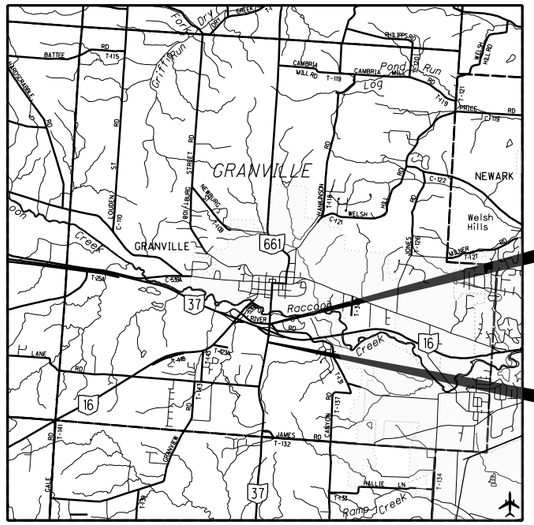


LOCATION MAP

LATITUDE: 40° 03′ 32″ LONGITUDE: -82° 31′ 16″

SCALE IN MILES

0 1 2 3 4

PORTION TO BE IMPROVED

INTERSTATE HIGHWAY

FEDERAL ROUTES

STATE ROUTES

COUNTY & TOWNSHIP ROADS

OTHER ROADS

DESIGN DESIGNATION

	S.R. 37/661
CURRENT ADT (2021)	7,370
DESIGN YEAR ADT (2041)	9,010
DESIGN HOURLY VOLUME (2041)	930
DIRECTIONAL DISTRIBUTION	53%
TRUCKS (24 HOUR B&C)	7%
DESIGN SPEED	45/35
LEGAL SPEED	45/35
DESIGN FUNCTIONAL CLASSIFICATION	URBAN MAJOR COLLECTOR
NHS PROJECT	NO

DESIGN EXCEPTIONS:

SUPERELEVATION (RAMP F) 6/08/2018

UNDERGROUND UTILITIES

OHIO811.org Before You Dig

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 5 PLANNING & ENGINEERING

ENGINEERS SEAL:

STATE OF OHIO Heather Ann Gilbert E-68643 REGISTERED PROFESSIONAL ENGINEER

SIGNED: Heather A. Gilbert
DATE: 11/18/2019

ENGINEERS SEAL:

STATE OF OHIO CHRISTOPHER PHILIP SHONK E-77365 REGISTERED PROFESSIONAL ENGINEER

SIGNED: Christopher Shonk
DATE: 11/18/2019

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
LIC-37/661-16.59/0.00
VILLAGE OF GRANVILLE
GRANVILLE TOWNSHIP
LICKING COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

BRIDGE REPLACEMENT AND WIDENING OF THE EXISTING SR 661 OVER SR 16 BRIDGE (LIC-661-0.030). WORK INCLUDES RECONSTRUCTION OF THE SR 37/661 & SR 16 INTERCHANGE RAMPS AND PAVEMENT WIDENING OF SR 37/661 FOR TURN LANES.

PROJECT EARTH DISTURBED AREA:	13 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	2 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	15 ACRES

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.

2019 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE PART TIME CLOSING OF THE HIGHWAY TO TRAFFIC, AS NOTED ON SHEETS 31-35. DURING WHICH TIME DETOURS WILL BE PROVIDED AS SHOWN HEREIN. PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED _____

DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED _____

DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS

BP-2.1	7/17/15	MGS-1.1	1/19/18	MT-95.31	7/19/19	HL-10.11	7/19/19	TC-42.10	10/18/13	800-2019	10/18/19
BP-2.2	7/18/08	MGS-2.1	1/19/18	MT-95.41	7/21/17	HL-10.12	1/20/17	TC-42.20	10/18/13	809	10/18/19
BP-3.1	10/18/19	MGS-3.1	1/19/18	MT-95.50	7/21/17	HL-10.13	7/20/18	TC-51.11	1/15/16	813	10/19/18
BP-4.1	7/19/13	MGS-3.2	1/18/13	MT-96.11	1/18/19	HL-20.11	4/21/17	TC-52.10	10/18/13	823	7/18/14
BP-5.1	1/18/19	MGS-4.2	7/19/13	MT-96.20	7/15/16	HL-20.14	1/18/19	TC-52.20	7/20/18	832	10/19/18
		MGS-5.2	7/15/16	MT-96.26	1/18/19	HL-30.21	1/17/14	TC-61.10	1/17/14	840	1/18/19
CB-2.1	7/20/18	MGS-5.3	7/15/16	MT-97.12	1/20/17	HL-30.22	1/17/14	TC-61.30	7/19/19	867	1/18/19
CB-2.2	7/20/18			MT-99.20	4/19/19	HL-30.32	1/17/14	TC-65.10	1/17/14	878	1/18/19
CB-3.2	1/15/16	HW-2.1	7/20/18	MT-99.60	7/15/16	HL-40.20	7/20/18	TC-65.11	7/21/17	902	7/19/19
		HW-2.2	7/20/18	MT-101.60	1/20/17	HL-50.11	1/18/19	TC-71.10	1/19/18	903	4/21/17
I-2.3	1/15/16			MT-101.70	7/20/18	HL-50.21	1/18/19	TC-73.20	7/21/17	910	1/19/18
		RM-1.1	7/18/14	MT-101.75	7/15/16	HL-60.11	7/21/17	TC-81.31	1/18/19		
F-1.1	7/19/13	RM-4.2	10/24/19	MT-101.90	7/21/17	HL-60.31	1/18/19	TC-83.20	7/21/17		
F-3.3	7/19/13	RM-4.3	7/18/14	MT-102.10	1/18/19			TC-85.10	1/18/19		
		RM-4.4	7/19/19	MT-102.20	4/19/19	TC-12.30	1/19/18	TC-85.20	7/20/18		
DM-1.1	7/21/17	RM-4.5	7/21/17	MT-103.10	1/19/18	TC-21.20	7/20/18	AS-1-15	7/17/15		
DM-1.2	1/18/13	RM-4.6	7/19/13	MT-105.10	7/19/13	TC-22.10	10/18/13	AS-2-15	1/18/19		
DM-3.1	1/18/13	RM-5.1	7/18/14	MT-120.00	1/19/18	TC-22.20	1/17/14	GSD-1-19	1/18/19		
DM-4.1	1/18/19					TC-41.10	7/19/13	PCB-91	1/18/13		
DM-4.2	7/20/12			ITS-12.50	7/19/19	TC-41.15	10/18/13	SBR-1-13	7/20/18		
DM-4.3	1/15/16			ITS-50.10	7/19/19	TC-41.20	10/18/13	SICD-1-96	7/18/14		
DM-4.4	1/15/16					TC-41.30	10/18/13	SICD-2-14	7/18/14		
						TC-41.50	10/18/13	VPF-1-90	7/20/18		

SPECIAL PROVISIONS	
ASBESTOS SURVEY	
REPORT	
06/07/18	

FEDERAL PROJECT NO. E 170 (636)

PID NO. 92411

CONSTRUCTION PROJECT NO. LIC-37/661-16.59/0.00

RAILROAD INVOLVEMENT NONE

ITEM 614 MAINTAINING TRAFFIC

TRAFFIC SHALL BE MAINTAINED AS PER THE DETAIL SHEETS AND SPECIFICATIONS AND AS OUTLINED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION. IN ADDITION, THE FOLLOWING REQUIREMENTS SHALL APPLY:

THE CONTRACTOR SHALL SUBMIT, IN WRITING A SCHEDULE OF OPERATIONS TO THE DISTRICT DEPUTY DIRECTOR AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IMMEDIATELY, AS PER CMS 614.03.

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

DRUMS SHALL BE PROPERLY REFELCTORIZED (HIGH INTENSITY, FLORESCENT SHEETING) PLASTIC DRUMS AND WEIGHTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL INVOLVED IN PLACING AND REMOVING ITEM 622 PORTABLE CONCRETE BARRIER, 32".

THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS SO AS TO PREVENT ANY INTERFERENCE TO THE CONTINUOUS FLOW OF TRAFFIC. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE ROADWAY UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.

TEMPORARY FEATHERS USING ITEM 441 WILL BE REQUIRED AT ANY LOCATION DESIGNATED BY THE PROJECT ENGINEER. THEY SHALL BE INSTALLED ACCORDING TO BP-3.1 AND REMOVED WHEN NO LONGER REQUIRED.

THE PLANS INDICATE THE MINIMUM SIGNAGE WHICH MUST BE INSTALLED AND/OR MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

EXISTING SIGNS OR CONTRACTOR SUPPLIED SIGNS SHALL BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN IN THE PLANS.

ANY CONFLICTING SIGNS AND PAVEMENT MARKINGS WHETHER INSIDE OR OUTSIDE THE WORK LIMITS SHALL BE REMOVED OR COVERED AND TEMPORARY SIGNS AND MARKINGS ERECTED AND PLACED WHEN APPLICABLE BY THE CONTRACTOR.

THE ENGINEER SHALL RECORD INSTALLATION, REMOVAL, COVERING, UNCOVERING OR REERECTION OF SIGNS IN THE PROJECT DIARY.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 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 AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 MAINTAINING TRAFFIC, UNLESS ITEMIZED SEPARATELY IN THE PLAN.

PROTECTION OF TRAFFIC: PRIOR TO DEMOLITION OF ANY PORTIONS OF THE EXISTING SUPERSTRUCTURE, THE CONTRACTOR SHALL SUBMIT PLANS FOR THE PROTECTION OF TRAFFIC (VEHICULAR, PEDESTRIAN, ETC.) AS PER CMS 2019 501.05.B.2.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 614 MAINTAINING TRAFFIC LS

ITEM 614, MAINTAINING TRAFFIC (LANE CLOSURE/REDUCTION REQUIRED)

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.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

ITEM 614 MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES ON S.R. 16 SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANE(S) ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY	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 (THANKS-GIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $150 FOR EACH MINUTE THE ABOVE DESCRIBED LANE RESTRICTIONS ARE VIOLATED.

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. 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 TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE D5 PUBLIC INFORMATION OFFICER (PIO). 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 AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVEABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD CLOSURES	>= 2 WEEKS	21 DAYS
	> 12 HOURS & < 2 WEEKS	14 DAYS
	<= 12 HOURS	4 DAYS
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 DAYS
	< 2 WEEKS	5 DAYS
START OF CONST. & TRAFFIC PATTERN CHANGE	N/A	14 DAYS

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

ITEM 615 ROADS FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED TO CONSTRUCT THE TEMPORARY PAVEMENT DURING PRE-PHASE AND PHASES 1A AND 1B. THE REMOVAL OF THE TEMPORARY PAVEMENT SHALL BE INCLUDED IN THIS ITEM. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO PERFORM THIS WORK AS PER ITEM 615.

THE FOLLOWING QUANTITES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN (SEE SHEET 36)

ITEM 615 ROADS FOR MAINTAINING TRAFFIC LS

ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

AS PER THE REQUIREMENTS OF ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, THE CONTRACTOR SHALL PREPARE THE SUBGRADE AS PER 615.05. THE SUBGRADE SHALL BE COMPACTED IN ACCORDANCE TO 204.03 AND MUST HAVE A COMPACTED SUBGRADE. PAYMENT FOR THE SUBGRADE COMPACTION SHALL BE INCLUDED IN THE UNIT BID PRICE PER SQ.YD. FOR PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN.

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITES HAVE BEEN INCLUDED IN THE PLANS FOR INFORMATION ONLY:

EXCAVATION FOR MAINTAINING TRAFFIC	251 CY
EMBANKMENT FOR MAINTAINING TRAFFIC	209 CY
SEEDING & MULCHING FOR MAINTAINING TRAFFIC	1,858 SY

(SEE CROSS-SECTIONS SHEETS 38, 52, 53 & 63 FOR DETAILS)

MAINTAINING EXISTING DRIVES

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL RESIDENTIAL AND COMMERCIAL DRIVES TO THE FULLEST EXTENT POSSIBLE. IT IS UNDERSTOOD THAT FOR SHORT PERIODS OF TIME, THE FULL ACCESS TO A DRIVEWAY MAY NOT BE POSSIBLE. THE CONTRACTOR SHALL MAKE ACCOMODATIONS TO THE RESIDENCE/ BUSINESS OWNER SO THAT DURING THESE SHORT INTERVALS, THE HOME OR BUSINESS OWNER CAN STILL HAVE ACCESS TO PARK NEAR THEIR RESIDENCE OR BUSINESS.

PROPERTIES WITH MULTIPLE ACCESS POINTS:
WORK AT ONE DRIVE AT A TIME.
PROPERTIES WITH A SINGLE ACCESS POINT:
MAINTAIN ACCESS TO PROPERTY AT ALL TIMES USING ONE OF THE FOLLOWING METHODS: REPLACE DRIVEWAY USING PART WIDTH CONSTRUCTION, BACKFILL OPEN EXCAVATION WITH ITEM 304 AGGREGATE FOR TEMPORARY ACCESS, OR USE STEEL PLATES TO SPAN OVER OPEN EXCAVATIONS AND/OR CONCRETE NOT OUT OF CURE.

BEFORE ACCESS TO A DRIVEWAY IS INTERRUPTED, THE CONTRACTOR SHALL GIVE PRIOR NOTICE TO THE OCCUPANT OF THE PROPERTY 72 HOURS BEFORE THE WORK IS STARTED.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT U.S. MAIL OR ANY OTHER DELIVERY WITHIN THE PROJECT LIMITS IS NOT DISRUPTED BY CONSTRUCTION OPERATIONS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 410 TRAFFIC COMPACTED SURFACE, TYPE A OR B	25 CY
ITEM 410 TRAFFIC COMPACTED SURFACE, TYPE C	25 CY
ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	40 CY

MAINTAINING APPROACH ACCESS

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED TO CONSTRUCT THE TEMPORARY PAVEMENT WEDGE DURING PHASE 1B ON RAMP H. THE REMOVAL OF THE TEMPORARY PAVEMENT SHALL BE INCLUDED IN THIS ITEM. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO PERFORM THIS WORK AS PER ITEM 615.

THE FOLLOWING QUANTITES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY:

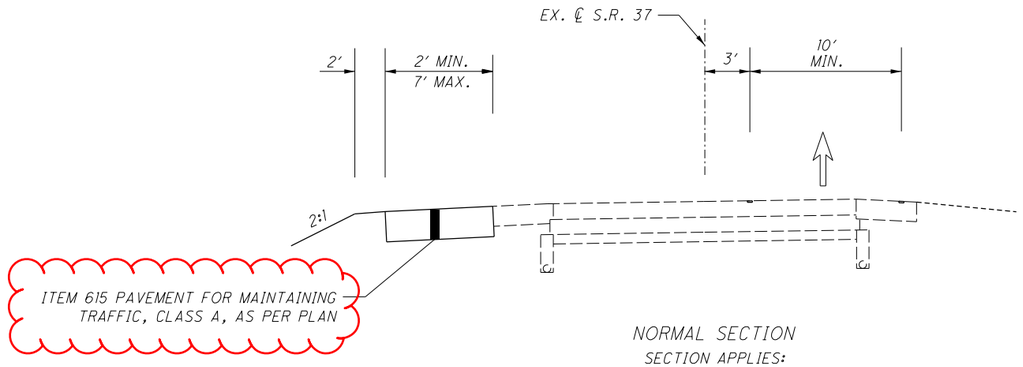
ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 10 CY

CALCULATED HG CHECKED HG

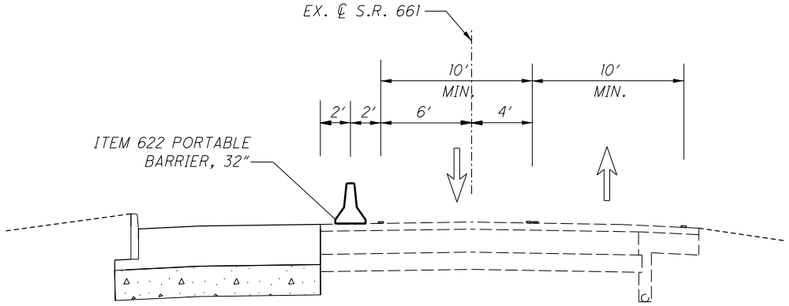
MAINTENANCE OF TRAFFIC - GENERAL NOTES

LIC-37/661-16.59/0.00

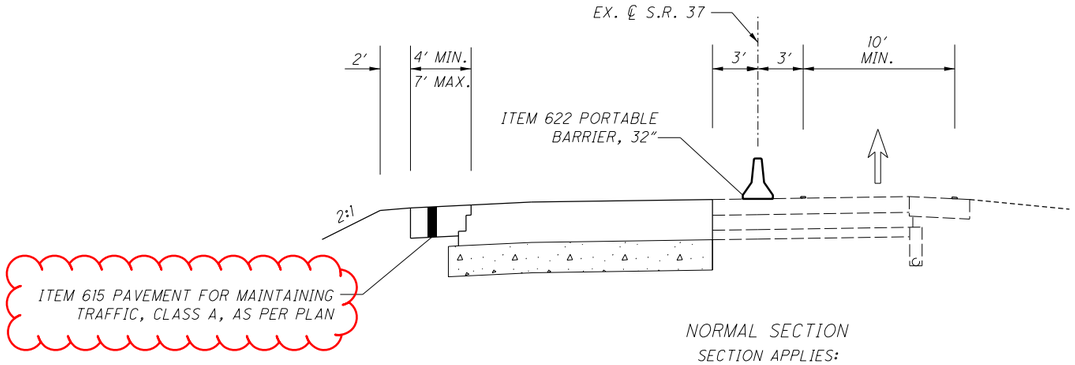
21
341



NORMAL SECTION
SECTION APPLIES:
STA. 355+00 TO STA. 361+50



NORMAL SECTION
SECTION APPLIES:
STA. 375+72.75 TO STA. 382+18.00



NORMAL SECTION
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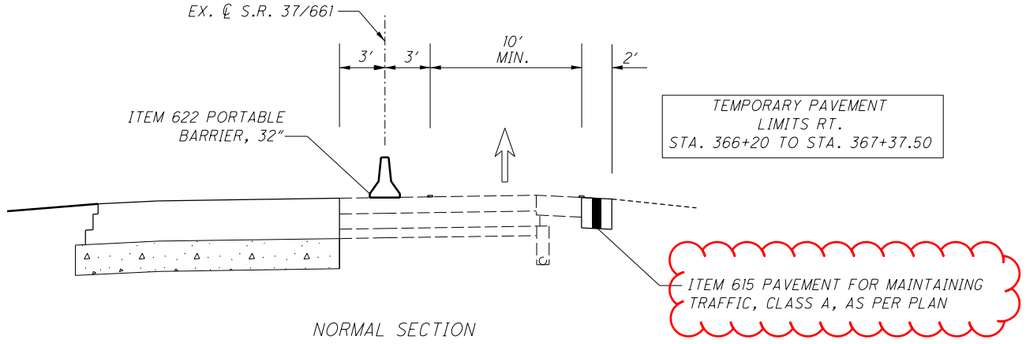
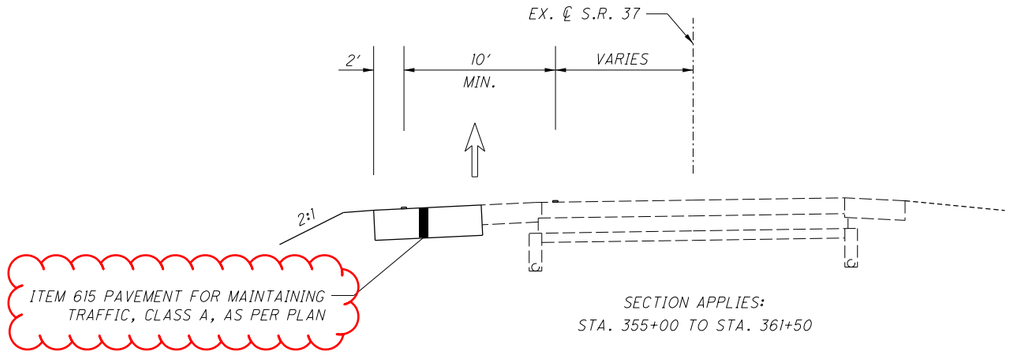


NORMAL SECTION
SECTION APPLIES:
STA. 363+75 TO STA. 369+12.50
STA. 371+52.58 TO STA. 374+80.19

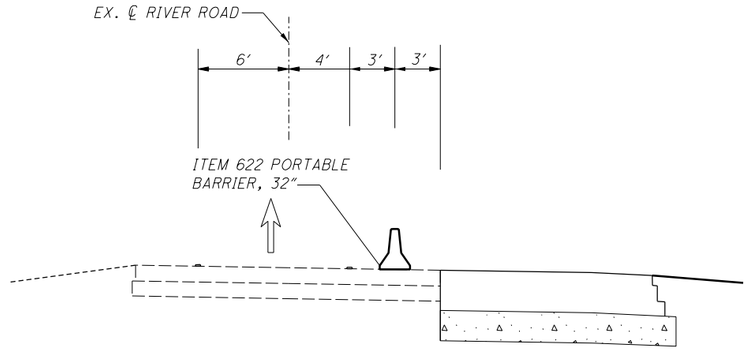
SEE BRIDGE MOT SHEET 276
FOR STA. 369+12.50 TO STA. 371+52.58

MOT TYPICAL SECTIONS PHASE 1A - S.R. 37/S.R. 661

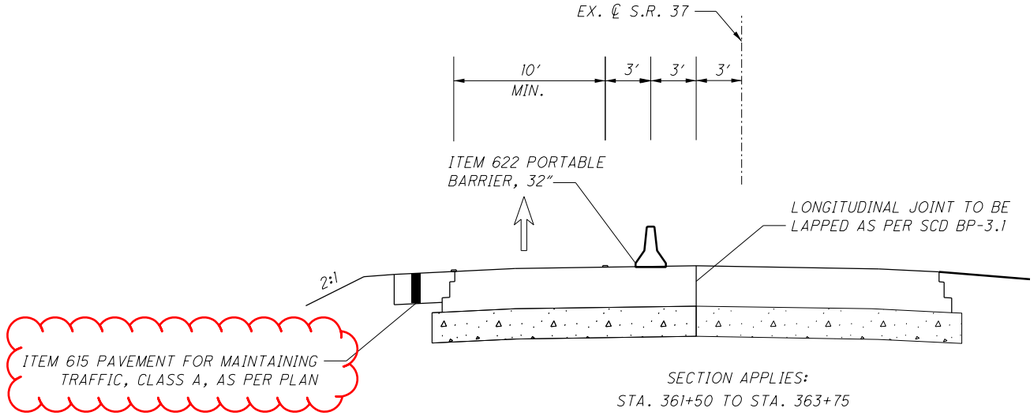
LIC-37/661-
16.59/0.00



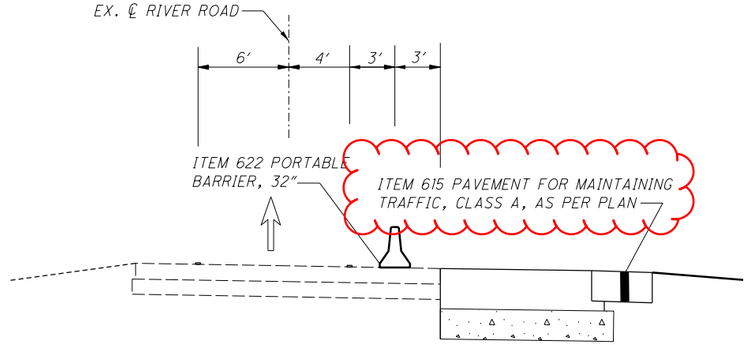
SECTION APPLIES:
STA. 355+00 TO STA. 361+50



SECTION APPLIES:
STA. 25+66.05 TO STA. 27+73.35



SECTION APPLIES:
STA. 361+50 TO STA. 363+75



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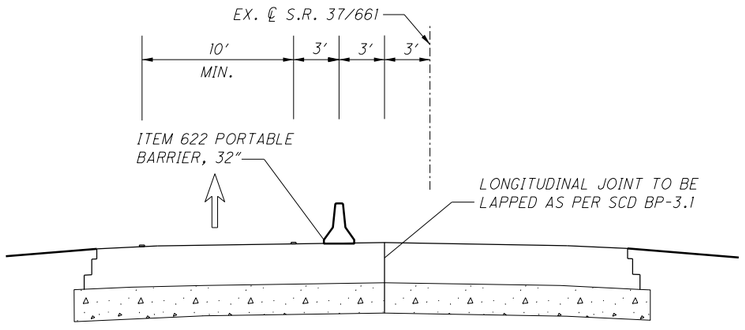
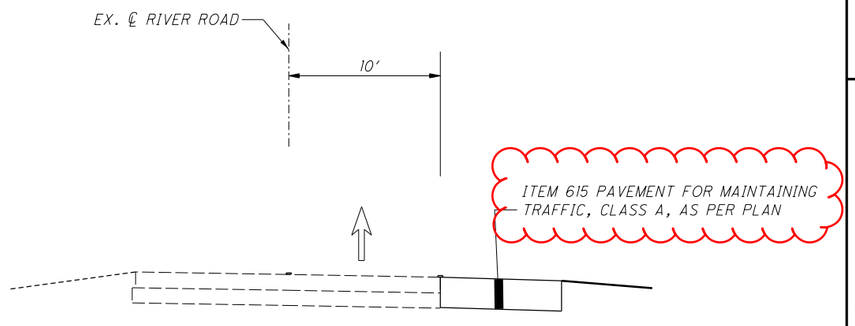


SECTION APPLIES:
STA. 363+75 TO STA. 374+80.19

SEE BRIDGE MOT SHEETS 276
FOR STA. 369+12.50 TO STA. 371+52.58

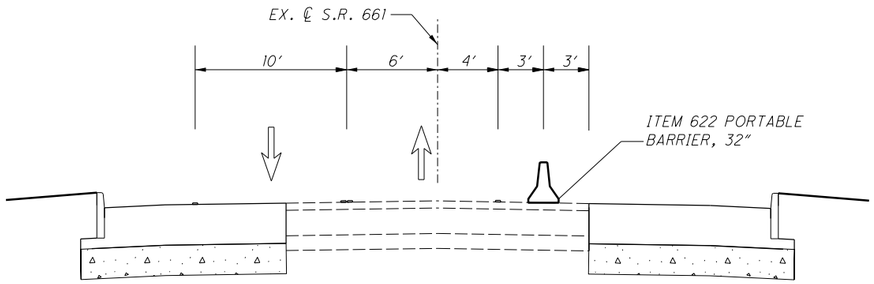


SECTION APPLIES:
STA. 27+73.35 TO STA. 30+00.00

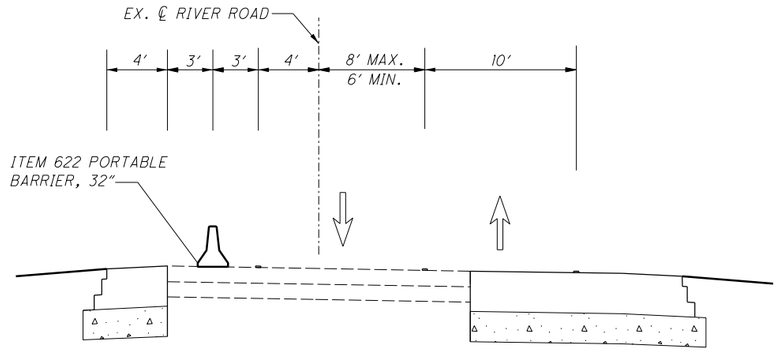
MOT TYPICAL SECTIONS PHASE 1B - S.R. 37/S.R. 661/RIVER RD.

LIC-37/661-16.59/0.00

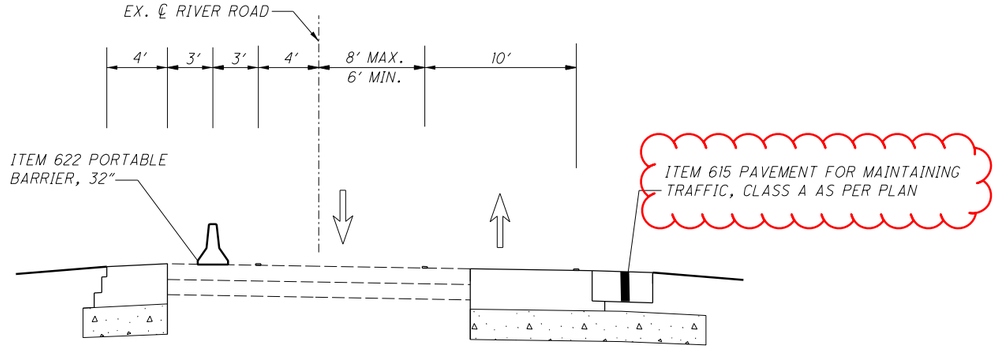
SEE BRIDGE MOT SHEET 277
FOR STA. 369+12.50 TO STA. 371+52.58



SECTION APPLIES:
STA. 375+76.25 TO STA. 382+18.00



SECTION APPLIES:
STA. 25+07.20 TO STA. 27+73.35



SECTION APPLIES:
STA. 27+73.35 TO STA. 28+39.30

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MOT TYPICAL SECTIONS PHASE 2A - S.R. 37/S.R. 661/RIVER RD.

LIC-37/661-16.59/0.00

SHEET NO.	PHASING	614 WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL), 24" EACH	614 WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL), 24" EACH	614 BARRIER REFLECTOR, TYPE 1 (UNIDIRECTIONAL) EACH	614 BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	614 OBJECT MARKER, ONE WAY EACH	614 OBJECT MARKER, TWO WAY EACH	614 WORK ZONE CENTER LINE, CLASS I, 642 PAINT (DOUBLE SOLID) MILE	614 WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE) MILE	614 WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW) MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE) MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE) FT	614 WORK ZONE STOP LINE, CLASS I, 642 PAINT FT	614 WORK ZONE ARROW, CLASS I, 642 PAINT EACH	614 WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT EACH	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	622 PORTABLE BARRIER, 32" FT	622 PORTABLE BARRER, 32", BRIDGE MOUNTED FT	670 DITCH EROSION PROTECTION MAT TYPE E SY		
	PLAN SPLIT CODE 02/NHS/PV																					
39	PRE-PHASE													36								
40	PRE-PHASE													24								
37	PRE-PHASE										0.041	108			1	1	51					
42	PHASE 1A, 1B & 2A	4		40		39												2000				
44	PHASE 1A				11		10		0.071	0.104							28	350	200			
45	PHASE 1A		1		8		7	0.065	0.121	0.072				9				313	50			
54	PHASE 1A										0.057		300									
55	PHASE 1A										0.073		320									
59	PHASE 1B	1			9		8		0.087	0.087								191	250			
60	PHASE 1B				6		5	0.035	0.153	0.040			87	18				280				
65	PHASE 2A		1		6		5	0.083	0.184					40				63	200			
66	PHASE 2A		1		3		2	0.068	0.176				427	70				77	50			
	PLAN SPLIT CODE 02/NHS/PV TOTAL	5	3	40	43	39	37	0.251	0.792	0.303	0.171	108	1134	197	1	1	79	3274	750			
	PLAN SPLIT CODE 03/S<2/PV																					
43	PHASE 1A	2			8		7		0.106	0.133				12			543	394		72		
46	PHASE 1A							0.186	0.350													
57	PHASE 1B								0.116	0.116				12								
58	PHASE 1B	1			13		12		0.208	0.208								641				
61	PHASE 1B							0.010	0.11													
62	PHASE 1B								0.067	0.076							159					
64	PHASE 2A							0.114	0.227													
67	PHASE 2A							0.155	0.350					22								
68	PHASE 2A							0.097	0.180													
	PLAN SPLIT CODE 03/S<2/PV TOTAL	3			21		19	0.562	1.714	0.533				46			702	1035		72		
	TOTALS CARRIED TO GENERAL SUMMARY	**8**	**3**	**40**	**64**	**39**	**56**	**0.81**	**3.34**		**0.17**	**108**	**1134**	**243**	**1**	**1**	**781**	**4309**	**750**	**72**		

CALCULATED HG CHECKED HG

MOT SUB-SUMMARY

LIC-37 / 661-16.59 / 0.00

℄ CONSTRUCTION RIVER ROAD

BEGIN TEMPORARY PAVEMENT
STA. 142+80.00, 58.5' LT.

END TEMPORARY PAVEMENT
STA. 144+10.00, 58.5' LT.

+35.75

65' R

+85.00

WA

+15.00

WP

+65.00

+10.00

+43.00

3.5'

11'

+93.00

+85.00

EW6

ITEM 614 WORK ZONE
CHANNELIZING LINE,
CLASS I, 8", 642 PAINT

WESTBOUND LANES

EASTBOUND LANES

℄ CONSTRUCTION S.R. 16

141 142 143 144 145 146

PT STA. 7+17.07

PT Sta. 142+30.82

S 28° 50' 39" E

PC Sta. 9+50.02

℄ CONSTRUCTION RIVER ROAD

9

8

LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
ITEM 622, PORTABLE BARRIER, 32"	EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
DIRECTION OF TRAFFIC	EW6	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE)	WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT

TYPE III BARRICADE AS PER MT-101.60

CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PRE-PHASE - S.R. 16 WB
STA. 142+85 TO STA. 144+43

LIC-37/661-16.59/0.00

37
341

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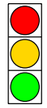
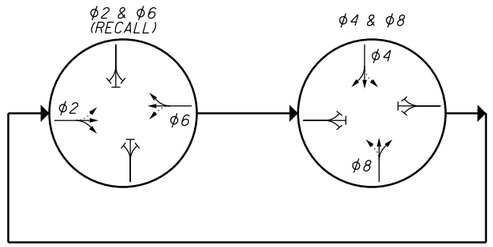
SIGNAL HEAD INDICATIONS

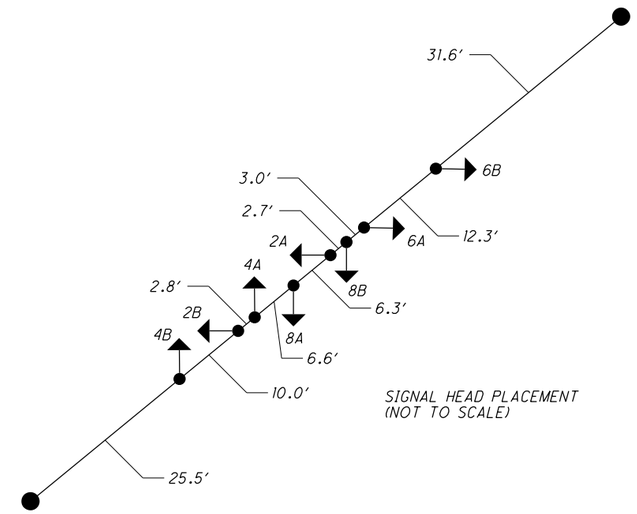


2A/2B
4A/4B
6A/6B
8A/8B

PHASING DIAGRAM



MOT SIGNAL TIMING CHART								
PHASE	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
DIRECTION		**NB**		**EB**		**SB**		**WB**
MINIMUM GREEN		15		15		15		15
PASSAGE TIME		3		3		3		3
MAXIMUM GREEN		30		30		30		30
YELLOW CHANGE		3		3		3		3
ALL RED CLEARANCE		1.5		1.5		1.5		1.5



SIGNAL HEAD PLACEMENT
(NOT TO SCALE)

NOTE: TWO STOP SIGNS TO BE COVERED DURING TEMPORARY SIGNAL OPERATION AND TO BE PAID FOR UNDER ITEM 614 MAINTAINING TRAFFIC LUMP SUM

LEGEND

	ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
	ITEM 622, PORTABLE BARRIER, 32"
→	DIRECTION OF TRAFFIC
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT
CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT
EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)
EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)
DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
	CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

TEMPORARY SIGNAL MOT PRE-PHASE
S.R. 16 & RAMPS A & B / WEAVER DRIVE

LIC-37/661-16.59/0.00

39
341

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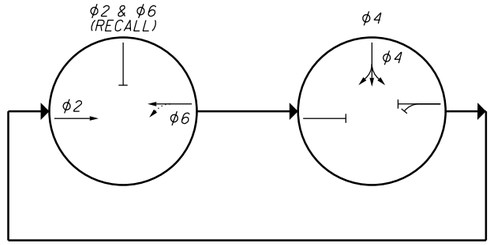
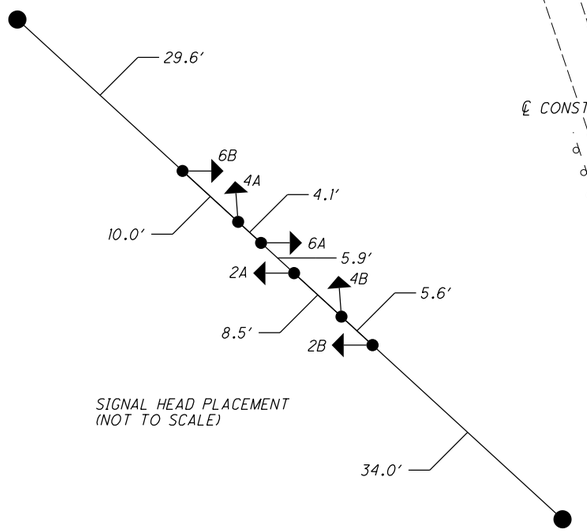
SIGNAL HEAD INDICATIONS

2A/2B
4A/4B
6A/6B

PHASING DIAGRAM



MOT SIGNAL TIMING CHART								
PHASE	1	2	3	4	5	6	7	8
DIRECTION		NB		EB		SB		
MINIMUM GREEN		15		15		15		
PASSAGE TIME		3		3		3		
MAXIMUM GREEN		30		30		30		
YELLOW CHANGE		3		3		3		
ALL RED CLEARANCE		1.5		1.5		1.5		



SIGNAL HEAD PLACEMENT
(NOT TO SCALE)

NOTE: TWO STOP SIGNS TO BE COVERED DURING TEMPORARY SIGNAL OPERATION AND TO BE PAID FOR UNDER ITEM 614 MAINTAINING TRAFFIC LUMP SUM

LEGEND

- ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
- ITEM 622, PORTABLE BARRIER, 32″
- DIRECTION OF TRAFFIC
- SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT
- CL — ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT
- EW4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4″, 642 PAINT (WHITE)
- EY4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4″, 642 PAINT (YELLOW)
- DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
- WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
- WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72″, CLASS I, 642 PAINT
- CONSTRUCTION WORK AREA

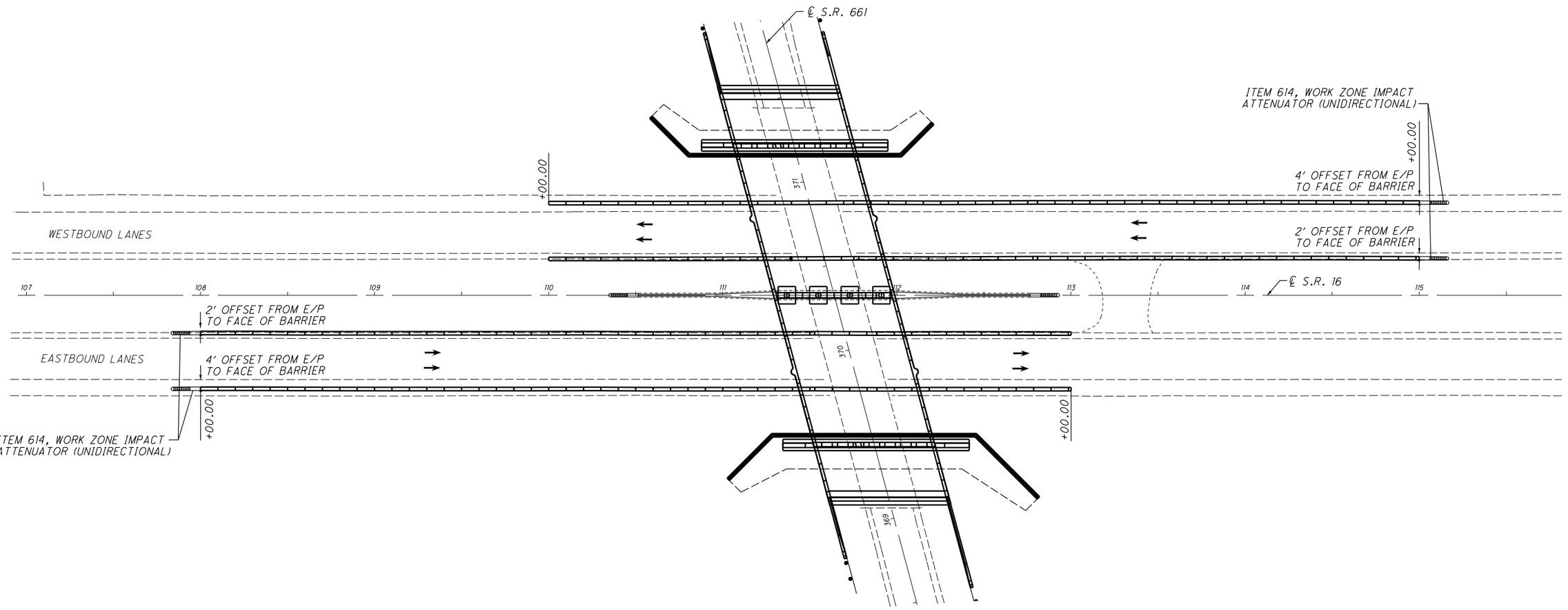
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PRE-PHASE TEMPORARY SIGNAL
S.R. 16 & RAMPS C & D

LIC-37 / 661-
16.59 / 0.00

40
341



ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

ITEM 622, PORTABLE BARRIER, 32"

DIRECTION OF TRAFFIC

(SL) ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT

LEGEND

(CL) ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT

(EW4) ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)

(EY4) ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)

(DL) ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)

(WA) ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT

(WP) ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT

TYPE III BARRICADE AS PER MT-101.60

CONSTRUCTION WORK AREA

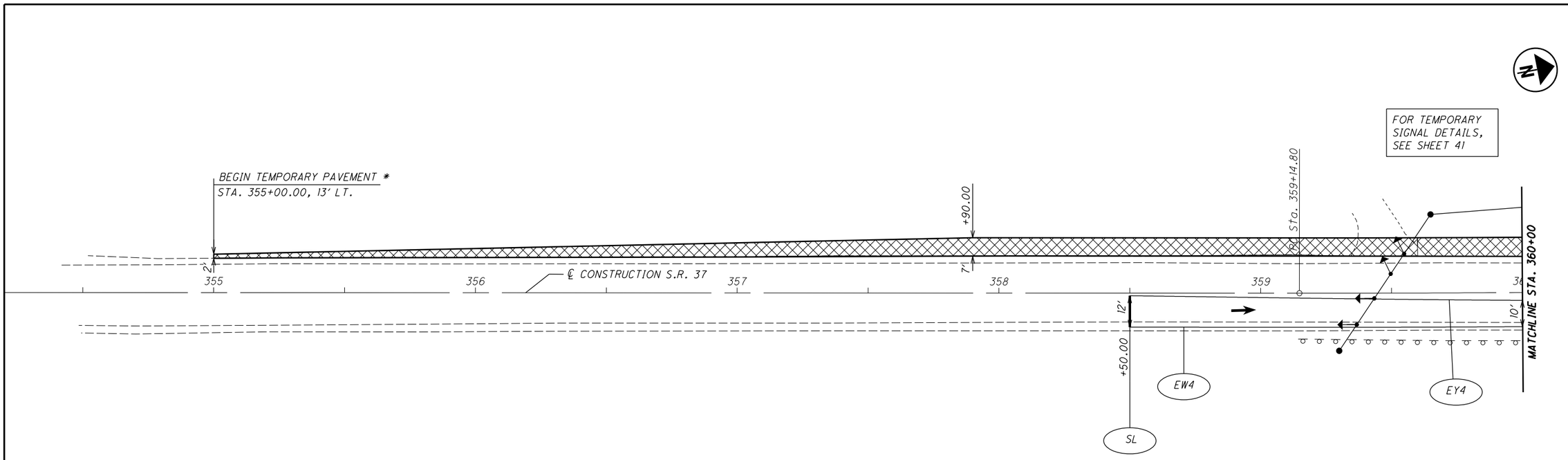
N

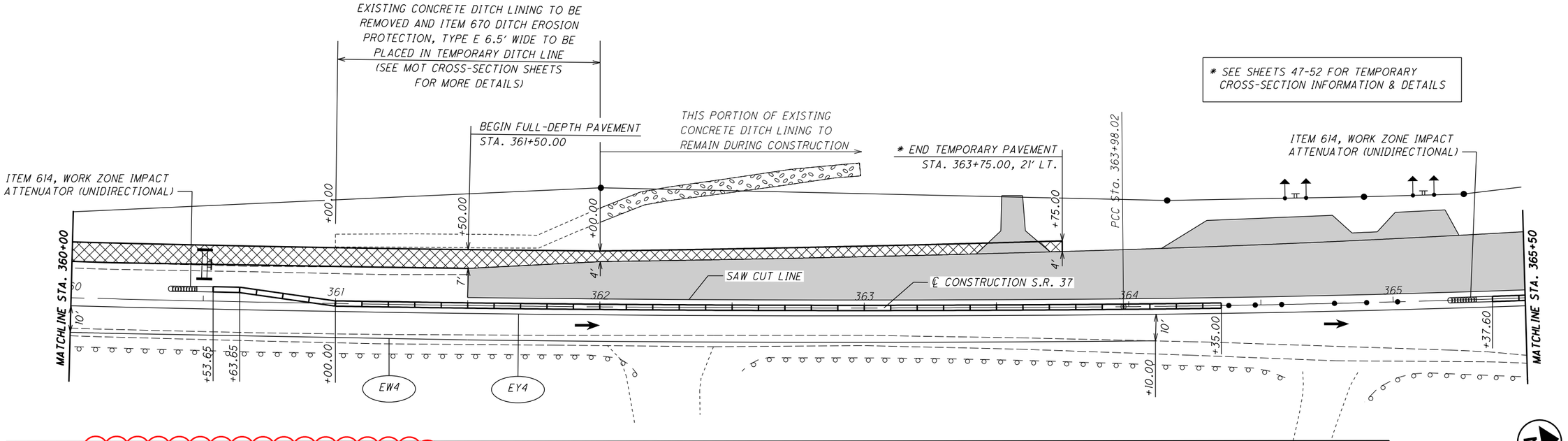
0 15 30 60 HORIZONTAL SCALE IN FEET

CALCULATED HG CHECKED HG

MOT PHASE 1A, 1B & 2A - S.R. 16 STA. 108+00 TO STA. 115+00

LIC-37/661-16.59/0.00





LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	
ITEM 622, PORTABLE BARRIER, 32"	
DIRECTION OF TRAFFIC	
SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	
CL — ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
EW4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	
EY4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	
DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)	
WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT	
WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT	
TYPE III BARRICADE AS PER MT-101.60	
CONSTRUCTION WORK AREA	

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 1A - S.R. 37
STA. 355+00 TO STA. 365+50

LIC-37/661-16.59/0.00

43
341

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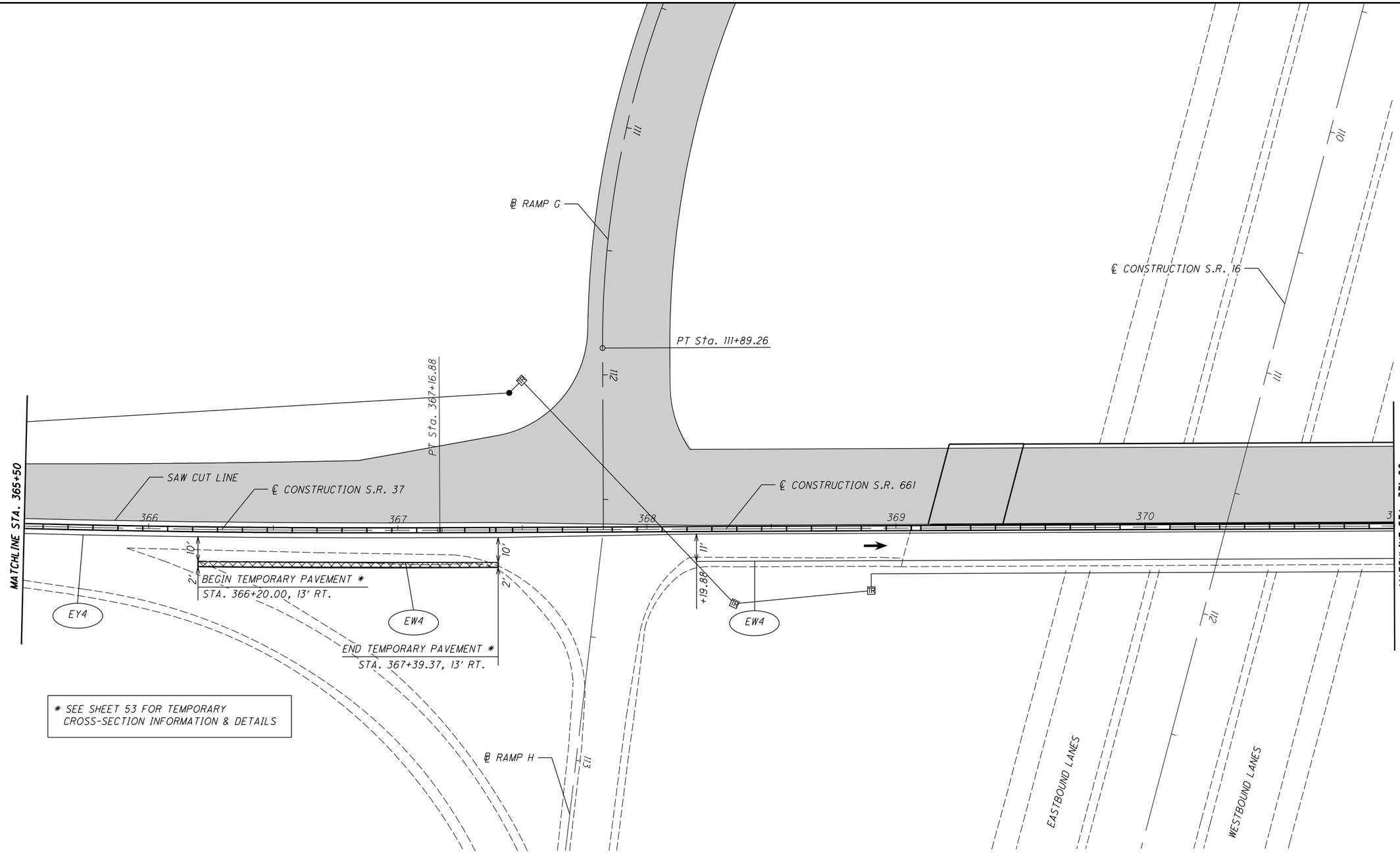


LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN		CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
ITEM 622, PORTABLE BARRIER, 32"		EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE)	WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
DIRECTION OF TRAFFIC		EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW)	WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT				TYPE III BARRICADE AS PER MT-101.60
					CONSTRUCTION WORK AREA

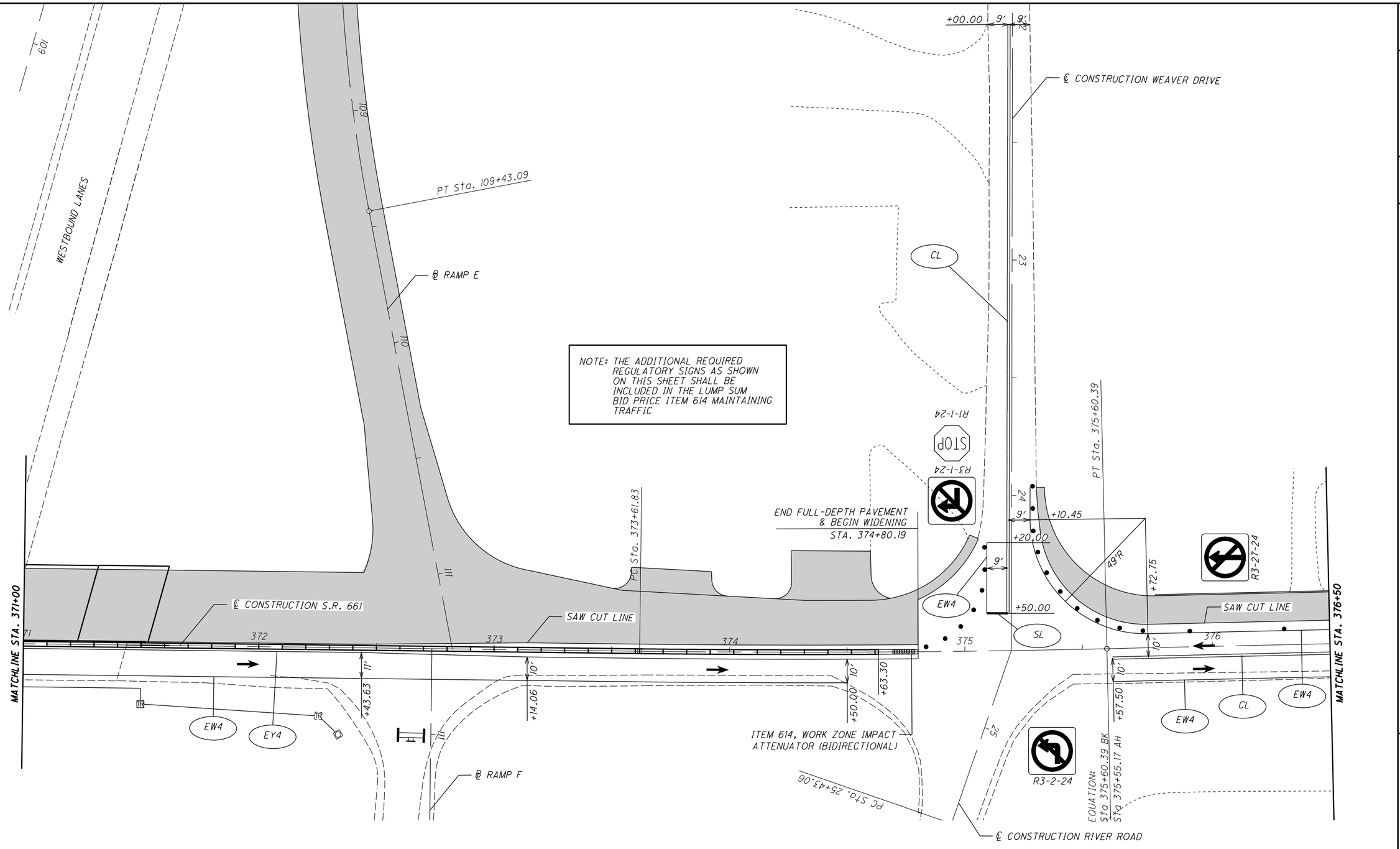
N

0 10 20 40 HORIZONTAL SCALE IN FEET

CALCULATED BRH
CHECKED HAG

MOT PHASE 1A - S.R. 37 / S.R.661
STA. 365+50 TO STA. 371+00

LIC-37 / 661-16.59 / 0.00



LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	
ITEM 622, PORTABLE BARRIER, 32"	
DIRECTION OF TRAFFIC	
SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	
CL — ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
EW4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	
EY4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	
DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)	
WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT	
WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT	
TYPE III BARRICADE AS PER MT-101.60	
CONSTRUCTION WORK AREA	

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 1A - S.R. 661
STA. 371+00 TO STA. 376+50

LIC-37 / 661-16.59 / 0.00

45
341

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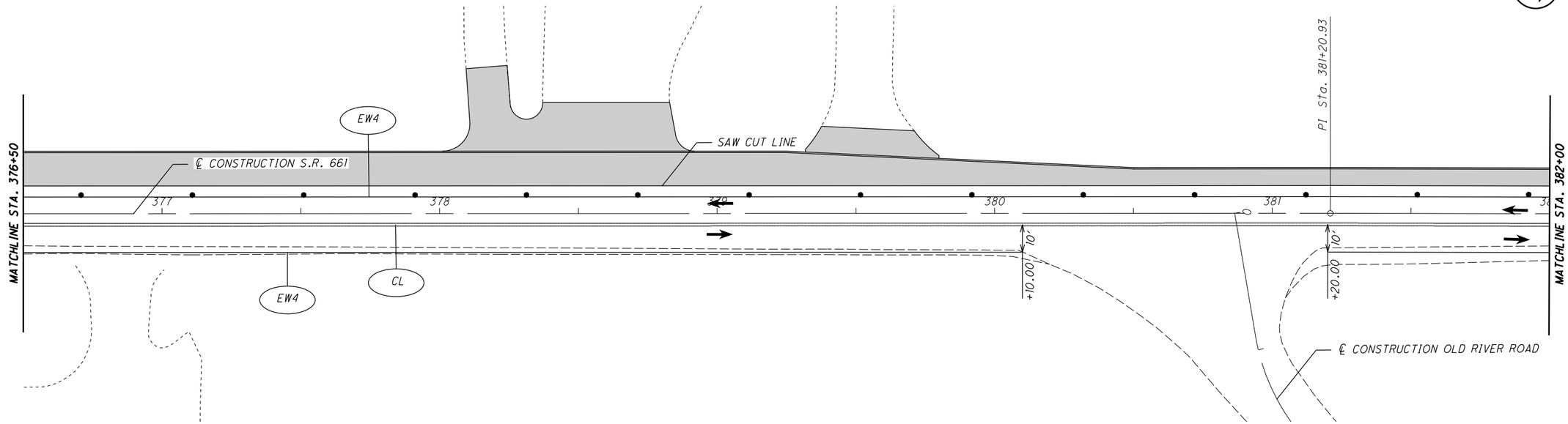
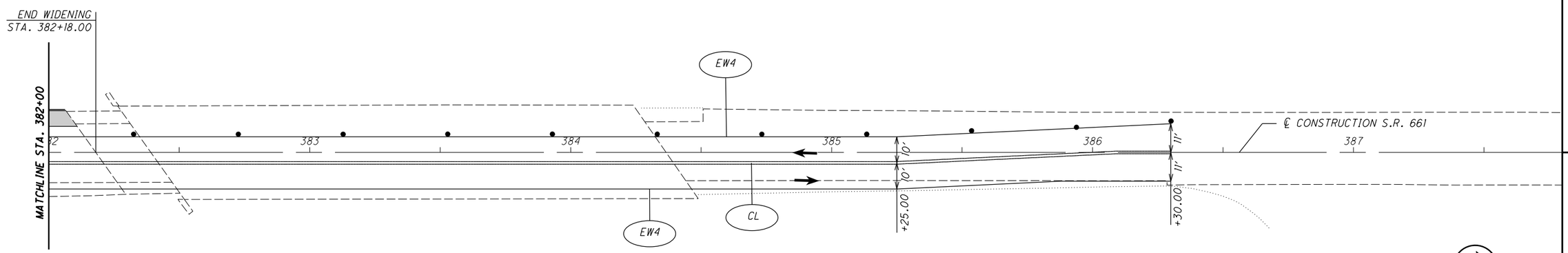




LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN		CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
ITEM 622, PORTABLE BARRIER, 32"		EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
DIRECTION OF TRAFFIC		EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT				

TYPE III BARRICADE AS PER MT-101.60

CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 1A - S.R. 661
STA. 376+50 TO STA. 386+30

LIC-37/661-16.59/0.00

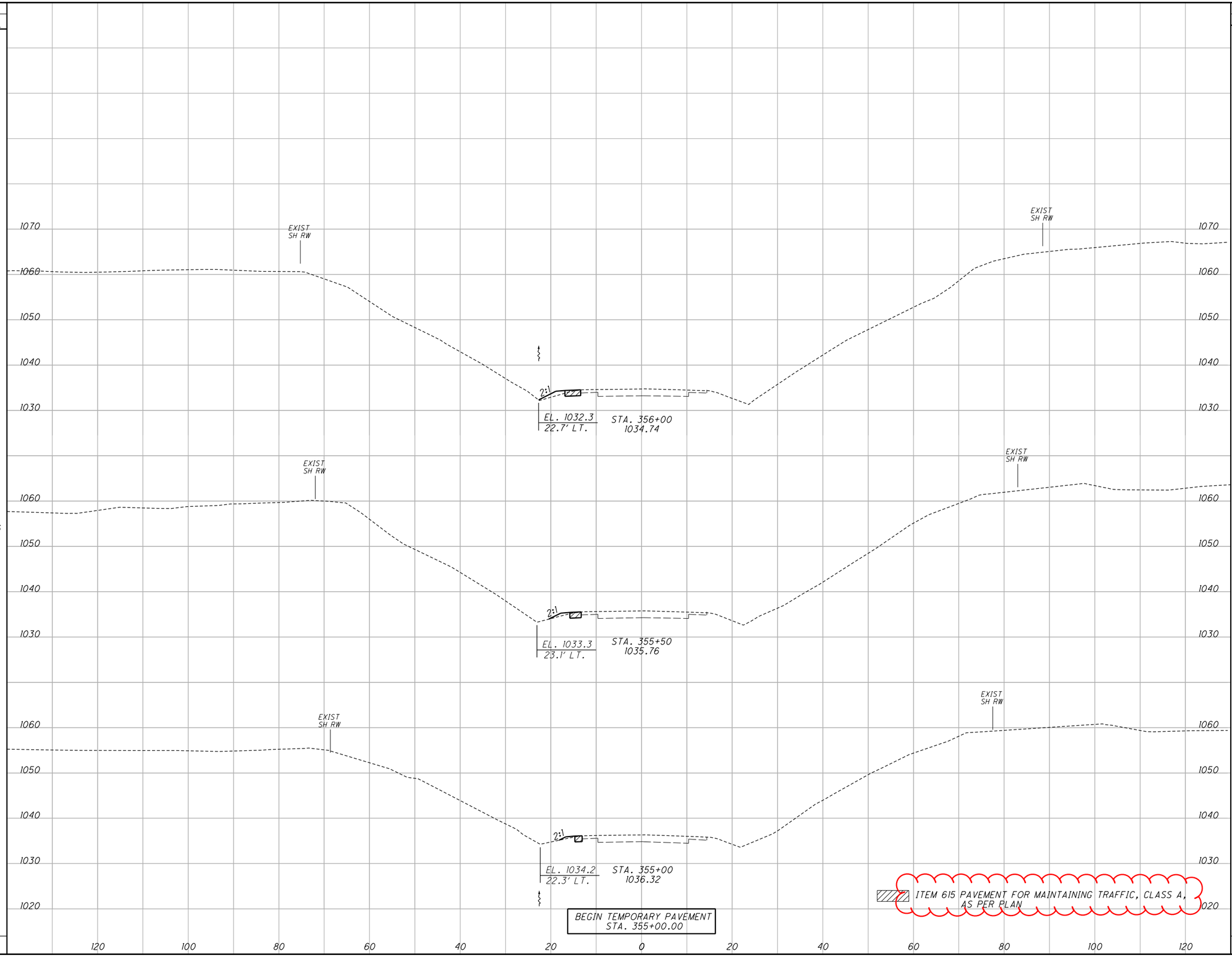
SEEDING	
END WIDTH	SQ. YDS.
16	
15	86
14	81

END AREA	
CUT	FILL
4	4
3	2
2	1

VOLUME	
CUT	FILL
7	6
5	3

CALCULATED HG

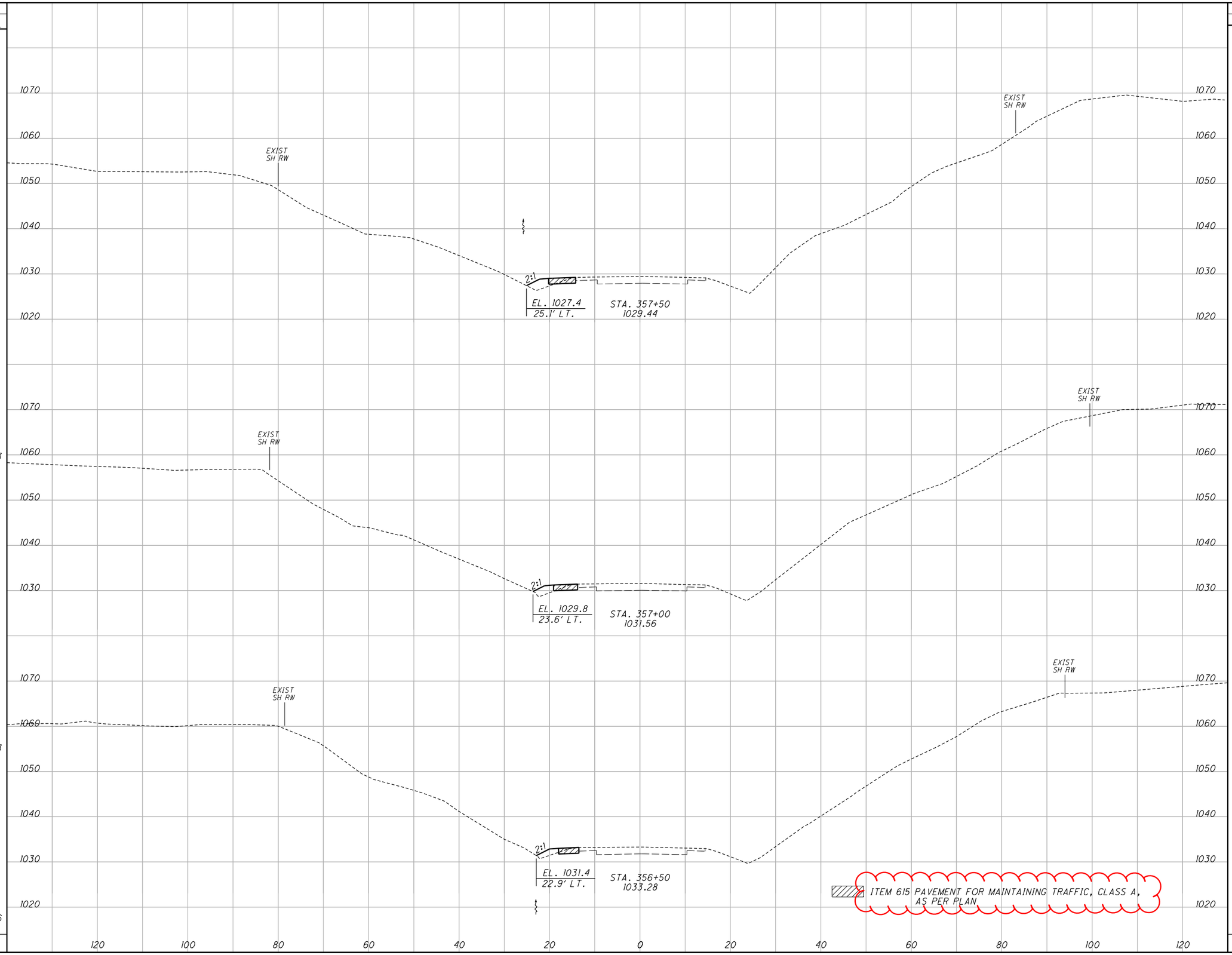
CHECKED HG



CROSS SECTIONS - MOT PHASE 1A S.R. 37
STA. 355+00.00 TO STA. 356+00.00

LIC-37/661-
16.59/0.00

SEEDING	
END WIDTH	SQ. YDS.
15	83
15	83
15	86



END AREA	
CUT	FILL
4	9
4	7
5	6

VOLUME	
CUT	FILL
7	15
8	12
8	9

CALCULATED HG

CHECKED HG

CROSS SECTIONS - MOT PHASE 1A S.R. 37
STA. 356+50.00 TO STA. 357+50.00

LIC-37/661-16.59/0.00

48
341

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SEEDING END WIDTH	SEEDING SQ. YDS.
14	81
15	83
15	83
15	83

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
8	5	11	10
4	6		
3	8	7	13
3	8	6	15
3	8	7	16

CALCULATED HG
CHECKED HG

CROSS SECTIONS - MOT PHASE 1A S.R. 37
STA. 358+00.00 TO STA. 359+50.00

LIC-37/661-16.59/0.00

EXIST SH RW

2:1

EL. 1015.5
25.0' LT.

STA. 359+50
1017.14

EL. 1019.0
25.4' LT.

STA. 359+00
1020.76

EL. 1022.2
25.5' LT.

STA. 358+50
1024.05

EL. 1025.0
25.6' LT.

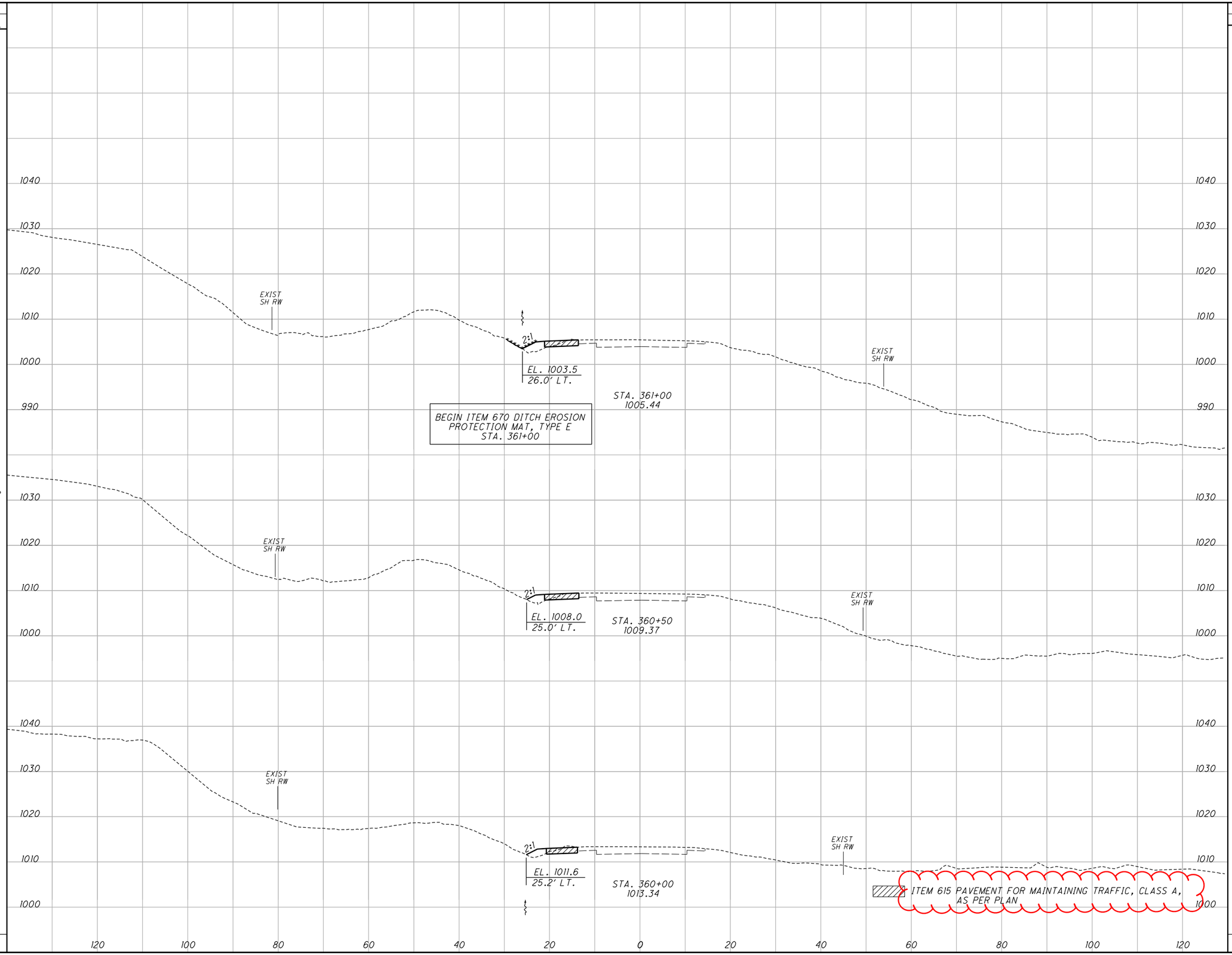
STA. 358+00
1026.92

ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

1040 1030 1020 1010 1050

120 100 80 60 40 20 0 20 40 60 80 100 120

SEEDING	
END WIDTH	SQ. YDS.
12	
72	
14	
81	
15	
81	



END AREA	
CUT	FILL
6	8
6	6
7	6
14	10

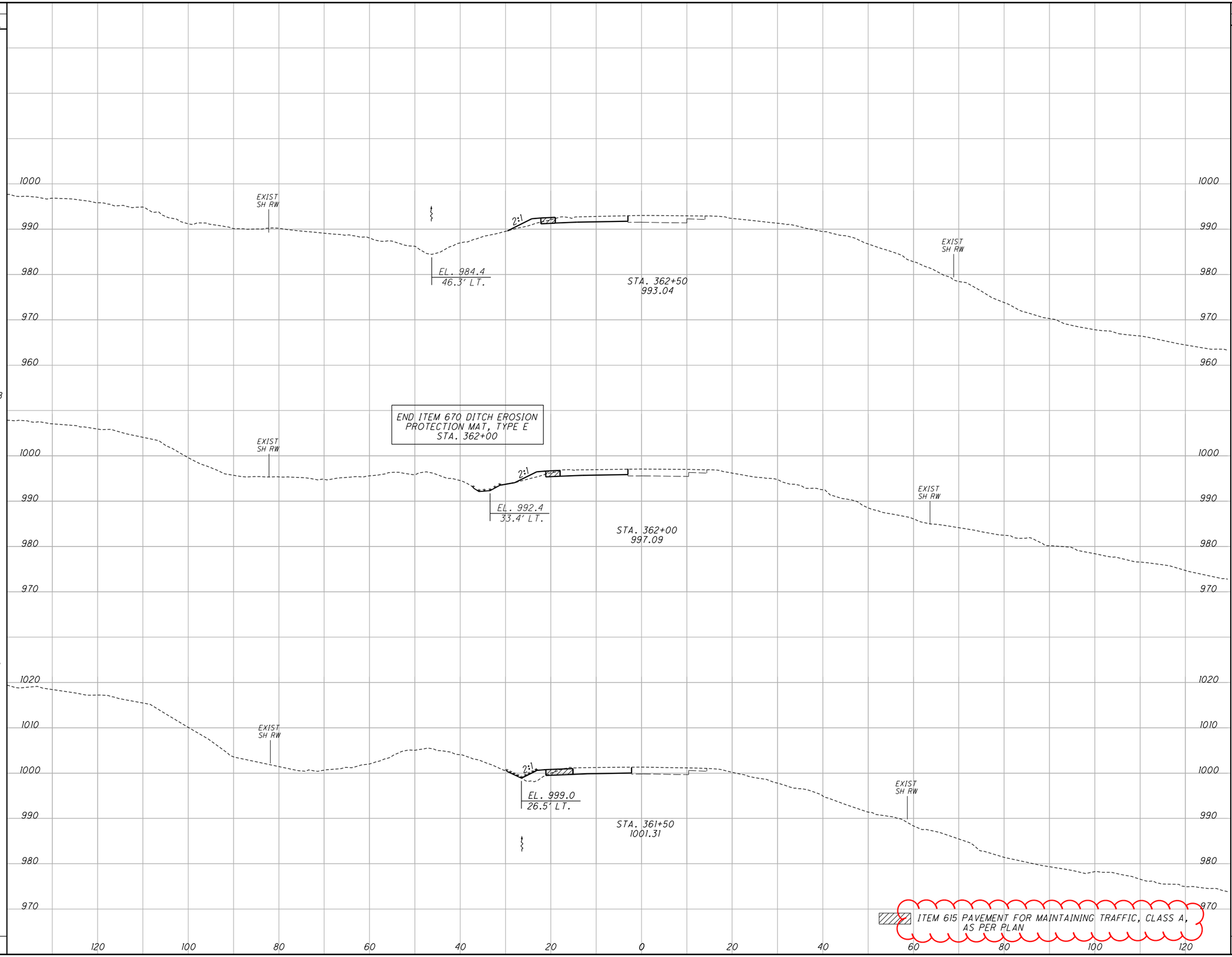
VOLUME	
CUT	FILL
11	13
12	11
14	10

CALCULATED	CHECKED
HG	HG

CROSS SECTIONS - MOT PHASE 1A S.R. 37
STA. 360+00.00 TO STA. 361+00.00

LIC-37 / 661-
16.59 / 0.00

SEEDING	
END WIDTH	SQ. YDS.
18	108
21	92
12	67



END AREA	
CUT	FILL
2	6
3	5
6	9

VOLUME	
CUT	FILL
5	10
8	13
11	16

CALCULATED HG
CHECKED HG

CROSS SECTIONS - MOT PHASE 1A S.R. 37
STA. 361+50.00 TO STA. 362+50.00

LIC-37/661-16.59/0.00

51
341

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SEEDING	
END WIDTH	SQ. YDS.
	1,466
14	39
14	83
16	94

END AREA		VOLUME	
CUT	FILL	CUT	FILL
		139	187
3	1	3	1
3	1		
		5	5
2	4		
		4	9

CALCULATED HG

CHECKED HG

FOR INFORMATION ONLY
SEEDING FOR MAINTAINING TRAFFIC

FOR INFORMATION ONLY
EXCAVATION & EMBANKMENT FOR MAINTAINING TRAFFIC

END TEMPORARY PAVEMENT
STA. 363+75.00

STA. 363+75.00 BACK

STA. 363+75.00 BACK

EXIST SH RW

6:1

8%

STA. 363+50
984.84

EXIST SH RW

C/L

EXIST SH RW

2:1

STA. 363+00
988.87

EXIST SH RW

C/L

ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

940 930 980 970 960 990 980 970 960 950

120 100 80 60 40 20 0 20 40 60 80 100 120

CROSS SECTIONS - MOT PHASE 1A S.R. 37
STA. 363+00.00 TO STA. 363+50.00

LIC-37 / 661-
16.59 / 0.00

52
341

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SEEDING	
END WIDTH	SQ. YDS.
	0
0	
	0
0	
	0
0	
	0
0	

END AREA	
CUT	FILL
3	0
3	0
3	0

VOLUME	
CUT	FILL
13	0
4	0
6	0
3	0

CALCULATED HG
CHECKED HG

FOR INFORMATION ONLY
SEEDING FOR MAINTAINING TRAFFIC

FOR INFORMATION ONLY
EXCAVATION & EMBANKMENT FOR MAINTAINING TRAFFIC

STA. 367+37.50 BACK

END TEMPORARY PAVEMENT
STA. 367+37.50

STA. 367+37.50 BACK

EXIST SH RW

EXIST LA RW

STA. 367+00
962.43

STA. 366+50
964.96

EXIST SH RW

STA. 366+20 AHEAD

BEGIN TEMPORARY PAVEMENT
STA. 366+20.00

STA. 366+20 AHEAD

ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

970
960
950
940
930

120 100 80 60 40 20 0 20 40 60 80 100 120

CROSS SECTIONS - MOT PHASE 1A S.R. 37
STA. 366+50.00 TO STA. 367+00.00

LIC-37/661-16.59/0.00

53
341

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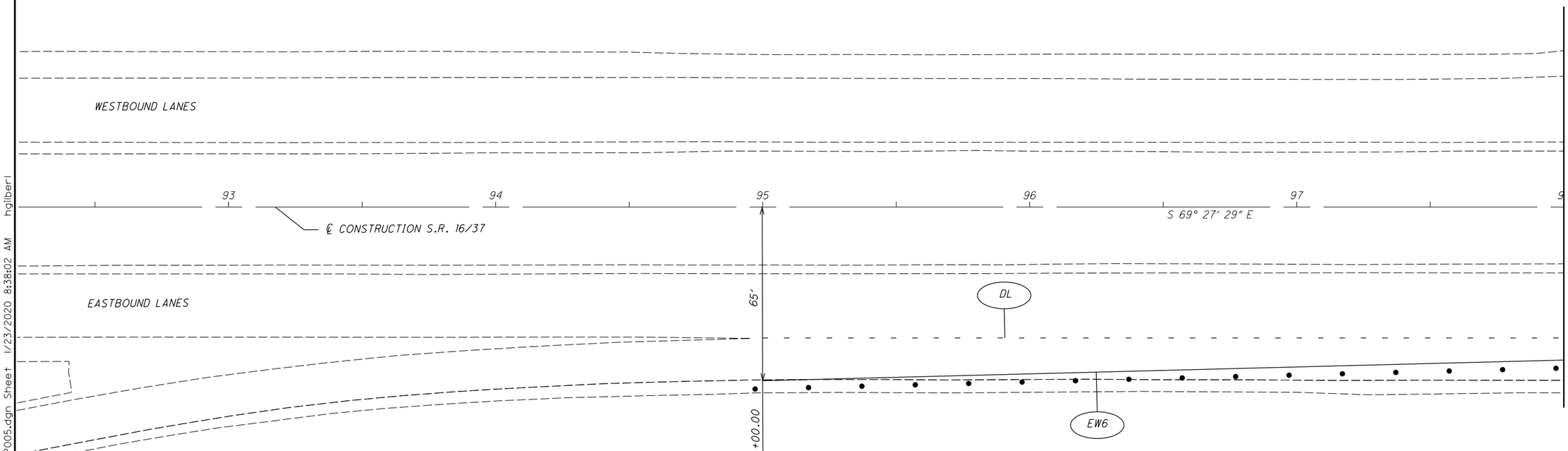


LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
ITEM 622, PORTABLE BARRIER, 32"	EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
DIRECTION OF TRAFFIC	EW6	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE)	WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT

TYPE III BARRICADE AS PER MT-101.60

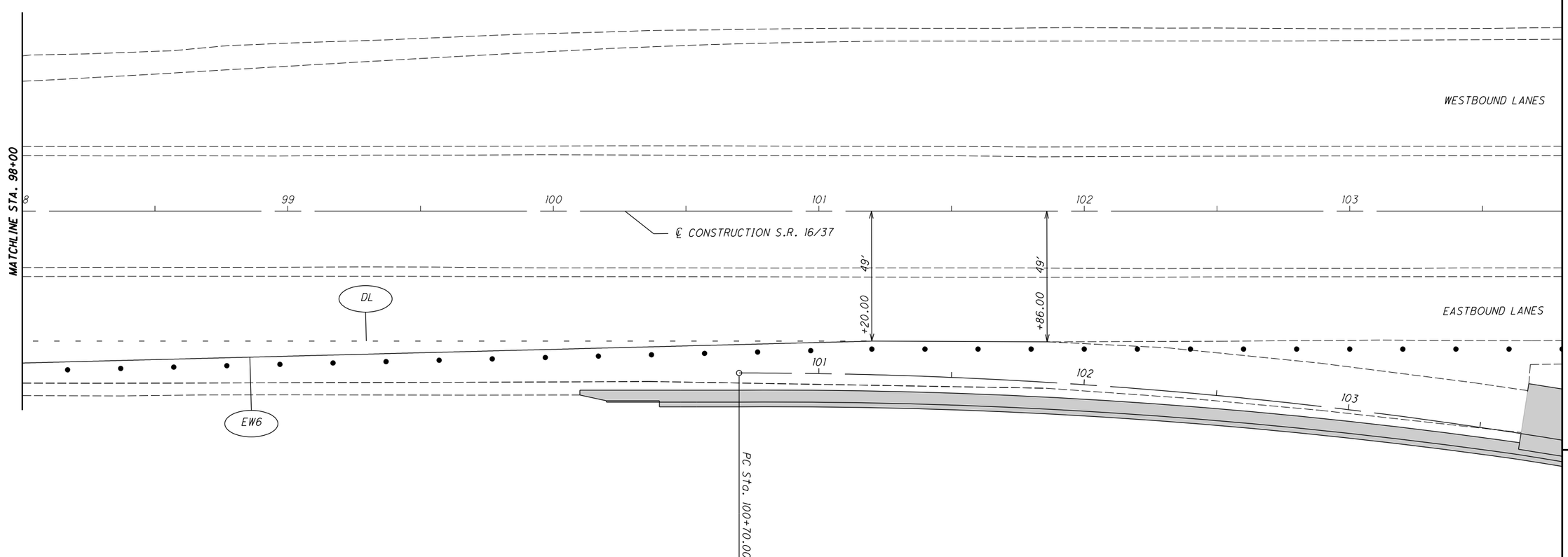
CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 1A - RAMP G CLOSURE
S.R. 16 - STA. 95+00 TO STA. 98+00

LIC-37/661-16.59/0.00



LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN		CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT		
ITEM 622, PORTABLE BARRIER, 32"		EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
DIRECTION OF TRAFFIC		EW6	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE)	WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT

TYPE III BARRICADE AS PER MT-101.60

CONSTRUCTION WORK AREA

N

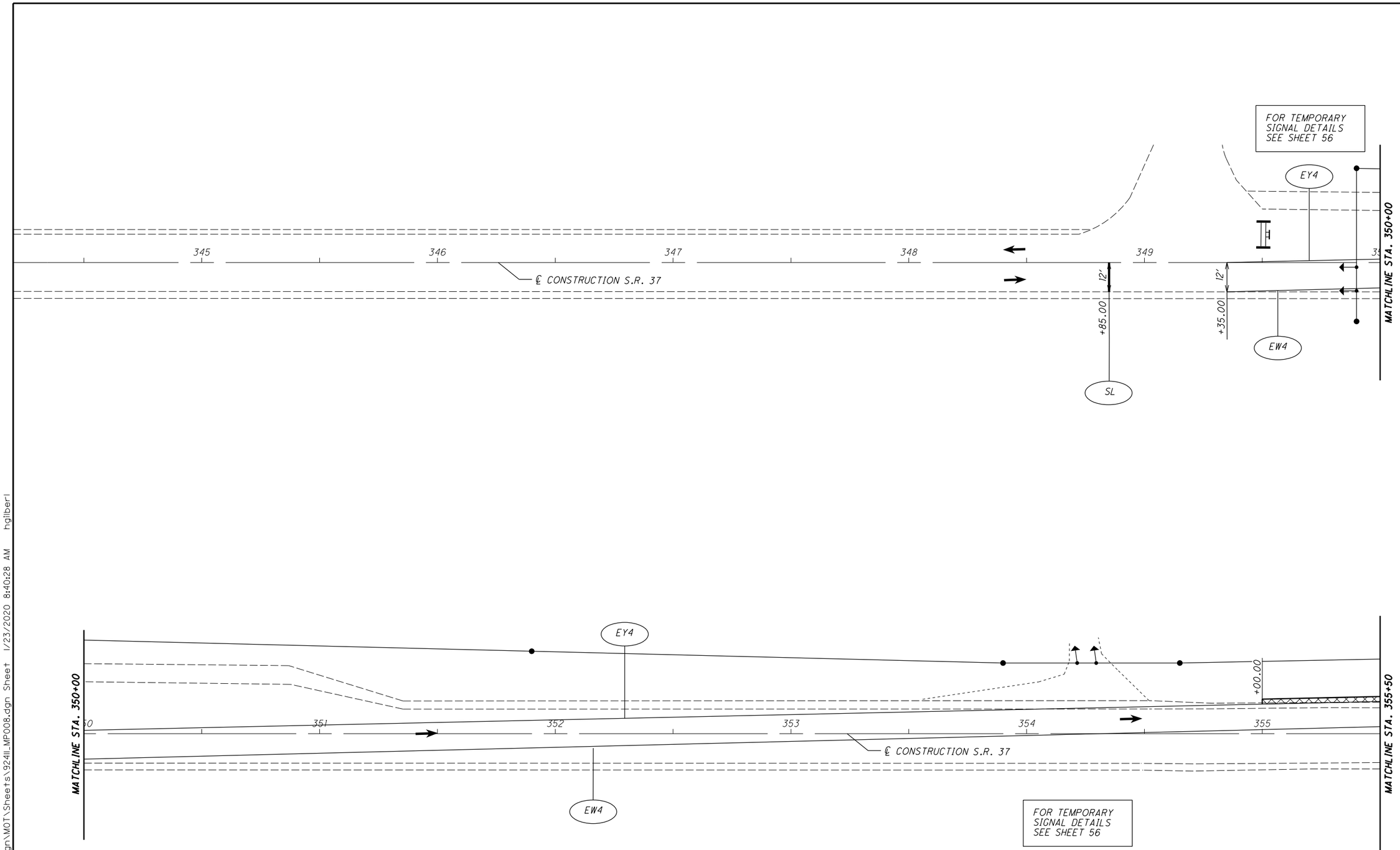
0 10 20 40 HORIZONTAL SCALE IN FEET

CALCULATED BRH
CHECKED HAG

MOT PHASE 1A - RAMP G CLOSURE
S.R. 16 - STA. 98+00 TO STA. 101+86

LIC-37/661-
16.59/0.00

55
341



LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN			TYPE III BARRICADE AS PER MT-101.60
ITEM 622, PORTABLE BARRIER, 32"	CL — ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)	CONSTRUCTION WORK AREA
DIRECTION OF TRAFFIC	EW4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT	
SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	EY4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT	

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 1B - S.R. 37
STA. 348+85 TO STA. 355+50

LIC-37/661-16.59/0.00

57
341

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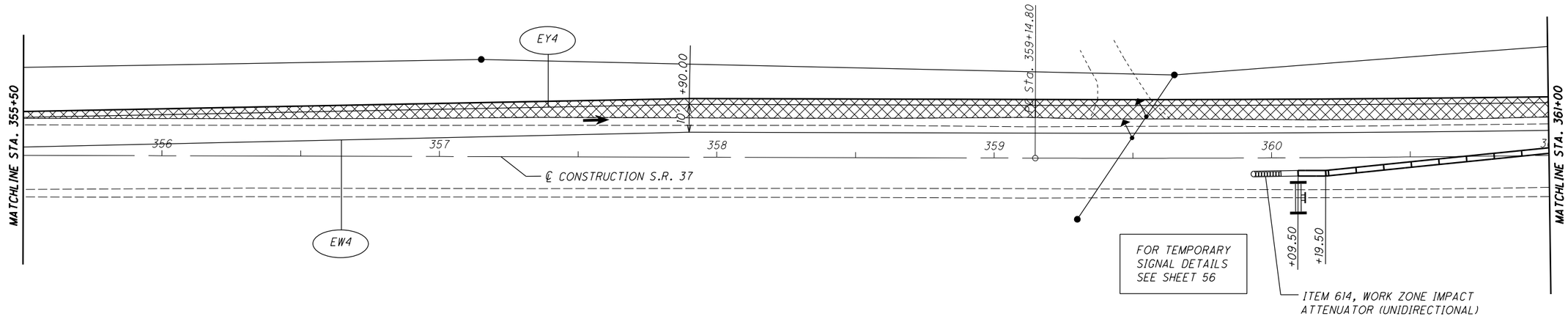

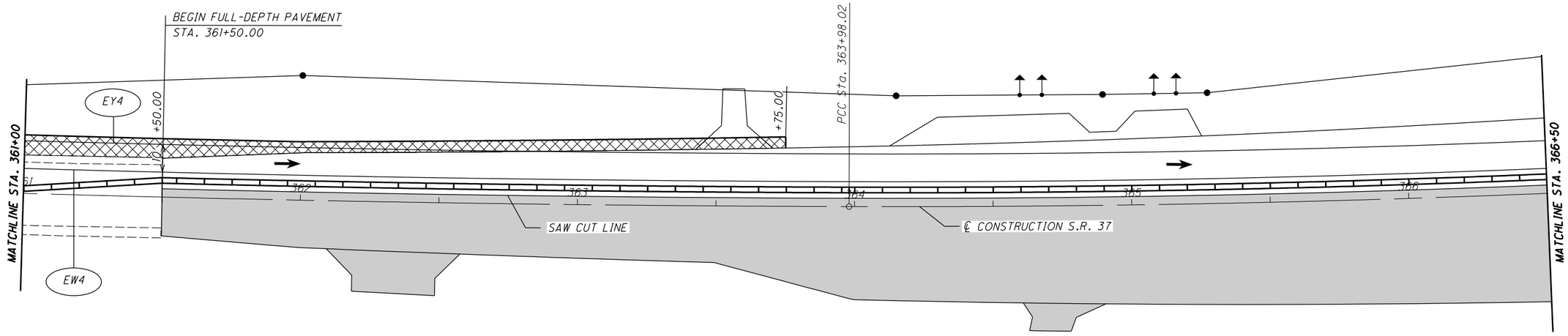

LEGEND

- ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
- ITEM 622, PORTABLE BARRIER, 32"
- DIRECTION OF TRAFFIC
- SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT
- CL — ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT
- EW4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)
- EY4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)
- DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
- WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
- WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
- TYPE III BARRICADE AS PER MT-101.60
- CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 1B - S.R. 37
STA. 355+50 TO STA. 366+50

LIC-37/661-16.59/0.00

℄ RAMP G

PT Sta. 111+89.26

NOTE: THE ADDITIONAL REQUIRED REGULATORY SIGNS AS SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE LUMP SUM BID PRICE ITEM 614 MAINTAINING TRAFFIC

℄ CONSTRUCTION S.R. 16

ITEM 614, WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)

PT Sta. 367+16.88

EY4

EW4

+40.20

10'

R3-1-24

24' *

+33.00

+50.00

10'

MATCHLINE STA. 366+50

MATCHLINE STA. 372+00

367

368

369

370

371

SAW CUT LINE

℄ CONSTRUCTION S.R. 37

℄ CONSTRUCTION S.R. 661

+07.50

SUSPEND FULL-DEPTH PAVEMENT
STA. 368+07.50

* OPENING TO BE MAINTAINED FOR EMERGENCY PERSONNEL ONLY. UPON RAMP CLOSURE, OPENING MAY BE CLOSED WITH DRUMS. UPON COMPLETION OF THE RAMP, GAP TO BE RE-OPENED FOR EMERGENCY PERSONNEL ONLY.

TEMPORARY PAVEMENT WEDGE

℄ RAMP H

EASTBOUND LANES

WESTBOUND LANES

LEGEND

- ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
- ITEM 622, PORTABLE BARRIER, 32"
- DIRECTION OF TRAFFIC
- SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT
- CL — ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT
- EW4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)
- EY4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)
- DL# — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
- WA# — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
- WP# — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
- TYPE III BARRICADE AS PER MT-101.60
- CONSTRUCTION WORK AREA

N

0 10 20 40 HORIZONTAL SCALE IN FEET

CALCULATED BRH
CHECKED HAG

MOT PHASE 1B - S.R. 37/S.R. 661 STA. 366+50 TO STA. 372+00

LIC-37/661-16.59/0.00

59
341

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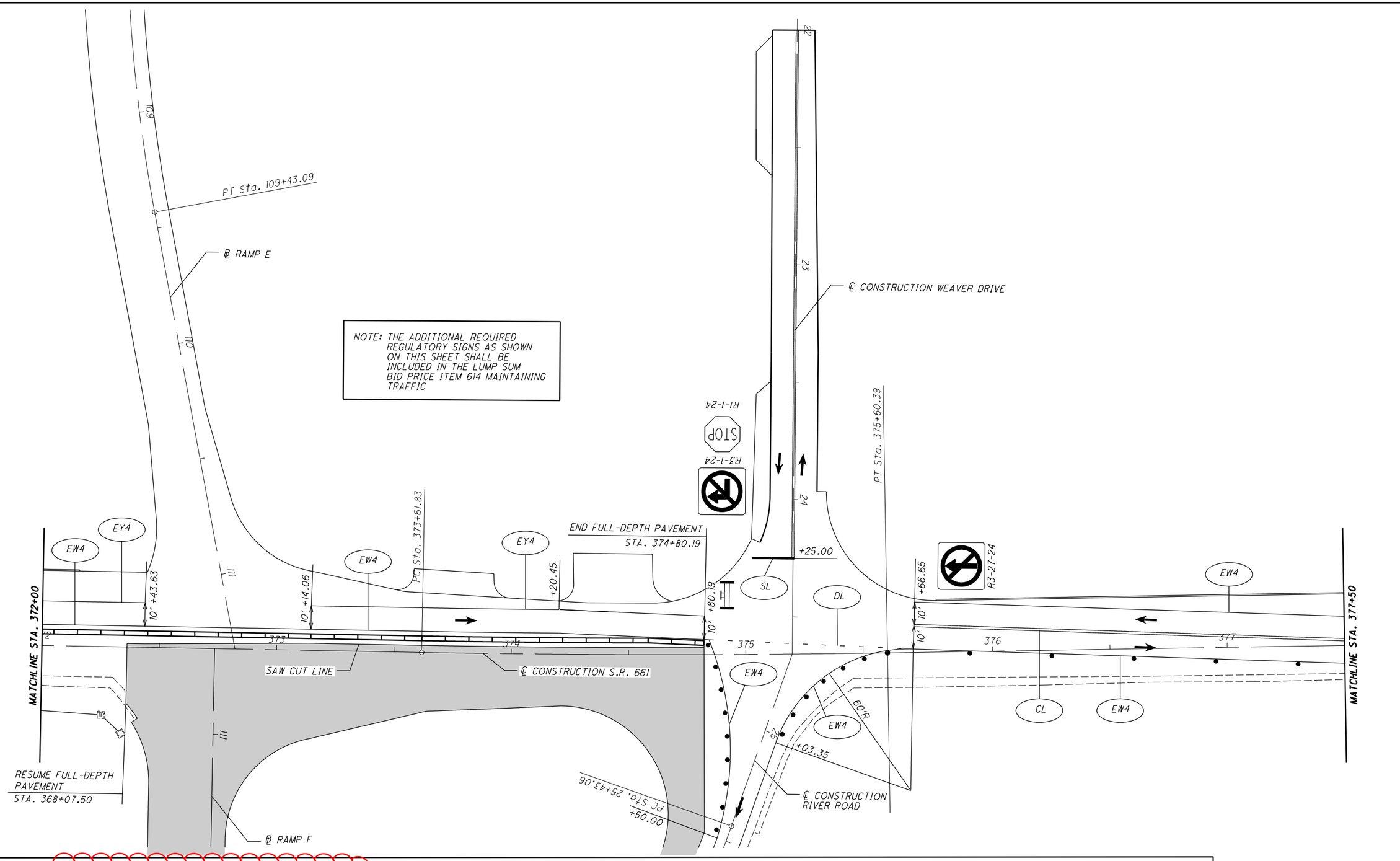

LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN		DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
ITEM 622, PORTABLE BARRIER, 32"	CL ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
DIRECTION OF TRAFFIC	EW4 ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
SL ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	EY4 ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)		TYPE III BARRICADE AS PER MT-101.60
			CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 1B - S.R. 661
STA. 372+00 TO STA. 377+50

LIC-37 / 661-16.59 / 0.00

60
341

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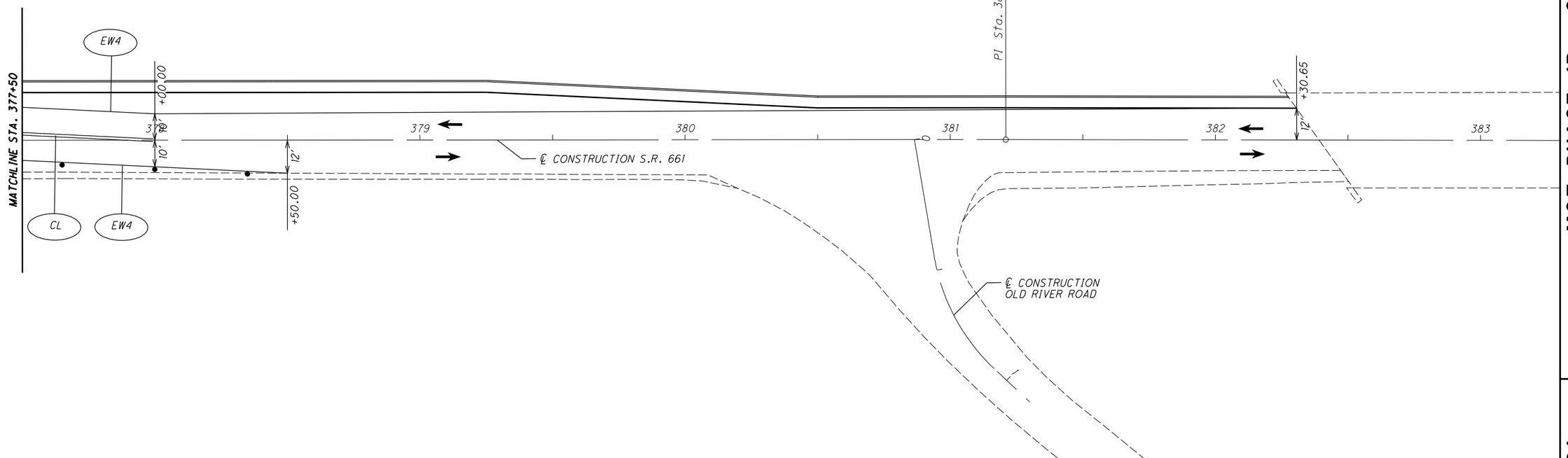

LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	
ITEM 622, PORTABLE BARRIER, 32"	
DIRECTION OF TRAFFIC	
SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	
CL — ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
EW4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	
EY4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	
DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)	
WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT	
WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT	
TYPE III BARRICADE AS PER MT-101.60	
CONSTRUCTION WORK AREA	

N

0 10 20 40
HORIZONTAL SCALE IN FEET

CALCULATED BRH
CHECKED HAG

MOT PHASE 1B - S.R. 661
STA. 377+50 TO STA. 378+50

LIC-37/661-16.59/0.00

61
341

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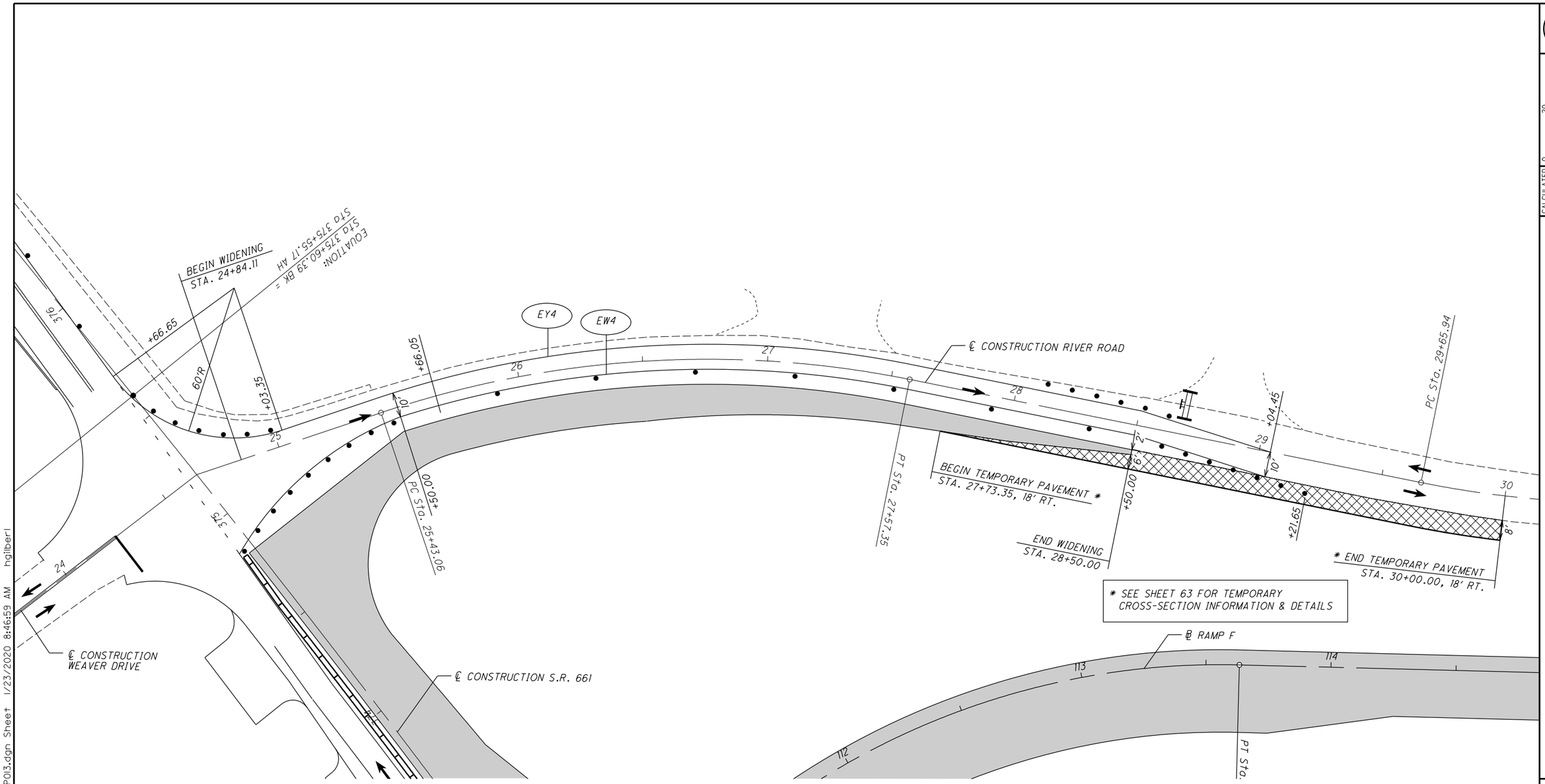


LEGEND

	ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
	ITEM 622, PORTABLE BARRIER, 32"	EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE)	WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
→	DIRECTION OF TRAFFIC	EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW)	WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT				TYPE III BARRICADE AS PER MT-101.60
					CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 1B - RIVER RD.
STA. 24+84.11 TO STA. 30+00.00

LIC-37/661-16.59/0.00

62
341

I:\ProjectData\LIC\924IN\Design\MOT\Sheets\924III_MP013.dgn Sheet 1/23/2020 8:46:59 AM hgilbert

SEEDING END WIDTH	SEEDING SQ. YDS.
14	392
15	81
18	92
18	100
25	119

FOR INFORMATION ONLY
SEEDING FOR MAINTAINING TRAFFIC

END TEMPORARY PAVEMENT
STA. 30+00.00

FOR INFORMATION ONLY
EXCAVATION & EMBANKMENT FOR MAINTAINING TRAFFIC

STA. 30+00.00
919.34

STA. 29+50.00
919.98

921.46
STA. 28+50.00
921.46

922.23
STA. 28+00.00
922.23

29.2' RT.
919.33

2.0'

BEGIN TEMPORARY PAVEMENT
STA. 28+00.00

ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

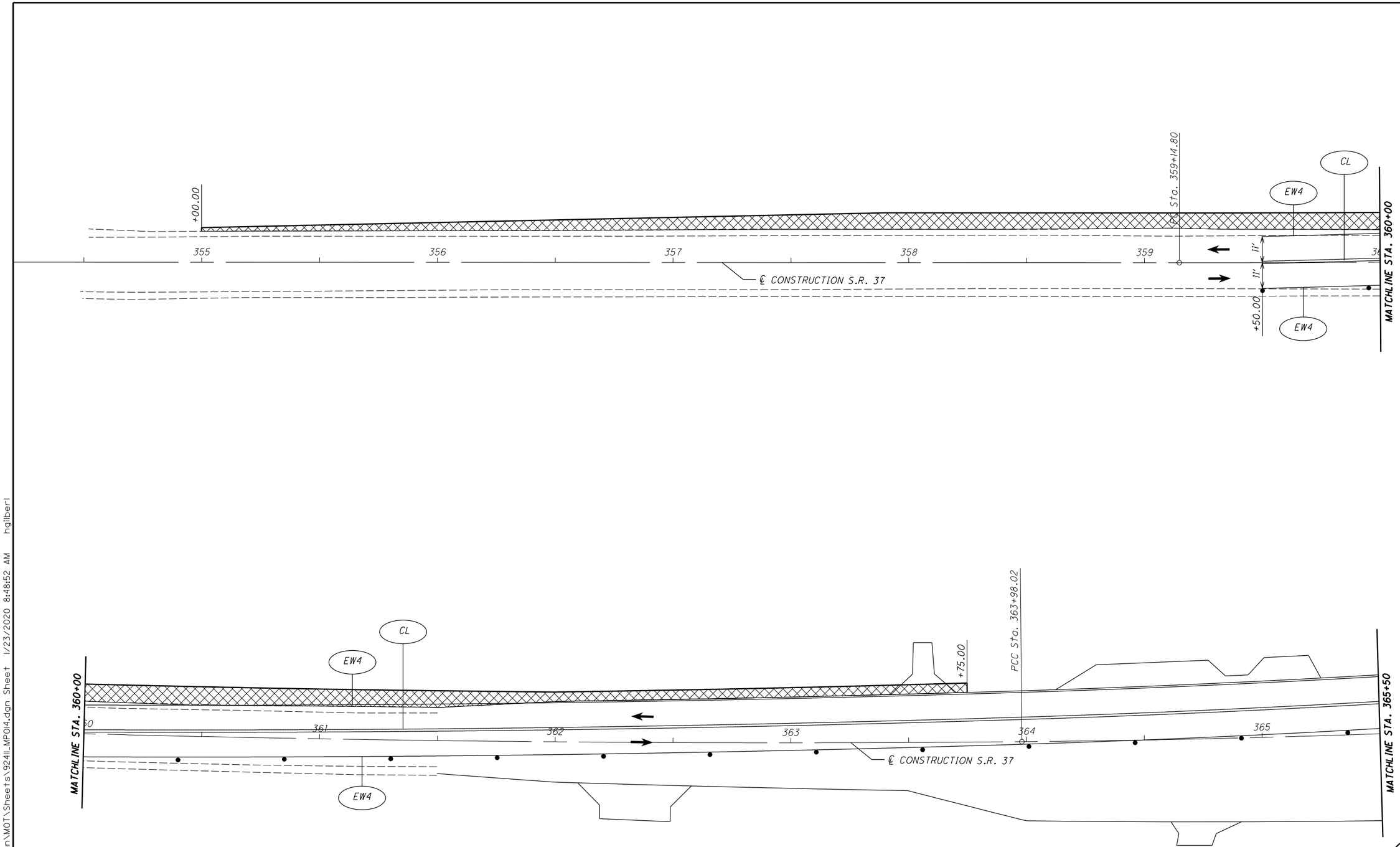
END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		63	22
10	1		
		19	2
10	1		
		19	4
10	3		
		16	7
7	4		
		9	9
3	6		

CALCULATED HG
CHECKED HG

CROSS SECTIONS - MOT PHASE 1B RIVER ROAD
STA. 28+00.00 TO STA. 30+00.00

LIC-37 / 661-
16.59 / 0.00

63
341



LEGEND

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	
ITEM 622, PORTABLE BARRIER, 32"	
DIRECTION OF TRAFFIC	
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT
CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT
EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)
EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)
DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
	TYPE III BARRICADE AS PER MT-101.60
	CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20

CALCULATED BRH
CHECKED HAG

MOT PHASE 2A - S.R. 37
STA. 359+50 TO STA. 365+50

LIC-37/661-16.59/0.00

NOTE: THE ADDITIONAL REQUIRED REGULATORY SIGNS AS SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE LUMP SUM BID PRICE ITEM 614 MAINTAINING TRAFFIC

℄ RAMP G

℄ CONSTRUCTION S.R. 16

PT Sta. 111+89.26

R1-1-24 STOP

R3-2-24

R3-2-24

CL

EW4

SL

+30.00

+20.35

PT Sta. 367+16.88

MATCHLINE STA. 365+50

366

367

368

369

370

℄ CONSTRUCTION S.R. 37

+08.10

60'R

+63.80

+36.80

℄ CONSTRUCTION S.R. 661

SAW CUT LINE

ITEM 614 WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)

MATCHLINE STA. 371+00

℄ RAMP H

EASTBOUND LANES

WESTBOUND LANES

11'

LEGEND

	ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
	ITEM 622, PORTABLE BARRIER, 32"	EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
→	DIRECTION OF TRAFFIC	EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT				TYPE III BARRICADE AS PER MT-101.60
					CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 2A - S.R. 37 / S.R.661
STA. 365+50 TO STA. 371+00

LIC-37 / 661-16.59 / 0.00

65
341

WESTBOUND LANES

PT Sta. 109+43.09

℄ RAMP E

℄ CONSTRUCTION WEAVER DRIVE

NOTE: THE ADDITIONAL REQUIRED REGULATORY SIGNS AS SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE LUMP SUM BID PRICE ITEM 614 MAINTAINING TRAFFIC

ITEM 614, WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)

MATCHLINE STA. 371+00

℄ CONSTRUCTION S.R. 661

SAW CUT LINE

PC Sta. 373+61.83

PT Sta. 375+60.39

MATCHLINE STA. 376+50

BEGIN WIDENING STA. 374+80.19

SAW CUT LINE

EXIST. PATH

ACCESS TO THE GRANVILLE MULTI-USE PATH SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR DURING THIS PHASE WHEN CONSTRUCTION ON AND/OR NEAR THE PATH IS NECESSARY. MINIMIZE AS MUCH AS PRACTICAL THE CLOSURE TIME OF THIS PATH TO THE PUBLIC.

EQUATION:
Sta 375+60.39 BK =
Sta 375+55.17 AH

PC Sta. 111+60.89

℄ RAMP F

℄ CONSTRUCTION RIVER ROAD

PC Sta. 25+43.06

LEGEND

- ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN
- ITEM 622, PORTABLE BARRIER, 32"
- DIRECTION OF TRAFFIC
- SL — ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT
- CL — ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT
- EW4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)
- EY4 — ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)
- DL — ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
- WA — ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
- WP — ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
- TYPE III BARRICADE AS PER MT-101.60
- CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 2A - S.R. 661
STA. 371+00 TO STA. 376+50

LIC-37/661-16.59/0.00

66
341

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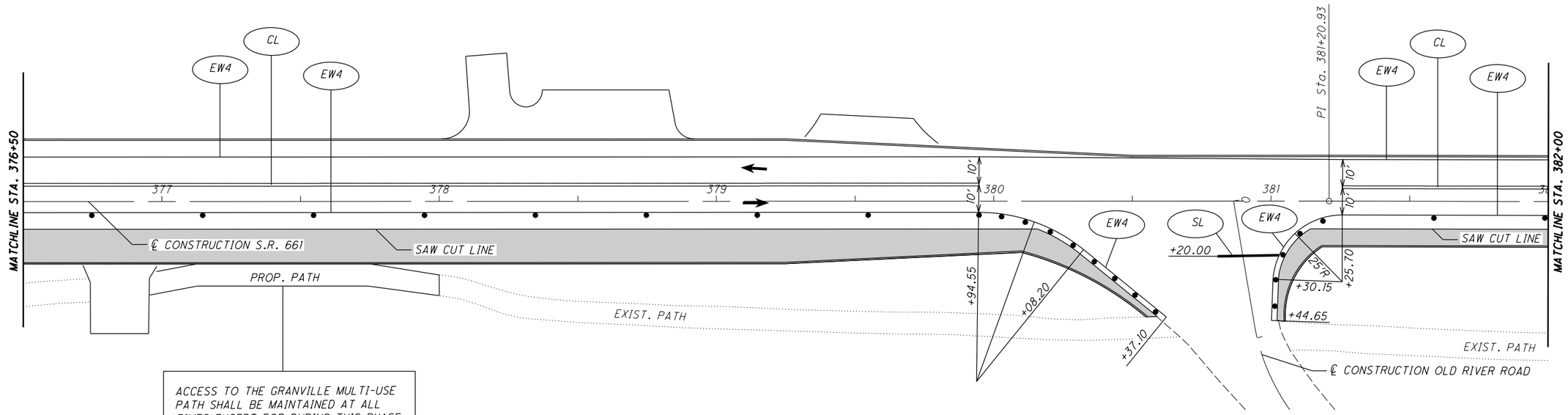
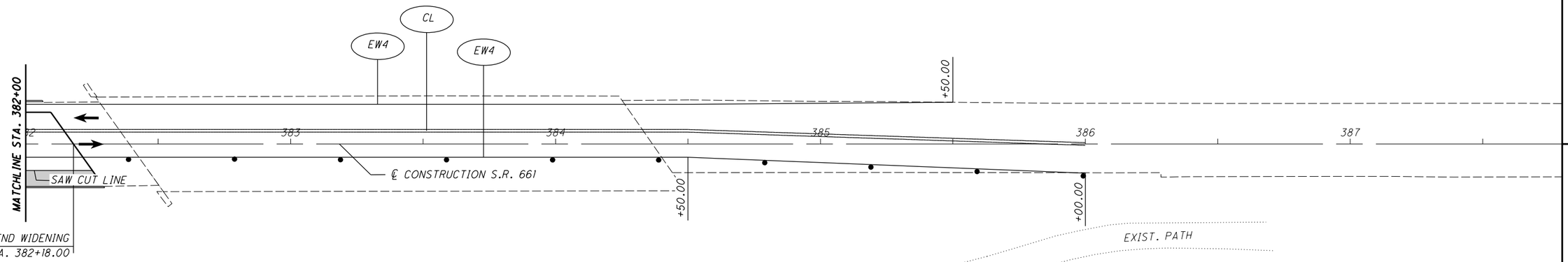


ACCESS TO THE GRANVILLE MULTI-USE PATH SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR DURING THIS PHASE WHEN CONSTRUCTION ON AND/OR NEAR THE PATH IS NECESSARY. MINIMIZE AS MUCH AS PRACTICAL THE CLOSURE TIME OF THIS PATH TO THE PUBLIC.



LEGEND

	ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
	ITEM 622, PORTABLE BARRIER, 32"	EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
→	DIRECTION OF TRAFFIC	EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT				

TYPE III BARRICADE AS PER MT-101.60

CONSTRUCTION WORK AREA

N

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 2A - S.R. 661 STA. 376+50 TO STA. 386+00

LIC-37/661-16.59/0.00

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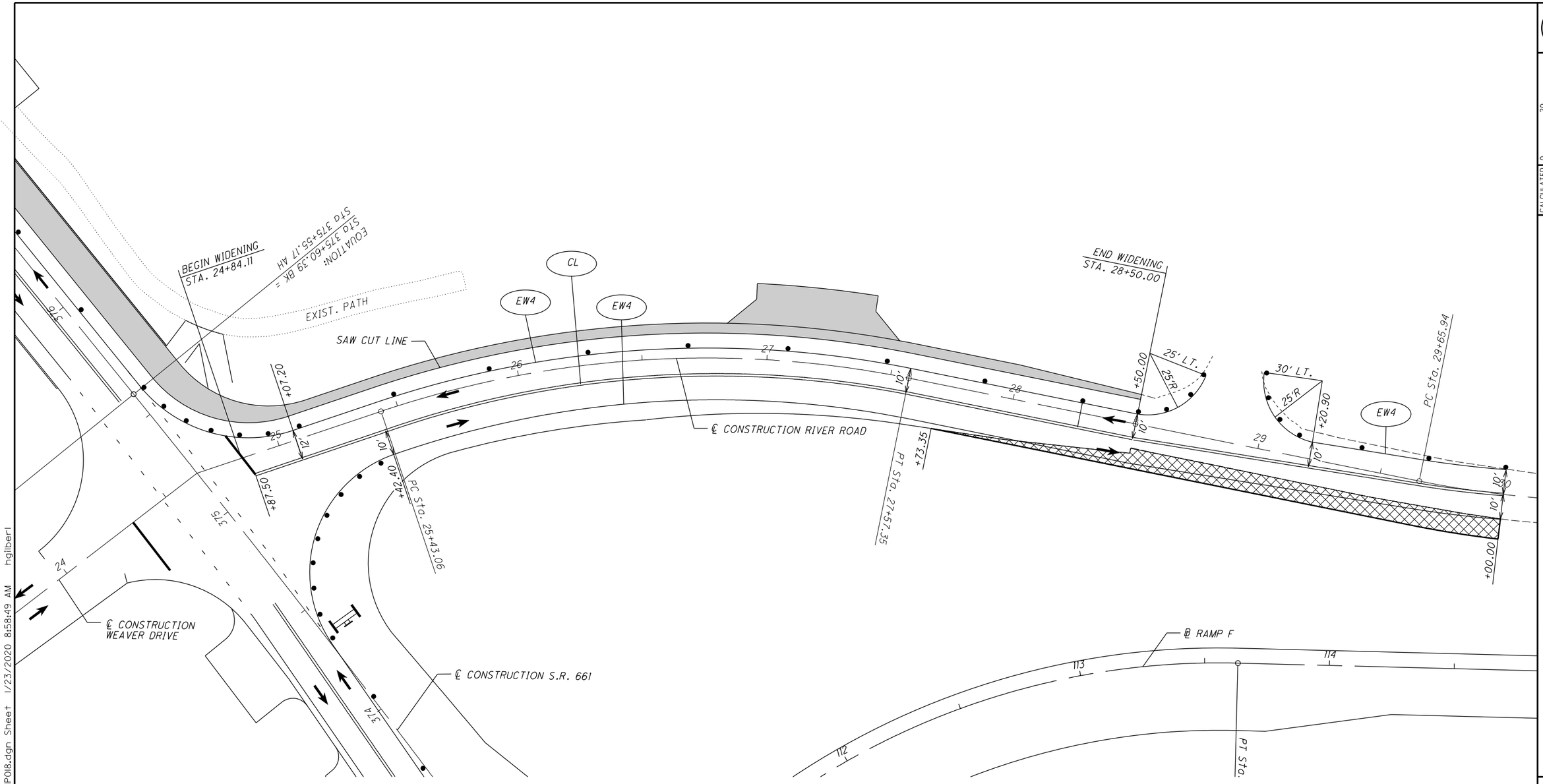

LEGEND

	ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	CL	ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT	DL	ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 642 PAINT (WHITE)
	ITEM 622, PORTABLE BARRIER, 32"	EW4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	WA	ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT
→	DIRECTION OF TRAFFIC	EY4	ITEM 614, WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (YELLOW)	WP	ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT
SL	ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT				TYPE III BARRICADE AS PER MT-101.60
					CONSTRUCTION WORK AREA

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BRH
CHECKED HAG

MOT PHASE 2A - RIVER RD. STA. 24+84.11 TO STA. 30+00.00

LIC-37/661-16.59/0.00

SHEET NUM.										PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
20	181	182	274							01/NHS/BR	02/NHS/PV	03/S<2/OT	04/NHS/OT						
																		DRAINAGE	
	0.84	0.21									0.84	0.21		602	20000	1.05	CY	CONCRETE MASONRY	
	6,369	2,853									6,369	2,853		605	11100	9,222	FT	6" SHALLOW PIPE UNDERDRAINS	
	294	100									294	100		605	13300	394	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
	174	54									174	54		611	00510	228	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
	112	11									112	11		611	00900	123	FT	6" CONDUIT, TYPE B	
		50										50		611	01500	50	FT	6" CONDUIT, TYPE F	
		74										74		611	04600	74	FT	12" CONDUIT, TYPE C	
	204										204			611	05200	204	FT	12" CONDUIT, TYPE F, 707.05 TYPE C OR 707.21	
10												10		611	97400	10	FT	CONDUIT, MISC.: TYPE B FOR DRAINAGE DISCHARGE CONTINUANCE	20
10												10		611	97400	10	FT	CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	20
10												10		611	97400	10	FT	CONDUIT, MISC.: TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE	20
10												10		611	97400	10	FT	CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE	20
		2										2		611	98151	2	EACH	CATCH BASIN, NO. 3, AS PER PLAN	20
		2										2		611	98181	2	EACH	CATCH BASIN, NO. 3A, AS PER PLAN	20
	4										4			611	98301	4	EACH	CATCH BASIN, NO. 5, AS PER PLAN	20
			4								4			611	99115	4	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN	20
	6	4									6	4		611	99710	10	EACH	PRECAST REINFORCED CONCRETE OUTLET	
1												1		611	99720	1	EACH	INSPECTION WELL	

CALCULATED BRH
CHECKED HAG

GENERAL SUMMARY

LIC-37/661-
16.59/0.00

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341

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SHEET NUM.										PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
24	79	86	87	167	274					01/NHS/BR	02/NHS/PV	03/S<2/OT	04/NHS/OT						
																		PAVEMENT	
		2,114										2,114		252	01500	2,114	FT	FULL DEPTH PAVEMENT SAWING	
		2,023										2,023		254	01000	2,023	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.25" DEEP)	
		6,033										6,033		254	01000	6,033	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.5" DEEP)	
		1,027	103									1,130		301	46000	1,130	CY	ASPHALT CONCRETE BASE, PG64-22	
		3,289	31		79						2,225	1,174		304	20000	3,399	CY	AGGREGATE BASE	
		5										5		407	10000	5	GAL	TACK COAT	
10		1,533	45									1,588		407	20000	1,588	GAL	NON-TRACKING TACK COAT	
		582										582		441	10100	582	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG70-22M	
		314										314		441	10200	314	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)	
5			26									31		441	50100	31	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	
		23										23		441	50300	23	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) (VARIABLE)	
			44									44		452	12050	44	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	
		12,550									12,550			452	13020	12,550	SY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
				44									44	609	24001	44	FT	CURB, TYPE 4-A, AS PER PLAN	167
	73										73			609	24510	73	FT	CURB, TYPE 4-C	
	1,327											1,327		609	26000	1,327	FT	CURB, TYPE 6	
			4									4		823	10000	4	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448)	
			5									5		823	20000	5	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
																		WATER WORK	
	1											1		638	10900	1	EACH	SERVICE BOX ADJUSTED TO GRADE	
	1											1		SPECIAL	63821600	1	EACH	FIRE HYDRANT AND GATE VALVE REMOVED AND RESET (GRANVILLE)	18

CALCULATED BRH
CHECKED HAG

GENERAL SUMMARY

LIC-37 / 661-
16.59 / 0.00

SHEET NUM.											PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
24	79	167	201	203	204	205	215	216	228	229	01/NHS/BR	02/NHS/PV	03/S<2/OT	04/NHS/OT						
																			TRAFFIC CONTROL	
						183						111	72		621	00100	183	EACH	RPM	
						35						9	26		621	54000	35	EACH	RAISED PAVEMENT MARKER REMOVED	
									1			1			625	52000	1	EACH	GROUND ROD	
	4	6										4		6	626	00102	10	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	
	21											21			626	00110	21	EACH	BARRIER REFLECTOR, TYPE 2 (UNIDIRECTIONAL)	
	43	3										24	19	3	626	00110	46	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)	
									363	267		363	267		630	03100	630	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
									62	84		68	84		630	04100	146	FT	GROUND MOUNTED SUPPORT, NO. 4 POST	
									58			58			630	06100	58	FT	GROUND MOUNTED SUPPORT, NO. 6 POST	
									81	37		81	37		630	07600	118	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12	
									2			2			630	08200	2	EACH	GROUND MOUNTED SUPPORT, PIPE	
									13	1		13	1		630	08600	14	EACH	SIGN POST REFLECTOR	
									4			4	2		630	09000	6	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
									2			2			630	09050	2	EACH	TRIANGULAR SLIP BASE CONNECTION	
									1			1			630	20200	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 2	
			6									6			630	75000	6	EACH	SIGN ATTACHMENT ASSEMBLY	
									361	173		361	173		630	80100	534	SF	SIGN, FLAT SHEET	
									190	51		190	51		630	80200	241	SF	SIGN, GROUND MOUNTED EXTRUSHEET	
			120						49			169			630	80224	169	SF	SIGN, OVERHEAD EXTRUSHEET	
									4	2		4	2		630	84500	6	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
									1			1			630	84510	1	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
									2			2			630	84600	2	EACH	GROUND MOUNTED PIPE SUPPORT FOUNDATION	
							65	49				65	49		630	84900	114	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
							6	5				6	5		630	85100	11	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
								2					2		630	85200	2	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DELIVERY	
							8	1				8	1		630	85400	9	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
							44	40				44	40		630	86002	84	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
								1					1		630	86050	1	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DELIVERY	
							8	2				8	2		630	86103	10	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL, AS PER PLAN	201
							2					2			630	86272	2	EACH	REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND DISPOSAL	
							1	1				1	1		630	87400	2	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
							8					8			630	87500	8	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	
							1	1				1	1		630	89707	2	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.30, AS PER PLAN	201
										1			1		631	92001	1	EACH	SIGN FLASHER ASSEMBLY, AS PER PLAN	201
0.5													0.5		642	00300	0.5	MILE	CENTER LINE, TYPE 1	
				0.19									0.19		644	00100	0.19	MILE	EDGE LINE, 4"	
				1.02									1.02		644	00104	1.02	MILE	EDGE LINE, 6"	
				0.8									0.8		644	00300	0.8	MILE	CENTER LINE	
				670									670		644	00400	670	FT	CHANNELIZING LINE, 8"	
				122									122		644	00500	122	FT	STOP LINE	
				276									276		644	00600	276	FT	CROSSWALK LINE	
				437									437		644	00700	437	FT	TRANSVERSE/DIAGONAL LINE	
				12									12		644	01300	12	EACH	LANE ARROW	
				4									4		644	01400	4	EACH	WORD ON PAVEMENT, 72"	
				0.18	1.26							1.44			646	10010	1.44	MILE	EDGE LINE, 6"	
				0.11								0.11			646	10200	0.11	MILE	CENTER LINE	
				776	810							1,586			646	10300	1,586	FT	CHANNELIZING LINE, 8"	
				108	114							222			646	10400	222	FT	STOP LINE	
				180								180			646	10600	180	FT	TRANSVERSE/DIAGONAL LINE	
				492								492			646	10800	492	SF	ISLAND MARKING	
				7	14							21			646	20300	21	EACH	LANE ARROW	
					2							2			646	20320	2	EACH	WRONG WAY ARROW	
				2	2							4			646	20400	4	EACH	WORD ON PAVEMENT, 72"	

CALCULATED BRH
CHECKED HAG

GENERAL SUMMARY

LIC-37 / 661-
16.59 / 0.00

SHEET NUM.										PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
16	17	21	22	23	24	25	26	36		01/NHS/BR	02/NHS/PV	03/S<2/OT	04/NHS/OT						
																		MAINTENANCE OF TRAFFIC	
		25										25		410	12000	25	CY	TRAFFIC COMPACTED SURFACE, TYPE A OR B	
		25										25		410	13000	25	CY	TRAFFIC COMPACTED SURFACE, TYPE C	
			24								24			614	11110	24	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
						1					1			SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL (COLUMBUS RD. & RAMP B/WEAVER DR.)	25
						1					1			SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL (COLUMBUS RD. & RAMP C)	25
						1					1			SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL (COLUMBUS RD. & GRANVIEW RD./KENDALL DR.)	25
							1					1		SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL (S.R. 37/S.R. 661 THROUGH THE WORK ZONE)	25-26
								8			5	3		614	12336	8	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL), 24"	
								3			3			614	12338	3	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL), 24"	
					LS						LS			614	12421	LS		DETOUR SIGNING, AS PER PLAN	24
				25								25		614	12600	25	EACH	REPLACEMENT DRUM	
		50									10	40		614	13000	50	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
								40			40			614	13310	40	EACH	BARRIER REFLECTOR, TYPE 1 (UNIDIRECTIONAL)	
								64			43	21		614	13310	64	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	
								39			39			614	13350	39	EACH	OBJECT MARKER, ONE WAY	
								56			37	19		614	13360	56	EACH	OBJECT MARKER, TWO WAY	
			64								64			614	18601	64	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	22
				1				0.81			0.25	1.56		614	21100	1.81	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
				3				3.34			1.09	5.25		614	22100	6.34	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT	
								0.17			0.17			614	22110	0.17	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
				100				108			108	100		614	23200	208	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
				1,000				1,134			1,134	1,000		614	24200	2,134	FT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT	
				250				243			197	296		614	26200	493	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
								1			1			614	30200	1	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT	
								1			1			614	31200	1	EACH	WORK ZONE WORD ON PAVEMENT, 72", CLASS I, 642 PAINT	
		LS										LS		615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
								781				781		615	20001	781	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	21
	145.7										71.5	74.2		616	10000	145.7	MGAL	WATER	
								4,309			3,274	1,035		622	41000	4,309	FT	PORTABLE BARRIER, 32"	
								750			750			622	41020	750	FT	PORTABLE BARRIER, 32", BRIDGE MOUNTED	
																		INCIDENTALS	
										LS	LS	LS	LS	108	10000	LS		CPM PROGRESS SCHEDULE	
		LS								LS	LS	LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
										5.7	6.65	4.75	1.9	619	16020	19	MNTH	FIELD OFFICE, TYPE C	
LS										LS	LS	LS	LS	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	16
										LS	LS	LS	LS	624	10000	LS		MOBILIZATION	

CALCULATED BRH
CHECKED HAG

GENERAL SUMMARY

LIC-37 / 661-
16.59 / 0.00

Sheet No.	Reference No.	Station	Side	Drive Type	Length	Pavement Width	R1 (Left Side Radii of Drive Looking From CL)	R2 (Right Side Radii of Drive Looking From CL)	Pavement Area (Calculated Using CADD)	202 PAVEMENT REMOVED	202 PAVEMENT REMOVED, ASPHALT	204 SUBGRADE COMPACTION	301 5.00" ASPHALT CONCRETE BASE, PG64-22	304 6.00" AGGREGATE BASE	304 8.00" AGGREGATE BASE	407 0.06 NON-TRACKING TACK COAT (@ 0.060 GAL./SQ. YD.)	441 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE I, (448), PG70-22M	452 8.00" 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	823 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE I, (448)	823 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
			Lt./Rt.		Lin. Ft.	Ft.	Ft.	Ft.	Sq. Yd.	SY	SY	SY	CY	CY	CY	GAL	CY	SY	CY	CY
PLAN SPLIT CODE 03/S<2/PV																				
S.R. 37 & S.R. 661																				
90	1-D	362+33.98	RT.	FIELD/BITUM. COATED.	15.1	30			59.7		59.7	59.7			13.3					
91	2-D	363+56.30	LT.	RESIDENTIAL/GRAVEL	21.7	8			33.5			33.5	4.7			2.0	1.2			
91	3-D	364+53.89	LT.	RESIDENTIAL/GRAVEL	10.0	48			69.0			69.0	9.6			4.1	2.4			
91	4-D	364+83.79	RT.	RESIDENTIAL/BITUM. COATED	10.3	15			27.8		27.8	27.8	3.9			1.7	1.0			
91	5-D	365+11.17	LT.	RESIDENTIAL/ASPHALT	10.0	19			32.6		32.6	32.6	4.5			2.0	1.1			
92	6-D	373+75.08	LT.	COMMERCIAL/ASPHALT	10.0	34	7	7	40.8		40.8	40.8	5.7			2.4	1.4			
93	7-D	374+43.38	LT.	COMMERCIAL/ASPHALT	21.0	34	7	10	82.7		82.7	82.7	11.5			5.0	2.9			
93	8-D	376+40.06	LT.	RESIDENTIAL/ASPHALT	9.5	11	5	5	13.3		13.3	13.3	1.8			0.8	0.5			
93	9-D	376+85.00	RT.	COMMERCIAL/ASPHALT	23.9	21	10	10	62.9		62.9	62.9	8.7			3.8	2.2			
93	10-D	378+21.13	LT.	RESIDENTIAL/GRAVEL	30.5	15	10	6	60.4			60.4	8.4			3.6	2.1			
93	11-D	378+60.82	LT.	COMMERCIAL/ASPHALT	17.6	46	6	7	101.8		101.8	101.8	14.1			6.1	3.5			
94	12-D	379+54.34	LT.	COMMERCIAL/CONCRETE	9.5	35	40	40	43.4	43.4		43.4						43.4		
WEAVER DRIVE																				
151	13-D	22+32.29	RT.	COMMERCIAL/GRAVEL	6.9	46			40.5			40.5	5.6			2.4	1.4			
151	14-D	23+85.92	RT.	COMMERCIAL/ASPHALT	7.0	62			47.9		47.9	47.9	6.7			2.9	1.7			
RIVER ROAD																				
154	15-D	27+17.59	LT.	COMMERCIAL/ASPHALT	14.3	49			88.3		88.3	88.3	12.3			5.3	3.1			
RIVER ROAD CUL-DE-SAC																				
157	16-D	5+73.62	LT.	COMMERCIAL/ASPHALT	11.7	38		12.5	34.2		34.2	34.2	4.8			2.1	1.2			
MULTI-USE PATH																				
93	STA. 376+96.82 TO STA. 378+00		RT.		103.2	8			91.7	91.7		91.7		17.2					3.2	4.5
Sub-Totals This Sheet										135.1	592.0	930.5	102.2	17.2	13.3	44.1	25.5	43.4	3.2	4.5
Totals Carried to General Summary										136	592	931	103	31		45	26	44	4	5

CALCULATED CMY
CHECKED HG

DRIVE CALCULATIONS

LIC-37 / 661-
16.59 / 0.00

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LEGEND

- (C) CONTRACTION JOINT AS PER SCD BP-2.2
- (L) STANDARD LONGITUDINAL JOINT PER SCD BP-2.1
- (S) STANDARD LONGITUDINAL JOINT PER SCD BP-2.1, WITHOUT TIE BARS
- (E) EXPANSION JOINT PER SCD BP-2.2
- (X) EXPANSION JOINT PER SCD BP-2.2 WITHOUT DOWEL BARS AND P.E.J.F. (2" DEEP SAWCUT WITH 705.04 JOINT SEAL)
- (*) 2" MINIMUM

N

0 10 20 40
HORIZONTAL SCALE IN FEET

CALCULATED RG
CHECKED HG

PAVEMENT JOINT DETAILS - S.R. 37

LIC-37/661-16.59/0.00

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REFERENCE	STATION TO STATION	SIDE	601 TIED CONCRETE BLOCK MAT, TYPE 1 (SQ. YD.)		601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER (CU. YD.)	602 CONCRETE MASONRY (CU. YD.)	605 6" SHALLOW PIPE UNDERDRAIN (FT.)	605 6" UNCLASSIFIED PIPE UNDERDRAIN (FT.)		611 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS (FT.)	611 6" CONDUIT, TYPE B (FT.)			611 12" CONDUIT, TYPE F, 707.05 TYPE C OR 707.21 (FT.)			611 CATCH BASIN, NO. 5, AS PER PLAN (EA.)		611 PRECAST REINFORCED CONCRETE OUTLET (EA.)	BENDS AND CONNECTORS FOR INFORMATION ONLY: CAP	CROSS	TEE	45° BEND	90° BEND	45° WYE
	PLAN SPLIT CODE 02/NHS/PV																									
	UNDERDRAINS																									
1-UD	366+89 - 367+40	LT	1.8				51			17										1			1			
2-UD	366+89 - 367+24	RT					35																			
3-UD	366+89 - 369+06	RT					185	32			8									1			1			
4-UD	367+00 - 369+19	LT					209	10			8									2			1			
6-UD	371+59 - 372+44	LT					85													1						
7-UD	371+46 - 372+36	RT					90													1						
15-UD	RAMP E 107+08 - 111+01	RT					405				17									1			1			
16-UD	RAMP E 107+08 - 111+11	LT	1.8				418			24										1		1				
17-UD	RAMP F 110+88 - 117+07	RT					597			28															1	1
18-UD	RAMP F 110+95 -117+07	LT	1.8				631			23	17									1			1		1	
19-UD	RAMP G 103+75 -112+30	RT					884				26												1	1		1
20-UD	RAMP G 103+75 -112+37	LT	1.8				860			26	19									1	1	1		2		
21-UD	RAMP H 112+55-123+12	RT	1.8				960	126		16	17									1	1		2			
22-UD	RAMP H 112+98 - 123+12	LT	1.8				959	126		40										1	2	1	1			
	STORM SEWER																									
5-SS	117+07+/- RAMP F	RT															1									
6-SS	121+92+/- S.R. 16	LT															1									
7-SS	6-95.7+/- RIVER ROAD	RT															1									
12-SS	116+86+/- RAMP F	LT															1									
8-SS	368+74.0	RT			1.4	0.21								70												
9-SS	369+09.0	LT			1.6	0.21								49												
10-SS	371+56.0	RT			1.4	0.21								41												
11-SS	371+75.7	LT			1.4	0.21								44												
TOTALS CARRIED TO GENERAL SUMMARY			10.8		5.8	0.84	6369	294		174	112			204			4			6	10	3	9	3	2	2

CALCULATED RJG CHECKED HAG

DRAINAGE SUBSUMMARY

LIC-37 / 661-16.59 / 0.00

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NOTE: ELEVATIONS FOR THE CATCH BASINS AND PROPOSED/EXISTING CONDUITS SHALL BE FIELD VERIFIED BEFORE ORDERING THE PROPOSED CATCH BASINS

EXISTING 18" INV. 913.86

℄ RIVER ROAD

EX. 10" HP MARATHON PIPELINE

PROPOSED CB #5, A.P.P.
45.8'± LT, STA. 116+86± RAMP F
GRATE - 918.40
18" (N & S) - 913.58

12-SS

Sta. 115+78.33

PCC Sta. 117+24.50

Ex SH

Ex LA

Ex G

Ex W

27-R

6-SS

PROPOSED CB #5, A.P.P.
82.5'± LT, STA. 121+92± S.R. 16
GRATE- 914.37±
6" (SW) - 911.47±
18" (S) - 911.47±

PT Sta. 121+00

MATCHLINE STA. 115+00

℄ RAMP F

CONSTRUCTION LIMITS

207'-6" SHALLOW PIPE UNDERDRAIN

18-UD

17-UD

209'-6" SHALLOW PIPE UNDERDRAIN

90° BEND, +07

17'-6" TYPE B

90° BEND, WYE, +07

28'-6" TYPE F FOR UNDERDRAIN OUTLETS

26-R

CONSTRUCTION LIMITS

PROPOSED CB #5, A.P.P.
45.6'± RT, STA. 117+07± RAMP F
SEE RAMP F CROSS SECTIONS FOR INFORMATION

5-SS

℄ S.R. 16

WESTBOUND LANES

EASTBOUND LANES

926.23 925.41 924.65 923.95 923.30 922.72 922.19 921.72 921.32 920.97 920.68 920.45 920.28 920.16

925.13 924.42 923.24 922.25 921.32 920.75 920.36 920.12 920.06 919.90 919.63 919.19

940 935 930 925 920 915 910 905

-3.97 %

-0.19 %

920.12

P.V.I. STA 116+40.00 ELEV = 920.50'
400.00' VC
K = 106

115+00 116+00 117+00 118+00 119+00 120+00

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RG
CHECKED HG

DRAINAGE PLAN AND PROFILE - RAMP F
STA. 115+00 TO STA. 118+42.89

LIC-37 / 661-
16.59 / 0.00

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REF NO.	SHEET NO.	STATION TO STATION			646 EDGE LINE, 6" (WHITE)	646 EDGE LINE, 6" (YELLOW)	646 CHANNELIZING LINE, 8"	646 STOP LINE	646 LANE ARROW (LEFT ONLY)	646 LANE ARROW (THROUGH / RIGHT)	646 WORD ON PAVEMENT, 72"	646 WRONG WAY ARROW
PLAN SPLIT 02/NHS/PV					MILE	MILE	FT	FT	EACH	EACH	EACH	EACH
RAMP E												
EW-10	210	107+07.62	TO	373+14.06 (661)	0.08							
EY-1	210	107+07.62	TO	372+43.63 (661)		0.08						
RAMP F												
EW-11	211	373+14.06 (661)	TO	118+42.89	0.15							
EY-2	211	372+36.20 (661)	TO	118+42.89		0.14						
SL-8	211	110+95.50						57				
CH-6	211	110+95.50	TO	113+75.00			280					
LA-16	211	111+05.50							1			
LA-25	211	111+05.50								1		
WD-6	211	111+71.75									1	
LA-17	211	112+38							1			
LA-26	211	112+38								1		
LA-18	211	113+69							1			
LA-27	211	113+69								1		
LA-28	211	115+50										1
RAMP G												
EW-12	212	100+36.00 (16)	TO	367+40.29 (37)	0.23							
EY-3	212	103+65.69	TO	368+19.88 (661)		0.16						
CH-7	212	107+00.00		112+30.07			530					
LA-29	212	105+50										1
LA-19	212	107+06.00							1			
LA-30	212	107+06								1		
LA-20	212	108+95.00							1			
LA-31	212	108+95								1		
LA-21	212	110+88.07							1			
LA-32	212	110+88.07								1		
WD-7	212	111+54.07									1	
LA-22	212	112+20.07							1			
LA-33	212	112+20.07								1		
SL-9	212	112+30.07						57				
RAMP H												
EY-4	213	368+07.48 (661)	TO	123+13.14		0.21						
EW-13	213	367+23.66 (37)	TO	123+13.14	0.21							
SUB-TOTALS					0.67	0.59	810	114	7	7	2	
TOTALS CARRIED TO GENERAL SUMMARY					1.26		810	114	14		2	2

CALCULATED CMY
CHECKED XXX

PAVEMENT MARKING SUBSUMMARY

LIC-37 / 661-
16.59 / 0.00

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	621 RPM 1-WAY WHITE	621 RPM 2-WAY WHITE/RED	621 RPM 2-WAY YELLOW/RED	621 RPM 2-WAY YELLOW/YELLOW	INFO ONLY RPM SPACING CENTER/CENTER SEE SCD'S TC-65.10 AND TC-65.11	621 RAISED PAVEMENT MARKER REMOVED
						EACH	EACH	EACH	FEET	EACH
		PLAN SPLIT CODE 03/S<2/PV								
206-207	1-RPM	S.R. 37 WHITE EDGE LINE (EW-2)	360+30	367+50	16				40/80	
206-207	2-RPM	S.R. 37 YELLOW CENTER LINE LINE (CL-1)	349+50	367+50				23	80	23
206-207	3-RPM	S.R. 37 YELLOW CENTER LINE (CL-2)	361+50	367+50				8	80	
206-207	4-RPM	S.R. 37 CHANNELIZING LINE WHITE (CH-1)	364+00	367+50		9			40	
208	17-RPM	S.R. 661 WHITE EDGE LINE (EW-5)	373+00	374+60	4				40	
208	18-RPM	S.R. 661 YELLOW CENTER LINE (CL-4)	373+00	374+60				3	80	3
208	19-RPM	S.R. 661 WHITE EDGE LINE (EW-6)	373+14	374+22	3				40	
208	20-RPM	S.R. 661 YELLOW CENTER LINE (CL-5)	373+00	374+32				3	80	
208	21-RPM	S.R. 661 CHANNELIZING LINE WHITE (CH-4)	373+75	374+60		3			40	
		PLAN SPLIT CODE 03/S<2/PV TOTAL			23	12		37		26
		PLAN SPLIT CODE 02/NHS/PV								
210	5-RPM	WESTBOUND ON-RAMP YELLOW EDGE LINE (EY-1) RAMP E	107+07.62	111+00			6		80	
211	6-RPM	WESTBOUND OFF-RAMP YELLOW EDGE LINE (EY-2) RAMP F	111+00	118+42			10		80	3
211	7-RPM	WESTBOUND OFF-RAMP WHITE CHANNELIZING LINE (CH-6) RAMP F	111+00	113+75		7			40	
211	22-RPM	WESTBOUND OFF-RAMP WHITE EDGE LINE (EW-11) RAMP F	111+00	119+40		16			40/80	
212	8-RPM	EASTBOUND OFF-RAMP YELLOW EDGE LINE (EY-3) RAMP G	103+65.69	112+25			11		80	
212	9-RPM	EASTBOUND OFF-RAMP WHITE CHANNELIZING LINE (CH-7) RAMP G	107+00	112+25		13			40	
212	23-RPM	EASTBOUND OFF-RAMP WHITE EDGE LINE (EW-12) RAMP G	103+60	112+20		16			40/80	
213	10-RPM	EASTBOUND ON-RAMP YELLOW EDGE LINE (EY-4) RAMP H	112+27	123+13			14		80	3
207	11-RPM	S.R. 661 WHITE EDGE LINE (EW-4)	368+20	369+20	3				40	
207	12-RPM	S.R. 661 YELLOW CENTER LINE (CL-3)	368+50	369+10				3	80	
207	13-RPM	S.R. 661 CHANNELIZING LINE WHITE (CH-2)	368+50	369+15		3			40	
208	14-RPM	S.R. 661 WHITE EDGE LINE (EW-3)	371+46	372+36	3				40	
208	15-RPM	S.R. 661 YELLOW CENTER LINE (CL-3)	371+50	372+05				3	80	3
208	16-RPM	S.R. 661 CHANNELIZING LINE WHITE (CH-3)	371+52	372+05		3			40	
		PLAN SPLIT CODE 02/NHS/PV TOTAL			6	58	41	6		9
		TOTALS CARRIED TO GENERAL SUMMARY					183			35

CALCULATED RJG
CHECKED HAG

RPM SUBSUMMARY

LIC-37 / 661-
16.59 / 0.00

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CMY
CHECKED XXX

RAMP F PAVEMENT MARKING PLAN SHEET STA. 110+63 TO STA. 120+50

LIC-37/661-16.59/0.00

211
341

RAMP G PAVEMENT MARKING PLAN SHEET
STA. 100+70 TO STA. 112+50

LIC-37/661-16.59/0.00

212
341

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED CMY
CHECKED XXX

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	625 GROUND ROD EACH	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT	630 GROUND MOUNTED SUPPORT, NO. 4 POST FT	630 GROUND MOUNTED SUPPORT, NO. 6 POST FT	630 GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12 FT	630 GROUND MOUNTED SUPPORT, PIPE EACH	630 SIGN POST REFLECTOR EACH	630 BREAKAWAY STRUCTURAL BEAM CONNECTION EACH	630 TRIANGULAR SLIP BASE CONNECTION EACH	630 OVERHEAD SIGN SUPPORT, TYPE TC-12.30 DESIGN 2 EACH	630 SIGN, FLAT SHEET SF	630 SIGN, GROUND MOUNTED EXTRUSHEET SF	630 SIGN, OVERHEAD EXTRUSHEET SF	630 GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION EACH	630 RIGID OVERHEAD SIGN SUPPORT FOUNDATION EACH	630 GROUND MOUNTED PIPE SUPPORT FOUNDATION EACH	631 SIGN FLASHER ASSEMBLY, AS PER PLAN EACH
		PLAN SPLIT CODE 02/NHS/PV																					
234	PS-95	RAMP E	107+94	RT	W4-1R-36	36 X 36		15.7					1				9.00						
235	PS-96	RAMP F	111+42	LT	R6-1R-36	36 X 12		15.8					1				3.00						
235	PS-97	RAMP F	111+42	LT	R5-1-36	36 X 36											9.00						
235	PS-98	RAMP F	111+42	LT	R6-1R-36	36 X 12											3.00						
235	PS-99	RAMP F	111+42	LT	R3-H8ba-30	30 X 30											6.25						
235	PS-100	RAMP F	111+42	RT	R6-1R-36	36 X 12		16.2					1				3.00						
235	PS-101	RAMP F	111+42	RT	R5-1-36	36 X 36											9.00						
235	PS-102	RAMP F	111+42	RT	R6-1R-36	36 X 12											3.00						
235	PS-103	RAMP F	111+42	RT	R3-H8ba-30	30 X 30											6.25						
235	PS-104	RAMP F	112+63	LT	R5-1a-42	42 X 30		26.0					2				8.75						
235	PS-104A	RAMP F	112+63	LT	R5-1a-42	42 X 30											8.75						
235	PS-105	RAMP F	112+63	RT	R5-1a-42	42 X 30		26.0					2				8.75						
235	PS-105A	RAMP F	112+63	RT	R5-1a-42	42 X 30											8.75						
235	PS-106	RAMP F	114+15	LT	R3-H8ba-30	30 X 30		10.0									6.25						
235	PS-107	RAMP F	117+75	RT	E5-H1d-48	48 X 84						1			1			28				1	
236	PS-108	RAMP G	104+60	LT	E5-H1d-48	48 X 84						1			1			28				1	
236	PS-109	RAMP G	106+50	RT	R3-H8ba-30	30 X 30		14.5									6.25						
236	PS-110	RAMP G	109+18	LT	R5-1a-42	42 X 30		26.0					2				8.75						
236	PS-110A	RAMP G	109+18	LT	R5-1a-42	42 X 30											8.75						
236	PS-111	RAMP G	109+18	RT	R5-1a-42	42 X 30		26.0					2				8.75						
236	PS-111A	RAMP G	109+18	RT	R5-1a-42	42 X 30											8.75						
236	PS-112	RAMP G	110+58	RT	D1-H1a-72	72 X 1				28.9							6.00						
236	PS-113	RAMP G	110+58	RT	D1-H1a-72	72 X 1				28.9							6.00						
236	PS-114	RAMP G	110+58	RT	M6-1-21	21 X 15											2.19						
236	PS-115	RAMP G	110+58	RT	M1-5-30-3	30 X 24											5.00						
236	PS-116	RAMP G	110+58	RT	M3-1-24	24 X 12											2.00						
236	PS-117	RAMP G	110+58	RT	M6-1-21	21 X 15											2.19						
236	PS-118	RAMP G	110+58	RT	M1-5-24-2	24 X 24											4.00						
236	PS-119	RAMP G	110+58	RT	M3-2-24	24 X 12											2.00						
236	PS-120	RAMP G	111+94	LT	R3-H8ba-30	30 X 30			16.4				1				6.25						
236	PS-121	RAMP G	111+94	LT	R6-1L-36	36 X 12											3.00						
236	PS-122	RAMP G	111+94	LT	R5-1-36	36 X 36											9.00						
236	PS-123	RAMP G	111+94	LT	R6-1R-36	36 X 12											3.00						
236	PS-124	RAMP G	111+94	RT	R3-H8ba-30	30 X 30			15.8				1				6.25						
236	PS-125	RAMP G	111+94	RT	R6-1L-36	36 X 12											3.00						
236	PS-126	RAMP G	111+94	RT	R5-1-36	36 X 36											9.00						
236	PS-127	RAMP G	111+94	RT	R6-1R-36	36 X 12											3.00						
		SUB-TOTALS						176.2	32.2	57.8		2	13		2		205.88	56				2	
		TOTALS FROM SHEET 227 (PLAN SPLIT 02/NHS/PV)					1	185.9	29.0		80.9			4		1	154.625	134	49	4	1		
		TOTALS CARRIED TO GENERAL SUMMARY					1	363	62	58	81	2	13	4	2	1	361	190	49	4	1	2	

CALCULATED RJG
CHECKED HAG

PROPOSED SIGNING SUBSUMMARY

LIC-37 / 661-
16.59 / 0.00

PS-98
PS-99
PS-97
PS-96
R6-1R-36
R3-1-30
R5-1-36
R6-1L-36
PS-104
PS-104A
R5-1a-42
R5-1a-42
STA. 112+63
PS-106
R3-H8b-30
STA. 114+15
PC Sta. 115+78.33
MATCHLINE STA. 116+50.00
S 46° 01' 59" E
PT Sta. 113+63.33
PS-105A
R5-1a-42
R5-1a-42
STA. 112+63
PS-105
PS-102
PS-103
R6-1R-36
R3-1-30
R5-1-36
R6-1L-36
STA. 111+42
PS-101
PS-100
PC Sta. 111+60.89
PC Sta. 111+60.89
S 84° 29' 49" E
PCC Sta. 117+24.50
PS-107
EXIT 27
E5-H1C-48
STA. 117+75
MATCHLINE STA. 116+50.00

PROPOSED SIGNS
RAMP F

LIC-37 / 661-
16.59 / 0.00

235
341

HORIZONTAL
SCALE IN FEET
0 0 0 0

CALCULATED RJG
CHECKED HAG

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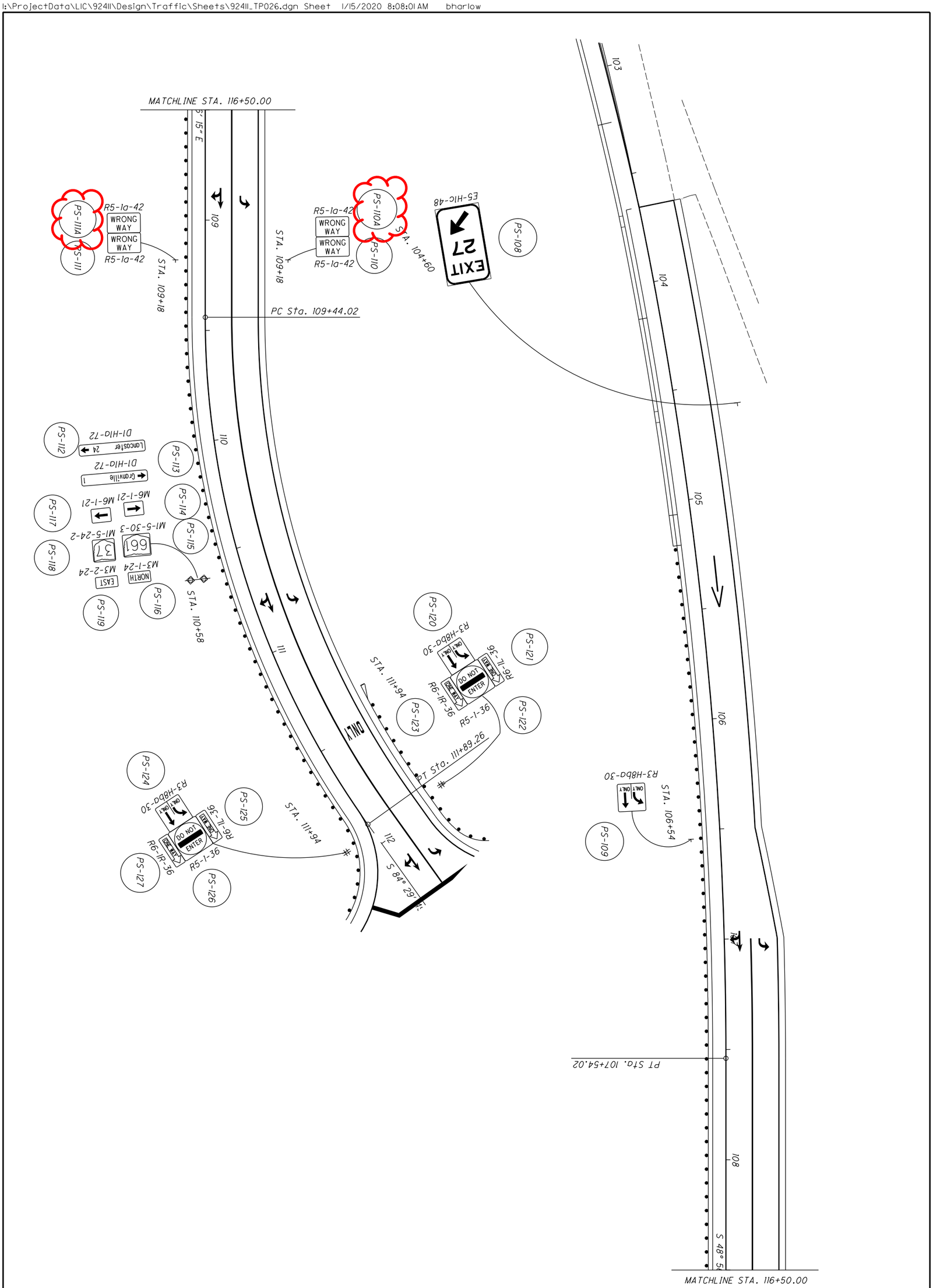


236 / 341	LIC-37 / 661-16.59 / 0.00	PROPOSED SIGNS RAMP G	CALCULATED RJG / CHECKED HAG	HORIZONTAL SCALE IN FEET

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	DATED/REVISED	7/17/15
AS-2-15	DATED/REVISED	1/18/19
GSD-1-19	DATED/REVISED	1/18/19
PCB-91	DATED/REVISED	1/18/13
SBR-1-13	DATED/REVISED	7/20/18
SICD-1-96	DATED/REVISED	7/18/14
SICD-2-14	DATED/REVISED	7/18/14
VFP-1-90	DATED/REVISED	7/20/18

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

SS 840	DATED/REVISED	1/18/19
SS 867	DATED/REVISED	1/18/19
SS 878	DATED/REVISED	1/18/19

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 8TH EDITION, NOVEMEBER 2017 AND THE ODOT BRIDGE DESIGN MANUAL, 2019 EXCEPT AS NOTED ELSEWHERE IN THE PLANS.

LOAD MODIFIER FOR OPERATIONAL IMPORTANCE

OPERATIONAL IMPORTANCE: A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN LOADING

DESIGN LOADING: DESIGN LOADING: HL-93

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

DESIGN DATA

DESIGN DATA:
CONCRETE CLASS QSC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QSC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60,000 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL.
2.5" CONCRETE COVER.
PARAPETS.

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

INSPECTION FOR BATS

PRIOR TO THE START OF DEMOLITION ACTIVITIES THE CONTRACTOR SHALL INSPECT THE UNDERSIDE OF THE BRIDGE FOR THE PRESENCE OF BATS OR NESTING BIRDS. IF ANY BATS OR BIRD NESTS ARE OBSERVED THE CONTRACTOR SHALL NOTIFY NICOLE HAFER-LIPSTREU IN THE DISTRICT 5 PLANNING DEPARTMENT @ (740) 323-5103 (NICOLE.HAFERLIPSTREU@DOT.OHIO.GOV), OR, BRIAN TATMAN @ (740) 323-5191 (BRIAN.TATMAN@DOT.OHIO.GOV) PRIOR TO STARTING ANY DEMOLITION WORK.

EXISTING STRUCTURE VERIFICATION

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 CMS SECTIONS 102.05, 105.02 AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

ITEM 202 STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

DECRIPTION: THIS WORK CONSISTS OF THE REMOVAL OF THE EXISTING STRUCTURE. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED IN THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED I.E. THE EXISTING STRUCTURE USED FOR MAINTAINING PHASE 1 TRAFFIC. THE USE OF EXPLOSIVES, HEADACHE BALLS, HOE-RAM TYPE EQUIPMENT, AND TRACK HOE PULVERIZER/SHEAR/MULTI-PROCESSOR ATTACHMENTS IS PROHIBITED FOR REMOVAL OF THE EXISTING ABUTMENT AND PIER FOOTINGS WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED I.E. EXISTING ABUTMENTS AND PIER FOOTING THAT IS TO REMAIN FOR MAINTAINING PHASE 1 TRAFFIC. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

PROTECTION OF TRAFFIC: THE CONTRACTOR SHALL SUBMIT PLANS FOR THE PROTECTION OF TRAFFIC (VEHICULAR, PEDESTRIAN, BOAT, ETC.) AS PER CMS 2010 501.05.B.2.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE THE EXISTING CONCRETE PIER FOOTINGS AND ABUTMENTS AT THE ℄ OF CONSTRUCTION BY CUTTING AND BY MEANS OF APPROVED HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OF BLUNTED CHISEL TYPE TOOLS IN THE AREA DESCRIBED ABOVE. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED.

ALL EXISTING ABUTMENT PILING SHALL BE REMOVED A MINIMUM OF 1 FOOT BELOW THE PROPOSED GROUND SURFACE AS PER CMS 202.03.

ALL EXISTING REINFORCED CONCRETE, REINFORCED CONRETE BRIDGE DECK, STEEL BEAMS, END DAMS, CROSS FRAMES, BULB ANGLES, SCUPPERS, EXPANSION JOINTS, AND ALL OTHER ITEMS ENCOUNTERED WHILE REMOVING THE EXISTING BRIDGE, UNLESS ITEMIZED SEPARATELY, SHALL BE REMOVED AND INCLUDED PAYMENT FOR UNDER ITEM 202 STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

MEASUREMENT AND PAYMENT: THE DEPARTMENT WILL MEASURE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

PILE DRIVING CONSTRAINTS

PRIOR TO DRIVING ABUTMENT PILES TO THE ULTIMATE BEARING VALUE (UBV), CONSTRUCT THE MSE WALL AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENT UP TO THE BOTTOM OF THE FOOTING FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE CONTRACTOR MAY PRE-DRIVE ABUTMENT PILES BEFORE CONSTRUCTING MSE WALLS. PRE-DRIVING CONSISTS OF INSTALLING THE ABUTMENT PILES INTO THE SOIL ONLY AS FAR AS NECESSARY SO THAT THE PILE WILL REMAIN VERTICAL DURING MSE WALL CONSTRUCTION. IF PRE-DRIVING PILES, INSTALL PILE SLEEVES AROUND PILES BEFORE CONSTRUCTING THE MSE WALL. AT LEAST THREE FEET OF PILE MUST EXTEND ABOVE THE TOP OF THE PILE SLEEVE TO MEET THE REQUIREMENTS OF C&MS 507.09 REGARDING SPLICES. DO NOT DRIVE ABUTMENT PILES TO THE UBV UNTIL AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND A 20 CALENDAR DAY WAITING PERIOD HAS ELAPSED. THE ENGINEER MAY ADJUST THE LENGTH OF THE WAITING PERIOD BASED ON SETTLEMENT PLATFORM READINGS. AFTER THE SPECIFIED WAITING PERIOD HAS ELAPSED, DRIVE ABUTMENT PILES TO THE UBV. IN ORDER TO REMOVE ANY NEGATIVE SKIN FRICTION THAT HAS DEVELOPED DURING THE WAITING PERIOD, DRIVE EACH ABUTMENT PILE A DISTANCE OF AT LEAST 0.5 INCH.

IF NOT PRE-DRIVING ABUTMENT PILES, INSTALL THE ABUTMENT PILES THROUGH PILE SLEEVES AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND THE SPECIFIED WAITING PERIOD HAS ELAPSED.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE)

THE ULTIMATE BEARING VALUE IS 232 KIPS PER PILE FOR THE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 313 KIPS PER PILE FOR THE PIER PILES.

ABUTMENT PILES:
60 - 14" CAST-IN-PLACE PILES 50 FEET LONG, ORDER LENGTH 55 FEET
1 DYNAMIC LOAD TESTING ITEMS

PIER PILES:
28 - 16" CAST-IN-PLACE PILES 30 FEET LONG, ORDER LENGTH 35 FEET
1 DYNAMIC LOAD TESTING ITEMS

ITEM 507 - 14" CAST-IN-PLACE REINFORCED CONCRETE PILES FURNISHED, AS PER PLAN

THE MINIMUM STEEL PILE WALL THICKNESS FOR THE REAR AND FORWARD ABUTMENTS PILES SHALL BE 0.344 INCH.

ITEM 511 CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN

IN ADDITION TO ALL OTHER REQUIREMENTS FOR ITEM 511, ALL VERTICAL HAUNCH BRACKETS DESIGNED TO STAY IN PLACE AFTER CONCRETE IS POURED SHALL BE GALVANIZED. SEE C&MS 711.02 FOR GALVANIZATION REQUIREMENTS.

WELD ATTACHMENT

WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 1/4" FOR THICKNESSES UP TO 3/4" OR 5/16" FOR GREATER THAN 3/4" THICK.

STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH)

CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01

HIGH STRENGTH BOLTS

HIGH STRENGTH BOLTS SHALL BE 1 ⅛" DIAMETER A325, TYPE 1.

ABUTMENT DIAPHRAGM CONCRETE

PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPARATELY, LOCATE THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE AT THE APPROACH SLAB SEAT.

DECK SLAB CONCRETE QUANTITY

DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 2 INCHES OVER THE MIDDLE BEAM SECTIONS, 2.69 INCHES OVER THE REAR BEAM SECTIONS, AND 2.69 INCHES OVER THE FORWARD BEAM SECTIONS. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.

DECK PLACEMENT DESIGN ASSUMPTIONS:

DECK PLACEMENT DESIGN ASSUMPTIONS:
THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 1.66 KIPS FOR A TOTAL MACHINE LOAD OF 13.3 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

PAINTING OF STRUCTURAL STEEL

ALL STRUCTURAL STEEL SHALL BE PAINTED IN ACCORDANCE WITH SECTION 514 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE FINISH COAT COLOR SHALL BE BROWN FS-595C-10324 AND MATCH THE LIC-16-1718 BRIDGE, CHERRY VALLEY INTERCHANGE OVERPASS.

ELASTOMERIC BEARINGS

ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.5 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. PERFORM THE LONG-TERM COMPRESSION PROOF LOAD TEST IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6 AND 18.7.4.5.

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
CPS	CPS	CPS	MM/DD/YY

CHECKED	REVISED	STRUCTURE FILE NUMBER
TAG	-	4506333

BRIDGE NOTES
BRIDGE NO. LIC-661-0003
OVER S.R. 16

LIC-37/661-16.59/0.00
PID No. 92411

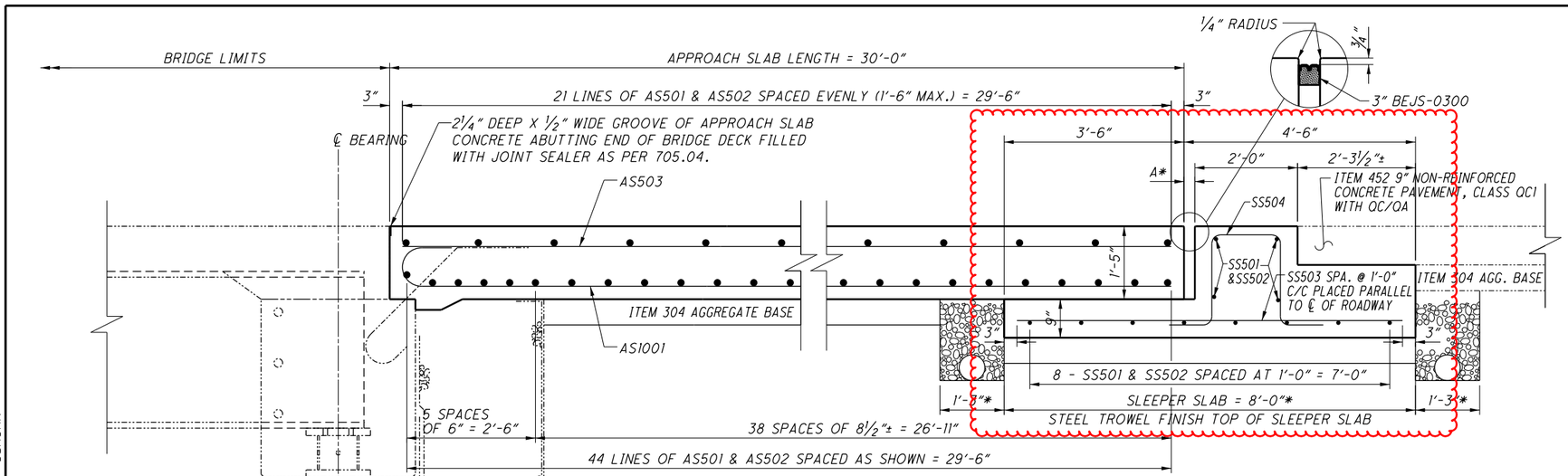
SUPER-STRUCTURE	ABUTMENT	PIER	MSE WALL	GENERAL	PART. 01/NHS/BR	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
										STRUCTURE OVER 20 FOOT SPAN (LIC-661-0003)	
					LS	202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	3
				133	133	202	22900	133	SY	APPROACH SLAB REMOVED	
528					528	202	38500	528	FT	BRIDGE RAILING REMOVED	
					LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
					LS	503	21300	LS		UNCLASSIFIED EXCAVATION	
					LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
	3,000				3,000	507	00600	3,000	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	3
	3,300				3,300	507	00650	3,300	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	3
		840			840	507	00700	840	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	3
		980			980	507	00750	980	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	3
112,621	12,613	23,671			148,905	509	10000	148,905	LB	EPOXY COATED REINFORCING STEEL	55/56
406					406	511	34447	406	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN	3
81					81	511	34463	81	CY	CLASS QC SCC CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN	4
		51			51	511	41012	51	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS	
	70				70	511	45723	70	CY	CLASS QC SCC CONCRETE WITH QC/QA, ABUTMENT, AS PER PLAN (NOT INCLUDING FOOTING)	4
	155	52			207	511	46512	207	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
401	148	155	665	297	1,666	512	10050	1,666	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
	101				101	512	33000	101	SY	TYPE 2 WATERPROOFING	
LS					LS	513	10040	LS		STRUCTURAL STEEL MEMBERS, LEVEL 2	
3,984					3,984	513	20000	3,984	EACH	WELDED STUD SHEAR CONNECTORS	
17,361					17,361	514	00060	17,361	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	
17,361					17,361	514	00066	17,361	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	3
14					14	514	10000	14	EACH	FINAL INSPECTION REPAIR	
18					18	516	13601	18	SF	1" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN	4
	55				55	516	13901	55	SF	2" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN	4
	156				156	516	14020	156	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
				140	140	516	14600	140	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.:EMSEAL WITH SLEEPER SLAB	58
	16				16	516	44300	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (1'-6" x 1'-2" x 4.1479")	
		8			8	516	44300	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (1'-9" x 1'-8" x 4.1479")	
	92				92	518	21200	92	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
	1	1			2	523	20000	2	EACH	DYNAMIC LOAD TESTING	
				449	449	526	30011	449	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN	57/59
			2,032		2,032	203	20000	2,032	CY	EMBANKMENT	
			681		681	203	35110	681	CY	GRANULAR MATERIAL, TYPE B	
			238		238	203	35120	238	CY	GRANULAR MATERIAL, TYPE C	
			6,410		6,410	840	20001	6,410	SF	MECHANICALLY STABILIZED EARTH WALL, AS PER PLAN	59-65
			4,242		4,242	840	21000	4,242	CY	WALL EXCAVATION	
			713		713	840	22000	713	SY	FOUNDATION PREPARATION	
			3,941		3,941	840	23000	3,941	CY	SELECT GRANULAR BACKFILL	
			666		666	840	23050	666	CY	NATURAL SOIL	
			894		894	840	25010	894	FT	6" DRAINAGE PIPE, PERFORATED	
			18		18	840	25020	18	FT	6" DRAINAGE PIPE, NON-PERFORATED	
			391		391	840	26001	391	FT	CONCRETE COPING, AS PER PLAN	63
			6,410		6,410	840	26050	6,410	SF	AESTHETIC SURFACE TREATMENT	
			5		5	840	27000	5	DAY	ON-SITE ASSISTANCE	
			LS		LS	840	28000	LS		SGB INSPECTION AND COMPACTION TESTING	
			LS		LS	867	00100	LS		TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL	
			LS		LS	878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
										STRUCTURE OVER 20 FOOT SPAN (LIC-661-0003) ALTERNATES	
				420	420	607	39901	420	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN (ALTERNATE 1)	49
				420	420	SPECIAL	60740000	420	FT	VANDAL PROTECTION FENCE (DECORATIVE) (ALTERNATE 2)	48-54

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED CPS | DRAWN CPS | REVIEWED CPS | DATE MM/DD/YY
CHECKED TAG | REVISED - | STRUCTURE FILE NUMBER 4506333

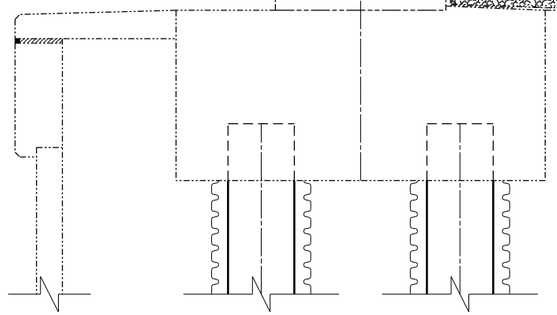
BRIDGE SUMMARY
BRIDGE NO. LIC-661-0003
OVER S.R. 16

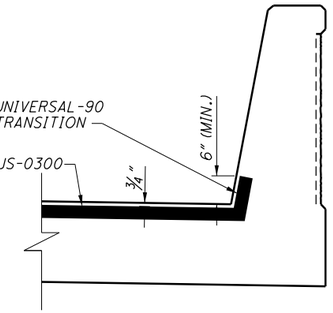
LIC-37/661-16.59/0.00
PID No. 92411



* MEASURED PERPENDICULAR TO THE JOINT

SECTION AS-1 / 57



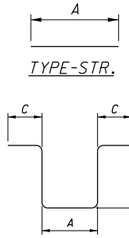


PARAPET DETAIL

MARK	NUMBER REQ'D.	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C
SLEEPER SLABS (INFORMATIONAL PURPOSES ONLY)							
SS501	24	34'-0"	851	STR.	34'-0"		
SS502	24	38'-2"	955	STR.	38'-2"		
SS503	70	7'-9"	566	STR.	7'-9"		
SS504	70	4'-4"	316	6	1'-5"	1'-9"	0'-10"
SLEEPER SLABS TOTAL			2,688 ##				

ALL SLEEPER SLAB REINFORCING STEEL TO BE INCLUDED FOR PAYMENT WITH ITEM 516-STRUCTURAL JOINT OR JOINT SEALER, MISC: EMSEAL WITH SLEEPER SLAB

SLEEPER SLAB BENDING DIAGRAMS



ITEM 516-STRUCTURAL JOINT OR JOINT SEALER, MISC: EMSEAL WITH SLEEPER SLAB:

ITEM 516-STRUCTURAL JOINT OR JOINT SEALER, MISC: EMSEAL WITH SLEEPER SLAB: FURNISH MATERIAL CONFORMING TO 705.11. THE SEAL CONFIGURATION SHOULD BE SIMILAR TO THE DETAILS SHOWN HERIN. ACCEPTED MANUFACTURES ARE: EMSEAL JOINT SYSTEMS, LTD. (3" BEJS-0300) OR AN APPROVED EQUIVALENT. INSTALL THE SEAL ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS AND UNDER THE SUPERVISION OF THE MANUFACTURER'S DESIGNATED REPRESENTATIVE. FURNISH SEALS IN ONE CONTIUOUS PIECE UNLESS APPROVED BY THE ENGINEER.

BOND BREAKER: A BOND BREAKER CONSISTING OF TWO 4 FOOT SHEETS OF CLEAR OR OPAQUE POLYETHYLENE FILM, ITEM 705.06, SHALL BE CENTERED ABOVE THE JOINT BETWEEN THE SUBBASE AND THE SLEEPER SLAB. CARE SHALL BE TAKEN IN THE AREA BENEATH THE POLY-ETHYLENE FILM TO ENSURE THE SURFACE OF THE SUBBASE IS FINISHED SMOOTH AND IS FLUSH WITH OR SLIGHTLY HIGHER THAN THE SURFACE OF THE SLEEPER SLAB. THE FILM SHALL HAVE A NOMINAL THICKNESS OF 4 MILS.

PAYMENT: MEASUREMENT OF THE EXPANSION JOINT FOR PAYMENT PURPOSES SHALL BE ALONG THE CENTERLINE OF THE SLEEPER SLAB AND BETWEEN THE BACKS OF CURB. PAYMENT SHALL BE PER FOOT OF ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC: JEENE SEAL WITH SLEEPER SLAB AND SHALL INCLUDE 3" BEJS-0300 AS PROVIDED BY EMSEAL, WESTBOROUGH, MASSACHUSETTS (508) 836-0280 OR AN APPROVED EQUAL, CONCRETE SLEEPER SLAB, RESTEEL AND ALL LABOR, MATERIALS AND INCIDENTIALS NEEDED TO CONSTRUCT THE JOINT AS SHOWN EXCEPT FOR THE PIPE UNDERDRAIN. THE UNDERDRAINS SHALL BE PAID FOR PER FOOT OF ITEM 605- 6" SHALLOW PIPE UNDERDRAIN, ITEM 707.32 TYPE CP, OR 707.41.

AMBIENT TEMP. (°F)	DIMENSION "A" REAR & FWD. APPR. SLABS (3" BEJS)
90°	2"
80°	2⅛"
70°	2¼"
60°	2⅜"
50°	2½"
40°	2½"

NOTE:
THE MAXIMUM "A" DIMENSION AT TIME OF INSTALLATION IS 2.5"

NOTE:
TYPE "A" WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE CUT GROOVE IN WHICH THE HOT APPLIED JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.

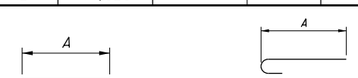
NOTE:
FOR ADDITIONAL DETAILS SEE STANDARD DRAWING AS-1-15 & AS-2-15.
NOTE:
FOR APPROACH SLAB FINISH ELEVATIONS, SEE SHEET 38/65.

ITEM	DESCRIPTION	QUANT'Y	UNIT
202	** WEARING COURSE REMOVED	134	SQ. YD.
203	** EMBANKMENT	1,603	CU. YD.
204	** SUBGRADE COMPACTION	473	SQ. YD.
304	** AGGREGATE BASE	79	CU. YD.
516	* STRUCTURAL JOINT OR JOINT SEALER, MISC: EMSEAL WITH SLEEPER SLAB	139	FT.
526	* REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN	449	SQ. YD.

CARRIED TO (*) BRIDGE SUMMARY or (**) SHEET 5/65

NOTE: ALL QUANTITIES SHOWN ARE FOR REAR AND FORWARD APPROACH SLABS.

MARK	NUMBER REQ'D.	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	R	INC.
APPROACH SLABS								
AS501	130	31'-0"	4,203	STR.	31'-0"			
AS502	130	38'-2"	5,175	STR.	38'-2"			
AS503	56	29'-6"	1,723	STR.	29'-6"			
AS1001	252	30'-11"	33,525	19	29'-6"			
APPROACH SLABS TOTAL			44,626					



BENDING DIAGRAMS

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED CPS | DRAWN CPS | REVIEWED CPS | DATE MM/DD/YY
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APPROACH SLAB DETAILS
BRIDGE NO. LIC-661-0003 OVER S.R. 16

LIC-37/661-16.59/0.00
PID No. 92411

58/65

327/341