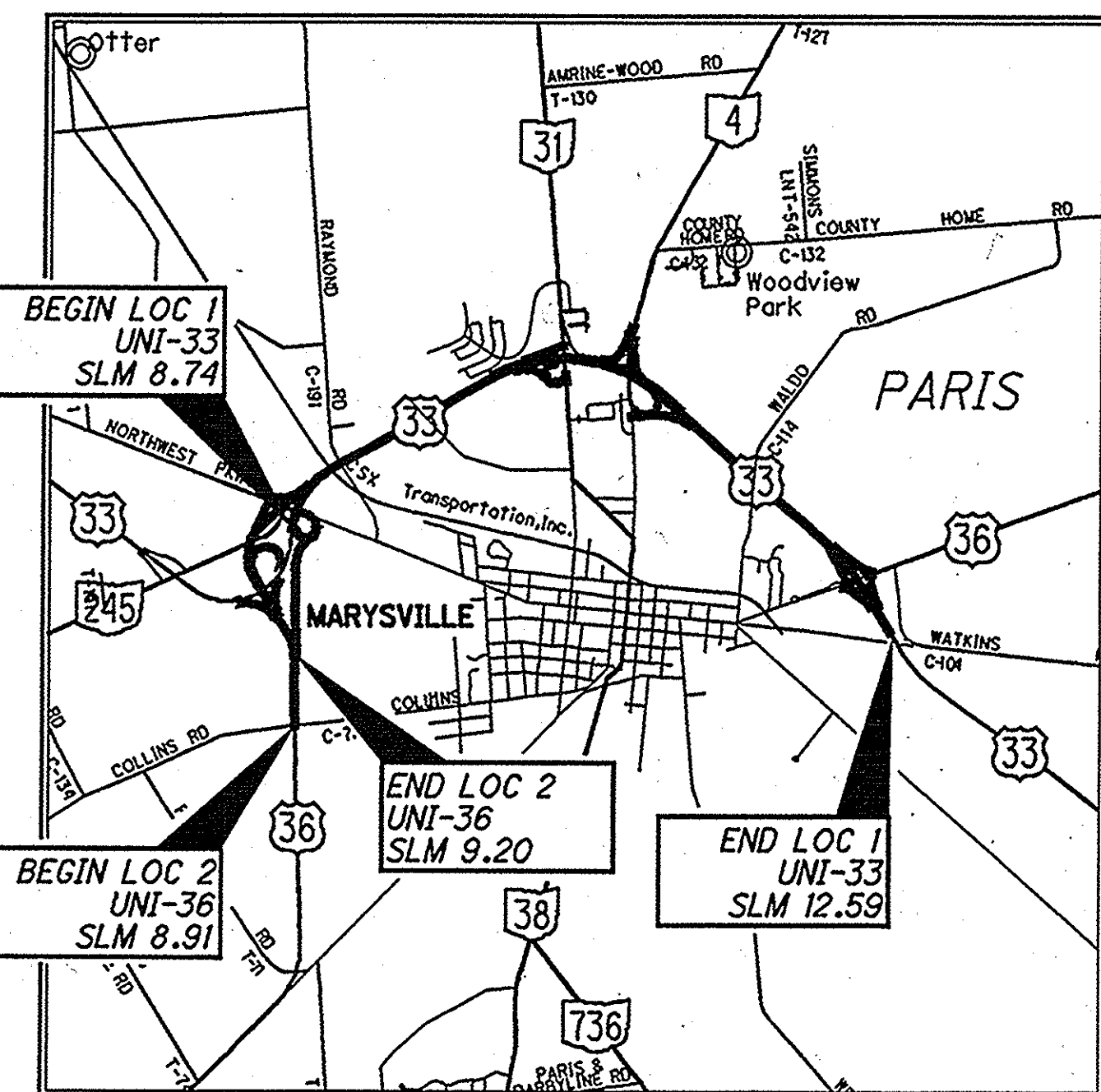


STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

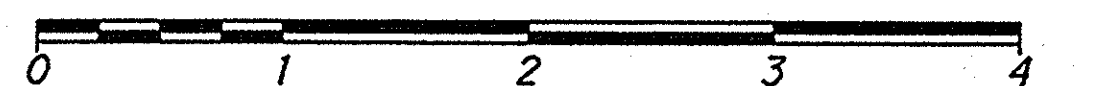
UNI-33-8.74
UNI-36-8.91

CITY OF MARYSVILLE
PARIS TOWNSHIP
UNION COUNTY



LOCATION MAP

LAT: N 40° 25' 42" / LONG: W 83° 32' 21"
SCALE IN MILES



PORTION TO BE IMPROVED	-----
INTERSTATE & DIVIDED HIGHWAYS	=====
UNDIVIDED STATE & FEDERAL ROUTES	-----
OTHER ROADS	-----

DESIGN DESIGNATION	UNI-33	UNI-36
CURRENT ADT (2013)	35,225	8,683
DESIGN YEAR ADT (2025)	47,906	11,809
DESIGN HOURLY VOLUME (2025)	1,996	492
DIRECTIONAL DISTRIBUTION	50%	50%
TRUCKS (24' HOUR B & C)	16%	13%
DESIGN SPEED	70	60
LEGAL SPEED	65	55
LANE ADTT	11,977	5,905

DESIGN FUNCTIONAL CLASSIFICATION

UNI-33-8.74 - 12.59	NHS	URBAN ARTERIAL
UNI-36-8.91 - 9.20	STP	URBAN ARTERIAL

DESIGN EXCEPTIONS

NONE REQUIRED

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

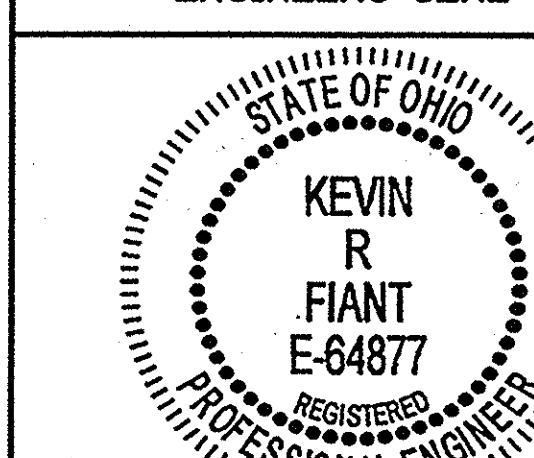
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:



ENGINEERS SEAL:



SIGNED: *Kevin R. Fiant*
DATE: 10/11/12

INDEX OF SHEETS:

TITLE	1
SCHEMATIC PLANS	2 - 5
TYPICAL SECTIONS	6 - 7
TYPICAL DETAILS	8
GENERAL NOTES	9 - 12
MAINTENANCE OF TRAFFIC NOTES	13 - 17
MAINTENANCE OF TRAFFIC PLAN (RAMP R)	18 - 19
MAINTENANCE OF TRAFFIC PLAN (RAMP U)	20 - 21
MAINTENANCE OF TRAFFIC PLAN (RAMP A & C)	22
DETOUR PLANS	23
UTILITY CONTACT INFORMATION	24
GENERAL SUMMARY	25 - 26
PAVEMENT PLAN SUBSUMMARY	27
PAVEMENT PLAN SHEETS (US-33)	28 - 44
PAVEMENT PLAN SHEETS (US-33 RAMPS)	45 - 57
PAVEMENT PLAN SHEETS (US-36W)	58 - 59
PAVEMENT PLAN SHEETS (US-36W RAMPS)	60 - 67
GUARDRAIL PLAN SUBSUMMARY	68
GUARDRAIL PLAN SHEETS	69 - 79
TRAFFIC CONTROL SUBSUMMARIES	80 - 82
TRAFFIC CONTROL PLAN	83 - 95
STRUCTURE NOTES	96 - 97
STRUCTURES OVER 20'	98 - 108

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF PAVEMENT REPAIRS, PLANING AND RESURFACING, AND VARIOUS BRIDGE WORK FOR A TOTAL OF 3.85 MILES ON US-33 IN UNION COUNTY.

THIS PROJECT CONSISTS OF PAVEMENT REPAIRS, PLANING AND RESURFACING, AND VARIOUS BRIDGE WORK FOR A TOTAL OF 6.03 MILES ON VARIOUS RAMPS ON US-33 IN UNION COUNTY.

THIS PROJECT CONSISTS OF PAVEMENT REPAIRS, PLANING AND RESURFACING, FOR A TOTAL OF 0.29 MILES ON US-36 IN UNION COUNTY.

THIS PROJECT ALSO INCLUDES WORK ASSOCIATED WITH UPGRADING GUARDRAIL SYSTEMS AT SPECIFIC LOCATIONS AS DETAILED IN THE PLAN.

EARTH DISTURBED AREA:

PROJECT EARTH DISTURBED AREA	N/A *
EST. CONTRACTOR EARTH DISTURBED AREA	N/A *
NOTICE OF INTENT EARTH DISTURBED AREA	N/A *

* MAINTENANCE PROJECT

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2010 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS PROJECT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET 23. PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

PLANS CERTIFIED BY:
NAME: *David H. Rankin* DATE: 10/11/12
DISTRICT 6
OHIO DEPT. OF TRANSPORTATION

APPROVED *[Signature]*
DATE 10-12-12
DISTRICT DEPUTY DIRECTOR

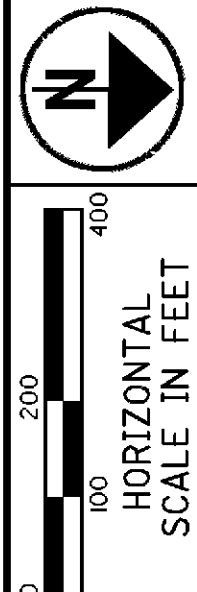
APPROVED *[Signature]*
DATE 11-14-12
DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	01/20/12	RM-4.2	10/15/10	TC-52.10	01/19/07	MT-98.20	07/20/12	800	10/19/12
BP-4.1	07/16/04	RM-4.3	10/21/11	TC-52.20	01/19/07	MT-98.22	07/20/12	823	07/15/11
		RM-4.4	10/16/09	TC-61.10	04/20/12	MT-98.28	07/20/12	832	05/05/09
GR-1.1	07/20/12	RM-4.5	10/16/09	TC-65.10	04/20/12	MT-98.29	07/20/12		
GR-2.1	07/20/12	RM-4.6	04/16/10	TC-65.11	04/20/12	MT-99.20	07/20/12	848	10/21/2011
GR-3.1	07/20/12			TC-73.10	04/20/12	MT-101.90	10/21/11		
GR-3.2	07/20/12	TC-7.65	01/21/11	TC-82.10	10/21/11	MT-101.60	07/20/12		
GR-4.2	07/20/12	TC-21.40	01/19/07			MT-101.70	04/15/11		
GR-5.1	04/16/10	TC-22.10	01/19/01	MT-95.30	07/20/12	MT-105.10	07/20/12		
GR-5.2	04/16/10	TC-41.20	01/19/01	MT-95.50	07/20/12				
GR-5.3	04/16/10	TC-41.30	01/19/07	MT-98.10	07/20/12				
GR-6.1	04/16/10	TC-42.20	01/21/11	MT-98.11	07/20/12				

SPECIAL PROVISIONS

FEDERAL PROJECT NO. E 036(460)
PID NO. 76466
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
UNI-33-8.74
1/108

13-NOV-2012 1:40PM drankin
UNI - US-33-8.74-UNI-36-8.91
130017 PID - 76466
Dist 6 1/10/2013
Contract Proposal Available
@www.ohio.gov/home
state.oh.us/home
I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\TITLE



SCHEMATIC PLAN

UNI-33-8.74

BEARINGS

- 22 US 36 - N 1° 31' 51" W
- 23 US 36 - N 1° 08' 32" E
- 24 US 36 RAMP U - N 1° 58' 34" W
- 25 US 36 RAMP U - N 31° 18' 27" W
- 26 US 36 RAMP V - N 1° 08' 32" E
- 27 US 36 RAMP V - N 31° 18' 27" W
- 28 US 36 RAMP P - N 5° 26' 57" E
- 29 US 36 RAMP P - N 1° 35' 37" W
- 30 US 36 RAMP P - N 0° 25' 11" E
- 31 US 36 RAMP P - N 4° 54' 05" E
- 32 US 36 RAMP Z - N 30° 13' 50" E
- 33 US 36 RAMP W - N 24° 28' 38" E

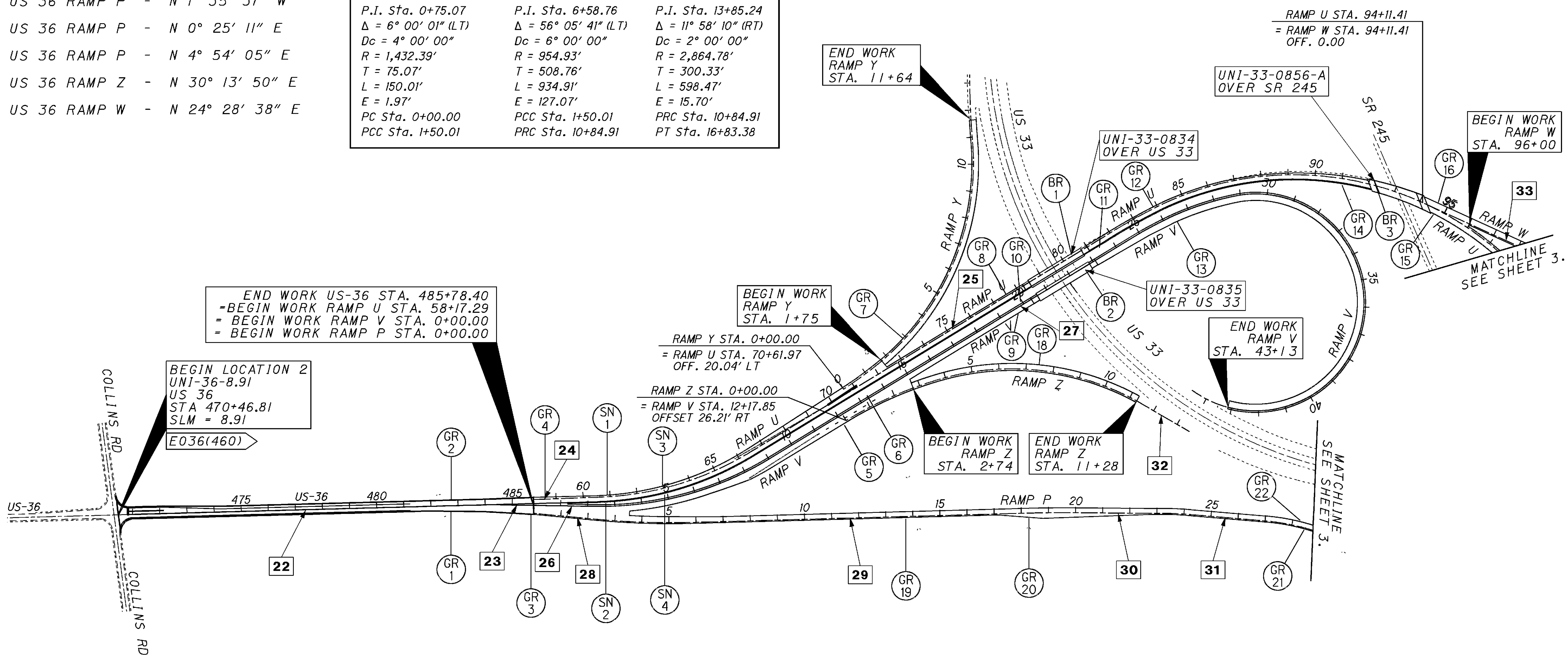
RAMP U CURVE DATA		
P.I. Sta. 63+56.39	P.I. Sta. 82+95.70	P.I. Sta. 91+85.10
$\Delta = 29^\circ 41' 46''$ (LT)	$\Delta = 6^\circ 19' 58''$ (RT)	$\Delta = 67^\circ 25' 13''$ (RT)
Dc = 5° 00' 00"	Dc = 2° 31' 59"	Dc = 5° 00' 00"
R = 1,145.93'	R = 2,261.84'	R = 1,145.92'
T = 303.80'	T = 125.12'	T = 764.52'
L = 593.93'	L = 250.00'	L = 1,348.41'
E = 39.59'	E = 3.46'	E = 231.63'
PC Sta. 60+52.60	PC Sta. 81+70.58	PCC Sta. 84+20.57
PT Sta. 66+46.52	PCC Sta. 84+20.57	PCC Sta. 97+68.98

RAMP V CURVE DATA				
P.I. Sta. 5+69.46	P.I. Sta. 25+66.32	P.I. Sta. 27+61.87	P.I. Sta. 34+94.57	P.I. Sta. 42+75.92
$\Delta = 32^\circ 26' 59''$ (LT)	$\Delta = 2^\circ 57' 35''$ (RT)	$\Delta = 14^\circ 36' 08''$ (RT)	$\Delta = 112^\circ 14' 58''$ (RT)	$\Delta = 112^\circ 14' 58''$ (RT)
Dc = 4° 46' 29"	Dc = 2° 35' 53"	Dc = 5° 17' 46"	Dc = 14° 19' 46"	Dc = 14° 22' 40"
R = 1,200.00'	R = 2,205.44'	R = 1,081.83'	R = 399.85'	R = 398.50'
T = 349.20'	T = 56.97'	T = 138.61'	T = 595.59'	T = 593.59'
L = 679.63'	L = 113.92'	L = 275.71'	L = 783.35'	L = 780.72'
E = 49.78'	E = 0.74'	E = 8.84'	E = 317.51'	E = 316.45'
PC Sta. 2+20.27	PC Sta. 25+09.34	PCC Sta. 26+23.27	PCC Sta. 28+98.98	PCC Sta. 36+82.33
PT Sta. 8+99.89	PCC Sta. 26+23.27	PCC Sta. 28+98.98	PCC Sta. 36+82.33	PT Sta. 44+63.04

RAMP Y CURVE DATA		
P.I. Sta. 0+75.07	P.I. Sta. 6+58.76	P.I. Sta. 13+85.24
$\Delta = 6^\circ 00' 01''$ (LT)	$\Delta = 56^\circ 05' 41''$ (LT)	$\Delta = 11^\circ 58' 10''$ (RT)
Dc = 4° 00' 00"	Dc = 6° 00' 00"	Dc = 2° 00' 00"
R = 1,432.39'	R = 954.93'	R = 2,864.78'
T = 75.07'	T = 508.76'	T = 300.33'
L = 150.01'	L = 934.91'	L = 598.47'
E = 1.97'	E = 127.07'	E = 15.70'
PC Sta. 0+00.00	PCC Sta. 1+50.01	PRC Sta. 10+84.91
PCC Sta. 1+50.01	PRC Sta. 10+84.91	PT Sta. 16+83.38

RAMP P CURVE DATA			
P.I. Sta. 4+07.03	P.I. Sta. 18+93.28	P.I. Sta. 23+80.26	P.I. Sta. 30+19.85
$\Delta = 7^\circ 02' 34''$ (LT)	$\Delta = 2^\circ 00' 48''$ (RT)	$\Delta = 4^\circ 28' 54''$ (RT)	$\Delta = 43^\circ 12' 51''$ (RT)
Dc = 1° 54' 35"	Dc = 0° 57' 18"	Dc = 4° 46' 29"	Dc = 7° 09' 43"
R = 3,000.00'	R = 6,000.00'	R = 1,200.00'	R = 800.00'
T = 184.61'	T = 105.43'	T = 46.96'	T = 316.86'
L = 368.76'	L = 210.84'	L = 93.86'	L = 603.38'
E = 5.68'	E = 0.93'	E = 0.92'	E = 60.46'
PC Sta. 2+22.41	PC Sta. 17+87.84	PC Sta. 23+33.30	PC Sta. 27+02.99
PT Sta. 5+91.17	PT Sta. 19+98.69	PT Sta. 24+27.17	PT Sta. 33+06.37

RAMP Z CURVE DATA	
P.I. Sta. 1+89.60	P.I. Sta. 7+86.93
$\Delta = 15^\circ 04' 49''$ (RT)	$\Delta = 46^\circ 27' 53''$ (RT)
Dc = 4° 00' 00"	Dc = 6° 00' 00"
R = 1,432.40'	R = 954.93'
T = 189.60'	T = 409.92'
L = 377.01'	L = 774.41'
E = 12.49'	E = 84.27'
PC Sta. 0+00.00	PCC Sta. 3+77.01
PCC Sta. 3+77.01	PT Sta. 11+51.42



END WORK US-36 STA. 485+78.40
 = BEGIN WORK RAMP U STA. 58+17.29
 = BEGIN WORK RAMP V STA. 0+00.00
 = BEGIN WORK RAMP P STA. 0+00.00

BEGIN LOCATION 2
 UNI-36-8.91
 US 36
 STA 470+46.81
 SLM = 8.91
 E036(460)

BEGIN WORK
 RAMP Y
 STA. 1+75

RAMP Y STA. 0+00.00
 = RAMP U STA. 70+61.97
 OFF. 20.04' LT

RAMP Z STA. 0+00.00
 = RAMP V STA. 12+17.85
 OFFSET 26.21' RT

BEGIN WORK
 RAMP Z
 STA. 2+74

END WORK
 RAMP Z
 STA. 11+28

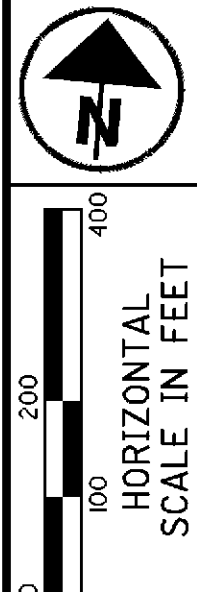
END WORK
 RAMP V
 STA. 43+13

RAMP U STA. 94+11.41
 = RAMP W STA. 94+11.41
 OFF. 0.00

BEGIN WORK
 RAMP W
 STA. 96+00

- (GR #) GUARDRAIL WORK LOCATIONS.
SEE GUARDRAIL PLAN SHEETS 69-79 .
- (BR #) STRUCTURE WORK LOCATIONS.
SEE STRUCTURE PLAN SHEETS 99-108 .
- (SN #) SIGN WORK LOCATIONS.
SEE STRUCTURE PLAN SHEETS 83-95 .

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\SCHMATIC PLANS.dgn SHEET_GB000 13-NOV-2012 1:40PM drankin



SCHEMATIC PLAN

UNI-33-8.74

RAMP S CURVE DATA	
P.I. Sta = 3+75.27	
$\Delta = 24^\circ 04' 54''$ (LT)	
$Dc = 4^\circ 00' 00''$	
$R = 1,432.39'$	
$T = 305.53'$	
$L = 602.04'$	
$E = 32.22'$	
PC Sta. 0+69.74	
PCC Sta. 6+71.78	
P.I. Sta = 9+81.90	
$\Delta = 35^\circ 58' 57''$ (LT)	
$Dc = 6^\circ 00' 00''$	
$R = 954.93'$	
$T = 310.11'$	
$L = 599.71'$	
$E = 49.09'$	
PCC Sta. 6+71.78	
PT Sta. 12+71.49	

US 33 CURVE DATA		
P.I. Sta = 465+03.73	P.I. Sta = 473+19.25	
$\Delta = 55^\circ 04' 25''$ (RT)	$Dc = 6^\circ 00' 00''$ (RT)	
$Dc = 3^\circ 00' 00''$	$Dc = 2^\circ 14' 59''$	
$R = 1,909.86'$	$R = 2,546.76'$	
$Lc = 1435.78'$	$T = 133.47'$	
$Ls = 400.00'$	$L = 266.70'$	
$LT = 266.82'$	$E = 3.50'$	
$ST = 133.47'$	PCC Sta. 471+85.78	
$Ts = 1197.51'$	PT Sta. 474+52.47	
$Es = 247.94'$		
$\theta_s = 6^\circ 00' 00''$		
TS Sta. 453+51.17		
SC Sta. 457+50.00		
PCC Sta. 471+85.78		

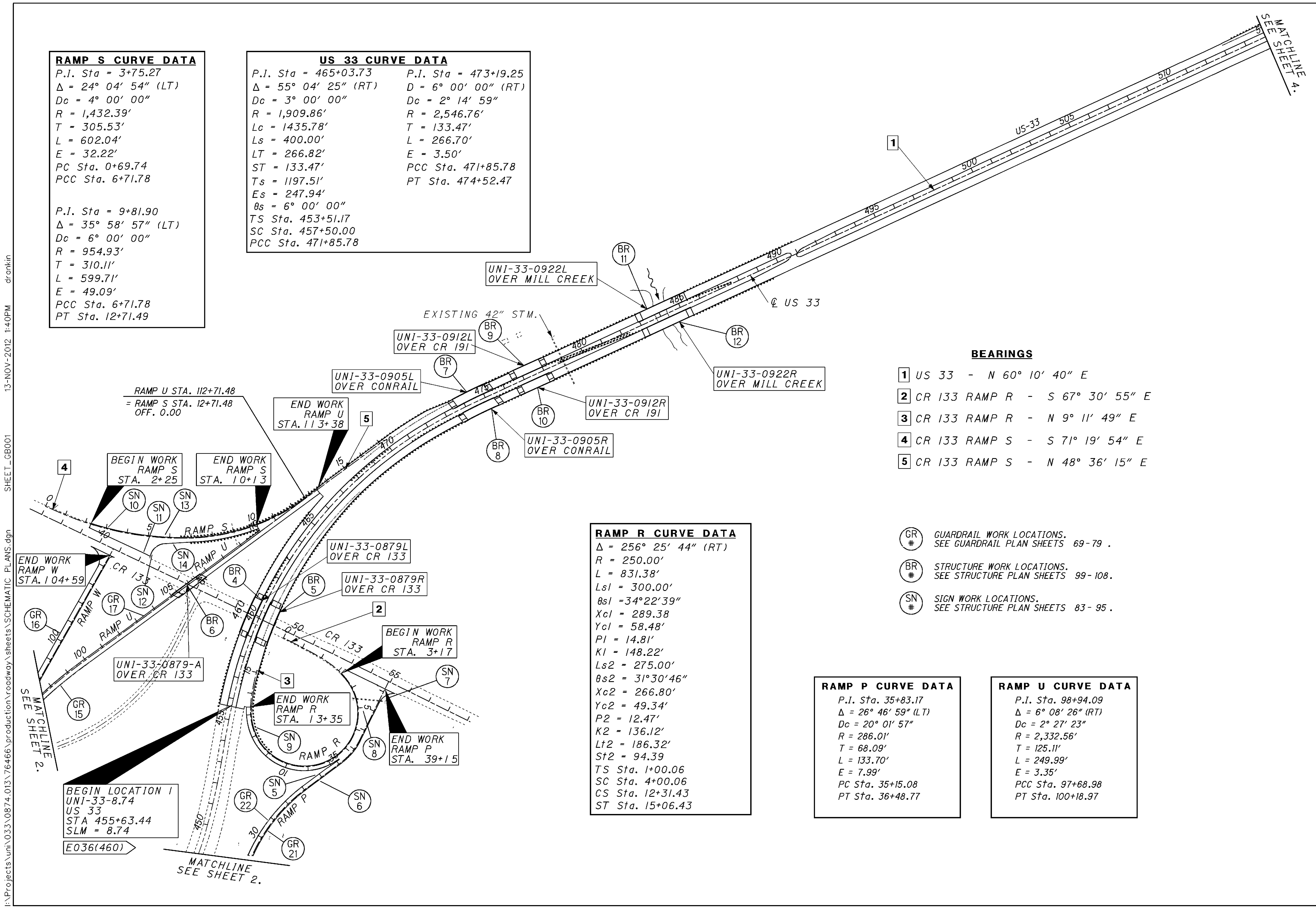
RAMP R CURVE DATA	
$\Delta = 256^\circ 25' 44''$ (RT)	
$R = 250.00'$	
$L = 831.38'$	
$Ls1 = 300.00'$	
$\theta_{s1} = 34^\circ 22' 39''$	
$Xc1 = 289.38$	
$Yc1 = 58.48'$	
$PI = 14.81'$	
$K1 = 148.22'$	
$Ls2 = 275.00'$	
$\theta_{s2} = 31^\circ 30' 46''$	
$Xc2 = 266.80'$	
$Yc2 = 49.34'$	
$P2 = 12.47'$	
$K2 = 136.12'$	
$Lt2 = 186.32'$	
$St2 = 94.39$	
TS Sta. 1+00.06	
SC Sta. 4+00.06	
CS Sta. 12+31.43	
ST Sta. 15+06.43	

RAMP P CURVE DATA	
P.I. Sta. 35+83.17	
$\Delta = 26^\circ 46' 59''$ (LT)	
$Dc = 20^\circ 01' 57''$	
$R = 286.01'$	
$T = 68.09'$	
$L = 133.70'$	
$E = 7.99'$	
PC Sta. 35+15.08	
PT Sta. 36+48.77	

RAMP U CURVE DATA	
P.I. Sta. 98+94.09	
$\Delta = 6^\circ 08' 26''$ (RT)	
$Dc = 2^\circ 27' 23''$	
$R = 2,332.56'$	
$T = 125.11'$	
$L = 249.99'$	
$E = 3.35'$	
PCC Sta. 97+68.98	
PT Sta. 100+18.97	

- BEARINGS**
- 1 US 33 - N 60° 10' 40" E
 - 2 CR 133 RAMP R - S 67° 30' 55" E
 - 3 CR 133 RAMP R - N 9° 11' 49" E
 - 4 CR 133 RAMP S - S 71° 19' 54" E
 - 5 CR 133 RAMP S - N 48° 36' 15" E

- GR # GUARDRAIL WORK LOCATIONS. SEE GUARDRAIL PLAN SHEETS 69-79 .
- BR # STRUCTURE WORK LOCATIONS. SEE STRUCTURE PLAN SHEETS 99-108 .
- SN # SIGN WORK LOCATIONS. SEE STRUCTURE PLAN SHEETS 83-95 .



I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\SCHEMATIC_PLANS.dgn SHEET_GB001 13-NOV-2012 1:40PM drankin

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\SCHMATIC_PLANS.dgn SHEET_GB002 13-NOV-2012 1:40PM drankin

RAMP E CURVE DATA
 P.I. Sta = 3+30.00
 $\Delta = 14^\circ 00' 00''$ (LT)
 $Dc = 3^\circ 00' 00''$
 $R = 1,909.86'$
 $T = 234.50'$
 $L = 466.67'$
 $E = 14.34'$
 PC Sta. 0+95.50
 PT Sta. 5+62.17

US 33 CURVE DATA
 P.I. Sta = 549+86.70
 $\Delta = 71^\circ 10' 01''$ (RT)
 $Dc = 1^\circ 28' 00''$
 $R = 3,906.22'$
 $T = 2,794.87'$
 $L = 4,851.91'$
 $E = 896.89'$
 PC Sta. 521+91.83
 PT Sta. 570+43.73

RAMP M CURVE DATA
 P.I. Sta = 16+13.73
 $\Delta = 10^\circ 00' 00''$ (LT)
 $Dc = 3^\circ 00' 00''$
 $R = 1,909.86'$
 $T = 167.09'$
 $L = 333.33'$
 $E = 7.30'$
 PC Sta. 14+46.64
 PT Sta. 17+79.97

RAMP L CURVE DATA
 P.I. Sta = 2+20.04
 $\Delta = 17^\circ 28' 00''$ (LT)
 $Dc = 4^\circ 00' 00''$
 $R = 1,432.39'$
 $T = 220.04'$
 $L = 436.67'$
 $E = 16.80'$
 PC Sta. 0+00.00
 PT Sta. 4+36.67

P.I. Sta = 11+16.49
 $\Delta = 57^\circ 27' 40''$ (LT)
 $Dc = 10^\circ 00' 00''$
 $R = 572.96'$
 $T = 314.08'$
 $L = 574.61'$
 $E = 80.44'$
 PC Sta. 8+02.41
 PT Sta. 13+77.02

RAMP F CURVE DATA
 P.I. Sta = 2+61.03
 $\Delta = 9^\circ 25' 23''$ (RT)
 $Dc = 2^\circ 00' 00''$
 $R = 2,864.80'$
 $T = 236.11'$
 $L = 471.16'$
 $E = 9.71'$
 PC Sta. 0+24.92
 PT Sta. 4+96.08

RAMP H CURVE DATA
 $\Delta = 271^\circ 45' 40''$ (RT) $Ls2 = 275.00'$
 $R = 230.00'$ $\theta s2 = 34^\circ 15' 10''$
 $Lc = 803.42'$ $Xc2 = 265.33'$
 $Ls1 = 300.00'$ $Yc2 = 53.42'$
 $\theta s1 = 37^\circ 22' 01''$ $P2 = 13.52'$
 $Xc1 = 287.49$ $K2 = 135.88'$
 $Yc1 = 63.26'$ $Lt2 = 186.89'$
 $PI = 16.06'$ $St2 = 94.91$
 $KI = 147.90'$
 TS Sta. 0+00.00
 SC Sta. 3+00.01
 CS Sta. 11+03.43
 ST Sta. 13+78.44

RAMP M CURVE DATA
 P.I. Sta = 4+62.24
 $\Delta = 77^\circ 47' 27''$ (LT)
 $Dc = 10^\circ 00' 00''$
 $R = 572.96'$
 $T = 462.24'$
 $L = 777.91'$
 $E = 163.21'$
 PC Sta. 0+00.00
 PT Sta. 7+77.91

P.I. Sta = 10+83.21
 $\Delta = 52^\circ 40' 00''$ (LT)
 $Dc = 8^\circ 00' 00''$
 $R = 716.20'$
 $T = 354.49'$
 $L = 658.34'$
 $E = 82.93'$
 PC Sta. 7+28.72
 PT Sta. 13+87.06

RAMP K CURVE DATA
 P.I. Sta = 11+47.15
 $\Delta = 44^\circ 24' 15''$ (RT)
 $Dc = 4^\circ 00' 00''$
 $R = 1,432.39'$
 $T = 584.61'$
 $L = 1,110.10'$
 $E = 114.71'$
 PC Sta. 5+62.54
 PT Sta. 16+72.64

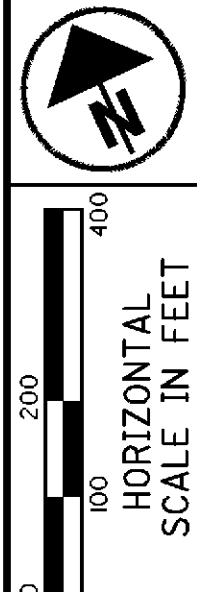
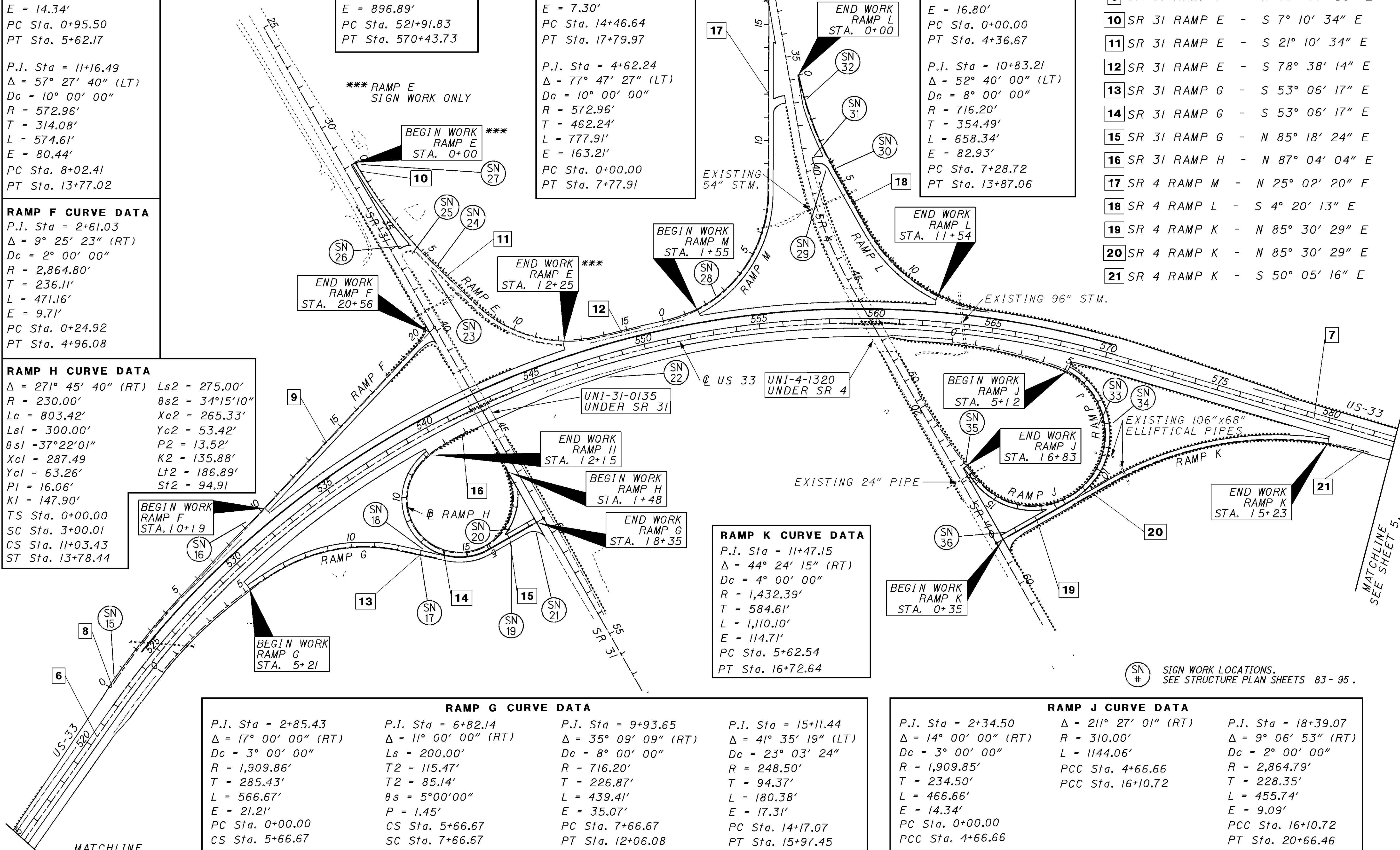
RAMP G CURVE DATA

P.I. Sta = 2+85.43 $\Delta = 17^\circ 00' 00''$ (RT) $Dc = 3^\circ 00' 00''$ $R = 1,909.86'$ $T = 285.43'$ $L = 566.67'$ $E = 21.21'$ PC Sta. 0+00.00 CS Sta. 5+66.67	P.I. Sta = 6+82.14 $\Delta = 11^\circ 00' 00''$ (RT) $Ls = 200.00'$ $T2 = 115.47'$ $T2 = 85.14'$ $\theta s = 5^\circ 00' 00''$ $P = 1.45'$ CS Sta. 5+66.67 SC Sta. 7+66.67	P.I. Sta = 9+93.65 $\Delta = 35^\circ 09' 09''$ (RT) $Dc = 8^\circ 00' 00''$ $R = 716.20'$ $T = 226.87'$ $L = 439.41'$ $E = 35.07'$ PC Sta. 7+66.67 PT Sta. 12+06.08	P.I. Sta = 15+11.44 $\Delta = 41^\circ 35' 19''$ (LT) $Dc = 23^\circ 03' 24''$ $R = 248.50'$ $T = 94.37'$ $L = 180.38'$ $E = 17.31'$ PC Sta. 14+17.07 PT Sta. 15+97.45
---	--	--	--

RAMP J CURVE DATA

P.I. Sta = 2+34.50 $\Delta = 14^\circ 00' 00''$ (RT) $Dc = 3^\circ 00' 00''$ $R = 1,909.85'$ $T = 234.50'$ $L = 466.66'$ $E = 14.34'$ PC Sta. 0+00.00 PCC Sta. 4+66.66	$\Delta = 211^\circ 27' 01''$ (RT) $R = 310.00'$ $L = 1144.06'$ PCC Sta. 16+10.72	P.I. Sta = 18+39.07 $\Delta = 9^\circ 06' 53''$ (RT) $Dc = 2^\circ 00' 00''$ $R = 2,864.79'$ $T = 228.35'$ $L = 455.74'$ $E = 9.09'$ PCC Sta. 16+10.72 PT Sta. 20+66.46
--	--	---

- BEARINGS**
- 6 US 33 - N 60° 10' 40" E
 - 7 US 33 - S 48° 39' 30" E
 - 8 SR 31 RAMP F - N 58° 41' 35" E
 - 9 SR 31 RAMP F - N 68° 06' 58" E
 - 10 SR 31 RAMP E - S 7° 10' 34" E
 - 11 SR 31 RAMP E - S 21° 10' 34" E
 - 12 SR 31 RAMP E - S 78° 38' 14" E
 - 13 SR 31 RAMP G - S 53° 06' 17" E
 - 14 SR 31 RAMP G - S 53° 06' 17" E
 - 15 SR 31 RAMP G - N 85° 18' 24" E
 - 16 SR 31 RAMP H - N 87° 04' 04" E
 - 17 SR 4 RAMP M - N 25° 02' 20" E
 - 18 SR 4 RAMP L - S 4° 20' 13" E
 - 19 SR 4 RAMP K - N 85° 30' 29" E
 - 20 SR 4 RAMP K - N 85° 30' 29" E
 - 21 SR 4 RAMP K - S 50° 05' 16" E



SCHEMATIC PLAN

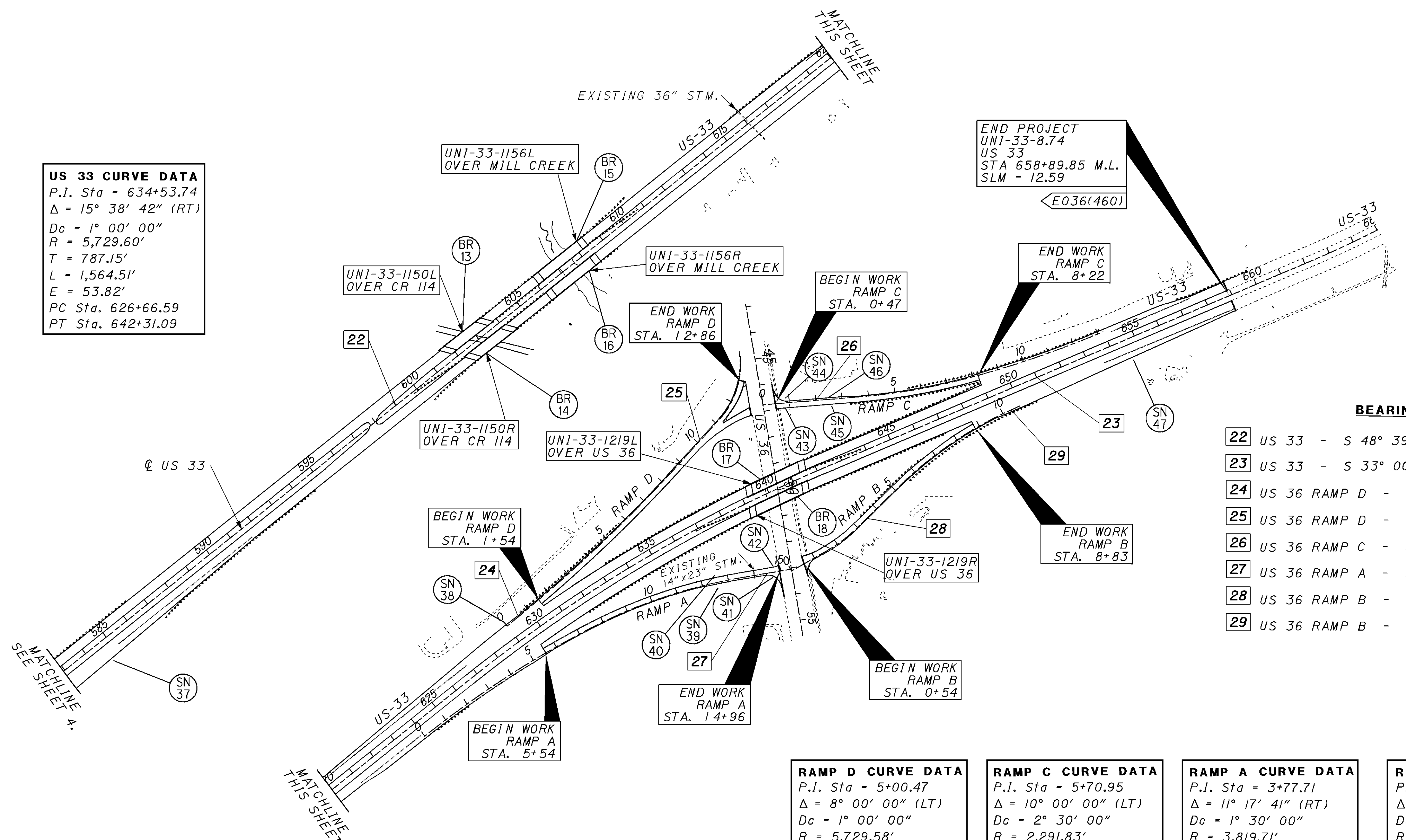
UNI-33-8.74



SCHEMATIC PLAN

UNI-33-8.74

US 33 CURVE DATA
 P.I. Sta = 634+53.74
 $\Delta = 15^\circ 38' 42''$ (RT)
 $D_c = 1^\circ 00' 00''$
 $R = 5,729.60'$
 $T = 787.15'$
 $L = 1,564.51'$
 $E = 53.82'$
 PC Sta. 626+66.59
 PT Sta. 642+31.09



BEARINGS

- 22 US 33 - S 48° 39' 30" E
- 23 US 33 - S 33° 00' 48" E
- 24 US 36 RAMP D - S 49° 48' 31" E
- 25 US 36 RAMP D - S 57° 48' 31" E
- 26 US 36 RAMP C - S 14° 42' 52" E
- 27 US 36 RAMP A - S 19° 48' 00" E
- 28 US 36 RAMP B - S 54° 29' 43" E
- 29 US 36 RAMP B - S 34° 29' 43" E

RAMP D CURVE DATA
 P.I. Sta = 5+00.47
 $\Delta = 8^\circ 00' 00''$ (LT)
 $D_c = 1^\circ 00' 00''$
 $R = 5,729.58'$
 $T = 400.65'$
 $L = 800.00'$
 $E = 13.99'$
 PC Sta. 0+99.82
 PT Sta. 8+99.82

P.I. Sta = 12+63.43
 $\Delta = 50^\circ 04' 56''$ (LT)
 $D_c = 18^\circ 28' 57''$
 $R = 310.00'$
 $T = 144.83'$
 $L = 270.97'$
 $E = 32.16'$
 PC Sta. 11+18.60
 PT Sta. 13+89.57

RAMP C CURVE DATA
 P.I. Sta = 5+70.95
 $\Delta = 10^\circ 00' 00''$ (LT)
 $D_c = 2^\circ 30' 00''$
 $R = 2,291.83'$
 $T = 200.51'$
 $L = 400.00'$
 $E = 8.75'$
 PC Sta. 3+70.44
 PCC Sta. 7+70.44

P.I. Sta = 10+47.46
 $\Delta = 8^\circ 17' 46''$ (LT)
 $D_c = 1^\circ 30' 00''$
 $R = 3,819.72'$
 $T = 277.02'$
 $L = 553.07'$
 $E = 10.03'$
 PCC Sta. 7+70.44
 PT Sta. 13+23.52

RAMP A CURVE DATA
 P.I. Sta = 3+77.71
 $\Delta = 11^\circ 17' 41''$ (RT)
 $D_c = 1^\circ 30' 00''$
 $R = 3,819.71'$
 $T = 377.71'$
 $L = 752.98'$
 $E = 18.63'$
 PC Sta. 0+00.00
 PCC Sta. 7+52.98

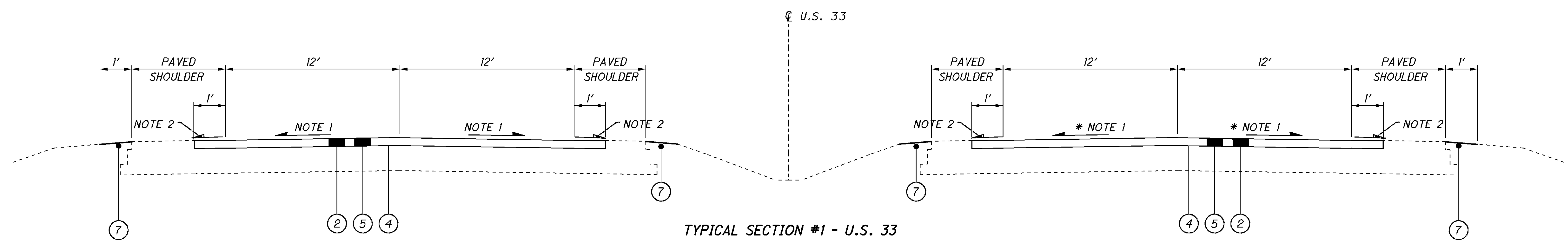
P.I. Sta = 10+47.98
 $\Delta = 17^\circ 33' 39''$ (RT)
 $D_c = 3^\circ 00' 00''$
 $R = 1,909.86'$
 $T = 294.99'$
 $L = 585.36'$
 $E = 22.65'$
 PCC Sta. 7+52.98
 PT Sta. 13+38.34

RAMP B CURVE DATA
 P.I. Sta = 2+25.42
 $\Delta = 14^\circ 41' 43''$ (LT)
 $D_c = 10^\circ$
 $R = 572.96'$
 $T = 73.88'$
 $L = 146.95'$
 $E = 4.74'$
 PC Sta. 1+51.54
 PT Sta. 2+98.49

P.I. Sta = 7+76.29
 $\Delta = 20^\circ 00' 00''$ (RT)
 $D_c = 4^\circ 00' 00''$
 $R = 1,432.39'$
 $T = 252.57'$
 $L = 500.00'$
 $E = 22.10'$
 PC Sta. 5+23.72
 PT Sta. 10.23.72

- (BR #) STRUCTURE WORK LOCATIONS.
SEE STRUCTURE PLAN SHEETS 99-108.
- (SN #) SIGN WORK LOCATIONS.
SEE STRUCTURE PLAN SHEETS 83-95.

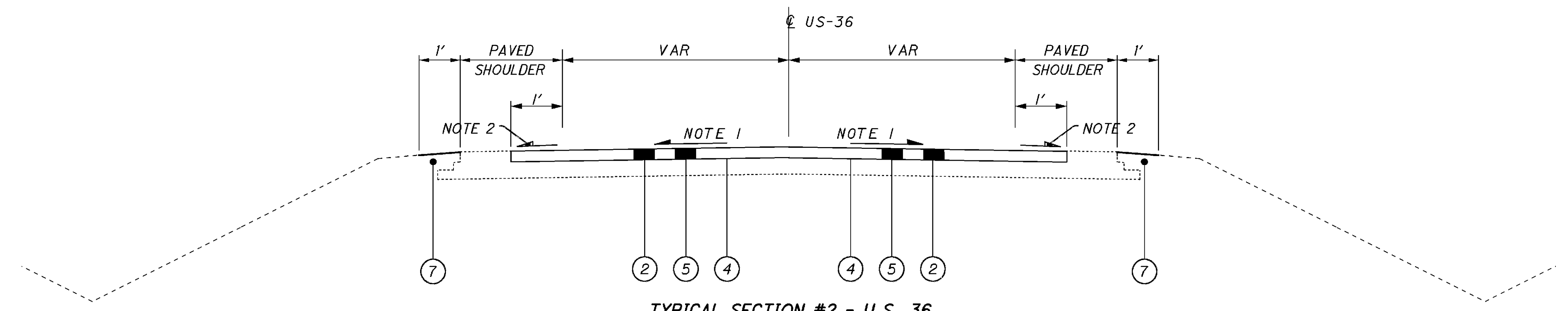
I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\SCHEMATIC_PLANS.dgn SHEET_GB003 13-NOV-2012 1:40PM drankin



TYPICAL SECTION #1 - U.S. 33

SECTION APPLIES TO THE FOLLOWING STATIONS:

UNI 33 STA. 455+63.44 TO STA. 658+89.85 = 20,326.41 FT
TOTAL = 20,326.41 FT



TYPICAL SECTION #2 - U.S. 36

SECTION APPLIES TO THE FOLLOWING STATIONS:

UNI 36 STA. 470+46.81 TO STA. 485+78.40 = 1,531.59 FT
TOTAL = 1,531.59 FT

LEGEND:

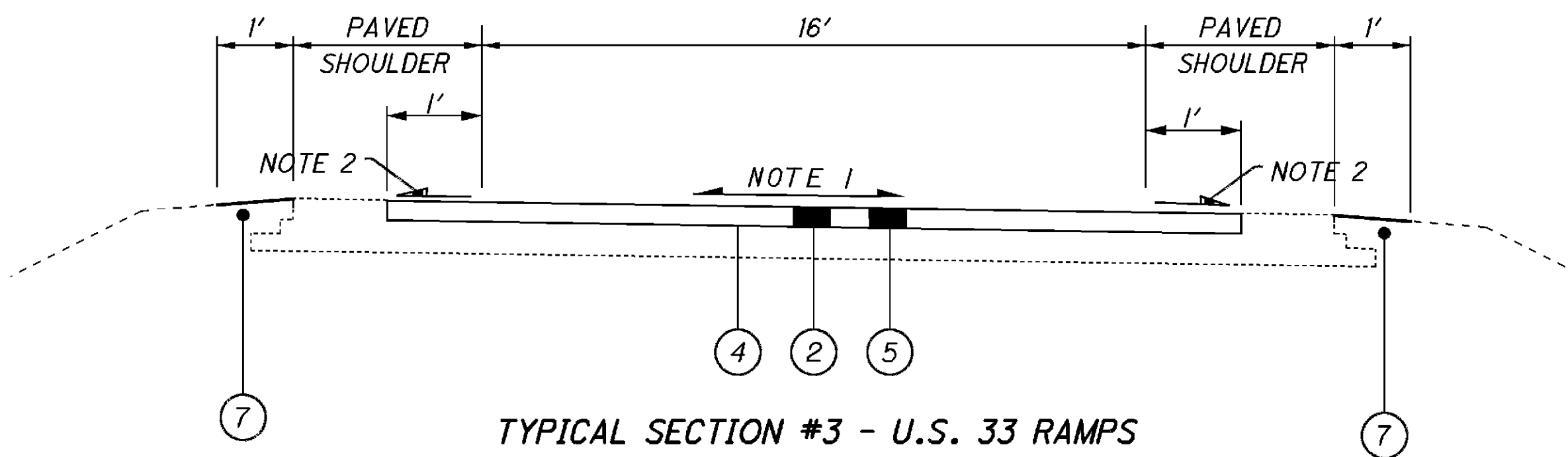
- ITEM 202 - (13 1/4") PAVEMENT REMOVED, ASPHALT, AS PER PLAN
- ITEM 209 - (13 1/4") PREPARING SUBGRADE FOR SHOULDER PAVING
- EXISTING (4 1/4") ASPHALT
- EXISTING (9") CONCRETE
- ITEM 204 - SUBGRADE COMPACTION
- ITEM 254 - (1 1/2") PAVEMENT PLANING, ASPHALT CONCRETE
- ITEM 301 - (11.75") ASPHALT CONCRETE BASE, PG64-22

- ITEM 407 - TACK COAT @ 0.075 GAL/SQ YD
- ITEM 442 - (1 1/2") ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
- ITEM 442 - (1 1/2") ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN
- ITEM 617 - (1 1/2" AVG) COMPACTED AGGREGATE

NOTE 1:
PROPOSED PAVEMENT CROSS SLOPES TO REMAIN AS EXISTING.

NOTE 2:
PLANING AND PAVING OF 1' SHOULDER ONLY. PROPOSED PAVED SHOULDER CROSS SLOPES TO REMAIN AS EXISTING.

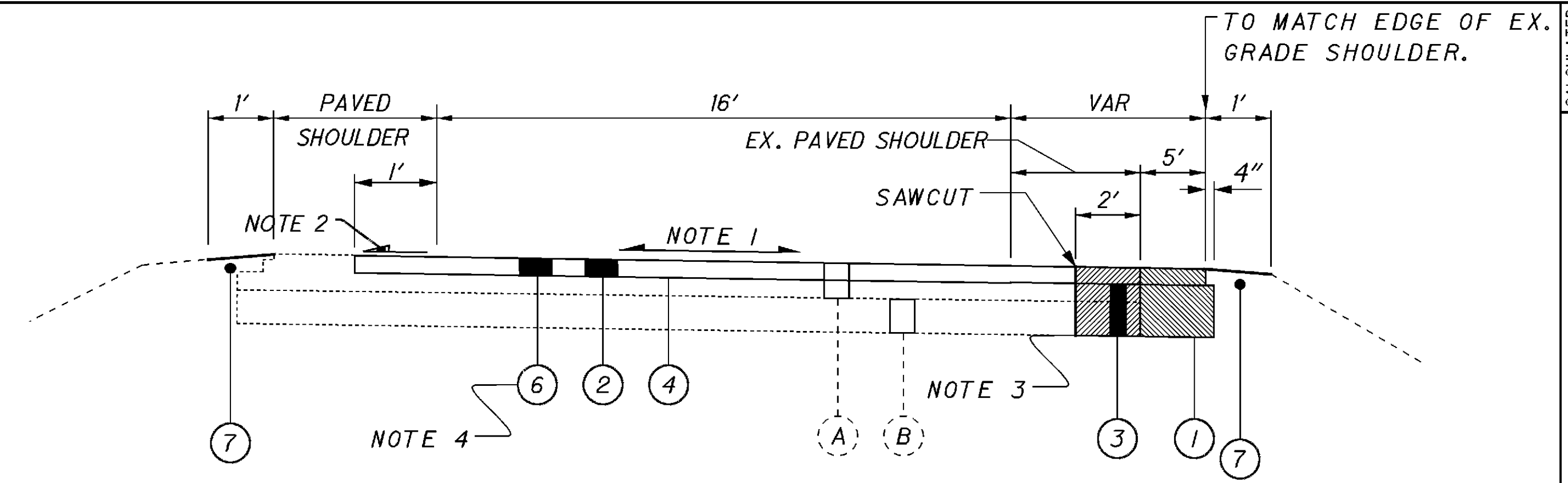
I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\TYPICAL_SECTIONS.dgn SHEET_GY101 13-NOV-2012 1:40PM drankin



TYPICAL SECTION #3 - U.S. 33 RAMPS

SECTION APPLIES TO THE FOLLOWING STATIONS:

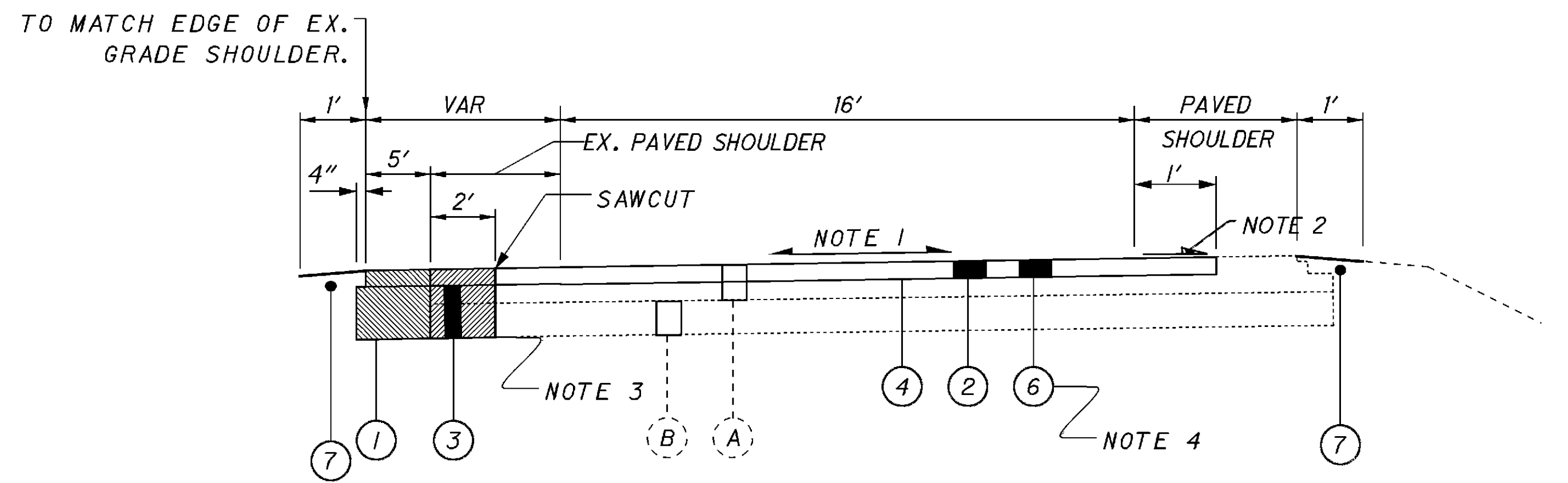
RAMP A	STA. 5+54	TO STA. 11+85	=	631	FT
RAMP B	STA. 0+54	TO STA. 8+83	=	829	FT
RAMP C	STA. 3+65	TO STA. 8+22	=	457	FT
RAMP D	STA. 1+54	TO STA. 12+86	=	1,132	FT
RAMP F	STA. 10+19	TO STA. 20+56	=	1,037	FT
RAMP G	STA. 5+21	TO STA. 18+35	=	1,314	FT
RAMP H	STA. 1+48	TO STA. 12+15	=	1,067	FT
RAMP J	STA. 5+12	TO STA. 16+83	=	1,171	FT
RAMP K	STA. 0+35	TO STA. 15+23	=	1,488	FT
RAMP L	STA. 0+00	TO STA. 11+54	=	1,154	FT
RAMP M	STA. 1+55	TO STA. 15+86	=	1,431	FT
RAMP P	STA. 0+00	TO STA. 39+15	=	3,915	FT
RAMP R	STA. 3+17	TO STA. 13+35	=	1,018	FT
RAMP S	STA. 2+25	TO STA. 10+13	=	788	FT
RAMP U	STA. 58+17	TO STA. 113+38	=	5,521	FT
RAMP V	STA. 0+00	TO STA. 43+13	=	4,313	FT
RAMP W	STA. 96+00	TO STA. 104+59	=	859	FT
RAMP Y	STA. 1+75	TO STA. 11+64	=	989	FT
RAMP Z	STA. 2+74	TO STA. 11+28	=	854	FT
TOTAL			=	29,968	FT



TYPICAL SECTION #4 - U.S. 33 RAMP (A)

SECTION APPLIES TO THE FOLLOWING STATIONS:

RAMP A	STA. 11+85	TO STA. 14+96	=	311	FT
TOTAL			=	311	FT



TYPICAL SECTION #5 - U.S. 33 RAMP (C)

SECTION APPLIES TO THE FOLLOWING STATIONS:

RAMP C	STA. 0+47	TO STA. 3+65	=	318	FT
TOTAL			=	318	FT

LEGEND:

- ITEM 202 - (13 1/4") PAVEMENT REMOVED, ASPHALT, AS PER PLAN
- ITEM 209 - (13 1/4") PREPARING SUBGRADE FOR SHOULDER PAVING
- EXISTING (4 1/4") ASPHALT
- EXISTING (9") CONCRETE
- ITEM 204 - SUBGRADE COMPACTION
- ITEM 254 - (1 1/2") PAVEMENT PLANING, ASPHALT CONCRETE
- ITEM 301 - (11.75") ASPHALT CONCRETE BASE, PG64-22

- ITEM 407 - TACK COAT @ 0.075 GAL/SQ YD
- ITEM 442 - (1 1/2") ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
- ITEM 442 - (1 1/2") ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN
- ITEM 617 - (1 1/2" AVG) COMPACTED AGGREGATE

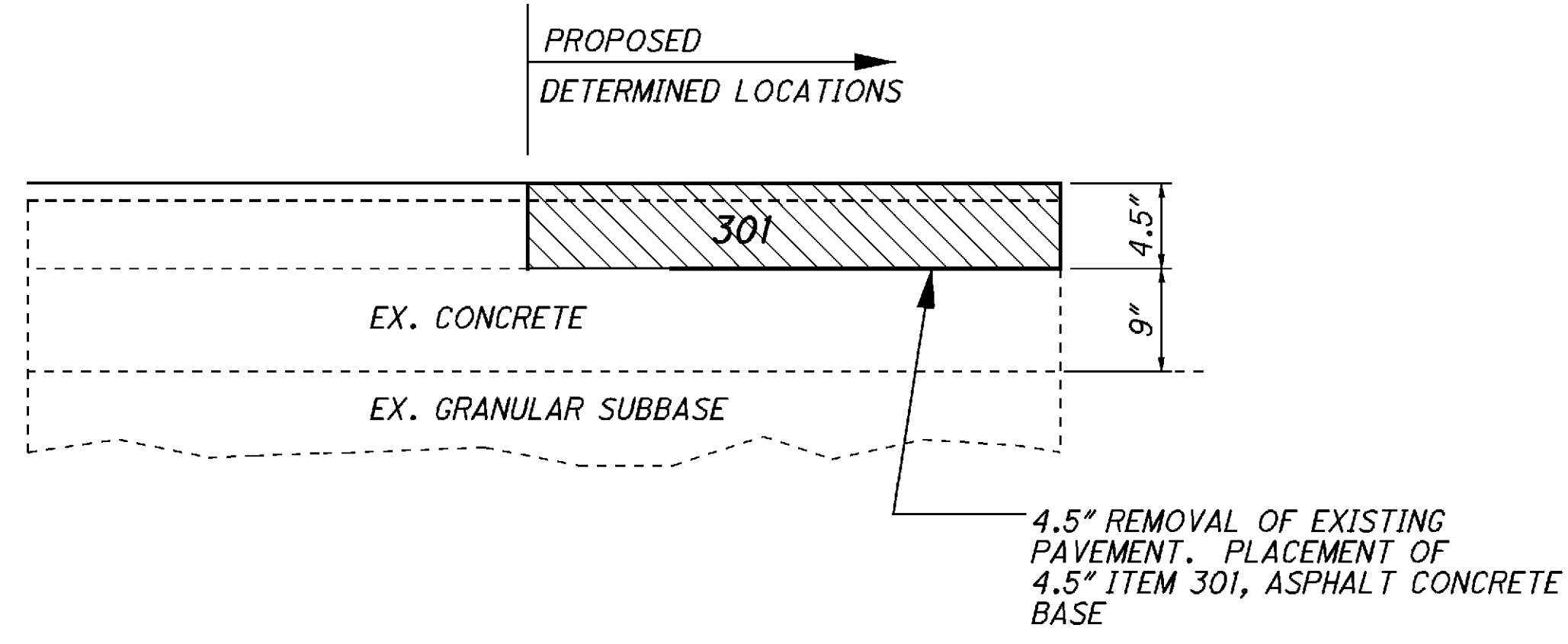
NOTE 1:
PROPOSED PAVEMENT CROSS SLOPES TO REMAIN AS EXISTING.

NOTE 2:
PLANING AND PAVING OF 1' SHOULDER ONLY. PROPOSED PAVED SHOULDER CROSS SLOPES TO REMAIN AS EXISTING.

NOTE 3:
ITEM 301 - ASPHALT CONCRETE BASE TO EXTEND TO A DEPTH EQUAL TO THE EXISTING ROAD SUB-GRADE. SAWCUT DEPTH AT A MINIMUM OF 13 1/4".

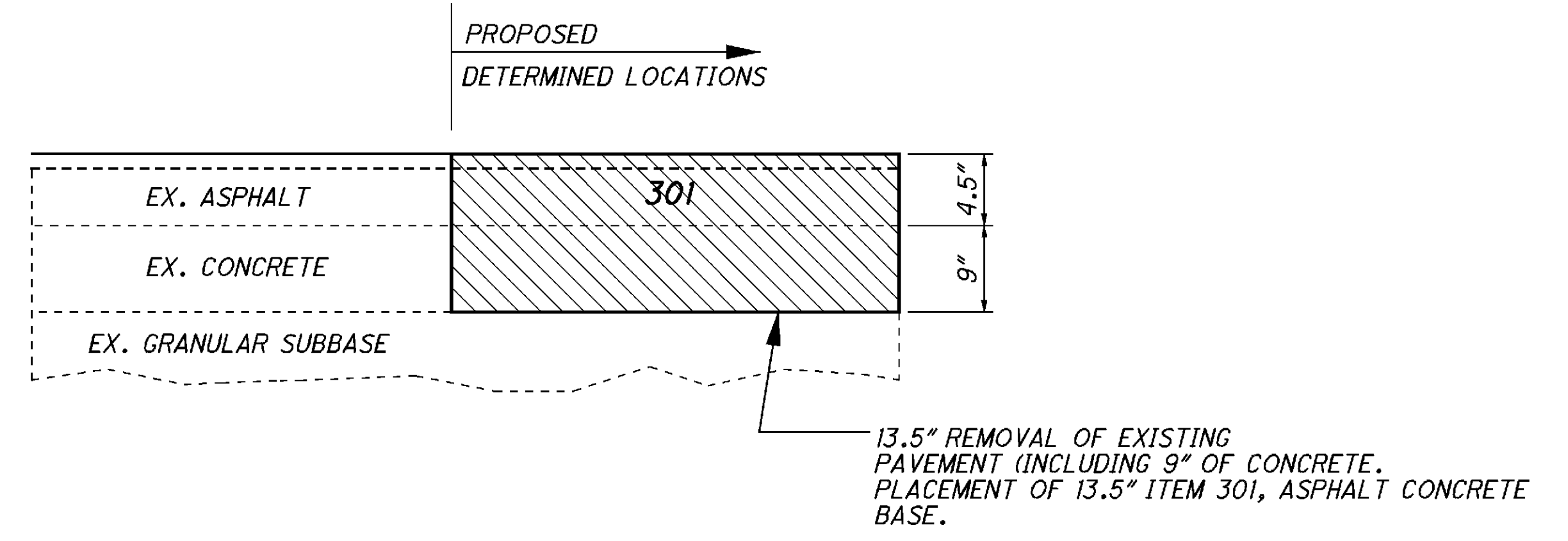
NOTE 4:
ITEM 442 - (1 1/2") ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN TO BE USED PRIOR TO THE SIGNALIZED INTERSECTION. SEE GENERAL NOTES FOR MORE INFORMATION.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\typical\DETAILS.dgn SHEET_GA001 13-NOV-2012 1:40PM drankin



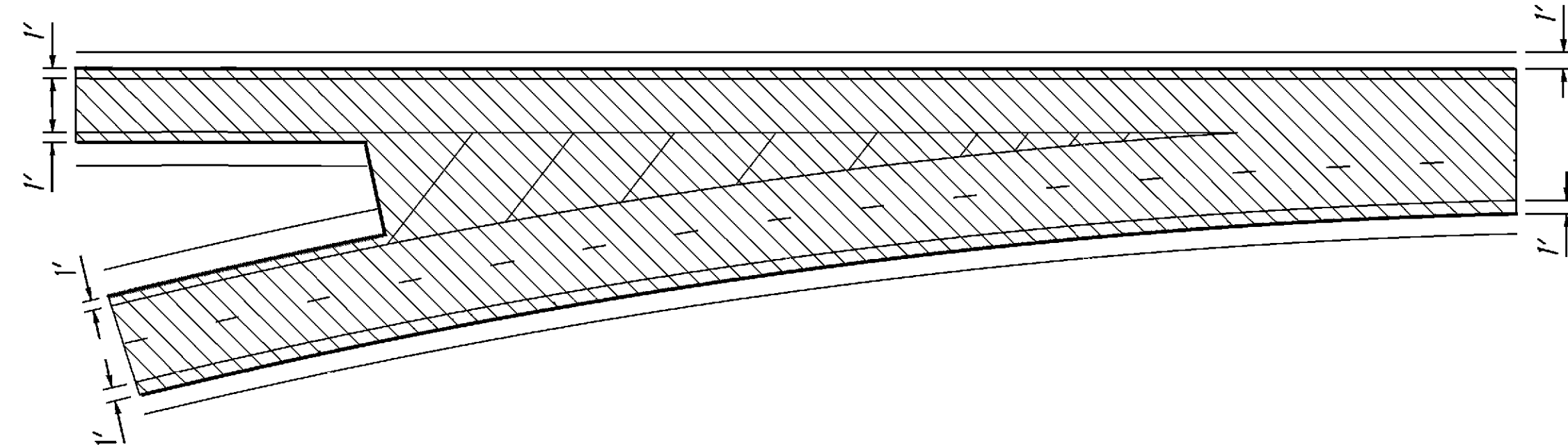
PARTIAL DEPTH PAVEMENT REPAIR DETAIL

SEE GENERAL NOTES FOR MORE INFORMATION REGARDING ITEM 251-PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN.

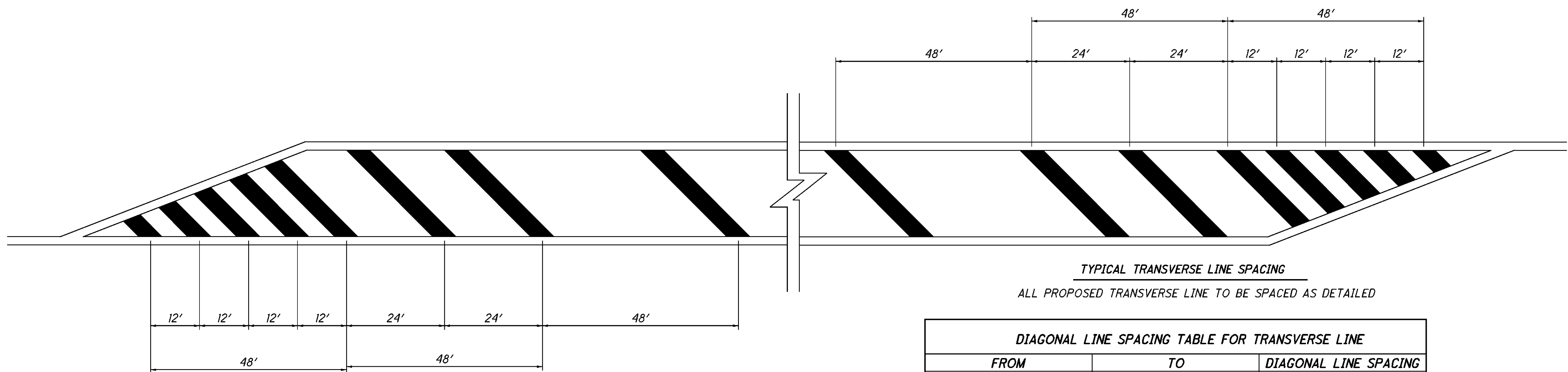


PAVEMENT REPAIR DETAIL

SEE GENERAL NOTES FOR MORE INFORMATION REGARDING ITEM 254- PAVEMENT REPAIR, AS PER PLAN.



PAVING AT GORE DETAIL
PLANE AND RESURFACE ENTIRE GORE



TYPICAL TRANSVERSE LINE SPACING
ALL PROPOSED TRANSVERSE LINE TO BE SPACED AS DETAILED

DIAGONAL LINE SPACING TABLE FOR TRANSVERSE LINE		
FROM	TO	DIAGONAL LINE SPACING
0 FEET	48 FEET	12 FEET
49 FEET	96 FEET	24 FEET
97 FEET	>97 FEET	48 FEET

CALCULATED
DRAWN
CHECKED
CCT

TYPICAL DETAILS

UNI-33-8.74

I:\Projects\uni\033\0874.013\76466\production\roadway\sheets\GENERAL NOTES.dgn SHEET_GN101 19-DEC-2012 2:47PM drankin

NOTIFICATION OF CONSTRUCTION INITIATION:

AT LEAST FOURTEEN DAYS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT d06.pio@dot.state.oh.us AND THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT d06.mot@dot.state.oh.us OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES, INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

GENERAL:

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER (SEE 108.02) AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALIGNMENT AND PROFILE:

THE MAJORITY OF WORK INVOLVED IN THIS PROJECT IS TO PLANE PAVEMENT AT AN EQUAL DEPTH TO THE PROPOSED PAVEMENT WHILE MAINTAINING THE EXISTING CROSS-SLOPE (CROWN).

CONTRACTORS EQUIPMENT - OPERATION AND STORAGE:

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTOR'S STORAGE AREA.

CONTINGENCY QUANTITIES:

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

REMOVAL ITEMS:

UNLESS OTHERWISE INSTRUCTED, GUARDRAIL, POSTS, ASPHALT AND MISCELLANEOUS HARDWARE DESIGNATED FOR REMOVAL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE REMOVED ITEM.

WORK LIMITS:

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

UNDERGROUND UTILITIES:

THE IDENTITY AND THE LOCATION OF SOME OF THE EXISTING UNDERGROUND FACILITIES KNOWN TO BE LOCATED IN THE CONSTRUCTION AREA HAVE BEEN IDENTIFIED. THE CONTRACTOR SHALL GIVE NOTICE OF INTENT TO CONSTRUCT TO THE OHIO UTILITIES PROTECTION SERVICE, PRODUCERS UNDERGROUND PROTECTION SERVICE, AND OWNERS OF UNDERGROUND FACILITIES THAT ARE NOT MEMBERS OF A REGISTERED PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE ABOVE, MENTIONED NOTICE SHALL BE GIVEN AT LEAST TWO WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

OHIO UTILITY PROTECTION SERVICE 1-800-362-2764
 PRODUCERS UNDERGROUND PROTECTION SERVICE 1-614-587-0486
 NON-MEMBERS MUST BE CALLED DIRECTLY.

UTILITIES OWNERSHIP:

LISTED ON SHEET 24/108 ARE THE KNOWN UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS.

DRAIN PIPES:

AT ALL DRAIN PIPES LOCATED IN EXISTING CURB AND THAT DRAIN INTO THE GUTTER, SPECIAL CARE SHALL BE TAKEN BY THE CONTRACTOR SO THAT THESE DRAINS WILL NOT BE CLOSED OR OTHERWISE RENDERED INOPERATIVE. ANY DAMAGE DONE TO THE DRAIN PIPE WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL:

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

GUARDRAIL POST HOLES:

ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS SHALL BE FILLED WITH GRANULAR MATERIAL, EXCESS MATERIAL RESULTING FROM GUARDRAIL RECONSTRUCTION, OR EXCESS MATERIAL FROM BERM RESHAPING. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPLICABLE GUARDRAIL ITEM.

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN:

THIS ITEM IS BEING PROVIDED IN THE PLAN IN CONJUNCTION WITH THE SHOULDER WIDENING ON RAMP A AND RAMP C. SAWCUTTING TO A COMPLETE DEPTH EQUAL TO THE REMOVAL (TO THE SUBBASE) IS INCLUDED WITH THIS ITEM. PAVEMENT REMOVED, AS PER PLAN WILL INCLUDE THE REMOVAL OF EXISTING ASPHALT AND CONCRETE (APPROX. 9") DOWN TO THE EXISTING SUBBASE (13.25" AVG. DEPTH). LOCATIONS OF THIS WORK CAN BE FOUND IN THE PAVEMENT PLAN SHEETS.

ITEM 202 - GUARDRAIL REMOVED, AS PER PLAN:

IN ADDITION TO THE REQUIREMENTS OF ITEM 202 - GUARDRAIL REMOVED, THE CONTRACTOR SHALL REMOVE THE FOLLOWING GUARDRAIL ITEMS AT LOCATIONS SPECIFIED IN THIS PLAN. REMOVAL OF SPECIFIED GUARDRAIL SHALL INCLUDE BUT NOT BE LIMITED TO TERMINAL ASSEMBLIES, ANY ATTACHED POSTS, SIGNS AND DELINEATORS. THIS REMOVAL WILL INCLUDE ALL POSTS, ANCHORS AND HARDWARE UNDER GROUND WITH THE EXCEPTION OF ANY CONCRETE FOUNDATIONS. CONCRETE FOUNDATIONS SHALL BE REMOVED TO A MINIMUM OF 1 FOOT BELOW THE GRADE OF THE SURROUNDING AREA.

ALL HOLES AND VOIDS REMAINING AFTER REMOVAL OF GUARDRAIL ITEMS SHALL BE FILLED WITH GRANULAR MATERIAL. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER.

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL NEW GUARDRAIL IN A CONTINUOUS OPERATION.

GUARDRAIL REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. PAVEMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE PER FEET OF ITEM 202, GUARDRAIL REMOVED, AS PER PLAN.

ITEM 203 - EMBANKMENT, AS PER PLAN:

THIS ITEM IS TO BE USED IN CONJUNCTION WITH THE PROPOSED GUARDRAIL TO ENSURE PROPER PLACEMENT OF THE PROPOSED ANCHOR ASSEMBLIES.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN:

ALL REPAIR AREAS WILL BE IDENTIFIED AND MARKED OUT BY THE PROJECT ENGINEER. THE REPAIR AREAS SHALL BE OF VARYING LENGTH AND THE AVERAGE WIDTH SHALL NOT BE LESS THAN 4 FEET. THE AVERAGE DEPTH OF EACH REPAIR SHALL BE 4 INCHES. ALL AREAS SHALL BE REFILLED WITH AN EQUAL AMOUNT OF ITEM 301 - ASPHALT CONCRETE BASE. FOR MORE INFORMATION SEE DETAIL ON SHEET 8/109. NO MORE PARTIAL PAVEMENT REPAIR, AS PER PLAN SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

LOCATION	BEGIN SLM	END SLM	TOTAL	UNIT
UNI-33WB (VARIOUS)	9.70	10.00	141	SQ YD
UNI-33EB (VARIOUS)	9.70	11.60	892	SQ YD
RAMP H (VARIOUS)	-	-	356	SQ YD
UNI-33 & VARIOUS RAMPS CONTINGENCY			200	SQ YD
*UNI-36 @ WATKINS RD			200	SQ YD
UNI-36			50	SQ YD
			1839	SQ YD

*THE 36/WATKINS ROAD LOCATION IS TO CORRECT A PAVEMENT DRAINAGE PROBLEM. THE LIMITS OF THE WORK WILL BE DETERMINED IN THE FIELD BY ELEVATIONS PROVIDED BY THE CONTRACTOR AND APPROVED BY THE PROJECT ENGINEER. BECAUSE THIS SURFACE IS NOT PART OF THE PROPOSED MILLING AND PAVING, THE SURFACE REPAIR SHALL BE AN APPROVED TYPE 448 ASPHALT CONCRETE AS PER CMS 251.03 AND SHALL INCLUDE SEALING THE PEREMETER SURFACE OF THE REPAIRED AREA. THE CONTRACTOR IS TO COORDINATE THIS WORK WITH THE CITY OF MARYSVILLE:

ROB PRIESTAS
 CITY OF MARYSVILLE PROJECT ENGINEER
 (937) 642-6015

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN
 = 1,839 SQ YD

ITEM 254 - PAVEMENT REPAIR, AS PER PLAN:

ALL REPAIR AREAS WILL BE IDENTIFIED AND MARKED OUT BY THE PROJECT ENGINEER. THE REPAIR AREAS SHALL BE OF VARYING LENGTH AND WIDTH. REPAIRS SHALL CONSIST OF REMOVING 13.25" OF PAVEMENT (9" OF CONCRETE AND 4.25" OF ASPHALT) AND PLACING 13.25" OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22. AS DETAILED ON SHEET 8/108. WORK SHALL BE PERFORMED PRIOR TO RESURFACING. NO MORE PARTIAL PAVEMENT REPAIR, AS PER PLAN SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

LOCATION	QUANTITY	UNIT
UNI-33 (AND RAMPS)	200	CU YD
TOTAL	200	CU YD

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 254 - PAVEMENT REPAIR, AS PER PLAN
 = 200 CU YD

CALCULATED
 DRAWN
 CHECKED
 C-3

GENERAL NOTES

UNI-33-8.74

9
 108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GENERAL NOTES.dgn SHEET_GN102 13-NOV-2012 1:40PM dronkin

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE:
 THIS ITEM IS TO BE PERFORMED ON US-33 AND US-36 MAINLINE PLUS 1-FOOT OF SHOULDER BOTH DIRECTIONS AND ALL RAMPS EDGE TO EDGE LINE PLUS 1-FOOT OF SHOULDER.

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE CONTRACTORS EQUIPMENT THAT MAY RESULT FROM THE PLANING OPERATION, INCLUDING DAMAGE CAUSED BY CASTINGS AND LOOP DETECTORS. THE DEPTH OF PLANING CLOSE TO THE CASTINGS SHALL BE AS DIRECTED; TO ACHIEVE A SMOOTH RIDING FINISHED PAVEMENT. GREAT CARE SHALL BE TAKEN TO PREVENT THE REMOVAL OF THE EXISTING PAVEMENT CROSS-SLOPE (CROWN) DURING THE PLANING OPERATIONS.

ALL PLANED PAVEMENT SHALL BE PLANED TO A DEPTH OF 1.5 INCHES AND RESURFACED WITH 1.5 INCHES OF THE ASPHALT CONCRETE SURFACE COURSE WITHIN THE SAME WORK PERIOD.

ITEM 407 - TACK COAT:
 THE RATE OF APPLICATION OF ITEM 407 - TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR ESTIMATING PURPOSES ONLY, THE PLAN INDICATES AN AVERAGE APPLICATION RATE OF TACK COAT AT 0.075 GALLON PER SQUARE YARD. A COVER AGGREGATE SHALL BE USED IF HEAVY TRACKING OF THE TACK COAT ON TO THE EXISTING PAVEMENT SHOULD OCCUR DURING THE PAVING OPERATIONS. THE COST OF THE COVER AGGREGATE SHALL BE INCLUDED IN THE COST OF THIS ITEM.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446):
 THIS ITEM IS TO BE PERFORMED ON US-33 AND US-36 MAINLINE PLUS 1-FOOT OF SHOULDER BOTH DIRECTIONS AND ALL RAMPS EDGE TO EDGE LINE PLUS 1-FOOT OF SHOULDER. GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS-SLOPE (CROWN), INTERSECTION CROSS-SLOPES (CROWN) AS WELL AS ALL LONGITUDINAL SLOPES WITHIN THE EXISTING CROSSWALKS DURING THE PAVING OPERATIONS.

ALL PLANED PAVEMENT SHALL BE PLANED TO A DEPTH OF 1.5 INCHES AND RESURFACED WITH 1.5 INCHES OF THE ASPHALT CONCRETE SURFACE COURSE WITHIN THE SAME WORK PERIOD.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN:
 ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN MIX SHALL REQUIRE A PG76-22M BINDER.

THIS ITEM IS TO BE USED FOR 250 FEET IN LANES APPROACHING THE SIGNALIZED INTERSECTION ON RAMPS A & C. DETAILS OF THE LIMITS OF THIS ITEM CAN BE FOUND IN THE PAVEMENT PLAN.

GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS-SLOPE (CROWN), INTERSECTION CROSS-SLOPES (CROWN) AS WELL AS ALL LONGITUDINAL SLOPES WITHIN THE EXISTING CROSSWALKS DURING THE PAVING OPERATIONS.

ALL PLANED PAVEMENT SHALL BE PLANED TO A DEPTH OF 1.5 INCHES AND RESURFACED WITH 1.5 INCHES OF THE ASPHALT CONCRETE SURFACE COURSE WITHIN THE SAME WORK PERIOD.

ITEM 604 - CATCH BASIN ADJUSTED TO GRADE:
 THIS ITEM IS A CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER AT VARIOUS LOCATIONS AND PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO ADJUST TO GRADE THE EXISTING CATCH BASIN TO THE PROPOSED ASPHALT ELEVATION. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL CARRIED TO THE GENERAL SUMMARY.

LOCATION	QUANTITY	UNIT
UNI-33 (AND RAMPS)	4	EACH
TOTAL	4	EACH

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.
 ITEM 604 - CATCH BASIN ADJUSTED TO GRADE = 4 EACH

ITEM 604 - CATCH BASIN RECONSTRUCTED TO GRADE:
 THIS ITEM IS A CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER AT VARIOUS LOCATIONS AND PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO RECONSTRUCT TO GRADE THE EXISTING CATCH BASIN TO THE PROPOSED ASPHALT ELEVATION. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL CARRIED TO THE GENERAL SUMMARY.

LOCATION	QUANTITY	UNIT
UNI-33 (AND RAMPS)	4	EACH
TOTAL	4	EACH

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.
 ITEM 604 - CATCH BASIN RECONSTRUCTED TO GRADE = 4 EACH

ITEM 604 - MANHOLE RECONSTRUCTED TO GRADE:
 THIS ITEM IS A CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER AT VARIOUS LOCATIONS AND PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO RECONSTRUCT TO GRADE THE EXISTING MANHOLE TO THE PROPOSED ASPHALT ELEVATION. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL CARRIED TO THE GENERAL SUMMARY.

LOCATION	QUANTITY	UNIT
UNI-33 (AND RAMPS)	2	EACH
TOTAL	2	EACH

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.
 ITEM 604 - MANHOLE RECONSTRUCTED TO GRADE = 2 EACH

ITEM 606 - GUARDRAIL, MISC.: ALTERNATIVE GUARDRAIL PLACEMENT:
 THIS ITEM SHALL BE USED WHEN THE CONTRACTOR IS REQUIRED TO USE AN ALTERNATE METHOD TO SET POSTS TO PREVENT DAMAGE TO AN UNDERGROUND OBSTACLE, SUCH AS A UTILITY. THE USE OF THIS ITEM WILL BE AS DEEMED NECESSARY BY THE ENGINEER. THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIAL NEEDED TO SET AND BACKFILL POSTS WHILE MEETING THE REQUIREMENTS OF THE APPLICABLE GUARDRAIL ITEM BEING PERFORMED. APPLICABLE GUARDRAIL ITEMS INCLUDE BUT ARE NOT LIMITED TO SETTING POSTS (AND SLEEVES) FOR TYPE 5, BARRIER DESIGN, ANCHOR ASSEMBLIES, AND BRIDGE TERMINAL ASSEMBLIES. PAYMENT SHALL BE AT THE UNIT BID PRICE OF EACH AND SHALL BE PAID FOR IN ADDITION TO THE APPLICABLE GUARDRAIL PLACEMENT ITEM LISTED ABOVE.

LOCATION	QUANTITY	UNIT
UNI-33 (AND RAMPS)	100	FT
UNI-36	25	FT
TOTAL	125	FT

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED:
 ITEM 606 - GUARDRAIL, MISC.: ALTERNATIVE GUARDRAIL PLACEMENT: = 125 FT

ITEM 606 - CURVED RAIL ELEMENTS:
 ALL RADII OF CURVED RAIL ARE ESTIMATED AND ACTUAL RADII OF PROPOSED RAIL SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING. LENGTH OF CURVED RAIL ELEMENTS, WHERE CALLED FOR IN A RUN, SHALL BE INCLUDED IN THE TOTAL LENGTH OF RUN SHOWN IN THE GUARDRAIL COLUMN AND THE CURVED RAIL ELEMENT TOTAL ARE INCLUDED WITH THE GUARDRAIL TOTALS ON THE GENERAL SUMMARY SHEET.

ITEM 606 - ANCHOR ASSEMBLY, TYPE B:
 THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27.75 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

THE FACE OF THE TYPE B IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE B, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING REFLECTIVE SHEETING AND ALL RELATED HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E:
 THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27.75 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

I:\Projects\uni\033\0874.013\76466\production\roadway\sheets\GENERAL NOTES.dgn SHEET_GN103 13-NOV-2012 1:40PM drankin

ITEM 606 - IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL):
 THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY ONE OF THE TYPE 1 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE 1 IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED TRANSITIONS, HARDWARE, REFLECTIVE SHEETING AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 606 - IMPACT ATTENUATOR, TYPE 3, AS PER PLAN:
 THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE TYPE 3 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE. THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 3 [(62.1 MPH), HAZARD WIDTH (32 INCHES)], BIDIRECTIONAL, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS/BACKSTOPS, TRANSITIONS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS TO ATTACHED TO THE PROPOSED CONCRETE BARRIER, END SECTION, TYPE B SHOWN ON SHEET 71/109.

THIS ITEM ALSO INCLUDES ALL LABOR TOOLS, EQUIPMENT, HARDWARE AND MATERIALS TO CONSTRUCT A CONCRETE FOUNDATION (NOT ASPHALT) THAT MEETS THE MANUFACTURER'S SPECIFICATIONS.

ITEM 617 - WATER:

LOCATION	QUANTITY	UNIT
UNI-33 (AND RAMPS)	3	MGAL
UNI-36	1	MGAL
TOTAL	4	MGAL

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.
 ITEM 617 - WATER = 4 MGAL

ITEM 620 - DELINEATOR, POST MOUNTED:
 TYPE C DELINEATORS SHALL BE INSTALLED ON A FLEXIBLE POST AT THE HEAD OF ALL ANCHOR ASSEMBLY, TYPE E UNITS LOCATED ON THE RIGHT SIDE OF THE THROUGH ROADWAY. DELINEATORS SHALL COMPLY WITH STANDARD CONSTRUCTION DRAWING TC-61.10 AND CMS 620.

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B, AS PER PLAN:
ITEM 622 - CONCRETE BARRIER END SECTION, TYPE B, AS PER PLAN:
 IN ADDITION TO THE REQUIREMENTS OF CMS 622 AND STANDARD CONSTRUCTION DRAWING RM-4.4, THIS ITEM WILL ALSO INCLUDE ALL LABOR, TOOLS, EQUIPMENT, HARDWARE AND MATERIALS TO CONSTRUCT AN ASPHALT CONCRETE FOUNDATION AS DETAILED ON SHEET 70/108. THIS ITEM INCLUDES END ANCHORAGE AS PER RM 4.3 AND RESTEEL PLACEMENT AS PER THE APPLICABLE STANDARD DRAWINGS.

ITEM 630 - OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6, AS PER PLAN:
 THIS ITEM IS FOR A PROPOSED OUTSIDE (MEDIAN) END FRAME (ONLY) MOUNTED ON THE PROPOSED CONCRETE BARRIER. EVENTHOUGH THE PROPOSED END FRAME HAS BEEN CALCULATED TO BE 22'-0" FROM EXISTING GROUND DATA AND PLACEMENT CRITERIA, INDIVIDUAL LENGTHS OF BEAMS (HEIGHTS) SHALL BE TREATED AS ESTIMATES AND NOT EXACT MEASUREMENTS. THE CONTRACTOR SHALL VERIFY THE ACCURATE LENGTH PRIOR TO ORDERING ANY MATERIALS AND INSTALLATION OF THE PROPOSED END FRAME. THIS ITEM INCLUDES ALL LABOR TOOLS, EQUIPMENT, HARDWARE AND MATERIALS TO CONSTRUCT AND CONNECT THE PROPOSED END FRAME TO THE EXISTING BOX TRUSS.

ITEM 630 - REMOVAL OF OVERHEAD SIGN SUPPORT AND REERECTION, (TYPE TC-7.65), AS PER PLAN:
 THIS ITEM IS FOR THE REMOVAL OF THE TYPE TC-7.65 OVERHEAD SIGN SUPPORT AS DETAILED ON SHEET 70/108. THE REERECTION WILL ONLY INCLUDE THE OVERHEAD BOX TRUSS AND OUTSIDE END FRAME. THE EXISTING MEDIAN END FRAME SHALL BE DISPOSED AND BECOME PROPERTY OF THE CONTRACTOR. ANY PROPOSAL TO DEVIATE FROM THE COMPLETE REMOVAL OF THE EXISTING OVERHEAD SIGN SUPPORT SHALL BE SUBJECT TO APPROVAL FROM THE ENGINEER.

ITEM 630 - TEMPORARY SIGNING DURING CONCRETE BARRIER CONSTRUCTION:
 THESE ITEMS ARE TO PROVIDE SIGNS FOR DIRECTING TRAFFIC TO THE PROPER LANES TO EXIT ONTO US-33 EAST AND US-33 WEST WHILE THE EXISTING OVERHEAD SIGN IS REMOVED DURING THE PROPOSED MEDIAN BARRIER CONSTRUCTION AS DETAILED ON SHEET 70/108. SIGNS SHALL BE IN PLACE PRIOR TO THE REMOVAL OF THE OVERHEAD SIGN (TRUSS). PLACEMENT OF THESE SIGNS SHALL BE DIRECTED AS DETAILED ON PLAN SHEET 70/108. SIGNS SHALL BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR WHEN ALL WORK IS COMPLETE AT THIS LOCATION.

QUANT	SIGN	SIGN	#2 POST	#3 POST
	DESC.	SQ FT	FEET	FEET
3	MI-4-48-2	18.0	21	30
2	M3-2-36	10.0		
1	M3-4-36	5.0		
2	M6-2-30	10.0		
1	M6-3-30	5.0		
	TOTAL	48.0	21	30

THE FOLLOWING QUANTITIES HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, AS PER PLAN = 21 FT
 ITEM 630 - GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN = 30 FT
 ITEM 630 - SIGN, FLAT SHEET, AS PER PLAN = 48 SQ FT

WATER QUALITY PROTECTION:
 NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO ANY STREAMS, DRAINAGE COURSES OR BODIES OF WATER. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALT OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL NOT BE DISPOSED OF WITHIN A FLOODPLAIN BELOW THE 100-YEAR FLOOD ELEVATION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT LIQUIDS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE (E.G. PAINT, SEALER, SOLVENT) FROM ENTERING STREAMS, WETLANDS OR OTHER "WATERS OF THE UNITED STATES" AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

JURISDICTIONAL DITCHES AND WETLANDS PROTECTION:
 THERE ARE POSSIBLE JURISDICTIONAL DITCHES AND WETLANDS OUTSIDE OF THE PROJECT LIMITS. EVERY EFFORT SHALL BE MADE BY THE ENGINEER AND THE CONTRACTOR TO PRESERVE AND PROTECT THESE AREAS. AS DETAILED ELSEWHERE IN THE PLANS, FILTER FABRIC FENCE SHALL BE PLACED AT THE CONSTRUCTION LIMITS ALONG THE CONSTRUCTION LIMITS ALONG THE RAMPS. UNDER NO CIRCUMSTANCES IS THE CONTRACTOR TO PERFORM ANY WORK OR HAVE ANY EQUIPMENT BEYOND THE CONSTRUCTION LIMITS ALONG THE RAMPS (SUCH AS: CLEARING TREES AND SHRUBS, FIELD OFFICE LOCATION, STAGING, PARKING, STORAGE, BORROW OR WASTE AREAS).

WATERSHED PROTECTION:
 THE PROJECT IS LOCATED WITHIN VARIOUS SOURCE WATER PROTECTION AREAS. IT IS ESSENTIAL THAT ALL ACTIVITIES ASSOCIATED WITH THIS WORK BE PERFORMED IN A MANNER CONSISTENT WITH BEST WATERSHED MANAGEMENT PRACTICES INCLUDING, BUT NOT LIMITED TO: AREAS OF DISTURBED GROUND SHALL HAVE APPROPRIATE EROSION AND SEDIMENT CONTROLS. IF HAZARDOUS/TOXIC MATERIALS INCLUDING BUT NOT LIMITED TO FUELS, OILS, BITUMEN'S PAINTS, SEALANTS, OR OTHER CHEMICALS, ARE STORED ON SITE, THEY SHALL BE STORED IN A DOUBLE-CONTAINMENT MANNER. ALL EQUIPMENT REPAIRS, MAINTENANCE, AND MECHANICAL WORK THAT COULD RESULT IN THE RELEASE OF HAZARDOUS/TOXIC MATERIALS SHALL BE PERFORMED IN AN APPROPRIATELY CONTAINED AREA, PREFERABLY OFF SITE OR AN APPROPRIATE OFF-SITE FACILITY. IN THE EVENT THAT ANY HAZARDOUS/TOXIC MATERIALS INCLUDING, BUT NOT LIMITED TO FUELS, OILS, BITUMEN'S PAINTS, SEALANTS, OR OTHER CHEMICALS ARE SPILLED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY EMERGENCY SERVICES BY CALLING 911 AND THE OHIO EPA @ (800) 282-9378. THE CONTRACTOR SHOULD BE PREPARED TO PROVIDE DETAILED INFORMATION RELATIVE TO THE TYPE AND QUANTITY OF MATERIAL THAT HAS BEEN SPILLED AS WELL AS THE EXACT LOCATION AND THE EXACT TIME AT WHICH THE SPILL OCCURRED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INFORMING ALL SUBCONTRACTORS AND OTHER AGENTS OF THESE RESPONSIBILITIES, PRECAUTIONS, AND PROHIBITIONS.

CALCULATED
 DRAWN
 CHECKED
 C-3

GENERAL NOTES

UNI-33-8.74

I:\Projects\uni\033\0874.013\76466\production\roadway\sheets\GENERAL NOTES.dgn SHEET_GN104 13-NOV-2012 1:40PM drankin

ITEM 632 - LOOP DETECTOR TIE IN:

THIS ITEM SHALL BE USED TO CONNECT AND SPLICE THE PROPOSED LOOP DETECTORS TO THE APPROPRIATE EXISTING LEAD IN CABLE INSIDE THE PULL BOX. THIS ITEM IS NOT TO BE USED IN AREAS WITH PROPOSED STOP BAR DETECTION RADAR.

LOCATION	QUANTITY	UNIT
UNI-33 VARIOUS RAMPS	8	EACH
UNI-36	2	EACH
TOTAL	10	EACH

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.
ITEM 632 - LOOP DETECTOR TIE IN = 10 EACH

ITEM 632 - DETECTOR LOOP:

THE LOCATIONS, SIZES AND SHAPES OF PROPOSED LOOP DETECTORS WILL BE THE SAME AS EXISTING AND WILL BE AS SCD TC-82.10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THE EXISTING LOOP DETECTORS LISTED IN THE PLAN BEFORE THE PAVEMENT PLANING DESTROYS THEM. ALL LOOP WIRE SHALL BE IDENTIFIED WITH A PLASTIC TAG (WBLT, EBRT, ETC.) AT THE SPLICE POINT OR AT ENTRANCE TO THE CONTROL CABINET. WHEN A PULLBOX IS NOT USED, THE SOLDERED SPLICE SHALL BE MADE IN AN ANCHOR BASE, STRAIN POLE OR A CONDUIT RISER SPECIFIED BY THE PROJECT ENGINEER, EXCEPT WHERE A CONTROLLER CABINET IS MOUNTED ON THAT POLE IN WHICH CASE THE LOOP WIRE SHALL BE ROUTED DIRECTLY INTO THE CABINET. THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER PRIOR TO THE COMMENCEMENT OF WORK, A COPY OF THE IMSA CERTIFICATION PAPERS FOR ALL SIGNAL TECHNICIANS WORKING ON THIS PROJECT. THE CONTRACTOR SHALL ALSO CONTACT THE TRANSPORTATION DIVISION SIGNALS MANAGEMENT ENGINEER AT LEAST FORTY-EIGHT HOURS (EXCLUDING SAT & SUN) IN ADVANCE OF THIS ITEM OF WORK. ALL DETECTOR LOOPS SHALL BE REPLACED AND FUNCTIONAL WITHIN 48 HOURS OF BEING REMOVED. THE CONTRACTOR SHALL ALSO PROTECT ANY INLET OR CATCH BASIN FROM FOREIGN MATERIAL OR CONSTRUCTION DEBRIS ENTERING THE INLET OR CATCH BASIN WHILE CUTTING DETECTOR LOOPS.

OHIO DEPARTMENT OF TRANSPORTATION TRAFFIC ENGINEER
400 EAST WILLIAM STREET
DELAWARE, OHIO 43015
1-740-833-8198

LOCATION	QUANTITY	UNIT
UNI-33 VARIOUS RAMPS	8	EACH
UNI-36	2	EACH
TOTAL	10	EACH

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.
ITEM 632 - DETECTOR LOOP = 10 EACH

ITEM 638 - VALVE BOX ADJUSTED TO GRADE:

THIS ITEM IS A CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER AT VARIOUS LOCATIONS AND PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO ADJUST TO GRADE THE EXISTING CATCH BASIN TO THE PROPOSED ASPHALT ELEVATION. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL CARRIED TO THE GENERAL SUMMARY.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.
ITEM 638 - VALVE BOX ADJUSTED TO GRADE = 4 EACH

ITEM 644 - THERMOPLASTIC PAVEMENT MARKING:

THE LOCATIONS, SIZES AND SHAPES OF PROPOSED AUXILIARY PAVEMENT MARKINGS WILL BE THE SAME AS EXISTING ON THE MAJORITY OF THIS PROJECT. ANY DEVIATION FROM EXISTING WILL BE IDENTIFIED WITHIN THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THESE EXISTING PAVEMENT MARKINGS BEFORE THE PAVEMENT PLANING AND RESURFACING OBLITERATES THEM. ANY PAVEMENT MARKING WHICH IS PLACED AT THE WRONG LOCATION SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

ITEM 646 - EPOXY PAVEMENT MARKING:

QUANTITIES FOR ITEM 646 - EPOXY PAVEMENT MARKINGS HAVE BEEN PROVIDED IN THIS PLAN FOR USE ON ALL CONCRETE STRUCTURES.

ITEM 653 - TOPSOIL FURNISHED AND PLACED:

ITEM 659 - SEEDING AND MULCHING, CLASS 1:

ITEM 659 - COMMERCIAL FERTILIZER:

ITEM 659 - WATER:

THESE ITEM OF WORK SHALL BE USED TO REPAIR ANY DAMAGED GRASSY AREAS DUE TO THE PLACEMENT THE PROPOSED GUARDRAIL.

CALCULATED
DRAWN
CHECKED
DATE

GENERAL NOTES

UNI - 33 - 8.74

I:\Projects\uni\033\0874.013\76466\production\roadway\sheets\GENERAL NOTES.dgn SHEET_MN101 13-NOV-2012 1:40PM drankin

GENERAL:

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). COPIES ARE AVAILABLE FROM:

THE OHIO DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC,
1980 WEST BROAD STREET
COLUMBUS, OHIO 43223.

MAINTENANCE OF TRAFFIC (HOLIDAYS AND SPECIAL EVENTS):

NO WORK SHALL BE PERFORMED AND ATLEAST 2 THROUGH LANES (EACH DIRECTION) SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING HOLIDAYS:

CHRISTMAS FOURTH OF JULY
NEW YEARS LABOR DAY
MEMORIAL DAY THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THE PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	12:00N TUESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

RAMP R CLOSURE AND DETOUR THRU MARYSVILLE SHALL NOT BE PERMITTED DURING THE FOLLOWING EVENTS:

UNION COUNTY FAIR - JULY 21-27, 2013

FRIDAY NIGHTS UPTOWN:

(CONTACT AMANDA MORRIS, CITY OF MARYSVILLE 937-645-1051 TO VERIFY DATES)

MAY 17, 2013
JUNE 14, 2013
JULY 12, 2013
AUGUST 9, 2013
SEPTEMBER 20, 2013

FARMERS MARKET FESTIVAL - AUGUST 10, 2013

FESTIFAIR - SEPTEMBER 7, 2013

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

NOTIFICATION OF TRAFFIC RESTRICTIONS:

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THIS WILL INCLUDE NOTIFYING THE CITY OF MARYSVILLE ONE WEEK PRIOR TO ANY IMPACTS TO THE CITY. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHOULD LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

ITEM	DURATION OF CLOSURE	NOTIFICATION DUE TO DISTRICT 6 COMMUNICATIONS OFFICE
RAMP AND ROAD CLOSURES	>= 2 WEEKS	14 BUSINESS DAYS PRIOR TO CLOSURE
	> 12 HOURS AND < 2 WEEKS	7 BUSINESS DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

LANE CLOSURES/ RESTRICTIONS	>= 2 WEEKS	7 BUSINESS DAYS PRIOR TO CLOSURE
	< 2 WEEKS	2 BUSINESS DAYS PRIOR TO CLOSURE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

USE OF STANDARD DRAWINGS

FOR THE PURPOSE OF THIS PROJECT, "MOVING OPERATION" SHALL BE LIMITED TO PAVEMENT MARKING STRIPING.

IT MAY BE NECESSARY TO EXTEND THE ADVANCE WARNING AND BUFFER ZONES BEYOND THE MINIMUM DISTANCES SHOWN ON THE STANDARD DRAWINGS. THIS MAY BE DUE TO HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, RAMP LOCATIONS, OR OTHER SIGHT OBSTRUCTIONS. LOCATIONS OF THE TAPER ZONES MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER, BUT TAPER LENGTHS MUST MEET THE MINIMUM STANDARDS. TAPERS SHOULD BE PLACED IN TANGENT SECTIONS WHENEVER POSSIBLE. ADDITIONAL YIELD SIGNS MAY BE REQUIRED FOR RAMP WITHIN 1,000 FEET OF A WORK ZONE. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

FOR ANY MULTILANE HIGHWAY, DEVICE SPACING SHALL BE A MAXIMUM OF 40' CENTER ON CENTER IN THE TAPERS AND 80' CENTER ON CENTER IN THE TANGENT SECTIONS.

WORK SITE LIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR, AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

USE OF WEIGHTED CHANNELIZERS

WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THIS SECTION. THE WEIGHTED CHANNELIZERS SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A HANDLE OR LIFTING DEVICE, WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZERS SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETRO REFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETRO REFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZERS SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS. WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE TANGENT AREA. THE TANGENT AREA IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS. MAXIMUM SPACING OF THE WEIGHTED CHANNELIZERS SHALL BE 40 FEET.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

PUBLIC NOTIFICATION

THE CONTRACTOR IS TO BE RESPONSIBLE FOR NOTIFYING, BY LETTER WITH HIS COMPANY LETTERHEAD, RESIDENTS, AND BUSINESSES WITHIN PROJECT LIMITS WHERE DRIVEWAYS WILL BE IMPACTED DURING THE RESURFACING. ADVANCED NOTICE SHALL BE TWO WEEKS PRIOR TO THE FIRST DAY OF WORK AT THAT LOCATION. A COPY OF THE LETTER TO BE CIRCULATED SHALL BE PRESENTED AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR IS TO NOTIFY THE PROJECT ENGINEER OF THE DATES WHEN THIS NOTIFICATION IS DISTRIBUTED.

PERMITTED LANE CLOSURE TIMES

ALL LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR THE ALLOWABLE TIMES SHOWN IN THE PERMITTED LANE CLOSURE TABLE. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT SHOWN IN THE UNAUTHORIZED LANE USED TABLE FOR EACH PERIOD OF TIME THAT A LANE REDUCTION, LANE RESTRICTION, RAMP REDUCTION OR RAMP RESTRICTION REMAINS BEYOND THE PERMITTED WORKING HOURS SHOWN IN THE PERMITTED LANE CLOSURE TABLE.

PERMITTED LANE CLOSURE TABLES:

US-33 HOURS OF WORK (UNION COUNTY):

7:00 PM TO 5:00 AM MON - FRI	MAINTAIN 1 LANE EASTBOUND & 1 LANE WESTBOUND
9:00 AM TO 3:00 PM MON - FRI	MAINTAIN 1 LANE EASTBOUND & 1 LANE WESTBOUND
ANYTIME SAT-SUN	MAINTAIN 1 LANE EASTBOUND & 1 LANE WESTBOUND
*9:00 PM FRI TO 5:00 AM MON	MAINTAIN 1 LANE EASTBOUND & 1 LANE WESTBOUND

*WEEKEND CLOSURE PERMITTED ONLY FOR MAINLINE US-33 BRIDGE DECK OVERLAY WORK.

MAINTENANCE OF TRAFFIC
GENERAL NOTES

UNI - 33 - 8.74

CALCULATED
DRAWN
CHECKED
DATE

DISINCENTIVE

THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE AS DESIGNATED IN THE UNAUTHORIZED LANE USE TABLE LOCATED BELOW FOR EACH UNIT OF TIME A CRITICAL LANE / RAMP IS CLOSED BY THE CONTRACTOR'S ACTION WHILE NOT OTHERWISE PERMITTED BY THE CONTRACT. THE DISINCENTIVE WILL BE FOR ANY LANE CLOSURES CAUSED BY THE CONTRACTOR DURING TIMES AND LOCATIONS NOT SPECIFICALLY PERMITTED BY THIS CONTRACT. THERE SHALL BE NO WORK PERFORMED, NO LANE REDUCTIONS OR NO LANE RESTRICTIONS OUTSIDE OF THE WORKING HOURS GIVEN WITH IN THIS PLAN. THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVE AS SHOWN IN THE UNAUTHORIZED LANE USE TABLE.

UNAUTHORIZED LANE USE

THE PERMITTED LANE CLOSURE TIMES PREVIOUSLY LISTED SHALL BE SUBJECT TO DISINCENTIVES AS PER THE UNAUTHORIZED LANE USED TABLE BELOW FOR ANY TIME PERIOD OR PORTION THEREOF IN WHICH THE MINIMUM OF OPEN LANES PER DIRECTION IS VIOLATED.

UNAUTHORIZED LANE USE TABLE

DESCRIPTION OF WORK	TIME PERIOD	DISINCENTIVE \$ PER TIME PERIOD
LANE CLOSURE/ LANE REDUCTION	EACH MINUTE	\$75

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC:

THIS ITEM IS A CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER AT VARIOUS LOCATIONS.

LOCATION	QUANTITY	UNIT
UNI-33	20	CU YD
TOTAL	20	CU YD

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC = 20 CU YD

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS:

USE OF LEOS BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE PROJECT ENGINEER. LAW ENFORCEMENT OFFICERS (LEOS) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- FOR RAMP CLOSURE: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW RAMP CLOSURE ARRANGEMENTS ARE INITIATED. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR RAMP CLOSURE. LEO'S ARE NOT INTENDED TO BE USED FOR EACH LANE CLOSURE REQUIRED TO COMPLETE PLANING/RESURFACING ACTIVITIES.
- THE USE OF A LAW ENFORCEMENT OFFICER WITH PATROL CAR IS REQUIRED WHERE A COMPLETE BLOCKAGE OF APPROACH TRAFFIC IS REQUIRED
- THE USE OF A LAW ENFORCEMENT OFFICER WITH PATROL CAR IS REQUIRED IF THE CONTRACTOR TURNS THE INTERSECTION SIGNALS OFF OR PUTS THE INTERSECTION IN FLASHING OPERATION, AND WHEN THE LEO DIRECTS TRAFFIC THROUGH THE INTERSECTION CONTRARY TO THE SIGNAL DISPLAY.

LAW ENFORCEMENT OFFICERS SHOULD NOT FORSAKE THEIR TRAFFIC CONTROL RESPONSIBILITIES TO CHASE MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF THE MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST MAY BE ACCEPTABLE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEO'S AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEO. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THEIR RESPECTIVE DUTIES, PLACEMENT AND WILL RESOLVE ANY ISSUES BETWEEN THE TWO PARTIES THAT MAY ARISE. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE SERVICES WITH:

THE OHIO HIGHWAY PATROL 1-614-466-2660

THE LEO SHOULD REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING THE SHIFT. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF THE SHIFT.

LAW ENFORCEMENT OFFICERS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A L.E.O. ARE INCLUDED WITHIN THE BID UNIT PRICE FOR ITEM-614 LAW ENFORCEMENT OFFICER WITH PATROL CAR. THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE = 150 HOUR

ITEM 614 - WORK ZONE MARKING SIGN:

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE MARKING SIGNS PER THE REQUIREMENTS OF MT-101.90, 614.04 AND 614.11.

LOCATION	R4-1-18	R4-2-18
	NO EDGE LINES EACH	DO NOT PASS EACH
UNI-36	4	2
TOTAL	4	2

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE MARKING SIGN = 6 EACH

ITEM 614 - WORK ZONE LANE LINE, CLASS III, 642 PAINT:

WORK ZONE LANE LINE SHALL BE PLACED TO REFLECT THE PROPOSED LANE LINE AS DETERMINED FROM THE PROPOSED MARKINGS WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

LOCATION	BEGIN SLM	END SLM	SIDE	APP	TOTAL	UNIT		
UNI-33	8.74	12.59	EB	1	4.41	MI		
UNI-33	8.74	12.59	WB	1	4.41	MI		
UNI-33 VARIOUS RAMPS					-	1	0.04	MI
					TOTAL	8.86	MI	

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE LANE LINE, CLASS III, 642 PAINT = 8.86 MI

ITEM 614 - WORK ZONE CENTER LINE, CLASS III, 642 PAINT:

WORK ZONE CENTER LINE SHALL BE PLACED TO REFLECT THE PROPOSED CENTER LINE AS DETERMINED FROM THE PROPOSED MARKINGS WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

LOCATION	BEGIN SLM	END SLM	SIDE	APP	TOTAL	UNIT	
UNI-36	8.91	9.20	C	1	0.29	MI	
					TOTAL	0.29	MI

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE CENTER LINE, CLASS III, 642 PAINT = 0.29 MI

ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 642 PAINT:

WORK ZONE EDGE LINE SHALL BE PLACED ON ALL EDGE LINE OF US-33 AND RAMPS WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

LOCATION	SIDE	APP	TOTAL	UNIT	
UNI-33 MAINLINE	LT & RT	1	16.83	MI	
UNI-33 VARIOUS RAMPS	LT & RT	1	12.97	MI	
			TOTAL	29.80	MI

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 642 PAINT = 29.80 MI

ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT:

WORK ZONE CHANNELIZING LINE SHALL BE PLACED TO REFLECT THE PROPOSED CHANNELIZING LINE AS DETERMINED FROM THE PROPOSED MARKINGS WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

LOCATION	SIDE	APP	TOTAL	UNIT	
UNI-33 VARIOUS MAINLINE	-	1	6,095	FT	
UNI-33 VARIOUS RAMPS	-	1	1,457	FT	
UNI-36	-	1	130	FT	
			TOTAL	7,682	FT

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT = 7,682 FT

ITEM 614 - WORK ZONE STOP LINE, CLASS III, 642 PAINT:

WORK ZONE STOP LINE SHALL BE PLACED TO REFLECT THE EXISTING STOP LINE AS DETERMINED FROM THE EXISTING MARKINGS WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

LOCATION	SIDE	APP	TOTAL	UNIT
UNI-33 RAMP P	-	1	24	FT
UNI-33 RAMP S	-	1	24	FT
UNI-33 RAMP G	-	1	34	FT
UNI-33 RAMP L	-	1	24	FT
UNI-33 RAMP J	-	1	20	FT
UNI-33 RAMP A	-	1	38	FT
UNI-33 RAMP C	-	1	44	FT
UNI-36	-	1	24	FT
TOTAL			232	FT

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - WORK ZONE STOP LINE, CLASS III, 642 PAINT = 232 FT

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN:

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND REMOVE WHEN NO LONGER NEEDED, CHANGEABLE MESSAGE SIGNS, ON SITE, TO BE USED AS DIRECTED AT THE INTERSTATE LOCATIONS.

THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. ONLY CLASS I OR II SIGNS WILL BE PERMITTED. EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TEMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLE SHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PLACEMENT OF THE PCMS'S SHALL BE AS DIRECTED BY THE ENGINEER.

SIGN ACTIVATION SHALL BE 7 DAYS PRIOR TO CONSTRUCTION INITIATION OR AS DIRECTED BY THE ENGINEER. OPERATION AND MAINTENANCE OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9 INCHES BY 15 INCHES MINIMUM, FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLE SHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NEEDED. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHOULD BE SUPPORTED, BUT NORMALLY, NOT MORE THAN TWO MESSAGE PHASES SHOULD BE EMPLOYED, ALTHOUGH THREE PHASES MAY BE USED IN UNUSUAL CONDITIONS. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED, OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614.03. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF A FAILURE. ANY FAILURE SHALL NOT RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATIONS AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN, AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF ITS RESPONSIBILITIES AS OUTLINED IN 104.04. PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT BID PRICE PER MONTH FOR EACH ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE, AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

THE FOLLOWING QUANTITY HAS BEEN CALCULATED AT 2 FOR 60 DAYS:

LOCATION	# OF PCMS	DAYS	TOTAL	UNIT
UNI-33	2	60	120	DAYS
TOTAL			120	DAYS

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN = 120 DAYS

WRITTEN NOTICE OF CLOSURE:

AT LEAST SEVEN DAYS PRIOR TO A CLOSURE, ADVANCED WRITTEN NOTIFICATION SHALL BE MADE TO LOCAL AGENCIES OR OFFICIALS HAVING JURISDICTION OVER EMERGENCY SERVICES IN THE AREA (POLICE, FIRE, MEDICAL), SCHOOL BUS ROUTES, UTILITY SERVICES, ALL RESIDENCES ADJACENT TO THE PROJECT SITE, AND MAINTENANCE OF LOCAL ROADS.

VALERIE KLINGMAN, MARYSVILLE CITY ENGINEER 937-645-1045
 CHIEF FLOYD GOLDEN, MARYSVILLE POLICE 937-645-1039
 CHIEF JAY RILEY, MARYSVILLE FIRE DEPT. 937-645-1068
 STEVE ADER, MARYSVILLE SCHOOLS 937-644-8105

SUCH NOTIFICATION SHALL ALSO BE MADE TO ODOT DISTRICT SIX PUBLIC INFORMATION OFFICER (740-833-8063) AND THE MAINTENANCE OF TRAFFIC ENGINEER (740-833-8323). THE NOTIFICATION SHALL STATE WHEN THE CLOSURE WILL START AND THE ANTICIPATED PERIOD OF CLOSURE.

IF, SUBSEQUENT TO THAT NOTIFICATION, THE START DATE IS CHANGED, THEN A NEW SEVEN-DAY NOTIFICATION WILL BE REQUIRED. THE ROAD CANNOT BE CLOSED UNLESS THIS PRIOR NOTIFICATION PROCESS HAS BEEN ACCOMPLISHED. THE SAME PARTIES SHALL BE NOTIFIED WHEN A CLOSURE HAS CONCLUDED.

ITEM 614 - MAINTENANCE OF TRAFFIC (DETOUR PHASE):

BRIDGE DECK WORK ON UNI-33-0879 L & R

PHASE 1 - THIS WORK WILL REQUIRE THE CLOSURE OF THE OUTSIDE LANES (BOTH DIRECTIONS) OF US-33 IN ACCORDANCE WITH MT-95.30 AND SHOWN ON SHEET 18/108 FOR ONE WEEKEND.

PHASE 2 - THIS WORK WILL REQUIRE THE CLOSURE OF THE INSIDE LANES (BOTH DIRECTIONS) OF US-33 IN ACCORDANCE WITH MT-95.30 AND SHOWN ON SHEET 19/108 FOR ONE WEEKEND.

THE DIRECTIONAL RAMP R FROM CR-133 TO US-33 EASTBOUND WILL BE CLOSED DURING PHASE 1 ONLY. THE DETOUR ROUTE IS SHOWN ON SHEET 23/108.

THE ALLOWABLE HOURS FOR SINGLE LANE CLOSURES DURING PHASES 1 & 2 ARE AS PER PERMITTED LANE CLOSURE TABLE.

PREPARE TO DETOUR TRAFFIC BY ERECTING TRAFFIC CONTROL AS DETAILED ON SHEET 23/108 AND STANDARD CONSTRUCTION DRAWING MT-102.20 AT THE LOCATIONS SHOWN IN THE DETOUR PLANS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

BRIDGE DECK WORK ON UNI-33-0879A (RAMP U)

THIS DECK OVERLAY WORK WILL BE DONE IN TWO PHASES WITH RAMP TRAFFIC MAINTAINED AT ALL TIMES. SEE SHEETS 20/108 AND 21/108 FOR DETAILS.

RAMP WORK AT THE US-33 AND US-36 INTERCHANGE

MAINTAIN ONE LANE (MINIMUM) OF TRAFFIC ON RAMPS A AND C, SHOWN ON SHEET 22/108. THE CONTRACTOR IS TO PERFORM THE CONSTRUCTION OF THE ADDITIONAL SHOULDER ON THE RIGHT SIDES OF RAMPS A AND C UP TO THE FINAL SURFACE COURSE.

OVERHEAD SIGN WORK AT RAMPS U & V

TWO LANE TRAFFIC SHALL BE MAINTAINED BY USE OF THE EXISTING PAVEMENT. ONE LANE TRAFFIC MAY BE PERMITTED DURING PLACEMENT OF OVERHEAD SUPPORTS AND CONCRETE BARRIER POURING OPERATIONS. SUBJECT TO THE APPROVAL OF THE ENGINEER. SHORT DURATION CLOSURE OF TEN MINUTES ARE PERMITTED UNDER THE DIRECTION OF LAW ENFORCEMENT OFFICER AS PER THE SHORT DURATION CLOSURE OF MULTILANE DIVIDED HIGHWAY DETAIL ON SHEET 70/108.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, DETOUR SIGNING, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

TRUCK MOUNTED ATTENUATOR (TMA):

THE USE OF A TRUCK MOUNTED ATTENUATOR (TMA), AS SHOWN IN SCD MT-95.30, IS REQUIRED WHEN A LANE IS CLOSED WITH DRUMS ON US-33. THIS ALSO INCLUDES TIMES DURING ALL GUARDRAIL AND CONCRETE BARRIER WORK. THE TMA SHALL BE PLACED IN SUCH A WAY TO ADEQUATELY PROTECT THE WORKERS INSIDE THE WORK ZONE. THE TMA IS NOT INTENDED TO BE USED AS OR SUBSTITUTED FOR THE FLASHING ARROW PANEL AT THE BEGINNING OF THE MERGE TAPER. PAYMENT FOR THIS ITEM IS TO BE INCLUDED WITH THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

ITEM 622 - PORTABLE CONCRETE BARRIER, 32":

THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 32 INCH PORTABLE CONCRETE BARRIER AT THE LOCATIONS SHOWN ON SHEETS 20/108 AND 21/108. FOR DETAILS, SEE SCD RM-4.2.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE.

CALCULATED
 DRAWN
 CHECKED
 C-3

MAINTENANCE OF TRAFFIC
 GENERAL NOTES

UNI-33-8.74

ITEM 614 - BARRIER REFLECTORS/OBJECT MARKERS:

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE CONCRETE BARRIER WITHIN THE RIGHT-OF-WAY IN ACCORDANCE WITH THE ALTERNATE) SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.70. BARRIER REFLECTOR AND OBJECT MARKER MATERIAL AND INSTALLATION SHALL CONFORM TO CMS 626.02 AND 626.04.

ITEM 614 - WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL):

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ONE OF THE FOLLOWING IMPACT ATTENUATORS:

1. THE QUADGUARD CZ, (24 INCHES WIDE SIX-BAY) WORK ZONE IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: 312-467-6750).

THE LENGTH OF THE SIX-BAY QUADGUARD CZ IS 20'-9". INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER	DRAWING NAME	DRAWING/ REVISION DATE	ODOT APPROVAL DATE
QSCZCVR-T4	QUADGUARD CZ SYSTEM FOR CONSTRUCTION ZONES	5/13/99 REV. J	8/27/99
35-40-10	QUADGUARD SYSTEM CONCRETE PAD, CZ, QG	11/19/97 REV. D	8/27/99
35-4-16	QUADGUARD SYSTEM BACKUP ASSEMBLY, CZ, QG	7/30/99 REV. F	8/27/99
354051Z	QUADGUARD CZ SYSTEM NOSE ASSEMBLY, CZ, QG, 24, 30, 36	5/17/99	8/27/99
35-40-18	TRANSITION ASSEMBLY, 4 OFFSET, QG	6/25/99 REV. F	8/27/99
35400260	QUADGUARD SYSTEM PCMB ANCHOR ASSEMBLY	11/19/97 REV. C	8/27/99

2. THE TRACC (TRINITY ATTENUATING CRASH CUSHION) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE TRACC IS 21'-0" LONG AND 2'-7" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER	DRAWING NAME	DRAWING/ REVISION DATE	ODOT APPROVAL DATE
SS450	CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS	3/12/99 REV. 1	8/27/99
SS455	TRACC TRANSITION TO W-BEAM MEDIAN BARRIER PLAN, ELEVATION & SECTIONS	2/18/1999	8/27/99

SS461	TRACC TRANSITION TO CONCRETE SAFETY SHAPE BARRIER PLAN, ELEVATION & SECTIONS	6/30/99 REV. 1	8/27/99
SS462	TRACC TRANSITION TO CONCRETE BARRIER SINGLE SLOPE PLAN, ELEVATION & SECTIONS	6/30/1999	8/27/99

3. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS, INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OH 44515, (TELEPHONE 330-799-9291).

THE TAU-II FOR THIS NOTE IS A PARALLEL 8-BAY UNIT 24' LONG AND 35" WIDE). INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER	DRAWING NAME	DRAWING/ REVISION DATE	ODOT APPROVAL DATE
A040416	UNIVERSAL TAU-II PARTS LIST	4/22/04	10/16/04
A040420	UNIVERSAL TAU-II FOUNDATION, FLUSH MOUNT BACKSTOP	4/28/04	10/16/04
A040105	UNIVERSAL TAU-II FOUNDATION, PCB BACKSTOP (REFERENCED ON A04020)	1/7/04	10/16/04
B040239	APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)	4/21/04	10/16/04

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

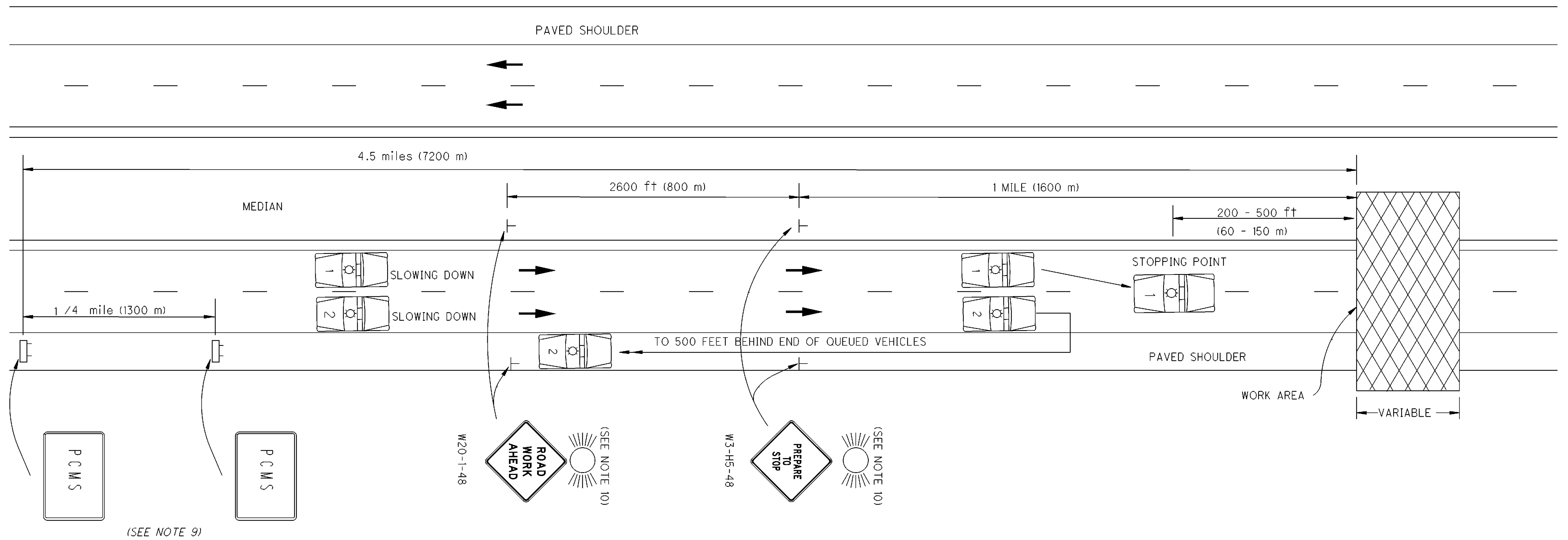
CONTRACTOR COORDINATION:

THE CONTRACTOR ON THIS PROJECT SHALL COORDINATE WORK WITH ADJOINING PROJECT UNI-33-10.35 (PID#89221) AS TO NOT INTERFERE WITH ONE ANOTHER DURING THE CONSTRUCTION PROCESS. SPECIAL ATTENTION IS TO BE MADE WHILE WORKING NEAR RAMP "E" AT THE SR-31 INTERCHANGE.

CALCULATED
DRAFTER
CHECKED
CCT

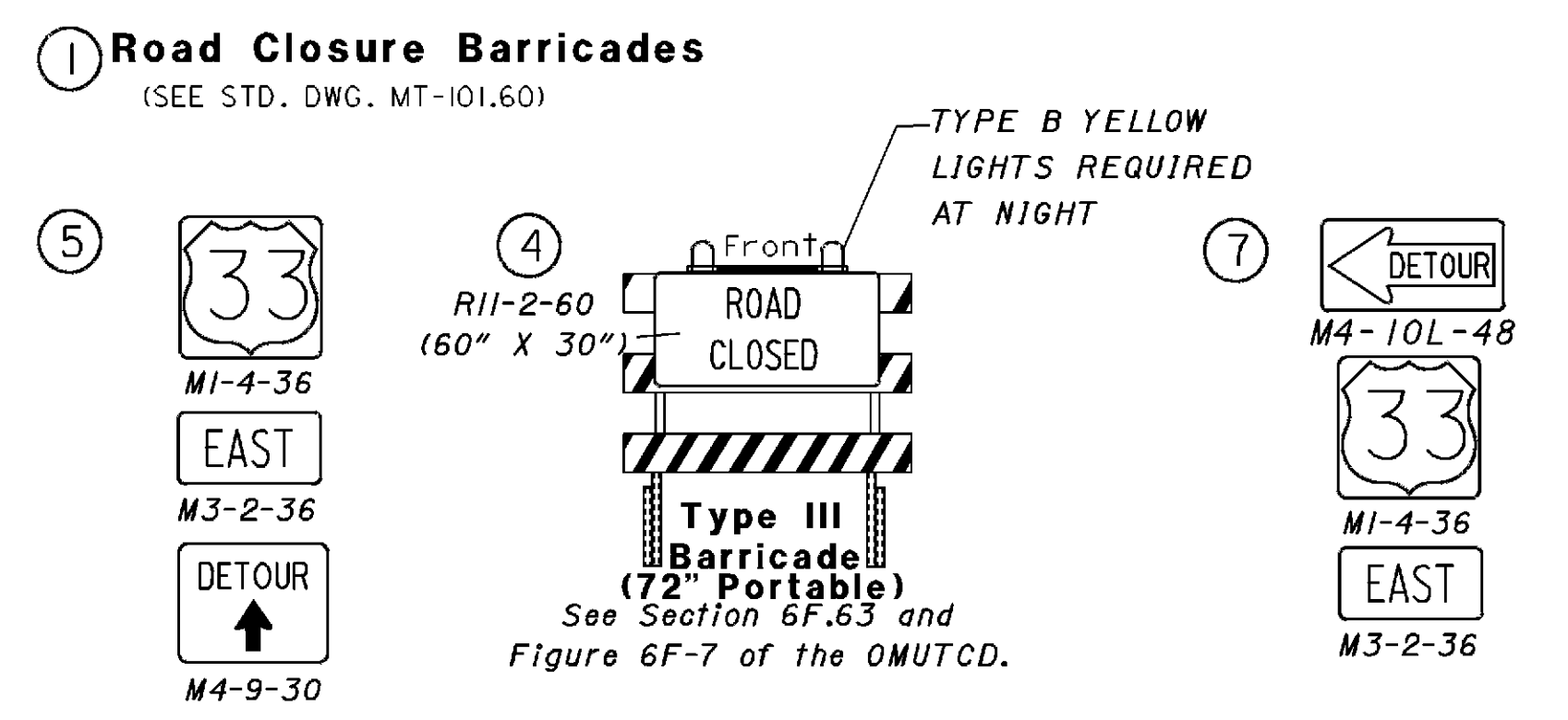
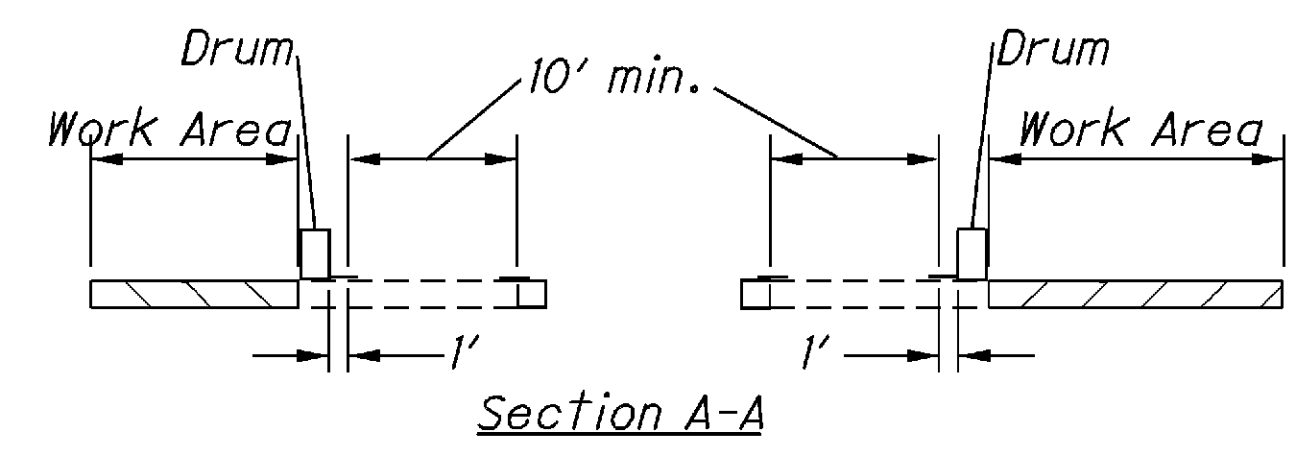
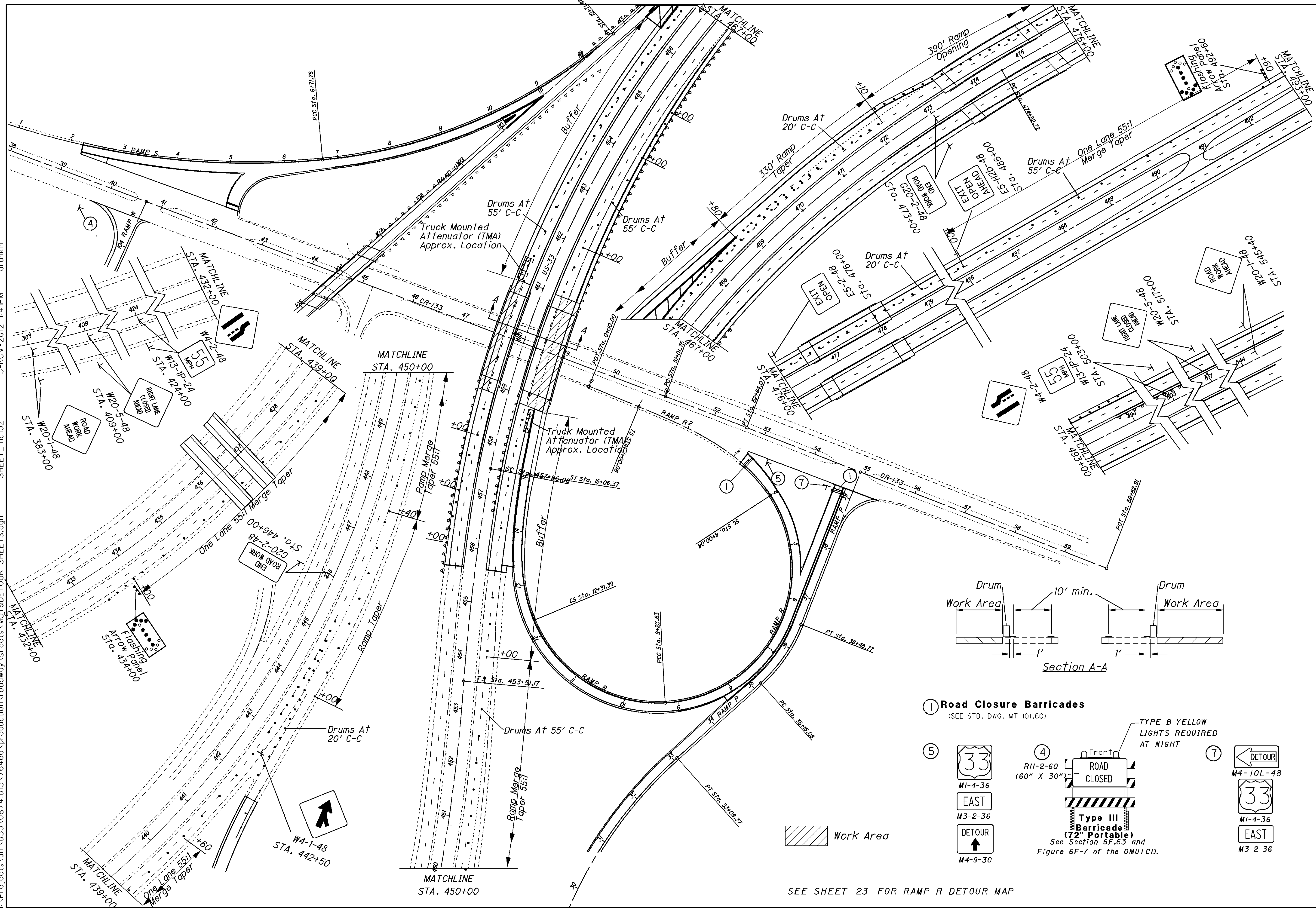
MAINTENANCE OF TRAFFIC
GENERAL NOTES

UNI - 33 - 8.74



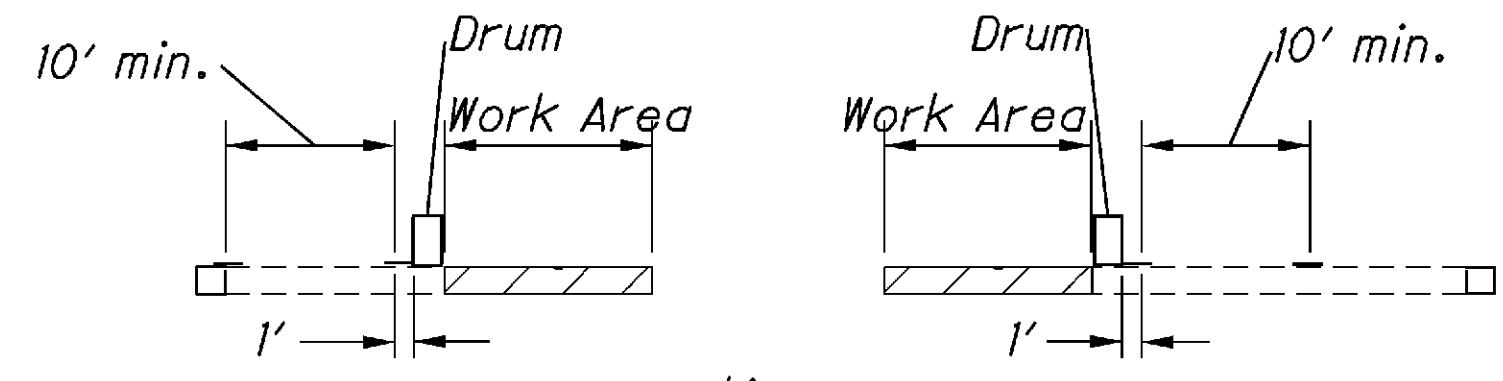
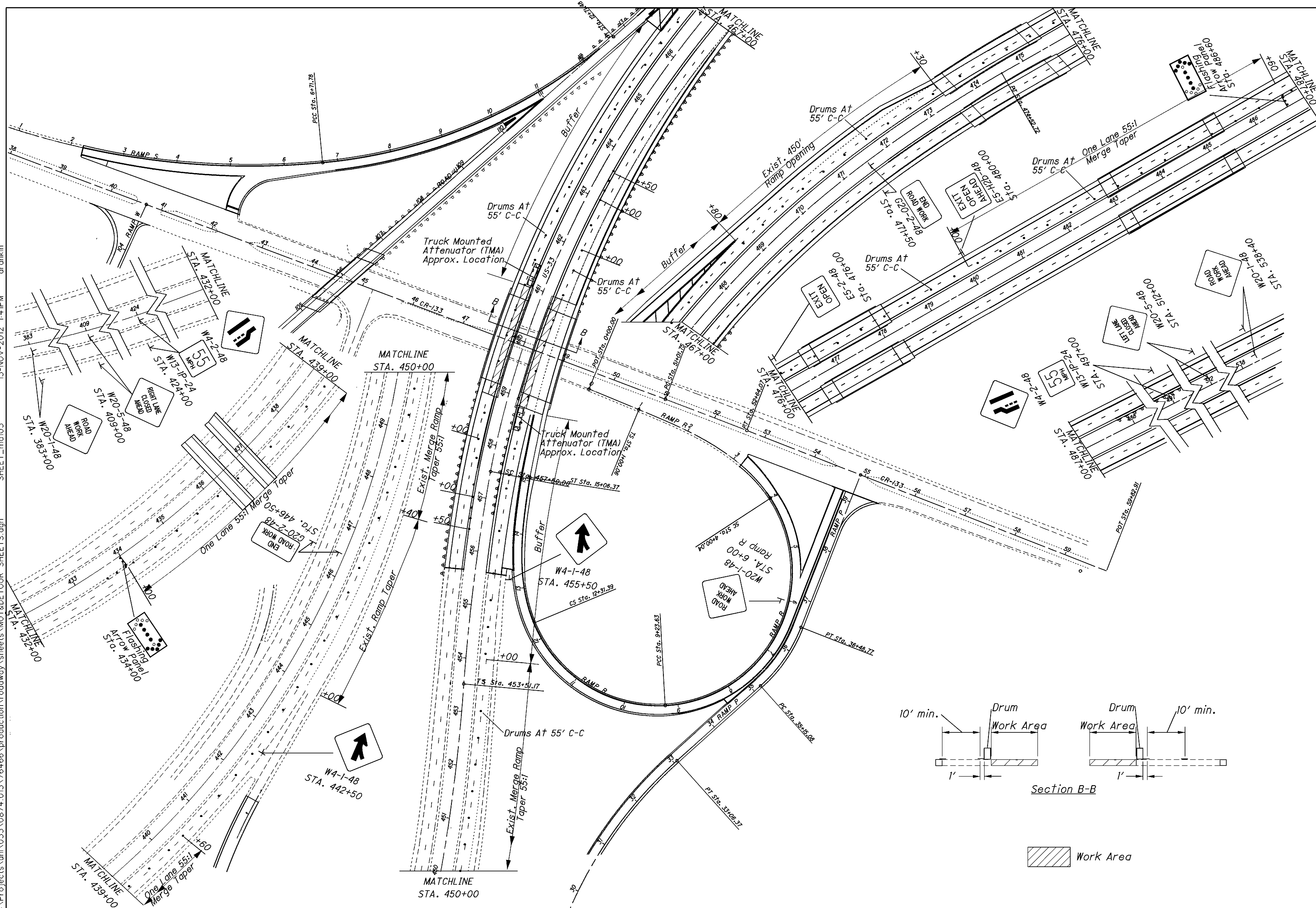
1. This type of highway closure shall be used for all construction, maintenance and utility operations when the duration of closure will not exceed 15 minutes.
2. A minimum of two Law Enforcement Officers (LEO) with patrol cars per direction shall be provided to block traffic and pace motorists to a stop. The number of patrol cars shall equal the number of lanes closed on the highway.
3. Patrol cars, with lights flashing, should enter the stream of traffic at approximately three (3) miles before the point of closure. At approximately two (2) miles before the point of closure, they should begin the gradual slow down. Traffic shall be brought to a complete stop a safe distance, between 200 feet and 500 feet (60 and 150 m), from the work area. This slowing operation shall take no more than ten (10) minutes. After traffic has been stopped, one patrol car shall travel along the roadway shoulder 500 feet (150 m) behind the end of the queued vehicles.
4. The contractor shall not begin work until traffic has been brought to a complete stop.
5. All entrance ramps located between the stopped traffic and the work area shall be closed.
6. After the highway has been closed and reopened via this procedure, both of the following requirements shall have been met before implementation of another short duration closure, except with the approval of the engineer:
 - A. A minimum period of 15 minutes shall have elapsed
 - B. The queued traffic shall have dissipated
7. The time frame for stopping traffic shall be specified in the plans or by the District District Deputy Director.
8. The public shall be given advance notice of the upcoming closure by providing Portable Changeable Message signs at the site 3 days in advance of the scheduled closing. Appropriate message will be provided by the Engineer.
9. Two ODOT approved Portable Changeable Message Signs, Class 1, shall be provided. The first message sign shall be placed at approximately 4.5 miles in advance of the closure or as directed by the engineer. The second message sign shall be placed at approximately one quarter mile beyond the first message sign. The first message sign shall read ROAD CLOSED AHEAD (0.8 sec.), PREPARE TO STOP (0.8 sec.), (Black screen for 0.3 sec.) The second message sign shall read ROAD CLOSED AHEAD (0.8 sec.), "EXPECT 30 MIN. DELAY" (0.8 sec.), (Black screen for 0.3 sec.)
10. The contractor shall erect and maintain 48 inch "ROAD WORK AHEAD" and "PREPARE TO STOP" signs on each side of the highway. During night operations, each sign shall be illuminated with one (1) Type A flashing warning light or two (2) flares. The flares shall be replaced if they burn out.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\MOI&DETOUR_SHEETS.dgn SHEET_md102 13-NOV-2012 1:41PM drankin



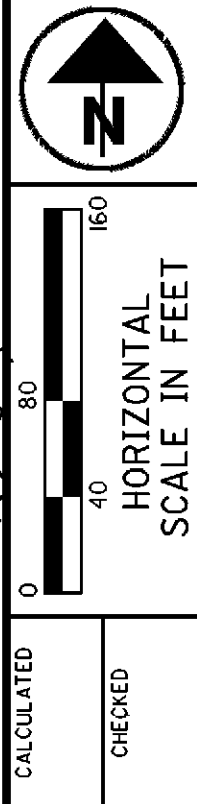
SEE SHEET 23 FOR RAMP R DETOUR MAP

I:\Projects\uni\033\0874.013\76466\production\roadway\sheets\MOT&DETOUTR SHEETS.dgn SHEET_md103 13-NOV-2012 1:41PM drankin



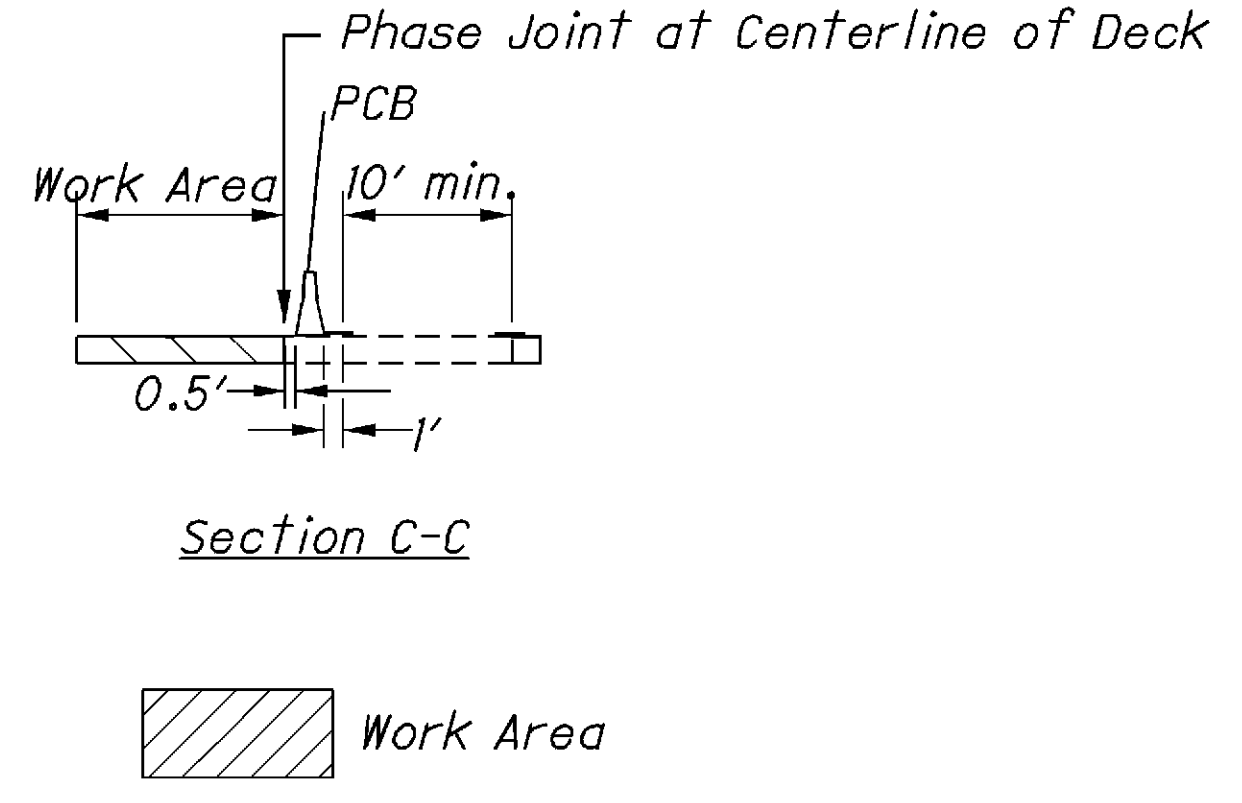
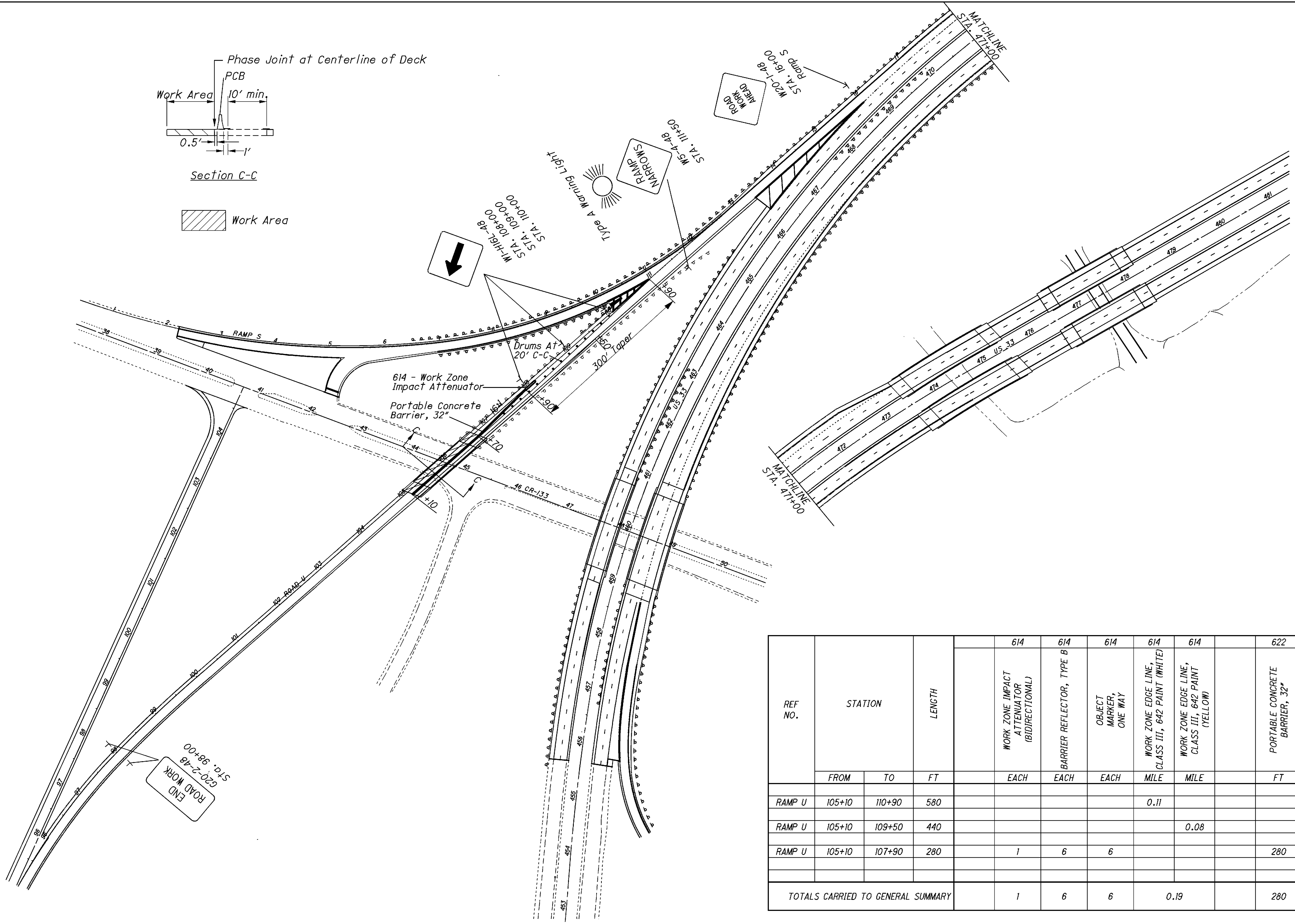
Section B-B

Work Area

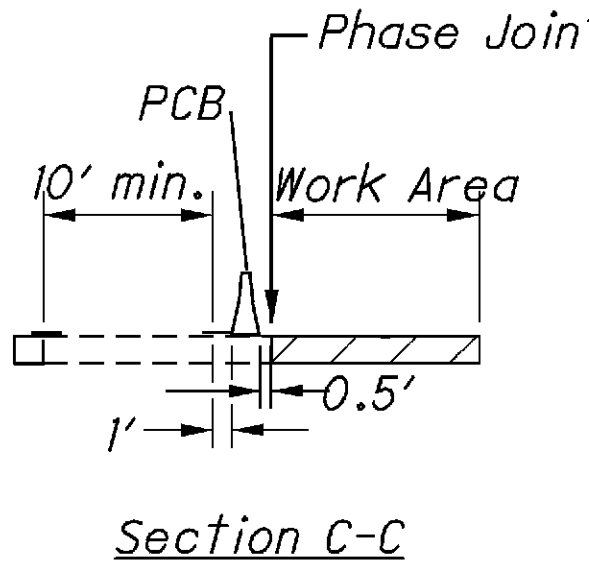
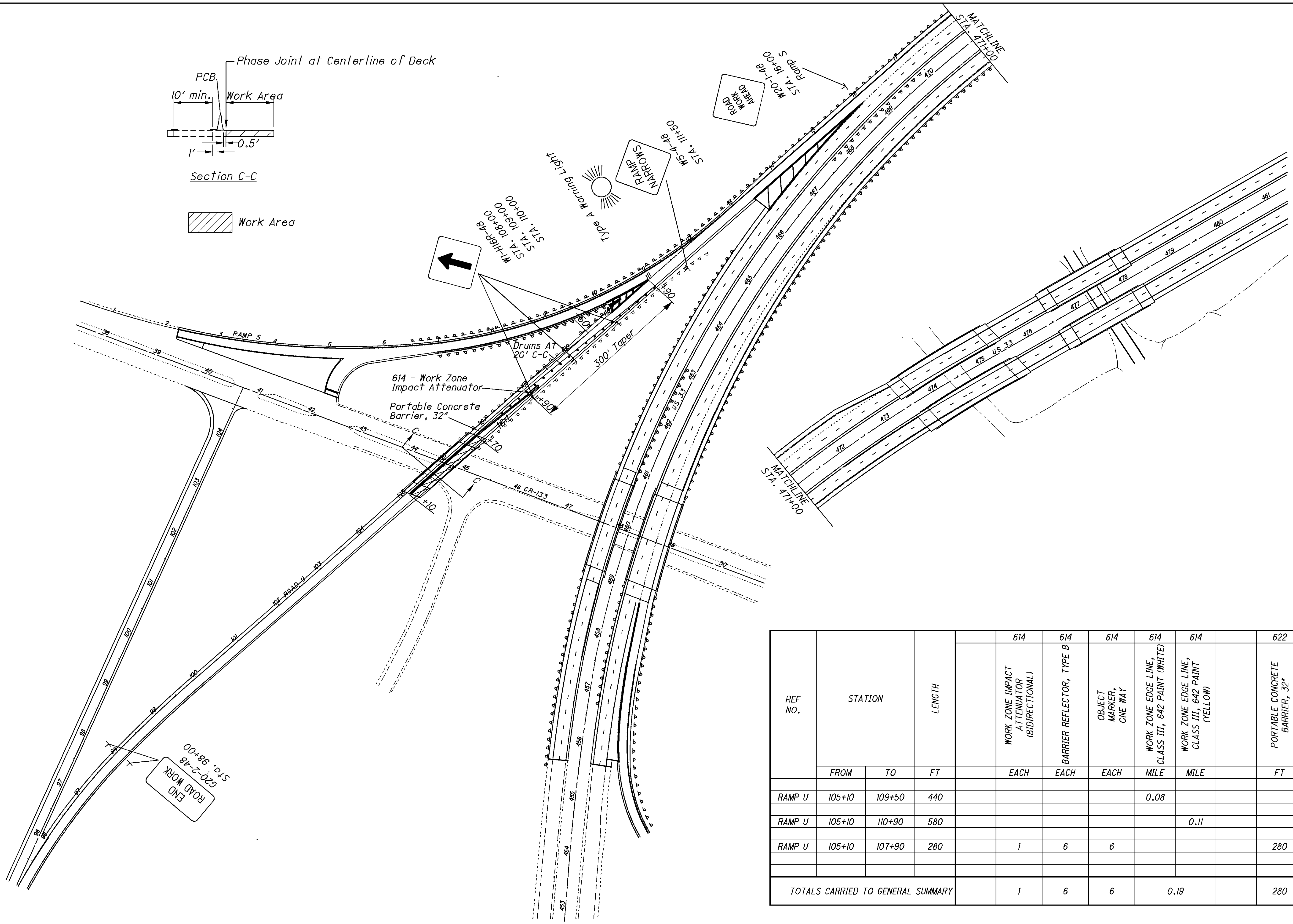


**MAINTENANCE OF TRAFFIC PLAN
PHASE 2 BRIDGE WORK AT RAMP R**

UNI-33-8.74



REF NO.	STATION		LENGTH FT	614		614		614		614		622	
	FROM	TO		WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE B	OBJECT MARKER, ONE WAY	WORK ZONE EDGE LINE, CLASS III, 642 PAINT (WHITE)	WORK ZONE EDGE LINE, CLASS III, 642 PAINT (YELLOW)					
RAMP U	105+10	110+90	580				0.11						
RAMP U	105+10	109+50	440					0.08					
RAMP U	105+10	107+90	280	1	6	6						280	
TOTALS CARRIED TO GENERAL SUMMARY				1	6	6	0.19					280	



Section C-C

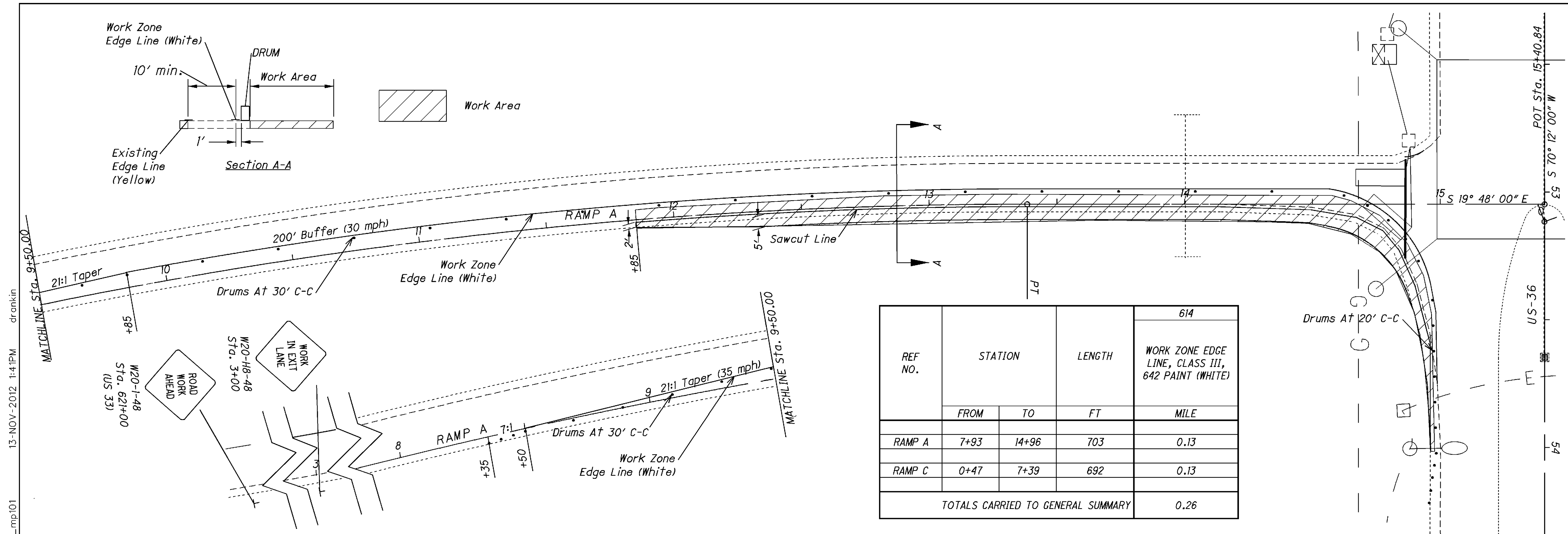
Work Area

REF NO.	STATION		LENGTH FT	ITEMS					TOTALS CARRIED TO GENERAL SUMMARY
	FROM	TO		614 WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	614 BARRIER REFLECTOR, TYPE B	614 OBJECT MARKER, ONE WAY	614 WORK ZONE EDGE LINE, CLASS III, 642 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS III, 642 PAINT (YELLOW)	
RAMP U	105+10	109+50	440				0.08		
RAMP U	105+10	110+90	580				0.11		
RAMP U	105+10	107+90	280	1	6	6			280
TOTALS CARRIED TO GENERAL SUMMARY				1	6	6	0.19		280

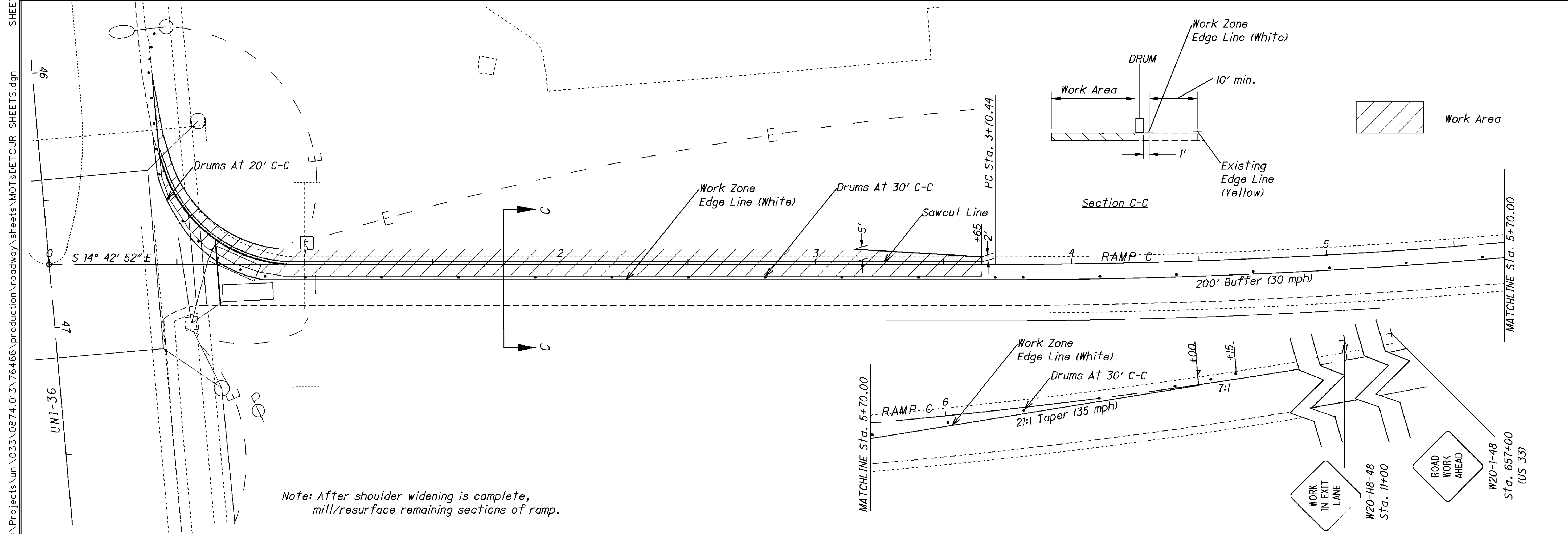


**MAINTENANCE OF TRAFFIC PLAN
PHASE 2 BRIDGE WORK AT RAMP U**

UNI-33-8.74



REF. NO.	STATION		LENGTH FT	614 WORK ZONE EDGE LINE, CLASS III, 642 PAINT (WHITE) MILE
	FROM	TO		
RAMP A	7+93	14+96	703	0.13
RAMP C	0+47	7+39	692	0.13
TOTALS CARRIED TO GENERAL SUMMARY				0.26



Note: After shoulder widening is complete, mill/resurface remaining sections of ramp.

I:\Projects\uni\033\0874.013\76466\production\roadway\sheets\MOT&DETOUR_SHEETS.dgn SHEET_mp101 13-NOV-2012 1:41PM drankin

MAINTENANCE OF TRAFFIC PLAN A & C
SHOULDER WIDENING AT RAMPS A & C

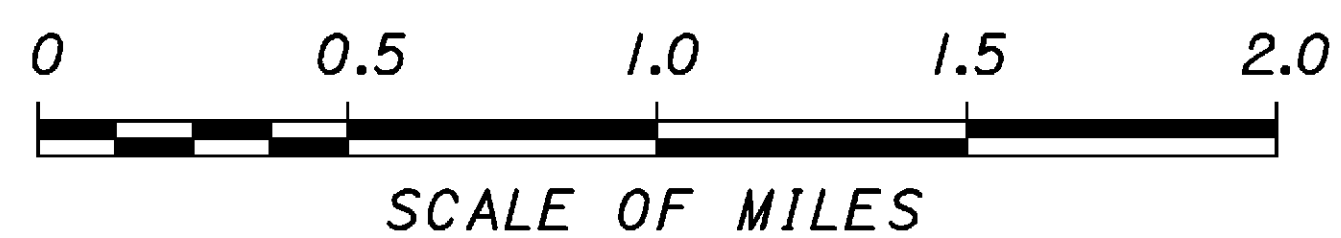
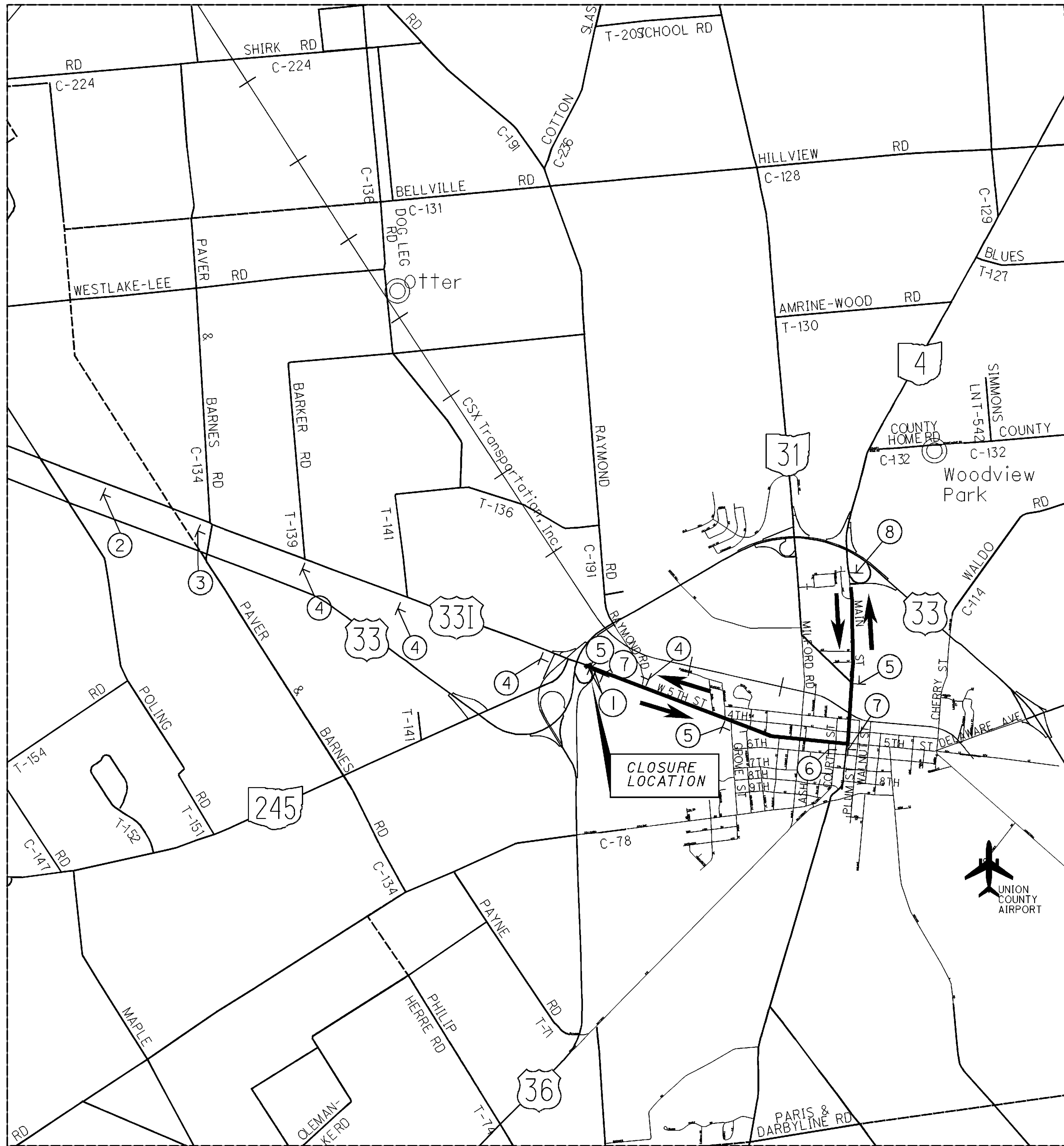
UNI-33-8.74

22
108

CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET
0 10 20 40

I:\Projects\uni\033\0874.013\76466\production\roadway\sheets\MOT&DETOUR SHEETS.dgn SHEET_md101 13-NOV-2012 1:41PM drankin



① Road Closure Barricades (SEE STD. DWG. MT-101.60)			
<p>② ROAD CLOSED AHEAD W20-3-48</p> <p>③ DETOUR AHEAD W20-2-48</p>	<p>④ TYPE B YELLOW LIGHTS REQUIRED AT NIGHT</p> <p>Front</p> <p>R11-2-60 (60" X 30") SEE NOTE BELOW</p> <p>ROAD CLOSED -- MILES AHEAD</p> <p>Type III Barricade (72" Portable)</p> <p>See Section 6F.63 and Figure 6F-7 of the OMUTCD.</p>	<p>⑤</p> <p>⑥</p>	<p>⑦</p> <p>⑧</p>
<p>MI-4-36</p> <p>EAST</p> <p>M3-2-36</p>	<p>MI-4-36</p> <p>EAST</p> <p>M3-2-36</p>	<p>MI-4-36</p> <p>EAST</p> <p>M3-2-36</p>	<p>M4-10L-48</p> <p>M4-8A-24 (24" X 18")</p>
<p>MI-4-36</p> <p>EAST</p> <p>M3-2-36</p>	<p>MI-4-36</p> <p>EAST</p> <p>M3-2-36</p>	<p>MI-4-36</p> <p>EAST</p> <p>M3-2-36</p>	<p>M4-9-30</p> <p>M4-9-30</p>

NOTES:
 THE CONTRACTOR SHALL ERECT, MAINTAIN AND REMOVE THE DETOUR AND THE ALTERNATE DETOUR. ALL SIGNS AND BARRICADES ARE TO BE INCLUDED IN ITEM 614 - DETOUR SIGNING FOR PAYMENT. ALL SIGNS, EXCEPT MI-5 AND M3-1 ARE TO BE BLACK ON ORANGE CONSTRUCTION SIGNS, ON TYPE 2 POSTS, ON OR NEXT TO EXISTING ROUTE MARKING SIGNS WHERE PRACTICAL. FLASHING LIGHTS REQUIRED AT NIGHT FOR SIGNS 2 & 3.

R11-2-60
 US 331 AND TR 139 INTERSECTION: 1.5 MILES AHEAD
 US 331 AND TR 141 INTERSECTION: 1.0 MILES AHEAD
 US 331 AND SR 245 SB RAMP INTERSECTION: 0.2 MILES AHEAD
 W 5TH AVE AND RAYMOND RD INTERSECTION: 0.3 MILES AHEAD

ALL DETOUR SIGNING PAID FOR UNDER LUMP SUM ITEM 614, DETOUR SIGNING.

LEGEND

DETOUR ROUTE

U.S. ROUTE

STATE ROUTE

I:\Projects\uni\033\0874.013\76466\production\roadway\sheets\GENERAL NOTES.dgn SHEET_UNI01 13-NOV-2012 1:41PM drankin

AEP
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215
614.716.2531

DUBLINK DEVELOPMENT/ FISHEL
1366 DUBLIN RD
COLUMBUS, OH 43215
614.274.8100

QWEST COMMUNICATIONS
1801 CALIFORNIA ST
DENVER, COLORADO 80202
303.299.0170

AEP
700 MORRISON RD
GAHANNA, OH 43230
614.552.1801

FRONTIER COMMUNICATIONS
1300 COLUM - SANDUSKY RD
MARION, OH 43302
740.383.0551

SOUTHEASTERN NATURAL GAS
P.O. BOX 430
FRAZEYSBURG, OH 43822
740.828.2892

AEP
850 TECH CENTER DR
GAHANNA, OH 43230
614.883.6831

HEIBY OIL COMPANY INC
1020 S DETROIT ST
BELLEFONTAINE, OH 43311
937.592.3906

TIME WARNER CABLE
3760 INTERCHANGE DR
COLUMBUS, OH 43204
614.255.6349

AMERIGAS PROPANE
2353 WESTBROOKE DR
COLUMBUS, OH 43228
800.992.6602

LEVEL 3 COMMUNICATIONS
226 NORTH FIFTH ST
COLUMBUS, OH 43215
614.324.4444

TW TELECOM
250 OLD WILSON BRIDGE RD
WORTHINGTON, OH 43081
614.255.2127

AT&T - OHIO
111 NORTH FOURTH ST
COLUMBUS, OH 43215
614.223.7162

LOGAN CTY ELECTRIC COOP
1587 COUNTY ROAD
BELLEFONTAINE, OH 43311
937.592.4781

U S SIGNAL COMPANY
201 IONIA AVENUE SW
GRAND RAPIDS, MI 49503
866.274.4625

BP OIL
4421 BRADLEY RD
CLEVELAND, OH 44109
216.912.2559

LOGAN CTY WATER POLLUTION CNTRL
1015 ORCHARD ISLAND RD
RUSSELLS POINT, OH 43348
937.843.3328

UNION COUNTY ENGINEERS
233 W 6TH ST
MARYSVILLE, OH 43040
937.645.3018

BUCKEYE PIPELINE
P.O. BOX 90
LIMA, OH 45802
419.236.7766

MARYSVILLE - CITY OF
125 EAST SIXTH ST
MARYSVILLE, OH 43040
937.642.6015

UNION RURAL ELECTRIC & GAS
15461 US ROUTE 36
MARYSVILLE, OH 43040
937.642.1826

CENTURYLINK
441 WEST BROAD ST
PATASKALA, OH 43062
740.927.8282

MARYSVILLE EXEMPTED SCHOOL
1000 EDGEWOOD DR
MARYSVILLE, OH 43040
937.644.8105

WIDE OPEN WEST
3765 CORPORATE DR
COLUMBUS, OH 43231
614.948.4653

COLUMBIA GAS OF OHIO
1600 DUBLIN RD
COLUMBUS, OH 43215
614.481.1057

MID OHIO ENERGY
2589 MARION UPPER SANDUSKY
MARION, OH 43302
888.362.6732

WINDSTREAM
3701 COMMUNICATIONS WAY
EVANSVILLE, IN 47715
812.759.2831

COLUMBIA GAS TRANS
589 NORTH STATE RD
MEDINA, OH 44256
330.721.4163

MILLCREEK TWP (UNION COUNTY)
15999 THOMPSON RD
OSTRANDER, OH 43061

NATIONWIDE ENERGY PARTNERS
230 WEST ST
COLUMBUS, OH 43215
877.818.2637

COLUMBUS DEPT OF UTILITIES
109 NORTH FRONT ST
COLUMBUS, OH 43215

CONSOLIDATED ELECTRIC COOP
5255 STATE ROUTE 95
MT GILEAD, OH 43338
419.947.3055

ODOT TRAFFIC (DIST 6)
400 EAST WILLIAM ST
DELAWARE, OH 43015
740.833.8332

DAYTON POWER & LIGHT
1900 DRYDEN RD
DAYTON, OH 45439
937.331.4497

OHIO EDISON
420 SOUTH YORK ST
SPRINGFIELD, OH 45505
937.327.1283

DEL-CO WATER
6773 OLENTANGY RIVER RD
DELAWARE, OH 43015
740.548.7746

PIONEER ELECTRIC COOP INC
344 US ROUTE 36
PIQUA, OH 45356
937.773.2523

PIONEER ENERGY MANAGEMENT
481 SCHROCK RD
COLUMBUS, OH 43229
614.442.7100

CALCULATED
DRAWN
CHECKED
DATE

UTILITY NOTES

UNI - 33 - 8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\SUMMARY_SHEETS.dgn Sheet_C0101 19-DEC-2012 8:36AM drankin

SHEET NUMBER											PARTICIPATION				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
9 - 12	13 - 17	20	21	22	23	27	68	80	81	82	01/NHS/PV	02/SQ/PV	03/NHS/BR	04/BRO/BR						
						138					138				202	23001	138	SQ YD	ROADWAY	
							9275				9025	250			202	38001	9275	FT	PAVEMENT REMOVED, AS PER PLAN	9
							16				12	4			202	42000	16	EACH	GUARDRAIL REMOVED, AS PER PLAN	9
							3				3				202	42210	3	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	
							230				190	40			203	20001	230	CU YD	ANCHOR ASSEMBLY REMOVED, BARRIER DESIGN	
																			EMBANKMENT, AS PER PLAN	9
						415					415				204	10000	415	SQ YD		
							102.18				96.50	5.68			209	15000	102.18	STATION	SUBGRADE COMPACTION	
						6.22					6.22				209	72000	6.22	STATION	RESHAPING UNDER GUARDRAIL	
							7175				6850	325			606	13000	7175	FT	PREPARING SUBGRADE FOR SHOULDER PAVING	
							1887.5				1887.5				606	13030	1887.5	FT	GUARDRAIL, TYPE 5	
																			GUARDRAIL, TYPE 5, USING 9 FOOT POSTS	
							50				50				606	13050	50	FT		
							100				100				606	15500	100	FT	GUARDRAIL, TYPE 5A	
							4				3	1			606	26000	4	EACH	GUARDRAIL, BARRIER DESIGN, TYPE 5	
							12				9	3			606	26100	12	EACH	ANCHOR ASSEMBLY, TYPE B	
							12				12				606	26500	12	EACH	ANCHOR ASSEMBLY, TYPE E	
																			ANCHOR ASSEMBLY, TYPE T	
							6				6				606	35000	6	EACH		
							6				6				606	35100	6	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1	
							1				1				606	60012	1	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	
							2				2				606	60033	2	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	
125											100	25			606	98000	125	FT	IMPACT ATTENUATOR, TYPE 3, AS PER PLAN	11
																			GUARDRAIL, MISC.: ALTERNATIVE GUARDRAIL PLACEMENT	10
							90				90				622	10061	90	FT		
							2				2				622	24841	2	EACH	CONCRETE BARRIER, SINGLE SLOPE, TYPE B, AS PER PLAN	11
																			CONCRETE BARRIER END SECTION, TYPE B, AS PER PLAN	11
							60				56	4			653	10000	60	CU YD	EROSION CONTROL	
							1200				1120	80			659	00500	1200	SQ YD	TOPSOIL FURNISHED AND PLACED	
							0.03				0.03				659	20000	0.03	TON	SEEDING AND MULCHING, CLASS 1	
							3				3				659	35000	3	M GAL	COMMERCIAL FERTILIZER	
											915	85			832	30000	1000	EACH	WATER	
																			EROSION CONTROL	
																			DRAINAGE	
4											4				604	09000	4	EACH	CATCH BASIN ADJUSTED TO GRADE	
4											4				604	09500	4	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
2											2				604	35500	2	EACH	MANHOLE RECONSTRUCTED TO GRADE	
																			PAVEMENT	
1839											1589	250			251	01001	1839	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN	9
200											200				253	02001	200	CU YD	PAVEMENT REPAIR, AS PER PLAN	9
							212566				206164	6402			254	01000	212566	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
							136				136				301	46000	136	CU YD	ASPHALT CONCRETE BASE, PG64-22	
							15960				15479	481			407	10000	15960	GALLON	TACK COAT	
							8772				8506	266			442	10000	8772	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)	
							79				79				442	10001	79	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446), AS PER PLAN	10
							815				799	16			617	10100	815	CU YD	COMPACTED AGGREGATE	
4											3	1			617	25000	4	M GAL	WATER	
																			STRUCTURES OVER 20'	
																			SEE STRUCTURES GENERAL SUMMARY	98
																			WATER WORK	
4											4				638	10800	4	EACH	VALVE BOX ADJUSTED TO GRADE	

CALCULATED BY:RJK	CHECKED CCT	GENERAL SUMMARY

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\SUMMARY_SHEETS.dgn Sheet_C0102 13-NOV-2012 1:41PM drankin

SHEET NUMBER											PARTICIPATION				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
9 - 12	13 - 17	20	21	22	23	27	68	80	81	82	01/NHS/PV	02/SQ/PV	03/NHS/BR	04/BRO/BR						
							10				8	2			620	00500	10	EACH	TRAFFIC CONTROL	
								776	635		1367	44			621	00100	1411	EACH	DELINEATOR, POST MOUNTED	
								698	572		1231	39			621	54000	1270	EACH	RPM	
							115				6	109			626	00100	115	EACH	RAISED PAVEMENT MARKER REMOVED	
										469	469				630	02100	469	FT	BARRIER REFLECTOR	
																			GROUND MOUNTED SUPPORT, NO. 2 POST	
21											21				630	02101	21	FT	GROUND MOUNTED SUPPORT, NO. 2 POST, AS PER PLAN	11
											670				630	03100	670	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
30											30				630	03101	30	FT	GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN	11
											85				630	08600	85	EACH	GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN	
											1				630	35501	1	EACH	SIGN POST REFLECTOR	
																			OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6, AS PER PLAN	11
										462.02	462.02				630	80100	462.02	SQ FT	SIGN, FLAT SHEET	
48.00											48.00				630	80101	48.00	SQ FT	SIGN, FLAT SHEET, AS PER PLAN	11
							1				1				630	84000	1	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.40	
											55				630	84900	55	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
											10				630	85100	10	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
											67				630	86002	67	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
							1				1				630	88901	1	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND REERECTION, AS PER PLAN	11
								17.44	12.49		29.32	0.61			644	00104	29.93	MILE	EDGE LINE, 6"	
								8.81	0.04		8.85				644	00204	8.85	MILE	LANE LINE, 6"	
								0.36				0.36			644	00300	0.36	MILE	CENTER LINE	
								6225	1457		7552	130			644	00404	7682	FT	CHANNELIZING LINE, 12"	
								24	229		229	24			644	00500	253	FT	STOP LINE	
									230		230				644	00600	230	FT	CROSSWALK LINE	
								1061	213		1198	76			644	00700	1274	FT	TRANSVERSE/DIAGONAL LINE	
								5412	696		6108				644	01510	6108	FT	DOTTED LINE, 6"	
								1.51			1.51				646	10010	1.51	MILE	EDGE LINE, 6"	
								0.94			0.94				646	10110	0.94	MILE	LANE LINE, 6"	
																			TRAFFIC SIGNALS	
10											8	2			632	26500	10	EACH	DETECTOR LOOP	
10											8	2			632	27200	10	EACH	LOOP DETECTOR TIE IN	
																			MAINTENANCE OF TRAFFIC	
											134	16			614	11110	150	HOURLY	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
											2				614	12338	2	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	
											LUMP				614	12420	LUMP		DETOUR SIGNING	
												6			614	12460	6	EACH	WORK ZONE MARKING SIGN	
											20				614	13000	20	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
											12				614	13300	12	EACH	BARRIER REFLECTOR, TYPE B	
											12				614	13350	12	EACH	OBJECT MARKER, ONE WAY	
											120				614	18401	120	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	15
											8.86				614	20550	8.86	MILE	WORK ZONE LANE LINE, CLASS III, 642 PAINT	
												0.29			614	21550	0.29	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
											30.44				614	22350	30.44	MILE	WORK ZONE EDGE LINE, CLASS III, 642 PAINT	
											7552	130			614	23680	7682	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	
											208	24			614	26610	232	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
											560				622	40020	560	FT	PORTABLE CONCRETE BARRIER, 32"	
											0.9	0.1			614	11000	LUMP		MAINTAINING TRAFFIC	
											5.5	0.5			619	16000	6	MONTH	FIELD OFFICE, TYPE A	
											0.9	0.1			624	10000	LUMP		MOBILIZATION	
											0.9	0.1			823	10000	LUMP		CONSTRUCTION LAYOUT STAKES	

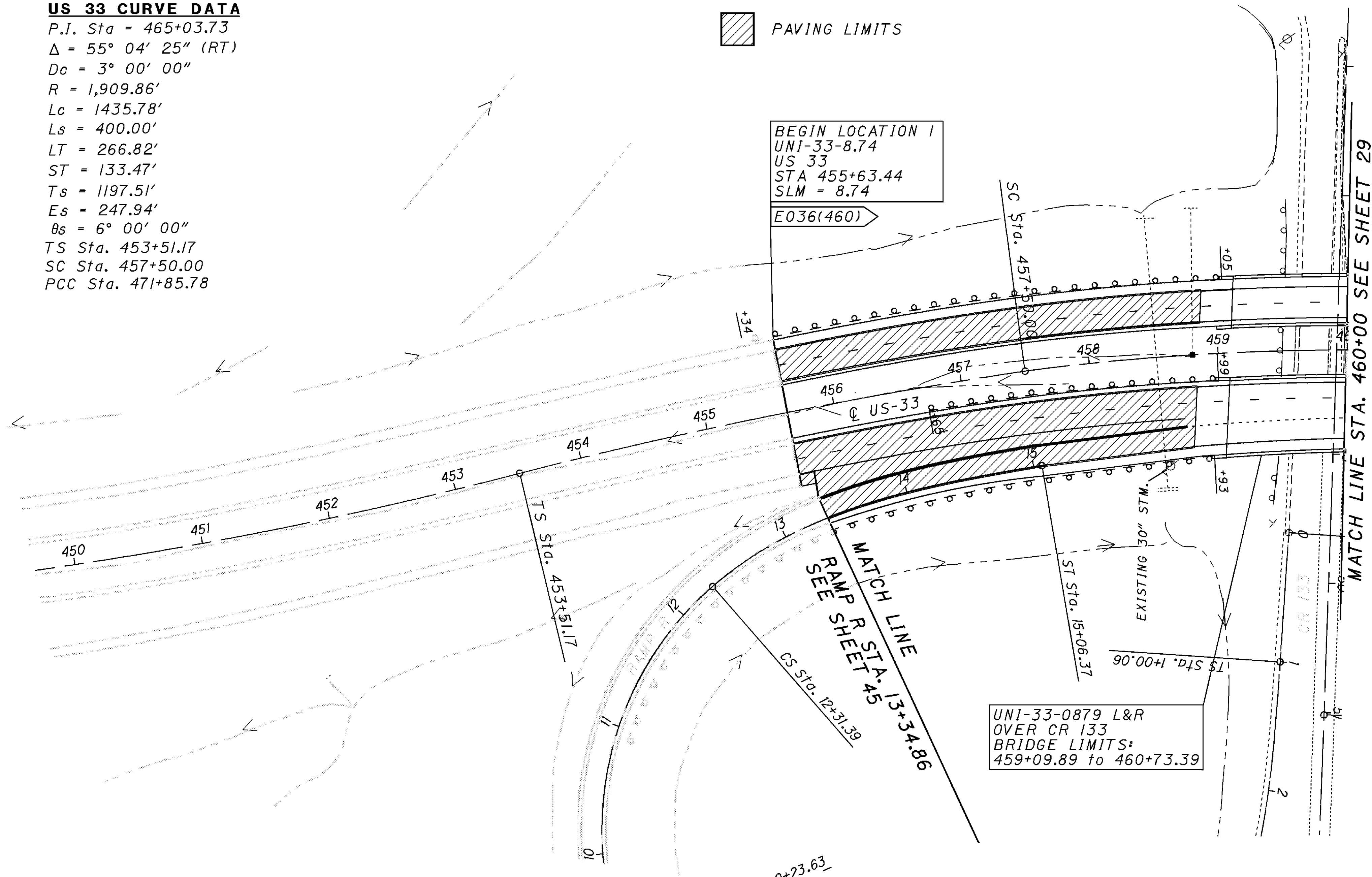
CALCULATED	DRAWN	CHECKED
GENERAL SUMMARY		
UNI - 33 - 8.74		
26		
108		

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\PLAN & PROFILE SHEETS.dgn SHEET_GP000 13-NOV-2012 1:41PM drankin

US 33 CURVE DATA

P.I. Sta = 465+03.73
 $\Delta = 55^\circ 04' 25''$ (RT)
 $D_c = 3^\circ 00' 00''$
 $R = 1,909.86'$
 $L_c = 1435.78'$
 $L_s = 400.00'$
 $LT = 266.82'$
 $ST = 133.47'$
 $T_s = 1197.51'$
 $E_s = 247.94'$
 $\theta_s = 6^\circ 00' 00''$
 TS Sta. 453+51.17
 SC Sta. 457+50.00
 PCC Sta. 471+85.78

 PAVING LIMITS



CALCULATED
 DRY/POK
 CHECKED
 CJK

 HORIZONTAL SCALE IN FEET
 0 25 50 100

PLAN VIEW UNI-US33
STA. 455+63.44 TO STA. 460+00

S	T	A	W	I	D	E	254	407	442	617	REMARK
							PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SY	TACK COAT 0.075 GAL. PER SQ. YD. GAL	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CY	COMPACTED AGGREGATE (2" DEPTH) CY	
						RT	915	69	38	4	MAINLINE US 33
						RAMP R	476	36	20		MAINLINE US 33 ENTRANCE RAMP R
						LT	938	70	39	4	MAINLINE US 33
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108							2,329	175	97	8	

UNI-33-8.74

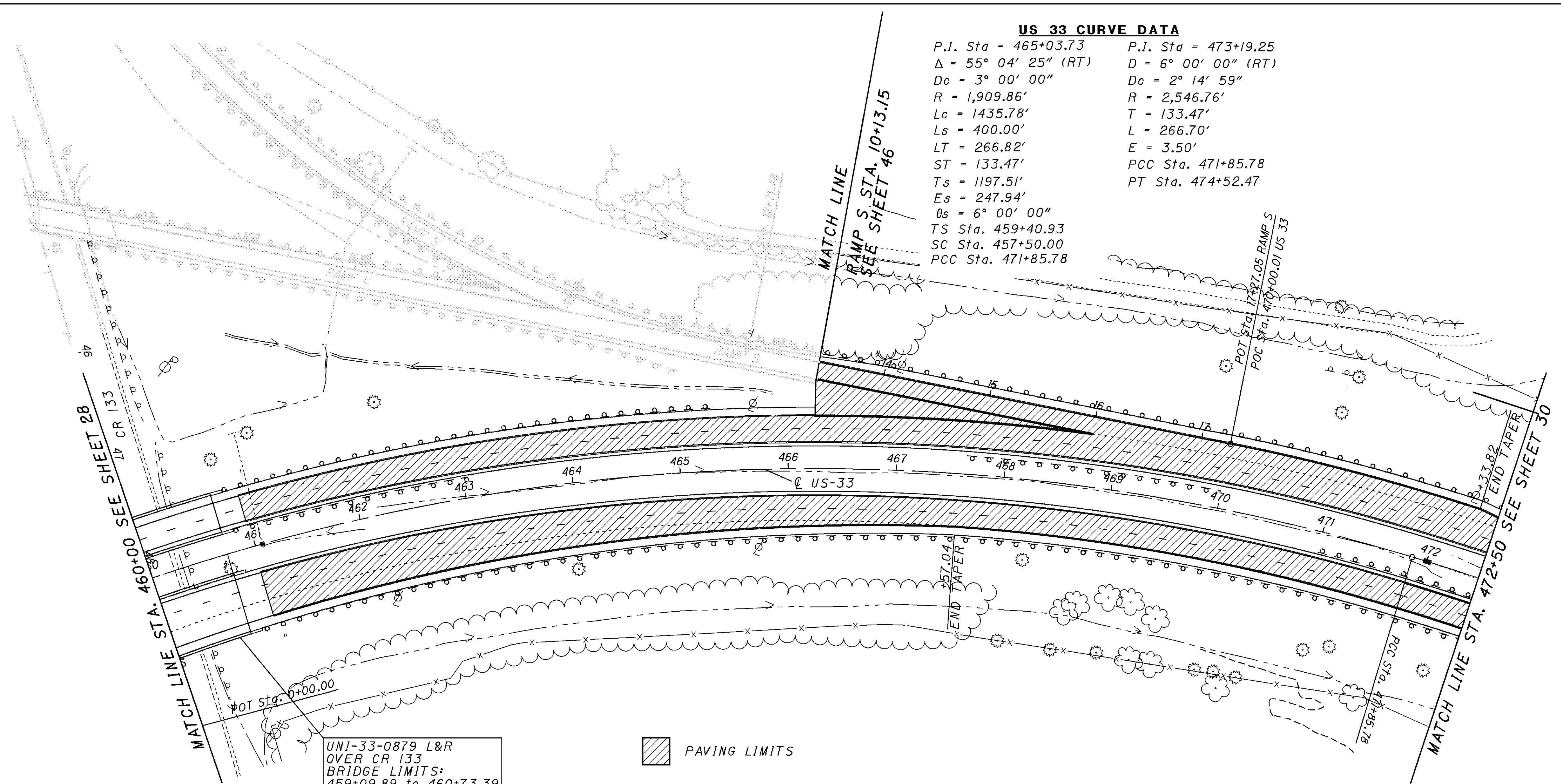
I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile_sheets.dgn SHEET_GP001 13-NOV-2012 1:41PM drankin

CALCULATED
DRAWN
CHECKED

0 25 50 100
HORIZONTAL
SCALE IN FEET

US 33 CURVE DATA

P.I. Sta = 465+03.73	P.I. Sta = 473+19.25
$\Delta = 55^\circ 04' 25''$ (RT)	$D = 6^\circ 00' 00''$ (RT)
$D_c = 3^\circ 00' 00''$	$D_c = 2^\circ 14' 59''$
$R = 1,909.86'$	$R = 2,546.76'$
$L_c = 1435.78'$	$T = 133.47'$
$L_s = 400.00'$	$L = 266.70'$
$LT = 266.82'$	$E = 3.50'$
$ST = 133.47'$	PCC Sta. 471+85.78
$T_s = 1197.51'$	PT Sta. 474+52.47
$E_s = 247.94'$	
$\theta_s = 6^\circ 00' 00''$	
TS Sta. 459+40.93	
SC Sta. 457+50.00	
PCC Sta. 471+85.78	



UNI-33-0879 L&R
OVER CR 133
BRIDGE LIMITS:
459+09.89 to 460+73.39

PAVING LIMITS

S	T	A	W	I	D	H	S	E	254	407	442	617	REMARK
									PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
460+98	472+50	26'	RT						3,328	250	139	14	MAINLINE US 33
466+25	472+34	7'	RAMP R						473	36	20	4	MAINLINE US 33 ENT. RAMP R TAPER
466+25	472+34	13'	RAMP R						879	66	37	4	MAINLINE US 33 ENT. RAMP R AVG. WIDTH
460+98	472+50	26'	LT						3,328	250	139	14	MAINLINE US 33
466+25	468+75	14'	RAMP S						389	29	16	2	MAINLINE US 33 EXIT RAMP S & ROAD U
468+75	472+34	13'	RAMP S						518	39	22	2	MAINLINE US 33 EXIT RAMP S & ROAD U
472+34	472+50	9.5'	RAMP S						17	1	1		MAINLINE US 33 ENT. RAMP S AVG. WIDTH
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108									8,932	671	374	40	

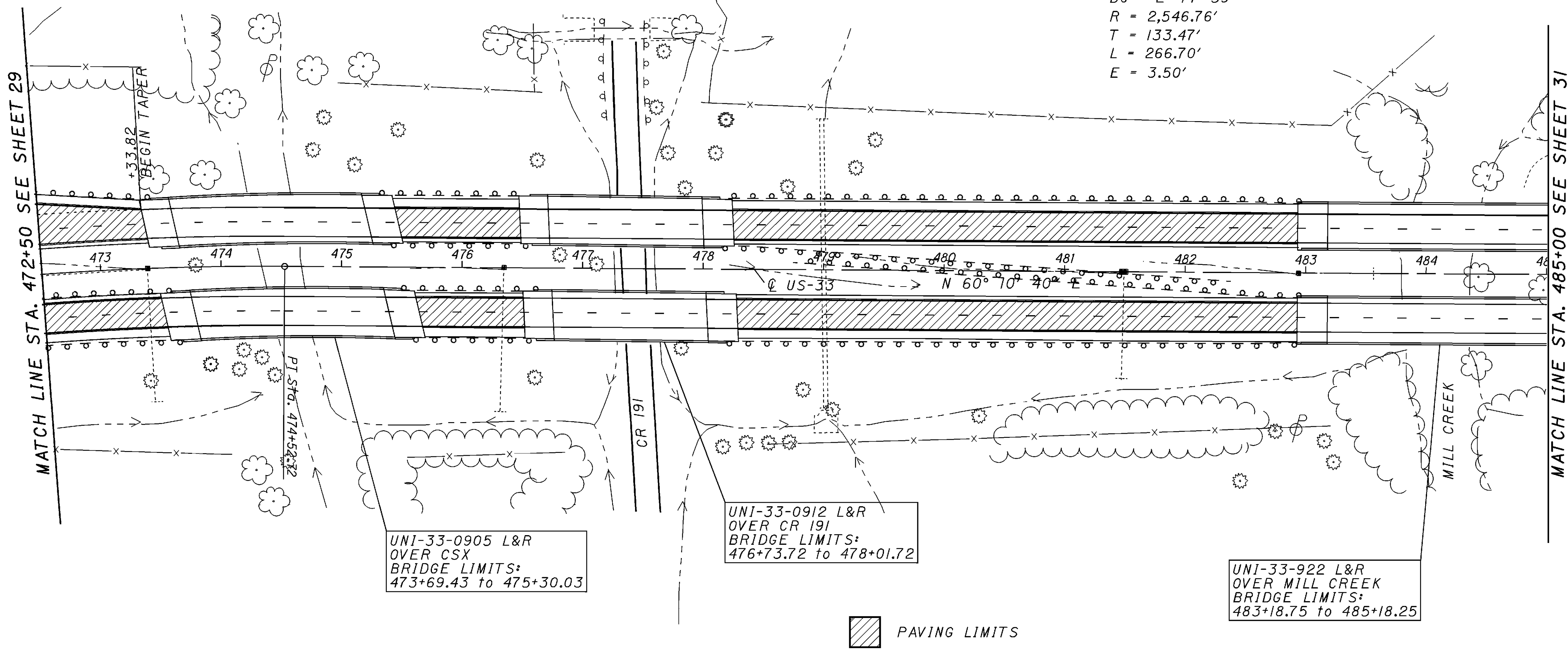
PLAN VIEW UNI-US33
STA. 460+00 TO STA. 472+50

UNI-33-8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GPO02 13-NOV-2012 1:41PM drankin

US 33 CURVE DATA

P.I. Sta = 473+19.25
 D = 6° 00' 00" (RT)
 Dc = 2° 14' 59"
 R = 2,546.76'
 T = 133.47'
 L = 266.70'
 E = 3.50'

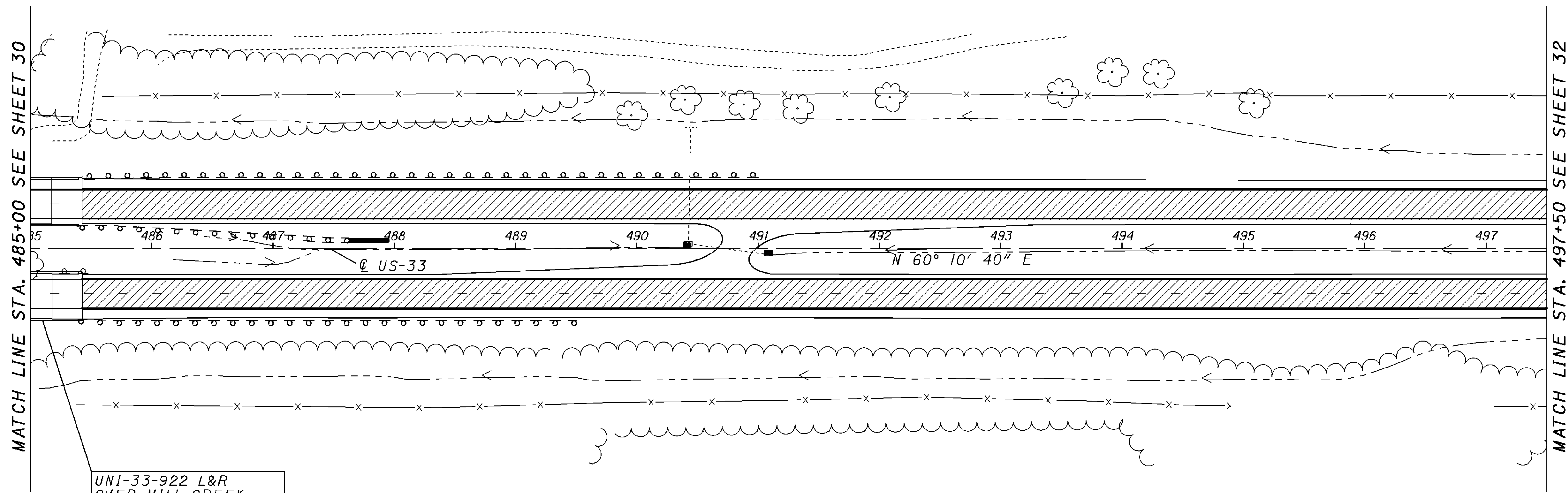


S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK	
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD										
472+50	473+52	26'	RT	295	22	12	2									MAINLINE US 33	
475+65	476+50	26'	RT	246	18	10	2									MAINLINE US 33	
478+28	482+93	26'	RT	1,343	101	56	6									MAINLINE US 33	
472+34	473+33	4'	RAMP S	44	3	2										MAINLINE US 33 ENT. RAMP S AVG. WIDTH	
472+50	473+33	26'	LT	240	18	10	2									MAINLINE US 33	
475+46	476+47	26'	LT	292	22	12	2									MAINLINE US 33	
478+25	482+92	26'	LT	1,349	101	56	6									MAINLINE US 33	
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				3,809	285	158	20										

**PLAN VIEW UNI-US33
STA. 472+50 TO STA. 485+00**

UNI-33-8.74

30
108



UNI-33-922 L&R
OVER MILL CREEK
BRIDGE LIMITS:
483+18.75 to 485+18.25

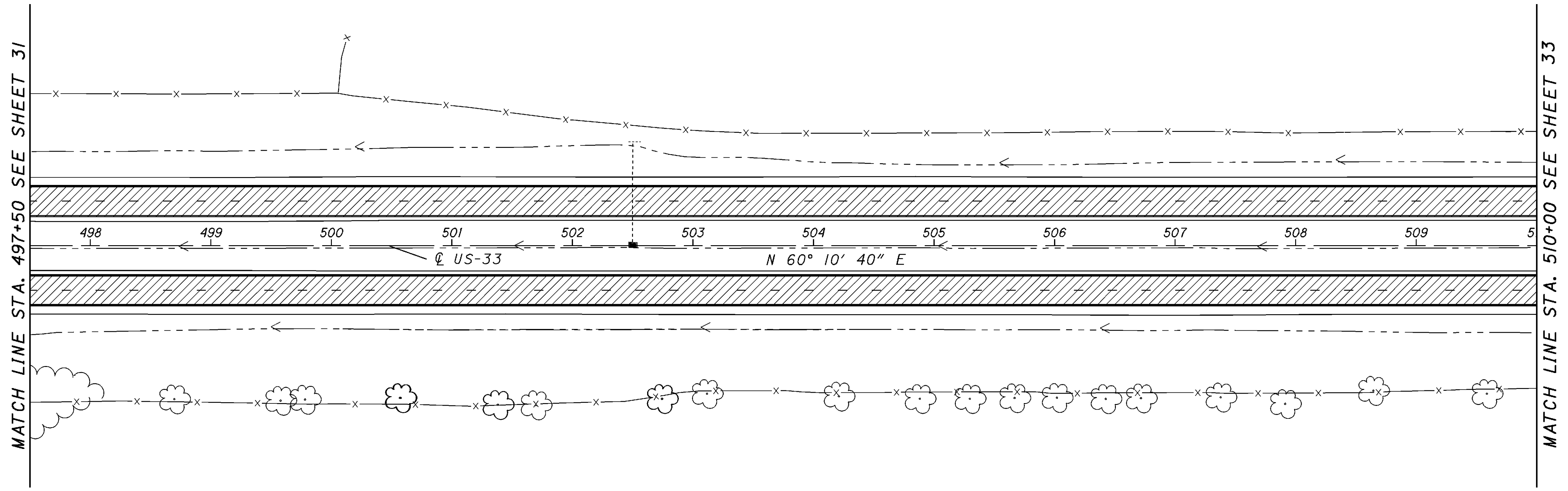
PAVING LIMITS

CALCULATED
DIP/PK
CHECKED
C/C

0 25 50 100
HORIZONTAL
SCALE IN FEET

PLAN VIEW UNI-US33
STA. 485+00 TO STA. 497+50

S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD									
485+42	497+50	26'	RT	3,490	262	145	14									MAINLINE US 33
485+42	497+50	26'	LT	3,490	262	145	14									MAINLINE US 33
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				6,980	524	290	28									



 PAVING LIMITS

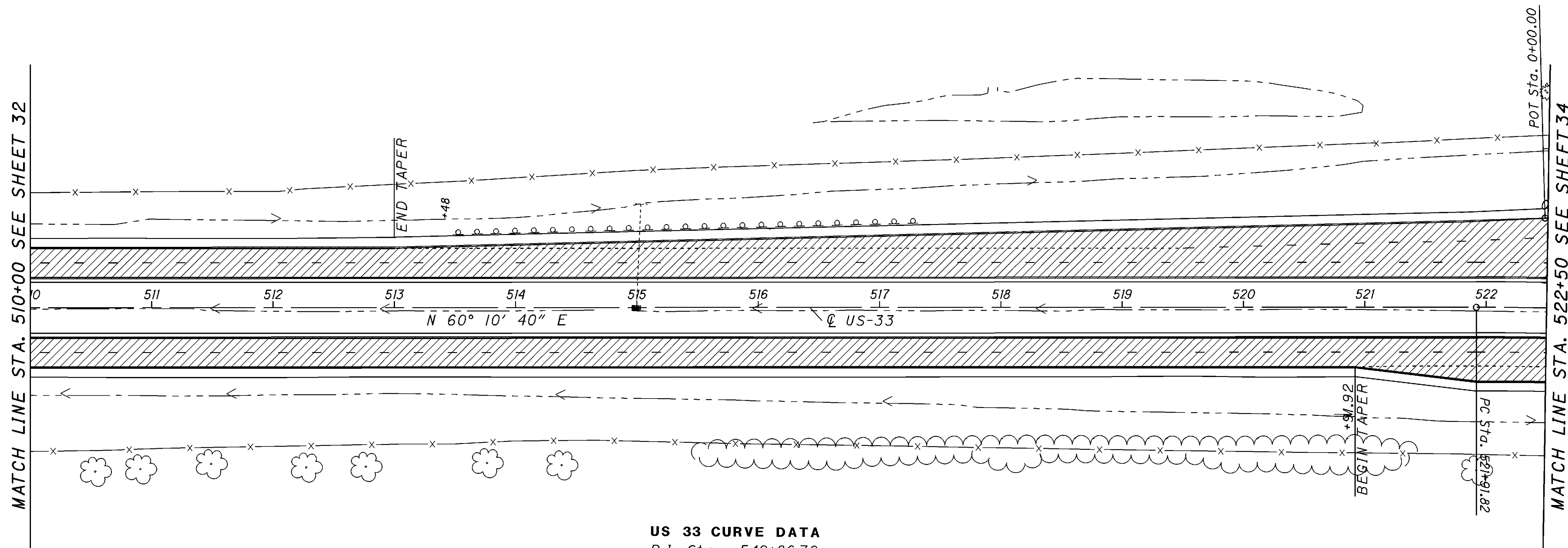
S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD									
497+50	510+00	26'	RT	3,611	271	150	16									MAINLINE US 33
497+50	510+00	26'	LT	3,611	271	150	16									MAINLINE US 33
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				7,222	542	300	32									

PLAN VIEW UNI-US33
STA. 497+50 TO STA. 510+00

UNI -33-8.74

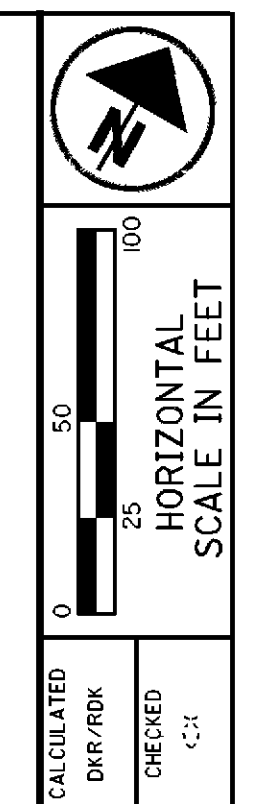
32
108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GPO05 13-NOV-2012 1:41PM drankin



US 33 CURVE DATA
P.I. Sta = 549+86.70
 $\Delta = 71^\circ 10' 01''$ (RT)
 $D_c = 1^\circ 28' 00''$
 $R = 3,906.22'$
 $T = 2,794.87'$
 $L = 4,851.91'$
 $E = 896.89'$
PC Sta. 521+91.82
PT Sta. 570+43.73

PAVING LIMITS



PLAN VIEW UNI-US33
 STA. 510+00 TO STA. 522+50

S T A	S T A	W I D T H	S I D E	254	407	442	617	REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
510+00	520+91	26'	RT	3,152	236	131	14	MAINLINE US 33
520+91	522+50	25'	RT	442	33	18		MAINLINE US 33
520+91	521+91	7.5'	RT	83	6	3	2	MAINLINE US 33 ENT. RAMP G AVG. WIDTH
521+91	522+50	13'	RT	85	6	4		MAINLINE US 33 EXIT RAMP G
510+00	513+00	26'	LT	867	65	36	4	MAINLINE US 33
513+00	522+50	7.5'	LT	792	59	33	6	MAINLINE US 33 CD ROAD ENT. RAMP TAPER
513+00	522+50	25	LT	2,639	198	110	6	MAINLINE US 33
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				8,060	605	335	32	

UNI-33-8.74

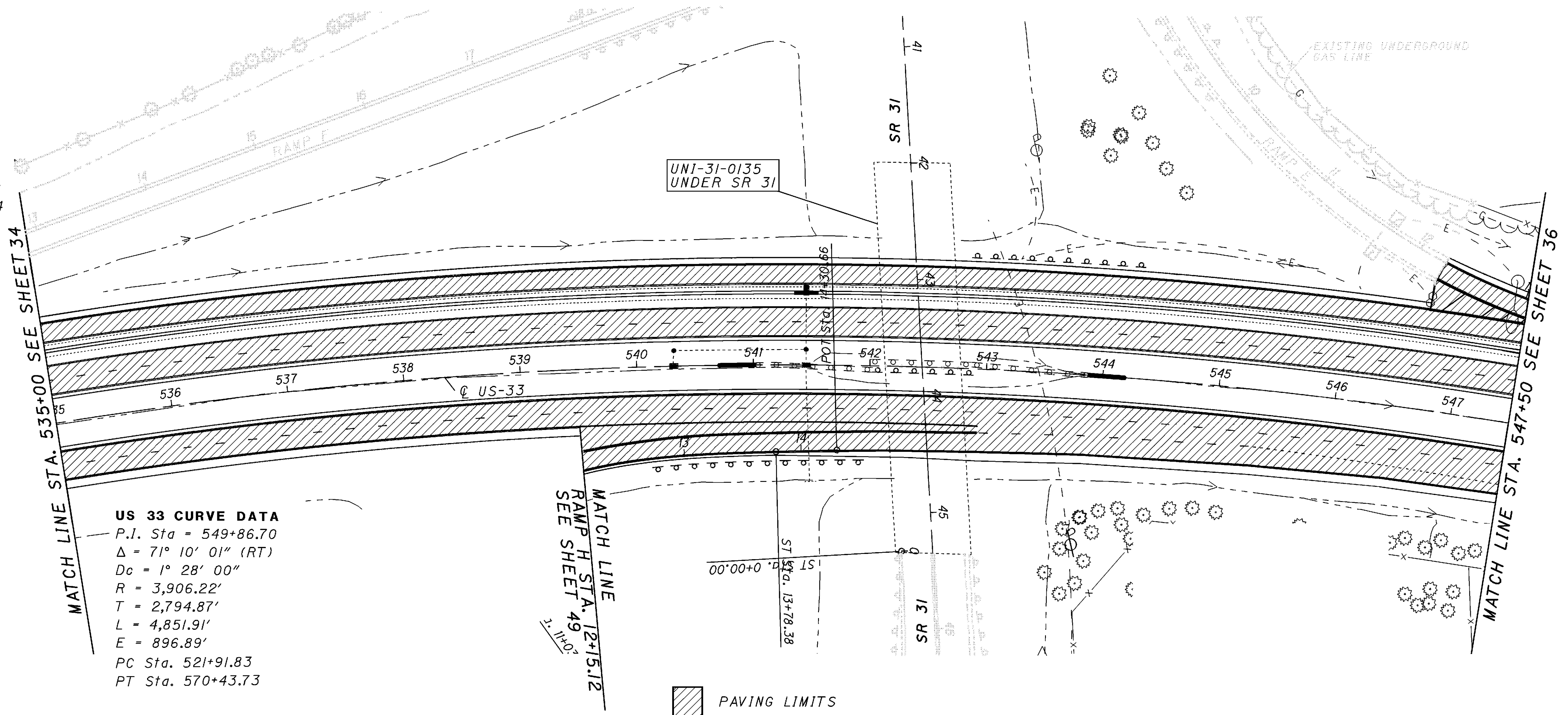
RAMP H CURVE DATA

$\Delta = 271^\circ 45' 40''$ (RT)
 $R = 230.00'$
 $Lc = 803.42'$
 $Lsl = 300.00'$
 $\theta sl = -37^\circ 22' 01''$
 $Xcl = 287.49$
 $Ycl = 63.26'$
 $PI = 16.06'$
 $KI = 147.90'$
 TS Sta. 0+00.00
 SC Sta. 3+00.01
 CS Sta. 11+03.43
 ST Sta. 13+78.44
 $Ls2 = 275.00'$

$Xc2 = 265.33'$
 $Yc2 = 53.42'$
 $K2 = 135.88'$
 $Lt2 = 186.89'$
 $St2 = 94.91$

US 33 CURVE DATA

P.I. Sta = 549+86.70
 $\Delta = 71^\circ 10' 01''$ (RT)
 $Dc = 1^\circ 28' 00''$
 $R = 3,906.22'$
 $T = 2,794.87'$
 $L = 4,851.91'$
 $E = 896.89'$
 PC Sta. 521+91.83
 PT Sta. 570+43.73



PAVING LIMITS

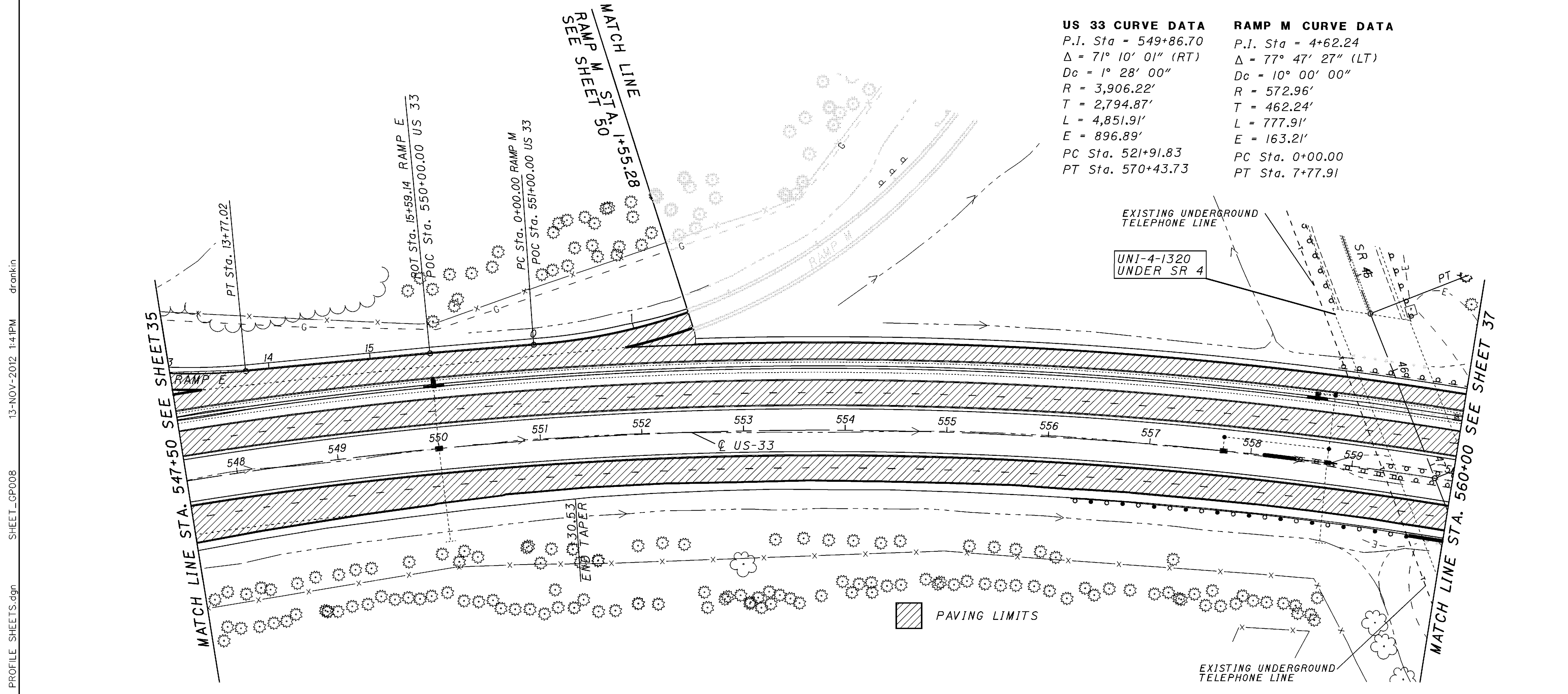
I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP007 13-NOV-2012 1:41PM drankin



PLAN VIEW UNI-US33
 STA. 535+00 TO STA. 547+50

S	S	W	S	254	407	442	617								REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD								
535+00	542+90	26'	RT	2,282	171	95	10								MAINLINE US 33
542+90	547+50	25'	RT	1,278	96	53	3								MAINLINE US 33 ENT. RAMP H
530+50	542+90	14'	RT	1,929	145	80	8								MAINLINE US 33 ENT. RAMP H
542+90	547+50	9'	RT	460	35	19	3								MAINLINE US 33 ENT. RAMP H AVG. WIDTH
535+00	547+50	26'	LT	3,611	271	150	8								MAINLINE US 33
535+00	547+50	18'	LT	2,500	188	104	8								CD ROAD
546+71	547+50	14'	LT	123	9	5									CD ROAD EXIT RAMP E
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				12,183	914	506	40								

UNI-33-8.74



CALCULATED
 DRAWN
 CHECKED

0 25 50 100
 HORIZONTAL
 SCALE IN FEET

PLAN VIEW UNI-US33
 STA. 547+50 TO STA. 560+00

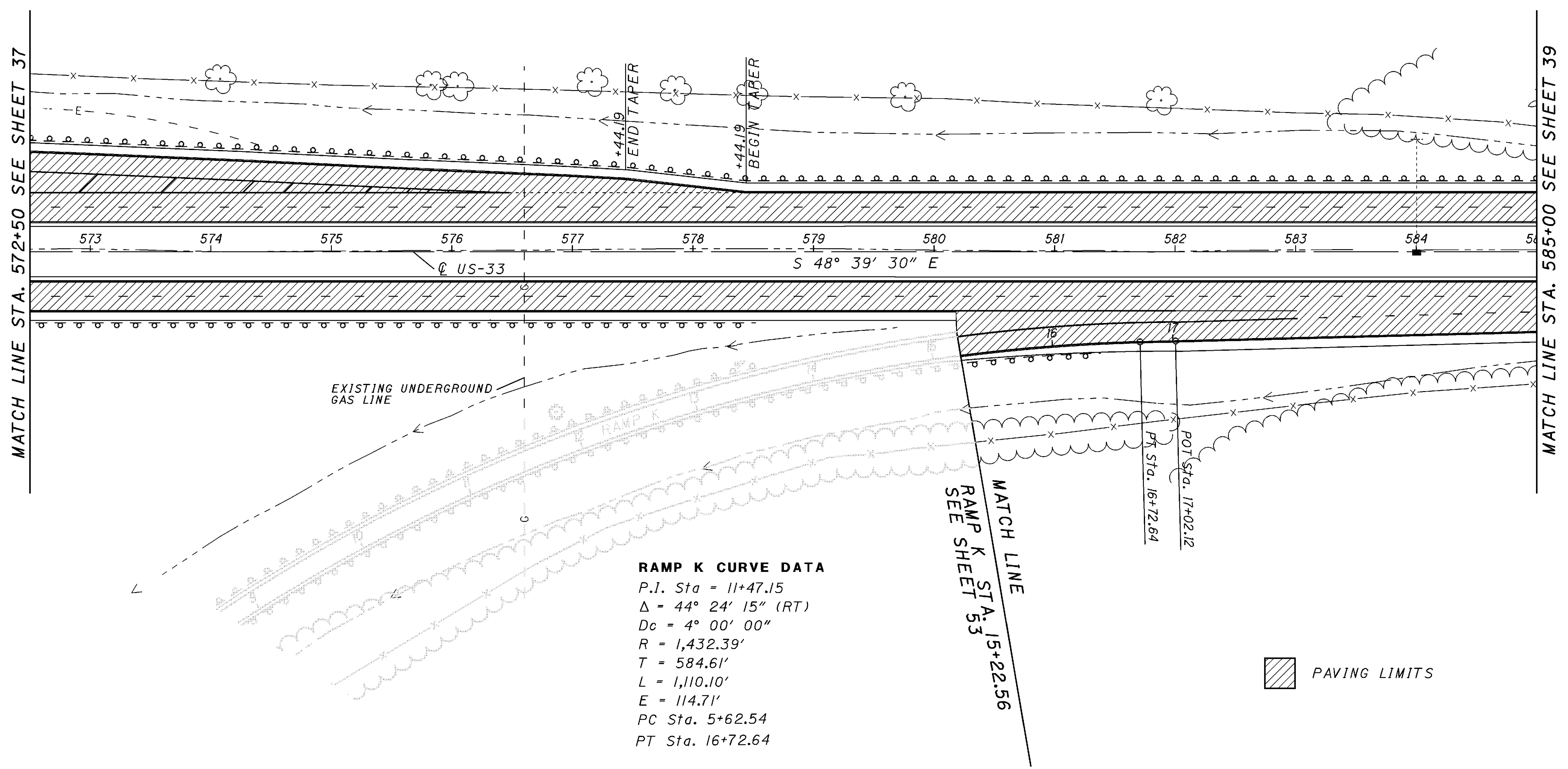
S T A	S T A	W I D T H	S I D E	254	407	442	617	REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
547+50	551+30	25'	RT	1,056	79	44	2	MAINLINE US 33
547+50	551+30	6'	RT	253	19	11	2	MAINLINE US 33 ENT. RAMP H AVG. WIDTH
551+30	560+00	26'	RT	2,513	188	105	10	MAINLINE US 33
547+50	560+00	26'	LT	3,611	271	150	8	MAINLINE US 33
547+50	547+80	14'	LT	47	4	2		CD ROAD RAMP E
547+80	552+15	13'	LT	628	47	26	3	CD ROAD RAMP E & RAMP M
552+15	552+55	14'	LT	62	5	3		CD ROAD RAMP M
547+50	552+15	17'	LT	878	66	37	3	CD ROAD RAMP E & RAMP M
552+15	560+00	18'	LT	1,570	118	65	5	CD ROAD
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				10,618	796	443	33	

UNI-33-8.74

36
108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet.dgn SHEET_GP008 13-NOV-2012 1:41PM drankin

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP010 13-NOV-2012 1:41PM drankin



RAMP K CURVE DATA
 P.I. Sta = 11+47.15
 $\Delta = 44^\circ 24' 15''$ (RT)
 $D_c = 4^\circ 00' 00''$
 $R = 1,432.39'$
 $T = 584.61'$
 $L = 1,110.10'$
 $E = 114.71'$
 PC Sta. 5+62.54
 PT Sta. 16+72.64

PAVING LIMITS

S	S	W	S	254	407	442	617								REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD								
572+50	583+00	26'	RT	3,033	227	126	12								MAINLINE US 33
580+20	583+00	14'	RT	436	33	18	2								MAINLINE US 33 ENT. RAMP K
580+20	583+00	22'	RT	684	51	29	2								MAINLINE US 33 ENT. RAMP K
583+00	585+00	23'	RT	511	38	21	1								MAINLINE US 33 ENT. RAMP K AVG. WIDTH
572+50	585+00	26'	LT	3,611	271	150	16								MAINLINE US 33
572+50	576+50	18'	LT	800	60	33	2								CD ROAD
576+50	578+45	10'	LT	217	16	9	1								CD ROAD ENT. TAPER
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				9,292	697	386	36								

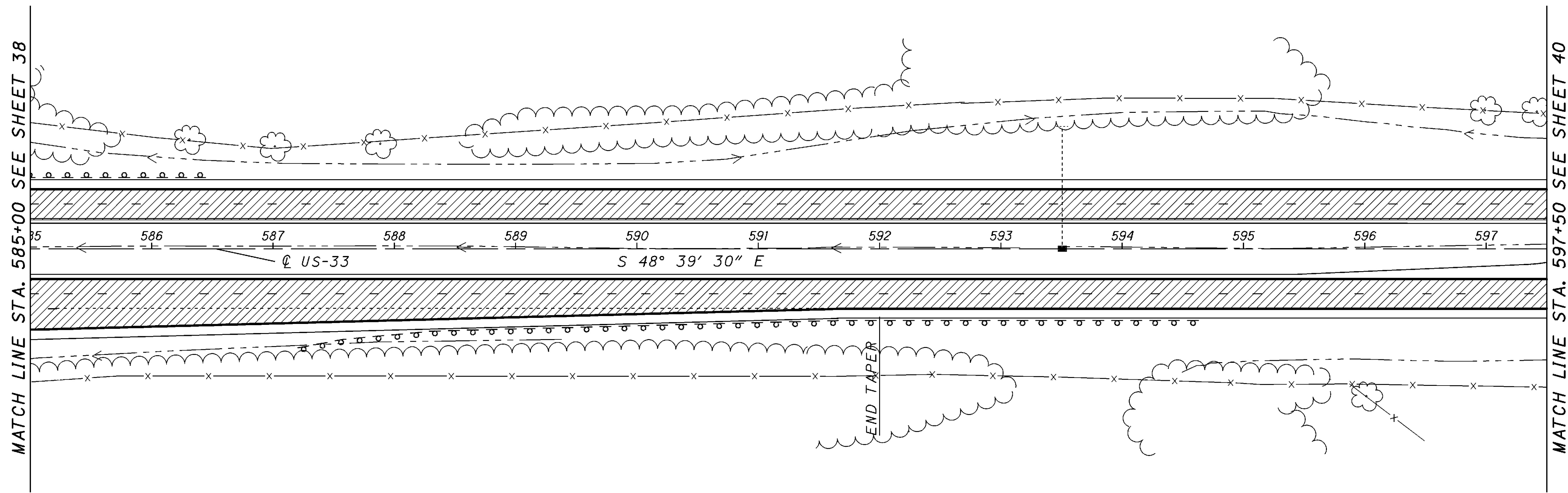
PLAN VIEW UNI-US33
STA. 572+00 TO STA. 585+00

UNI-33-8.74

38
108

CALCULATED: []
 DRAWN: []
 CHECKED: []

0 25 50 100
 HORIZONTAL SCALE IN FEET



PAVING LIMITS

S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD									
585+00	592+00	25'	RT	1,944	146	81	4									MAINLINE US 33
585+00	592+00	7.5'	RT	583	44	24	4									MAINLINE US 33 ENT. RAMP K AVG. WIDTH
592+00	597+50	26'	RT	1,589	119	66	6									MAINLINE US 33
585+00	597+50	26'	LT	3,611	271	150	16									MAINLINE US 33
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				7,727	580	321	30									

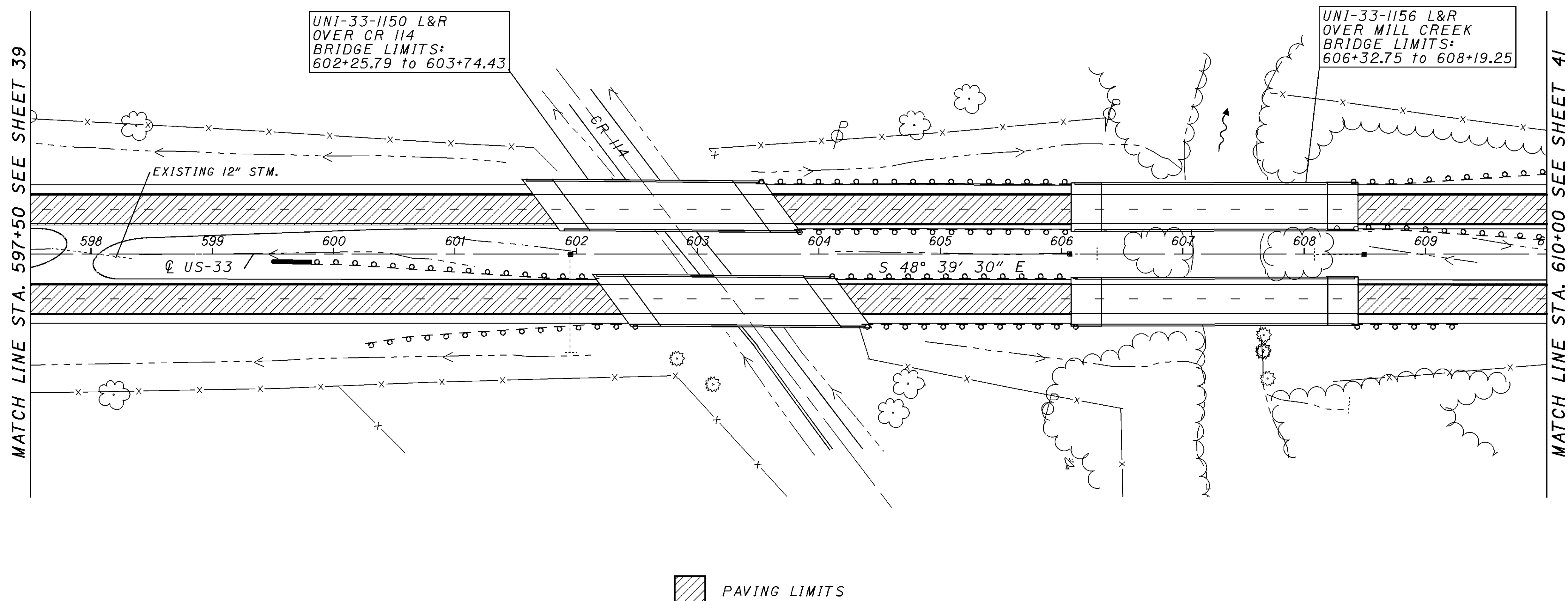
0 25 50 100
HORIZONTAL
SCALE IN FEET

CALCULATED
DIR/PK
CHECKED
C/C

PLAN AND SUBSUMMARY
US 33 STA. 585+00 TO STA. 597+50

UNI -33-8.74

39
108



PAVING LIMITS

S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK	
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD										
597+50	602+30	26'	RT	1,387	104	58	6									MAINLINE US 33	
604+25	606+10	26'	RT	534	40	22	2									MAINLINE US 33	
608+45	610+00	26'	RT	448	34	19	2									MAINLINE US 33	
597+50	601+70	26'	LT	1,213	91	51	6									MAINLINE US 33	
603+70	606+10	26'	LT	693	52	29	2									MAINLINE US 33	
608+45	610+00	26'	LT	448	34	19	2									MAINLINE US 33	
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				4,723	354	198	20										

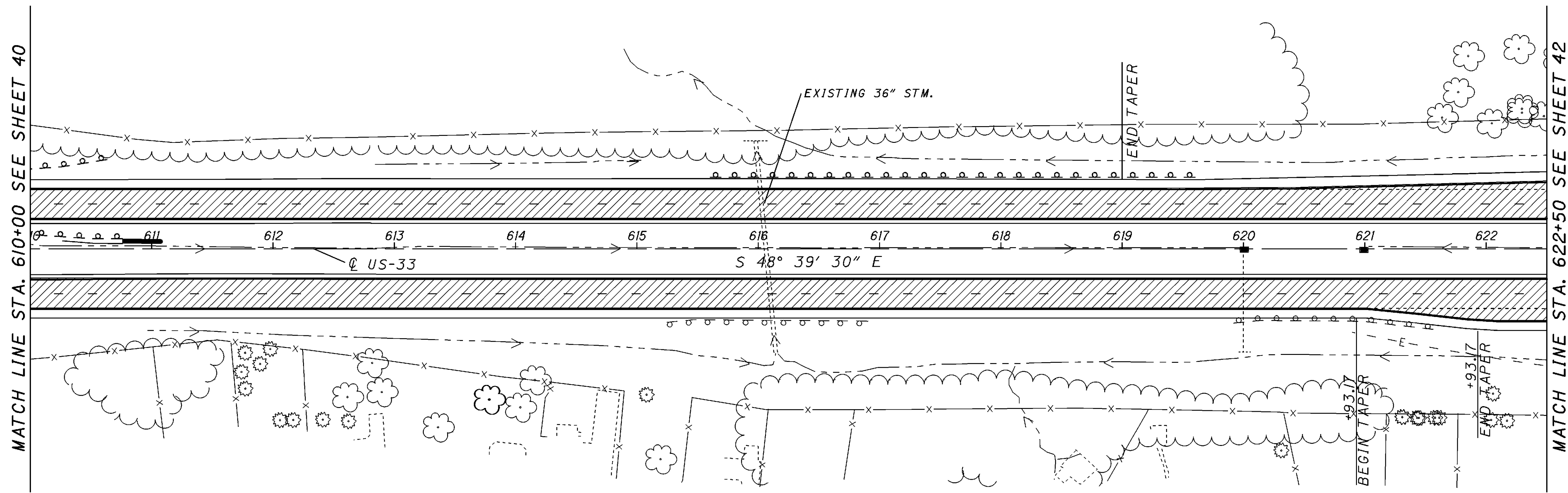
HORIZONTAL SCALE IN FEET

CALCULATED
DWR/PWK
CHECKED
C/C

PLAN VIEW UNI-US33
STA. 597+50 TO STA. 610+00

UNI-33-8.74

40
108



PAVING LIMITS

S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD									
610+00	620+90	26'	RT	3,149	236	131	14									MAINLINE US 33
620+90	622+50	25'	RT	444	33	19	1									MAINLINE US 33
620+90	621+90	7	RT	78	6	3	1									MAINLINE US 33 EXIT RAMP A AVG. WIDTH
621+90	622+50	13	RT	87	7	4	1									MAINLINE US 33 EXIT RAMP A
610+00	622+50	26'	LT	3,611	271	150	16									MAINLINE US 33
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				7,369	553	307	33									

CALCULATED
DIR/PWK
CHECKED
CZ

0 25 50 100
HORIZONTAL
SCALE IN FEET

PLAN VIEW UNI-US33
STA. 610+00 TO STA. 622+50

UNI-33-8.74

41
108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP014 13-NOV-2012 1:42PM drankin

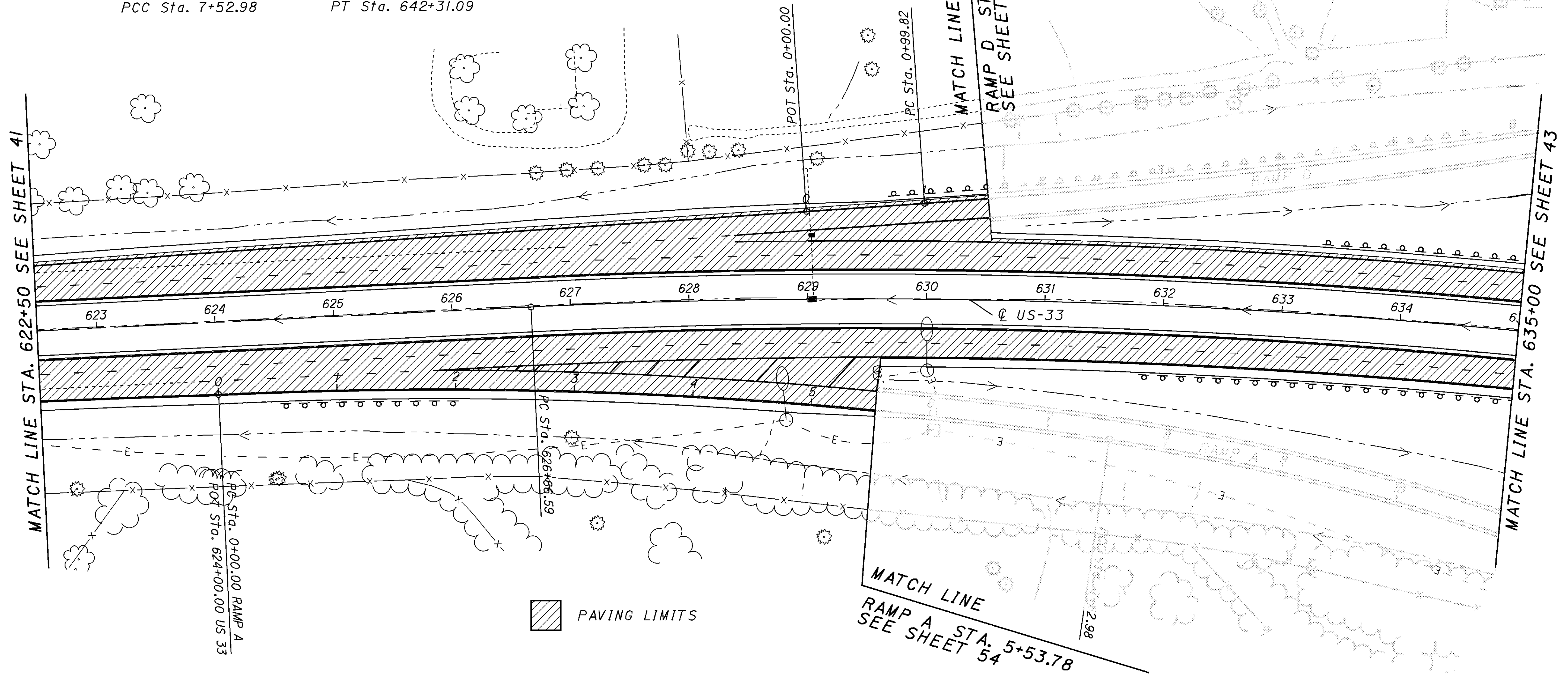
RAMP A CURVE DATA
 P.I. Sta = 3+77.71
 $\Delta = 11^\circ 17' 41''$ (RT)
 $D_c = 1^\circ 30' 00''$
 $R = 3,819.71'$

 $L = 752.98'$
 $E = 18.63'$
 PC Sta. 0+00.00
 PCC Sta. 7+52.98

US 33 CURVE DATA
 P.I. Sta = 634+53.74
 $\Delta = 15^\circ 38' 42''$ (RT)
 $D_c = 1^\circ 00' 00''$
 $R = 5,729.60'$
 $T = 787.15'$
 $L = 1,564.51'$
 $E = 53.82'$
 PC Sta. 626+66.59
 PT Sta. 642+31.09

RAMP D CURVE DATA
 P.I. Sta = 5+00.47
 $\Delta = 8^\circ 00' 00''$ (LT)
 $D_c = 1^\circ 00' 00''$
 $R = 5,729.58'$
 $T = 400.65'$
 $L = 800.00'$
 $E = 13.99'$
 PC Sta. 0+99.82

P.I. Sta = 10+47.98
 $= 17^\circ 33' 39''$ (RT)
 $D_c = 3^\circ 00' 00''$
 $R = 1,909.86'$
 $T = 294.99'$
 $L = 585.36'$
 $E = 22.65'$
 PCC Sta. 7+52.98
 PT Sta. 13+38.34

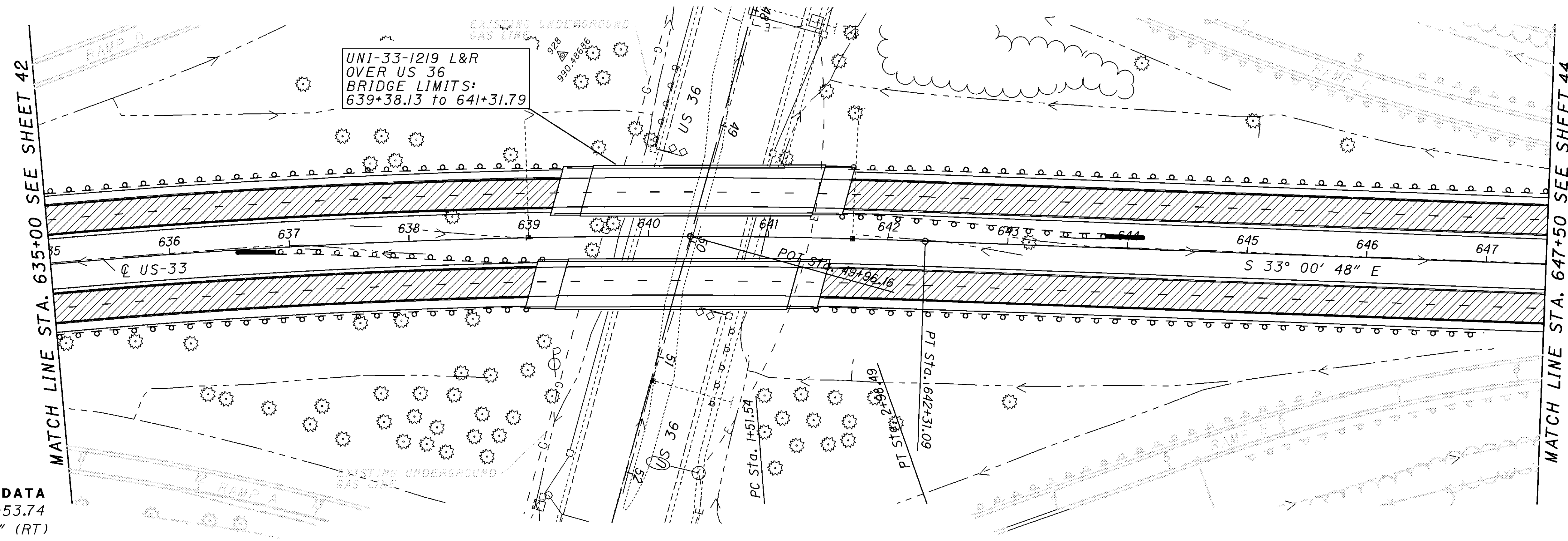


PLAN VIEW UNI-US33
 STA. 622+50 TO STA. 635+00

S	T	A	W	I	D	E	H	254	407	442	617	REMARK	
								PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD		
622+50	625+85	25'	RT	931	70	39	2					MAINLINE US 33	
622+50	625+85	13'	RT	484	36	20	2					MAINLINE US 33 EXIT RAMP A	
625+85	629+58	14'	RT	580	44	24	2					MAINLINE US 33 EXIT RAMP A	
625+85	635+00	24'	RT	2,440	183	102	12					MAINLINE US 33	
622+50	628+40	25'	LT	1,639	123	68	4					MAINLINE US 33	
622+50	628+40	13'	LT	852	64	36	4					MAINLINE US 33 ENT. RAMP D	
628+40	630+52	14'	LT	330	25	14	1					MAINLINE US 33 ENT. RAMP D	
628+40	635+00	26'	LT	1,907	143	79	8					MAINLINE US 33	
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108								9,163	687	382	35		

UNI-33-8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet\sheet.dgn 13-NOV-2012 1:42PM drankin



US 33 CURVE DATA
 P.I. Sta = 634+53.74
 $\Delta = 15^\circ 38' 42''$ (RT)
 $D_c = 1^\circ 00' 00''$
 $R = 5,729.60'$
 $T = 787.15'$
 $L = 1,564.51'$
 $E = 53.82'$
 PC Sta. 626+66.59
 PT Sta. 642+31.09

PAVING LIMITS

S	S	W	S	254	407	442	617	REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
635+00	639+05	26'	RT	1,170	88	49	6	MAINLINE US 33
641+46	647+50	26'	RT	1,745	131	73	8	MAINLINE US 33
635+00	639+25	26'	LT	1,228	92	51	6	
641+65	647+50	26'	LT	1,690	127	70	8	
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				5,833	437	243	28	

CALCULATED: _____
 DRAWN BY: _____
 CHECKED: _____

HORIZONTAL SCALE IN FEET

PLAN VIEW UNI-US33

STA. 635+00 TO STA. 647+50

UNI -33-8.74

43

108

RAMP C CURVE DATA

P.I. Sta = 10+47.46
 $\Delta = 8^\circ 17' 46''$ (LT)
 $D_c = 1^\circ 30' 00''$
 $R = 3,819.72'$
 $T = 277.02'$
 $L = 553.07'$
 $E = 10.03'$
 PCC Sta. 7+70.44
 PT Sta. 13+23.52

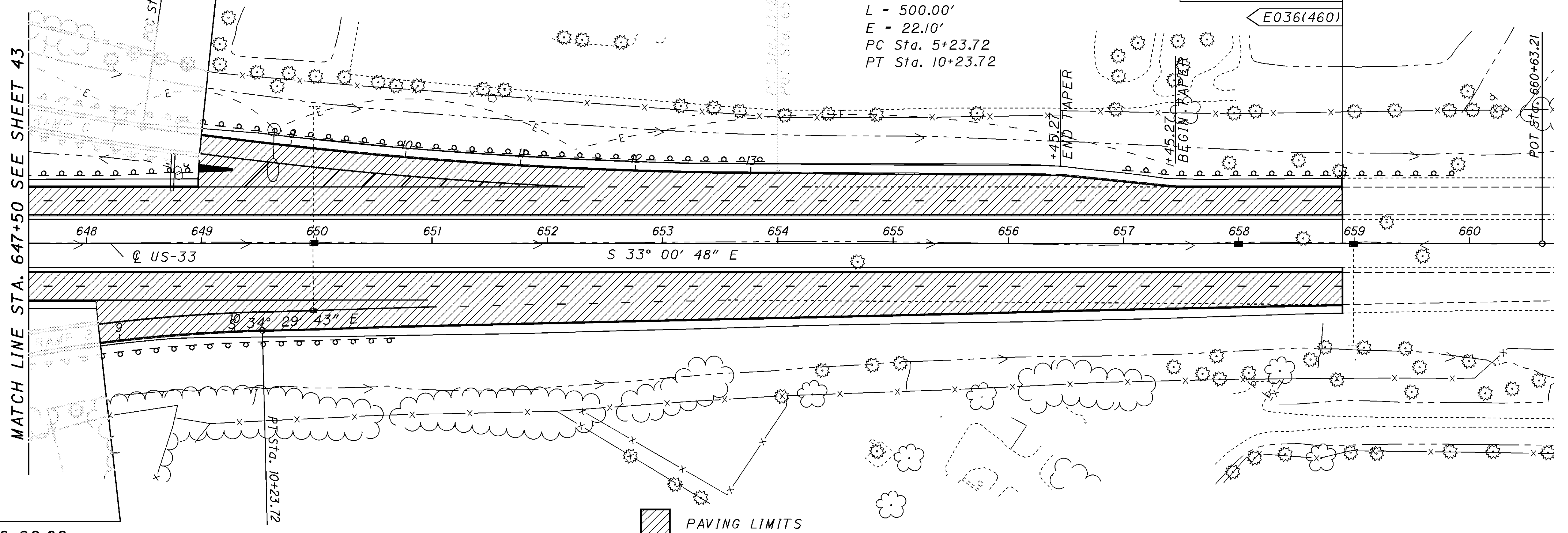
MATCH LINE

RAMP C STA. 8+22.35
SEE SHEET 57

RAMP B CURVE DATA

P.I. Sta = 7+76.29
 $\Delta = 20^\circ 00' 00''$ (RT)
 $D_c = 4^\circ 00' 00''$
 $R = 1,432.39'$
 $T = 252.57'$
 $L = 500.00'$
 $E = 22.10'$
 PC Sta. 5+23.72
 PT Sta. 10+23.72

END PROJECT
 UNI-33-8.74
 SR 33
 STA 658+89.85
 SLM = 12.59



MATCH LINE

RAMP B STA. 8+82.68
SEE SHEET 56

PAVING LIMITS

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile_sheets.dgn SHEET_GP016 13-NOV-2012 1:42PM drankin



PLAN VIEW UNI-US33
 STA. 647+50 TO STA. 658+89.85

S T A	S T A	W I D T H	S I D E	254 PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	407 TACK COAT 0.075 GAL. PER SQ. YD. GAL.	442 ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	617 COMPACTED AGGREGATE (2" DEPTH) CU YD												REMARK
647+50	650+96	26'	RT	1,000	75	42	4												MAINLINE US 33
648+10	650+96	14'	RT	445	33	19	2												MAINLINE US 33 ENT. RAMP B
650+96	658+89	13'	RT	1,145	86	48	5												MAINLINE US 33 ENT. RAMP B AVG. WIDTH
650+96	658+89	25'	RT	2,203	165	92	5												MAINLINE US 33
647+50	652+25	26'	LT	1,372	103	57	6												MAINLINE US 33
648+95	652+25	14'	LT	513	38	21	2												MAINLINE US 33 EXIT RAMP C
652+25	656+45	13'	LT	607	46	25	3												MAINLINE US 33 EXIT RAMP C
656+45	657+45	7'	LT	78	6	3	1												MAINLINE US 33 EXIT RAMP C AVG. WIDTH
657+45	658+89	26'	LT	416	31	17	2												MAINLINE US 33
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				7,779	583	324	30												

UNI - 33 - 8.74
 44
 108

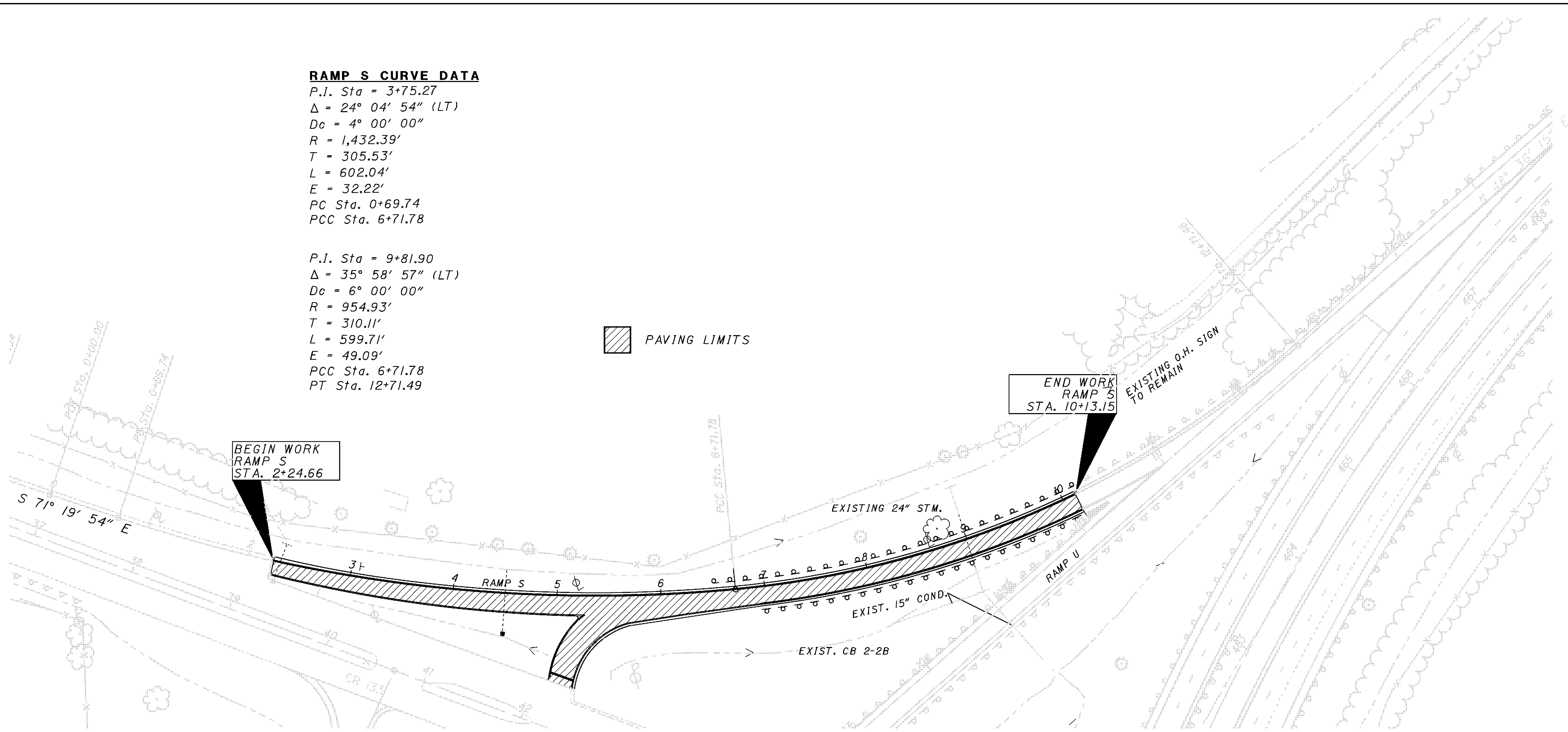
I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP201 13-NOV-2012 1:42PM drankin

RAMP S CURVE DATA

P.I. Sta = 3+75.27
 $\Delta = 24^\circ 04' 54''$ (LT)
 $Dc = 4^\circ 00' 00''$
 $R = 1,432.39'$
 $T = 305.53'$
 $L = 602.04'$
 $E = 32.22'$
 PC Sta. 0+69.74
 PCC Sta. 6+71.78

P.I. Sta = 9+81.90
 $\Delta = 35^\circ 58' 57''$ (LT)
 $Dc = 6^\circ 00' 00''$
 $R = 954.93'$
 $T = 310.11'$
 $L = 599.71'$
 $E = 49.09'$
 PCC Sta. 6+71.78
 PT Sta. 12+71.49

 PAVING LIMITS



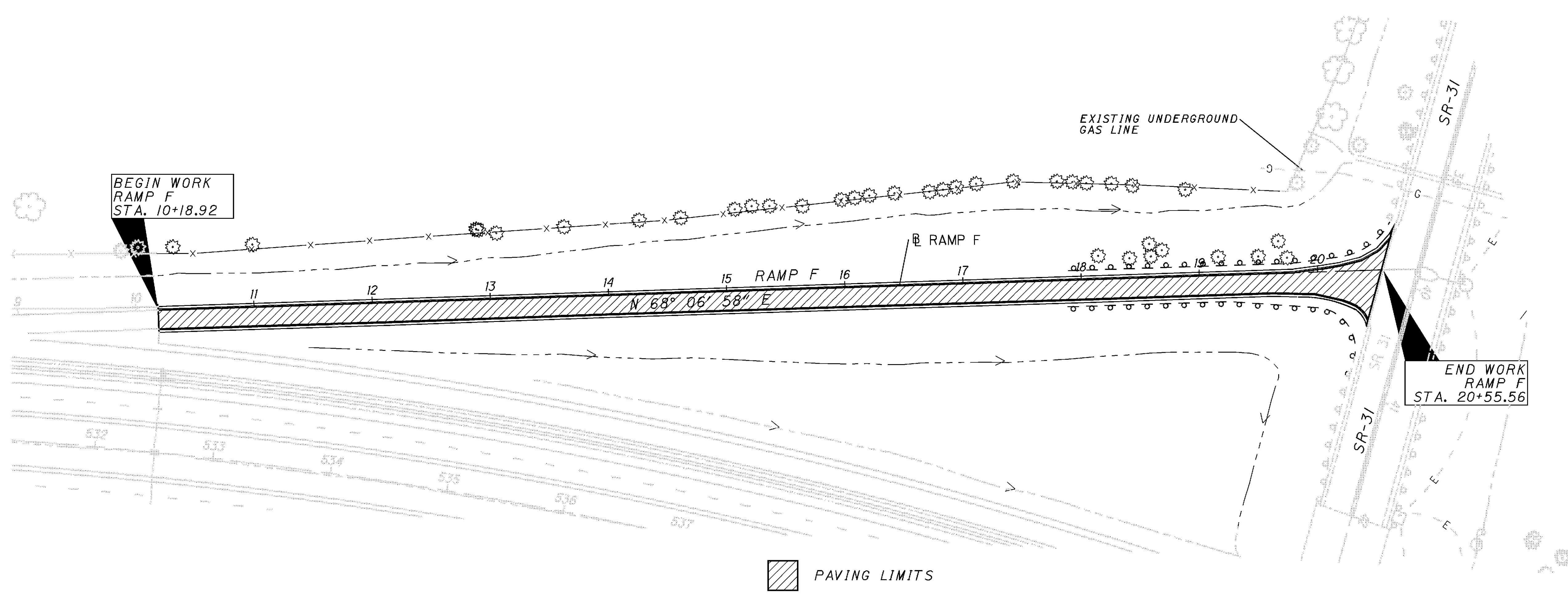
S	T	A	W	I	D	E	H	254	407	442	617	REMARK
								PAVEMENT PLANING ASPHALT COURSE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
	2+24	5+20	18'		LT			592	44	25	2	RAMP S LT SLIP RAMP
	5+04	5+20	18'		RT			32	2	1	1	RAMP S RT SLIP RAMP
	5+20	7+00	32'		LT & RT			640	48	27	1	RAMP S TAPER AVG. WIDTH
	7+00	10+13	18'					626	47	26	2	RAMP S
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108								1,890	142	79	6	

PLAN VIEW UNI-US33 RAMP S

UNI - 33 - 8.74

46
108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP203 13-NOV-2012 1:42PM drankin

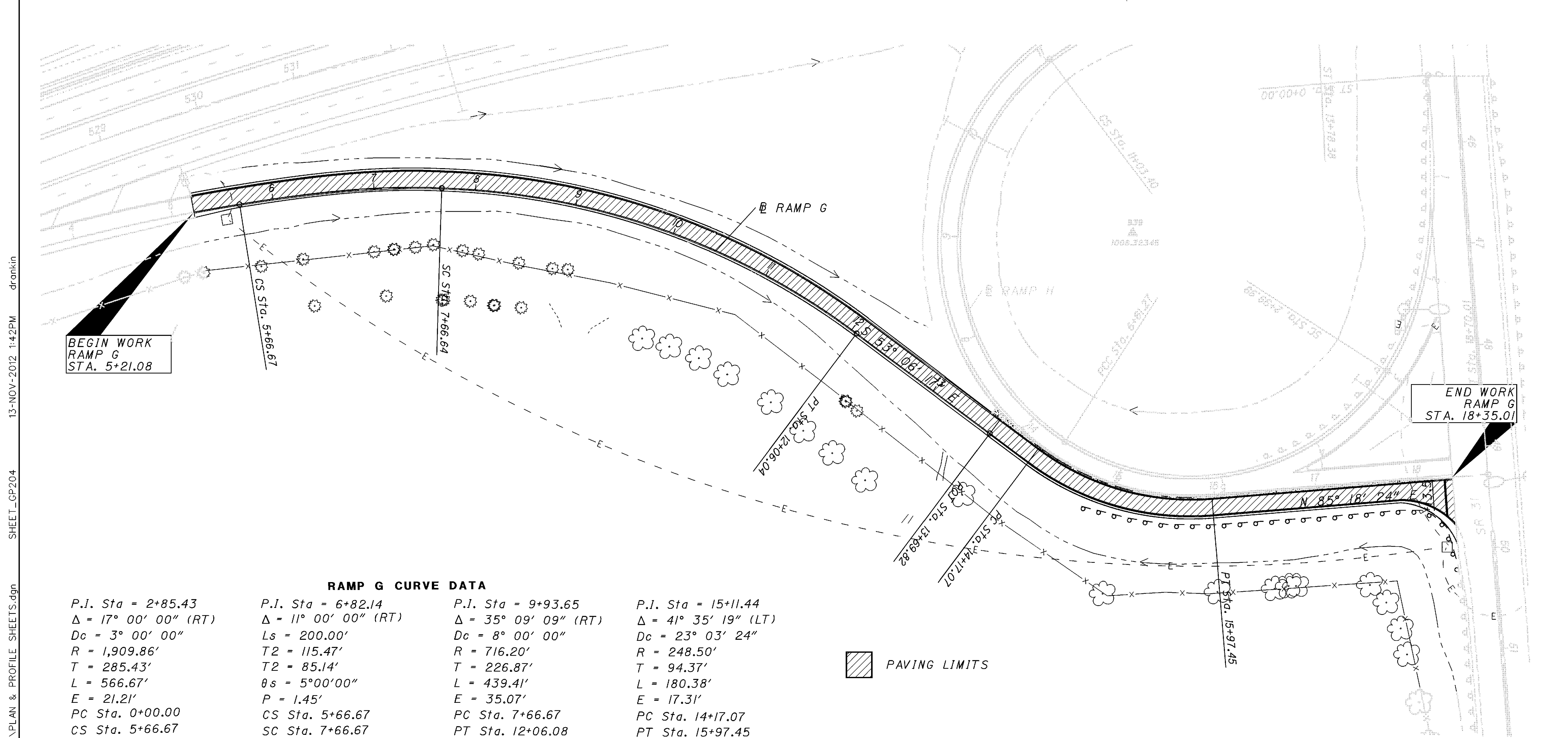


CALCULATED
DRAWN
CHECKED

0 25 50 100
HORIZONTAL
SCALE IN FEET

PLAN VIEW UNI-US33
RAMP F

S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446)	COMPACTED AGGREGATE (2" DEPTH)									
10+18	19+78	18'		1,920	144	80	6									RAMP F
19+78	20+55	48'		411	31	17	1									RAMP F TAPER AVG. WIDTH
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				2,331	175	97	7									



RAMP G CURVE DATA

P.I. Sta = 2+85.43	P.I. Sta = 6+82.14	P.I. Sta = 9+93.65	P.I. Sta = 15+11.44
$\Delta = 17^\circ 00' 00''$ (RT)	$\Delta = 11^\circ 00' 00''$ (RT)	$\Delta = 35^\circ 09' 09''$ (RT)	$\Delta = 41^\circ 35' 19''$ (LT)
$Dc = 3^\circ 00' 00''$	$Ls = 200.00'$	$Dc = 8^\circ 00' 00''$	$Dc = 23^\circ 03' 24''$
$R = 1,909.86'$	$T2 = 115.47'$	$R = 716.20'$	$R = 248.50'$
$T = 285.43'$	$T2 = 85.14'$	$T = 226.87'$	$T = 94.37'$
$L = 566.67'$	$\theta s = 5^\circ 00' 00''$	$L = 439.41'$	$L = 180.38'$
$E = 21.21'$	$P = 1.45'$	$E = 35.07'$	$E = 17.31'$
PC Sta. 0+00.00	CS Sta. 5+66.67	PC Sta. 7+66.67	PC Sta. 14+17.07
CS Sta. 5+66.67	SC Sta. 7+66.67	PT Sta. 12+06.08	PT Sta. 15+97.45

PAVING LIMITS

S	T	A	W	I	D	E	H	254	407	442	617	REMARK
								PAVEMENT PLANING ASPHALT COURSE	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE (2" DEPTH)	COMPACTED AGGREGATE (2" DEPTH)	
5+21	17+80	18'	RT	2,518	189	105	8					RAMP G
17+80	18+35	27'	LT	165	12	7						RAMP G TAPER AVG. WIDTH
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108								2,683	201	112	8	

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\PLAN & PROFILE SHEETS.dgn SHEET_GP204 13-NOV-2012 1:42PM drankin

0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED
DRAFTER
CHECKED

PLAN VIEW UNI-US33
RAMP M

UNI -33-8.74

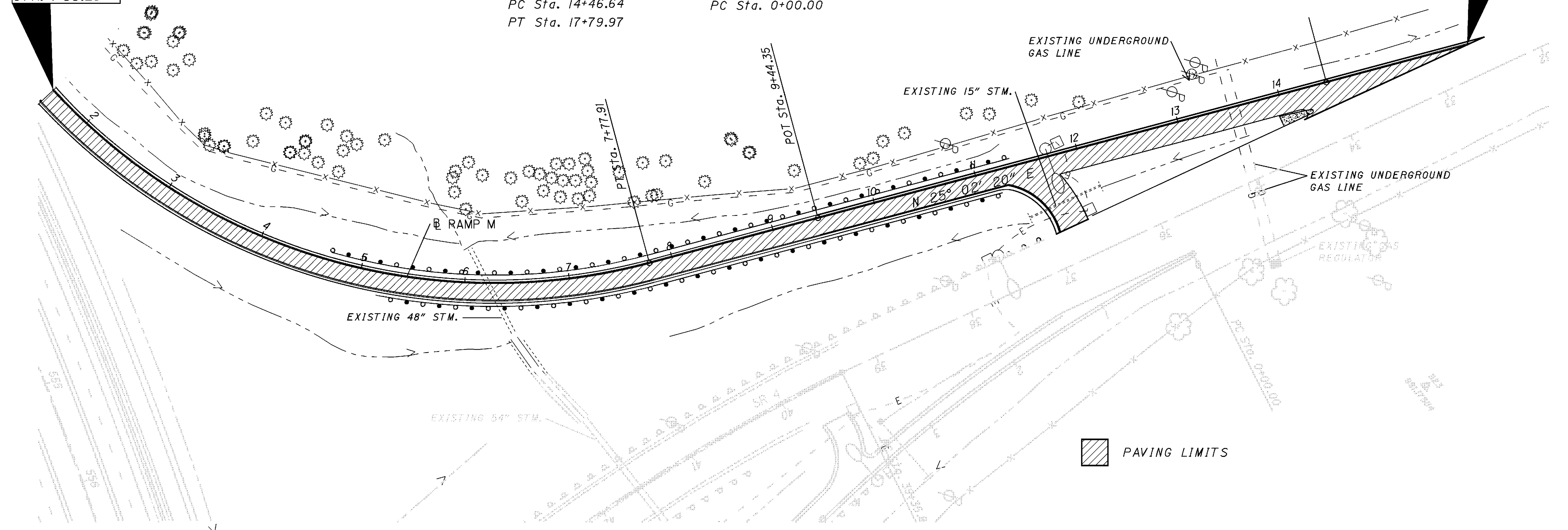
50
108

RAMP M CURVE DATA

P.I. Sta = 16+13.73	P.I. Sta = 4+62.24
$\Delta = 10^\circ 00' 00''$ (LT)	$\Delta = 77^\circ 47' 27''$ (LT)
Dc = 3° 00' 00"	Dc = 10° 00' 00"
R = 1,909.86'	R = 572.96'
T = 167.09'	T = 462.24'
L = 333.33'	L = 777.91'
E = 7.30'	E = 163.21'
PC Sta. 14+46.64	PC Sta. 0+00.00
PT Sta. 17+79.97	

BEGIN WORK
RAMP M
STA. 1+55.28

BEGIN WORK
RAMP M
STA. 15+86.00



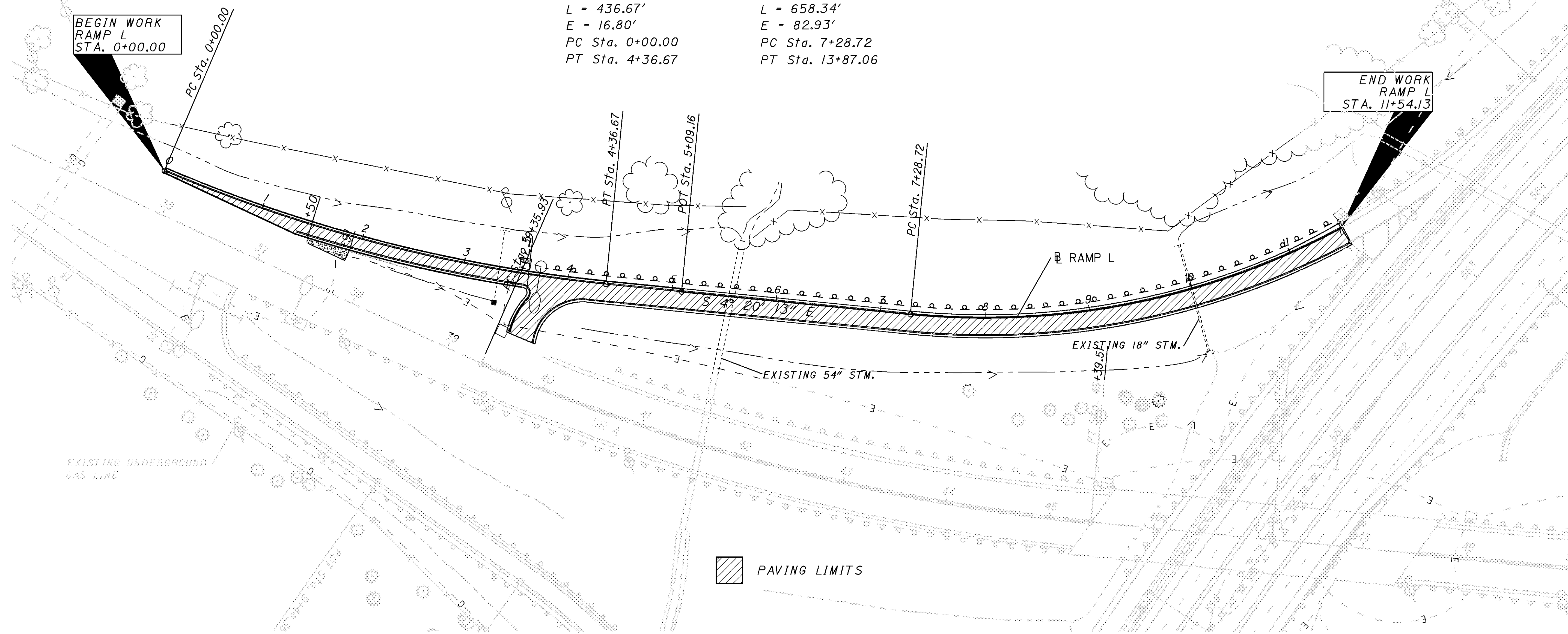
S	T	A	W	I	D	T	H	S	E	254	407	442	617	REMARK
										PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
0+00	14+17	18'	RT & LT							2834	213	118	9	RAMP M
14+17	15+86	20'	RT & LT							376	28	16	1	RAMP M TAPER
11+25		VAR	RT							216	16	9		RAMP M SLIP RAMP
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108										3,426	257	143	10	

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet.dgn SHEET_GP208 13-NOV-2012 1:42PM drankin

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP209 13-NOV-2012 1:42PM drankin

RAMP L CURVE DATA

P.I. Sta = 2+20.04	P.I. Sta = 10+83.21
$\Delta = 17^\circ 28' 00''$ (LT)	$\Delta = 52^\circ 40' 00''$ (LT)
$Dc = 4^\circ 00' 00''$	$Dc = 8^\circ 00' 00''$
$R = 1,432.39'$	$R = 716.20'$
$T = 220.04'$	$T = 354.49'$
$L = 436.67'$	$L = 658.34'$
$E = 16.80'$	$E = 82.93'$
PC Sta. 0+00.00	PC Sta. 7+28.72
PT Sta. 4+36.67	PT Sta. 13+87.06



CALCULATED
DRAWN
CHECKED
CCT

0 50 100
HORIZONTAL
SCALE IN FEET

N

**PLAN VIEW UNI-US33
RAMP L**

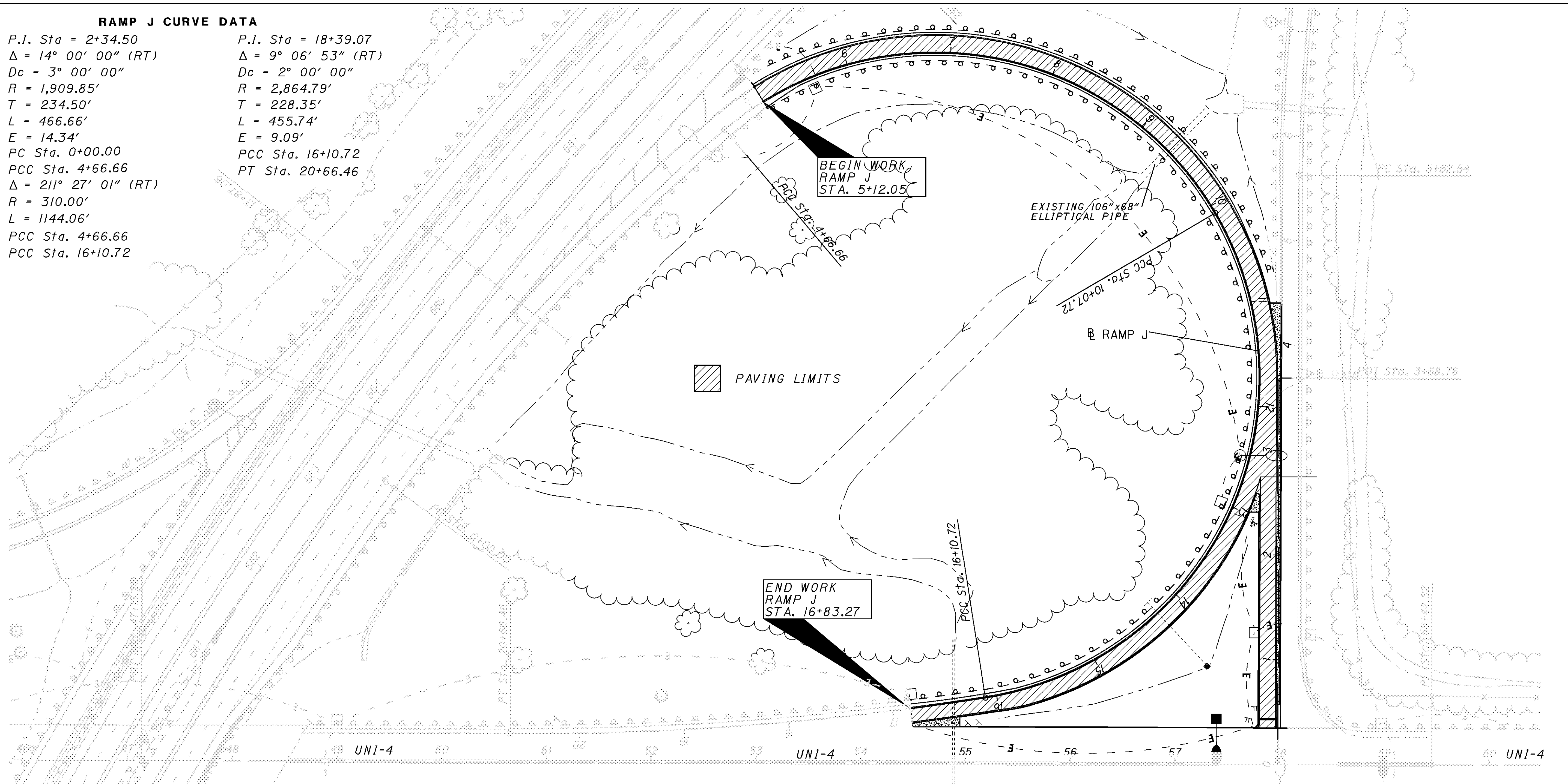
S	T	A	W	I	D	H	S	254	407	442	617	REMARK	
								PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD		
0+00	1+38	VAR	RT & LT	144	11	6	1					RAMP L TAPER	
1+38	11+54	18'	RT & LT	2032	152	85	6					RAMP L	
3+65		VAR	RT	178	13	7						RAMP L SLIP RAMP	
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108								2,354	176	98	7		

UNI - 33 - 8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet\PLAN & PROFILE SHEETS.dgn SHEET_GP210 13-NOV-2012 1:42PM drankin

RAMP J CURVE DATA

P.I. Sta = 2+34.50	P.I. Sta = 18+39.07
$\Delta = 14^\circ 00' 00''$ (RT)	$\Delta = 9^\circ 06' 53''$ (RT)
$Dc = 3^\circ 00' 00''$	$Dc = 2^\circ 00' 00''$
$R = 1,909.85'$	$R = 2,864.79'$
$T = 234.50'$	$T = 228.35'$
$L = 466.66'$	$L = 455.74'$
$E = 14.34'$	$E = 9.09'$
PC Sta. 0+00.00	PCC Sta. 16+10.72
PCC Sta. 4+66.66	PT Sta. 20+66.46
$\Delta = 211^\circ 27' 01''$ (RT)	
$R = 310.00'$	
$L = 1144.06'$	
PCC Sta. 4+66.66	
PCC Sta. 16+10.72	

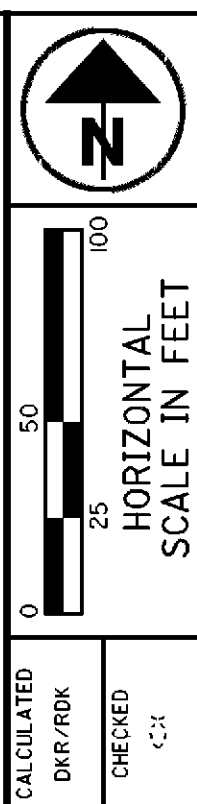
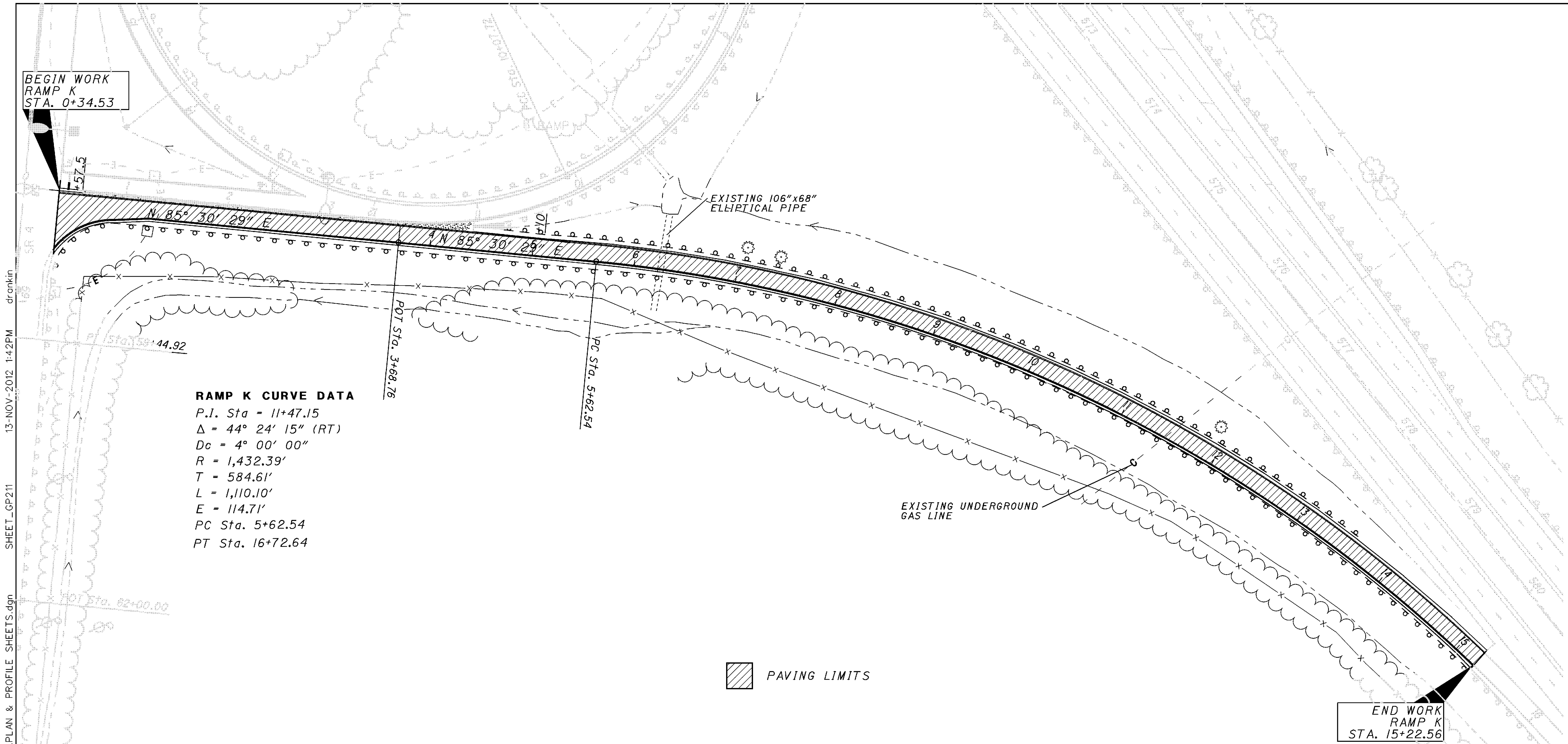


CALCULATED
DRAWN
CHECKED

0 25 50 100
HORIZONTAL
SCALE IN FEET

**PLAN VIEW UNI-US33
RAMP J**

S	T	A	W	I	D	H	E	254	407	442	617	REMARK
								PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
5+12	16+83	18'	RT & LT					2342	176	98	7	RAMP J
12+65		18'	RT & LT					470	35	20		RAMP J SLIP RAMP
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108								2,812	211	118	7	



PLAN VIEW UNI-US33
 RAMP K

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet.dgn SHEET_GP211 13-NOV-2012 1:42PM drankin

S	S	W	S	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD									
0+00	1+34	VAR	RT & LT	296	22	12	1									RAMP K TAPER
1+34	15+23	18'	RT & LT	2778	208	116	9									RAMP K
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				3,074	230	128	10									



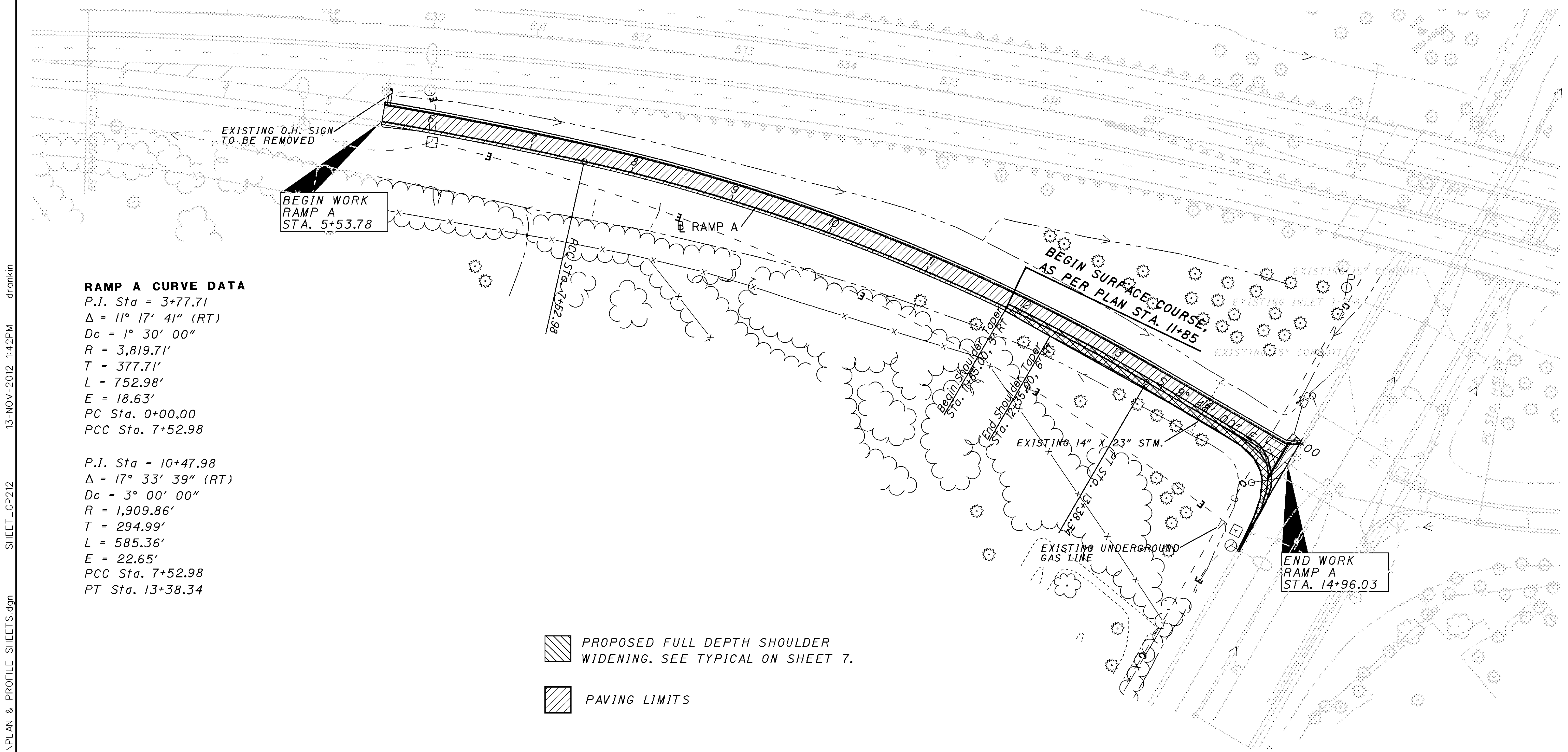
0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED
CHK/PWK
CHECKED
CZ:

PLAN VIEW UNI-US33
RAMP A

UNI-33-8.74

54
108



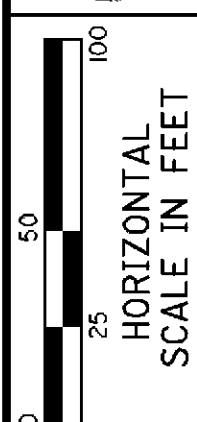
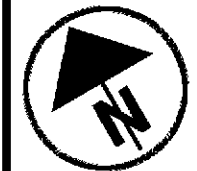
RAMP A CURVE DATA
 P.I. Sta = 3+77.71
 $\Delta = 11^\circ 17' 41''$ (RT)
 $Dc = 1^\circ 30' 00''$
 $R = 3,819.71'$
 $T = 377.71'$
 $L = 752.98'$
 $E = 18.63'$
 PC Sta. 0+00.00
 PCC Sta. 7+52.98

P.I. Sta = 10+47.98
 $\Delta = 17^\circ 33' 39''$ (RT)
 $Dc = 3^\circ 00' 00''$
 $R = 1,909.86'$
 $T = 294.99'$
 $L = 585.36'$
 $E = 22.65'$
 PCC Sta. 7+52.98
 PT Sta. 13+38.34

- PROPOSED FULL DEPTH SHOULDER WIDENING. SEE TYPICAL ON SHEET 7.
- PAVING LIMITS

S	S	W	S	254	407	442	442	617	204	202	209	301				REMARK
T	T	I	I	PAVEMENT	TACK	ASPHALT	ASPHALT	COMPACTED	SUBGRADE	PAVEMENT	PREPARING	ASPHALT				
A	A	D	D	PLANING	COAT	SURFACE	SURFACE	AGGREGATE	COMPACTION	REMOVED,	SUBGRADE	CONCRETE				
		T	E	ASPHALT	0.075	COURSE	COURSE	(2" DEPTH)		AS PER PLAN	FOR	BASE,				
		H		CONCRETE	GAL. PER	12.5mm	12.5mm	(2" DEPTH)		(13.25')	SHOULDER	PG64-22				
				1.5"	SQ. YD.	TYPE A	TYPE A (446)	(2" DEPTH)			PAVING	(11.75')				
				DEPTH		(446)	AS PER PLAN				(13.25')					
				SQ YD	GALLON	CU YD	CU YD	CU YD	SQ YD	SQ YD	STATION	CU YD				
5+54	11+85	18'	RT & LT	1262	95	53		4								RAMP A SURFACE COURSE
11+85	14+96	VAR	RT & LT	971	73		40	2								RAMP A SURFACE COURSE (AS PER PLAN)
11+85	14+96	VAR	RT		16				207	69	3.11	68				RAMP A SHOULDER WIDENING
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				2,233	183	53	40	6	207	69	3	68				

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\PLAN & PROFILE SHEETS.dgn
 SHEET_GP212
 13-NOV-2012 1:42PM
 drankin



CALCULATED
DRAWN
CHECKED
CZ

PLAN VIEW UNI-US33
RAMP D

UNI - 33 - 8.74

RAMP D CURVE DATA

P.I. Sta = 5+00.47

$\Delta = 8^\circ 00' 00''$ (LT)

Dc = 1° 00' 00"

R = 5,729.58'

T = 400.65'

L = 800.00'

E = 13.99'

PC Sta. 0+99.82

PT Sta. 8+99.82

P.I. Sta = 12+63.43

$\Delta = 50^\circ 04' 56''$ (LT)

Dc = 18° 28' 57"

R = 310.00'

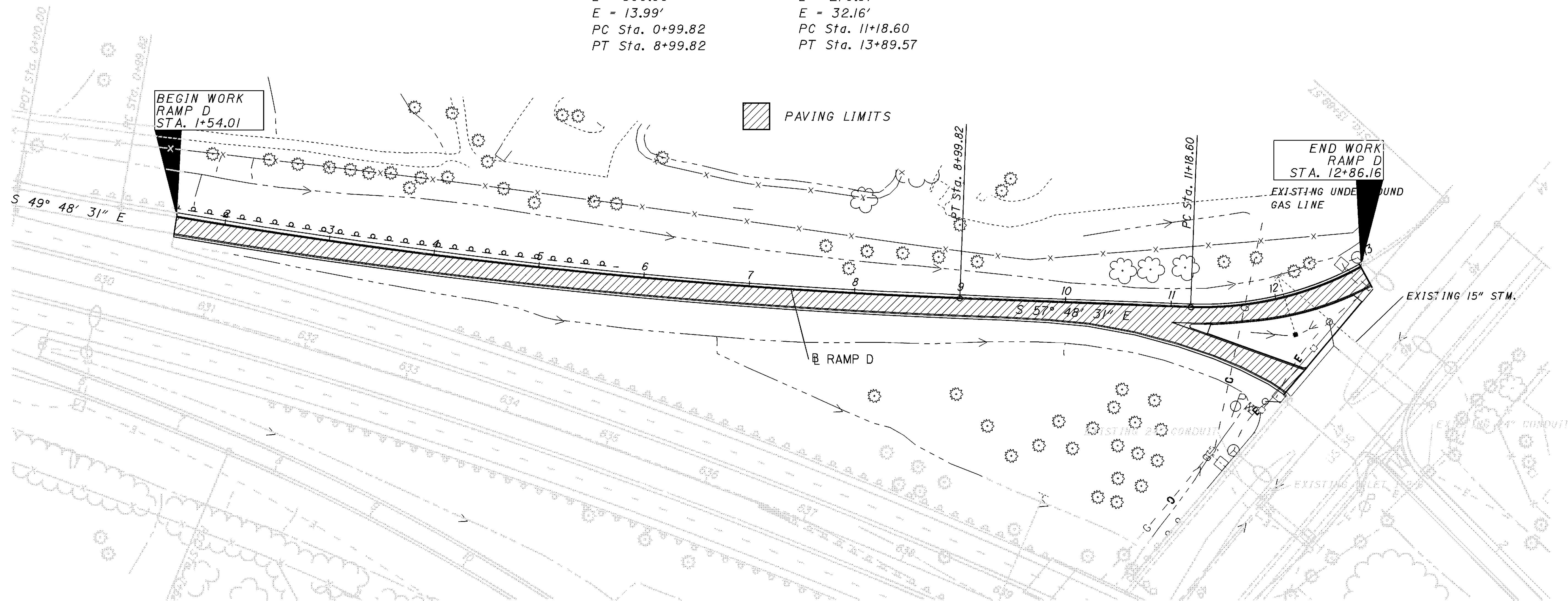
T = 144.83'

L = 270.97'

E = 32.16'

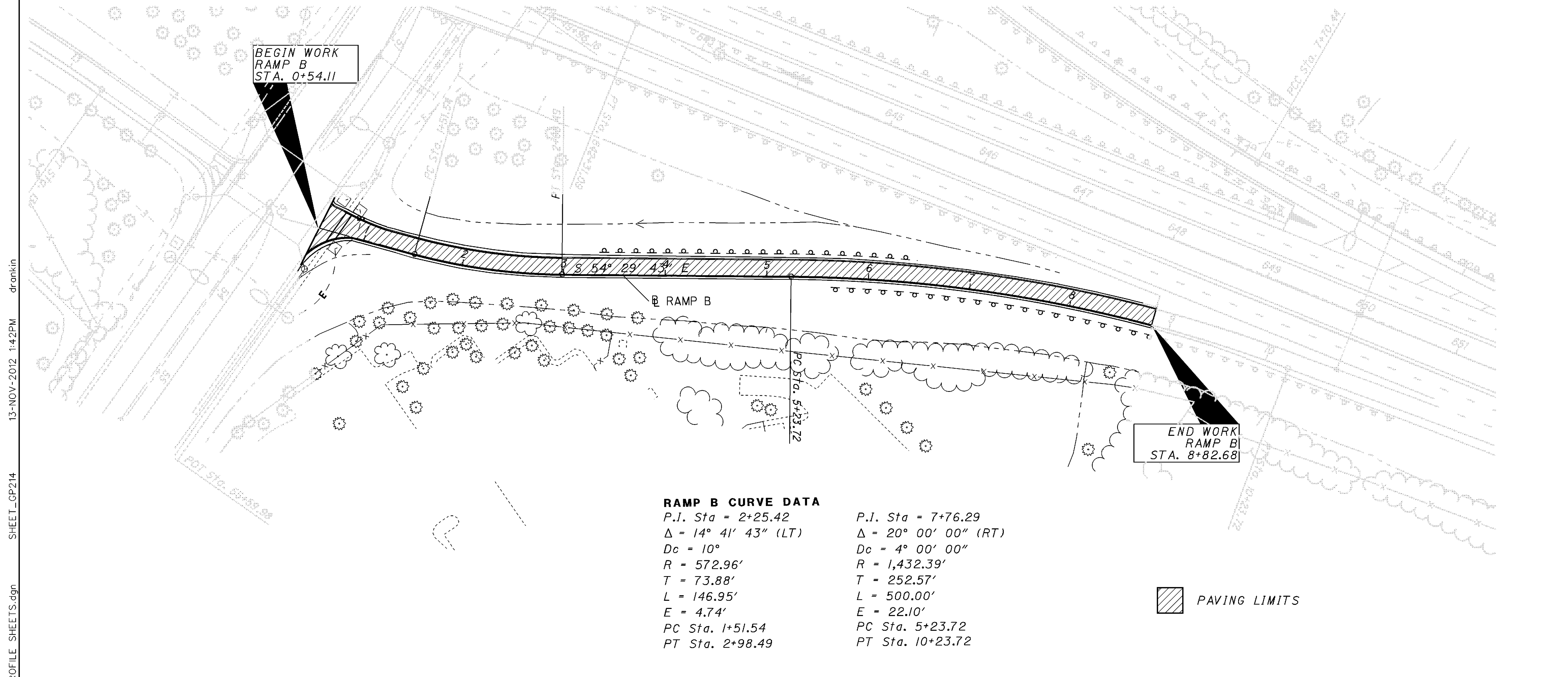
PC Sta. 11+18.60

PT Sta. 13+89.57



I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP213 13-NOV-2012 1:42PM drankin

S	T	A	W	I	D	H	S	E	254	407	442	617	REMARK
									PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
1+54	12+86	18'	RT & LT						2264	170	94	7	RAMP D
0+10		VAR	RT						387	29	16		RAMP D SLIP RAMP
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108									2,651	199	110	7	



RAMP B CURVE DATA

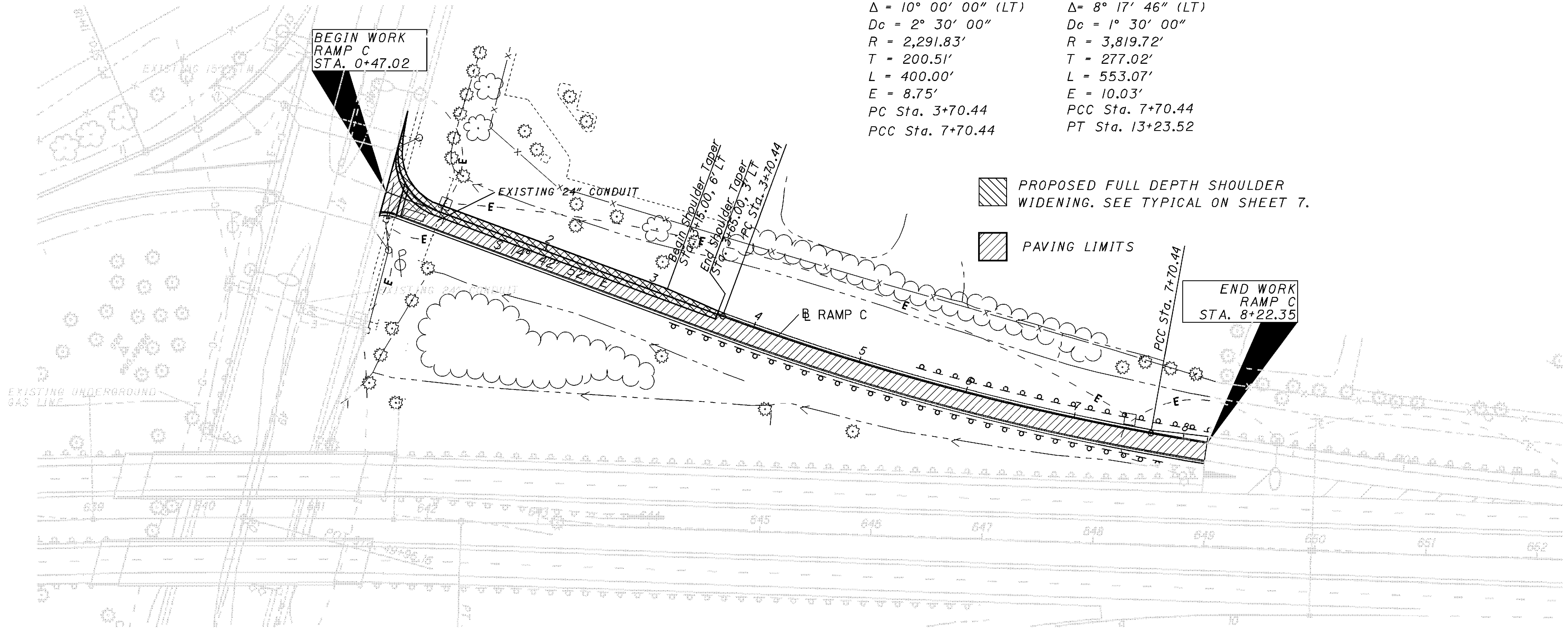
P.I. Sta = 2+25.42	P.I. Sta = 7+76.29
$\Delta = 14^\circ 41' 43''$ (LT)	$\Delta = 20^\circ 00' 00''$ (RT)
$D_c = 10^\circ$	$D_c = 4^\circ 00' 00''$
$R = 572.96'$	$R = 1,432.39'$
$T = 73.88'$	$T = 252.57'$
$L = 146.95'$	$L = 500.00'$
$E = 4.74'$	$E = 22.10'$
PC Sta. 1+51.54	PC Sta. 5+23.72
PT Sta. 2+98.49	PT Sta. 10+23.72

PAVING LIMITS

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet.dgn SHEET_GP214 13-NOV-2012 1:42PM drankin

S	S	W	S	254	407	442	617										REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD										
0+54	0+88	VAR	RT & LT	154	12	6											RAMP B TAPER
0+88	8+83	18'	RT & LT	1590	119	66	5										RAMP B
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				1,744	131	72	5										

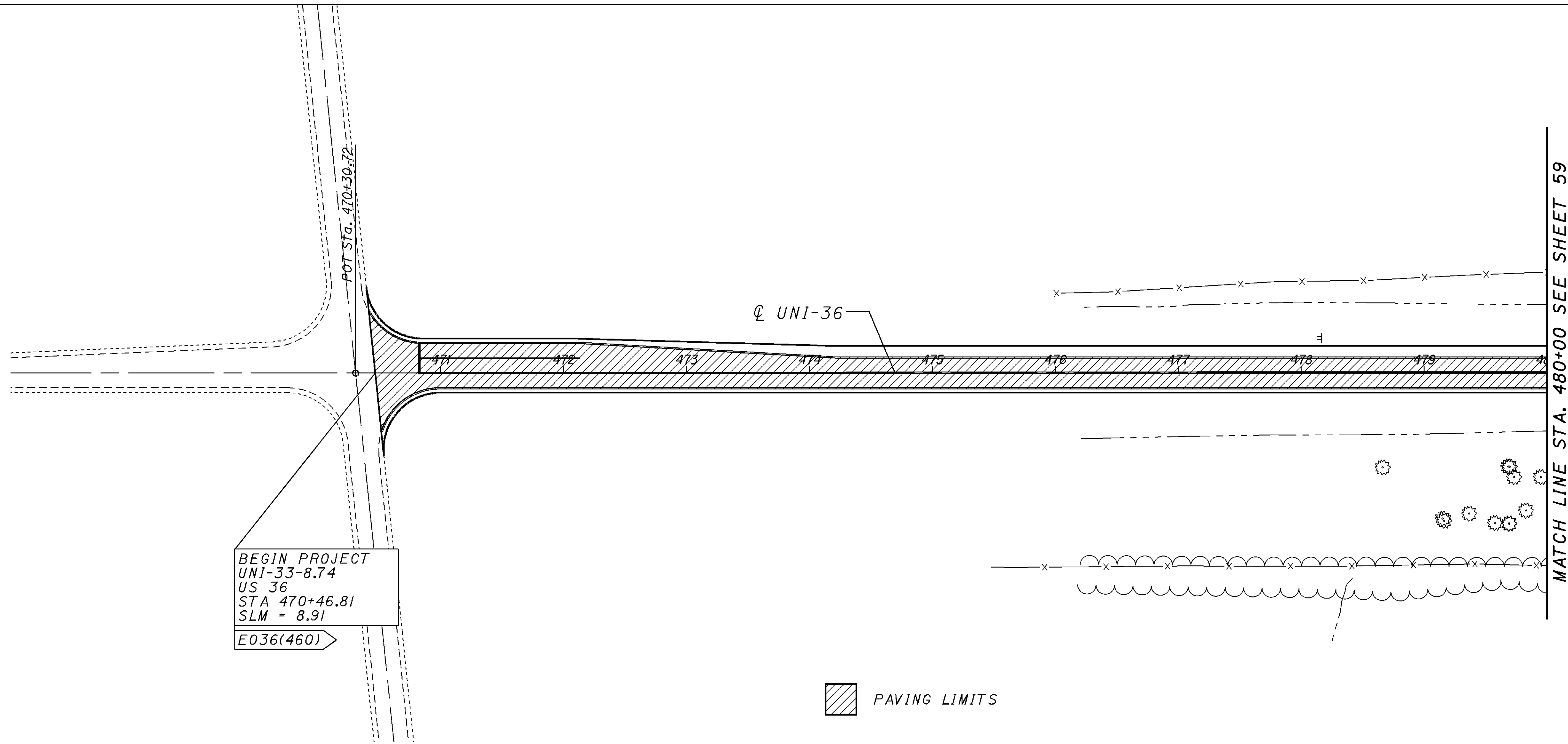
I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile_sheets.dgn SHEET_GP215 13-NOV-2012 1:42PM drankin



PLAN VIEW UNI-US33
 RAMP C

S	T	A	W	I	D	S	254	407	442	442	617	204	202	209	301	REMARK	
							PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) AS PER PLAN CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	SUBGRADE COMPACTION SQ YD	PAVEMENT REMOVED, AS PER PLAN (13.25") SQ YD	PREPARING SUBGRADE FOR SHOULDER PAVING (13.25") STATION	ASPHALT CONCRETE BASE, PG64-22 (11.75") CU YD		
			VAR			RT & LT	940	71		39	2					RAMP C SURFACE COURSE (AS PER PLAN)	
						RT & LT	914	69	38		3					RAMP C SURFACE COURSE	
			VAR			RT						207	69	3.11	68	RAMP C SHOULDER WIDENING	
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108							1,854	140	38	39	5	207	69	3.11	68		

UNI -33-8.74



PAVING LIMITS

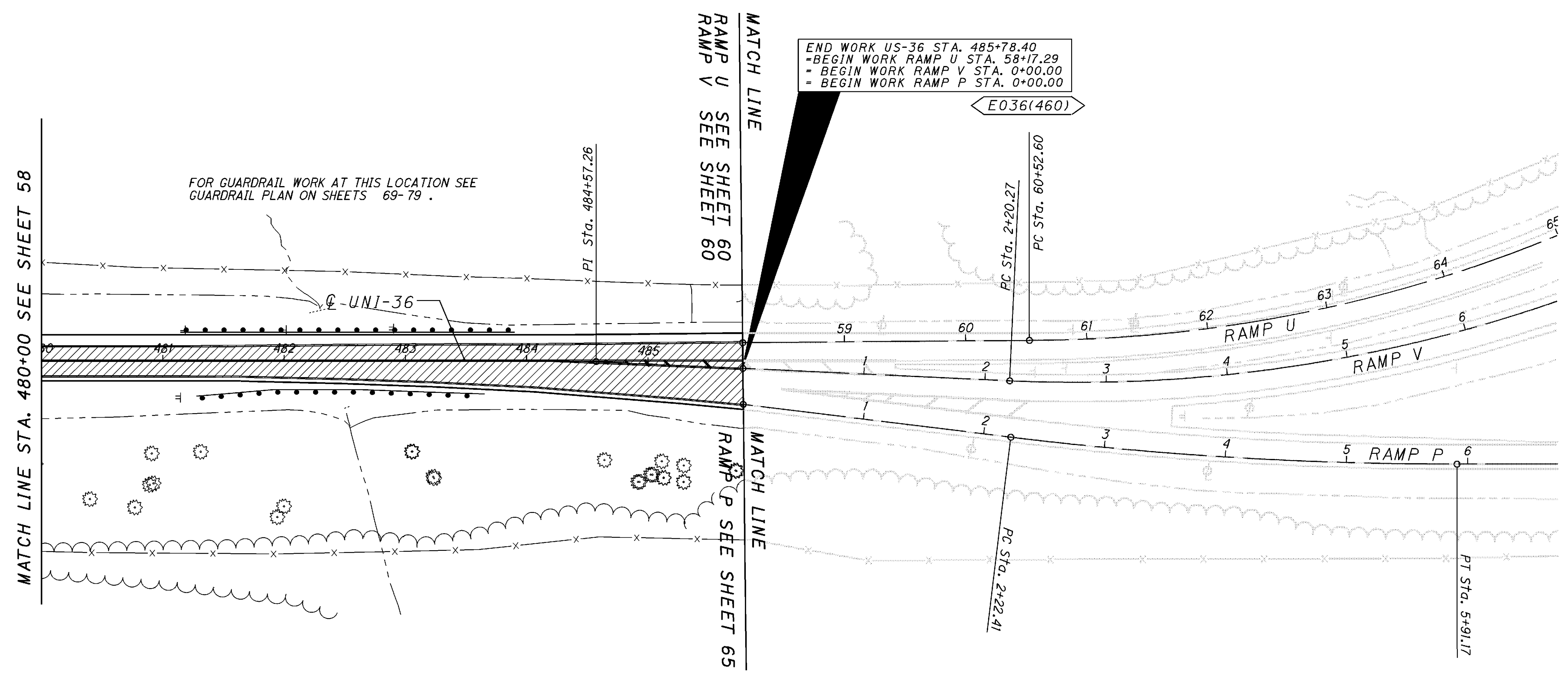
S T A	S T A	W I D T H	S I D E	254	407	442	617								REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD								
470+47	474+24	VAR	RT & LT	1878	141	78	5								UNI-36 INTERSECTION TAPER
474+24	480+00	26'	RT & LT	1664	125	69	4								UNI-36
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				3,542	266	147	9								

PLAN VIEW UNI-US36
STA. 470+46.81 TO STA. 480+00

UNI -33-8.74

58
108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP301 13-NOV-2012 1:42PM drankin



CALCULATED
 DNR/PWK
 CHECKED
 C:Z

0 25 50 100
 HORIZONTAL
 SCALE IN FEET

PLAN VIEW UNI-US36
 STA. 480+00 TO STA. 485+78.40

S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH)									
480+00	485+78	VAR	RT & LT	2860	215	119	7									UNI-36
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				2,860	215	119	7									

UNI-33-8.74

59
108

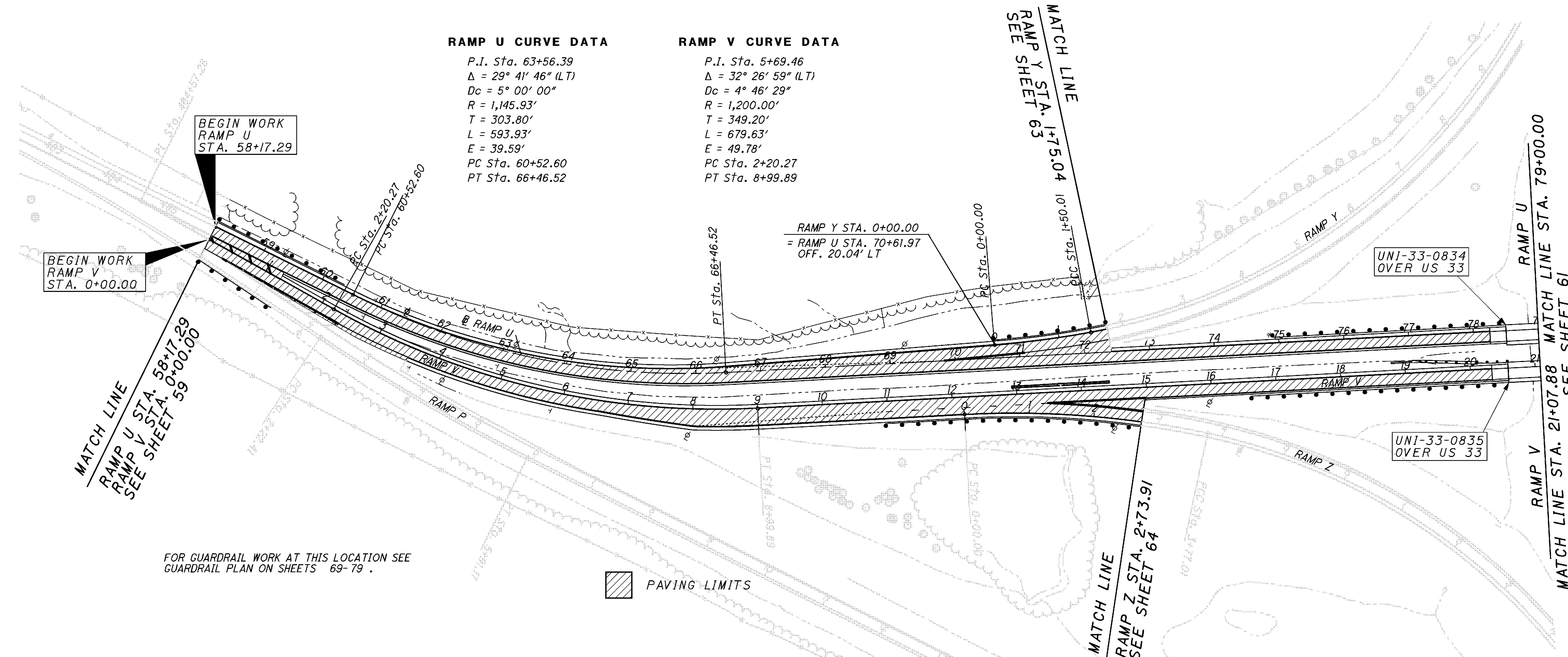
I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP400 13-NOV-2012 1:42PM drankin

RAMP U CURVE DATA

P.I. Sta. 63+56.39
 $\Delta = 29^\circ 41' 46''$ (LT)
 $Dc = 5^\circ 00' 00''$
 $R = 1,145.93'$
 $T = 303.80'$
 $L = 593.93'$
 $E = 39.59'$
 PC Sta. 60+52.60
 PT Sta. 66+46.52

RAMP V CURVE DATA

P.I. Sta. 5+69.46
 $\Delta = 32^\circ 26' 59''$ (LT)
 $Dc = 4^\circ 46' 29''$
 $R = 1,200.00'$
 $T = 349.20'$
 $L = 679.63'$
 $E = 49.78'$
 PC Sta. 2+20.27
 PT Sta. 8+99.89



FOR GUARDRAIL WORK AT THIS LOCATION SEE GUARDRAIL PLAN ON SHEETS 69-79 .

PAVING LIMITS

S	T	A	W	I	D	H	S	E	254	407	442	617	REMARK
									PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
58+17	60+53	VAR	RT & LT	657	49	27	1						RAMP U RAMP TAPER AT GORE
60+53	72+41	VAR	RT & LT	4715	354	196	15						RAMP U TAPER TO RAMP Y
72+41	78+25	18'	RT & LT	1168	88	49	7						RAMP U (SUSPEND AT STRUCTURE)
0+00	2+20	VAR	RT & LT	559	42	23	1						RAMP V RAMP TAPER AT GORE
2+20	14+97	VAR	RT & LT	5081	381	212	8						RAMP V TAPER TO RAMP Z
14+97	20+33	18'	RT & LT	1072	80	45	7						RAMP V (SUSPEND AT STRUCTURE)
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108									13,252	994	552	39	

PLAN VIEW UNI-33 RAMP U & V

UNI - 33 - 8.74

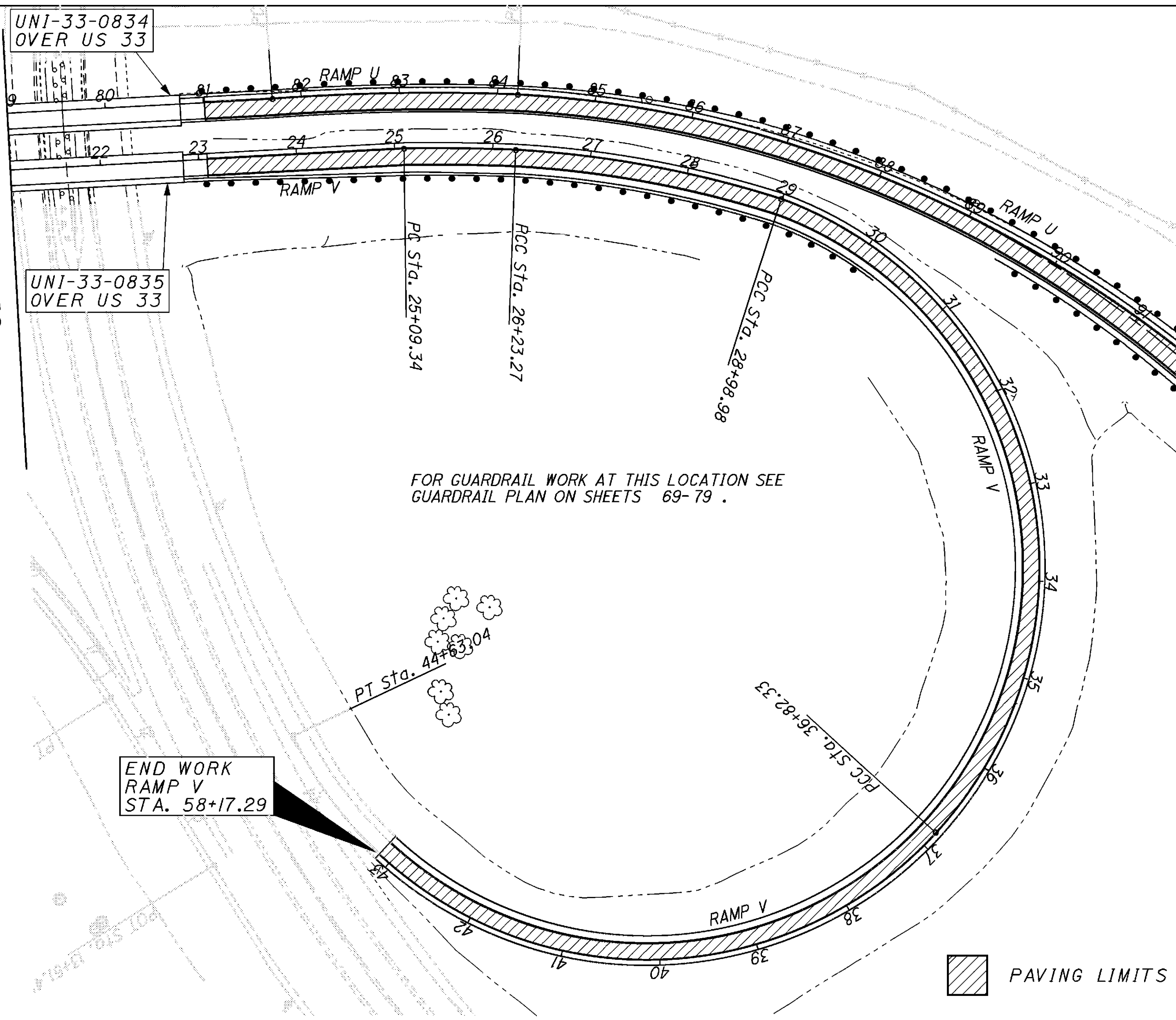
60
108

CALCULATED
DRAWN
CHECKED

HORIZONTAL SCALE IN FEET

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet.dgn SHEET_GP401 13-NOV-2012 1:42PM drankin

MATCH LINE STA. 79+00.00 RAMP U
MATCH LINE STA. 21+07.88 RAMP V
SEE SHEET 60



RAMP V CURVE DATA

P.I. Sta. 27+61.87	P.I. Sta. 34+94.57	P.I. Sta. 42+75.92
$\Delta = 14^\circ 36' 08''$ (RT)	$\Delta = 112^\circ 14' 58''$ (RT)	$\Delta = 112^\circ 14' 58''$ (RT)
$Dc = 5^\circ 17' 46''$	$Dc = 14^\circ 19' 46''$	$Dc = 14^\circ 22' 40''$
$R = 1,081.83'$	$R = 399.85'$	$R = 398.50'$
$T = 138.61'$	$T = 595.59'$	$T = 593.59'$
$L = 275.71'$	$L = 783.35'$	$L = 780.72'$
$E = 8.84'$	$E = 317.51'$	$E = 316.45'$
PCC Sta. 26+23.27	PCC Sta. 28+98.98	PCC Sta. 36+82.33
PCC Sta. 28+98.98	PCC Sta. 36+82.33	PT Sta. 44+63.04

RAMP U CURVE DATA

P.I. Sta. 82+95.70
$\Delta = 6^\circ 19' 58''$ (RT)
$Dc = 2^\circ 31' 59''$
$R = 2,261.84'$
$T = 125.12'$
$L = 250.00'$
$E = 3.46'$
PC Sta. 81+70.58
PCC Sta. 84+20.57
P.I. Sta. 91+85.10
$\Delta = 67^\circ 25' 13''$ (RT)
$Dc = 5^\circ 00' 00''$
$R = 1,145.92'$
$T = 764.52'$
$L = 1,348.41'$
$E = 231.63'$
PCC Sta. 84+20.57
PCC Sta. 97+68.98

END WORK
RAMP V
STA. 58+17.29

FOR GUARDRAIL WORK AT THIS LOCATION SEE
GUARDRAIL PLAN ON SHEETS 69-79 .

PAVING LIMITS

UNI-33-0862
OVER SR 245

MATCH LINE
RAMP W STA. 96+00.32
SEE SHEET 67

MATCH LINE STA. 99+00.00 RAMP U
SEE SHEET 62

S	T	A	W	I	D	H	S	I	D	E	254	407	442	617	REMARK
											PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
81+02	86+70	18'	RT & LT								1136	85	47	7	RAMP U (RESUME AT STRUCTURE)
86+70	92+03	VAR	RT & LT								1586	119	66	7	RAMP U LANE TAPER TO STRUCTURE
92+03	94+29														SKIP STRUCTURE
94+29	99+00	VAR	RT & LT								1720	129	72	6	RAMP U (INCLUDES GORE AT RAMP W)
23+09	58+17	18'	RT & LT								7016	526	292	43	RAMP V (RESUME AT STRUCTURE)
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108											11,458	859	477	63	

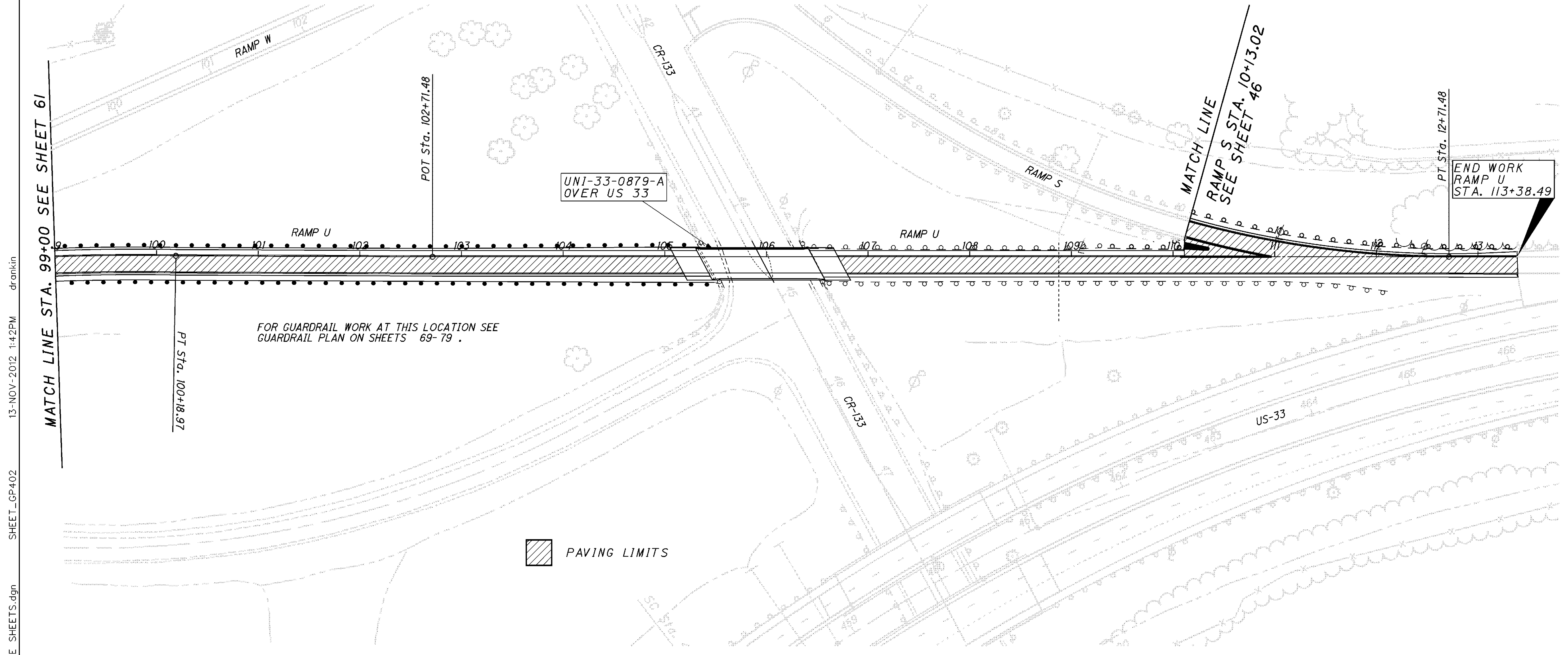
PLAN VIEW UNI-33
RAMP U & V

UNI-33-8.74

61
108

CALCULATED
DRAWN
CHECKED

HORIZONTAL SCALE IN FEET



CALCULATED
 DRAWN
 CHECKED
 DATE:

PLAN VIEW UNI-US33
 RAMP U

S	S	W	S	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD									
99+00	105+10	18'	RT & LT	1220	92	51	8									RAMP U (SUSPEND AT STRUCTURE)
105+10	106+70															SKIP STRUCTURE
106+70	110+10	18'	RT & LT	680	51	28	4									RAMP U (RESUME AT STRUCTURE)
110+10	113+38	VAR	RT & LT	1183	89	49	2									RAMP U (INCLUDES GORE AT RAMP S)
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				3,083	232	128	14									

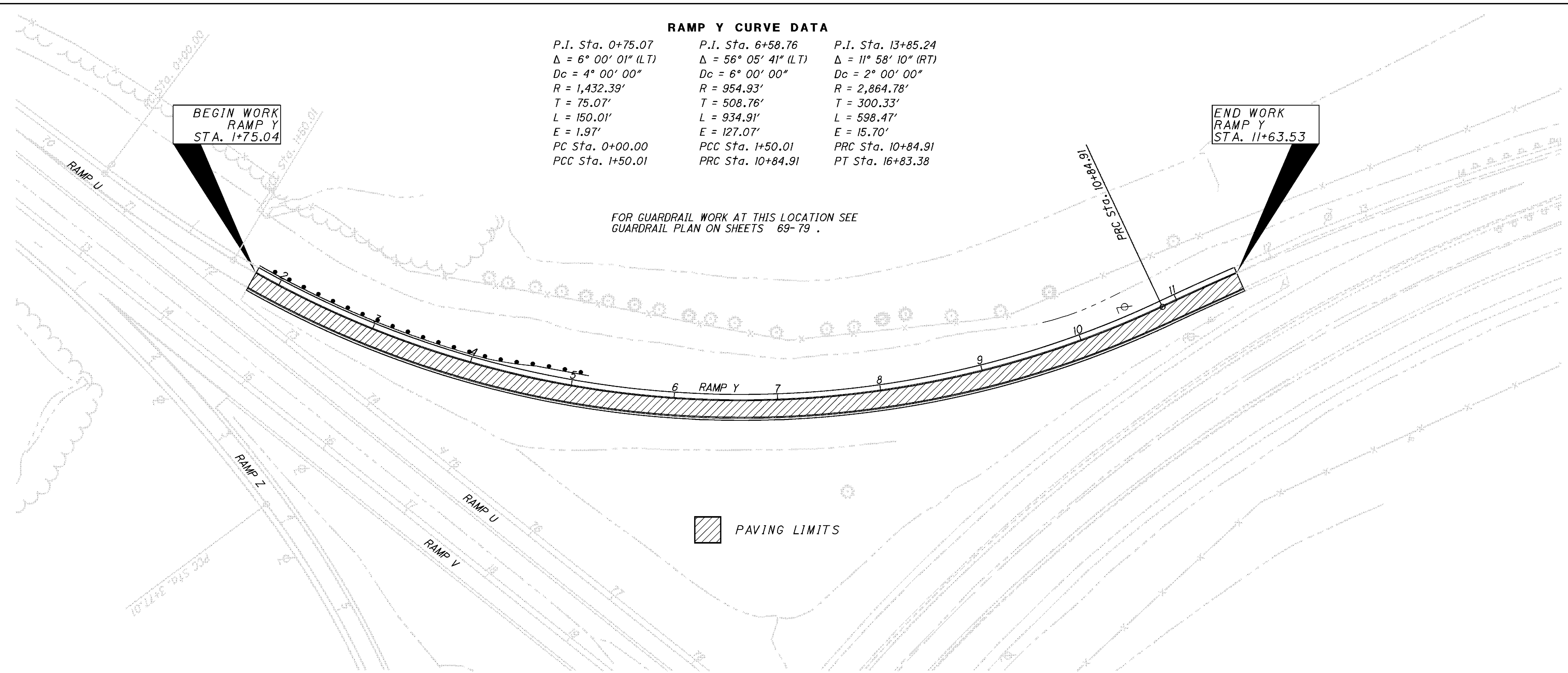
UNI-33-8.74
 62
 108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet\sheet.dgn SHEET_GP402 13-NOV-2012 1:42PM drankin

RAMP Y CURVE DATA

P.I. Sta. 0+75.07	P.I. Sta. 6+58.76	P.I. Sta. 13+85.24
$\Delta = 6^\circ 00' 01''$ (LT)	$\Delta = 56^\circ 05' 41''$ (LT)	$\Delta = 11^\circ 58' 10''$ (RT)
Dc = 4' 00' 00"	Dc = 6' 00' 00"	Dc = 2' 00' 00"
R = 1,432.39'	R = 954.93'	R = 2,864.78'
T = 75.07'	T = 508.76'	T = 300.33'
L = 150.01'	L = 934.91'	L = 598.47'
E = 1.97'	E = 127.07'	E = 15.70'
PC Sta. 0+00.00	PCC Sta. 1+50.01	PRC Sta. 10+84.91
PCC Sta. 1+50.01	PRC Sta. 10+84.91	PT Sta. 16+83.38

FOR GUARDRAIL WORK AT THIS LOCATION SEE
GUARDRAIL PLAN ON SHEETS 69-79 .



I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile_sheets.dgn SHEET_GP403 13-NOV-2012 1:42PM drankin

S T A	S T A	W I D T H	S I D E	254	407	442	617	REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD. GAL.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
1+75	11+64	18'	RT & LT	1978	148	82	12	RAMP Y
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				1,978	148	82	12	





 CALCULATED: _____

 DRAWN: _____

 CHECKED: _____

 PLAN VIEW UNI-US33

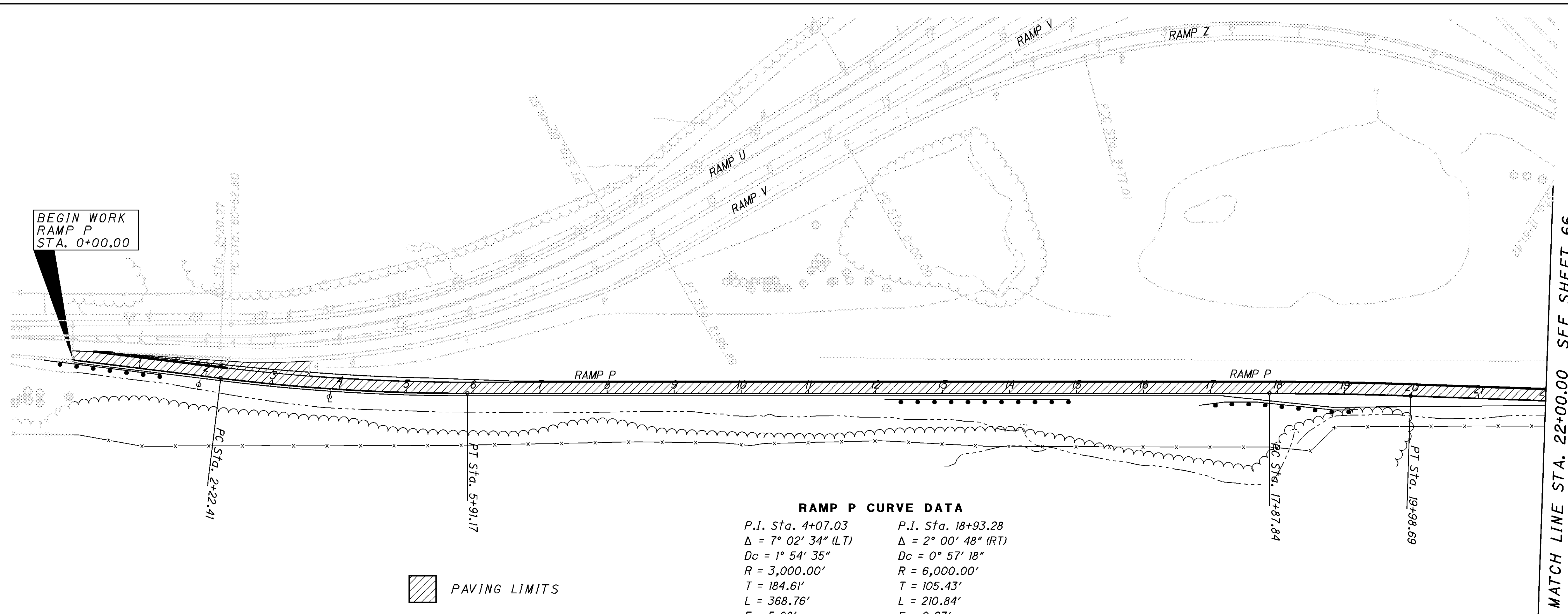
 RAMP Y

 UNI-33-8.74

 63

 108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\plan & profile\sheet.dgn SHEET_GP405 13-NOV-2012 1:42PM drankin



BEGIN WORK
RAMP P
STA. 0+00.00

MATCH LINE STA. 22+00.00 SEE SHEET 66

PAVING LIMITS

FOR GUARDRAIL WORK AT THIS LOCATION SEE
GUARDRAIL PLAN ON SHEETS 69-79.

RAMP P CURVE DATA

P.I. Sta. 4+07.03	P.I. Sta. 18+93.28
$\Delta = 7^\circ 02' 34''$ (LT)	$\Delta = 2^\circ 00' 48''$ (RT)
$Dc = 1^\circ 54' 35''$	$Dc = 0^\circ 57' 18''$
$R = 3,000.00'$	$R = 6,000.00'$
$T = 184.61'$	$T = 105.43'$
$L = 368.76'$	$L = 210.84'$
$E = 5.68'$	$E = 0.93'$
PC Sta. 2+22.41	PC Sta. 17+87.84
PT Sta. 5+91.17	PT Sta. 19+98.69

S	T	A	W	I	D	H	S	E	254	407	442	617	REMARK
									PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
0+00	22+00	18'					RT & LT		4400	330	183	27	RAMP P
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108									4,400	330	183	27	

PLAN VIEW UNI-US33 RAMP P

UNI -33-8.74

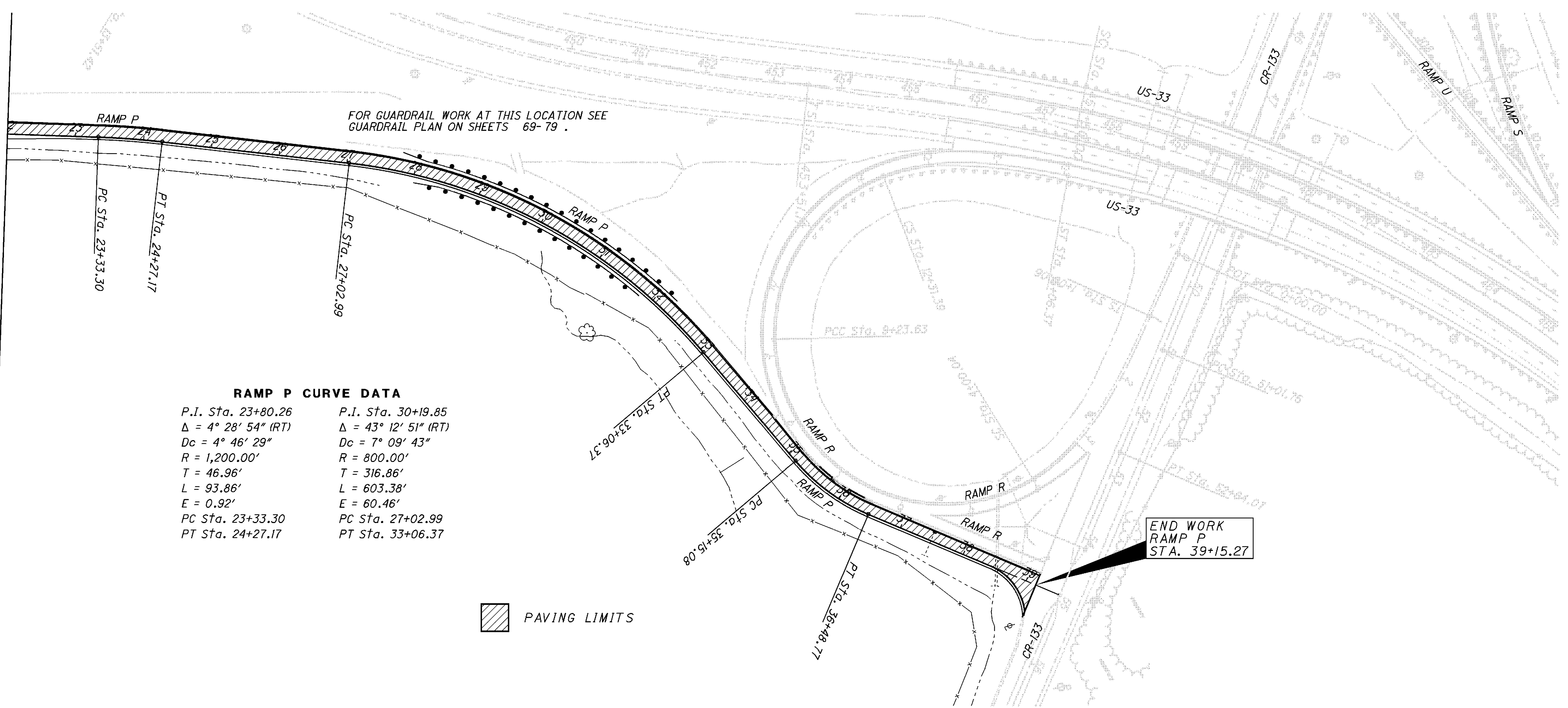
65
108

CALCULATED: []
DRAWN: []
CHECKED: []

N
0 40 80 160
HORIZONTAL SCALE IN FEET

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP406 13-NOV-2012 1:43PM drankin

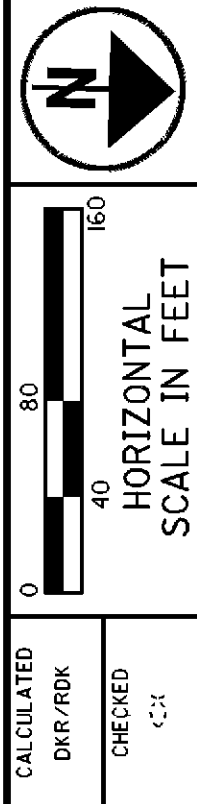
MATCH LINE STA. 22+00.00 SEE SHEET 65



RAMP P CURVE DATA

P.I. Sta. 23+80.26	P.I. Sta. 30+19.85
$\Delta = 4^\circ 28' 54''$ (RT)	$\Delta = 43^\circ 12' 51''$ (RT)
$Dc = 4^\circ 46' 29''$	$Dc = 7^\circ 09' 43''$
$R = 1,200.00'$	$R = 800.00'$
$T = 46.96'$	$T = 316.86'$
$L = 93.86'$	$L = 603.38'$
$E = 0.92'$	$E = 60.46'$
PC Sta. 23+33.30	PC Sta. 27+02.99
PT Sta. 24+27.17	PT Sta. 33+06.37

PAVING LIMITS

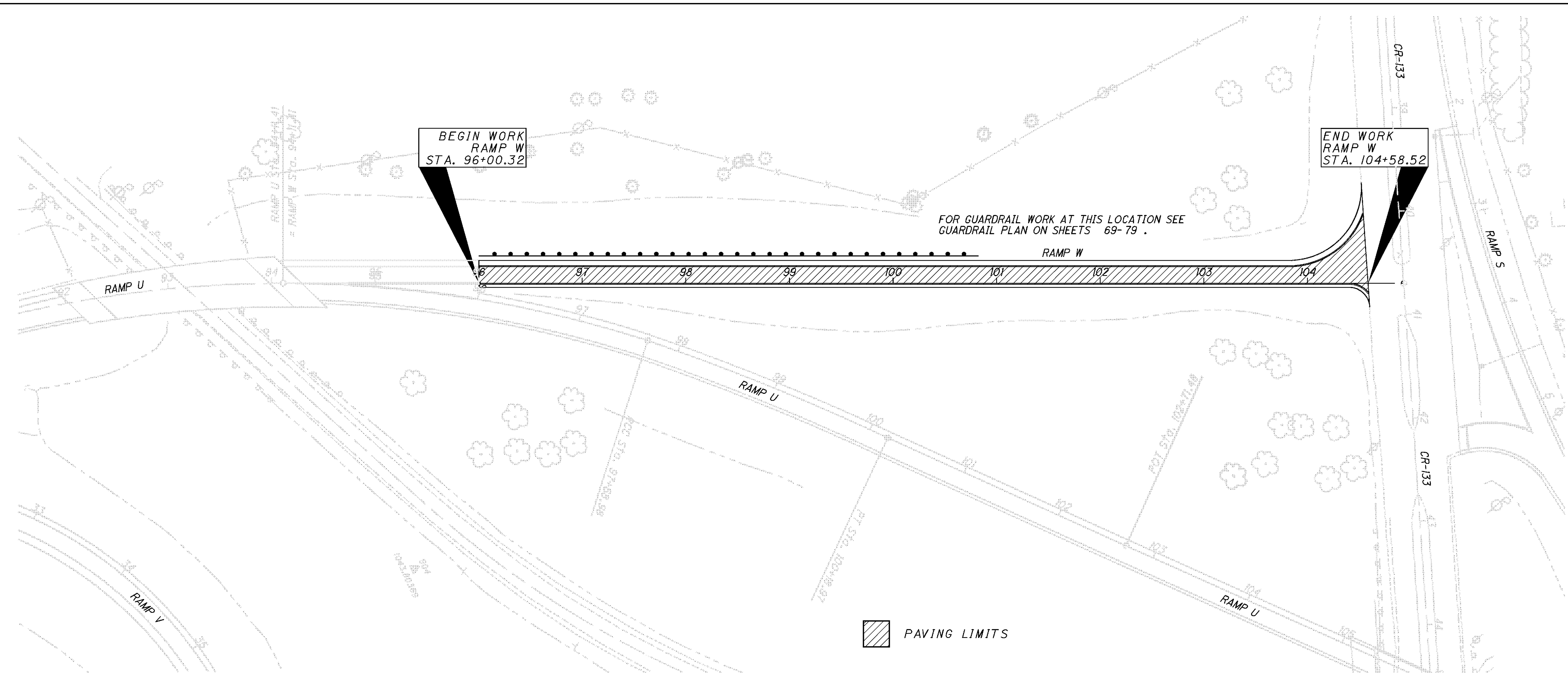


PLAN VIEW UNI-US33
RAMP P

S	T	A	W	I	D	H	S	E	254	407	442	617	REMARK
									PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD	
22+00	38+43	18'	RT & LT						3286	246	137	20	RAMP P
38+43	39+15	VAR	RT & LT						253	19	11		RAMP P INTERSECTION TAPER
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108									3,539	265	148	20	

UNI-33-8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\PLAN & PROFILE SHEETS.dgn SHEET_GP407 13-NOV-2012 1:43PM drankin



CALCULATED
DRAFTER
CHECKED

0 25 50 100
HORIZONTAL
SCALE IN FEET

PLAN VIEW UNI-US33
RAMP W

S T A	S T A	W I D T H	S I D E	254	407	442	617									REMARK
				PAVEMENT PLANING ASPHALT CONCRETE 1.5" DEPTH SQ YD	TACK COAT 0.075 GAL. PER SQ. YD.	ASPHALT SURFACE COURSE 12.5mm TYPE A (446) CU YD	COMPACTED AGGREGATE (2" DEPTH) CU YD									
96+00	103+82	18'	RT & LT	1564	117	65	10									RAMP W
103+82	104+59	VAR	RT & LT	364	27	15	1									RAMP W INTERSECTION TAPER
TOTALS CARRIED TO PAVEMENT SUBSUMMARY SHEET 27/108				1,928	144	80	11									

UNI-33-8.74

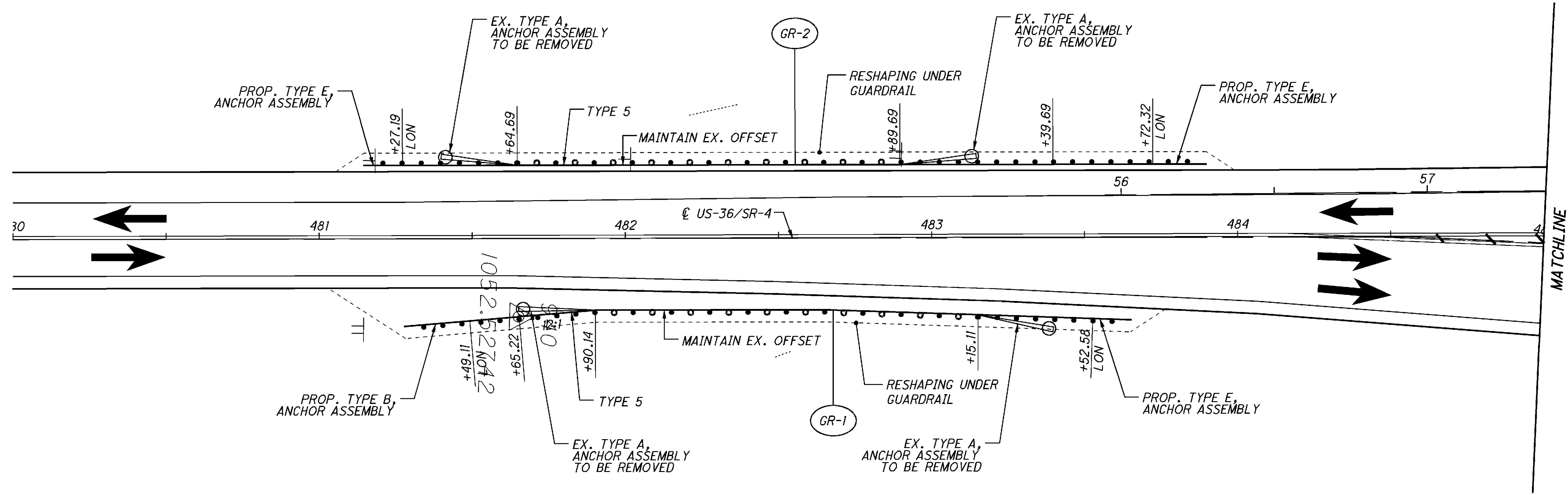
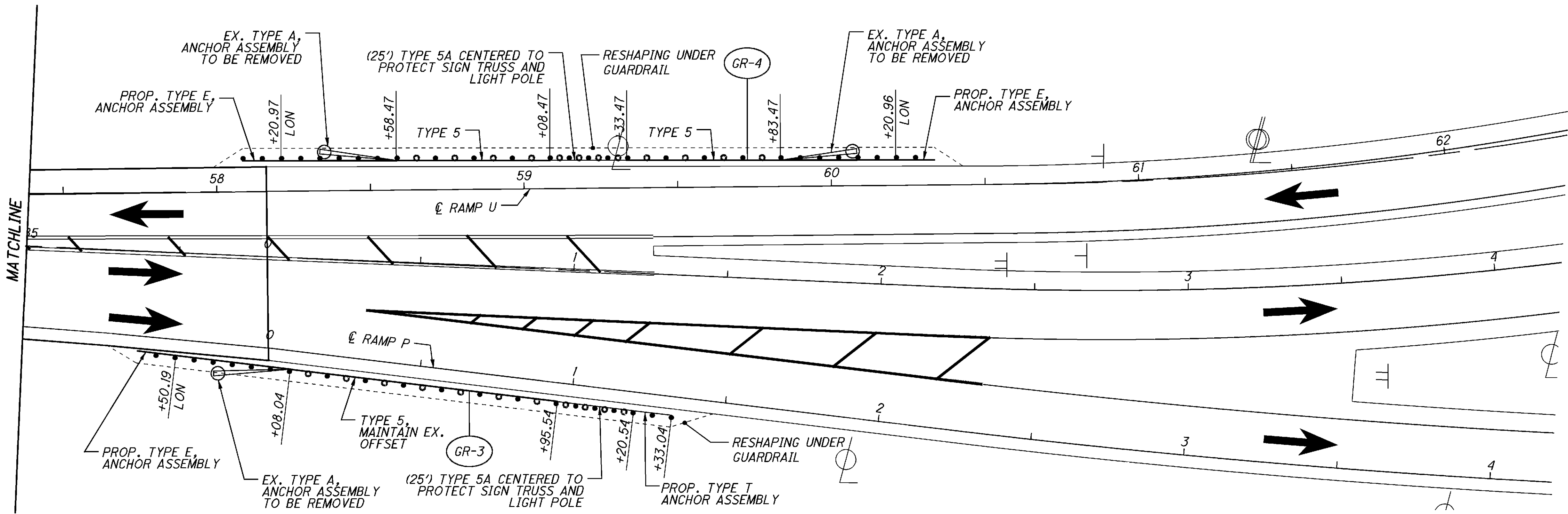
MARK	LOCATION					ROADWAY															EROSION CONTROL				TRAFFIC CONTROL					CALCULATED RUB	CHECKED C-3						
	SEE SHEET(S)	LOCATION	BEGIN STATION	END STATION	SIDE	202	202	202	203	209	606	606	606	606	606	606	606	606	606	622	622	653	659	659	659	620	626					630		630	630		
						GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A	ANCHOR ASSEMBLY REMOVED, BARRIER DESIGN	EMBANKMENT, AS PER PLAN	RESHAPING UNDER GUARDRAIL	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE 5A	GUARDRAIL, BARRIER DESIGN, TYPE 5	GUARDRAIL, TYPE 5, USING 9 FOOT POSTS	ANCHOR ASSEMBLY, TYPE B	ANCHOR ASSEMBLY, TYPE E	ANCHOR ASSEMBLY, TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 2	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	IMPACT ATTENUATOR, TYPE 3, AS PER PLAN	CONCRETE BARRIER, SINGLE SLOPE, TYPE B, AS PER PLAN	CONCRETE BARRIER END SECTION, TYPE B, AS PER PLAN	TOPSOIL FURNISHED AND PLACED	SEEDING AND MULCHING, CLASS 1	COMMERCIAL FERTILIZER	WATER	DELINEATOR, POST MOUNTED	A			A2	B	B2	OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6, AS PER PLAN	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.40	REMOVAL OF OVERHEAD SIGN SUPPORT AND REELECTION, AS PER PLAN (TYPE TC-7.65)
FT	EACH	EACH	CU YD	STA	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	EACH	CU YD	SQ YD	TON	M GAL	EACH	EA	EA	EA	EA	EACH	EACH	EACH							
GR-1	69		US-36	481+49.11	283+52.58	RT	125.00	2		20	2.74	150.00				1	1				2	40	0.001	0.1	1		3										
GR-2	69		US-36	481+27.19	56+72.32	LT	125.00	2		20	2.94	175.00					2				2	40	0.001	0.1	1		3										
GR-3	69		RAMP P	0+00.00	1+33.04	RT	112.50	1		10	1.99	87.50	25.00			1	1				2	40	0.001	0.1	1		3										
GR-4	69		RAMP U	58+20.97	60+20.96	LT	125.00	2		20	2.44	100.00	25.00			2					2	40	0.001	0.1	1		3										
GR-5	70	77	RAMP Z	0+00.00	11+48.73	RT	1137.50	1		10	12.81	1200.00				1	1				2	40	0.001	0.1	1	13											
GR-6	70		RAMP V	12+93.06	14+43.06	MED	450.00		2	40											2	90	0.009	0.9			4		1		1		1				
GR-7	70	71	RAMP Y	0+00.00	5+02.07	LT	462.50	1		10	5.43	450.00				1	1				2	40	0.001	0.1	1	5											
GR-8	71		RAMP U	74+89.92	78+52.42	LT	362.50				3.39	350.00					1		1		2	40	0.001	0.1			4										
GR-9	71		RAMP V	16+72.90	20+60.40	RT	225.00	1		10	3.83	350.00				1			1		2	40	0.001	0.1	1	4											
GR-10	71		RAMP V	19+10.76	20+60.40	MED	100.00		1	30	1.65	50.00	100.00					1		1	2	40	0.001	0.1			3										
GR-11	72		RAMP U	80+74.06	81+05.31	MED	31.25					31.25						1			2	40	0.001	0.1													
GR-12	72	73	74	RAMP U	80+74.06	92+20.36	LT	1162.50			11.03							1	1		2	40	0.001	0.1		12											
GR-13	72	73		RAMP V	22+81.94	30+39.90	RT	737.50			7.15						1		1		2	40	0.001	0.1		8											
GR-14	73	74		RAMP U	89+43.99	92+50.72	RT	300.00			3.00	287.50					1		1		2	40	0.001	0.1		4											
GR-15	74	75	76	RAMP U	94+20.20	105+48.96	RT	1118.75			10.61	1118.75						1	1		2	40	0.001	0.1		12											
GR-16	74	75		RAMP W	93+70.60	100+69.69	LT	612.50	1		10	6.97	662.50				1		1		2	40	0.001	0.1	1	7											
GR-17	75	76		RAMP U	98+97.38	105+46.57	LT	637.50			6.25	625.00					1		1		2	40	0.001	0.1		7											
GR-18	77			RAMP Z	4+43.20	8+83.06	LT	412.50	1		10	4.76	400.00				1	1			2	40	0.001	0.1	1	5											
GR-19	78			RAMP P	12+34.22	14+89.16	RT	150.00	1		10	3.14	212.50								2	40	0.001	0.1	1	3											
GR-20	78			RAMP P	16+95.64	19+20.36	RT	150.00	1		10	2.90	187.50			1		1			2	40	0.001	0.1		3											
GR-21	79			RAMP P	28+14.49	31+81.05	RT	312.50	1		10	4.08	325.00			1		1			2	40	0.001	0.1		4											
GR-22	79			RAMP P	28+90.35	32+27.54	LT	425.00	1		10	5.07	412.50			1		1			2	40	0.001	0.1		5											
TOTALS CARRIED TO GENERAL SUMMARY							9275	16	3	230	102.18	7175	50	100	1887.5	4	12	12	6	6	1	2	90	2	60	1200	0.03	3	10		115		1		1		1

GUARDRAIL SUB SUMMARY

UNI -33-8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\SUMMARY_SHEETS.dgn Sheet_GR101 13-NOV-2012 1:43PM drankin

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GUARDRAIL SHEETS.dgn SHEET_GR001 13-NOV-2012 1:43PM drankin



CALCULATED: []
 DRAWN BY: []
 CHECKED: []

0 20 40
 HORIZONTAL SCALE IN FEET

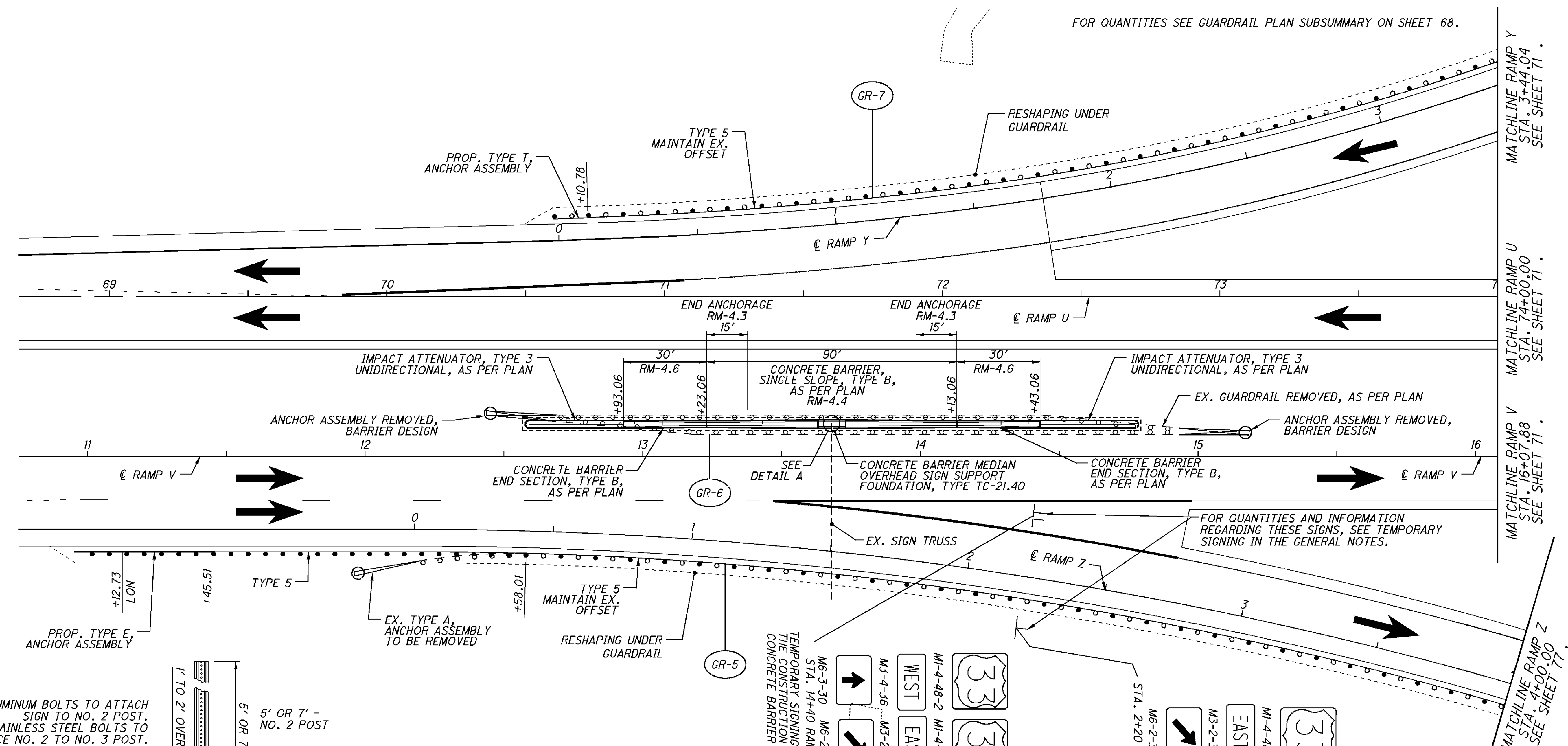
GUARDRAIL PLAN
US-36 & RAMP P & RAMP U

UNI-33-8.74

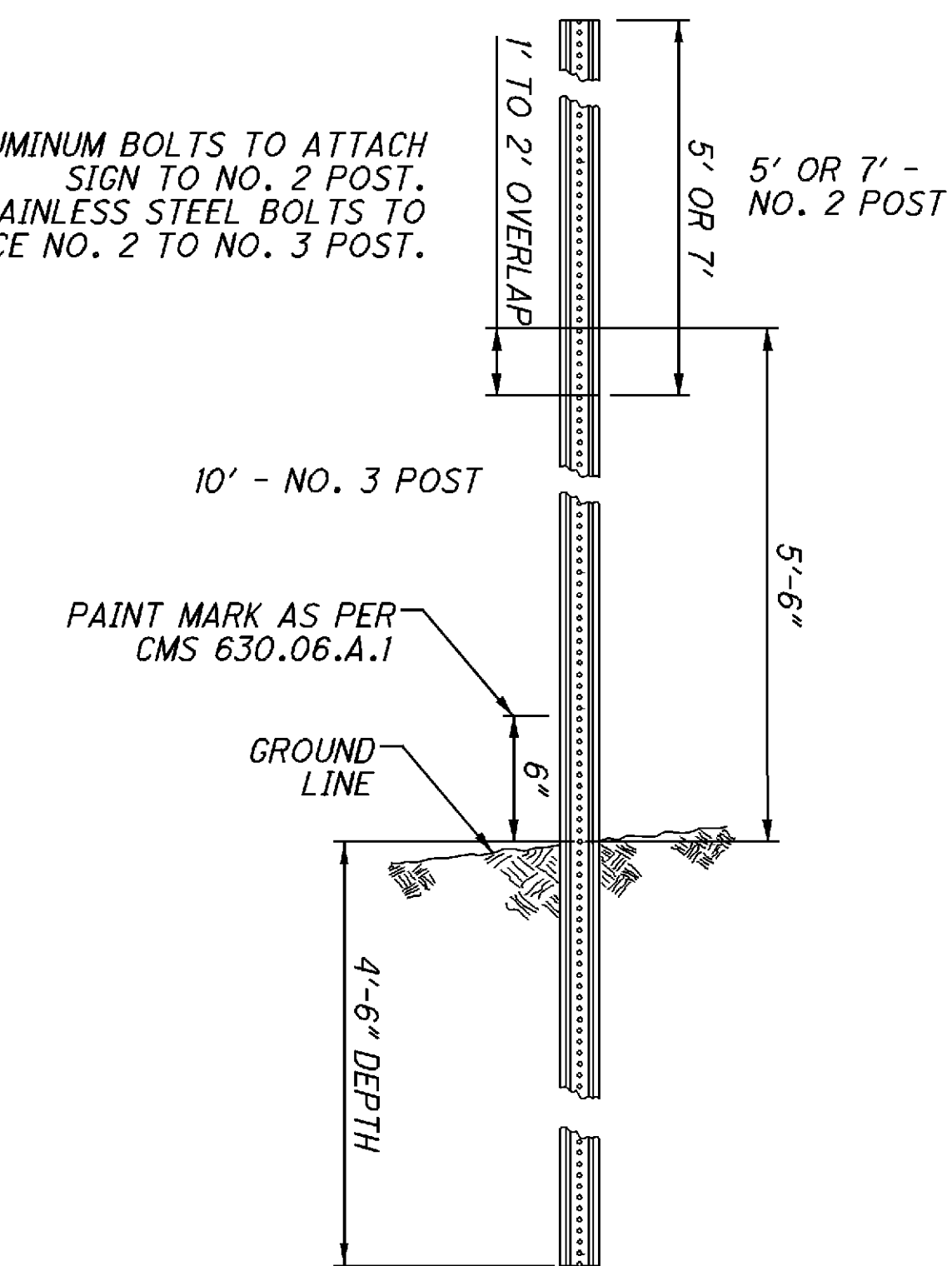
FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\GUARDRAIL_SHEETS.dgn SHEET_GR002 13-NOV-2012 1:43PM drankin

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.



USE ALUMINUM BOLTS TO ATTACH SIGN TO NO. 2 POST.
USE 2 STAINLESS STEEL BOLTS TO SPLICE NO. 2 TO NO. 3 POST.



TYPICAL NO.2 & NO. 3 U CHANNELSPLICE WITH 10' DRIVEN SECTION INSTALLATION

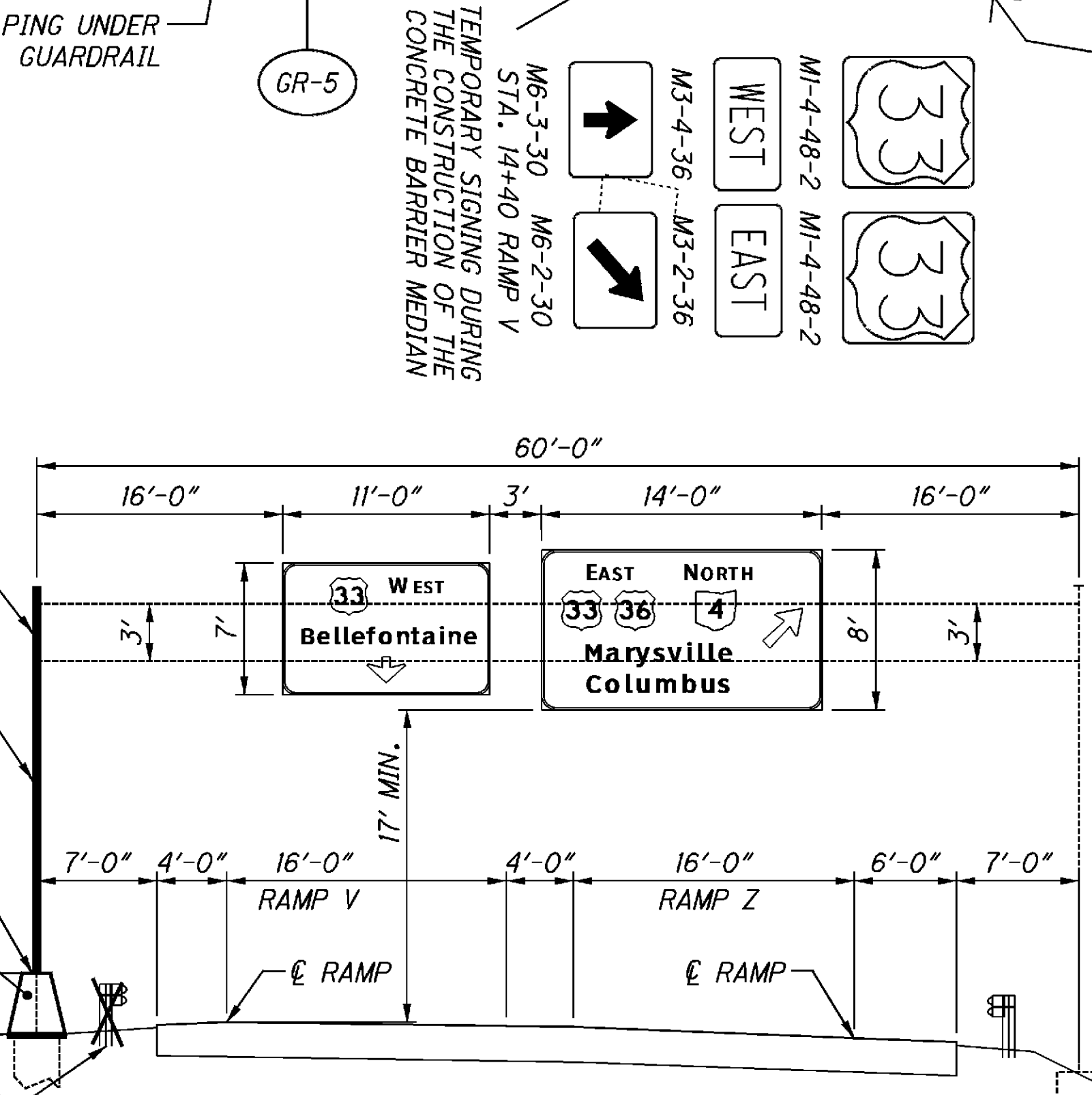
REMOVAL OF 25'-6" OVERHEAD SIGN SUPPORT AND DISPOSAL, (TYPE TC-7.65) AS PER PLAN

PROPOSED 22'-0" OVERHEAD SIGN SUPPORT, TYPE TC-7.65, DESIGN 6, AS PER PLAN

CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.40

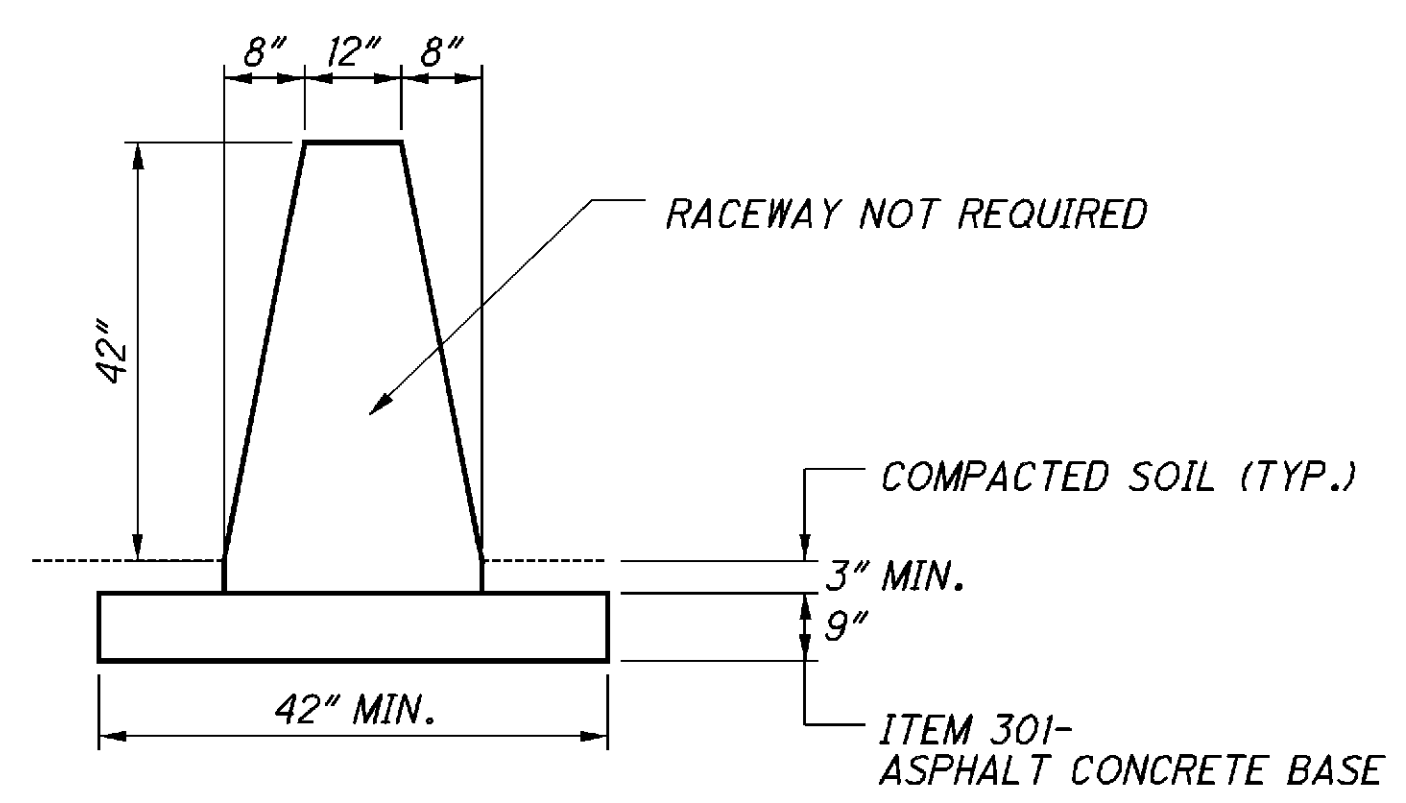
CONCRETE BARRIER, SINGLE SLOPE, TYPE B RM-4.4

EX. GUARDRAIL REMOVED, AS PER PLAN



DETAIL A

FOR QUANTITIES AND INFORMATION REGARDING THESE SIGNS, SEE TEMPORARY SIGNING IN THE GENERAL NOTES.



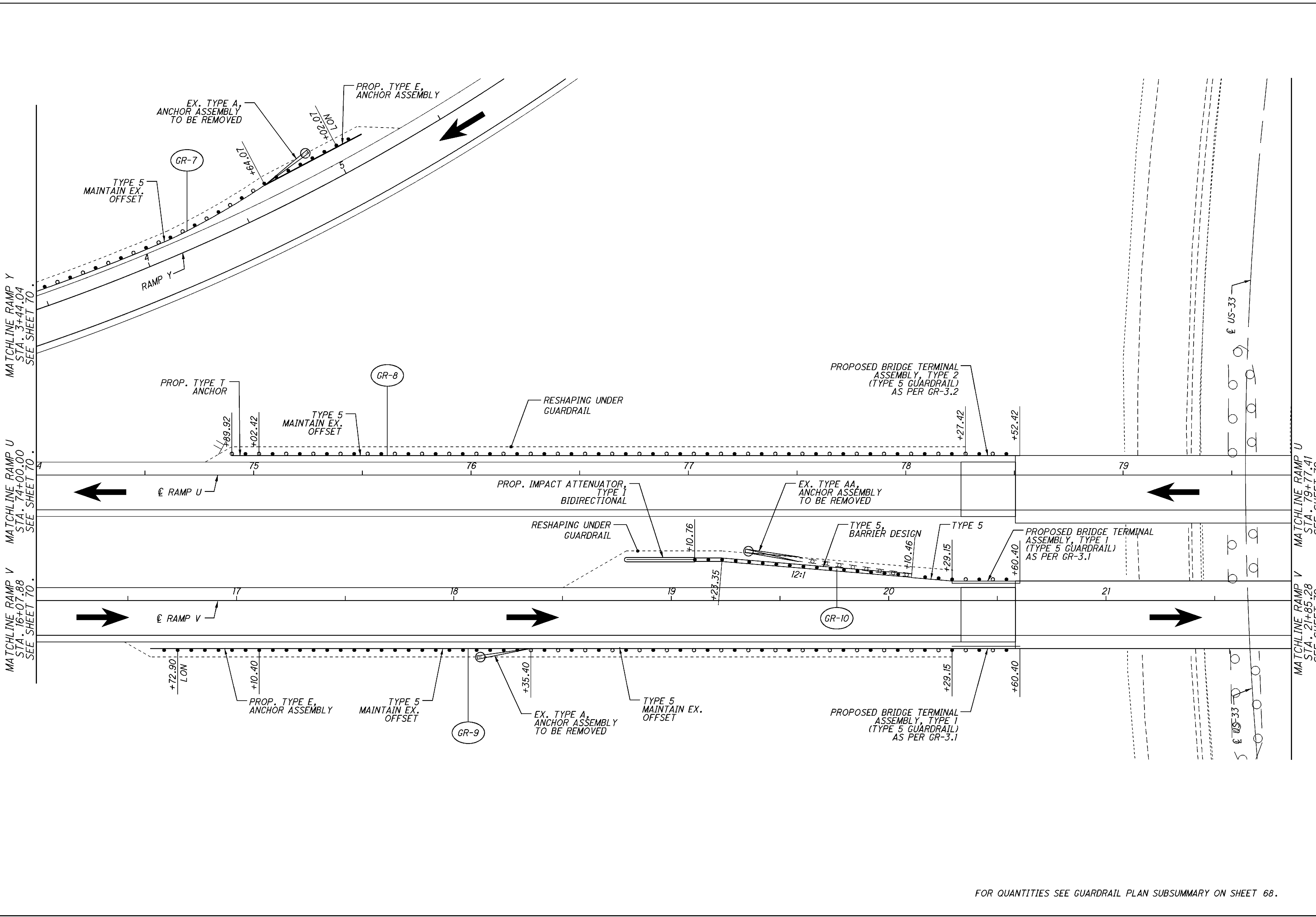
BARRIER AS PER PLAN DETAIL

SEE STANDARD DRAWINGS FOR RESTEEL PLACEMENT DETAILS

GUARDRAIL PLAN
RAMP U & RAMP V & RAMP Y & RAMP Z

UNI-33-8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GUARDRAIL SHEETS.dgn SHEET_GR003 13-NOV-2012 1:43PM drankin



CALCULATED BY: DRK/DRK
 CHECKED BY: CJK

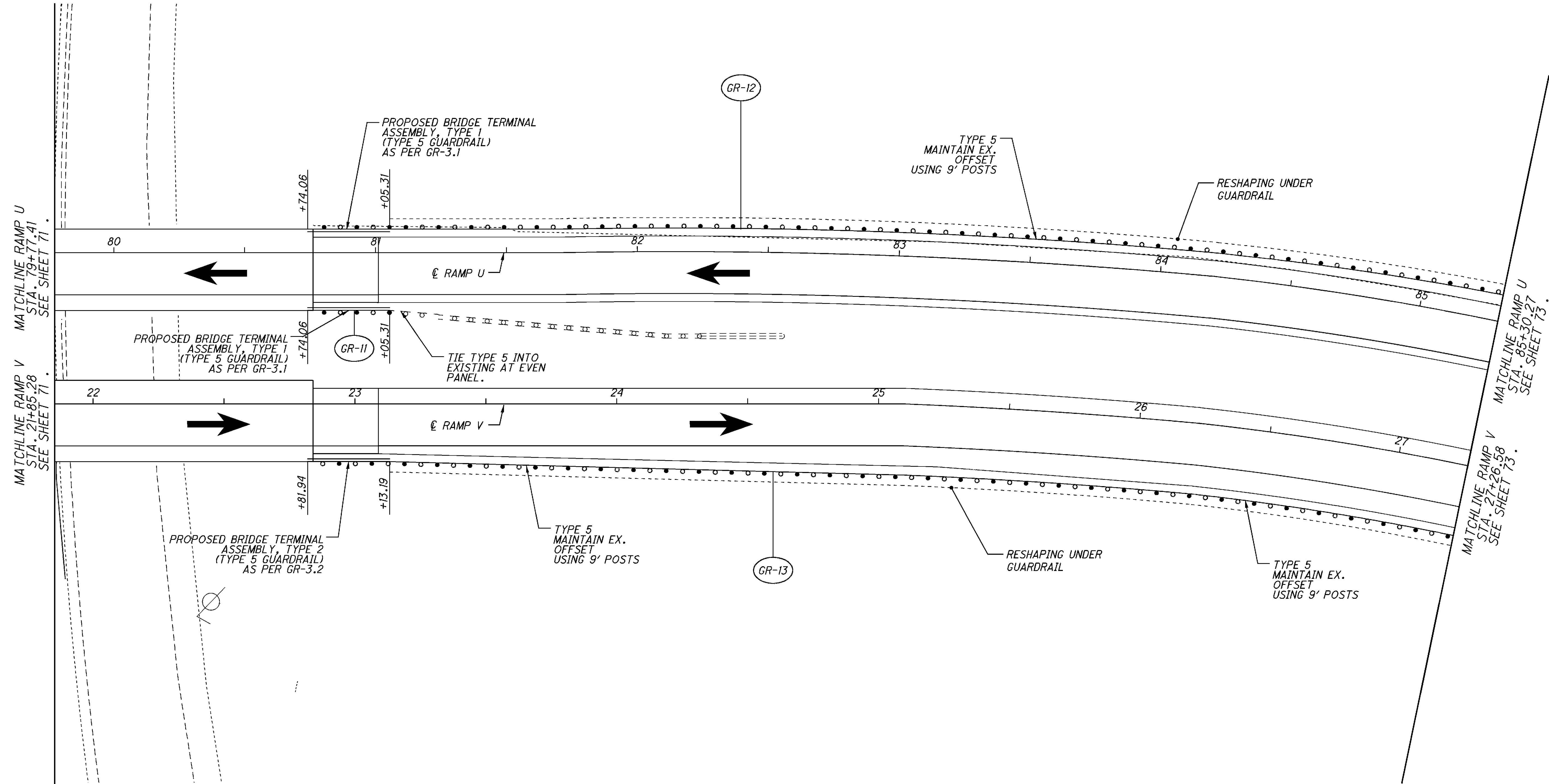
GUARDRAIL PLAN
RAMP U & RAMP V & RAMP Y

UNI -33-8.74

71
108

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GUARDRAIL SHEETS.dgn SHEET_GR004 13-NOV-2012 1:43PM dronkin



CALCULATED
DWR/MSK

CHECKED
CCT

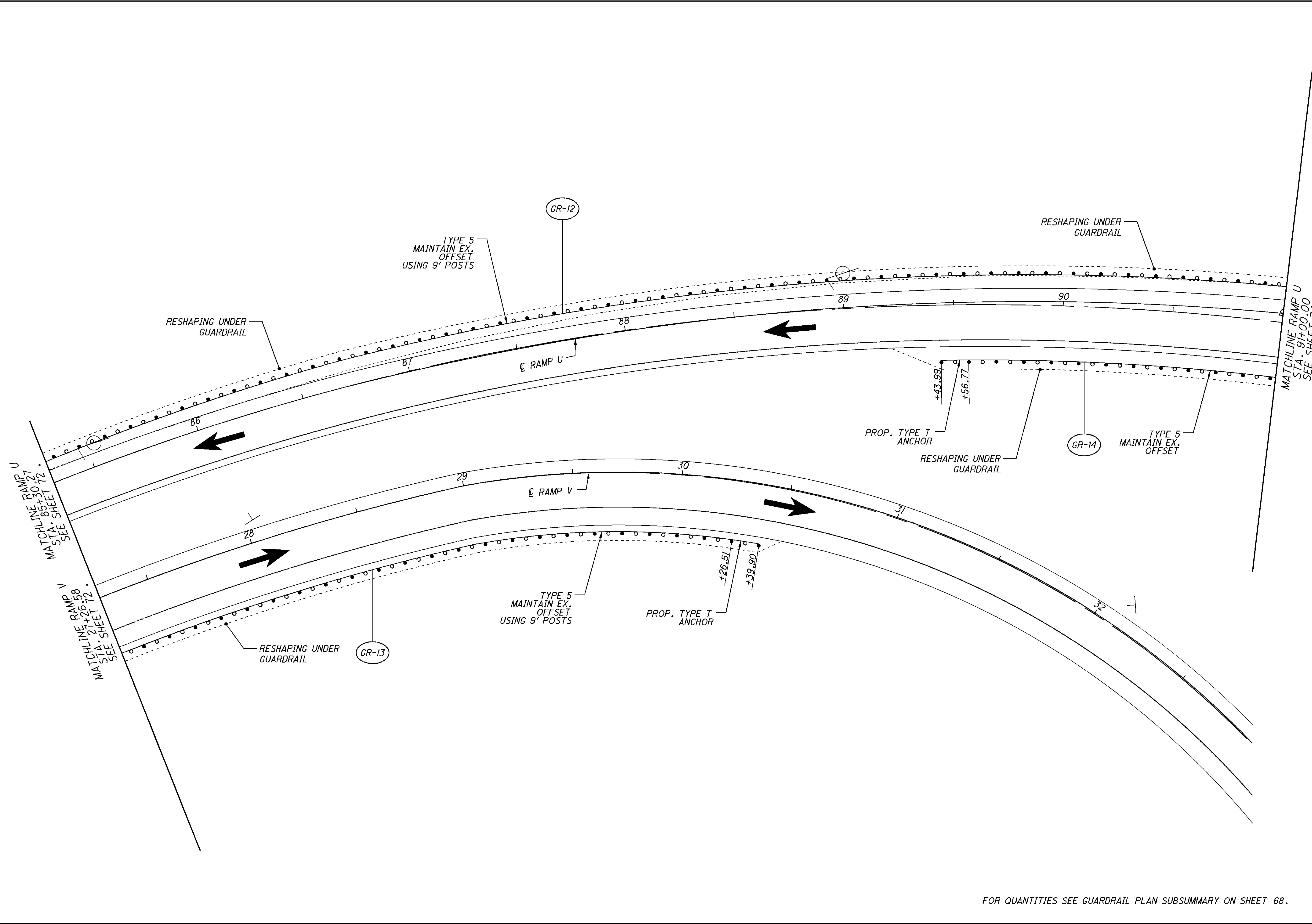
0 20 40
HORIZONTAL
SCALE IN FEET

**GUARDRAIL PLAN
RAMP U & RAMP V**

UNI - 33 - 8.74

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GUARDRAIL_SHEETS.dgn SHEET_GR005 13-NOV-2012 1:43PM drankin



CALCULATED
DWR/MSK

CHECKED
CZ

0 20 40
HORIZONTAL
SCALE IN FEET

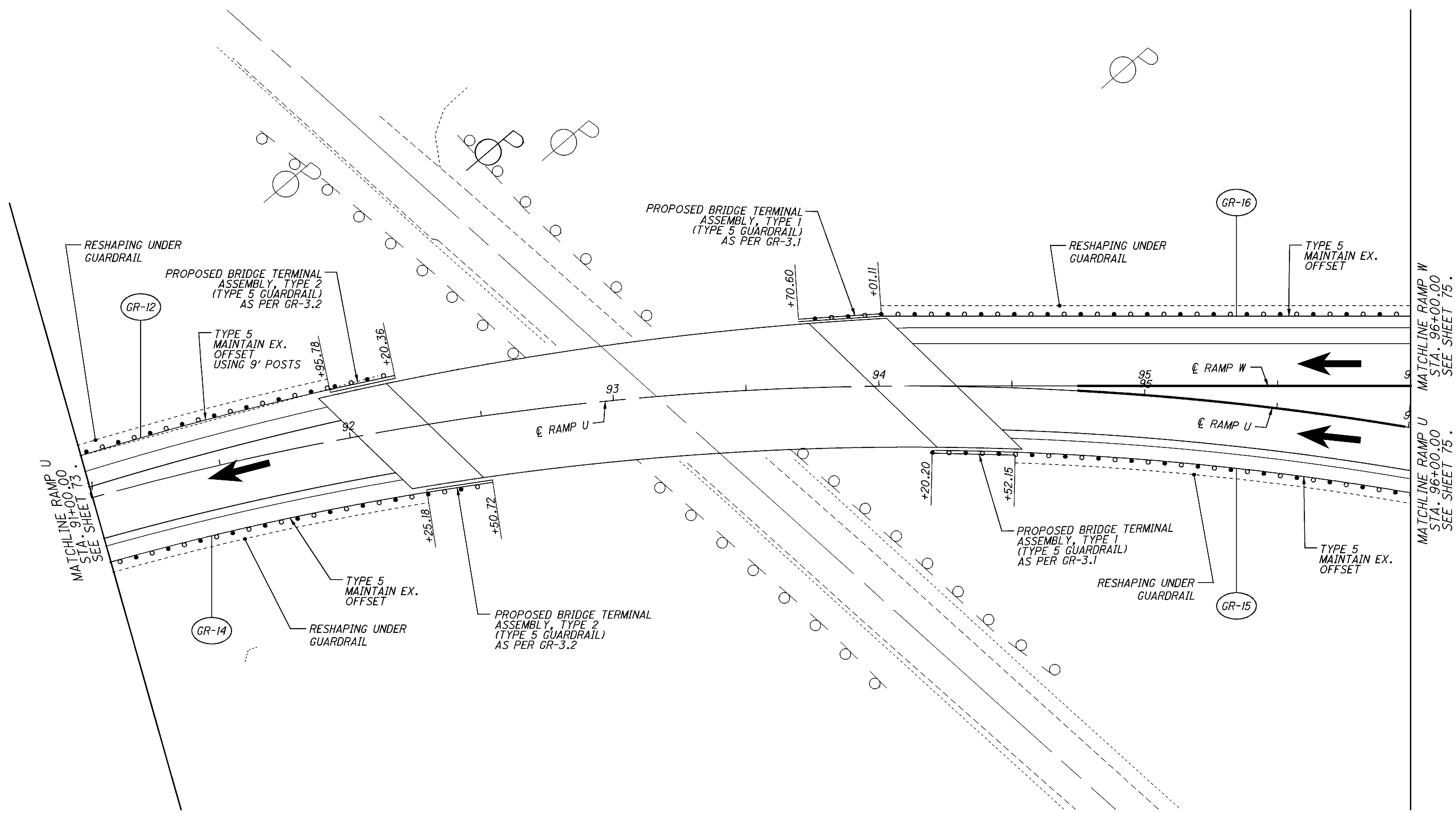
N

**GUARDRAIL PLAN
RAMP U & RAMP V**

UNI-33-8.74

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\GUARDRAIL_SHEETS.dgn SHEET_GR006 13-NOV-2012 1:43PM drankin



CALCULATED
DWR/MSK

CHECKED
CCT

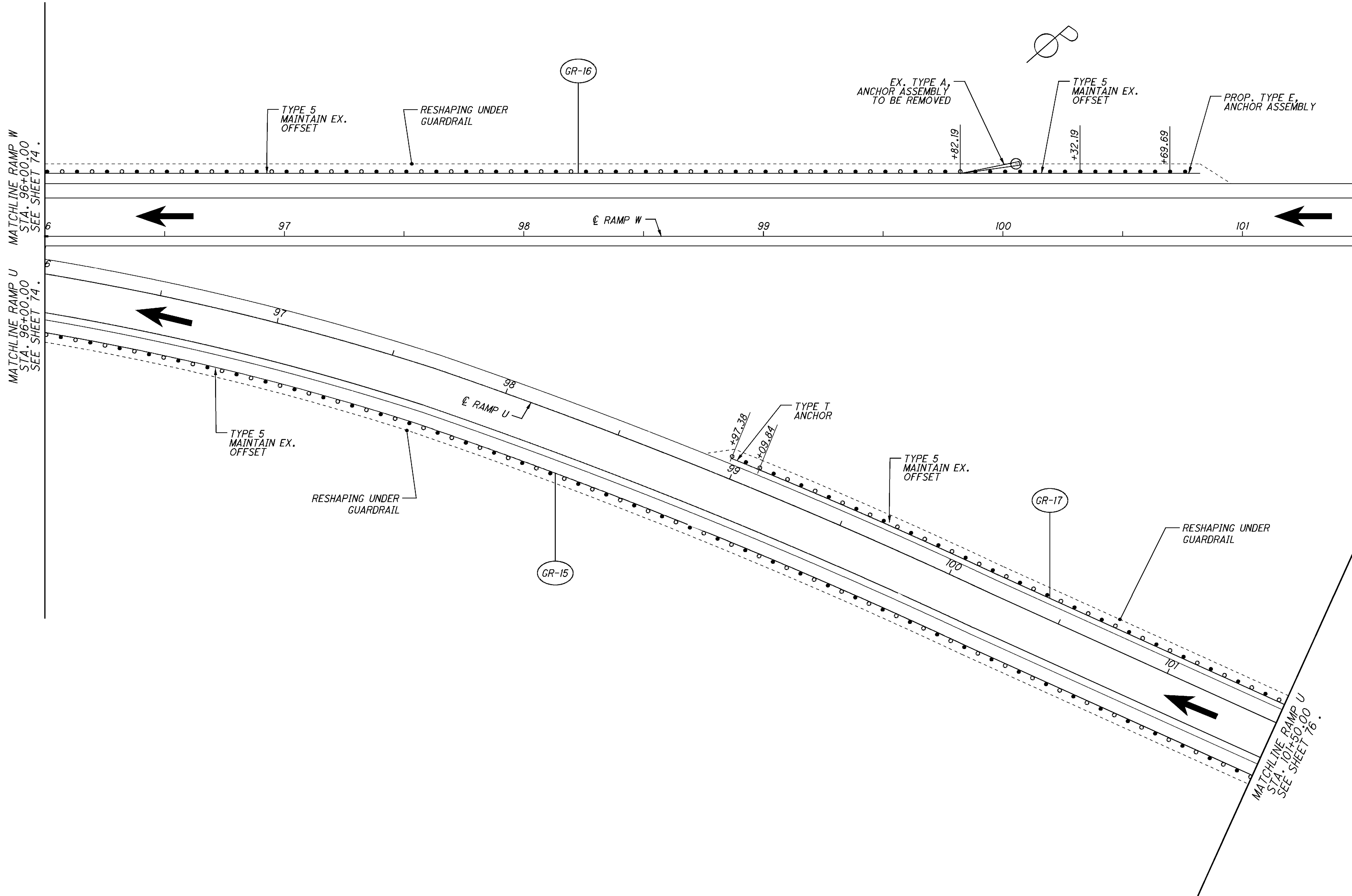
0 20 40
HORIZONTAL
SCALE IN FEET

**GUARDRAIL PLAN
RAMP U & RAMP W**

UNI - 33 - 8.74

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GUARDRAIL_SHEETS.dgn SHEET_GR007 13-NOV-2012 1:43PM drankin



CALCULATED
CHKD: [initials]
CHECKED
[initials]

0 20 40
HORIZONTAL
SCALE IN FEET

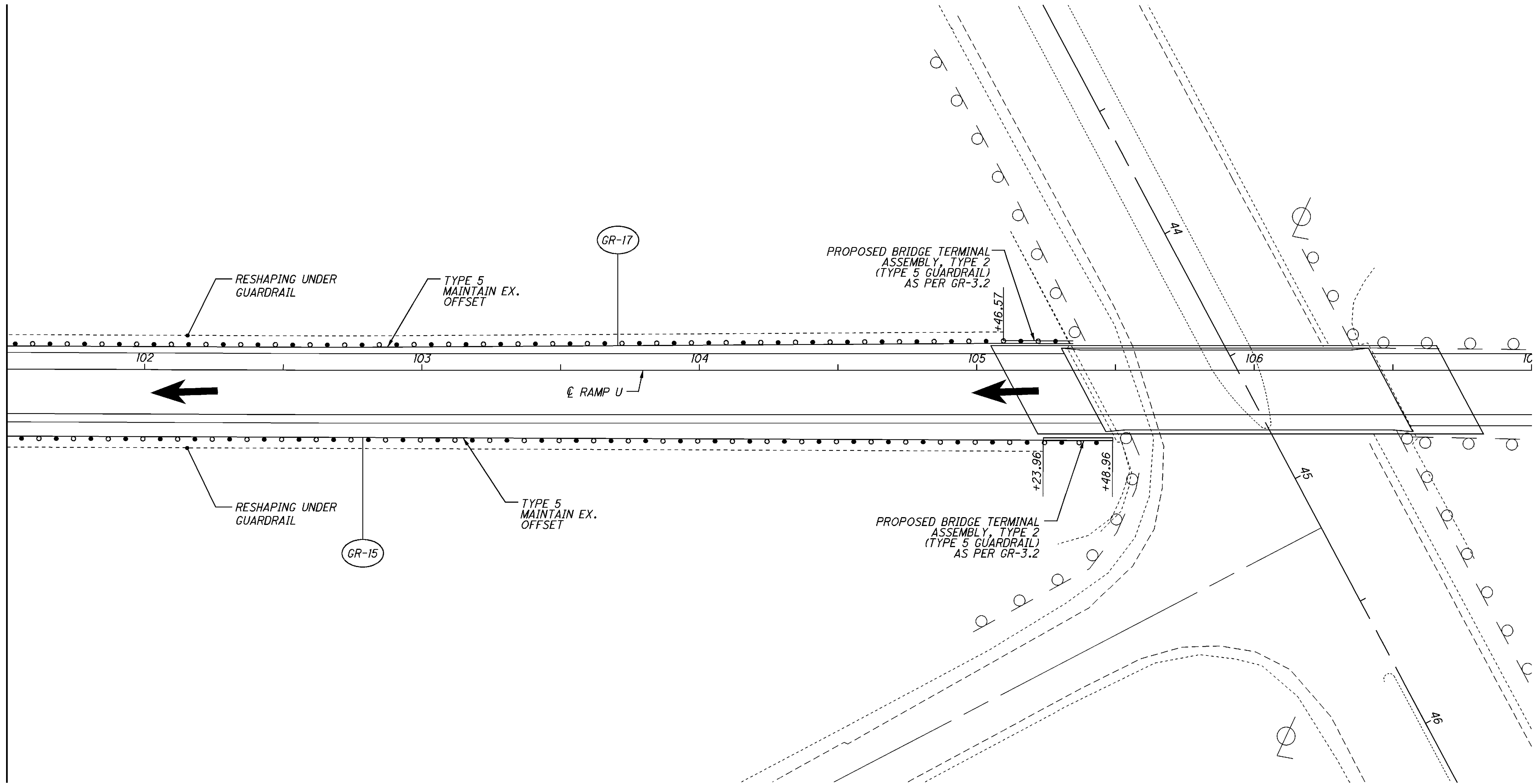
**GUARDRAIL PLAN
RAMP U & RAMP W**

UNI - 33 - 8.74

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GUARDRAIL_SHEETS.dgn 13-NOV-2012 1:43PM drankin SHEET_CR008

MATCHLINE RAMP U
STA. 101+50.00
SEE SHEET 75



CALCULATED	CHK'D	CHK'D
DRY/ARK		

0 20 40
HORIZONTAL
SCALE IN FEET

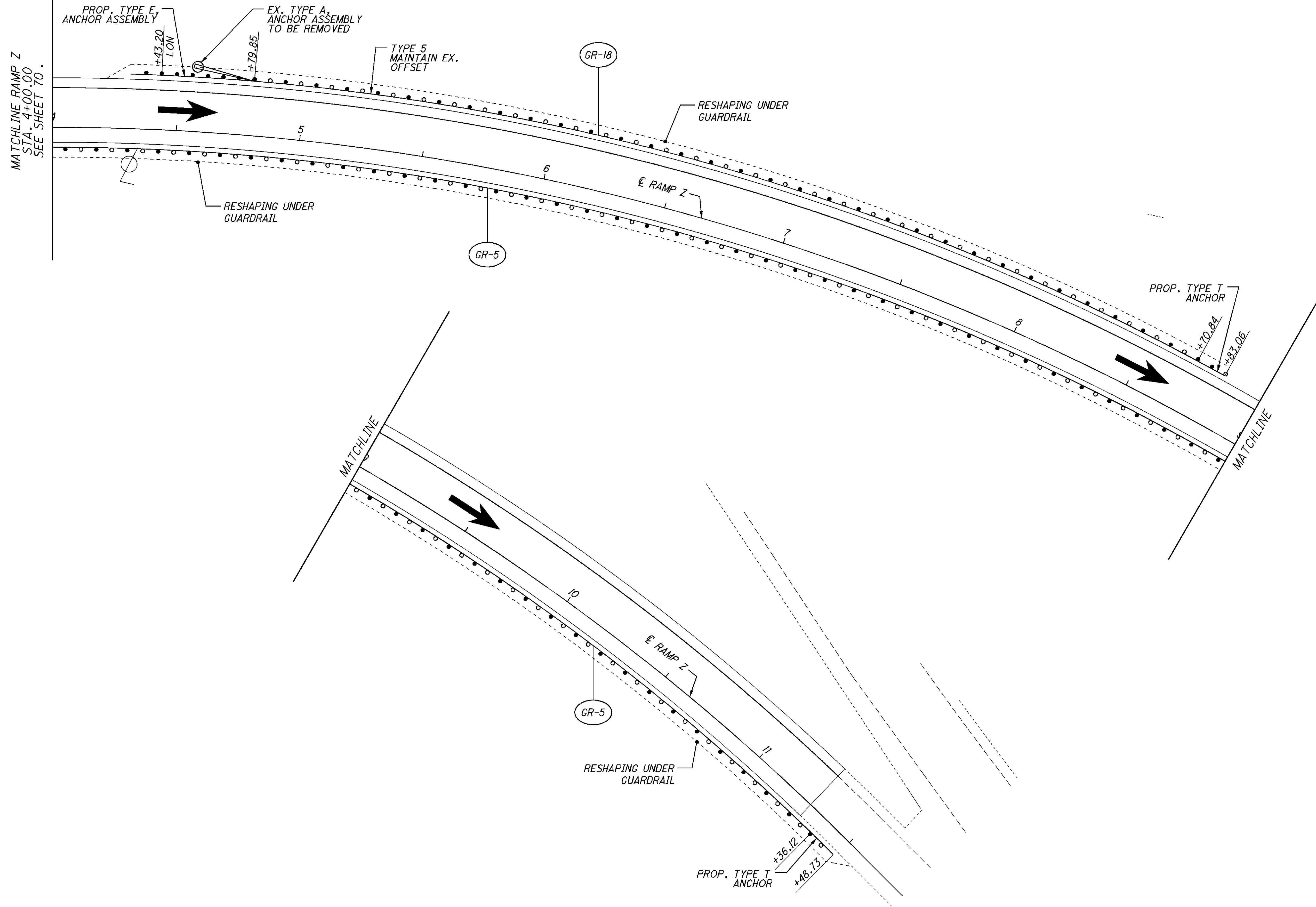
GUARDRAIL PLAN RAMP U

UNI -33-8.74

76
108

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GUARDRAIL SHEETS.dgn SHEET_GR009 13-NOV-2012 1:43PM drankin



CALCULATED
BY: RWB

CHECKED
CCT

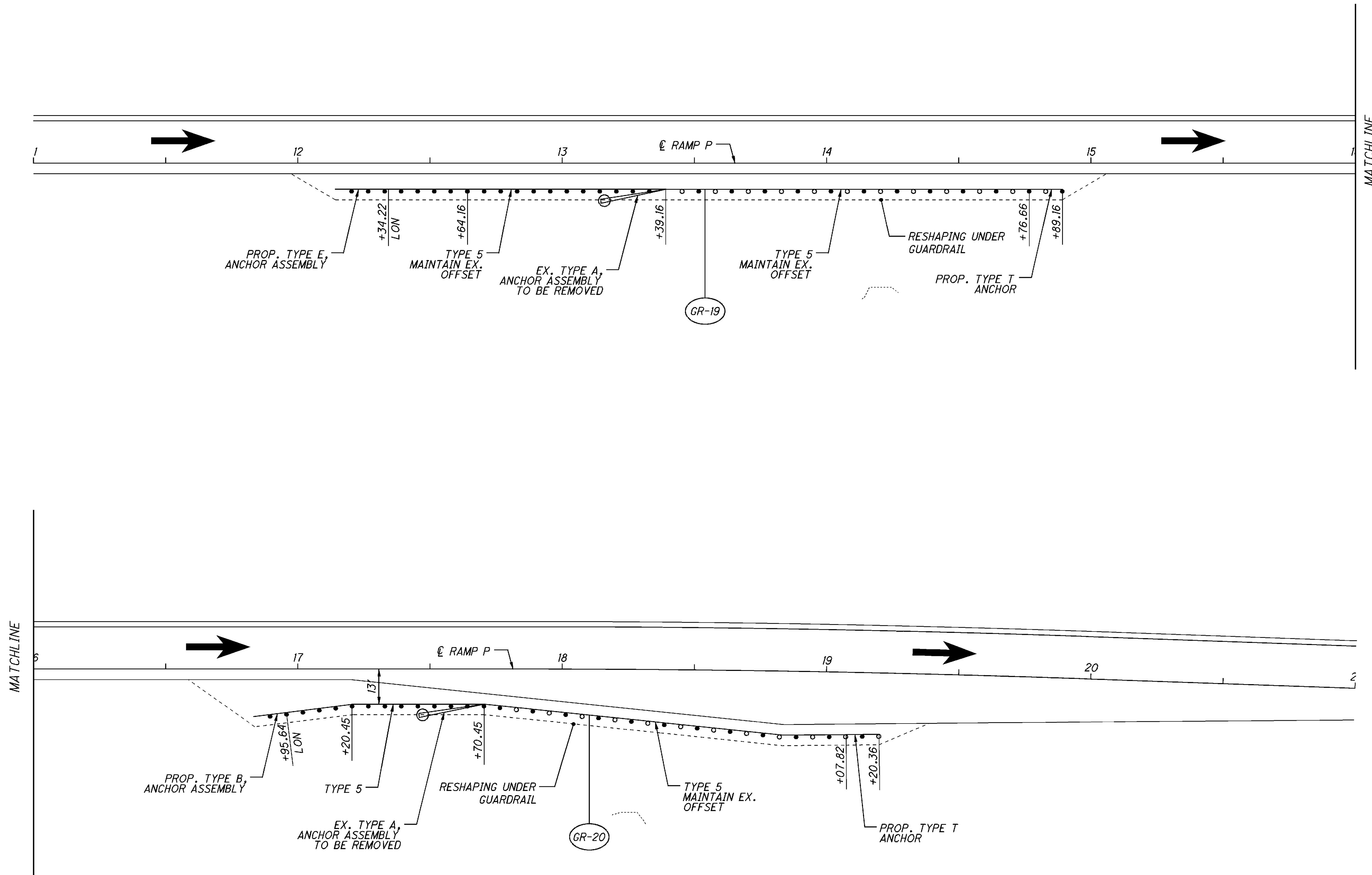
0 20 40
10
HORIZONTAL
SCALE IN FEET

**GUARDRAIL PLAN
RAMP Z**

UNI - 33 - 8.74

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\GUARDRAIL_SHEETS.dgn SHEET_GR010 13-NOV-2012 1:43PM drankin



CALCULATED
DRA:RMB
CHECKED
CZ

0 20 40
HORIZONTAL
SCALE IN FEET

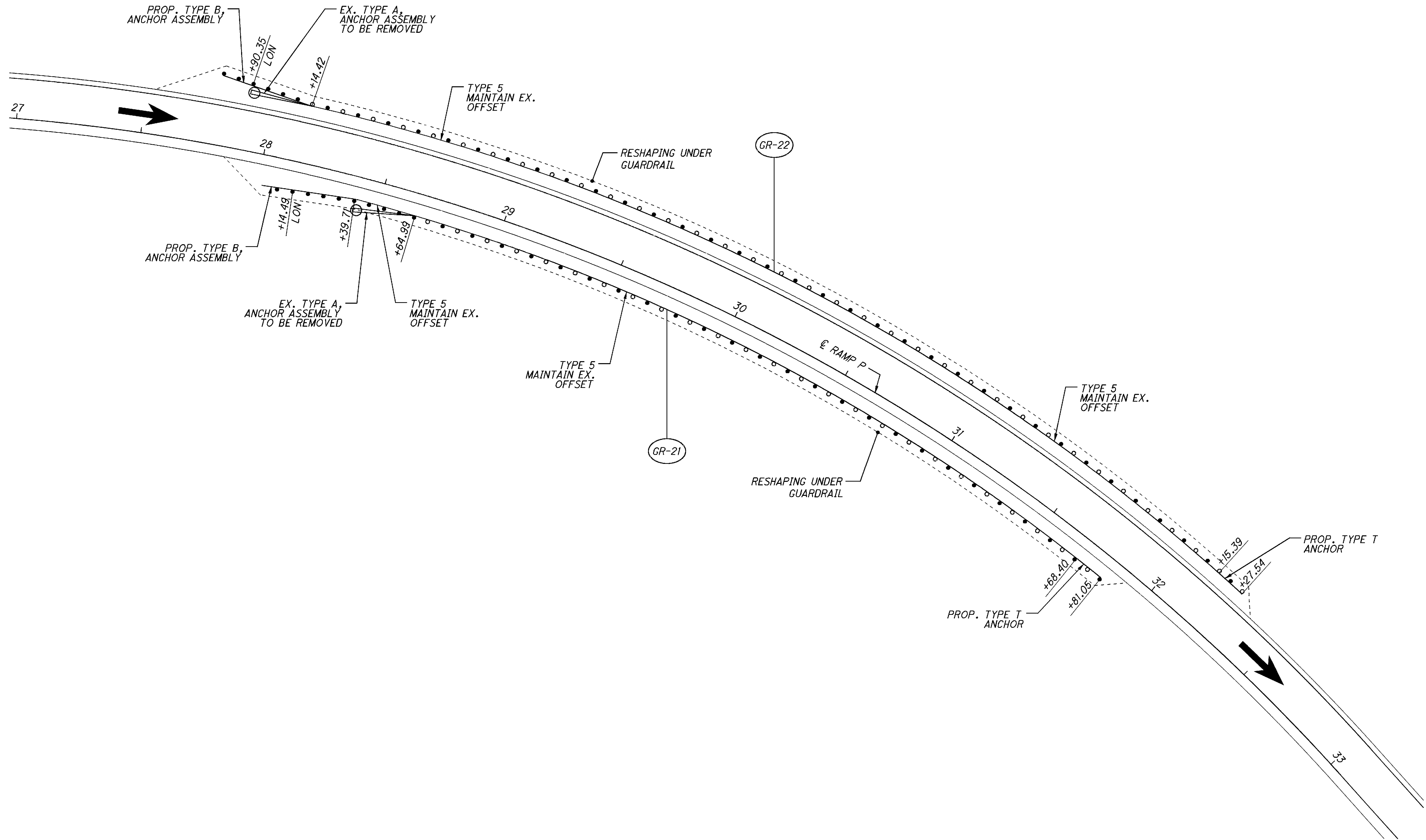
N

**GUARDRAIL PLAN
RAMP P**

UNI - 33 - 8.74

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\GUARDRAIL_SHEETS.dgn SHEET_CR011 13-NOV-2012 1:43PM drankin



CALCULATED BY: RAK CHECKED: CCA

0 10 20 40
HORIZONTAL SCALE IN FEET

N

**GUARDRAIL PLAN
RAMP P**

UNI - 33 - 8.74

FOR QUANTITIES SEE GUARDRAIL PLAN SUBSUMMARY ON SHEET 68.

TRAFFIC CONTROL SUBSUMMARY - MAINLINE																				CALCULATED DRAINAGE CHECKED CCT								
S H E E T #	B E G I N S T A.	E N D S T A.	L E G T M I L E	L E G T F T	S I D E	DESCRIPTION	644 LONG LINE MARKINGS				644 AUXILIARY MARKINGS					621 RAISED PAVEMENT MARKERS							RAISED PAVEMENT MARKER REMOVED EACH					
							EDGE LINE, 6"	EDGE LINE, 6"	LANE LINE, 6"	CENTER LINE (DOUBLE SOLID) MILE	CHANNEL IZING LINE, 12" FT.	STOP LINE FT.	CROSS WALK FT.	TRANS VERSE LINE YELLOW FT.	TRANS VERSE LINE WHITE FT.	DOTTED LINE 6" FT.	RPM											
																	ONE WAY - WHITE		WHITE/RED		YELLOW/RED	YELLOW/YELLOW		RAISED PAVEMENT MARKER REMOVED EACH				
																	RIGHT EDGE LINE 40' EACH	80' EACH	EDGE LINE 40' EACH	CHANNELIZING 40' EACH	LANE LINE 120' EACH	EDGE LINE 80' EACH			CENTER LINE 80' EACH			
85/108	455+63	470+00	0.272	1,437	EB/RT	US-33 MAINLINE	0.272	0.272	0.272		122								705			4	4	12				
85/108	455+63	470+00	0.272	1,437	WB/LT	US-33 MAINLINE	0.272	0.272	0.292		518								160			13	14	12				
86/108	470+00	496+00	0.492	2,600	EB/RT	US-33 MAINLINE	0.492	0.492	0.492															22				
86/108	470+00	496+00	0.492	2,600	WB/LT	US-33 MAINLINE	0.492	0.492	0.492															22				
87/108	496+00	522+00	0.492	2,600	EB/RT	US-33 MAINLINE	0.492	0.492	0.492															110				
87/108	496+00	522+00	0.492	2,600	WB/LT	US-33 MAINLINE	0.492	0.492	0.542															635				
88/108	522+00	535+00	0.246	1,300	EB/RT	US-33 MAINLINE	0.246	0.246	0.273		700								140			18	19	11				
88/108	522+00	535+00	0.246	1,300	WB/LT	US-33 MAINLINE	0.246	0.246	0.256		195											5	6	11				
89/108	535+00	550+00	0.284	1,500	EB/RT	US-33 MAINLINE	0.284	0.284	0.329															470				
89/108	535+00	550+00	0.284	1,500	WB/LT	US-33 MAINLINE	0.284	0.284	0.294															13				
90/108	550+00	565+00	0.284	1,500	EB/RT	US-33 MAINLINE	0.284	0.284	0.315															310				
90/108	550+00	565+00	0.284	1,500	WB/LT	US-33 MAINLINE	0.284	0.284	0.294															13				
91/108	565+00	585+00	0.379	2,000	EB/RT	US-33 MAINLINE	0.379	0.379	0.416		790								125			20	21	17				
91/108	565+00	585+00	0.379	2,000	WB/LT	US-33 MAINLINE	0.379	0.379	0.389		1,130								180			29	29	17				
92/108	585+00	611+00	0.492	2,600	EB/RT	US-33 MAINLINE	0.410	0.410	0.410															22				
92/108	585+00	611+00	0.492	2,600	WB/LT	US-33 MAINLINE	0.410	0.410	0.410															680				
93/108	611+00	637+00	0.492	2,600	EB/RT	US-33 MAINLINE	0.492	0.492	0.528		740								140			19	20	22				
93/108	611+00	637+00	0.492	2,600	WB/LT	US-33 MAINLINE	0.492	0.492	0.520		360											10	10	22				
94/108	637+00	655+00	0.341	1,800	EB/RT	US-33 MAINLINE	0.341	0.341	0.390		290											8	8	15				
94/108	637+00	655+00	0.341	1,800	WB/LT	US-33 MAINLINE	0.341	0.341	0.378		655								110			17	17	15				
95/108	655+00	658+90	0.074	390	EB/RT	US-33 MAINLINE	0.074	0.074	0.074															490				
95/108	655+00	658+90	0.074	390	WB/LT	US-33 MAINLINE	0.074	0.074	0.074															250				
88/108	524+48	535+00	0.199	1,053	WB/LT	US-33 COLLECTOR-DISTRIBUTOR	0.199	0.199	0.199		110											3	4	14				
89/108	535+00	550+00	0.284	1,500	WB/LT	US-33 COLLECTOR-DISTRIBUTOR	0.284	0.284	0.284		225								60			6	7	19				
90/108	550+00	565+00	0.284	1,500	WB/LT	US-33 COLLECTOR-DISTRIBUTOR	0.284	0.284	0.284		260								70			7	8	19				
91/108	565+00	570+82	0.110	582	WB/LT	US-33 COLLECTOR-DISTRIBUTOR	0.110	0.110	0.110															8				
83/108	470+47	486+78	0.309	1,631	EB/WB	US-36 MAINLINE	0.618			0.360	130	24							76			11	5	4		24		
TOTALS CARRIED TO GENERAL SUMMARY							17.44	8.81	0.36		6,225	24					1,061	5,412						776			698	
TRAFFIC CONTROL SUBSUMMARY - BRIDGE DECKS																												
S H E E T #	B E G I N S T A.	E N D S T A.	L E G T M I L E	L E G T F T	S I D E	DESCRIPTION	646 LONG LINE MARKINGS				646 AUXILIARY MARKINGS					621 RAISED PAVEMENT MARKERS							RAISED PAVEMENT MARKER REMOVED EACH					
							EDGE LINE, 6"	EDGE LINE, 6"	LANE LINE, 6"	CENTER LINE (DOUBLE SOLID) MILE	CHANNEL IZING LINE, 12" FT.	STOP LINE FT.	CROSS WALK FT.	TRANS VERSE LINE YELLOW FT.	TRANS VERSE LINE WHITE FT.	DOTTED LINE 6" FT.	RPM											
																	ONE WAY - WHITE		WHITE/RED		YELLOW/RED	YELLOW/YELLOW		RAISED PAVEMENT MARKER REMOVED EACH				
																	RIGHT EDGE LINE 40' EACH	80' EACH	EDGE LINE 40' EACH	CHANNELIZING 40' EACH	LANE LINE 120' EACH	EDGE LINE 80' EACH			CENTER LINE 80' EACH			
84/108	78+25	81+01	0.052	276	RAMP U	UNI-33-8.34	0.052	0.052	0.105																			
84/108	20+58	23+09	0.048	251	RAMP V	UNI-33-8.35	0.048	0.048	0.095																			
84/108	92+03	94+28	0.043	225	RAMP U	UNI-33-8.62	0.043	0.043	0.085																			
85/108	458+80	460+98	0.041	219	EB/RT	UNI-US33-8.79	0.041	0.041	0.083																			
85/108	458+88	460+98	0.040	209	WB/LT	UNI-US33-8.79	0.040	0.040	0.040																			
85/108	105+13	106+75	0.031	162	RAMP U	UNI-US33-8.79 A	0.031	0.031	0.031																			
86/108	473+56	475+70	0.041	214	EB/RT	UNI-US33-9.05	0.041	0.041	0.041																			
86/108	473+56	475+70	0.041	214	WB/LT	UNI-US33-9.05	0.041	0.041	0.041																			
86/108	476+52	478+30	0.034	178	EB/RT	UNI-US33-9.12	0.034	0.034	0.034																			
86/108	476+52	478+30	0.034	178	WB/LT	UNI-US33-9.12	0.034	0.034	0.034																			
86/108	482+93	485+43	0.047	250	EB/RT	UNI-US33-9.22	0.047	0.047	0.047																			
86/108	482+93	485+43	0.047	250	WB/LT	UNI-US33-9.22	0.047	0.047	0.047																			
92/108	602+28	604+28	0.038	200	EB/RT	UNI-US33-11.50	0.038	0.038	0.038																			
92/108	601+70	603+70	0.038	200	WB/LT	UNI-US33-11.50	0.038	0.038	0.038																			
92/108	606+08	608+44	0.045	236	EB/RT	UNI-US33-11.56	0.045	0.045	0.045																			
92/108	606+08	608+44	0.045	236	WB/LT	UNI-US33-11.56	0.045	0.045	0.045																			
94/108	639+01	641+46	0.046	245	EB/RT	UNI-US33-12.19	0.046	0.046	0.046																			
94/108	639+24	641+65	0.046	241	WB/LT	UNI-US33-12.19	0.046	0.046	0.046																			
TOTALS CARRIED TO GENERAL SUMMARY							1.51	0.94																				

13-NOV-2012 1:43PM drankin

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\summary_sheets\SUMMARY_SHEETS.dgn

TRAFFIC CONTROL SUBSUMMARY
MAINLINE / BRIDGE DECKS

UNI-33-8.74

80
108

TRAFFIC CONTROL SUBSUMMARY - RAMPS

S H E T #	B E G I N S T A	E N D S T A	L E N G T H M I L E	L E N G T H F T	S I D E	DESCRIPTION	644 LONG LINE MARKINGS				644 AUXILIARY MARKINGS					621 RAISED PAVEMENT MARKERS							RAISED PAVEMENT MARKER REMOVED EACH
							EDGE LINE, 6"	EDGE LINE, 6"	LANE LINE, 6"	CENTER LINE (DOUBLE SOLID)	CHANNEL IZING LINE, 12"	STOP LINE	CROSS WALK	TRANS VERSE LINE	TRANS VERSE LINE	DOTTED LINE 6"	RPM						
																	ONE WAY - WHITE		WHITE/RED		YELLOW/RED	YELLOW/YELLOW	
							WHITE	YELLOW	WHITE					YELLOW	WHITE		RIGHT EDGE LINE	EDGE LINE	CHANNELIZING	LANE LINE	EDGE LINE	CENTER LINE	
							MILE	MILE	MILE	MILE	FT.	FT.	FT.	FT.	FT.	FT.	40'	80'	40'	40'	120'	80'	
										EACH	EACH	EACH	EACH	EACH	EACH	EACH							
83/108	58+17	70+92	0.241	1,275	RT/LT	RAMP U	0.241	0.241		160						401			5	17			
84/108	70+92	98+99	0.532	2,807	RT/LT	RAMP U	0.532	0.532		250									7	36			
85/108	98+99	113+38	0.273	1,439	RT/LT	RAMP U	0.273	0.273		175						68			5	19			
83/108	0+00	13+00	0.246	1,300	RT/LT	RAMP V	0.246	0.246	0.039	405						80			11	17			
84/108	13+00	58+17	0.855	4,517	RT/LT	RAMP V	0.855	0.855		300									9	57			
83/108	0+00	15+76	0.298	1,576	RT/LT	RAMP P	0.298	0.298												21			
84/108	15+76	33+63	0.338	1,787	RT/LT	RAMP P	0.338	0.338												23			
85/108	33+63	39+15	0.105	552	RT/LT	RAMP P	0.105	0.105			45							11	5		8		
84/108	1+75	11+64	0.187	989	RT/LT	RAMP Y	0.187	0.187													13		
84/108	2+74	11+28	0.162	854	RT/LT	RAMP Z	0.162	0.162													12		
84/108	96+00	98+96	0.056	296	RT/LT	RAMP W	0.056	0.056													5		
85/108	96+00	104+59	0.163	859	RT/LT	RAMP W	0.163	0.163													12		
85/108	3+17	5+56	0.045	239	EB/RT	RAMP R		0.045													4		
85/108	4+36	5+56	0.023	120	EB/RT	RAMP R	0.023														3		
85/108	3+15	13+35	0.193	1,020	EB/RT	RAMP R	0.193														14		
85/108	4+41	13+35	0.169	894	EB/RT	RAMP R		0.169													12		
85/108	2+25	10+13	0.149	788	WB/LT	RAMP S	0.149														11		
85/108	4+96	5+27	0.006	31	WB/LT	RAMP S	0.006			24							11	5			1		
85/108	2+25	5+27	0.057	302	WB/LT	RAMP S		0.057													5		
85/108	5+15	10+13	0.094	498	WB/LT	RAMP S		0.094		167						65			5		7		
88/108	5+21	10+00	0.091	479	EB/RT	RAMP G	0.091	0.091													7		
89/108	10+00	18+35	0.158	835	EB/RT	RAMP G	0.158	0.158		34							11	5			11		
88/108	10+19	13+00	0.053	281	WB/LT	RAMP F	0.053	0.053													5		
89/108	13+00	20+56	0.143	756	WB/LT	RAMP F	0.143	0.143													10		
89/108	1+48	12+15	0.202	1067	EB/RT	RAMP H	0.20	0.20													14		
89/108	2+84	4+28	0.027	144	EB/RT	RAMP H	0.03	0.03													3		
90/108	11+27	11+91	0.012	64	WB/LT	RAMP M	0.01	0.01													2		
90/108	11+27	15+86	0.087	459	WB/LT	RAMP M	0.09	0.09													7		
90/108	1+55	11+27	0.184	972	WB/LT	RAMP M	0.18	0.18													13		
90/108	3+70	11+54	0.148	784	WB/LT	RAMP L	0.15	0.15													11		
90/108	0+00	3+70	0.070	370	WB/LT	RAMP L	0.07	0.07													6		
90/108	3+45	3+70	0.005	25	WB/LT	RAMP L	0.005	0.005		24							11	5			1		
91/108	5+12	12+80	0.145	768	EB/RT	RAMP J	0.15	0.15													11		
91/108	12+80	16+83	0.076	403	EB/RT	RAMP J	0.08	0.08													6		
91/108	12+80	14+25	0.027	145	EB/RT	RAMP J	0.03	0.03		20							11	5			3		
91/108	0+35	15+23	0.282	1488	EB/RT	RAMP K	0.28	0.28													20		
93/108	5+54	13+00	0.141	746	EB/RT	RAMP A	0.14	0.14													10		
94/108	13+00	14+96	0.037	196	EB/RT	RAMP A	0.04	0.04		38							11	5			3		
93/108	1+54	8+00	0.122	646	WB/LT	RAMP D	0.12	0.12													9		
94/108	8+00	11+20	0.061	320	WB/LT	RAMP D	0.06	0.06													5		
94/108	11+20	12+86	0.031	166	WB/LT	RAMP D	0.03	0.03													3		
94/108	11+20	11+91	0.013	71	WB/LT	RAMP D	0.01	0.01													2		
94/108	0+54	8+83	0.157	829	EB/RT	RAMP B	0.16	0.16			120										11		
94/108	0+47	8+22	0.147	775	WB/LT	RAMP C	0.15	0.15		44	110						11	5			11		
TOTALS CARRIED TO GENERAL SUMMARY							12.49	0.04		1,457	229	230	213	696		635					572		

CALCULATED BY: [blank] CHECKED BY: [blank]
TRAFFIC CONTROL SUBSUMMARY RAMPS
UNI-33-8.74
 81
 108

13-NOV-2012 1:43PM drankin
 Sheet_TS102
 I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\SUMMARY_SHEETS.dgn

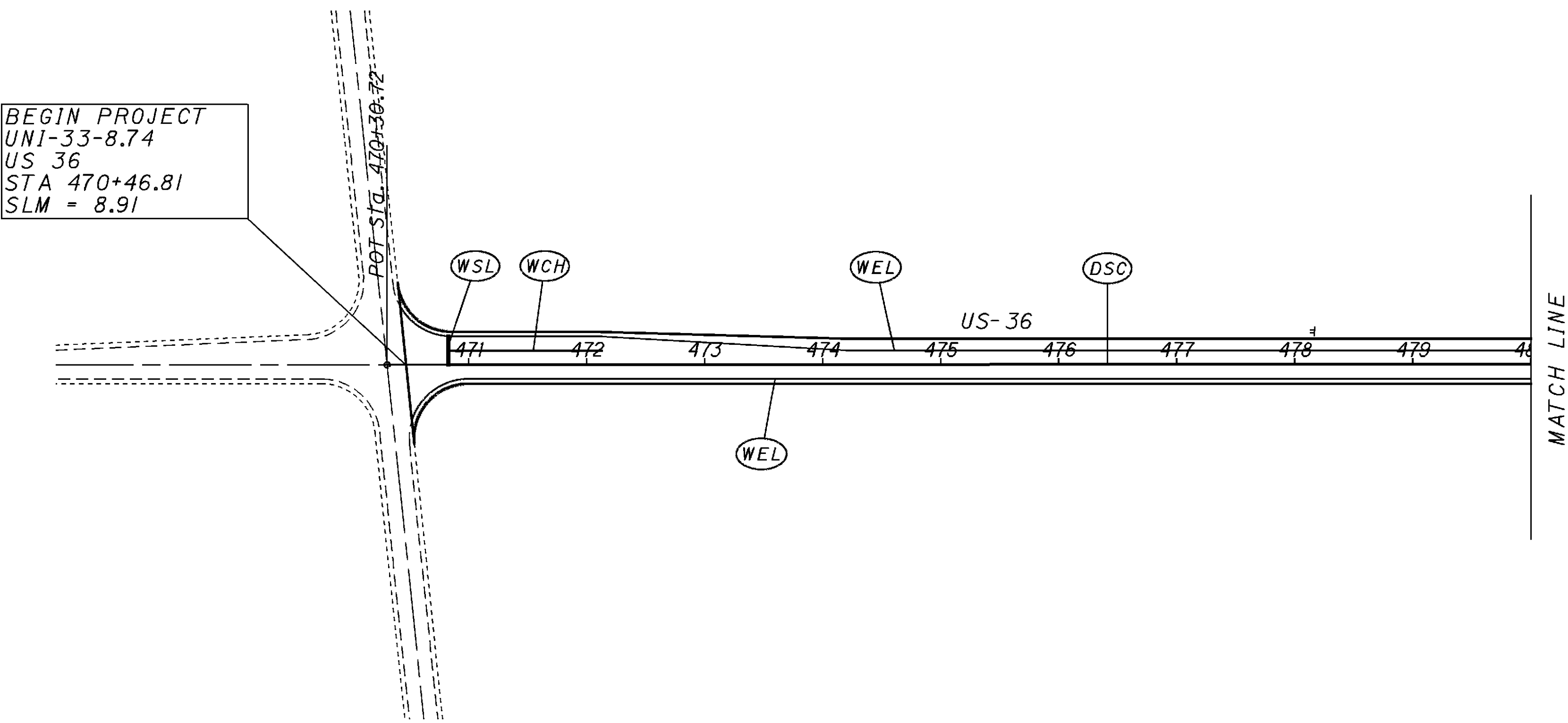
LOCATION					TRAFFIC CONTROL									CALCULATED DRAWING CHECKED DATE		
MARK	SEE SHEET	LOCATION	STATION	SIDE	630	630	630	630				630	630		630	
					GROUND MOUNTED SUPPORT, NO. 2 POST	GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN POST REFLECTOR (RED)	SIGN, FLAT SHEET				REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION		REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
					FT	FT	EACH	STOP RI-1-48 SQ FT	YIELD RI-2-48 SQ FT	DO NOT ENTER R5-1-36 SQ FT	WRONG WAY R5-1a-36 SQ FT	EACH	EACH		EACH	
SN-1	83	RAMP U	60+90.00	LT	7	10	1			9.00			1		1	
SN-2	83	RAMP U	60+90.00	RT	7	10	1			9.00			1		1	
SN-3	83	RAMP U	63+00.00	LT	7	10	1				6.00		1		1	
SN-4	83	RAMP U	63+00.00	RT	7	10	1				6.00		1		1	
SN-5	85	RAMP P	33+80.04	LT	7	10	1				6.00		1		1	
SN-6	85	RAMP P	33+80.04	RT	7	10	1				6.00		1		1	
SN-7	85	RAMP P	38+77.73	RT	14	20	4	16.00		9.00			2		2	
SN-8	85	RAMP R	5+15.85	LT	14	20	2		6.93				1		2	
SN-9	85	RAMP R	12+32.78	RT	14	20	2		6.93				1		2	
SN-10	85	RAMP S	3+07.96	LT	14	20	2		6.93				1		2	
SN-11	85	RAMP S	4+87.85	RT	14	20	4	16.00		9.00			2		2	
SN-12	85	RAMP S	5+25.54	RT	7	10	1			9.00			1	2	1	
SN-13	85	RAMP S	5+77.58	LT			1				6.00		1			
SN-14	85	RAMP S	6+18.67	RT	7	10	1				6.00		1		1	
SN-15	88	RAMP F	0+46.93	LT	14	20	2		6.93				1		2	
SN-16	88	RAMP F	9+20.93	LT	14	20	2		6.93				1		2	
SN-17	89	RAMP G	13+04.60	RT	7	10	1				6.00		1		1	
SN-18	89	RAMP G	13+04.60	LT	7	10	1				6.00		1		1	
SN-19	89	RAMP G	16+91.15	RT	7	10	1				6.00		1		1	
SN-20	89	RAMP G	17+21.26	LT	14	20	2		6.93				1		2	
SN-21	89	RAMP G	18+10.62	RT	14	20	4	16.00		9.00			2	2	2	
SN-22	89	US-33	548+01.02	RT	14	20	2		6.93				1		2	
SN-23	89	RAMP E	5+67.06	RT	7	10	1				6.00		1		1	
SN-24	89	RAMP E	5+67.06	LT			1				6.00		1			
SN-25	89	RAMP E	4+62.32	RT	7	10	1				6.00		1		1	
SN-26	89	RAMP E	4+09.12	RT	14	20	4	16.00		9.00			2	2	2	
SN-27	89	RAMP E	0+19.58	RT	14	20	2		6.93				1		2	
SN-28	90	RAMP M	2+68.77	LT	14	20	2		6.93				1		2	
SN-29	90	RAMP L	4+28.26	RT	7	10	1				6.00		1		1	
SN-30	90	RAMP L	4+36.26	LT	7	10	1				6.00		1		1	
SN-31	90	RAMP L	3+48.22	RT	14	20	4	16.00		9.00			2	2	2	
SN-32	90	RAMP L	1+08.08	LT	14	20	2		6.93				1		2	
SN-33	91	RAMP J	8+00.92	RT	7	10	1				6.00		1		1	
SN-34	91	RAMP J	8+00.92	LT	7	10	1				6.00		1		1	
SN-35	91	RAMP J	16+77.74	RT	14	20	2		6.93				1		2	
SN-36	91	RAMP K	0+51.05	LT	14	20	4	16.00		9.00			2	2	2	
SN-37	91	US-33	584+66.31	RT	14	20	2		6.93				1		2	
SN-38	93	RAMP D	0+00.00	LT	14	20	2		6.93				1		2	
SN-39	93	RAMP A	12+55.06	RT	7	10	1				6.00		1		1	
SN-40	93	RAMP A	12+55.06	LT	7	10	1				6.00		1		1	
SN-41	94	RAMP A	14+74.20	RT	14	20	4	16.00		9.00			2		2	
SN-42	94	RAMP A	14+74.20	LT	7	10	1			9.00			1		1	
SN-43	94	RAMP C	0+84.44	RT	7	10	1			9.00			1		1	
SN-44	94	RAMP C	0+84.44	LT	14	20	4	16.00		9.00			2		2	
SN-45	94	RAMP C	2+45.86	RT	7	10	1				6.00		1		1	
SN-46	94	RAMP C	2+45.86	LT	7	10	1				6.00		1		1	
SN-47	94	US-33	654+61.82	RT	14	20	2		6.93				1		2	
TOTALS CARRIED TO GENERAL SUMMARY						469	670	85		462.02			55	10	67	

TRAFFIC CONTROL SUBSUMMARY
GROUND MOUNTED SIGNS

UNI -33-8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\SUMMARY SHEETS.dgn Sheet_IC101 13-NOV-2012 1:43PM drankin

BEGIN PROJECT
UNI-33-8.74
US 36
STA 470+46.81
SLM = 8.91



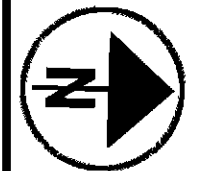
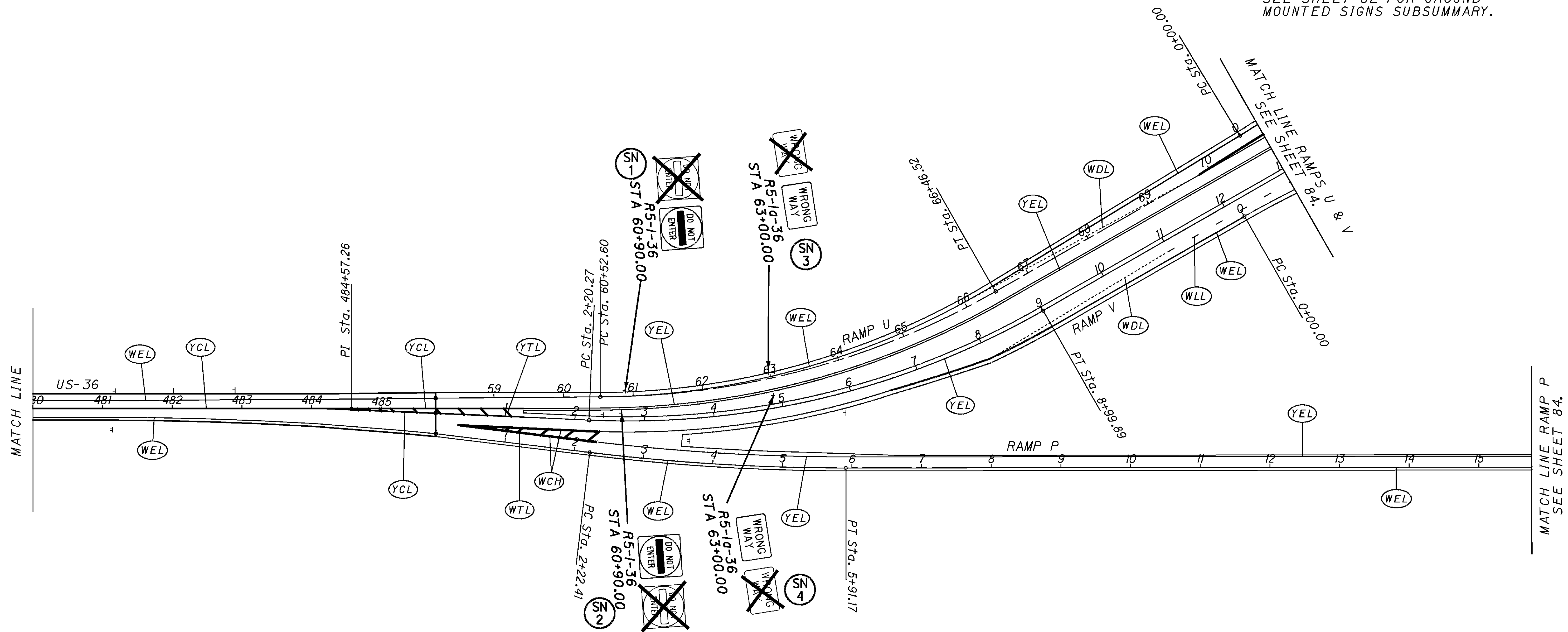
PAVEMENT MARKING LEGEND

- (WLL) 6" WHITE LANE LINE
- (WEL) 6" WHITE EDGE LINE
- (YEL) 6" YELLOW EDGE LINE
- (WCH) 8" WHITE CHANNELIZING LINE
- (WTL) 24" WHITE TRANSVERSE LINE
- (WSL) 24" WHITE STOP LINE
- (CWL) 12" CROSSWALK LINE
- (WDL) 6" DASHED LINE
- (YCL) DOUBLE SOLID CENTER LINE
- (SN #) PROPOSED SIGN LOCATION

NOTE:
STRIPE TO MAINTAIN CURRENT
SHOULDER WIDTHS. ALL MAINLINE
LANES ARE 12' AND RAMP LANES
ARE 16'.

SEE SHEETS 80-81 FOR RPM AND
PAVEMENT MARKING SUBSUMMARIES.

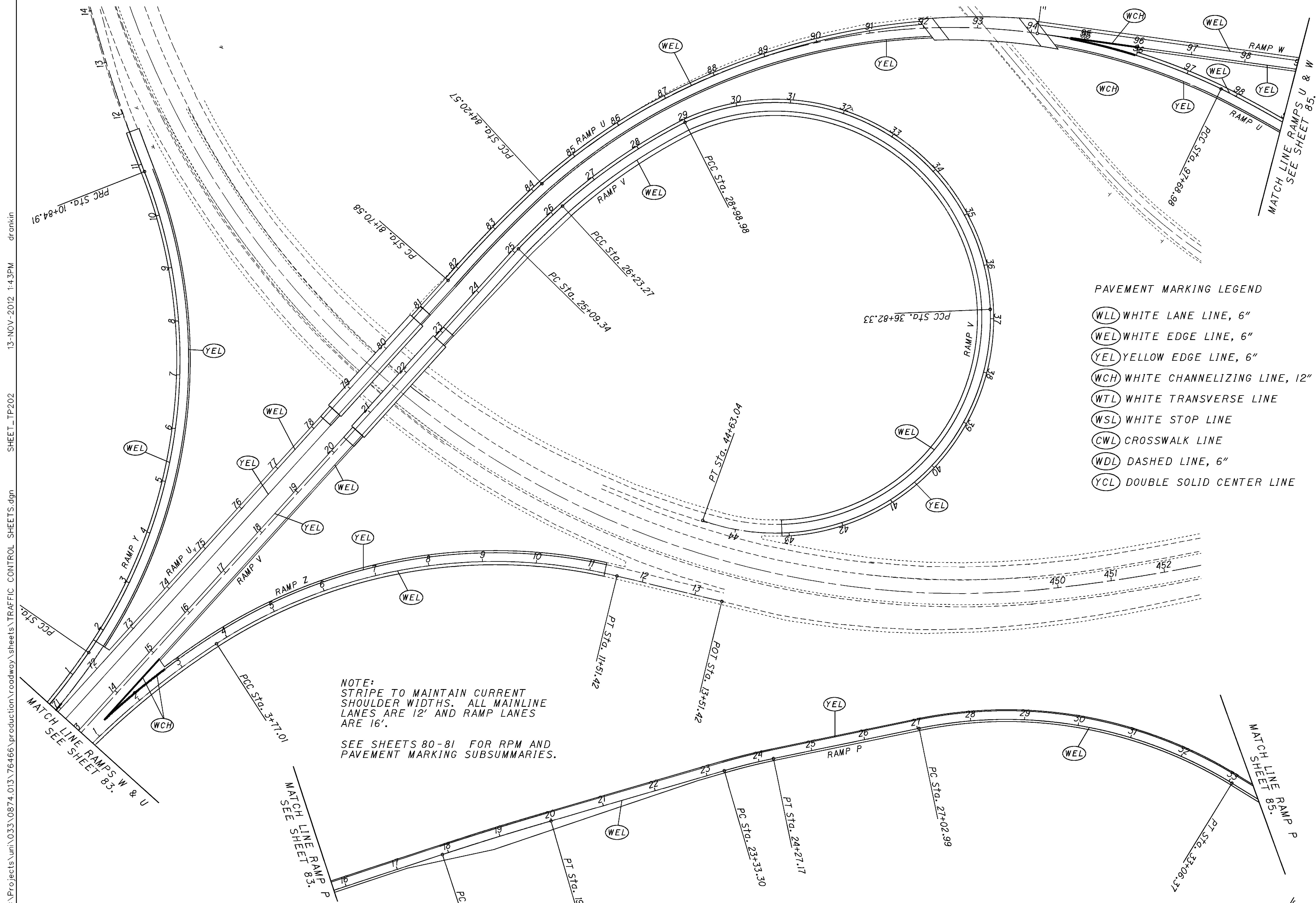
SEE SHEET 82 FOR GROUND
MOUNTED SIGNS SUBSUMMARY.



CALCULATED
CHK/PCHK
CHECKED
CZ

TRAFFIC CONTROL PLAN
US-36, RAMP U, RAMP V & RAMP P

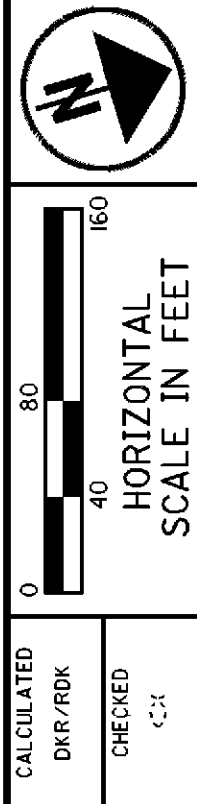
UNI-33-8.74



- PAVEMENT MARKING LEGEND
- (WLL) WHITE LANE LINE, 6"
 - (WEL) WHITE EDGE LINE, 6"
 - (YEL) YELLOW EDGE LINE, 6"
 - (WCH) WHITE CHANNELIZING LINE, 12"
 - (WTL) WHITE TRANSVERSE LINE
 - (WSL) WHITE STOP LINE
 - (CWL) CROSSWALK LINE
 - (WDL) DASHED LINE, 6"
 - (YCL) DOUBLE SOLID CENTER LINE

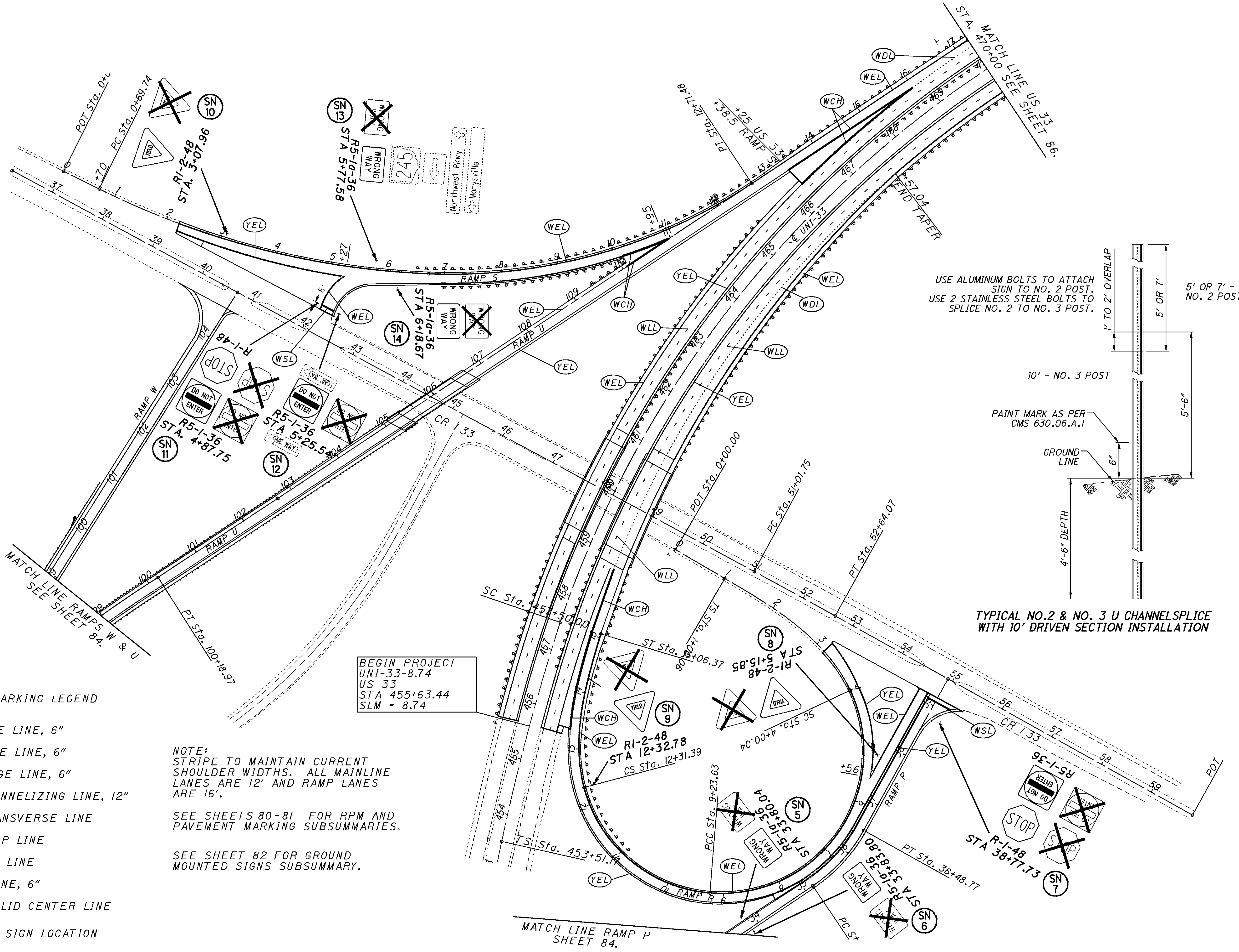
NOTE:
 STRIPE TO MAINTAIN CURRENT
 SHOULDER WIDTHS. ALL MAINLINE
 LANES ARE 12' AND RAMP LANES
 ARE 16'.

SEE SHEETS 80-81 FOR RPM AND
 PAVEMENT MARKING SUBSUMMARIES.

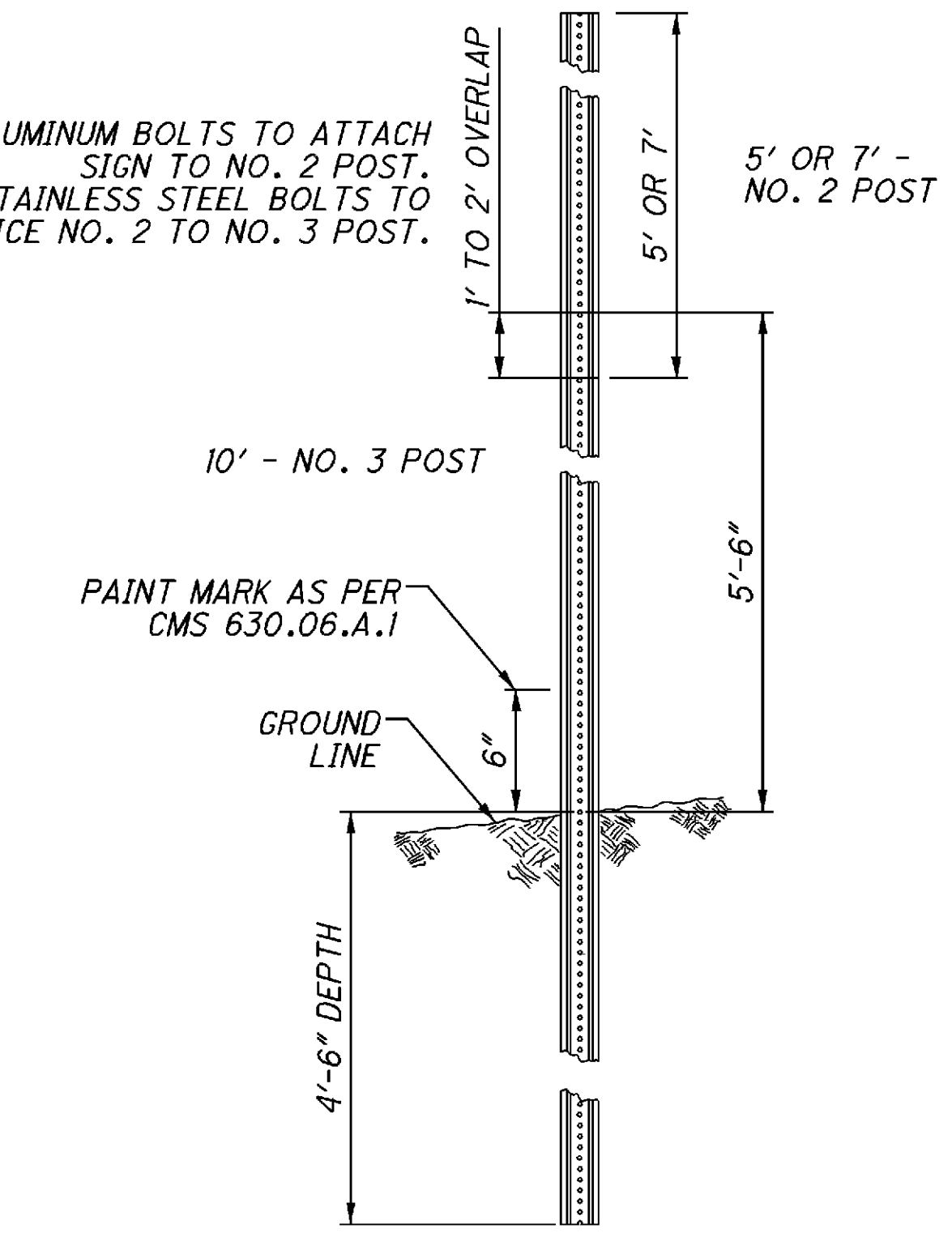


TRAFFIC CONTROL PLAN
RAMPS U, V, Z, Y, P, & W

UNI-33-8.74



USE ALUMINUM BOLTS TO ATTACH SIGN TO NO. 2 POST.
USE 2 STAINLESS STEEL BOLTS TO SPLICE NO. 2 TO NO. 3 POST.



TYPICAL NO. 2 & NO. 3 U CHANNEL SPLICE WITH 10' DRIVEN SECTION INSTALLATION

PAVEMENT MARKING LEGEND

- (WLL) WHITE LANE LINE, 6"
- (WEL) WHITE EDGE LINE, 6"
- (YEL) YELLOW EDGE LINE, 6"
- (WCH) WHITE CHANNELIZING LINE, 12"
- (WTL) WHITE TRANSVERSE LINE
- (WSL) WHITE STOP LINE
- (CWL) CROSSWALK LINE
- (WDL) DASHED LINE, 6"
- (YCL) DOUBLE SOLID CENTER LINE
- (SN #) PROPOSED SIGN LOCATION

NOTE:
STRIPE TO MAINTAIN CURRENT SHOULDER WIDTHS. ALL MAINLINE LANES ARE 12' AND RAMP LANES ARE 16'.

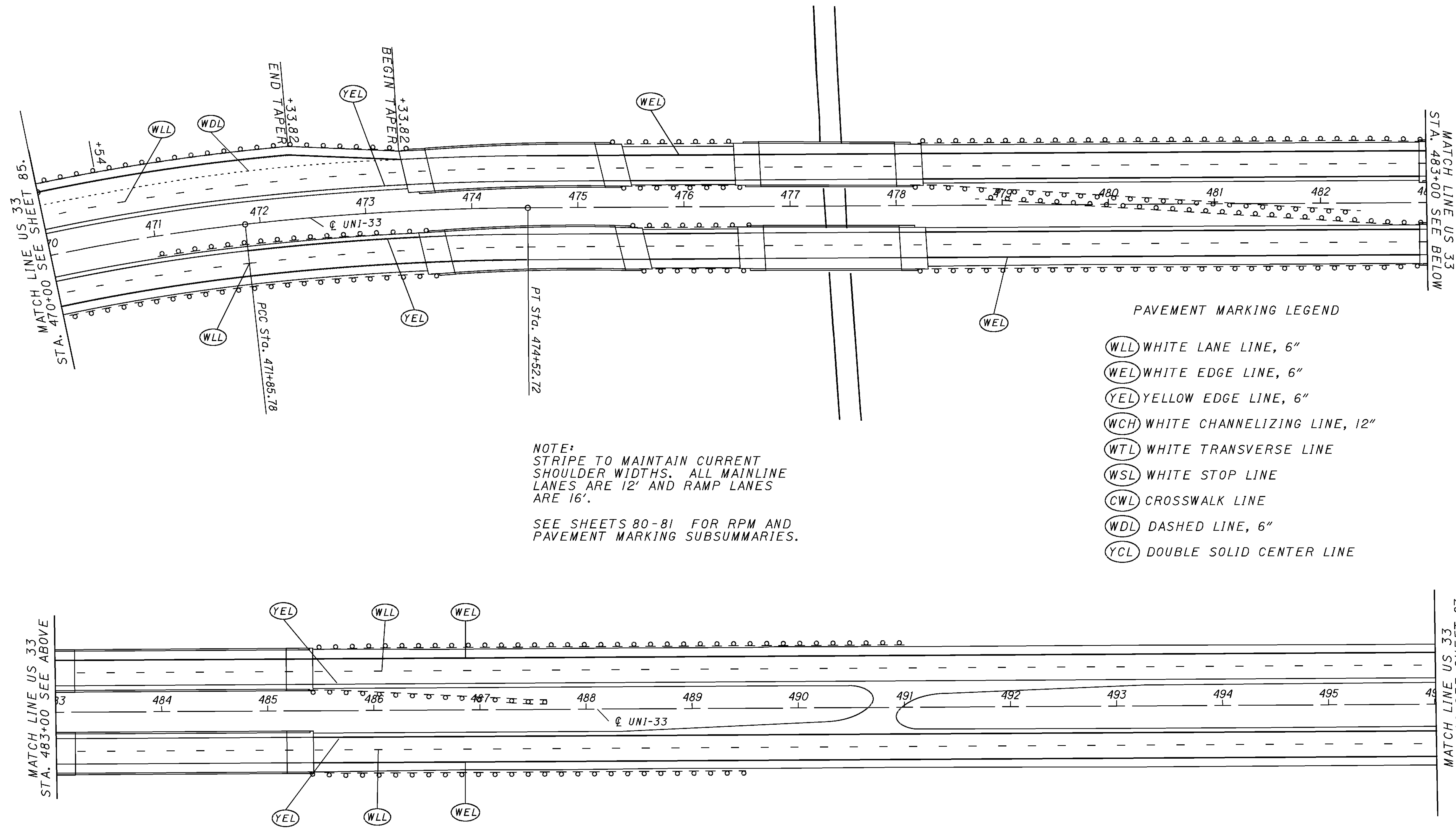
SEE SHEETS 80-81 FOR RPM AND PAVEMENT MARKING SUBSUMMARIES.

SEE SHEET 82 FOR GROUND MOUNTED SIGNS SUBSUMMARY.

BEGIN PROJECT
UNI-33-8.74
US 33
STA 455+63.44
SLM = 8.74

MATCH LINE RAMP P
SHEET 84.

MATCH LINE US 33
SEE SHEET 86.

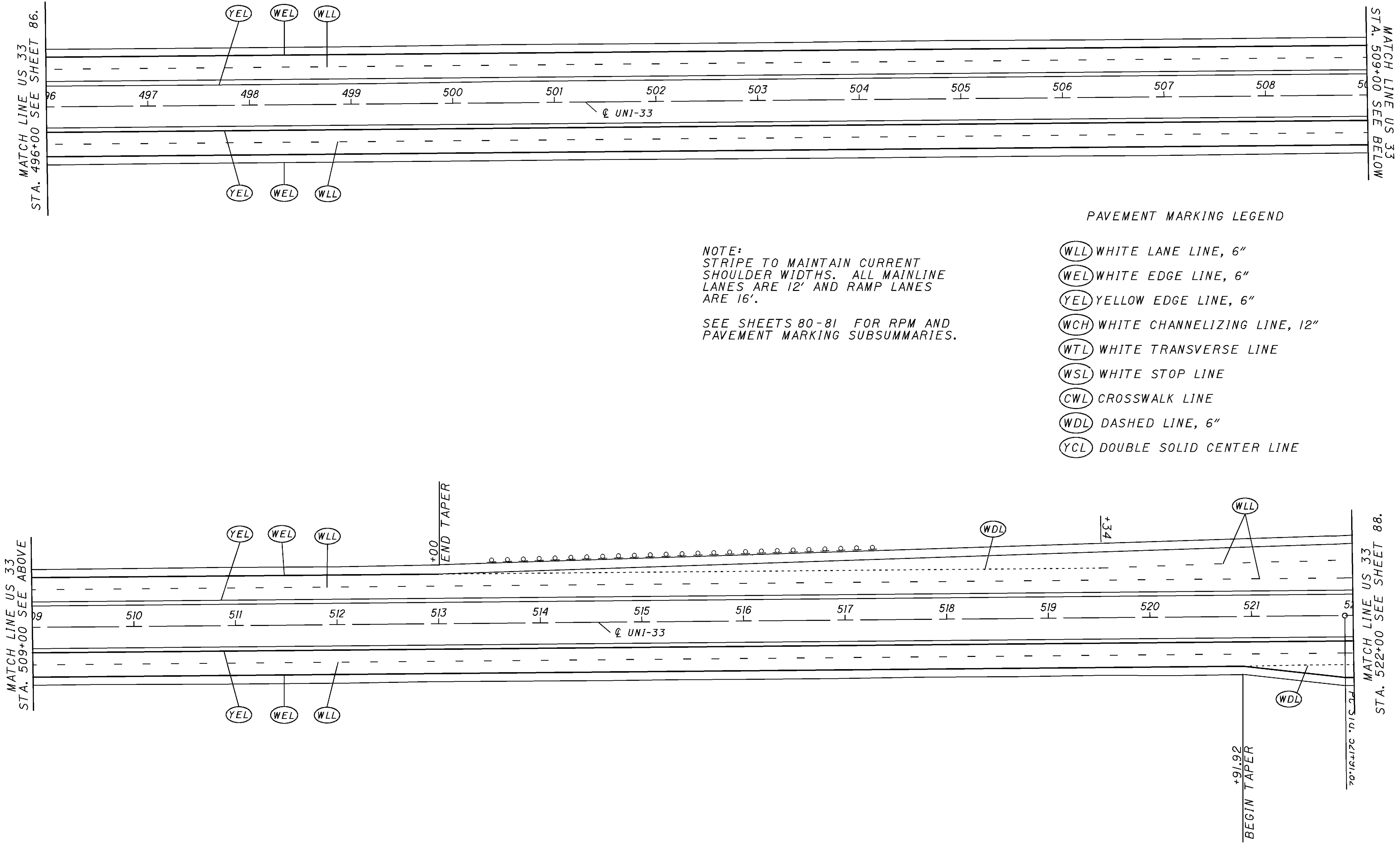


NOTE:
 STRIPE TO MAINTAIN CURRENT
 SHOULDER WIDTHS. ALL MAINLINE
 LANES ARE 12' AND RAMP LANES
 ARE 16'.
 SEE SHEETS 80-81 FOR RPM AND
 PAVEMENT MARKING SUBSUMMARIES.

- PAVEMENT MARKING LEGEND
- (WLL) WHITE LANE LINE, 6"
 - (WEL) WHITE EDGE LINE, 6"
 - (YEL) YELLOW EDGE LINE, 6"
 - (WCH) WHITE CHANNELIZING LINE, 12"
 - (WTL) WHITE TRANSVERSE LINE
 - (WSL) WHITE STOP LINE
 - (CWL) CROSSWALK LINE
 - (WDL) DASHED LINE, 6"
 - (YCL) DOUBLE SOLID CENTER LINE

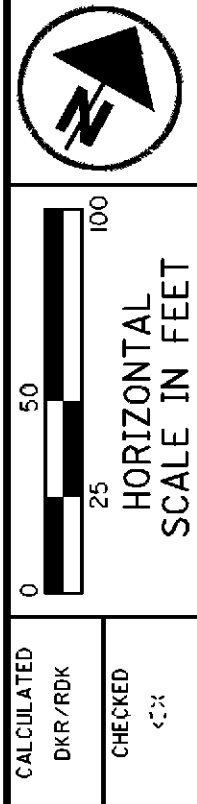


TRAFFIC CONTROL PLAN
 US-33



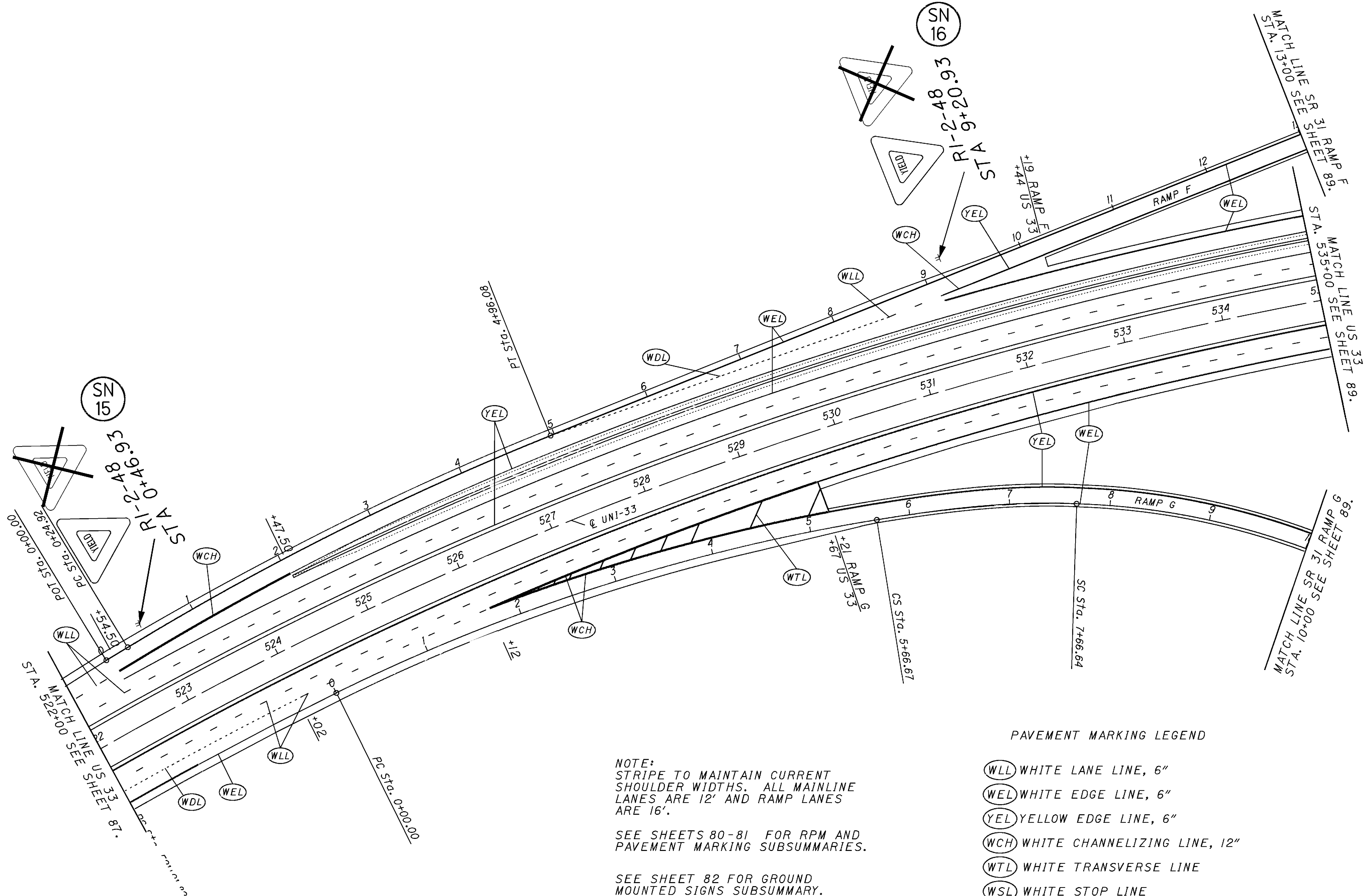
NOTE:
 STRIPE TO MAINTAIN CURRENT
 SHOULDER WIDTHS. ALL MAINLINE
 LANES ARE 12' AND RAMP LANES
 ARE 16'.
 SEE SHEETS 80-81 FOR RPM AND
 PAVEMENT MARKING SUBSUMMARIES.

- PAVEMENT MARKING LEGEND
- (WLL) WHITE LANE LINE, 6"
 - (WEL) WHITE EDGE LINE, 6"
 - (YEL) YELLOW EDGE LINE, 6"
 - (WCH) WHITE CHANNELIZING LINE, 12"
 - (WTL) WHITE TRANSVERSE LINE
 - (WSL) WHITE STOP LINE
 - (CWL) CROSSWALK LINE
 - (WDL) DASHED LINE, 6"
 - (YCL) DOUBLE SOLID CENTER LINE



TRAFFIC CONTROL PLAN
 US -33

UNI -33-8.74



TRAFFIC CONTROL PLAN
US-36, RAMP F & RAMP G

UNI-33-8.74
88
108

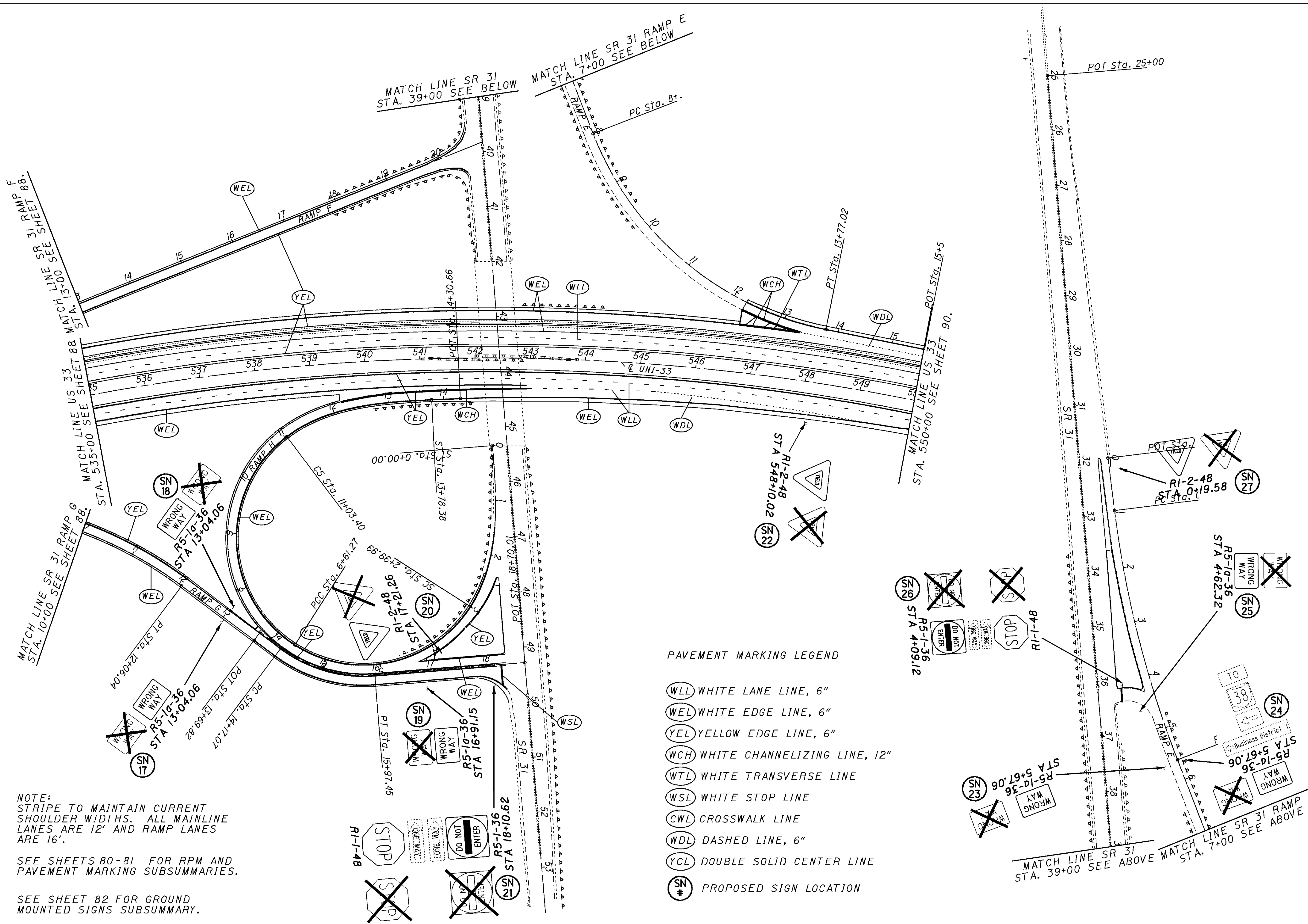
NOTE:
STRIPES TO MAINTAIN CURRENT
SHOULDER WIDTHS. ALL MAINLINE
LANES ARE 12' AND RAMP LANES
ARE 16'.

SEE SHEETS 80-81 FOR RPM AND
PAVEMENT MARKING SUBSUMMARIES.

SEE SHEET 82 FOR GROUND
MOUNTED SIGNS SUBSUMMARY.

PAVEMENT MARKING LEGEND

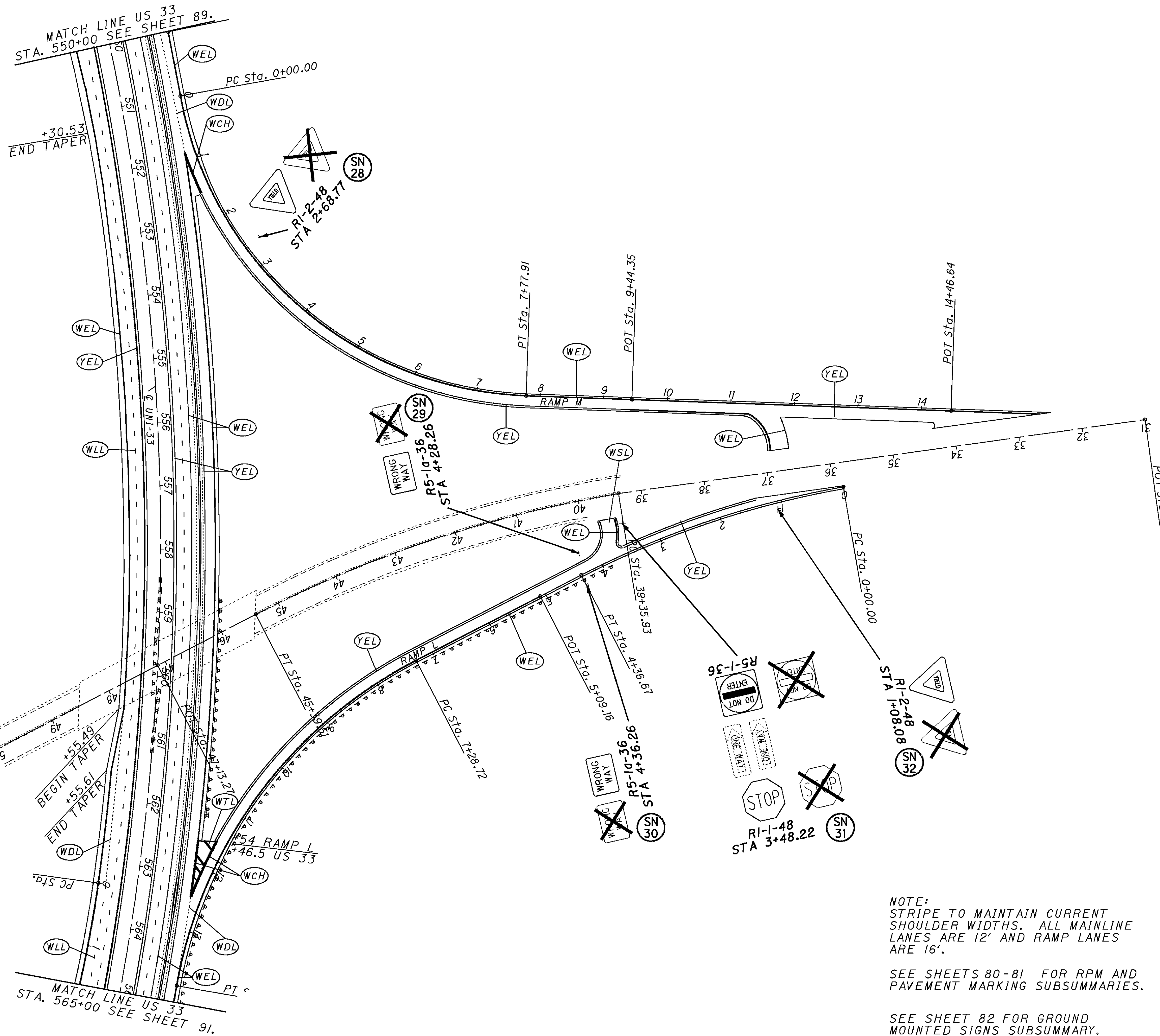
- (WLL) WHITE LANE LINE, 6"
- (WEL) WHITE EDGE LINE, 6"
- (YEL) YELLOW EDGE LINE, 6"
- (WCH) WHITE CHANNELIZING LINE, 12"
- (WTL) WHITE TRANSVERSE LINE
- (WSL) WHITE STOP LINE
- (CWL) CROSSWALK LINE
- (WDL) DASHED LINE, 6"
- (YCL) DOUBLE SOLID CENTER LINE
- (SN #) PROPOSED SIGN LOCATION



NOTE:
 STRIPE TO MAINTAIN CURRENT
 SHOULDER WIDTHS. ALL MAINLINE
 LANES ARE 12' AND RAMP LANES
 ARE 16'.
 SEE SHEETS 80-81 FOR RPM AND
 PAVEMENT MARKING SUBSUMMARIES.
 SEE SHEET 82 FOR GROUND
 MOUNTED SIGNS SUBSUMMARY.

PAVEMENT MARKING LEGEND

- (WLL) WHITE LANE LINE, 6"
- (WEL) WHITE EDGE LINE, 6"
- (YEL) YELLOW EDGE LINE, 6"
- (WCH) WHITE CHANNELIZING LINE, 12"
- (WTL) WHITE TRANSVERSE LINE
- (WSL) WHITE STOP LINE
- (CWL) CROSSWALK LINE
- (WDL) DASHED LINE, 6"
- (YCL) DOUBLE SOLID CENTER LINE
- (SN #) PROPOSED SIGN LOCATION



PAVEMENT MARKING LEGEND

- (WLL) WHITE LANE LINE, 6"
- (WEL) WHITE EDGE LINE, 6"
- (YEL) YELLOW EDGE LINE, 6"
- (WCH) WHITE CHANNELIZING LINE, 12"
- (WTL) WHITE TRANSVERSE LINE
- (WSL) WHITE STOP LINE
- (CWL) CROSSWALK LINE
- (WDL) DASHED LINE, 6"
- (YCL) DOUBLE SOLID CENTER LINE
- (SN #) PROPOSED SIGN LOCATION

NOTE:
 STRIPE TO MAINTAIN CURRENT
 SHOULDER WIDTHS. ALL MAINLINE
 LANES ARE 12' AND RAMP LANES
 ARE 16'.
 SEE SHEETS 80-81 FOR RPM AND
 PAVEMENT MARKING SUBSUMMARIES.

SEE SHEET 82 FOR GROUND
 MOUNTED SIGNS SUBSUMMARY.

CALCULATED
 DRY/POK
 CHECKED
 CJK

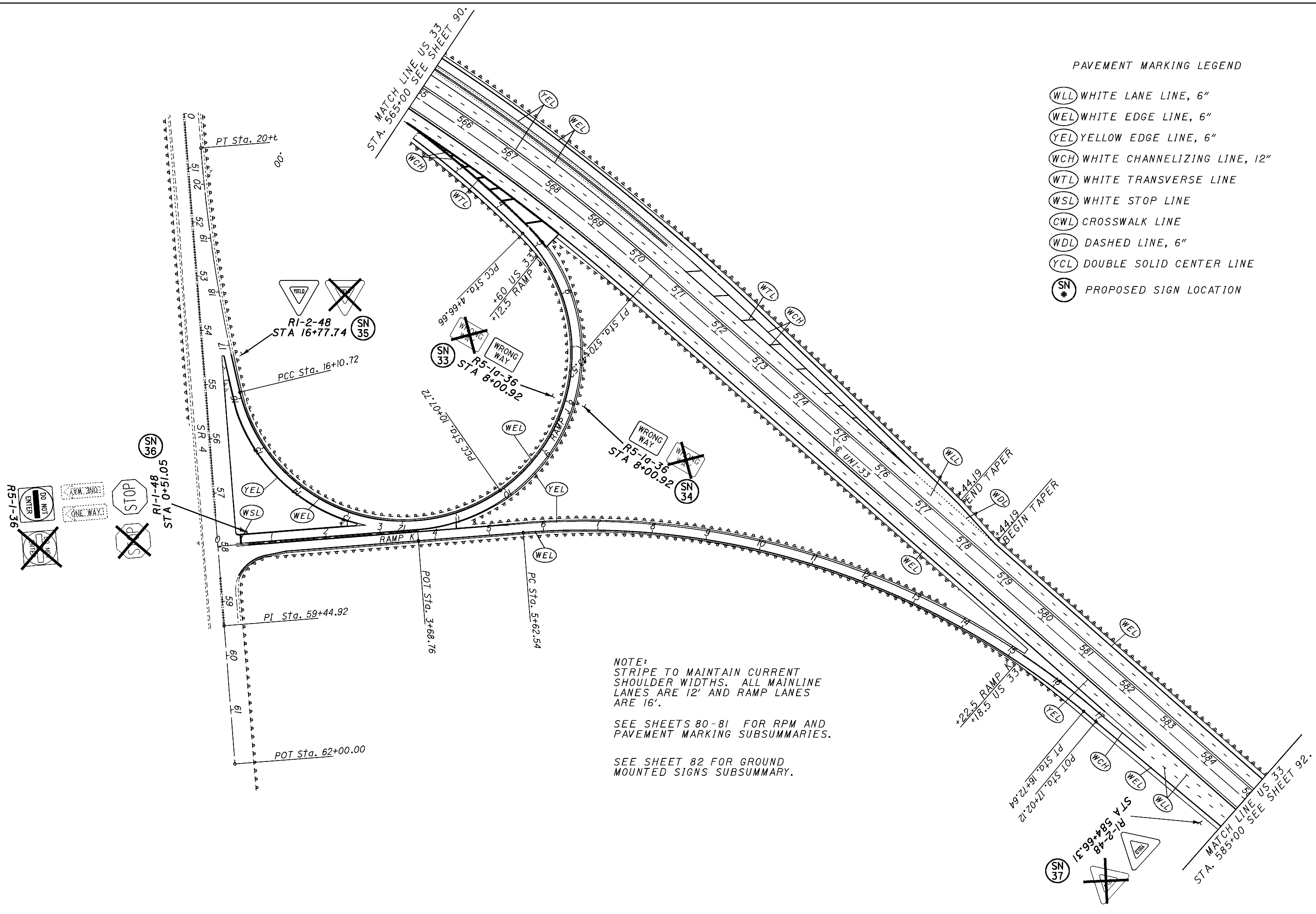
0 40 80 160
 HORIZONTAL
 SCALE IN FEET

TRAFFIC CONTROL PLAN
 US-33, RAMP L & M

UNI-33-8.74

PAVEMENT MARKING LEGEND

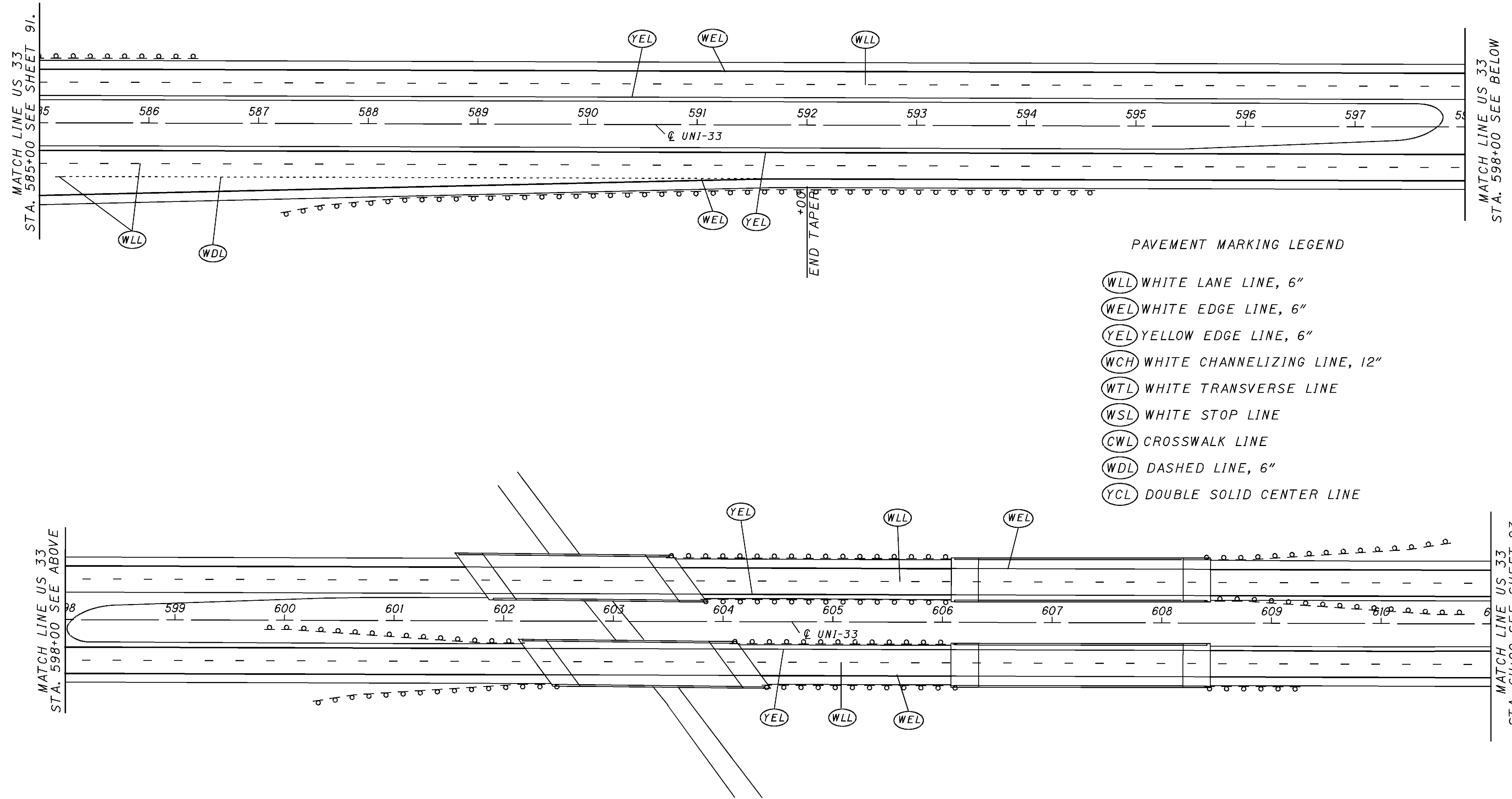
- (WLL) WHITE LANE LINE, 6"
- (WEL) WHITE EDGE LINE, 6"
- (YEL) YELLOW EDGE LINE, 6"
- (WCH) WHITE CHANNELIZING LINE, 12"
- (WTL) WHITE TRANSVERSE LINE
- (WSL) WHITE STOP LINE
- (CWL) CROSSWALK LINE
- (WDL) DASHED LINE, 6"
- (YCL) DOUBLE SOLID CENTER LINE
- (SN #) PROPOSED SIGN LOCATION



NOTE:
STRIPE TO MAINTAIN CURRENT
SHOULDER WIDTHS. ALL MAINLINE
LANES ARE 12' AND RAMP LANES
ARE 16'.

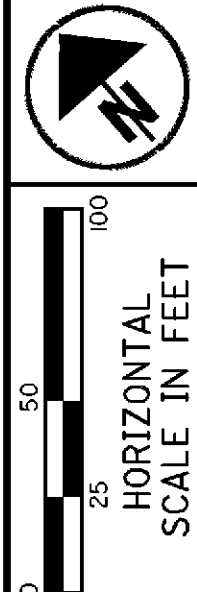
SEE SHEETS 80-81 FOR RPM AND
PAVEMENT MARKING SUBSUMMARIES.

SEE SHEET 82 FOR GROUND
MOUNTED SIGNS SUBSUMMARY.



- PAVEMENT MARKING LEGEND
- (WLL) WHITE LANE LINE, 6"
 - (WEL) WHITE EDGE LINE, 6"
 - (YEL) YELLOW EDGE LINE, 6"
 - (WCH) WHITE CHANNELIZING LINE, 12"
 - (WTL) WHITE TRANSVERSE LINE
 - (WSL) WHITE STOP LINE
 - (CWL) CROSSWALK LINE
 - (WDL) DASHED LINE, 6"
 - (YCL) DOUBLE SOLID CENTER LINE

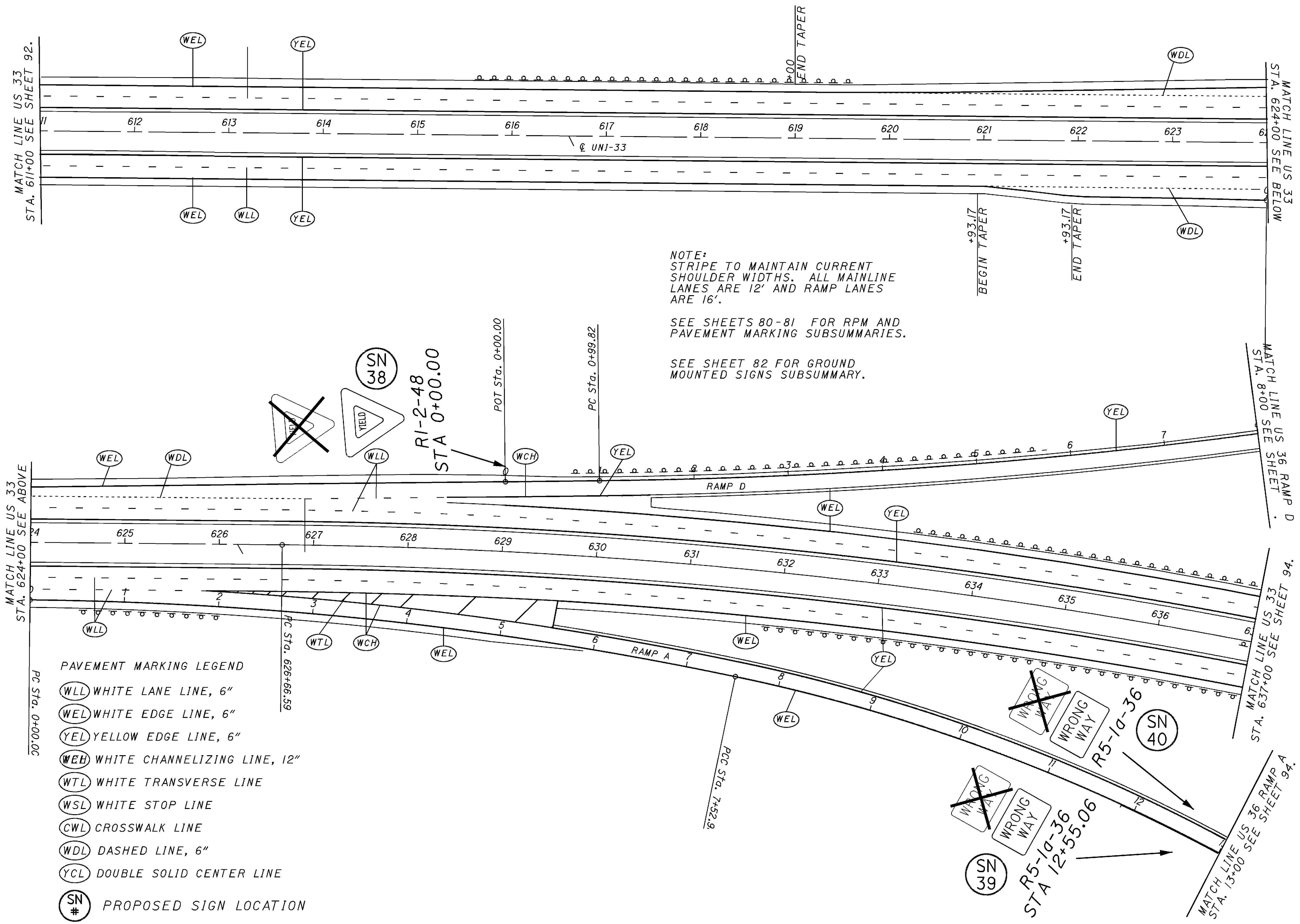
NOTE:
 STRIPE TO MAINTAIN CURRENT
 SHOULDER WIDTHS. ALL MAINLINE
 LANES ARE 12' AND RAMP LANES
 ARE 16'.
 SEE SHEETS 80-81 FOR RPM AND
 PAVEMENT MARKING SUBSUMMARIES.



CALCULATED
 DRAWN
 CHECKED
 CJK

**TRAFFIC CONTROL PLAN
 US-33**

UNI-33-8.74



MATCH LINE US 33
STA. 611+00 SEE SHEET 92.

MATCH LINE US 33
STA. 624+00 SEE BELOW

MATCH LINE US 33
STA. 624+00 SEE ABOVE

MATCH LINE US 36 RAMP D
STA. 8+00 SEE BELOW

MATCH LINE US 33
STA. 637+00 SEE SHEET 94.

MATCH LINE US 36 RAMP A
STA. 13+00 SEE SHEET 94.

NOTE:
STRIPE TO MAINTAIN CURRENT
SHOULDER WIDTHS. ALL MAINLINE
LANES ARE 12' AND RAMP LANES
ARE 16'.

SEE SHEETS 80-81 FOR RPM AND
PAVEMENT MARKING SUBSUMMARIES.

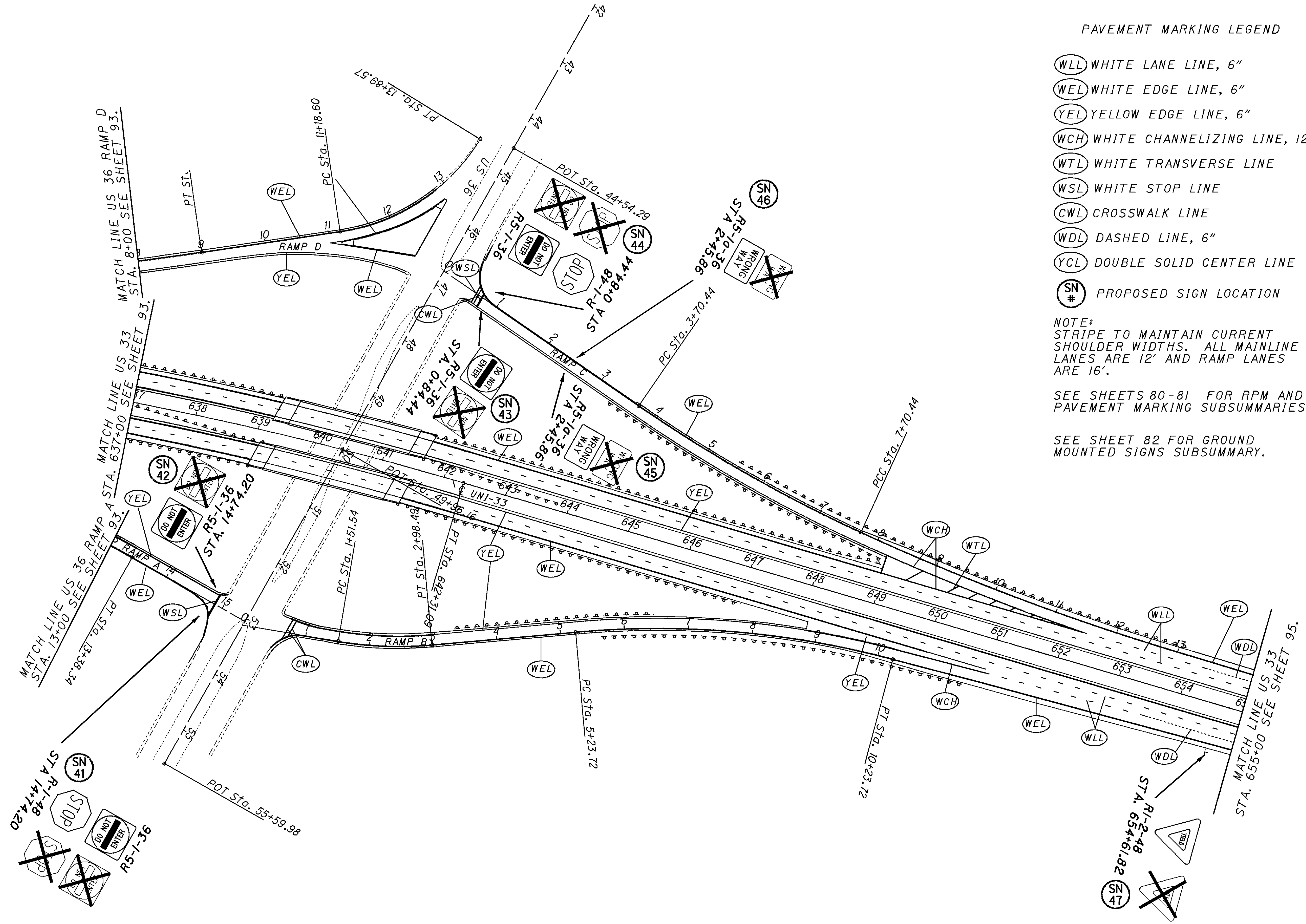
SEE SHEET 82 FOR GROUND
MOUNTED SIGNS SUBSUMMARY.

- PAVEMENT MARKING LEGEND
- (WLL) WHITE LANE LINE, 6"
 - (WEL) WHITE EDGE LINE, 6"
 - (YEL) YELLOW EDGE LINE, 6"
 - (WCH) WHITE CHANNELIZING LINE, 12"
 - (WTL) WHITE TRANSVERSE LINE
 - (WSL) WHITE STOP LINE
 - (CWL) CROSSWALK LINE
 - (WDL) DASHED LINE, 6"
 - (YCL) DOUBLE SOLID CENTER LINE
 - (SN #) PROPOSED SIGN LOCATION



TRAFFIC CONTROL PLAN
US-33, RAMP A & D

UNI-33-8.74



PAVEMENT MARKING LEGEND

- (WLL) WHITE LANE LINE, 6"
- (WEL) WHITE EDGE LINE, 6"
- (YEL) YELLOW EDGE LINE, 6"
- (WCH) WHITE CHANNELIZING LINE, 12"
- (WTL) WHITE TRANSVERSE LINE
- (WSL) WHITE STOP LINE
- (CWL) CROSSWALK LINE
- (WDL) DASHED LINE, 6"
- (YCL) DOUBLE SOLID CENTER LINE
- (SN #) PROPOSED SIGN LOCATION

NOTE:
 STRIPE TO MAINTAIN CURRENT SHOULDER WIDTHS. ALL MAINLINE LANES ARE 12' AND RAMP LANES ARE 16'.

SEE SHEETS 80-81 FOR RPM AND PAVEMENT MARKING SUBSUMMARIES.

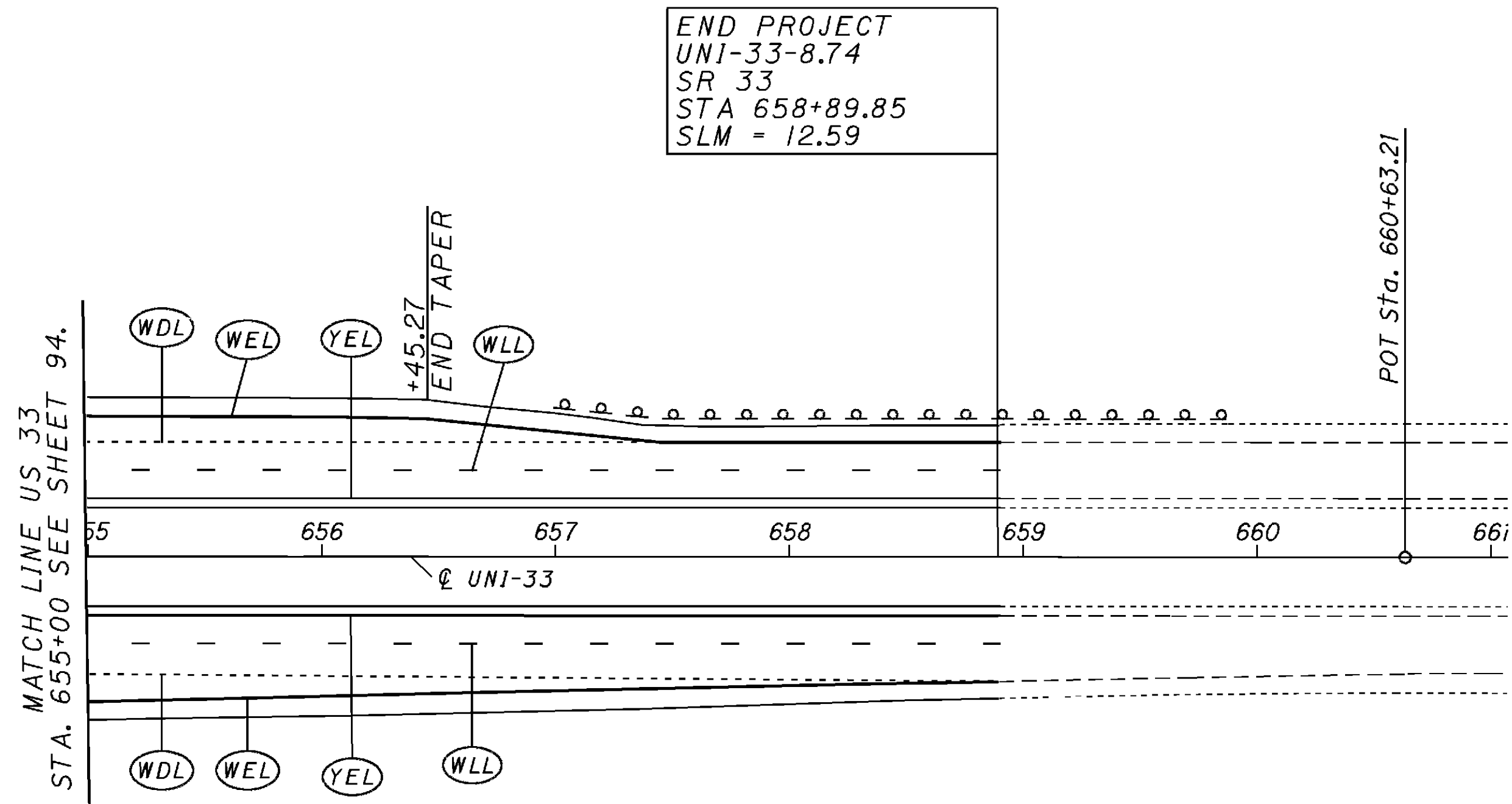
SEE SHEET 82 FOR GROUND MOUNTED SIGNS SUBSUMMARY.



TRAFFIC CONTROL PLAN
 US-33, RAMPS A, B, C, & D

UNI -33-8.7.4

94
108



PAVEMENT MARKING LEGEND

- (WLL) WHITE LANE LINE, 6"
- (WEL) WHITE EDGE LINE, 6"
- (YEL) YELLOW EDGE LINE, 6"
- (WCH) WHITE CHANNELIZING LINE, 12"
- (WTL) WHITE TRANSVERSE LINE
- (WSL) WHITE STOP LINE
- (CWL) CROSSWALK LINE
- (WDL) DASHED LINE, 6"
- (YCL) DOUBLE SOLID CENTER LINE

NOTE:
 STRIPE TO MAINTAIN CURRENT SHOULDER WIDTHS. ALL MAINLINE LANES ARE 12' AND RAMP LANES ARE 16'.

SEE SHEETS 80-81 FOR RPM AND PAVEMENT MARKING SUBSUMMARIES.

CALCULATED
 DRAWN
 CHECKED
 DATE

0 25 50 100
 HORIZONTAL SCALE IN FEET

TRAFFIC CONTROL PLAN
 US - 33

UNI - 33 - 8.74

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):
848 DATED 10/21/2011

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE, AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CONSTRUCTION MATERIAL AND SPECIFICATIONS (CMS) SECTION 102.05. CONTRACT BID PRICES SHALL BE BASED UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR.

HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS, WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ALIGNMENT AND PROFILE:

THE ALIGNMENT OF THE EXISTING OVERLAY WILL NOT BE CHANGED. THE PROPOSED PROFILE GRADE ELEVATIONS ARE TO BE THE SAME AS THE EXISTING.

CONTINGENCY QUANTITIES:

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED AS DIRECTED BY THE ENGINEER, UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THE PROJECT.

PROPOSED STRUCTURE WORK:

BELOW IS A SUMMARY OF ALL THE STRUCTURES WITHIN THE PROJECT LIMITS WITH A DESCRIPTION OF THE WORK TO BE PERFORMED. SEE SCHEMATIC PLAN FOR LOCATIONS OF ALL STRUCTURES.

STRUCTURE NAME	WORK TO BE PERFORMED
UNI-33-0834	TREAT DECK WITH SRS
UNI-33-0835	TREAT DECK WITH SRS
UNI-33-0856A	TREAT DECK WITH SRS
UNI-33-0879 L&R	DECK HYDRODEMOLITION WITH OVERLAY
UNI-33-0879A	DECK HYDRODEMOLITION WITH OVERLAY
UNI-33-0905 L&R	DECK PATCHING & TREAT DECK WITH SRS
UNI-33-0912 L&R	DECK PATCHING & TREAT DECK WITH SRS
UNI-33-0922 L&R	DECK PATCHING & TREAT DECK WITH SRS
UNI-31-0135	NO WORK TO BE PERFORMED
UNI-04-1320	NO WORK TO BE PERFORMED
UNI-33-1150 L&R	DECK PATCHING & TREAT DECK WITH SRS
UNI-33-1156 L&R	DECK PATCHING & TREAT DECK WITH SRS
UNI-33-1219 L&R	DECK PATCHING & TREAT DECK WITH SRS

ITEM 519 - SPECIAL - PATCHING CONCRETE BRIDGE DECK, TYPE B:

DECK PATCHING HAS BEEN SETUP ON SEVERAL STRUCTURES AS IDENTIFIED ABOVE. THE INTENT OF THE DECK PATCHING IS TO REPAIR DELAMINATED AREAS THAT ARE VISUALLY IDENTIFIED ON THE DECK. THE VISUALLY IDENTIFIED AREA IS TO HAVE THE PERIMETER SOUNDED TO IDENTIFY THE LIMITS OF THE REPAIR. THE ENTIRE BRIDGE DECK IS NOT INTENDED TO BE SOUNDED. THE REPAIR AREAS ARE TO BE MARKED AND APPROVED BY THE ENGINEER PRIOR TO PROCEEDING WITH THE PATCHING. IN NO CASE SHALL MORE THAN 10% OF THE DECK AREA BE PATCHED. IF MORE THAN 10% OF THE DECK AREA IS IDENTIFIED FOR PATCHING THE CONTRACTOR SHALL CONTACT THE DISTRICT 6 BRIDGE ENGINEER FOR DIRECTION ON HOW TO PROCEED.

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER, AS PER PLAN:

THE ROCK CHANNEL PROTECTION SHALL BE TYPE C PER ITEM 601.09, AND BE PLACED 6" THICK NORMAL TO THE SLOPE. THE RCP SHALL BE PLACED AS DIRECTED BY THE ENGINEER TO REPLENISH THE EXISTING FLUMES AT THE ENDS OF THE STRUCTURES (UNI-330834 & UNI-33-0835), WHERE PORTIONS OF THE EXISTING RCP HAVE SLID TO THE BOTTOM OF THE SLOPE. PAYMENT FOR THE ABOVE SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 613 - LOW STRENGTH MORTAR BACKFILL, AS PER PLAN:

PLACE LOW STRENGTH MORTAR BACKFILL CONFORMING TO ITEM 613 BENEATH THE APPROACH SLABS OF THE STRUCTURES (UNI-330834 & UNI-33-0835), AS DIRECTED BY THE ENGINEER. THE INTENT OF THIS ITEM IS TO FILL VOID BENEATH THE SLABS CAUSED BY SETTLEMENT AND ANIMAL BURROWS. PAYMENT FOR THE ABOVE SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

DECK PROTECTION METHOD:

SUPER-PLASTICIZED DENSE CONCRETE OVERLAY

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION AS PER PLAN, (1.5" THICK), AS PER PLAN:

ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN:

ITEM 848 - HAND CHIPPING, AS PER PLAN:

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN:

ITEM 848 - TEST SLAB, AS PER PLAN:

ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED X" NOMINAL THICKNESS, AS PER PLAN:

ITEM 848 - REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY, AS PER PLAN:

THESE ITEMS SHALL BE PERFORMED PER SUPPLEMENTAL SPECIFICATION 848, "BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRO-DEMOLITION," ON STRUCTURES UNI-33-0879 L/R WITH THE FOLLOWING REVISIONS:

- A) THE THICKNESS OF THE CONCRETE OVERLAY REMOVED, PROPOSED OVERLAY, AND THE DEPTH OF HYDRO-DEMOLITION SHALL BE AS SPECIFIED IN THE PLANS.
- B) CONSTRUCTION JOINTS WILL NOT BE PERMITTED IN THE WHEEL LINE. ALL CONSTRUCTION JOINTS TO BE SEALED BY 2' WIDE BAND OF HMWM RESIN CENTERED ON JOINT (PAID FOR SEPARATELY).
- C) TWO TEST SLABS WILL BE REQUIRED IN ACCORDANCE WITH SS848 IF A PERIOD OF 30 DAYS OR MORE HAS ELAPSED SINCE THE POURING OF THE TEST SLABS OR ANY OVERLAY OPERATION AS PART OF THIS PROJECT.
- D) THE MAXIMUM AMOUNT OF OVERLAY MATERIAL TO BE CARRIED BY ANY ONE VEHICLE DURING THE OVERLAY OPERATIONS IS 6 CY.
- E) THE REMOVAL OPERATIONS SHALL NOT BEGIN IF SUSTAINED RAINS (5 HOURS OR MORE WITH BREAKS BETWEEN SHOWERS LESS THAN 1 1/2 HOURS) ARE PREDICTED WITHIN 48 HOURS OF COMMENCEMENT.
- F) THE FINAL SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.
- G) HAND CHIPPING IS FOR THE PURPOSE OF CHIPPING AREAS WHERE THE HYDRO-DEMOLITION MACHINE DOES NOT HAVE ACCESS. IF THE DESIRED DEPTH IS ACHIEVED BY HYDRO-DEMOLITION, NO FURTHER REMOVAL IS NECESSARY.

H) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER. AFTER THE 24 HOUR WET CURE, THE FINISHED OVERLAY SURFACE SHALL BE CURED BY SPRAYING A UNIFORM APPLICATION OF THE CURING MATERIAL 705.07, TYPE 1 OR 1D, AS PER CMS 511.14 METHOD B MEMBRANE CURING. THE DECK SURFACE MUST BE DRY PRIOR TO PLACEMENT OF THE CURING MATERIAL. IF THE CURING MATERIAL CANNOT BE PLACED WITHIN THE SAME SHORT-TERM CLOSURE PERIOD AS THE OVERLAY, THE CONTRACTOR MAY ALLOW TRAFFIC ONTO THE OVERLAY, AND SHALL HAVE 24 HOURS FROM REMOVAL OF THE WET CURE TO APPLY THE MEMBRANE-CURING COMPOUND.

I) TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE UNTIL AFTER THE COMPLETION OF THE 24 HOUR WET CURE, AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 600 PSI.

J) THE OVERLAY SURFACE EVAPORATION RATE REQUIREMENTS ARE IN EFFECT FROM 9:30 AM TO 11:00 PM. THEY ARE NOT IN EFFECT FROM 11:00 PM TO 9:30 AM.

K) FOR EACH POUR, THE CONTRACTOR SHALL PROVIDE ENOUGH MATERIAL FOR TWO BEAM BREAKS EACH AT 12 HOURS, 24 HOURS, 36 HOURS, AND 48 HOURS. THE DEPARTMENT WILL PERFORM THE BEAM BREAK TESTS AND DOCUMENT THE TIME OF POUR, THE TIME OF THE BEAM BREAK TESTS, AND THE MODULUS OF RUPTURE OF EACH BEAM, UNTIL THE MODULUS OF RUPTURE OF TWO TESTS IS NOT LESS THAN 600 PSI. TRAFFIC WILL BE ALLOWED ON THE OVERLAY AT 600 PSI.

ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL EQUIPMENT, TOOLS, MATERIAL, AND LABOR NECESSARY TO PERFORM THIS TASK. PAYMENT SHALL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 848, SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRO-DEMOLITION, AS PER PLAN (T = 1.5").

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\STRUCTURE SHEETS.dgn SHEET_SNI01 13-NOV-2012 1:44PM drankin

ITEM SPECIAL-SAWING AND SEALING BITUMINOUS CONCRETE JOINTS

1) DESCRIPTION:

THIS WORK SHALL CONSIST OF CUTTING AND SEALING TRANSVERSE JOINTS IN THE NEW BITUMINOUS CONCRETE OVERLAY OF BRIDGES. BITUMINOUS CONCRETE JOINTS SHALL BE CONSTRUCTED DIRECTLY OVER, AND IN LINE WITH, THE EXISTING UNDERLYING TRANSVERSE ABUTMENT AND APPROACH SLAB JOINTS.

2) MATERIALS:

THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ITEM 705.04, JOINT SEALANTS, HOT-POURED, FOR CONCRETE AND ASPHALT PAVEMENTS. ACCEPTABLE ALTERNATE MATERIALS ARE:

A SILICONE SEALANT MEETING FEDERAL SPECIFICATIONS TT-S-001543A CLASS A (ONE-PART SILICONE SEALANTS) AND TT-S-00230C CLASS A (ONE-COMPONENT SEALANTS), SUCH AS THOSE MANUFACTURED BY GENERAL ELECTRIC, SILICONE PRODUCTS DIVISION, 4015 EXECUTIVE PARK DRIVE, CINCINNATI, OHIO 45242 (513-243-1953)OR DOW CORNING, 400 TECHNE CENTER, SUITE 103, MILFORD, OHIO 45150 (513-831-3586); OR SOF-SEAL, A COLD-APPLIED, LOW-MODULUS, TWO-COMPONENT POLY-MERIC COMPOUND HORIZONTAL SEALANT AS MANUFACTURED BY W.R.MEADOWS, INC., P.O. BOX 543,ELGIN,ILLINOIS 60121 (800-342-5976).

3) CONSTRUCTION DETAILS:

A) GENERAL: THE CONTRACTOR SHALL CONDUCT HIS OPERATION SO THAT THE CUTTING, CLEANING AND SEALING OF TRANSVERSE JOINTS IS A CONTINUOUS OPERATION THAT WILL BE PERFORMED AS SOON AS PRACTICAL AFTER THE PAVING, BUT NO LATER THAN FOUR (4) DAYS AFTER PLACEMENT OF THE ASPHALT CONCRETE SURFACE COURSE. TRAFFIC SHALL NOT BE ALLOWED TO KNEAD TOGETHER OR DAMAGE JOINT CUT PRIOR TO SEALING.

B) CUTTING OF TRANSVERSE JOINTS: THE CONTRACTOR SHALL SAW OR ROUT TRANSVERSE JOINTS TO THE DIMENSIONS SHOWN IN THE DETAILS ON THIS SHEET. THE CUT JOINTS SHALL LIE DIRECTLY ABOVE EACH TRANSVERSE JOINT.

THE BLADE OR BLADES SHALL BE OF SUCH SIZE THAT THE FULL WIDTH AND DEPTH OF THE CUT CAN BE MADE WITH ONE PASS. DRY OR WET CUTTING WILL BE ALLOWED. JOINTS SHALL EXTEND THE FULL WIDTH OF THE BRIDGE.

C) CLEANING JOINTS: DRY SAWED JOINTS SHALL BE THOROUGHLY CLEANED WITH A SUFFICIENT AMOUNT OF COMPRESSED AIR TO REMOVE ANY DIRT, DUST, OR DELETERIOUS MATTER. WET SAWED JOINTS SHALL BE WASHED CLEAN OF ALL CUTTINGS BY FLUSHING WITH A JET OF WATER AND WITH OTHER TOOLS AS NECESSARY. AFTER FLUSHING, THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR. WHEN THE SURFACES ARE THOROUGHLY CLEAN AND DRY, AND JUST PRIOR TO PLACING THE JOINT SEALER, COMPRESSED AIR HAVING A PRESSURE OF AT LEAST 90 PSI SHALL BE USED TO BLOW OUT THE JOINT AND REMOVE ALL TRACES OF DUST.

IN THE EVENT FRESHLY CUT JOINTS BECOME CONTAMINATED BEFORE THEY ARE SEALED, THEY SHALL BE RE-CLEANED OF ALL FOREIGN MATERIAL BY HIGH PRESSURE WATER JET.

D) SEALING JOINTS: THE JOINT SHALL BE THOROUGHLY DRY WHEN THE SEALANT IS PLACED. AFTER CLEANING AND DRYING, A BOND-BREAKER MATERIAL SHALL BE APPLIED TO THE BOTTOM OF THE GROOVE.

HOT-POURED JOINT SEALANT MATERIAL SHALL BE HEATED IN A KETTLE OR MELTER CONSTRUCTED AS A DOUBLE BOILER, WITH THE SPACE BETWEEN THE INNER AND OUTER SHELLS FILLED WITH OIL OR OTHER HEAT TRANSFER MEDIUM. POSITIVE TEMPERATURE CONTROL AND MECHANICAL AGITATION SHALL BE PROVIDED. HEATING MUST BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. JOINT SEALER MATERIAL SHALL NEVER BE KEPT HEATED AT THE POURING TEMPERATURE FOR MORE THAN FOUR (4) HOURS AND SHALL NEVER BE REHEATED. SEALER LEFT IN THE APPLICATOR AT THE END OF A DAY'S WORK SHALL NOT BE USED.

HOT-POURED SEALANT SHALL BE APPLIED IMMEDIATELY THROUGH A NOZZLE, WHICH MUST PROJECT INTO THE SAWED JOINT, FILLING FROM THE BOTTOM UP. THE SEALANT SHALL COMPLETELY FILL THE JOINT IN SUCH A MANNER THAT, AFTER COOLING, THE LEVEL OF THE SEALANT WILL NOT BE HIGHER THAN 1/8" BELOW THE PAVEMENT SURFACE. ANY DEPRESSION IN THE COOLED SEAL GREATER THAN 1/4" SHALL BE BROUGHT UP TO THE SPECIFIED LIMIT BY FURTHER ADDITION OF HOT-POURED SEALANT. CARE SHALL BE TAKEN IN THE SEALING OF THE JOINTS SO THAT THE FINAL APPEARANCE WILL PRESENT A NEAT FINE LINE.

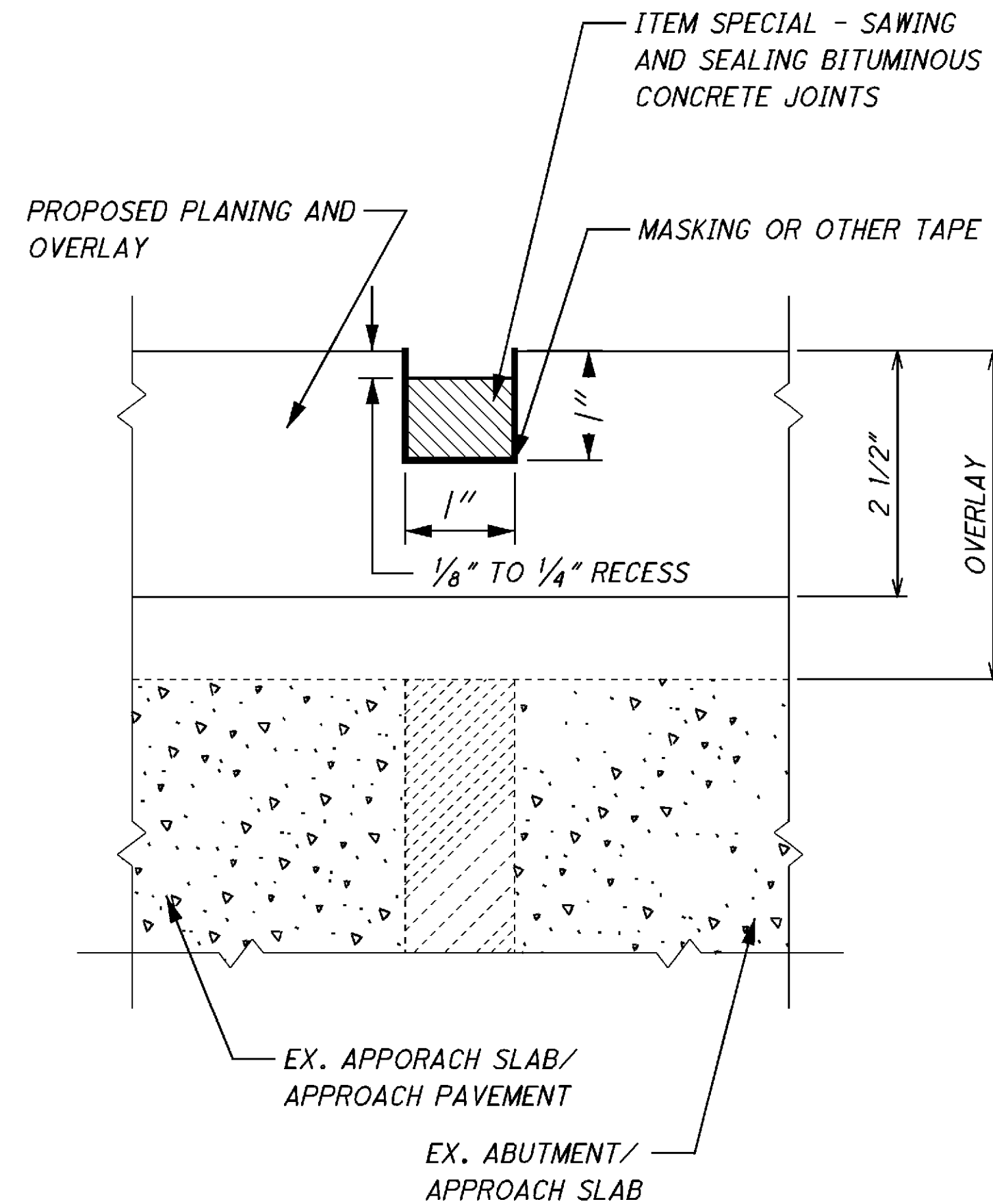
THE COLD APPLIED SEALANT MATERIALS (POLYURETHANE, SILICONE, AND POLYMERIC COMPOUNDS) SHALL BE INSTALLED AS PER MANUFACTURERS' RECOMMENDATIONS, EXCEPT AS MODIFIED BY THIS DRAWING. THE SEALANT SHALL BE INSTALLED WHEN THE AMBIENT TEMPERATURE IS 40 DEGREES F OR HIGHER. TRAFFIC SHALL NOT BE ALLOWED ON THE JOINT FOR ONE HOUR AFTER APPLICATION OF THE SEALANT.

4) METHOD OF MEASUREMENT:

THE QUANTITY TO BE PAID FOR UNDER THIS ITEM WILL BE THE NUMBER OF LINEAR FEET OF JOINTS SAWED AND SEALED AS PER THE ABOVE REQUIREMENTS.

5) BASIS OF PAYMENT:

THE UNIT PRICE PER LINEAR FOOT FOR ITEM SPECIAL - "SAWING AND SEALING BITUMINOUS CONCRETE JOINTS" SHALL INCLUDE THE COST OF ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK, INCLUDING THE FURNISHING AND PLACING OF THE JOINT SEALER MATERIAL.



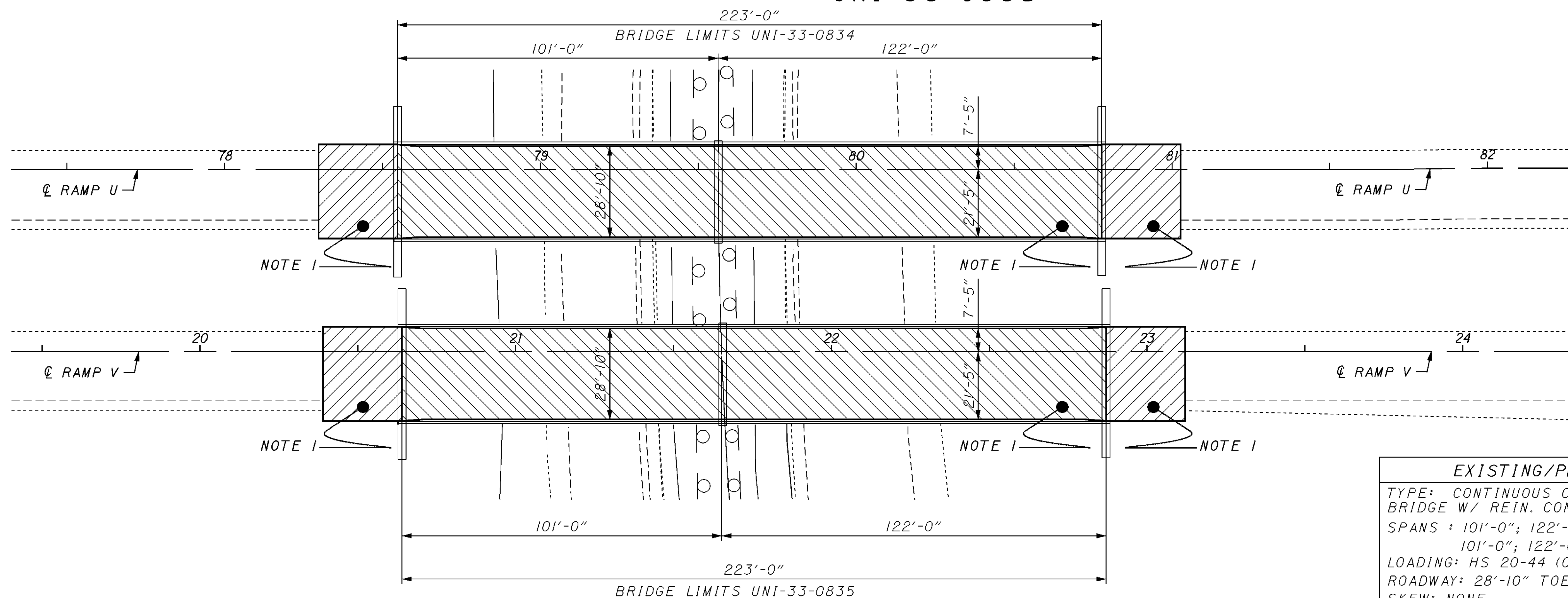
CALCULATED
BY: RAK
CHECKED
CCT

STRUCTURE NOTES
SAW AND SEAL

UNI - 33 - 8.74

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\structure SHEETS.dgn SHEET_SNI02 13-NOV-2012 1:44PM drankin

GENERAL PLAN VIEW - UNI-33-0834
UNI-33-0835



WORK TO BE PERFORMED:

NOTE I:
-TREATING OF CONCRETE BRIDGE DECKS AND APPROACHES WITH SRS

STRUCTURE WORK
 APPROACH WORK

EXISTING/PROPOSED STRUCTURE
 TYPE: CONTINUOUS COMPOSITE STEEL GIRDER BRIDGE W/ REIN. CONC. DECK AND SUBSTRUCTURE.
 SPANS : 101'-0"; 122'-0" C/C BRG. (RAMP U)
 101'-0"; 122'-0" C/C BRG. (RAMP V)
 LOADING: HS 20-44 (CASE 11) & ALT. MIL.
 ROADWAY: 28'-10" TOE/TOE PARAPET
 SKEW: NONE
 WEARING SURFACE: MONO. CONC.
 APPROACH SLABS: AS-I-81 (25'-LONG)
 SUPERELEVATION: NONE
 ALIGNMENT: TANGENT
 RAILING: 42" CONCRETE PARAPET (BR-1)

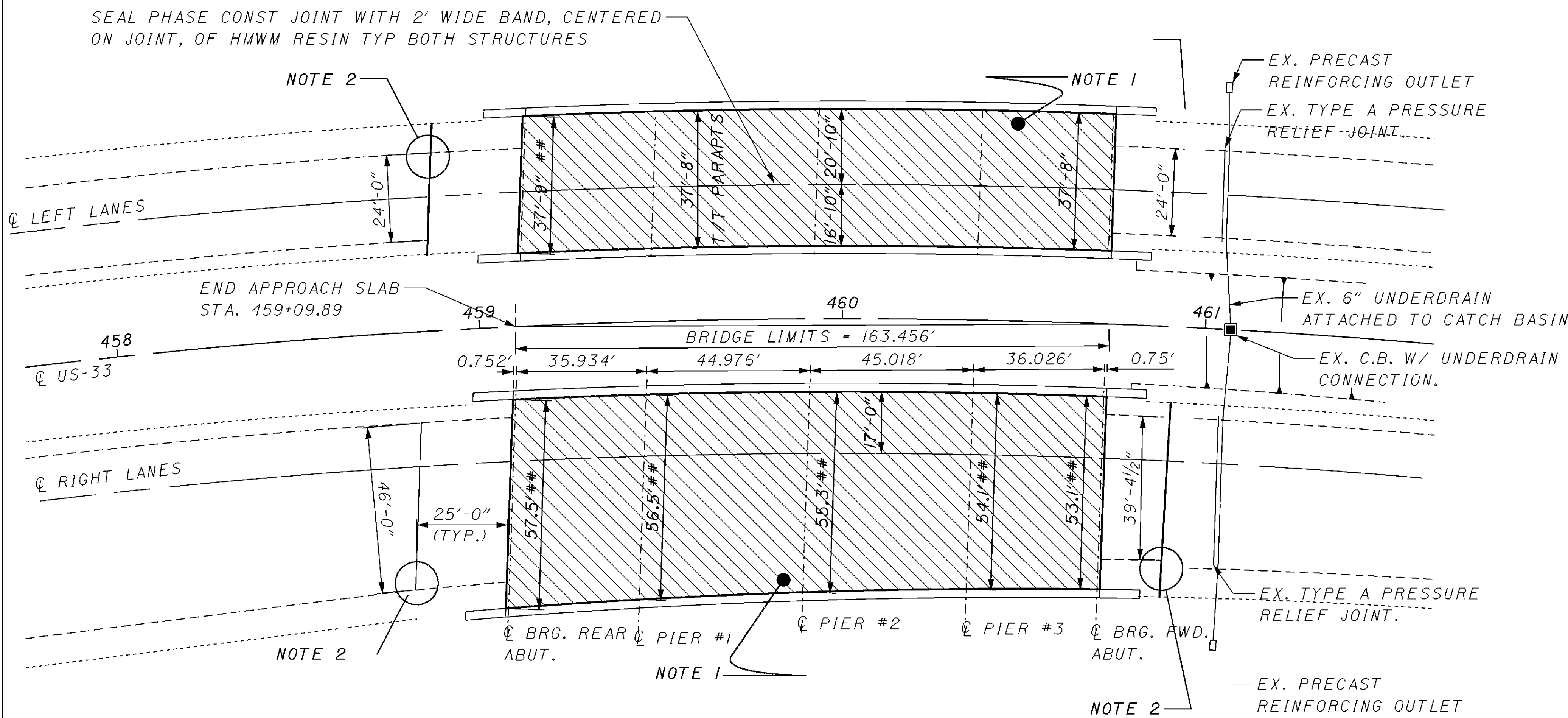
LOCATION				QUANTITIES			REMARKS
C	R	N	L	512	601	613	
O	O	U	E	TREATING	ROCK CHANNEL	LOW	
U	U	M	N	OF	PROTECTION,	STRENGTH	
N	T	B	G	CONCRETE	TYPE C	MORTAR	
T	E	E	T	BRIDGE	WITHOUT FILTER	BACKFILL,	
Y		R	H	DECK	AS PER	AS PER	
				WITH SRS	PLAN	PLAN	
				SQ YD	CU YD	CU YD	
UNI	33	0834	223'	716			DECK
UNI	33	0834		166			APPROACHES
UNI	33	0835	223'	716			DECK
UNI	33	0835		166			APPROACHES
UNI	33	0834			15	3	AS DIRECTED
UNI	33	0835			15	3	AS DIRECTED

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

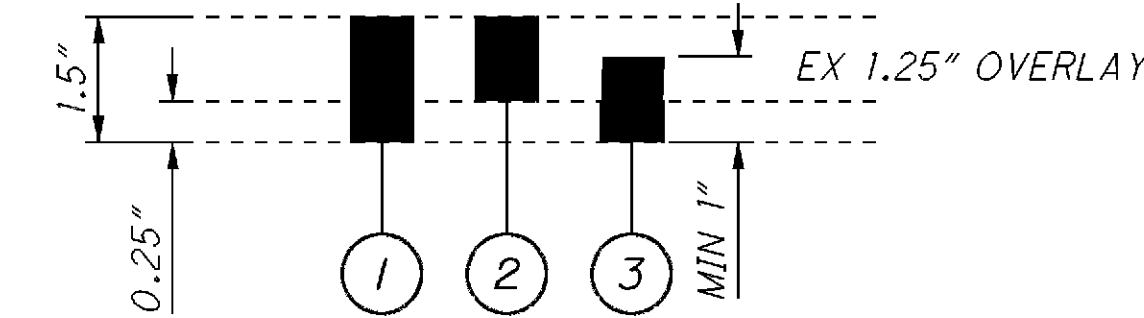
I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\STRUCTURE_SHEETS.dgn SHEET_SM200 13-NOV-2012 1:44PM drankin

DESIGN AGENCY: DIST. #6 IN-HOUSE DESIGN
 DATE: 9/28/2012
 REVIEWED: L-8001219 R-8001227
 GENERAL PLAN VIEW
 UNI-33-0834 (OVER US-33)
 UNI-33-0835 (OVER US-33)
UNI-33-8.74
 PID# 76466
 2 / 11
 99 / 108

GENERAL PLAN VIEW - UNI-33-0879 L&R (OVER C.R. 133)



NOTE 1:
 -REMOVE EXISTING OVERLAY + 1/4" ON BRIDGE DECK. TOP 0.5" MAY BE REMOVED BY SCARIFICATION. REMAINING 1" TO BE REMOVED BY HYDRODEMOLITION.
 -OVERLAY BRIDGE DECK WITH 1.5" SUPERPLASTICIZED DENSE CONCRETE.



- ① ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (1.5")
- ② ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED (1.25")
- ③ ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION

NOTE 2:
 -SAW AND SEAL JOINTS.

DIMENSIONED ALONG SKEW.

EXISTING/PROPOSED STRUCTURES	
TYPE:	CONTINUOUS CONCRETE SLAB BRIDGE WITH CONCRETE SUBSTRUCTURE.
SPANS:	36'-0", 45'-0", 45'-0", 36'-0"
LOAD FREQUENCY RATING:	CF 2000 (57)
ROADWAY:	37'-8"-(LT.), VARIES-(RT)
SKEW:	02°-13'-26.5" LT. FWD
WEARING SURFACE:	EX: 1" LATEX MODIFIED CONC. PR: 1.5" SDC OVERLAY.
APPROACH SLABS:	AS-I-54 (25'-LONG)
TYPE OF JOINTS:	SAW AND SEAL JOINT
ALIGNMENT:	3°-00' CURVE
SUPERELEVATION:	1' PER FOOT

LONGITUDINAL MEASUREMENTS
 LABELED FOR 8.79 R APPLY FOR 8.79 L.



LOCATION				QUANTITIES								REMARKS	
C	R	N	L	512	516	848	848	848	848	848	848	848	
U	U	U	E										
N	T	B	G										
T	E	E	T										
Y		R	H										
				SQ YD	FT	SQ YD	SQ YD	CU YD	SQ YD	LUMP	SQ YD	SQ YD	
UNI	33	0879L	163'	37		685	685	4	34	LUMP	17	685	DECK
UNI	33	0879L			72								APPROACHES
UNI	33	0879R	163'	37		1,004	1004	6	50	LUMP	25	1,004	DECK
UNI	33	0879R			112								APPROACHES

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

I:\Projects\uni\033\0879\production\roadway\sheet\STRUCTURE SHEETS.dgn
 SHEET_SM001
 13-NOV-2012 1:44PM
 drankin

DESIGN AGENCY: DIST. #6
 IN-HOUSE DESIGN

DATE: 9/28/2012
 REVIEWED: DKR
 SPN: L-8000786
 R-8000816

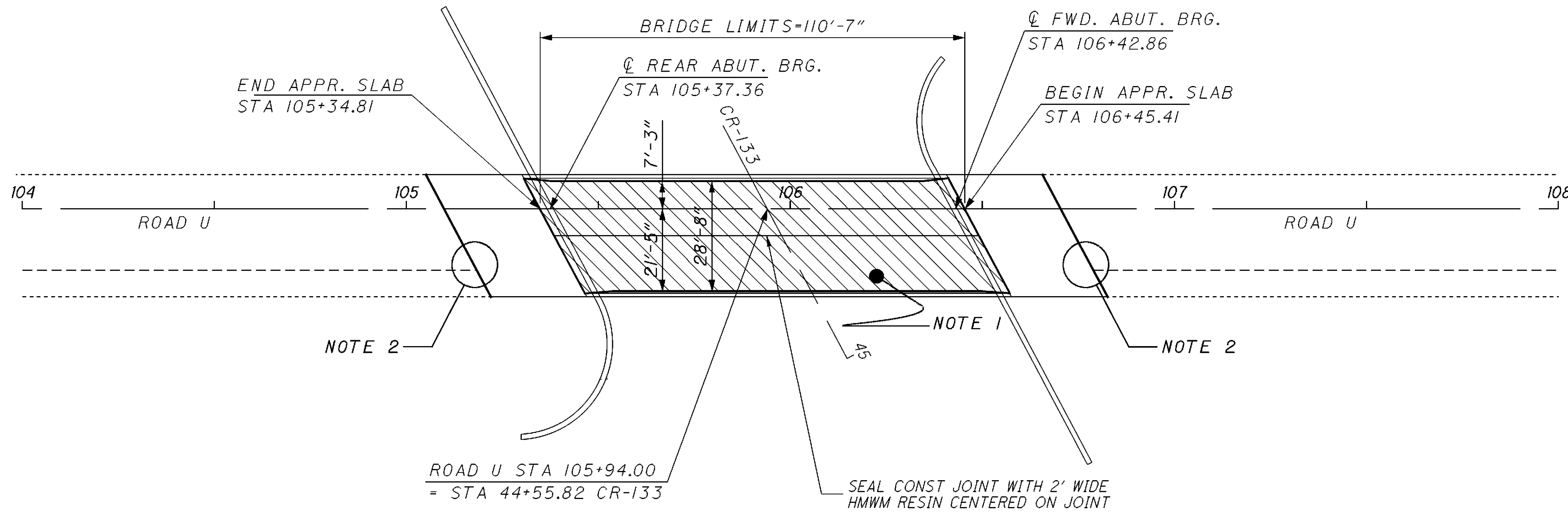
GENERAL PLAN VIEW
 UNI-33-0879 L&R (OVER C.R. 133)

UNI-33-8.74
 PID# 76466

4 / 11

101
 108

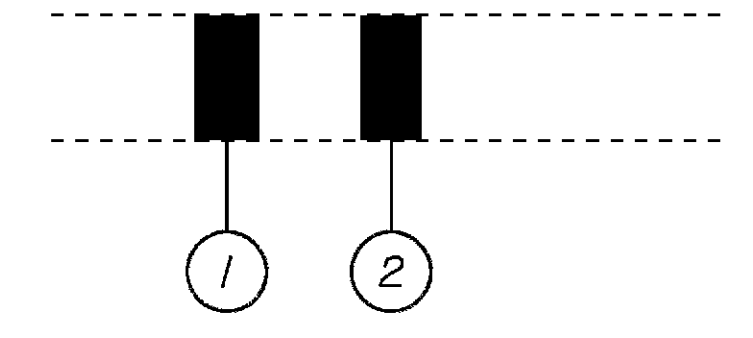
GENERAL PLAN VIEW - UNI-33-0879A (OVER C.R. 133)



STRUCTURE WORK

WORK TO BE PERFORMED:

- NOTE 1:**
 -PREPARE SURFACE USING HYDRODEMOTION (1.25")
 -OVERLAY BRIDGE DECK WITH 1.25" SUPERPLASTICIZED DENSE CONCRETE.
 -ALL REQUIREMENTS OF SS 848 TO BE FOLLOWED.



- ① ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOTION (1.25")
 ② ITEM 848 - SURFACE PREPARATION USING HYDRODEMOTION (1.25")

NOTE 2:
 -SAW AND SEAL JOINTS.

EXISTING/PROPOSED STRUCTURE
 TYPE: COMPOSITE STEEL GIRDER BRIDGE WITH REINFORCED CONCRETE DECK.
 SPAN: 105'-6" C/C BRGS.
 LOAD FREQUENCY RATING: HS 20-44 (CASE II) & ALT. MIL. LO.
 SKEW: 28°-01'-47" RT. FWD
 WEARING SURFACE: EX: MONO CONC
 PR: SDC OVERLAY
 APPROACH SLABS: AS-1-81 (25'-LONG)
 ALIGNMENT: TANGENT

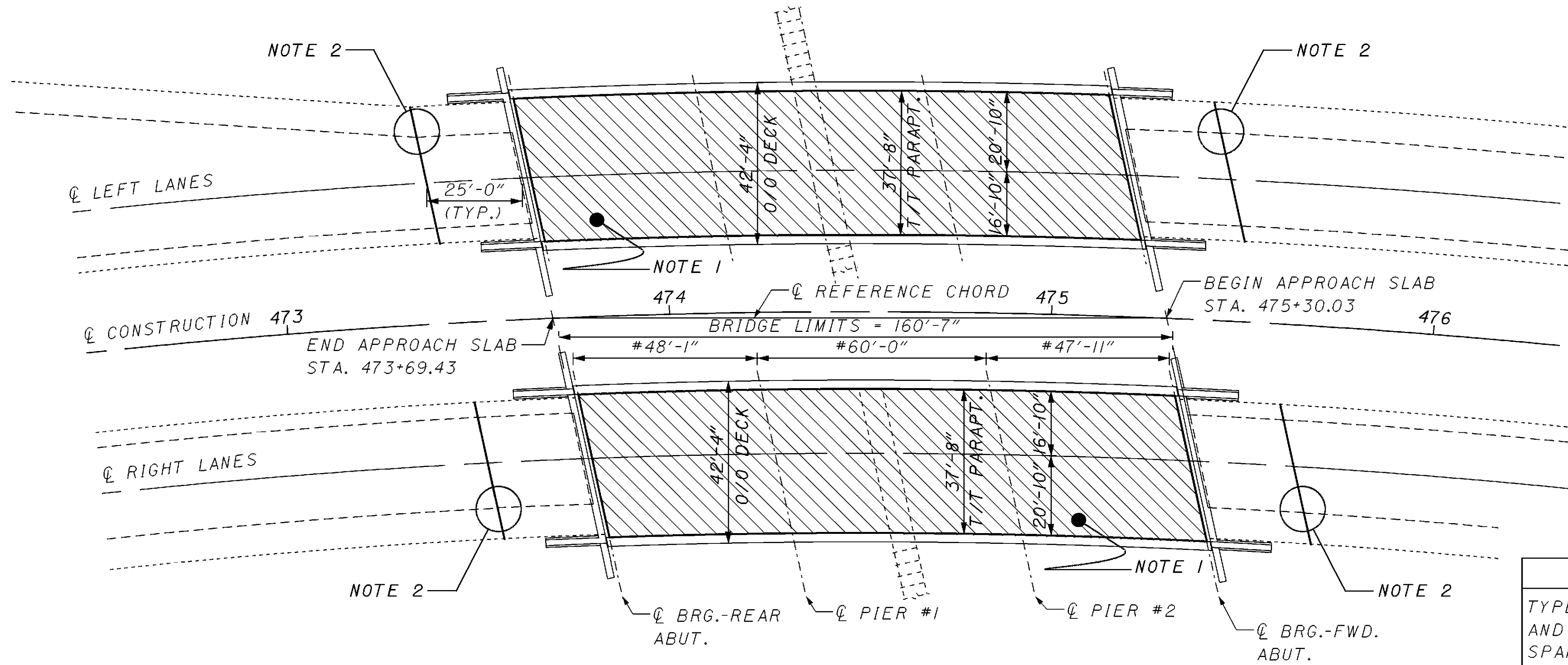
LOCATION				QUANTITIES								REMARKS
C	R	N	L	512	516	848	848	848	848	848	848	
U	U	U	E									
N	T	M	N									
T	E	B	G									
Y		E	T									
		R	H									
				SQ YD	FT	SQ YD	SQ YD	CU YD	SQ YD	LUMP	CU YD	
UNI	33	0879A	111'	25		354	354	2	18	LUMP	3	DECK
UNI	33	0879A			72							APPROACHES

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

DESIGN AGENCY: DIST. #6 IN-HOUSE DESIGN
 DATE: 9/28/2012
 REVIEWED: DRK: SFN: 8001251
 GENERAL PLAN VIEW
 UNI-33-0879A (OVER C.R. 133)
UNI-33-8.74
 PID# 76466
 5 / 11

I:\Projects\uni\033\0874\013\76466\production\roadway\sheet\structure_sheets\SHEET_SMO02.dgn 13-NOV-2012 1:44PM drankin

GEN. PLAN VIEW UNI-33-0905 L&R (OVER CSX RAILROAD)



WORK TO BE PERFORMED:

NOTE 1:
-TREATING OF CONCRETE BRIDGE DECK WITH SRS

NOTE 2:
-SAW AND SEAL JOINTS.

EXISTING/PROPOSED STRUCTURE	
TYPE: CONTINUOUS STEEL BEAM BRIDGE WITH CONCRETE DECK AND SUBSTRUCTURE	
SPAN: 48'-0", 60'-0", 48'-0" (ALONG ϕ CONSTRUCTION)	
LOAD FREQUENCY : C.F. 2000 (57)	
ROADWAY: 37'-8" TOE/TOE PARAPETS	
SKEW: 12°-18'-54" R.F.	
WEARING SURFACE: 1 3/4" MICRO SILICA MODIFIED CONCRETE OVERLAY	
APPROACH SLAB: AS-I-54 (25' LONG)	
TYPE OF JOINTS: EXJ-4-87 - STRIP SEAL EXPANSION JOINT SYSTEM	
ALIGNMENT: SPIRAL CURVE RIGHT	
SUPERELEVATION: VARIES	
RAILING: 42" CONCRETE PARAPET	

STRUCTURE WORK

LOCATION				QUANTITIES				REMARKS
C	R	N	L	512	516	519		
O	O	U	E	TREATING	SAWING	PATCHING		
U	U	M	N	OF	AND	CONCRETE		
N	T	B	G	CONCRETE	SEALING	BRIDGE		
T	E	E	T	BRIDGE	BITUMINOUS	DECK,		
Y		R	H	DECK	CONCRETE	TYPE B		
				WITH SRS	JOINTS			
				SQ. YD.	FT	SQ YD		
UNI	33	0905L	161'	653		33		DECK
UNI	33	0905L			74			APPROACHES
UNI	33	0905R	161'	653		33		DECK
UNI	33	0905R			74			APPROACHES

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\STRUCTURE_SHEETS.dgn SHEET_SM003 13-NOV-2012 1:44PM drankin



DESIGN AGENCY
DIST. #6
IN-HOUSE DESIGN

DATE
9/28/2012
REVIEWED
DKR
SPN: L-8000840
R-8000875

GENERAL PLAN VIEW
UNI-33-0905 L&R (OVER CSX R.R.)

UNI-33-8.74
PID# 76466

6 / 11

103
108



DESIGN AGENCY
DIST. #6
IN-HOUSE DESIGN

DATE
9/28/2012
REVIEWED
DKR
SPN: L-8000905
R-8000964

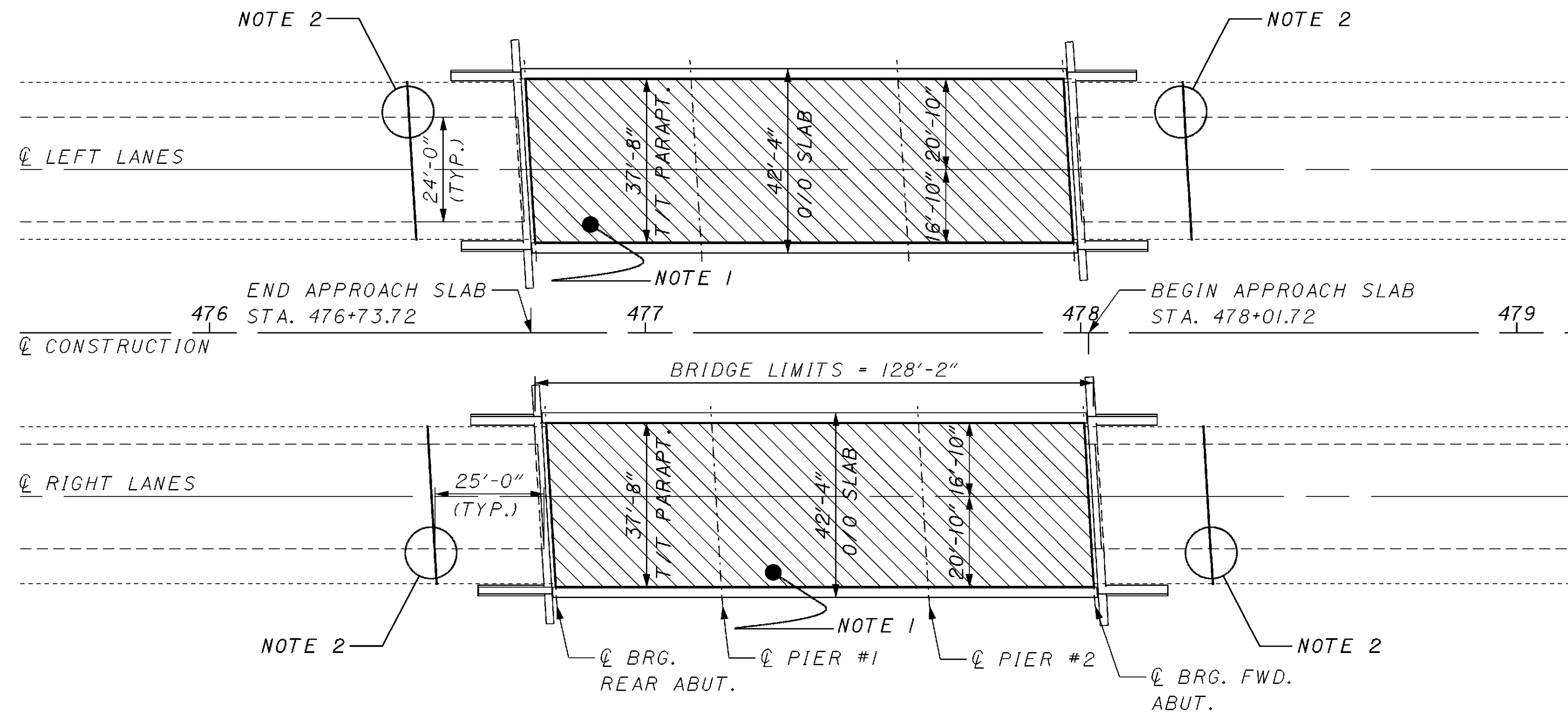
GENERAL PLAN VIEW
UNI-33-0912 L&R (OVER C.R. 191)

UNI-33-8.74
PID# 76466

7 / 11

104
108

GENERAL PLAN VIEW - UNI-33-0912 L&R (OVER C.R. 191)



WORK TO BE PERFORMED:

NOTE 1:
-TREATING OF CONCRETE BRIDGE DECK WITH SRS

NOTE 2:
-SAW AND SEAL JOINTS.

EXISTING/PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM BRIDGE WITH CONCRETE DECK AND SUBSTRUCTURE.
 SPANS : 38'-0", 47'-6", 38'-0" C/C BEARINGS
 LOAD FREQUENCY RATING: CF 2000 (57)
 ROADWAY: 37'-8" TOE/TOE OF PARAPET.
 SKEW: 3°27'12" R.F.
 WEARING SURFACE: 1 3/4" MICRO SILICA CON. OVERLAY
 APPROACH SLABS: AS-1-81 (25'-LONG)
 TYPE OF JOINTS: STRIP STEEL EXPAN. JNT. (EXJ-4-87).
 ALIGNMENT: TANGENT
 RAILING: 36" CONCRETE PARAPET

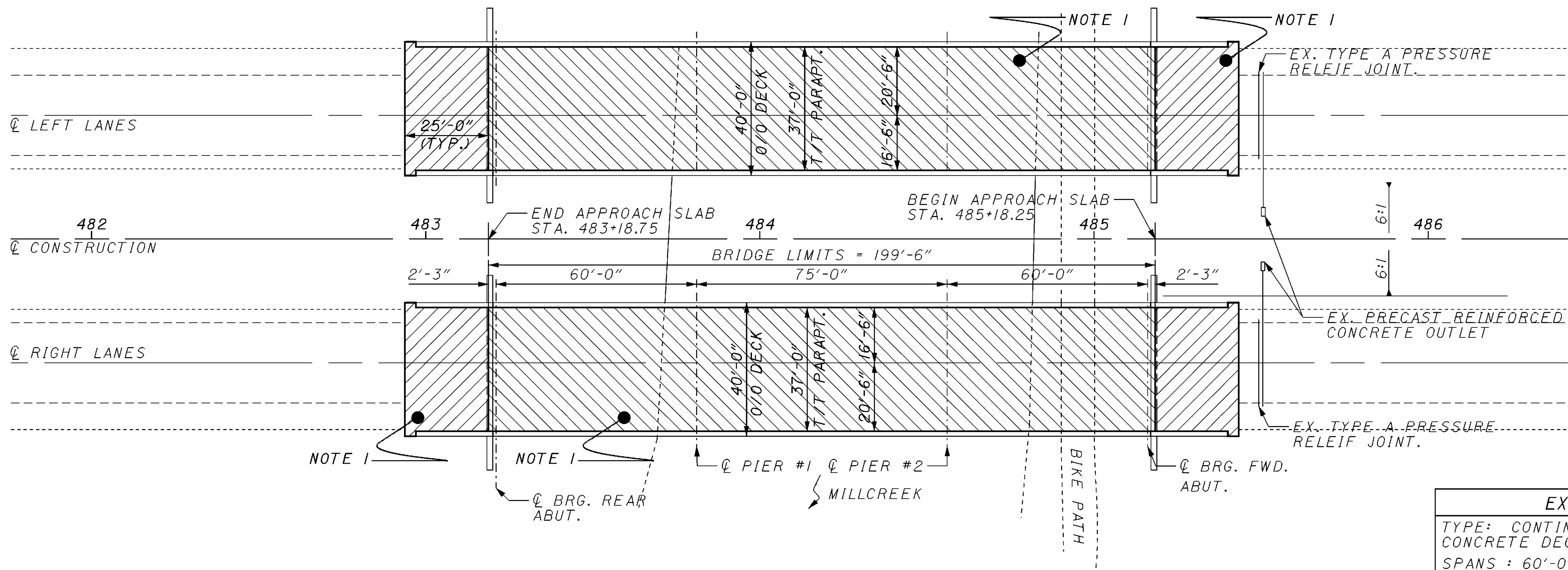
STRUCTURE WORK

LOCATION				QUANTITIES			REMARKS
C	R	N	L	512	516	519	
O	O	U	E	TREATING	SAWING	PATCHING	
U	U	M	N	OF	AND	CONCRETE	
N	T	B	G	CONCRETE	SEALING	BRIDGE	
T	E	E	T	BRIDGE	BITUMINOUS	DECK,	
Y		R	H	DECK	CONCRETE	TYPE B	
				WITH SRS	JOINTS		
				SQ. YD.	FT	SQ YD	
UNI	33	0912L	128'	517		26	DECK
UNI	33	0912L			72		APPROACHES
UNI	33	0912R	128'	517		26	DECK
UNI	33	0912R			72		APPROACHES

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\STRUCTURE_SHEETS.dgn SHEET_SM004 13-NOV-2012 1:44PM drankin

GENERAL PLAN VIEW - UNI-33-0922 L&R



WORK TO BE PERFORMED:

NOTE 1:
-TREATING OF CONCRETE BRIDGE DECKS AND APPROACHES WITH SRS

- STRUCTURE WORK
- APPROACH WORK

EXISTING/PROPOSED STRUCTURE
TYPE: CONTINUOUS STEEL BEAM BRIDGE WITH CONCRETE DECK AND SUBSTRUCTURE. (WITH DBR)
SPANS : 60'-0", 75'-0", 60'-0" C/C BEARINGS
LOAD FREQUENCY RATING: CF 2000 (57)
ROADWAY: 37'-0" TOE/TOE OF PARAPET
SKEW: NONE
WEARING SURFACE: 1 3/4" MICRO-SILICA CONCRETE
APPROACH SLABS: AS-1-81 (25'-LONG)
TYPE OF JOINTS: STRIP STEEL EXPAN. JNT. (EXJ-4-87).
ALIGNMENT: TANGENT
RAILING: 42" CONCRETE PARAPET (BR-1)

LOCATION				QUANTITIES				REMARKS
C	R	N	L	512		519		
O	O	U	E	TREATING		PATCHING		
U	U	M	N	OF		CONCRETE		
N	T	B	G	CONCRETE		BRIDGE		
T	E	E	T	BRIDGE		DECK,		
Y		R	H	DECK		TYPE B		
				WITH SRS				
				SQ. YD.		SQ YD		
UNI	33	0922L	200'	820		41		DECK
UNI	33	0922L		208				APPROACHES
UNI	33	0922R	200'	820		41		DECK
UNI	33	0922R		208				APPROACHES

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\STRUCTURE_SHEETS.dgn SHEET_SM005 13-NOV-2012 1:44PM drankin

DESIGN AGENCY: DIST. #6 IN-HOUSE DESIGN

REVIEWED DATE: 9/28/2012
DKR: L-8000999
SPN: R-8001022

GENERAL PLAN VIEW
UNI-33-0922 L&R (OVER MILLCREEK)

UNI-33-8.74

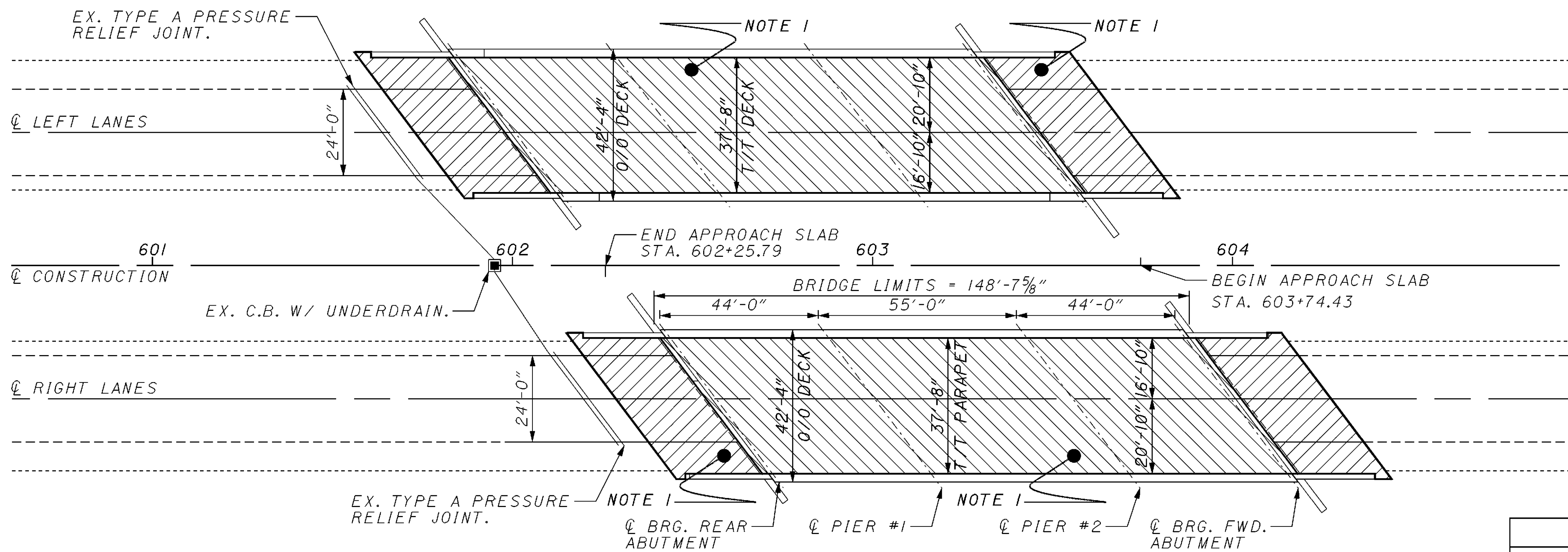
PID# 76466

8 / 11

105

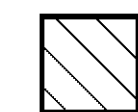
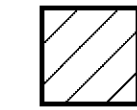
108

GENERAL PLAN VIEW - UNI-33-1150 L&R



WORK TO BE PERFORMED:

NOTE 1:
-TREATING OF CONCRETE BRIDGE DECKS AND APPROACHES WITH SRS

 STRUCTURE WORK
 APPROACH WORK

EXISTING/PROPOSED STRUCTURE
 TYPE: CONTINUOUS STEEL BEAM BRIDGE WITH CONCRETE DECK AND SUBSTRUCTURE.
 SPANS : 44'-0", 55'-0", 44'-0" C/C BEARINGS
 LOAD FREQUENCY RATING: CF 2000 (57)
 ROADWAY: 37'-8" F/F of PARAPET.
 SKEW: 37°-00'-55"
 WEARING SURFACE: MICRO-SILICA CONCRETE OVERLAY
 APPROACH SLABS: AS-1-81 (25'-LONG)
 TYPE OF JOINTS: STRIP STEEL EXPAN. JNT (EXJ-4-87).
 ALIGNMENT: TANGENT
 RAILING: 36" CONCRETE PARAPET

LOCATION				QUANTITIES				REMARKS
C	R	N	L	512		519		
O	O	U	E	TREATING		PATCHING		
U	U	M	N	OF		CONCRETE		
N	T	B	G	CONCRETE		BRIDGE		
T	E	E	T	BRIDGE		DECK,		
Y		R	H	DECK		TYPE B		
				WITH SRS				
				SQ. YD.		SQ YD		
UNI	33	1150L	149'	622		31		DECK
UNI	33	1150L		212				APPROACHES
UNI	33	1150R	149'	622		31		DECK
UNI	33	1150R		212				APPROACHES

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\STRUCTURE_SHEETS.dgn SHEET_SM006 13-NOV-2012 1:44PM drankin



DESIGN AGENCY
DIST. #6
IN-HOUSE DESIGN

REVIEWED DATE 9/28/2012
DKR L-8001057
SFH R-8001081

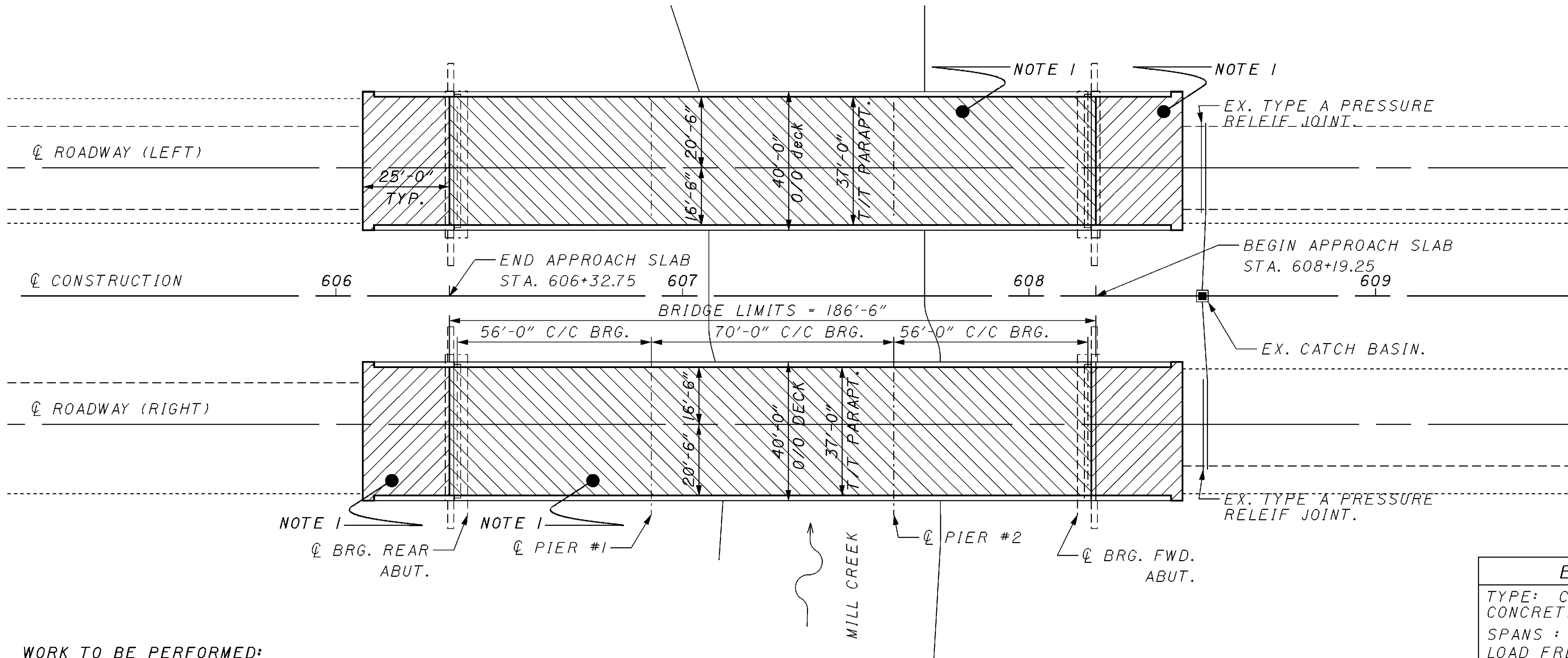
GENERAL PLAN VIEW
UNI-33-1150 L&R (COVER C.R. 114)

UNI-33-8.74
PID# 76466

9/11

106
108

GENERAL PLAN VIEW - UNI-33-1156 L&R



WORK TO BE PERFORMED:

NOTE 1:
-TREATING OF CONCRETE BRIDGE DECKS AND APPROACHES WITH SRS

- STRUCTURE WORK
- APPROACH WORK

EXISTING/PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM BRIDGE WITH CONCRETE DECK AND SUBSTRUCTURE.
 SPANS : 56'-70'-56' C/C BEARINGS
 LOAD FREQUENCY RATING: CF 2000 (57)
 ROADWAY: 37'-0" TOE/TOE PARAPET
 SKEW: NONE
 WEARING SURFACE: 1 3/4" MICRO-SILICA CON. OVERLAY
 APPROACH SLABS: AS-1-B1 (25'-LONG)
 TYPE OF JOINTS: STRIP STEEL EXPAN. JNT (EXJ-4-87)
 ALIGNMENT: TANGENT
 RAILING: 42" CONCRETE PARAPET (BR-1)

LOCATION				QUANTITIES				REMARKS
C	R	N	L	512	519			
O	O	U	E	TREATING	PATCHING			
U	U	M	N	OF	CONCRETE			
N	T	B	G	CONCRETE	BRIDGE			
T	E	E	T	BRIDGE	DECK,			
Y		R	H	DECK	TYPE B			
				WITH SRS				
				SQ. YD.	SQ YD			
UNI	33	1156L	187'	767	38		DECK	
UNI	33	1156L		208			APPROACHES	
UNI	33	1156R	187'	767	38		DECK	
UNI	33	1156R		208			APPROACHES	

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\STRUCTURE_SHEETS.dgn SHEET_SM007 13-NOV-2012 1:44PM drankin

DESIGN AGENCY
 DIST. #6
 IN-HOUSE DESIGN

REVIEWED
 DRK :
 SPN: L-800111
 R-800146

DATE
 9/28/2012

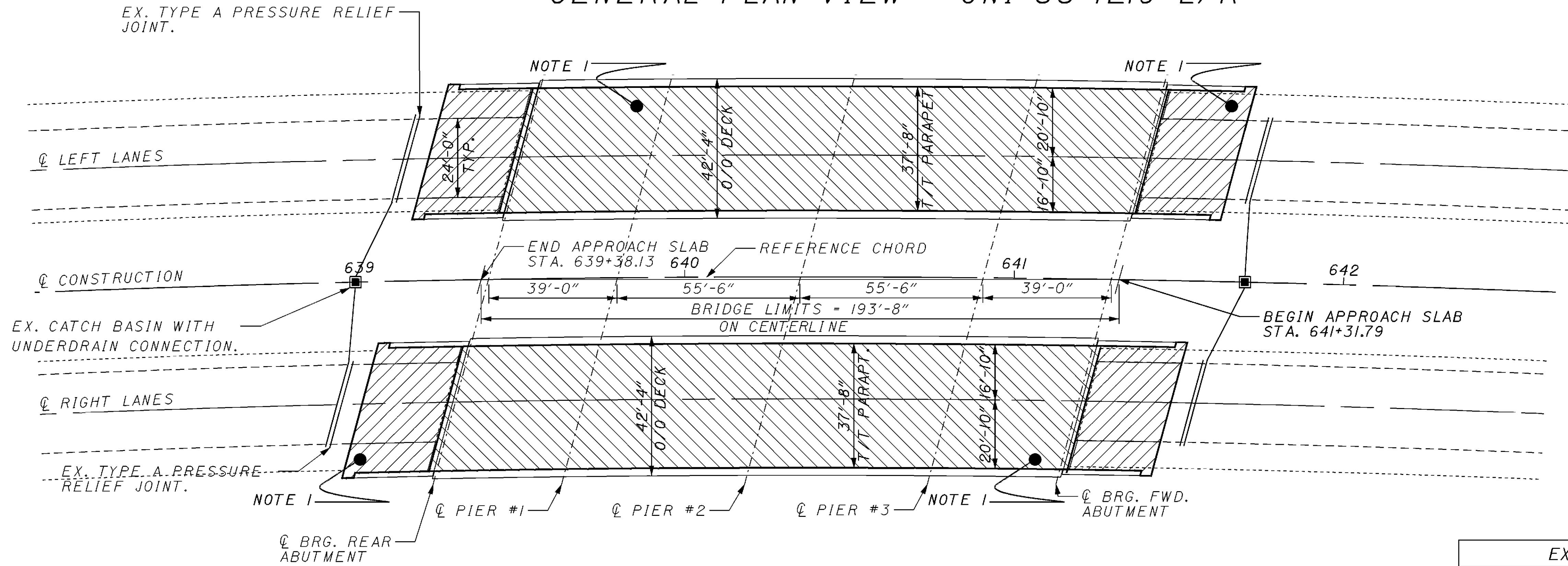
GENERAL PLAN VIEW
 UNI-33-1156 L&R (OVER MILLCREEK)

UNI-33-8.74
 PID# 76466

10 / 11

107
 108

GENERAL PLAN VIEW - UNI-33-1219 L/R



WORK TO BE PERFORMED:

NOTE 1:
-TREATING OF CONCRETE BRIDGE DECKS AND APPROACHES WITH SRS

- STRUCTURE WORK
- APPROACH WORK

EXISTING/PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM BRIDGE WITH CONCRETE DECK AND SUBSTRUCTURE.
 SPANS : 39'-0", 55'-6", 55'-6", 39'-0" C/C BEARINGS
 LOAD FREQUENCY RATING: CF 2000 (57)
 ROADWAY: 37'-8" TOE/TOE PARAPETS.
 SKEW: 15°-10'-19" L.F.
 WEARING SURFACE: MICRO-SILICA CONCRETE OVERLAY
 APPROACH SLABS: AS-1-81 (25'-LONG)
 TYPE OF JOINTS: STRIP STEEL EXPAN. JNT. (EXJ-4-87).
 ALIGNMENT: TANGENT
 RAILING: 42" CONCRETE PARAPET (BR-1)

LOCATION				QUANTITIES				REMARKS
C	R	N	L	512		519		
O	O	U	E	TREATING		PATCHING		
U	U	M	N	OF		CONCRETE		
N	T	B	G	CONCRETE		BRIDGE		
T	E	E	T	BRIDGE		DECK,		
Y		R	H	DECK		TYPE B		
				WITH SRS				
				SQ. YD.		SQ YD		
UNI	33	1219L	194'	808		40		DECK
UNI	33	1219L		222				APPROACHES
UNI	33	1219R	194'	808		40		DECK
UNI	33	1219R		222				APPROACHES

SEE TOTALS ON STRUCTURE SUBSUMMARY SHEET 98/108

I:\Projects\uni\033\0874\013\76466\production\roadway\sheets\STRUCTURE_SHEETS.dgn SHEET_SM008 13-NOV-2012 1:44PM drankin

DESIGN AGENCY
DIST. #6
IN-HOUSE DESIGN

REVIEWED DATE 9/28/2012
DKR << L-8001170
SPN R-8001200

GENERAL PLAN VIEW
UNI-33-1219 L&R (OVER U.S. 36)

UNI-33-8.74
PID# 76466

11 / 11

108
108