09/08/99

TIP PROJECT: Y-5500LA

CONTRACT: 80000.2.2.2

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	Y-5500LA	1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
45533.1.FD2	RR-1218(7)	PE
80000.2.2.2		CONST.

STATE OF NORTH CAROLINA
RAIL DIVISION

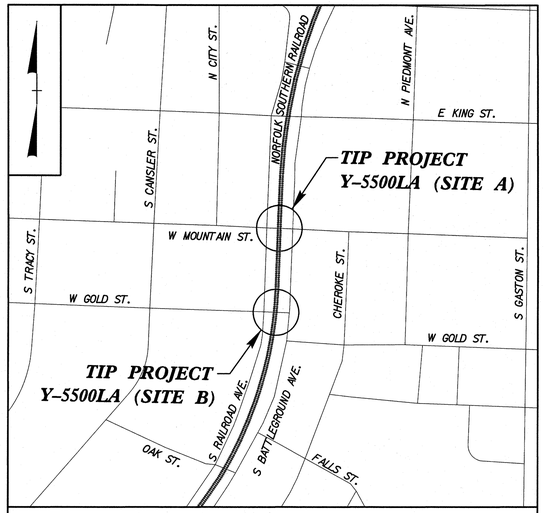
CLEVELAND COUNTY

LOCATION: WEST MOUNTAIN STREET AND WEST GOLD STREET BETWEEN NC 216 (SOUTH BATTLEGROUND AVENUE) AND SOUTH RAILROAD AVENUE

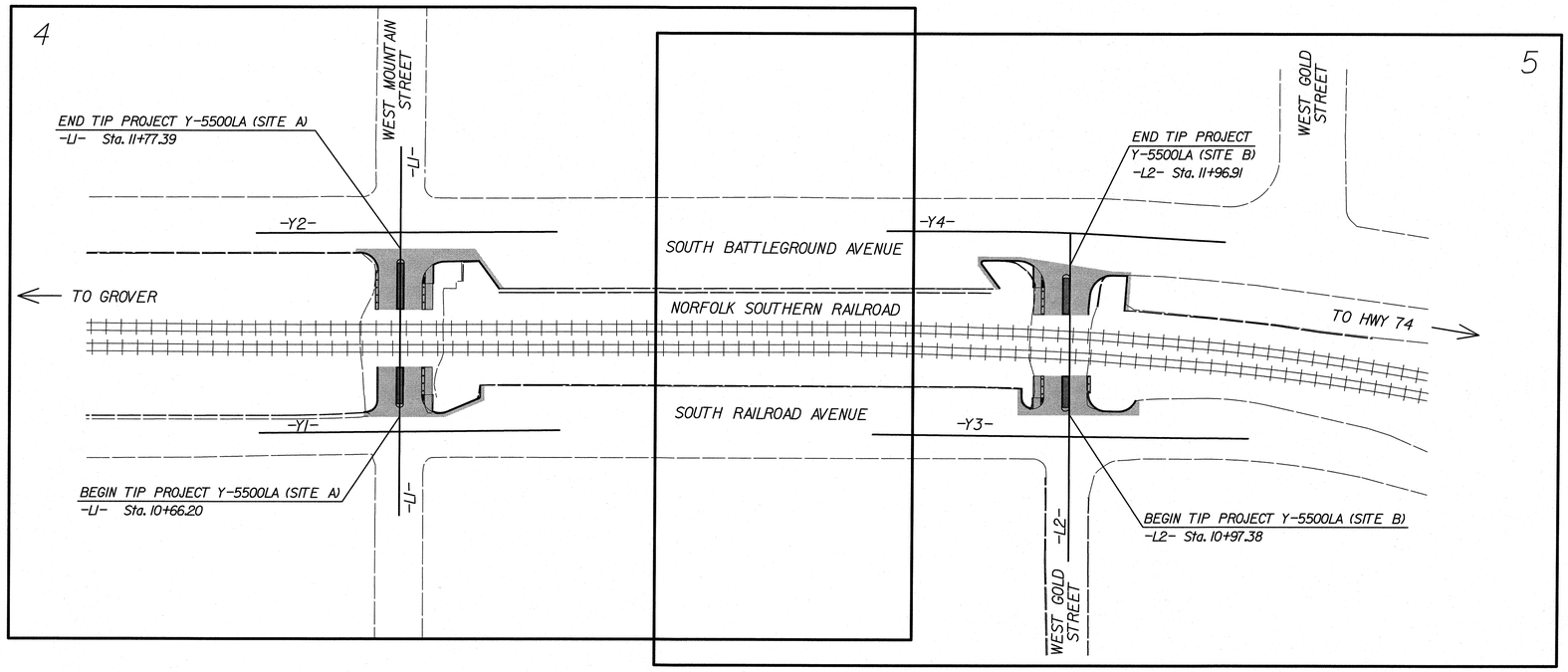
TYPE OF WORK: GRADING AND PAVING

NAD 83/2011

See Sheet 1-A For Index of Sheets



VICINITY MAP



SUBMITTAL: FINAL PLANS
DATE: 11-21-14

GRAPHIC SCALES

20 10 0 20 40
PLANS

DESIGN DATA

N/A

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT Y-5500LA (SITE A) = 0.014 MILES
LENGTH OF ROADWAY TIP PROJECT Y-5500LA (SITE B) = 0.011 MILES
TOTAL LENGTH OF TIP PROJECT Y-5500LA = 0.025 MILES

NCDOT CONTACT: DANIEL HAVENER, PE

Prepared In the Office of:
ATKINS
1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: N/A

LETTING DATE:

DAVID W. BASS, PE
PROJECT ENGINEER

BRYAN S. LAMBETH, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 20107 ENGINEER DAVID W. BASS 11/25/14

SIGNATURE:

NC DEPARTMENT OF TRANSPORTATION
RAIL DIVISION
ENGINEERING COORDINATION AND SAFETY

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PROJECT REFERENCE NO.	SHEET NO.
Y-5500LA	1A

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 20106 ENGINEER DAVID W. BASS

11/20/14

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2	PAVEMENT SCHEDULE AND TYPICAL SECTIONS,
2A	WHEELCHAIR RAMP, SIDEWALK WITH INTEGRATED CURB, CONCRETE ISLAND, AND CURB DETAILS
2B	MEDIAN ISLAND DETAIL
3A	SUMMARY OF EARTHWORK AND PAVEMENT REMOVAL SUMMARY
4 THRU 5	PLAN SHEETS
TMP-1 THRU TMP-2	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-4	SIGNING AND PAVEMENT MARKING PLANS
X-0 THRU X-0A	CROSS-SECTION INDEX AND SUMMARY
X-1 THRU X-6	CROSS-SECTIONS

GENERAL NOTES:

2012 SPECIFICATIONS

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

GRADING AND SURFACING OR RESURFACING AND WIDENING:

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

SHOULDER CONSTRUCTION:

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

SIDE ROADS:

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

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

2012 ROADWAY ENGLISH STANDARD DRAWINGS

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

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

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.06	Method of Grading Sight Distance at Intersections
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 8 - INCIDENTALS	
846.01	Concrete Curb, Gutter and Curb & Gutter
848.01	Concrete Sidewalk
848.05	Curb Ramp - Proposed Curb & Gutter
852.01	Concrete Islands
852.02	Concrete Mountable Median - for Use with Rigid or Flexible Pavement

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04/16/11

PROJECT REFERENCE NO.	SHEET NO.
Y-5500LA	1B

Note: Not to Scale

****S.U.E. = Subsurface Utility Engineering***

STATE OF NORTH CAROLINA
RAIL DIVISION

CONVENTIONAL PLAN SHEET SYMBOLS

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
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

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
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (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
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

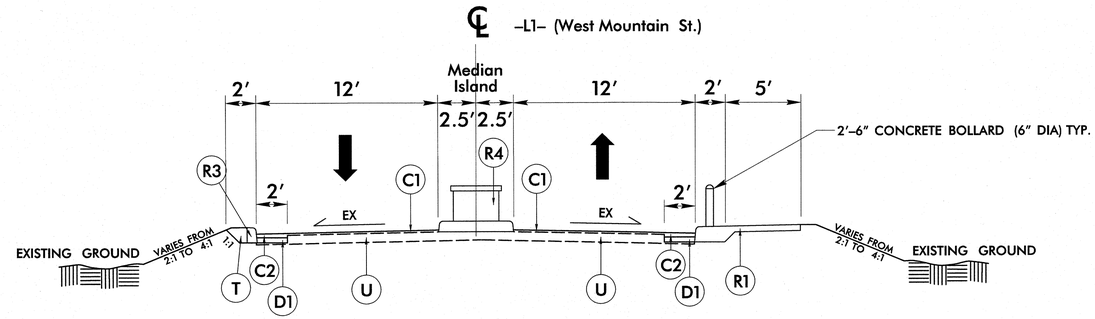
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?UTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According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

PROJECT REFERENCE NO.	SHEET NO.
Y-5500LA	2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 20107 ENGINEER DAVID W. BASS
11/20/14

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF THE TWO LAYERS
D1	PROP. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
R1	CONCRETE SIDEWALK WITH INTEGRATED CURB AND BOLLARDS
R2	2' CONCRETE ISLAND WITH BOLLARDS
R3	6"CONCRETE CURB
R4	PLANTER
T	EARTH MATERIAL
U	EXISTING PAVEMENT.
V	MILLING BITUMINOUS PAVEMENT. 1½" DEPTH.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL THIS SHEET)

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



TYPICAL SECTION NO. 1

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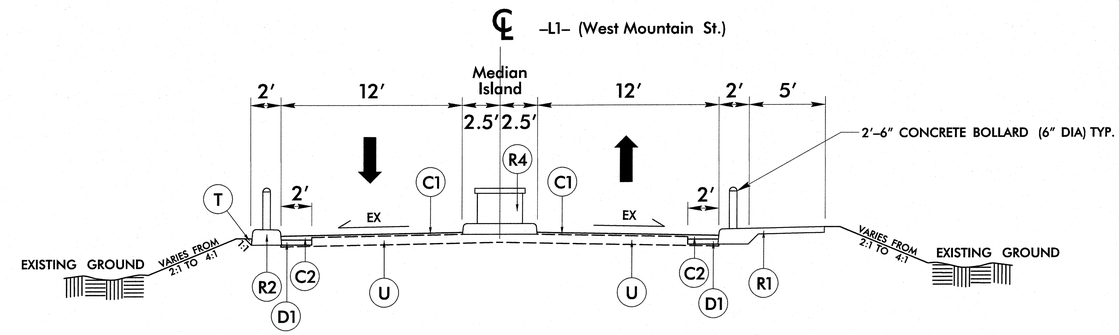
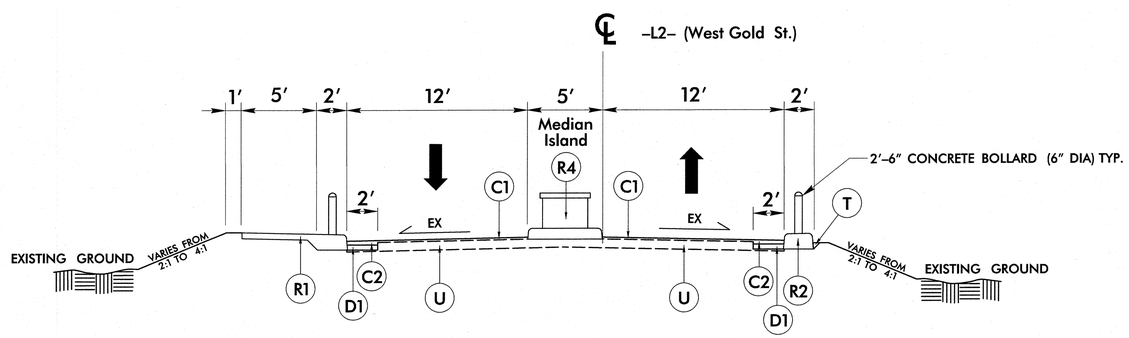
–L1– STA. 10+66.20 TO STA. 10+98.84



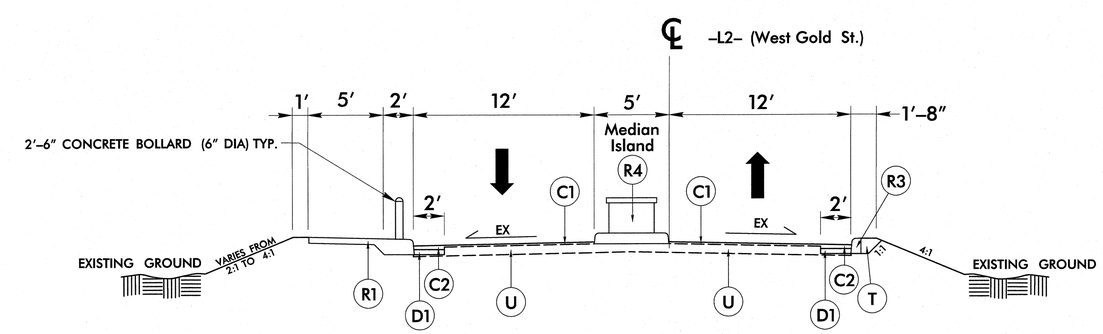
TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2 AS FOLLOWS:
–L1– STA. 11+37.32 TO STA. 11+77.39



TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3 AS FOLLOWS:
–L2– STA. 10+97.38 TO STA. 11+23.23



TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4 AS FOLLOWS:
–L2– STA. 11+64.20 TO STA. 11+96.91

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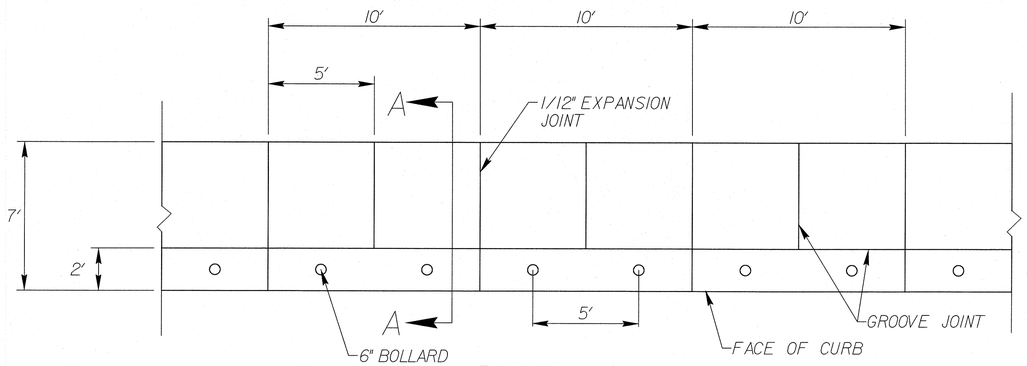
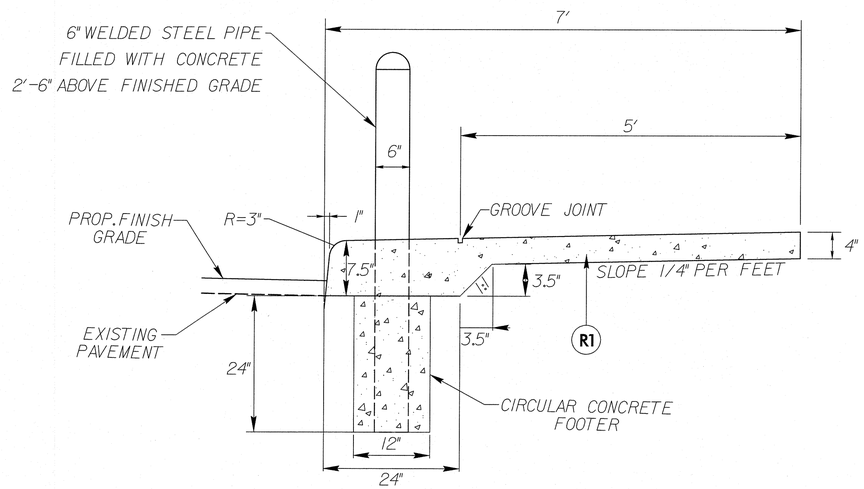
PROJECT REFERENCE NO.	SHEET NO.
Y-5500LA	2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 20107 ENGINEER DAVID W. BASS
11/20/14

SIDEWALK WITH INTEGRATED CURB DETAIL



PLAN



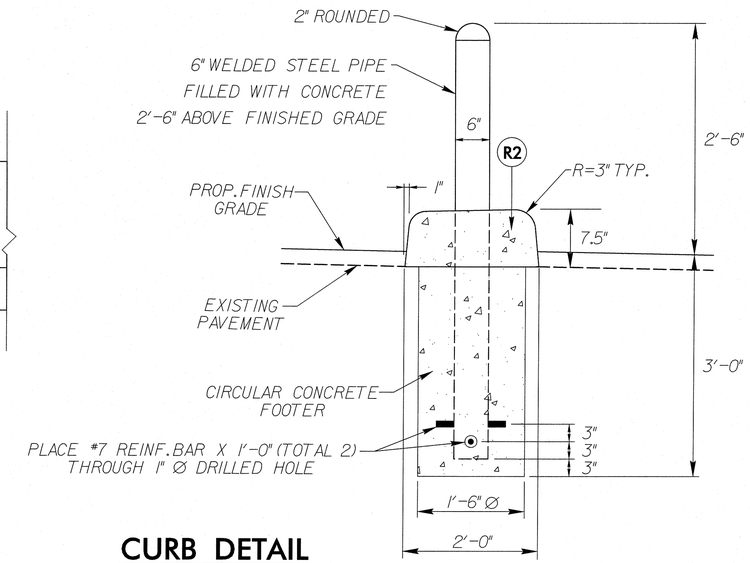
SECTION A-A

NOTES

1. A GROOVE JOINT 1" DEEP WITH 1/3" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 40' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIDGID STRUCTURE.
2. ALL CONCRETE TO BE 3600 P.S.I. COMPRESSIVE STRENGTH.
3. SEE STD. 848.01 FOR JOINT DETAILS

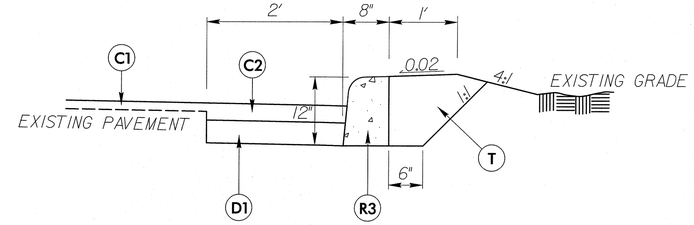
CONCRETE ISLAND DETAIL

SEE STD. 848.01 FOR JOINT DETAILS



CURB DETAIL

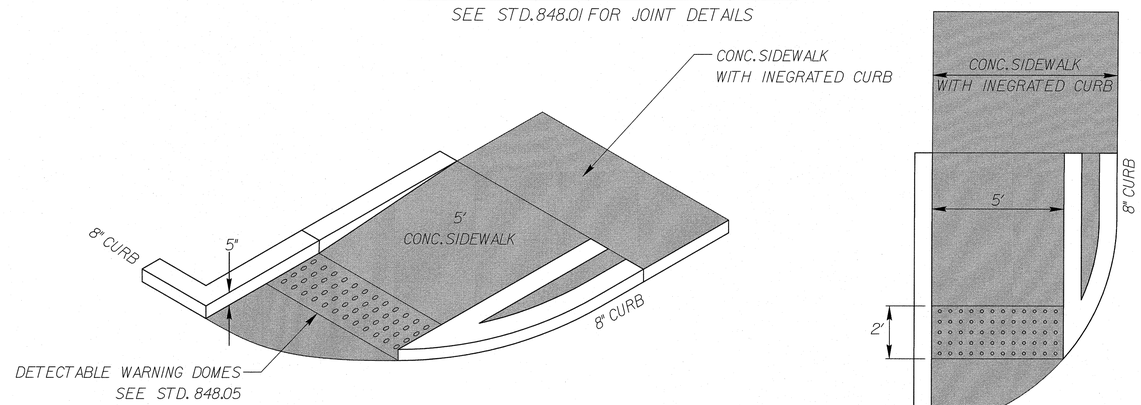
SEE STD. 846.01 AND STD. 848.01
FOR NOTES AND JOINT DETAILS



PAVEMENT SCHEDULE	
C1	1.5" S9.5B
C2	3" S9.5B
D1	4" B25.0B
R1	SIDEWALK WITH INTEGRATED CURB
R2	2' CONC. ISLAND/BOLLARDS
R3	6" CONC. CURB
T	EARTH MATERIAL

WHEELCHAIR RAMP DETAIL

SEE STD. 848.01 FOR JOINT DETAILS



NOTE: WHEEL CHAIR RAMP SLOPES MUST COMPLY WITH ADA STANDARDS

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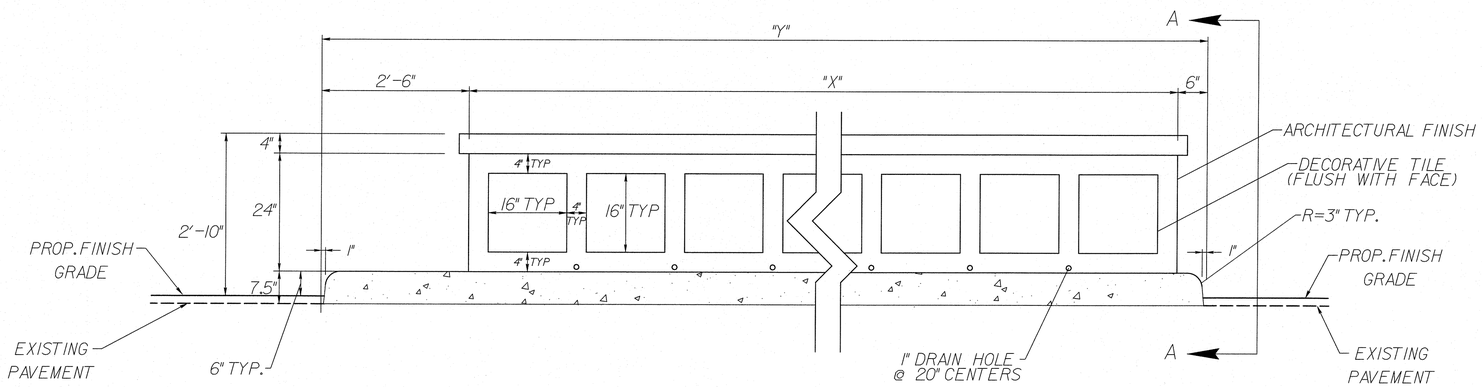
PROJECT REFERENCE NO.	SHEET NO.
Y-5500LA	2B
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 20107 ENGINEER DAVID W. BASS

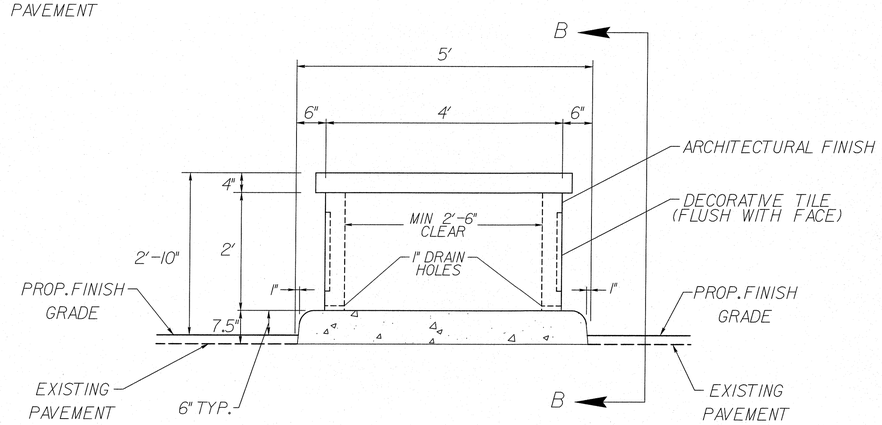
1/29/14

MEDIAN ISLAND DETAIL



SECTION B-B

CHAIN	STATION	STATION	LT/RT	NUMBER OF TILES	"X" DIST.	"Y" DIST.
-L1-	10+72.17	10+98.84	CL	14	23'-8"	26'-8"
-L1-	11+37.32	11+70.65	CL	18	30'-4"	33'-4"
-L2-	10+99.90	11+23.23	LT	12	20'-4"	23'-4"
-L2-	11+64.20	11+90.87	LT	14	23'-8"	26'-8"



SECTION A-A

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COMPUTED BY: IB DATE: 11-17-14
CHECKED BY: DB DATE: 11-17-14

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
Y-5500LA	3A

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	EMBANK. +30%	BORROW	WASTE
-L1- STA 10+70.00	-L1- STA 10+98.84	0	9	9	0
SUBTOTALS:		0	9	9	0
-L1- STA 10+37.32	-L1- STA 11+80.00	0	8	8	0
SUBTOTALS:		0	8	8	0
-L2- STA 11+00.00	-L2- STA 11+23.23	0	5	5	0
SUBTOTALS:		0	5	5	0
-L2- STA 11+64.20	-L2- STA 12+00.00	0	8	8	0
SUBTOTALS:		0	8	8	0
PROJECT TOTALS:		0	30	30	0
BORROW TO REPLACE TOPSOIL ON BORROW PIT (5%)				1	
GRAND TOTALS:		0	30	31	0
SAY:		0	30	35	0

NOTE: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Shoulder Borrow, Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading".

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD^2
-L1-	10+67	10+99	LT	38
-L1-	10+70	10+99	CL	28
-L1-	10+66	10+99	RT	49
-L1-	11+37	11+77	LT	26
-L1-	11+37	11+73	CL	34.37
-L1-	11+37	11+72	RT	91.24
-L1-	10+99	11+23	LT	25.57
-L1-	10+98	11+23	CL	24.37
-L1-	10+97	11+07	RT	7.97
-L1-	11+05	11+23	RT	2.82
-L1-	11+64	12+02	LT	52.70
-L1-	11+64	11+93	CL	27.70
-L1-	11+64	11+92	RT	33.57
			TOTAL:	441
			SAY:	450

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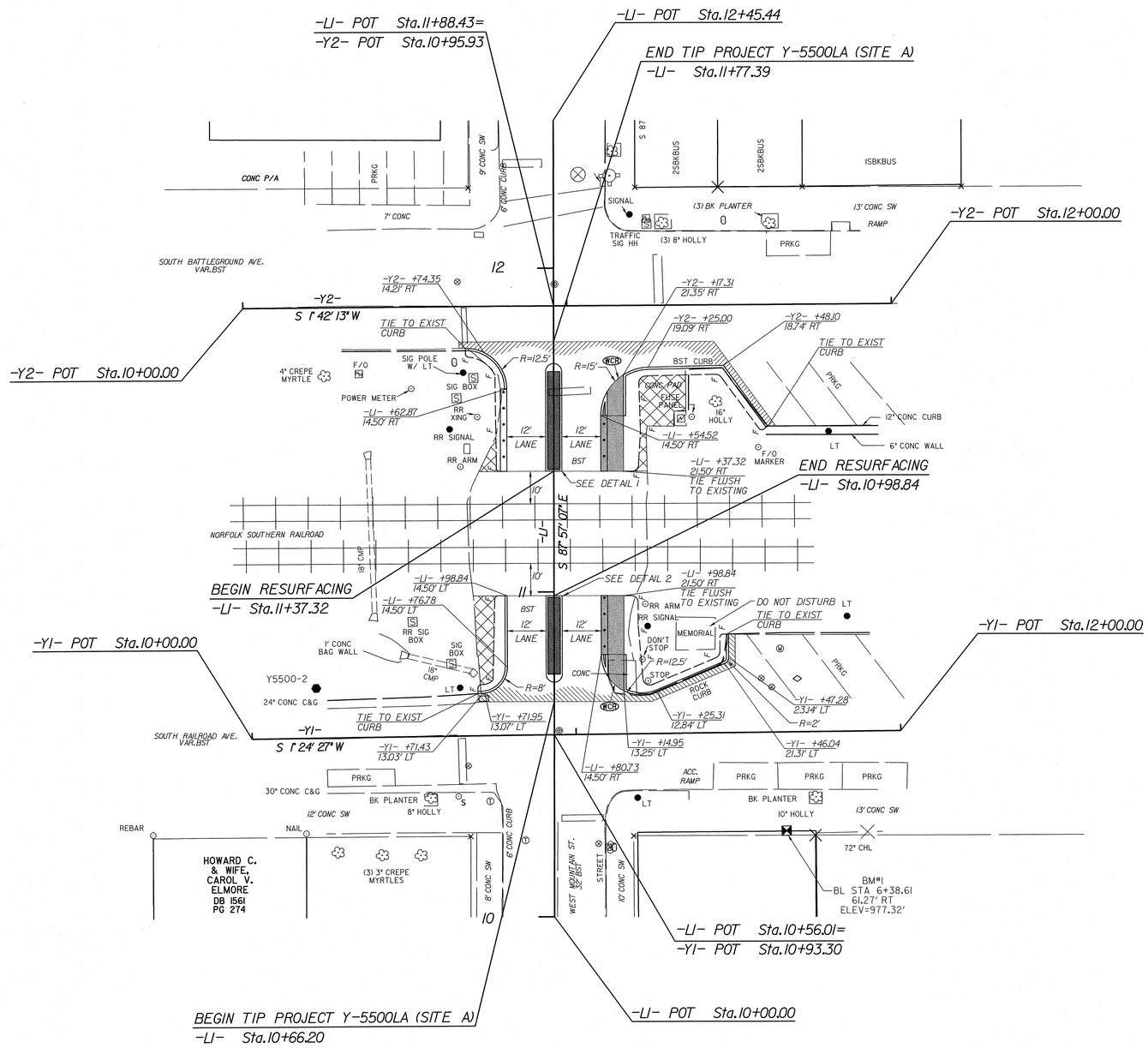
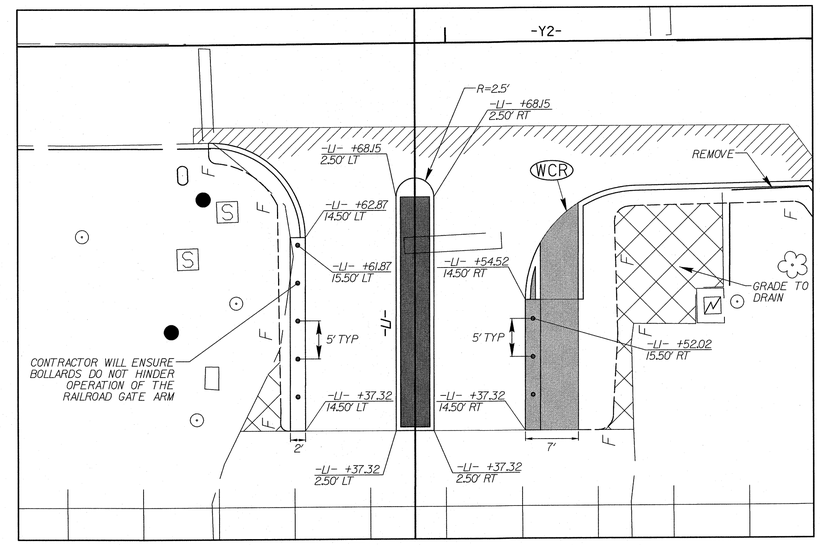
PROJECT REFERENCE NO.	SHEET NO.
Y-5500LA	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 20107 ENGINEER DAVID W. BASS 11/20/14

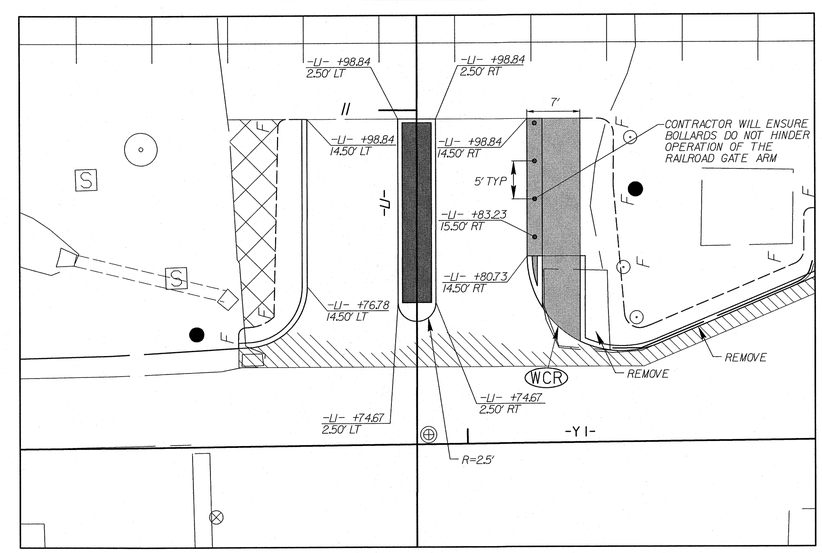


Island Detail 1



SEE SHEET 2A & 2B FOR MEDIAN ISLAND, CURB, AND WCR DETAILS

Island Detail 2



SEE SHEET 2A & 2B FOR MEDIAN ISLAND, CURB, AND WCR DETAILS

8/17/99

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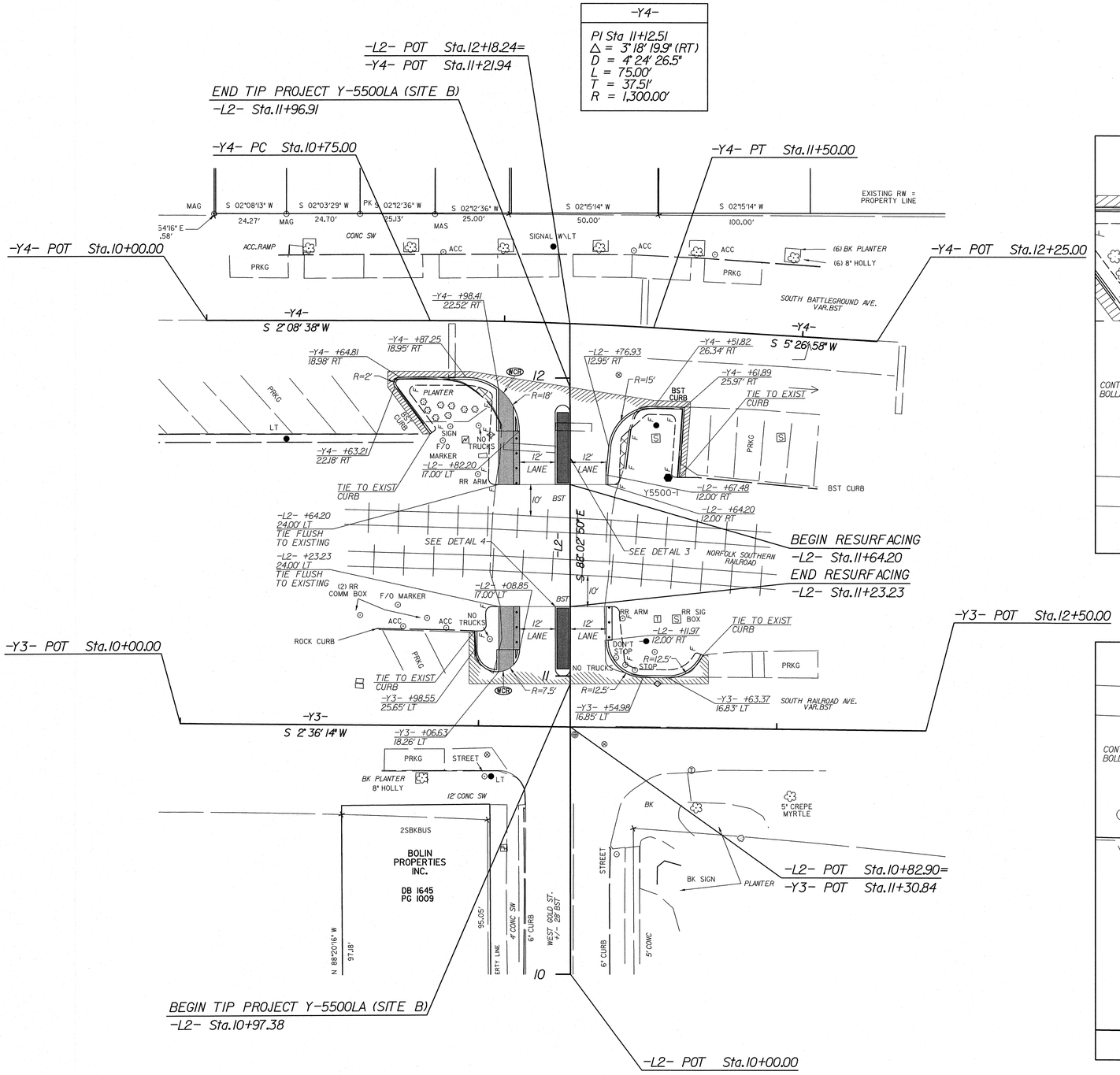
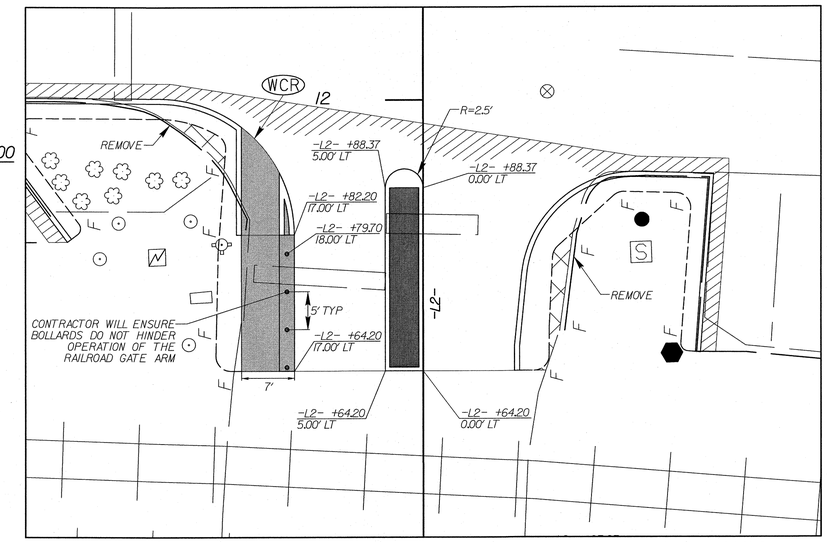
PROJECT REFERENCE NO.	SHEET NO.
Y-5500LA	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 20107 ENGINEER DAVID W. BASS 11/20/14

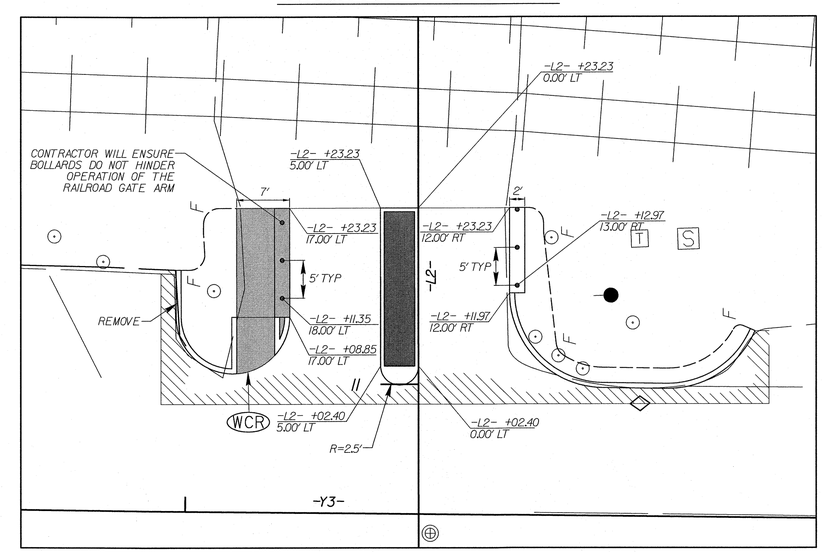


Island Detail 3



SEE SHEET 2A & 2B FOR MEDIAN ISLAND, CURB, AND WCR DETAILS

Island Detail 4



SEE SHEET 2A & 2B FOR MEDIAN ISLAND, CURB, AND WCR DETAILS

8/17/99

14-OCT-2014 14:04
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$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
Y-5500LA	TMP-1

TIP PROJECT: Y-5500LA

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

CLEVELAND COUNTY

WEST MOUNTAIN STREET AND WEST GOLD STREET BETWEEN NC 216 (SOUTH BATTLEGROUND AVENUE) AND SOUTH RAILROAD AVENUE

ROADWAY STANDARD DRAWINGS

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

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES - TYPE III
1150.01	FLAGGING DEVICES
1180.01	SKINNY DRUM

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	ROADWAY STANDARD DRAWINGS, INDEX OF SHEETS, LEGEND, GENERAL NOTES & PHASING.
TMP-2	DETOUR SIGNING

LEGEND

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)

TEMPORARY SIGNING

STATIONARY SIGN

GENERAL NOTES

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

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.

LANE CLOSURE REQUIREMENTS

A) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENIGNEER.

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

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

D) INSTALL ADVANCED WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

E) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

F) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

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

TRAFFIC CONTROL DEVICES

H) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROAD.

I) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

PHASING

STEP 1: INSTALL ALL DETOUR SIGNING KEEPING SIGNS COVERED (SEE SHEET TMP-2)

STEP 2: USING ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9, INSTALL TYPE III BARRICADES TO CLOSE WEST MOUNTAIN STREET AND WEST GOLD STREET BETWEEN NC 216 (SOUTH BATTLEGROUND AVENUE) AND SOUTH RAILROAD AVENUE TO TRAFFIC, UNCOVER ALL DETOUR SIGNING AND SHIFT TRAFFIC TO DETOUR (SEE SHEET TMP-2).

STEP 3: COMPLETE CONSTRUCTION OF PROPOSED GRADING, PAVING, MEDIAN, SIDEWALK, CURB & GUTTER AND ASSOCIATED ITEMS.

STEP 4: USING FLAGGERS AND ALTERNATE LANE CLOSURES, PLACE FINAL PAVEMENT MARKINGS AS SHOWN IN PAVEMENT MARKING PLANS. SEE RSD 1101.02, SHEET 1 OF 15.

STEP 5: REMOVE ALL DETOUR SIGNING, ALL TRAFFIC CONTROL DEVICES AND OPEN WEST MOUNTAIN STREET AND WEST GOLD STREET TO TRAFFIC.

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

APPROVED: DATE: 11/19/14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 17586 ENGINEER J. TODD BROOKS

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

ROADWAY STANDARD DRAWINGS, INDEX OF SHEETS, LEGEND, GENERAL NOTES AND PHASING

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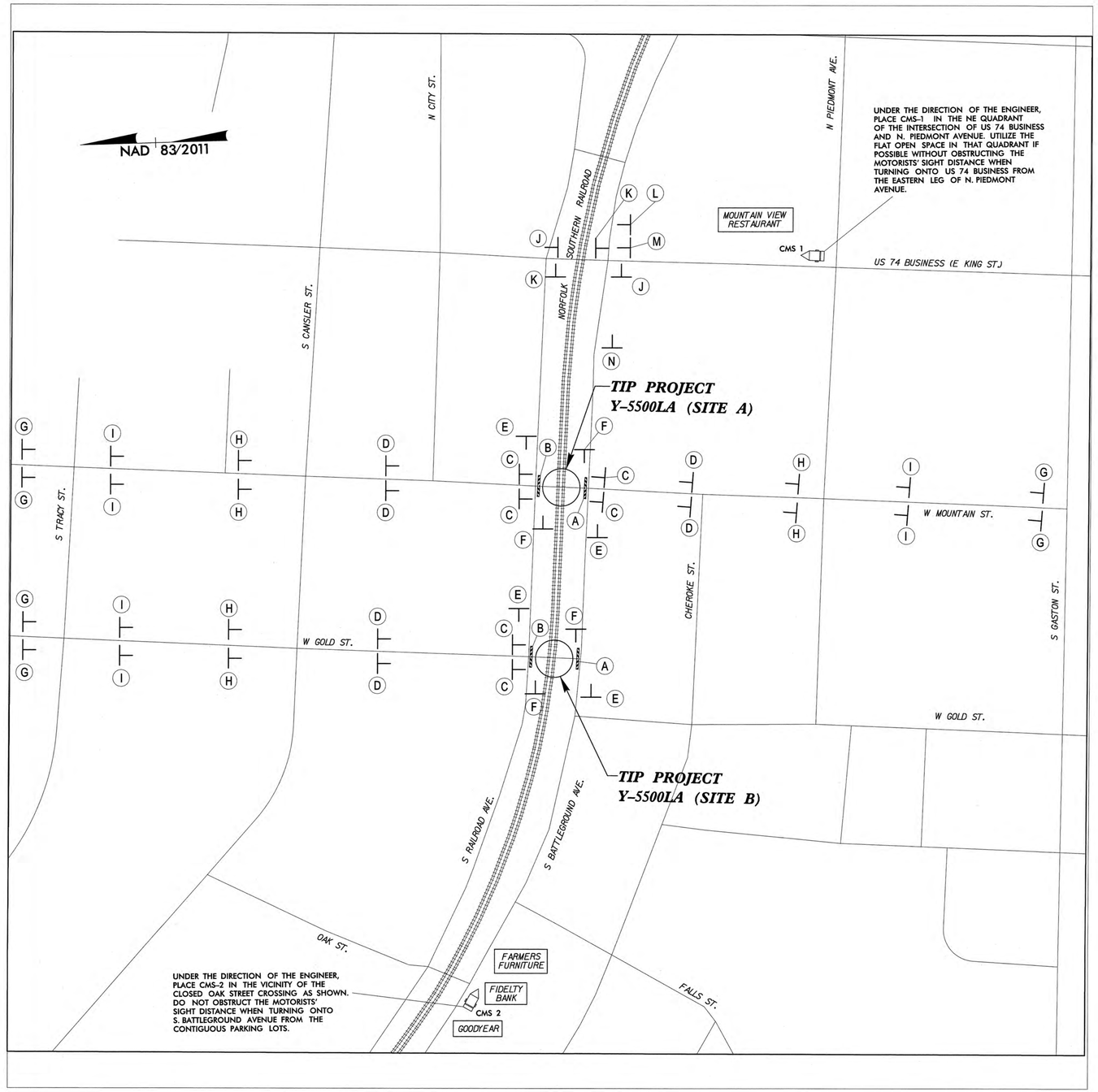
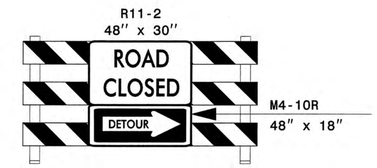
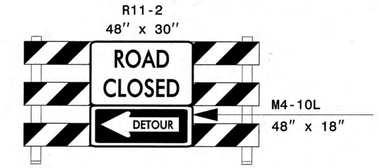
PROJ. REFERENCE NO.	SHEET NO.
Y-5500LA	TMP-2





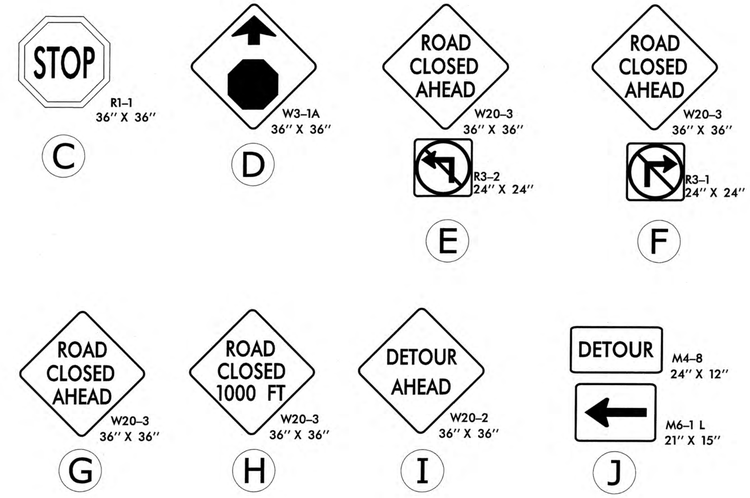
TYPE III BARRICADE

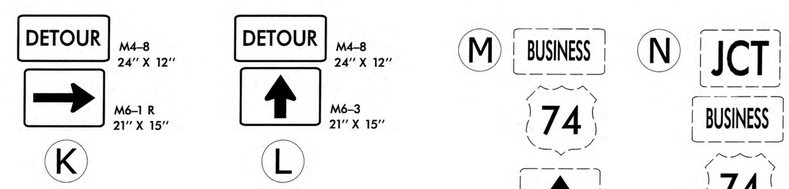
A



TYPE III BARRICADE

B





DISPLAY ONE WEEK PRIOR TO CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
MTN-GOLD RR XINGS TO CLOSE	STARTING xxxDAY MMM DD

CHANGEABLE MESSAGE SIGN

CMS 1 & 2

DISPLAY DURING CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
MTN-GOLD CLOSED AT RR TRACKS	FOLLOW DETOUR ROUTES

CHANGEABLE MESSAGE SIGN

CMS 1 & 2

APPROVED: DATE: 11/19/14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 17586 ENGINEER J. TODD BROOKS

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

DETOUR SIGNING

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

19-NOV-2014 09:46
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WILE2054 AT DUS290AO

T.I.P.: Y-5500LA

CONTRACT:

TIP NO.	SHEET NO.
Y-5500LA	PMP-01

APPROVED: Melissa B. Toth

DATE: 10/15/14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

SIGNING & PAVEMENT MARKING PLAN
CLEVELAND COUNTY

INDEX

SHEET NO.	DESCRIPTION
PMP-01	SIGNING & PAVEMENT MARKING PLAN TITLE SHEET
PMP-01A	REVISED PAVEMENT MARKING ROADWAY STANDARD DRAWING
PMP-02	TYPE E SIGNS
PMP-03-04	SIGNING & PAVEMENT MARKING PLANS

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
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1205D08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

SUMMARY OF QUANTITIES

ITEM NO. DESC. NO.	ITEM NO. SECT. NO.	ITEM DESCRIPTION	QUANTITY	UNIT
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	123	L.F.
4102000000	904	SIGN ERECTION, TYPE E	9	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E	3	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	2	EA.
4238000000	907	DISPOSAL OF SIGN, D, E OR F	2	EA.
4685000000	1205	THERMOPLASTIC (4", 90 MILS)	222	L.F.
4705000000	1205	THERMOPLASTIC (16", 120 MILS)	135	L.F.
4710000000	1205	THERMOPLASTIC (24", 120 MILS)	190	L.F.
4721000000	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	6	EA.
4900000000	1251	PERMANENT RAISED PAVEMENT MARKERS	12	EA.

NC DEPARTMENT OF TRANSPORTATION
RAIL DIVISION
ENGINEERING COORDINATION AND SAFETY

GENERAL NOTES

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

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

ROAD NAME	MARKING	MARKER
-L1- WEST MOUNTAIN STREET	THERMOPLASTIC	NONE
-L2- WEST GOLD STREET	THERMOPLASTIC	NONE

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

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

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

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

F) SEE ROADWAY PLANS FOR ALTERNATE CURB RAMP DESIGNS WHEN INDICATED ON PAVEMENT MARKING DETAIL SHEETS.

G) SIGNS FURNISHED BY CITY OF KINGS MOUNTAIN

H) WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER

I) ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.

J) WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.

K) THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

PAY ITEM NOTES

1. DISPOSAL OF SIGN SYSTEM, U-CHANNEL
2. RETAIN SIGN SYSTEM, U-CHANNEL
3. SIGN ERECTION, RELOCATE SIGN TYPE E
4. DISPOSAL OF SIGN, D, E OR F

SUBMITTAL: 100% SIGNING & PAVEMENT MARKING PLANS

DATE: 10-7-14

MELISSA TOTH, PE — PROJECT ENGINEER

A. MATTHEW THIGPEN, PE — PROJECT DESIGN ENGINEER

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

13-OCT-2014 15:24
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THIC5651 AT DJS29014I

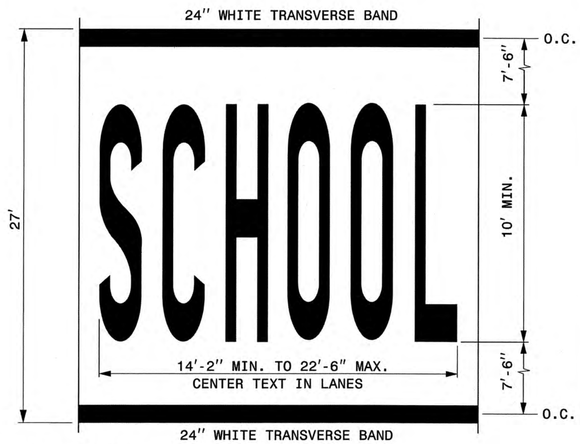
TIP NO.	SHEET NO.
Y-5500LA	PMP-01A

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

1-12

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
SYMBOLS AND WORD MESSAGES

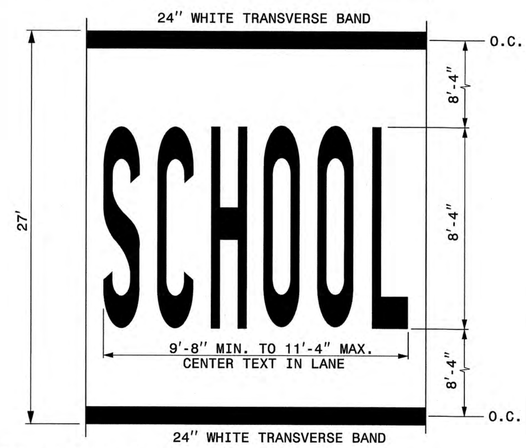
MULTI-LANE WIDTH "SCHOOL"



LETTER HEIGHT = 10' MIN.
LETTER WIDTH = 20"
SPACING = 10" MIN./30" MAX. (USE EQUAL SPACING BETWEEN LETTERS)

NOTE: THE TWO-LANE PAVEMENT MARKING DIMENSIONS OF "SCHOOL" SHOWN IN PART 7 OF THE MUTCD MAY ALSO BE USED.

SINGLE LANE WIDTH "SCHOOL"



LETTER HEIGHT = 8'-4"
LETTER WIDTH = 16"
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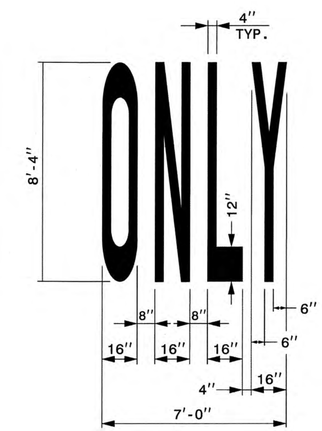
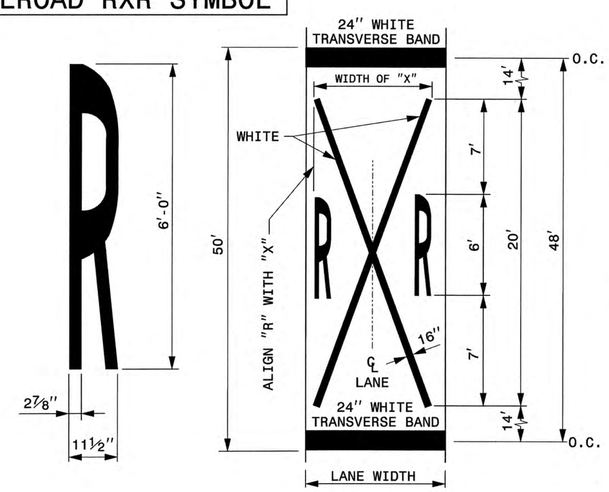


RAILROAD RXR SYMBOL



LANE WIDTH (FEET)	WIDTH OF "X" (FEET)
8'≤W≤9'	7'
9'<W≤12'	8'
W>12'	10'

GENERAL NOTES:

1- THE SCHOOL PAVEMENT MARKING CONSISTS OF SIX (6) CHARACTERS. THE TWO (2) 24" TRANSVERSE BANDS WILL BE PAID FOR UNDER A SEPARATE PAY ITEM. REFER TO ROADWAY STANDARD DRAWING 1205.10 FOR ADDITIONAL PAVEMENT MARKING GUIDANCE.

2- PAVEMENT MARKING IN ADVANCE OF A HIGHWAY-RAIL CROSSING SHALL CONSIST OF TWO (2) CHARACTERS AND TWO (2) 16" LINES (FORMING AN X) WHICH ARE PAID FOR UNDER TWO SEPARATE PAY ITEMS. THE TWO (2) 24" TRANSVERSE BANDS WILL BE PAID FOR UNDER A SEPARATE PAY ITEM. REFER TO ROADWAY STANDARD DRAWING 1205.11 FOR ADDITIONAL PAVEMENT MARKING GUIDANCE.

SHEET 3 OF 8
1205D08

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

1-12

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
SYMBOLS AND WORD MESSAGES

SHEET 3 OF 8
1205D08

REVISED PAVEMENT MARKING
ROADWAY STANDARD DRAWING

15-OCT-2014 13:45
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THIG5651 AT DUS290141

TIP NO.	SHEET NO.
Y-5500LA	PMP-02

APPROVED: Melissa B Toth

DATE: 10/15/14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

401 QUANTITY REQ'D 2 STOP 36 X 36 R1-1 ONE "U" POST PER SIGN	402 QUANTITY REQ'D 3 24 X 24 R5-2 ONE "U" POST PER SIGN	403 QUANTITY REQ'D 4 24 X 30 R4-7 ONE "U" POST PER SIGN				

TYPE "E" SIGNS

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THIG5651 AT DUS290141

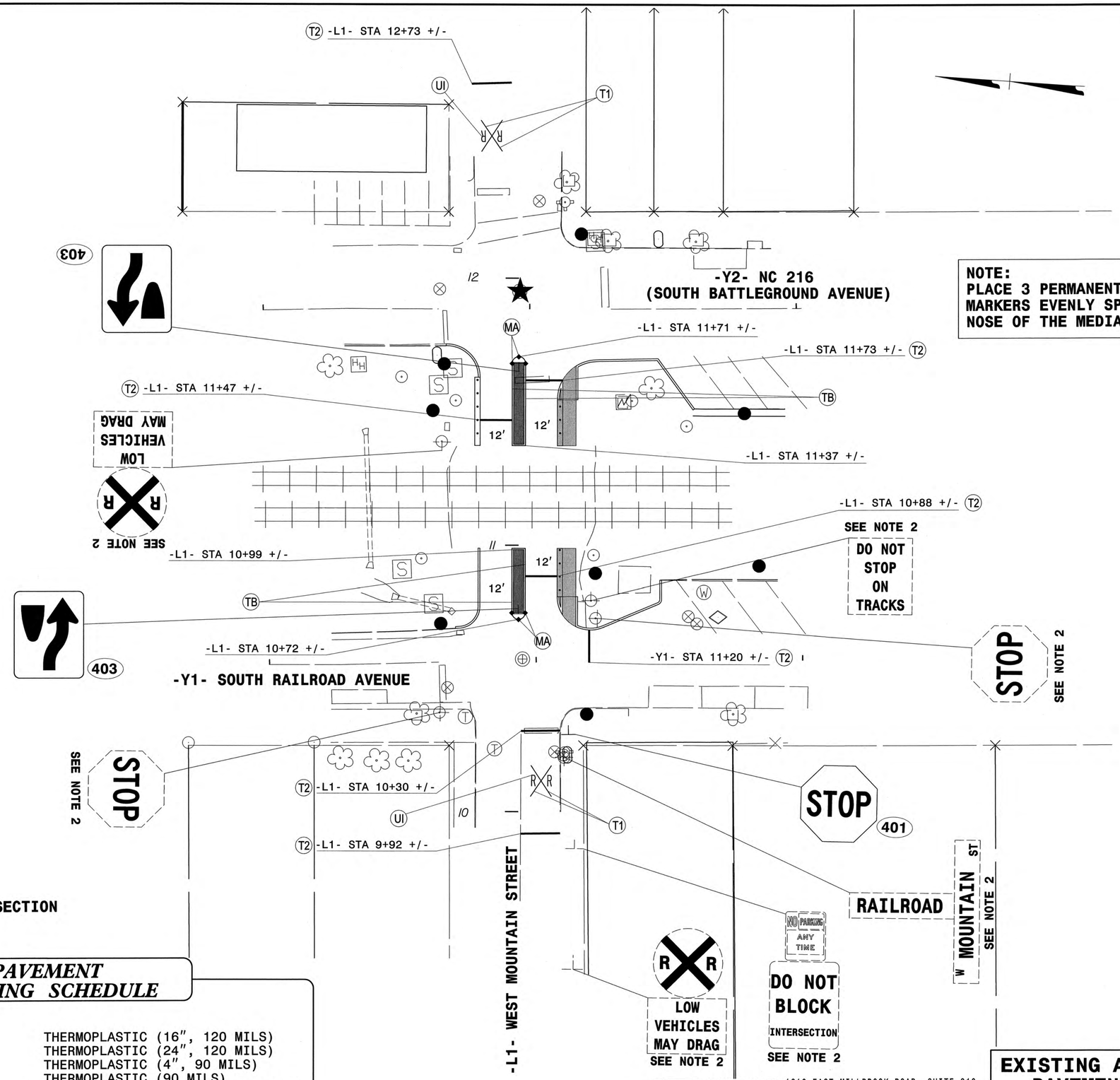
TIP NO.	SHEET NO.
Y-5500LA	PMP-03

APPROVED: Melissa B. Toth

DATE: 10/15/14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH



NOTE:
PLACE 3 PERMANENT RAISED PAVEMENT MARKERS EVENLY SPACED AROUND THE NOSE OF THE MEDIAN ISLANDS

★ **SIGNALIZED INTERSECTION**

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	
T1	WHITE LINE, RR	THERMOPLASTIC (16", 120 MILS)
T2	WHITE STOPBAR	THERMOPLASTIC (24", 120 MILS)
TB	YELLOW EDGELINE	THERMOPLASTIC (4", 90 MILS)
UA	LEFT TURN ARROW	THERMOPLASTIC (90 MILS)
MA	YELLOW & YELLOW	PERMANENT RAISED PAVEMENT MARKERS

ATKINS
1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

EXISTING AND PROPOSED SIGNS PAVEMENT MARKING PLANS -L1- WEST MOUNTAIN STREET

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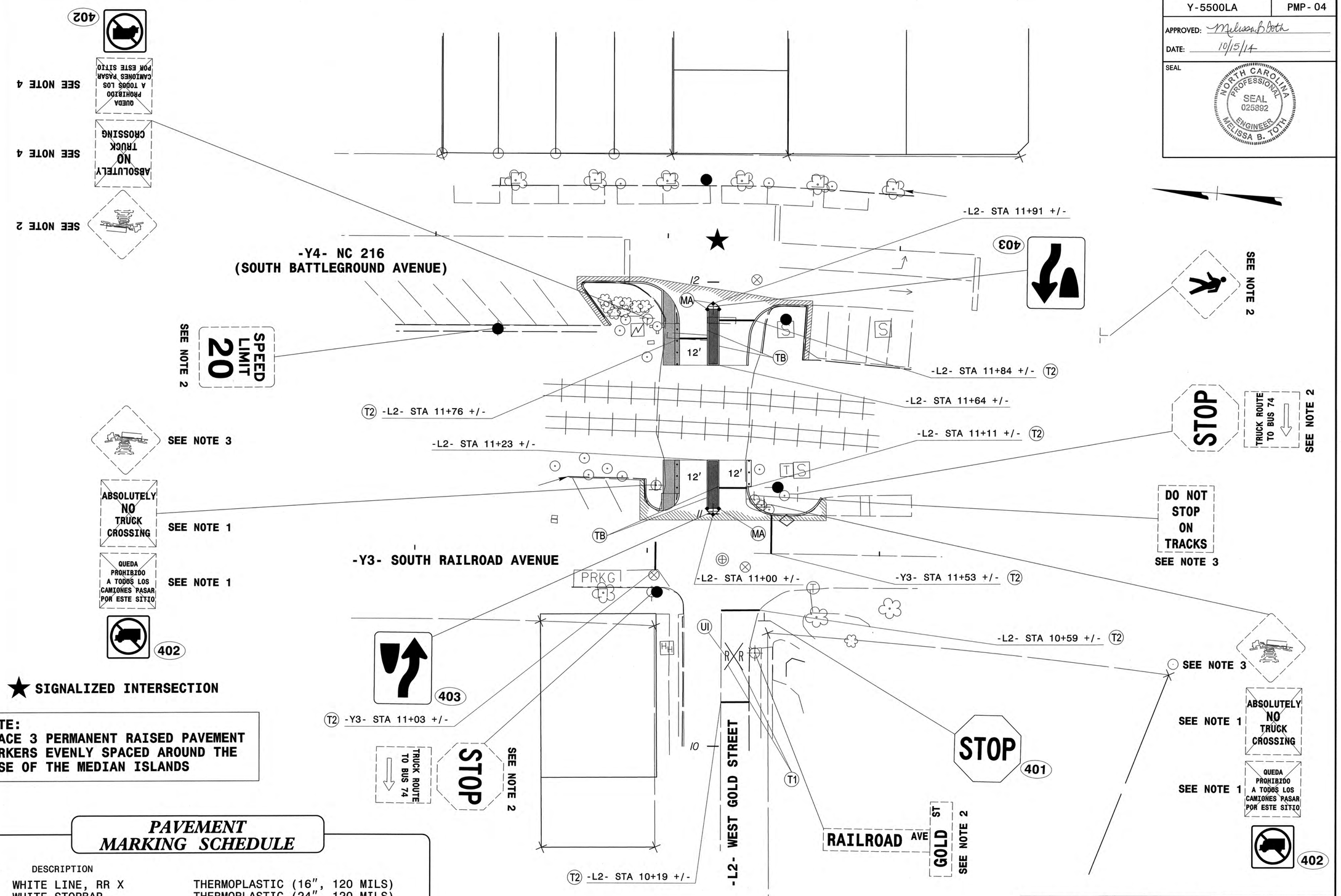
TIP NO.	SHEET NO.
Y-5500LA	PMP-04

APPROVED: Melissa B. Toth

DATE: 10/15/14

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH



NOTE:
PLACE 3 PERMANENT RAISED PAVEMENT MARKERS EVENLY SPACED AROUND THE NOSE OF THE MEDIAN ISLANDS

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	
T1	WHITE LINE, RR X	THERMOPLASTIC (16", 120 MILS)
T2	WHITE STOPBAR	THERMOPLASTIC (24", 120 MILS)
TB	YELLOW EDGELINE	THERMOPLASTIC (4", 90 MILS)
UI	ALPHANUMERIC CHARACTER	THERMOPLASTIC (120 MILS)
MA	YELLOW & YELLOW	PERMANENT RAISED PAVEMENT MARKERS

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

EXISTING AND PROPOSED SIGNS PAVEMENT MARKING PLANS -L2- WEST GOLD STREET

14-OCT-2014 09:24
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PROJ. REFERENCE NO.	SHEET NO.
Y-5500LA	X-0

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CROSS SECTON INDEX SHEET

Chain	Beg Sta	End Sta	LOC	Sheet No.	Comments / Log File
-L1-	10+70.00	11+80.00		X-1 TO X-3	
-L2-	10+90.00	12+00.00		X-4 TO X-6	

Chain	Beg Sta	End Sta	LOC	Sheet No.	Comments / Log File

PROJ. REFERENCE NO.	SHEET NO.
Y-5500LA	X-0A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

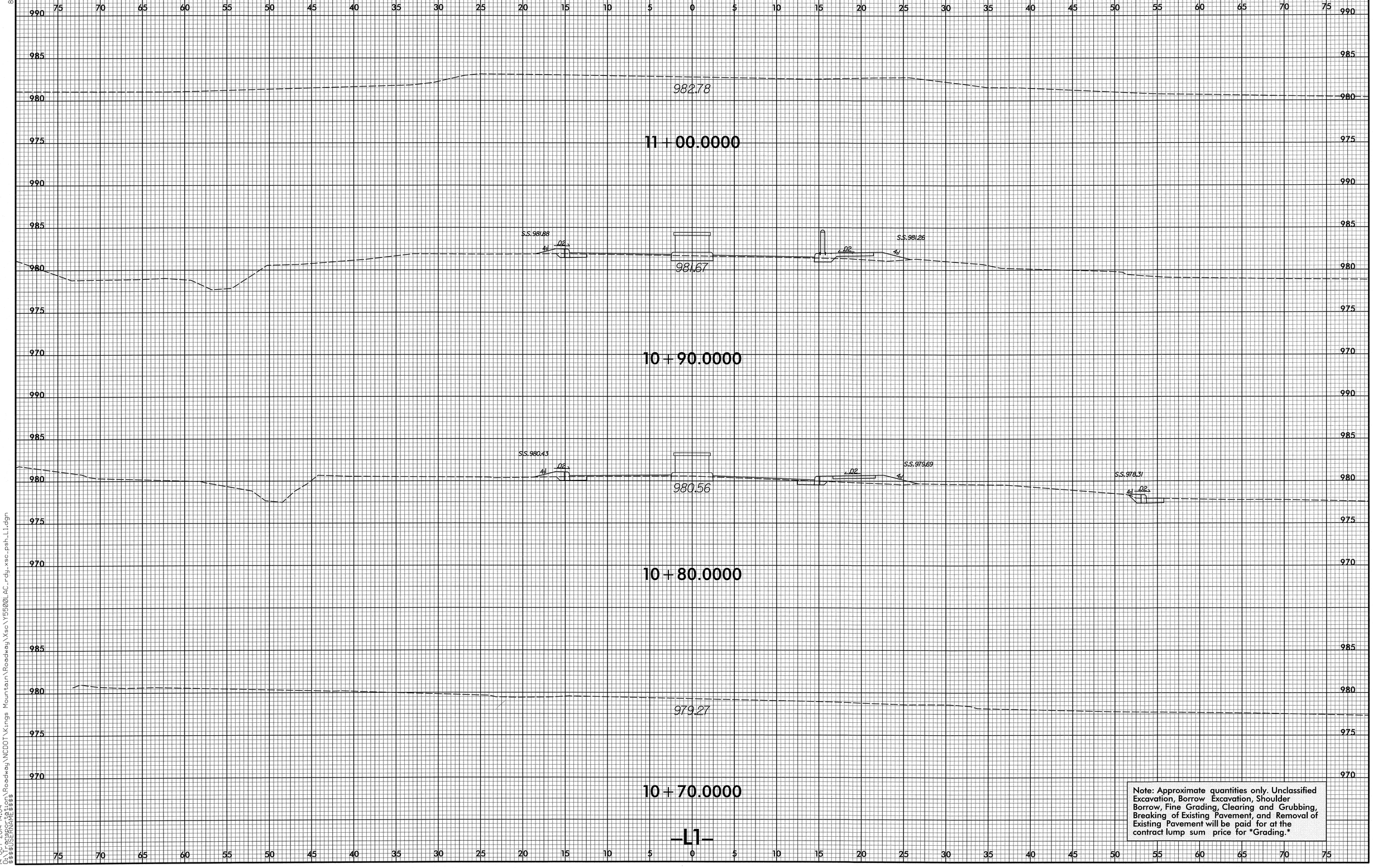
NOTE: Embankment does not include backfill for undercut.

CROSS-SECTION SUMMARY

Station -L1-	Uncl. Exc. (cu. yd.)	Undercut (cu. yd.)	Embt (cu. yd.)	Station -L2-	Uncl. Exc. (cu. yd.)	Undercut (cu. yd.)	Embt (cu. yd.)	Station	Uncl. Exc. (cu. yd.)	Undercut (cu. yd.)	Embt (cu. yd.)	Station	Uncl. Exc. (cu. yd.)	Undercut (cu. yd.)	Embt (cu. yd.)
10+70.00	0	0	0	11+00.00	0	0	0								
10+80.00	0	0	2	11+10.00	0	0	1								
10+90.00	0	0	3	11+20.00	0	0	2								
11+40.00	0	0	0	11+70.00	0	0	1								
11+50.00	0	0	2	11+80.00	0	0	2								
11+60.00	0	0	2	11+90.00	0	0	2								
11+70.00	0	0	2	12+00.00	0	0	1								
11+80.00	0	0	0												

NOTE: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Shoulder Borrow, Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading".

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	Y-5500LA	X-1



Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Shoulder Borrow, Fine Grading, Clearing and Grubbing, Breaking of Existing Pavement, and Removal of Existing Pavement will be paid for at the contract lump sum price for *Grading.*

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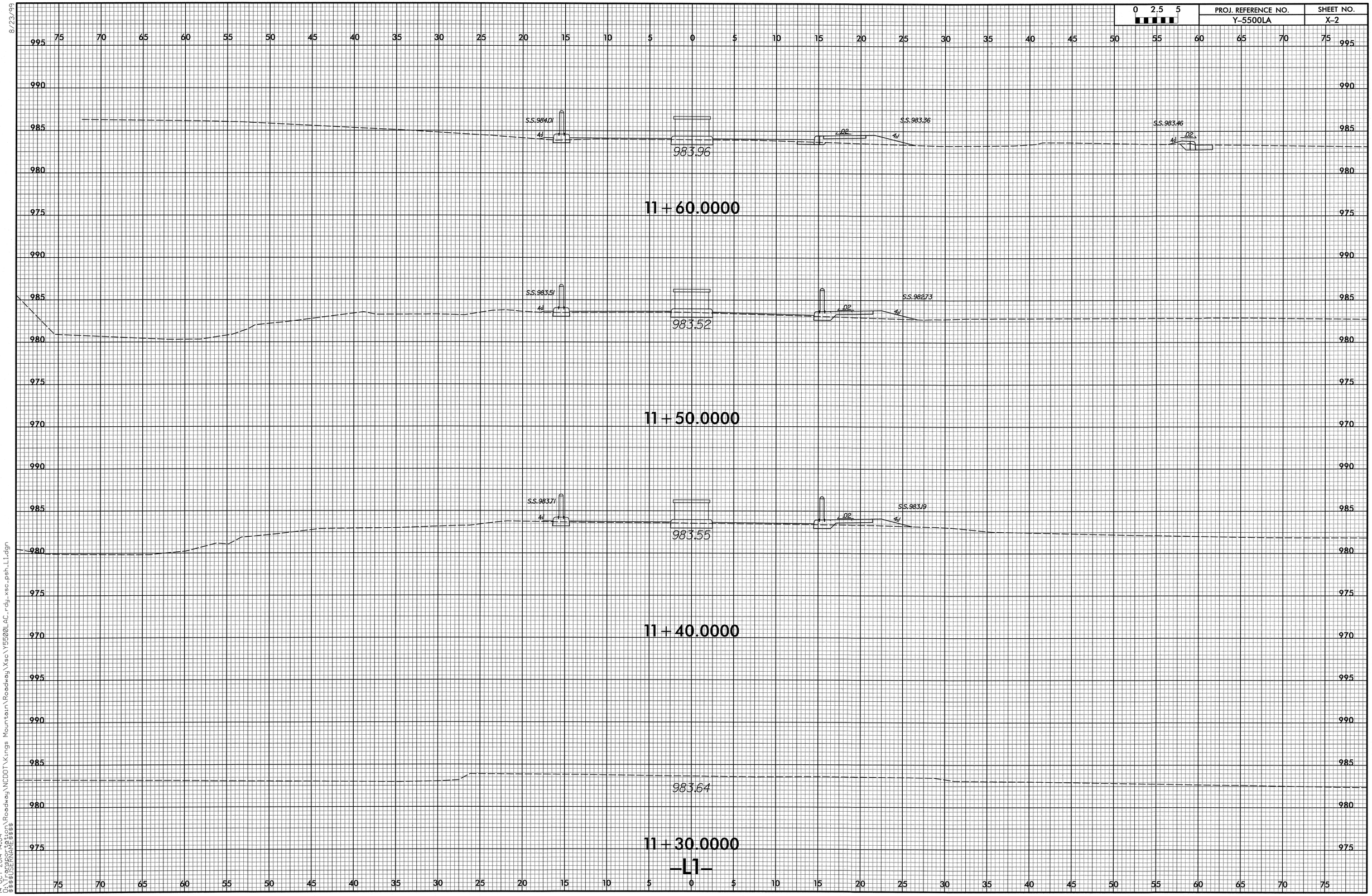

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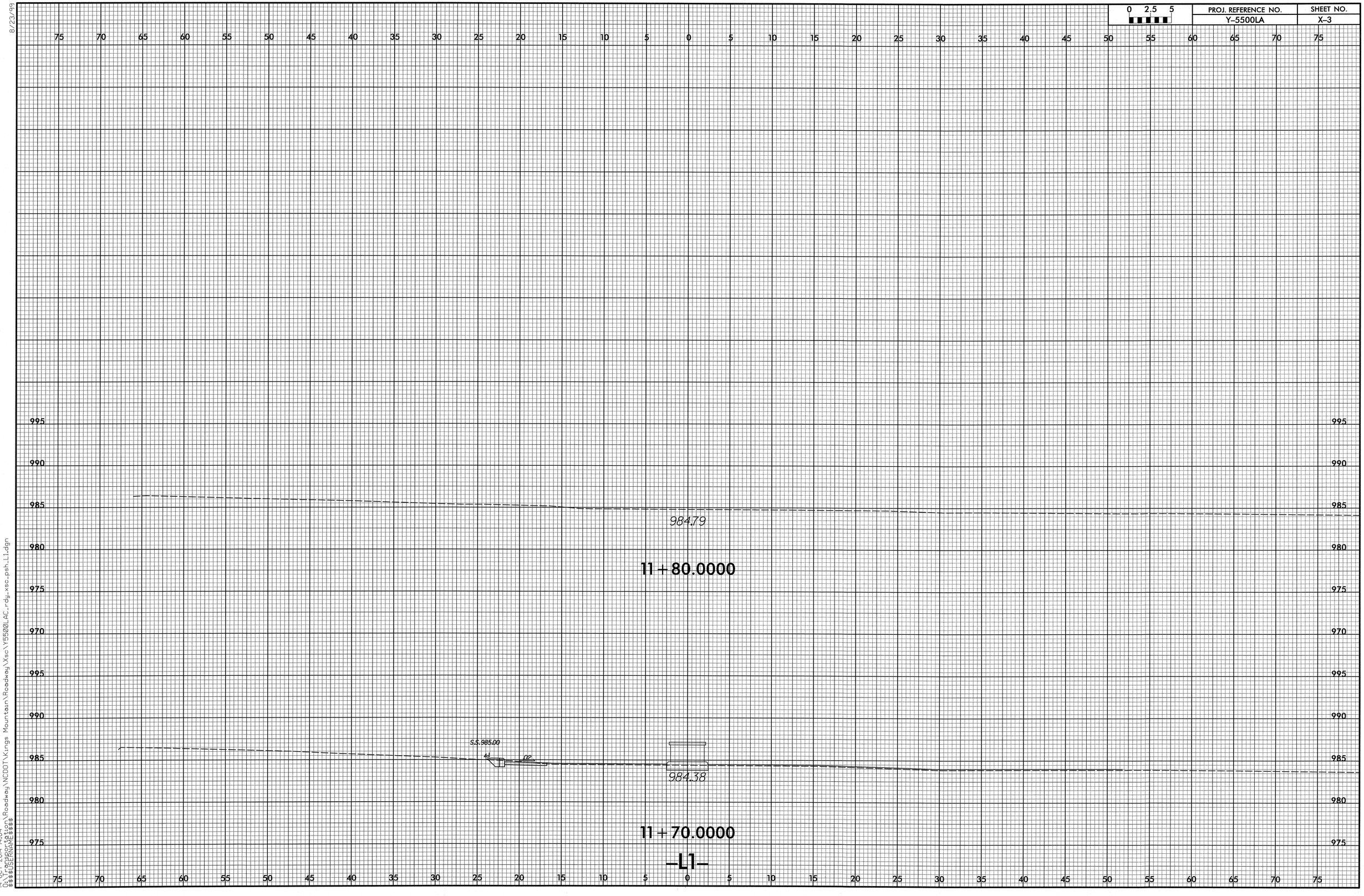

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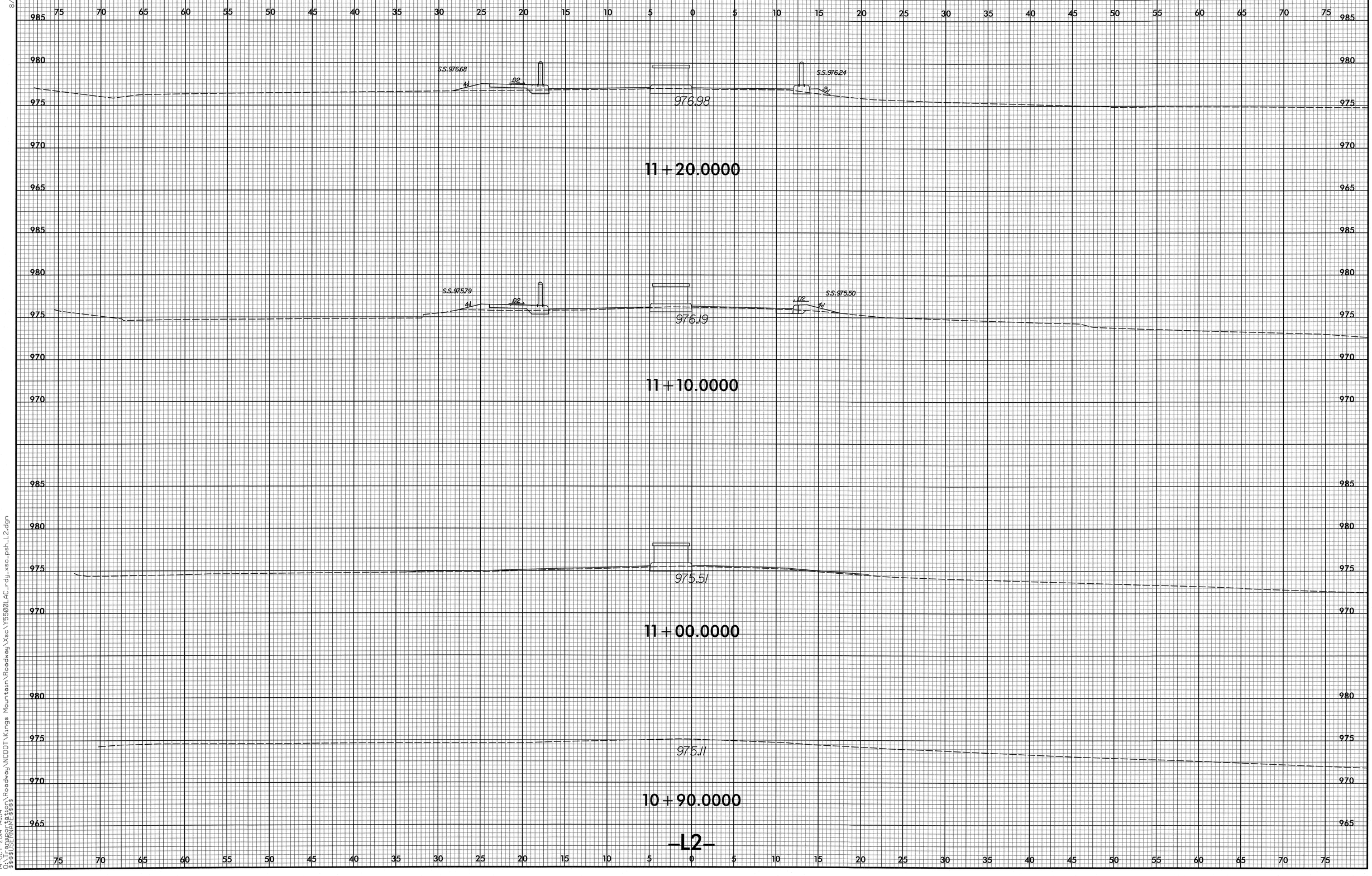

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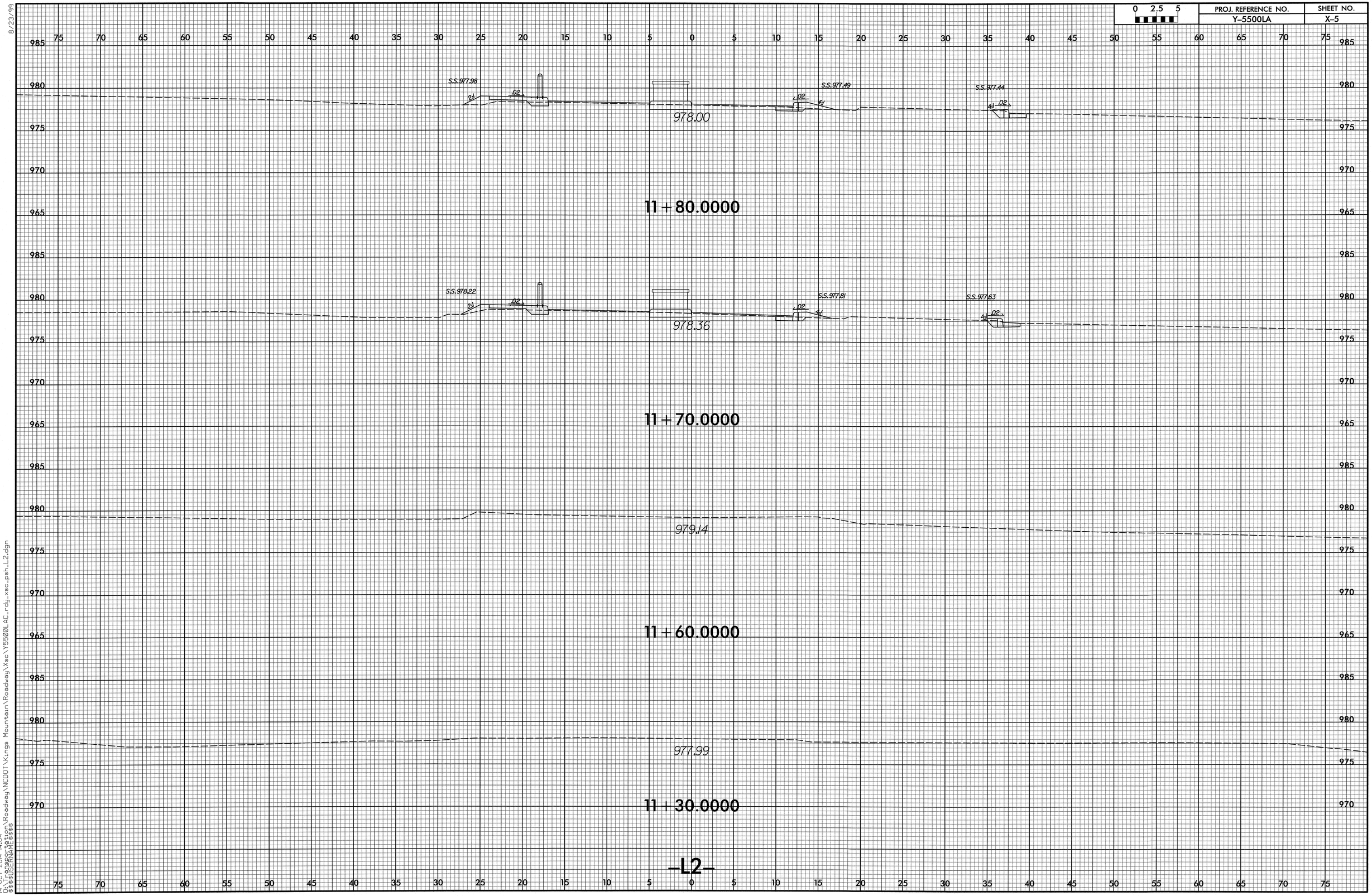

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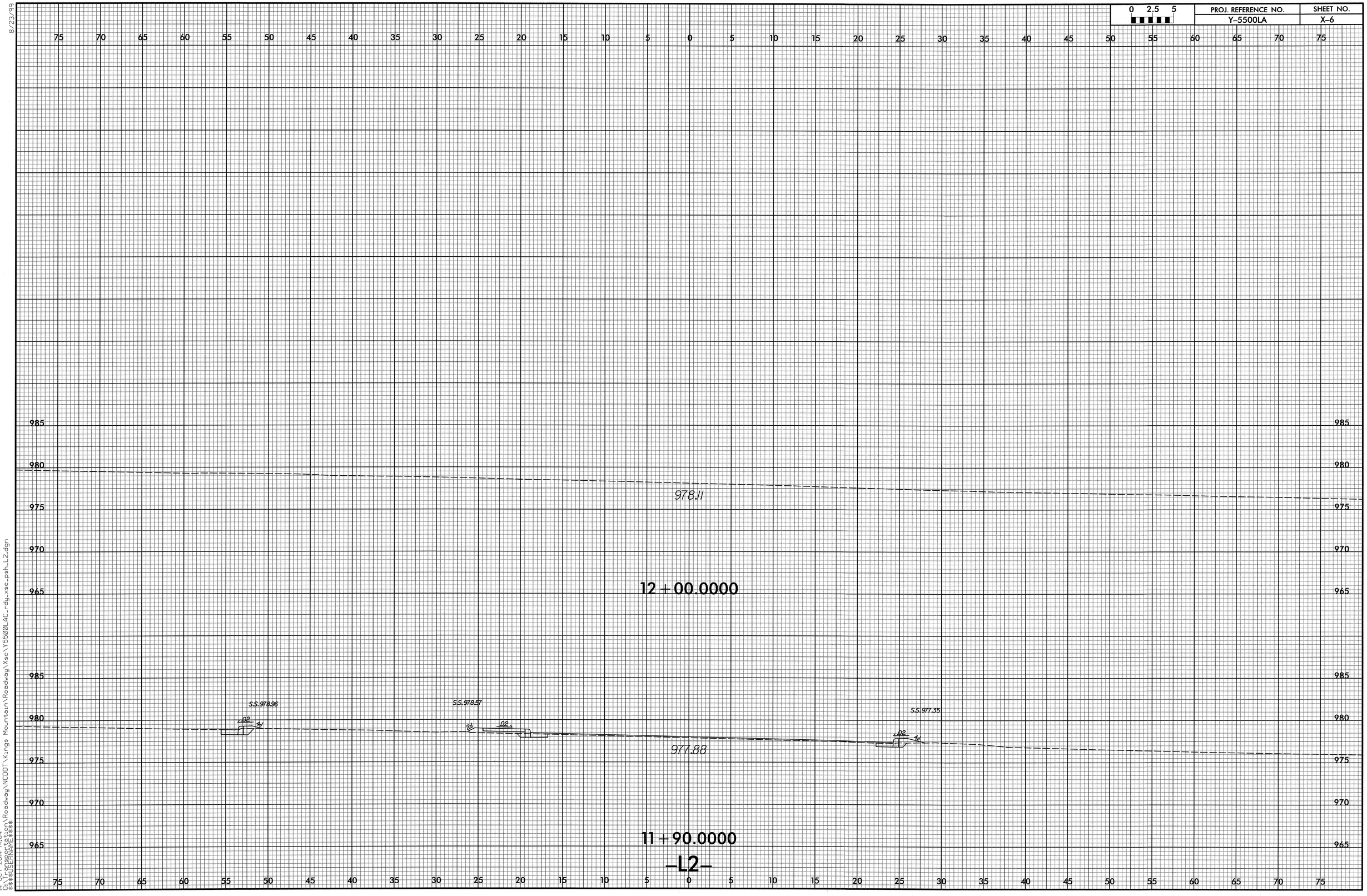

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