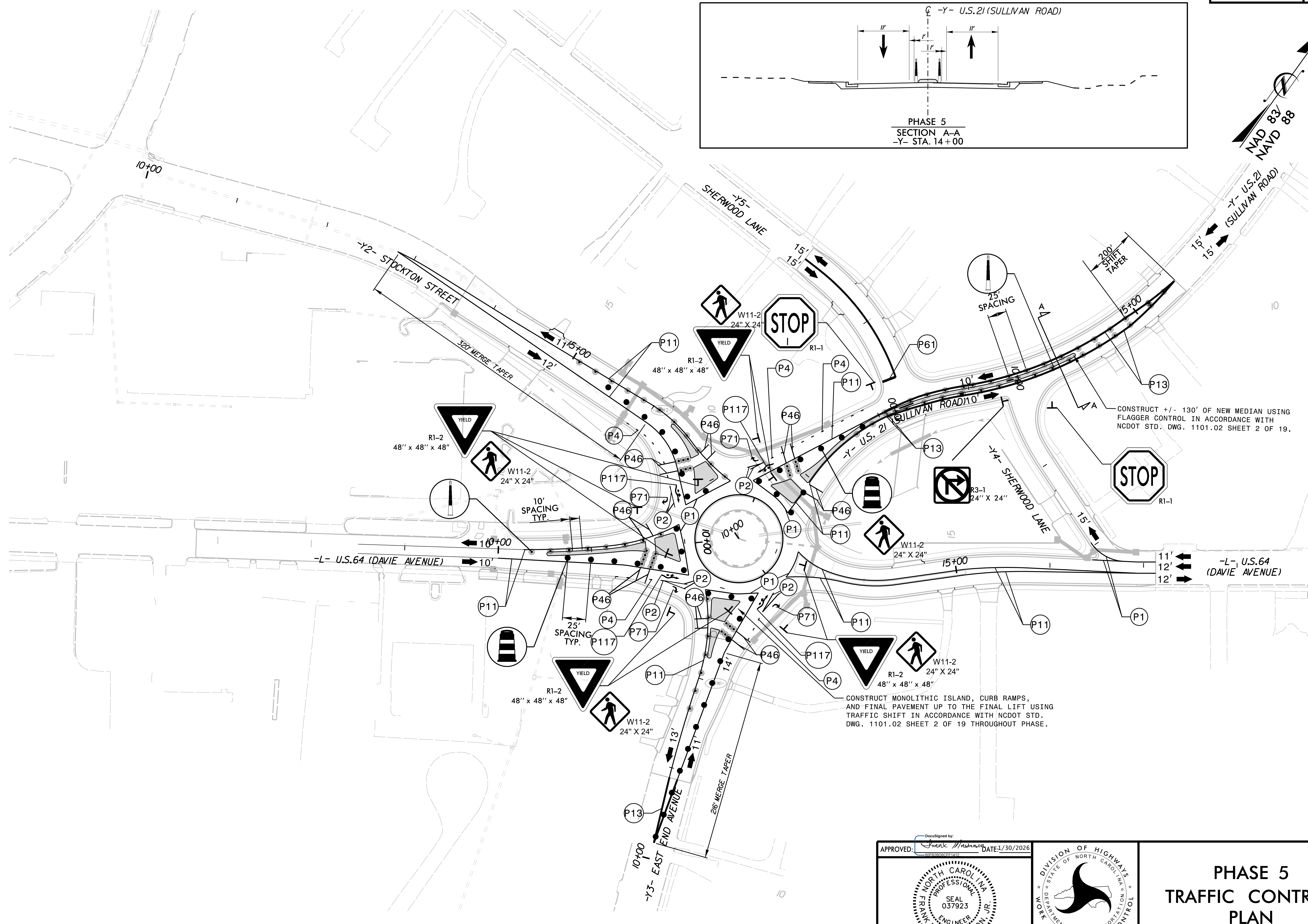
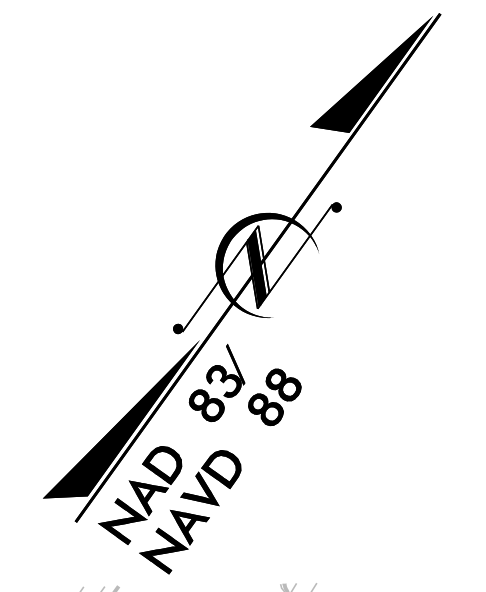
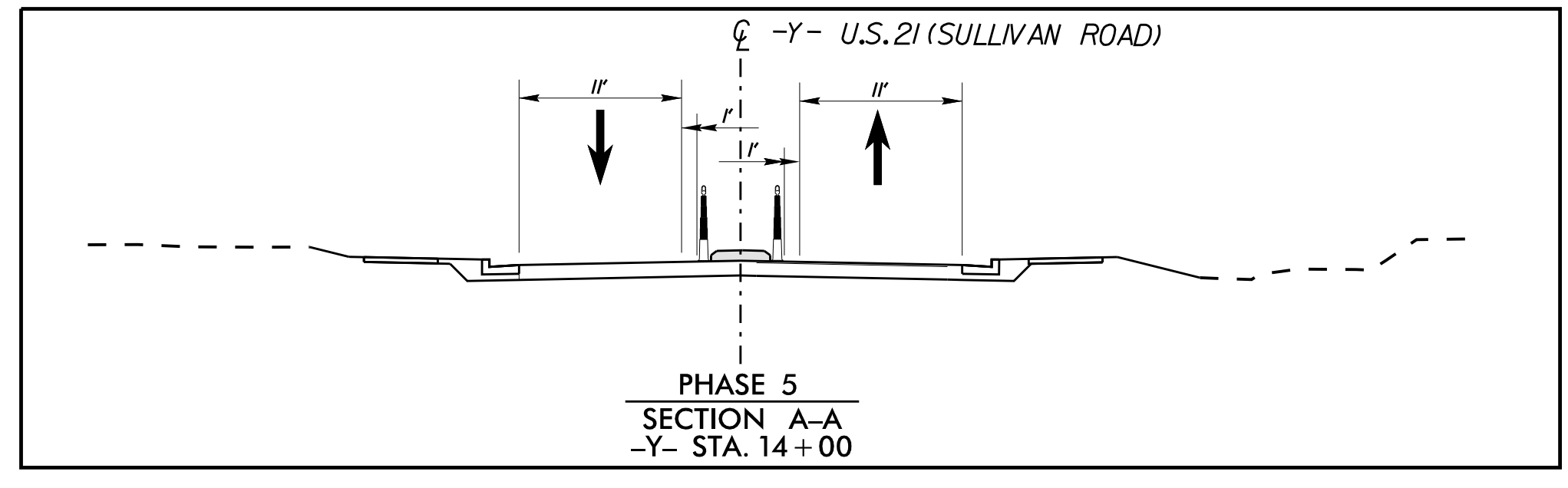


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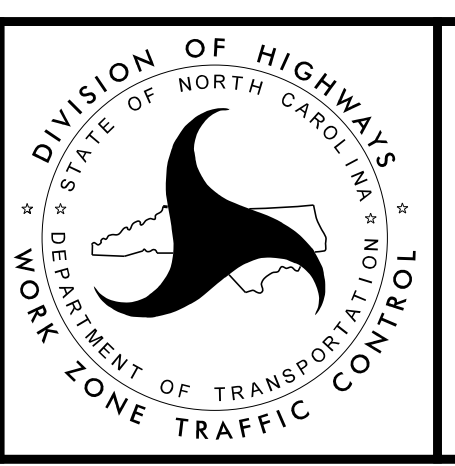
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PHASE 5 TRAFFIC CONTROL PLAN

TIP NO.	SHEET NO.
U-5964	PMP-1
APPROVED: _____	
DATE: _____	
SEAL	
	
DocuSigned by: <i>Frank Masterson</i> 1/30/2026	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN
IREDELL COUNTY**

**LOCATION: INTERSECTION OF US 64 (DAVIE AVENUE) AND US 21 (SULLIVAN ROAD),
STOCKTON STREET, AND EAST END AVENUE**

IN LIEU OF SHEET 1250D01

T.I.P.: U-5964

CONTRACT: C204431

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN TITLE AND SCHEDULE SHEET
PMP-2	PAVEMENT MARKING DETAIL

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
	FINAL PAVEMENT MARKINGS
	THERMOPLASTIC (4", 90 MILS)
T2	WHITE SOLID LANE LINE
T4	WHITE 3'-9"/SP MINI-SKIP
T11	YELLOW SINGLE CENTER
T13	YELLOW DOUBLE CENTER
	THERMOPLASTIC (8", 90 MILS)
T40	WHITE GORELINE
T41	WHITE DIAGONAL
T43	WHITE SOLID LANE LINE
T45	3 FT. - 3 FT./SP WHITE MINISKIP
T46	WHITE CROSSWALK LINE
	THERMOPLASTIC (24", 90 MILS)
T61	WHITE STOPBAR
	THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MILS)
T71	RIGHT TURN ARROW
T100	ALPHANUMERIC CHAR.
T103	YIELD LINE TRIANGLE
T111	FISH-HOOK LEFT/STRAIGHT ARROW
T114	FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 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 - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

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 ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
-L-	THERMOPLASTIC	POLYCARBONATE H-SHAPED MARKER
-Y-	THERMOPLASTIC	POLYCARBONATE H-SHAPED MARKER
-Y2-	THERMOPLASTIC	NONE
-Y3-	THERMOPLASTIC	NONE
-Y4-	THERMOPLASTIC	NONE
-Y5-	THERMOPLASTIC	NONE

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

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

D) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

E) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR ARROWS, STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.

PLAN REVIEWED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

KELVIN L. JORDAN	SIGNING & DELINEATION REGIONAL ENGINEER
WALTER JOHNSON	SIGNING & DELINEATION PROJECT DESIGN ENGINEER



PLAN PREPARED BY: Kimley-Horn and Associates

FRANK MASTERSON, P.E.	PROJECT DESIGN ENGINEER
ADAM RECKER, E.I.	DESIGNER




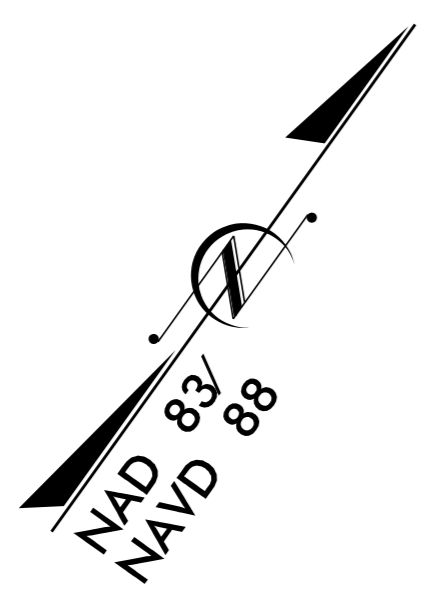
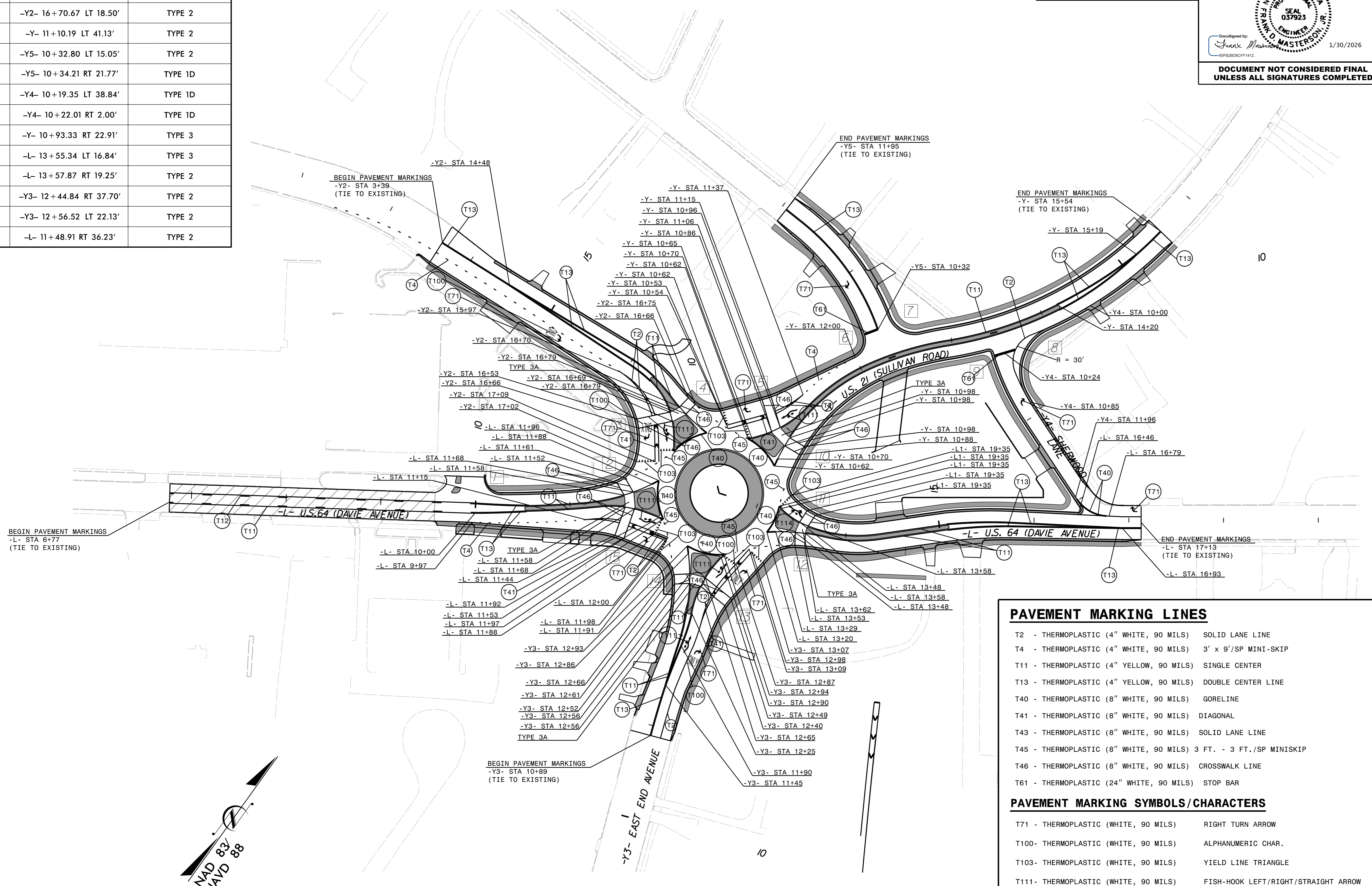
CURB RAMPS

1	-L- 10+15.24 LT 21.34'	TYPE 1 MOD
2	-L- 11+56.06 LT 22.88'	TYPE 3
3	-Y2- 16+59.43 RT 42.25'	TYPE 3
4	-Y2- 16+70.67 RT 18.50'	TYPE 2
5	-Y- 11+10.19 LT 41.13'	TYPE 2
6	-Y5- 10+32.80 LT 15.05'	TYPE 2
7	-Y5- 10+34.21 RT 21.77'	TYPE 1D
8	-Y4- 10+19.35 LT 38.84'	TYPE 1D
9	-Y4- 10+22.01 RT 2.00'	TYPE 1D
10	-Y- 10+93.33 RT 22.91'	TYPE 3
11	-L- 13+55.34 LT 16.84'	TYPE 3
12	-L- 13+57.87 RT 19.25'	TYPE 2
13	-Y3- 12+44.84 RT 37.70'	TYPE 2
14	-Y3- 12+56.52 LT 22.13'	TYPE 2
15	-L- 11+48.91 RT 36.23'	TYPE 2

REVISIONS

Kimley»Horn
 200 S. TRYON ST. • CHARLOTTE, NC 28202
 RIGHT-OF-WAY REV.
 CONST. REV.

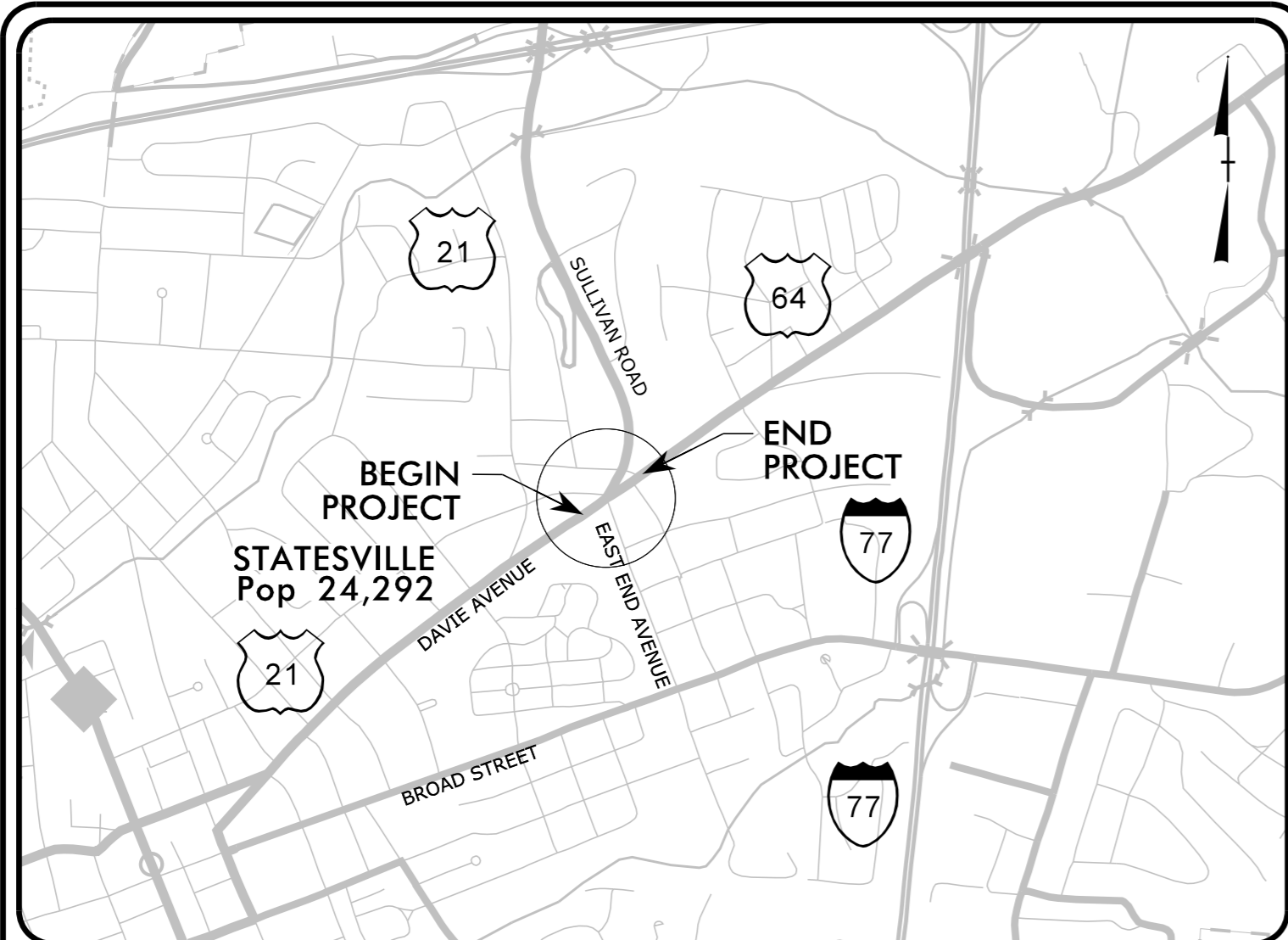
PROJECT REFERENCE NO.	U-5964	SHEET NO.	PMP-2
RW SHEET NO.	ROADWAY ENGINEER		
			
DocuSigned by:	Frank Masterston	1/30/2026	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



PAVEMENT MARKING LINES	
T2	- THERMOPLASTIC (4" WHITE, 90 MILS) SOLID LANE LINE
T4	- THERMOPLASTIC (4" WHITE, 90 MILS) 3' x 9'/SP MINI-SKIP
T11	- THERMOPLASTIC (4" YELLOW, 90 MILS) SINGLE CENTER
T13	- THERMOPLASTIC (4" YELLOW, 90 MILS) DOUBLE CENTER LINE
T40	- THERMOPLASTIC (8" WHITE, 90 MILS) GORELINE
T41	- THERMOPLASTIC (8" WHITE, 90 MILS) DIAGONAL
T43	- THERMOPLASTIC (8" WHITE, 90 MILS) SOLID LANE LINE
T45	- THERMOPLASTIC (8" WHITE, 90 MILS) 3 FT. - 3 FT./SP MINISKIP
T46	- THERMOPLASTIC (8" WHITE, 90 MILS) CROSSWALK LINE
T61	- THERMOPLASTIC (24" WHITE, 90 MILS) STOP BAR

PAVEMENT MARKING SYMBOLS/CHARACTERS	
T71	- THERMOPLASTIC (WHITE, 90 MILS) RIGHT TURN ARROW
T100	- THERMOPLASTIC (WHITE, 90 MILS) ALPHANUMERIC CHAR.
T103	- THERMOPLASTIC (WHITE, 90 MILS) YIELD LINE TRIANGLE
T111	- THERMOPLASTIC (WHITE, 90 MILS) FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW
T114	- THERMOPLASTIC (WHITE, 90 MILS) FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW

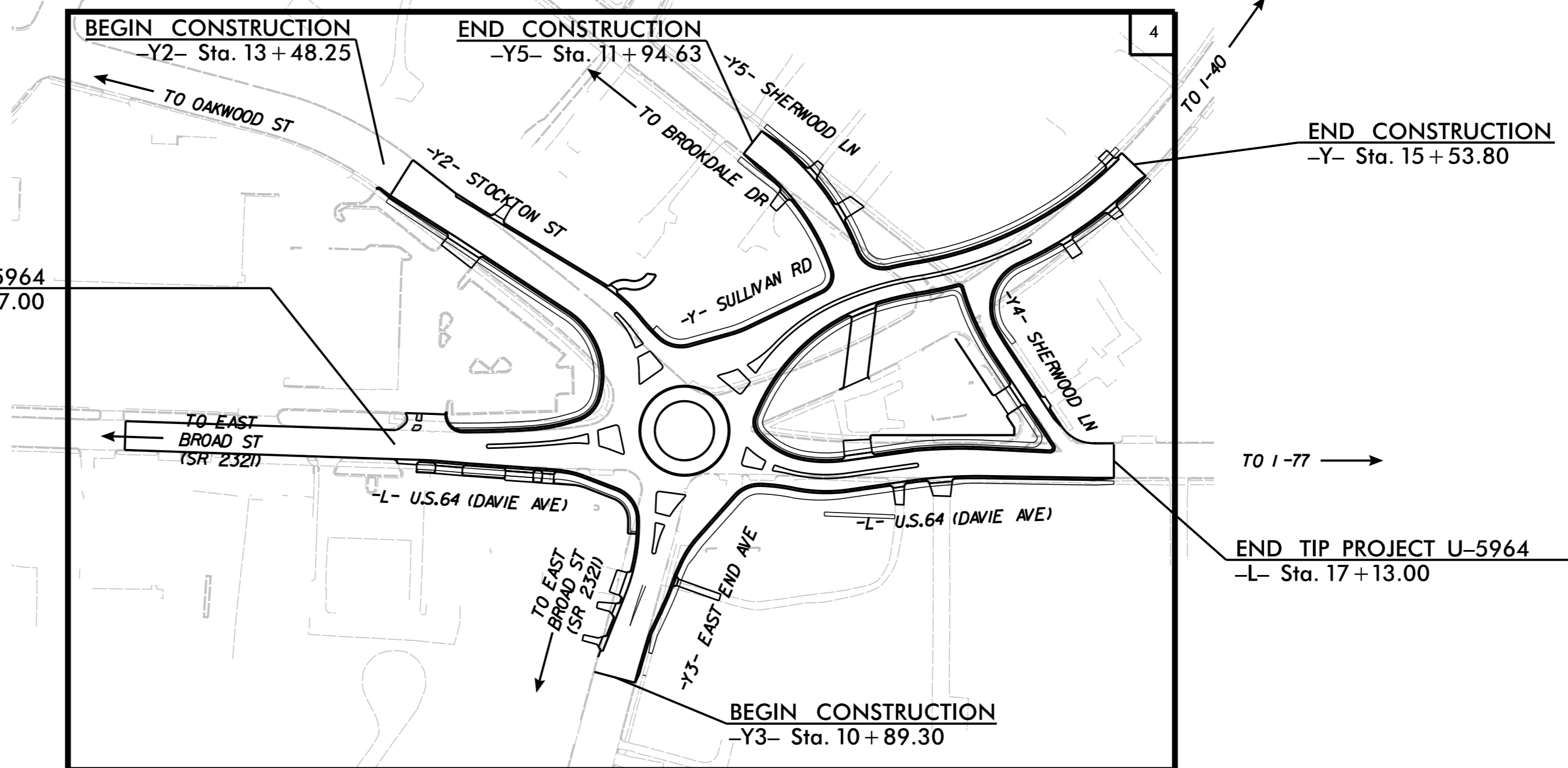
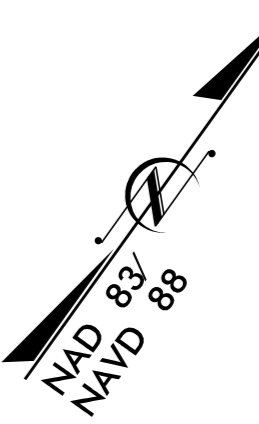
CONTRACT: DL00376 TIP PROJECT: U-5964



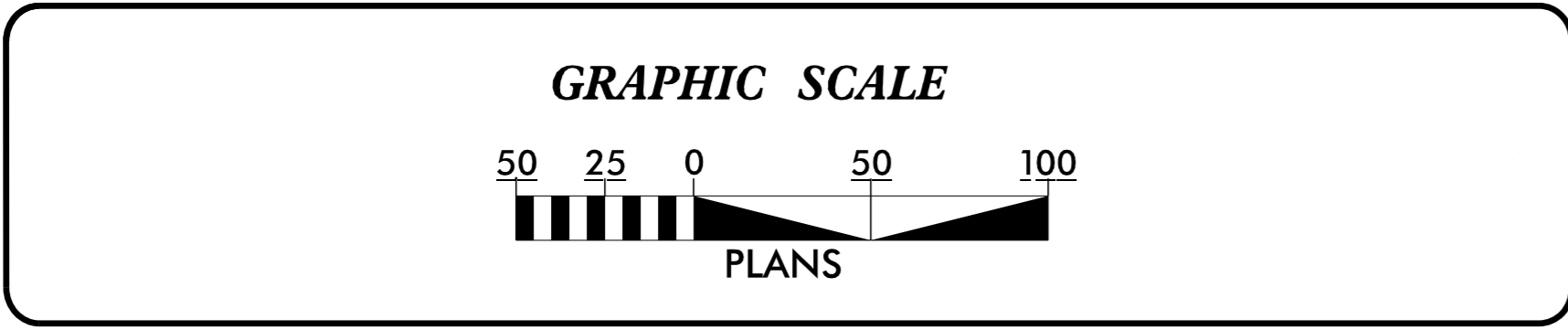
VICINITY MAP
NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
**PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL**
IREDELL COUNTY

LOCATION: INTERSECTION OF US 64 (DAVIE AVENUE), US 21 (SULLIVAN ROAD), STOCKTON STREET, AND EAST END AVENUE
TYPE OF WORK: GRADING, PAVING & DRAINAGE



THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

Kimley»Horn

NC LICENSE #P-0102
200 SOUTH TRYON STREET, SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (704) 333-5131

Prepared in the Office of:
KIMLEY HORN
200 SOUTH TRYON STREET, SUITE 200
CHARLOTTE, NORTH CAROLINA 28202

Designed by:
SPENCER GREEN, PE 4244
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5964	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

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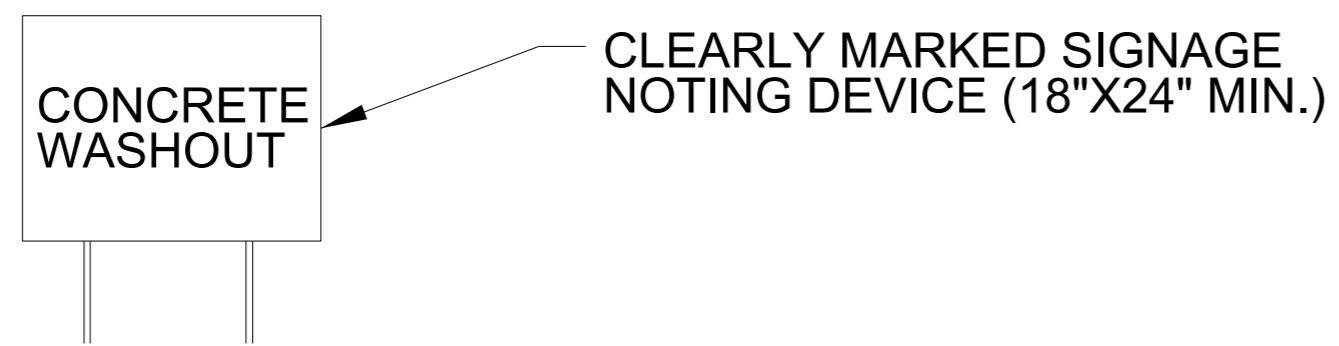
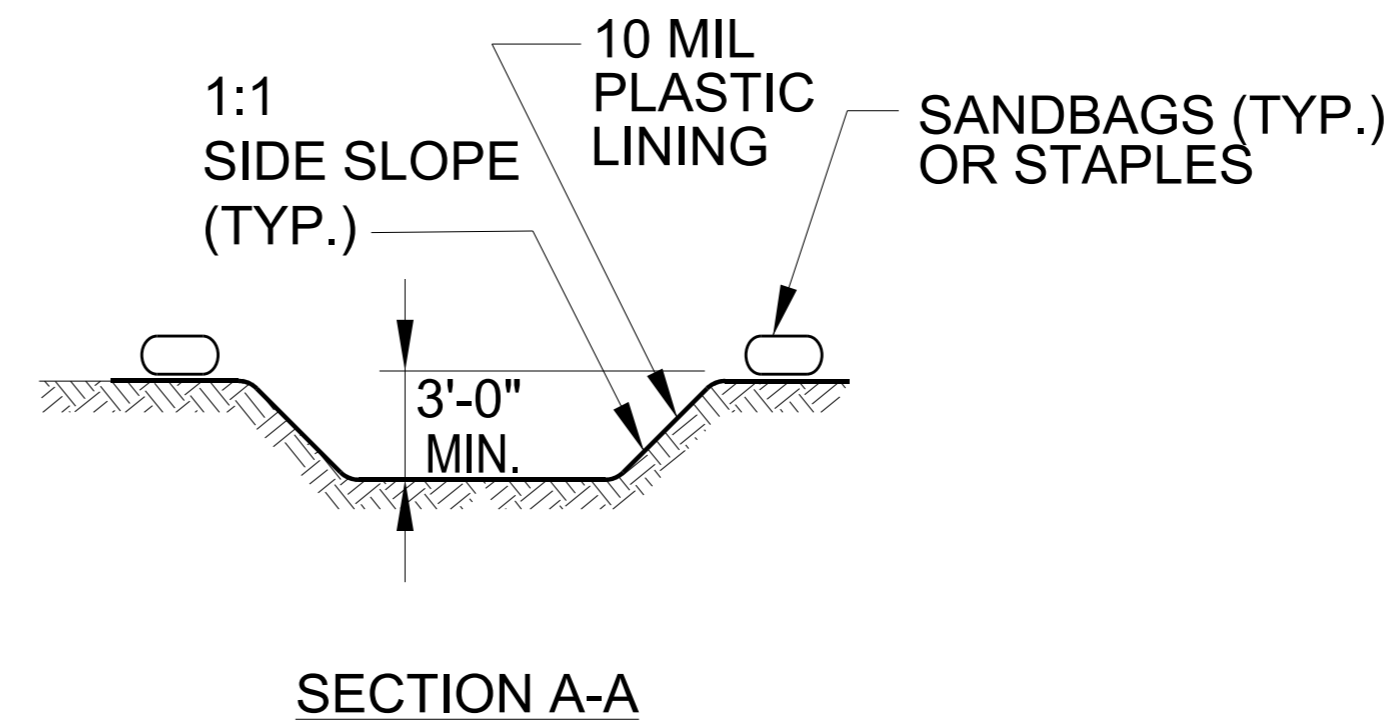
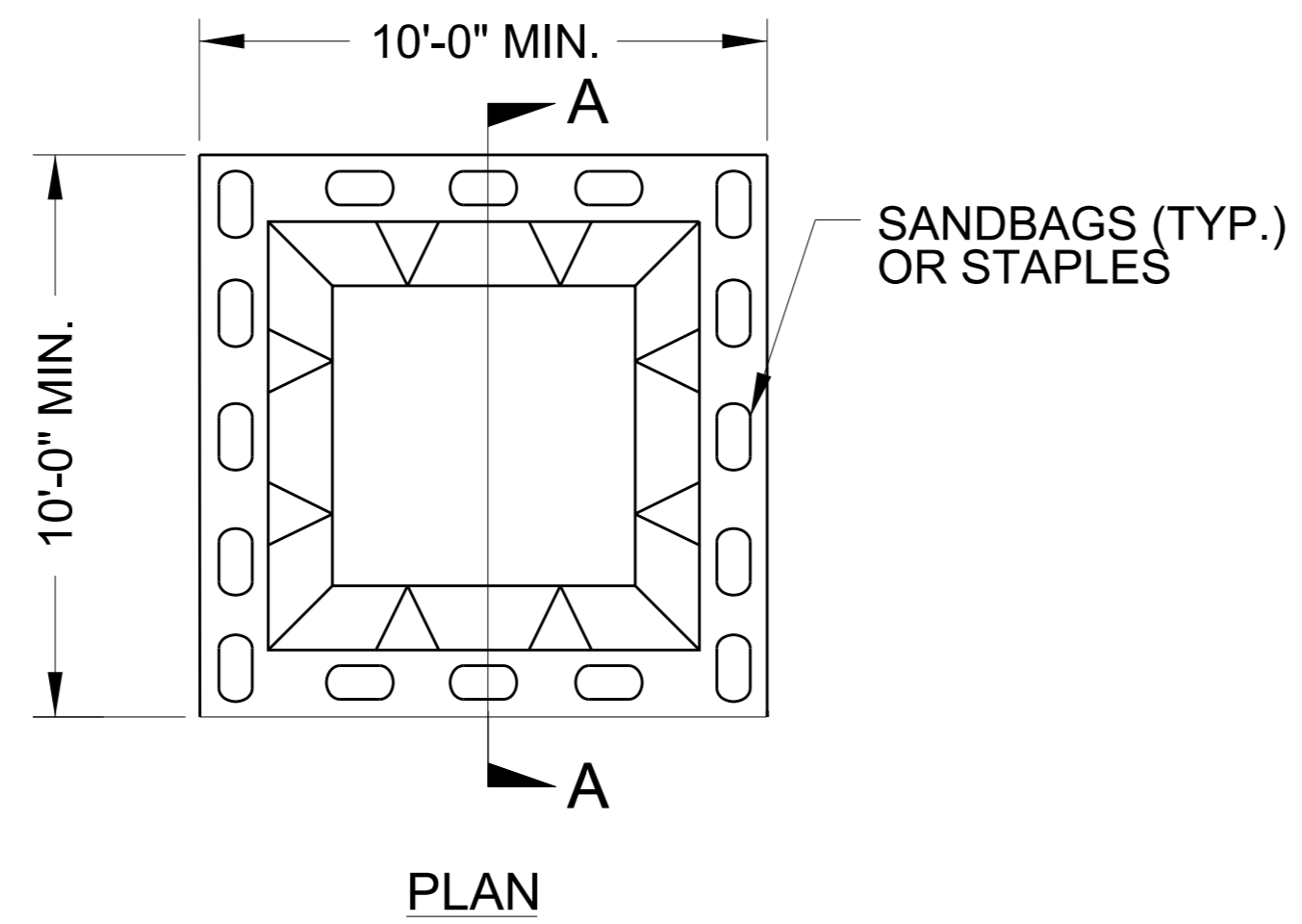
PROJECT REFERENCE NO. <i>U-5964</i>	SHEET NO. <i>EC-2</i>
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EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

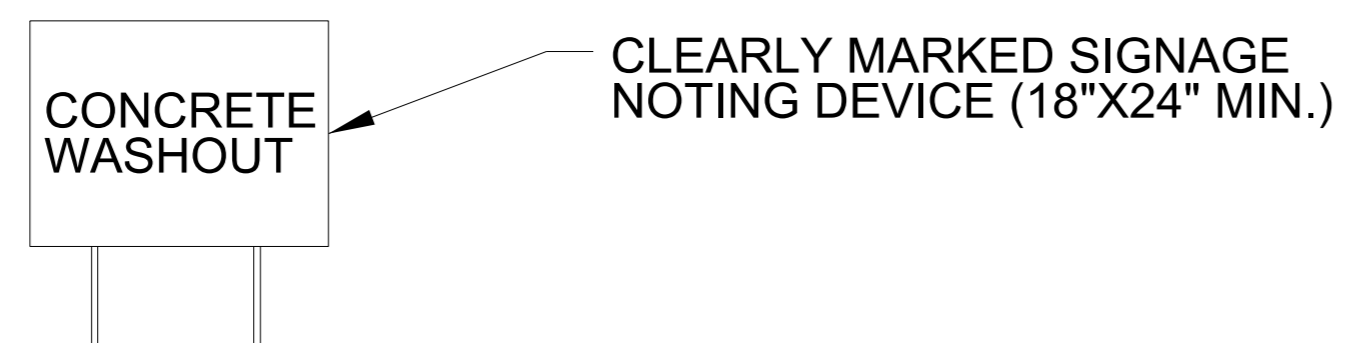
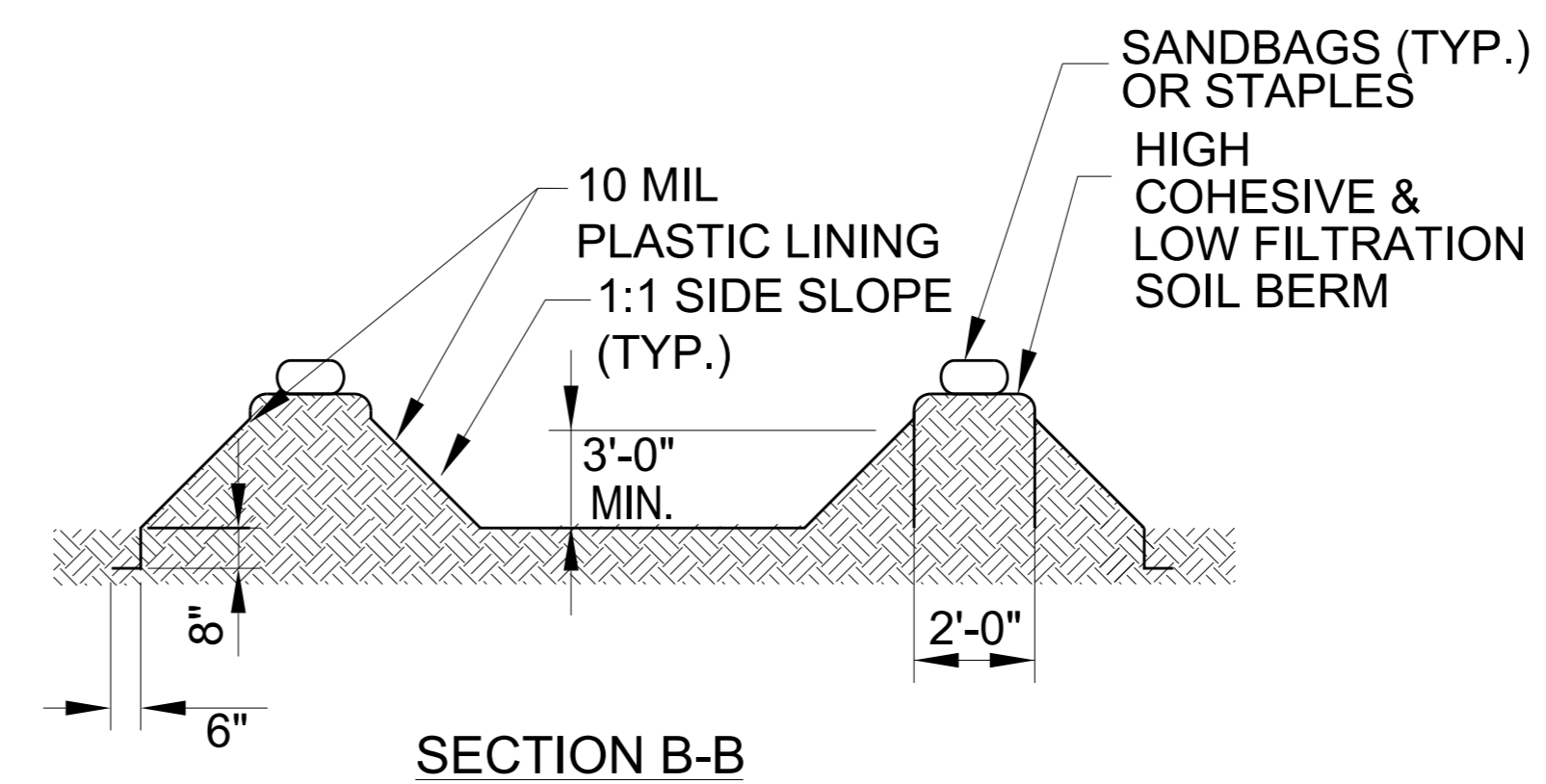
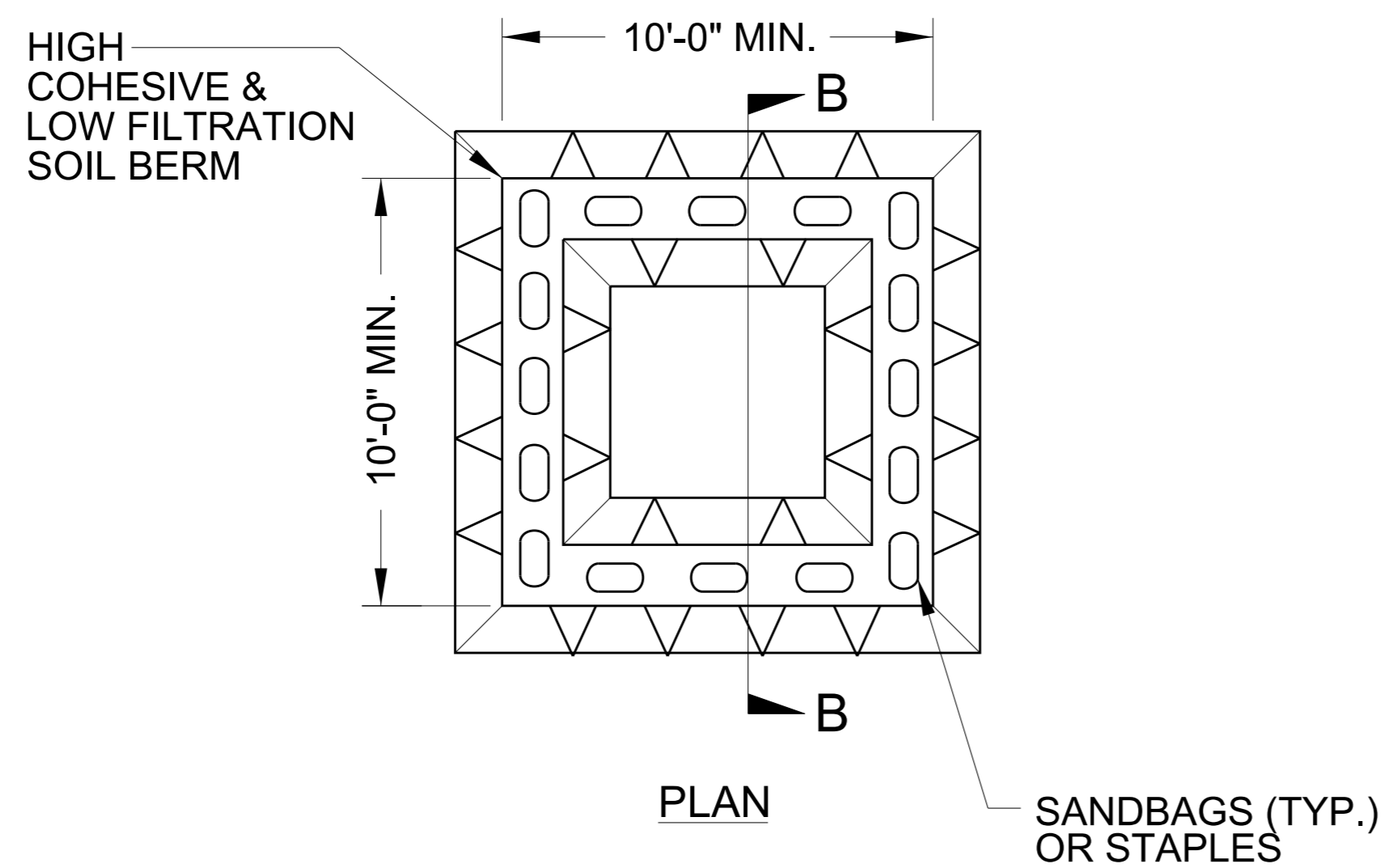
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ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
 NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



ABOVE GRADE WASHOUT STRUCTURE
 NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

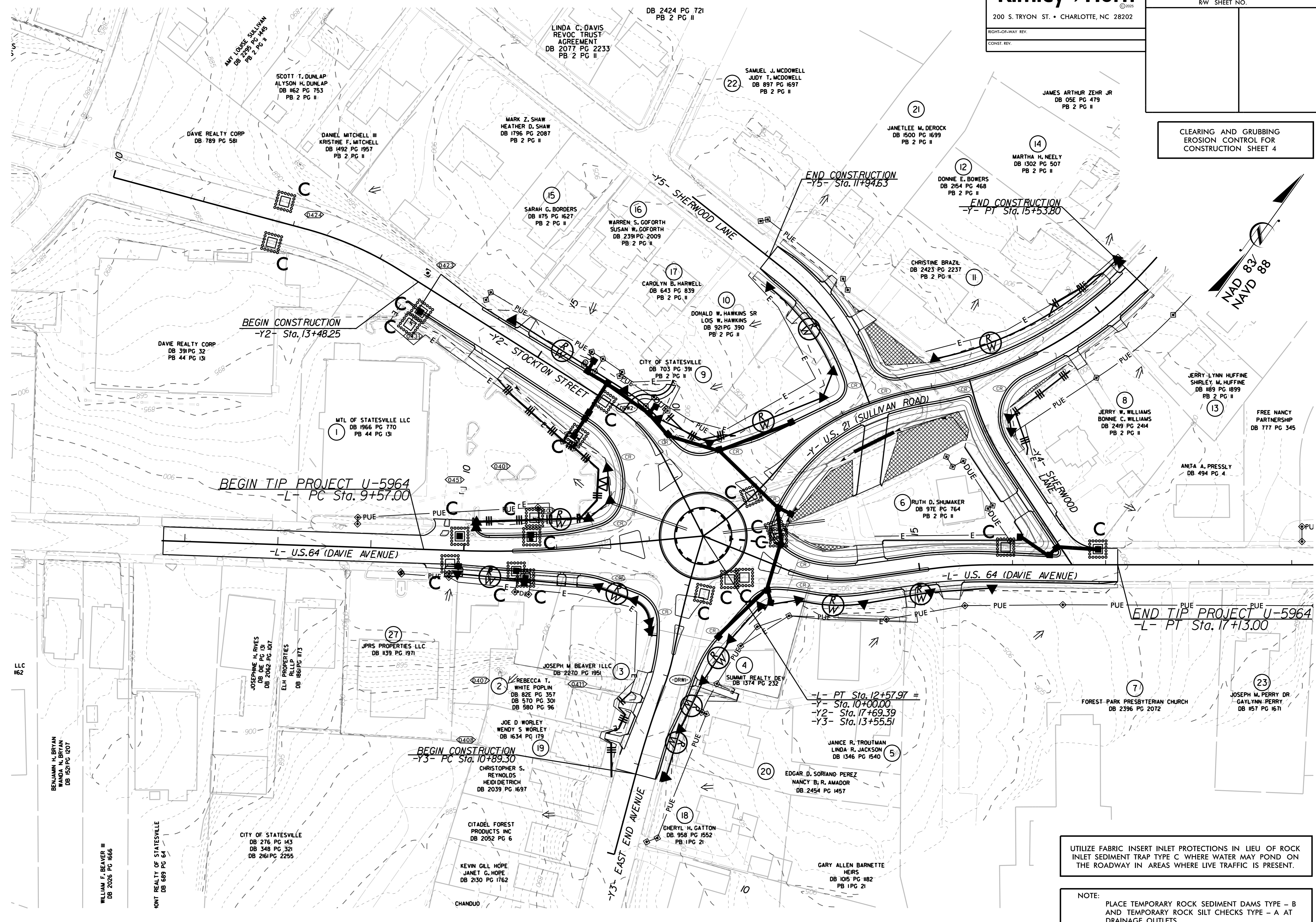
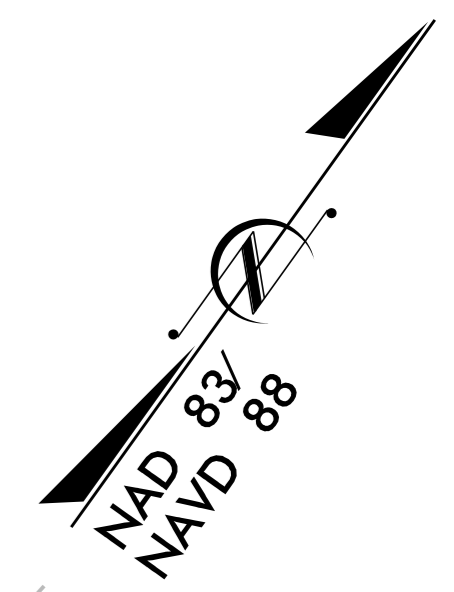
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 RIGHT-OF-WAY REV.
 CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-5964	EC-3

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
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 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

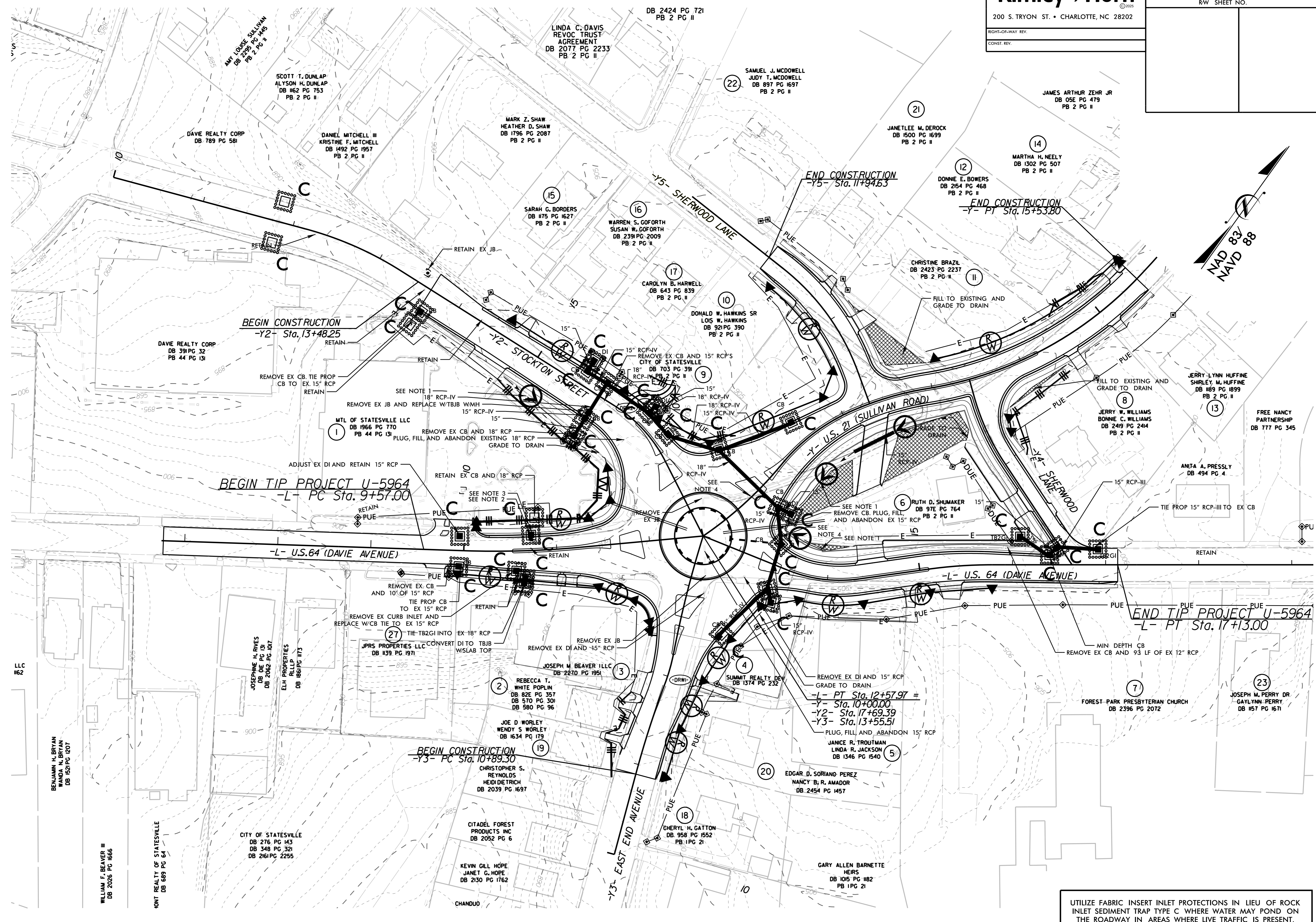
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

PROJECT REFERENCE NO.	SHEET NO.
U-5964	EC-5/CONST.4
RW SHEET NO.	

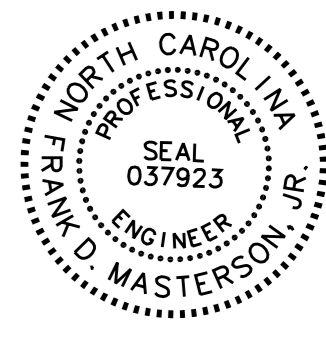


UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
IREDELL COUNTY**

**LOCATION: INTERSECTION OF US 64 (DAVIE AVENUE), US 21 (SULLIVAN ROAD),
STOCKTON STREET, AND EAST END AVENUE**

TIP NO.	SHEET NO.
U-5964	SIGN-1
APPROVED: _____	
DATE: _____	
SEAL	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

T.I.P.: U-5964

CONTRACT: C204431

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 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
910.40	SINGLE AND TWO LANE ROUNDABOUT SIGNING WITH PEDESTRIANS

GENERAL NOTES

- IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER.
- ALL EXISTING SIGNS ON "U" CHANNEL POSTS WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- THE BACKGROUND FOR TYPE 'E' SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4025000000	901	CONTRACTOR FURNISHED, TYPE 'E' SIGN	403	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	1109	L.F.
4102000000	904	SIGN ERECTION, TYPE E	79	EA.
4116100000	904	SIGN ERECTION, RELOCATE TYPE E (GROUND MOUNTED)	1	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	21	EA.

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	TYPE E SIGNS
SIGN-2A	DETAIL SHEET
SIGN-3	SIGNING PLANS

PLAN REVIEWED BY: DESIGN-BUILD UNIT & SIGNING AND DELINEATION UNIT

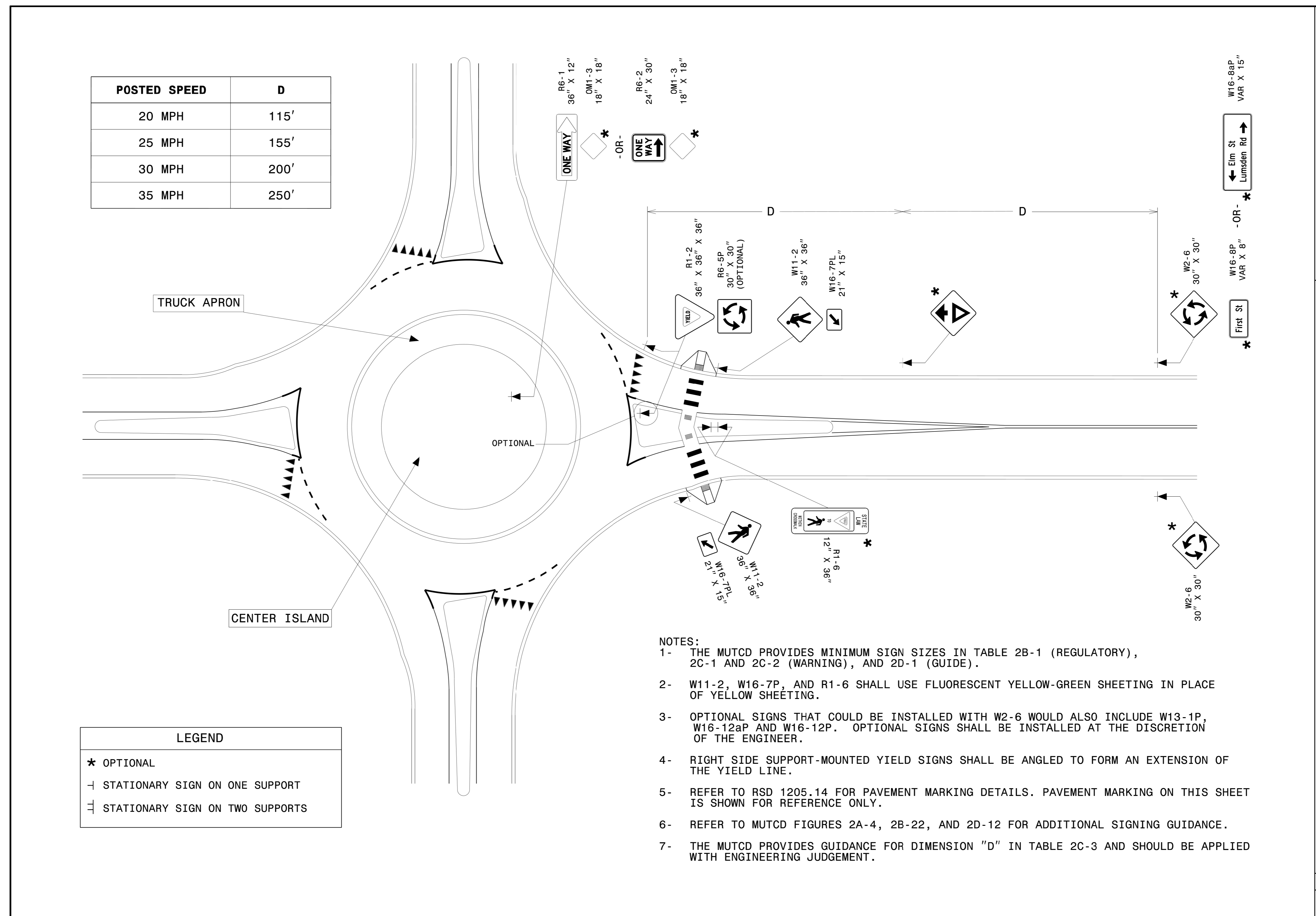
KELVIN L. JORDAN	SIGNING & DELINEATION REGIONAL ENGINEER
WALTER R. JOHNSON	SIGNING & DELINEATION PROJECT DESIGN ENGINEER



PLAN PREPARED BY: KIMLEY-HORN AND ASSOCIATES, INC.

FRANK MASTERSON, P.E.	PROJECT DESIGN ENGINEER
ADAM RECKER, E.I.	DESIGNER





POSTED SPEED	D
20 MPH	115'
25 MPH	155'
30 MPH	200'
35 MPH	250'

LEGEND	
★	OPTIONAL
—	STATIONARY SIGN ON ONE SUPPORT
—	STATIONARY SIGN ON TWO SUPPORTS

- NOTES:
- 1- THE MUTCD PROVIDES MINIMUM SIGN SIZES IN TABLE 2B-1 (REGULATORY), 2C-1 AND 2C-2 (WARNING), AND 2D-1 (GUIDE).
 - 2- W11-2, W16-7P, AND R1-6 SHALL USE FLUORESCENT YELLOW-GREEN SHEETING IN PLACE OF YELLOW SHEETING.
 - 3- OPTIONAL SIGNS THAT COULD BE INSTALLED WITH W2-6 WOULD ALSO INCLUDE W13-1P, W16-12aP AND W16-12P. OPTIONAL SIGNS SHALL BE INSTALLED AT THE DISCRETION OF THE ENGINEER.
 - 4- RIGHT SIDE SUPPORT-MOUNTED YIELD SIGNS SHALL BE ANGLED TO FORM AN EXTENSION OF THE YIELD LINE.
 - 5- REFER TO RSD 1205.14 FOR PAVEMENT MARKING DETAILS. PAVEMENT MARKING ON THIS SHEET IS SHOWN FOR REFERENCE ONLY.
 - 6- REFER TO MUTCD FIGURES 2A-4, 2B-22, AND 2D-12 FOR ADDITIONAL SIGNING GUIDANCE.
 - 7- THE MUTCD PROVIDES GUIDANCE FOR DIMENSION "D" IN TABLE 2C-3 AND SHOULD BE APPLIED WITH ENGINEERING JUDGEMENT.

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

ROADWAY DETAIL DRAWING FOR
**SINGLE LANE URBAN ROUNDABOUT
SIGNING, WITH PEDESTRIANS**

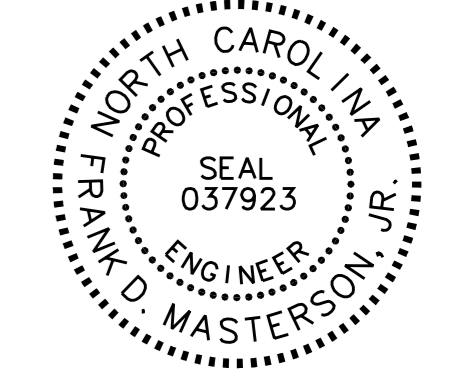
SHEET 1B OF 2
910D40




CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-8950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: R.S. GALLO	DATE: 02-29-2024
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC.: _____	

PROJECT REFERENCE NO. U-5964	SHEET NO. SIGN-2
APPROVED: _____	
DATE: _____	
SEAL	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

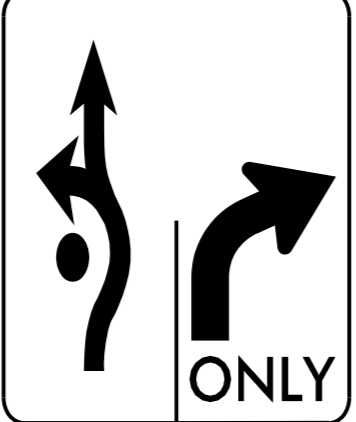
401 QUANTITY REQ'D 3_



R3-5R
30" X 30"

MOUNT BELOW SIGN 408
IN 2 INSTALLATIONS

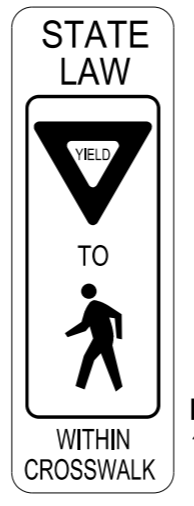
402 QUANTITY REQ'D 4_



R3-8
36" X 36"

ONE "U" POST PER SIGN


403 QUANTITY REQ'D 5_



R1-6
12" X 36"

ONE BREAKABLE MOUNT
PER TWO SIGNS

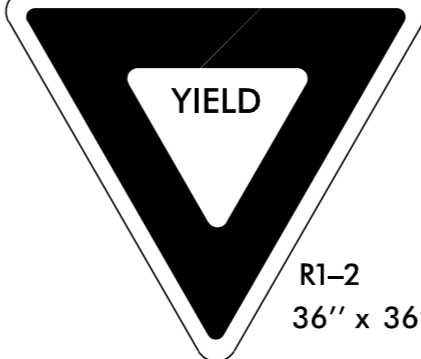
404 QUANTITY REQ'D 1_



R3-2
24" X 24"

ONE "U" POST PER SIGN

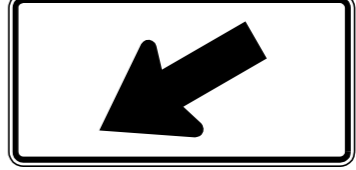
405 QUANTITY REQ'D 10_



R1-2
36" X 36" X 36"

ONE "U" POST PER SIGN


406 QUANTITY REQ'D 10_



W16-7PL
21" X 15"

MOUNT BELOW SIGN 407
IN 10 INSTALLATIONS


407 QUANTITY REQ'D 10_



W11-2
36" X 36"

ONE "U" POST PER SIGN


408 QUANTITY REQ'D 2_



R1-1
30" X 30"

ONE "U" POST PER SIGN

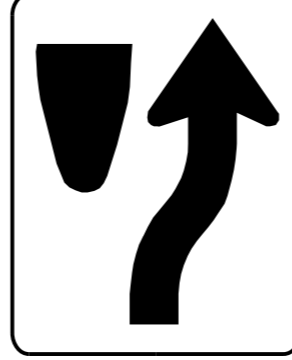
409 QUANTITY REQ'D 6_



R6-1
36" X 12"

TWO "U" POSTS PER SIGN

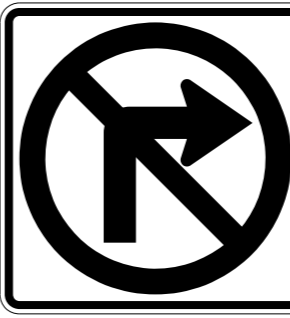
410 QUANTITY REQ'D 1_



R4-7
24" X 30"

ONE "U" POST PER SIGN


411 QUANTITY REQ'D 3_



R3-1
24" X 24"

ONE "U" POST PER SIGN

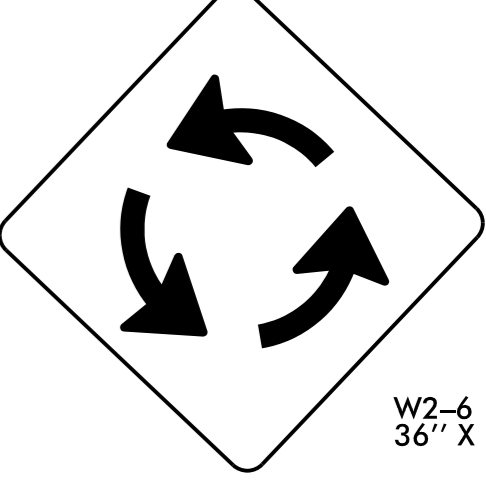
412 QUANTITY REQ'D 1_



R6-2R
24" X 30"

ONE "U" POST PER SIGN

413 QUANTITY REQ'D 5_



W2-6
36" X 36"

ONE "U" POST PER SIGN

414 QUANTITY REQ'D 2_



W11-1
24" X 24"

ONE "U" POST PER SIGN


415 QUANTITY REQ'D 2_



W16-IAP
21" X 18"

MOUNT BELOW SIGN 414

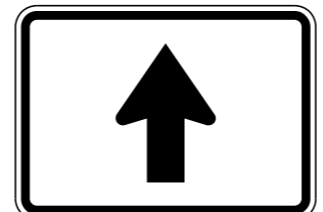
416 QUANTITY REQ'D 3_



R2-1
24" X 30"

ONE "U" POST PER SIGN

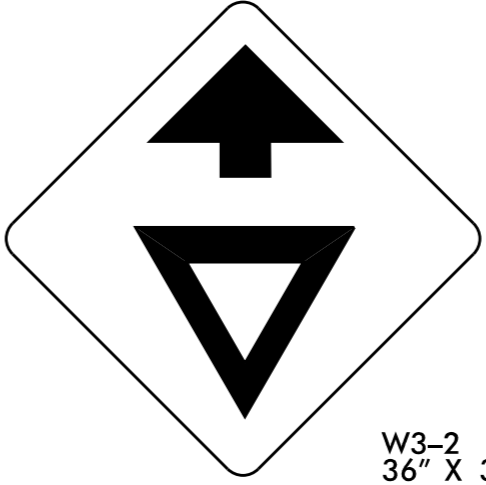
417 QUANTITY REQ'D 3_



M6-3
21" X 15"

MOUNT BELOW SIGN 420
IN 2 INSTALLATION
MOUNT BELOW SIGN 423
IN 1 INSTALLATION

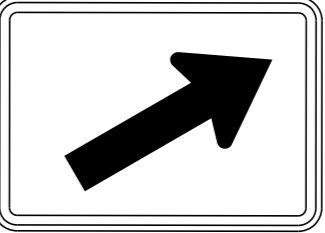
418 QUANTITY REQ'D 5_



W3-2
36" X 36"

ONE "U" POST PER SIGN

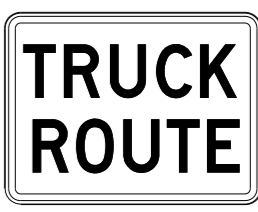
419 QUANTITY REQ'D 1_



M6-2R
21" X 15"

MOUNT UNDER SIGN 423

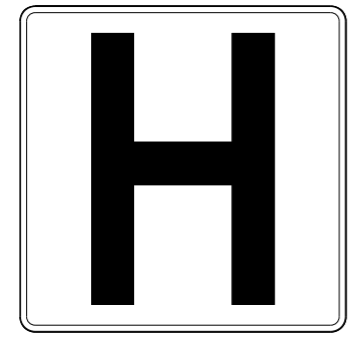
420 QUANTITY REQ'D 2_



24" X 18"
R14-1

ONE "U" POST PER SIGN

421 QUANTITY REQ'D 2



D9-2
24" X 24"

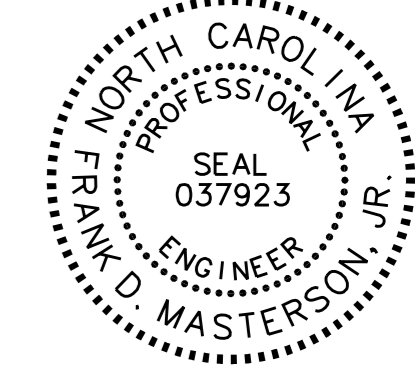
ONE "U" POST PER SIGN

PROJECT REFERENCE NO. SHEET NO.
U-5964 SIGN-3

APPROVED: _____

DATE: _____

SEAL



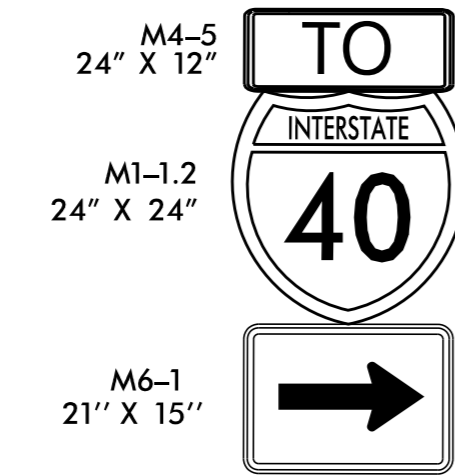
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

501 QUANTITY REQ'D 1



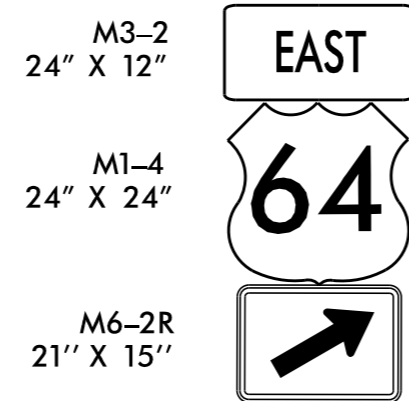
TWO "U" POSTS

502 QUANTITY REQ'D 1



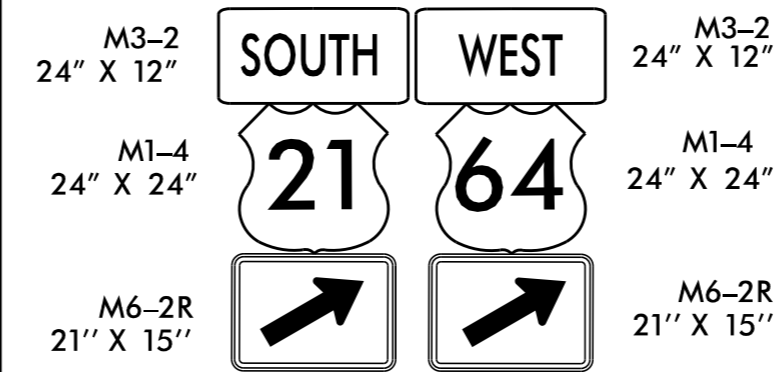
ONE "U" POST

503 QUANTITY REQ'D 1

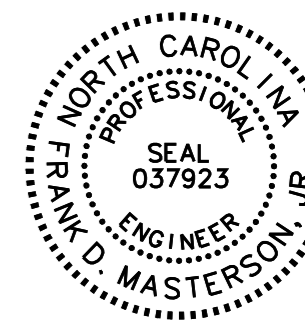


ONE "U" POST

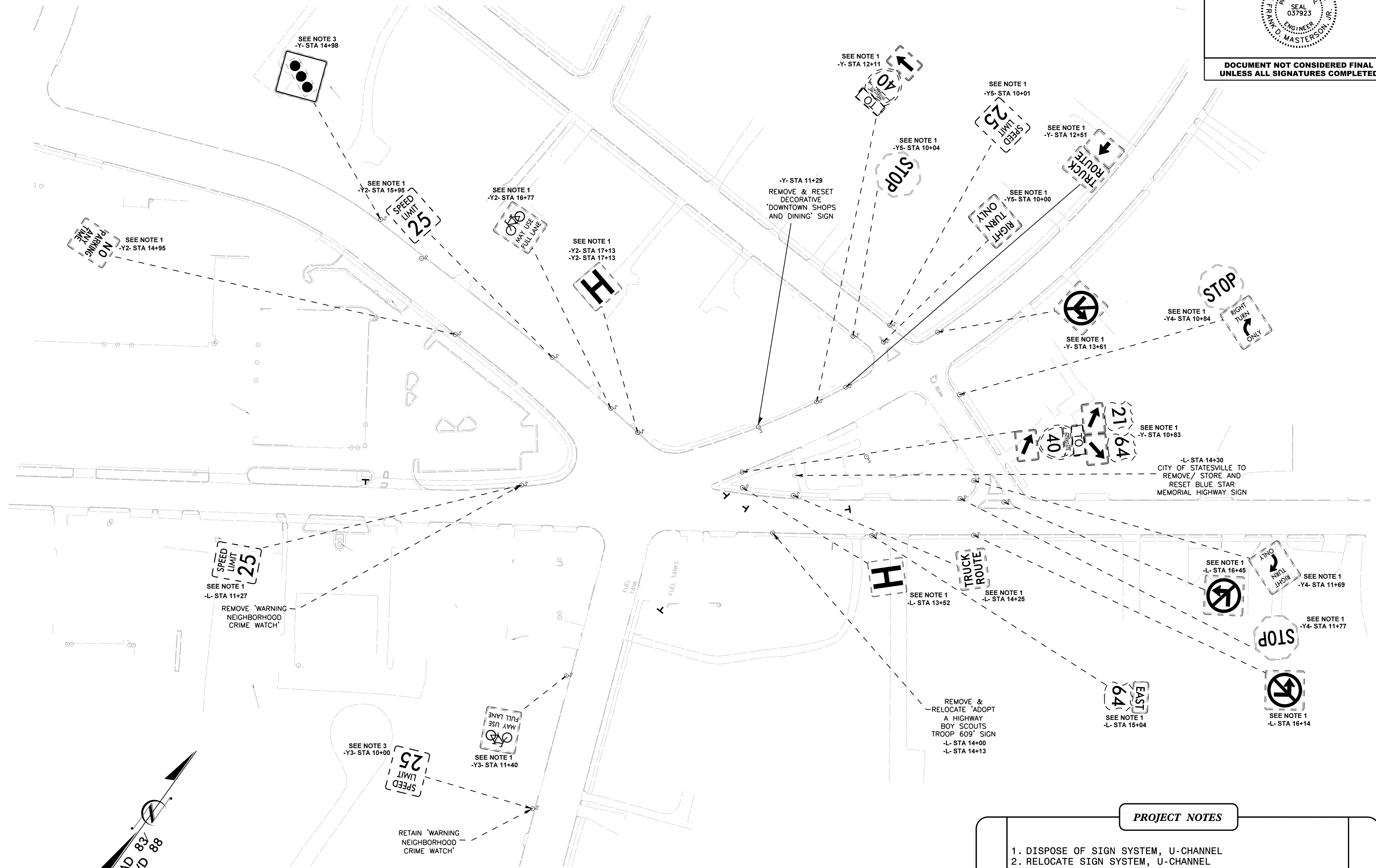
504 QUANTITY REQ'D 1



TWO "U" POSTS



**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



SEE NOTE 3
-Y- STA 14+98

SEE NOTE 1
-Y2- STA 14+95

SEE NOTE 1
-Y2- STA 15+95

SEE NOTE 1
-Y2- STA 16+77

SEE NOTE 1
-Y2- STA 17+13
-Y2- STA 17+13

SEE NOTE 1
-Y- STA 12+11

SEE NOTE 1
-Y5- STA 10+04

SEE NOTE 1
-Y6- STA 10+01

SEE NOTE 1
-Y- STA 12+51

SEE NOTE 1
-Y5- STA 10+00

-Y- STA 11+29
REMOVE & RESET
DECORATIVE
'DOWNTOWN SHOPS
AND DINING' SIGN

SEE NOTE 1
-Y- STA 13+61

SEE NOTE 1
-Y4- STA 10+84

SEE NOTE 1
-Y- STA 10+83

-L- STA 14+30
CITY OF STATESVILLE TO
REMOVE/ STORE AND
RESET BLUE STAR
MEMORIAL HIGHWAY SIGN

SEE NOTE 1
-L- STA 11+27

REMOVE 'WARNING
NEIGHBORHOOD
CRIME WATCH'

SEE NOTE 3
-Y3- STA 10+00

SEE NOTE 1
-Y3- STA 11+40

RETAIN 'WARNING
NEIGHBORHOOD
CRIME WATCH'

SEE NOTE 1
-L- STA 13+52

SEE NOTE 1
-L- STA 14+25

REMOVE &
-RELOCATE 'ADOPT
A HIGHWAY
BOY SCOUTS
TROOP 609' SIGN
-L- STA 14+00
-L- STA 14+13

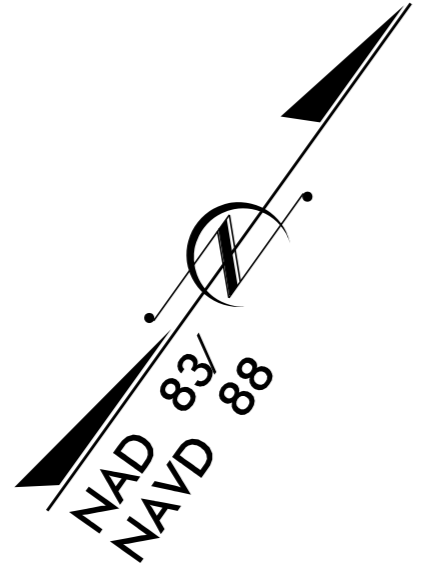
SEE NOTE 1
-L- STA 16+45

SEE NOTE 1
-Y4- STA 11+69

SEE NOTE 1
-Y4- STA 11+77

SEE NOTE 1
-L- STA 15+04

SEE NOTE 1
-L- STA 16+14



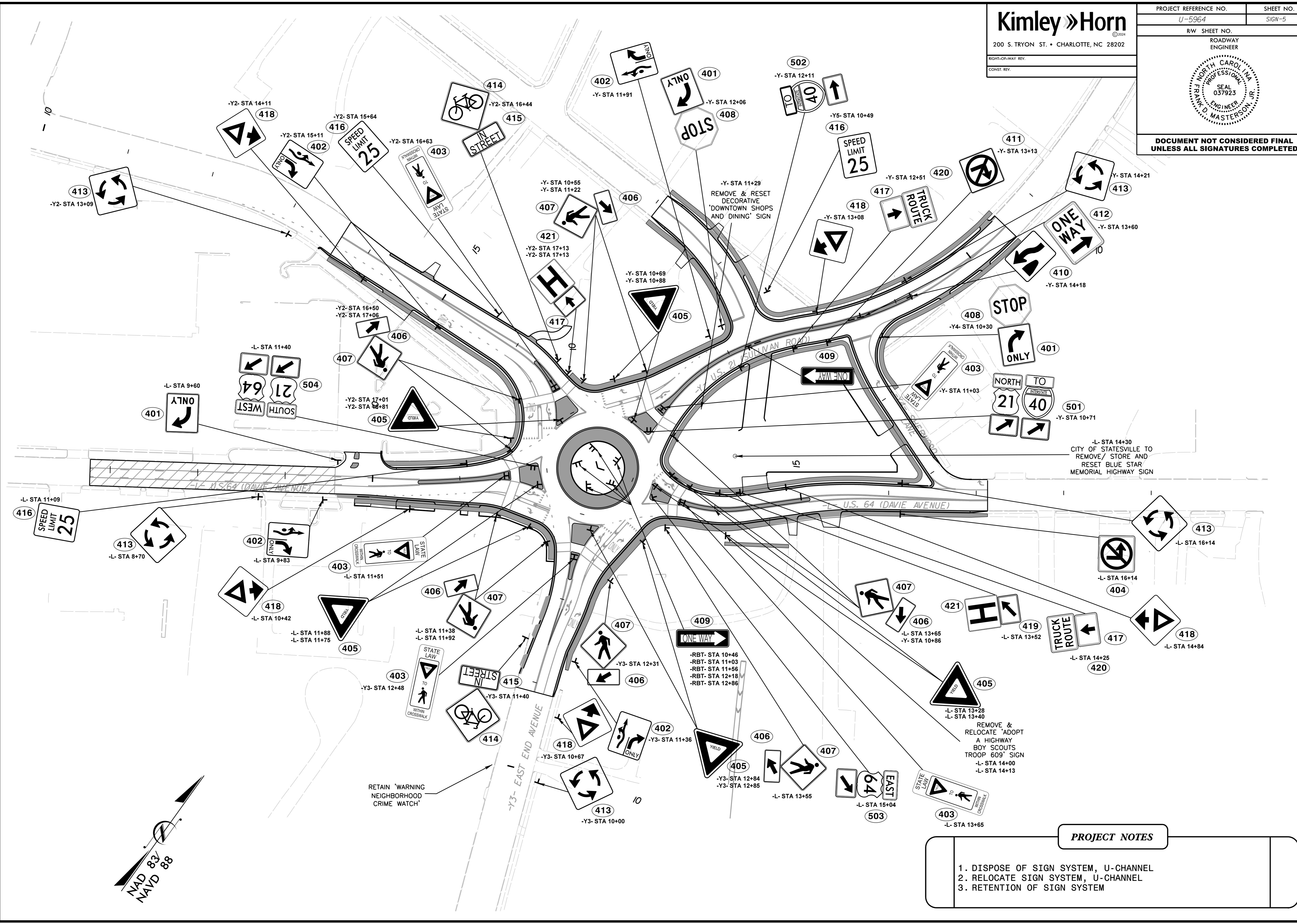
PROJECT NOTES

1. DISPOSE OF SIGN SYSTEM, U-CHANNEL
2. RELOCATE SIGN SYSTEM, U-CHANNEL
3. RETENTION OF SIGN SYSTEM

K:\CHL_PRJ\01036487 - U-5964 (Five Points)\Traffic\Signing\CADD\Signing Layout Plans\U-5964_Lrdy_sgn_04.dgn



**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



K:\CHL\PR\01036487 - U-5964 (Five Points)\Traffic\Signing\CADD\Signing Layout Plans\U-5964_rdy_sgn_05.dgn

1/28/2026

PROJECT NOTES

1. DISPOSE OF SIGN SYSTEM, U-CHANNEL
2. RELOCATE SIGN SYSTEM, U-CHANNEL
3. RETENTION OF SIGN SYSTEM

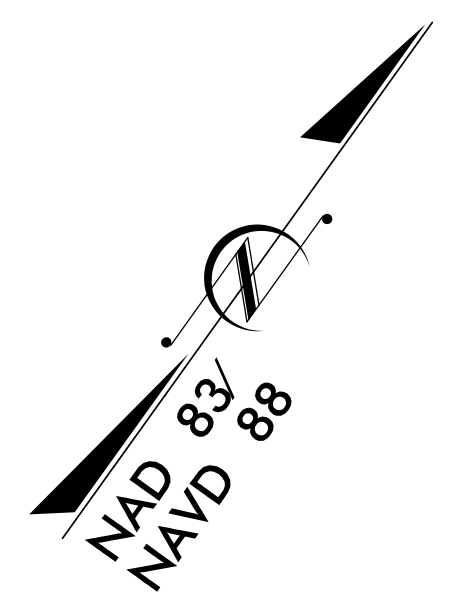
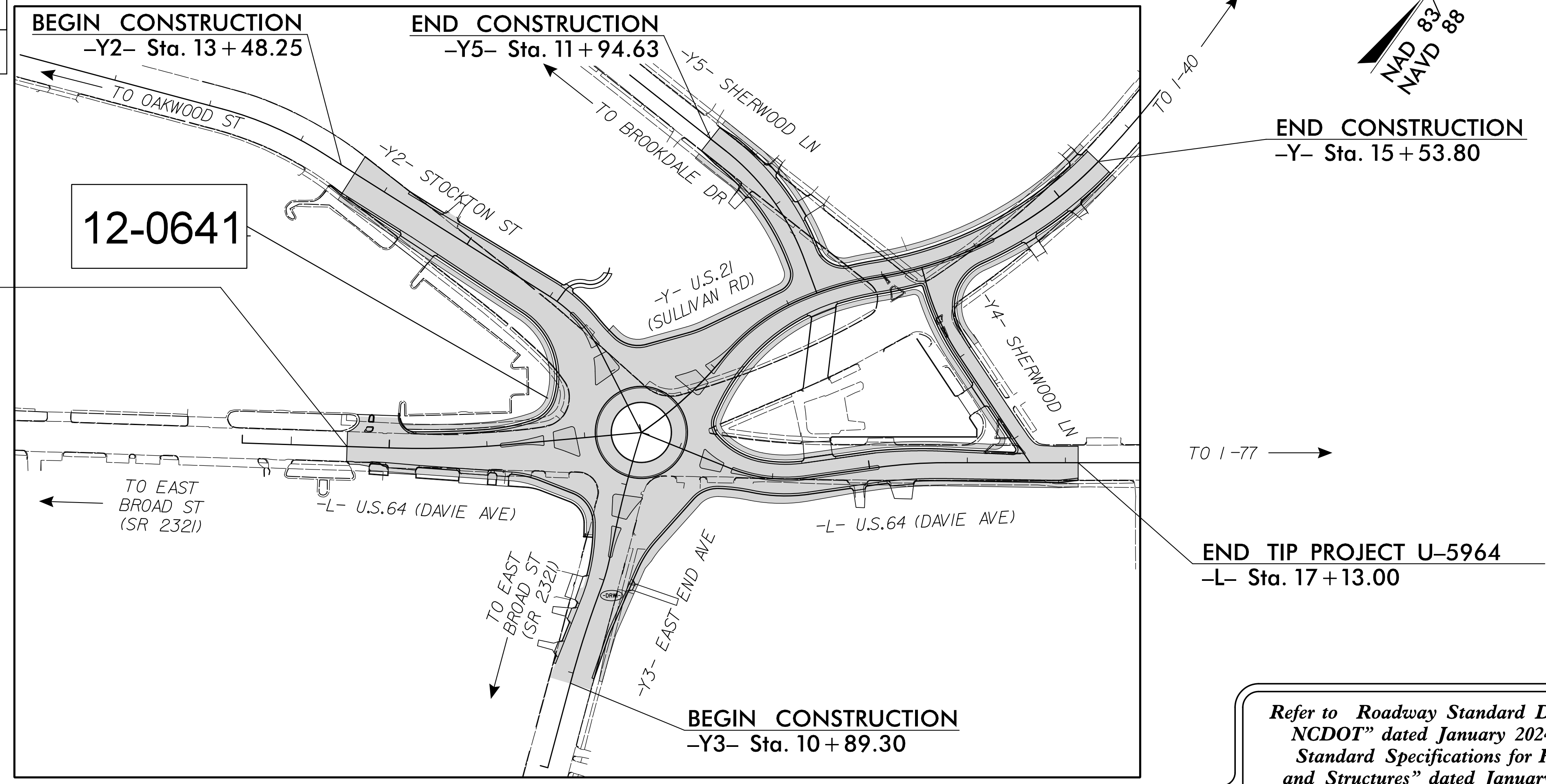
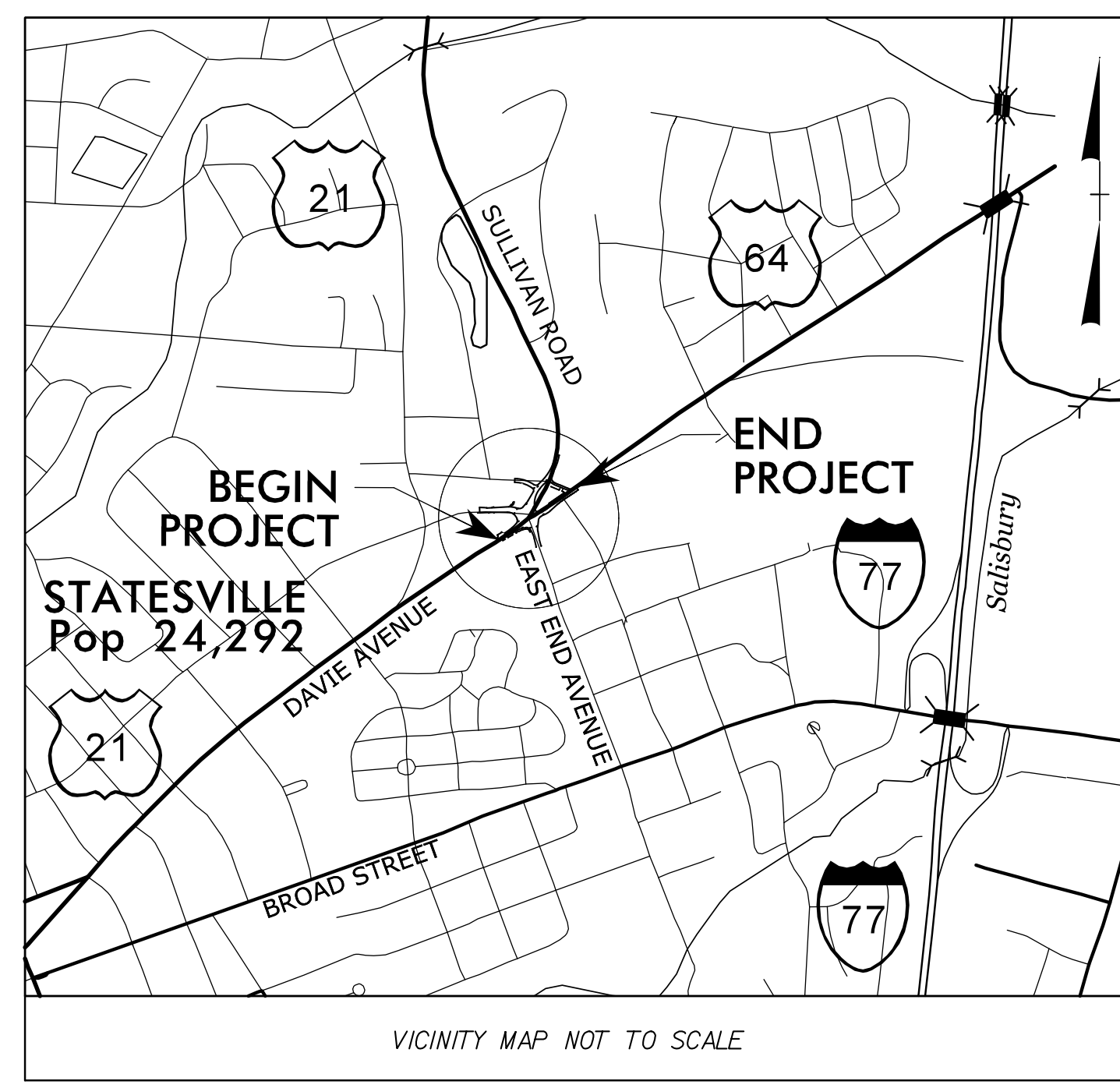
TIP PROJECT: U-5964

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

IREDELL COUNTY

LOCATION: INTERSECTION OF US 64 (DAVIE AVENUE), US 21 (SULLIVAN ROAD), STOCKTON STREET, AND EAST END AVENUE

TYPE OF WORK: TEMPORARY SIGNAL



BEGIN TIP PROJECT U-5964
-L- Sta. 9+57.00

Refer to *Roadway Standard Drawings NCDOT* dated January 2024 and *Standard Specifications for Roads and Structures* dated January 2024.

Sheet #	Reference #	Index of Plans	Location/Description
Sig. 1.0	-----	Title Sheet	US 64 (Davie Ave.) and US 21 (Sullivan Rd.) at E. End Ave. and Stockton St.
Sig. 2.0-4.1	12-0641		

TSMO SIGNAL CONTACT:

Nick Zinser, P.E.
CENTRAL REGION SIGNALS ENGINEER

Keith M. Mims, P.E.
SIGNAL EQUIPMENT DESIGN ENGINEER

PLANS PREPARED BY:

Kimley»Horn © 2025
421 Fayetteville Street, Suite 600
Raleigh, North Carolina 27601
PE NO. F-0102

Kevin P. Baumann, P.E.
TRAFFIC SIGNAL ENGINEER

DocuSigned by:
Kevin P. Baumann
SDCT09A88BCB447
SIGNATURE:

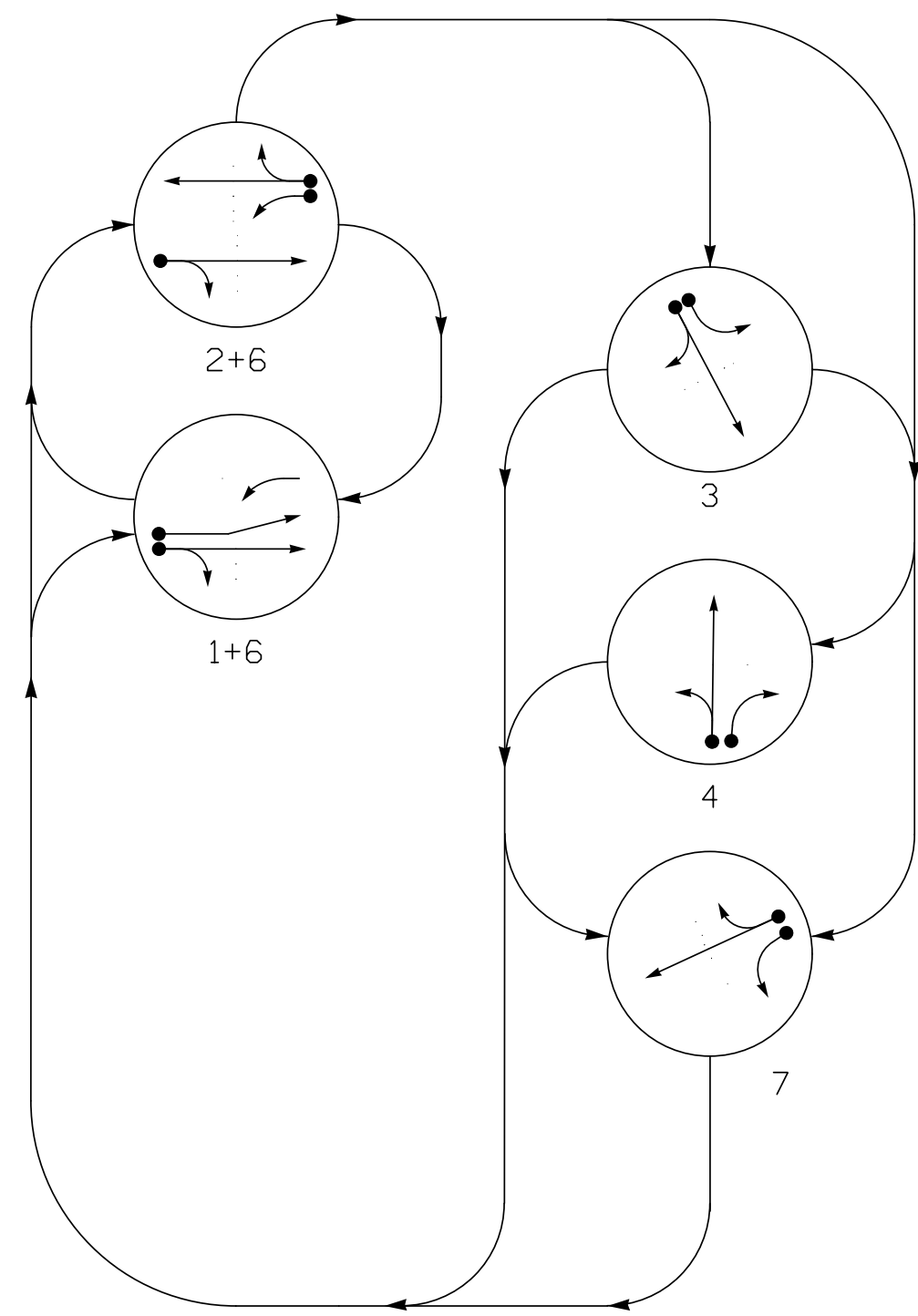
12/4/2025
P.E.

Prepared for:

750 N. Greenfield Pkwy, Garner, NC 27529

7:12:59 AM suscn.pennington K:\CHL_PRR\011036487 - U-5964 (Five Points)\Signals\12-0641 - Signal Design\1.0 U-5964 TSH.dgn 12/4/2025

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

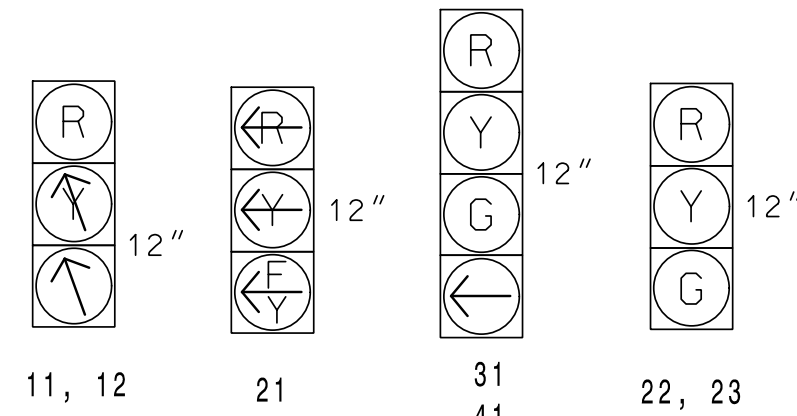
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- ◄ UNSIGNALIZED MOVEMENT
- ⇄ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE						
	1+6	2+6	3	4	7	F	H
11, 12	\	R	R	R	R	R	R
21	E	E	R	R	R	R	R
22, 23	R	G	R	R	R	R	R
31	R	R	G	R	R	R	R
32	R	R	G	R	R	R	R
41	R	R	R	G	R	R	R
42, 43	R	R	R	G	R	R	R
61, 62	G	G	R	R	R	R	R
71	R	R	R	R	G	R	R
72	R	R	R	R	G	R	R

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

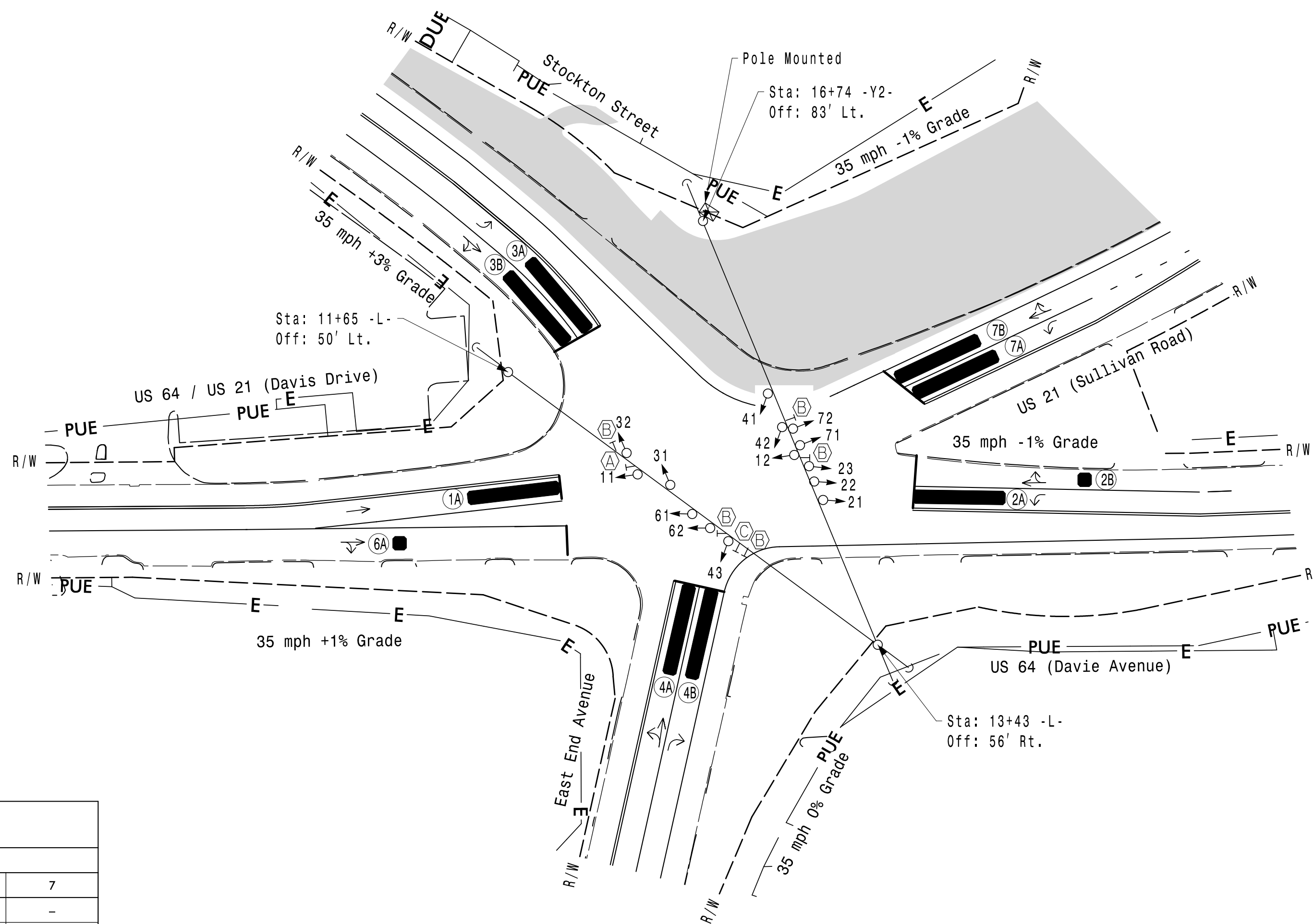
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A*	6X40	0	*	*	1	3.0	-	X	-	X	-	*
2A*	6X40	0	*	*	2	-	-	X	-	X	-	*
2B*	6X6	70	*	*	2	-	-	X	-	X	-	*
3A*	6X40	0	*	*	3	3.0	-	X	-	X	-	*
3B*	6X40	0	*	*	3	-	-	X	-	X	-	*
4A*	6X40	0	*	*	4	3.0	-	X	-	X	-	*
4B*	6X40	0	*	*	4	-	-	X	-	X	-	*
6A*	6X6	70	*	*	6	-	-	X	-	X	-	*
7A*	6X40	0	*	*	7	3.0	-	X	-	X	-	*
7B*	6X40	0	*	*	7	-	-	X	-	X	-	*

* Multi-zone Microwave Detection

5 Phase Fully Actuated (Isolated)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- The order of phase 3 and phase 4 and phase 7 may be reversed.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Reference traffic control design for pavement marking locations.



LEGEND

- | | |
|--|-----------------|
| PROPOSED | EXISTING |
| ○ Traffic Signal Head | ● N/A |
| ◐ Modified Signal Head | ○ N/A |
| ⊥ Sign | ⊥ N/A |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ N/A |
| ⊥ Signal Pole with Guy | ⊥ N/A |
| ⊥ Signal Pole with Sidewalk Guy | ⊥ N/A |
| ▭ Non-Intrusive Detection Zone | ▭ N/A |
| ⊠ Controller & Cabinet | ⊠ N/A |
| □ Junction Box | □ N/A |
| --- 2-in Underground Conduit | --- N/A |
| N/A Right of Way | — E |
| N/A Permanent Easement | — PUE |
| N/A Temporary Easement | — E |
| → Directional Arrow | → |
| ⊙ No Left Turn Sign (R3-2) | ⊙ A |
| ⊙ "NO TURN ON RED" Sign (R10-11) | ⊙ B |
| ⊙ Right Arrow "ONLY" Sign (R3-5R) | ⊙ C |
| ▭ Construction Zone | ▭ |

MAXTIME TIMING CHART

FEATURE	PHASE						
	1	2	3	4	6	7	
Walk *	-	-	-	-	-	-	
Ped Clear	-	-	-	-	-	-	
Min Green *	7	10	7	7	10	7	
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	
Max 1 *	15	35	15	15	35	15	
Yellow Change	3.0	3.9	3.7	3.8	3.9	3.9	
Red Clear	3.2	2.8	2.6	1.6	2.8	2.8	
Added Initial *	-	-	-	-	-	-	
Maximum Initial *	-	-	-	-	-	-	
Time Before Reduction *	-	-	-	-	-	-	
Time To Reduce *	-	-	-	-	-	-	
Minimum Gap	-	-	-	-	-	-	
Advance Walk	-	-	-	-	-	-	
Non Lock Detector	X	-	X	X	-	X	
Vehicle Recall	-	MIN RECALL	-	-	MIN RECALL	-	
Dual Entry	-	-	-	-	-	-	

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

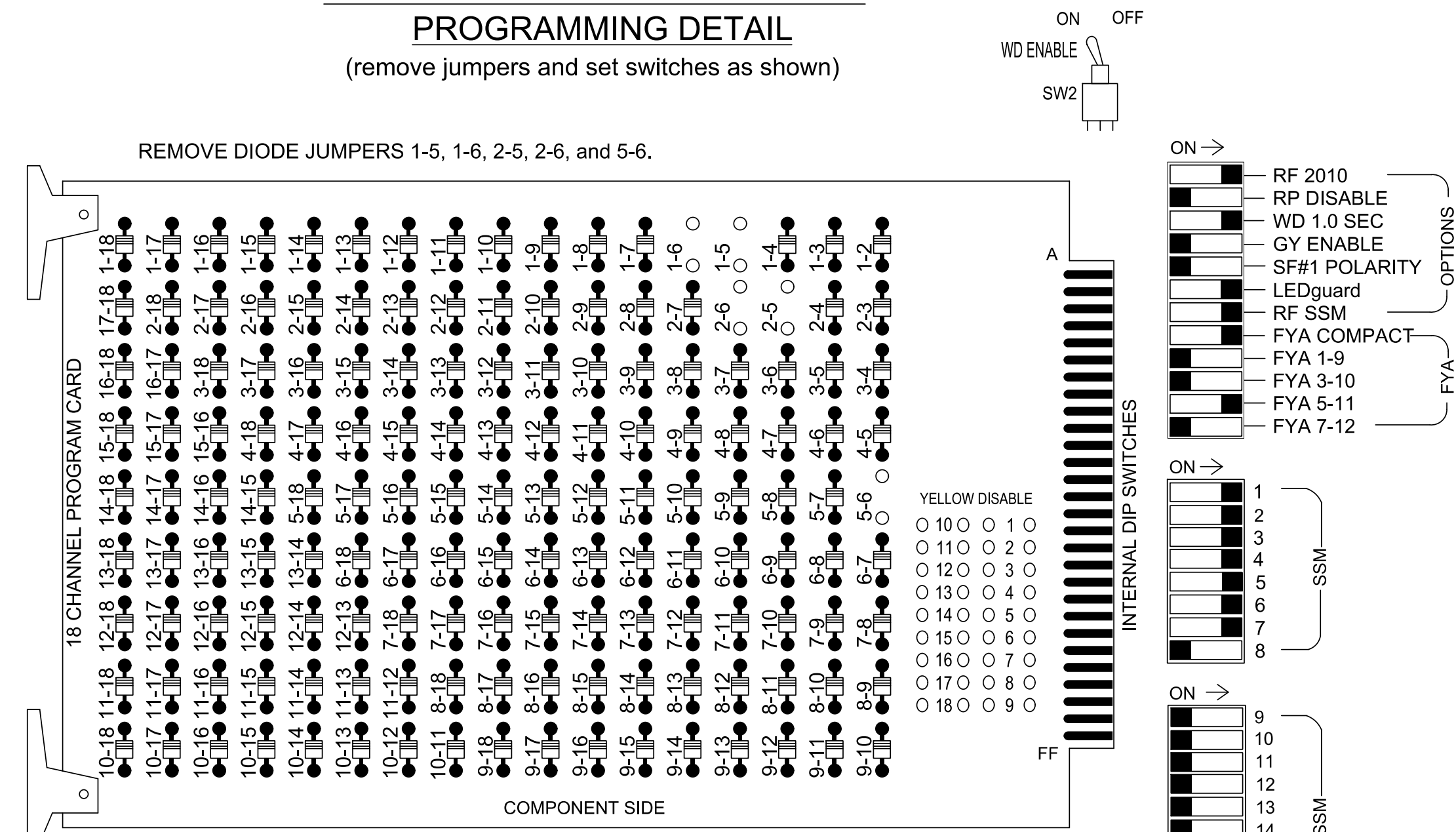
Signal Upgrade - Temporary Signal Design 1 (TMP Phase 1)

<p>750 N. Greenfield Pkwy, Garner, NC 27529 NC License #F-0102 421 Fayetteville Street, Suite 600 Raleigh, NC 27601 (919) 677-2000</p>	US 64 (Davie Ave.) and US 21 (Sullivan Rd.) at E. End Ave. and Stockton St. Division 12 Iredell County Statesville PLAN DATE: June 2025 REVIEWED BY: KP Baumann PREPARED BY: SP Pennington REVIEWED BY:		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL KEVIN P. BAUMANN ENGINEER DATE: 12/4/2025 SIG. INVENTORY NO. 12-0641T1
	SCALE 0 40 1"=40'	REVISIONS INIT. DATE	

12/4/2025 11:13:04 AM susan.pennington K:\CHL_Plan\011036487 - U-5964 (E) Live Prints\Signal\sig2.0 - Signal Design\2.0 - 2025\T1.dgn

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

EQUIPMENT INFORMATION

Controller.....2070LX
 Cabinet.....336
 Software.....Q-Free MAXTIME
 Cabinet Mount.....Pole
 Output File Positions.....12
 Load Switches Used.....S1, S2, S4, S5, S7, S8, S10
 Phases Used.....1, 2, 3, 4, 6, 7
 Overlap "1".....Not Used
 Overlap "2".....Not Used
 Overlap "3".....*
 Overlap "4".....Not Used

*See overlap programming detail on this sheet

OUTPUT CHANNEL CONFIGURATION

Front Panel
 Main Menu >Controller >More>Channels>Channels Config

Web Interface
 Home >Controller >Advanced IO>Channels>Channels Configuration
 Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Overlap	3		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

NOTICE OVERLAP 3 ASSIGNED TO CHANNEL 5

NOTICE: FLASH RED

SEQUENCE DETAIL

Front Panel
 Main Menu >Controller >Sequence & Phs Config>Sequences

Web Interface
 Home >Controller >Sequence

Sequence 1

Ring	Sequence Data
1	1,2,a,3,4,7,b
2	6,a,b

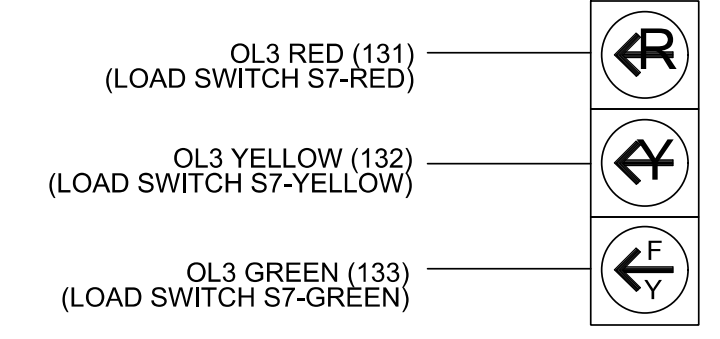
SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12		
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16		
PHASE	1	2	2 PED	3	4	4 PED	OL3	6	6 PED	7	8	8 PED		
SIGNAL HEAD NO.	11,12	22,23	NU	31	32	41	42,43	NU	21	61,62	71	72	NU	NU
RED	125	128		116	116	101	101			134	122	122		
YELLOW		129		117	117	102	102			135	123	123		
GREEN		130		118	118	103	103			136	124	124		
RED ARROW										131				
YELLOW ARROW	126									132				
FLASHING YELLOW ARROW										133				
GREEN ARROW	127			118	103						124			

NU = Not Used
 *See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal head as shown)



21

MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
 Main Menu >Controller >Unit

Web Interface
 Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters

StartUp Clearance Hold	6
------------------------	---

Unit Flash Parameters

All Red Flash Exit Time	6
-------------------------	---

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 12-0641T1
 DESIGNED: June 2025
 SEALED: 12/04/2025
 REVISED:

Electrical Detail
 Signal Upgrade - Temporary Design 1

Electrical and Programming Details For:

US 64 (Davie Avenue) and US 21 (Sullivan Road) at E. End Avenue and Stockton Street
 Division 12 Iredell County Statesville
 PLAN DATE: June 2025 REVIEWED BY: KP Baumann
 PREPARED BY: SP Pennington REVIEWED BY:

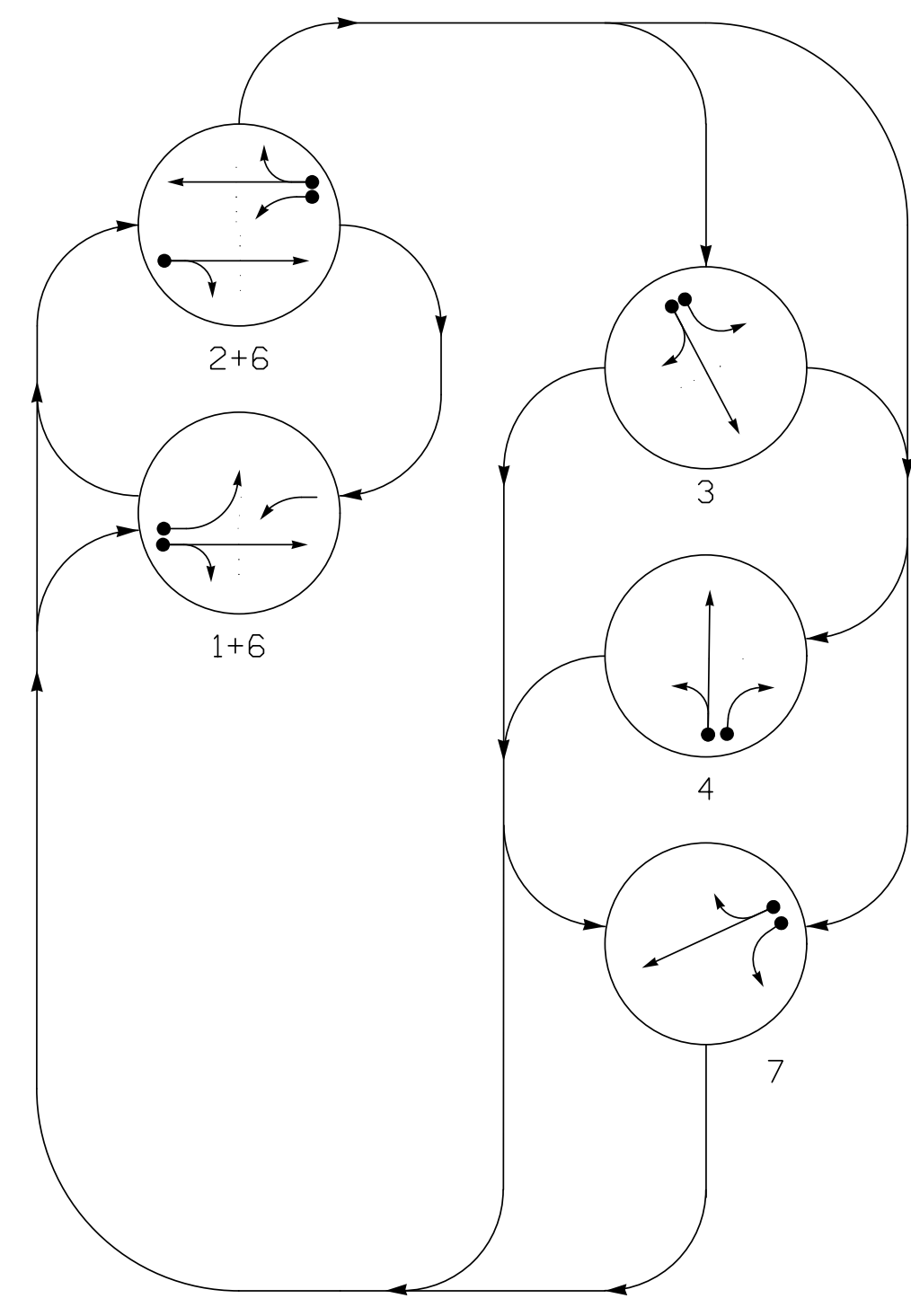
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 KEVIN P. BAUMANN
 ENGINEER
 12/4/2025
 DATE
 SIG. INVENTORY NO. 12-0641T1

PLANS PREPARED IN THE OFFICE OF:
KimleyHorn
 NC License #F-0102
 421 Fayetteville Street, Suite 600
 Raleigh, NC 27601
 (919) 677-2000

K:\MCHL_PRR\011036487 - U-5964 - Live Points\MS\Signal\K54 - Signal_Design\K54 - Signal_2025e-T1.dgn 12/4/2025 7:13:07 AM susan.pennington

PHASING DIAGRAM



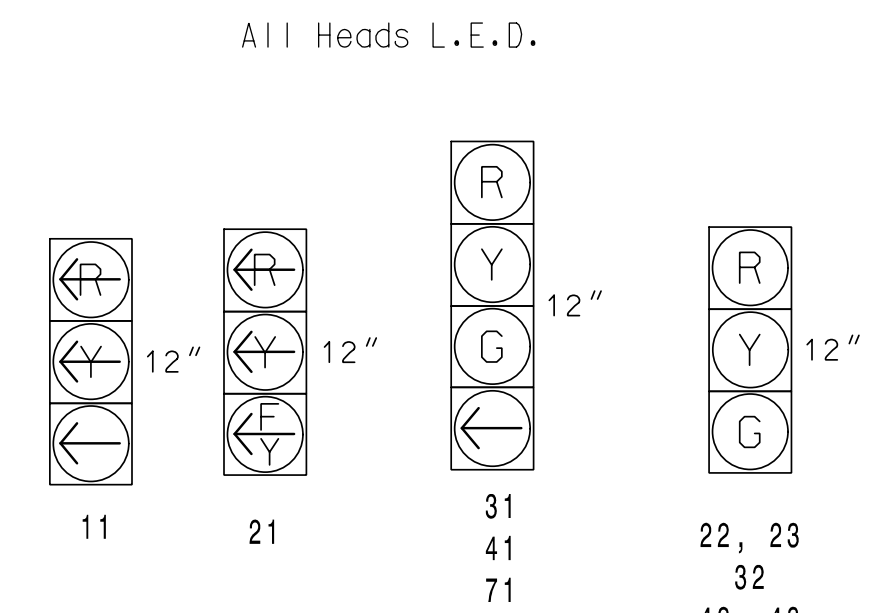
PHASING DIAGRAM DETECTION LEGEND

- ◀●▶ DETECTED MOVEMENT
- ◀◊▶ UNDETECTED MOVEMENT (OVERLAP)
- ◀---▶ UNSIGNALIZED MOVEMENT
- ◀---▶ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE						
	1+6	2+6	3	4	7	H	S
11	←	→	→	→	→	→	→
21	←	←	→	→	→	→	→
22, 23	R	G	R	R	R	R	R
31	R	R	G	R	R	R	R
32	R	R	G	R	R	R	R
41	R	R	R	G	R	R	R
42, 43	R	R	R	G	R	R	R
61, 62	G	G	R	R	R	R	R
71	R	R	R	R	G	R	R
72	R	R	R	R	G	R	R

SIGNAL FACE I.D.



MAXTIME DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	
1A*	6X40	0	*	-	1	3.0	-	X	-	X	-	-
2A*	6X40	0	*	-	2	-	-	X	-	X	-	-
2B*	6X6	70	*	-	2	-	-	X	-	X	-	-
3A*	6X40	0	*	-	3	3.0	-	X	-	X	-	-
3B*	6X40	0	*	-	3	-	-	X	-	X	-	-
4A*	6X40	0	*	-	4	3.0	-	X	-	X	-	-
4B*	6X40	0	*	-	4	-	-	X	-	X	-	-
6A*	6X6	70	*	-	6	-	-	X	-	X	-	-
7A*	6X40	0	*	-	7	3.0	-	X	-	X	-	-
7B*	6X40	0	*	-	7	-	-	X	-	X	-	-

* Multi-zone Microwave Detection

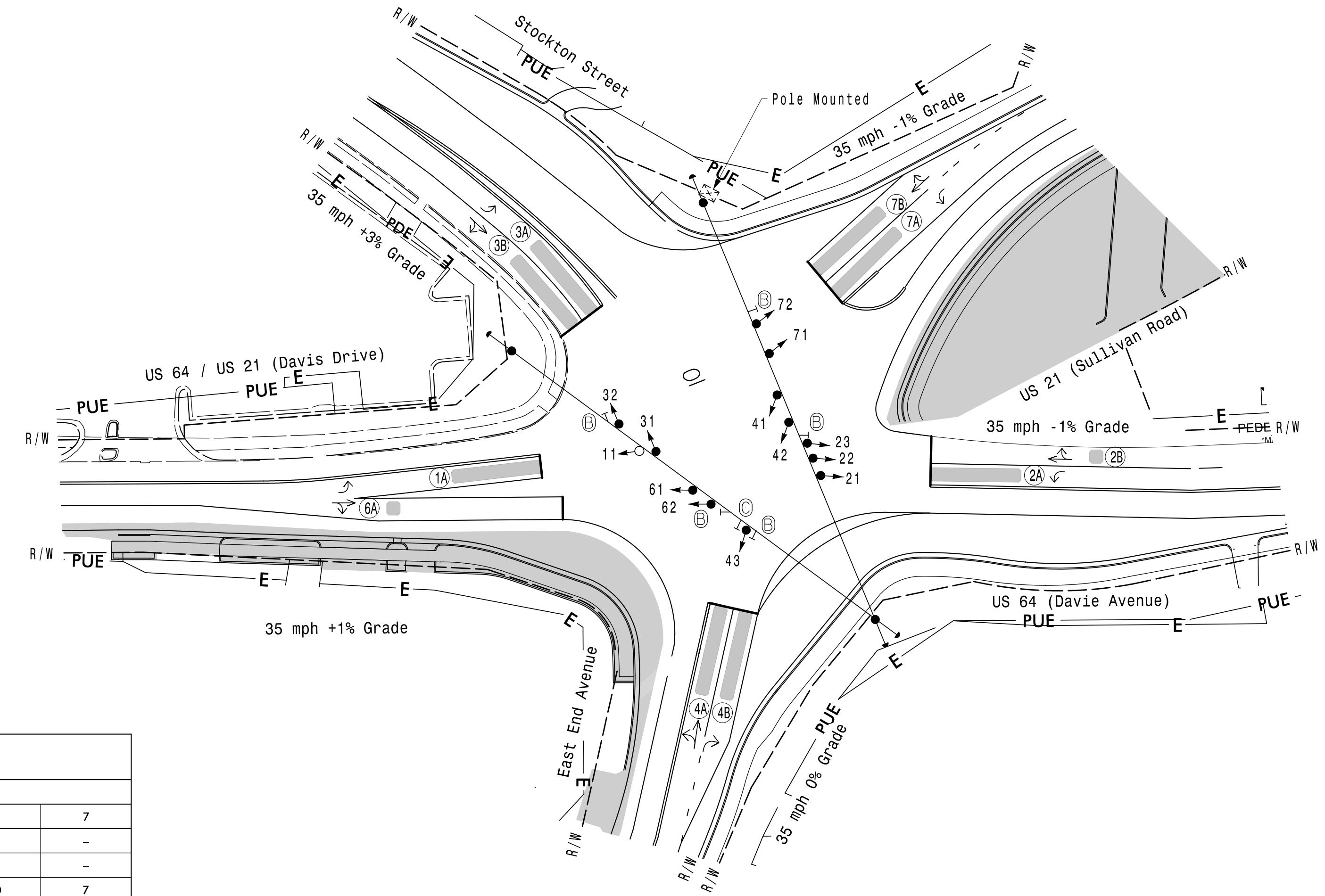
5 Phase Fully Actuated (Isolated)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- The order of phase 3 and phase 4 and phase 7 may be reversed.
- Set all detector units to presence mode.
- Reposition existing signal heads 31, 32, 41, 42, 71, and 72.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Reference traffic control design for pavement marking locations.

LEGEND

- | | | | |
|--|---|--|--|
| | Proposed Traffic Signal Head | | Existing Traffic Signal Head |
| | Proposed Modified Signal Head | | Existing Modified Signal Head |
| | Proposed Pedestrian Signal Head With Push Button & Sign | | Existing Pedestrian Signal Head |
| | Proposed Signal Pole with Guy | | Existing Signal Pole with Guy |
| | Proposed Signal Pole with Sidewalk Guy | | Existing Signal Pole with Sidewalk Guy |
| | Proposed Non-Intrusive Detection Zone | | Existing Non-Intrusive Detection Zone |
| | Proposed Controller & Cabinet Junction Box | | Existing Controller & Cabinet Junction Box |
| | Proposed 2-in Underground Conduit | | Existing 2-in Underground Conduit |
| | Proposed Right of Way | | Existing Right of Way |
| | Proposed Permanent Easement | | Existing Permanent Easement |
| | Proposed Temporary Easement | | Existing Temporary Easement |
| | Proposed Directional Arrow | | Existing Directional Arrow |
| | Proposed "NO TURN ON RED" Sign (R10-11) | | Existing "NO TURN ON RED" Sign (R10-11) |
| | Proposed Right Arrow "ONLY" Sign (R3-5R) | | Existing Right Arrow "ONLY" Sign (R3-5R) |
| | Proposed Construction Zone | | Existing Construction Zone |



MAXTIME TIMING CHART

FEATURE	PHASE						
	1	2	3	4	6	7	
Walk *	-	-	-	-	-	-	
Ped Clear	-	-	-	-	-	-	
Min Green *	7	10	7	7	10	7	
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	
Max 1 *	15	35	15	15	35	15	
Yellow Change	3.0	3.9	3.7	3.8	3.9	3.9	
Red Clear	3.9	3.0	3.1	2.9	3.0	2.4	
Added Initial *	-	-	-	-	-	-	
Maximum Initial *	-	-	-	-	-	-	
Time Before Reduction *	-	-	-	-	-	-	
Time To Reduce *	-	-	-	-	-	-	
Minimum Gap	-	-	-	-	-	-	
Advance Walk	-	-	-	-	-	-	
Non Lock Detector	X	-	X	X	-	X	
Vehicle Recall	-	MIN RECALL	-	-	MIN RECALL	-	
Dual Entry	-	-	-	-	-	-	

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Signal Upgrade - Temporary Signal Design 2 (TMP Phase 2)

PLANS PREPARED IN THE OFFICE OF:
Kimley Horn
750 N. Greenfield Pkwy, Garner, NC 27529
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

US 64 (Davie Ave.) and US 21 (Sullivan Rd.) at E. End Ave. and Stockton St.

Division 12 Iredell County Statesville

PLAN DATE: June 2025 REVIEWED BY: KP Baumann

PREPARED BY: SP Pennington REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
KEVIN P. BAUMANN
ENGINEER
044434

DocuSigned by:
Kevin P. Baumann
SDC79A886C8447
12/4/2025
DATE

SIG. INVENTORY NO. 12-0641T2

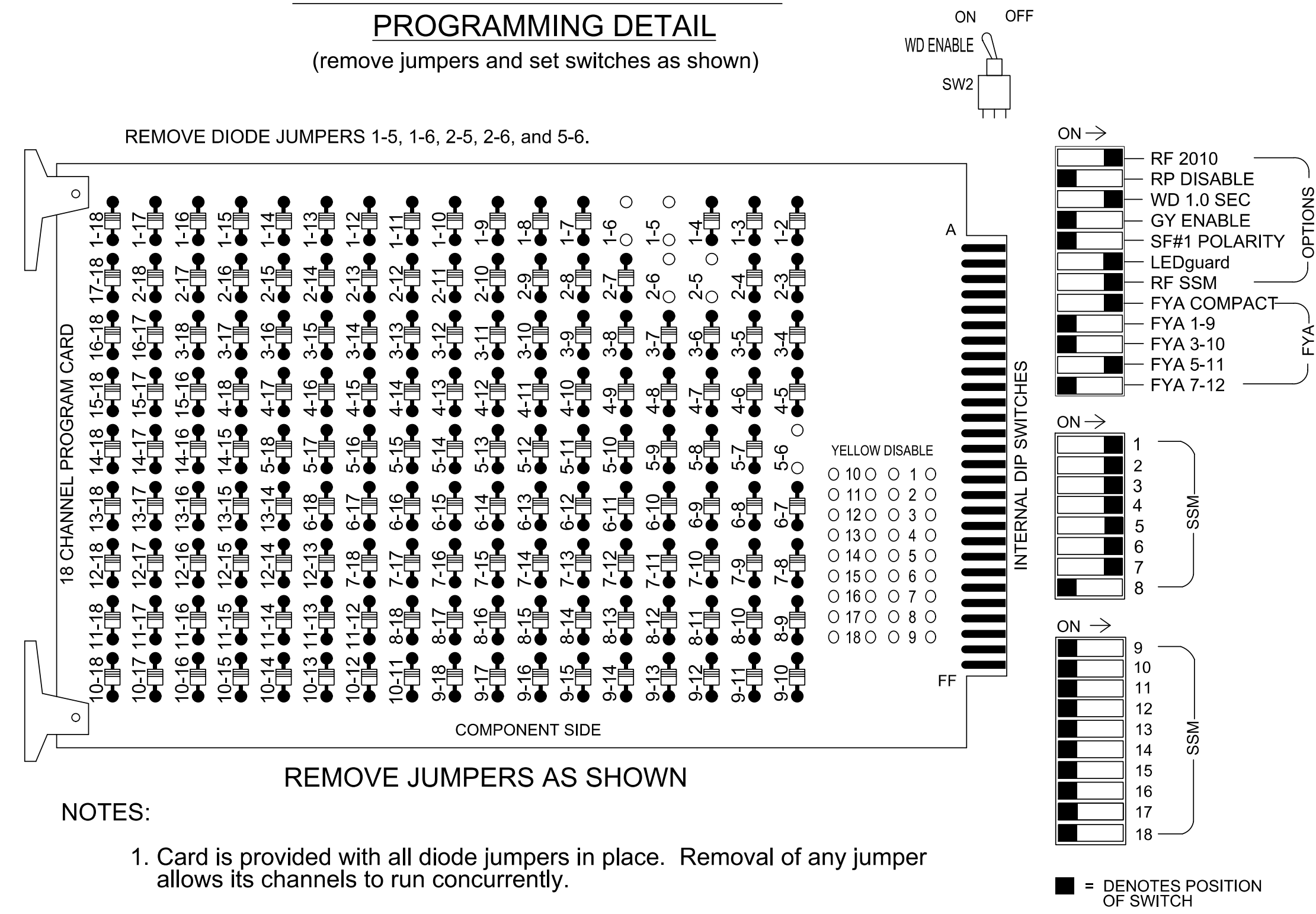
SCALE 1"=40'

REVISIONS	INIT.	DATE

12/4/2025 7:13:17 AM susan.pennington k:\chh\proj\01036487 - U-5964 (E) Live Prints\Signal\sig3.0 - Signal Design\3.0 - 120641_2025\T2.dgn

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

EQUIPMENT INFORMATION

Controller.....2070LX
 Cabinet.....336
 Software.....Q-Free MAXTIME
 Cabinet Mount.....Pole
 Output File Positions.....12
 Load Switches Used.....S1, S2, S4, S5, S7, S8, S10
 Phases Used.....1, 2, 3, 4, 6, 7
 Overlap "1".....Not Used
 Overlap "2".....Not Used
 Overlap "3".....*
 Overlap "4".....Not Used

*See overlap programming detail on this sheet

OUTPUT CHANNEL CONFIGURATION

Front Panel
 Main Menu >Controller >More>Channels>Channels Config

Web Interface
 Home >Controller >Advanced IO>Channels>Channels Configuration
 Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Overlap	3		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

NOTICE OVERLAP 3 ASSIGNED TO CHANNEL 5

NOTICE: FLASH RED

SEQUENCE DETAIL

Front Panel
 Main Menu >Controller >Sequence & Phs Config>Sequences

Web Interface
 Home >Controller >Sequence

Sequence 1

Ring	Sequence Data
1	1,2,a,3,4,7,b
2	6,a,b

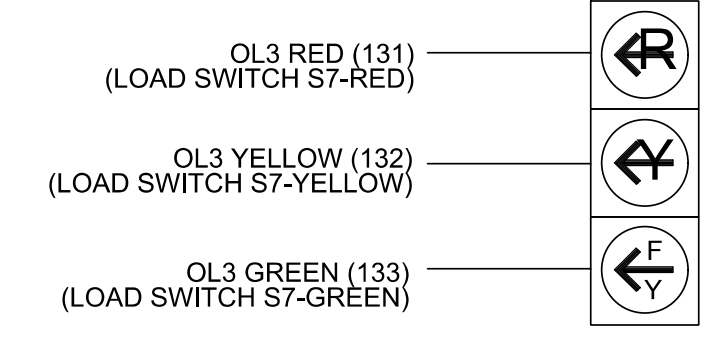
SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12				
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16				
PHASE	1	2	2 PED	3	4	4 PED	OL3	6	6 PED	7	8	8 PED				
SIGNAL HEAD NO.	11	22,23	NU	31	32	41	42,43	NU	21*	61,62	NU	71	72	NU	8	NU
RED		128		116	116	101	101			134		122	122			
YELLOW		129		117	117	102	102			135		123	123			
GREEN		130		118	118	103	103			136		124	124			
RED ARROW	125									131						
YELLOW ARROW	126									132						
FLASHING YELLOW ARROW										133						
GREEN ARROW	127			118		103						124				

NU = Not Used
 *See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal head as shown)



21

MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
 Main Menu >Controller >Unit

Web Interface
 Home >Controller >Unit

Modify parameters as shown below and save changes.

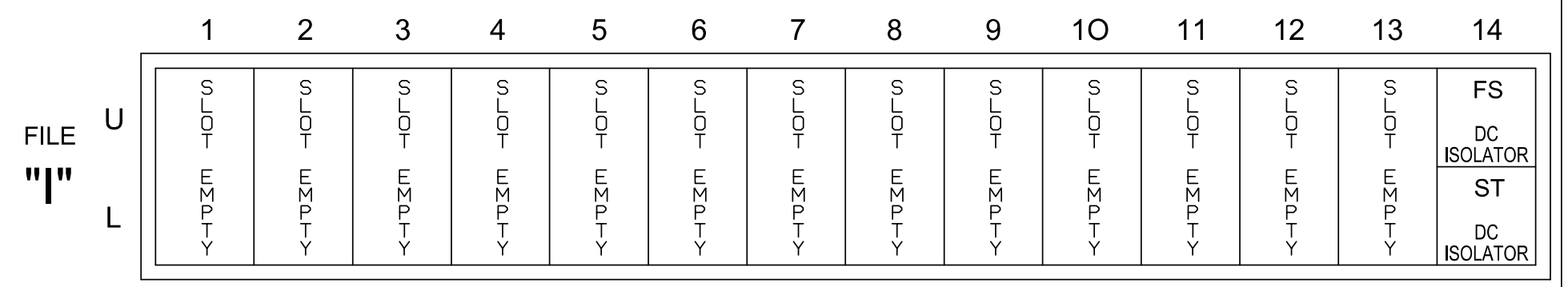
Start Up Parameters
 StartUp Clearance Hold
 6

Unit Flash Parameters
 All Red Flash Exit Time
 6

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 12-0641T2
 DESIGNED: June 2025
 SEALED: 12/04/2025
 REVISED:

INPUT FILE POSITION LAYOUT

(front view)



SPECIAL DETECTOR NOTE

Install a multizone microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

OVERLAP PROGRAMMING

Front Panel
 Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
 Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	3
Type	FYA 4 - Section
Included Phases	6
Modifier Phases	-
Modifier Overlaps	-
Trail Green	0
Trail Yellow	0.0
Trail Red	0.0

Electrical Detail
 Signal Upgrade - Temporary Design 2

Prepared in the Offices of:

 NC License #F-0102
 421 Fayetteville Street, Suite 600
 Raleigh, NC 27601
 (919) 677-2000

US 64 (Davie Avenue) and US 21 (Sullivan Road) at E. End Avenue and Stockton Street
 Division 12 Iredell County Statesville

PLAN DATE: June 2025
 PREPARED BY: SP Pennington
 REVISIONS

REVIEWED BY: KP Baumann
 REVIEWED BY:

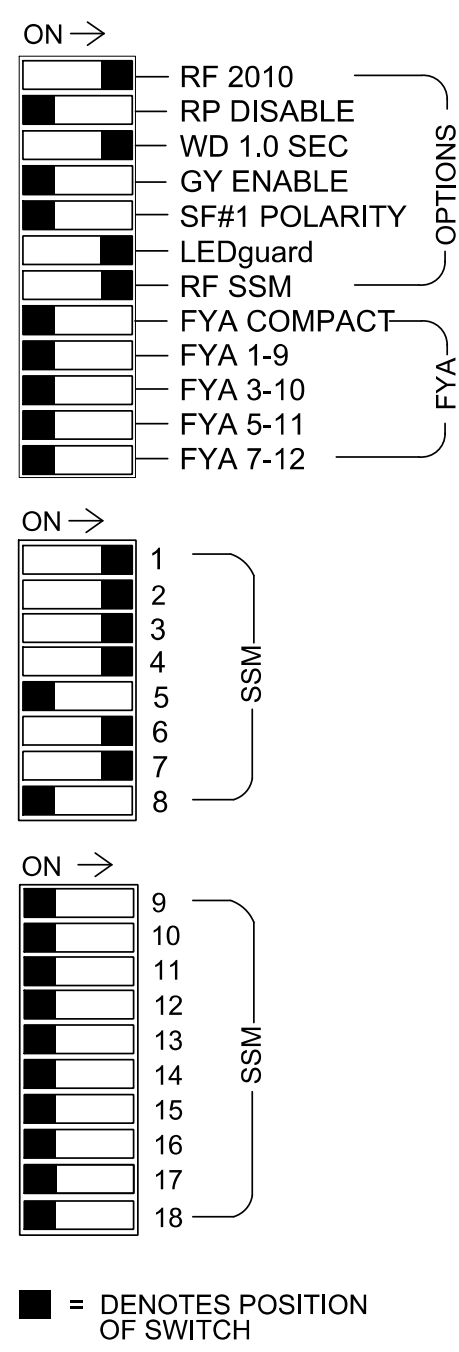
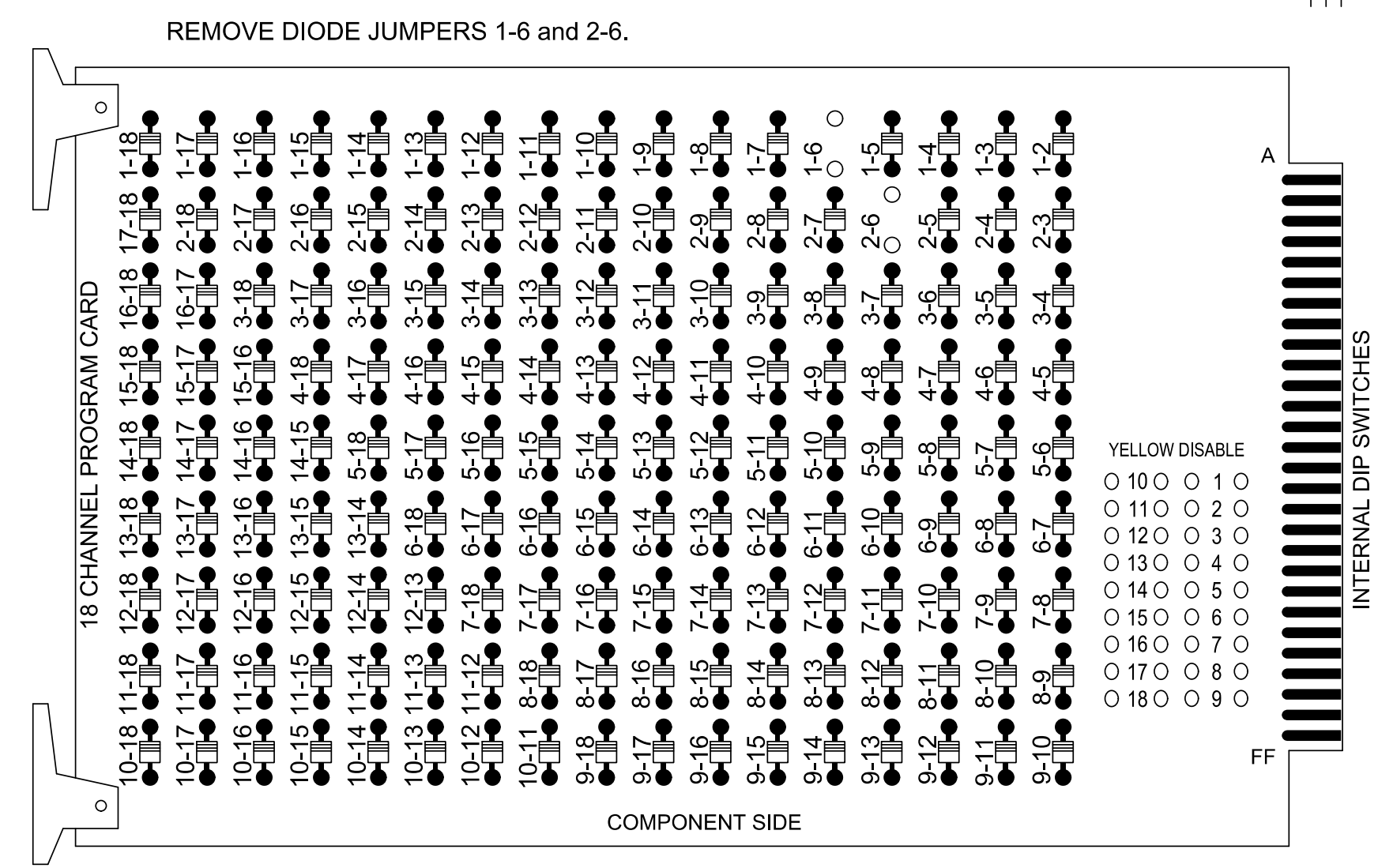
INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEERS
 SEAL 044434
 KEVIN P. BAUMANN
 12/4/2025
 DATE
 SIG. INVENTORY NO. 12-0641T2

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that the Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

EQUIPMENT INFORMATION

Controller.....2070LX
 Cabinet.....336
 Software.....Q-Free MAXTIME
 Cabinet Mount.....Pole
 Output File Positions.....12
 Load Switches Used.....S1, S2, S4, S5, S8, S10
 Phases Used.....1, 2, 3, 4, 6, 7
 Overlap "1".....Not Used
 Overlap "2".....Not Used
 Overlap "3".....Not Used
 Overlap "4".....Not Used

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12		
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16		
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED		
SIGNAL HEAD NO.	11	21,22	NU	31	32	41	42	NU	61,62	NU	71	72	NU	NU
RED		128		116	116	101	101		134		122	122		
YELLOW		129		117	117	102	102		135		123	123		
GREEN		130		118	118	103	103		136		124	124		
RED ARROW	125													
YELLOW ARROW	126													
FLASHING YELLOW ARROW														
GREEN ARROW	127			118	103					124				

NU = Not Used

MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

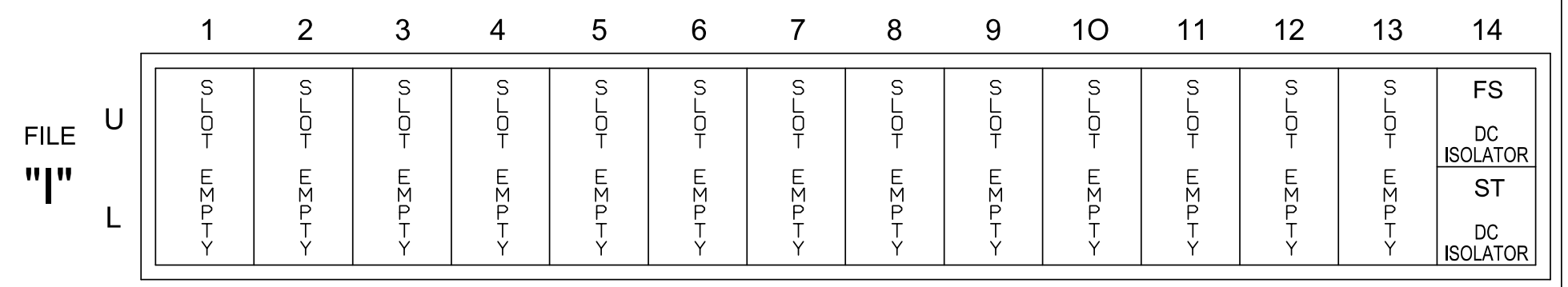
Modify parameters as shown below and save changes.

Start Up Parameters	
StartUp Clearance Hold	6

Unit Flash Parameters	
All Red Flash Exit Time	6

INPUT FILE POSITION LAYOUT

(front view)



SPECIAL DETECTOR NOTE

Install a multizone microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

OVERLAP PROGRAMMING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	3
Type	FYA 4 - Section
Included Phases	6
Modifier Phases	-
Modifier Overlaps	-
Trail Green	0
Trail Yellow	0.0
Trail Red	0.0

REMOVE!!!

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channels Configuration Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

NOTICE: FLASH RED

SEQUENCE DETAIL

Front Panel
Main Menu >Controller >Sequence & Phs Config>Sequences

Web Interface
Home >Controller >Sequence

Sequence 1

Ring	Sequence Data
1	1,2,a,3,4,7,b
2	6,a,b

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 12-0641T3
DESIGNED: June 2025
SEALED: 12/04/2025
REVISED:

Electrical Detail
Signal Upgrade - Temporary Design 3

Electrical and Programming Details For:

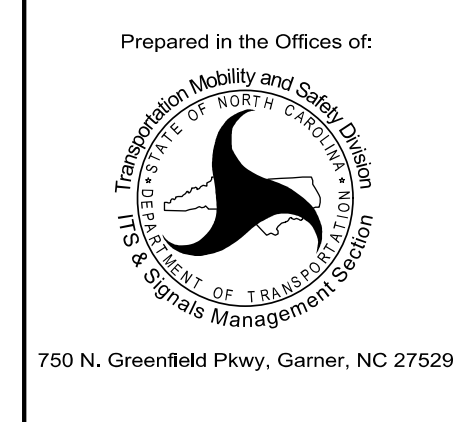
US 64 (Davie Avenue) and US 21 (Sullivan Road)

at E. End Avenue and Stockton Street

Division 12 Iredell County Statesville

PLAN DATE: June 2025 REVIEWED BY: KP Baumann

PREPARED BY: SP Pennington REVIEWED BY:



PLANS PREPARED IN THE OFFICE OF:
KimleyHorn
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

12/4/2025
DATE

SIG. INVENTORY NO. 12-0641T3

TIP PROJECT: U-5964

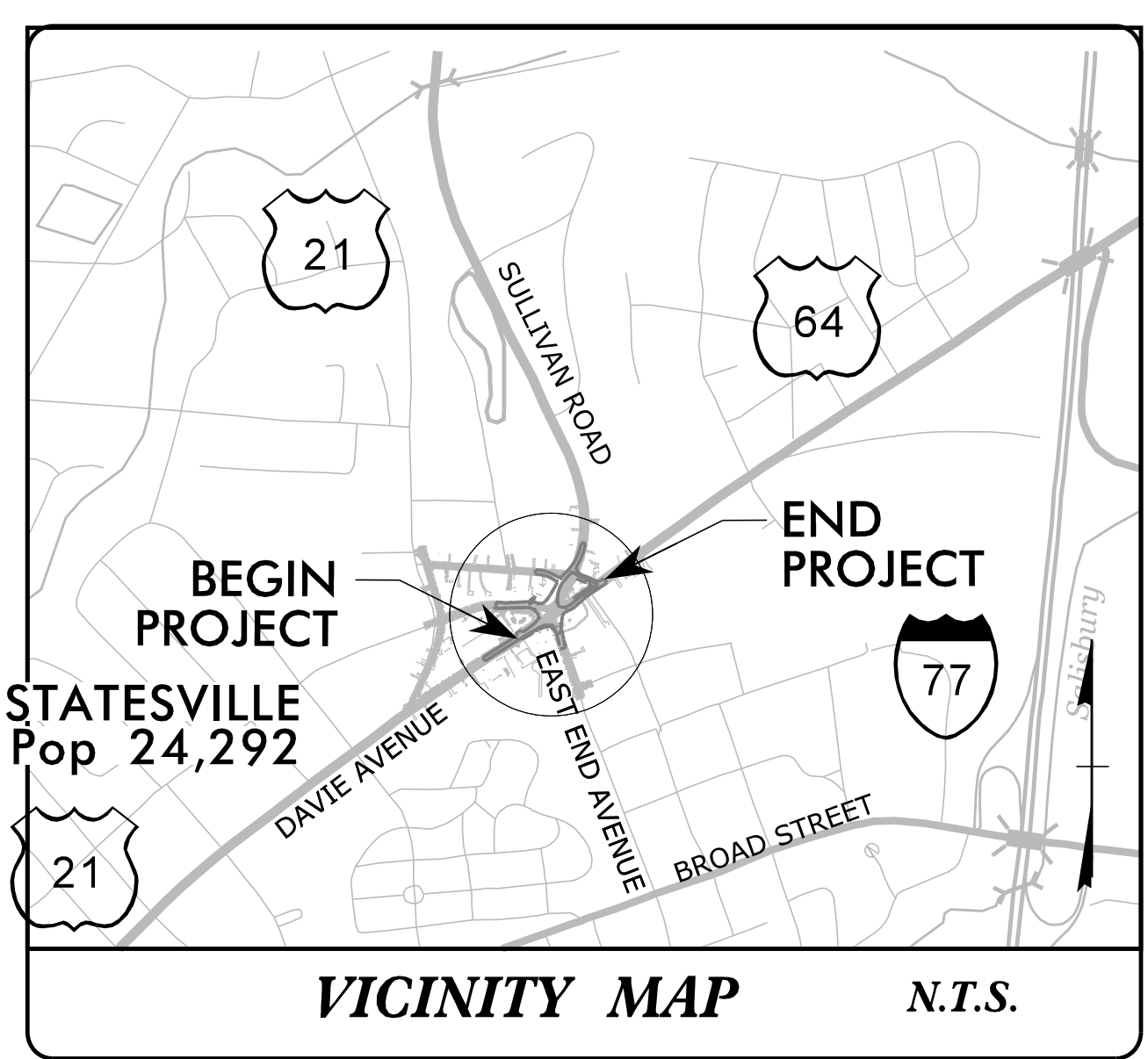
T.I.P. NO.	SHEET NO.
U-5964	UC-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

IREDELL COUNTY

LOCATION: INTERSECTION OF US 64 (DAVIE AVENUE), US 21 (SULLIVAN ROAD), STOCKTON STREET, AND EAST END AVENUE

TYPE OF WORK: UTILITY CONSTRUCTION



NCDOT CONTACT:
BRYAN K. SOWELL, P.E.
NCDOT - DIVISION 12
1710 E. MARION STREET
SHELBY, NC 28151-0047

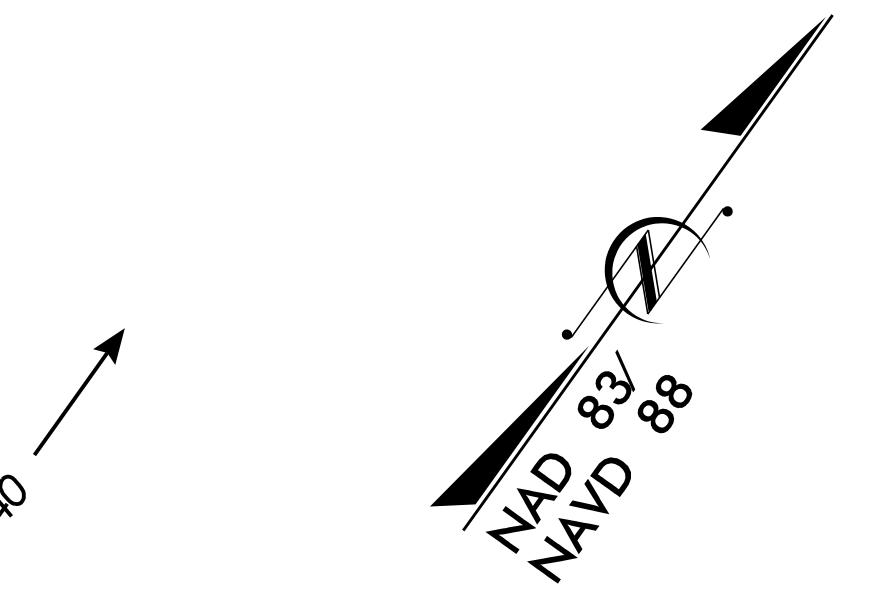
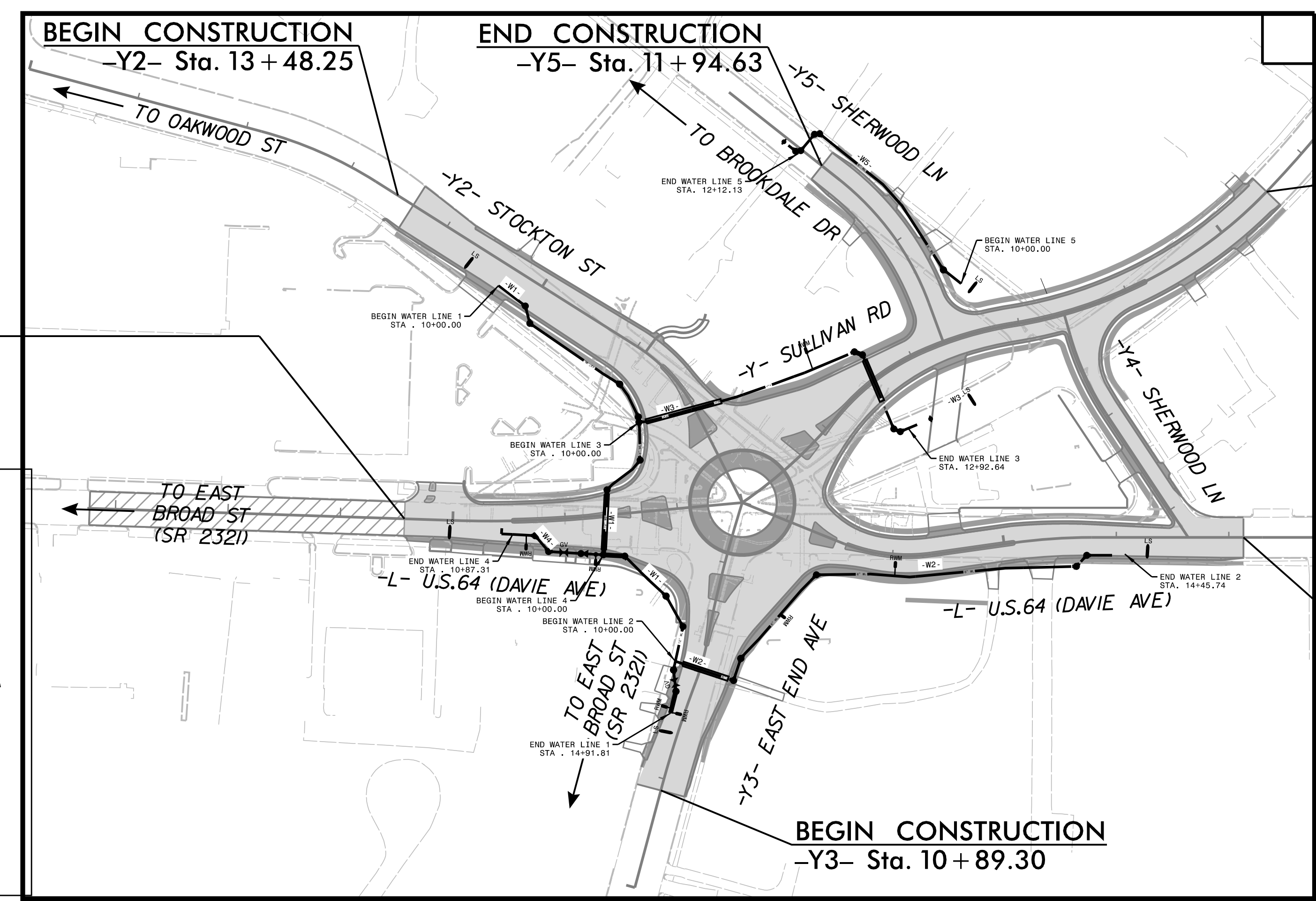
BEGIN TIP PROJECT U-5964
-L- Sta. 9 + 57.00

OWNER: CITY OF STATESVILLE PUBLIC UTILITIES DEPARTMENT

CONTACT INFORMATION: BRYAN K. SOWELL, P.E. (980) 552-4221 BKSOWELL@NCDOT.GOV

PROJECT ENGINEER: SOPHIA JOHNSTON, P.E. (704) 533-8901 SOPHIA.JOHNSTON@KIMLEY-HORN.COM 200 SOUTH TRYON STREET, SUITE 200 CHARLOTTE, NORTH CAROLINA 28202

CITY OF STATESVILLE PUBLIC UTILITIES DEPARTMENT: WILLIAM E. VAUGHAN, DPA, P.E. (704) 761-2383 WVAUGHAN@STATESVILLENC.NET



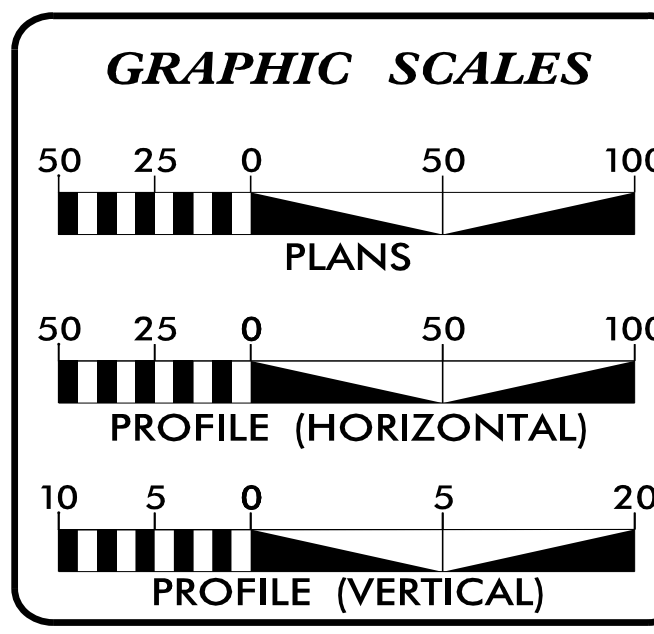
END CONSTRUCTION
-Y- Sta. 15 + 53.80

TO I-40

TO I-77

END TIP PROJECT U-5964
-L- Sta. 17 + 13.00

DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	UTILITY NOTES
UC-3A THRU UC-3C	UTILITY DETAILS
UC-4	UTILITY CONSTRUCTION SHEETS
UC-5	UTILITY PROFILE SHEETS

WATER AND SEWER OWNERS ON PROJECT

(1) WATER - CITY OF STATESVILLE
(2) SANITARY SEWER - CITY OF STATESVILLE

PREPARED IN THE OFFICE OF

Kimley Horn

NC LICENSE #F-2102
200 SOUTH TRYON STREET, SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (704) 333-5131

MATTHEW SHOESMITH, P.E. CONSULTANT CONTACT #1
SOPHIA JOHNSTON, P.E. CONSULTANT CONTACT #2

SEAL

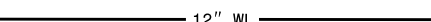
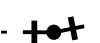






















DIVISION OF HIGHWAYS UTILITIES UNIT
1555 MAIL SERVICES CENTER
RALEIGH, NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

Stephen G. Sealy WESTERN UTILITIES MANAGER
Donald E. Hampton REGIONAL UTILITIES ENGINEER
Jong-Tae Yoon, P.E. SENIOR UTILITIES ENGINEER
Steve C. Trexler UTILITIES AREA COORDINATOR



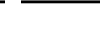

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS








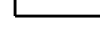
PROPOSED WATER SYMBOLS








Water Line (Sized as Shown)	
11¼ Degree Bend	
22½ Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	REM FH
Water Meter	
Relocate Water Meter	
Remove Water Meter	REM WM
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	
















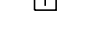
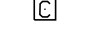

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

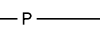
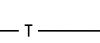





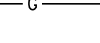
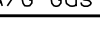
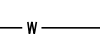
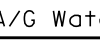




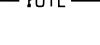



Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

NOTE
PAY ITEM

EXISTING UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Utility Pole	
Utility Pole with Base	
H-Frame Pole	
Power Transmission Line Tower	
Water Manhole	
Power Manhole	
Telephone Manhole	
Sanitary Sewer Manhole	
Hand Hole for Cable	
Power Transformer	
Telephone Pedestal	
CATV Pedestal	
Gas Valve	
Gas Meter	
Located Miscellaneous Utility Object	
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

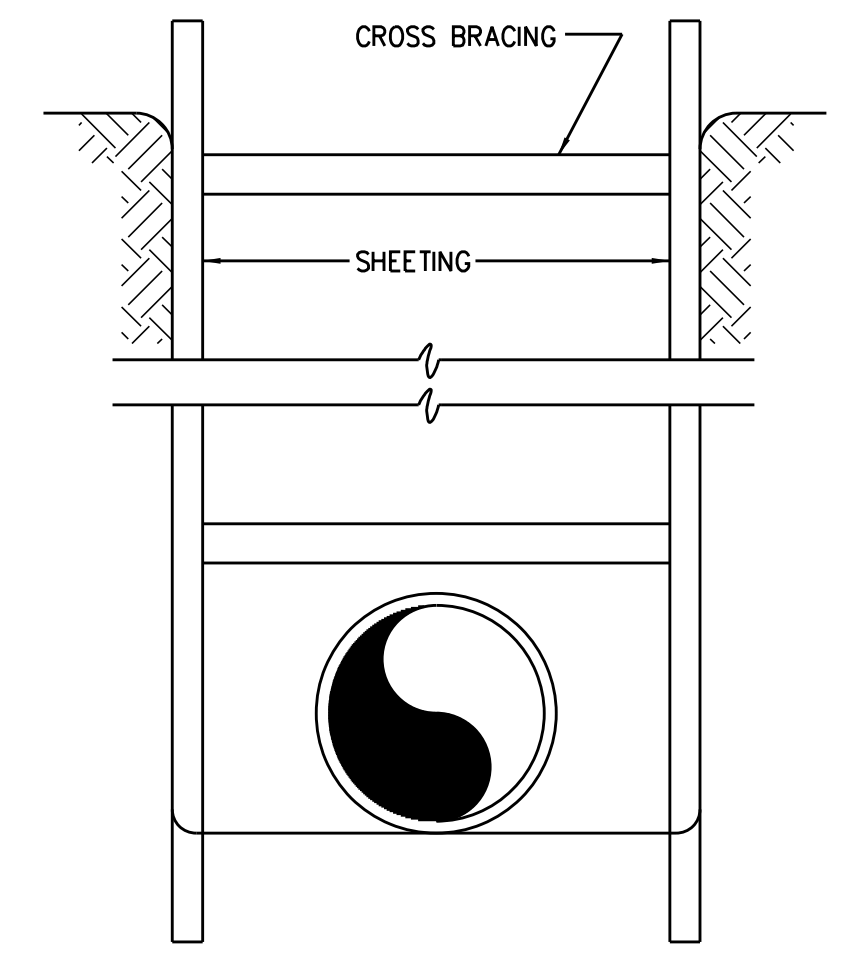
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*Underground Telephone Cable	
*Underground Telephone Conduit	
*Underground Fiber Optics Telephone Cable	
*Underground TV Cable	
*Underground Fiber Optics TV Cable	
*Underground Gas Pipeline	
Aboveground Gas Pipeline	
*Underground Water Line	
Aboveground Water Line	
*Underground Gravity Sanitary Sewer Line	
Aboveground Gravity Sanitary Sewer Line	
*Underground SS Forced Main Line	
Underground Unknown Utility Line	
SUE Test Hole	
Water Meter	
Water Valve	
Fire Hydrant	
Sanitary Sewer Cleanout	

*For Existing Utilities
Utility Line Drawn from Record (Type as Shown)

5/14/99

5/14/99

UTILITY CONSTRUCTION

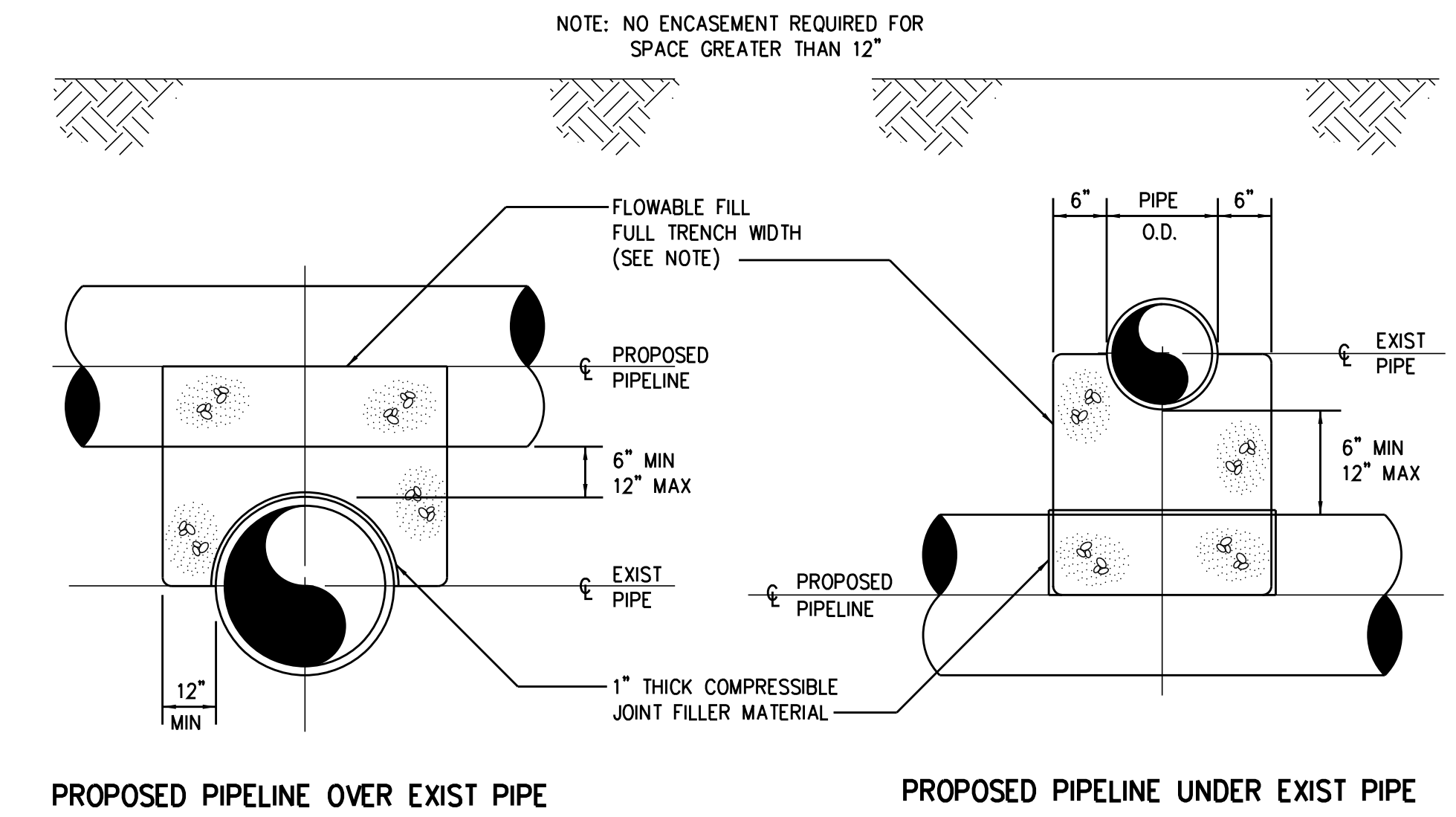


1 TYPICAL SHEETING
 UC-3A SCALE: N.T.S.

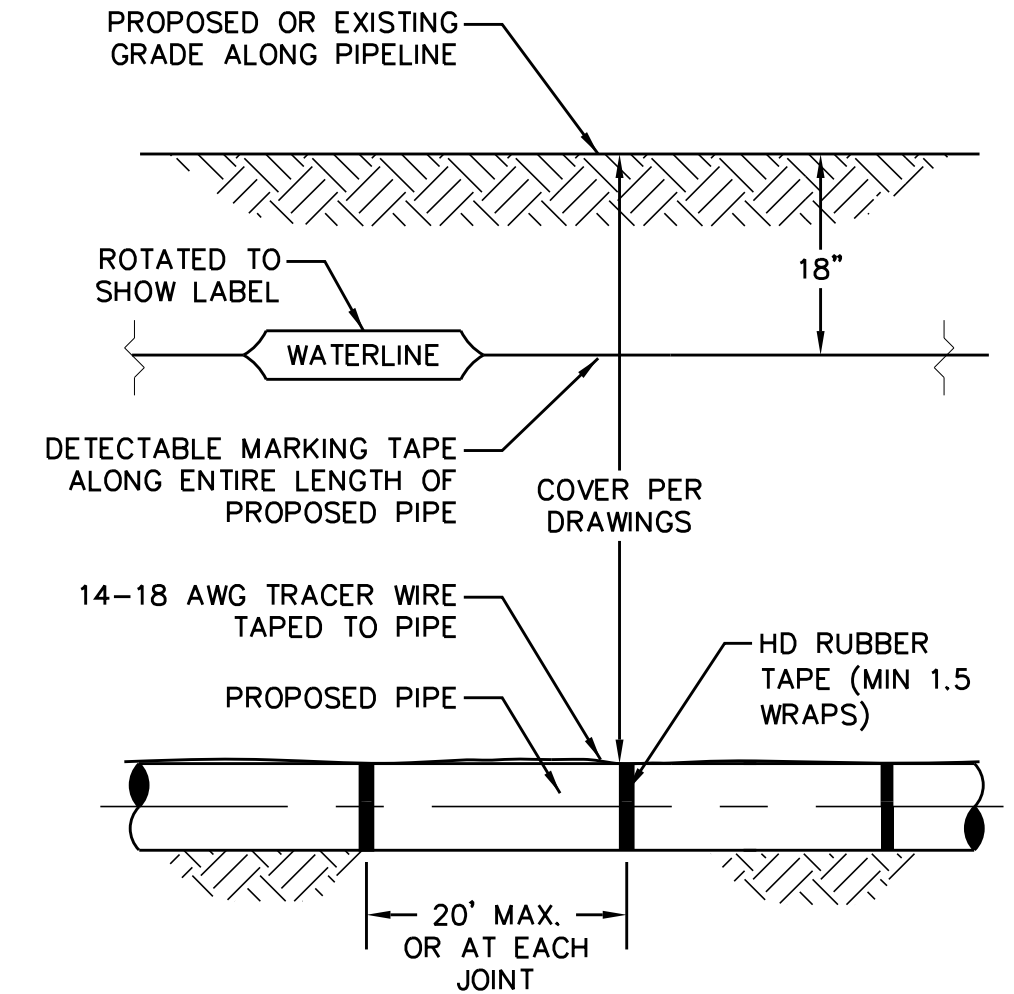
TRENCH EXCAVATION LIMITS		
INTERNAL DIAMETER OF PIPE	W WIDTH OF TRENCH	
	MAX	W=MIN
4"-6"	3'-9"	2'-0"
8"-10"	3'-9"	2'-2"
12"	3'-9"	O.D.+2'
14"-16"	4'-2"	O.D.+2'
18"	4'-4"	O.D.+2'
20"-21"	4'-8"	O.D.+2'
24"	4'-11"	O.D.+2'
27"	5'-9"	O.D.+2'
30"	6'-7"	O.D.+2'
36"	7'-4"	O.D.+2'
42"	8'-2"	O.D.+2'
48"	8'-9"	O.D.+2'
54"	9'-4"	O.D.+2'
60"	9'-10"	O.D.+2'
72"	11'-0"	O.D.+2'
78"	11'-8"	O.D.+2'
84"	12'-0"	O.D.+2'
90"	12'-6"	O.D.+2'
96"	13'-0"	O.D.+2'
108"	14'-0"	O.D.+2'
DEPTH OF CUT	S MAXIMUM PAVEMENT REPLACEMENT WIDTH	
	S	
0-6'	S=W+4'	
>6-8'	S=W+8'	
>8-10'	S=W+12'	
>10-12'	S=W+16'	
>12-14'	S=W+20'	
>14-16'	S=W+24'	
>16-18'	S=W+28'	
>18'	S=W+32'	

W = TRENCH WIDTH AT BOTTOM OF PIPE. TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS.

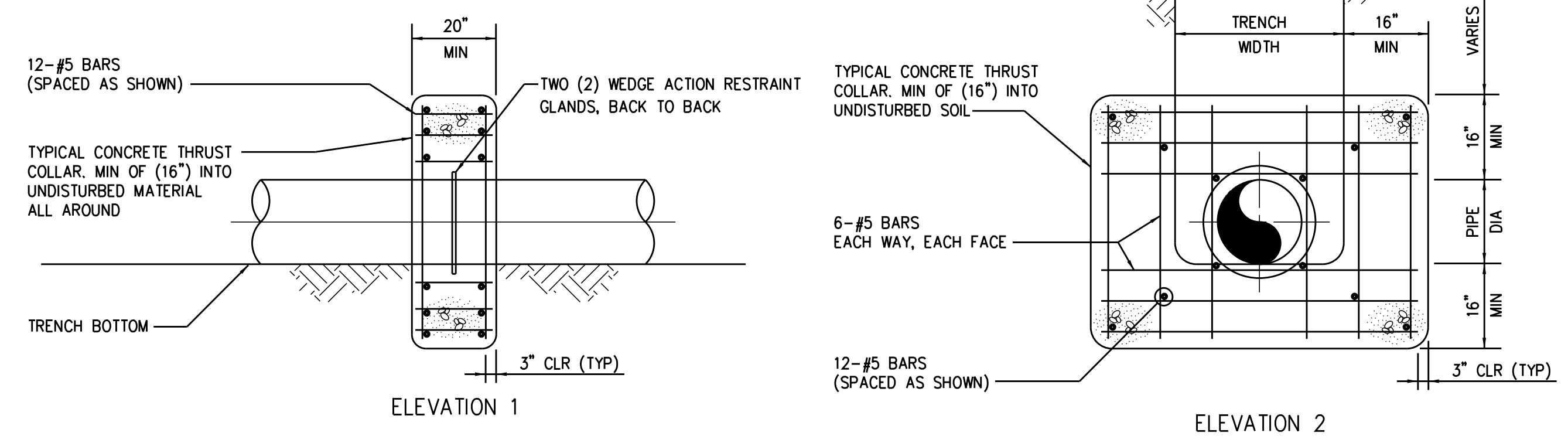
2 TRENCH EXCAVATION LIMITS
 UC-3A SCALE: N.T.S.



3 PROPOSED PIPELINE OVER/UNDER EXIST PIPE
 UC-3A SCALE: N.T.S.



4 DETECTABLE MARKING TAPE AND WIRE
 UC-3A SCALE: N.T.S.

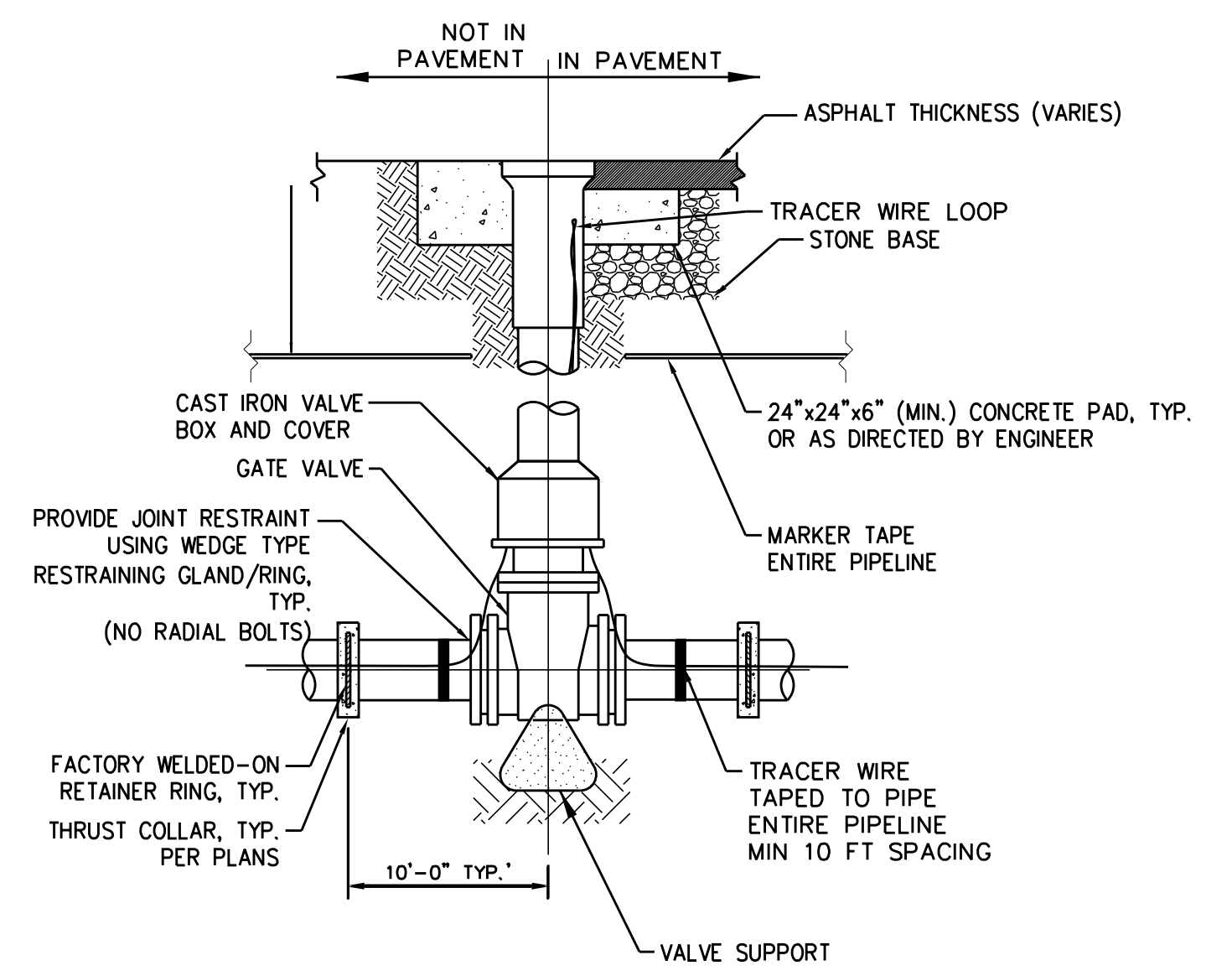


5 THRUST COLLAR
 UC-3A SCALE: N.T.S.

5/14/99
 UC-3A
 SCALE: N.T.S.
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5/14/2024

UTILITY CONSTRUCTION



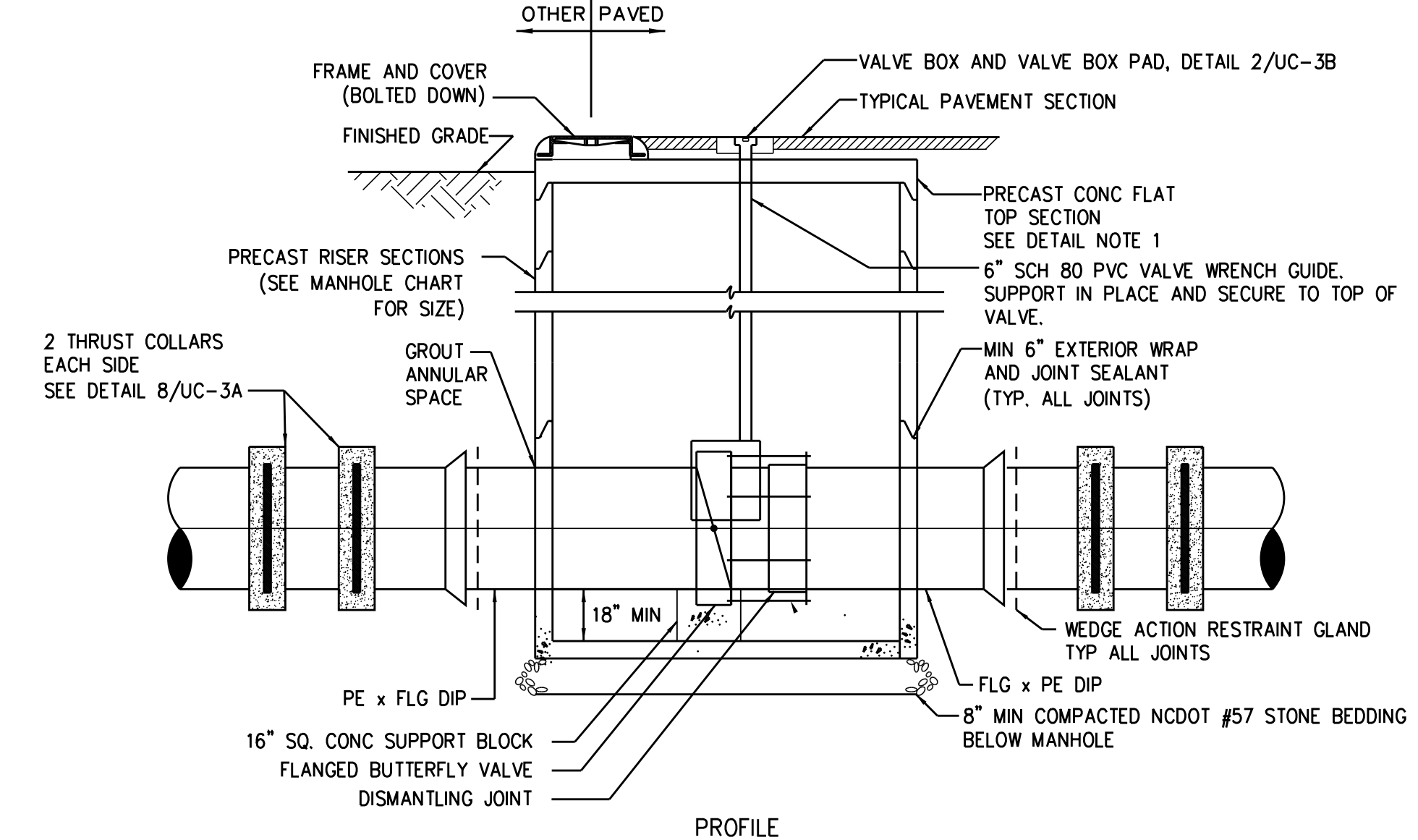
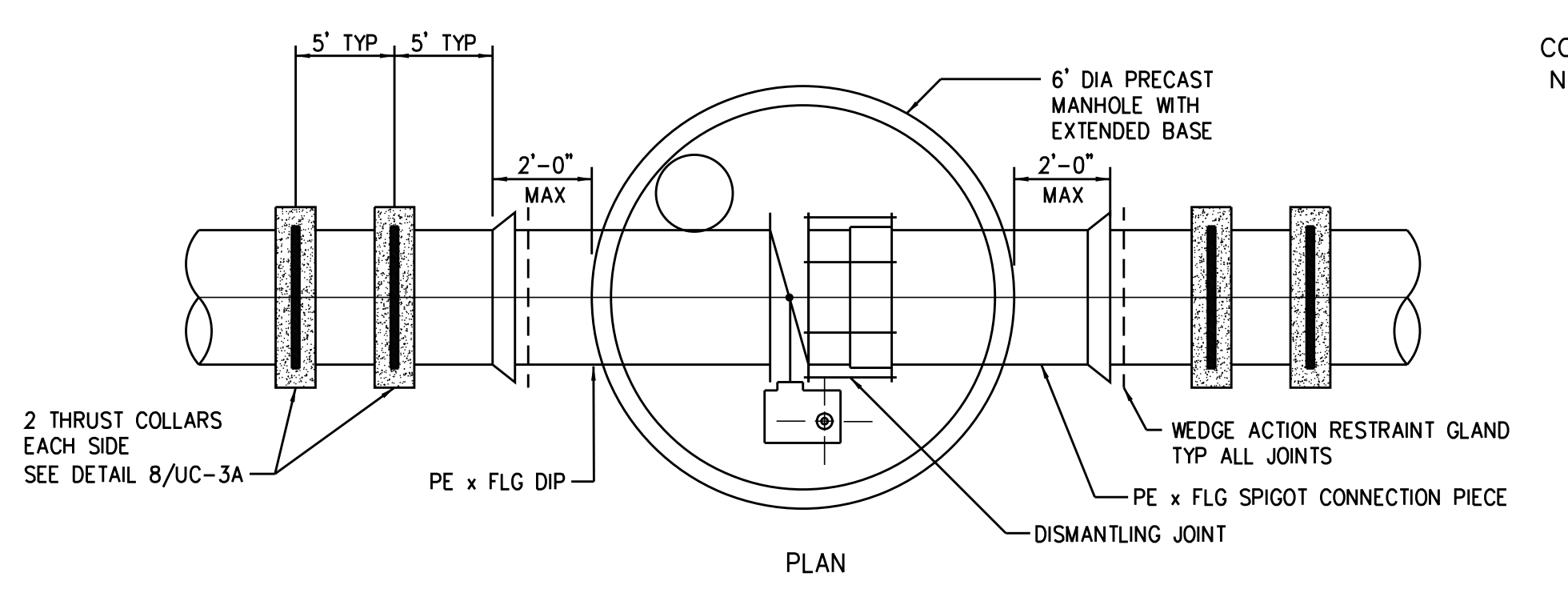
NOTES:
 1. PROVIDE HDPE INSERTS IN ALL VALVE BOXES.

DESIGN PRESSURE		
200 PSI		
PIPE SIZE	ROD DIA	NUMBER REQ'D
4" TO 8"	3/4"	2
10" TO 20"	3/4"	4
24"	3/4"	6
30"	1"	6
36"	1"	8

1. THREADED RODS FOR PIPE DIAMETERS LARGER THAN 12" SHALL BE ASTM A193 (GRADE B7). ALL OTHER THREADED RODS SHALL BE ASTM A36.
2. ALL HARDWARE IN CONTACT WITH SOIL SHALL BE PAINTED WITH TWO COATS HIGH BUILD COAL TAR EPOXY (MIN 26 MIL DRY FILM THICKNESS)
5. RODS SHALL BE EQUALLY SPACED AROUND PIPE.

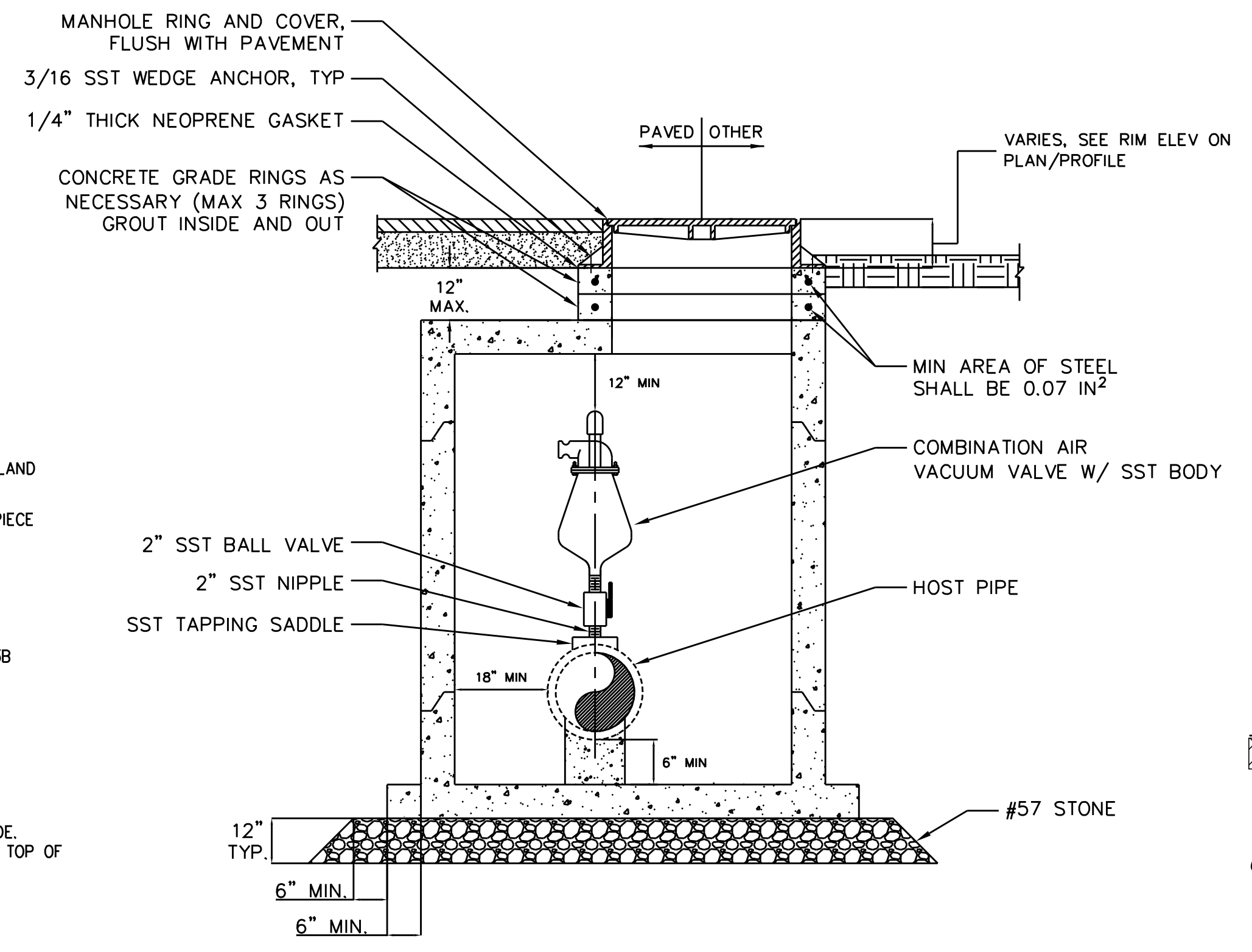
2 THREADED ROD SCHEDULE
 UC-3B SCALE: N.T.S.

1 GATE VALVE ASSEMBLY (FOR 4" THRU 12" VALVES)
 UC-3B SCALE: N.T.S.



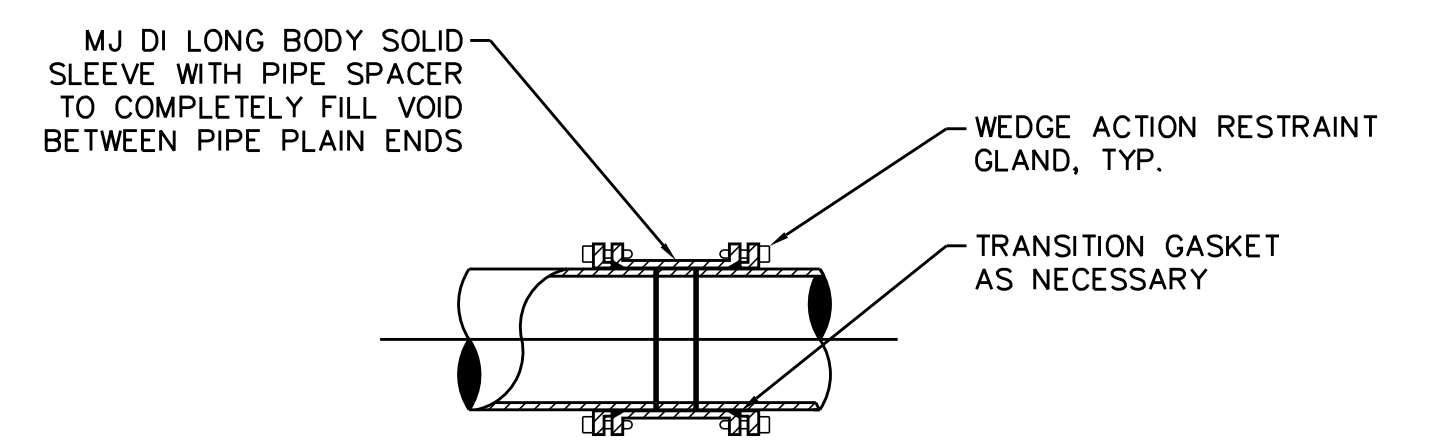
NOTES:
 1. VALVE MANHOLE TOP SHALL BE MIN 15" BELOW PAVEMENT SECTION IF INSTALLED WITHIN ROADWAY.
 2. DISMANTLING JOINT SHALL BE RATED FOR THE SAME PRESSURE AS THE HOST PIPE, SHALL HAVE STAINLESS STEEL THREADED RODS, AND SHALL BE NSF61 RATED.

3 BUTTERFLY VALVE ASSEMBLY (16" AND LARGER)
 UC-3B SCALE: N.T.S.



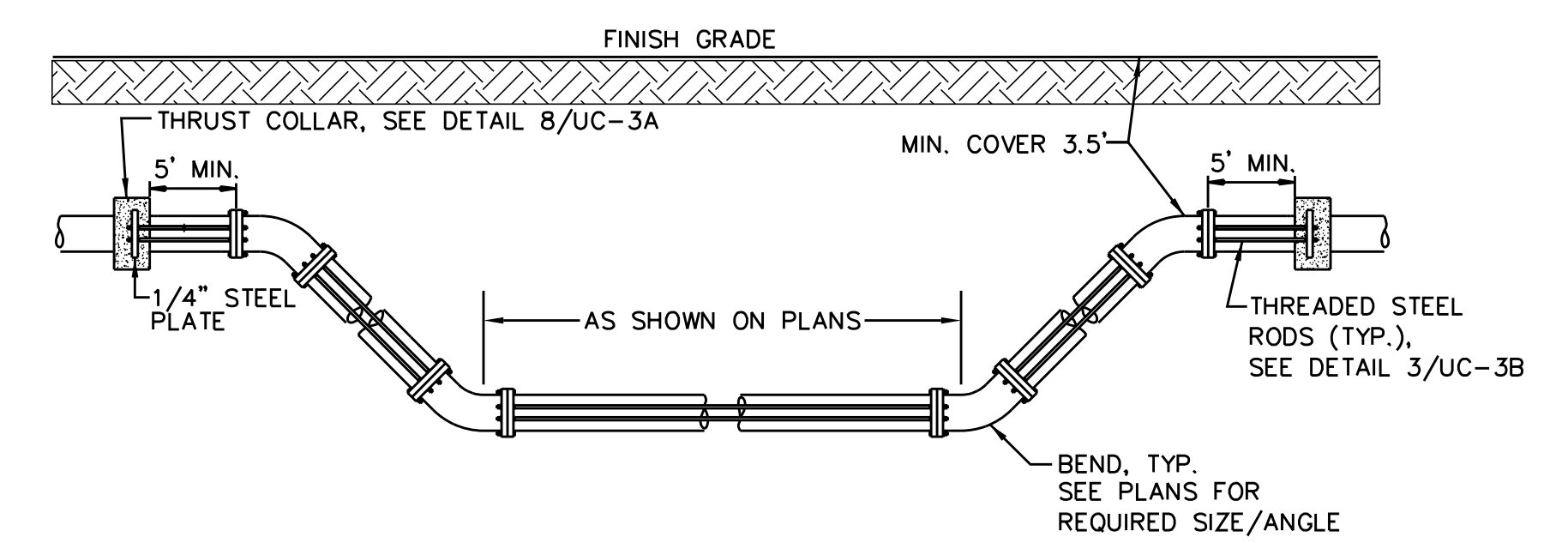
- NOTES:
1. ALL METALLIC COMPONENTS SHALL BE STAINLESS STEEL.
 2. PROVIDE SUFFICIENT SPACING BETWEEN BALL VALVE, ARV, AND TAPPING SADDLE SUCH THAT THE BALL VALVE WILL OPERATE PROPERLY.
 3. MALE THREADED END OF ARV SHALL BE COATED WITH ANTI-SEIZE THREAD COMPOUND PRIOR TO INSTALLATION.
 4. PROVIDE BUSHINGS AND ADAPTERS AS NECESSARY TO CONNECT TO TAP.
 5. MANHOLE SHALL BE STANDARD 5' WITH SLAB TOP AND EXTENDED BASE.
 6. PIPE PENETRATIONS THROUGH MANHOLE SHALL BE SEALED WITH RUBBER BOOTS.

4 AIR VACUUM MANHOLE
 UC-3B SCALE: N.T.S.



- NOTES:
1. SLEEVES SHALL BE DI MJ OF THE SAME PRESSURE RATING AS THE HOST PIPE.
 2. RESTRAINT GLANDS SHALL BE DESIGNED FOR THE INTENDED USE AND SHALL CONSIST OF MULTIPLE GRIPPING WEDGES INCORPORATED INTO A FOLLOWER GLAND AND BOLT-ACTUATED BY TORQUE-LIMITING TWIST OFF NUTS.

5 RESTRAINED MJ SOLID SLEEVE
 UC-3B SCALE: N.T.S.

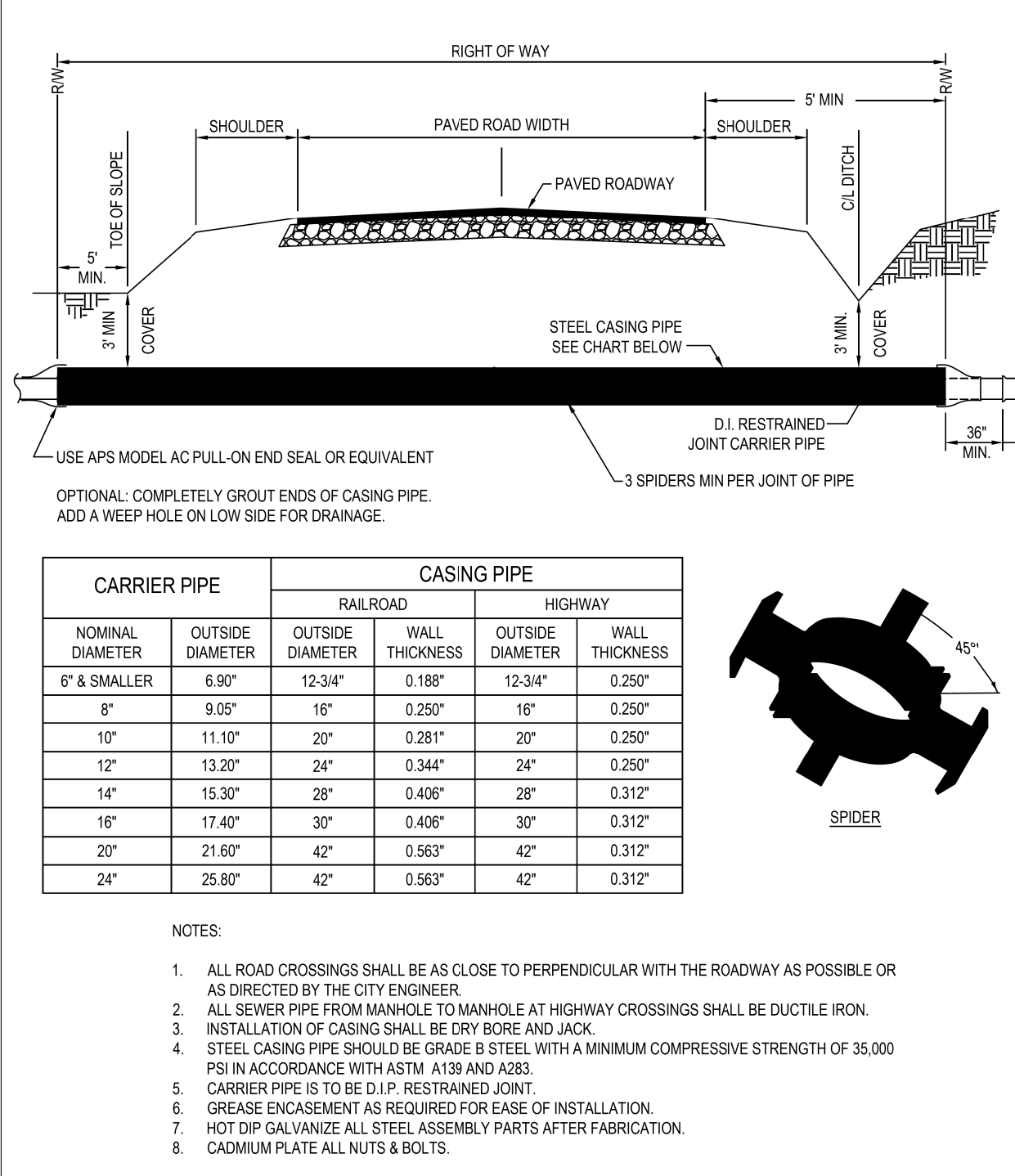


- NOTES:
1. ONCE INSTALLED AND TIGHT, THE STEEL RODS AND BOLTS SHALL BE COATED WITH 2 COATS OF BITUMINOUS BASE PAINT.
 2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT BENDS.
 3. MEGALUGS OR RESTRAINED JOINT PIPE AND FITTINGS ARE ALLOWED IN LIEU OF RODDING.
 4. THRUST COLLARS SHALL BE IN ACCORDANCE WITH DETAIL 1/UC-3B
 5. ALL PIPE AND FITTINGS BETWEEN THRUST COLLARS SHALL BE RODDED.

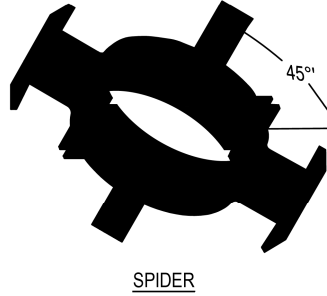
6 STANDARD VERTICAL BEND
 UC-3B SCALE: N.T.S.

5/14/2019


UTILITY CONSTRUCTION

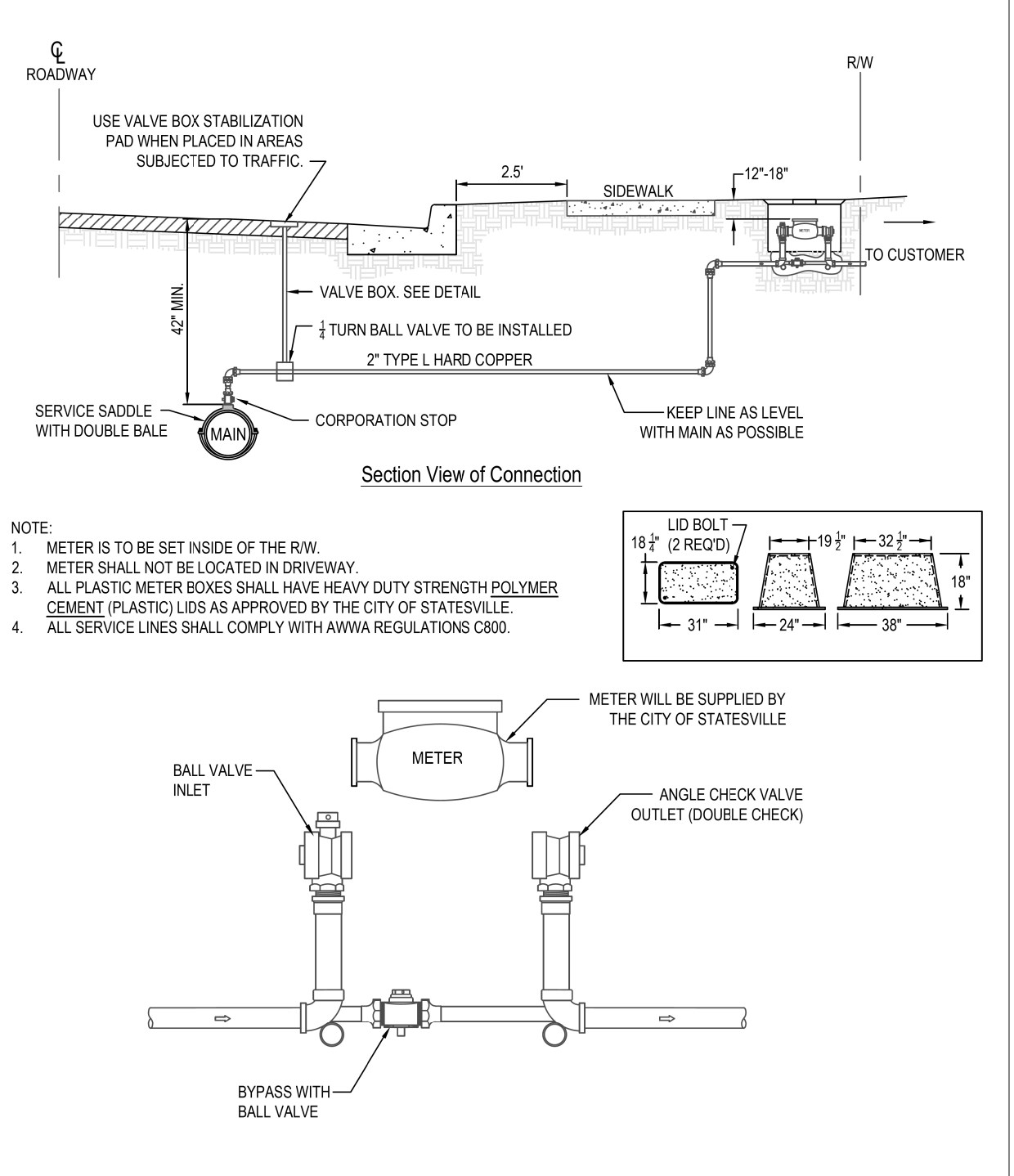


CARRIER PIPE	CASING PIPE			
	RAILROAD	HIGHWAY		
NOMINAL DIAMETER	OUTSIDE DIAMETER	OUTSIDE DIAMETER	WALL THICKNESS	OUTSIDE DIAMETER
6" & SMALLER	6.90"	12-3/4"	0.188"	12-3/4"
8"	9.05"	16"	0.250"	16"
10"	11.10"	20"	0.281"	20"
12"	13.20"	24"	0.344"	24"
14"	15.30"	28"	0.406"	28"
16"	17.40"	30"	0.406"	30"
20"	21.60"	42"	0.563"	42"
24"	25.80"	42"	0.563"	42"

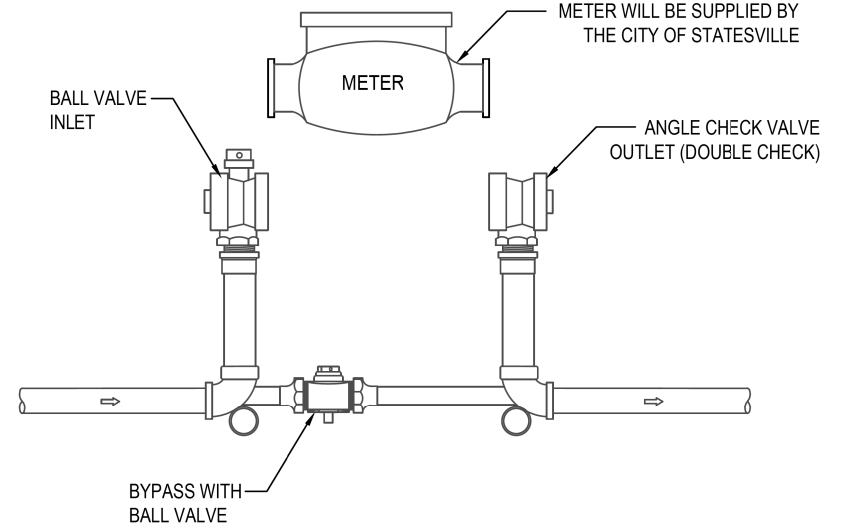


- NOTES:
- ALL ROAD CROSSINGS SHALL BE AS CLOSE TO PERPENDICULAR WITH THE ROADWAY AS POSSIBLE OR AS DIRECTED BY THE CITY ENGINEER.
 - ALL SEWER PIPE FROM MANHOLE TO MANHOLE AT HIGHWAY CROSSINGS SHALL BE DUCTILE IRON.
 - INSTALLATION OF CASING SHALL BE BY BORE AND JACK.
 - STEEL CASING PIPE SHOULD BE GRADE B STEEL WITH A MINIMUM COMPRESSIVE STRENGTH OF 35,000 PSI IN ACCORDANCE WITH ASTM A139 AND A263.
 - CARRIER PIPE IS TO BE D.I.P. RESTRAINED JOINT.
 - GREASE ENCASUREMENT AS REQUIRED FOR EASE OF INSTALLATION.
 - HOT DIP GALVANIZE ALL STEEL ASSEMBLY PARTS AFTER FABRICATION.
 - CADMIUM PLATE ALL NUTS & BOLTS.

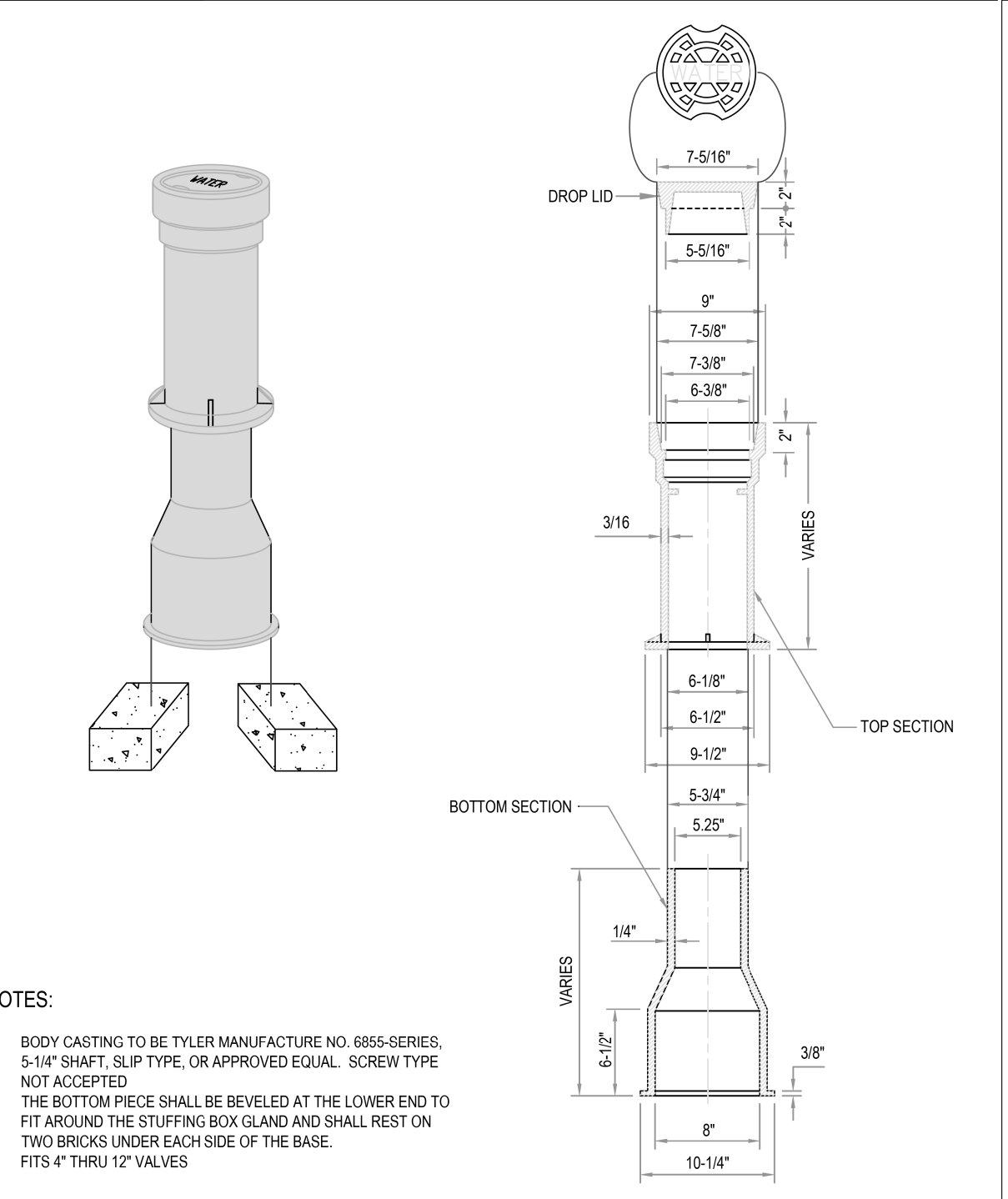
	CITY OF STATESVILLE	WATER LINE	DETAIL #	REVISED
	PUBLIC WORKS DEPARTMENT	Bore Under Paved Roadways	W-13	SEP 2019
			SCALE: N.T.S.	SHEET # 1 OF 1




- NOTE:
- METER IS TO BE SET INSIDE OF THE R.W.
 - METER SHALL NOT BE LOCATED IN DRIVEWAY.
 - ALL PLASTIC METER BOXES SHALL HAVE HEAVY DUTY STRENGTH POLYMER CEMENT (PLASTIC) LIDS AS APPROVED BY THE CITY OF STATESVILLE.
 - ALL SERVICE LINES SHALL COMPLY WITH AWWA REGULATIONS C800.

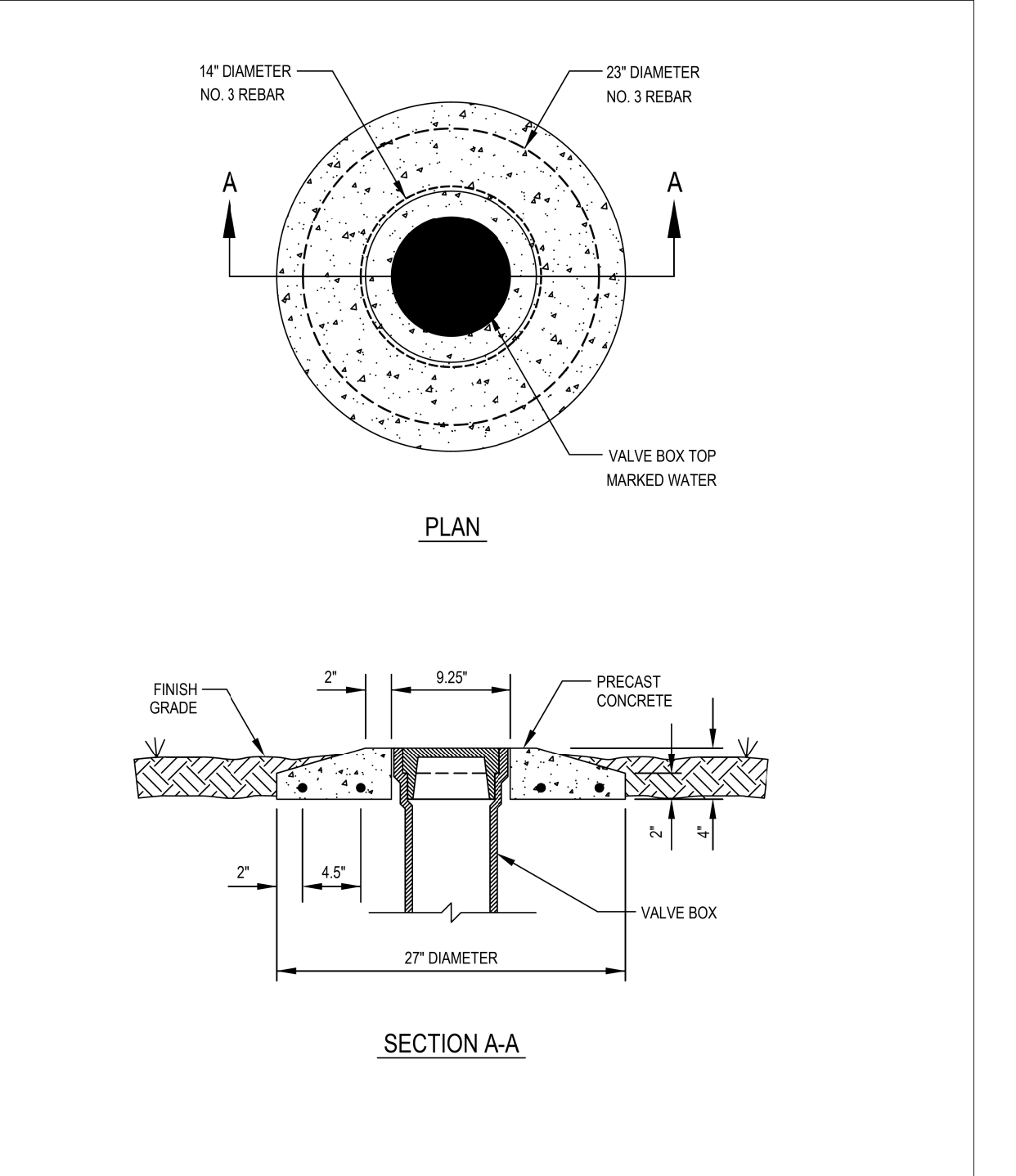



	CITY OF STATESVILLE	WATER LINE	DETAIL #	REVISED
	PUBLIC WORKS DEPARTMENT	2" WATER SERVICE	W-3	SEP 2019
			SCALE: N.T.S.	SHEET # 1 OF 1

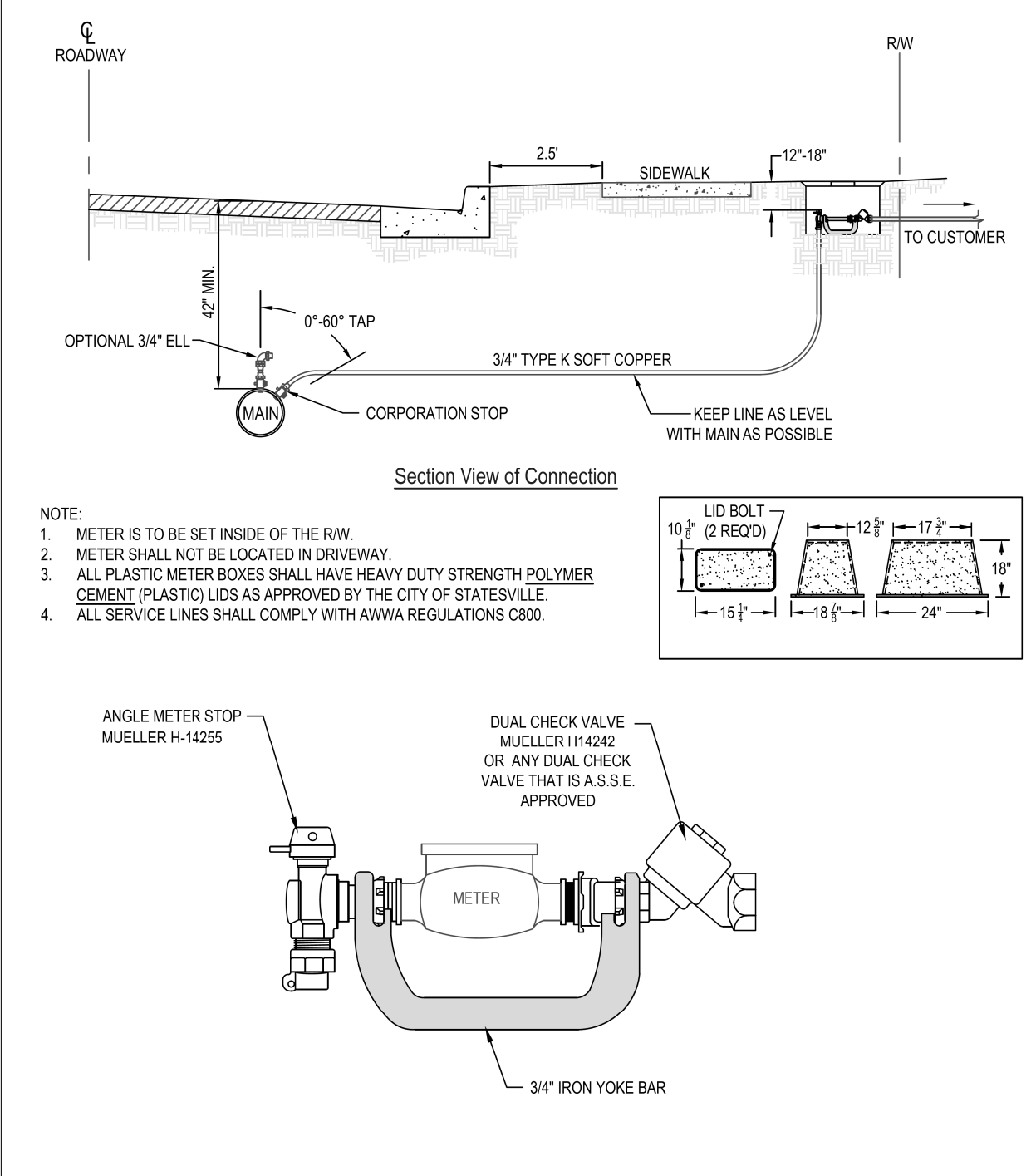


- NOTES:
- BODY CASTING TO BE TYLER MANUFACTURE NO. 6855-SERIES, 5-1/4" SHAFT, SLIP TYPE, OR APPROVED EQUAL. SCREW TYPE NOT ACCEPTED.
 - THE BOTTOM PIECE SHALL BE BEVELED AT THE LOWER END TO FIT AROUND THE STUFFING BOX GLAND AND SHALL REST ON TWO BRICKS UNDER EACH SIDE OF THE BASE.
 - FITS 4" THRU 12" VALVES.

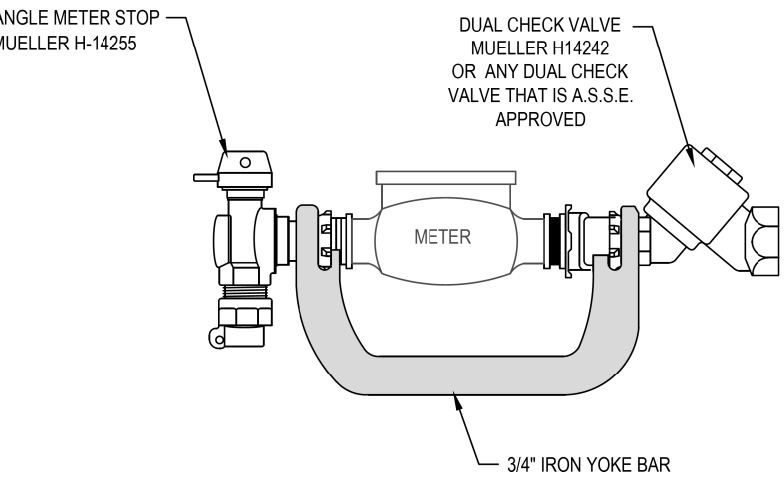
	CITY OF STATESVILLE	WATER LINE	DETAIL #	REVISED
	PUBLIC WORKS DEPARTMENT	Standard Valve Box	W-7	
			SCALE: N.T.S.	SHEET # 1 OF 1




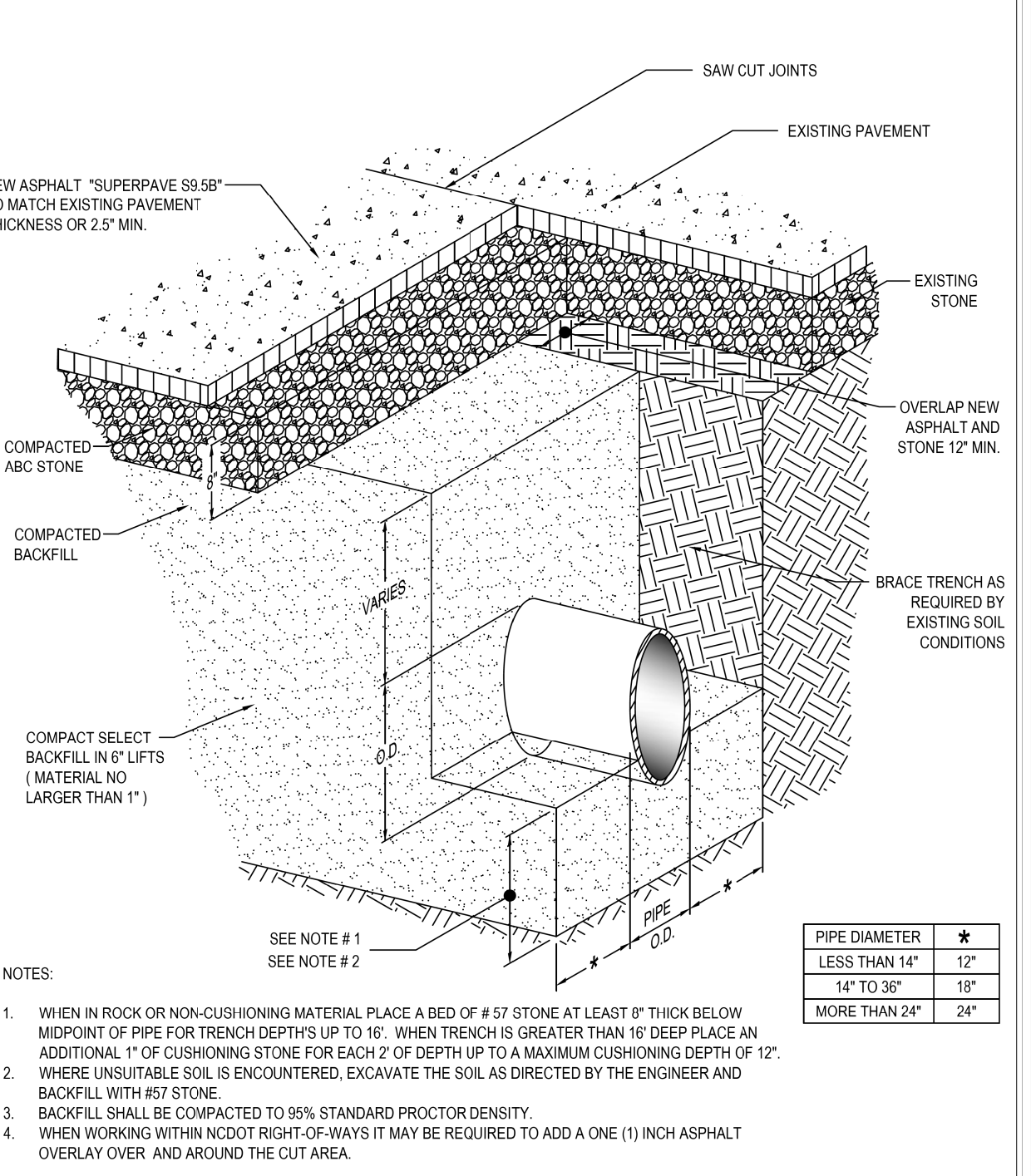
	CITY OF STATESVILLE	WATER LINE	DETAIL #	REVISED
	PUBLIC WORKS DEPARTMENT	Valve Box Protector (Stabilization Pad)	W-8	SEP 2019
			SCALE: N.T.S.	SHEET # 1 OF 1




- NOTE:
- METER IS TO BE SET INSIDE OF THE R.W.
 - METER SHALL NOT BE LOCATED IN DRIVEWAY.
 - ALL PLASTIC METER BOXES SHALL HAVE HEAVY DUTY STRENGTH POLYMER CEMENT (PLASTIC) LIDS AS APPROVED BY THE CITY OF STATESVILLE.
 - ALL SERVICE LINES SHALL COMPLY WITH AWWA REGULATIONS C800.

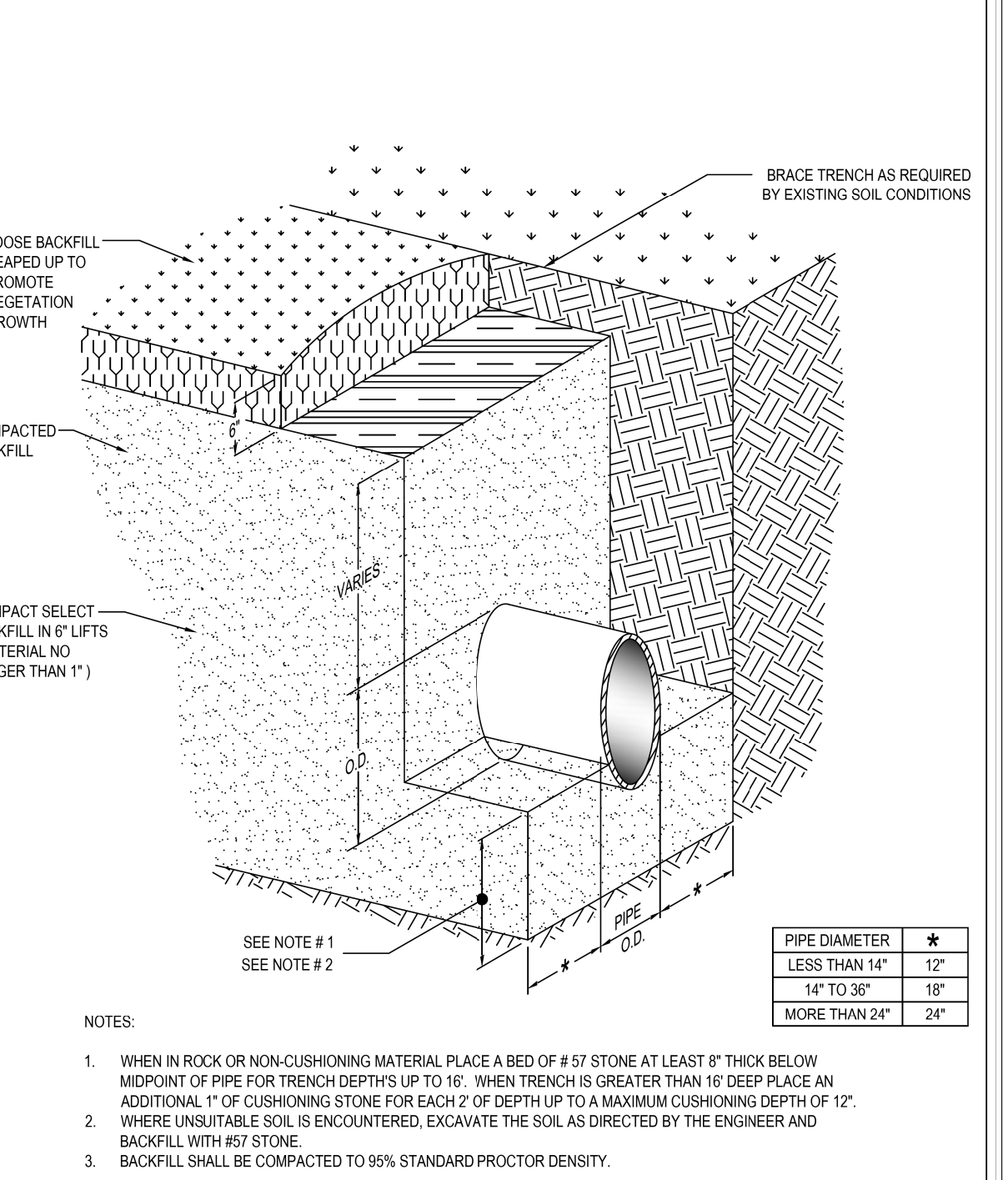


	CITY OF STATESVILLE	WATER LINE	DETAIL #	REVISED
	PUBLIC WORKS DEPARTMENT	3/4" - 1" WATER SERVICE	W-2	SEP 2019
			SCALE: N.T.S.	SHEET # 1 OF 1




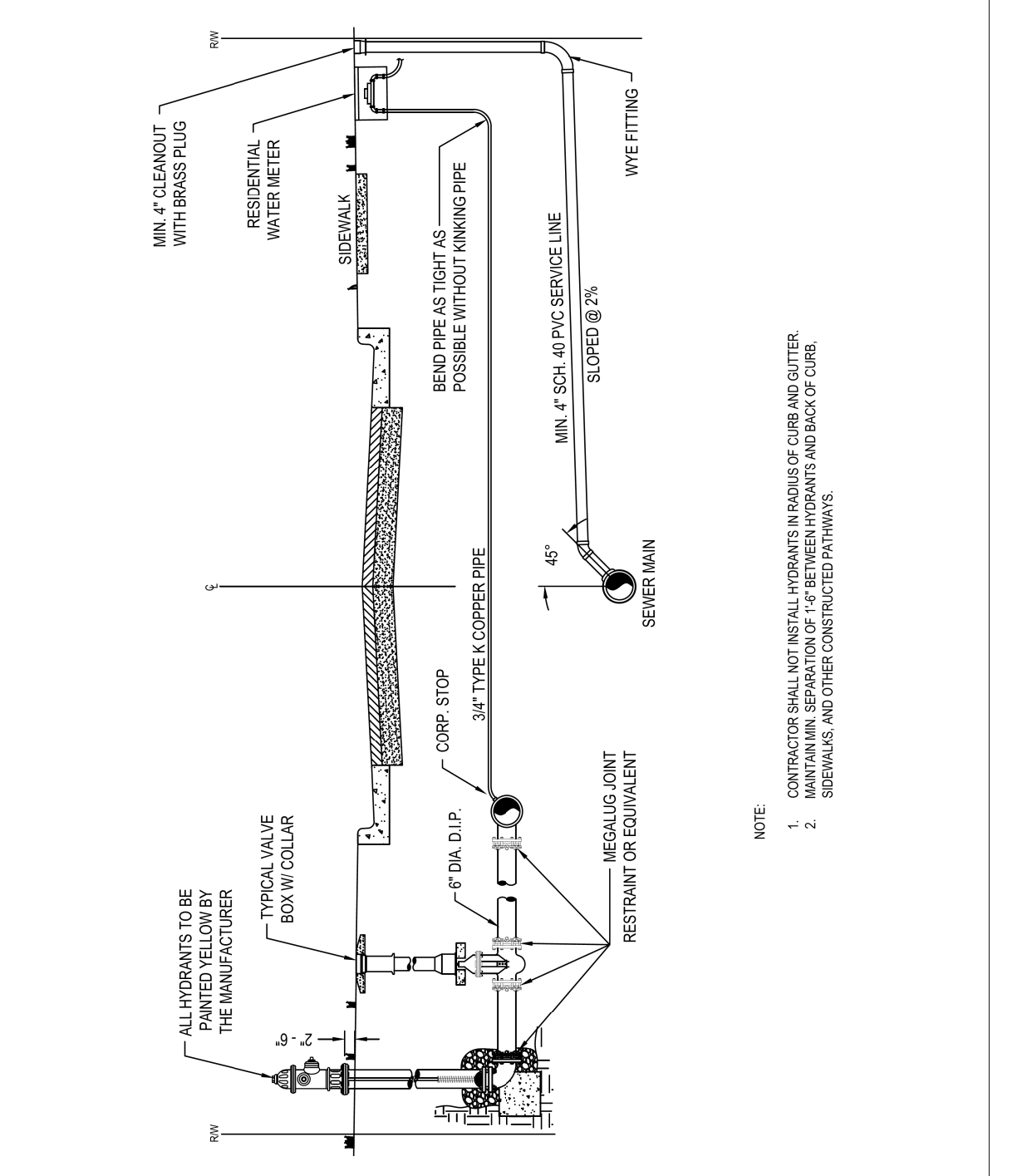
- NOTES:
- WHEN IN ROCK OR NON-CUSHIONING MATERIAL PLACE A BED OF #57 STONE AT LEAST 8" THICK BELOW MIDPOINT OF PIPE FOR TRENCH DEPTHS UP TO 16". WHEN TRENCH IS GREATER THAN 16" DEEP PLACE AN ADDITIONAL 1" OF CUSHIONING STONE FOR EACH 2" OF DEPTH UP TO A MAXIMUM CUSHIONING DEPTH OF 12".
 - WHERE UNSUITABLE SOIL IS ENCOUNTERED, EXCAVATE THE SOIL AS DIRECTED BY THE ENGINEER AND BACKFILL WITH #57 STONE.
 - BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
 - WHEN WORKING WITHIN RIGHT-OF-WAYS IT MAY BE REQUIRED TO ADD A ONE (1) INCH ASPHALT OVERLAY OVER AND AROUND THE CUT AREA.

	CITY OF STATESVILLE	WATER LINE	DETAIL #	REVISED
	PUBLIC WORKS DEPARTMENT	Trench, Bedding, & Backfill in Paved Roads	W-14	SEP 2019
			SCALE: N.T.S.	SHEET # 1 OF 1




- NOTES:
- WHEN IN ROCK OR NON-CUSHIONING MATERIAL PLACE A BED OF #57 STONE AT LEAST 8" THICK BELOW MIDPOINT OF PIPE FOR TRENCH DEPTHS UP TO 16". WHEN TRENCH IS GREATER THAN 16" DEEP PLACE AN ADDITIONAL 1" OF CUSHIONING STONE FOR EACH 2" OF DEPTH UP TO A MAXIMUM CUSHIONING DEPTH OF 12".
 - WHERE UNSUITABLE SOIL IS ENCOUNTERED, EXCAVATE THE SOIL AS DIRECTED BY THE ENGINEER AND BACKFILL WITH #57 STONE.
 - BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.

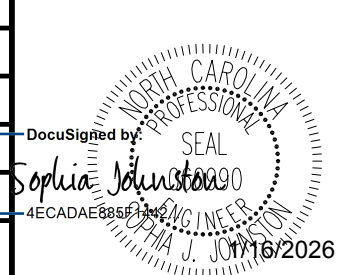
	CITY OF STATESVILLE	WATER LINE	DETAIL #	REVISED
	PUBLIC WORKS DEPARTMENT	Trench, Bedding, & Backfill Off Road	W-15	SEP 2019
			SCALE: N.T.S.	SHEET # 1 OF 1



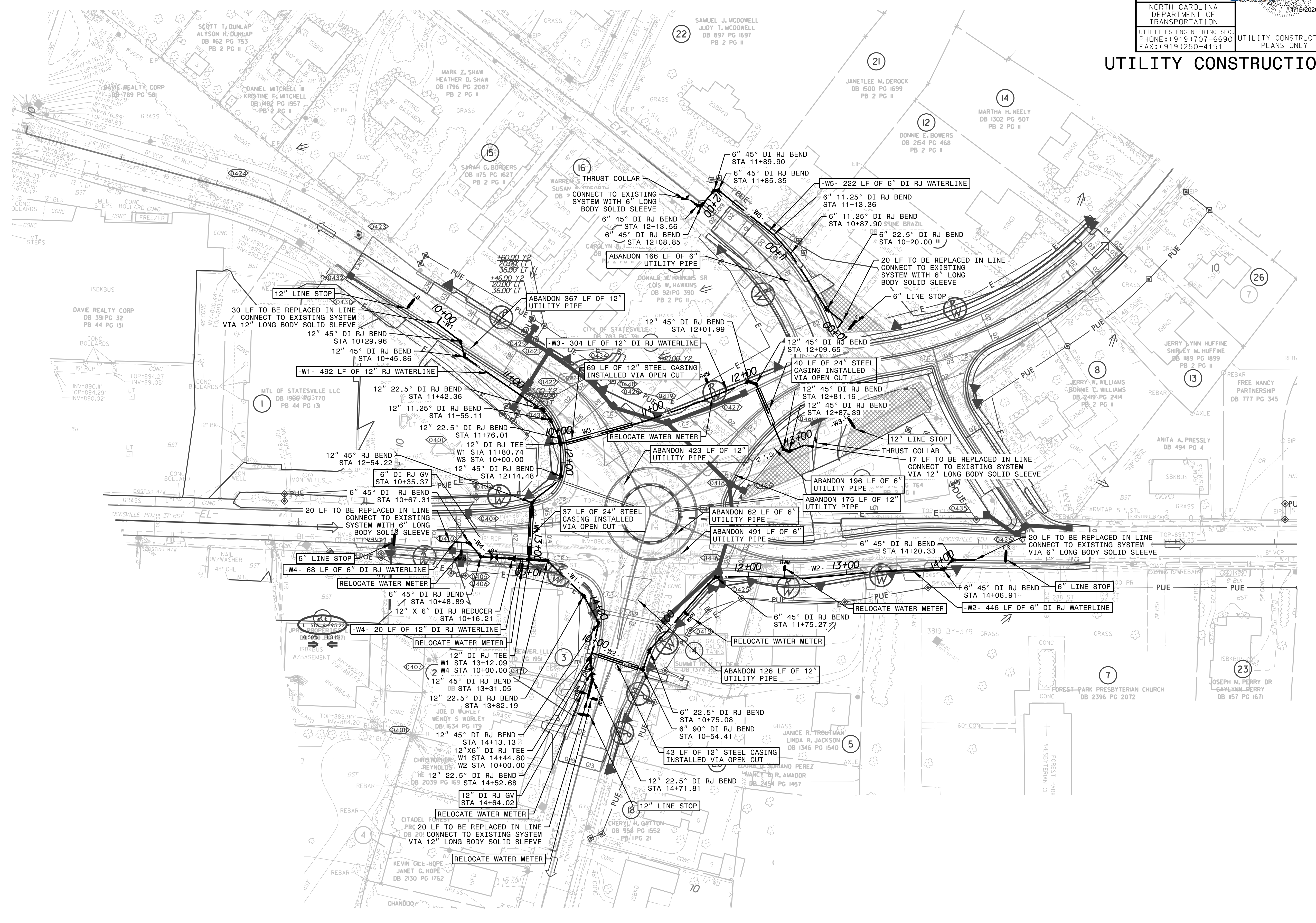
- NOTE:
- CONTRACTOR SHALL NOT INSTALL HYDRANTS, MAINS OR OUTLET.
 - MAINTAIN SEPARATION OF 12" BETWEEN HYDRANTS AND BACK OF CURB, SIDEWALK, AND OTHER CONSTRUCTED PATHWAYS.

	CITY OF STATESVILLE	WATER LINE	DETAIL #	REVISED
	PUBLIC WORKS DEPARTMENT	Utilities in R/W	W-16	MAY 2019
			SCALE: N.T.S.	SHEET # 1 OF 1

5/14/2023

PROJECT REFERENCE NO.	SHEET NO.
U-5964	UC-04
DESIGNED BY: SJJ	
DRAWN BY: BRM	
CHECKED BY: MAS	
APPROVED BY: SJJ	
REVISER:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SECTION	UTILITY CONSTRUCTION PLANS ONLY
PHONE: (919) 707-6690	
FAX: (919) 250-4151	

UTILITY CONSTRUCTION

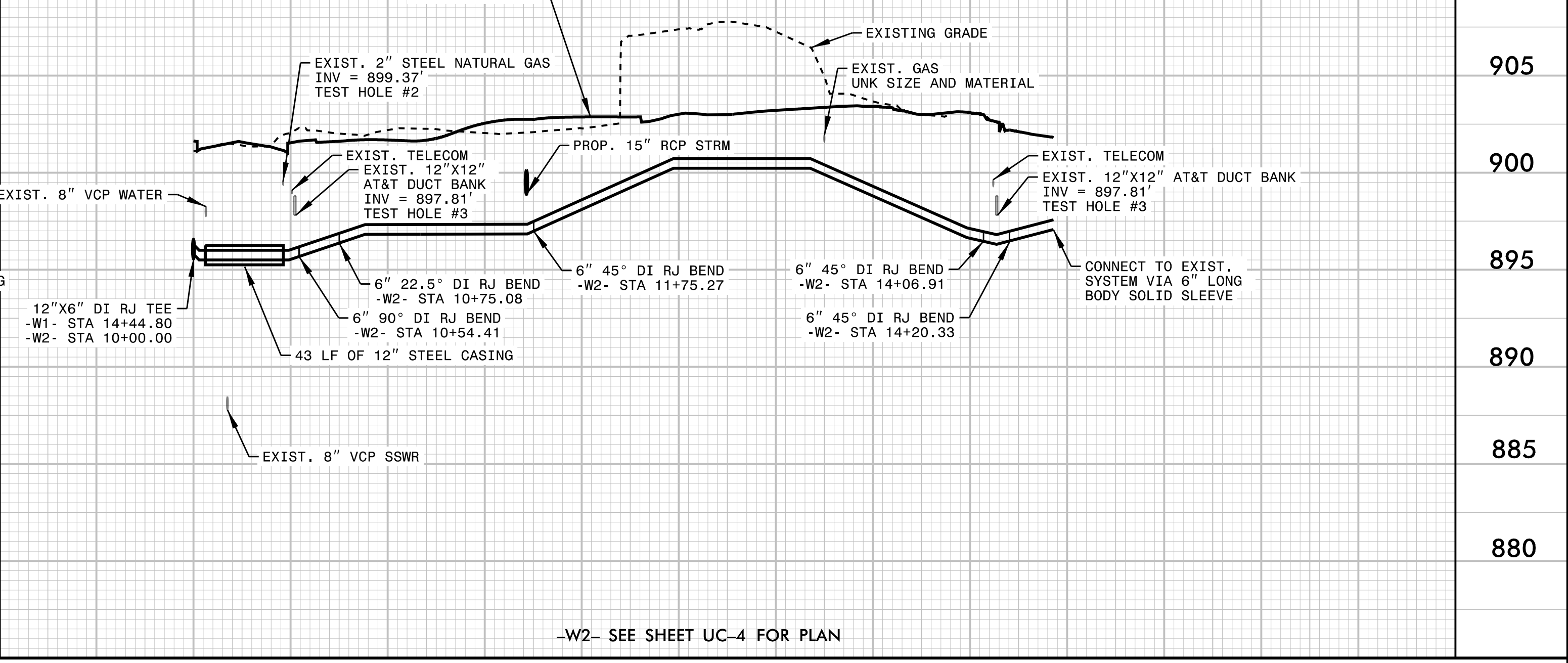
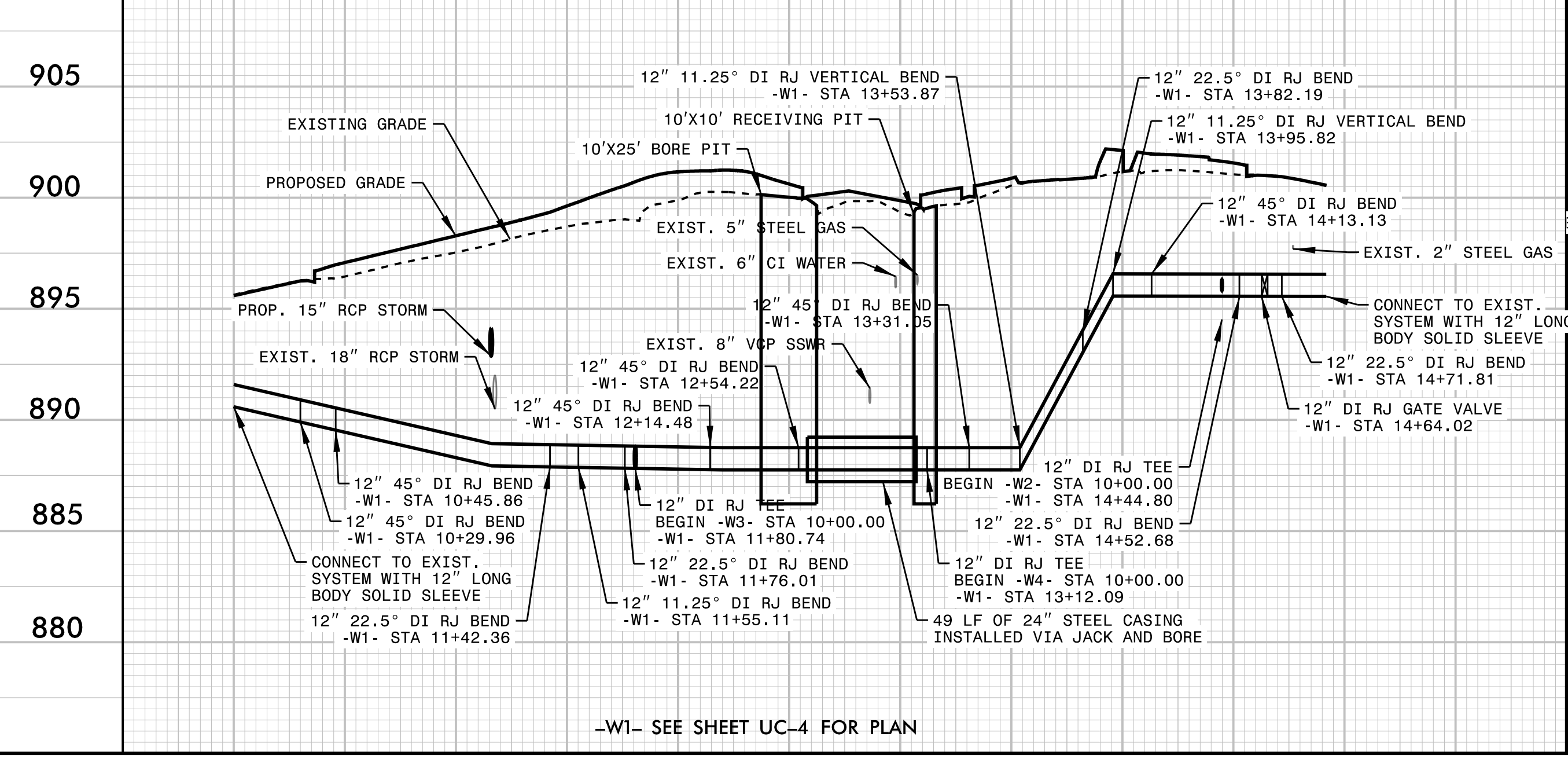


5/14/2019

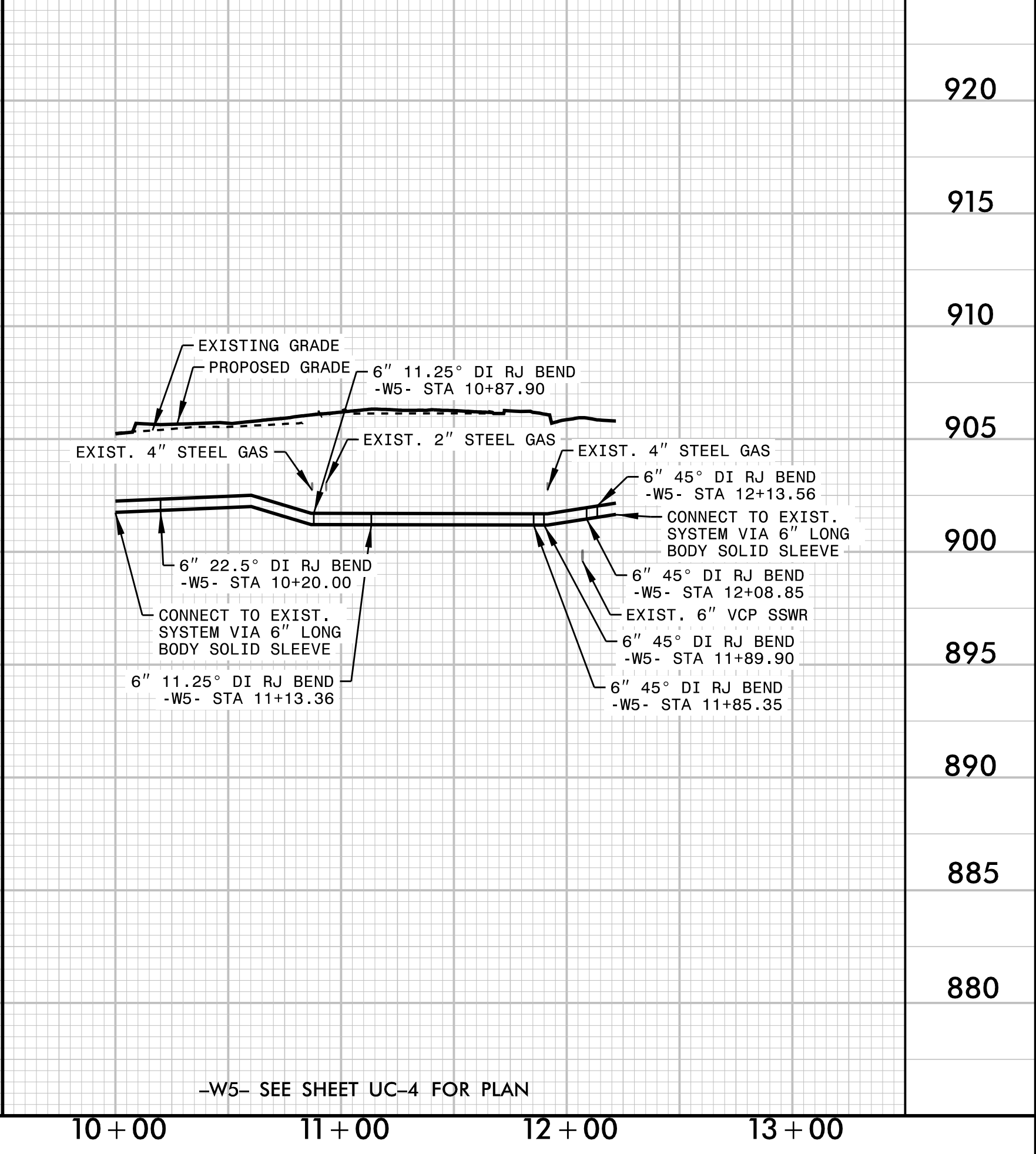
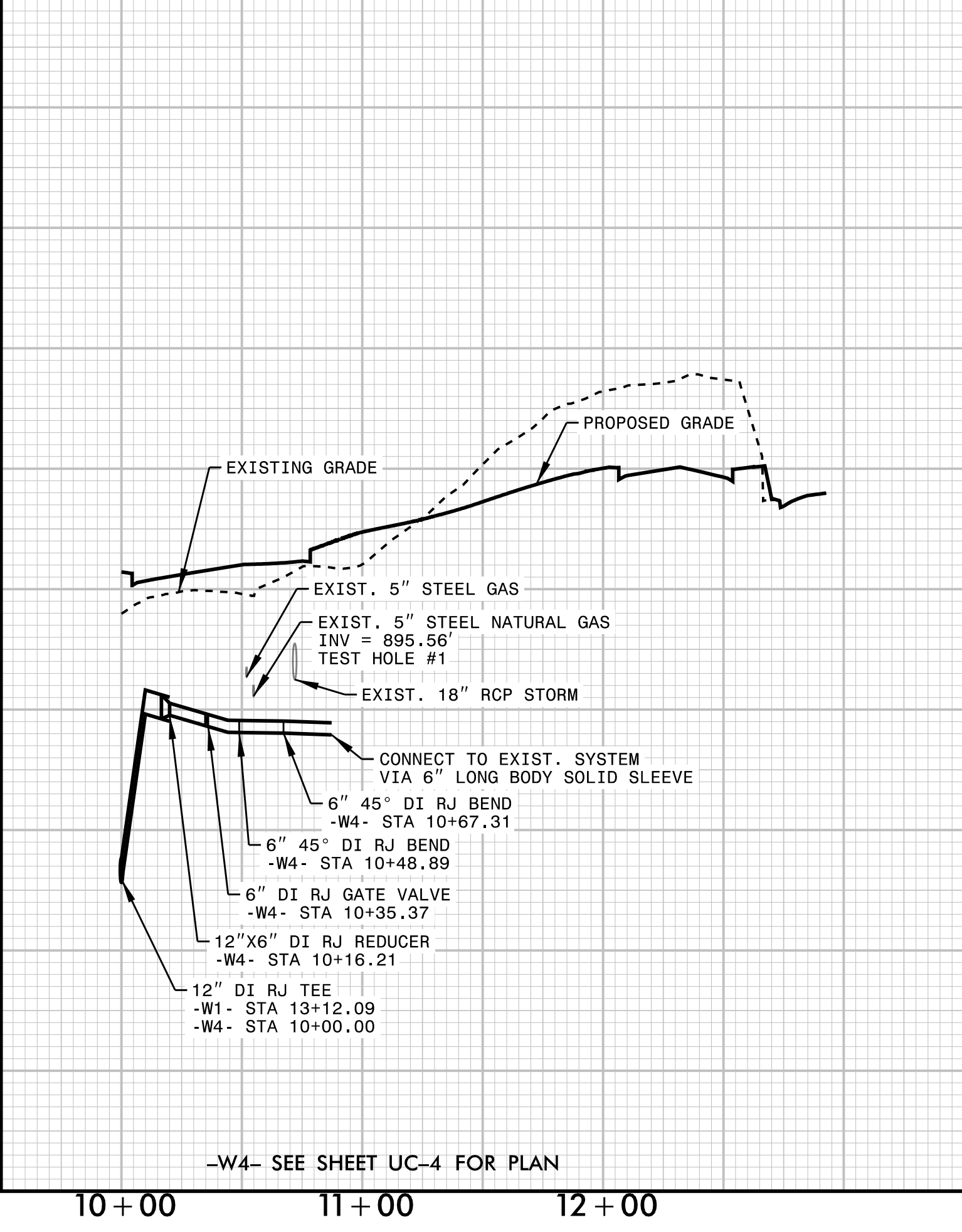
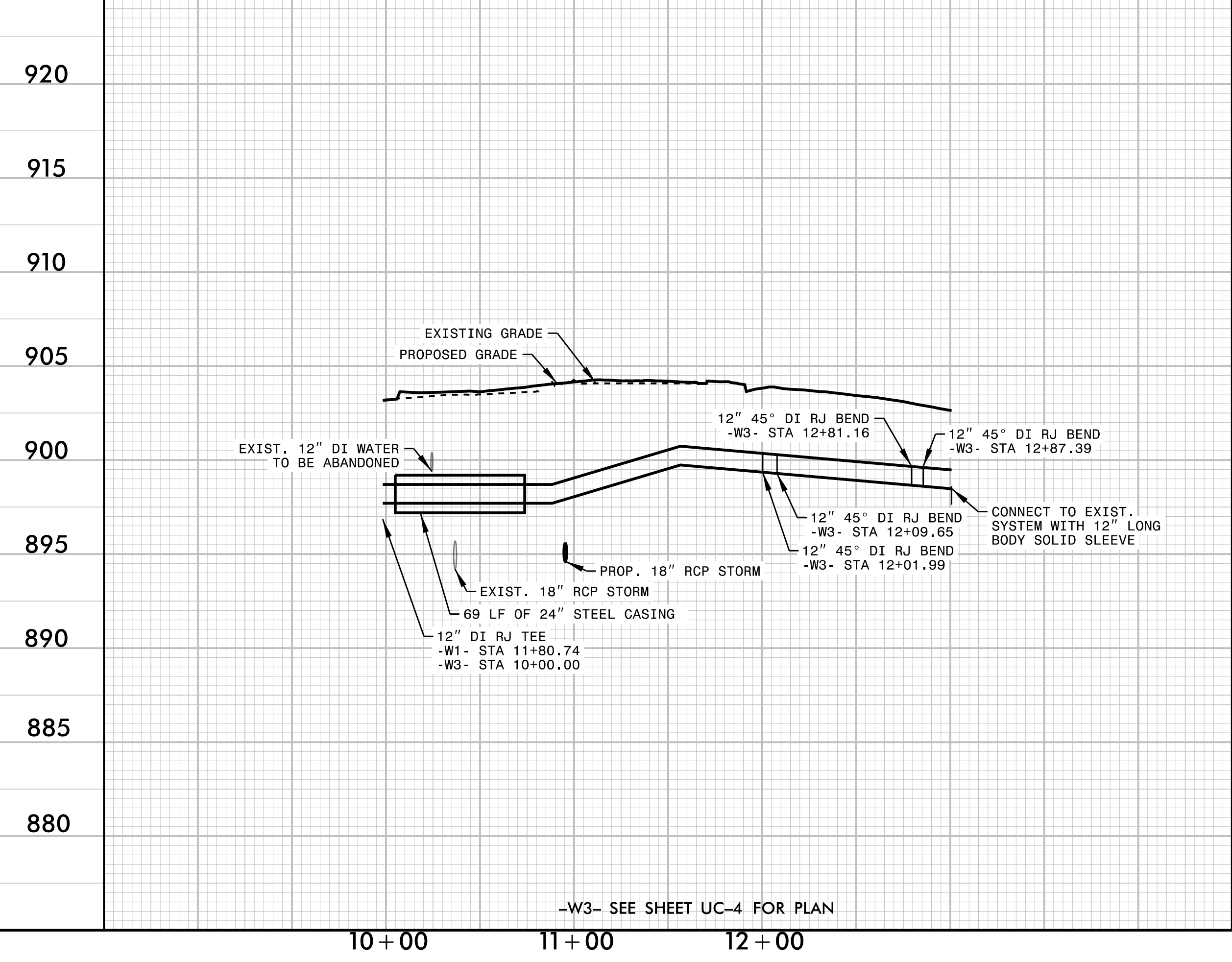
PREPARED BY:
Kimley Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, NC 27601

PROJECT REFERENCE NO. U-5964	SHEET NO. UC-5
DESIGNED BY: SJJ	
DRAWN BY: BRM	
CHECKED BY: MAS	
APPROVED BY: SJJ	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



10+00 11+00 12+00 13+00 14+00 15+00



10+00 11+00 12+00 13+00

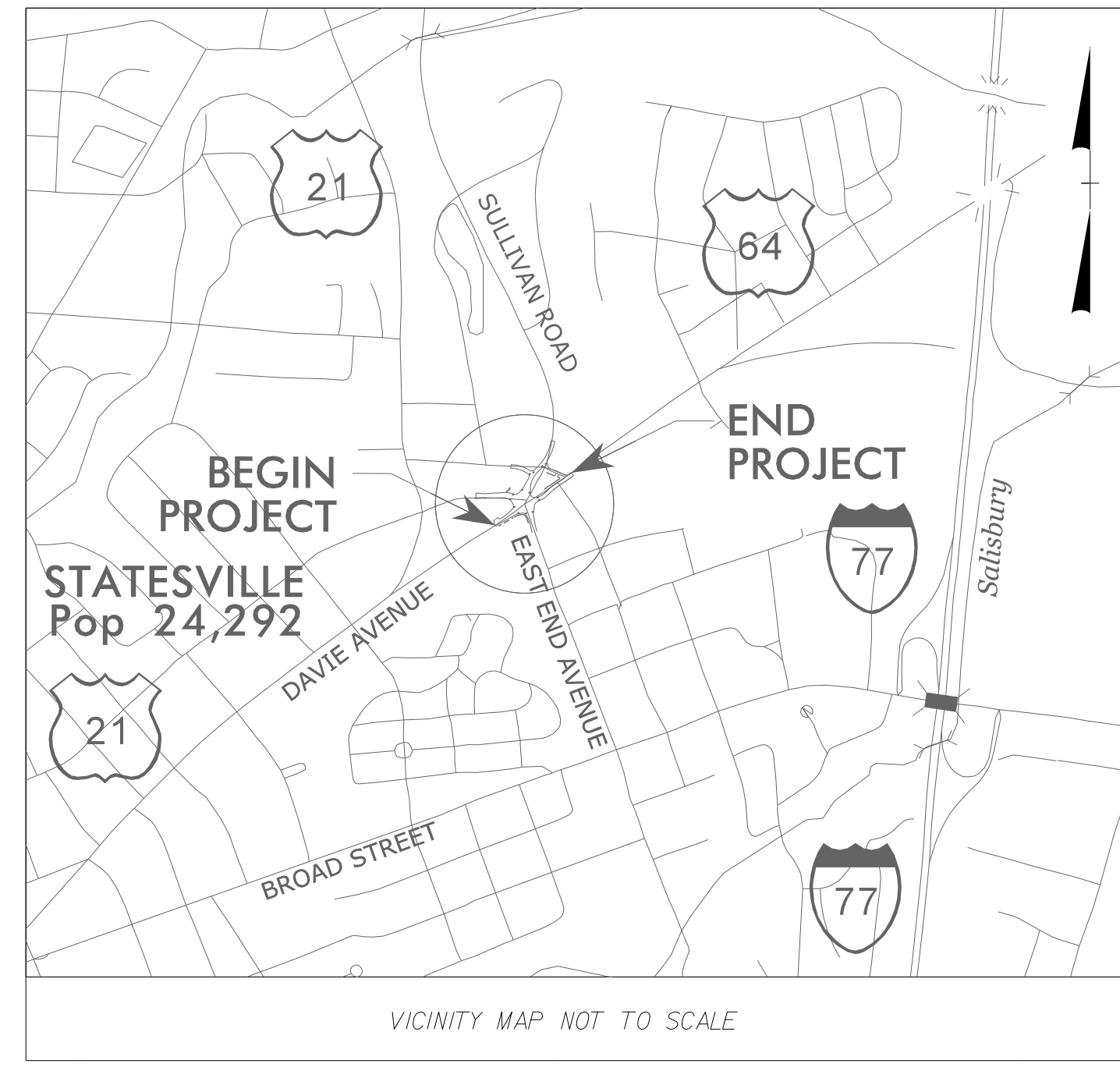
1/16/2026

TIP PROJECT: U-5964

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

T.I.P. NO.	SHEET NO.
U-5964	UO-1

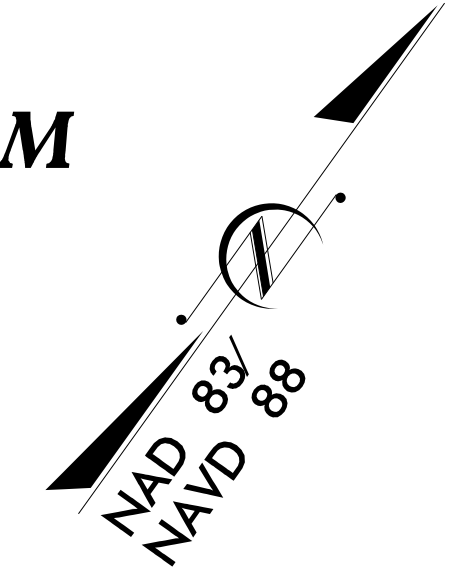
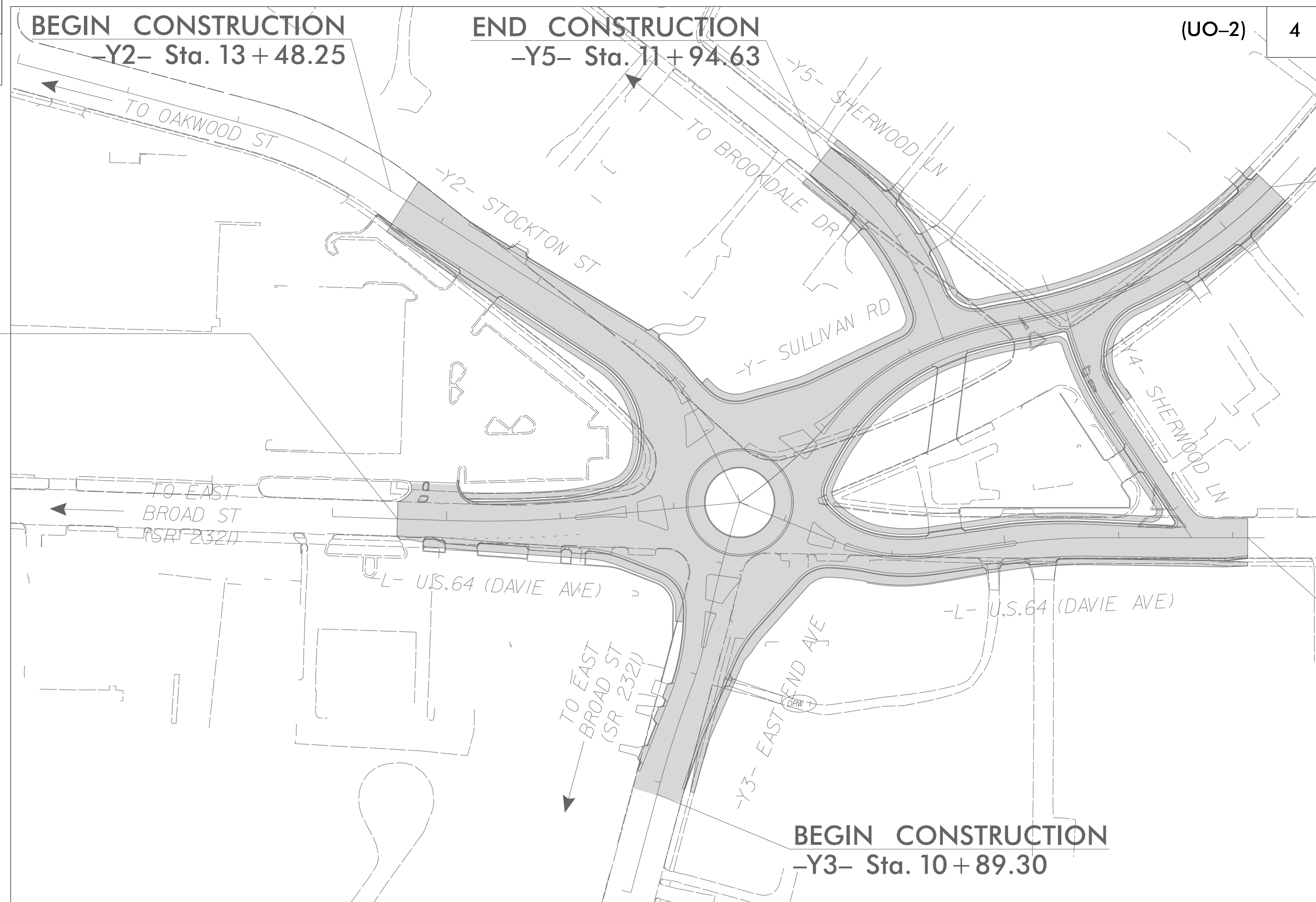
NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET IS DONE BY OTHERS.
NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



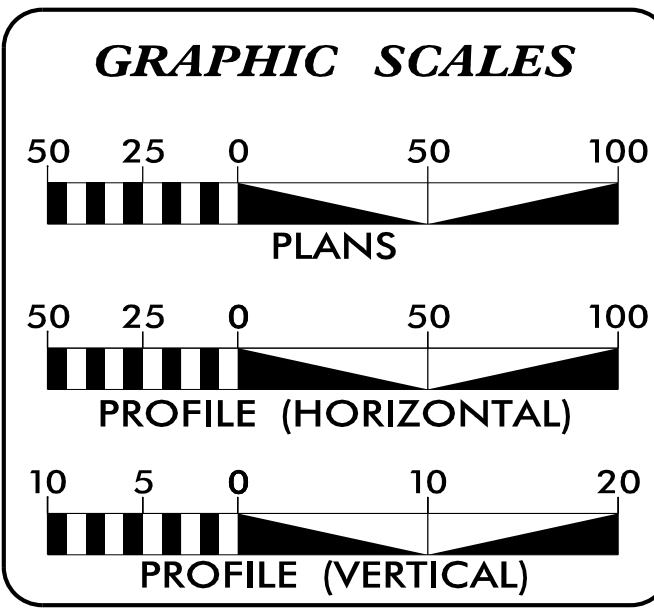
**UTILITIES BY OTHERS PLANS
IREDELL COUNTY**

LOCATION: INTERSECTION OF US 64 (DAVIE AVENUE), US 21 (SULLIVAN ROAD), STOCKTON STREET, AND EAST END AVENUE

TYPE OF WORK: POWER DISTRIBUTION, GAS DISTRIBUTION & TELECOM



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF STATESVILLE. CLEARING ON THIS PROJECT SHALL BE PERFORMED BY THE LIMITS ESTABLISHED BY METHOD 2



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	UBO PLAN SHEET

UTILITY OWNERS WITH CONFLICTS

(A) POWER DISTRIBUTION - CITY OF STATESVILLE
 (B) TELECOM - AT&T
 (C) TELECOM - SPECTRUM
 (D) GAS DISTRIBUTION - DOMINION ENERGY

PREPARED IN THE OFFICE OF:

Clint L. Stevens, PE UTILITY COORDINATION PROJECT MANAGER
Harris Winters PROJECT UTILITY COORDINATOR
James N. Arnold PROJECT UTILITY DESIGNER

**DIVISION OF HIGHWAYS
DIVISION 12**

PO BOX 47
SHELBY, NC 28151
PHONE (980) 552-4200
FAX (704) 480-5401

Mark Stafford, PE DIVISION ENGINEER
Bryan K. Sowell, PE PROJECT TEAM LEAD
Warren Anderson DIVISION UTILITY COORDINATOR

08-APR-2025 13:50 S:\Server\Files\PROJECTS\2018\A2018408.00_KHA_U-5964\Design\Utilities\Engineering\UBO\Proj\U-5964_ut_tsh_U001_psh.dgn

UBO PLANS ARE FOR INFORMATION ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION. ALL PROPOSED RELOCATION INFORMATION SHOWN ON THE UBO PLANS WAS PROVIDED BY 3RD PARTIES. HINDE ENGINEERING, INC. ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE ACCURACY OR VALIDITY OF 3RD PARTY INFORMATION PROVIDED.

U-5964

CROSS SECTION INDEX

CROSS SECTION SUMMARY

-L- U.S. 64 (DAVIE AVENUE)

-Y- U.S. 21 (SULLIVAN ROAD)

-Y2- STOCKTON STREET

-Y3- EAST END AVENUE

-Y4- SHERWOOD LANE

-Y5- SHERWOOD LANE

-RBT-

-CURB_1A-

-CURB_1B-

-CURB_1C-

-CURB_1D-

-CURB_1E-

-DRW2-

X-1A THRU X-1B

X-3 THRU X-7

X-8 THRU X-11

X-12 THRU X-14

X-15 THRU X-17

X-18 THRU X-19

X-20 THRU X-22

X-23 THRU X-25

X-26

X-27 THRU X-28

X-29

X-30 THRU X-31

X-32 THRU X-33

X-34

**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS**

PROJ. REFERENCE NO.	SHEET NO.
U-5964	X-1A

Quantities are approximate only. The Resident Engineer will recross-section the work accurately when the project is staked out. These cross-section notes will be used in computing the final quantities for which the contractor will be paid.

NOTE: EMBANKMENT COLUMN INCLUDES BACKFILL FOR UNDERCUT

CROSS-SECTION SUMMARY

Station Phase 1 Step 1.1 Y	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	Station Phase 1 Step 1.2 Y3	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	Station Phase 2 Y3 (CONT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	Station Phase 3 Y2	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)												
10+65.07	0	0		10+99.57	0	0		11+77.35	5	0		13+50.00	0	0													
11+00.00	106	7		11+00.00	0	0		12+00.00	5	0		13+64.37	5	0													
11+50.00	265	0		11+20.37	10	0		12+50.00	6	4		14+00.00	13	0													
12+00.00	285	0		11+50.00	15	0		Station Phase 2 Curb_1B	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	14+42.03	7	3													
12+41.53	173	0		11+56.28	4	0									14+50.00	2	1										
12+50.00	23	0		11+77.35	15	0									14+72.02	6	0										
13+00.00	70	2		12+00.00	49	0		10+36.79	0	0		15+00.00	7	2													
13+50.00	47	2		12+02.76	7	0		10+40.00	1	2		15+50.00	20	7													
14+00.00	59	0		12+50.00	86	0		10+60.00	12	11		15+78.00	20	5													
14+50.00	27	0		Station Phase 1 Step 1.2 L (RT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	10+80.00	7	4		16+00.00	15	4													
15+00.00	9	2						11+00.00	2	6		16+50.00	16	16													
15+06.64	1	0						11+20.00	4	6					Station Phase 3 Curb_1A	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)									
15+38.02	8	1		13+50.00	0	0		11+21.16	0	0																	
15+50.00	5	0		14+00.00	110	8		Station Phase 2 Y (RT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	10+60.29	0	0													
15+53.79	1	0		14+50.00	183	0						10+65.07	0	0		10+80.00	3	8									
Station Phase 1 Step 1.1 Y2	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	14+86.54	71	0						11+00.00	15	7		11+20.00	5	5									
				15+00.00	8	0		11+50.00	145	2		11+40.00	6	5													
				15+31.66	6	0		12+00.00	306	0		11+40.88	0	0													
14+42.03	0	0		16+00.00	6	2		12+41.53	297	0		Station Phase 3 L (LT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)												
14+50.00	3	0		16+50.00	7	1		12+50.00	52	0						13+50.00	0	0									
14+72.02	10	0		17+13.00	4	1		13+00.00	130	20						14+00.00	7	13									
15+00.00	10	0		Station Phase 1 Step 1.2 Curb_1C	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	13+50.00	1	23		14+50.00	8	6													
15+50.00	9	10						14+00.00	2	11		14+50.00	5	11		14+86.54	5	8									
15+78.00	0	15						10+43.98	0	0		15+00.00	6	5		15+00.00	1	5									
16+00.00	0	21		10+60.00	19	0		15+06.64	1	0		15+31.66	4	7													
Station Phase 1 Step 1.1 Y5	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	10+80.00	25	0		15+38.02	6	1		15+50.00	2	2													
				10+15.00	0	0		11+00.00	10	2		15+50.00	3	0		16+00.00	8	5									
				10+32.80	198	0		11+20.00	4	4		15+53.79	1	0		16+50.00	4	2									
10+50.00	128	0		11+31.35	1	3		10+15.00	0	0		17+13.00	0	0													
10+83.00	156	0		Station Phase 2 L (RT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	Station Phase 2 Y4	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	Station Phase 3 Curb_1D	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)												
11+00.00	45	0														10+00.00	0	0		10+50.00	0	12		10+36.64	0	0	
11+30.00	45	0														10+13.12	2	0		10+50.00	0	12		10+40.00	1	1	
11+41.00	8	0		10+50.00	4	3		11+00.00	5	9		10+60.00	5	6													
11+50.00	4	0		10+84.82	4	3		11+50.00	11	0		10+80.00	4	4													
Station Phase 1 Step 1.1 Curb_1E	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	11+00.00	2	2		12+00.00	11	0		11+00.00	10	3													
				10+59.15	0	0		11+11.58	2	1		Station Phase 3 L	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)												
				10+60.00	1	0		11+50.00	8	2						10+00.00	0	0									
10+80.00	38	1		Station Phase 2 Y3 (LT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)	10+13.12	1	0						11+19.13	7	2									
11+00.00	14	5						10+89.00	0	0		10+50.00	5	3													
11+20.00	6	6						10+99.57	1	0		10+84.82	3	6													
11+40.00	5	3		11+00.00	0	0		11+00.00	2	3																	
11+55.13	2	2		11+20.37	3	0		11+11.58	1	2																	
				11+50.00	5	0		11+50.00	6	9																	
				11+56.28	1	0																					

**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS**

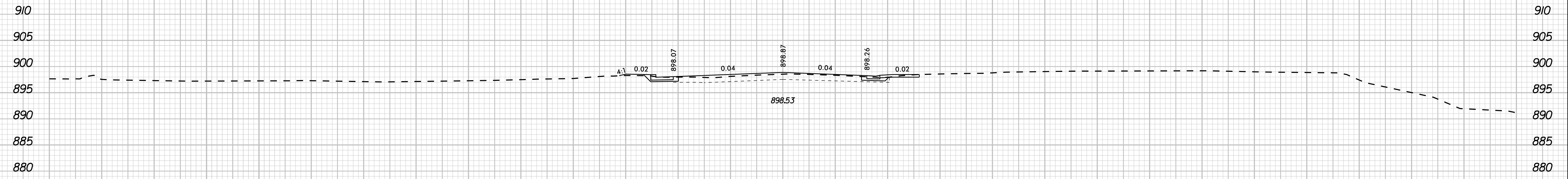
PROJ. REFERENCE NO.	SHEET NO.
U-5964	X-1B

Quantities are approximate only. The Resident Engineer will recross-section the work accurately when the project is staked out. These cross-section notes will be used in computing the final quantities for which the contractor will be paid.

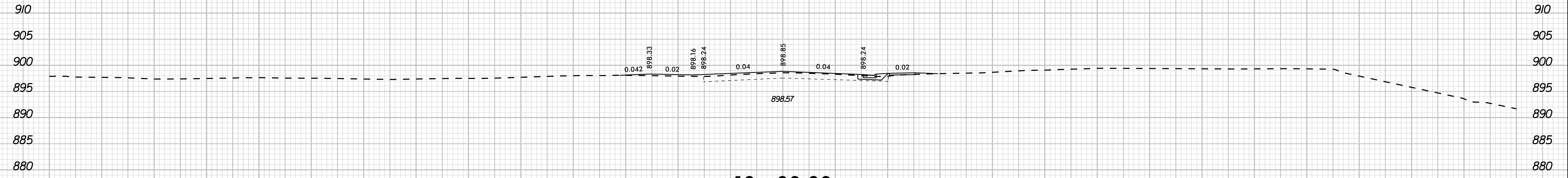
NOTE: EMBANKMENT COLUMN INCLUDES BACKFILL FOR UNDERCUT

CROSS-SECTION SUMMARY

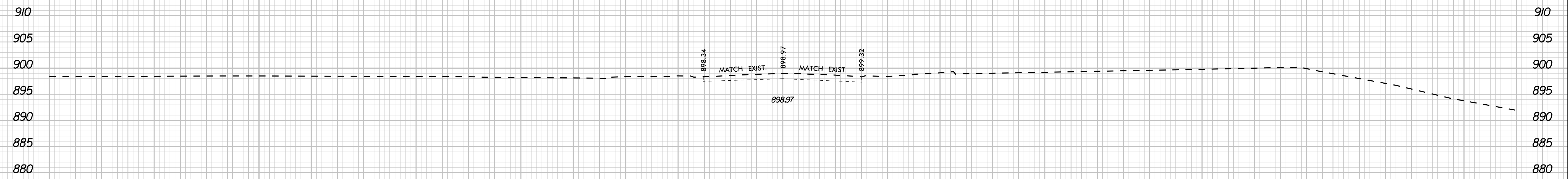
Station Phase 3 Y4 (LT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)
10+50.00	0	6	
11+00.00	5	18	
11+50.00	12	10	
12+00.00	12	1	
Station Phase 3 Y5 (LT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)
10+15.00	0	0	
10+32.80	0	4	
10+50.00	1	5	
10+83.00	6	7	
11+00.00	3	3	
11+30.00	5	4	
11+41.00	2	1	
11+50.00	1	1	
Station Phase 4 RBT	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)	UnderCut (cu. yd.)
10+00.00	0	0	
10+25.00	4	55	
10+50.00	0	62	
10+75.00	0	130	
11+00.00	0	136	
11+25.00	0	136	
11+50.00	2	142	
11+75.00	2	145	
12+00.00	1	145	
12+25.00	1	135	
12+50.00	3	116	
12+75.00	7	109	



10 + 13.12

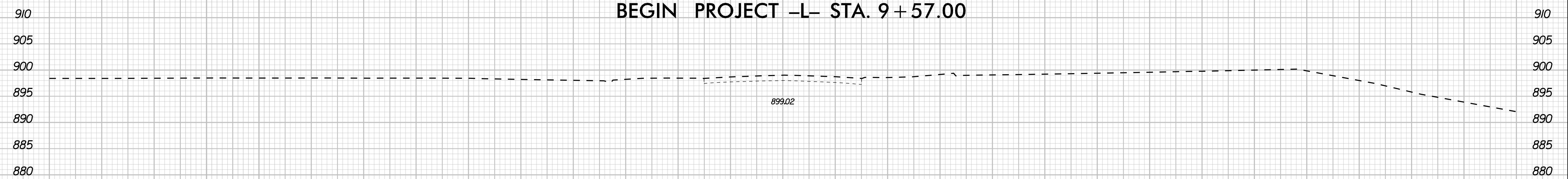


10 + 00.00



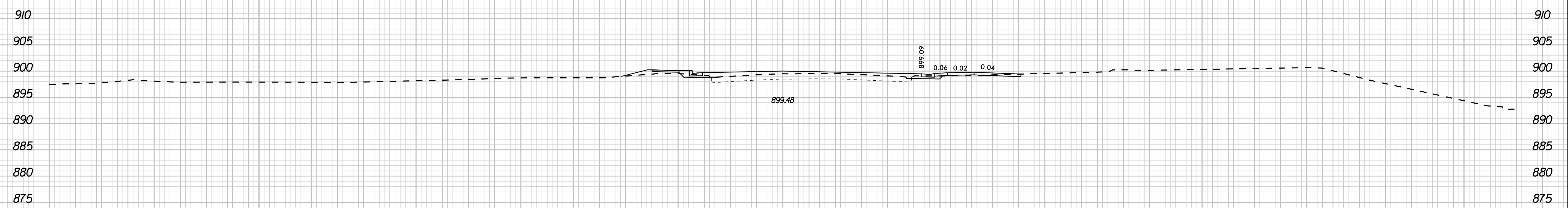
9 + 57.00

BEGIN PROJECT -L- STA. 9 + 57.00

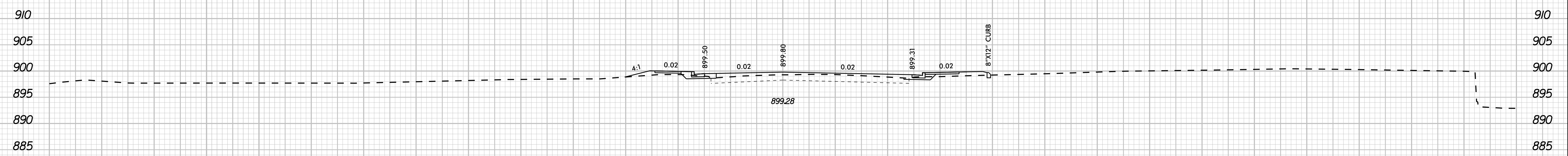


9 + 50.00

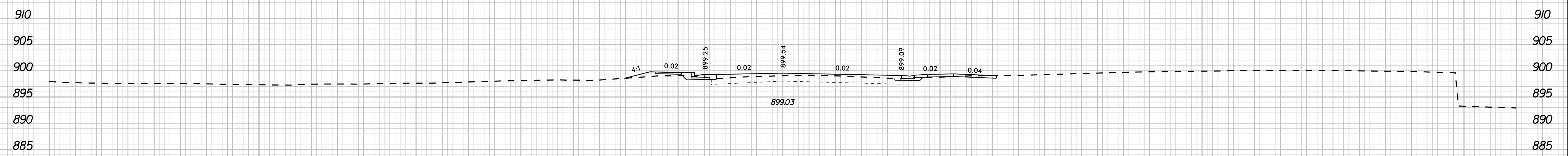
-L- US 64 (DAVIE AVE.)



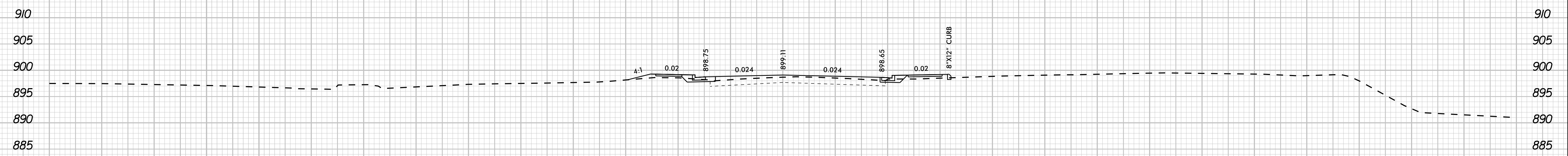
11 + 11.58



11 + 00.00



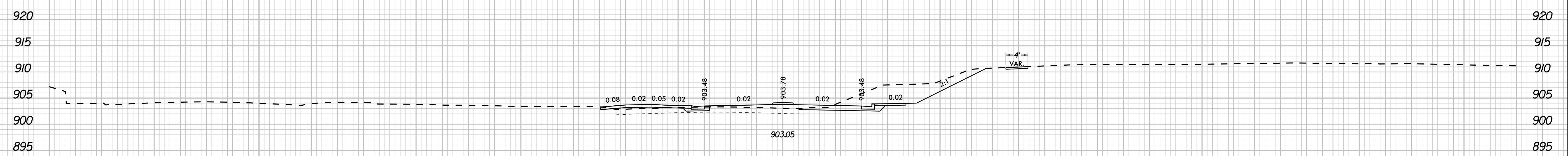
10 + 84.82



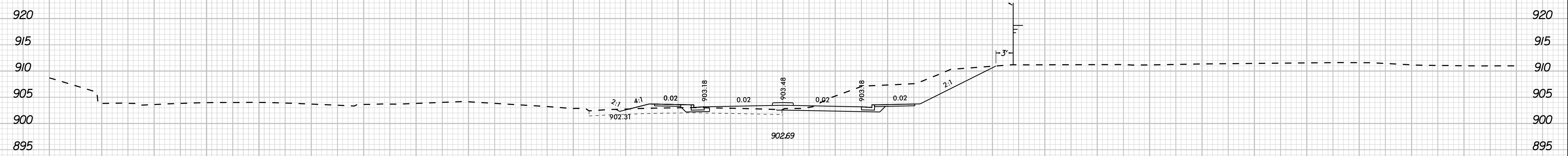
10 + 50.00

-L- US 64 (DAVIE AVE.)

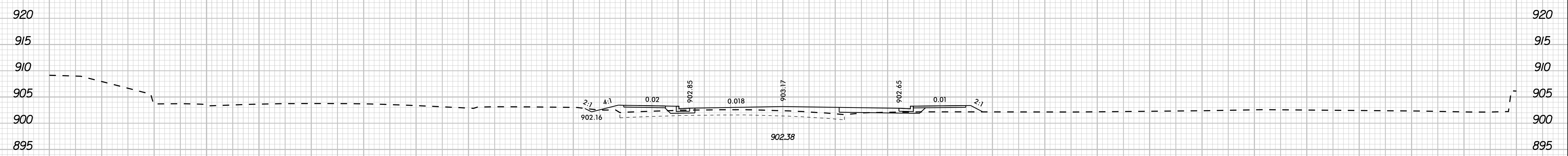
11/13/2017



14 + 50.00

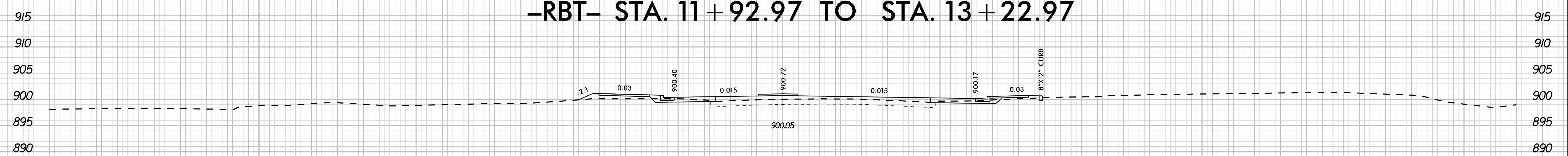


14 + 00.00



13 + 50.00

-RBT- STA. 11 + 92.97 TO STA. 13 + 22.97

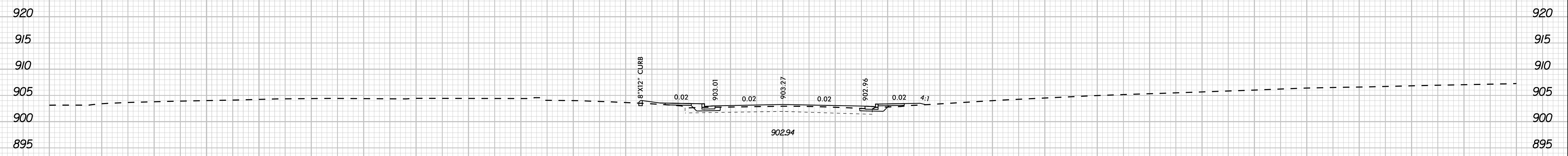


11 + 50.00

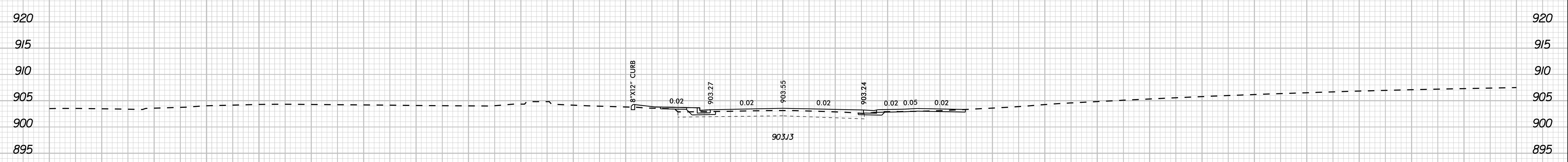
-L- US 64 (DAVIE AVE.)

11/13/2017

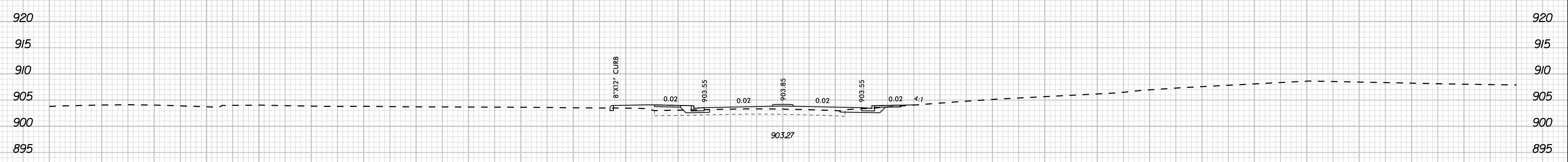
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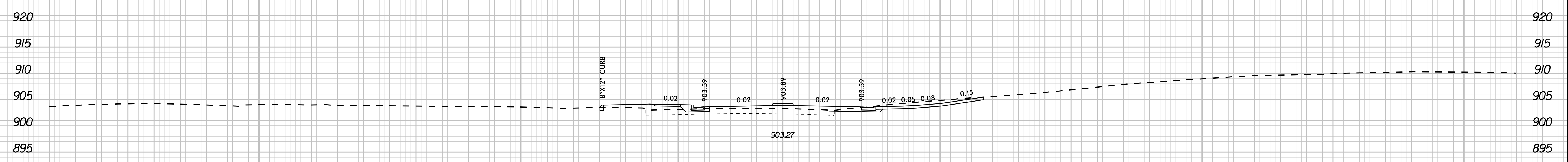
15 + 50.00



15 + 31.66

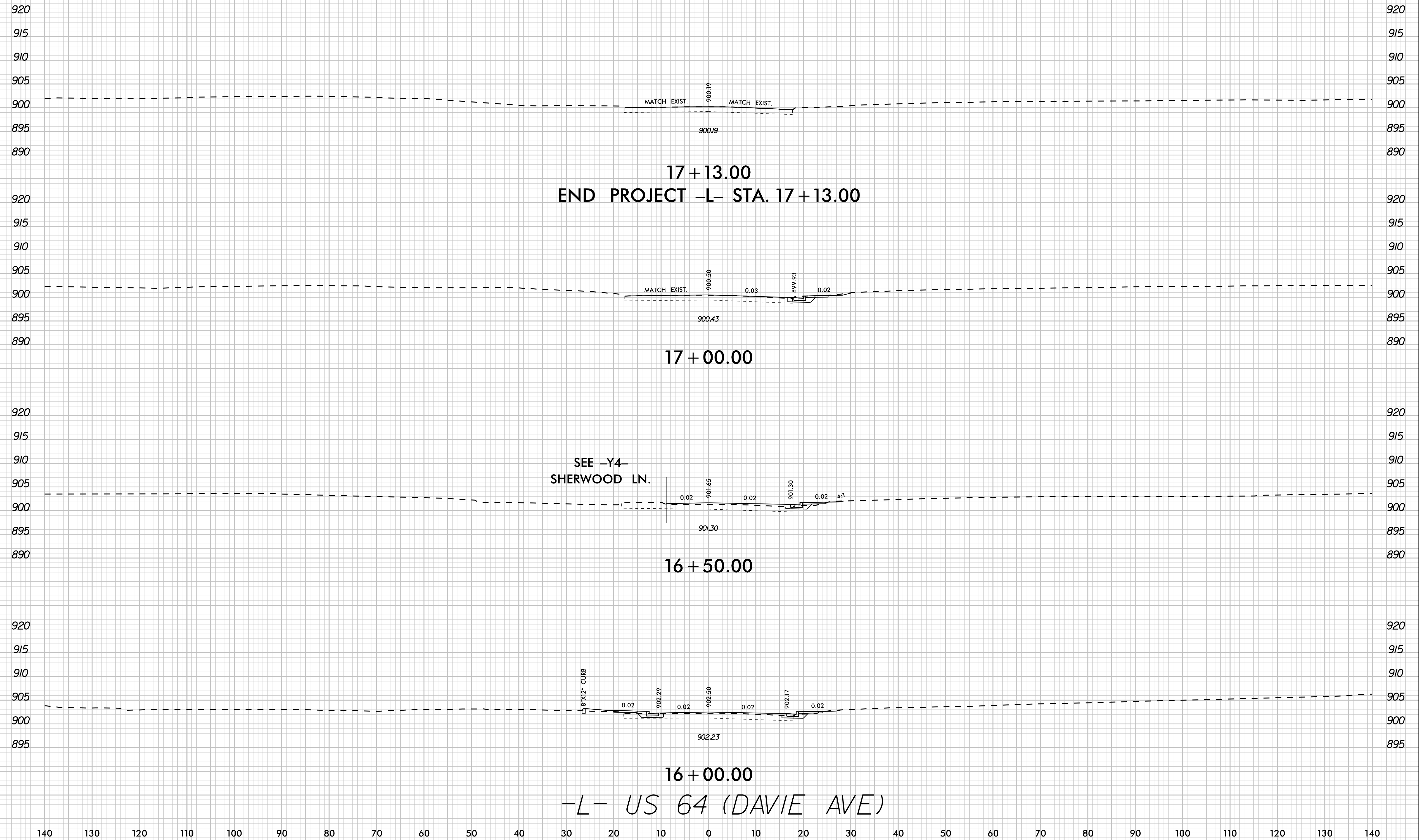


15 + 00.00

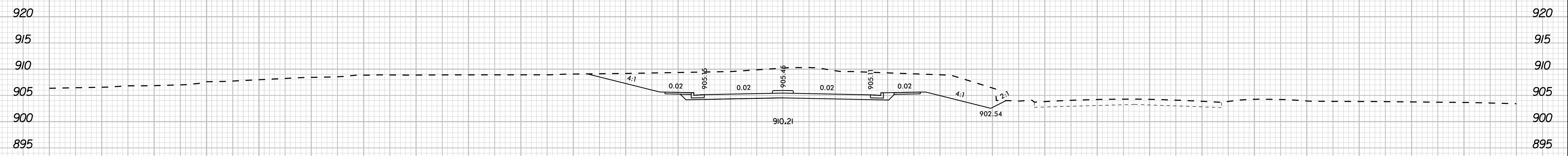


14 + 86.54

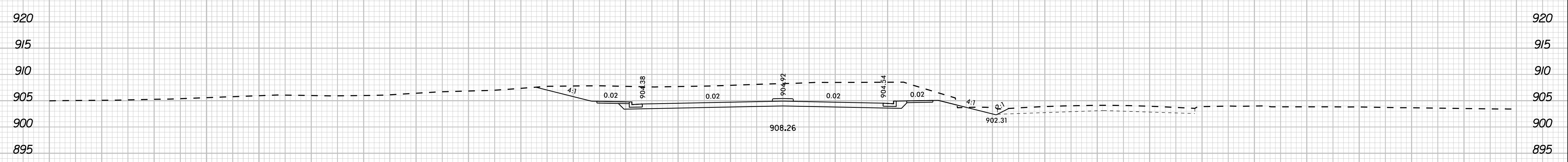
-L- US 64 (DAVIE AVE.)



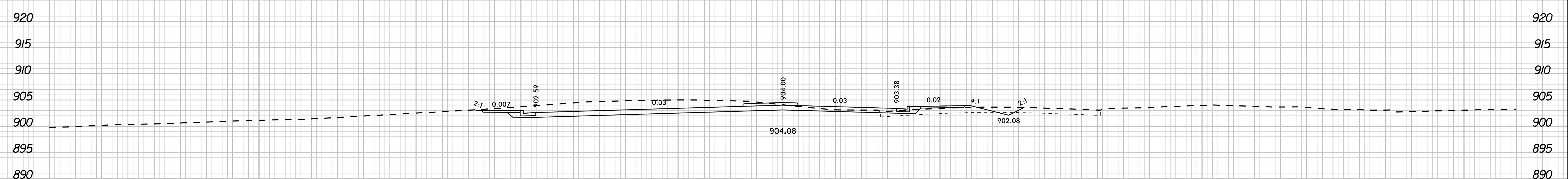
11/13/2017



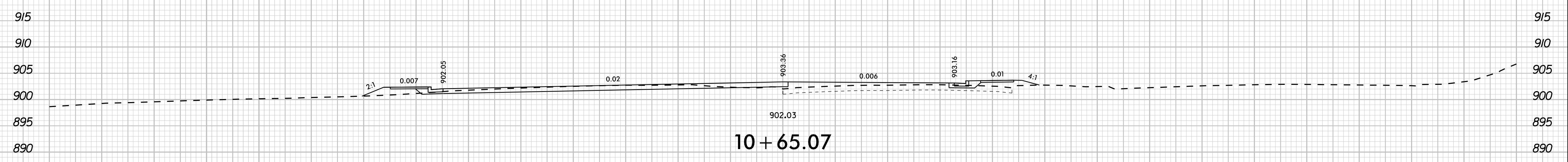
12 + 00.00



11 + 50.00



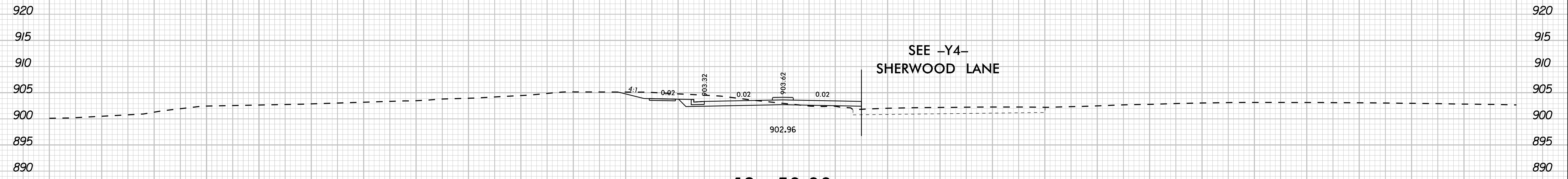
11 + 00.00



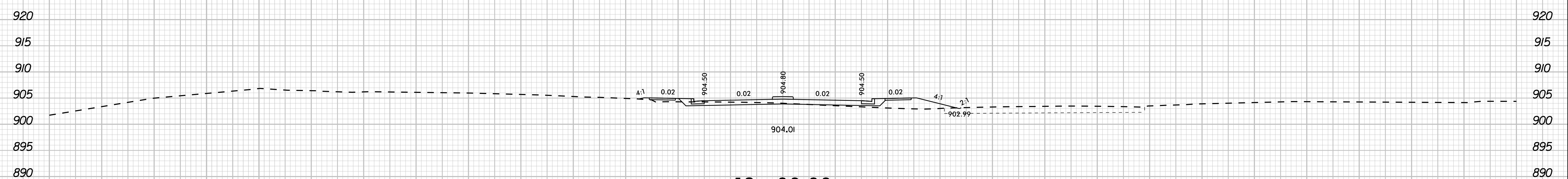
10 + 65.07

BEGIN CONSTRUCTION -Y- STA 10+65.07
-Y- US 21 (SULLIVAN ROAD)

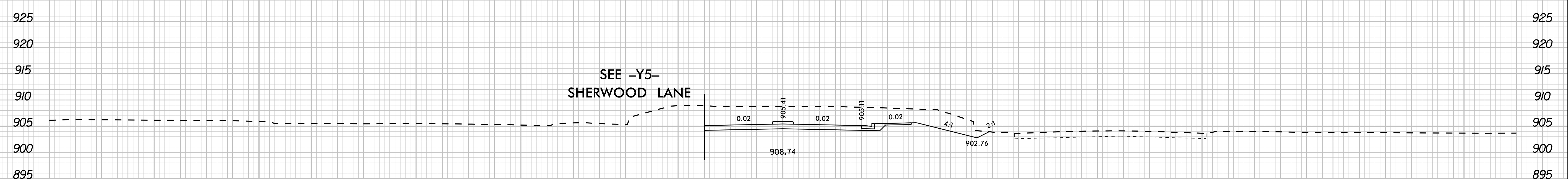
11/13/2017



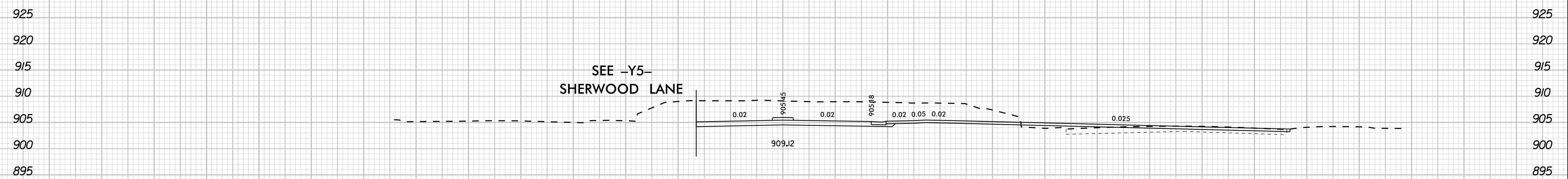
13 + 50.00



13 + 00.00



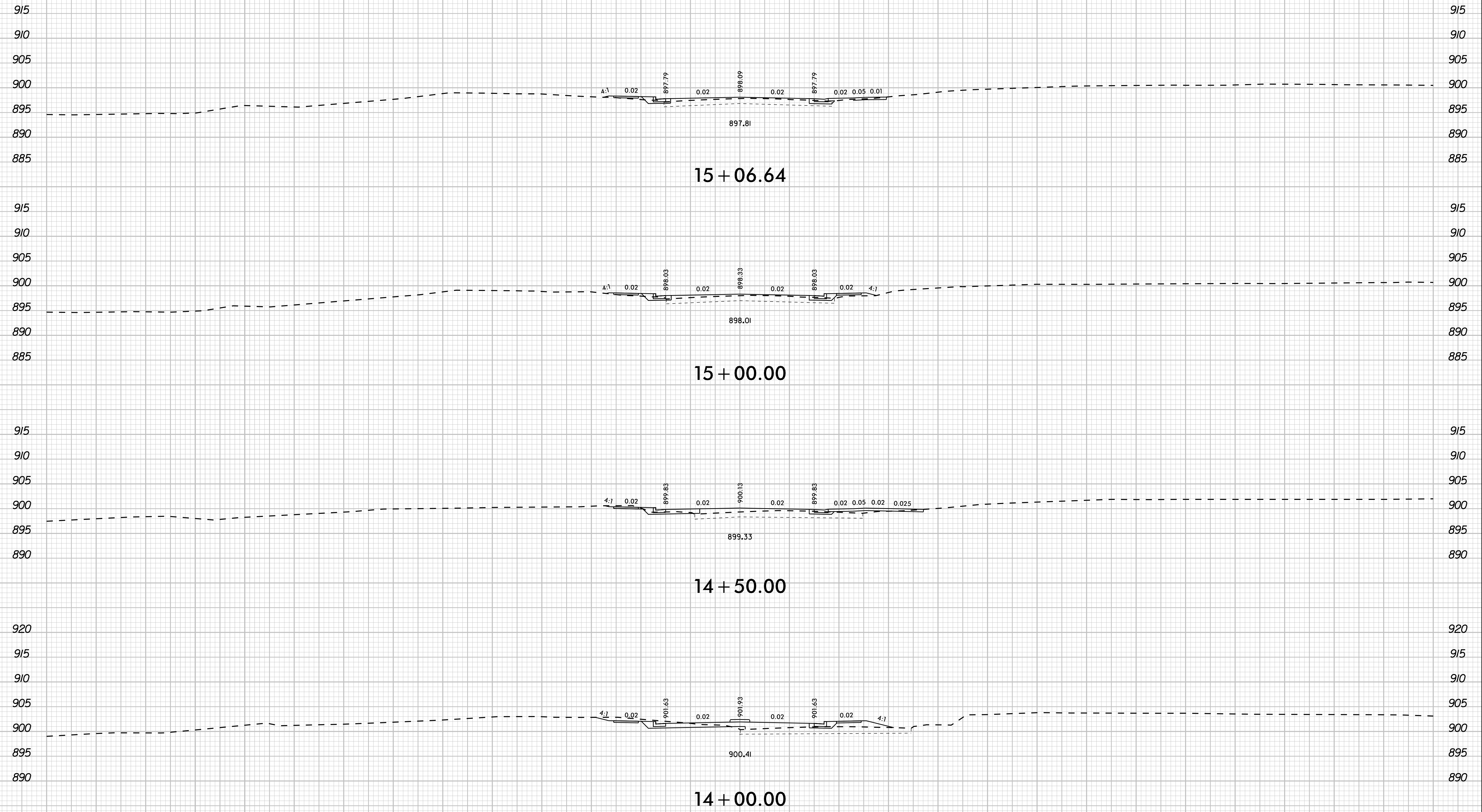
12 + 50.00



12 + 41.53

-Y- US 21 (SULLIVAN ROAD)

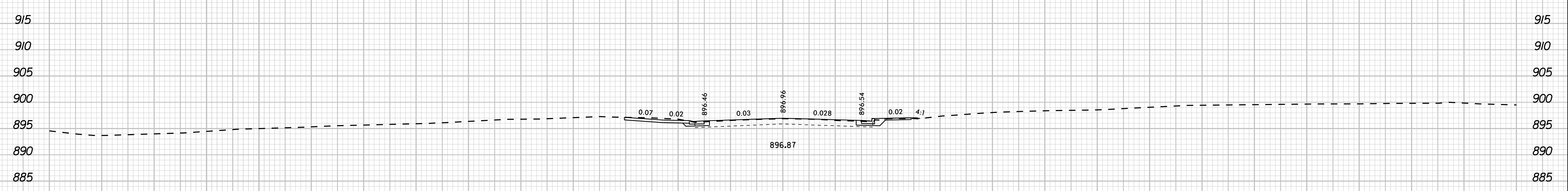
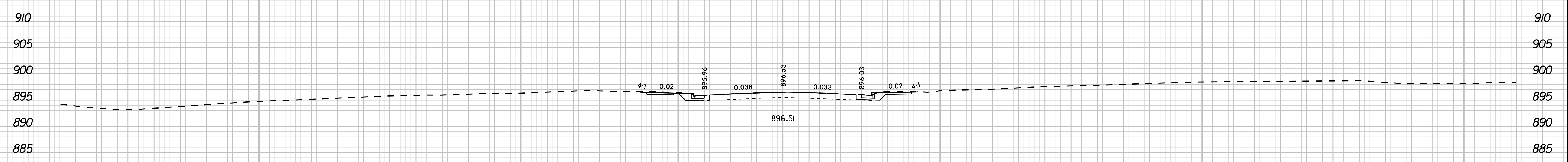
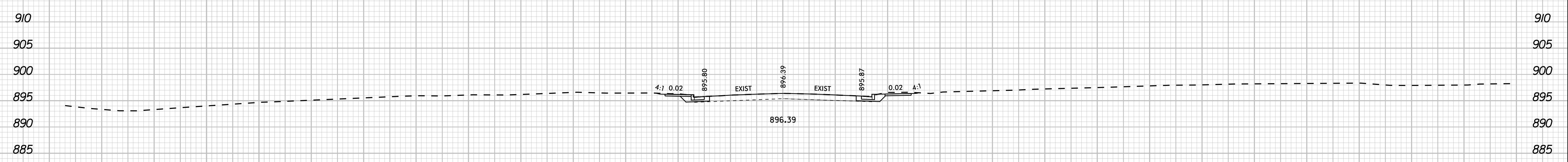
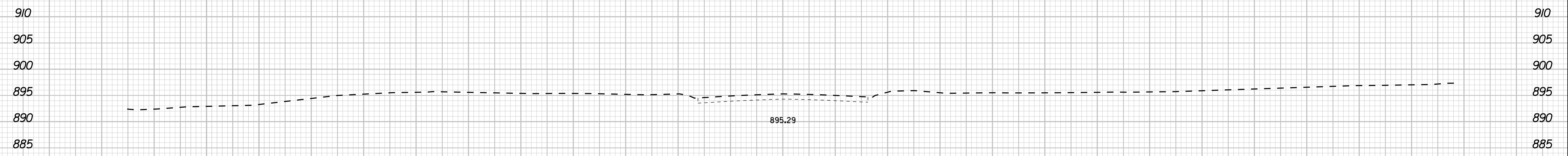
11/13/2017



-Y- US 21 (SULLIVAN ROAD)

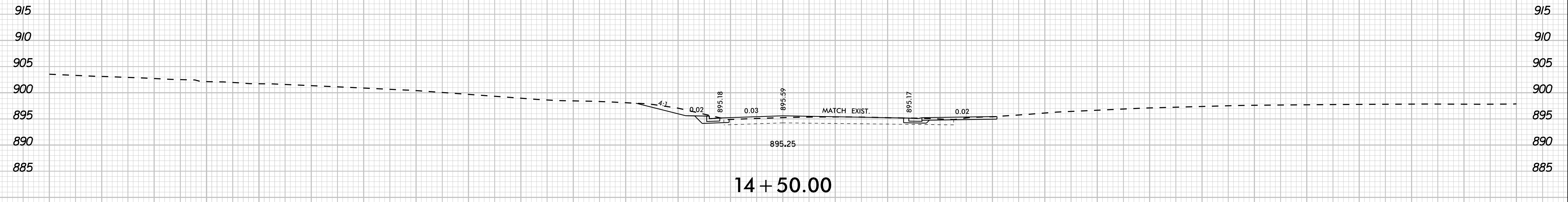
11/13/2017

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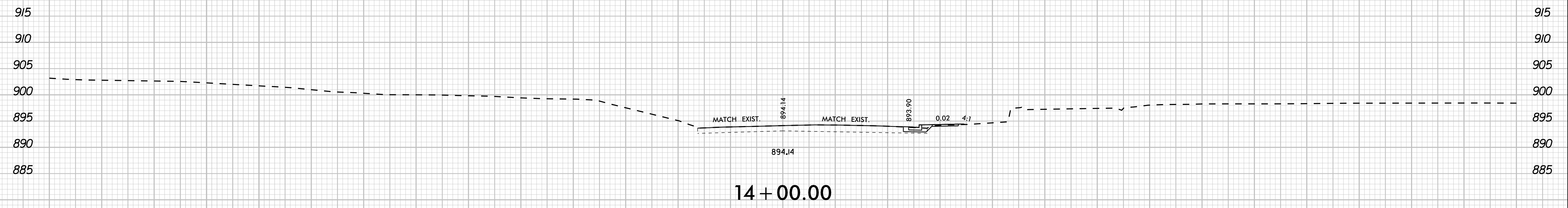


11/13/2017

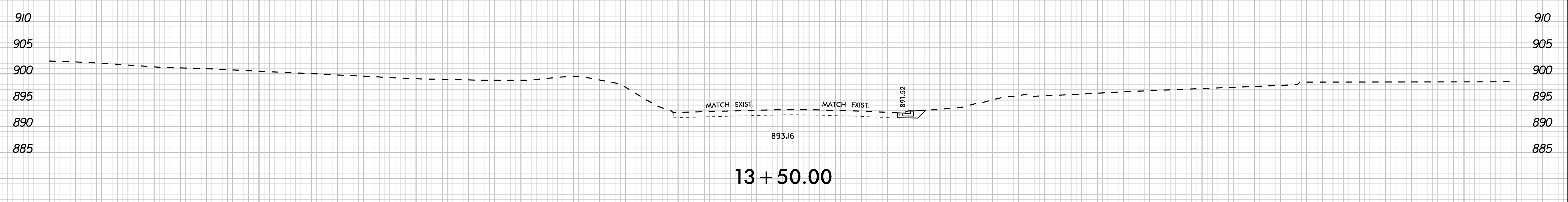
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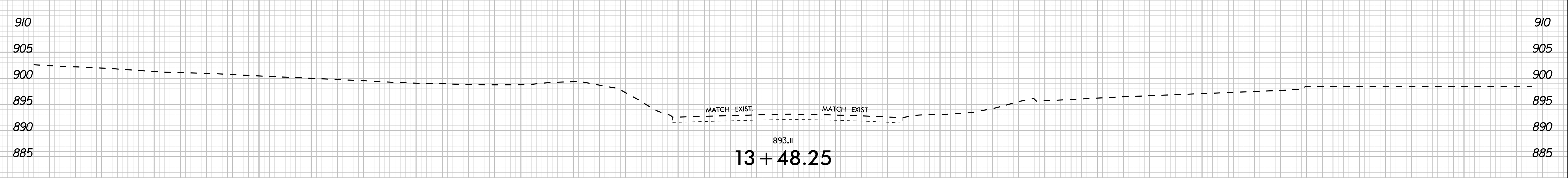
14 + 50.00



14 + 00.00



13 + 50.00

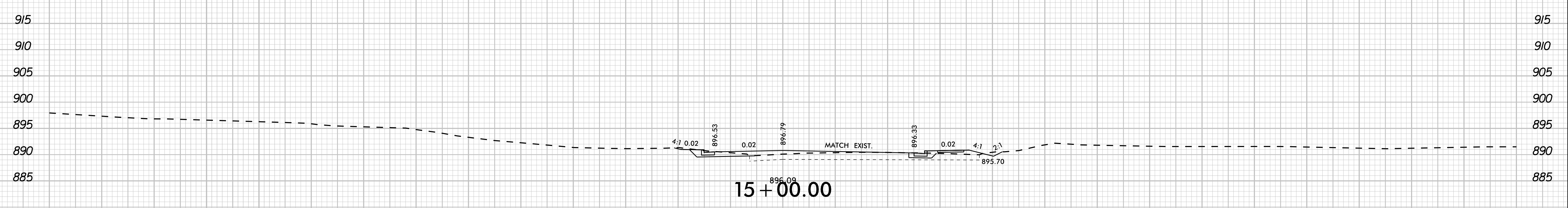
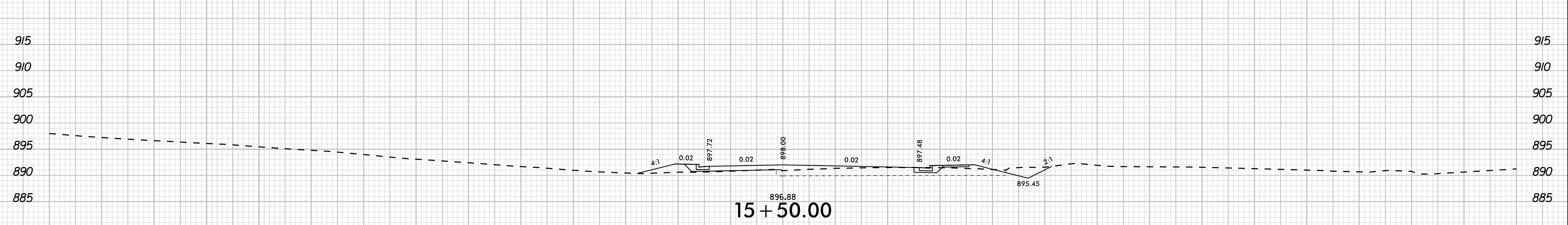
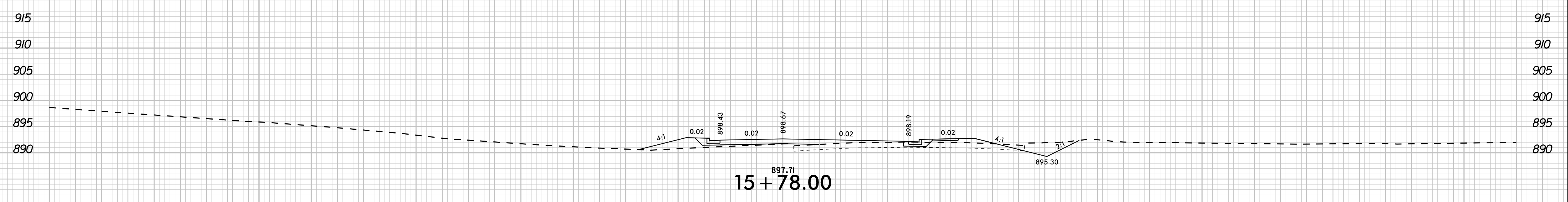
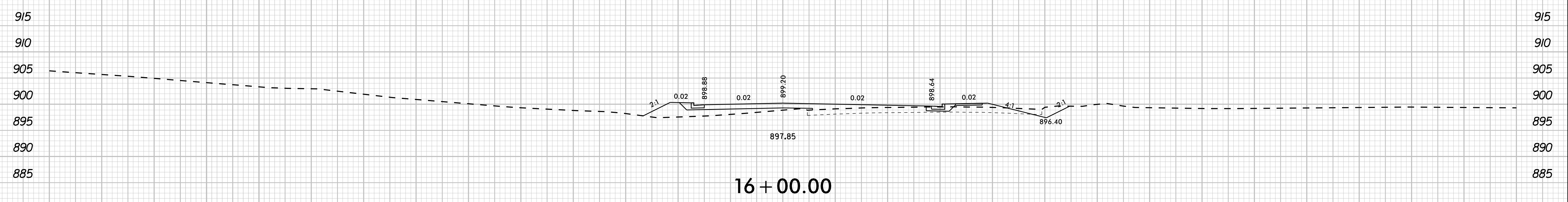


13 + 48.25

BEGIN CONSTRUCTION -Y2- 13+48.25
-Y2- STOCKTON STREET

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140



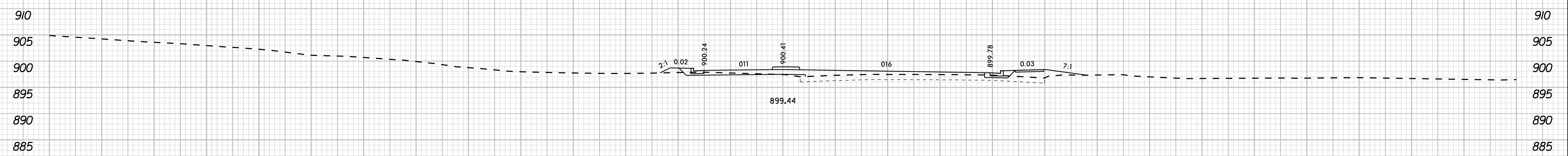
-Y2- STOCKTON STREET

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

11/13/2017

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

-RBT- STA. 17+04.39 TO STA. 17+69.39
END GRADE -Y2- STA. 17+04.39



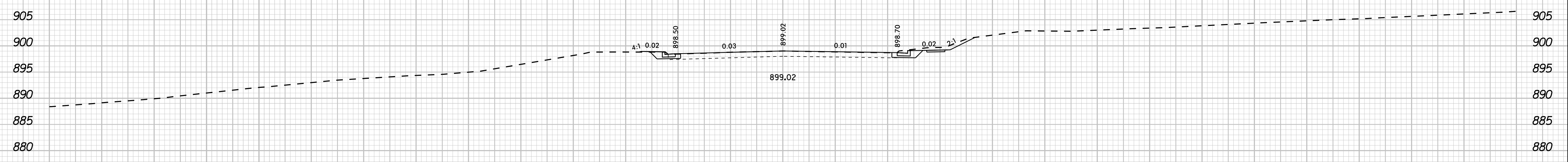
16+50.00

-Y2- STOCKTON STREET

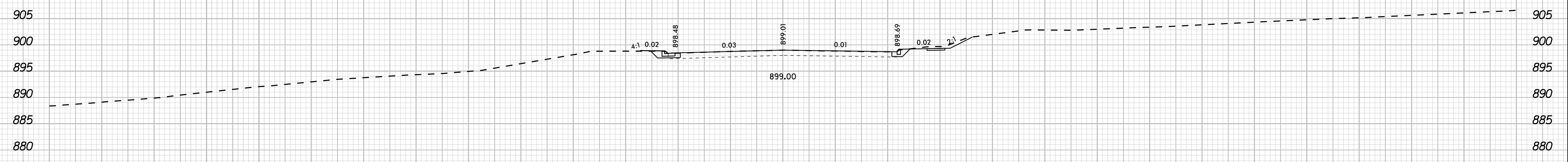
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11/13/2017

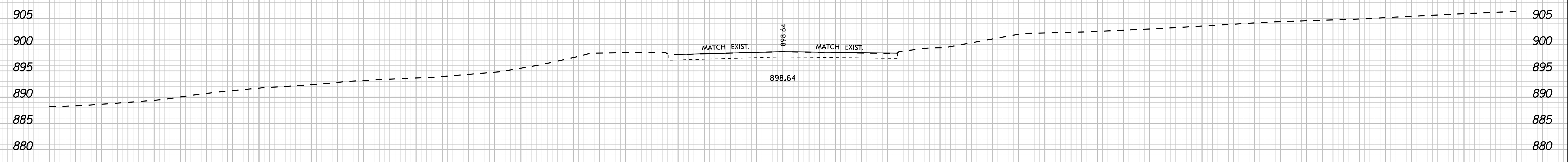
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11 + 00.00

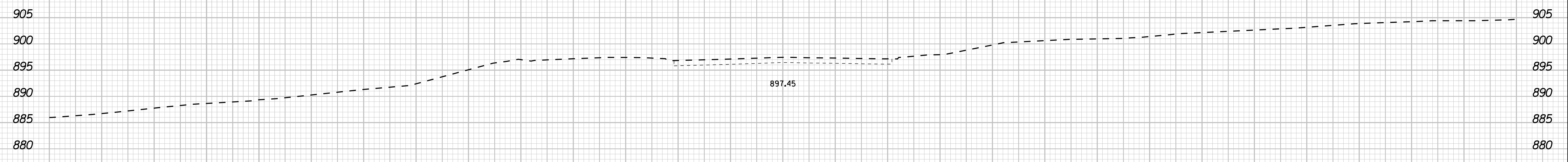


10 + 99.57



10 + 89.30

BEGIN CONSTRUCTION -Y3- STA. 10 + 89.30

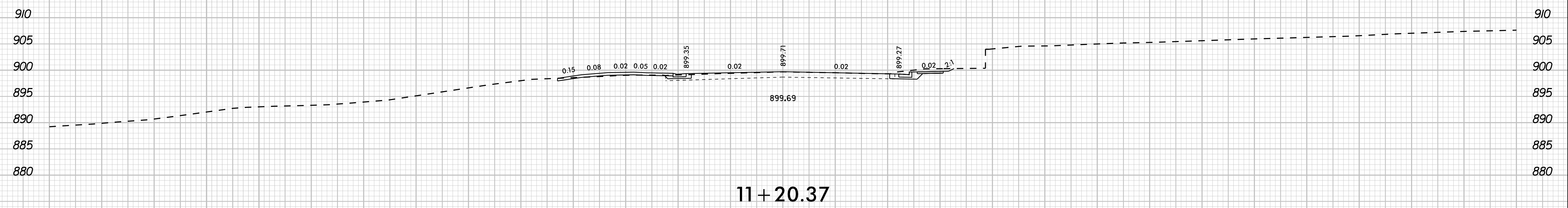
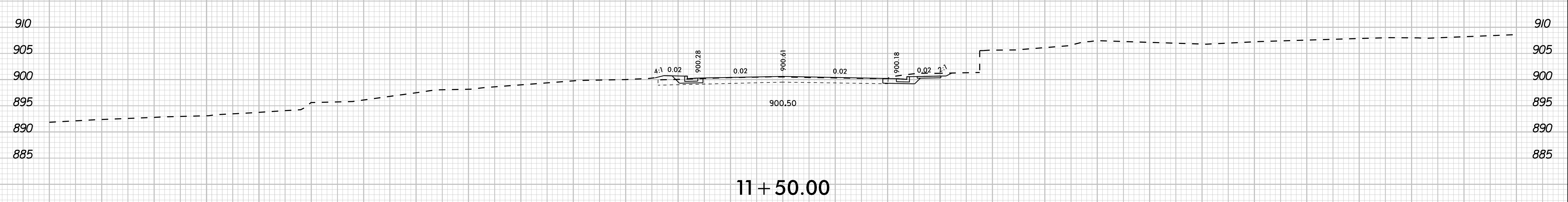
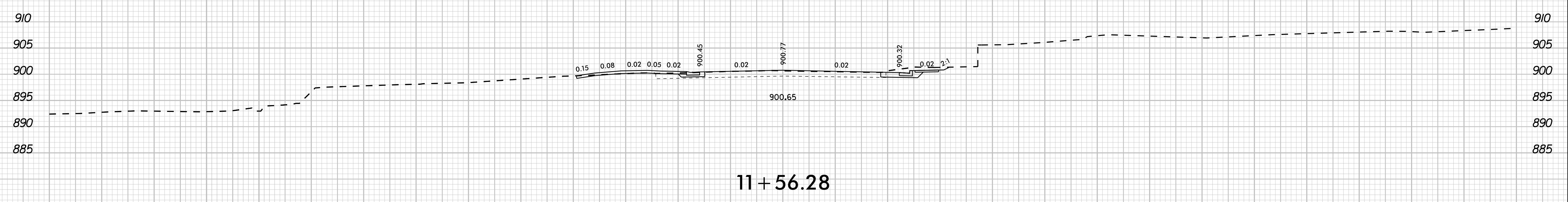
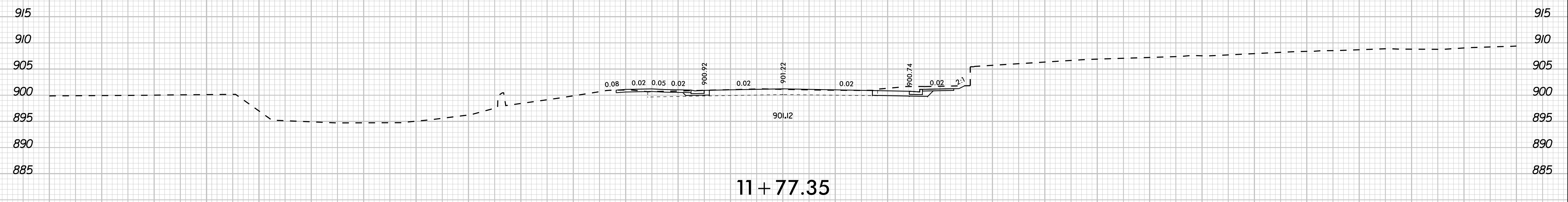


10 + 50.00

-Y3- EAST END AVENUE

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140



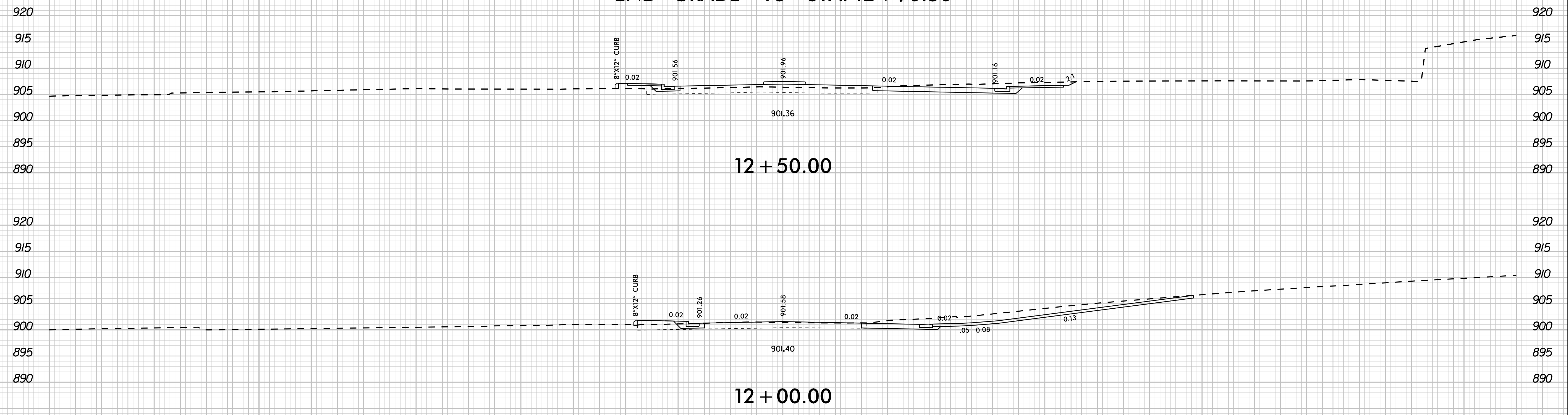
-Y3- EAST END AVENUE

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

11/13/2017

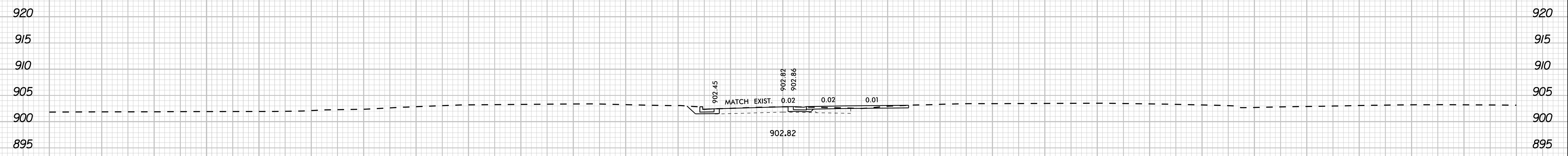
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-RBT- STA. 12+90.50 TO STA. 13+55.51
END GRADE -Y3- STA. 12+90.50

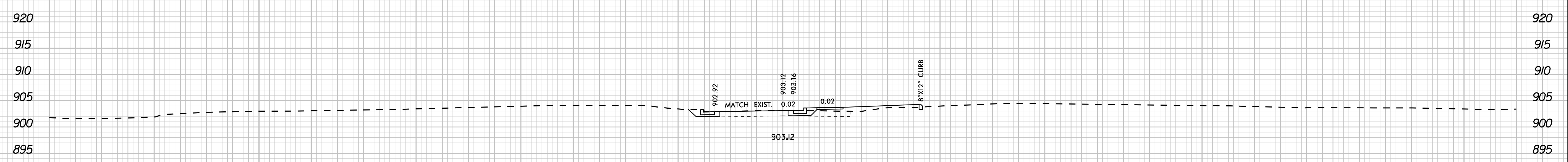


-Y3- EAST END AVENUE

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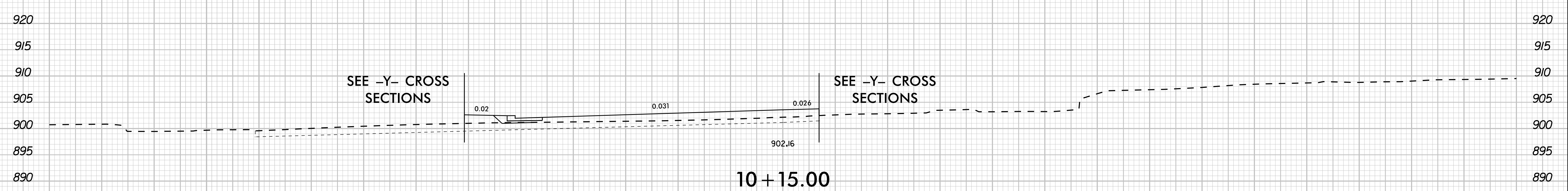
11+50.00



11+00.00



10+50.00

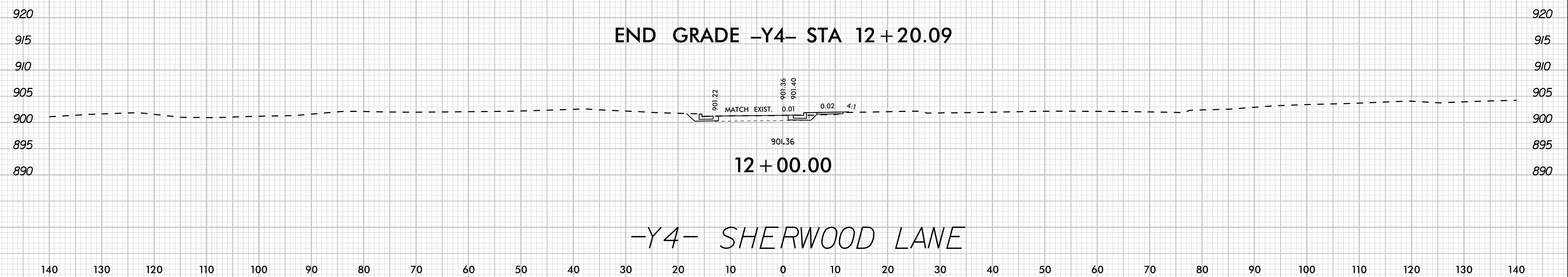


10+15.00

BEGIN GRADE -Y4- STA. 10+15.00

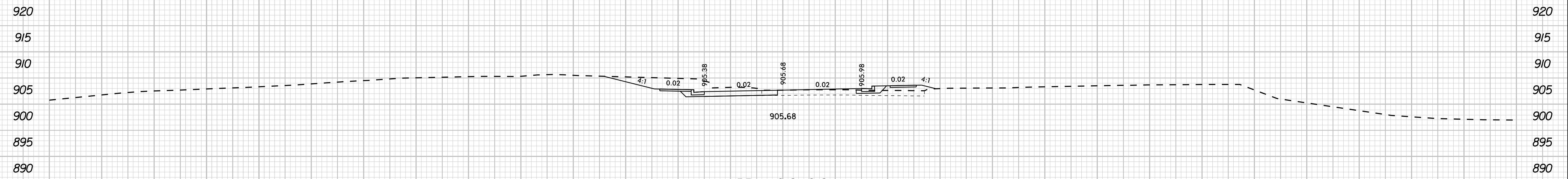
-Y4- SHERWOOD LANE

11/13/2017

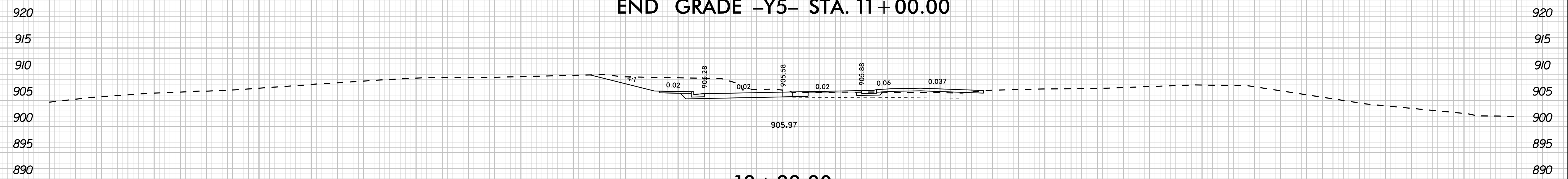


11/13/2017

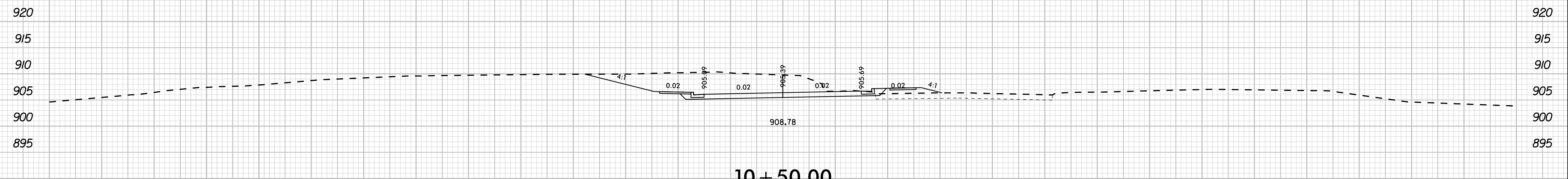
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140



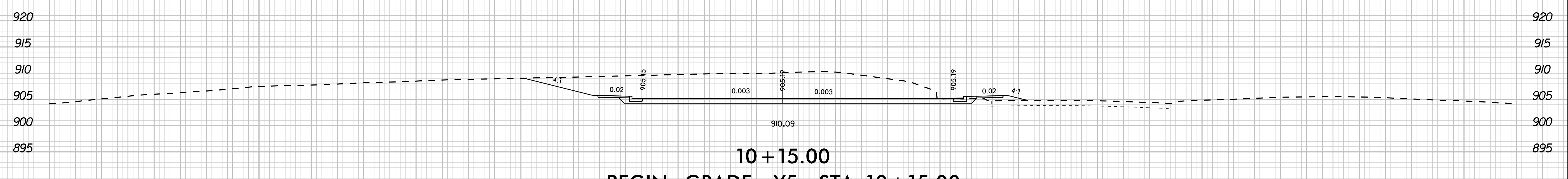
11 + 00.00
END GRADE -Y5- STA. 11 + 00.00



10 + 83.00



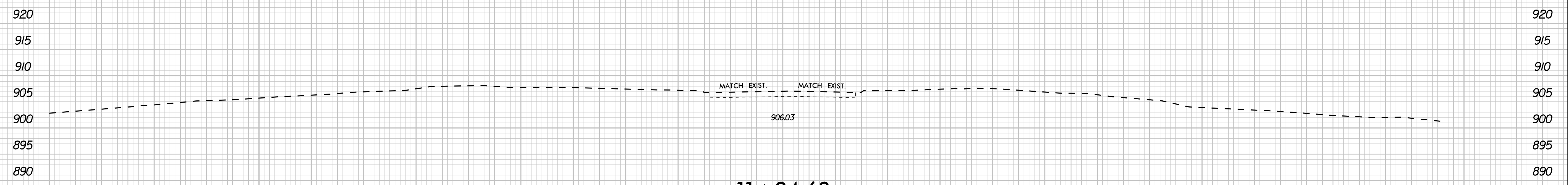
10 + 50.00



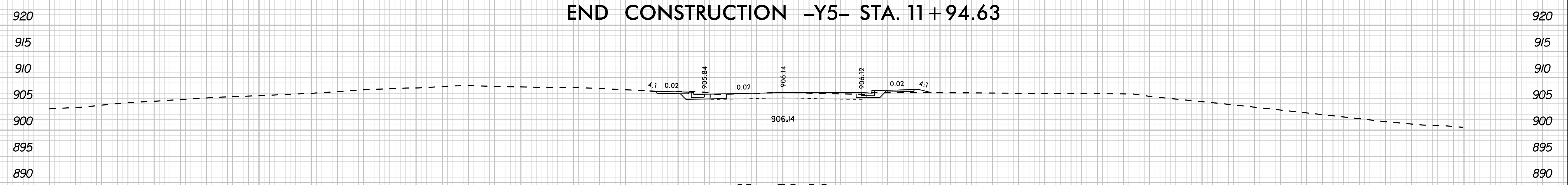
10 + 15.00
BEGIN GRADE -Y5- STA. 10 + 15.00
-Y5- SHERWOOD LANE

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

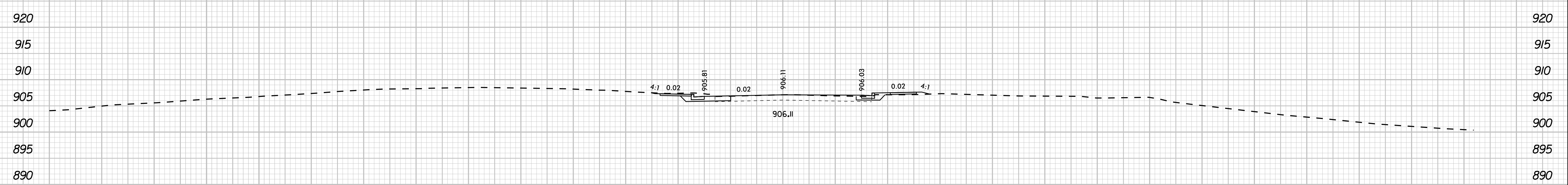
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140



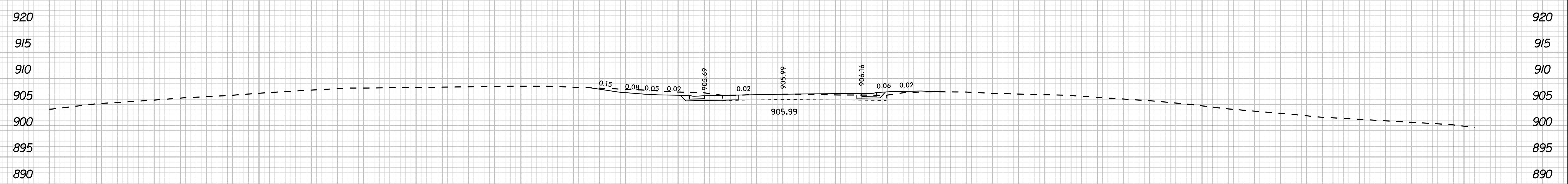
11 + 94.63
END CONSTRUCTION -Y5- STA. 11+94.63



11 + 50.00



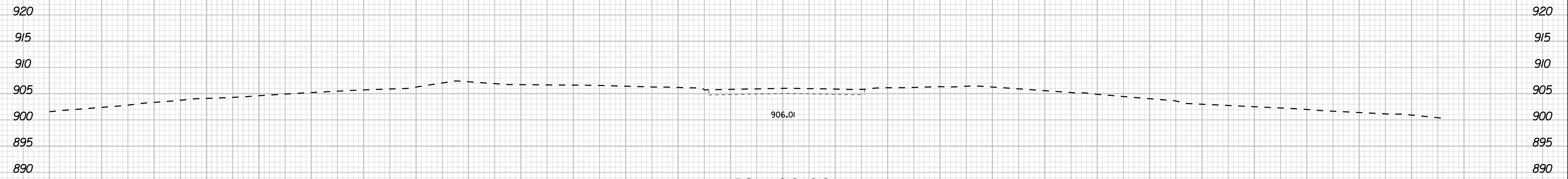
11 + 41.00



11 + 30.00
-Y5- SHERWOOD LANE

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

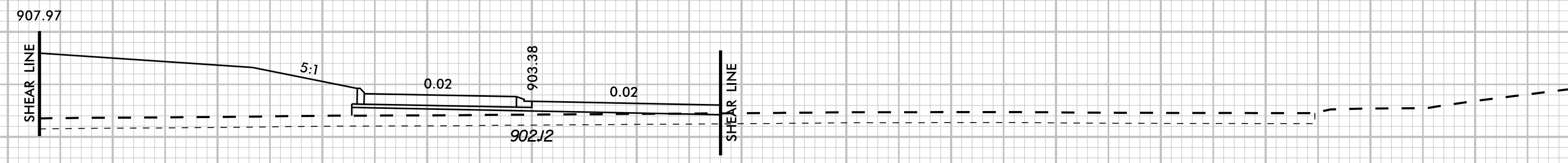
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140



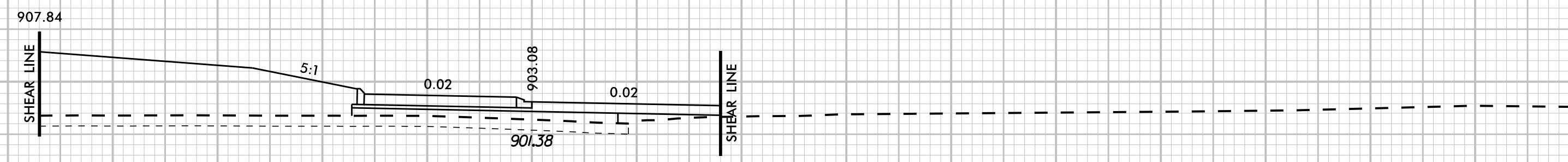
12+00.00
-Y5- SHERWOOD LANE

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

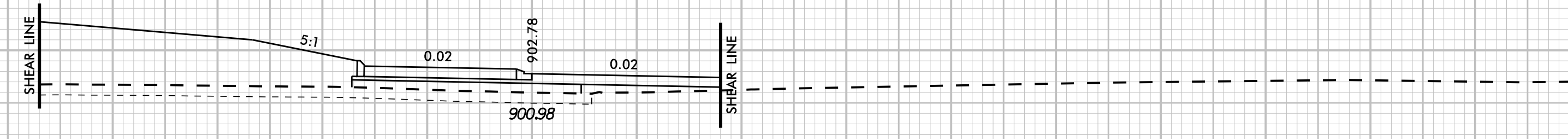
11/13/2017



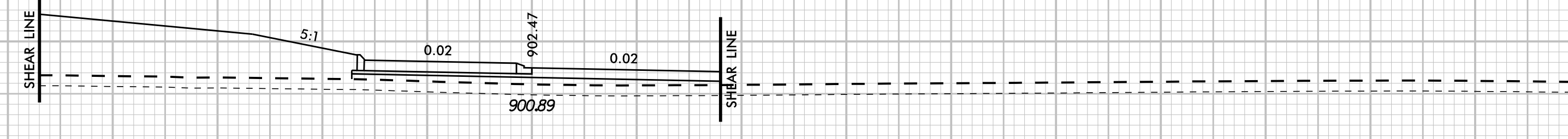
11 + 25.00



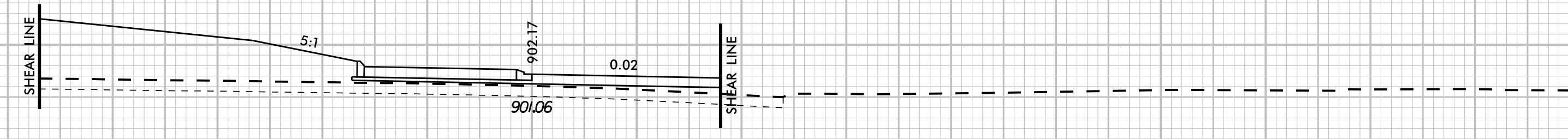
11 + 00.00



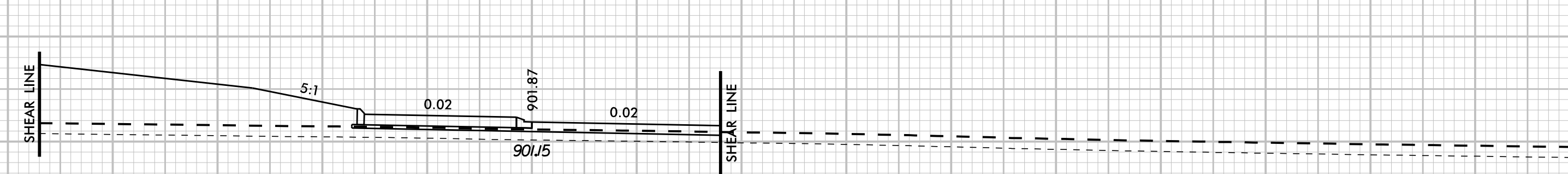
10 + 75.00



10 + 50.00



10 + 25.00

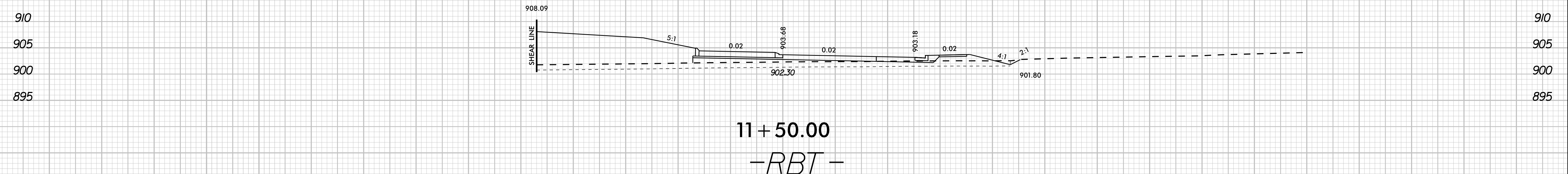
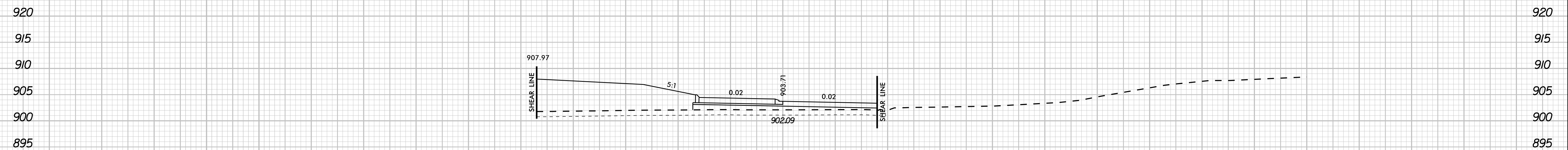
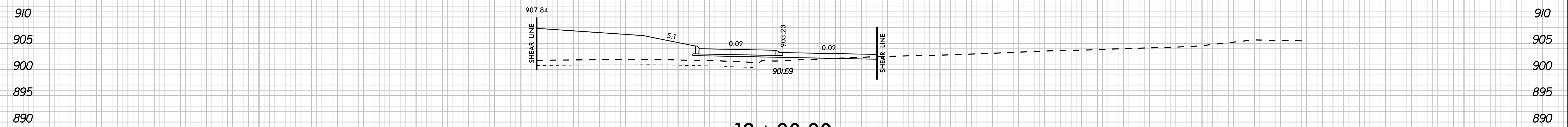
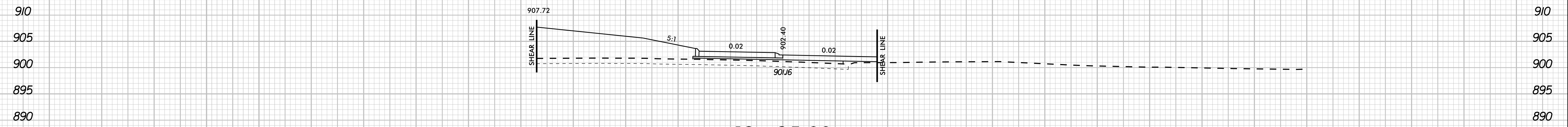
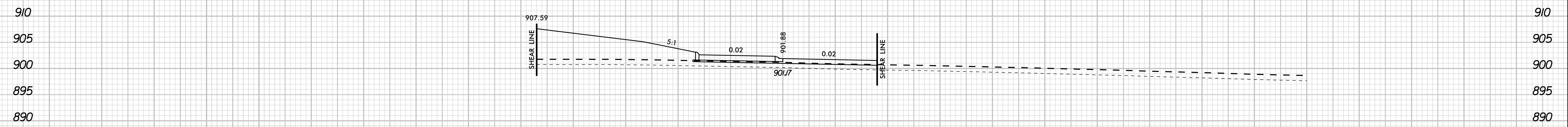


10 + 00.00

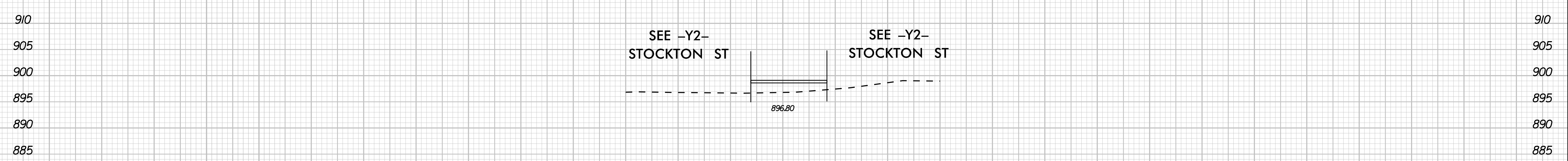
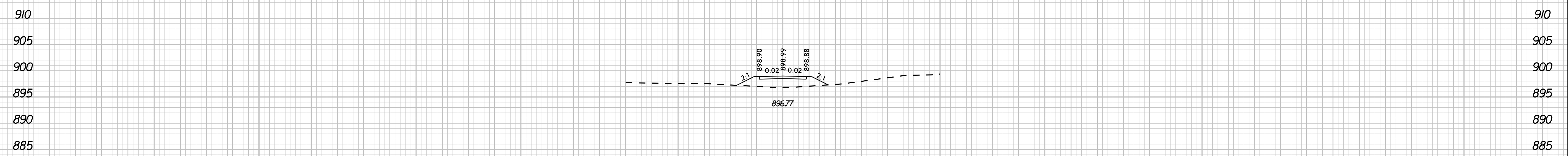
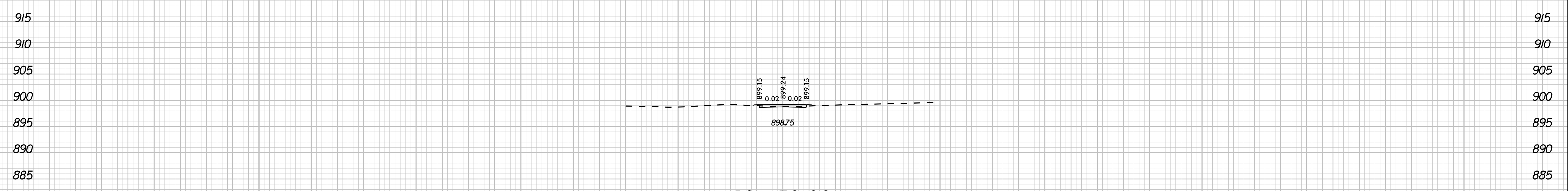
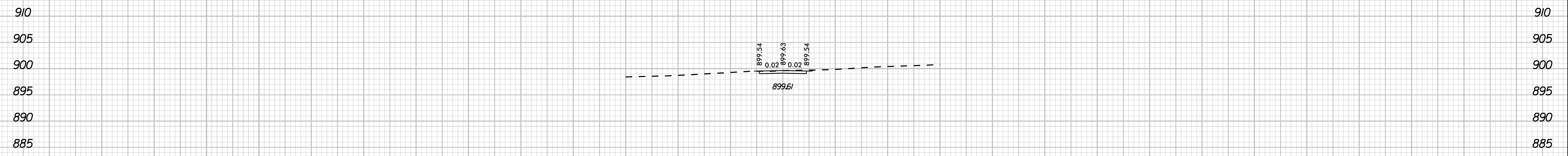
BEGIN GRADE -RBT- STA. 10 + 00.00

-RBT-

11/13/2017

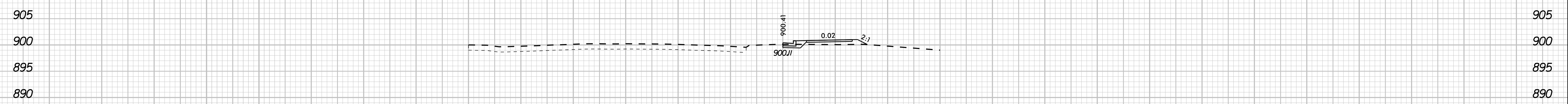


11/13/2017

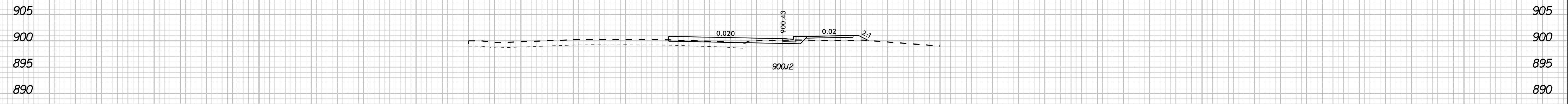


-DRW2-

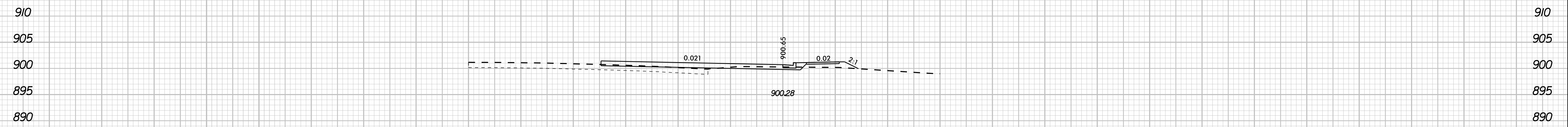
11/13/2017



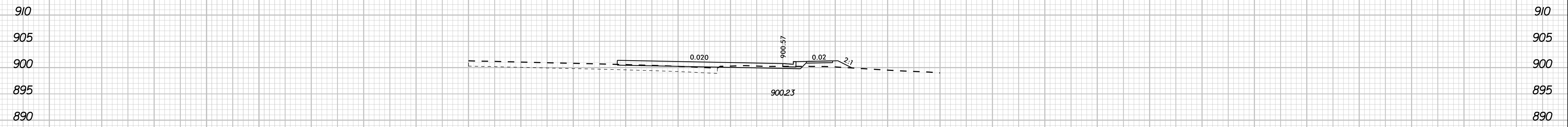
11+40.88
END GRADE -CURB_1A- STA. 11+40.88



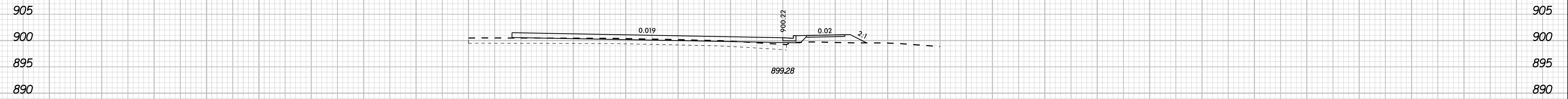
11+40.00



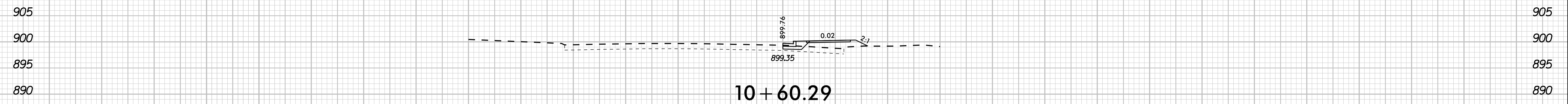
11+20.00



11+00.00



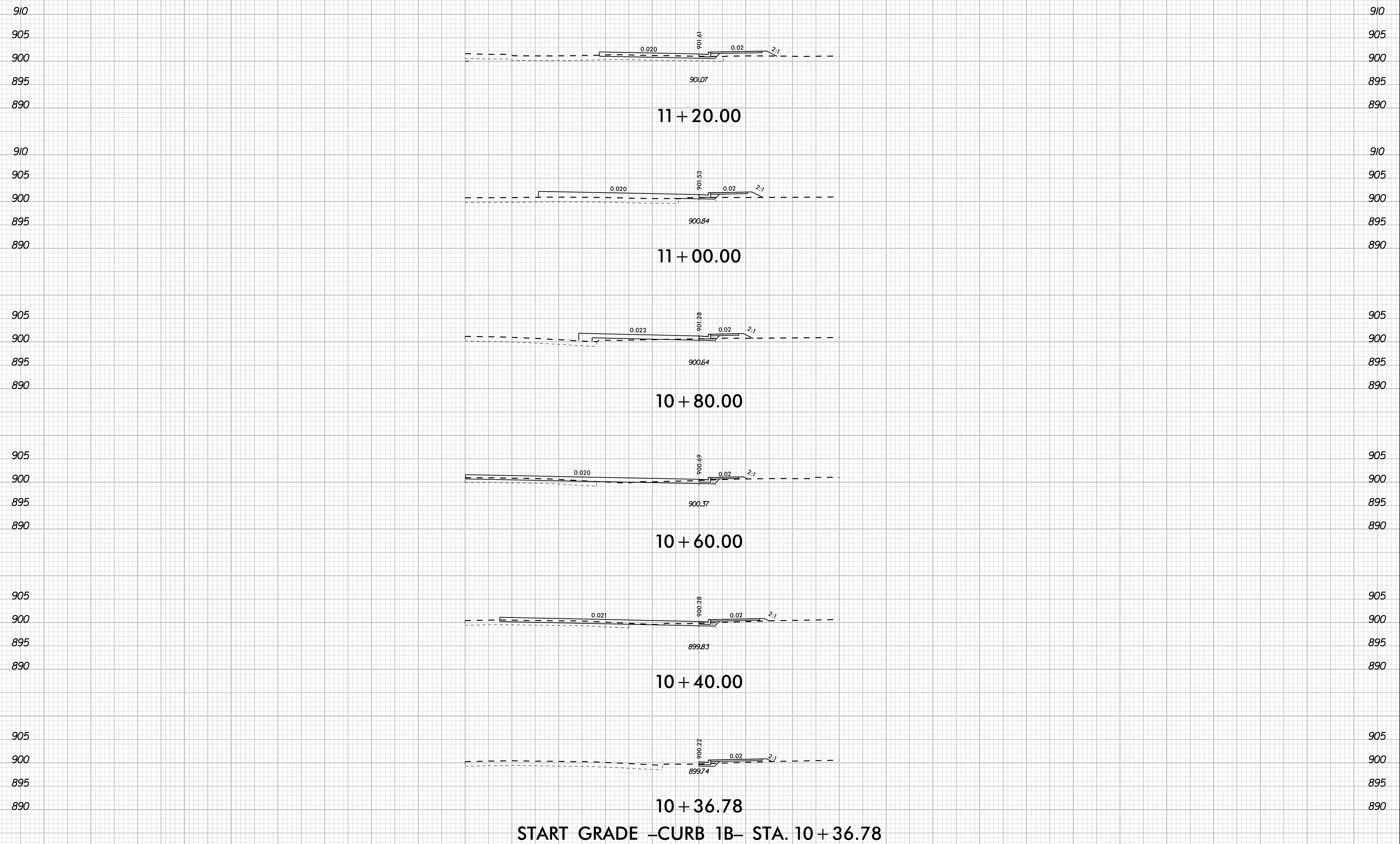
10+80.00



10+60.29
BEGIN GRADE -CURB_1A- STA. 10+60.29

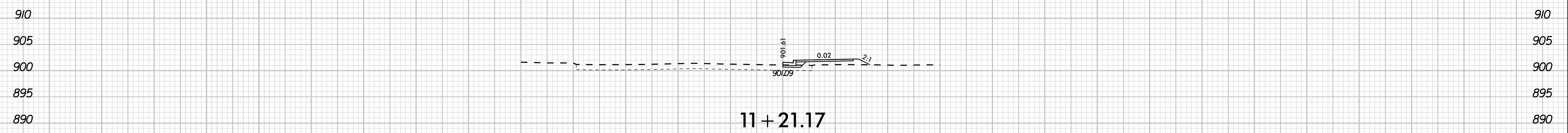
CURB-1A-

11/13/2017



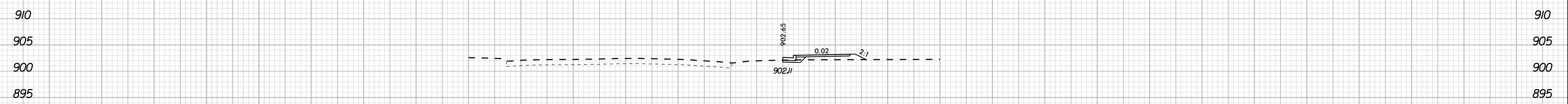
CURB-1B-

11/13/2017

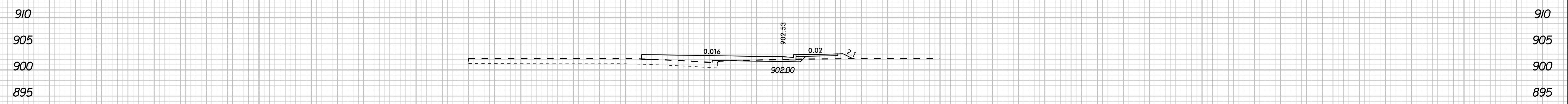


11+21.17
 END GRADE -CURB 1B- STA. 11+21.17
 CURB-1B-

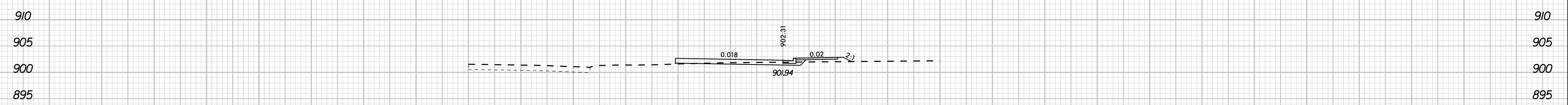
11/13/2017



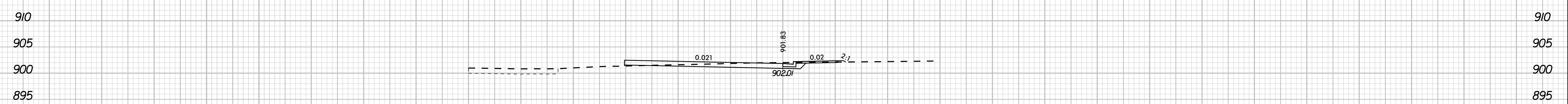
11 + 31.35
 END GRADE -CURB_1C- STA. 11 + 31.35



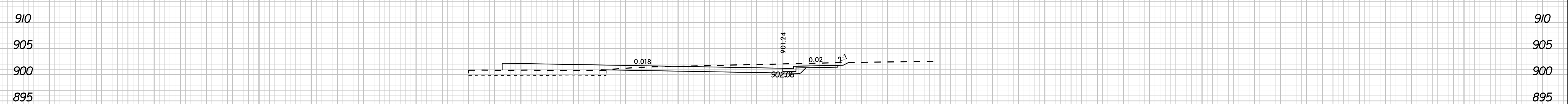
11 + 20.00



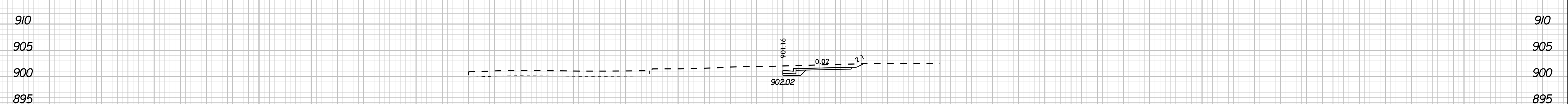
11 + 00.00



10 + 80.00

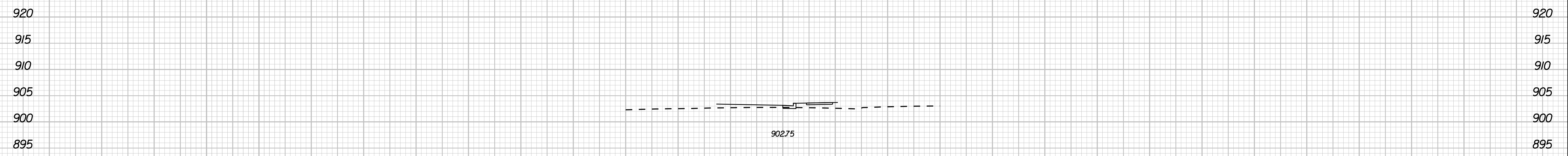


10 + 60.00



10 + 43.99
 START GRADE -CURB_1C- STA. 10 + 43.99
 CURB-1C-

11/13/2017



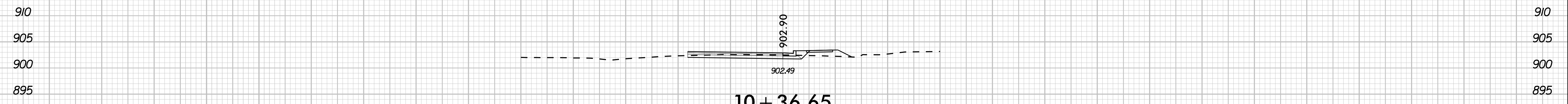
10 + 80.00



10 + 60.00

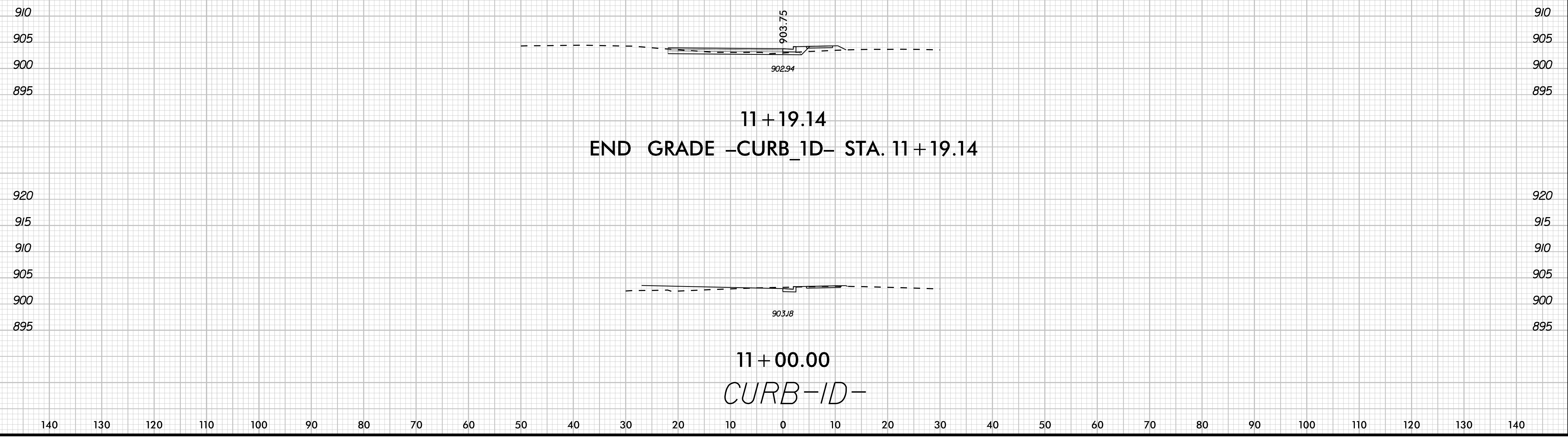


10 + 40.00

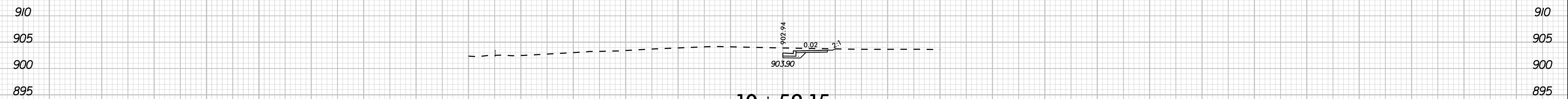
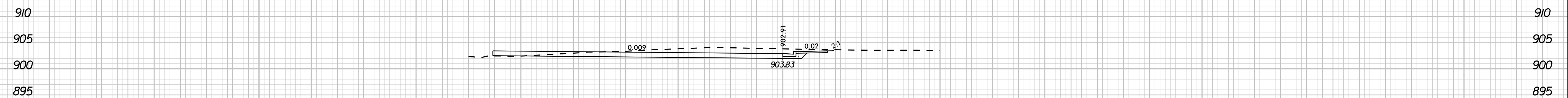
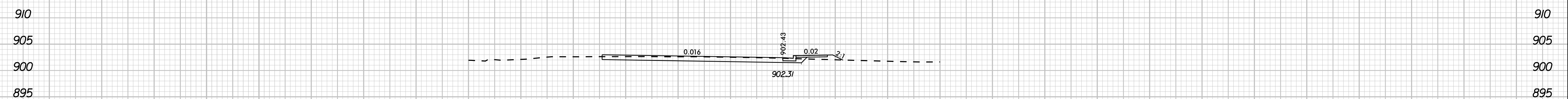
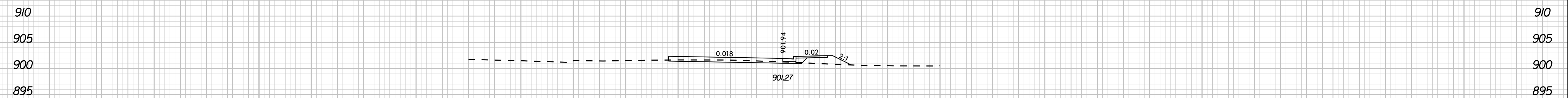
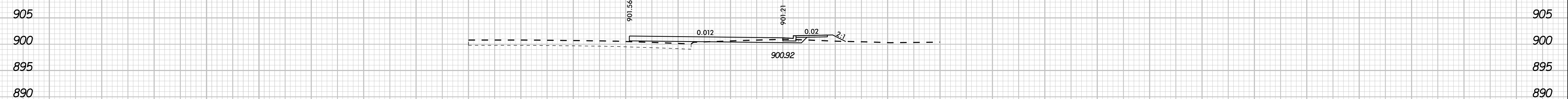
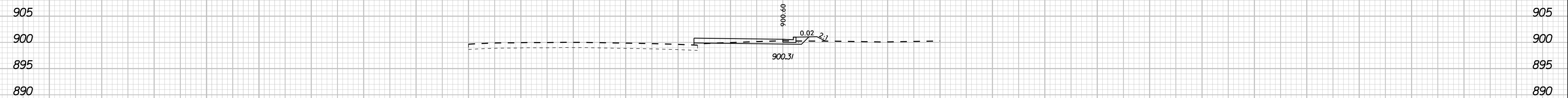


10 + 36.65
 BEGIN GRADE -CURB-ID- STA. 10 + 36.65
 CURB-ID-

11/13/2017



11/13/2017

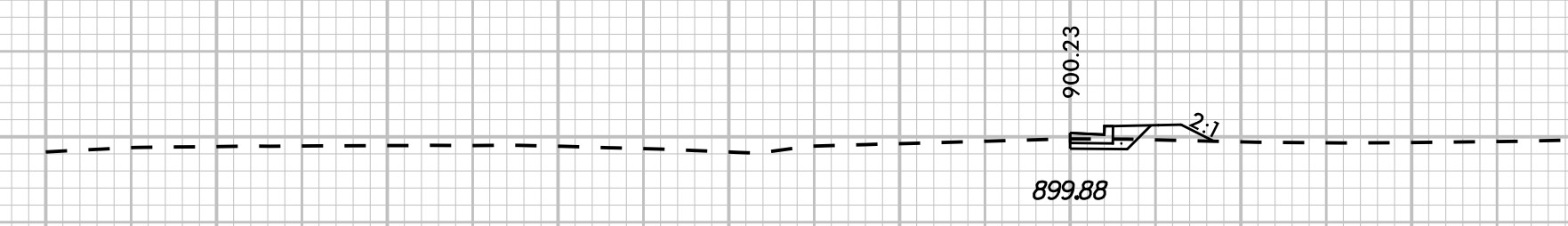


BEGIN GRADE -CURB_1E- STA. 10 + 59.15
CURB-1E-

11/13/2017

905
900
895
890

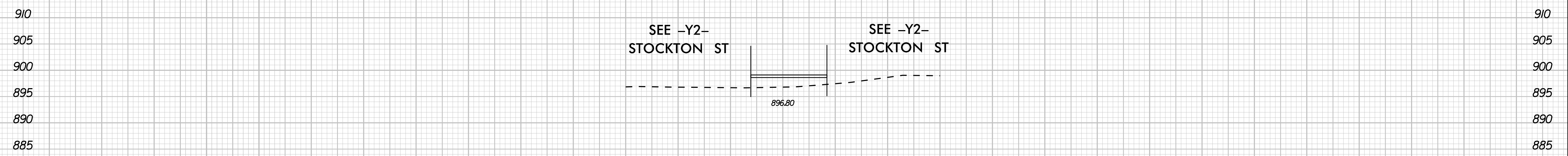
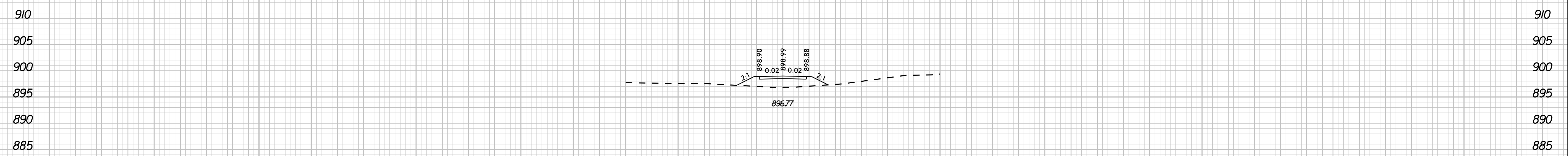
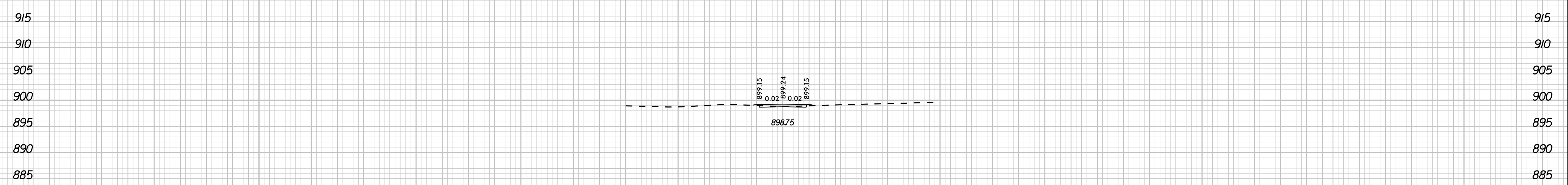
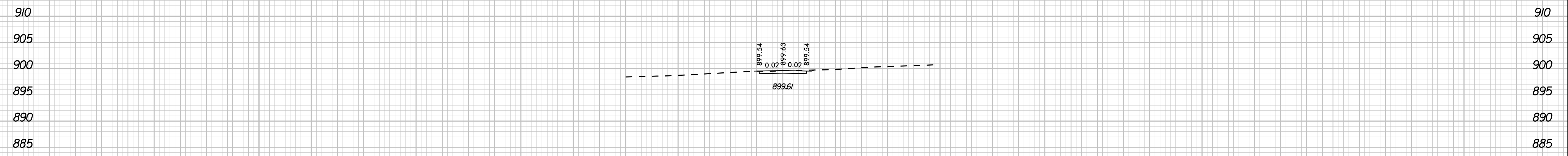
905
900
895
890



11+55.14
END GRADE -CURB_1E- STA. 11+55.14
CURB-1E-

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

11/13/2017



-DRW2-

11/13/2017