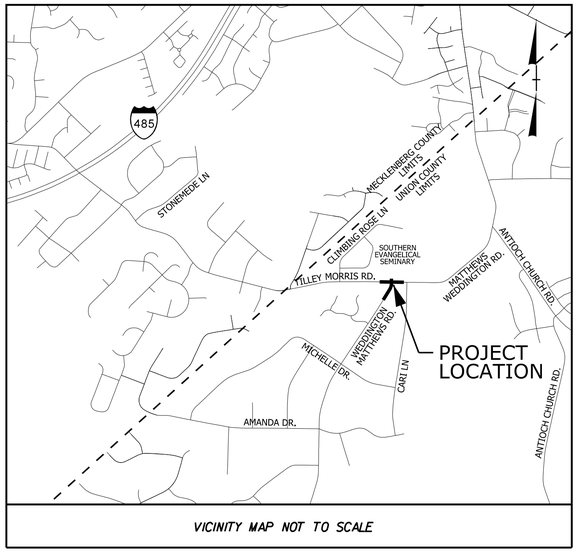
TIP PROJECT: U-6090

CONTRACT:

11/13/2017

See Sheet 1B For Conventional Symbols



R/W PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UNION COUNTY

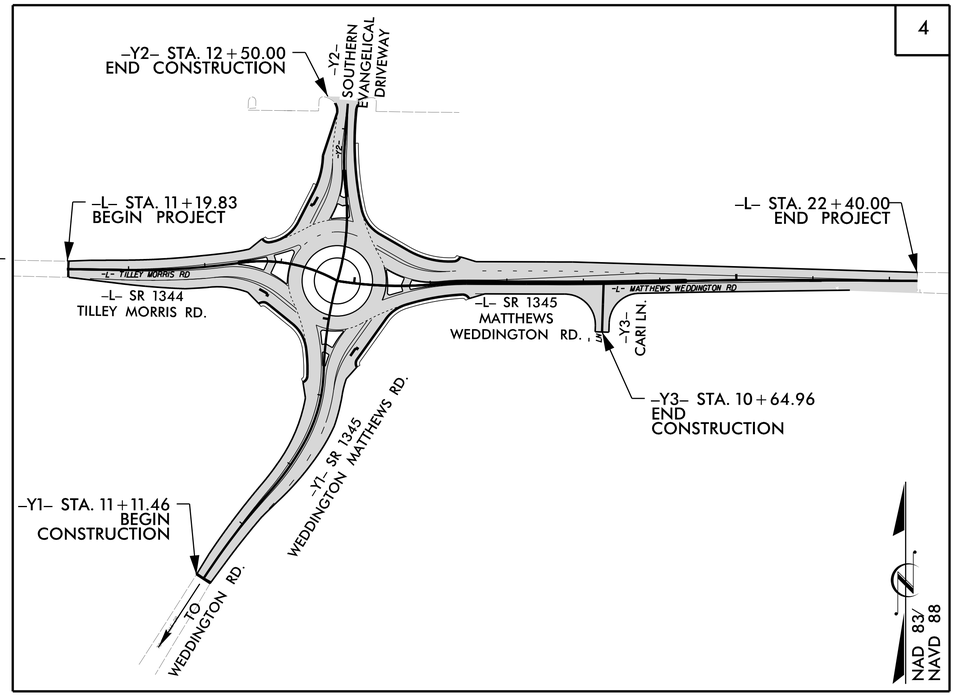
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6090	1	36

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
47884.1.1	STBGDA-1003(168)	PE
47884.2.1	STBGDA-1003(168)	R/W & UTIL
47884.3.1	STBGDA-1003(168)	CONST.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

LOCATION: *INTERSECTION OF TILLEY MORRIS RD. (SR–1345) AND WEDDINGTON MATTHEWS RD. (SR–1344)*

TYPE OF WORK: *GRADING, PAVEMENT REMOVAL, DRAINAGE, PAVING, CONCRETE ISLANDS, & THERMOPLASTIC PAVEMENT MARKINGS*



CLEARING ON THIS PROJECT SHALL BE PERFORMED BY THE LIMITS ESTABLISHED BY METHOD 3

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF UNION COUNTY

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2016 = 12,000 VPD
ADT 2040 = N/A
K = N/A
D = N/A
T = N/A
V = 45 MPH

FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR

* N/A TTST N/A DUAL
SUB REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U–6090 = 0.211 MILES
TOTAL LENGTH TIP PROJECT U–6090 = 0.211 MILES

PLANS PREPARED FOR THE NCDOT BY:

Kimley»Horn ©2019
NC LICENSE #F-0102
200 SOUTH TRYON STREET, SUITE 200
CHARLOTTE, NORTH CAROLINA 28202
PHONE: (704) 333-5131

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
03/21/2019

LETTING DATE:
09/2019

FRANK D. MASTERSON, P.E.
PROJECT ENGINEER

BEN J. VONDENBRINK
PROJECT DESIGN ENGINEER

RANDY BOWERS
NCDOT CONTACT

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION ·

PROJECT REFERENCE NO.	SHEET NO.
U-6090	1B

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

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

REVISIONS

11/13/2017

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- 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
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — 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:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite R/W Marker — RW
- Proposed Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

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.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	RW02C-1

SURVEY CONTROL SHEET

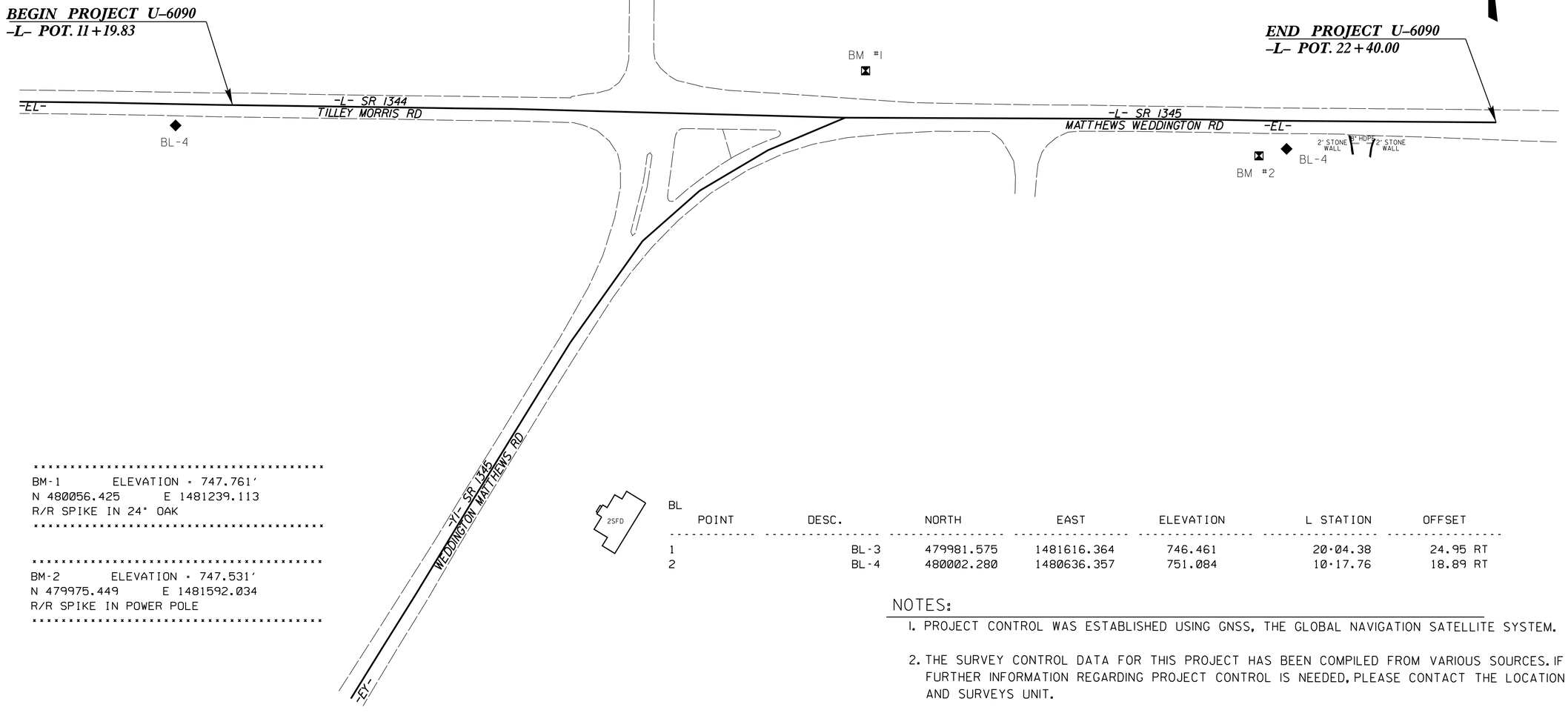
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U6090-1"
WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF
NORTHING: 480044.2668(ft) EASTING: 1481104.7118(ft)
ELEVATION: 746.178(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99985
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U6090" FROM -L- STATION 11+19.83 TO -L- STATION 22+36.18
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

GEOID G09NC
50 SCALE

NC GRID
NAD 83 NA 2011



****
BM-1 ELEVATION = 747.761'
N 480056.425 E 1481239.113
R/R SPIKE IN 24" OAK
****

****
BM-2 ELEVATION = 747.531'
N 479975.449 E 1481592.034
R/R SPIKE IN POWER POLE
****

BL

POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
1	BL-3	479981.575	1481616.364	746.461	20+04.38	24.95 RT
2	BL-4	480002.280	1480636.357	751.084	10+17.76	18.89 RT

NOTES:

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

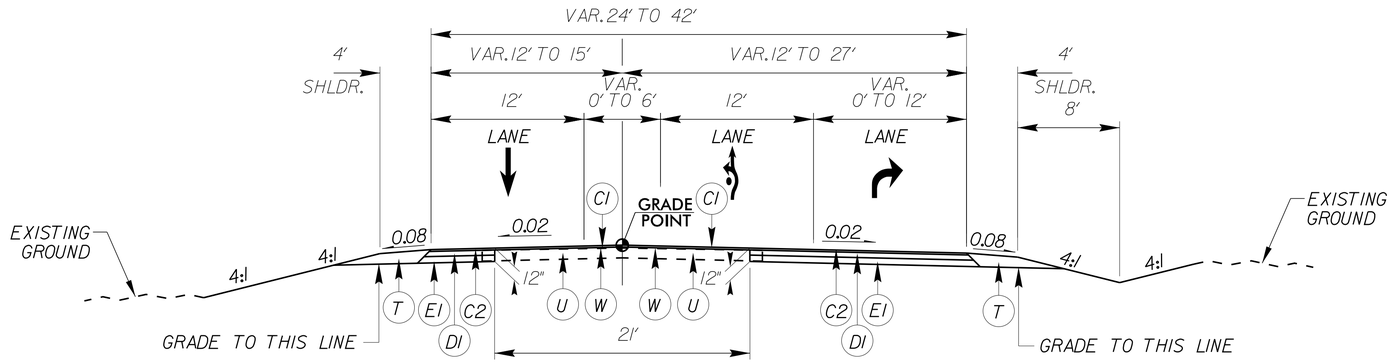
REVISIONS

3/7/2019 K:\CHL_PROJ\I036444 - U-6090 (Tilley Rd)\Roadway\Proj\U-6090_rdy_ss_lCdgn

REVISIONS

11/13/2017

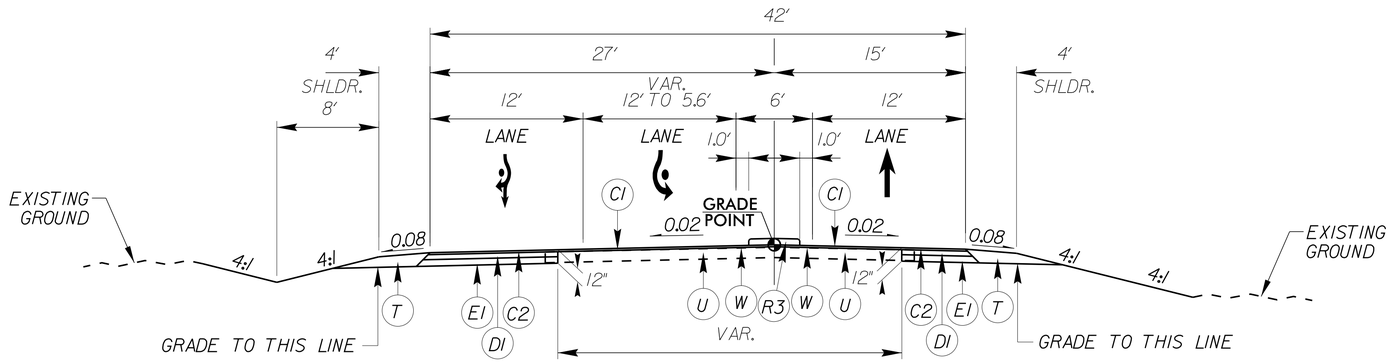
℄ -L- TILLEY MORRIS ROAD



TYPICAL SECTION NO. 1

-L- STA 11+19.83 TO STA 13+32.00

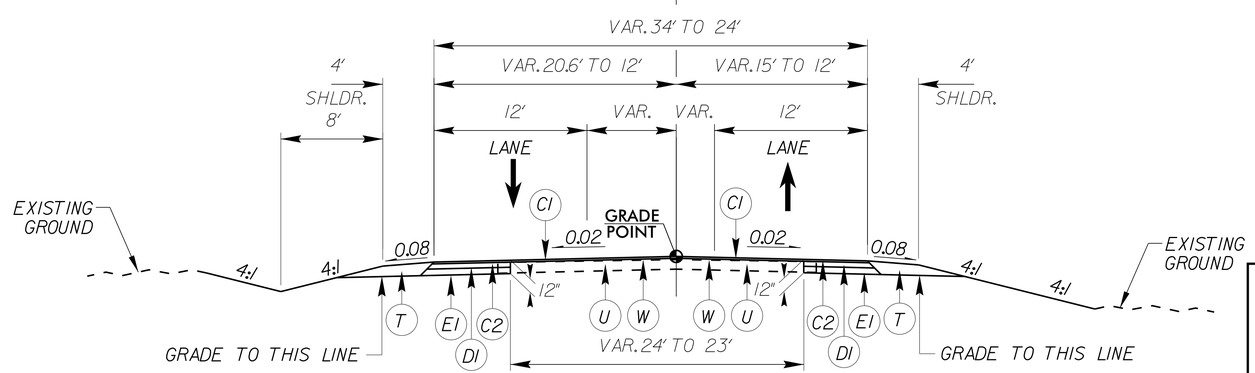
℄ -L- MATTHEWS-WEDDINGTON ROAD



TYPICAL SECTION NO. 2

-L- STA 16+14.00 TO STA 19+33.43

℄ -L- MATTHEWS-WEDDINGTON ROAD



TYPICAL SECTION NO. 3

-L- STA 19+33.43 TO STA 22+40.00

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	2A-1

ROADWAY DESIGN ENGINEER

PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

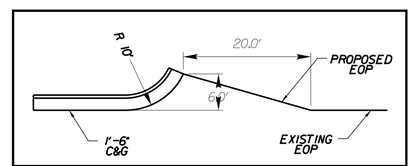
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

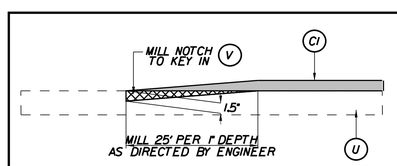
PAVEMENT SCHEDULE

A1	7" TRUCK MOUNTABLE CONCRETE APRON.CLASS AA
A2	7" TRUCK MOUNTABLE CONCRETE APRON W/ BLACK TINT.CLASS AA
CI	PROPOSED APPROX 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C. AT AN AVERAGE RATE OF 168 LBS. PER SQ.YD.
C2	PROPOSED APPROX 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C. AT AN AVERAGE RATE OF 168 LBS. PER SQ.YD. IN EACH OF TWO LAYERS.
C3	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C. AT AN AVERAGE RATE OF 110 LBS. PER SQ.YD.PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
DI	PROPOSED APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE I19.0C. AT AN AVERAGE RATE OF 456 LBS. PER SQ.YD.
D2	PROPOSED VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C. AT AN AVERAGE RATE OF 114 LBS. PER SQ.YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 2.5" OR GREATER THAN 4" IN DEPTH.
EI	PROPOSED APPROX. 5" ASPHALT CONCRETE BASE COURSE TYPE B25.0C. AT AN AVERAGE RATE OF 570 LBS. PER SQ.YD.
E2	PROPOSED VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C. AT AN AVERAGE RATE OF 114 LBS. PER SQ.YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 5.5" IN DEPTH.
RI	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER.CLASS AA
R3	5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)
R4	1'-6" CONCRETE CURB & GUTTER W/ BLACK TINT.CLASS AA
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	1.5" MILLING EXISTING PAVEMENT
W	WEDGING

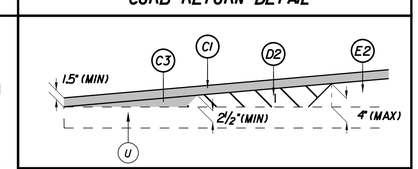
PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED



CURB RETURN DETAIL

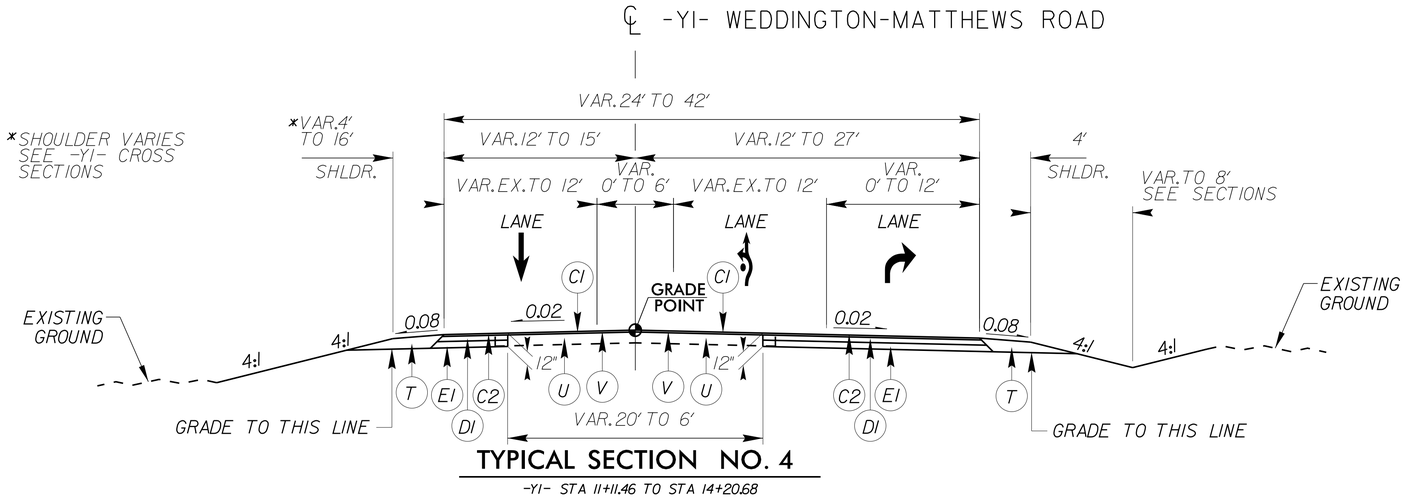


MILLING DETAIL



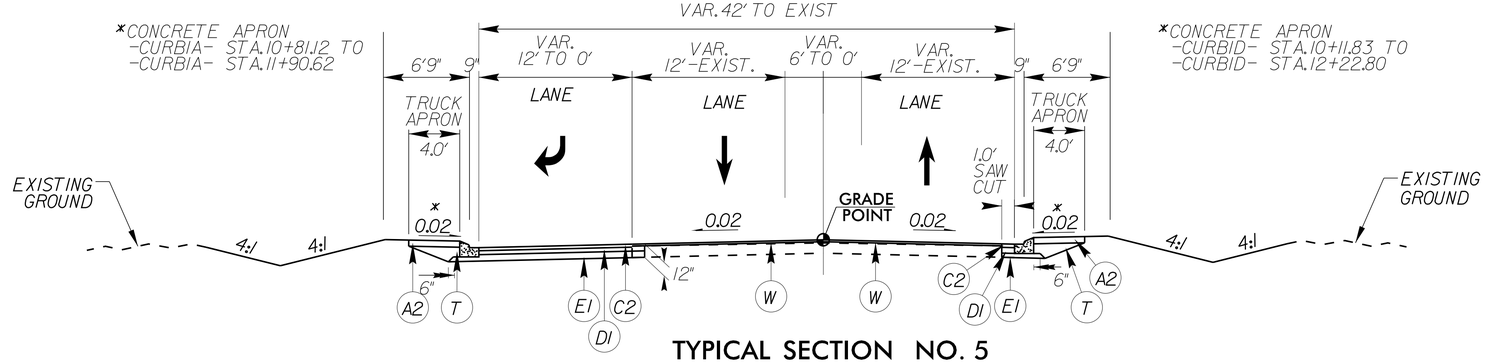
DETAIL W SHOWING METHOD OF WEDGING

REVISIONS



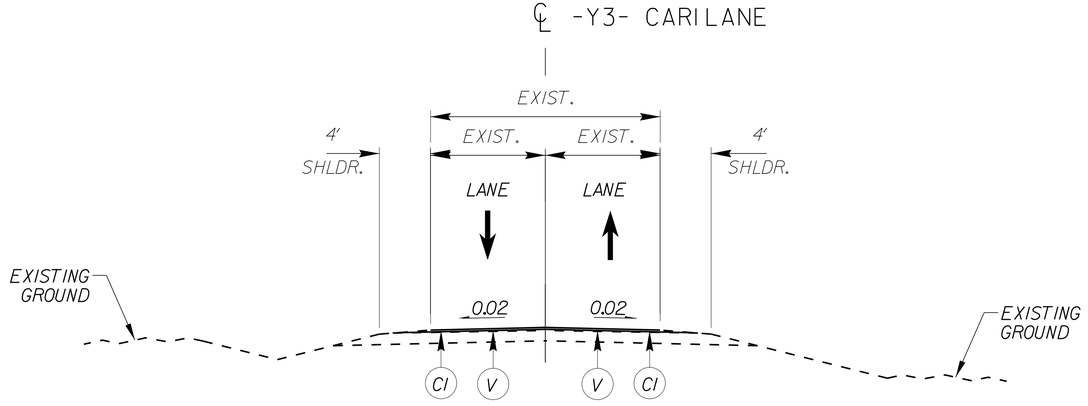
TYPICAL SECTION NO. 4

-Y1- STA 11+11.46 TO STA 14+20.68



TYPICAL SECTION NO. 5

-Y2- STA 11+50.00 TO STA 12+41.55



TYPICAL SECTION NO. 6

-Y3- STA 10+15.00 TO STA 10+64.96

11/13/2017

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	2A-2

ROADWAY DESIGN ENGINEER

PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE

AI	7" CONCRETE TRUCK APRON, CLASS AA
A2	7" CONCRETE TRUCK APRON W/ BLACK TINT, CLASS AA
CI	1.5" S9.5C
C2	3.0" S9.5C
C3	VAR. DEPTH S9.5C
DI	4" I19.0C
D2	VAR. DEPTH I19.0C
EI	5.0" B25.0C
E2	VAR. DEPTH B25.0C
RI	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER, CLASS AA
R3	5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)
R4	1'-6" CONCRETE CURB & GUTTER W/ BLACK TINT, CLASS AA
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	1.5" MILLING EXISTING PAVEMENT
W	WEDGING

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

REVISIONS

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	2A-3

ROADWAY DESIGN ENGINEER

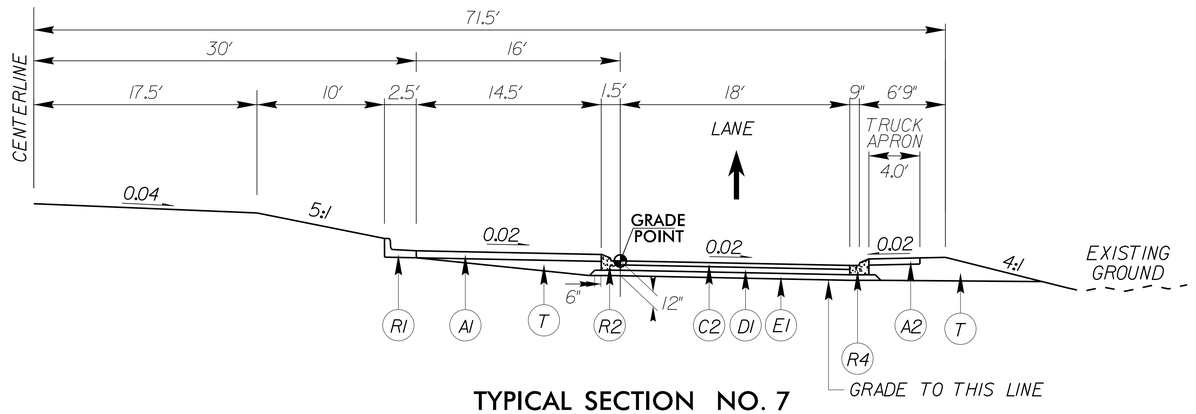
PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

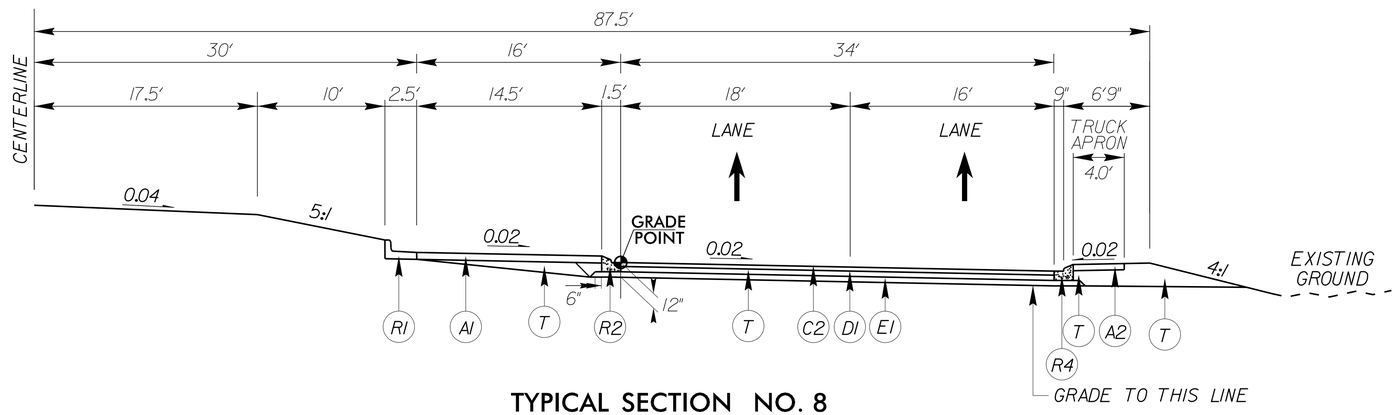
℄ -RBT- ROUNDABOUT



TYPICAL SECTION NO. 7

-RBT- STA 10+52.20 TO STA 10+80.62
-RBT- STA 11+27.22 TO STA 11+57.42
-RBT- STA 12+56.29 TO STA 12+89.03

℄ -RBT- ROUNDABOUT



TYPICAL SECTION NO. 8

-RBT- STA 10+00.00 TO STA 10+52.20
-RBT- STA 10+80.62 TO STA 11+27.22
-RBT- STA 11+57.42 TO STA 12+56.29

PAVEMENT SCHEDULE

A1	7" CONCRETE TRUCK APRON, CLASS AA
A2	7" CONCRETE TRUCK APRON W/ BLACK TINT, CLASS AA
C1	1.5" S9.5C
C2	3.0" S9.5C
C3	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C
E1	5.0" B25.0C
E2	VAR. DEPTH B25.0C
R1	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER, CLASS AA
R3	5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)
R4	1'-6" CONCRETE CURB & GUTTER W/ BLACK TINT, CLASS AA
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	1.5" MILLING EXISTING PAVEMENT
W	WEDGING

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

11/13/2017

PAVEMENT REMOVAL DETAIL SHEET

REVISIONS

11/13/2017

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RIGHT-OF-WAY REV.

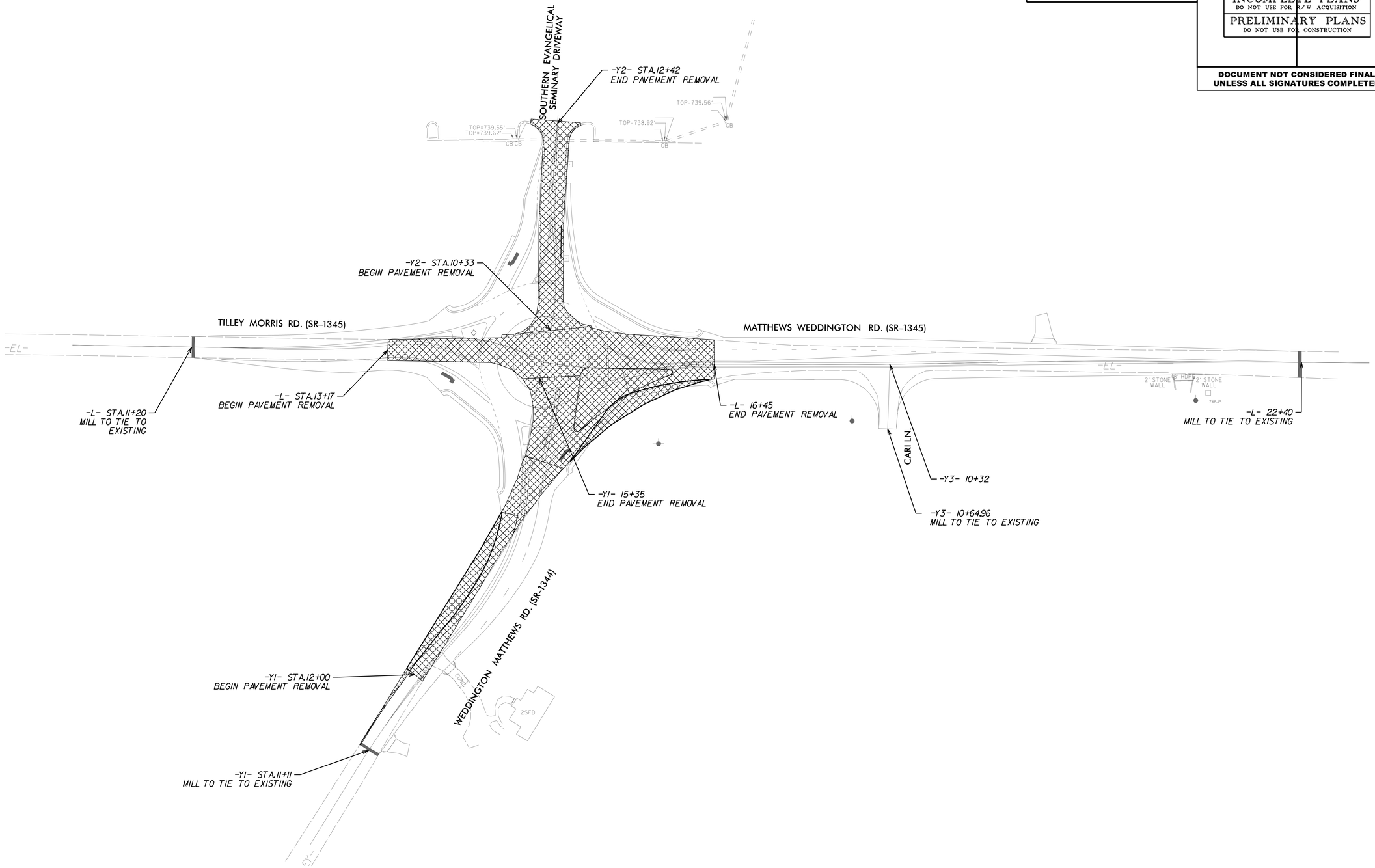
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	2B-1
R/W SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



ROUNDABOUT GEOMETRY SHEET

REVISIONS

11/13/2017

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	2-C

RW SHEET NO.

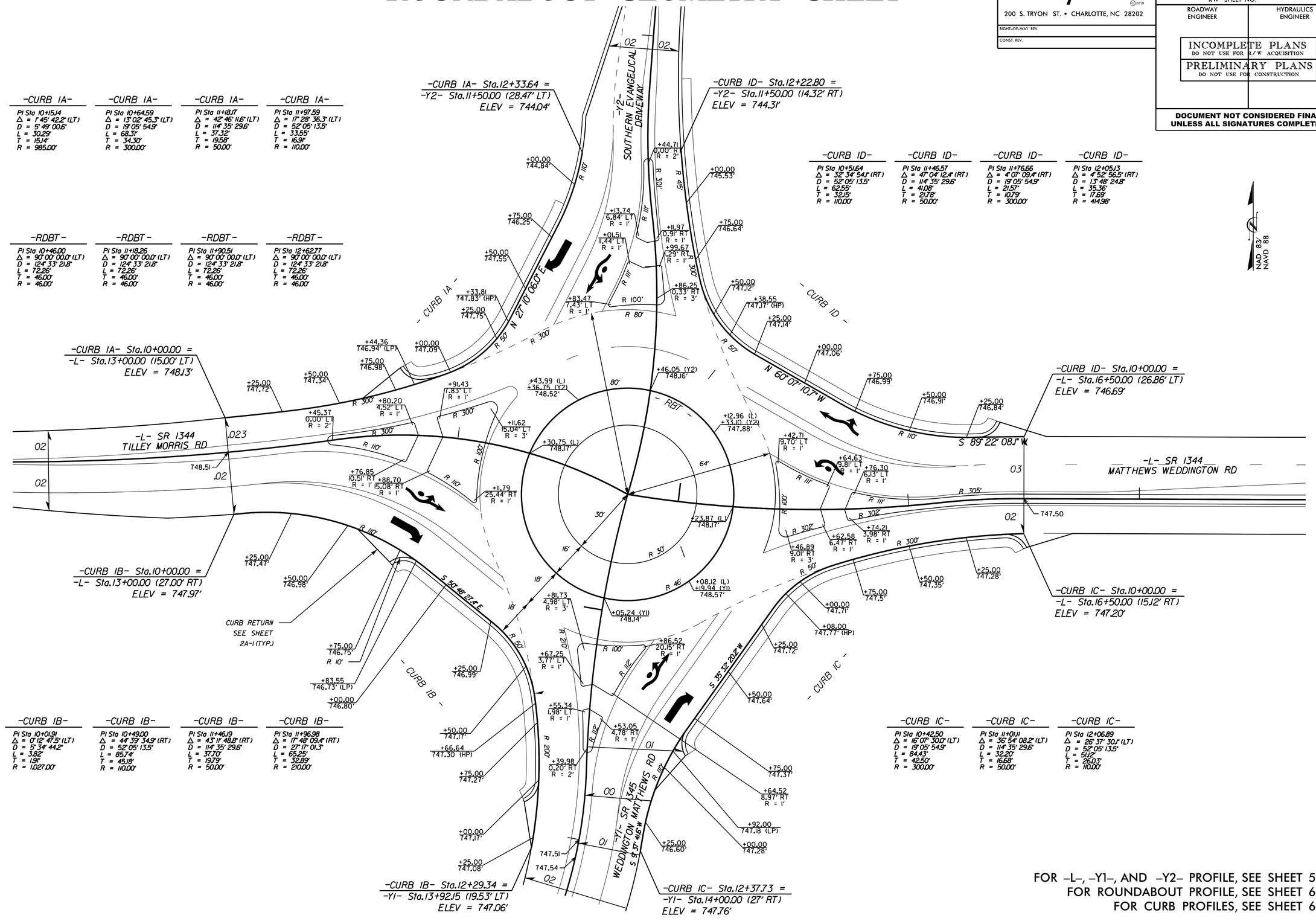
ROADWAY ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



-CURB IA-	-CURB IA-	-CURB IA-	-CURB IA-
PI Sta 10+15.14	PI Sta 10+64.59	PI Sta 11+18.17	PI Sta 11+97.59
Δ = 1° 45' 42.2" (LT)	Δ = 13° 02' 45.3" (LT)	Δ = 42° 46' 11.6" (LT)	Δ = 11° 28' 36.3" (LT)
D = 5° 49' 00.6"	D = 19° 05' 54.9"	D = 114° 35' 29.6"	D = 52° 05' 13.5"
L = 30.29'	L = 68.31'	L = 37.32'	L = 33.55'
T = 15.14'	T = 34.30'	T = 19.58'	T = 16.59'
R = 985.00'	R = 300.00'	R = 50.00'	R = 110.00'

-RDBT-	-RDBT-	-RDBT-	-RDBT-
PI Sta 10+46.00	PI Sta 11+18.26	PI Sta 11+90.51	PI Sta 12+62.77
Δ = 90° 00' 00.0" (LT)	Δ = 90° 00' 00.0" (LT)	Δ = 90° 00' 00.0" (LT)	Δ = 90° 00' 00.0" (LT)
D = 124° 33' 21.8"	D = 124° 33' 21.8"	D = 124° 33' 21.8"	D = 124° 33' 21.8"
L = 72.26'	L = 72.26'	L = 72.26'	L = 72.26'
T = 46.00'	T = 46.00'	T = 46.00'	T = 46.00'
R = 46.00'	R = 46.00'	R = 46.00'	R = 46.00'

-CURB ID-	-CURB ID-	-CURB ID-	-CURB ID-
PI Sta 10+51.64	PI Sta 11+46.57	PI Sta 11+76.66	PI Sta 12+05.13
Δ = 32° 34' 54.1" (RT)	Δ = 47° 04' 12.4" (RT)	Δ = 4° 07' 09.4" (RT)	Δ = 4° 52' 56.5" (RT)
D = 52° 05' 13.5"	D = 114° 35' 29.6"	D = 19° 05' 54.9"	D = 13° 48' 24.8"
L = 62.55'	L = 41.08'	L = 21.57'	L = 35.36'
T = 32.15'	T = 21.78'	T = 10.79'	T = 17.69'
R = 110.00'	R = 50.00'	R = 300.00'	R = 414.98'

-CURB IB-	-CURB IB-	-CURB IB-	-CURB IB-
PI Sta 10+01.91	PI Sta 10+49.00	PI Sta 11+46.19	PI Sta 11+96.98
Δ = 0° 12' 47.5" (LT)	Δ = 44° 39' 34.9" (RT)	Δ = 43° 11' 48.8" (RT)	Δ = 11° 48' 09.4" (RT)
D = 5° 34' 44.2"	D = 52° 05' 13.5"	D = 114° 35' 29.6"	D = 27° 17' 01.3"
L = 3.82'	L = 85.74'	L = 37.70'	L = 65.25'
T = 1.91'	T = 45.18'	T = 19.75'	T = 32.89'
R = 1027.00'	R = 110.00'	R = 50.00'	R = 210.00'

-CURB IC-	-CURB IC-	-CURB IC-
PI Sta 10+42.50	PI Sta 11+01.11	PI Sta 12+06.89
Δ = 16° 07' 30.0" (LT)	Δ = 36° 54' 08.2" (LT)	Δ = 26° 37' 30.1" (LT)
D = 19° 05' 54.9"	D = 114° 35' 29.6"	D = 52° 05' 13.5"
L = 84.43'	L = 32.20'	L = 51.12'
T = 42.50'	T = 16.58'	T = 26.03'
R = 300.00'	R = 50.00'	R = 110.00'

FOR –L–, –Y1–, AND –Y2– PROFILE, SEE SHEET 5
FOR ROUNDABOUT PROFILE, SEE SHEET 6
FOR CURB PROFILES, SEE SHEET 6

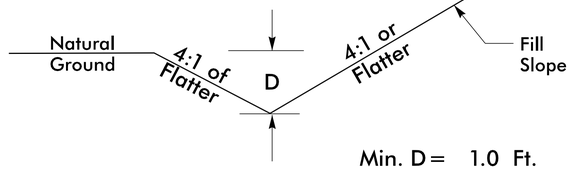
5/14/99

REVISIONS

DETAIL 1

SPECIAL LATERAL 'V' DITCH

(Not to Scale)

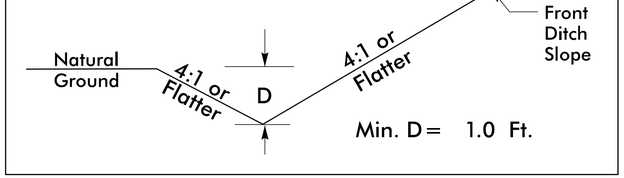


FROM STA. 11+19.83 TO STA. 13+00.00 –L– (RT)
FROM STA. 16+50.00 TO STA. 16+75.00 –L– (RT)
FROM STA. 19+00.00 TO STA. 20+50.00 –L– (RT)
FROM STA. 11+12.92 TO STA. 11+90.00 –Y1– (LT)
FROM STA. 11+43.18 TO STA. 14+00.00 –Y1– (RT)
FROM STA. 10+47.87 TO STA. 11+90.00 –Y2– (LT)

DETAIL 2

SPECIAL CUT DITCH

(Not to Scale)



FROM STA. 20+50.00 TO STA. 21+11.67 –L– (RT)
FROM STA. 12+00.00 TO STA. 14+00.00 –Y1– (LT)

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200 S. TRYON ST. • CHARLOTTE, NC 28202

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	2D-1
RW SHEET NO.	

ROADWAY ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

10/13/2017

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	3B-1
R/W SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD^2
L	11+19.83	14+28.00	LT/RT	69
L	14+28.00	16+50.00	CL	540
L	16+50.00	22+40.00	LT/RT	67
Y1	11+11.00	12+00.00	LT/RT	30
Y1	12+00.00	15+35.00	CL	1570
Y2	10+48.00	11+42.00	CL	290
Y2	10+42.00	12+42.00	LT/RT	22
Y3	10+32.00	10+64.96	LT/RT	7
TOTAL:				2595
SAY:				2600

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT+%	BORROW	WASTE
–L– STA 11+19.83 TO STA 22+36.18	1230	763	76	0	1154
–Y1– STA 11+11.46 TO STA 15+51.26	190	696	913	1419	696
–Y2– STA 10+00.00 TO STA 12+15.47	100	71	23	0	77
–Y3– STA 10+00.00 TO STA 10+64.95	31	40	31	40	40
–RDBT(L)– STA 13+50.00 TO STA 16+50.00	1	2043	1924	3966	2043
SUBTOTALS	1552	3613	2967	5028	4010
TOP SOIL 5%				252	
PROJECT TOTALS	1552	3613	2967	5280	
GRAND TOTALS	1552			5280	
SAY	1800			5800	

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

11/13/2021

REVISIONS

11/13/2017

-Y2-
PI Sta 10+61.62
△ = 23° 12' 55.2" (LT)
D = 19° 05' 54.9"
L = 121.56'
T = 61.62'
R = 300.00'

-Y2-
PI Sta 11+50.18
△ = 10° 47' 36.6" (RT)
D = 18° 54' 34.2"
L = 57.08'
T = 28.62'
R = 303.00'

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	4
R/W SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83/ NAVD 88

BEGIN PROJECT U-6090
-L- Sta.11+19.83

BEGIN CONSTRUCTION
-Y1- Sta.11+11.46

END CONSTRUCTION
-Y2- Sta.12+44.00

-Y2- PT Sta. 11+78.64
N 4° 16' 50.9" E

-Y2- PRC Sta. 11+21.56

RELOCATE WATERLINE. SEE WATERLINE PLAN FOR DETAILS

TIE EQUALITY
-L- Sta.14+77.86 =
-Y1- Sta.15+51.26
-Y2- Sta.10+00.00

END CONSTRUCTION
-Y3- Sta.10+64.96

TIE EQUALITY
-L- Sta.18+26.51 =
-Y3- Sta.10+00.00

END PROJECT U-6090
-L- Sta.22+40.00

-L- POT Sta. 10+00.00

-L- PT Sta. 13+47.54

-L- PC Sta. 11+91.59

-L- PC Sta. 17+50.89

-L- PT Sta. 18+91.16

-L- PC Sta. 19+91.96

-L- PT Sta. 20+90.96

-Y1- POT Sta. 10+00.00

-Y1- PRC Sta. 14+30.83

-Y1- PCC Sta. 13+35.82

-Y1- PRC Sta. 12+56.54

-Y1- PC Sta. 10+84.46

-Y3- CARLIN

-L- TILLEY MORRIS RD

-L- MATTHEWS WEDDINGTON RD

-Y1- MATTHEWS WEDDINGTON RD

-L- PT Sta. 16+47.34

-L- PRC Sta. 16+13.33

-Y1-
PI Sta 11+70.71
△ = 9° 51' 34.2" (RT)
D = 5° 43' 46.5"
L = 172.08'
T = 86.25'
R = 1,000.00'

-Y1-
PI Sta 12+96.35
△ = 12° 58' 44.7" (LT)
D = 16° 22' 12.8"
L = 79.28'
T = 39.81'
R = 350.00'

-Y1-
PI Sta 13+84.21
△ = 26° 48' 50.5" (LT)
D = 28° 13' 28.3"
L = 95.00'
T = 48.39'
R = 203.00'

-Y1-
PI Sta 14+91.34
△ = 13° 48' 03.0" (RT)
D = 11° 27' 33.0"
L = 120.43'
T = 60.51'
R = 500.00'

-L-
PI Sta 12+69.73
△ = 8° 56' 07.4" (LT)
D = 5° 43' 46.5"
L = 155.95'
T = 78.13'
R = 1,000.00'

-L-
PI Sta 14+15.12
△ = 37° 19' 33.1" (RT)
D = 28° 38' 52.4"
L = 130.29'
T = 67.55'
R = 200.00'

-L-
PI Sta 15+46.01
△ = 15° 31' 26.7" (LT)
D = 11° 27' 33.0"
L = 135.47'
T = 68.15'
R = 500.00'

-L-
PI Sta 16+30.35
△ = 6° 25' 49.8" (RT)
D = 18° 54' 34.2"
L = 34.01'
T = 17.02'
R = 303.00'

-L-
PI Sta 18+06.02
△ = 1° 15' 48.9" (LT)
D = 1° 08' 45.3"
L = 110.27'
T = 55.14'
R = 5,000.00'

-L-
PI Sta 20+26.06
△ = 1° 29' 14.7" (RT)
D = 1° 08' 45.3"
L = 129.80'
T = 64.90'
R = 5,000.00'

RADII DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED

SEE SHEET 5 FOR -L- PROFILE
SEE SHEET 5 FOR -Y1- PROFILE
SEE SHEET 5 FOR -Y2- PROFILE
SEE SHEET 6 FOR -RDBT- PROFILE

SEE SHEET 2B-1 FOR PAVEMENT REMOVAL

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

① STRATFORD HALL HOMEOWNERS ASSOCIATION
DB 3873 PG 839
PC 1FILE 758

② SOUTHERN EVANGELICAL SEMINARY INC.
DB 4496 PG 003
PC 1FILE 91

③ ALAN T. & CYNTHIA S. YOUNTS
PC A PG 156B

④ MARILYN GENE & KENNETH R. MOORE
DB 1120 PG 564
PC A PG 156B

⑤ JAMES STEWART & SUSAN REICHENBACH
DB 1359 PG 787
PC A PG 156B

⑥ PAUL E. & SUE M. PATTON
DB 1338 PG 281

SAMUEL J. CORNELIUS JR.
DB 6698 PG 189
PC 1FILE 91

ROBERT P. & BERNADETTE J. GUNST
DB 4475 PG 431
PC 1FILE 91

ROSE HILL HOMEOWNERS ASSOCIATION INC.
DB 5008 PG 118
PC 1FILE 91

ROBERT J. & BRANDI A. FORD
DB 6866 PG 188
PC A PG 156B

JOE W. WAGNER
DB 3137 PG 200
PC A PG 156B

SOUTHERN EVANGELICAL SEMINARY INC.
DB 4496 PG 003
PC 1FILE 91

SPECIAL LATERAL 'V' DITCH SEE DETAIL 1, SHEET 2D-1

OUTLET PROTECTION 4' MONOLITHIC ISLAND

RETAIN EXST. 24" R 20' 12+44.00 26.74 LT

10' TRANSITION TO EXST.CURB SEE SHEET 2A-1 (TYP.)

RETAIN EXST. CB 18"

12+44.00 23.13 RT

10' TRANSITION TO EXST.CURB SEE SHEET 2A-1 (TYP.)

150' MEDIAN TAPER

150' RIGHT TURN TAPER

160' STORAGE

150' LEFT TURN STORAGE

200' BAY TAPER

454' TAPER

100' STORAGE

50' TAPER

OUTLET PROTECTION W/CLASS B RIP RAP EST 3 TONS EST 11 SY GFD TYP.

SHOULDER VARIES STA 12+00-14+00 SEE -Y1- SECTIONS

SPECIAL CUT DITCH, SEE DETAIL 2 SHEET 2D-1

SPECIAL LATERAL 'V' DITCH SEE DETAIL 1, SHEET 2D-1

DO NOT DISTURB FENCE

TRANSITION BACKSLOPE TO 3:1 IN AREA OF CROSS PIPE TO AVOID FENCE IMPACT

15" RCP-III

18" RCP-V

REMOVE EXST. 18"

OUTLET PROTECTION W/CLASS B RIP RAP EST 2 TONS EST 7 SY GFD

CURB RETURN SEE SHEET 2A-1 (TYP.)

OUTLET PROTECTION

SPECIAL LATERAL 'V' DITCH SEE DETAIL 1, SHEET 2D-1

OUTLET PROTECTION W/CLASS B RIP RAP EST 3 TONS EST 11 SY GFD TYP.

AVOID SIGN R 40'

SPECIAL LATERAL 'V' DITCH SEE DETAIL 1, SHEET 2D-1

BEGIN INLAY END SAWCUT STA.21+48.48

15" RCP-III

28' INC.

22' INC.

21' INC.

2.5' INC.

4' INC.

BM #1 N=480056.425 E=1481239.113 ELEV.=747.76' R/R SPIKE IN 24" OAK

BM #2 N=479975.449 E=1481592.034 ELEV.=741.93' R/R SPIKE IN POWER POLE

BL-3 N=479981.573 E=1481616.364 ELEV.=746.46'

BL-4 N=480002.280 E=1480636.357 ELEV.=751.084'

S 89°02' 34.1" E

N 88°57' 08.1" E

S 89°47' 03.0" E

S 89°33' 37.2" E

N 84°16' 00" W 225.00'

N 89°13' 27" W 210.28'

N 53°48' 40" W 270.00'

N 53°39' 17" W 270.65'

REVISIONS

11/13/2017

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RIGHT-OF-WAY REV.

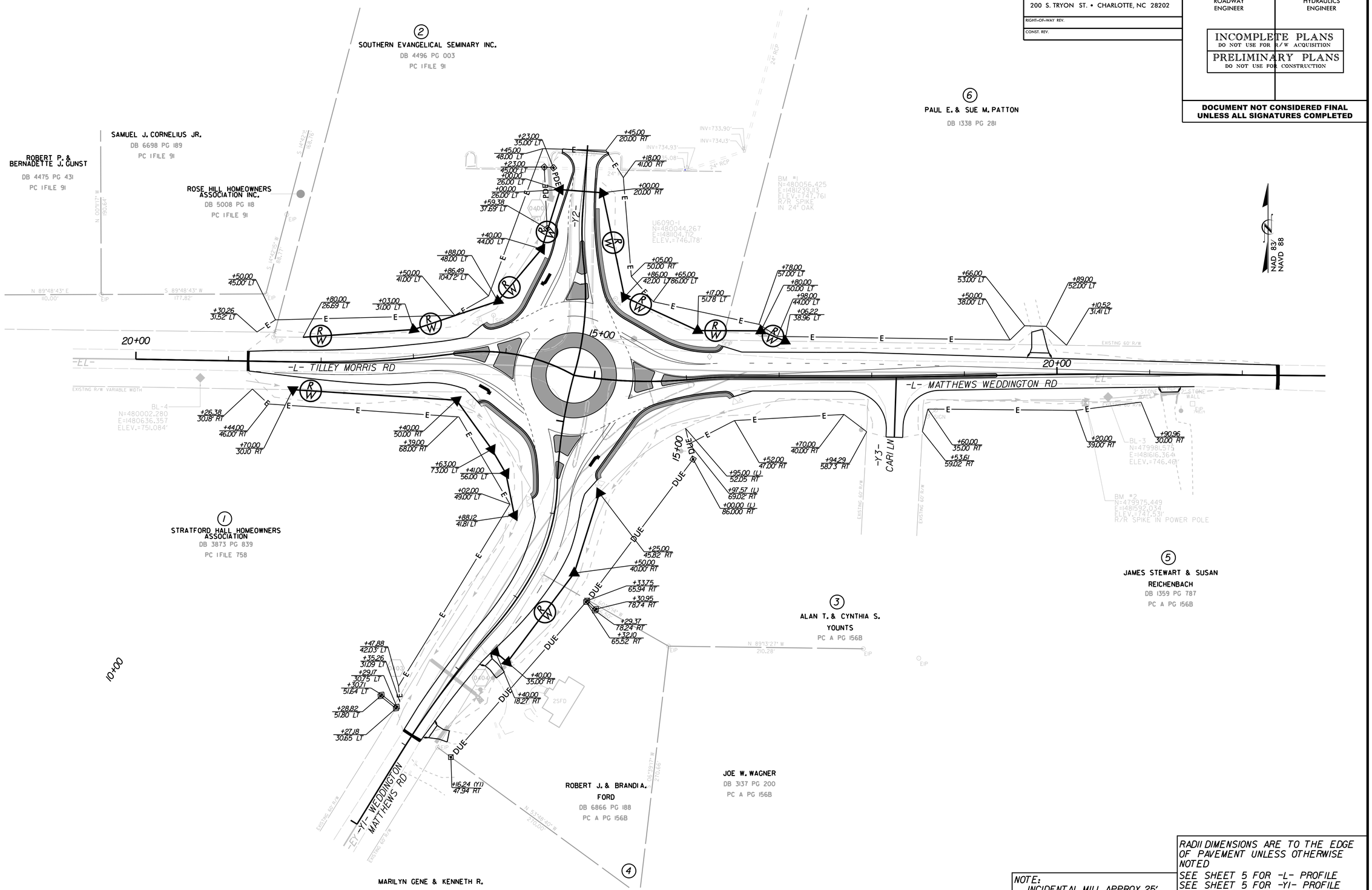
CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	4A
R/W SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



RADII DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED

SEE SHEET 5 FOR -L- PROFILE
SEE SHEET 5 FOR -Y1- PROFILE
SEE SHEET 5 FOR -Y2- PROFILE
SEE SHEET 6 FOR -RDBT- PROFILE

SEE SHEET 2B-1 FOR PAVEMENT REMOVAL

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

REVISIONS

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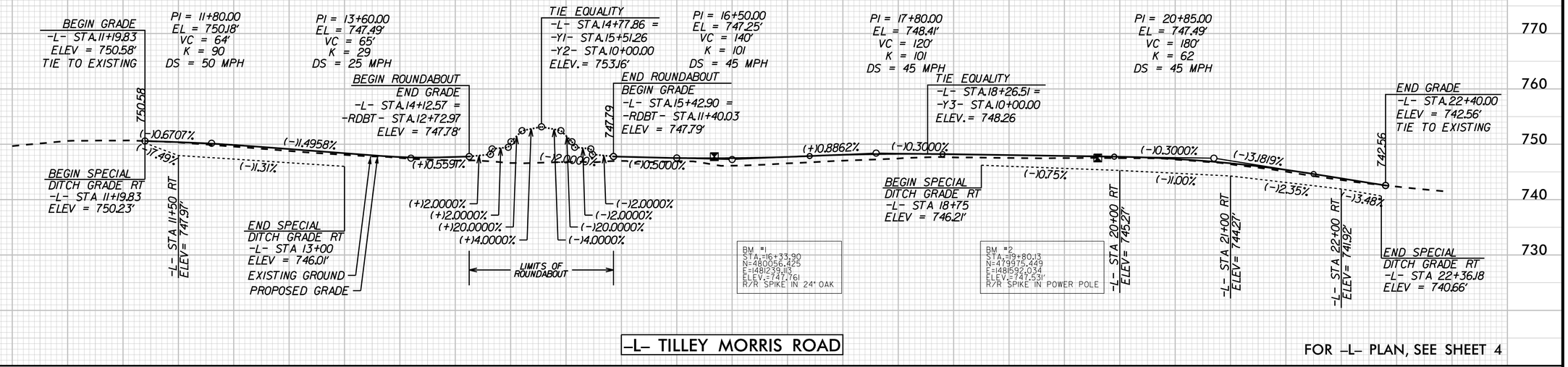
RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

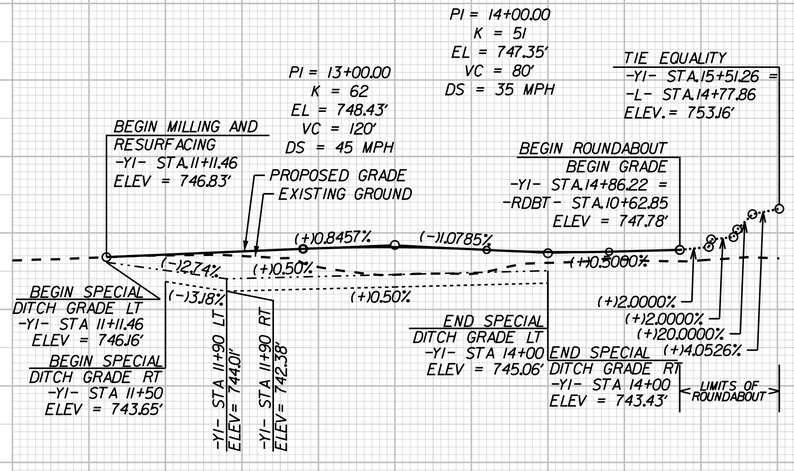
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



-L- TILLEY MORRIS ROAD

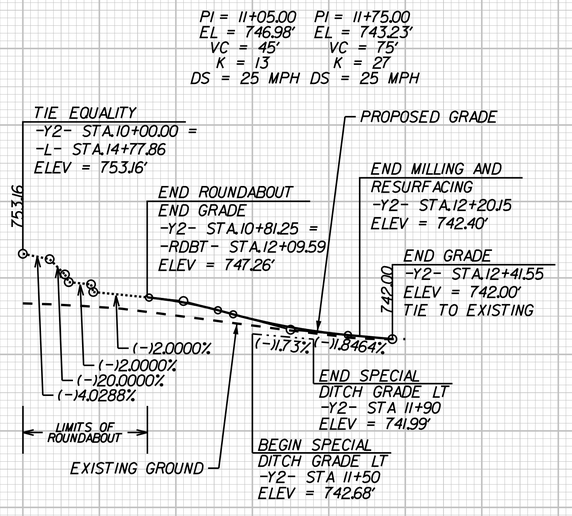
FOR -L- PLAN, SEE SHEET 4

FOR -Y1- PLAN, SEE SHEET 4



-Y1- WEDDINGTON MATTHEWS ROAD

FOR -Y2- PLAN, SEE SHEET 4



-Y2- SOUTHERN EVANGELICAL DRIVEWAY

11/13/2017

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	6

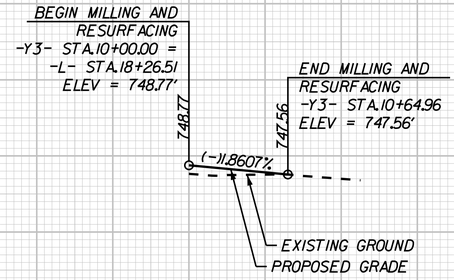
ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

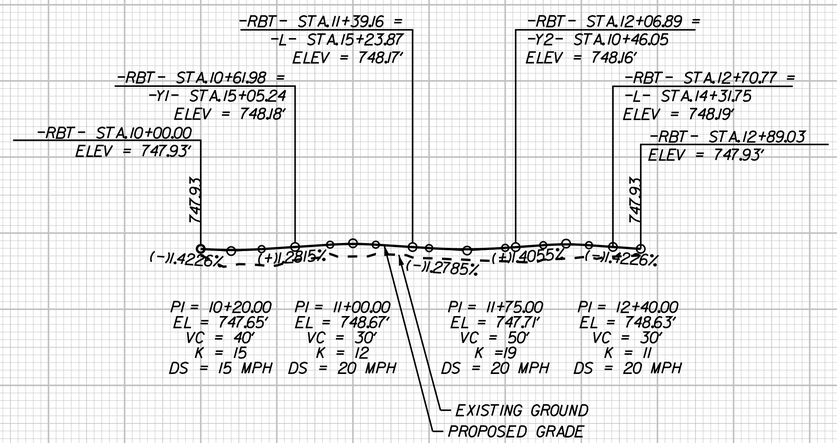


760 750 740

-Y3- CARI LANE

10 11

FOR -Y3- PLAN, SEE SHEET 4



760 750 740 730

-RDBT-

10 11 12 13

FOR -RDBT- PLAN, SEE SHEET 4

11/13/2017

TIP PROJECT: U-6090

CONTRACT:

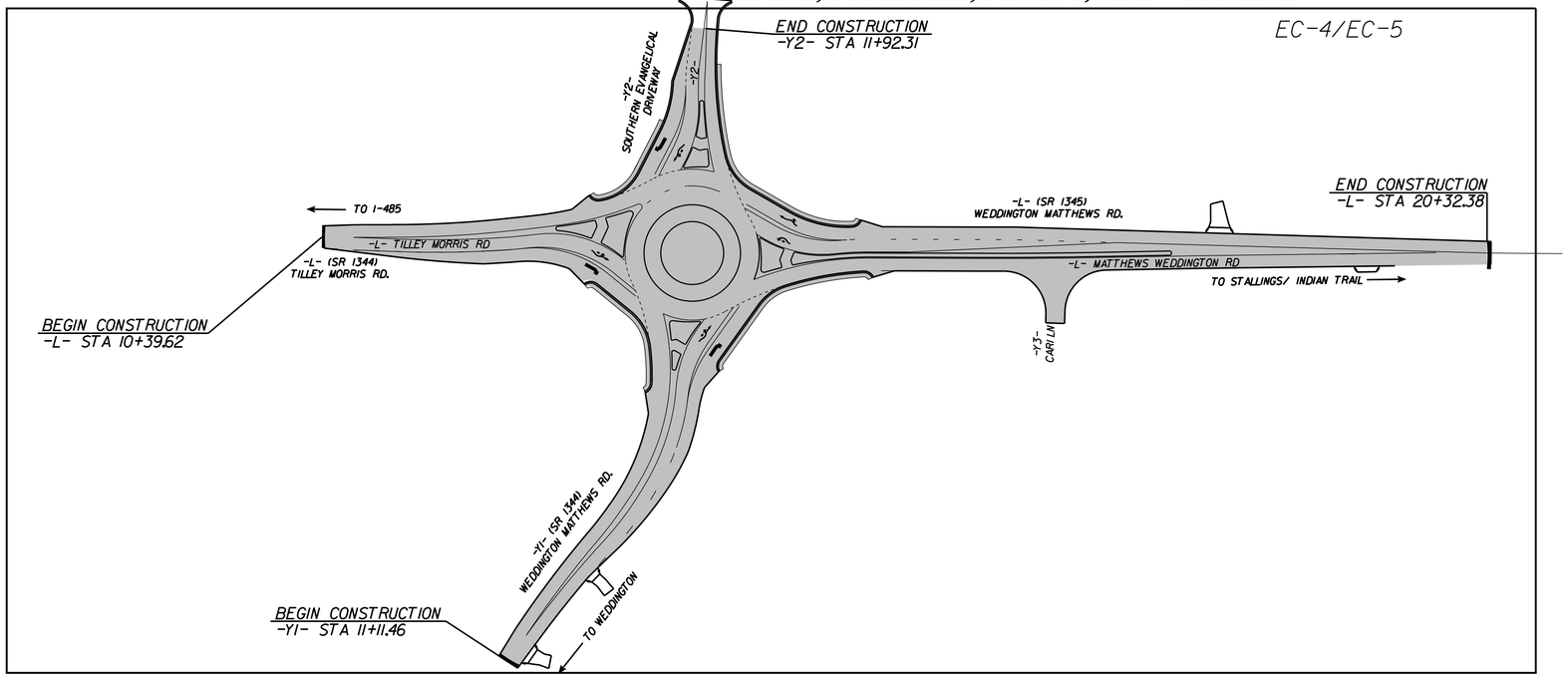
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

UNION COUNTY

LOCATION: ***INTERSECTION OF SR 1344 (TILLEY MORRIS ROAD), SR 1345 (WEDDINGTON MATTHEWS ROAD) AND THE SOUTHERN EVANGELICAL DRIVEWAY***

TYPE OF WORK: ***GRADING, DRAINAGE, PAVING, AND SIGNING***



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6090	EC-1	7

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

EROSION AND SEDIMENT CONTROL MEASURES

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

GRAPHIC SCALE

25 0 50
PLANS

25 0 50
PROFILE (HORIZONTAL)

5 0 10
PROFILE (VERTICAL)

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared in the Office of:

Kimley»Horn

NC LICENSE #F-0102
P.O. BOX 33068
RALEIGH, NORTH CAROLINA 27636
PHONE: (919) 677-2000

Designed by:

NAME *LEVEL III CERTIFICATION NO.*

Reviewed in the Office of:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2018 STANDARD SPECIFICATIONS

Reviewed by:

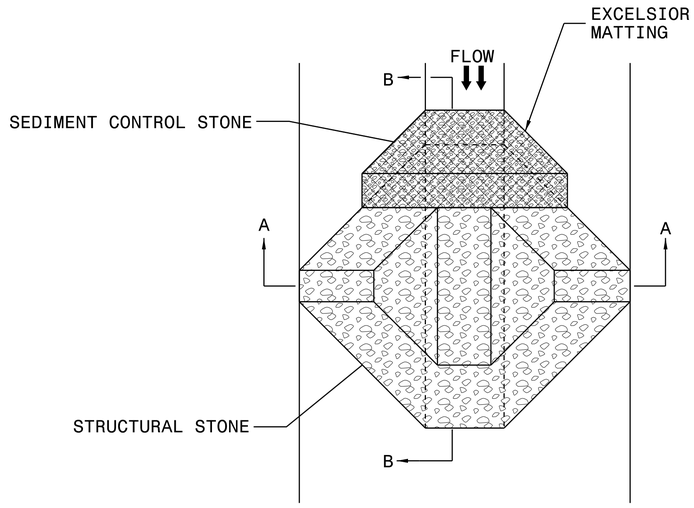
Roadway Standard Drawings

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.

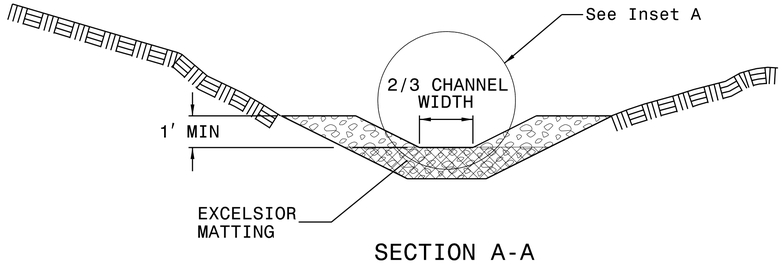
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type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

REVISIONS

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



PLAN



SECTION A-A

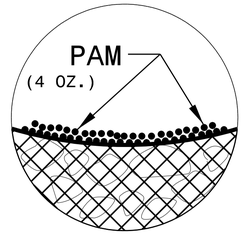
NOTES:

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

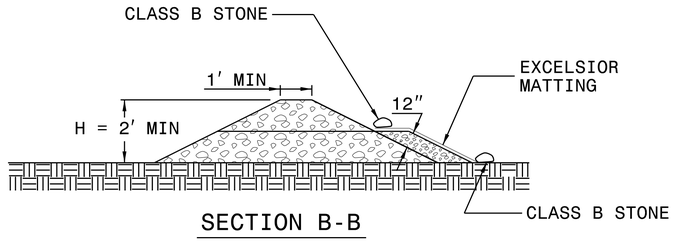
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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

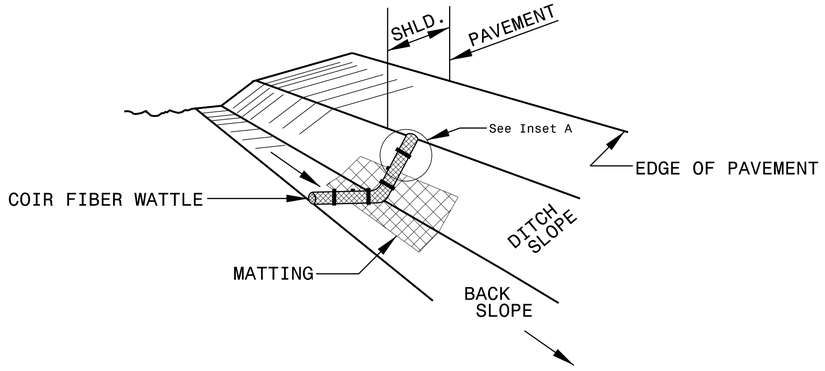


SECTION B-B

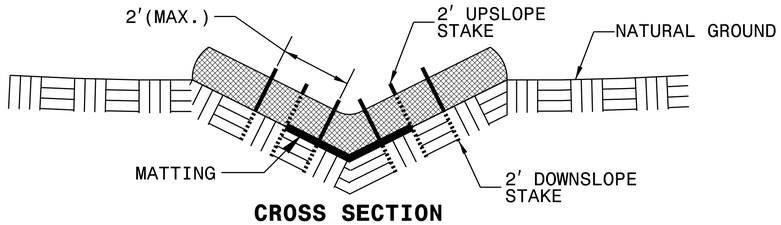
NOT TO SCALE

REVISIONS

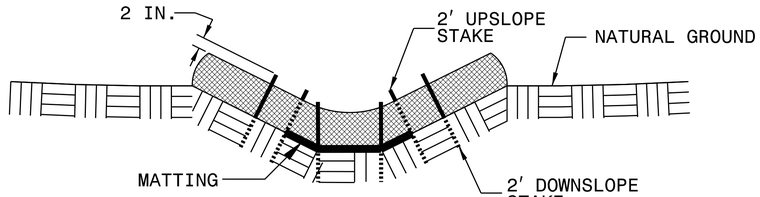
COIR FIBER WATTLE DETAIL



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.

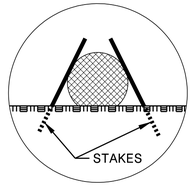
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.



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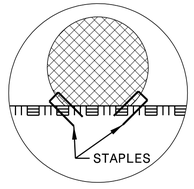
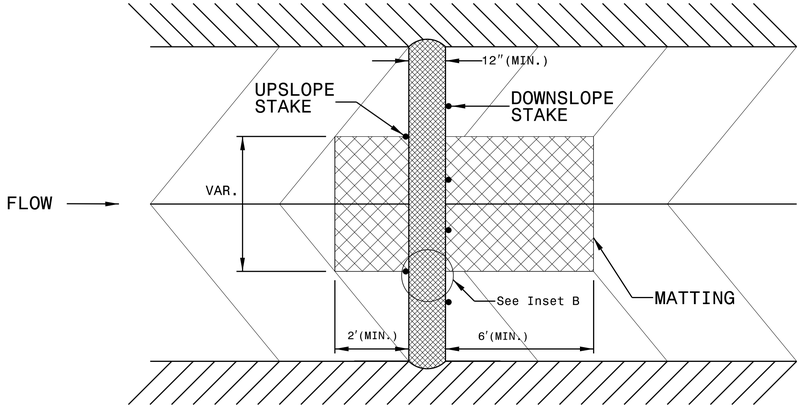


INSET B



TOP VIEW

NOT TO SCALE

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	EC-2C

REVISIONS

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)
				SUBTOTAL	
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					
				TOTAL	
				SAY	

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

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	EC-3

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.

REVISIONS

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CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	EC-4/CONS.4
R/W SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER

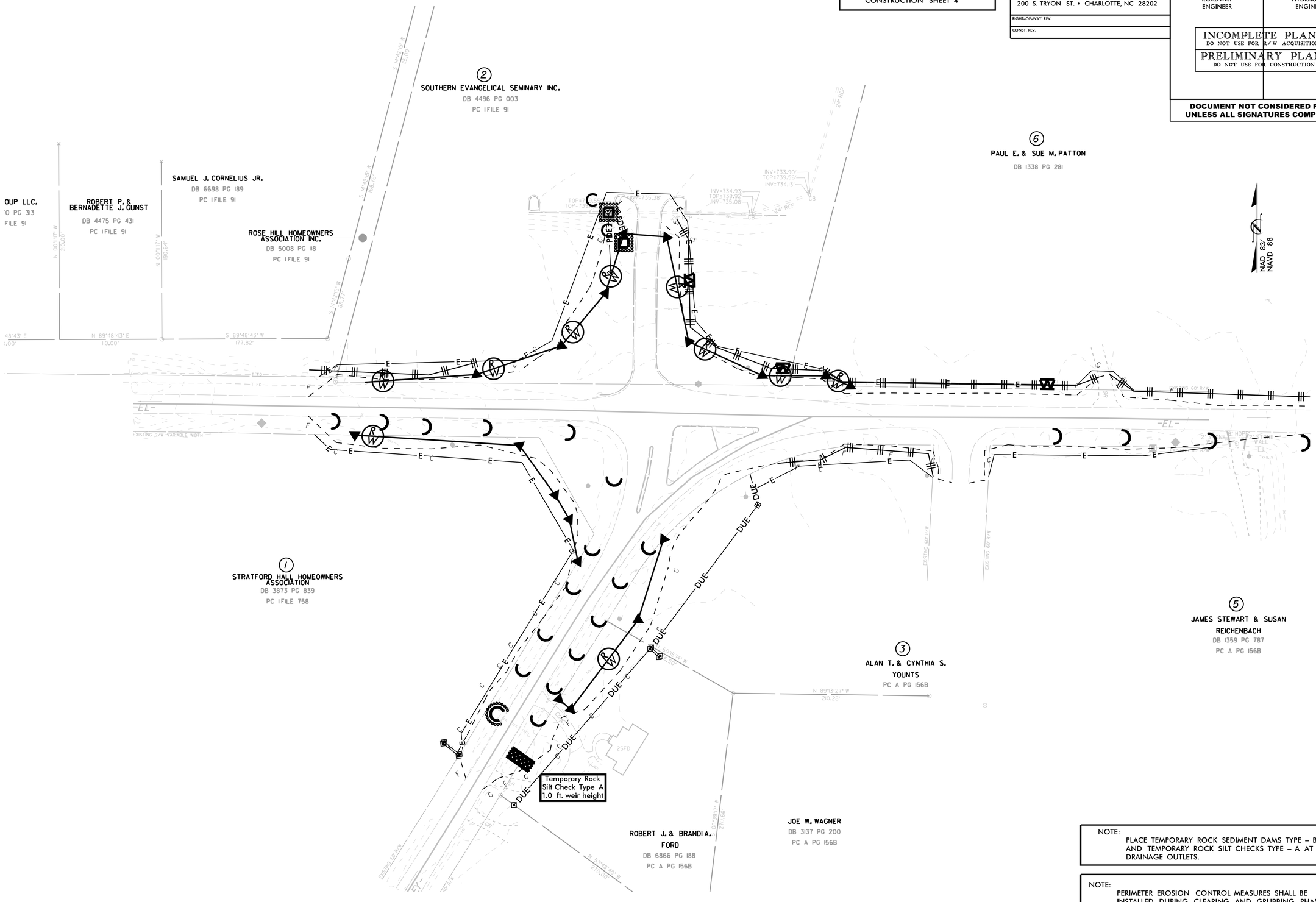
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

11/13/2017



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

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

REVISIONS

11/13/2017

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	EC-5/CONS.4
R/W SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER

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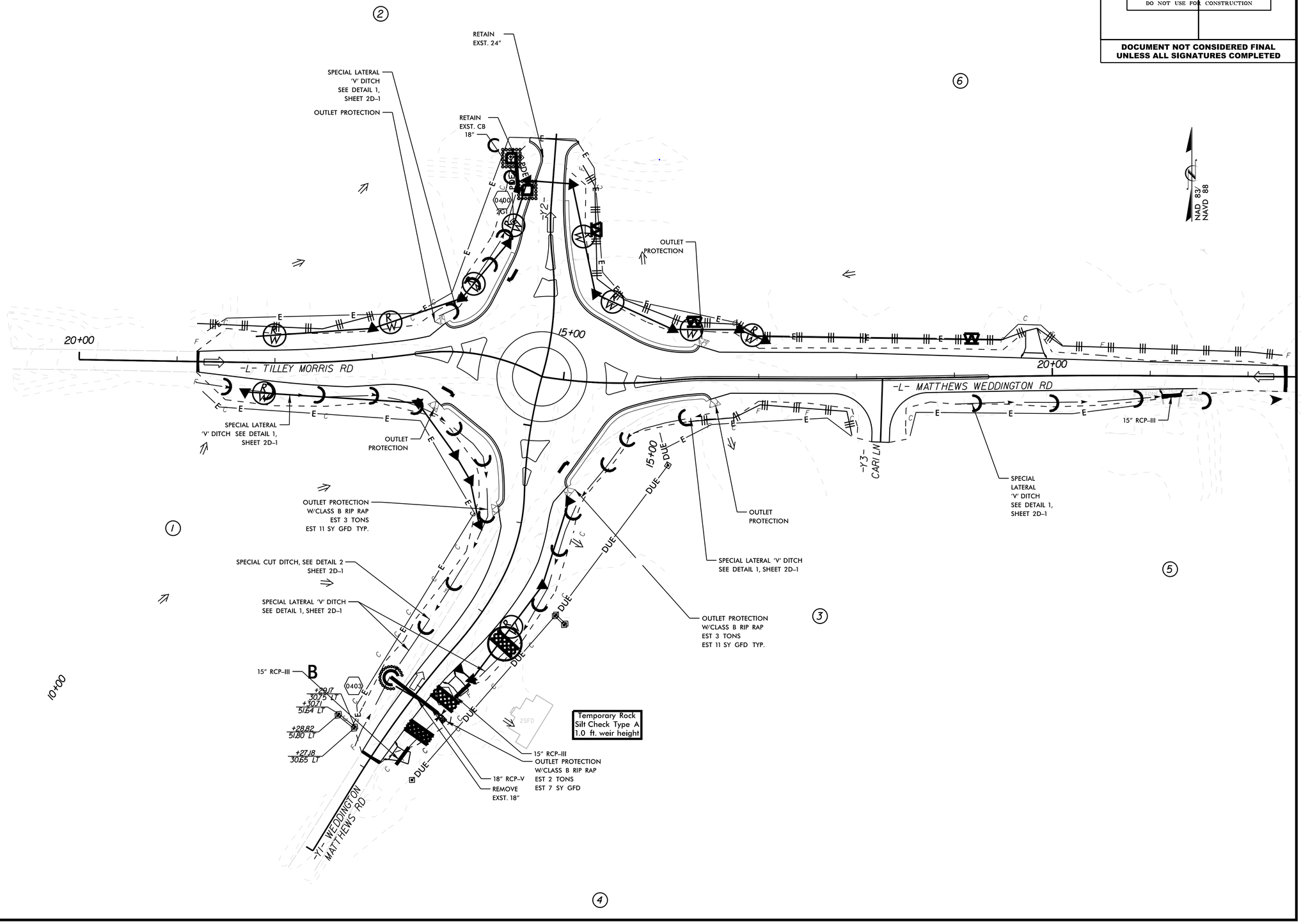


T.I.P.: U-6090

CONTRACT:

TIP NO.	SHEET NO.
U-6090	PMP-1

APPROVED: _____

DATE: _____

SEAL

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN
UNION COUNTY

LOCATION: INTERSECTION OF TILLEY MORRIS RD. (SR–1345) AND WEDDINGTON MATTHEWS RD. (SR–1344)

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
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
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
	FINAL PAVEMENT MARKINGS
	THERMOPLASTIC (4", 90 MILS)
TA	WHITE EDGELINE
TB	YELLOW EDGELINE
	THERMOPLASTIC (4", 120 MILS)
TI	YELLOW DOUBLE CENTER
	THERMOPLASTIC (8", 90 MILS)
TN	WHITE GORELINE (8", 90 MIL)
	THERMOPLASTIC (4", 120 MILS)
TD	3 FT. - 9 FT./SP WHITE MINISKIP
	THERMOPLASTIC (8", 120 MILS)
T17	3 FT. - 3 FT. ISP WHITE MINISKIP
	THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MILS)
UB	RIGHT TURN ARROW
UC	STRAIGHT ARROW
UD	COMBO LEFT/STRAIGHT ARROW
UN	24" YIELD LINE TRIANGLE
UW	FISH-HOOK RIGHT/STRAIGHT ARROW
WA	FISH-HOOK W/ CIRCLE LEFT ARROW
WB	FISH-HOOK W/ CIRCLE LEFT/STRAIGHT ARROW
WC	FISH-HOOK W/ CIRCLE LEFT/RIGHT/ STRAIGHT ARROW
	PAVEMENT MARKER SYMBOLS
MA	YELLOW & YELLOW

GENERAL NOTES

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

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

ROAD NAME	MARKING	MARKER
-L-	THERMOPLASTIC	MA
-Y1-	THERMOPLASTIC	MA

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

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

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

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

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

_____ SIGNING & DELINEATION REGIONAL ENGINEER

_____ SIGNING & DELINEATION PROJECT DESIGN ENGINEER

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

PLAN PREPARED BY: Kimley–Horn and Associates

FRANK MASTERSON, P.E. PROJECT DESIGN ENGINEER

BRANDON MURR DESIGNER

Kimley»Horn

$FILE$

3/7/2019

REVISIONS

THERMOPLASTIC PAVEMENT MARKING LINES

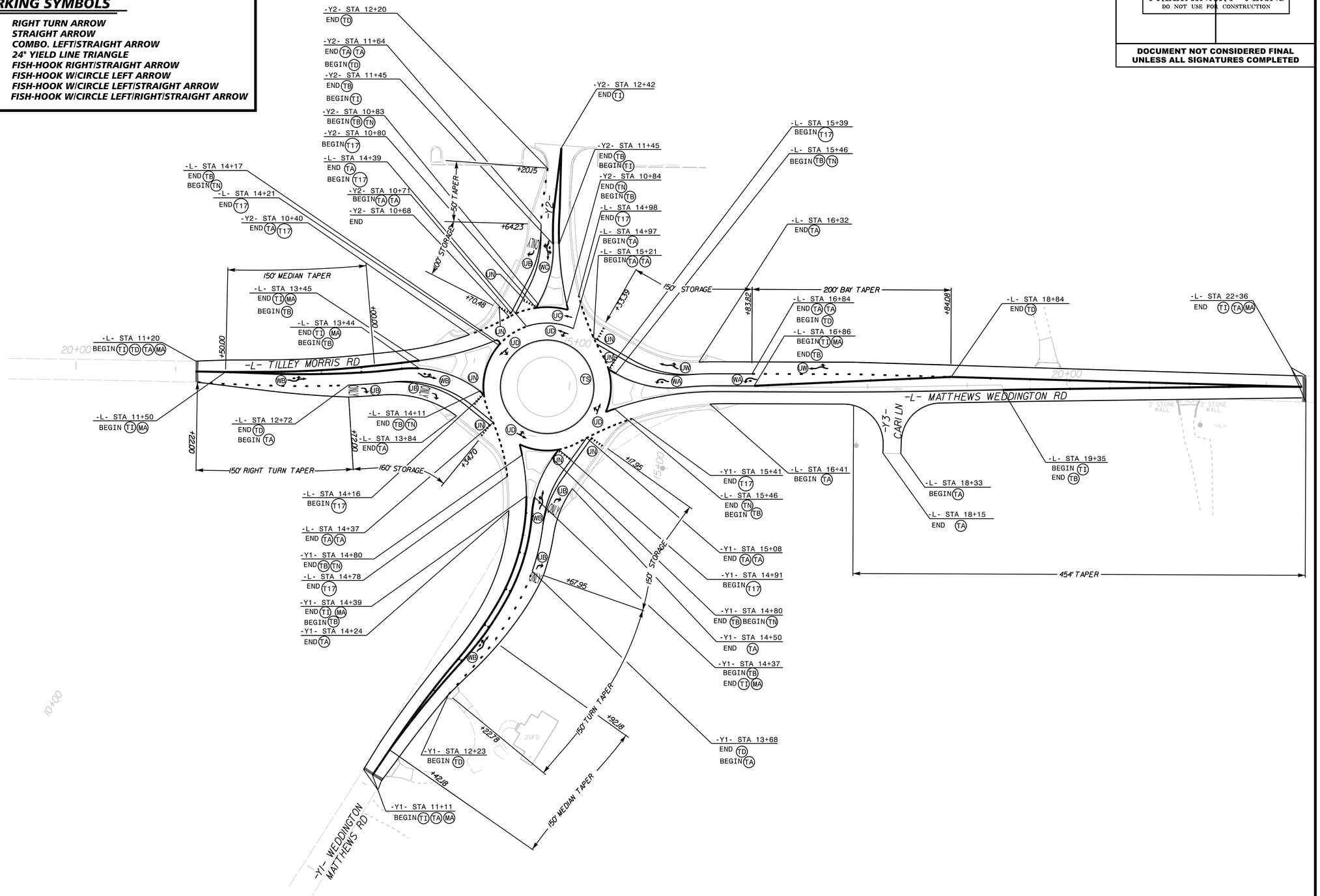
TA - THERMOPLASTIC (4", 90 MILS)	WHITE EDGE LINE
TB - THERMOPLASTIC (4", 90 MIL)	YELLOW EDGELINE
TD - THERMOPLASTIC (4", 120 MILS)	3 FT. - 9 FT./SP WHITE MINISKIP
TI - THERMOPLASTIC (4", 120 MILS)	YELLOW DOUBLE CENTER LINE
TN - THERMOPLASTIC (8", 90 MILS)	WHITE GORELINE
T17 - THERMOPLASTIC (8", 120 MILS)	3 FT. - 3 FT./SP WHITE MINISKIP

PAVEMENT MARKING SYMBOLS

UB - THERMOPLASTIC (90 MILS)	RIGHT TURN ARROW
UC - THERMOPLASTIC (90 MILS)	STRAIGHT ARROW
UD - THERMOPLASTIC (90 MILS)	COMBO. LEFT/STRAIGHT ARROW
UN - THERMOPLASTIC (90 MILS)	24" YIELD LINE TRIANGLE
UW - THERMOPLASTIC (90 MILS)	FISH-HOOK RIGHT/STRAIGHT ARROW
WA - THERMOPLASTIC (90 MILS)	FISH-HOOK W/CIRCLE LEFT ARROW
WB - THERMOPLASTIC (90 MILS)	FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW
WC - THERMOPLASTIC (90 MILS)	FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW

PAVEMENT MARKER SYMBOLS

MA - YELLOW & YELLOW PERMANENT RAISED PAVEMENT MARKER



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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.	SHEET NO.
U-6090	PMP-2
R/W SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

11/13/2017

T.I.P.: U-6090

CONTRACT:

K:\CHL_PRJ\011036444 - U-6090 (Tilley Rd)\Traffic\Signing\CADD\Sign Designs\U-6090_rdy_sgn_tsh.dgn

3/7/2019

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

TIP NO.	SHEET NO.
U-6090	SIGN-1

APPROVED: _____

DATE: _____

SEAL

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIGNING PLAN
UNION COUNTY

LOCATION: INTERSECTION OF TILLEY MORRIS RD. (SR-1345) AND WEDDINGTON MATTHEWS RD. (SR-1344)

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
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.20	SECONDARY SIGN MOUNTING
904.30	SUPPLEMENTAL SIGN MOUNTING
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
910.40	SINGLE AND TWO LANE ROUNDABOUT SIGNING WITH PEDESTRIANS

GENERAL NOTES

- ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER.
- WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.
- ALL PROPOSED SIGNS SEE PROJECT NOTE 3 UNLESS OTHERWISE NOTED ON PLAN SHEETS.

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4025000000	901	CONTRACTOR FURNISHED, TYPE E SIGN	137	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	196	L.F.
4108000000	904	SIGN ERECTION, TYPE E	22	EA.
4116100000	904	SIGN ERECTION, RELOCATE TYPE E (GROUND MOUNTED)	3	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	4	EA.
4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL	4	EA.

INDEX

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

FRANK MASTERSON, P.E. — PROJECT DESIGN ENGINEER

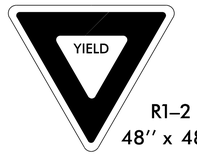
BRANDON MURR, EIT — DESIGNER

Kimley»Horn

(401) QUANTITY REQ'D _4_

R6-5P
30'' X 30''

(402) QUANTITY REQ'D _8_



R1-2
48'' x 48'' x 48"

(403) QUANTITY REQ'D _4_

R6-4A
48'' x 12"

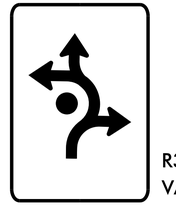
(404) QUANTITY REQ'D _1_

R4-7
24" X 30"

(405) QUANTITY REQ'D _1_

R3-8
30" X 30"

(406) QUANTITY REQ'D _ _



R3-8
VARIES X 30"

TIP NO.	SHEET NO.
U-6090	SIGN-2

APPROVED: _____

DATE: _____

SEAL

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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(407) QUANTITY REQ'D _3_

R3-8
30" X 30"

(408) QUANTITY REQ'D _1_

R3-5R
30'' x 36''

Kimley»Horn

TYPE "E" SIGNS

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3/7/2019

Kimley»Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

PROJECT REFERENCE NO.	SHEET NO.
U-6090	SIGN-3

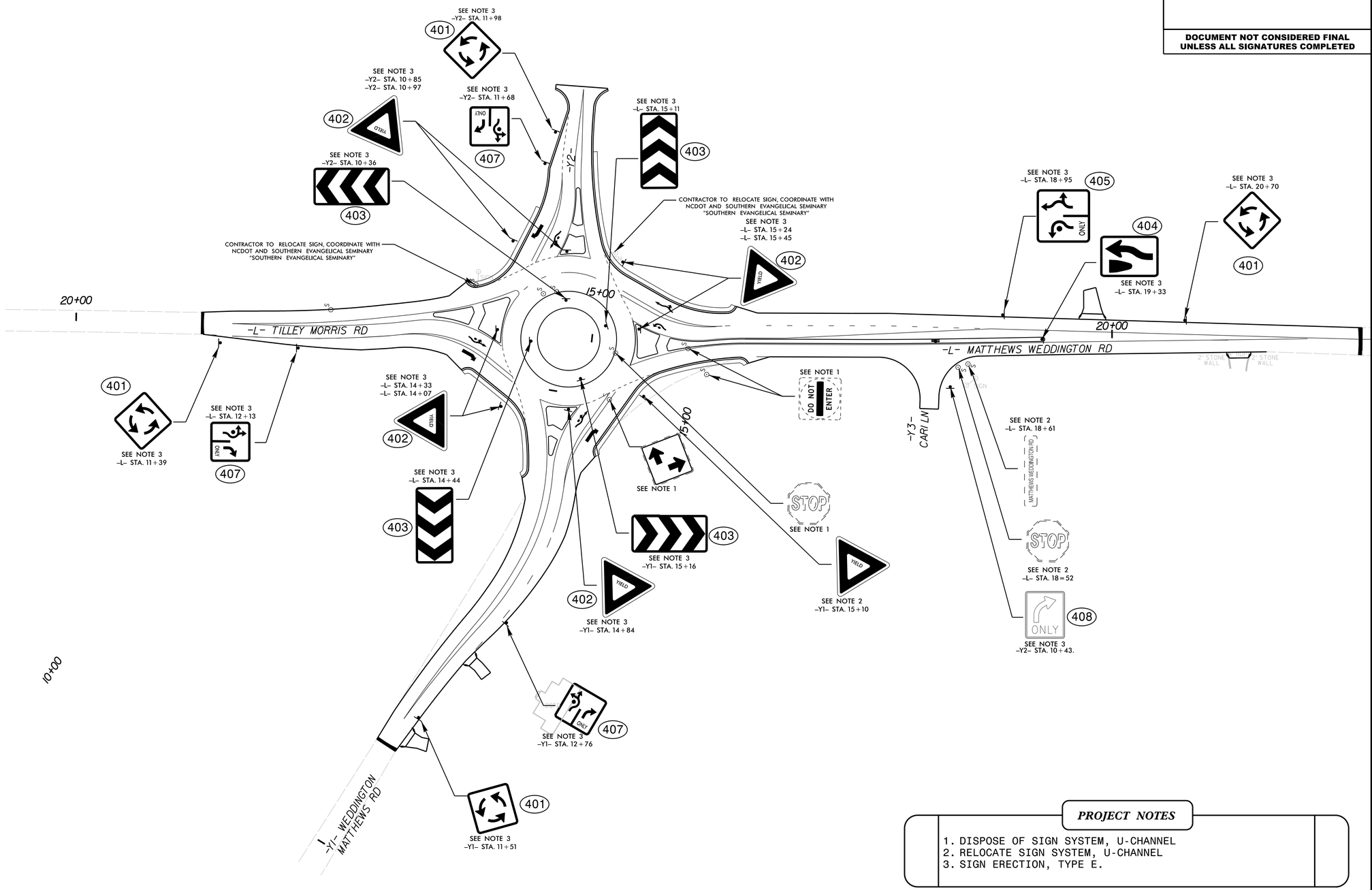
APPROVED: _____

DATE: _____

SEAL

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PROJECT NOTES

1. DISPOSE OF SIGN SYSTEM, U-CHANNEL
2. RELOCATE SIGN SYSTEM, U-CHANNEL
3. SIGN ERECTION, TYPE E.

$FILE$

3/7/2019

PROJ. REFERENCE NO.	SHEET NO.
U-6090	X-1A

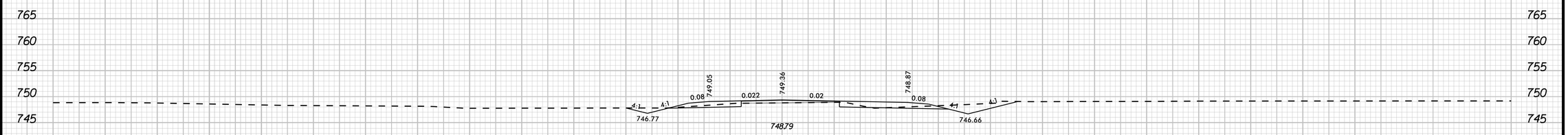
U–6090
CROSS SECTION INDEX

3/7/2019 K:\CHL_PRJ\0110036444 – U-6090 (Tilley Rdbt)\Roadway\XSC\U-6090_rdy_xpl_Cover.dgn

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-1

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



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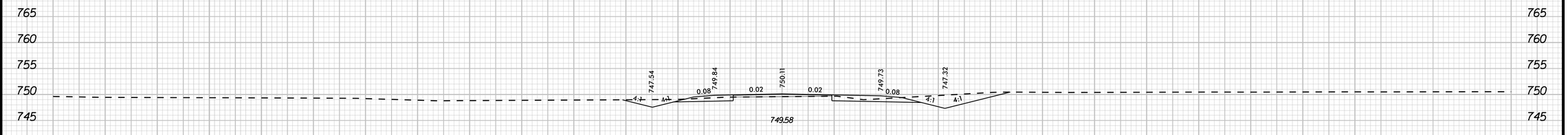

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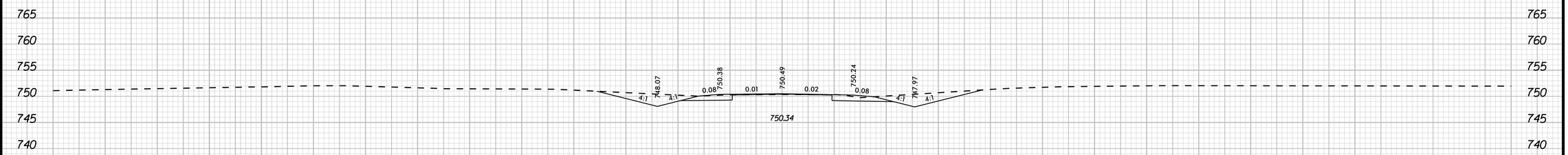

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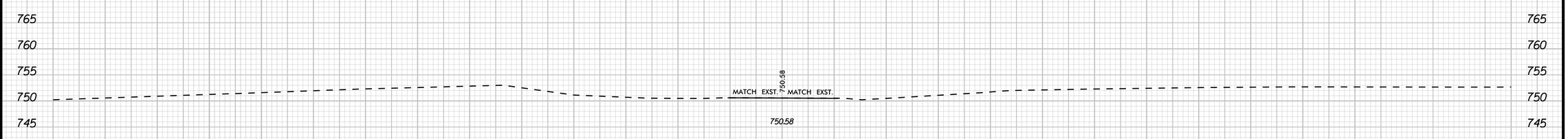


11+19.83
BEGIN CONSTRUCTION
-L- TILLEY MORRIS ROAD

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

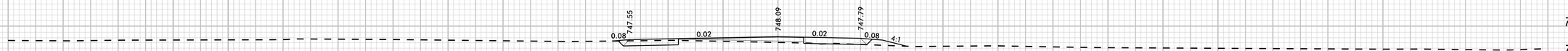
11/13/2017

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-2

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

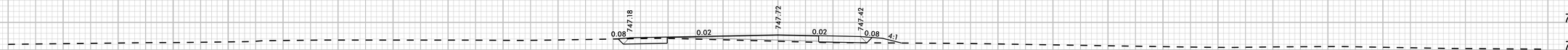
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

765 760 755 750 745 740 735



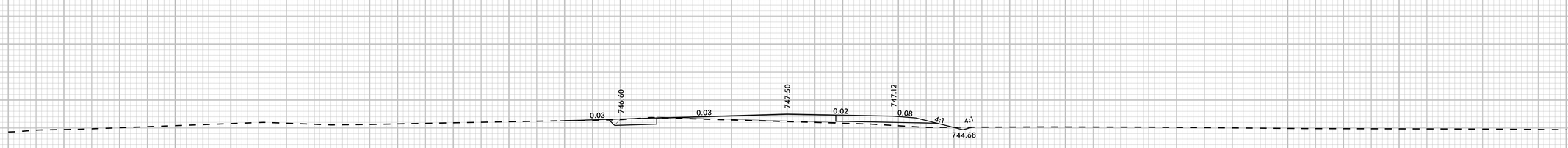
17+50.00

765 760 755 750 745 740 735



17+00.00

765 760 755 750 745 740 735

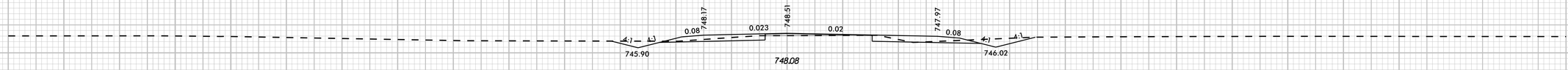


16+50.00

–L– MATTHEWS WEDDINGTON ROAD

765 760 755 750 745 740 735

ROUNDABOUT – SEE ROUNDABOUT GEOMETRY SHEET, 2–C



13+00.00

–L– TILLEY MORRIS ROAD

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

11/13/2017

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-3

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

765 760 755 750 745 740 735

0.08 747.50 19.61 0.02 747.90 0.02 747.59 5.00 0.08 4:1 4:1 746.20

19+50.00

765 760 755 750 745 740 735

0.07 747.60 22.05 0.02 748.05 0.02 747.75 5.00 0.08 4:1 4:1 746.71

19+00.00

765 760 755 750 745 740 735

0.08 747.71 0.02 748.20 0.02 747.90 0.08 4:1

18+50.00

765 760 755 750 745 740 735

0.08 747.74 0.02 748.26 0.02 747.97 0.08 4:1

18+00.00

-L- TILLEY MORRIS ROAD

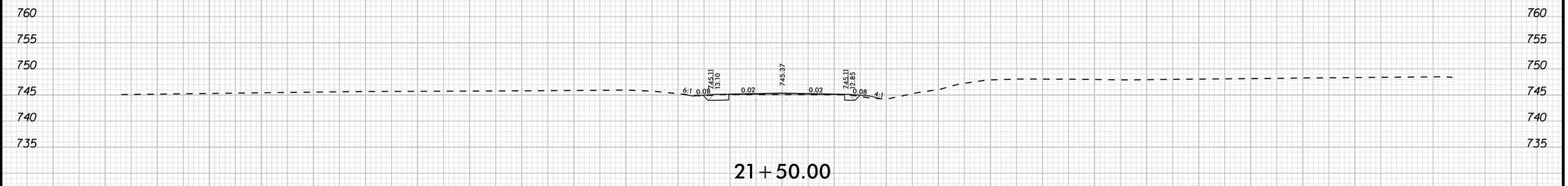
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

11/13/2017

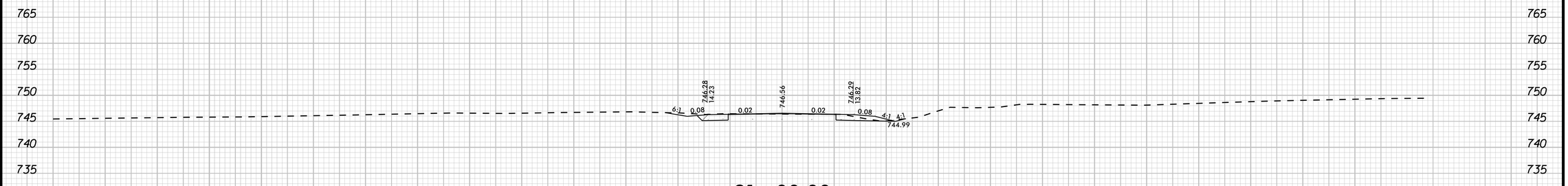
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-4

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

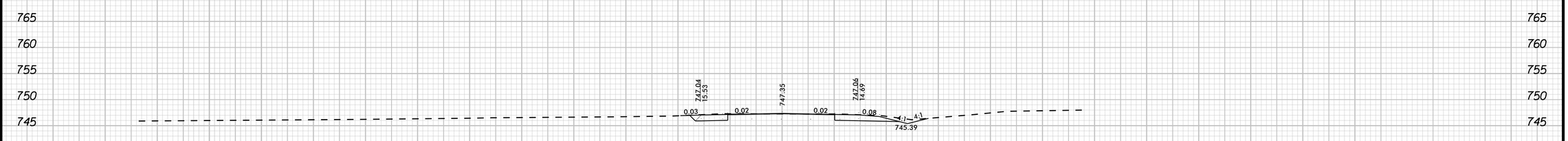
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



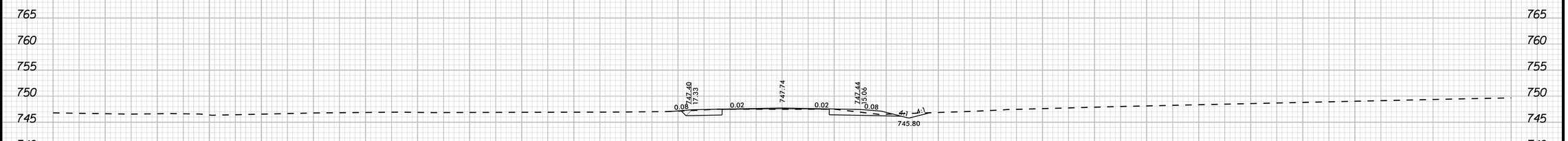
21+50.00



21+00.00



20+50.00



20+00.00

-L- TILLEY MORRIS ROAD

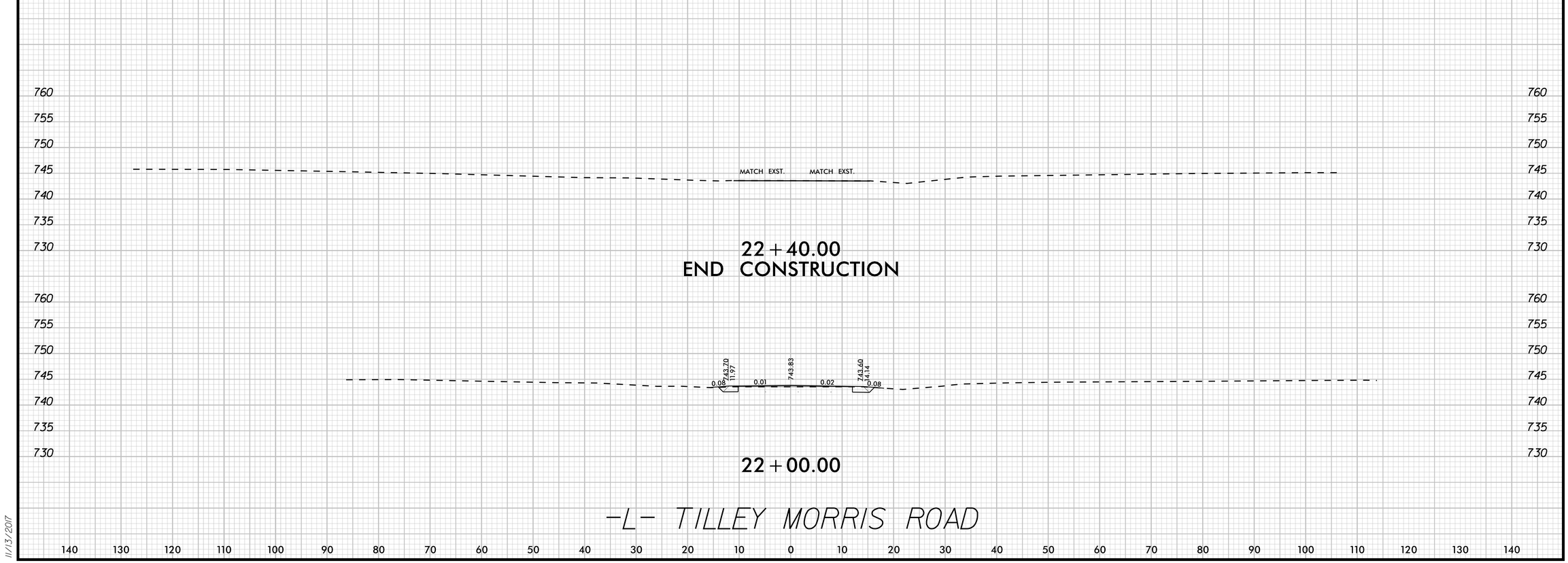
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

11/13/2017

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-5

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

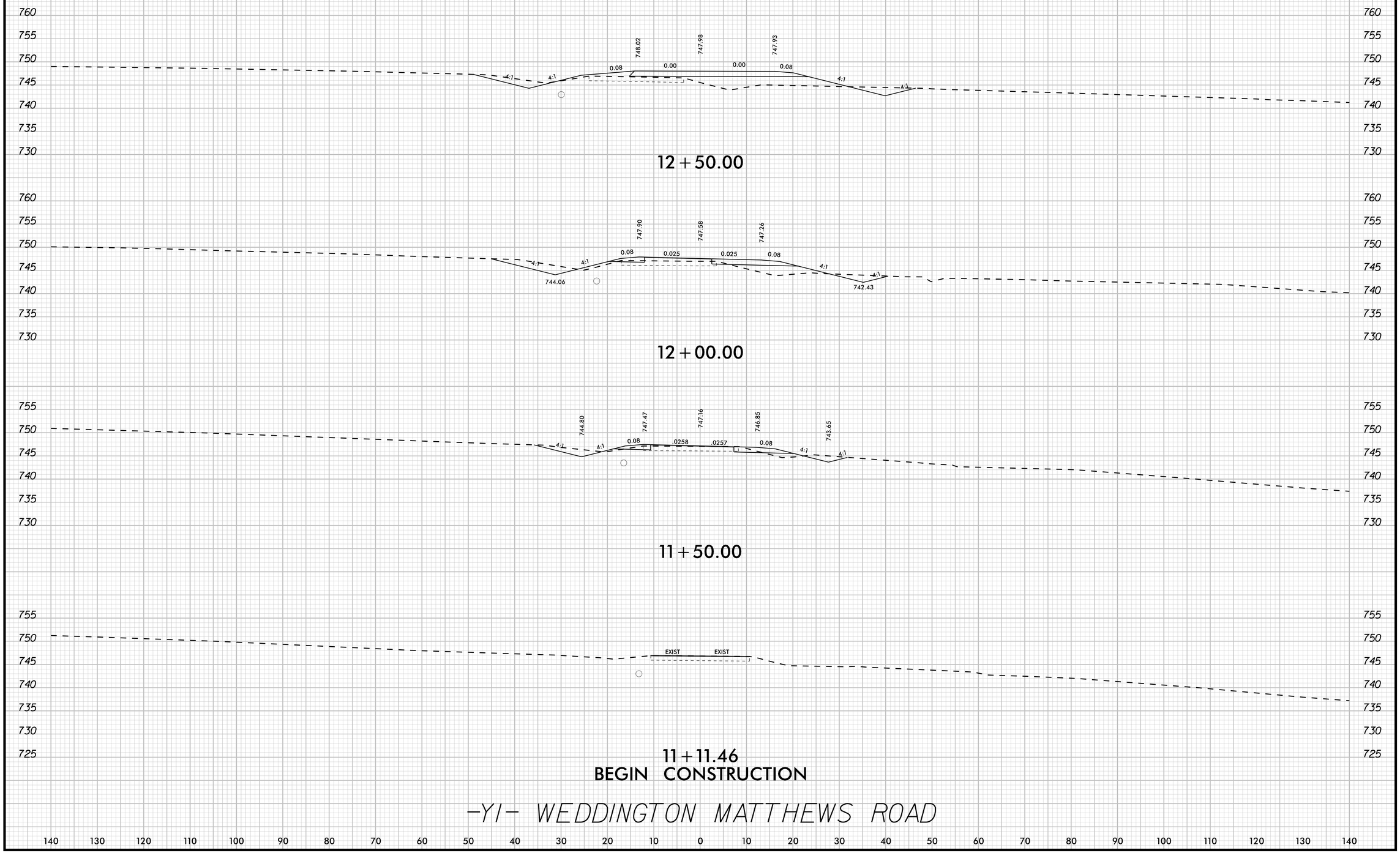


11/13/2017

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-6

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



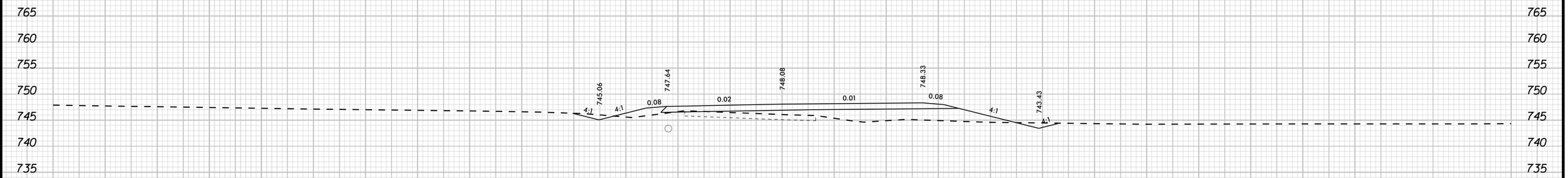
11/13/2017

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-7

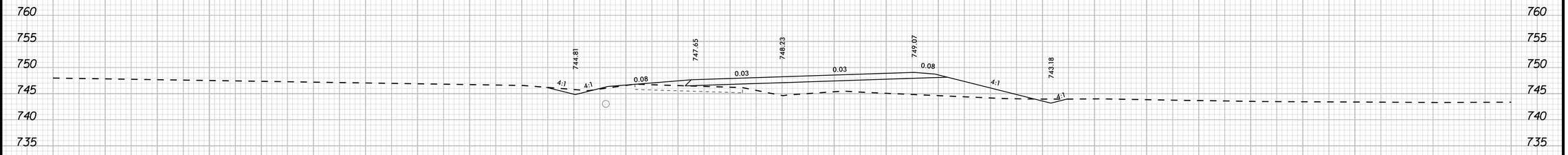
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

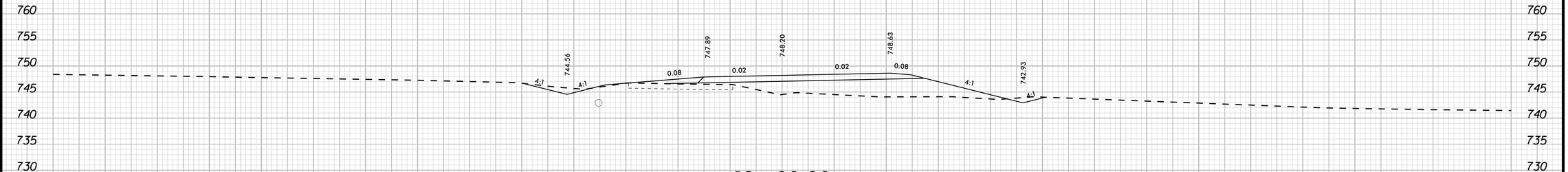
ROUNDABOUT – SEE ROUNDABOUT GEOMETRY SHEET, 2–C



14+00.00



13+50.00



13+00.00

-Y1- WEDDINGTON MATTHEWS ROAD

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

11/13/2017

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-8

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

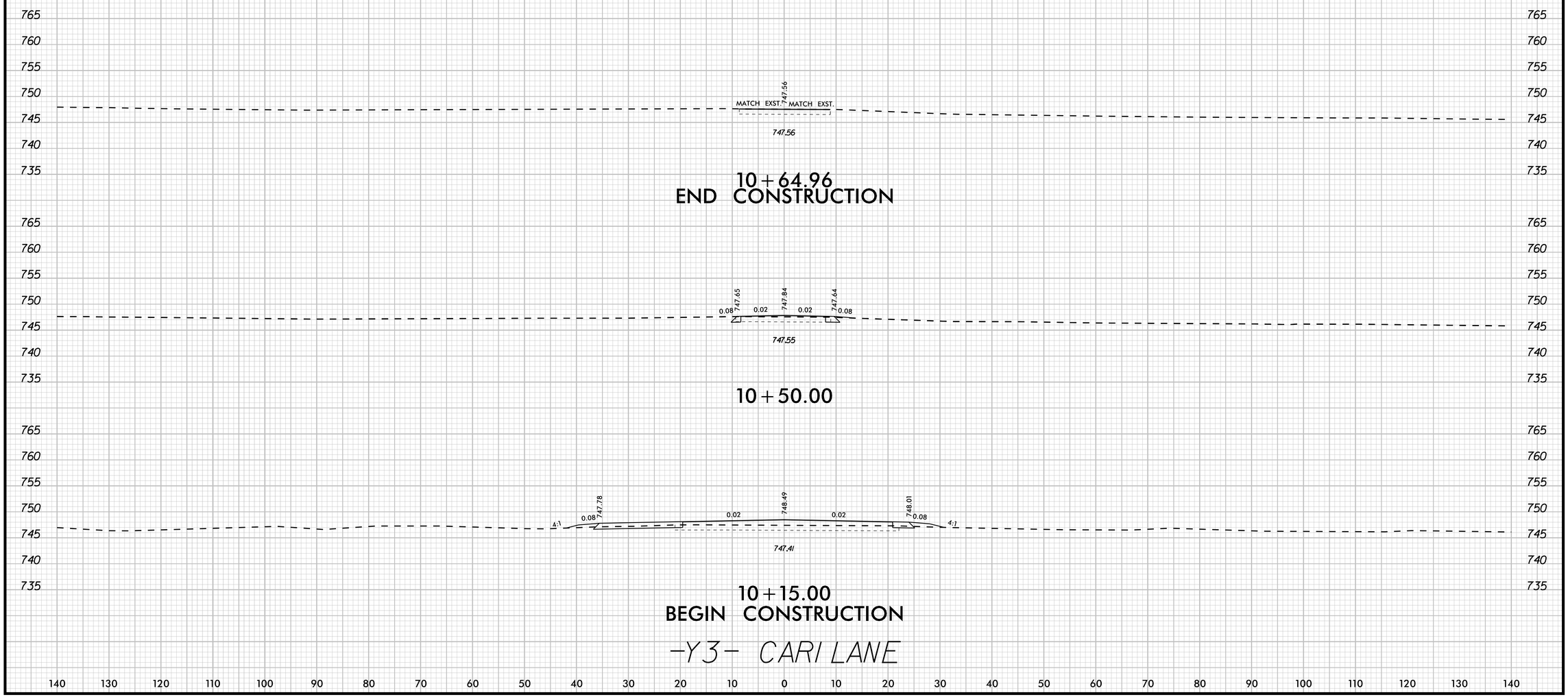
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

11/13/2017

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-6091	X-9

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



11/13/2017