09/08/99

See Sheet 1A For Index of Sheets

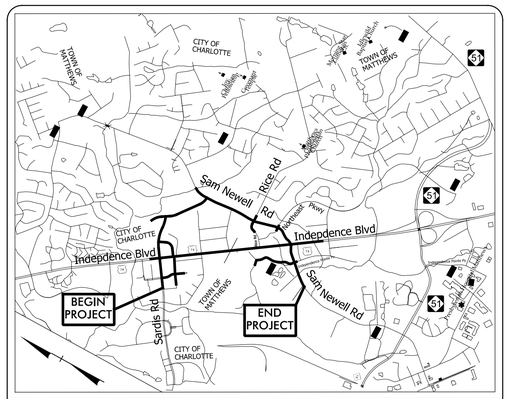
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MECKLENBURG COUNTY

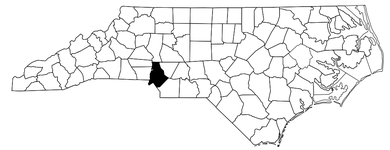
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2509AB	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
38965.1.8		PE	

LOCATION: SR 3356 (SARDIS ROAD) AND SR 3168 (SAM NEWELL ROAD) IN TOWN OF MATTHEWS AND CITY OF CHARLOTTE

TYPE OF WORK: GRADING, DRAINAGE, WIDENING, PAVING, STRUCTURES AND SIGNALS



VICINITY MAP
NOT TO SCALE



30% PLANS
BETTERMENT

NAD 83/NA 2011

U-2509AB Concurrence
Point 4B Plans
2024-02-27
VHB
JR Hopson, PE &
Eric Berger, PE

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

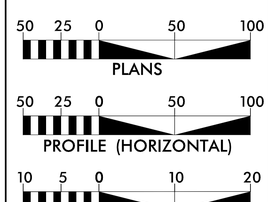
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF MATTHEWS AND CITY OF CHARLOTTE.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD ___.

☆ ***EXISTING SIGNAL TO BE MODIFIED***
★ ***PROPOSED SIGNAL***

TIP PROJECT: U-2509AB

CONTRACT:

GRAPHIC SCALES



DESIGN DATA (Y13)

ADT 2027 = 32,100
ADT 2047 = 39,800
K = 8 %
D = 55 %
T = 3 % *
V = 40 MPH
* TTST = 2% DUAL 1%
FUNC CLASS = STATEWIDE DESIGN TIER

PROJECT LENGTH
(MEASURED ALONG –L–, –Y13– & –Y8A–)

LENGTH OF ROADWAY TIP PROJECT U-2509AB = 3.443 MI.
LENGTH OF STRUCTURE TIP PROJECT U-2509AB = 0.109 MI.
TOTAL LENGTH OF TIP PROJECT U-2509AB = 3.552 MI.

vhb

Prepared In the Office of:
940 Main Campus Drive, Suite 500
Raleigh, NC 27606
NC License No. C-3705

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JULY 31, 2024

LETTING DATE:
JULY 18, 2028

THAD F. DUNCAN, PE
PROJECT ENGINEER

MARK HUSSEY
PROJECT DESIGN ENGINEER

BRYAN KEY, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

2/22/2024
U2509AB_uit_rdy_V2_TSH.dgn
jhopson

9/10/2021

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	1B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

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

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

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

RIGHT OF WAY & PROJECT CONTROL:

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

ROADS AND RELATED FEATURES:

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

VEGETATION:

- Single Tree
- Single Shrub
- Hedge

- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

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

MINOR:

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

UTILITIES:

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

POWER:

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

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

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

MISCELLANEOUS:

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

6/2/99

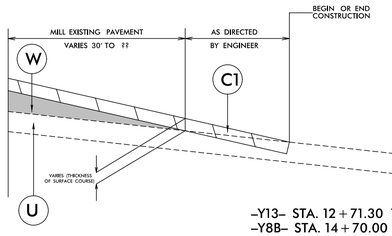
PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING

NOTES TO CONTRACTOR

For surface mixes over 1" in thickness, mill the existing pavement in accordance with the following sketch as directed by the Engineer.

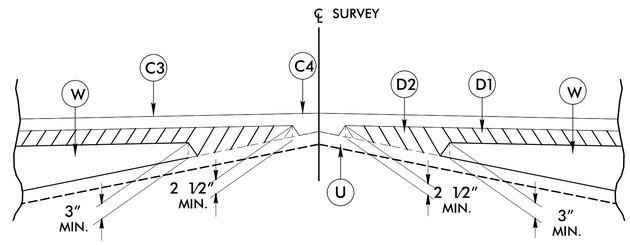
Locations shall include ties into existing concrete pavement, at bridge approaches where the bridge will not be resurfaced, and at the beginning and ending point of each resurfacing map.

Perform the work in accordance with Section 607 of the January 2018 North Carolina Department of Transportation Standard Specifications for Roads and Structures. Resurfacing will be accomplished at the same time as the milling operation.



MILLING DETAIL
PROFILE VIEW

–Y13– STA. 12+71.30 TO ??
–Y8B– STA. 14+70.00 TO ??
–Y9– STA. 16+33.51 TO ??
–Y44– STA. 11+95.00 TO ??
–Y8C– STA. 10+00.00 TO ??
–Y8D– STA. 12+94.50 TO ??
–Y7– STA. 10+00.00 TO ??



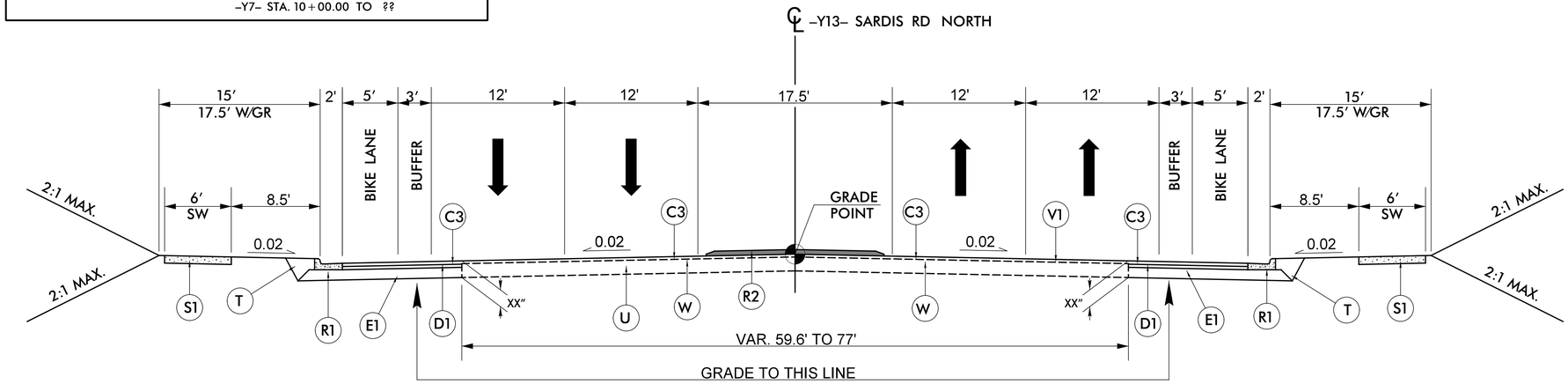
Detail Showing Method of Wedging

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-1
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

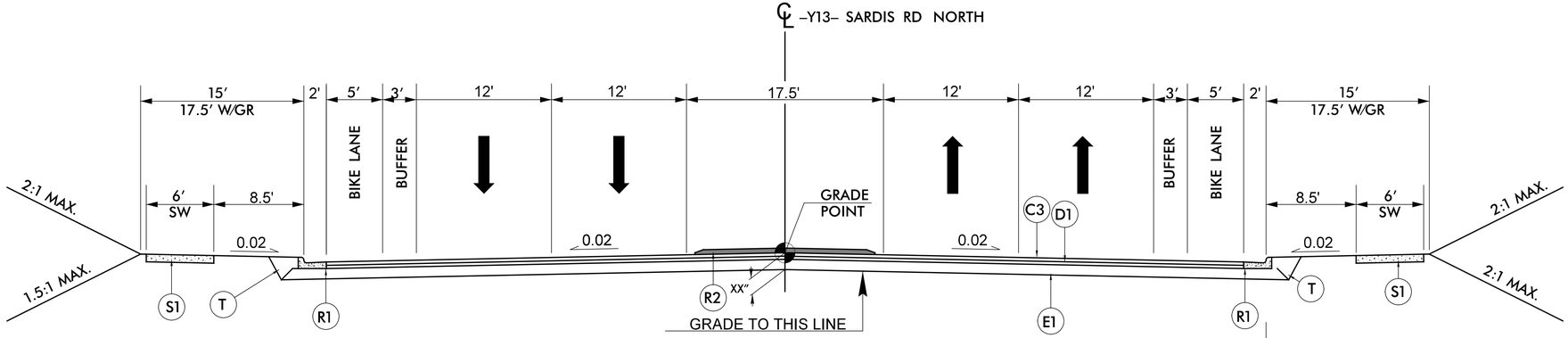
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

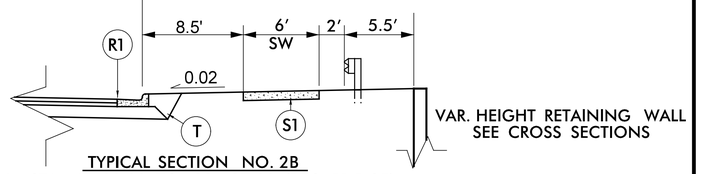
VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606



TYPICAL SECTION NO. 1
–Y13– STA. 12+71.30 TO 16+85.00



TYPICAL SECTION NO. 2
–Y13– STA. 16+85.00 TO 22+37.00 (BEG. BRIDGE)
–Y13– STA. 25+10.00 (END BRIDGE) TO 39+33.42



TYPICAL SECTION NO. 2B
–Y13– STA. 19+00.00 TO 22+37.00 (BEG. BRIDGE)

2/22/2024
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bpope

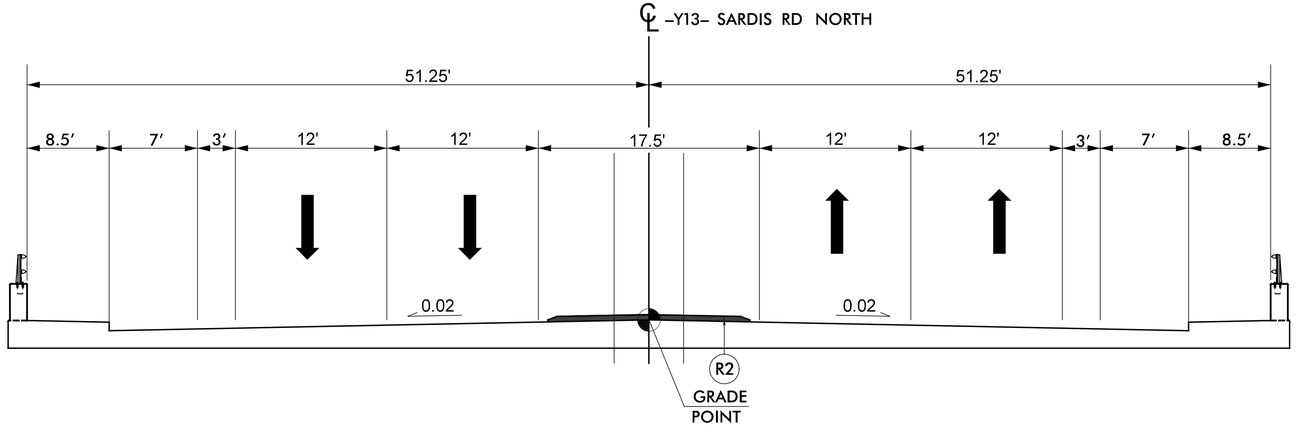
6/2/99

PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

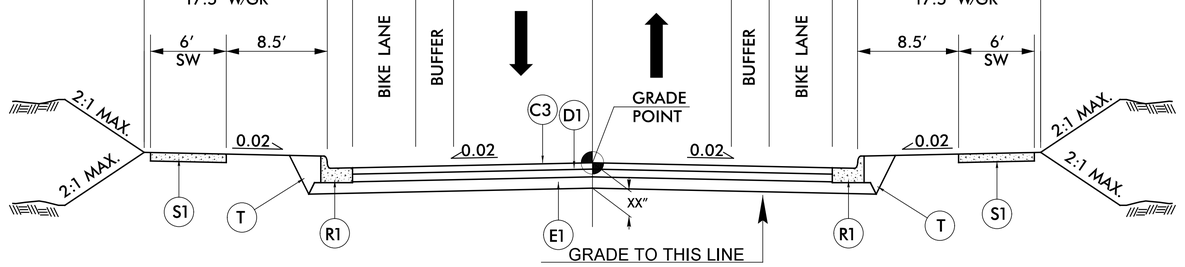
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

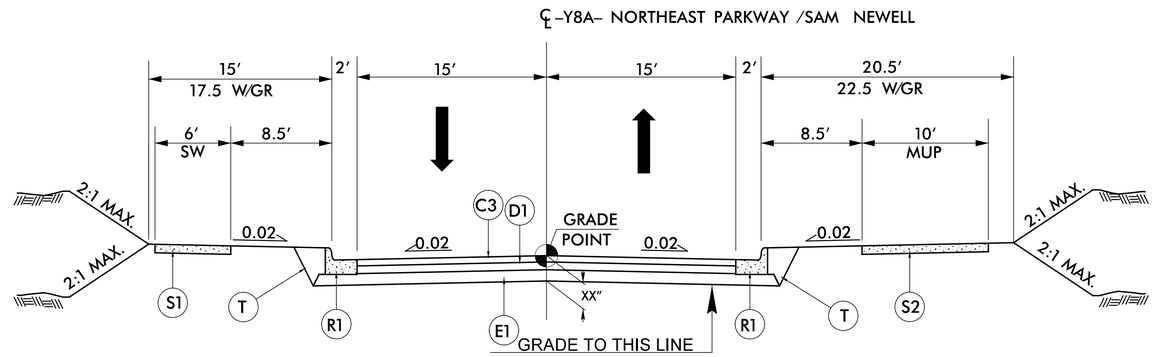


TYPICAL SECTION NO. 3
–Y13– STA. 22+37.00 TO 25+10.00

NOTE: RAIL TO BE DETERMINED BY STRUCTURES.
BIKE AND PEDESTRIAN SAFE RAIL REQUIRED.



TYPICAL SECTION NO. 4
–Y8A– STA. 12+25.00 TO 33+31.72
TRANSITION FROM TS 4 TO TS 5 32+31.72 TO 33+81.72



TYPICAL SECTION NO. 5
–Y8A– STA. 33+81.72 TO 46+00.00

2/22/2024
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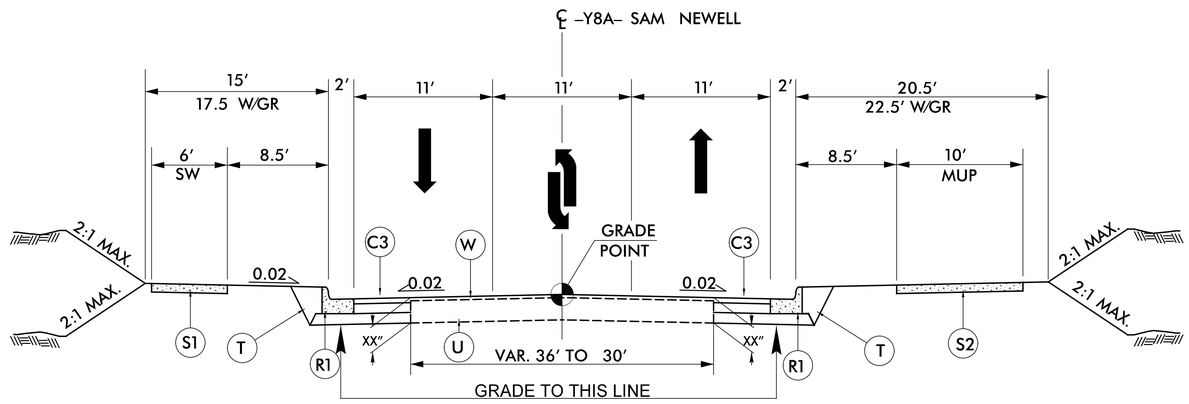
jhansen

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-3
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

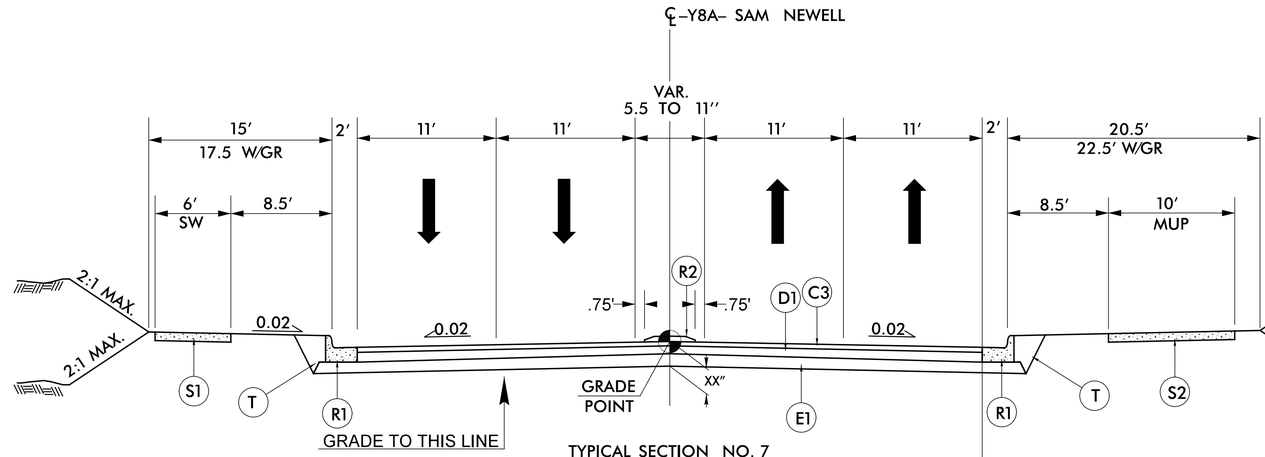
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

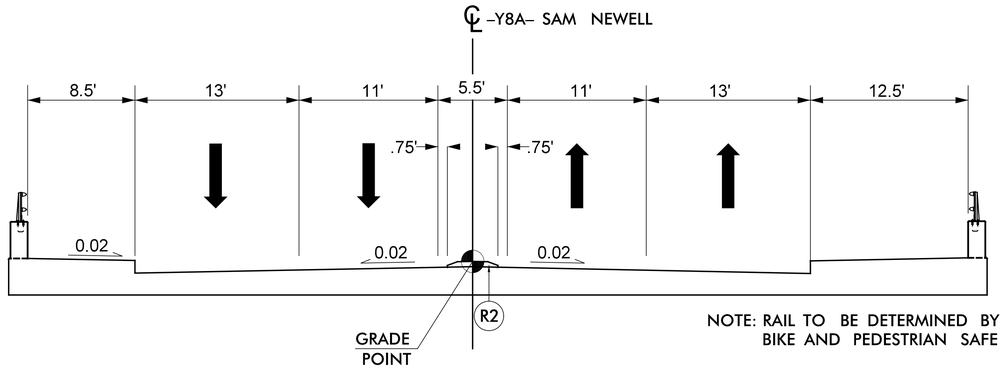
PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING



TYPICAL SECTION NO. 6
–Y8A– STA. 46+00.00 TO 70+70.00

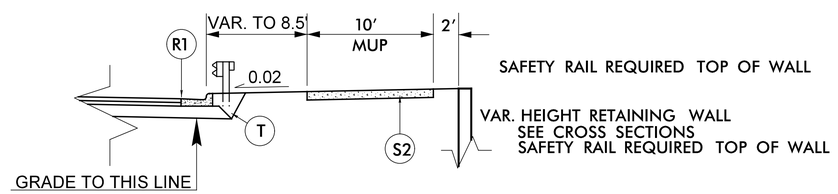


TYPICAL SECTION NO. 7
–Y8A– STA. 70+70.00 TO 77+01.00 (BEG. BRIDGE)
–Y8A– STA. 79+14.00 (END. BRIDGE) TO 84+79.72
∗ –Y8A– STA. 71+70.00 TO 84+84.45



TYPICAL SECTION NO. 8
–Y8A– STA. 77+01.00 TO 79+14.00

NOTE: RAIL TO BE DETERMINED BY STRUCTURES.
BIKE AND PEDESTRIAN SAFE RAIL REQUIRED.



TYPICAL SECTION NO. 7A
–Y8A– STA. 71+50.00 TO 72+50.00 RT
–Y8A– STA. 74+00.00 TO BRIDGE RT

6/2/99

2/28/2024
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jpassin

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-4
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

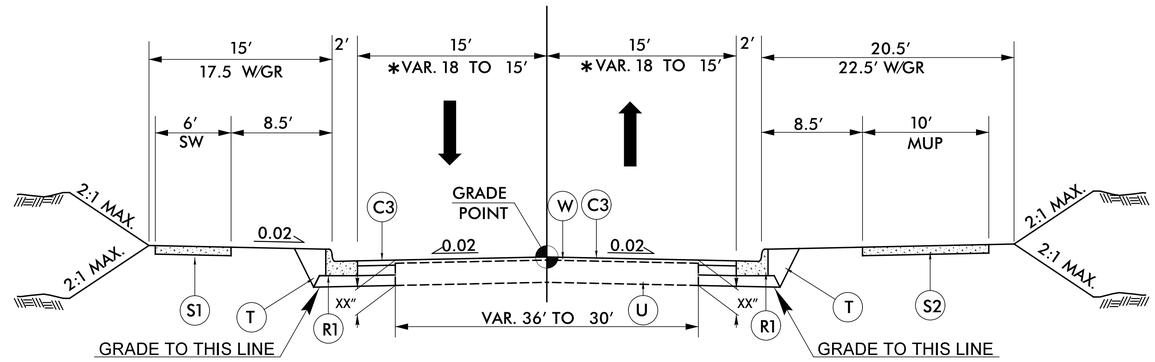
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE
AWAITING PAVEMENT DESIGN

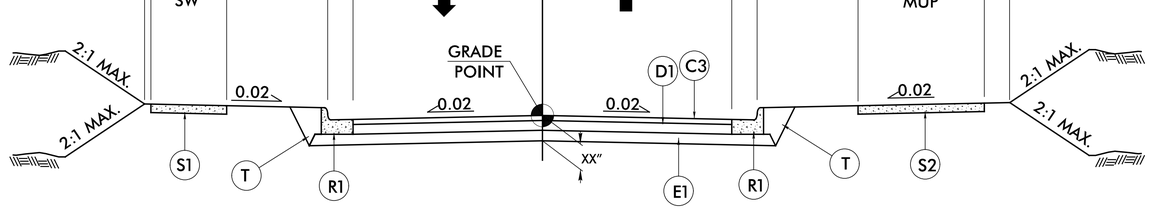
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING

℄ –Y8A– SAM NEWELL



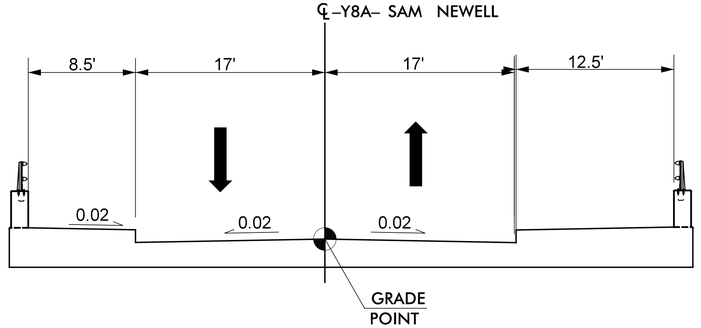
TYPICAL SECTION NO. 9
–Y8A– STA. 84+79.720 TO 85+76.72
*–Y8A– STA. 93+14.72 TO 94+82.72

℄ –Y8A– SAM NEWELL



TYPICAL SECTION NO. 10
–Y8A– STA. 85+76.72 TO 88+59.00 (BEG. BRIDGE)
–Y8A– STA. 89+54.00 (END BRIDGE) TO 93+14.72

℄ –Y8A– SAM NEWELL



TYPICAL SECTION NO. 11
–Y8A– STA. 88+59.00 TO 89+54.00

NOTE: RAIL TO BE DETERMINED BY STRUCTURES.
BIKE AND PEDESTRIAN SAFE RAIL REQUIRED.

2/22/2024
U2509AB_rdy_ULT_typ.dgn
hanson

6/2/99

PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-5
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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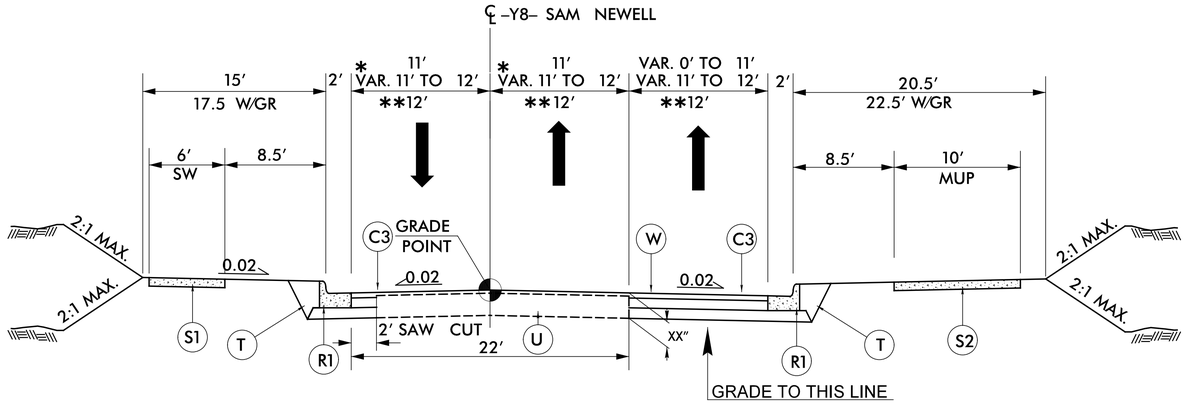
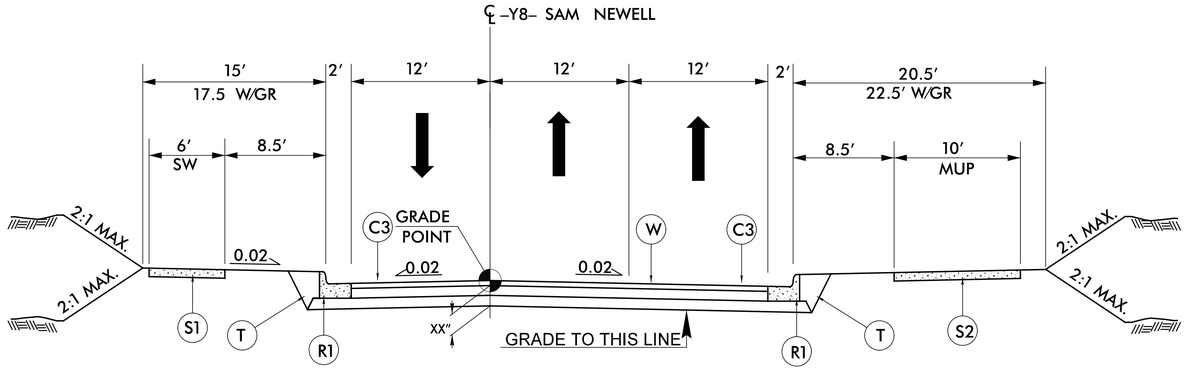


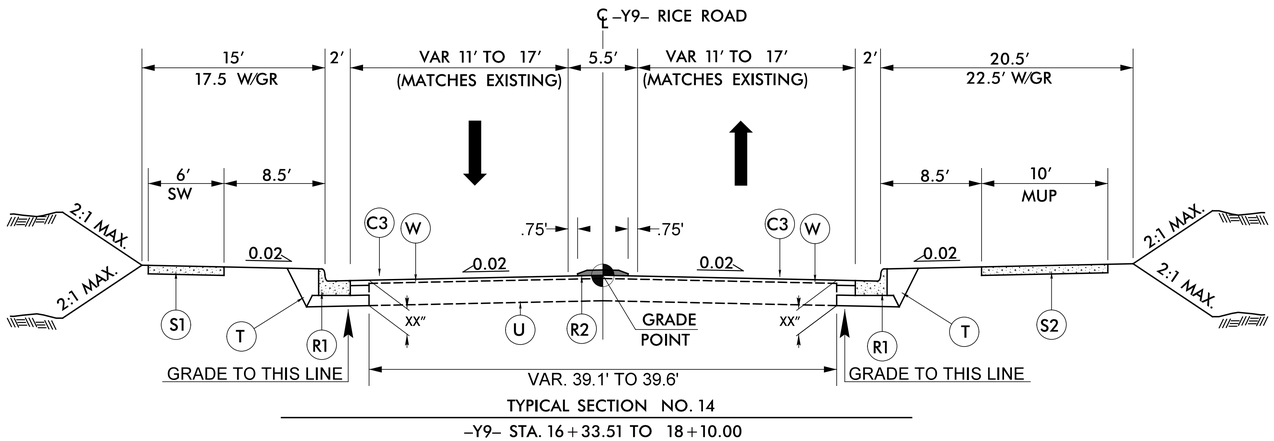
TYPICAL SECTION NO. 12

–Y8– STA. 11+68.10 TO 15+11.00



TYPICAL SECTION NO. 13

–Y8– STA. 15+11.00 TO 17+54.38



TYPICAL SECTION NO. 14

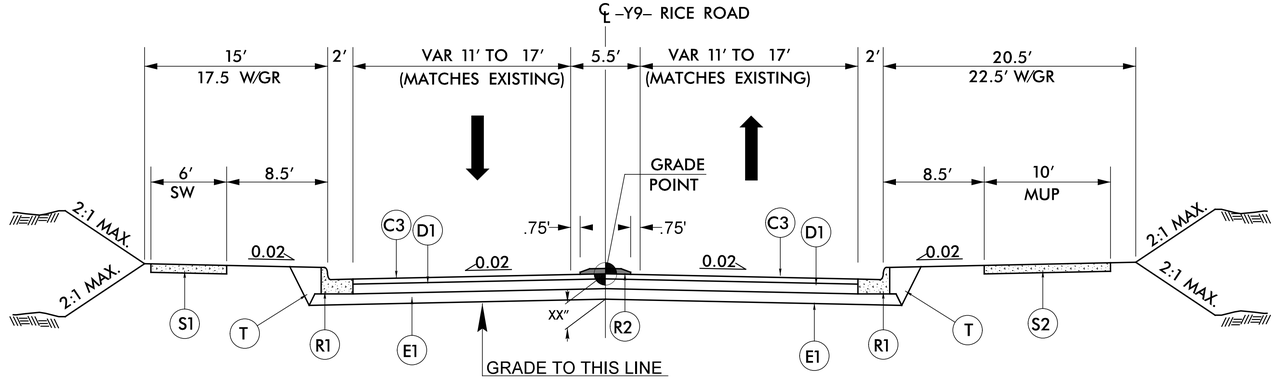
–Y9– STA. 16+33.51 TO 18+10.00

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-6
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

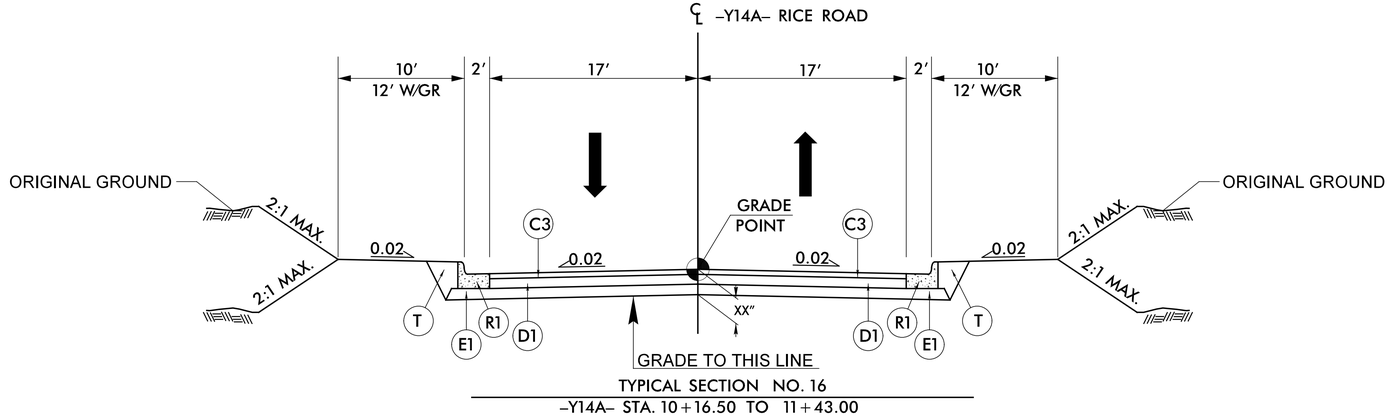
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

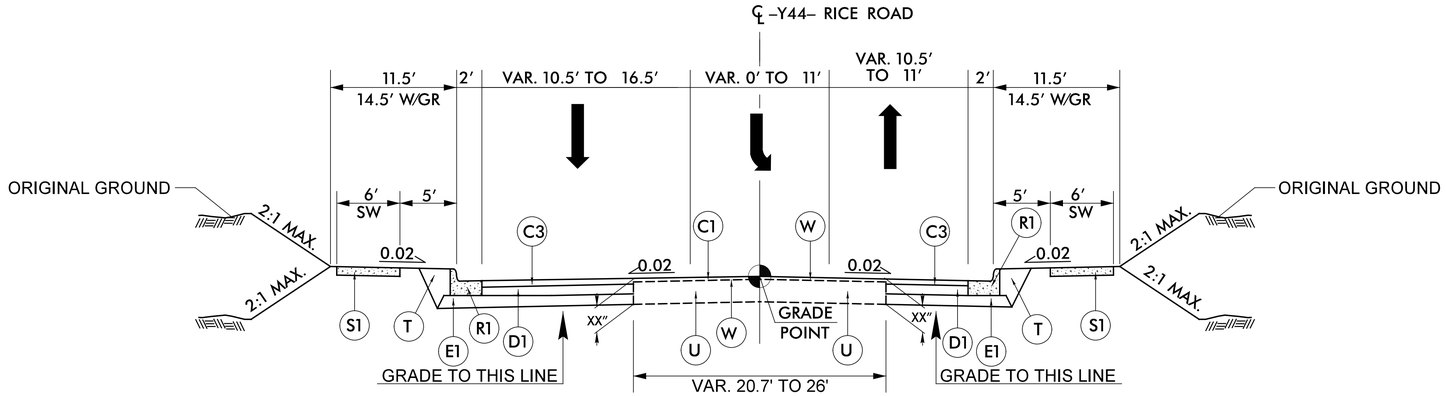
PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING



TYPICAL SECTION NO. 15
–Y9– STA. 18+10.00 TO 20+40.58



TYPICAL SECTION NO. 16
–Y14A– STA. 10+16.50 TO 11+43.00



TYPICAL SECTION NO. 17
–Y44– STA. 10+00.00 TO 11+12.90

6/2/99

2/22/2024
02509ab2_dy_UL_T_typ.dgn
jhorsley

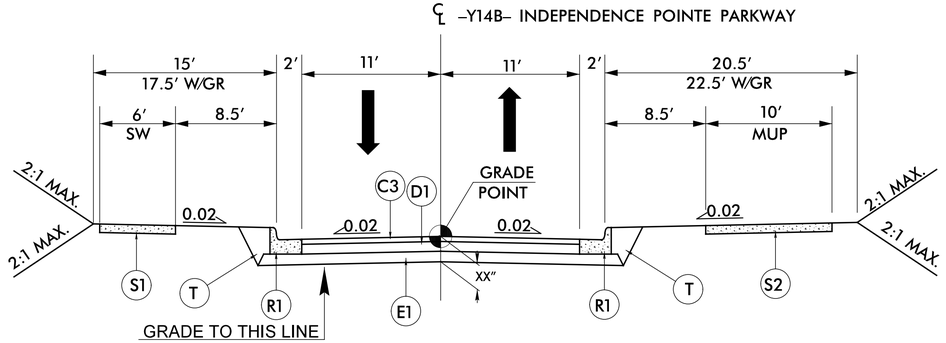
6/2/99

PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING

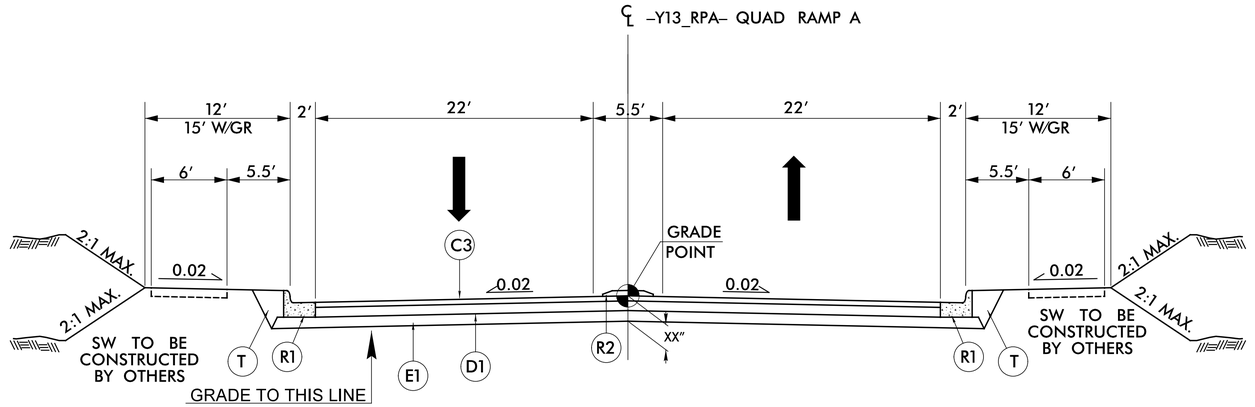
PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-7
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION NO. 18
–Y14B– STA. 10+10.91 TO 25+21.89



TYPICAL SECTION NO. 19
–Y13_RPA– STA. 10+39.18 TO 18+97.15

2/22/2024
D:\250908_rdy_ULT_typ.dgn
bonsin

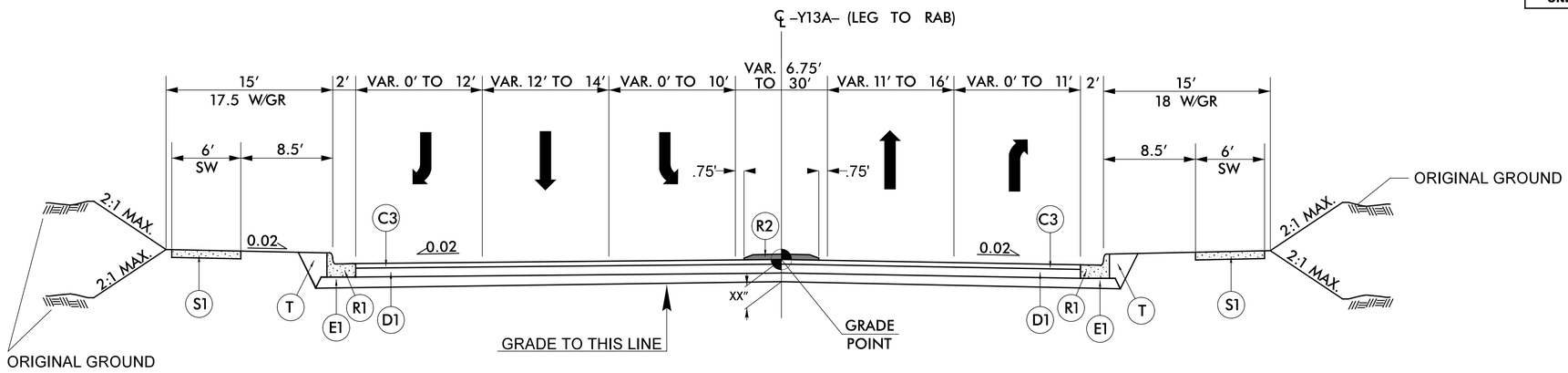
6/2/99

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-8
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

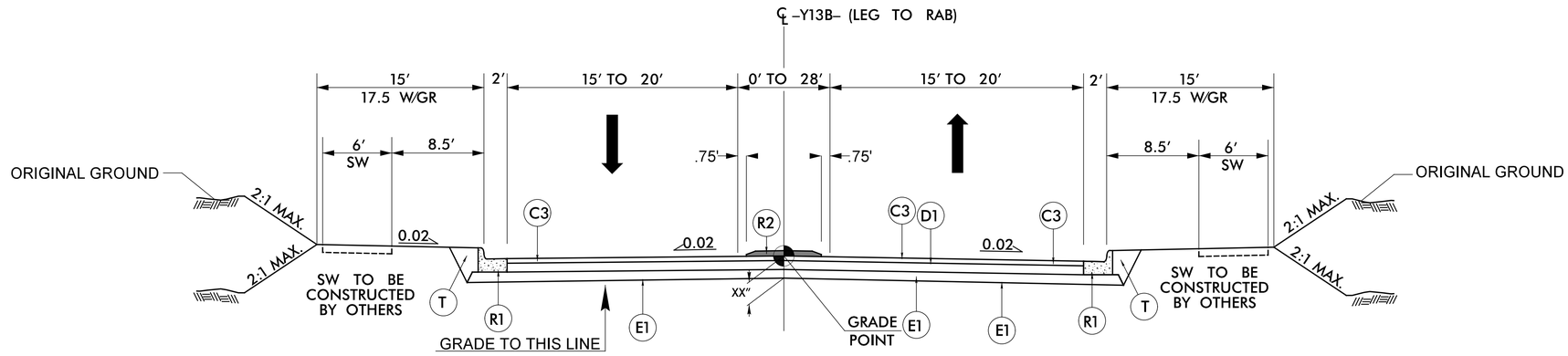
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING



TYPICAL SECTION NO. 20
–Y13A– STA. 10+32.75 TO 14+41.80



TYPICAL SECTION NO. 21
–Y13B– STA. 11+08.24 TO 13+00.00

2/22/2024
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bonsin

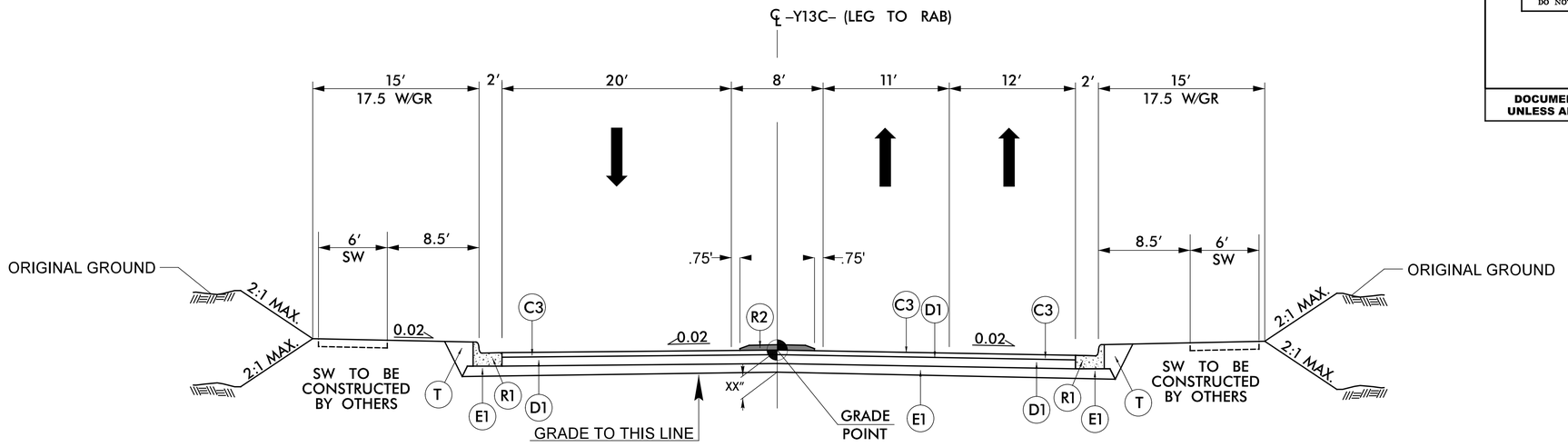
6/2/99

PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC ISLAND
S1	SIDEWALK
S2	MULTIUSE PATH
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-9
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

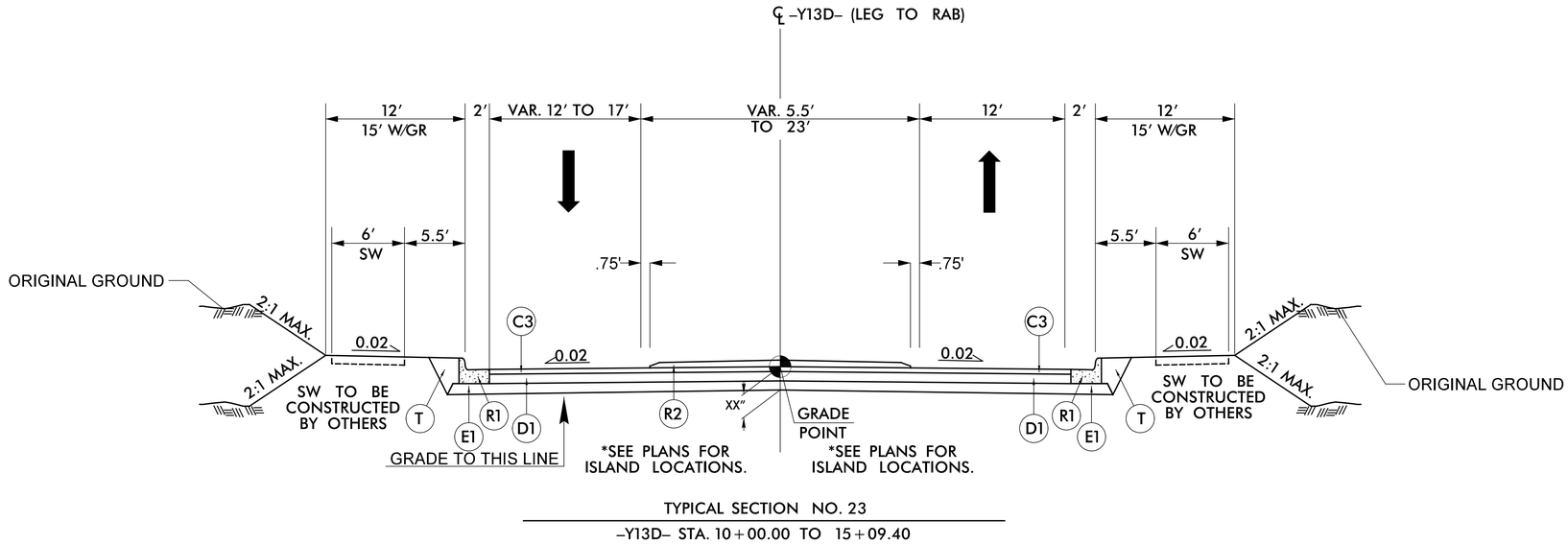
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION NO. 22

–Y13C– STA. 10+00.00 TO 11+63.31



TYPICAL SECTION NO. 23

–Y13D– STA. 10+00.00 TO 15+09.40

2/22/2024
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bpasin

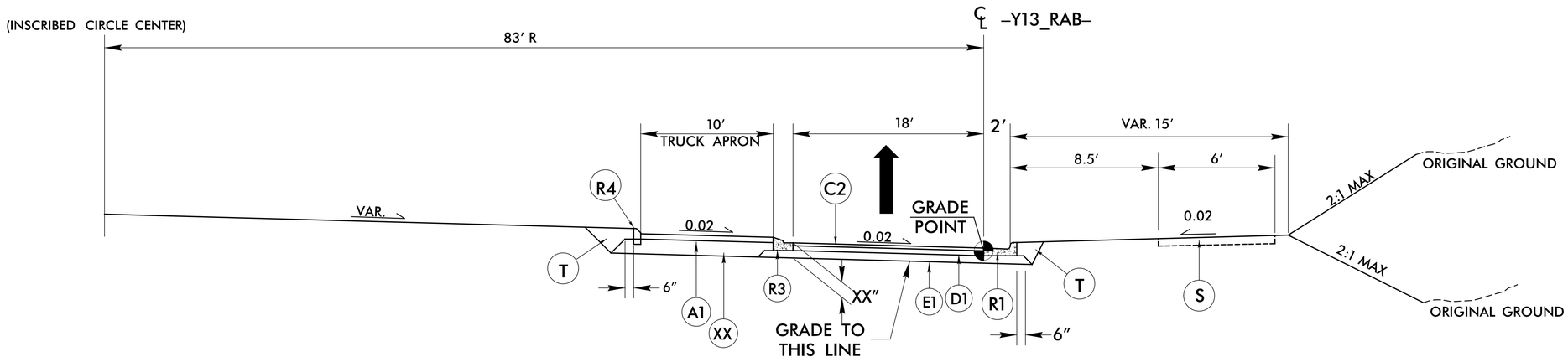
6/2/99

PAVEMENT SCHEDULE *AWAITING PAVEMENT DESIGN*	
C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R3	1'-6" CONCRETE CURB AND GUTTER.
R4	9" x 18" CURB
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-10
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

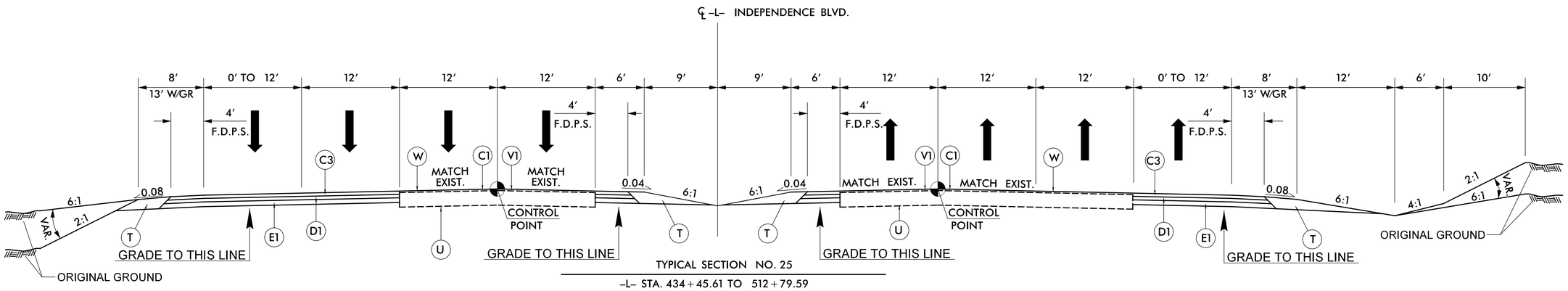
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION NO. 24

–Y13_RAB– STA. 10+00.00 TO STA. 15+21.50



TYPICAL SECTION NO. 25

–L– STA. 434+45.61 TO 512+79.59

2/26/2024
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bpeters

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2A-11
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

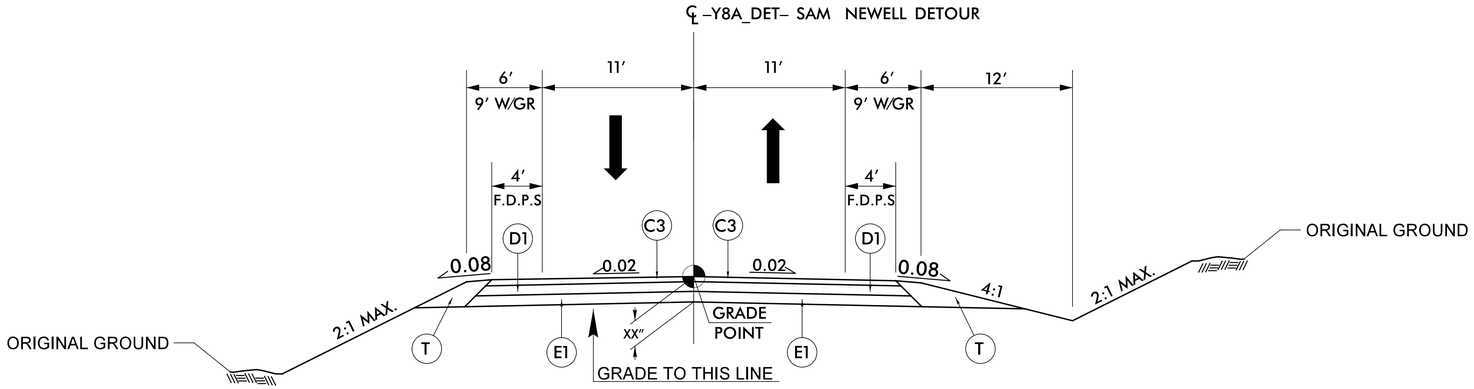
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

6/2/99

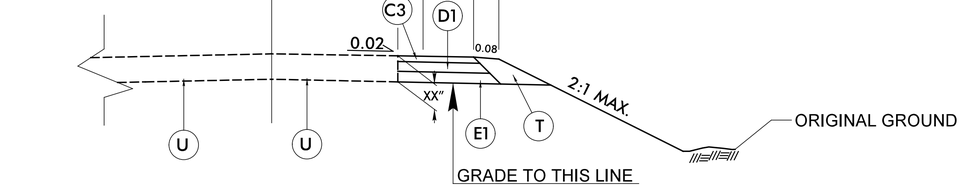
PAVEMENT SCHEDULE
AWAITING PAVEMENT DESIGN

C1	1.5" S9.5C
C3	3" S9.5C
C4	VAR. DEPTH S9.5C
D1	4" I19.0C
D2	VAR. DEPTH I19.0C,
E1	5" B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
R3	1'-6" CONCRETE CURB AND GUTTER.
R4	9" x 18" CURB
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" DEPTH.
W	WEDGING



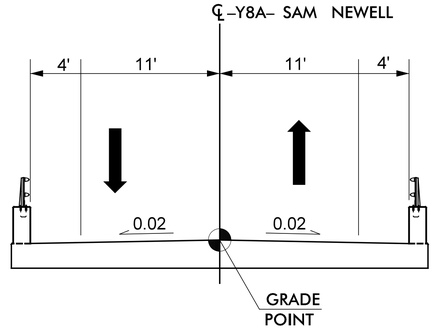
TYPICAL SECTION NO. 26

–Y8_DET– STA. 10+16.84 TO 13+78.00 (BEG. BRIDGE)
–Y8_DET– STA. 14+38.00 (END BRIDGE) TO 18+28.24



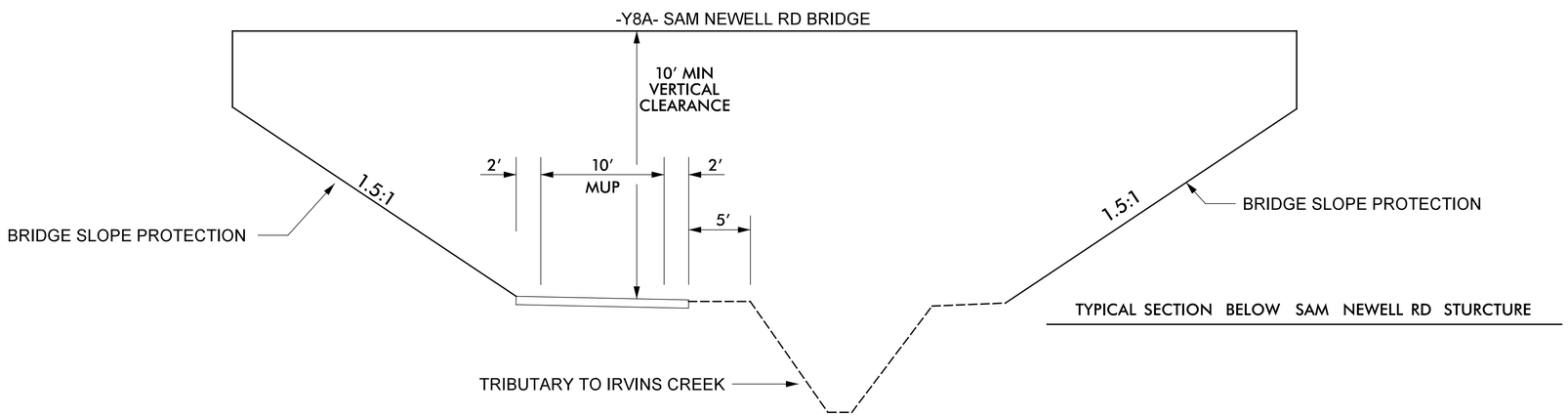
TYPICAL SECTION NO. 27

–Y8_DET– STA. 18+28.24 TO 22+4.76



TYPICAL SECTION NO. 28

–Y8A_DET– STA. 13+78.00 TO 14+38.00



TYPICAL SECTION BELOW SAM NEWELL RD STURCTURE

2/26/2024
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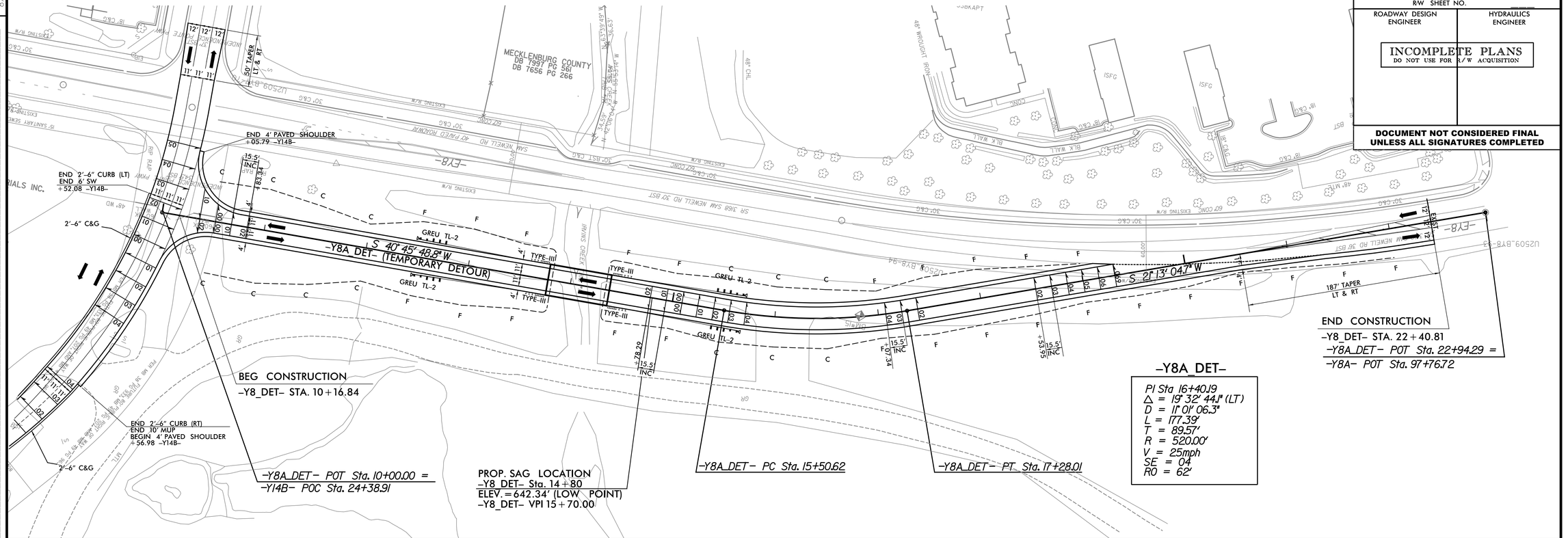
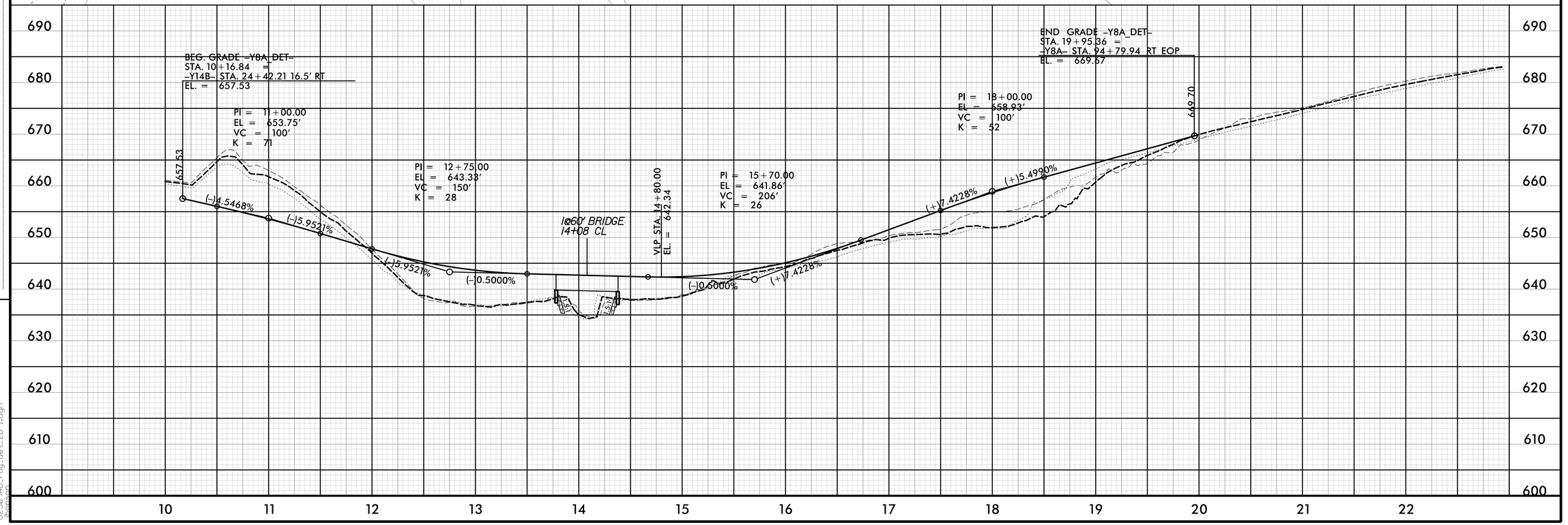
DETAIL OF TEMPORARY ONSITE DETOUR AT SAM NEWELL

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	2B-1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





2/27/2024
U2509AB_rdy_det_2B-1.dgn
jbenson

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

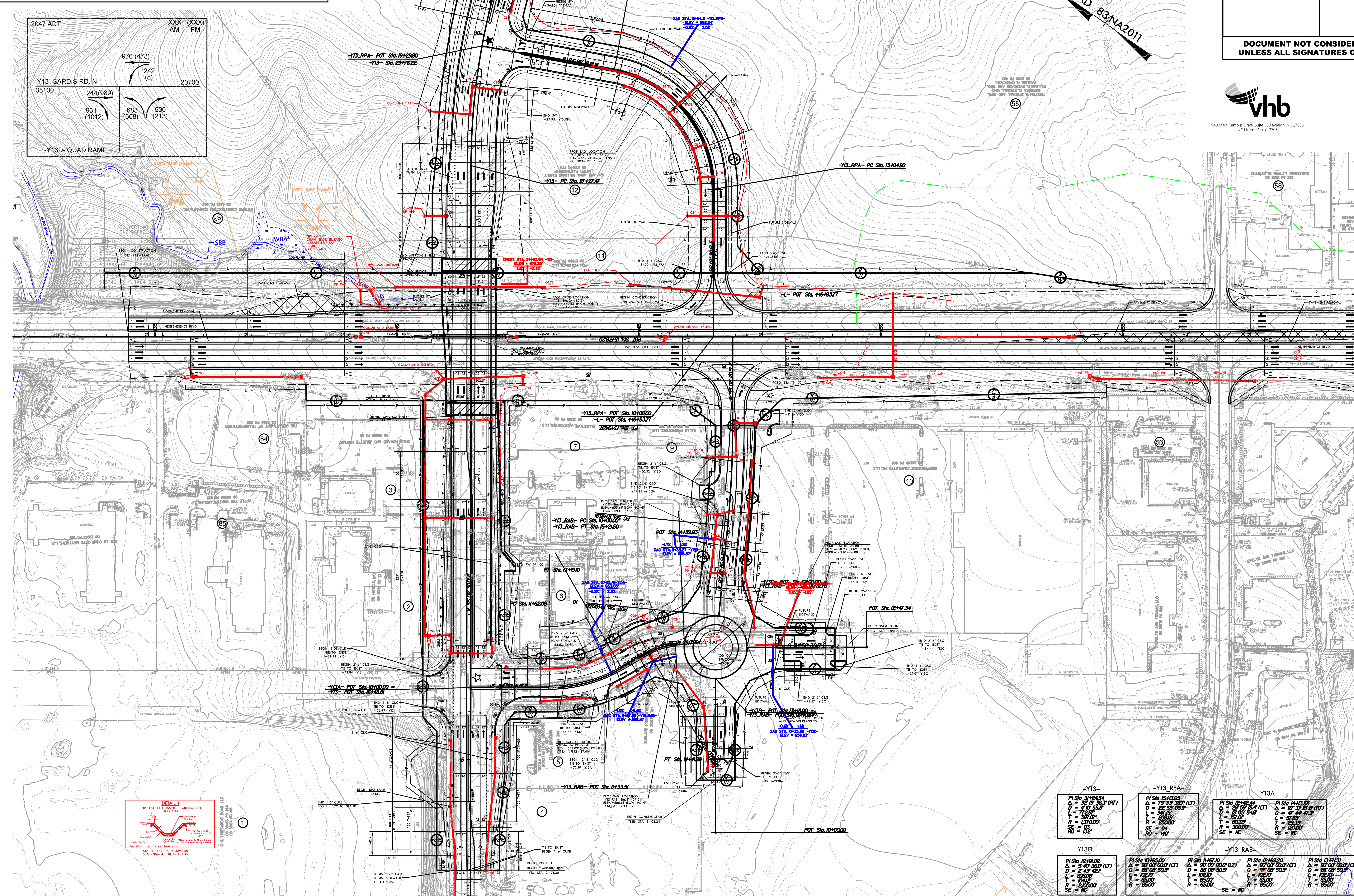
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

vhb
940 Main Campus Drive, Suite 500 Raleigh, NC 27606
NC License No. C-3705

FOR -Y13- PROFILE SEE SHEET 14
FOR -Y13A-,-Y13B-,-Y13C-,-Y13D-,& -Y13_RAB- PROFILES SEE SHEET 15
FOR -Y13_RPA- PROFILE SEE SHEET 16
FOR -L- PROFILE SEE SHEET 21 TO 23

★ PROPOSED SIGNAL
☆ EXISTING SIGNAL TO BE MODIFIED

100 50 0 100 200
PLANS



REVISIONS

8/17/99

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PROJECT REFERENCE NO.
U-2509AB
SHEET NO.
05
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
vhb
NAD 83/NA2011
REVISIONS
8/17/99
MATCHLINE -Y8A- STA 20+20.00 SEE SHEET 6
MATCHLINE -Y13- STA 32+00.00 SEE SHEET 4
MATCHLINE -Y8A- STA 29+75.00 SEE SHEET 7
(+) 3.0%
(-) 2.4%
-Y8A- PC Sta. 21+11.48
-Y8A- PT Sta. 25+00.52
-Y13- PRC Sta. 35+00.44
-Y13- PT Sta. 39+50.22
-Y8A- Sta. 26+60.95
-Y8A- PC Sta. 28+21.54
SAG STA. 37+76.12 -Y13-
ELEV. = 653.84'
STREAM CL NOT FROM SURVEY. SURVEYED STREAM NOT AVAILABLE AT TIME OF PLAN PRODUCTION.
PROP. SAG LOCATION
-Y13- Sta. 37+76.12
ELEV. = 653.84' (LOW POINT)
-Y13- VPI 37+64.00
NORTHEAST PARKWAY
SARDIS RD
EXIST. BASE CHANNEL
STABLE
STABLE RIP RAP IN BED/BED ROCK
STABLE NO FLOW
NO DEFINED CHANNEL BIG GULLY/SWALE 10' BASE
V-DITCH IN CENTER OF CLEARED ROAD
SPREADS
CLASS B RIP RAP
CHANNEL BLOCK W/CLASS I RIP RAP
STANDARD BASE DITCH W/CLASS I RIP RAP L = 135' SEE DETAIL 2
STANDARD BASE DITCH W/CLASS I RIP RAP L = 30' SEE DETAIL 2
JS
SBE
SBG
300' STORAGE
100' TAPER
16' CONC. ISLAND
4' CONC. ISLAND
2'-6" C&G
150' STORAGE
150' MEDIAN TAPER LT & RT
350' LEFT TURN LANE
6' SW
50' R
DETAIL 2
STANDARD BASE DITCH
(Not to Scale)
Natural Ground
Geotextile
Tuck Geotextile a Minimum of 1ft (TYP)
Detail Applies When B is < 6.0'
for Class I and II Rip-Rap;
And All Widths for Class B Rip-Rap
Type of Liner = CLASS I Rip-Rap, Keyed-In
Min. D = Ft.
d = Ft.
B = Ft.
FROM -Y13- STA. 37+33 TO STA. 37+57
FROM -Y8A- STA. 23+22 TO STA. 24+04
FROM -Y8A- STA. 43+25 TO STA. 43+62
FROM -L- STA. 485+98 TO STA. 486+36
FROM -L- STA. 497+24 TO STA. 497+57
PLAN VIEW
SECTION A-A
SECTION B-B
CHANNEL BLOCK
NOT TO SCALE
NOTES:
1) CHANNEL BLOCK SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
2) BLOCK SHOULD BE INSTALLED AT THE INTERFACE BETWEEN EXISTING CHANNEL AND PROPOSED CHANNEL.
3) BOTTOM OF BLOCK SHOULD BE A MINIMUM OF 1' BELOW THE INVERT OF THE EXISTING CHANNEL.
4) BLOCK SHOULD EXTEND A MINIMUM OF 5' BEYOND THE LIMITS OF THE EXISTING STREAM CHANNEL.
5) INSTALL EROSION CONTROL MATTING AND SEED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS IMMEDIATELY AFTER GRADING.
6) COMPACT BACKFILL TO EXTENT POSSIBLE OR AT THE DIRECTION OF THE ENGINEER.
PROPOSED SIGNAL
FOR -Y13- PROFILE SEE SHEET 14
FOR -Y8A- PROFILE SEE SHEET 16 & 17

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

8/17/99

NAD 83/NA 2011

MECKLENBURG COUNTY
DB 28615 PG 89

THC CAPITAL ASSOCIATES
DB 6183 PG 693

OUTLET CHANNEL

-Y8A- POT Sta. 10+00.00

SBA

IRWIN CREEK

EXIST. BASE CHANNEL

NO FLOW

STABLE
NO FLOW

WBB

DEEP GULLY

CLASS B RIP RAP

2'-6" C&G

-Y8A-
NORTHEAST PARKWAY

S 66°36'15.8" E

6' SW

BEGIN CONSTRUCTION
-Y8A- STA. 12+25.00
FUTURE PROJECT TBD

BEGIN SW
BEGIN 2'-6" C&G
LT & RT

STABLE

DEEP GULLY
STABLE

MATCHLINE -Y8A-
STA 20+20.00 SEE SHEET 5

(+) 3.0%

FOR -Y8A- PROFILE SEE SHEET 16

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jhopson

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	07
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

8/17/99

-Y8A-

PI Sta 23+12.16
Δ = 34° 39' 57.9" (RT)
D = 8° 54' 38.5"
L = 389.04'
T = 200.68'
R = 643.00'
SE = 04
RO = 108'

PI Sta 29+41.06
Δ = 21° 03' 38.5" (LT)
D = 8° 54' 38.5"
L = 236.35'
T = 119.53'
R = 643.00'
SE = 04
RO = 108'

WAS

WAT

SBR

NAD 83/NA 2011

EXIST. BASE CHANNEL

VERT.

3'

3.5'

STABLE

STREAM CL NOT FROM SURVEY. SURVEYED STREAM NOT AVAILABLE AT TIME OF PLAN PRODUCTION.

CREST STA. 35+39.12 -Y8A-
ELEV = 679.03'
3.0% -0.9452%

PROP. CREST LOCATION
-Y8A- Sta. 35 + 39.12
ELEV. = 679.03' (HIGH POINT)
-Y8A- VPI 34 + 61.00

CITY OF CHARLOTTE
TOWN OF MATTHEWS

EXIST. SWALE

3H

5'

STABLE

-Y8A- PT Sta. 30+57.89

MATCHLINE -Y8A- STA 29 + 75.00 SEE SHEET 5

(+) 3.0%

350' LEFT TURN LANE

100' TAPER

150' TRANSITION

TRANSITION SIDEWALK WIDTH FROM 6' TO 8'

+31.72

+33.45

6' SW

8' SW

CB

-Y8A-
NORTHEAST PARKWAY

S 52° 59' 56.4" E

10' MUP

END 2'-6" C&G +58.00

BEGIN 2'-6" C&G +59.00

+24.56

25' TYP

+50.00

20' SW TRS.

+31.72

+33.37

150' TRANSITION

NO DEFINED CHANNEL
WIDE SWALE - 4' BASE

2'-6" C&G

-Y8A- PC Sta. 39+88.02

150' TRANSITION

100' TAPER

MATCHLINE -Y8A- STA 40 + 00.00 SEE SHEET 8

(-) 0.9%

RUSSELL WILLIAM WISE, SR.
REVOCABLE TRUST, UTD
DB 31648 PG 484
DB 23219 PG 306
DB 7454 PG 646
DB 7454 PG 648
DB 7454 PG 652
DB 7454 PG 654
DB 7454 PG 656

12 30 35 87 15 14 88

FOR -Y8A- PROFILE SEE SHEET 17

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jhanson

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	08
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

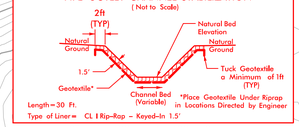
REVISIONS 8/17/99

–Y8A–
PI Sta 43+77.54
Δ = 45° 44' 34.6" (RT)
D = 6° 05' 43.1"
L = 750.46'
T = 396.52'
R = 940.00'
SE = 04
R0 = 108'

–Y8–

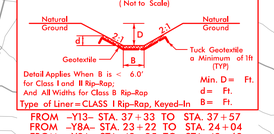
PI Sta 10+70.93	PI Sta 11+98.26	PI Sta 13+23.03	PI Sta 15+89.39
Δ = 4° 03' 44.8" (LT)	Δ = 12° 23' 32.4" (LT)	Δ = 9° 28' 14.5" (LT)	Δ = 40° 15' 25.1" (RT)
D = 2° 51' 53.2"	D = 11° 01' 06.3"	D = 6° 54' 11.2"	D = 10° 36' 37.2"
L = 141.81'	L = 112.47'	L = 137.19'	L = 379.41'
T = 70.93'	T = 56.45'	T = 68.75'	T = 197.92'
R = 2,000.00'	R = 520.00'	R = 830.00'	R = 540.00'
SE = 04	SE = 02		
SE = 100'			

DETAIL 1
PIPE OUTLET CHANNEL STABILIZATION
(Not to Scale)



STA. –L– 439+15 to 439+50
STA. –Y8A– 41+10 to 41+35

DETAIL 2
STANDARD BASE DITCH
(Not to Scale)



FROM –Y13– STA. 37+33 TO STA. 37+57
FROM –Y8A– STA. 23+22 TO STA. 24+04
FROM –Y8A– STA. 43+25 TO STA. 43+62
FROM –L– STA. 485+98 TO STA. 486+36
FROM –L– STA. 497+24 TO STA. 497+57

NAD 83/NA 2011

–Y8– PC Sta. 10+00.00
–Y8– PCC Sta. 11+48.81
–Y8– PCC Sta. 12+54.28
–Y8– PRC Sta. 13+91.47
BEG. CONSTRUCTION –Y8– STA. 11+68.10
CLASS B RIP RAP
SAM NEWELL RD
SBE
SBR
JS
WAR
NO CLAIM
STREAM CL NOT FROM SURVEY. SURVEYED STREAM NOT AVAILABLE AT TIME OF PLAN PRODUCTION.
EXIST. BASE CHANNEL
PIPE OUTLET CHANNEL STABILIZATION W/CLASS I RIP RAP L=20' SEE DETAIL 1
PROP SAG LOCATION –Y8A– Sta 41+29.81 ELEV. = 674.14 –Y8A– VPI 42+10.00
BEG. MUP, C&G +68.10
100' TAPER
175' RIGHT TURN LANE
10' MUP
6' SW
2'-6" C&G
30" RCP-III
BURIED
60" RCP-III
HW
R=60'
R=65'
STANDARD BASE DITCH W/CLASS I RIP RAP L= 30' SEE DETAIL 2
–Y8– PT Sta. 17+70.88=
–Y8A– POC Sta.42+24.60
–DR2– POT Sta. 10+00.00=
–Y8A– POC Sta.50+00.00
S 7° 15' 21.9" E
–DR2– PC Sta. 10+45.09
–DR2– PT Sta. 11+86.11
S 82° 44' 38.1" W
–DR2– PT Sta. 11+86.69
–DR2– PT Sta. 10+86.67
–DR2– PC Sta. 11+47.30
N 7° 50' 57.1" W
–Y8A– PT Sta. 47+31.49
NORTHEAST PARKWAY
GREU TL-2
10' DRIVE
ISFD
(+) 2.8%
(–) 0.9%
SAG STA. 41+29.81 –Y8A– ELEV. = 671.41 –K– = 2.8%
MATCHLINE –Y8A– STA 40+00.00 SEE SHEET 7
MATCHLINE –Y8A– STA 50+50.00 SEE SHEET 9

★ PROPOSED SIGNAL

FOR –Y8– PROFILE SEE SHEET 19
FOR –Y8A– PROFILE SEE SHEET 17

RICHARD &DIANN DALE DB 7094 PG 706
SALVATORE PECORELLA & KARRISSA RAE COOK DB 28641 PG 342
JEAN WEBB STEWART & RANDY WEBB DB 32862 PG 553
DEBORA FAIRCLOTH DB 04127 PG 2264
JOSE CARRILLA OROSCO DB 913 PG 248
SAMUEL & MONSERRATE CORTEZ DB 32171 PG 682
SAMUEL & WIL... DB 3204...
JAMES WILLARD HAMBY NEVA C. HAMBY DB 6873 PG 593 DB 6873 PG 595 DB 6873 PG 597
LFG PROPERTIES LLC DB 1532
PAUL O. W... DB 14627
CHARLOTTE PIPE TRUCK UNION WSPO 851
RUSSELL WILLIAM WISE, SR. REVOCABLE TRUST, ET/O DB 1454 PG 559
DEAN WISE PG 526 PG 231
DANIEL CHRISTOPHER DB 5538 PG

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bwason

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	09
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

8/17/99

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hpeters

-Y8A-

PI Sta 53+56.54
Δ = 8° 29' 47.9" (RT)
D = 1° 50' 53.7"
L = 459.71'
T = 230.28'
R = 3,100.00'
SE = 03
RO = 75'

PI Sta 62+31.76
Δ = 17° 58' 38.6" (LT)
D = 7° 09' 43.1"
L = 251.01'
T = 126.55'
R = 800.00'
SE = 04
RO = 100'

-Y9-

PI Sta 18+51.12
Δ = 66° 51' 17.7" (RT)
D = 28° 38' 52.4"
L = 233.37'
T = 132.01'
R = 200.00'
SE = NC
V = 25 MPH

PI Sta 14+90.49
Δ = 14° 59' 22.5" (LT)
D = 10° 44' 36.8"
L = 139.52'
T = 70.16'
R = 533.30'
SE = NC

NAD 83/NA 2011

-Y44- POT Sta. 13+49.37

MATCHLINE -Y8A- STA 50+50.00 SEE SHEET 8

MATCHLINE -Y8A- STA 64+00.00 SEE SHEET 10

MATCHLINE -Y9- STA 15+50.00 SEE SHEET 10

(+) 2.8%

(-) 3.3%

(+) 1.3%

IGLESIA DE DIOS PENTECOSTAL, MOVIMENTO INTERNACIONAL, INC.
DB 17881 PG 517

MICHAEL A. LANG AND WIFE, CLAIR B. LANG
DB 4843 PG 373

WALKING BY FAITH COMMUNITY CHURCH
DB 26806 PG 385

THU NGUYEN, KIM LOAN D
CHRISTOPHER LEON NG
DB 15126 PG 741

DEVELOPMENT DETENTION POND

EXIST. BASE CHANNEL

S 1°14'26.0" W

-Y8A- PC Sta. 61+05.21

PROP. SAG LOCATION
-Y44- Sta. 10+50.07
ELEV. = 726.44' (LOW POINT)
-Y44- VPI 10+65.00

CREST STA. 61+54.63 -Y8A-
ELEV = 727.23'
-4.7% 3.3%

PROP. CREST LOCATION
-Y8A- Sta. 61+45.63
ELEV. = 727.22' (HIGH POINT)
-Y8A- VPI 61+13.72

SAG STA. 10+50.07 -Y44-
ELEV = 726.44'
-0.7% 1.3%

END 2'-6" C&G
END SIDEWALK
+95.00 -Y44-

END CONSTRUCTION
-Y44- STA 10+75.00

BEGIN SIDEWALK
TIE TO EXIST
BEGIN 2'-6" C&G
+95.00 -Y44-

REMOVE EXISTING SIDEWALK

125' STORAGE

200' STORAGE

100' TAPER

75' TAPER TO EXIST (LT & RT)

-Y9- PT Sta. 19+52.47

-Y9- POT Sta. 20+68.08
-Y8A- Sta. 61+49.42
-Y44- POT Sta. 10+00.00

-Y9- PC Sta. 17+19.10

-Y9- PT Sta. 15+59.85

-Y9- STA. 16+33.51

-Y8A- PT Sta. 63+56.22

-Y8A- PC Sta. 51+26.26

-Y8A- PT Sta. 55+35.98

SAM NEWELL RD

RICE RD

JACKSON ST

10' MUP

6' SW

2'-6" C&G

JB w/MH

CLASS B RIP RAP

NO DEFINED CHANNEL STABLE SPREADS

THE TOWN OF MATTHEWS
DB 6001 PG 758

DITCH HAS BEEN RUN OVER BY UTILITY TRUCKS

30" RCP

EXIST. BASE CHANNEL

JOHN A. STEWMAN AND WIFE, ANN F. STEWMAN
DB 1802 PG 77

0.1' WATER DEPTH

WAQ

DI NOT FUNCTIONING FILLED W/SEDIMENT FILLS UP THEN FLOWS DOWN DITCH

BERM

ELIDA PROPERTIES LLC
DB 35342 PG 578

EAST VILLAGE SHOPPING CENTER, LLC
DB 21829 PG 495
PB 27 PG 960

Adj. CB

★ PROPOSED SIGNAL

FOR -Y8A- PROFILE SEE SHEET 17 & 18
FOR -Y44- PROFILE SEE SHEET 19
FOR -Y9- PROFILE SEE SHEET 20

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS 8/17/99

MATCHLINE -Y8A- STA 64+00.00 SEE SHEET 9

MATCHLINE -Y9- STA 15+50.00 SEE SHEET 09

MATCHLINE -Y8A- STA 76+00.00 SEE SHEET 11

MATCHLINE -Y9- STA 11+50.00 SEE SHEET 11

-Y39-
PI Sta 11+99.72
Δ = 14° 33' 09.2" (RT)
D = 5° 43' 46.5"
L = 253.99'
T = 127.68'

-Y39- PC Sta. 10+72.04
N 86° 17' 35.1" E
-Y39- POT Sta. 10+00.00
-Y8A- Sta. 70+70.97

-Y39- PT Sta. 13+26.03
S 64° 12' 05.4" E

-DRI- PC Sta. 10+86.85
-DRI- PT Sta. 11+46.27

-Y8A- PC Sta. 69+03.22

-Y9- PCC Sta. 14+20.33

-Y9- PC Sta. 12+72.24

-Y8A- PT Sta. 74+38.12

-DRI- POT Sta. 10+00.00
-Y8A- Sta. 73+46.34

PROP. SAG LOCATION
-Y8A- Sta. 72+93.08
ELEV. = 700.37' (LOW POINT)
PI Sta. 73+66.73

SAG Sta. 72+93.08 -Y8A-
END Sta. 73+41.93
ELEV = 700.37'
0.5% -2.0%

-Y9-
PI Sta 13+46.99
Δ = 19° 17' 01.4" (LT)
D = 13° 01' 18.4"
L = 148.09'
T = 74.75'
R = 440.00'

-DR1-
PI Sta 11+16.95
Δ = 22° 41' 53.4" (LT)
D = 38° 11' 49.9"
L = 59.42'
T = 30.11'
R = 150.00'
SE = 02
R0 = SEE PLANS

-Y8A-
PI Sta 71+95.64
Δ = 57° 30' 01.3" (RT)
D = 10° 44' 58.8"
L = 534.90'
T = 292.42'
R = 533.00'
SE = 04
R0 = SEE PLANS

NAD 83/NA 2011

(-)3.3%

(+)1.3%

(+)2.3%

SAM NEWELL RD

RICE RD

NORTHWEST PKWY

WAV

NO CLAIM

SEE SPECIAL DETAIL ?

DO NOT IN LOW SPOT-CONSIDER ADJUSTING

SYSTEM TIES TO DI ADJACENT TO INDEPENDENCE (IN FRONT OF ADVANCE AUTO) AND GOES ACROSS THE STREET TO NTB

END 2'-6" C&G TIE TO EXIST.

END CONSTRUCTION -DRI- STA. 11+24.14

BEGIN 2'-6" C&G TIE TO EXIST.

BEGIN 2'-6" C&G TIE TO EXIST. +65.90 -Y8-

END MUP TIE TO EXIST. +28.00 -Y8-

END 2'-6" C&G TIE TO EXIST. +22.67 -Y8-

BEGIN MUP TIE TO EXIST. +55.53 -Y8-

REMOVE EXISTING SIDEWALK

JB W/CONC. WALL INSIDE FOR DETENTION

WET/FLAT STANDING WATER, NO DEFINED CHANNEL

DRY DETENTION

RETAINING WALK

10' MUP

6' SW

2'-6" C&G

FOR -Y8A PROFILE SEE SHEET 18
FOR -Y9- PROFILE SEE SHEET 20
FOR -DRI- PROFILE SEE SHEET 20

★ PROPOSED SIGNAL

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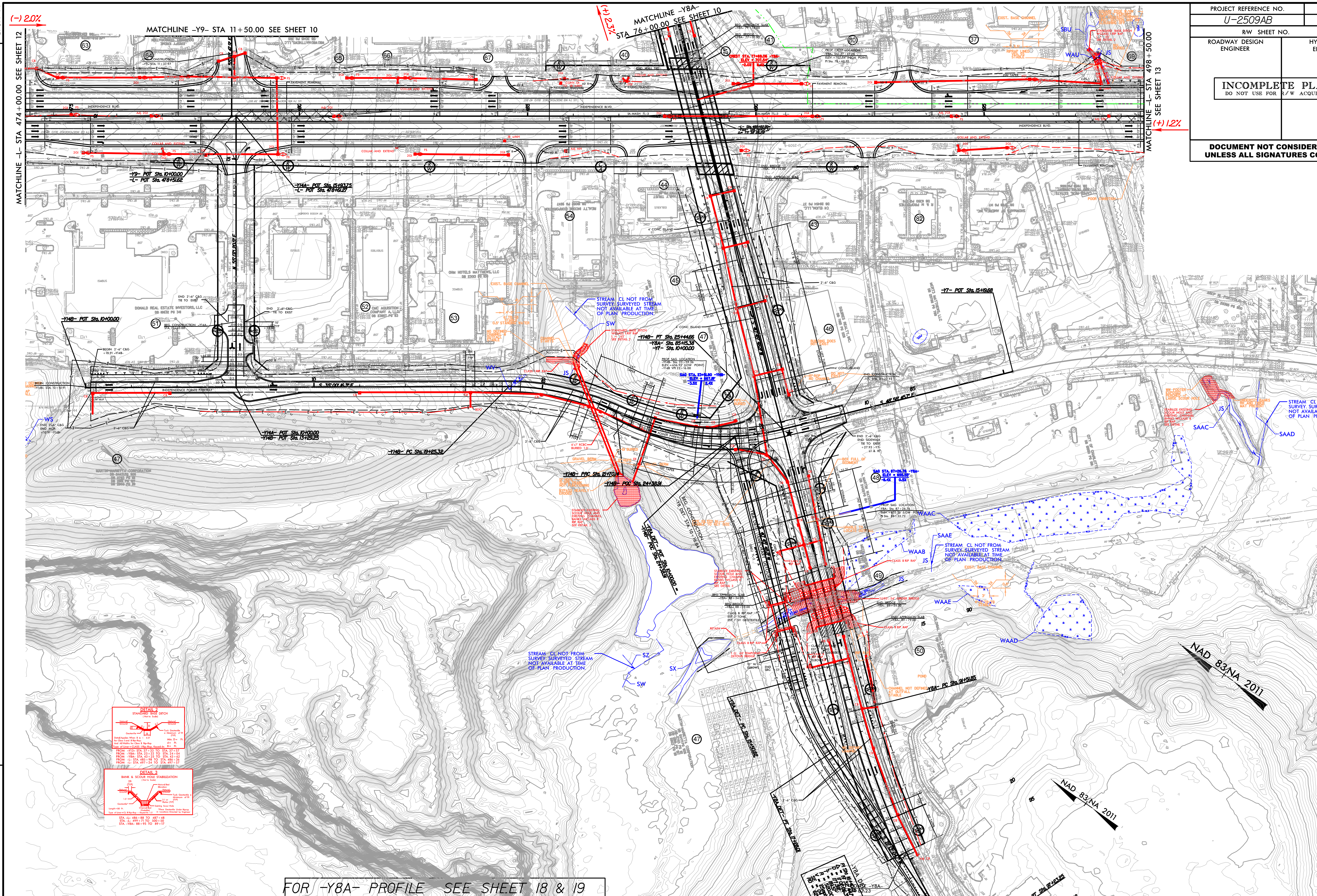
hpeterson

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



-Y8A-

PI Sta 94+40.35
Δ = 19° 32' 44.1" (LT)
D = 3° 25' 14.3"
L = 571.40'
T = 288.50'
R = 1,675.00'
SE = 03
RO = 81'

-Y14B-

PI Sta 20+49.93	PI Sta 23+38.83
Δ = 26° 19' 03.5" (RT)	Δ = 40° 15' 32.9" (LT)
D = 10° 44' 58.8"	D = 10° 44' 58.8"
L = 244.82'	L = 374.51'
T = 124.61'	T = 195.36'
R = 533.00'	R = 533.00'
SE = 04	SE = 04
RO = 80'	RO = 80'

FOR -Y8A- PROFILE SEE SHEET 18 & 19
FOR -Y14A- PROFILE SEE SHEET 20
FOR -Y14B- PROFILE SEE SHEET 20 & 21
FOR -L- PROFILE SEE SHEET 22 & 23

★ PROPOSED SIGNAL

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	12

R/W SHEET NO.

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

8/17/99

MATCHLINE –L– STA 498+50.00 SEE SHEET 11

NAD 83/NA 2011

INDEPENDENCE BLVD.

–L– STA. 502+79.59

END CONSTRUCTION

100' TAPER

PAVEMENT REMOVAL

GREU TL-3 2GI

50' R

(+) 1.2%

NO CLAIM
81

3:19:27 PM
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thopson

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y13–

BEGIN GRADE
–Y13– STA. 12+71.30
EL. = 652.24'

PI = 14+09.00
EL = 657.88'
VC = 230'
K = 63

(+)4.1000%

(+)0.4677%

–Y13– STA. 16+48.81 =
–Y13A– STA. 10+00.00

–Y13A–
℄

PI = 17+50.00
EL = 659.48'
VC = 228'
K = 64

(±)0.4677%

(+)4.0191%

BEGIN BRIDGE
–Y13– STA. 22+37

(+)4.0191%

PI = 23+85.00
EL = 685.00'
VC = 760'
K = 119

(–)2.3719%

END BRIDGE
–Y13– STA. 25+10

678.76'

VHP STA. 24+82.94
EL. = 679.33'

–Y13– STA. 23+73.73 =
INDEPENDENCE BLVD.
STA. 441.52.93

–L–
℄

–Y13–

–Y13– STA. 29+76.22 =
–Y13_RPA– STA. 19+29.90

–Y13_RPA–
℄

(–)2.3719%

678.76'

VLP STA. 37+76.12
EL. = 653.84'

END GRADE
–Y13– STA. 39+33.42
–Y8A– STA. 26+57.75, 16.5' RT
EL. = 655.68'

PI = 37+64.00
EL = 652.29'
VC = 285'
K = 65

(–)2.3719%

(+)2.0000%

2/27/2024
U2509AB_Cult_rdy_V2_PFL_Sheets.dgn
jhanson

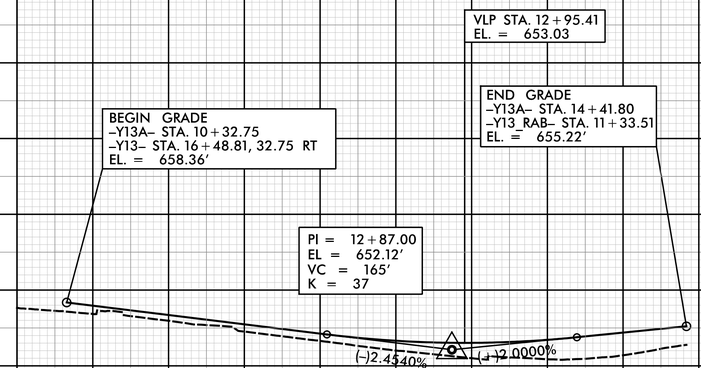
5/28/99

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	15
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

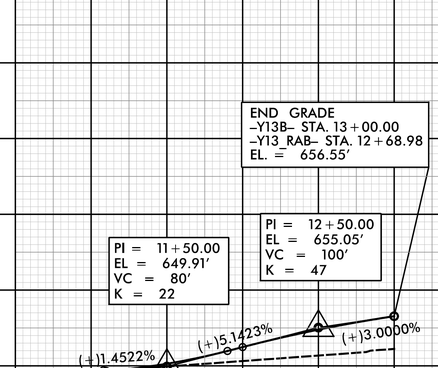
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

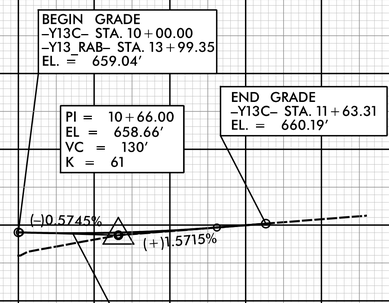
–Y13A–



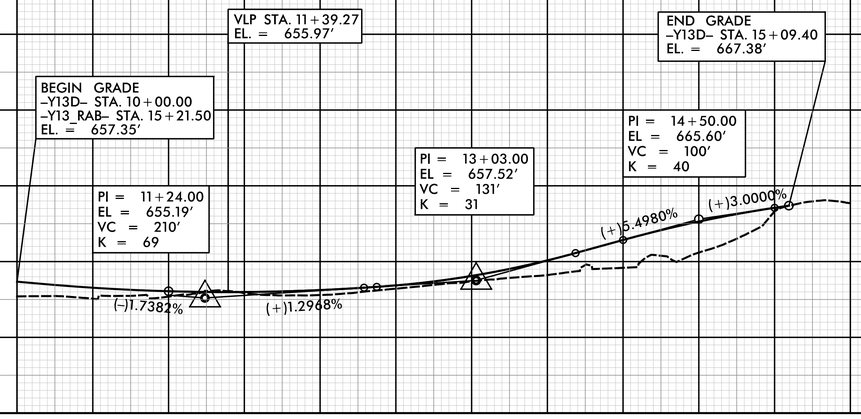
–Y13B–



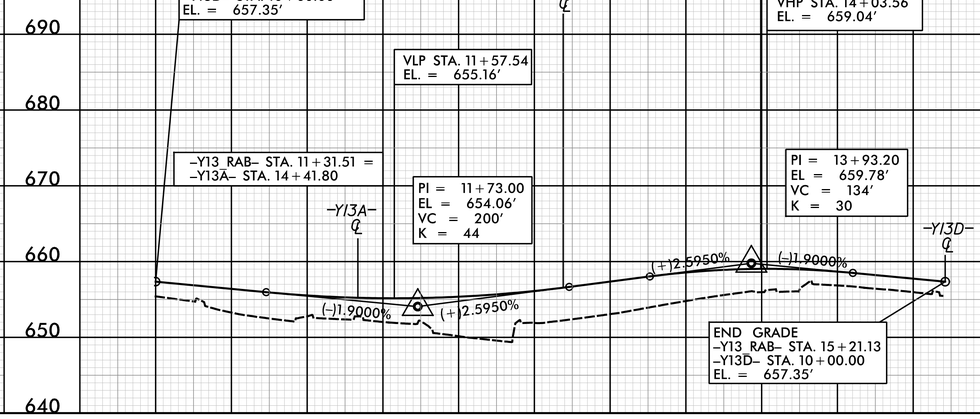
–Y13C–



–Y13D–



–Y13_RAB–



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PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y13_RPA–

BEGIN GRADE
–Y13_RPA– STA. 10+39.18
EL. = 666.48

PI = 11+04.00
EL = 665.12'
VC = 120'
K = 75

(–)2.0982%

(–)0.5031%

VLP STA. 15+54.90
EL. = 662.94'

PI = 16+44.00
EL = 662.41'
VC = 250'
K = 71

(–)0.5031%

(+)3.0000%

END GRADE
–Y13_RPA –STA. 18+97.15
–Y13– STA. 29+76.22, 32.75' RT
EL. = 670.00'

–Y8A–

BEG. GRADE –Y8A– STA. 12+25.00
EL. = 627.84627.84

PI = 13+34.00
EL = 631.44'
VC = 200'
K = 78

(+)3.3028%

(+)0.7269%

632.67

–Y8A–

PI = 20+00.00
EL = 636.28'
VC = 300'
K = 132

632.67

(+)0.7269%

(+)3.0000%

663.28

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y8A–

VHP STA. 35+39.12
EL = 679.03

VLP STA. 41+29.81
EL. = 674.14

PI = 34+61.00
EL = 680.11'
VC = 300'
K = 76

PI = 42+05.00
EL = 673.08'
VC = 300'
K = 79

663.28

(+)3.0000%

(–)0.9452%

(–)0.9452%

(+)2.8454%

673.97

730 720 710 700 690 680 670 660 650

29 30 31 32 33 34 35 36 37 38 39 40 41 42 43

–Y8A–

PI = 42+05.00
EL = 673.08'
VC = 300'
K = 79

675.97

(+)2.8454%

PI = 51+30.72
EL = 699.42'
VC = 265'
K = 121

(+)2.8454%

(+)0.6560%

(+)0.6560%

PI = 55+05.72
EL = 701.88'
VC = 420'
K = 103

(+)4.7836%

711.09

730 720 710 700 690 680 670 660 650 640

43 44 45 46 47 48 49 50 51 52 53 54 55 56 57

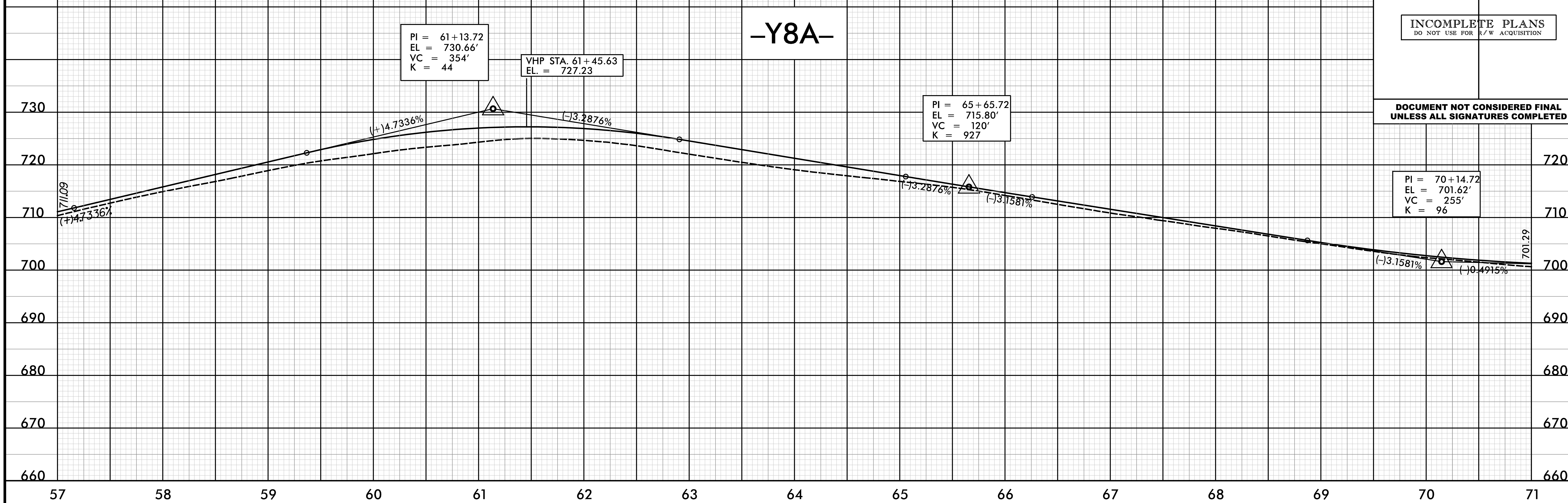
2/27/2024
U2509AB_Cult_rdy_V2_PFL_Sheets.dgn
jhanson

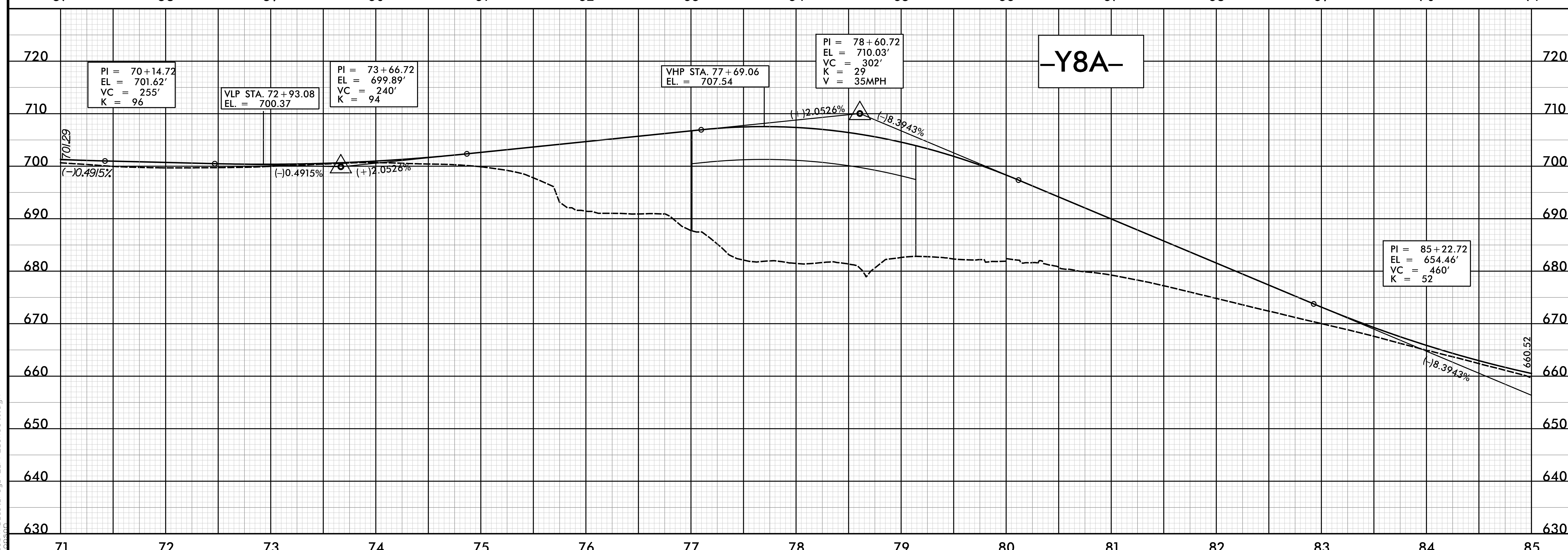
PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

5/28/99





2/27/2024
U2509AB_ult_rdy_V2_PFL_Sheets.dgn

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y8A–

VLP STA. 87+26.76
EL. = 655.55

PI = 85+22.72
EL = 654.46'
VC = 460'
K = 52

660.52

(–)0.5020%

(–)0.3943%

@95° BRIDGE
89+06.5 CL

1.5:1

1.5:1

END GRADE –Y8A– STA. 94+82.22
EL. = 668.94

PI = 92+87.72
EL = 658.30'
VC = 245'
K = 49

(+)0.5020%

(+)5.4704%

–Y8–

BEG GRADE –Y8–
Sta. 11+88.10 EL. = 658.36

PI = 13+25.00
EL = 658.82'
VC = 250'
K = 66

(+)0.2960%

(+)4.0677%

END GRADE –Y8– Sta. 17+54.38 =
–Y8A– Sta. 42+24.21, 16.5' LT EL. = 675.37

PI = 17+24.38
EL = 675.07'
VC = 60'
K = 18
V = 25mph

(+)4.0677%

(+)1.0000%

–Y44–

BEGIN GRADE
–Y44– STA. 10+16.50
–Y8A– STA. 61+49.34, 16.5' LT
EL. = 726.56'

PI = 10+65.00
EL = 726.22'
VC = 95'
K = 47

(–)0.7003%

(+)1.3420%

END GRADE
–Y44– STA. 11+95.00
EL. = 727.97'

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U-2509AB	20
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–Y9–

BEGIN GRADE
–Y9– STA. 16+33.51
EL. = 708.25'

PI = 17+83.00
EL = 710.24'
VC = 178'
K = 27
V = 25 MPH

(+)1.3352%

(+)7.9224%

PI = 19+99.00
EL = 727.36'
VC = 100'
K = 14
V = 25 MPH

(+)7.9224%

(+)1.0000%

–Y8A– ℄

END GRADE
–Y9– STA. 20+51.58
–Y8A– STA. 61+49.50, 16.5' RT
EL. = 727.88'

–DR1–

END GRADE
–DR1– STA. 11+24.14
EL. = 693.82'

PI = 10+54.00
EL = 701.21'
VS = 55'

(–)1.00%

(–)10.5415%

693.82

BEGIN GRADE
–DR1– STA. 10+25.05
–Y8A– STA. 73+44.21, 24.95' LT
EL. = 701.50'

–Y14A–

BEGIN GRADE
–Y14A– STA. 10+11.00
–Y14B– STA. 13+29.28, 11' LT
EL. = 688.57'

PI = 10+76.00
EL = 688.78'
VC = 100'
K = 156

(+)0.3143%

(+)0.9571%

END GRADE
–Y14A– STA. 11+43.00
EL. = 689.42'

–Y14B–

BEGIN GRADE
–Y14B– STA. 10+10.91
EL. = 699.84'

699.84

–Y14B– STA. 13+29.25 =
–Y14A– STA. 10+00.00

–Y14A– ℄

VLP STA. 23+51.80
EL. = 667.18'

PI = 23+16.00
EL = 654.55'
VC = 375'
K = 64

657.38'

(–)3.4708%

(+)2.3579%

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PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	21
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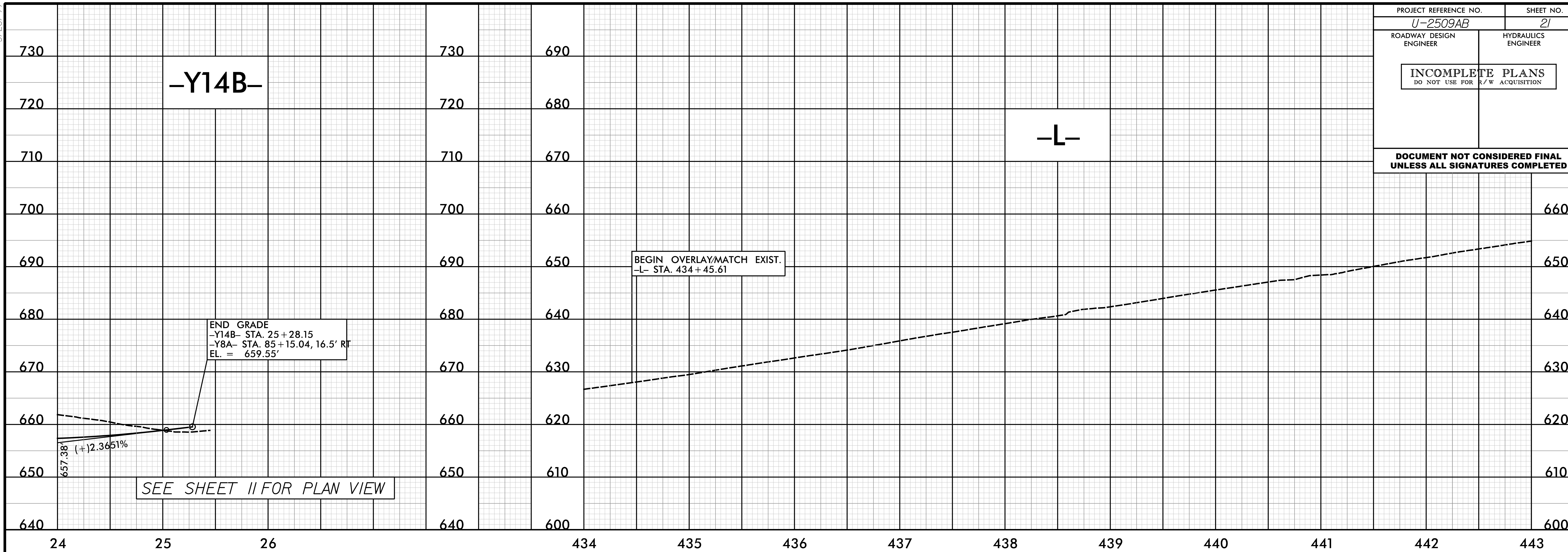

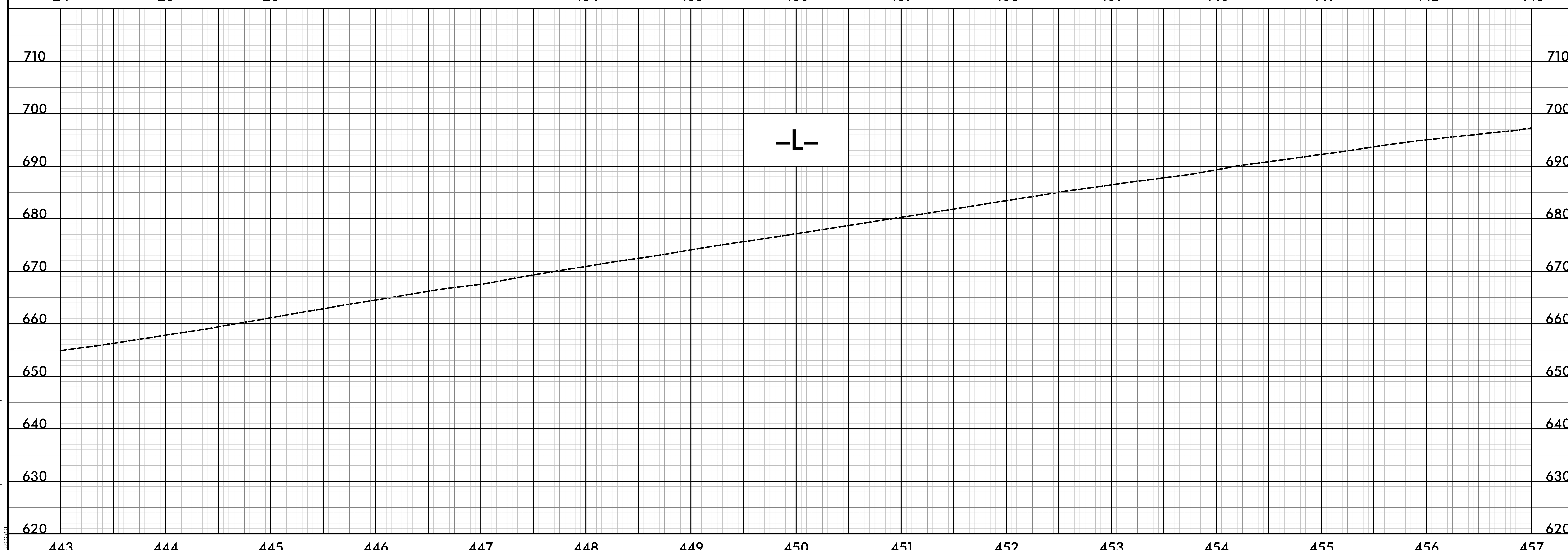

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PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	22
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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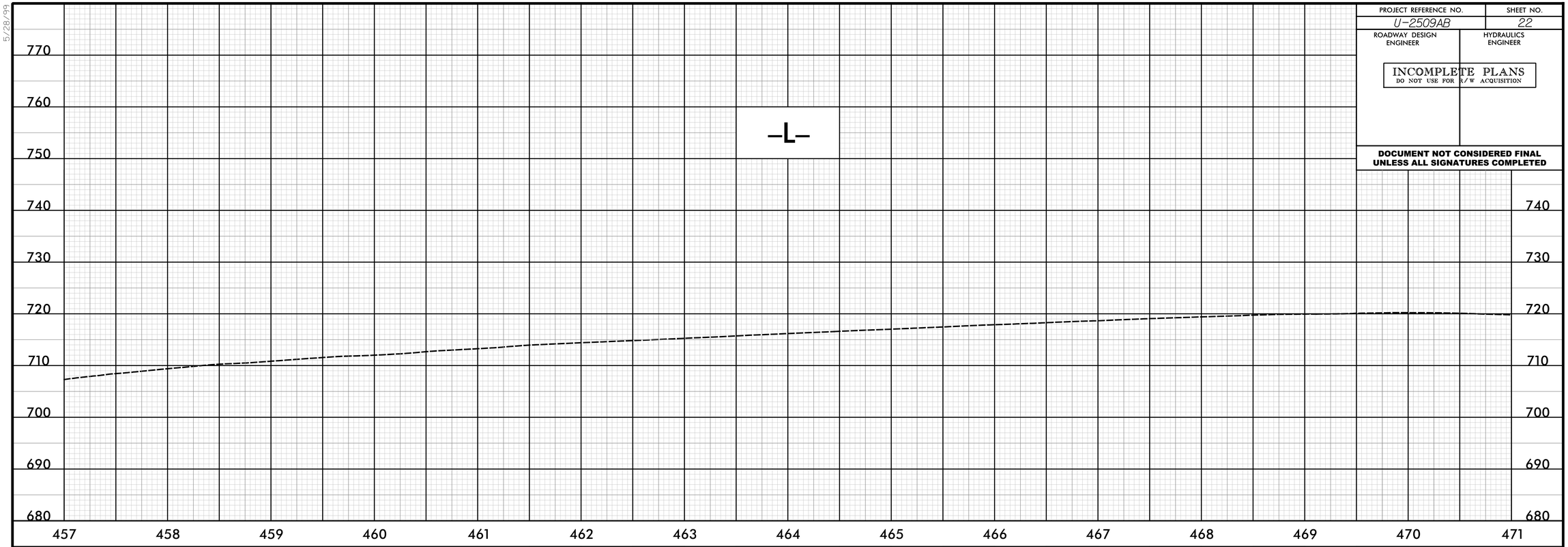

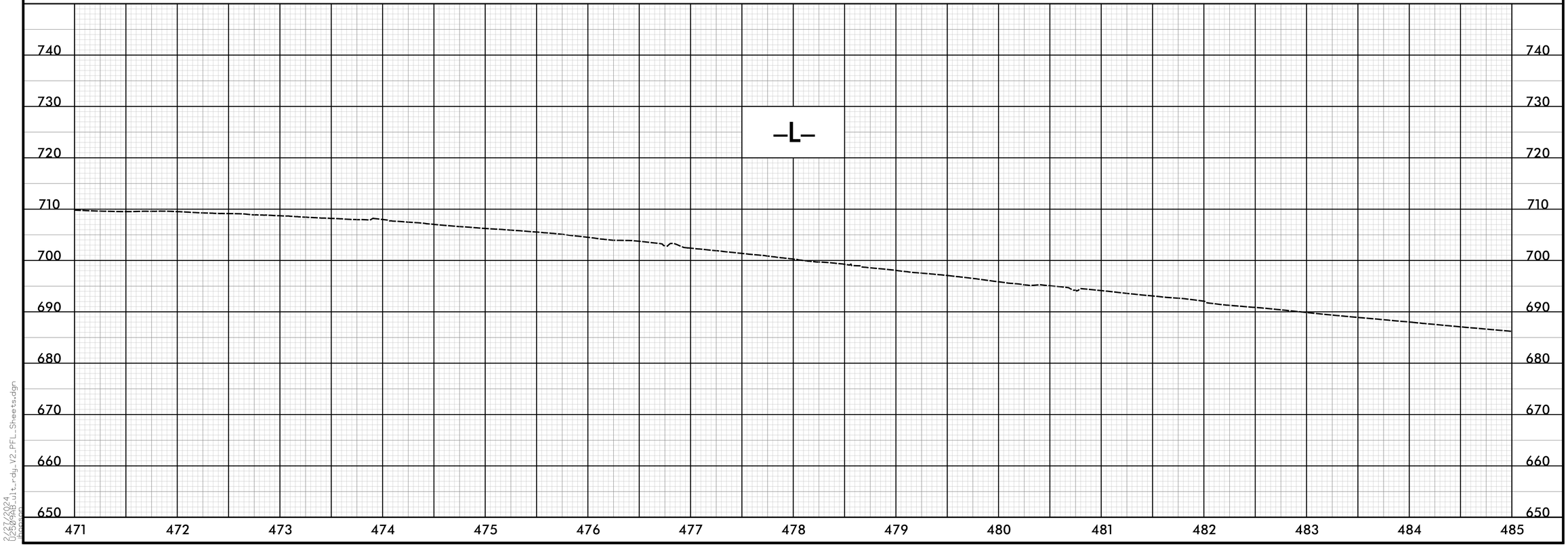

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PROJECT REFERENCE NO.	SHEET NO.
U-2509AB	23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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–L–

730 720 710 700 690 680 670 660 650 640

485 486 487 488 489 490 491 492 493 494 495 496 497 498 499

–L–

END OVERLAY/MATCH EXIST.
–L– STA. 512+79.59

730 720 710 700 690 680 670 660 650 640

499 500 501 502 503 504 505 506 507 508 509 510 511 512 513

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