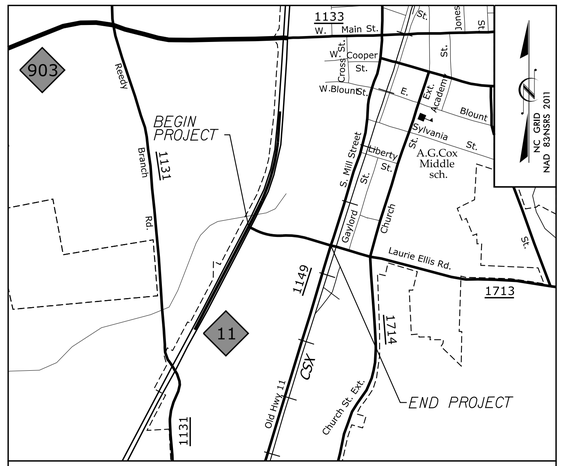
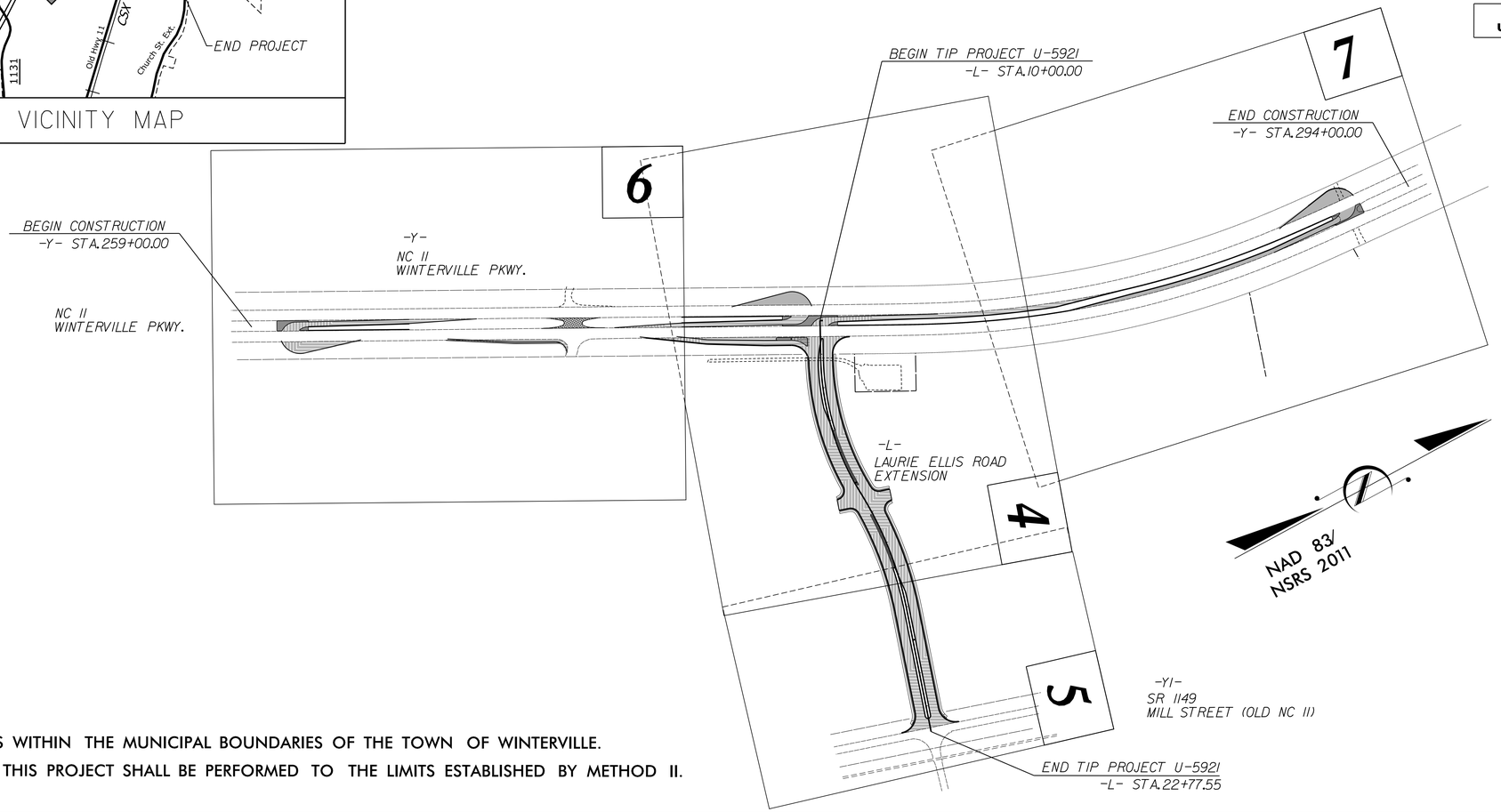
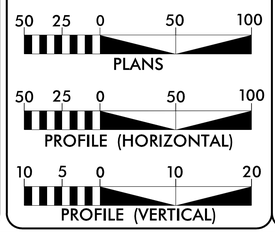






09/08/99

TIP PROJECT: U-5921

CONTRACT: DB00360

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5921	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
	N/A	P.E.

See Sheet 1A For Index of Sheets

VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PITT COUNTY

LOCATION: LAURIE ELLIS ROAD FROM NC 11 TO MILL STREET

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND CURB AND GUTTER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

FINAL ROADWAY PLANS

Vaughn & Melton
Consulting Engineers

☐ Asheville, North Carolina
828·253·2796

☐ Raleigh, NC
919·977·9455

☐ Charlotte, NC
704·357·0488

■ New Bern, NC
252·631·5115

☐ Boone, NC
828·355·9933

☐ Tri-Cities, TN
423·467·8401

☐ Knoxville, TN
865·546·5800

☐ Spartanburg, SC
864·574·4775

☐ Charleston, SC
843·974·5650

☐ Middlesboro, KY
606·248·6600

☐ Atlanta, GA
770·627·3509

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF WINTERVILLE.

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

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

V = 45 MPH

FUNC CLASS = MINOR ARTERIAL

PROJECT LENGTH

LENGTH ROADWAY PROJECT U-5921 = 0.230 Mi.
TOTAL LENGTH OF PROJECT U-5921 = 0.230 Mi.

TOTAL LENGTH OF PROJECT = 0.230 Mi.

Prepared in the Office of:

DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

DWAYNE H. ALLIGOOD, PE
PROJECT ENGINEER

DWAYNE H. ALLIGOOD, PE
PROJECT DESIGN ENGINEER

NCDOT CONTACT:
LARRY L. JONES
DIVISION 2 DDC ENGINEER

HYDRAULICS ENGINEER

DocuSigned by:
Edward Vance
8264F2B1B3DF494...

SEAL 029388

EDWARD J. VANCE, P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

DocuSigned by:
Dwayne H. Alligood
47608B64B6E14F6...

SEAL 16710

DWAYNE H. ALLIGOOD, P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 16710 ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INDEX OF SHEETS

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012
REVISED: 07-30-2012

GRADE LINE:

GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

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

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 AND/OR STD. NO. 225.05 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

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. NO. 848.02 USING 3' RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED ON PLANS.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE:

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS.
CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06.

EFF. 01-17-2012
REV. 10-30-2012

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.01	Guide for Grading Subgrade - Interstate and Freeway
225.02	Guide for Grading Subgrade - Secondary and Local
225.03	Deceleration and Acceleration Lanes
225.06	Method of Grading Sight Distance at Intersections
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.02	Parallel Pipe End Section - Precast Concrete Section for 15" to 24" Pipe
310.03	Cross Pipe End Section - Precast Concrete Section for 18" to 30" Pipe
310.10	Driveway Pipe Construction
DIVISION 8 - INCIDENTALS	
806.01	Concrete Right-of-Way Marker
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
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.22	Frames and Wide Slot Sag Grates
840.24	Frames and Narrow Slot Sag Grates
840.27	Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.51	Brick Manhole - 12" thru 36" Pipe
840.52	Precast Manhole - 4', 5' and 6' Diameter
840.53	Precast Manhole with Masonry Base - 12" thru 42" Pipe
846.01	Concrete Curb, Gutter and Curb & Gutter
848.01	Concrete Sidewalk
848.04	Street Turnout
848.05	Curb Ramp - Proposed Curb & Gutter
852.01	Concrete Islands
852.05	Median Curb for Catch Basin - for Use with 1'-6" Curb and Gutter
852.10	Median Construction - with Curb and Gutter
876.02	Guide for Rip Rap at Pipe Outlets
876.03	Drainage Ditches with Class 'A' Rip Rap
876.04	Drainage Ditches with Class 'B' Rip Rap

12/2/2016

PROJECT REFERENCE NO.	SHEET NO.
U-5921	1B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale **S.U.E. = Subsurface Utility Engineering*

BOUNDARIES AND PROPERTY:

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

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

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

RIGHT OF WAY & PROJECT CONTROL:

- Secondary Horiz and Vert Control Point
- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Exist Permanent Easment Pin and Cap
- New Permanent Easement Pin and Cap
- Vertical Benchmark
- Existing Right of Way Marker
- Existing Right of Way Line
- New Right of Way Line — RW
- New Right of Way Line with Pin and Cap — RW
- New Right of Way Line with Concrete or Granite R/W Marker — RW
- New Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- New Control of Access — CA
- Existing Easement Line — E
- New Temporary Construction Easement — E
- New Temporary Drainage Easement — TDE
- New Permanent Drainage Easement — PDE
- New Permanent Drainage / Utility Easement — DUE
- New Permanent Utility Easement — PUE
- New Temporary Utility Easement — TUE
- New Aerial Utility Easement — AUE

ROADS AND RELATED FEATURES:

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

VEGETATION:

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

EXISTING STRUCTURES:

MAJOR:

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

MINOR:

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

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H–Frame Pole
- U/G Power Line LOS B (S.U.E.*) — P
- U/G Power Line LOS C (S.U.E.*) — P
- U/G Power Line LOS D (S.U.E.*) — P

TELEPHONE:

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

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line LOS B (S.U.E*) — W
- U/G Water Line LOS C (S.U.E*) — W
- U/G Water Line LOS D (S.U.E*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- U/G TV Cable LOS B (S.U.E.*) — TV
- U/G TV Cable LOS C (S.U.E.*) — TV
- U/G TV Cable LOS D (S.U.E.*) — TV
- U/G Fiber Optic Cable LOS B (S.U.E.*) — TV FO
- U/G Fiber Optic Cable LOS C (S.U.E.*) — TV FO
- U/G Fiber Optic Cable LOS D (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line LOS B (S.U.E.*) — G
- U/G Gas Line LOS C (S.U.E.*) — G
- U/G Gas Line LOS D (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- SS Forced Main Line LOS B (S.U.E.*) — FSS
- SS Forced Main Line LOS C (S.U.E.*) — FSS
- SS Forced Main Line LOS D (S.U.E.*) — FSS

MISCELLANEOUS:

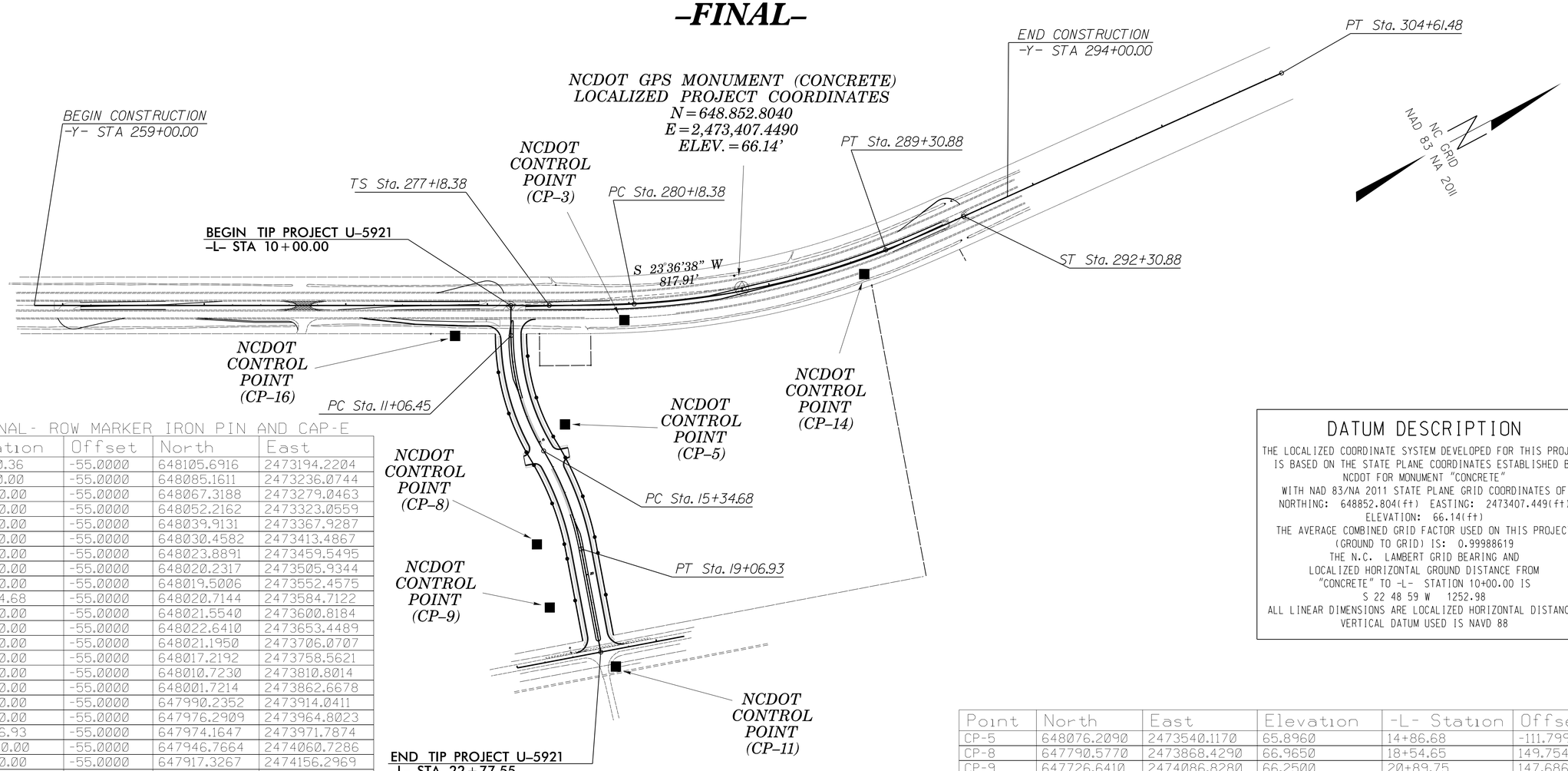
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line LOS B (S.U.E.*) — ?UTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole LOS A (S.U.E.*)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

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
U-5921	1C-1
Location and Surveys	

SURVEY CONTROL SHEET U-5931

-FINAL-



-FINAL- ROW MARKER IRON PIN AND CAP-E

Align	Station	Offset	North	East
L	11+00.36	-55.0000	648105.6916	2473194.2204
L	11+50.00	-55.0000	648085.1611	2473236.0744
L	12+00.00	-55.0000	648067.3188	2473279.0463
L	12+50.00	-55.0000	648052.2162	2473323.0559
L	13+00.00	-55.0000	648039.9131	2473367.9287
L	13+50.00	-55.0000	648030.4582	2473413.4867
L	14+00.00	-55.0000	648023.8891	2473459.5495
L	14+50.00	-55.0000	648020.2317	2473505.9344
L	15+00.00	-55.0000	648019.5006	2473552.4575
L	15+34.68	-55.0000	648020.7144	2473584.7122
L	15+50.00	-55.0000	648021.5540	2473600.8184
L	16+00.00	-55.0000	648022.6410	2473653.4489
L	16+50.00	-55.0000	648021.1950	2473706.0707
L	17+00.00	-55.0000	648017.2192	2473758.5621
L	17+50.00	-55.0000	648010.7230	2473810.8014
L	18+00.00	-55.0000	648001.7214	2473862.6678
L	18+50.00	-55.0000	647990.2352	2473914.0411
L	19+00.00	-55.0000	647976.2909	2473964.8023
L	19+06.93	-55.0000	647974.1647	2473971.7874
L	20+00.00	-55.0000	647946.7664	2474060.7286
L	21+00.00	-55.0000	647917.3267	2474156.2969
L	22+00.00	-55.0000	647887.8869	2474251.8652
L	22+27.56	-55.0000	647879.7745	2474278.1999
L	22+27.55	55.0000	647774.6511	2474245.8107
L	22+00.00	55.0000	647782.7618	2474219.4815
L	21+00.00	55.0000	647812.2015	2474123.9132
L	20+00.00	55.0000	647841.6413	2474028.3449
L	19+06.93	55.0000	647869.0395	2473939.4037
L	19+00.00	55.0000	647870.9520	2473933.1210
L	18+50.00	55.0000	647883.4942	2473887.4637
L	18+00.00	55.0000	647893.8255	2473841.2559
L	17+50.00	55.0000	647901.9220	2473794.6046
L	17+00.00	55.0000	647907.7650	2473747.6179
L	16+50.00	55.0000	647911.3410	2473700.4044
L	16+00.00	55.0000	647912.6417	2473653.0736
L	15+50.00	55.0000	647911.6640	2473605.7351
L	15+34.68	55.0000	647910.9088	2473591.2483
L	15+00.00	55.0000	647909.5143	2473554.1924
L	14+50.00	55.0000	647910.3542	2473500.7444
L	14+00.00	55.0000	647914.5560	2473447.4552
L	13+50.00	55.0000	647922.1029	2473394.5359
L	13+00.00	55.0000	647932.9652	2473342.1966
L	12+50.00	55.0000	647947.0996	2473290.6445
L	12+00.00	55.0000	647964.4503	2473240.0841
L	11+50.00	55.0000	647984.9483	2473190.7158
L	10+99.65	55.0000	648008.4448	2473142.8047

-L- FINAL

TYPE	STATION	NORTH	EAST
PT	10+00.00	648103.2363	2473079.8056
PC	11+06.45	648054.0904	2473174.2341
PT	15+34.68	647965.8116	2473587.9802
PC	15+34.68	647965.8116	2473587.9802
PT	19+06.93	647921.6021	2473955.5956
PT	22+77.55	647812.4929	2474309.7894

-Y- FINAL

TYPE	STATION	NORTH	EAST
PC	259+00.00	646615.8378	2472293.3981
TS	277+18.38	648223.3637	2473143.3186
PC	280+18.38	648490.9508	2473278.8739
PT	289+30.88	649365.5215	2473525.3802
ST	292+30.88	649664.5120	2473549.5203
PT	304+61.48	650892.6588	2473627.1333

GEOID MODEL - G12NC
NOTE: DRAWING NOT TO SCALE

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "CONCRETE"
WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
NORTHING: 648852.804(ft) EASTING: 2473407.449(ft)
ELEVATION: 66.14(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99988619
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "CONCRETE" TO -L- STATION 10+00.00 IS
S 22 48 59 W 1252.98
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

Point	North	East	Elevation	-L- Station	Offset
CP-5	648076.2090	2473540.1170	65.8960	14+86.68	-111.7999
CP-8	647790.5770	2473868.4290	66.9650	18+54.65	149.7544
CP-9	647726.6410	2474086.8280	66.2500	20+89.75	147.6865
CP-11	647835.8980	2474379.7250	68.5350	OFF CHAIN	OFF CHAIN

Point	North	East	Elevation	-Y- Station	Offset
"CONCRETE"	648852.8040	2473407.4490	66.1390	284+03.22	-9.7814
CP-3	648433.7160	2473313.3590	66.2940	279+81.62	55.5855
CP-14	649258.1720	2473565.6860	68.9090	288+30.76	54.1880
CP-16	647879.5090	2473082.7890	67.4500	273+86.11	107.2088

NOTES:

1. *THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:*
   HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION/

   THE FILES TO BE FOUND ARE AS FOLLOWS:
   U-5921_LS_CONTROL.TXT

   SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

△ *INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.*
PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

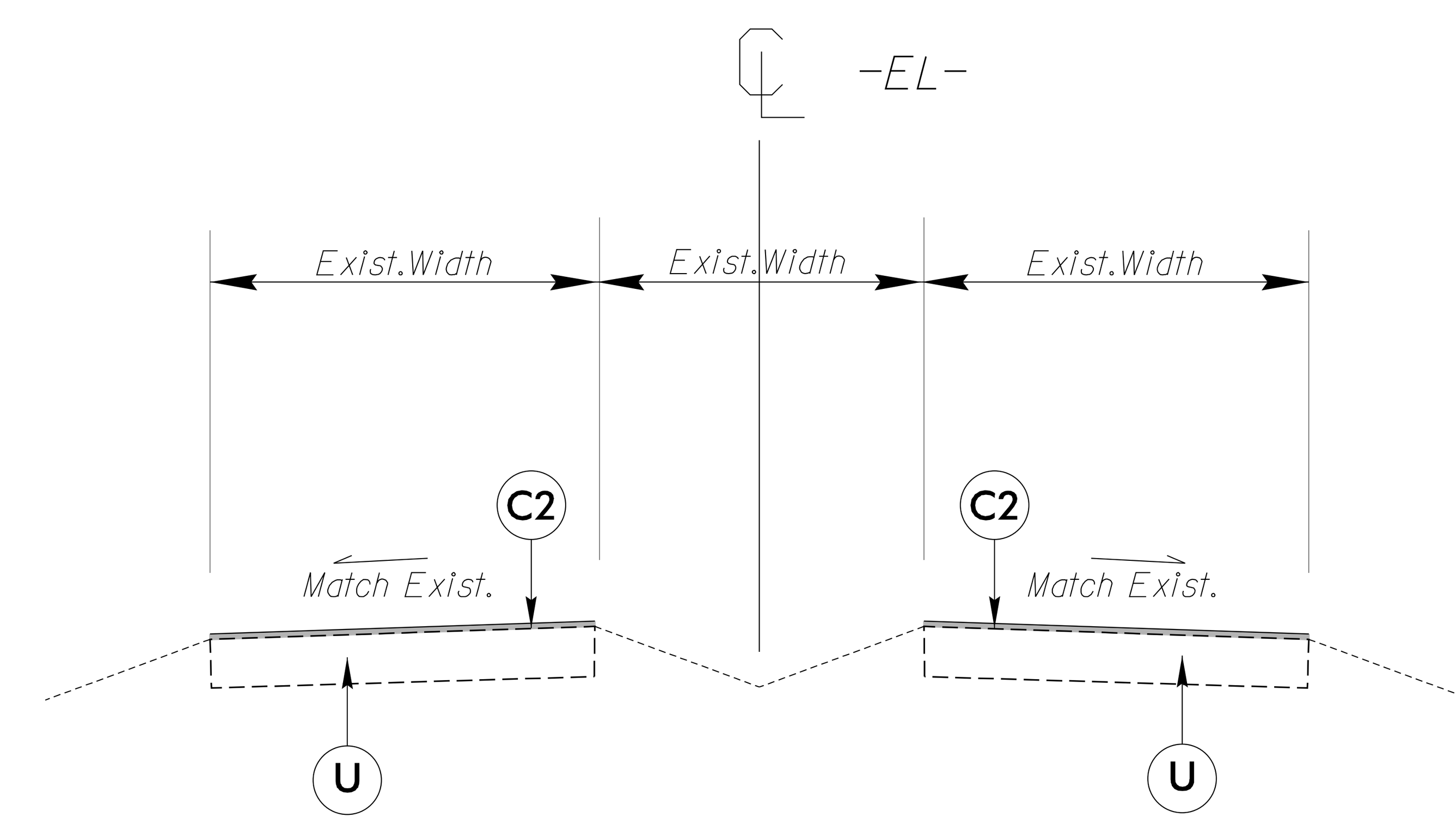
5/4/2017
S:\Transportation\31614-04 U-5921 Laurie Ellis Road Ext\Roadway\Proj\U5921_Rdy_1c-1.dgn
User:bbowles

PROJECT REFERENCE NO.	SHEET NO.
U-5921	2A-1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE

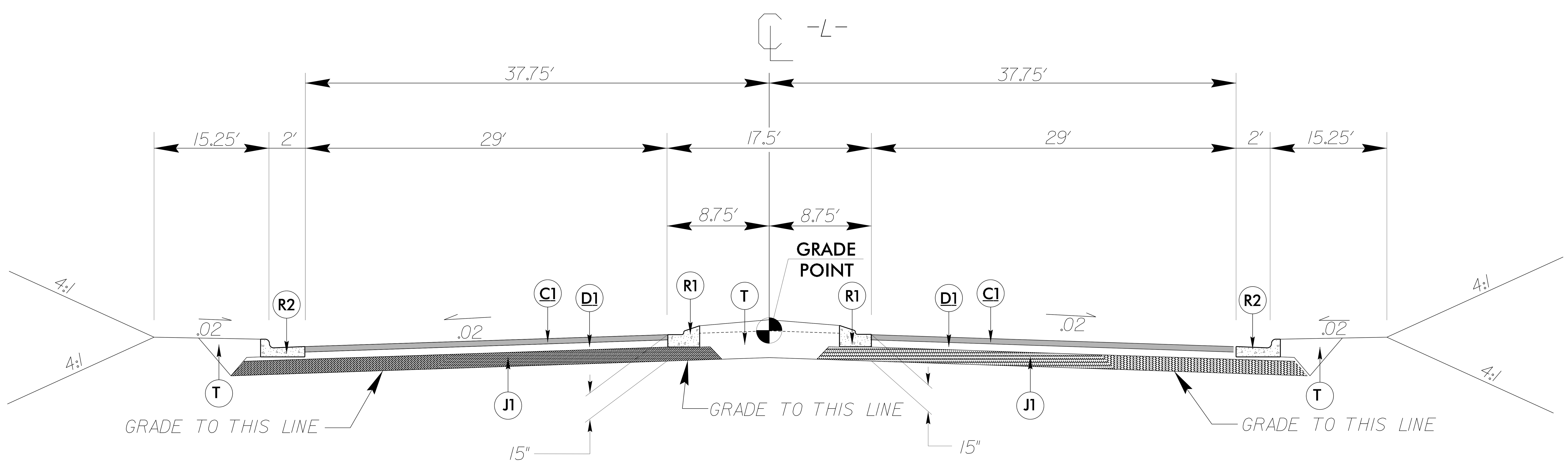
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
J1	PROP. 8" AGGREGATE BASE COURSE.
R1	1'-6" CONCRETE CURB AND GUTTER.
R2	2'-6" CONCRETE CURB AND GUTTER.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.



TYPICAL SECTION NO.2

USE TYPICAL SECTION NO. 2

-EL- STA.259+00 to STA.259+77
-EL- STA.268+27 to STA.270+43
-EL- STA.292+34 to STA.294+00



TYPICAL SECTION NO.1

USE TYPICAL SECTION NO. 1

-L- STA.10+47.54 to STA.22+68.04

PROJECT REFERENCE NO.	SHEET NO.
U-5921	2A-2
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER — SEAL 016710 — DWAYNE H. ALLGOOD

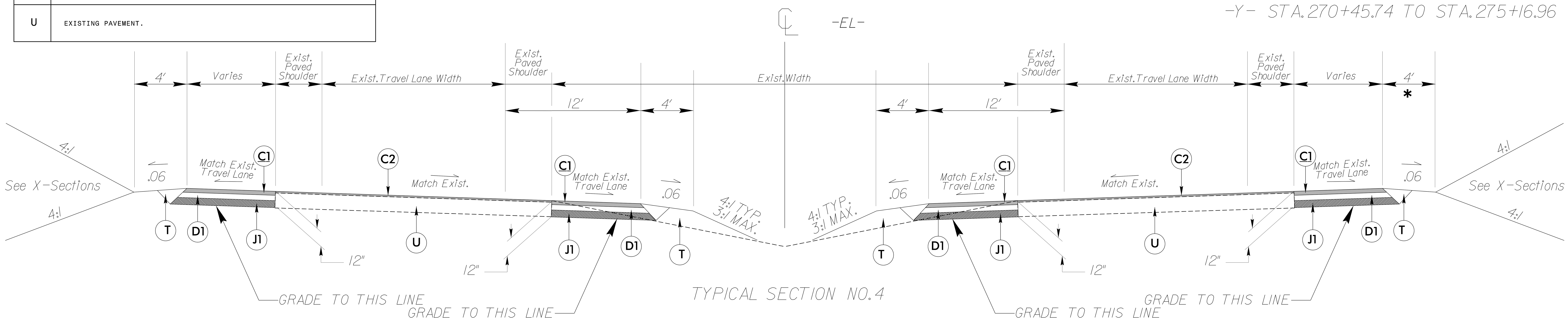
PAVEMENT ENGINEER — SEAL — WILLIAM C. KINCANNON

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE

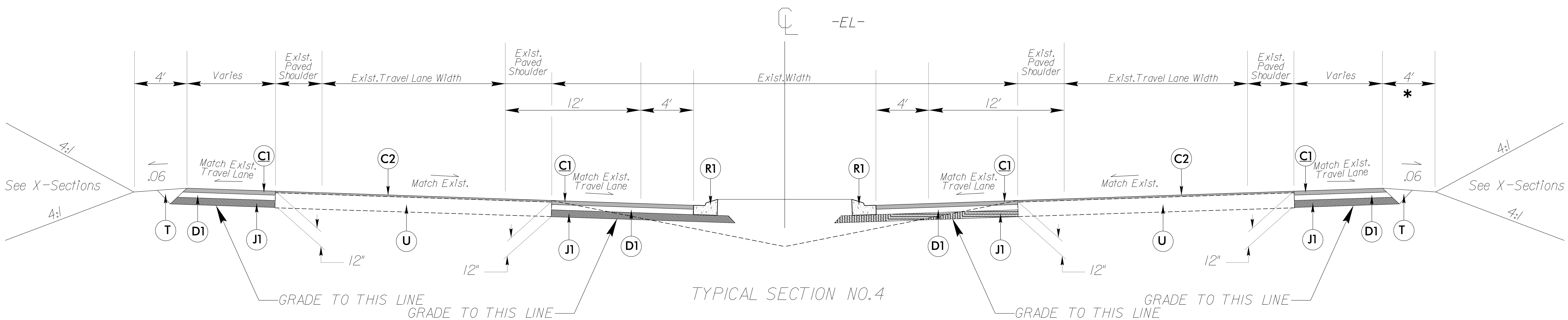
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
J1	PROP. 8" AGGREGATE BASE COURSE.
R1	1'-6" CONCRETE CURB AND GUTTER.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.

* 4' PAVED SHOULDERS FROM:
-Y- STA.264+76.54 TO STA.268+12.55
2' PAVED SHOULDERS FROM:
-Y- STA.270+45.74 TO STA.275+16.96



USE TYPICAL SECTION NO. 4

-EL- STA.283+85 TO STA.292+34



USE TYPICAL SECTION NO. 3

-EL- STA.259+93 to STA.268+27
-EL- STA.270+43 to STA.283+85

5/9/06

COMPUTED BY: B. BOYLES	DATE: 05/04/2017		
CHECKED BY: D. ALLIGOOD	DATE: 05/04/2017		

SUMMARY OF QUANTITIES

SECTION	QUANTITY	UNIT	DESCRIPTION
800	1	LS	MOBILIZATION
801	1	LS	CONSTRUCTION SURVEYING
225	400	CY	UNDERCUT EXCAVATION (CONTINGENCY)
226	1	LS	GRADING
265	600	CY	SELECT GRANULAR MATERIAL (CONTINGENCY)
270	100	SY	GEOTEXTILE FOR SOIL STABILIZATION
300	500	TON	FOUNDATION CONDITIONING MATERIAL,MINOR STRUCTURES
300	1560	SY	FOUNDATION CONDITIONING GEOTEXTILE
310	2908	LF	15" R.C.PIPE CULVERTS,CLASS IV
310	740	LF	18" R.C.PIPE CULVERTS,CLASS IV
310	1016	LF	24" R.C.PIPE CULVERTS,CLASS IV
340	24	LF	PIPE REMOVAL
505	4400	CY	SHALLOW UNDERCUT (INCLUDES 300 CY CONTINGENCY)
505	8700	TON	CLASS IV SUBGRADE STABILIZATION
520	6200	TON	AGGREGATE BASE COURSE
610	3700	TON	ASPHALT CONCRETE INTERMEDIATE COURSE,TYPE I19.0B
610	7000	TON	ASPHALT CONCRETE SURFACE COURSE,TYPE S9.5B
620	600	TON	ASPHALT BINDER FOR PLANT MIX
815	560	CY	SUBDRAIN EXCAVATION (4')
815	2500	CY	GEOTEXTILE FOR SUBSURFACE DRAINS
815	420	CY	SUBDRAIN COARSE AGGREGATE (3')
815	2500	LF	6" PERFORATED SUBDRAIN PIPE
815	30	LF	6" OUTLET PIPE (6 LF PER PIPE OUTLET)
815	5	EA	SUBDRAIN PIPE OUTLET (1 PER 500' OF PIPE)
840	40	EA	MASONRY DRAINAGE STRUCTURE
840	2.6	LF	MASONRY DRAINAGE STRUCTURE
840	10	EA	FRAME WITH GRATE AND HOOD, STD.840.03 TYPE E
840	12	EA	FRAME WITH GRATE AND HOOD, STD.840.03 TYPE F
840	13	EA	FRAME WITH GRATE AND HOOD, STD.840.03 TYPE G
840	2	EA	FRAME WITH GRATE,STD.840.16
840	1	EA	FRAME WITH TWO GRATES,STD.840.22
840	1	EA	FRAME WITH TWO GRATES,STD.840.24
840	1	EA	FRAME WITH COVER,STD.840.54
846	6500	LF	1'-6" CURB AND GUTTER
846	2500	LF	2'-6" CURB AND GUTTER
848	1230	SY	4" CONCRETE SIDEWALK
848	2	EA	CONCRETE CURB RAMPS
852	645	SY	5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)
866	4	EA	5" TIMBER FENCE POSTS,8' LONG
867	112	LF	WOVEN WIRE FENCE RESET
876	170	SY	GEOTEXTILE FOR DRAINAGE
901	200	SF	CONTRACTOR FURNISHED,TYPE 'E' SIGN
901	90	SF	CONTRACTOR FURNISHED,TYPE 'F' SIGN
903	240	LB	SUPPORTS,BREAKAWAY STEEL BEAM
903	350	LF	SUPPORTS,WOOD
904	30	EA	SIGN ERECTION,TYPE E (GROUND MOUNTED)
904	27	EA	SIGN ERECTION,TYPE F (GROUND MOUNTED)
907	1	EA	DISPOSAL OF SIGN,D,E,OR F

SECTION	QUANTITY	UNIT	DESCRIPTION
1110	192	SF	WORK ZONES SIGNS (PORTABLE)
1115	6	EA	FLASHING ARROW BOARD (0 MO.,720 HRS)
1120	2	EA	PORTABLE CHANGING MESSAGE BOARD (0 MO.,720 HRS)
1130	134	EA	DRUMS
1145	320	LF	BARRICADES (TYPE III)
1165	2	EA	TMA
1205	706	LF	THERMOPLASTIC PAVEMENT MARKING LINES,4",90 MILS
1205	1343	LF	THERMOPLASTIC PAVEMENT MARKING LINES,4",120 MILS
1205	57	LF	THERMOPLASTIC PAVEMENT MARKING LINES,12",90 MILS
1205	14365	LF	THERMOPLASTIC PAVEMENT MARKING LINES,6",90 MILS
1205	2639	LF	THERMOPLASTIC PAVEMENT MARKING LINES,6",120 MILS
1205	35	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOLS,90 MILS
1205	4	EA	THERMOPLASTIC PAVEMENT MARKING CHARACTER,120 MILS
1253	100	EA	SNOWPLOWABLE PAVEMENT MARKER
1605	3275	LF	TEMPORARY SILT FENCE
1610	60	TON	EROSION CONTROL STONE,CLASS A
1610	205	TON	EROSION CONTROL STONE,CLASS B
1610	230	TON	SEDIMENT CONTROL STONE
1615	0.50	ACRE	TEMPORARY MULCHING
1620	100	LB	SEED FOR TEMPORARY SEEDING
1620	1	TON	FERTILIZER FOR TEMPORARY SEEDING
1622	200	LF	TEMPORARY SLOPE DRAINS
1630	230	CY	SILT EXCAVATION
1631	3655	SY	MATTING FOR EROSION CONTROL
SP	10	SY	COIR FIBER MAT
1632	900	LF	1/4" HARDWARE CLOTH
SP	20	SY	LOW PERMEABILITY GEOTEXTILE
SP	310	LF	WATTLE
SP	200	LF	COIR FIBER WATTLE
SP	60	LB	POLYACRYLAMIDE (PAM)
1640	65	LF	COIR FIBER BAFFLE
SP	1	EA	1-1/2" SKIMMER
1660	3	ACRE	SEEDING AND MULCHING
1660	0.50	ACRE	MOWING
1661	50	LB	SEED FOR REPAIR SEEDING
1661	0.25	TON	FERTILIZER FOR REPAIR SEEDING
1662	50	LB	SEED FOR SUPPLEMENTAL SEEDING
1665	0.25	TON	FERTILIZER TOPDRESSING
1667	10	MHR	SPECIALIZED HAND MOWING
1675	7	EA	RESPONSE FOR EROSION CONTROL
SP	2	EA	CONCRETE WASHOUT STRUCTURE

$$$$$SYSTIME$$$$$
$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

COMPUTED BY: V. TRAN DATE: 05/05/2017
CHECKED BY: D. ALLIGOOD DATE: 05/04/2017

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
U-5921	3A

NOTE: Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	SHALLOW UNDERCUT	EMBT+25%	BORROW	WASTE
-L- Sta. 11+00.00 to 22+00.00	2,682	2,906	1,163		4,425
-Y- Sta. 260+00.00 to 292+00.00	2,389	1,194	5,532	3,143	1,194
SUBTOTAL	5,071	4,100	6,694	3,143	5,619
WASTE IN LIEU OF BORROW				-1,519	-1,519
PROJECT TOTAL	5,071	4,100	6,694	1,624	4,100
5% FOR BORROW PIT				81	
GRAND TOTAL	5,071	4,100	6,694	1,705	4,100
SAY	5,080	4,100	6,700	1,710	4,100

NOTES PER GEOTECHNICAL REPORT:

SELECT GRANULAR MATERIAL=600 CY CONTINGENCY
PER GEOTECH RECOMMENDATION, ESTIMATED 400 CUBIC YARDS OF UNDERCUT TO BE USED IN THE DISCRETION OF THE RESIDENT ENGINEER.
PER GEOTECH RECOMMENDATION, ADDITIONAL 300 CUBIC YARDS OF SHALLOW UNDERCUT TO BE USED IN THE DISCRETION OF THE RESIDENT ENGINEER.

SUMMARY OF PAVEMENT REMOVAL

(IN SQUARE YARDS)

STATION	STATION	LOCATION	ASPHALT PAVEMENT REMOVAL	ASPHALT PAVEMENT BREAKUP	CONCRETE PAVEMENT REMOVAL	CONCRETE PAVEMENT BREAKUP
267+56 -Y-	269+35 -Y-	C/L (MEDIAN)	269			
	TOTAL		269			
	SAY		270			

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
L	10+96	22+41	LT AND RT	SD	2300
CONTINGENCY					200
				TOTAL LF:	2500

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

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU/AST	Aggregate Thickness INCHES	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
VARIES	VARIES	VARIES	ASU	12"	4100	8100	12800	NA	NA
CONTINGENCY					300	600	200		
			TOTAL CY/TONS/SY:		4400	8700	13000**	0	0

***ASU = Aggregate Subgrade**
***AST = Aggregate Stabilization**
****Total square yards of "Geotextile for Soil Stabilization" is only the estimated quantity for ASU/AST and may only represent a portion of the geotextile quantity shown in the Item Sheets of the Proposal.**

$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

TICIVILWORK136

COMPUTED BY: Jordan Bendl, EI DATE: 5-3-2017
CHECKED BY: Edward Vance, PE DATE: 5-5-2017

PROJECT NO.	SHEET NO.
U-5921	3B-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)

LINE & STATION SIZE THICKNESS OR GAUGE	OFFSET	STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	54	60	66	72	78	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	54	60	66	72	78	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	
Y 276+31	77 RT	0401		65.0																																	
		0401	0400		58.3	57.5	1.8																	44													
Y 275+00	76 RT	0402		65.1																																	
		0402	0401		59.2	58.3	0.7																	132													
Y 275+00	88 RT	0403		61.9																																	
		0403	0402		60.0	59.9																12															
L 11+06	37 LT	0404		64.0																																	
		0404	0401		59.1	58.3																		32													
L 11+06	7 LT	0405		64.7																																	
		0405	0404		60.0	59.9																28															
L 11+06	5 RT	0406		64.7																																	
		0406	0405		60.1	60.0																12															
L 11+06	39 RT	0407		64.0																																	
		0407	0406		60.3	60.1																32															
L 11+50	37 RT	0408		64.3																																	
		0408	0407		60.5	60.3																44															
L 11+50	37 LT	0409		64.3																																	
		0409	0404		59.3	59.1																		40													
L 13+85	37 LT	0410		65.8																																	
		0410	0409		59.9	59.3																		224													
L 13+85	36 RT	0411		65.8																																	
		0411	0410		62.1	60.7																72															
L 16+25	37 LT	0412		66.5																																	
		0412	0410		61.6	60.4																	236														
L 16+25	37 RT	0413		66.5																																	
		0413	0412		62.8	61.9																72															
L 17+40	36 LT	0414		66.9																																	
		0414	0412		62.5	61.9	0.5															116															
L 17+40	37 RT	0415		66.9																																	
		0415	0414		63.1	62.5																72															
Y 277+29	3 RT	0420		65.6																																	
		0420	Ex. STR		60.7	60.7																4															
Y 276+40	5 RT	0421		65.4																																	
		0421	0420		61.0	60.7																88															
Y 275+37	7 RT	0422		66.3																																	
		0422	0421		61.6	61.0																104															
Y 274+66	4 LT	0423		65.8																																	
		0423	0422		61.9	61.6																72															
Y 273+50	2 LT	0424		65.8																																	
		0424	0423		62.5	61.9																116															
Y 272+00	1 RT	0425		65.9																																	
		0425	0424		62.9	62.5																148															
Y 278+50	0 CL	0426		65.8																																	
		0426	0419		61.8	59.5																	72														
Y 278+50	14 RT	0427		65.8																																	
		0427	0426		62.4	62.1																16															
Y 279+50	14 RT	0428		65.9																																	
		0428	0427		62.7	62.4																100															
Y 281+00	14 RT	0429		66.2																																	
		0429	0428		63.1	62.7																148															
SHEET TOTALS																						1256	308	472													

LINE & STATION	STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 0' THRU 5' EACH	A 5' THRU 10' LIN. FT.	B 10' AND ABOVE LIN. FT.	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G		CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR STD. 840.26	G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27	G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME WITH GRATE STD. 840.20	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	DRIVEWAY D.I. STD. 840.30	FRAME W/ GRATE FOR DRIVEWAY STD. 840.30	J.B. STD. 840.31 OR STD. 840.32	ANGLED VANE GRATES AND FRAMES STD. 840.33	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	T.B.D.I. FOR STEEL GRATES STD. 840.36	STEEL FRAME WITH TWO GRATES STD. 840.37	TEMP STEEL PLATE COVER MASONRY DRAINAGE	SPRING BOX STD. 840.41		M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	CONVERT EXISTING J.B. TO D.I.	ADJUST C.B.	ADJUST D.I.	PIPE REMOVAL LIN. FT.	REMARKS
Y 276+31	0401					1	1.7																										1										1	1								
	0401	0400																																																		
Y 275+00	0402					1	0.9																												1							1	1								
	0402	0401																																																		
Y 275+00	0403					1																1						1																							
	0403	0402																																																		
L 11+06	0404					1			1	1																																										
	0404	0401																																																		
L 11+06	0405					1			1	1																																										
	0405	0404																																																		
L 11+06	0406					1			1	1																																										
	0406	0405																																																		
L 11+06	0407					1			1	1																																										
	0407	0406																																																		
L 11+50	0408					1			1			1																																								
	0408	0407																																																		
L 11+50	0409					1			1		1																																									
	0409	0404																																																		
L 13+85	0410					1	0.9		1		1																																									
	0410	0409																																																		
L 13+85	0411					1			1			1																																								
	0411	0410																																																		
L 16+25	0412					1			1		1																																									
	0412	0410																																																		
L 16+25	0413					1			1			1																																								
	0413	0412																																																		
L 17+40	0414					1			1		1																																									
	0414	0412																																																		
L 17+40	0415					1			1			1																																								
	0415	0414																																																		
Y 277+29	0420					1			1			1																																								
	0420	Ex. STR																																																		
Y 276+40	0421					1			1			1																																								
	0421	0420																																																		
Y 275+37	0422					1															1							1																							
	0422	0421																																																		
Y 274+66	0423					1			1			1																																								
	0423	0422																																																		
Y 273+50	0424					1			1	1																																										
	0424	0423																																																		
Y 272+00	0425					1			1	1																																										
	0425	0424																																																		
Y 278+50	0426					1			1			1																																								
	0426	0419																																																		
Y 278+50	0427					1			1	1																																										
	0427	0426																																																		
Y 279+50	0428					1			1		1																																									
	0428	0427																																																		
Y 281+00	0429					1			1		1																																									
	0429	0428																																																		
SHEET TOTALS						25	3.5		21	7	6	8									1	1						2					1		1							2	2								

ABBREVIATIONS

C.A.A.	CORRUGATED ALUMINIUM ALLOY
C.B.	CATCH BASIN
C.S.	CORRUGATED STEEL
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
H.D.P.E.	HIGH DENSITY POLYETHYLENE
J.B.	JUNCTION BOX
M.H.	MANHOLE
N.S.	NARROW SLOT
P.V.C.	POLYVINYL CHLORIDE
R.C.	REINFORCED CONCRETE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX
W.S.	WIDE SLOT

TICIVILWORK136

COMPUTED BY: Jordan Bendl, EI **DATE:** 5-3-2017

CHECKED BY: Edward Vance, PE **DATE:** 5-5-2017

PROJECT NO.	SHEET NO.
U-5921	3B-2

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)

LINE & STATION / SIZE / THICKNESS OR GAUGE	OFFSET	STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	54	60	66	72	78	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	54	60	66	72	78	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE		ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 0' THRU 5' EACH	A 5' THRU 10' LIN. FT.	B 10' AND ABOVE LIN. FT.	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G		CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR STD. 840.26	G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27	G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME WITH GRATE STD. 840.20	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	DRIVEWAY D.I. STD. 840.30	FRAME W/ GRATE FOR DRIVEWAY STD. 840.30	J.B. STD. 840.31 OR STD. 840.32	ANGLED VANE GRATES AND FRAMES STD. 840.33	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	T.B.D.I. FOR STEEL GRATES STD. 840.36	STEEL FRAME WITH TWO GRATES STD. 840.37	TEMP STEEL PLATE COVER MASONRY DRAINAGE	SPRING BOX STD. 840.41		M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	CONVERT EXISTING J.B. TO D.I.	ADJUST C.B.	ADJUST D.I.	PIPE REMOVAL LIN. FT.	REMARKS
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Y 271+50	69 RT	0606		64.2																																																																																				
		0606	0402		62.2	59.2	0.5																	352																																																														
Y 283+98	8 RT	0701		66.1																																					1			1			1																																						
		0701	Ex. STR		62.7	62.7																	8																																																																
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		0702	0701		62.9	62.7																108																																																																		
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		0708	0707		63.5	63.2	1.0															104																																																																		
Y 292+50	67 LT	0709		65.9																																																																																				
		0709	0708		64.6	63.5	0.8															132																																																																24	
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		0710	0429		63.6	63.1																148																																																																		
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SHEET TOTALS																						1744	428	904																	18	0.1		14	3	6	5						2	2		1					1									1							1	1							24	
PROJECT TOTALS																						3000	736	1376																	43	3.6		35	10	12	13						2	2		2	1				1		2					1		2							3	3							24	

ABBREVIATIONS

C.A.A.	CORRUGATED ALUMINIUM ALLOY
C.B.	CATCH BASIN
C.S.	CORRUGATED STEEL
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
H.D.P.E.	HIGH DENSITY POLYETHYLENE
J.B.	JUNCTION BOX
M.H.	MANHOLE
N.S.	NARROW SLOT
P.V.C.	POLYVINYL CHLORIDE
R.C.	REINFORCED CONCRETE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX
W.S.	WIDE SLOT

PROJECT REFERENCE NO.	SHEET NO.
U-5921	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEE SHEET 8 FOR PROFILE OF LINE -L-
SEE SHEET 9-11 FOR PROFILE OF LINE -Y-

MATCH LINE -Y- STA. 272+00.00 SEE SHEET 7
MATCH LINE -Y- STA. 272+00.00 SEE SHEET 6
MATCH LINE -L- STA. 18+00.00 SEE SHEET 5
NAD 83
REVISIONS
SC Sta. 280+18.38
TS Sta. 277+18.38
PIs Sta 279+18.41
Θs = 3° 00' 00.0"
Ls = 300.00'
LT = 200.03'
ST = 100.03'
-L- 10+00.00 =
-Y- 275+82.50
PI Sta 13+25.91
Δ = 30° 54' 05.4" (LT)
D = 7° 12' 57.9"
L = 428.23'
T = 219.46'
R = 794.00'
PI Sta 17+22.83
Δ = 20° 31' 40.4" (RT)
D = 5° 30' 52.2"
L = 372.25'
T = 188.14'
R = 1,039.00'
PC Sta. 11+06.45
PRC Sta. 15+34.68
BEGIN TIP PROJECT U-5921
-L- Sta.10+00.00
MONOLITHIC ISLAND DETAIL
CL-B RIPRAP EST. 3 TONS 10 S.Y. GEOTEXTILE
CL-I RIPRAP EST. 7 TONS 15 S.Y. GEOTEXTILE
SPECIAL LATERAL BASE DITCH (SEE DETAIL A)
RETAIN
COLLAR AND EXTEND
GRADE TO DRAIN
N 27° 51' 57.6" E
S 62° 30'
DETAIL A
SPECIAL LATERAL BASE DITCH
(Not to Scale)
Natural Ground
2:1(MAX)
4:1 or Flatter
Fill Slope
Min. D=3.5 Ft.
B=2.0 Ft.
FROM -Y- STA. 276+75 TO 278+30 RT

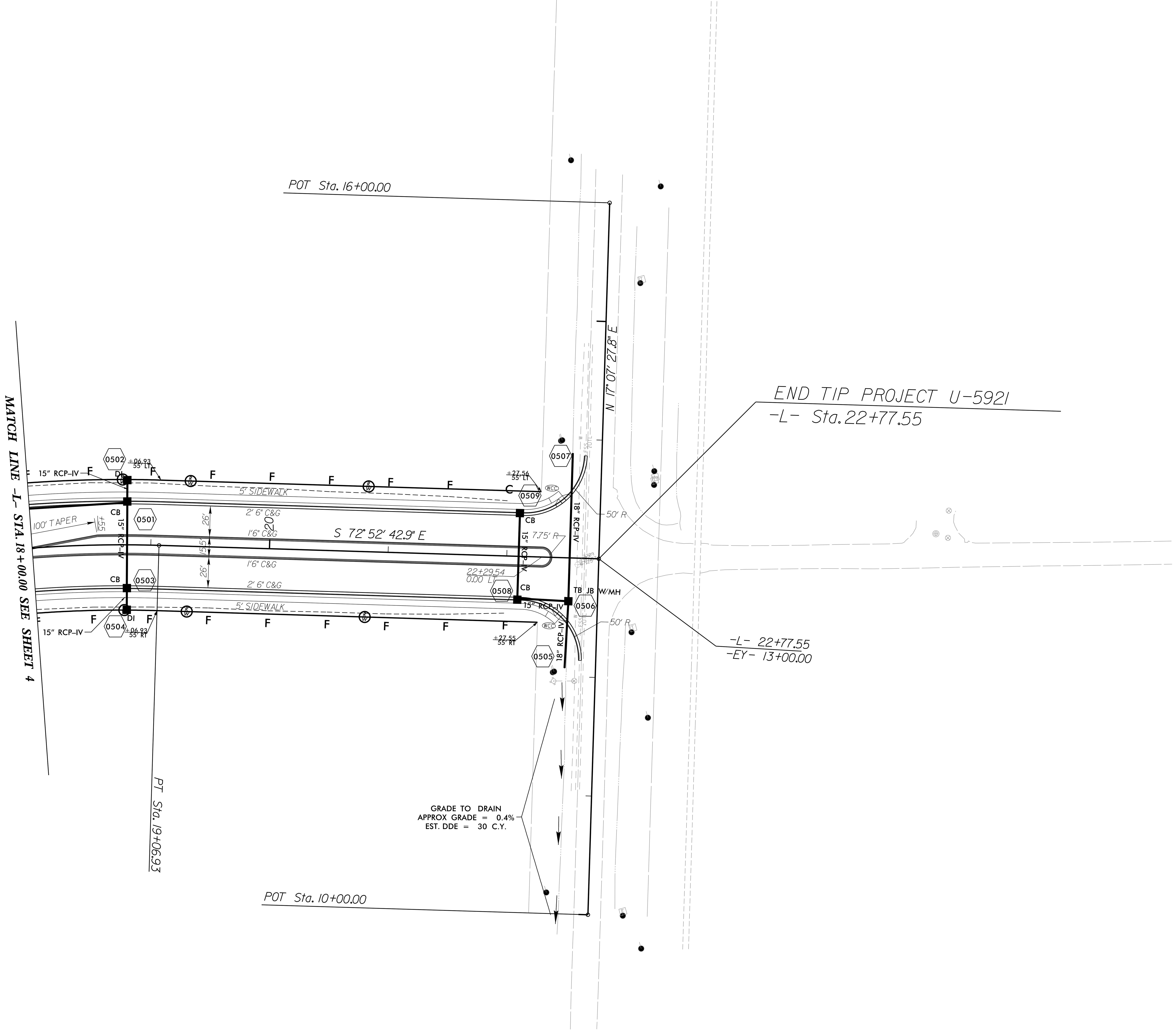
PROJECT REFERENCE NO.	SHEET NO.
U-5921	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEE SHEET 8 FOR PROFILE OF LINE -L-

REVISIONS

8/17/99



PROJECT REFERENCE NO.	SHEET NO.
U-5921	6
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
SEAL 16710 DWAYNE H. ALLIGOOD DocuSigned by: Dwayne H. Alligood 47608B64B6E14F6...	SEAL 029388 EDWARD J. VANCE DocuSigned by: Edward Vance 8264F2B1B3DF494...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEE SHEET 9-11 FOR PROFILE OF LINE -Y-

REVISIONS

8/17/99

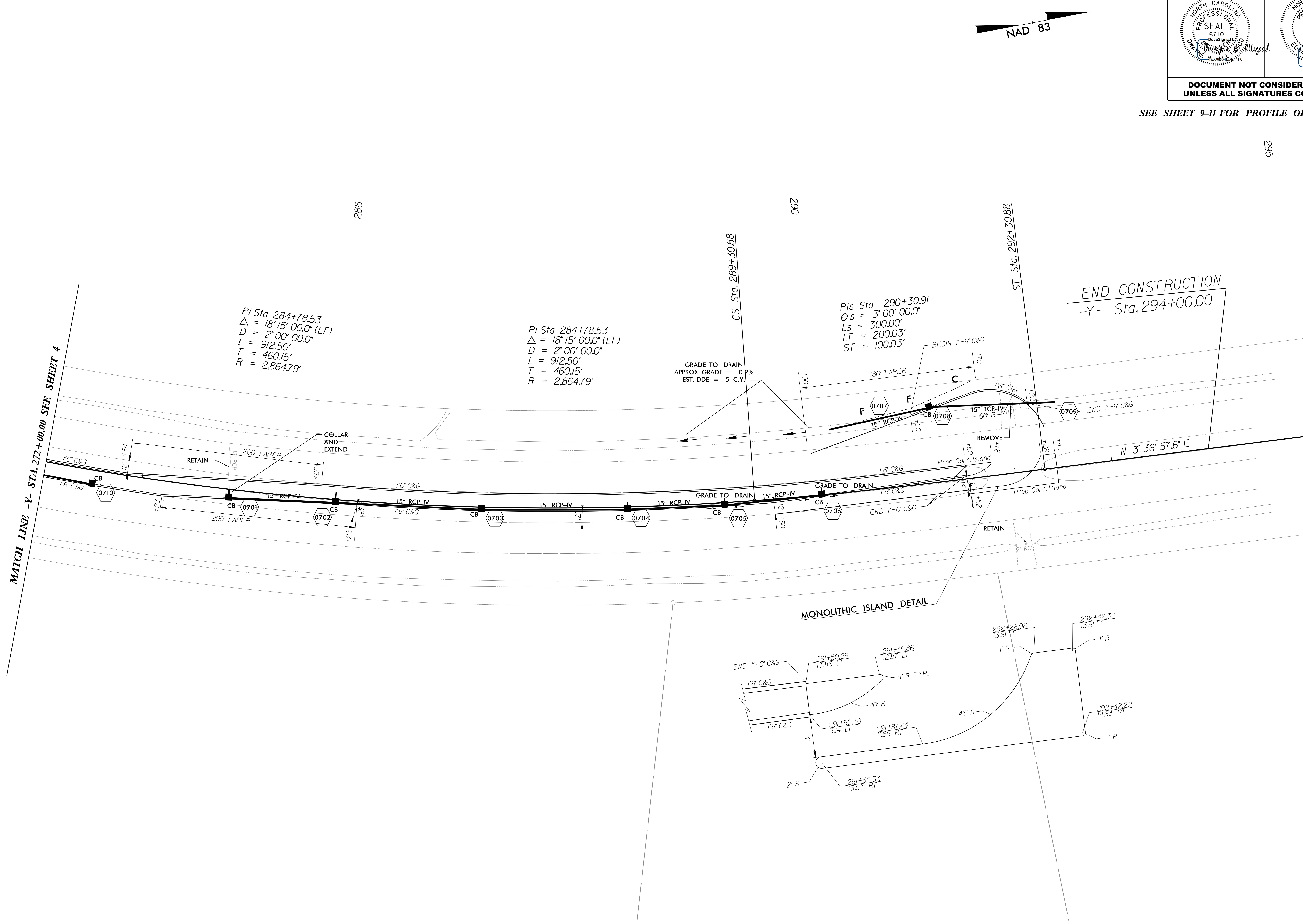
$$$$SYSTIME$$$$
$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
U-5921	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEE SHEET 9-11 FOR PROFILE OF LINE -Y-

REVISIONS



NAD 83
285
290
295
MATCH LINE -Y- STA. 272+00.00 SEE SHEET 4
PI Sta 284+78.53
△ = 18° 15' 00.0" (LT)
D = 2° 00' 00.0"
L = 912.50'
T = 460.15'
R = 2,864.79'
CS Sta. 289+30.88
ST Sta. 292+30.88
PIs Sta 290+30.91
θs = 3° 00' 00.0"
Ls = 300.00'
LT = 200.03'
ST = 100.03'
END CONSTRUCTION
-Y- Sta. 294+00.00
N 3° 36' 57.6" E
GRADE TO DRAIN
APPROX GRADE = 0.2%
EST. DDE = 5 C.Y.
BEGIN 1'-6" C&G
END 1'-6" C&G
180' TAPER
200' TAPER
COLLAR AND EXTEND
RETAIN
REMOVE
15" RCP-IV
1'6" C&G
Prop Conc. Island
MONOLITHIC ISLAND DETAIL
0701
0702
0703
0704
0705
0706
0707
0708
0709
0710
CB
291+50.29 13.86' LT
291+75.86 12.87' LT
292+28.98 13.61' LT
292+42.34 13.61' LT
291+50.30 3.14' LT
291+87.44 11.58' RT
292+42.22 14.63' RT
291+52.33 13.63' RT
1' R TYP.
40' R
45' R
2' R
1' R

PROJECT REFERENCE NO.	SHEET NO.
U-5921	8

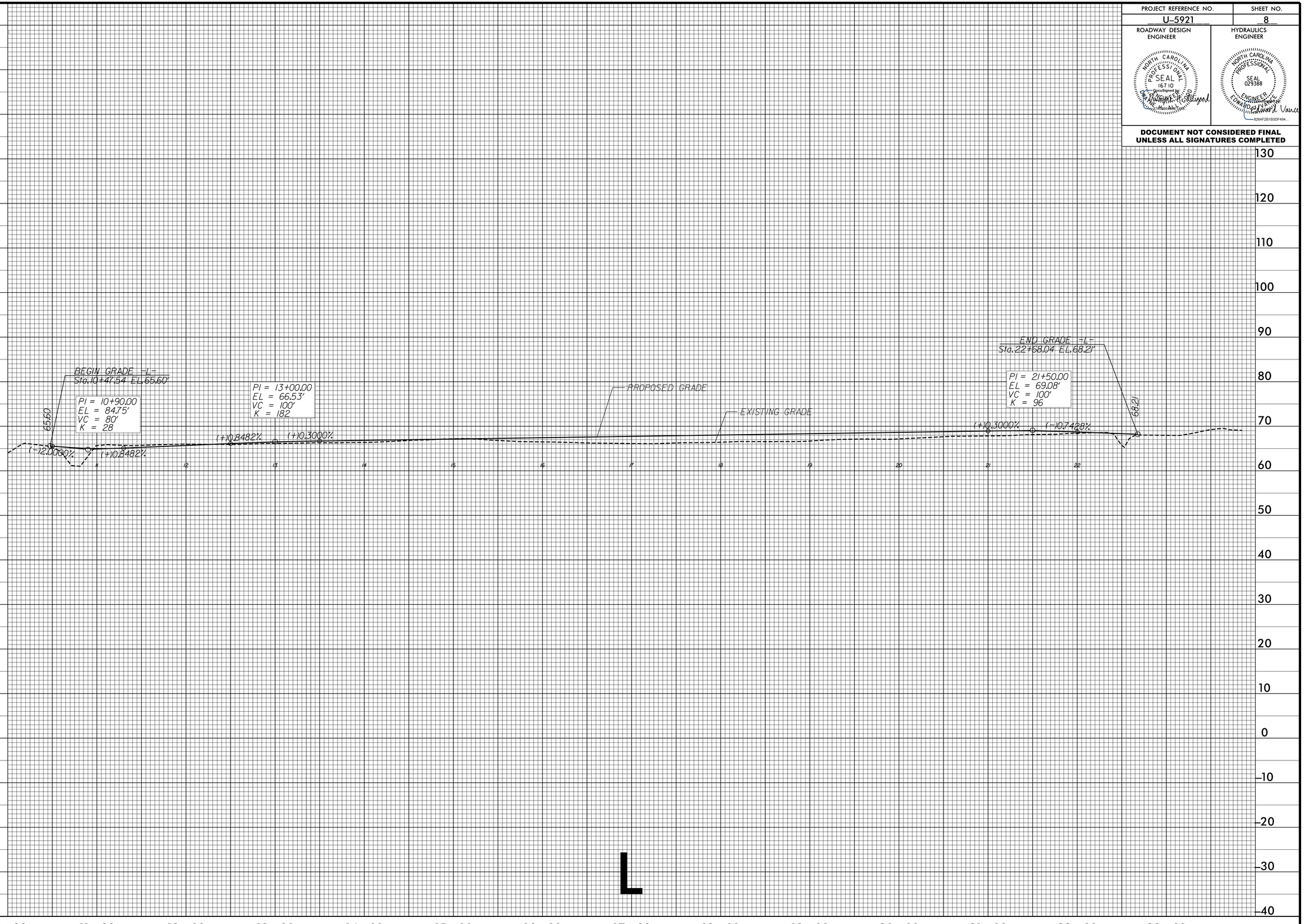
ROADWAY DESIGN ENGINEER

SEAL 16710
DocuSigned by: Dwayne H. Alligood
47608B64B6E14F6...

HYDRAULICS ENGINEER

SEAL 029388
DocuSigned by: Edward Vance
8264F2B1B3DF494...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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PROJECT REFERENCE NO.	SHEET NO.
U-5921	9

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
SEAL 16710 DWAYNE H. ALLIGOOD DocuSigned by: Dwayne H. Alligood 47608B64B6E14F6...	SEAL 029388 EDWARD VANCE DocuSigned by: Edward Vance 8264F2B1B3DF494...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.	SHEET NO.
U-5921	10

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
SEAL 16710 DWAYNE H. ALLIGOOD DocuSigned by: Dwayne H. Alligood 47608B64B6E14F6...	SEAL 029388 EDWARD T. VANCE DocuSigned by: Edward Vance 8264F2B1B3DF494...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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PROJECT REFERENCE NO.	SHEET NO.
U–5921	11

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
SEAL 16710 DWAYNE A. ALLGOOD DocuSigned by: Dwayne A. Allgood 47608B64B6E14F6...	SEAL 029388 EDWARD J. VANCE DocuSigned by: Edward Vance 8264F2B1B3DF494...

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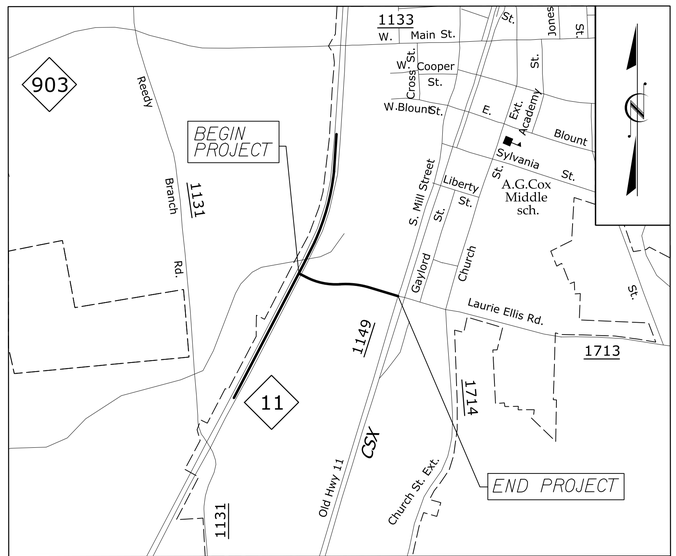
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

PITT COUNTY

LOCATION: SR 1713 (LAURIE ELLIS ROAD) FROM NC–11 (WINTERVILLE PARKWAY) TO SR 1149 (OLD NC–11)

TYPE OF WORK: GRADING, PAVING, & DRAINAGE



VICINITY MAP N.T.S.

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-2	TRANSPORTATION OPERATIONS PLAN
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4 THRU 6	TEMPORARY TRAFFIC CONTROL PHASE I DETAILS
TMP-7 THRU 9	TEMPORARY TRAFFIC CONTROL PHASE II DETAILS

SHEET NO.
TMP–1

05/04/17 DATE SUBMITTED
SUBMITTAL:
- [ ] STAGING CONCEPT
- [ ] MIDPOINT
- [ ] PRE-FINAL
- [x] FINAL

TIP PROJECT: U–5921

WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699–1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773–2800 FAX: (919) 771–2745

JOSEPH E. HUMMER — STATE TRAFFIC MANAGEMENT ENGINEER
_____ — TRAFFIC CONTROL PROJECT ENGINEER
_____ — TRAFFIC CONTROL PROJECT DESIGN ENGINEER
_____ — TRAFFIC CONTROL DESIGN ENGINEER

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

JOSEPH A. FREEMAN, PE
TRAFFIC ENGINEER
ETHAN P. WRIGHT, EI
TRANSPORTATION DESIGNER

APPROVED: Joseph A. Freeman (DocuSigned by: 5/4/2017)
DATE: 5/4/2017

NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A FREEMAN

STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

ROADWAY STANDARD DRAWINGS

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

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
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	DRUMS
1135.01	CONES
1145.01	BARRICADES - TYPE III
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- WORK AREA
- REMOVAL/BREAKING OF PAVEMENT
- ONGOING CONSTRUCTION

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM
- SKINNY DRUM
- TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW PANEL (TYPE C)
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

- EXISTING
- PROPOSED
- TEMP TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

APPROVED: Joseph A. Freeman

DocuSigned by: 0CBFB6533EE6430...

DATE: 5/4/2017

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

ROADWAY STANDARD DRAWINGS & LEGEND

5/4/2017
R:\Roadway\Proj\TCP\TCP Sheets\U5921_TC_TMP_01A.dgn
wrightep

PROJ. REFERENCE NO.	SHEET NO.
U-5921	TMP-2

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

MANAGEMENT STRATEGIES

PROPOSED LAURIE ELLIS ROAD AND IMPROVEMENTS TO NC-11 WILL BE CONSTRUCTED USING A COMBINATION OF LANE CLOSURES AND UTILIZING FLAGGERS AS NEEDED.

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
NC-11	ALL WEEK 7:00 A.M. TO 9:00 A.M. ALL WEEK 4:00 P.M. TO 6:00 P.M.

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

ROAD NAME

ALL ROADS

HOLIDAY

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

C) 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

D) 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.

E) 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.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, 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 ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

H) 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

I) 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.

J) 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) 350 ft IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

K) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

L) 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.

M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

PAVEMENT MARKINGS AND MARKERS

N) INSTALL TEMPORARY PAVEMENT MARKINGS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	RAISED

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

P) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION

TRAFFIC CONTROL DEVICES

Q) 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.

MISCELLANEOUS

R) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

S) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 200FT AND 400FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

LOCAL NOTES

T) NOTIFY PITT COUNTY EMERGENCY SERVICES (252)-902 3950 AND PUBLIC SCHOOLS (252)-830 4200 AT LEAST THIRTY DAYS PRIOR TO ROAD CLOSURE.

U) THE CONTRACTOR SHALL BUILD AS MUCH AS POSSIBLE AWAY FROM TRAFFIC.

APPROVED: Joseph A. Freeman

DATE: 5/4/2017

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

TRANSPORTATION OPERATIONS PLAN

5/4/2017
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PROJ. REFERENCE NO.	SHEET NO.
U-5921	TMP-3

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STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

PHASING NOTES

NOTE:

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS WITHIN THE PROJECT LIMITS AND COORDINATE AS NECESSARY WITH PROPERTY OWNERS FOR ALL PHASES OF TRAFFIC. CONTRACTOR SHALL MAINTAIN ACCESS TO CELL PHONE TOWER LOCATED ADJACENT TO NC-11 FOR ALL PHASES OF TRAFFIC.

PHASE I

STEP 1:

INSTALL WORK ZONE ADVANCE WARNING SIGNS ON ALL ROADWAYS WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1101.01, SHEET 1 THRU 3.

STEP 2:

AWAY FROM TRAFFIC OR USING RSD 1101.02 SHEET 4 OF 15 AND FLAGGERS AS NEEDED, PERFORM THE FOLLOWING AS SHOWN ON TMP-4:

A) PERFORM THE PROPOSED UNDERCUT FOR THE OUTSIDE WIDENING ON -Y-.

B) CONSTRUCT PROPOSED DRAINAGE, GRADING, AND OUTSIDE WIDENING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FOR THE FOLLOWING STATION RANGES:

-Y- STA. 259+85 TO STA. 262+21 (RT)
-Y- STA. 264+82 TO STA. 268+27 (RT)
-Y- STA. 270+47 TO STA. 276+70 (RT)
-Y- STA. 273+19 TO STA. 275+57 (LT)
-Y- STA. 289+92 TO STA. 292+34 (LT)

C) UNDER NIGHT TIME RESTRICTIONS (9 PM - 6 AM) CONSTRUCT PROPOSED CROSS-PIPE AT -Y- STA. 278+50 +/-.

D) PERFORM THE PROPOSED UNDERCUT ON -L-.

E) CONSTRUCT PROPOSED DRAINAGE, GRADING, CURB & GUTTER, SIDEWALK, AND PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM -L- STA. 10+47.54 TO STA. 22+65.56.

PHASE II

STEP 1:

USING RSD 1101.02 SHEET 4 OF 15 AND FLAGGERS AS NEEDED, PERFORM THE FOLLOWING AS SHOWN ON TMP-5:

A) PERFORM THE PROPOSED UNDERCUT FOR THE INSIDE WIDENING ON -Y-.

B) CONSTRUCT PROPOSED DRAINAGE, GRADING, CURB & GUTTER, AND INSIDE WIDENING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FOR THE FOLLOWING STATION RANGES:

-Y- STA. 259+71 TO STA. 265+65
-Y- STA. 269+65 TO STA. 292+43

PHASE III

STEP 1:

USING RSD 1101.02 SHEET 4 OF 15 AND FLAGGERS AS NEEDED, PERFORM THE FOLLOWING:

A) CONSTRUCT MONOLITHIC CONCRETE ISLANDS AT THE FOLLOWING STATION RANGES:

-Y- STA. 259+71 TO STA. 260+64
-Y- STA. 274+71 TO STA. 276+35
-Y- STA. 291+50 TO STA. 292+43
-Y- STA. 272+24 TO STA. 275+57 (RT)

B) REMOVE EXISTING ASPHALT PAVEMENT IN MEDIAN ON NC-11 FROM +/- -Y-STA. 267+78 TO STA. 269+15.

C) INSTALL FINAL LAYER OF SURFACE COURSE AND PERMANENT PAVEMENT MARKINGS & MARKERS (PER PAVEMENT MARKING PLANS) ON -Y- AND -L-.

STEP 2:

REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES AND OPEN ALL ROADS TO FINAL TRAFFIC PATTERN.

APPROVED: Digitally signed by Joseph A. Freeman DocuSigned by: Joseph A. Freeman
DATE: 5/4/2017
SEAL
NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

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PHASING NOTES

5/4/2017
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PROJ. REFERENCE NO.	SHEET NO.
U-5921	TMP-4

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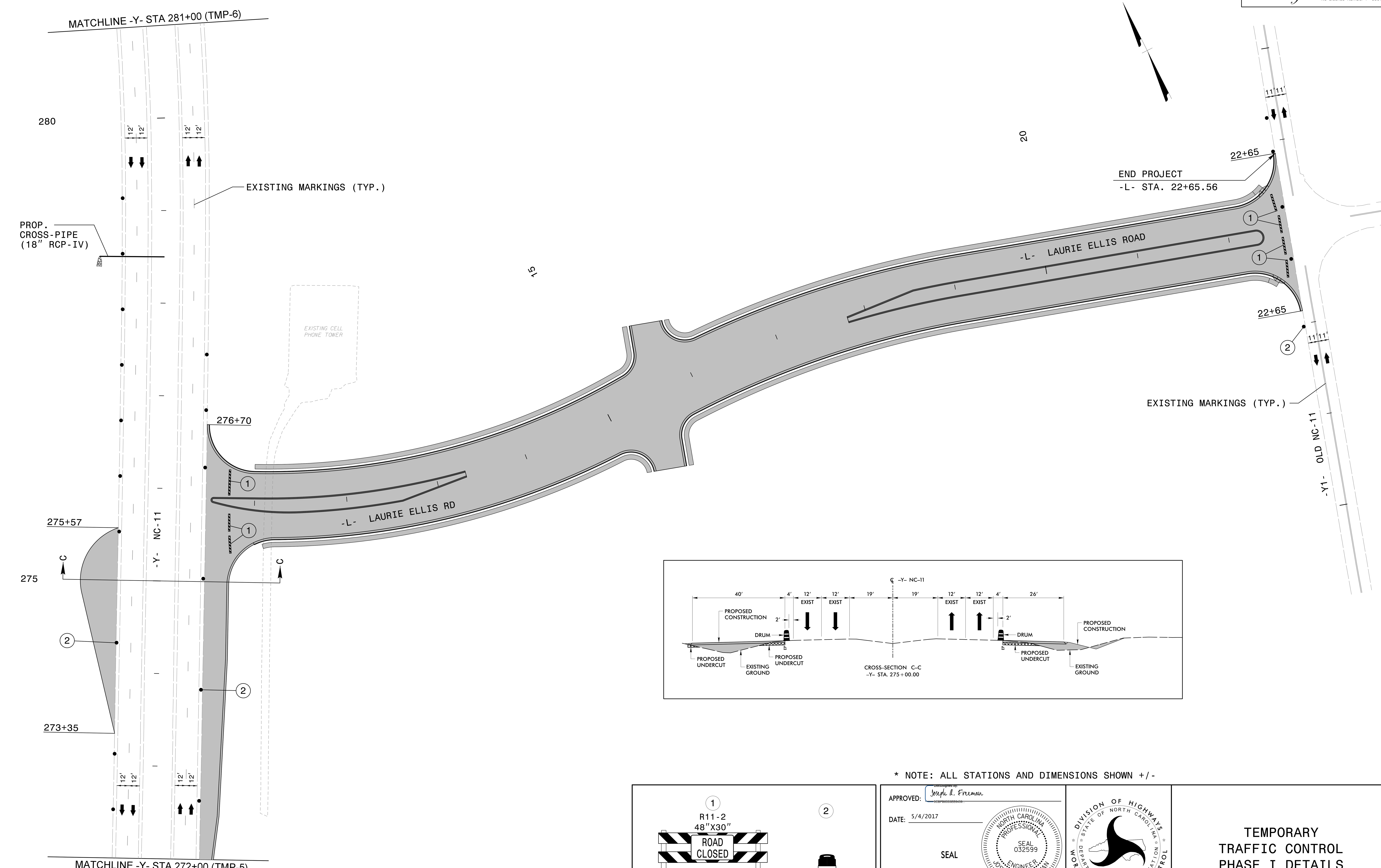

* NOTE: ALL STATIONS AND DIMENSIONS SHOWN +/-

(1) R11-2 48"X30" ROAD CLOSED
TYPE III BARRICADE

(2)

APPROVED: Joseph A. Freeman

DATE: 5/4/2017

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE I DETAILS

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PROJ. REFERENCE NO.	SHEET NO.
U-5921	TMP-5

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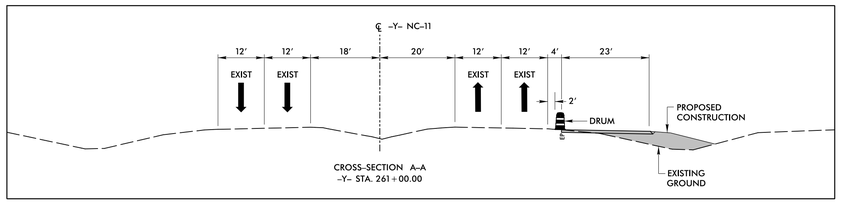
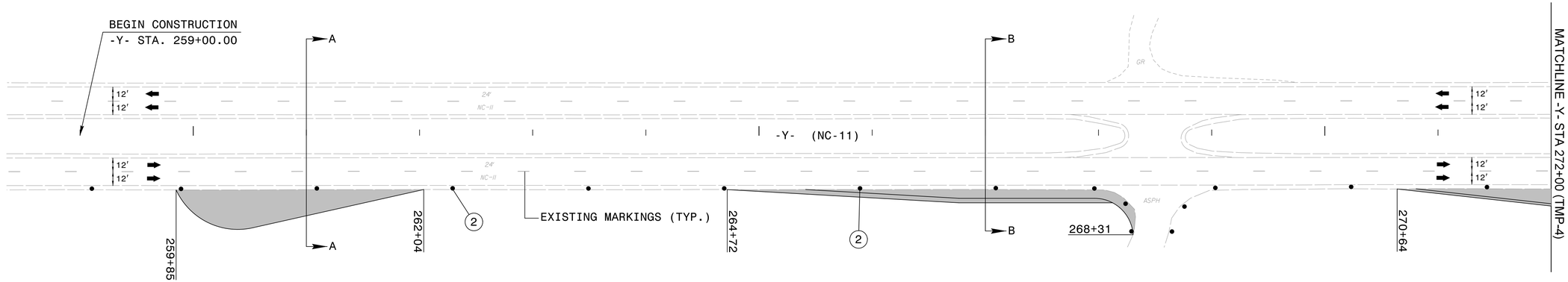
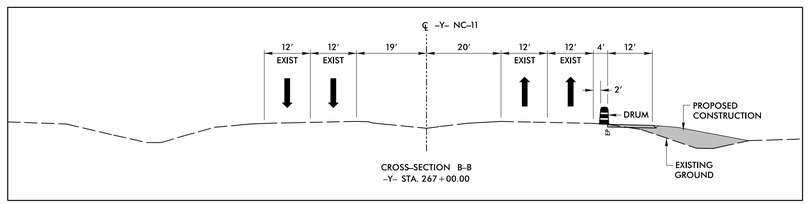


CROSS-SECTION A-A
-Y- STA. 261+00.00

260 265 270





CROSS-SECTION B-B
-Y- STA. 267+00.00

* NOTE: ALL STATIONS AND DIMENSIONS SHOWN +/-

1
R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE

2

APPROVED: Joseph A. Freeman
DocuSigned by:
DATE: 5/4/2017

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NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

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DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE I DETAILS

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PROJ. REFERENCE NO.	SHEET NO.
U-5921	TMP-6

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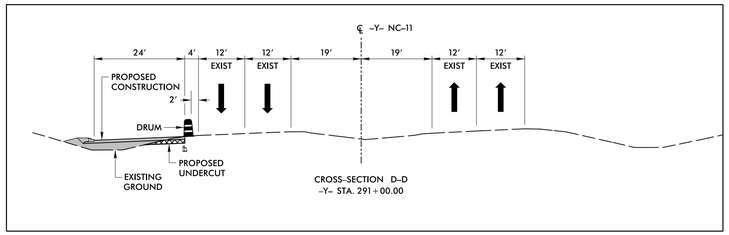
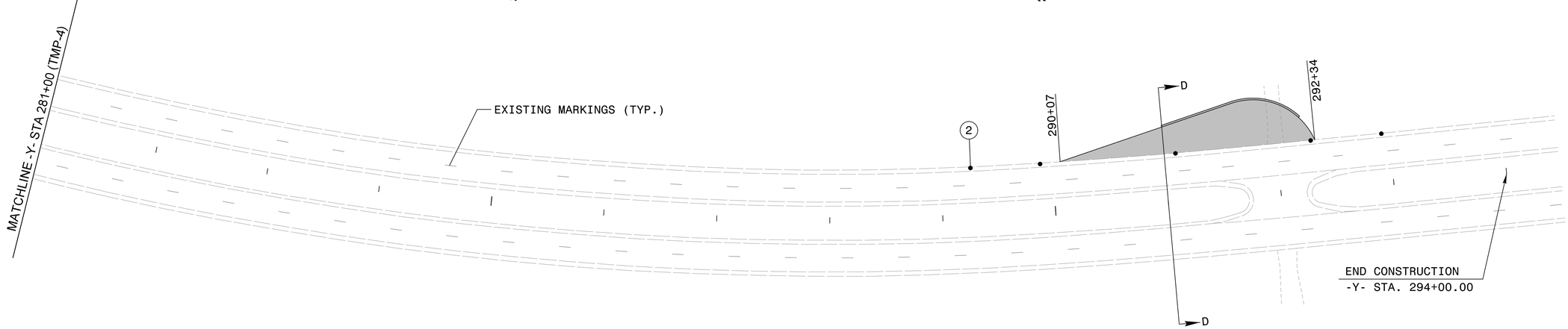


CROSS-SECTION D-D
-Y- STA. 291+00.00

285

290



* NOTE: ALL STATIONS AND DIMENSIONS SHOWN +/-

1
R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE

2

APPROVED: Joseph A. Freeman
DocuSigned by:
DATE: 5/4/2017
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

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TEMPORARY TRAFFIC CONTROL PHASE I DETAILS

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PROJ. REFERENCE NO.	SHEET NO.
U-5921	TMP-7

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MATCHLINE -Y- STA 281+00 (TMP-9)

280

12' 12' 12' 12'

EXISTING MARKINGS (TYP.)

2

EXISTING CELL PHONE TOWER

15

20

END PROJECT
-L- STA. 22+65.56

22+65

1

-L- LAURIE ELLIS ROAD

22+65

11' 11'

2

EXISTING MARKINGS (TYP.)

-Y1- OLD NC-11

1

1

-Y- (NC-11)

F

275

F

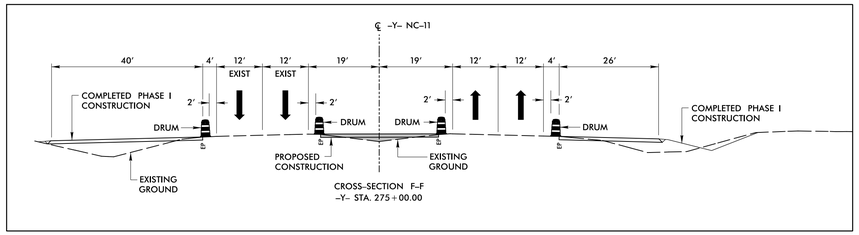
2

PHASE I
CONST. (TYP.)

2

12' 12' 12' 12'

MATCHLINE -Y- STA 272+00 (TMP-8)



CROSS-SECTION F-F
-Y- STA. 275+00.00

* NOTE: ALL STATIONS AND DIMENSIONS SHOWN +/-

1
R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE

2

APPROVED: Joseph A. Freeman
Docusigned by:
DocuSigned by:

DATE: 5/4/2017

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NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

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PROJ. REFERENCE NO.	SHEET NO.
U-5921	TMP-8

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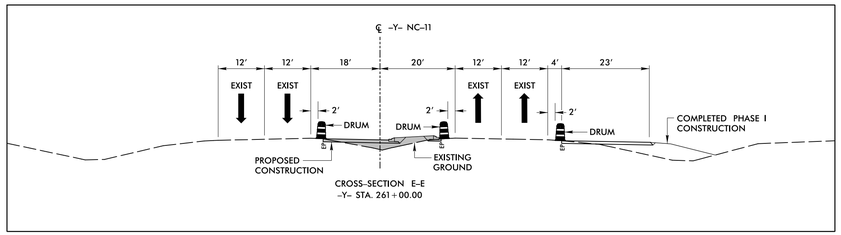
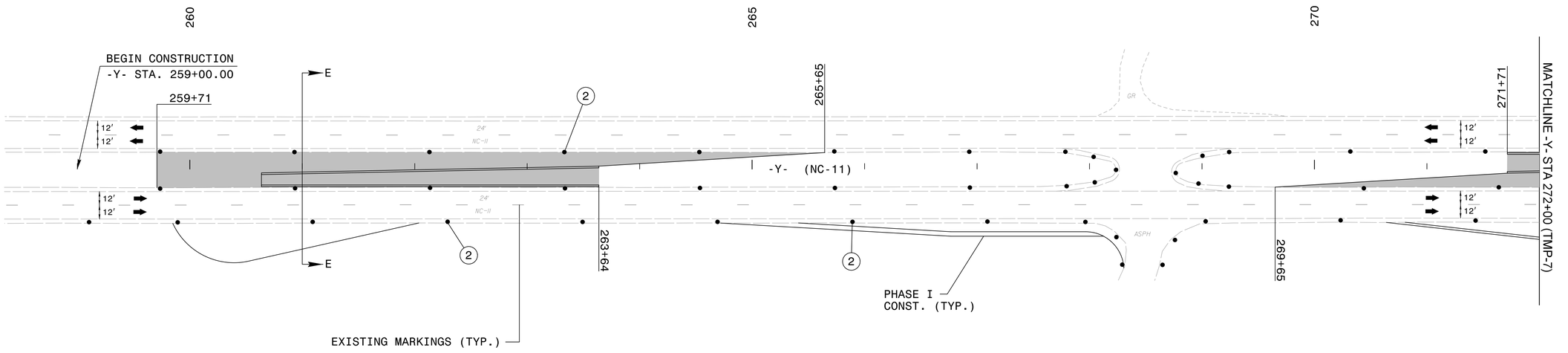


CROSS-SECTION E-E
-Y- STA. 261+00.00



* NOTE: ALL STATIONS AND DIMENSIONS SHOWN +/-

1
R11-2
48″X30″
ROAD CLOSED
TYPE III BARRICADE

2

APPROVED: Joseph A. Freeman
DATE: 5/4/2017
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NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

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TEMPORARY TRAFFIC CONTROL PHASE II DETAILS

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PROJ. REFERENCE NO.	SHEET NO.
U-5921	TMP-9

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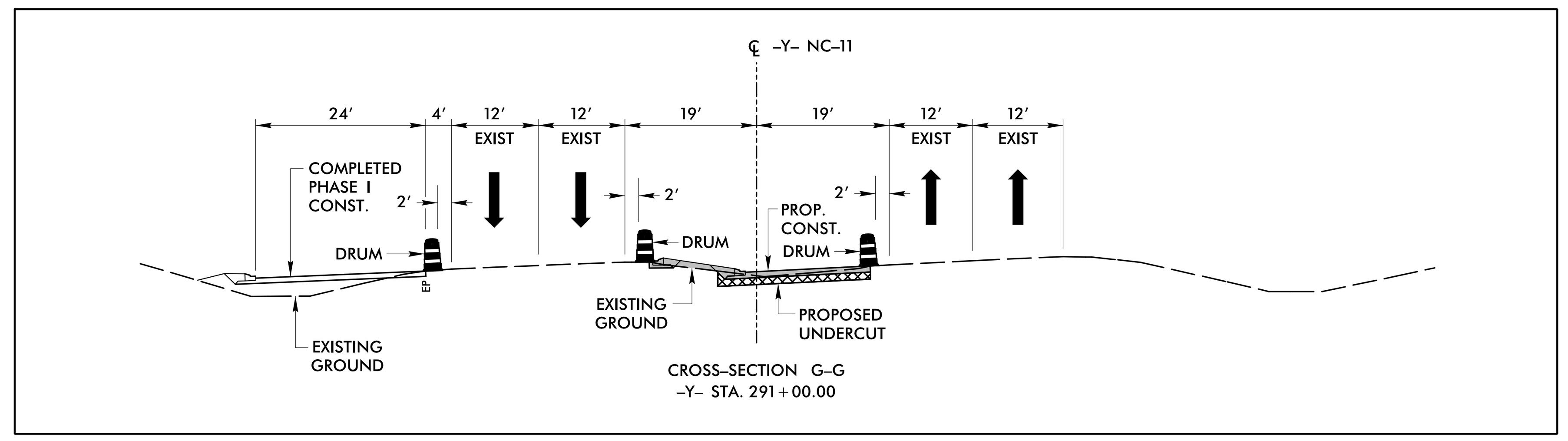
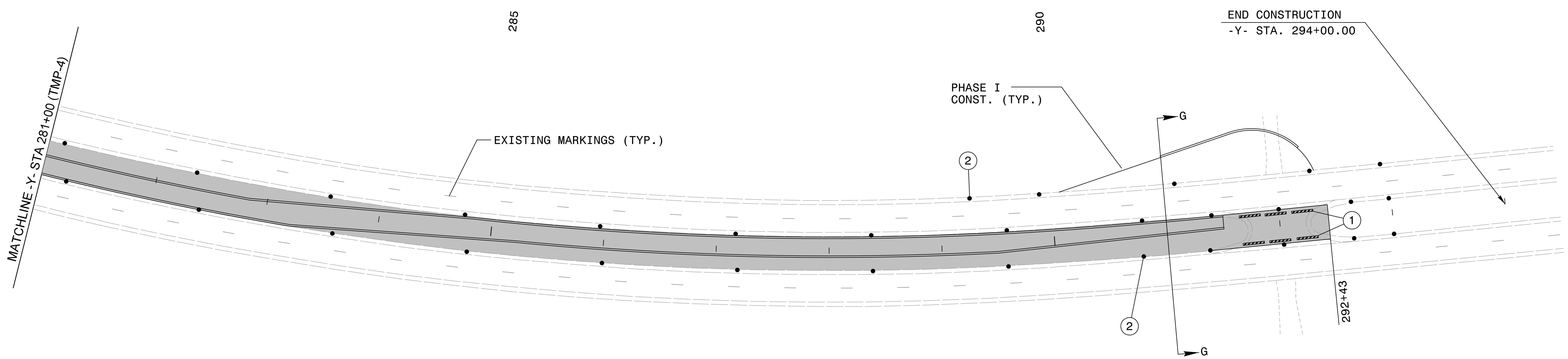


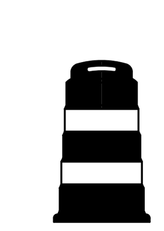


* NOTE: ALL STATIONS AND DIMENSIONS SHOWN +/-

1
R11-2
48"X30"

TYPE III BARRICADE

2



APPROVED: Joseph A. Freeman

DATE: 5/4/2017

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NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE II DETAILS

5/4/2017
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wrightep

8/17/99

PROJECT: U-5921

CONTRACT:

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING & SIGNING PLAN
PITT COUNTY

TIP NO.	SHEET NO.
U-5921	PMP-1

Designed by: Gerald H. McCauley
APPROVED: FE07527F1AB9460...
DATE: 5/4/2017

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 13008 ENGINEER GERALD H. McCAULEY

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INDEX

ROADWAY STANDARD DRAWING

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

STD. NO.	TITLE
901.50	ARROWS AND SHIELDS
903.10	GROUND MOUNTED SIGN SUPPORTS
903.20	WOOD SIGN POST
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E', AND 'F' SIGNS ON 'U' CHANNEL POSTS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU LANES DROPS
1205.08	PAVEMENT MARKINGS - SYMBOL AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

GENERAL NOTES

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

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

ROAD NAME	MARKING	MARKER
LAURIE ELLIS ROAD (SR 1713) [L]	4" THERMOPLASTIC	NONE
NC 11 [Y]	6" THERMOPLASTIC	SNOWPLOWABLE RAISED

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) USE PRISMATIC SIGN SHEETING.

F) MOUNT SHOULDER SIGNS ON 4" X 4" WOOD POST.

G) MOUNT CONCRETE ISLAND SIGNS USING "SAFE BREAK" SYSTEM WITH SQUARE METAL POST.

PLAN PREPARED BY:
STV Engineers, Inc.

GERALD H. McCAULEY, PE TRAFFIC ENGINEER

CLARK E. GROVES TRANSPORTATION DESIGNER

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

5/4/2017
c:\projects\proj\pmp\sht\U-5921_pmp_psh_pmp-1.dgn
cgroves

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NC License Number F-0991

TIP NO.	SHEET NO.
U-5921	PMP-1A

APPROVED: DocuSigned by: Gerald H. McCauley
DATE: 5/4/2017

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 13008 ENGINEER GERALD H. McCAULEY

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FINAL PAVEMENT MARKING SCHEDULE

PAVEMENT MARKINGS

SYMBOL	DESCRIPTION
	THERMOPLASTIC (4″, 90 MILS)
TA	WHITE EDGE LINE
TB	YELLOW EDGE LINE
	THERMOPLASTIC (4″, 120 MILS)
T8	2 FT. - 6 FT. / SP WHITE MINISKIP
TC	10 FT. WHITE SKIP
TD	3 FT. - 9FT. / SP WHITE MINISKIP
TE	WHITE SOLID LANE LINE
TI	YELLOW DOUBLE CENTER
	THERMOPLASTIC (6″, 90 MILS)
T6	WHITE EDGELINE
T7	YELLOW EDGELINE
	THERMOPLASTIC (6″, 120 MILS)
TJ	10′ WHITE SKIP
TK	3 FT. - 9 FT. / SP WHITE MINISKIP
TL	WHITE SOLID LANE LINE
T11	2 FT. - 6 FT. / SP WHITE MINISKIP
T12	2 FT. - 6 FT. / SP YELLOW MINISKIP
	THERMOPLASTIC (8″, 120 MILS)
TQ	WHITE CROSSWALK
	THERMOPLASTIC (12″, 90 MILS)
TS	WHITE GORELINE
TU	WHITE DIAGONAL
	THERMOPLASTIC (24″, 120 MILS)
T2	WHITE STOPBAR
	THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MILS)
UA	LEFT TURN ARROW
UB	RIGHT TURN ARROW
UD	COMBO. LEFT/STRAIGHT ARROW
UN	24′ YIELD LINE TRIANGLE
UT	U-TURN ARROW
	THERMOPLASTIC PAVEMENT MARKING CHARACTER(120 MILS)
UI	ALPHANUMERIC CHAR. (ONLY)

SNOWPLOWABLE MARKER

MF	CRYSTAL RED

TIP NO.	SHEET NO.
U-5921	PMP-1B

Docusigned by: Gerald H. McCauley
APPROVED: 5/4/2017
DATE:

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 13008 ENGINEER GERALD H. McCAULEY

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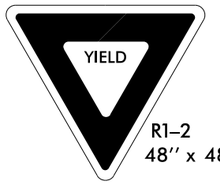
NC License Number F-0991

(401) QUANTITY REQ'D 1



R1–2
48'' x 48'' x 48''

4" X 4" WOOD POST

(402) QUANTITY REQ'D 6

R1–1
36" X 36"

4" X 4" WOOD POST

(403) QUANTITY REQ'D 4

R6–1L
36'' X 12''

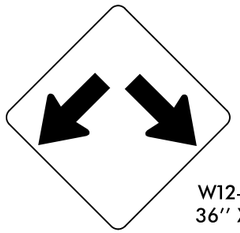
4" X 4" WOOD POST

(404) QUANTITY REQ'D 2

R6–1R
36'' X 12''

4" X 4" WOOD POST

(405) QUANTITY REQ'D 4



W12–1
36'' X 36''

SQUARE METAL SAFE BREAK POST

(406) QUANTITY REQ'D 3

R4–7
24'' X 30''

SQUARE METAL SAFE BREAK POST

(407) QUANTITY REQ'D 6

R5–1
30'' X 30''

4" X 4" WOOD POST

(408) QUANTITY REQ'D 1

R3–7 R
30'' X 30''

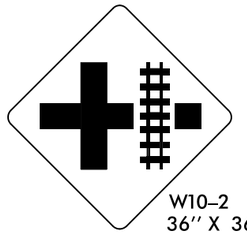
4" X 4" WOOD POST

(409) QUANTITY REQ'D 1

W10–1
36'' DIA.

4" X 4" WOOD POST

(410) QUANTITY REQ'D 2



W10–2
36'' X 36''

4" X 4" WOOD POST

(501) QUANTITY REQ'D 10

(501)
M1–5
24'' X 24''

ONE "U" POST PER SIGN

(502) QUANTITY REQ'D 4

M3–1
24'' X 12''

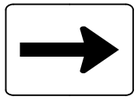
MOUNT ABOVE (501) M1–5
SEE PLANS FOR LOCATION

(503) QUANTITY REQ'D 6

M3–3
24'' X 12''

MOUNT ABOVE (501) M1–5
SEE PLANS FOR LOCATION

(504) QUANTITY REQ'D 2



M6–1
21'' X 15''

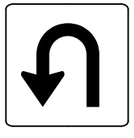
MOUNT BELOW (501) M1–5
SEE PLANS FOR LOCATION

(505) QUANTITY REQ'D 1

M6–3
21'' X 15''

MOUNT BELOW (501) M1–5
SEE PLANS FOR LOCATION

(506) QUANTITY REQ'D 4



SPECIAL–1
24'' X 24''

MOUNT BELOW (501) M1–5
SEE PLANS FOR LOCATION

TYPE "E" & "F" SIGNS

5/4/2017
I:\roadway\proj\pmp\sht\U-5921_pmp_psh_pmp-1B.dgn
cgross

DocuSign Envelope ID: 3DF5BD45-53C7-4A04-B15B-F9ACE9EEB8BD

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TIP NO.	SHEET NO.
U-5921	PMP-2

APPROVED: DocuSigned by: Gerald H. McCauley
EE3795B1AB9460...
DATE: 5/4/2017

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 13008
GERALD H. McCAULEY

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SEE PMP-1A FOR PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING & SIGNING DETAIL

5/4/2017
r:\roadway\proj\pmp\sht\U5921_pmp_psh_pmp-2.dgn
cgroves

8/17/99

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NC License Number F-0991

TIP NO.	SHEET NO.
U-5921	PMP-3

APPROVED: Gerald H. McCauley
DATE: 5/4/2017

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 13008 ENGINEER GERALD H. McCAULEY

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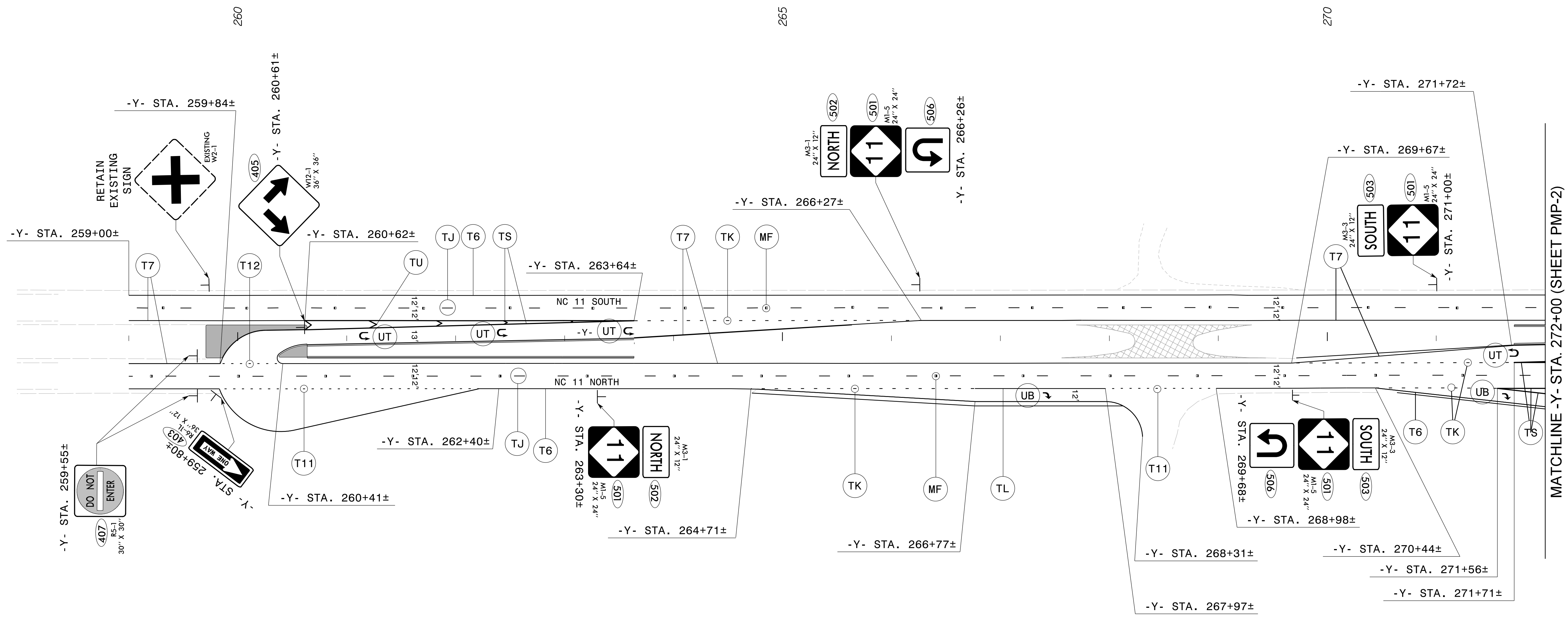
NAD 83



260
265
270
-Y- STA. 259+84±
RETAIN EXISTING SIGN
EXISTING W2-1
405
W12-1 36" X 36"
-Y- STA. 260+61±
-Y- STA. 259+00±
-Y- STA. 260+62±
-Y- STA. 263+64±
-Y- STA. 266+27±
502
M3-1 24" X 12"
NORTH
501
M1-5 24" X 24"
11
506
-Y- STA. 266+26±
-Y- STA. 271+72±
-Y- STA. 269+67±
503
M3-3 24" X 12"
SOUTH
-Y- STA. 271+00±
NC 11 SOUTH
NC 11 NORTH
-Y- STA. 259+55±
DO NOT ENTER
407
R5-1 30" X 30"
403
R6-1L 36" X 12"
ONE WAY
-Y- STA. 259+80±
-Y- STA. 262+40±
-Y- STA. 260+41±
-Y- STA. 263+30±
-Y- STA. 264+71±
-Y- STA. 266+77±
-Y- STA. 268+31±
-Y- STA. 267+97±
-Y- STA. 269+68±
-Y- STA. 268+98±
-Y- STA. 270+44±
-Y- STA. 271+56±
-Y- STA. 271+71±
MATCHLINE -Y- STA. 272+00 (SHEET PMP-2)

SEE PMP-1A FOR PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING & SIGNING DETAIL

5/4/2017
r:\roadway\proj\pmp\sht\U5921_pmp_psh_pmp-3.dgn
cgroves

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TIP NO.	SHEET NO.
U-5921	PMP-4

DocuSigned by: Gerald H. McCauley

APPROVED:

DATE: 5/4/2017

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NORTH CAROLINA PROFESSIONAL SEAL 13008 ENGINEER GERALD H. McCAULEY

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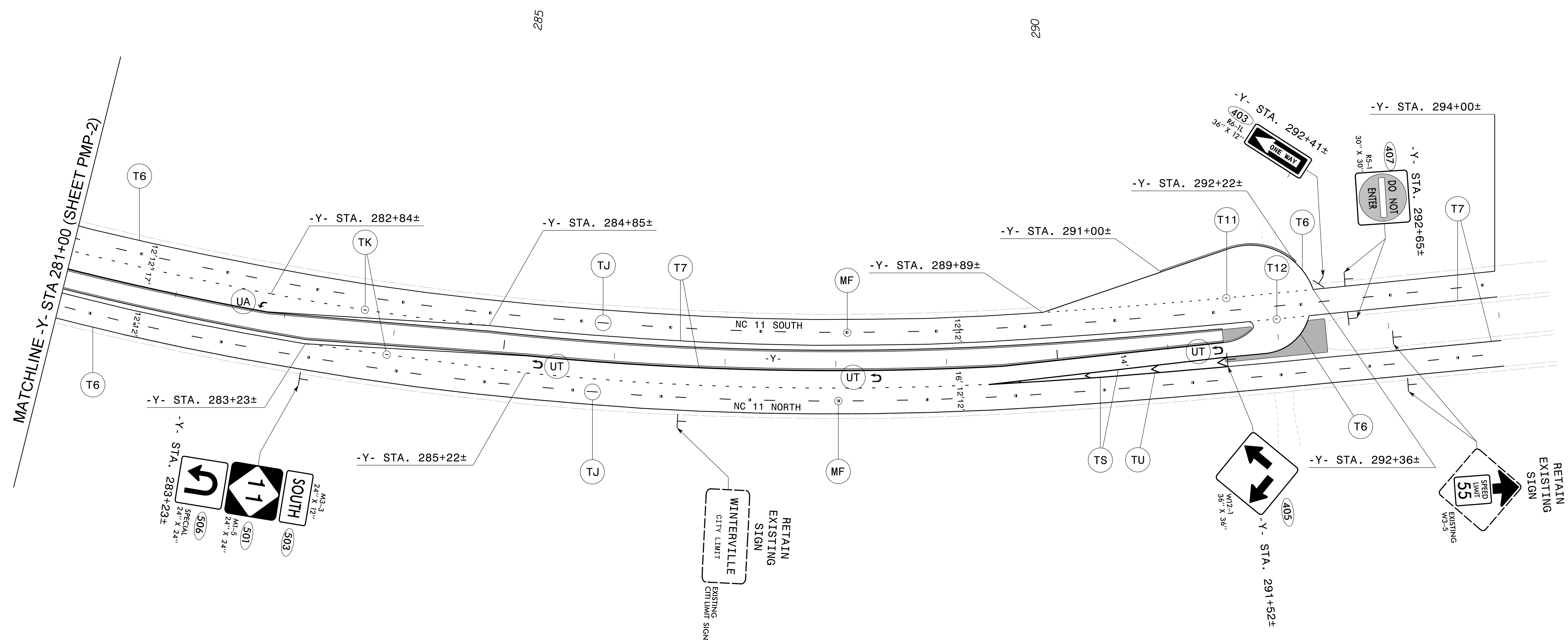
NAD 83



SEE PMP-1A FOR PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING & SIGNING DETAIL

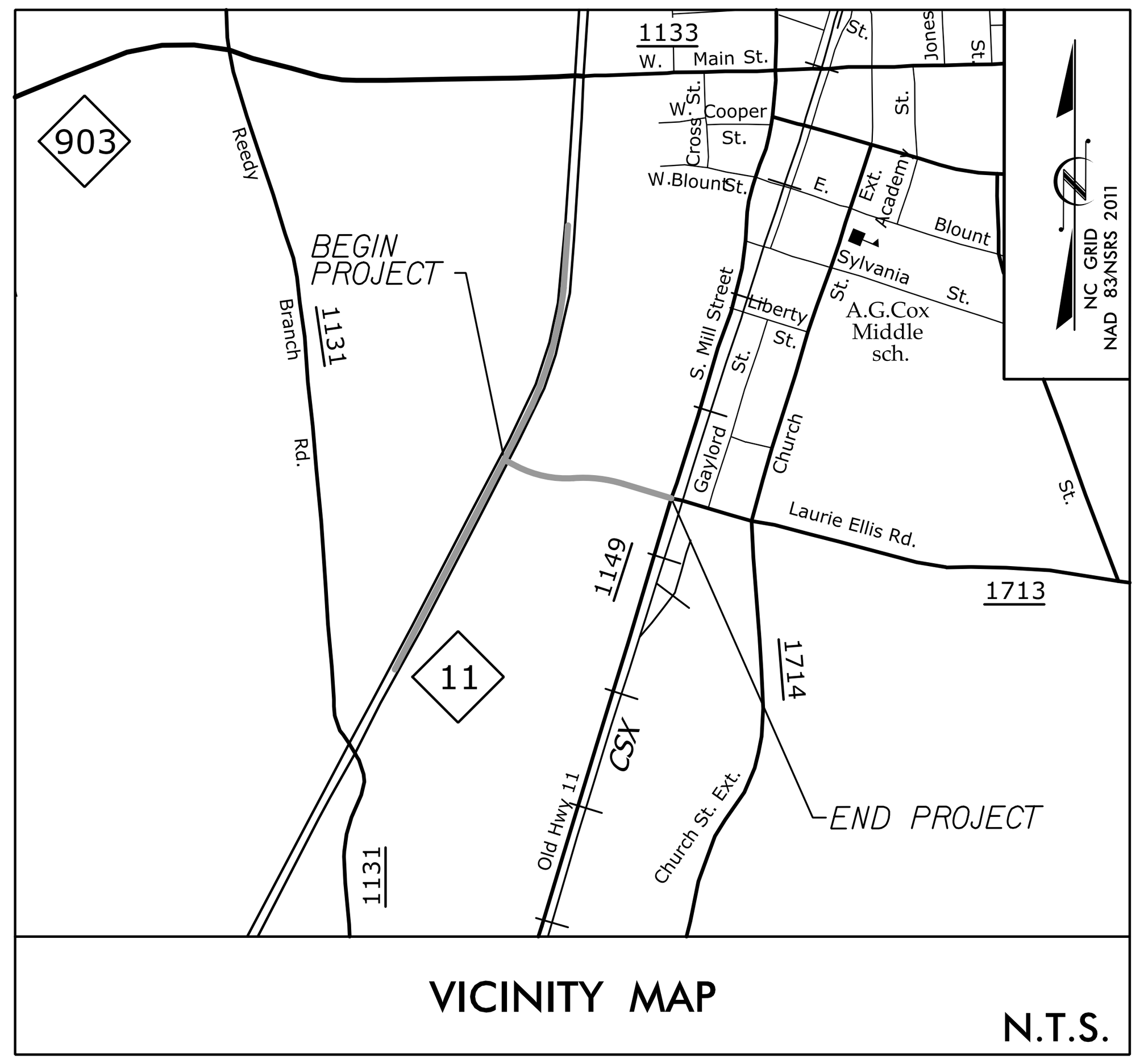
5/4/2017
r:\roadway\proj\pmp\sht\U5921_pmp_psh_pmp-4.dgn
cgroves

TIP PROJECT: U-5921

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5921	EC-1	16

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

See Sheet 1-A For Index of Sheets



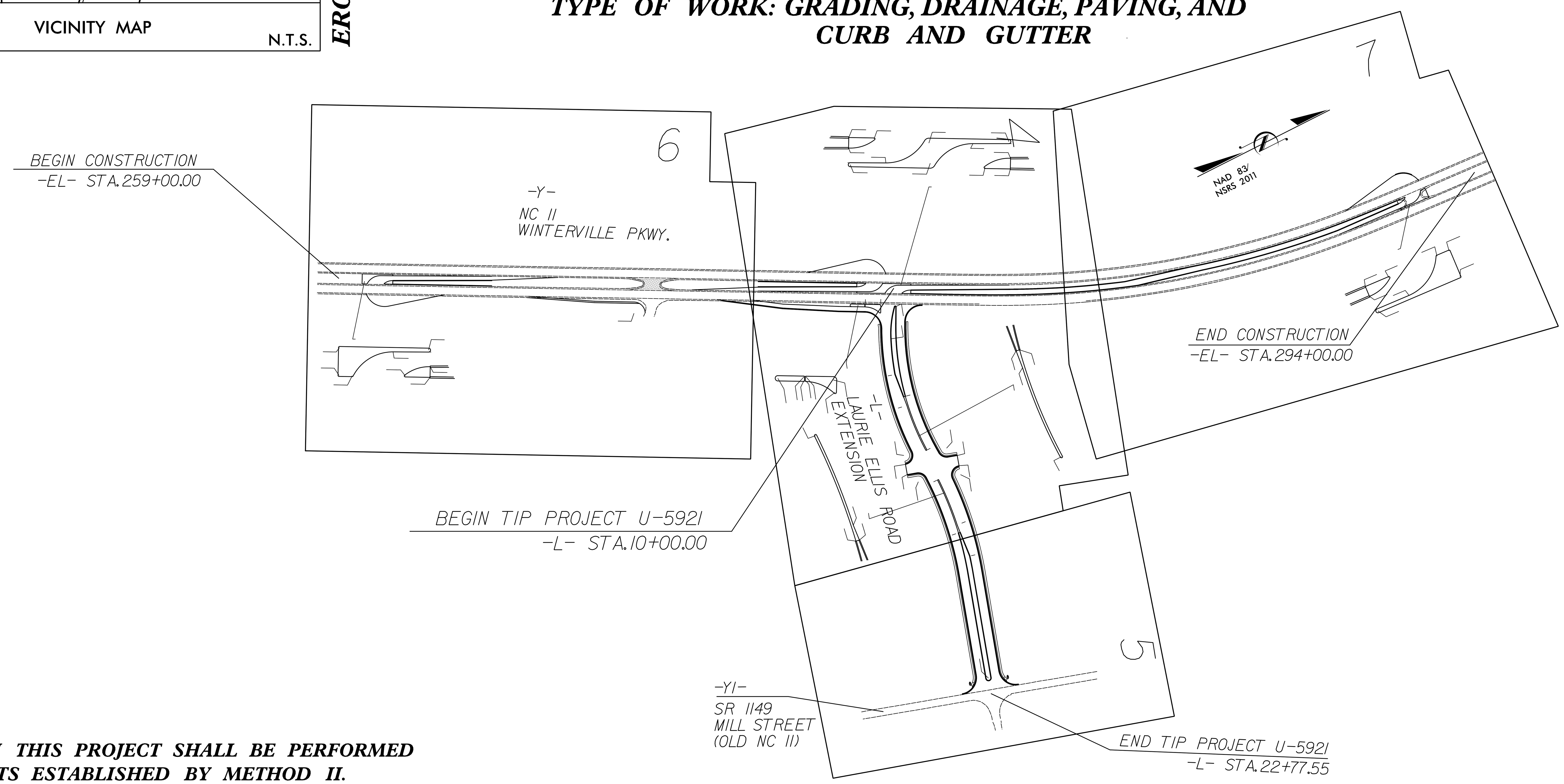
EROSION CONTROL PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

PITT COUNTY

LOCATION: LAURIE ELLIS ROAD FROM NC 11 TO MILL STREET
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND CURB AND GUTTER



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

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	EW / CFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

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GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared In the Office of:

STV ENGINEERS, INC.
900 WEST TRADE STREET, SUITE 715
CHARLOTTE, NC 28202

2012 STANDARD SPECIFICATIONS

Designed by:

JORDAN BENDL — 3928
NAME — LEVEL III CERTIFICATION NO.

Reviewed In the Office of:

DIVISION DESIGN CONSTRUCT
1704 North Greene Street
Greenville, NC 27835

2012 STANDARD SPECIFICATIONS

Reviewed by:

LANG JONES

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2012 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

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

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-2
R/W SHEET NO.	

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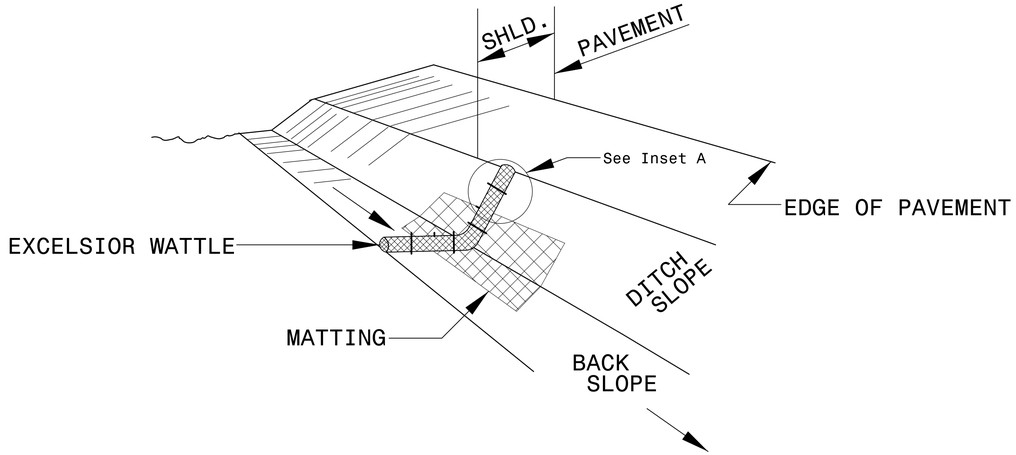
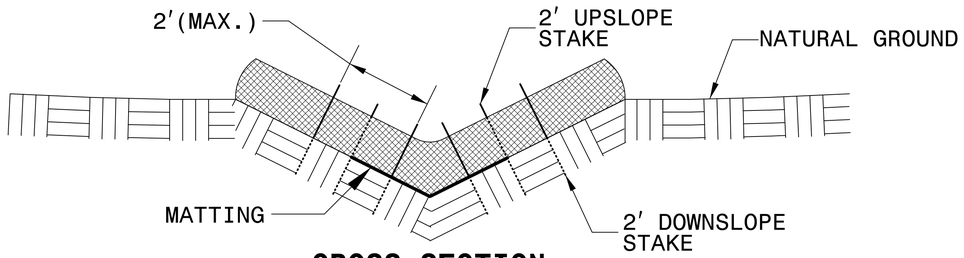
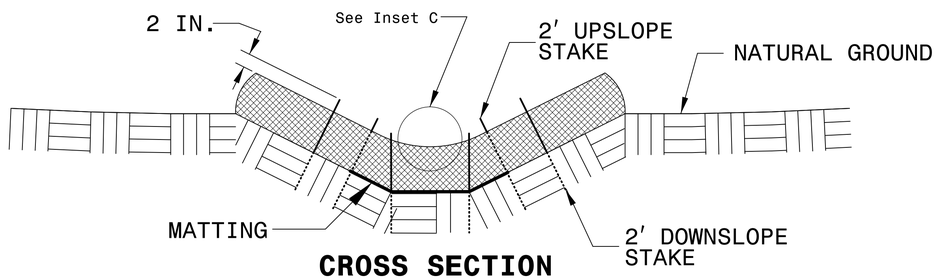
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

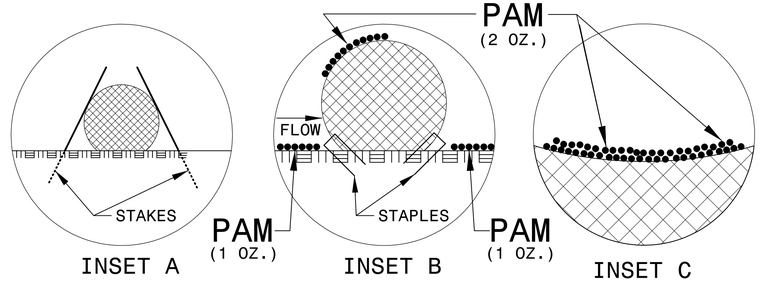
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

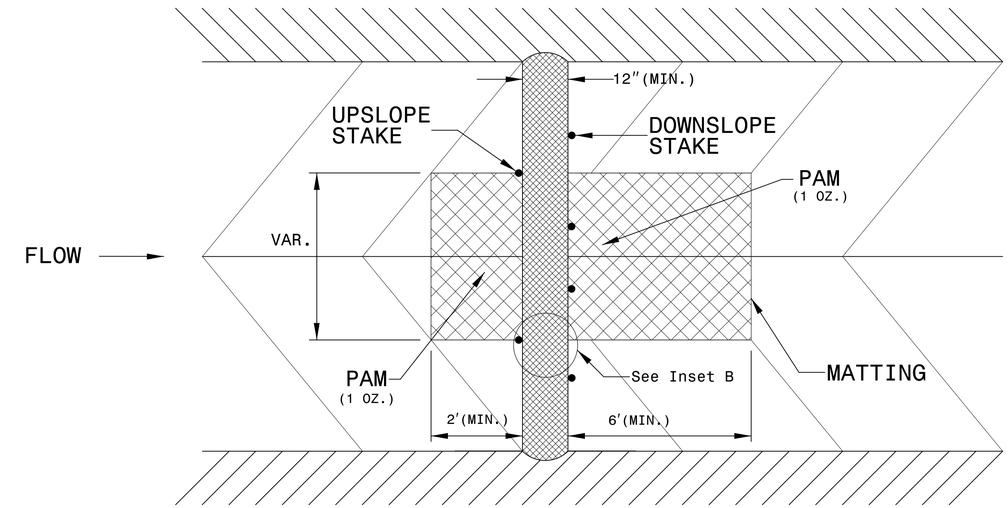
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-2A
R/W SHEET NO.	

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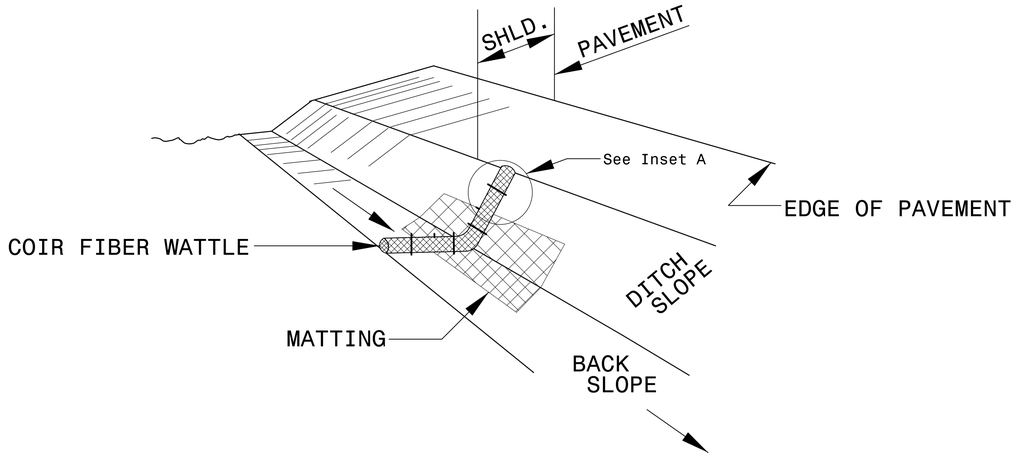
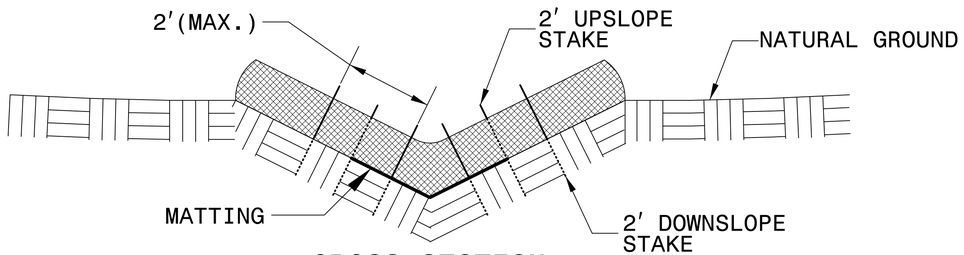
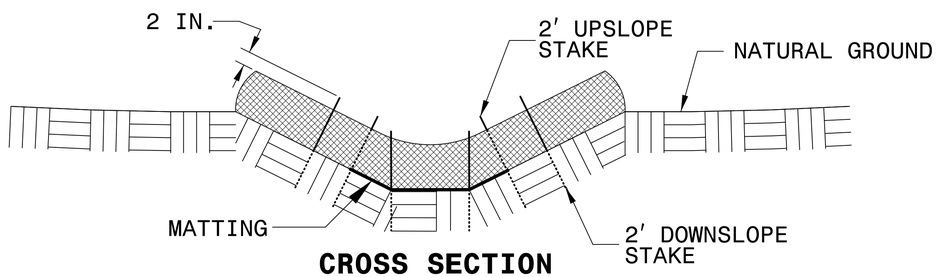
COIR FIBER WATTLE DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

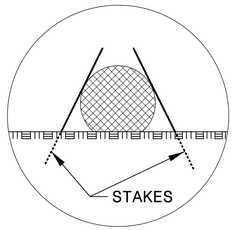
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

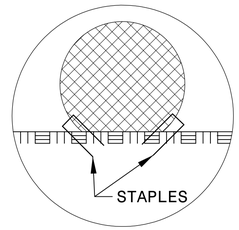
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

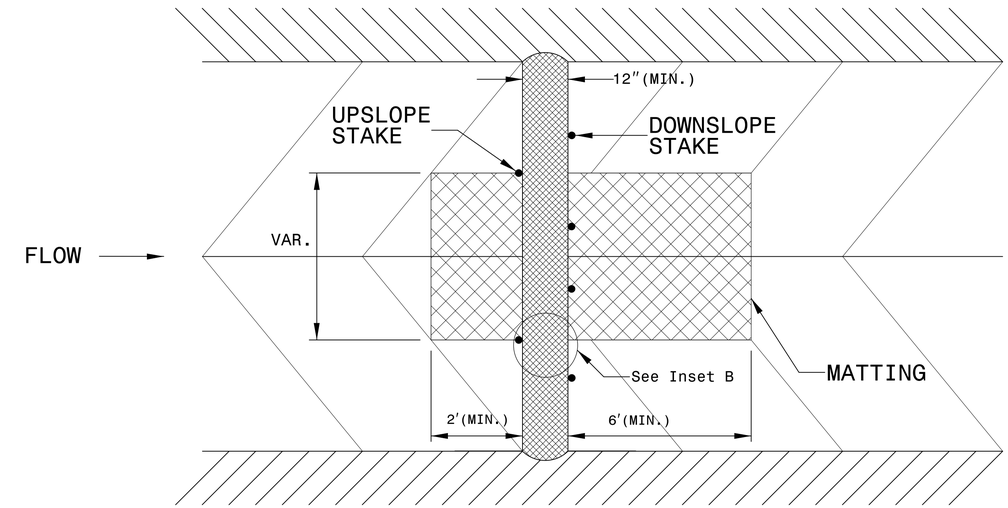
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



INSET A



INSET B



TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-2B
R/W SHEET NO.	

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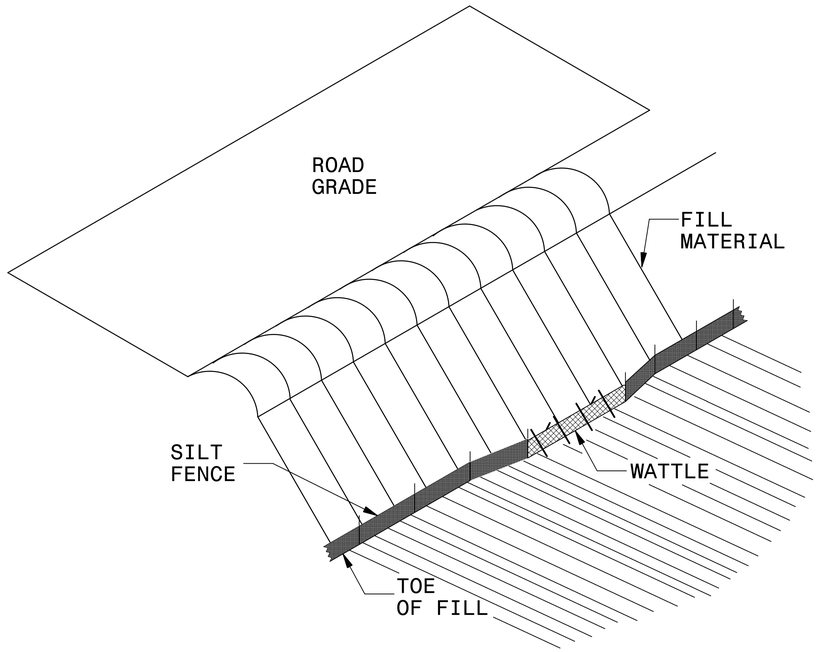
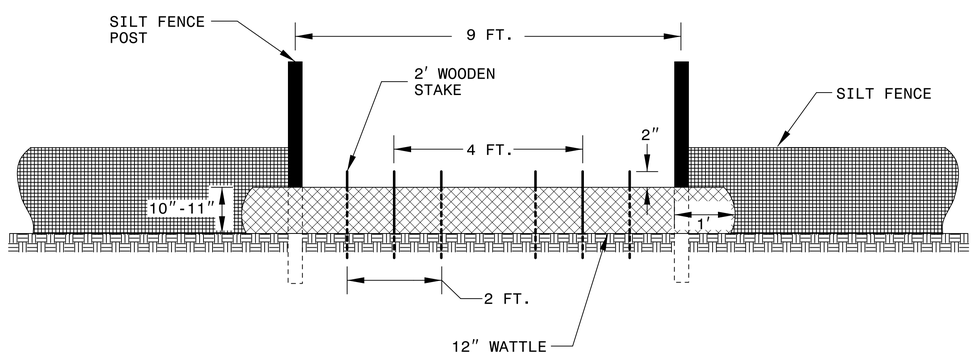
SILT FENCE COIR FIBER WATTLE BREAK DETAIL



ISOMETRIC VIEW



VIEW FROM SLOPE

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.

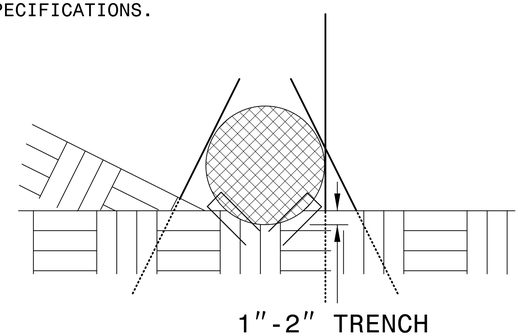
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

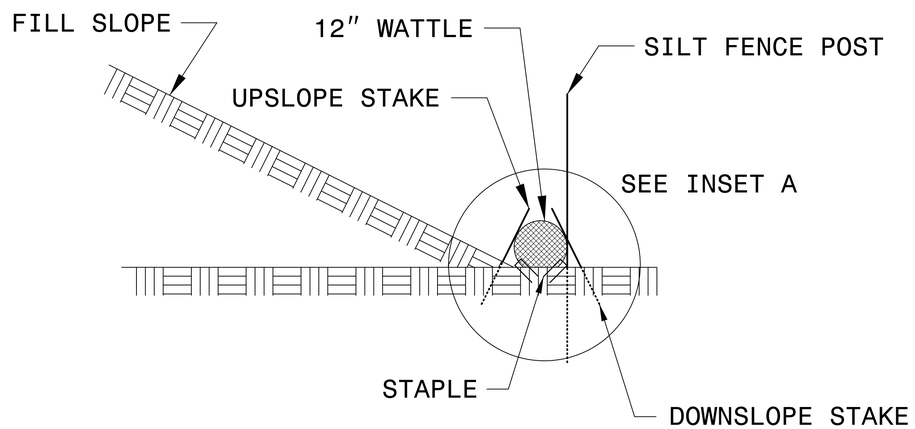
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A





SIDE VIEW

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-2C
R/W SHEET NO.	

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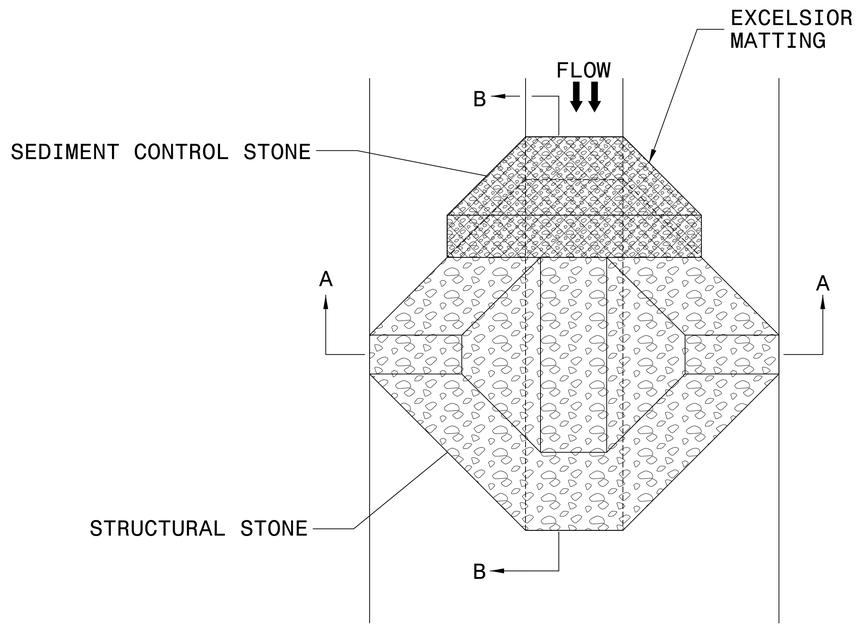
TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



PLAN

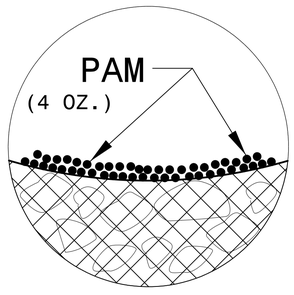
NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

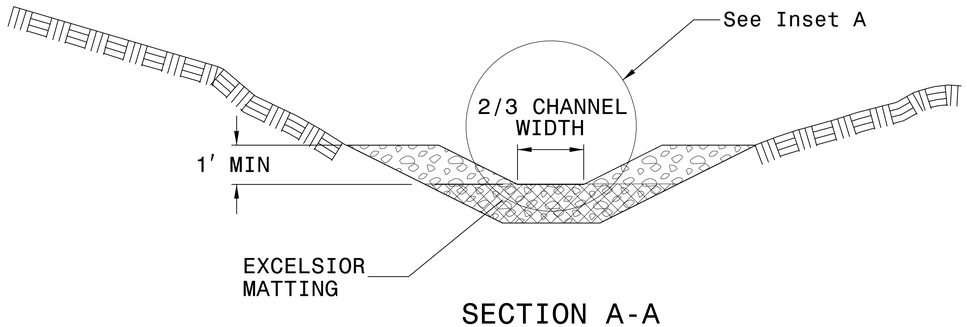
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

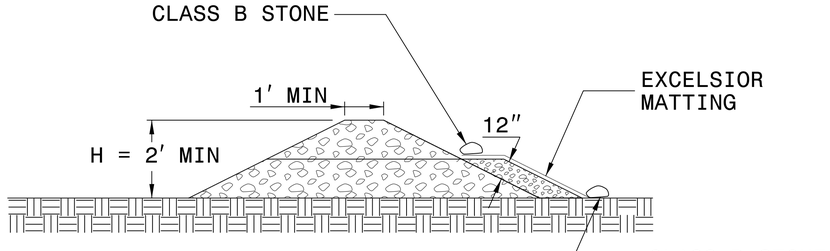
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



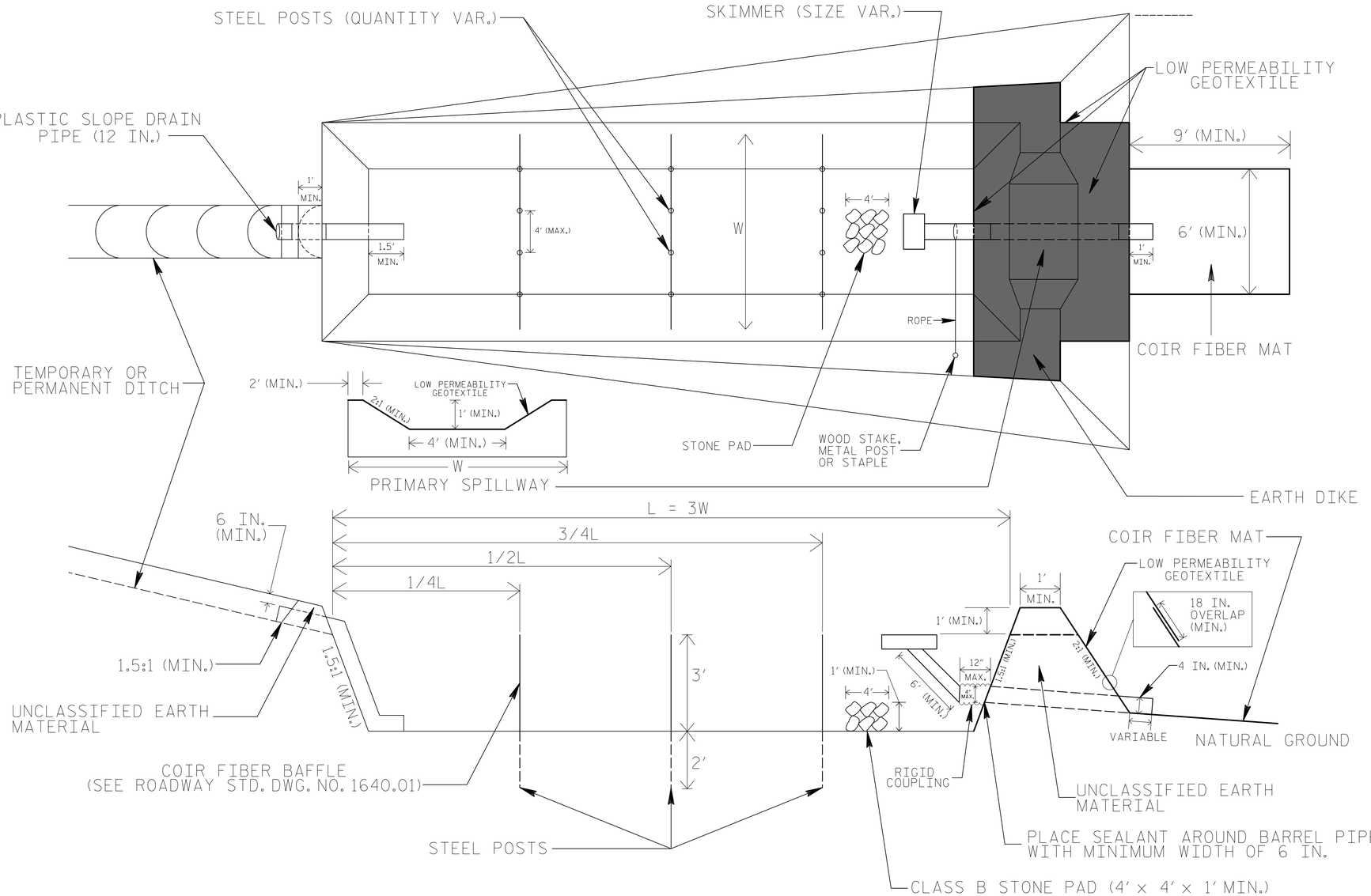
SECTION B-B

NOT TO SCALE

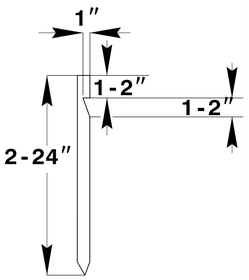
PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-2D
R/W SHEET NO.	

ENGINEER
STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

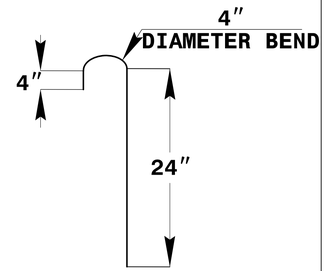
SKIMMER BASIN WITH BAFFLES DETAIL (EAST)



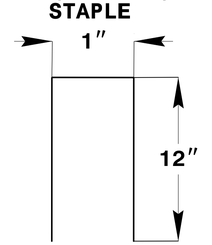
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE PRIMARY SPILLWAY WEIR LENGTH (FT.) USING Q/0.8, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. LOW PERMEABILITY GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-3
R/W SHEET NO.	

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-Y-	276+75	278+30	RT	470
				SUBTOTAL	470
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					1200
				TOTAL	1670
				SAY	1700

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
				SUBTOTAL	0
		ADDITIONAL PSRM TO BE INSTALLED			0
				TOTAL	0
				SAY	0

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-3A
R/W SHEET NO.	

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

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

Stabilization for this project shall comply with the time frame guidelines as specified by the NCG-010000 general construction permit effective August 3, 2011 issued by the North Carolina Department of Environment and Natural Resources Division of Water Quality. Temporary or permanent ground cover stabilization shall occur within 7 calendar days from the last land-disturbing activity, with the following exceptions in which temporary or permanent ground cover shall be provided in 14 calendar days from the last land-disturbing activity. Temporary and permanent ground cover stabilization shall be achieved in accordance with the provisions in this contract and as directed.

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-4/CONST.-4
R/W SHEET NO.	____

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

SCALE: 1"=50'

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NAD 83

-281+00=

-18+00=

WATTLE WITH PAM (TYP.)

ROCK SILT CHECK TYPE A (TYP.)

ROCK INLET SEDIMENT TRAP TYPE C (TYP.)

ROCK SILT CHECK TYPE A W/MATTING AND PAM (TYP.)

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC

CL-B RIPRAP EST. 3 TONS 10 S.Y. GEOTEXTILE

CL-I RIPRAP EST. 7 TONS 5 S.Y. GEOTEXTILE

RETAIN

COLLAR AND EXTEND

GRADE TO DRAIN

SPECIAL LATERAL BASE DITCH (SEE DETAIL A)

-L- 10+00.00 =
-Y- 275+82.50

48 x 24 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 4.1

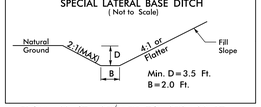
BEGIN TIP PROJECT U-5921
-L- Sta. 10+00.00

TEMPORARY SILT FENCE (TYP.)

COIR FIBER WATTLE SEGEMENT (TYP.)

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

DETAIL A
SPECIAL LATERAL BASE DITCH
(Not to Scale)



FROM -Y- STA. 276+75 TO 278+30 RT

5/3/2017
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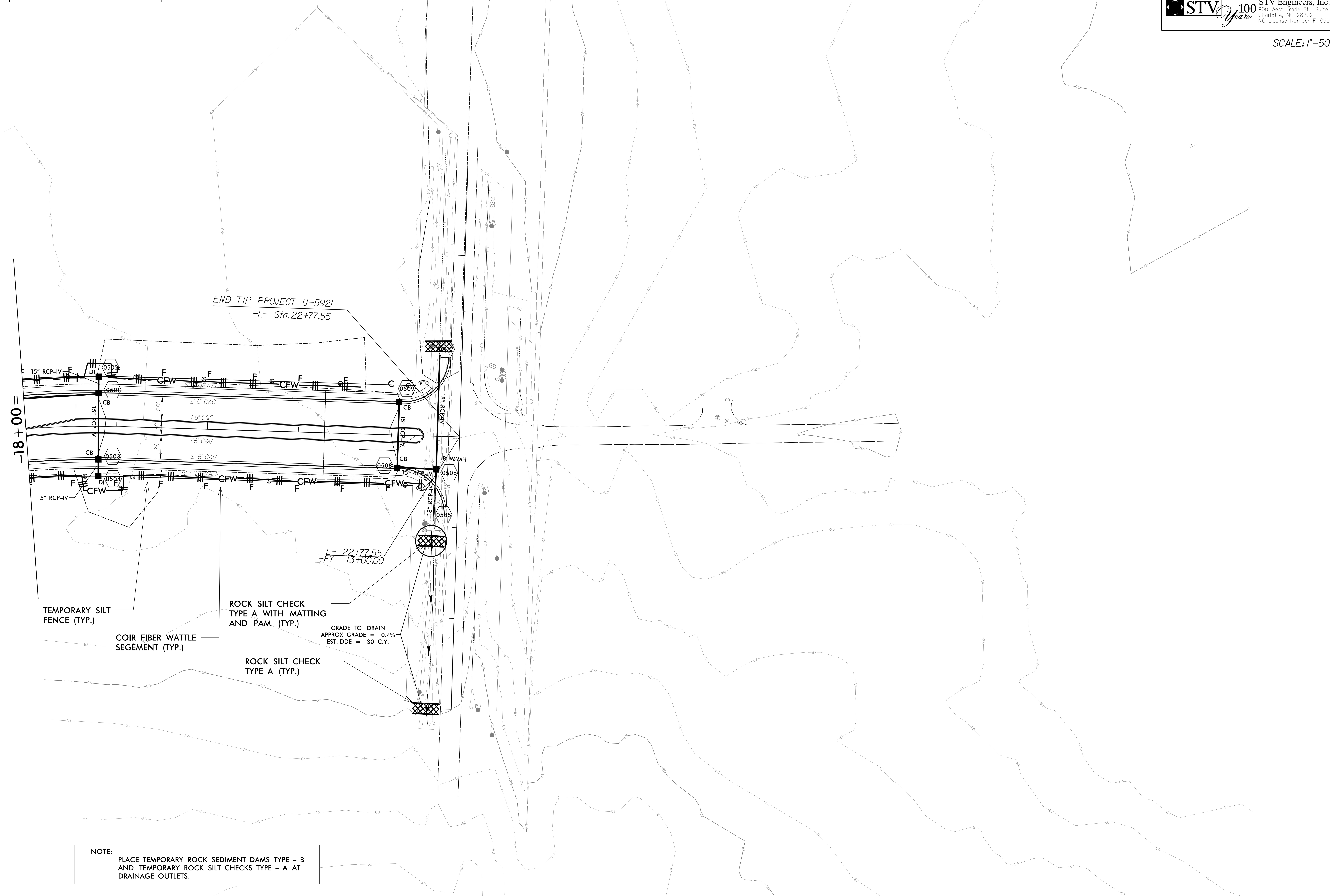
dendi1c

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-5/CONST.-5
R/W SHEET NO.	———

STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

SCALE: 1"=50'



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

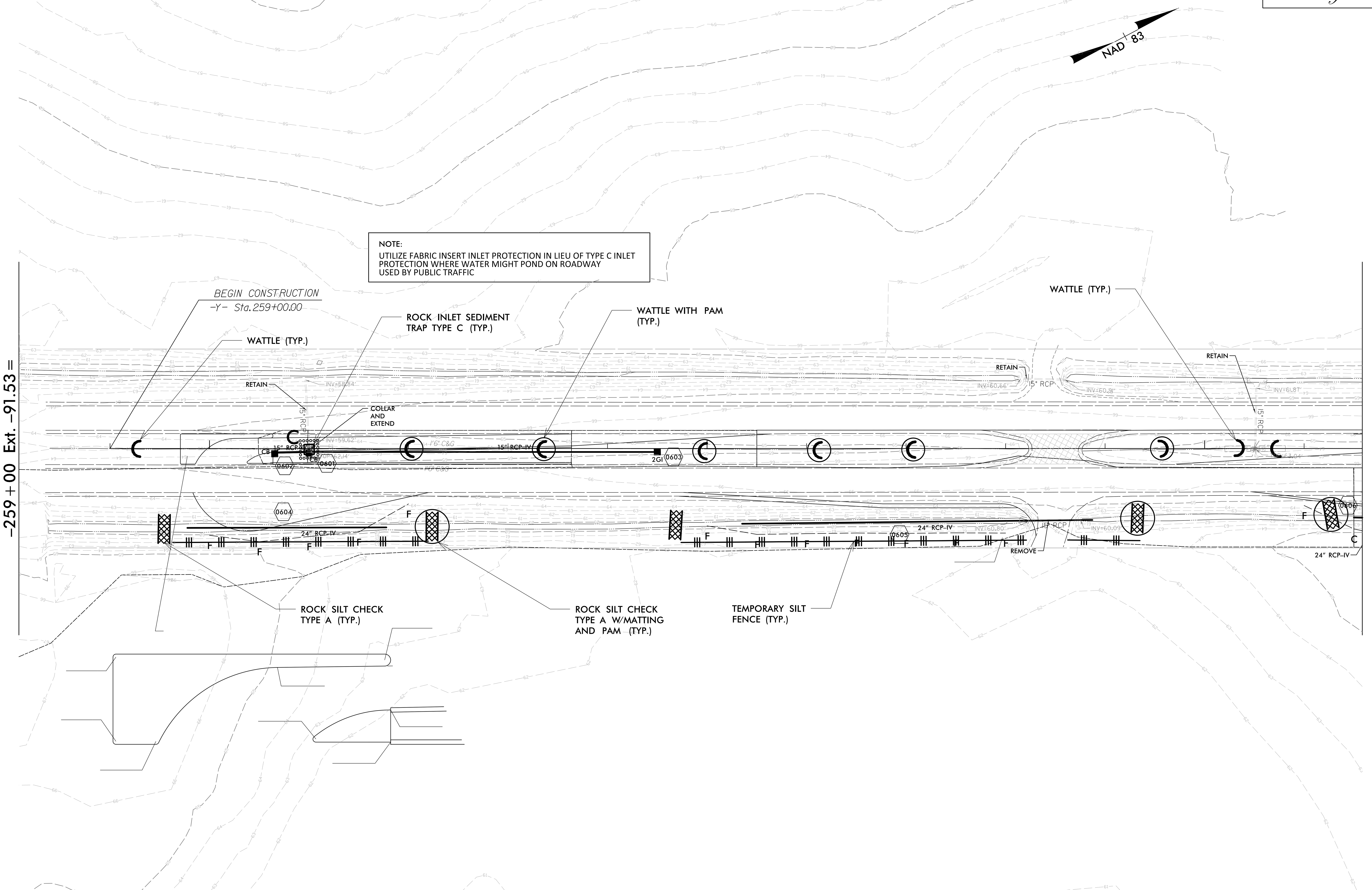
PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-6/CONST.-6
R/W SHEET NO.	

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

SCALE: 1"=50'

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC



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

8/17/99
5/3/2017
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bendl_jc

8/17/99

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-7/CONST.-7
R/W SHEET NO.	———

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

SCALE: 1"=50'

NAD 83

-281+00=

-294+50=

WATTLE WITH PAM (TYP.)

ROCK SILT CHECK TYPE A WITH MATTING AND PAM (TYP.)

ROCK SILT CHECK TYPE A (TYP.)

TEMPORARY SILT FENCE (TYP.)

GRADE TO DRAIN
APPROX GRADE = 0.2%
EST. DDE = 5 C.Y.

INV=62.02'

RETAIN

18" RCP

COLLAR AND EXTEND

INV=62.65'

13" RCP-IV

15" RCP-IV

CB 0710

CB 0709

CB 0708

CB 0707

CB 0706

CB 0705

CB 0704

GRADE TO DRAIN

INV=65.05'

INV=65.29'

12" RCP

REMOVE

INV=64.65'

INV=64.82'

RETAIN

WATTLE (TYP.)

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC

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

5/3/2017
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bendlc

8/17/99

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 4

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-8/CONST.-4
R/W SHEET NO.	____

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

SCALE: 1"=50'

NAD 83

-281+00=

-18+00=

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC

ROCK SILT CHECK TYPE A (TYP.)

ROCK SILT CHECK TYPE A W/MATTING AND PAM (TYP.)

CL-B RIPRAP EST. 3 TONS 10 S.Y. GEOTEXTILE

18" RCP-IV

15" RCP-IV

24" RCP-IV

RETAIN

COLLAR AND EXTEND

GRADE TO DRAIN

SPECIAL LATERAL BASE DITCH (SEE DETAIL A)

-L- 10+00.00 = -Y- 275+82.50

CL-I RIPRAP EST. 7 TONS 5 S.Y. GEOTEXTILE

48 x 24 x 3
1.5 inch Skimmer with 0.875 inch Orifice Diameter
4 ft. weir
ID 4.1

JB W/MH

DI (TYPE 'D')

JB W/MH

BEGIN TIP PROJECT U-5921
-L- Sta.10+00.00

ROCK INLET SEDIMENT TRAP TYPE C (TYP.)

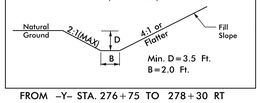
TEMPORARY SILT FENCE (TYP.)

COIR FIBER WATTLE SEGEMENT (TYP.)

WATTLE WITH PAM (TYP.)

WATTLE (TYP.)

DETAIL A
SPECIAL LATERAL BASE DITCH
(Not to Scale)



FROM -Y- STA. 276+75 TO 278+30 RT

5/3/2017
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bendlc

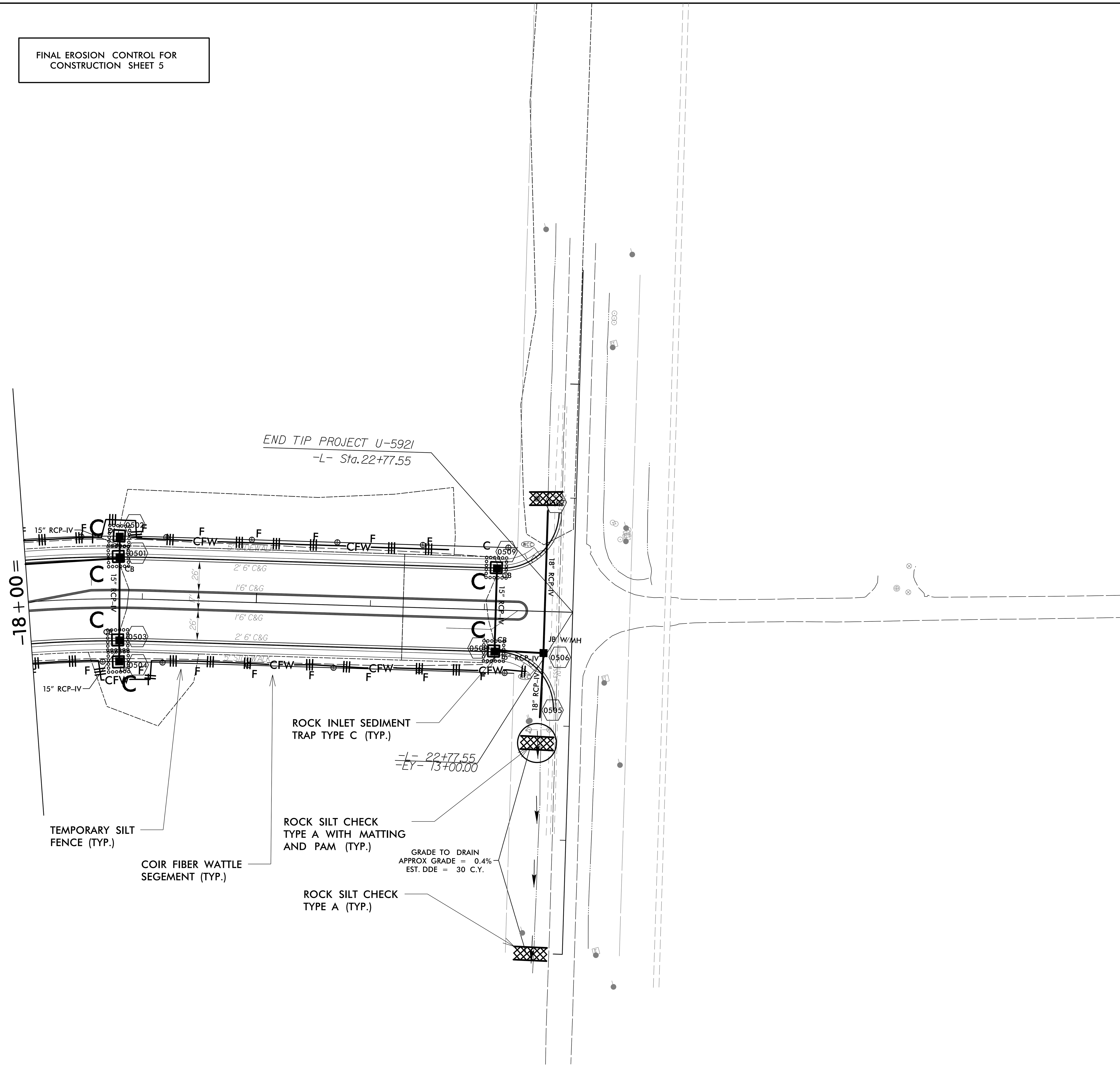
8/17/99

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 5

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-9/CONST.-5
R/W SHEET NO.	____

STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

SCALE: 1"=50'



5/3/2017
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8/17/99

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 6

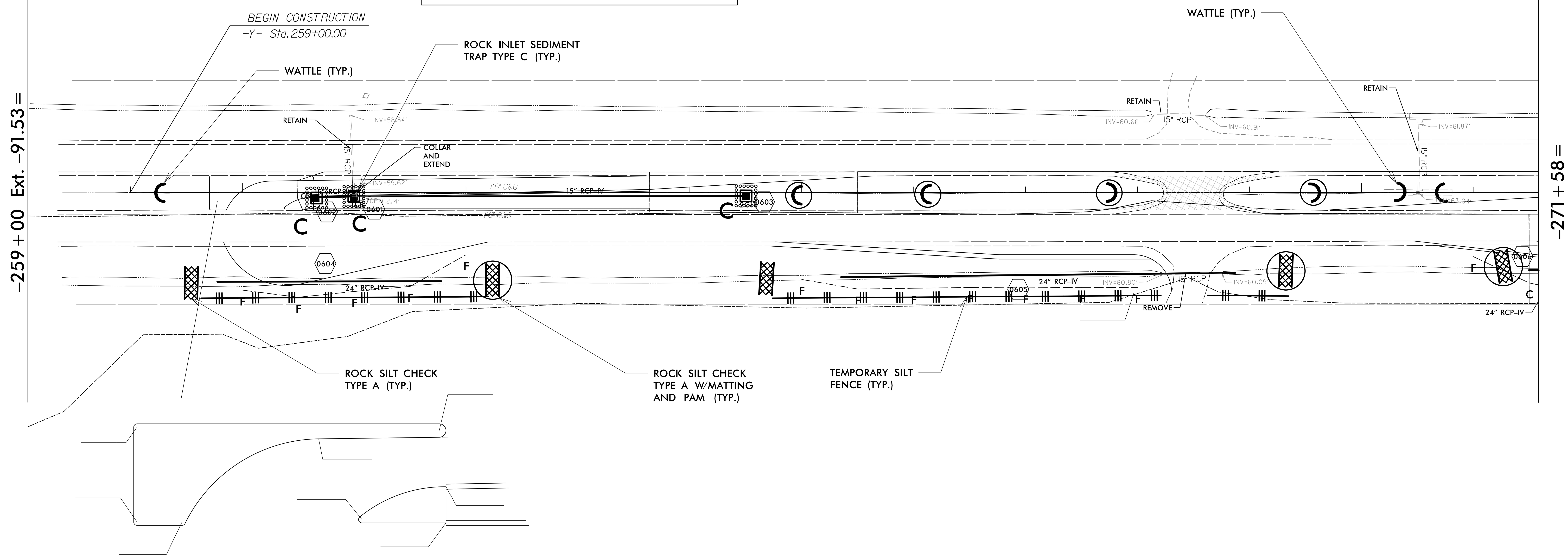
PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-10/CONST.-6
R/W SHEET NO.	____

STV 100 Years — STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

SCALE: 1"=50'

NAD 83

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC


BEGIN CONSTRUCTION
-Y- Sta.259+00.00
ROCK INLET SEDIMENT TRAP TYPE C (TYP.)
WATTLE (TYP.)
RETAIN
COLLAR AND EXTEND
INV=58.84'
INV=59.62'
15" RCP
1'6" C&G
15" RCP-IV
24" RCP-IV
0601
0602
0603
0604
0605
0606
-259+00 Ext. -91.53 =
-271+58 =
RETAIN
INV=60.66'
15" RCP
INV=60.91'
INV=61.87'
INV=60.80'
INV=60.09'
REMOVE
24" RCP-IV
ROCK SILT CHECK TYPE A (TYP.)
ROCK SILT CHECK TYPE A W/MATTING AND PAM (TYP.)
TEMPORARY SILT FENCE (TYP.)

5/3/2017
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8/17/99

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 7

PROJECT REFERENCE NO.	SHEET NO.
U-5921	EC-11/CONST.-7
R/W SHEET NO.	____

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

NAD 83

SCALE: 1"=50'

ROCK INLET SEDIMENT TRAP TYPE C (TYP.)

ROCK SILT CHECK TYPE A (TYP.)

ROCK SILT CHECK TYPE A WITH MATTING AND PAM (TYP.)

TEMPORARY SILT FENCE (TYP.)

WATTLE (TYP.)

GRADE TO DRAIN
APPROX GRADE = 0.2%
EST. DDE = 5 C.Y.

-281+00=

-294+50=

INV=62.02'

RETAIN

COLLAR AND EXTEND

INV=62.65'

15" RCP-IV

12" RCP

INV=65.05'

INV=65.29'

REMOVE

GRADE TO DRAIN

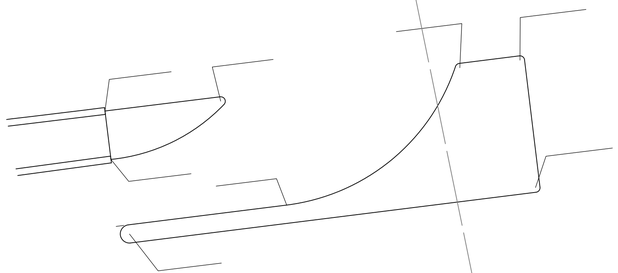
INV=64.65'

INV=64.82'

RETAIN

0701 0702 0703 0704 0705 0706 0707 0708 0709 0710

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC



5/3/2017
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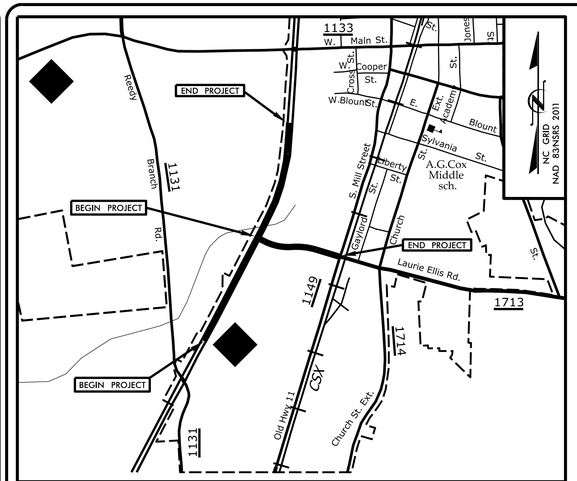
bendlis

4/14/17

TIP PROJECT: U-5921

CONTRACT: DB00360



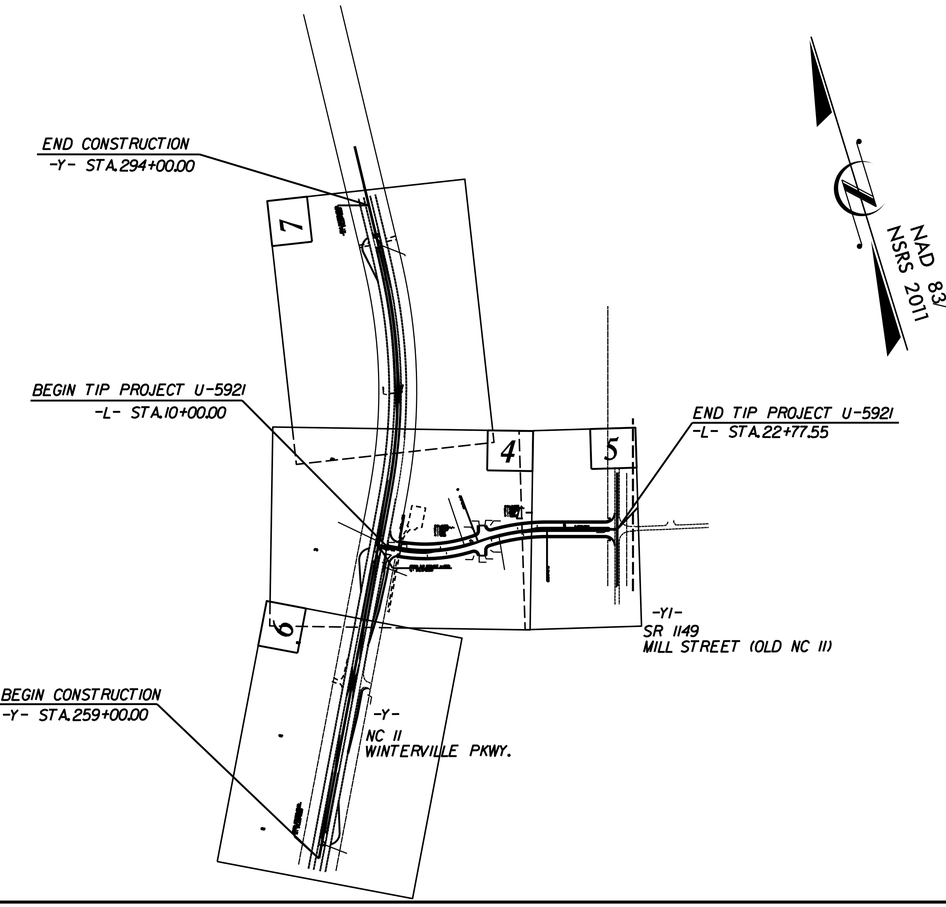
VICINITY MAP ***N.T.S.***

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES BY OTHERS PLANS
PITT COUNTY

PROJECT REFERENCE NO.	SHEET NO.
U-5921	UO-1

LOCATION: LAURIE ELLIS ROAD FROM NC 11 TO SR 1149 (MILL STREET)
TYPE OF WORK: AERIAL POWER



V&M Vaughn & Melton Consulting Engineers
New Bern, North Carolina 252-631-595
Tri-Cities, TN 423-467-8401
Knoxville, TN 865-546-5800
Spartanburg, SC 864-574-4775
Charleston, SC 843-974-5650
Middlesboro, KY 606-248-6600
Charlotte, NC 704-357-0488
Boone, NC 828-355-9933
Atlanta, GA 770-627-3509

GRAPHIC SCALES

50 25 0 50 100
UTILITY PLANS

INDEX OF SHEETS

SHEET NO.	*DESCRIPTION*
UO-1	*TITLE SHEET*
UO-2	*UTILITIES BY OTHERS PLAN SHEETS*

UTILITY OWNERS ON PROJECT

(1) POWER – TOWN OF WINTERVILLE

PLANS PREPARED BY:

V&M Vaughn & Melton Consulting Engineers
3115 Trent Ave.
New Bern, NC 28562
252-631-595

PREPARED FOR THE OFFICE OF:
DIVISION OF HIGHWAYS
UTILITIES ENGINEERING SECTION

1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 250-4128
FAX (919) 250-4119

Todd Lapham — *DESIGN-BUILD UTILITIES COORDINATOR*

[redacted] — *UTILITIES PROJECT COORDINATOR*

TRANSPORTATION/3614-04/U-5921/UTILITIES/UO-1.DGN

4/14/17

PROJECT: U-5921

CONTRACT: DB00360

PROJECT REFERENCE NO.	SHEET NO.
U-5921	U0-2

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

NAD 83

NEW PERMANENT POWER POLE

-L- 10+00.00 =
-Y- 275+82.50

REMOVE POWER POLE

BEGIN TIP PROJECT U-5921
-L- Sta.10+00.00

NEW PERMANENT POWER POLE

REMOVE POWER POLE

END TIP PROJECT U-5921
-L- Sta.22+77.55

-L- 22+77.55
-EY- 13+00.00

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

V&M Vaughan & Melton
Consulting Engineers
Asheville, North Carolina 828-253-2796
Charlotte, North Carolina 704-357-0488
Tri-Cities, Tennessee 423-467-8401
Knoxville, Tennessee 865-546-5800
Middlesboro, Kentucky 606-248-6600
Spartanburg, South Carolina 864-574-4775

TRANSPORTATION\31614-04\UTILITIES\U0-4.DGN

8/17/99

COMPUTED BY: KTB DATE: 03-12-15
CHECKED BY: _____ DATE: _____

PROJECT REFERENCE NO.	SHEET NO.
U-5921	X-0

REVISIONS

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

CROSS SECTION SUMMARY

IN CUBIC YARDS

-L- STATION	UNCLASSIFIED EXCAVATION	EMBT
11+00.00	0	0
11+50.00	340	0
12+00.00	277	1
12+50.00	227	6
13+00.00	187	11
13+50.00	174	14
14+00.00	165	19
14+50.00	181	17
15+00.00	206	9
15+50.00	189	8
16+00.00	132	18
16+50.00	77	43
17+00.00	36	76
17+50.00	17	91
18+00.00	18	90
18+50.00	18	90
19+00.00	16	92
19+50.00	30	79
20+00.00	38	71
20+50.00	50	65
21+00.00	70	56
21+50.00	89	48
22+00.00	145	26

NOTE: EMBANKMENT COLUMN DOES NOT INCLUDE BACKFILL FOR UNDERCUT.

-Y- STATION	UNCLASSIFIED EXCAVATION	EMBT
260+00.00	0	0
260+50.00	12	171
261+00.00	12	188
261+50.00	14	159
262+00.00	16	98
262+50.00	13	52
263+00.00	8	41
263+50.00	6	42
264+00.00	7	30
264+50.00	8	17
265+00.00	8	27
265+50.00	10	50
266+00.00	8	62
266+50.00	4	74
267+00.00	8	99
267+50.00	16	110
268+00.00	28	96
268+50.00	48	42
269+00.00	50	1
269+50.00	29	2
270+00.00	12	9
270+50.00	7	11
271+00.00	10	22
271+50.00	23	42
272+00.00	50	66
272+50.00	92	88
273+00.00	131	93
273+50.00	167	114
274+00.00	189	160
274+50.00	192	198
275+00.00	215	224
275+50.00	169	202
276+00.00	91	126
276+50.00	66	54
277+00.00	57	27
277+50.00	63	37
278+00.00	61	39
278+50.00	34	39

NOTE: EMBANKMENT COLUMN DOES NOT INCLUDE BACKFILL FOR UNDERCUT.

-Y- STATION	UNCLASSIFIED EXCAVATION	EMBT
279+00.00	12	41
279+50.00	12	45
280+00.00	11	49
280+50.00	11	51
281+00.00	11	56
281+50.00	9	62
282+00.00	10	62
282+50.00	11	57
283+00.00	11	54
283+50.00	11	51
284+00.00	10	56
284+50.00	9	56
285+00.00	10	41
285+50.00	10	32
286+00.00	9	32
286+50.00	9	30
287+00.00	12	25
287+50.00	13	23
288+00.00	13	23
288+50.00	12	24
289+00.00	12	25
289+50.00	12	25
290+00.00	14	28
290+50.00	16	48
291+00.00	21	68
291+50.00	54	72
292+00.00	119	36

NOTE: EMBANKMENT COLUMN DOES NOT INCLUDE BACKFILL FOR UNDERCUT.

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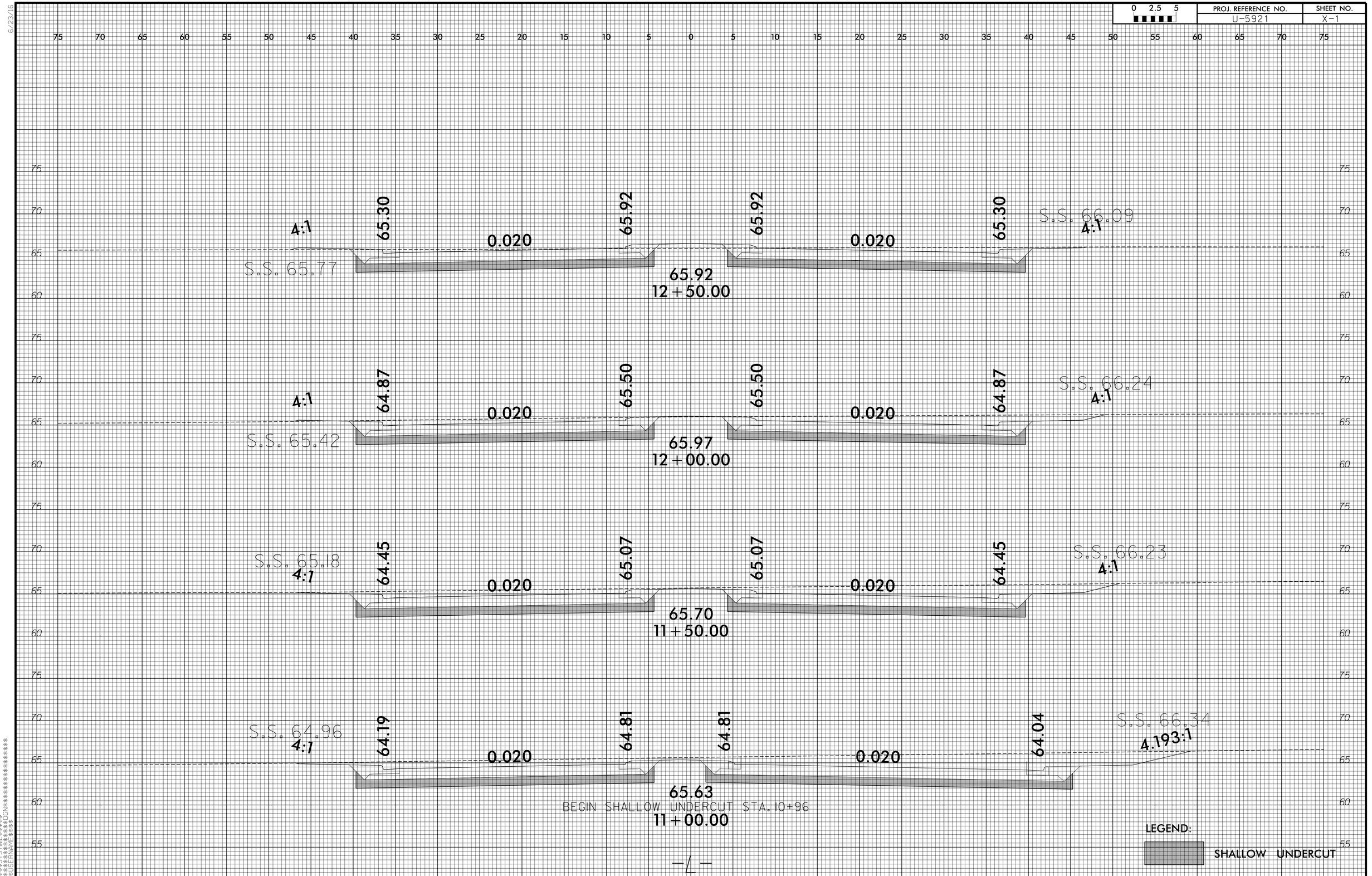

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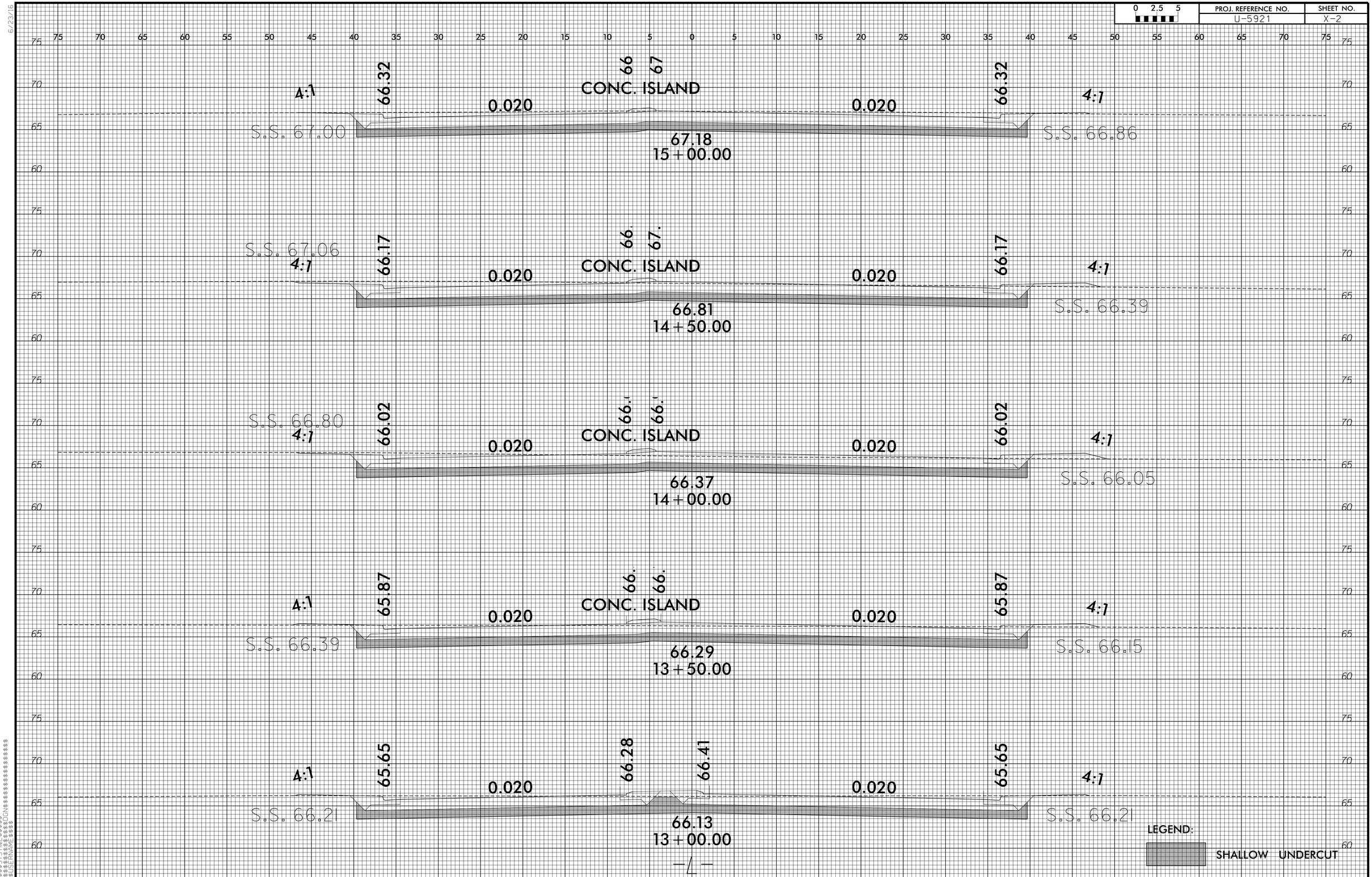

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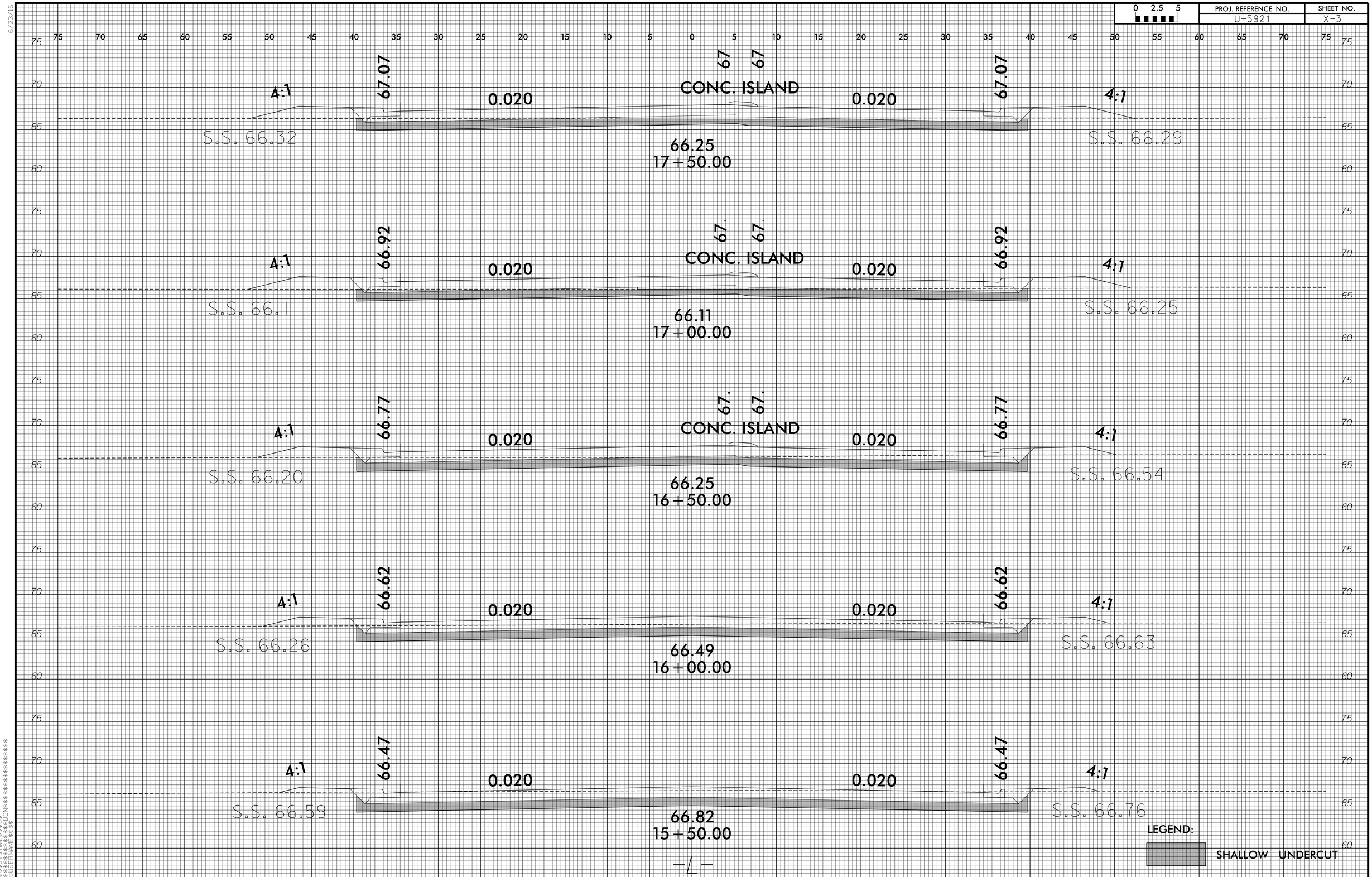

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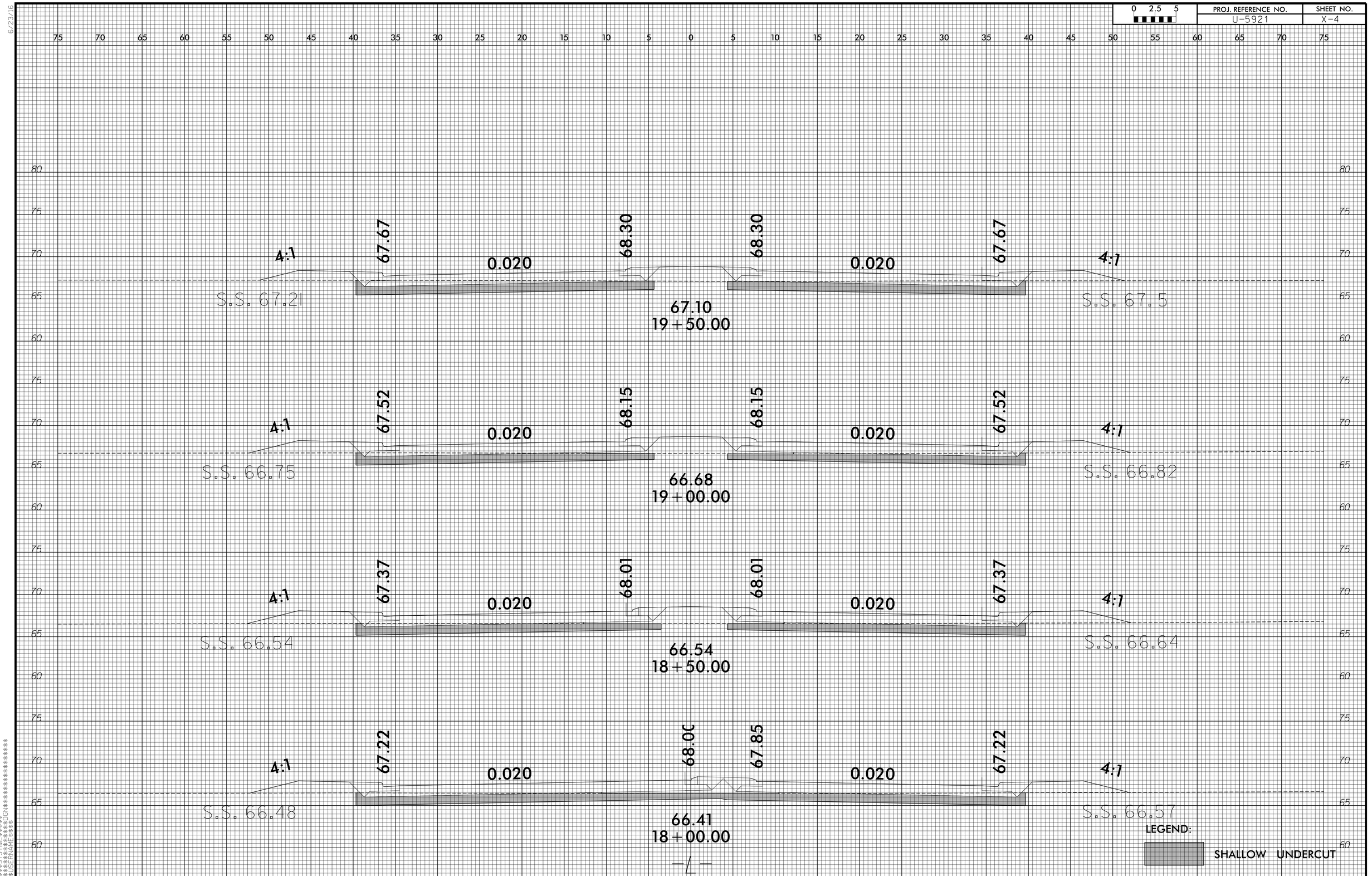
6/23/16



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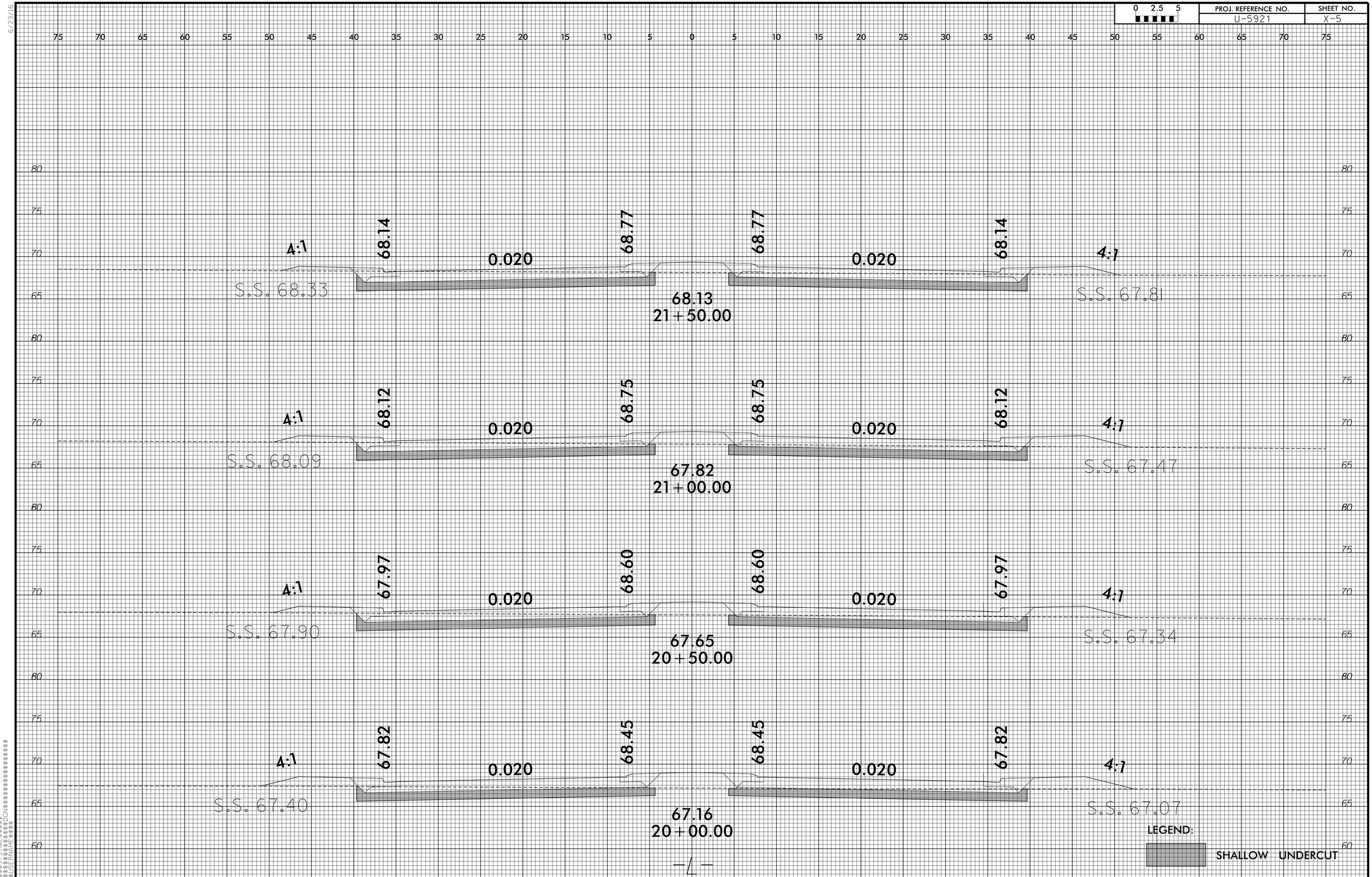

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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
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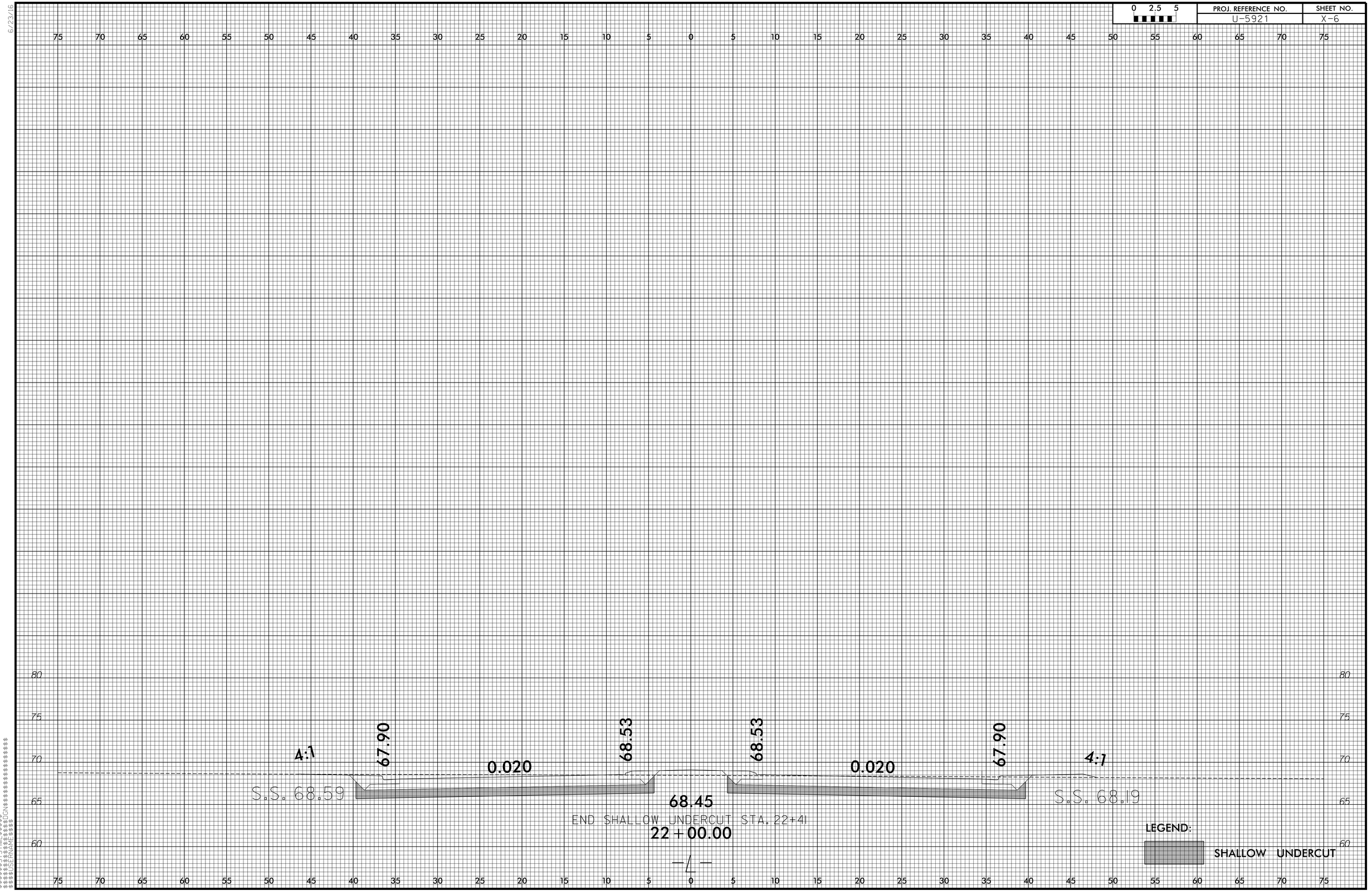

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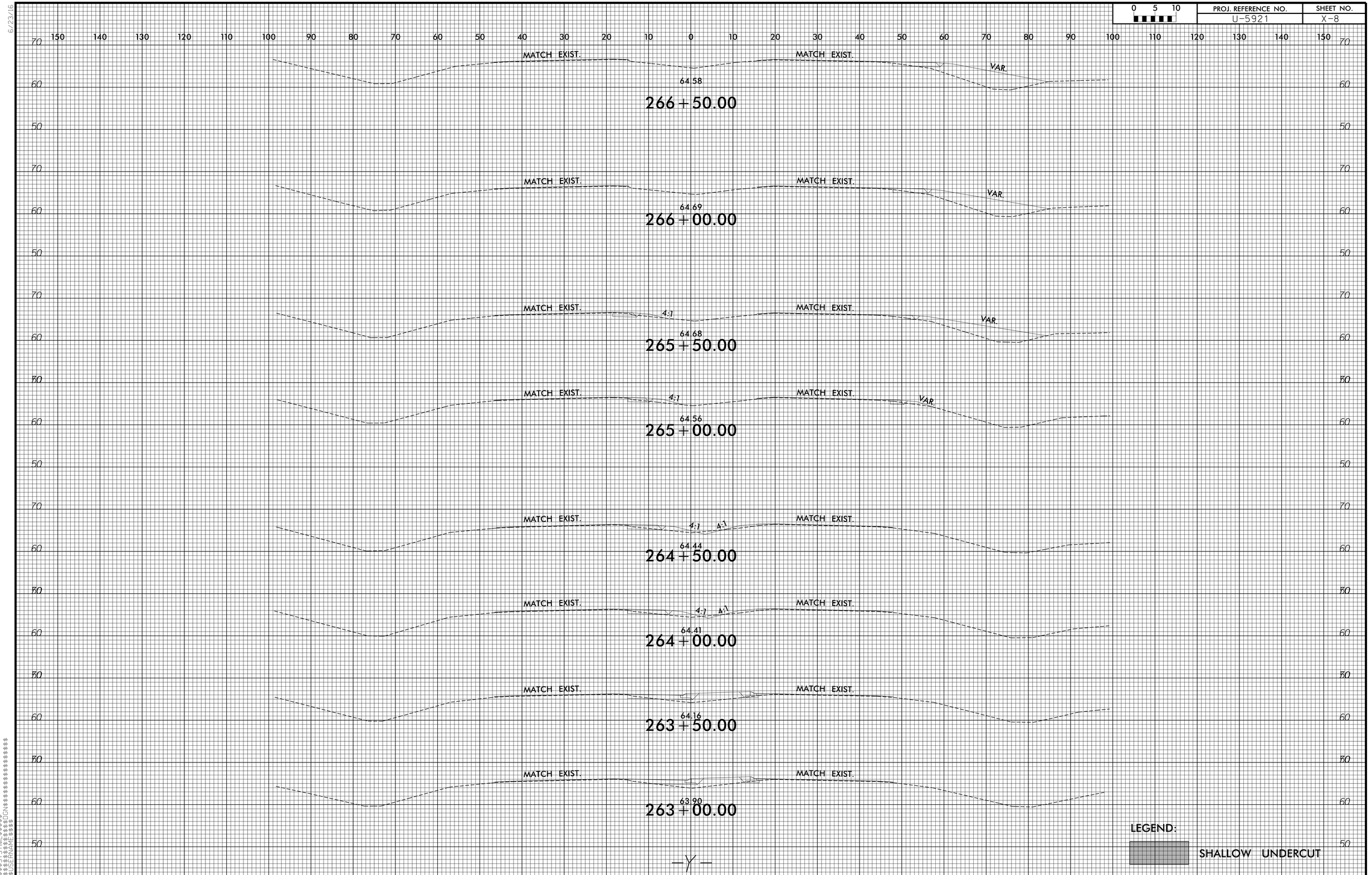

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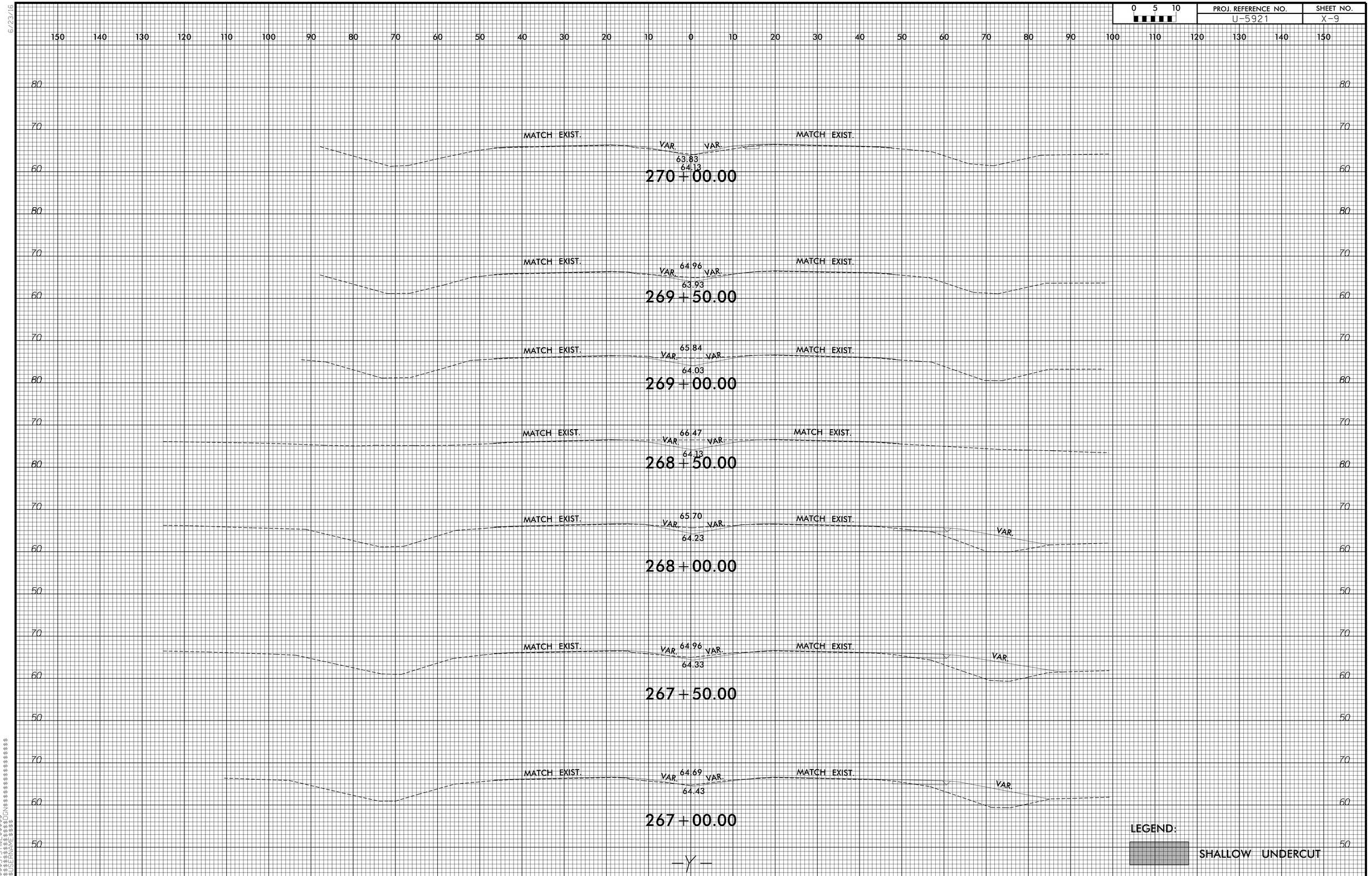

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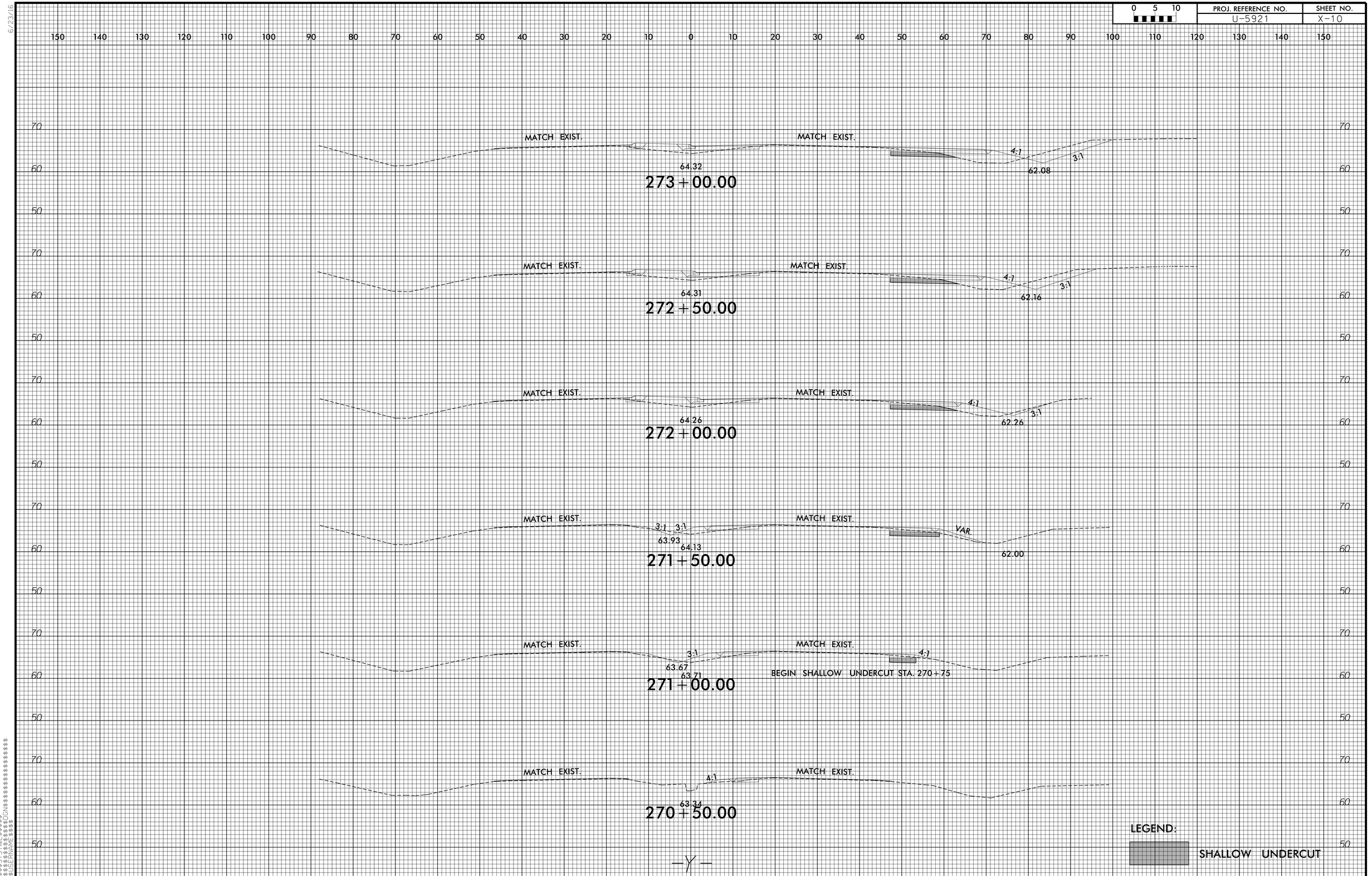

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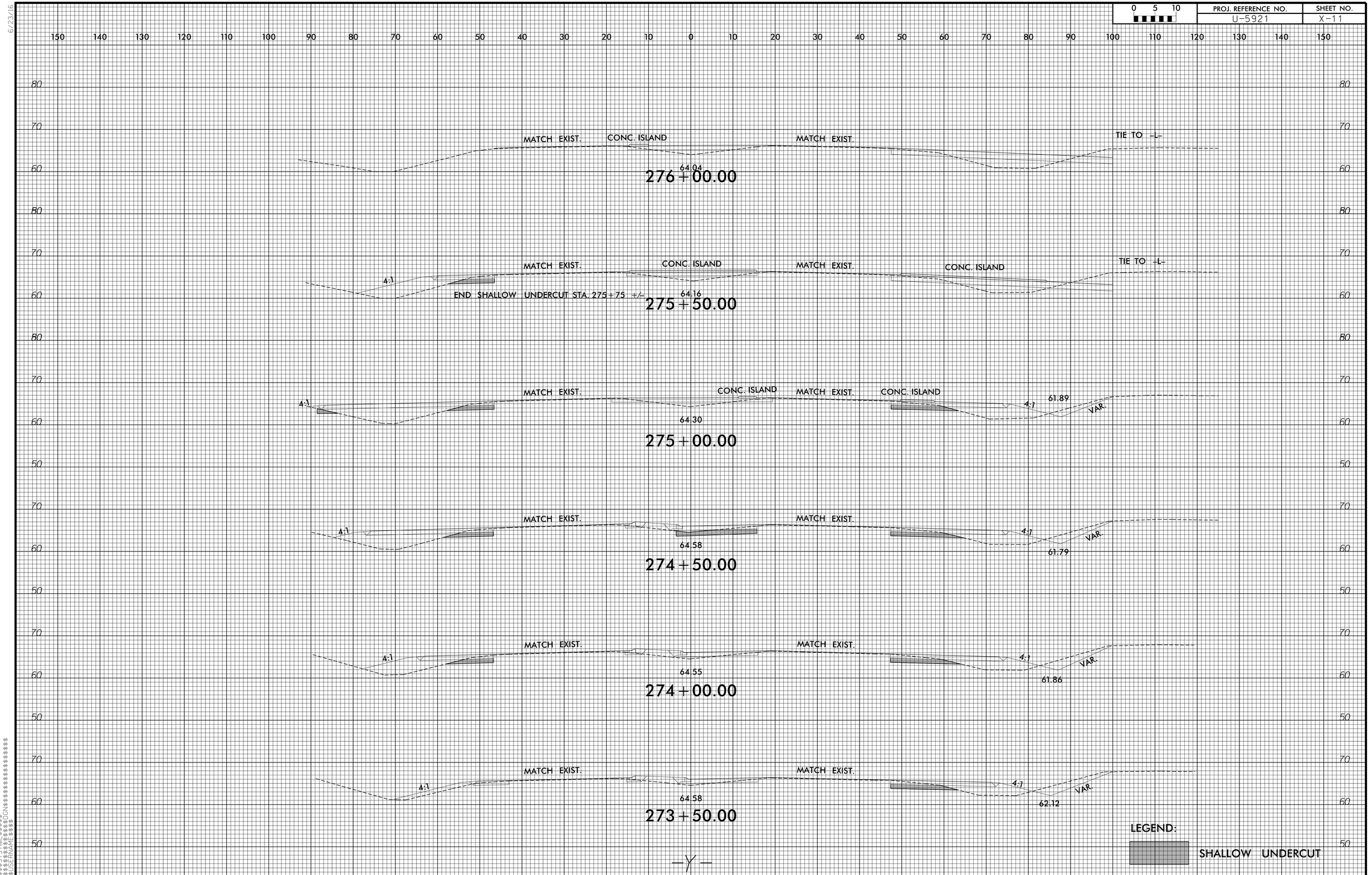

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PROJ. REFERENCE NO.	SHEET NO.
U-5921	X-12

LEGEND:

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
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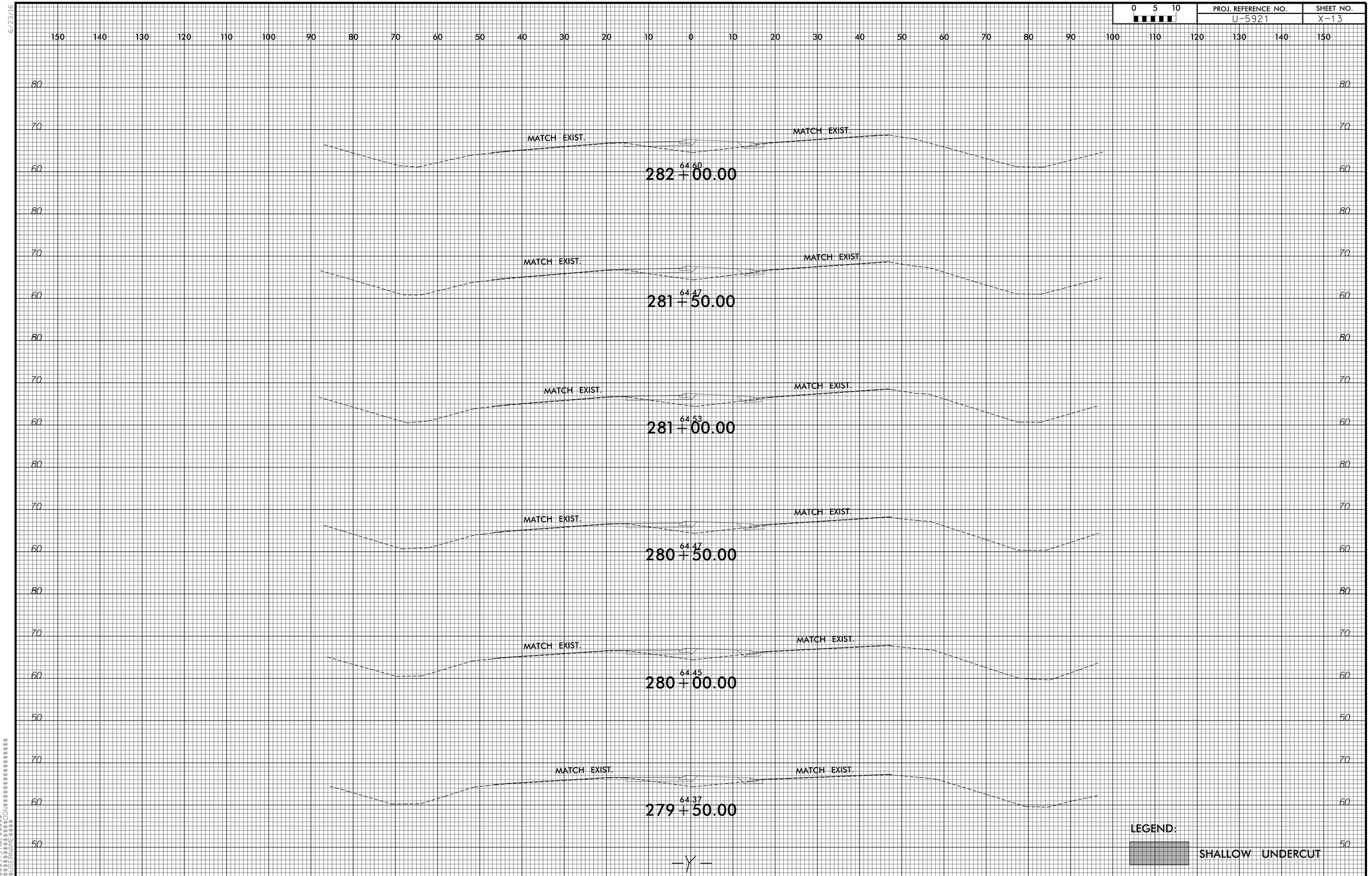

LEGEND:

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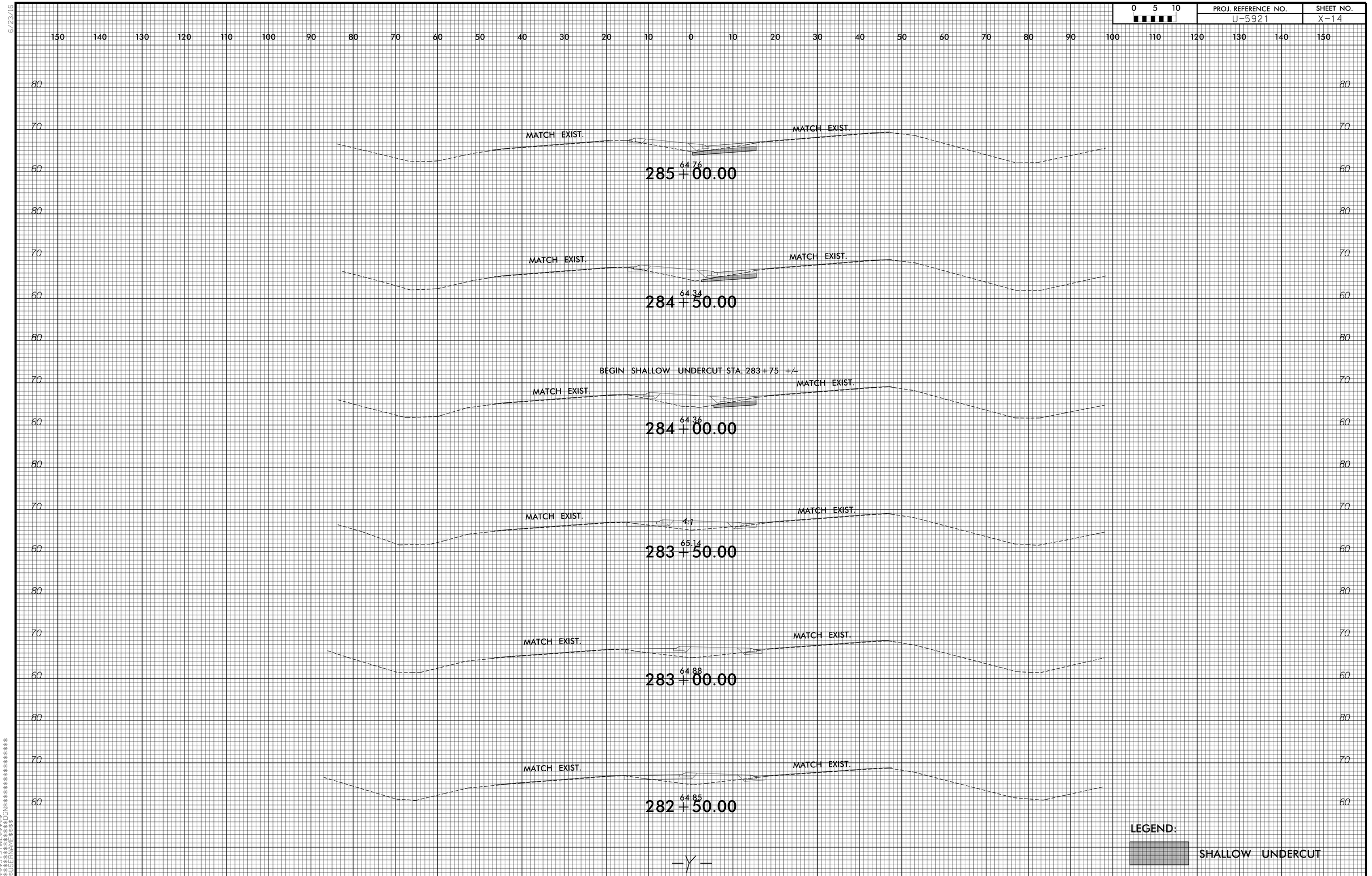
U-5921	X-14



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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
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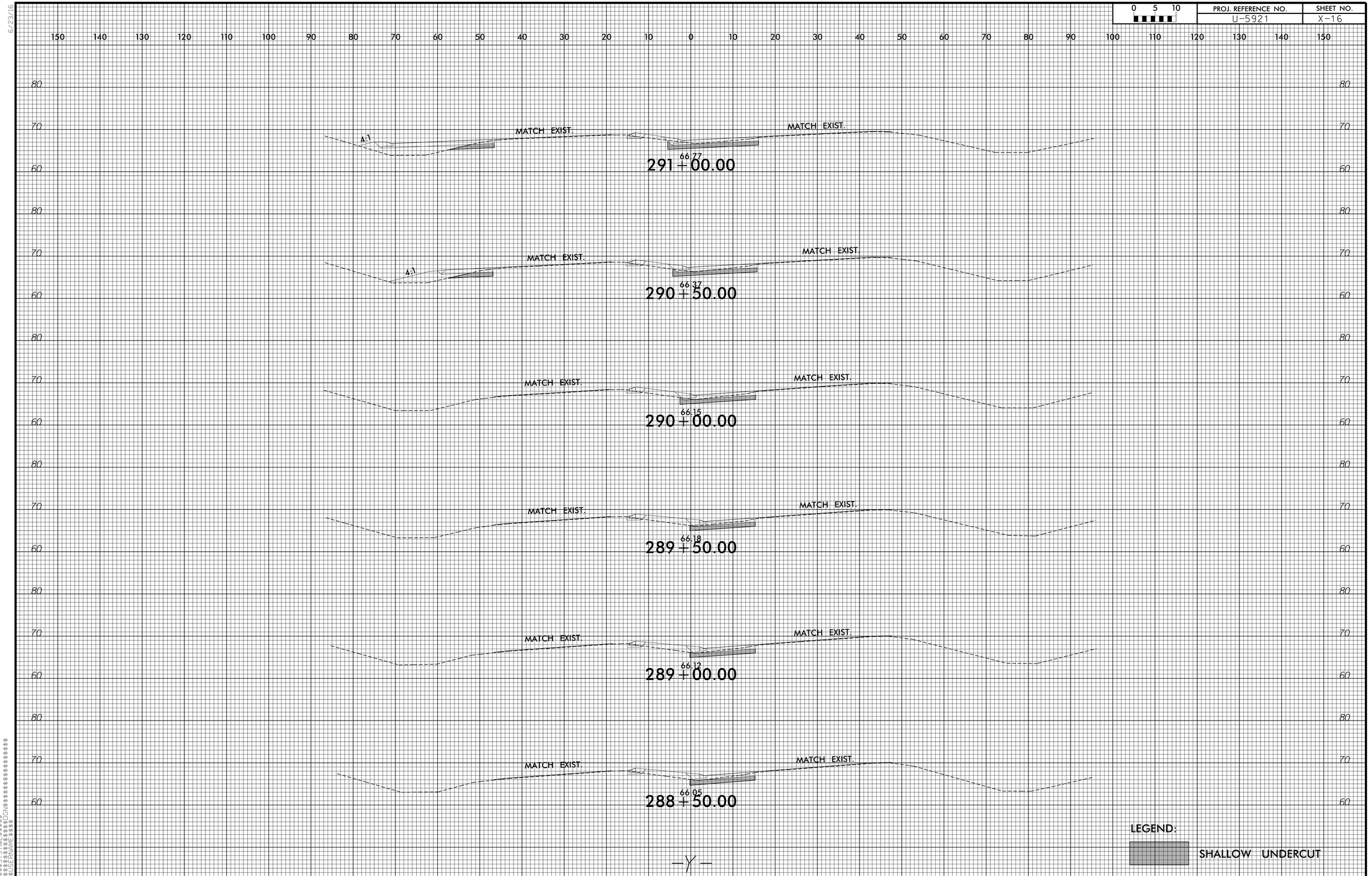

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