

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC FOR S.R. 283, 1 LANE OF TRAFFIC FOR S.R. 44 DURING CONTRACTOR WORK HOURS, AND 2 LANES OF TRAFFIC FOR S.R. 44 DURING CONTRACTOR NON-WORK HOURS IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, AND ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC.

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

TIME LIMITATION ON DETOURS

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR RAMP B, EXCEPT FOR A PERIOD NOT TO EXCEED 120 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 18. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$ 1,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

HOLIDAYS OR SPECIAL EVENTS

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

NEW YEAR'S (OBSERVED)	GENERAL/REGULAR ELECTION DAY (NOV.)
TOTAL SOLAR ECLIPSE (4/8/24)	THANKSGIVING
MEMORIAL DAY	CHRISTMAS (OBSERVED)
FOURTH OF JULY (OBSERVED)	LABOR DAY

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

DAY OF HOLIDAY OR SPECIAL EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
MONDAY (TOTAL SOLAR ECLIPSE)	12:00N FRIDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (GEN. REG. ELECTION)	5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAIL ABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATIONS INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEETS 18 TO 19 OF THE PLANS. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO

IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

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

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614,	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN. ASSUMING 1 PCMS SIGN FOR 8 MONTHS	8 SIGN MONTH
-----------	----------------------------------------------------------------------------------	--------------

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616,	WATER	2 M. GAL.
-----------	-------	-----------

REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

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

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS BIDIRECTIONAL

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE THE ODOT OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ODOT ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

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

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

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

MAINTENANCE OF TRAFFIC SIGNAL/ FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/ FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

- EXISTING SIGNAL/ FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.
- NEW OR REUSED SIGNAL/ FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES ,CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED, ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE COUNTY OR THE CITY OF MENTOR FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISION TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 8 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6 AM TO 9 PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS, EXCEPT FOR THE FOLLOWING INTERSECTIONS WHICH SHALL BE PROTECTED BY OFF-DUTY CITY OF MENTOR POLICE, HIRED BY THE CONTRACTOR:

- S.R. 283/ RAMP C/ RAMP D

ANY PEDESTRIAN PUSHBUTTON SIGN (AND THE CORRESPONDING PUSHBUTTON), EITHER NEW OR EXISTING, WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN A MANNER DESCRIBED IN 630.10. ANY VEHICULAR TRAFFIC SIGNAL HEAD AND ANY PEDESTRIAN SIGNAL HEAD EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

- THE TIME OF MALFUNCTION;
- TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;
- ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
- A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
- TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614. MAINTAINING TRAFFIC.



SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
6	7	8	9	11	12	23	24	51	52	59	XS		01/NHS		EXT	TOTAL			SHEET NO.
								0.39					0.39	644	00100	0.39	MILE	EDGE LINE, 4"	
								1.34					1.34	644	00104	1.34	MILE	EDGE LINE, 6"	
									0.73				0.73	644	00204	0.73	MILE	LANE LINE, 6"	
								0.32					0.32	644	00300	0.32	MILE	CENTER LINE	
								280					280	644	00400	280	FT	CHANNELIZING LINE, 8"	
								369					369	644	00404	369	FT	CHANNELIZING LINE, 12"	
								65					65	644	00500	65	FT	STOP LINE	
									88				88	644	00620	88	FT	CROSSWALK LINE, 12"	
								84					84	644	00700	84	FT	TRANSVERSE/DIAGONAL LINE	
									2				2	644	01300	2	EACH	LANE ARROW	
								2					2	644	01360	2	EACH	WRONG WAY ARROW	
								0.12					0.12	646	10000	0.12	MILE	EDGE LINE, 4"	
								0.09					0.09	646	10010	0.09	MILE	EDGE LINE, 6"	
								0.12					0.12	646	10200	0.12	MILE	CENTER LINE	
								580					580	646	10300	580	FT	CHANNELIZING LINE, 8"	
								17					17	646	10400	17	FT	STOP LINE	
									8				8	646	20300	8	EACH	LANE ARROW	
										LS			LS	202	11203	LS		STRUCTURE OVER 20 FOOT SPAN (SFN 4302826)	
								365					365	202	22900	365	SY	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	57
								365					365	202	23500	365	SY	APPROACH SLAB REMOVED	
								LS					LS	503	11101	LS		WEARING COURSE REMOVED	
								201	1				201	503	21100	201	1	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	
																		UNCLASSIFIED EXCAVATION	1
								166,098					166,098	509	10000	166,098	LB	EPOXY COATED STEEL REINFORCEMENT	
								939					939	509	26000	939	LB	GALVANIZED STEEL REINFORCEMENT	
								7,013					7,013	509	30020	7,013	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
								912					912	510	10001	912	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	
								429					429	511	34446	429	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
								72					72	511	34450	72	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
								36					36	511	43212	36	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER	
								118	1				118	511	45712	118	1	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT	
								1,353					1,353	512	10100	1,353	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
								21					21	512	10600	21	FT	CONCRETE REPAIR BY EPOXY INJECTION	
								87					87	512	33000	87	SY	TYPE 2 WATERPROOFING	
								14,100					14,100	513	10201	14,100	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	
								7,914					7,914	513	20000	7,914	EACH	WELDED STUD SHEAR CONNECTORS	
								18,750					18,750	514	00050	18,750	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	
								18,750					18,750	514	00056	18,750	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	
								19,300					19,300	514	00060	19,300	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	
								19,300					19,300	514	00066	19,300	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	
								31					31	514	00504	31	MNHR	GRINDING FINES, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL	
								11					11	514	10000	11	EACH	FINAL INSPECTION REPAIR	
								186					186	516	10010	186	FT	ARMORLESS PREFORMED JOINT SEAL	
								187					187	516	11210	187	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL	
								112					112	516	13900	112	SF	2" PREFORMED EXPANSION JOINT FILLER	
								24					24	516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14" x 14" x 2 5/8")	
								16					16	516	44201	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" x 12" x 3 5/8")	
								LS					LS	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	
								225					225	518	21200	225	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
								240					240	518	40000	240	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
								80					80	518	40010	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
								3,100					3,100	SPECIAL	51900100	3,100	SF	COMPOSITE FIBER WRAP SYSTEM	
								106					106	519	11101	106	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	
								361					361	526	25010	361	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")	
								180					180	526	90030	180	FT	TYPE C INSTALLATION	
								944					944	SPECIAL	53013000	944	SF	FORM LINER	
								450					450	607	39900	450	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC	
								40					40	SPECIAL	69070100	40	SF	ASBESTOS ABATEMENT (ALUMINUM RAIL PADS)	2
																		MAINTENANCE OF TRAFFIC	

1  
REVISED 07/28/25

2  
REVISED 08/07/25

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

JLM

REVIEWER

DWS 06/09/23

PROJECT ID

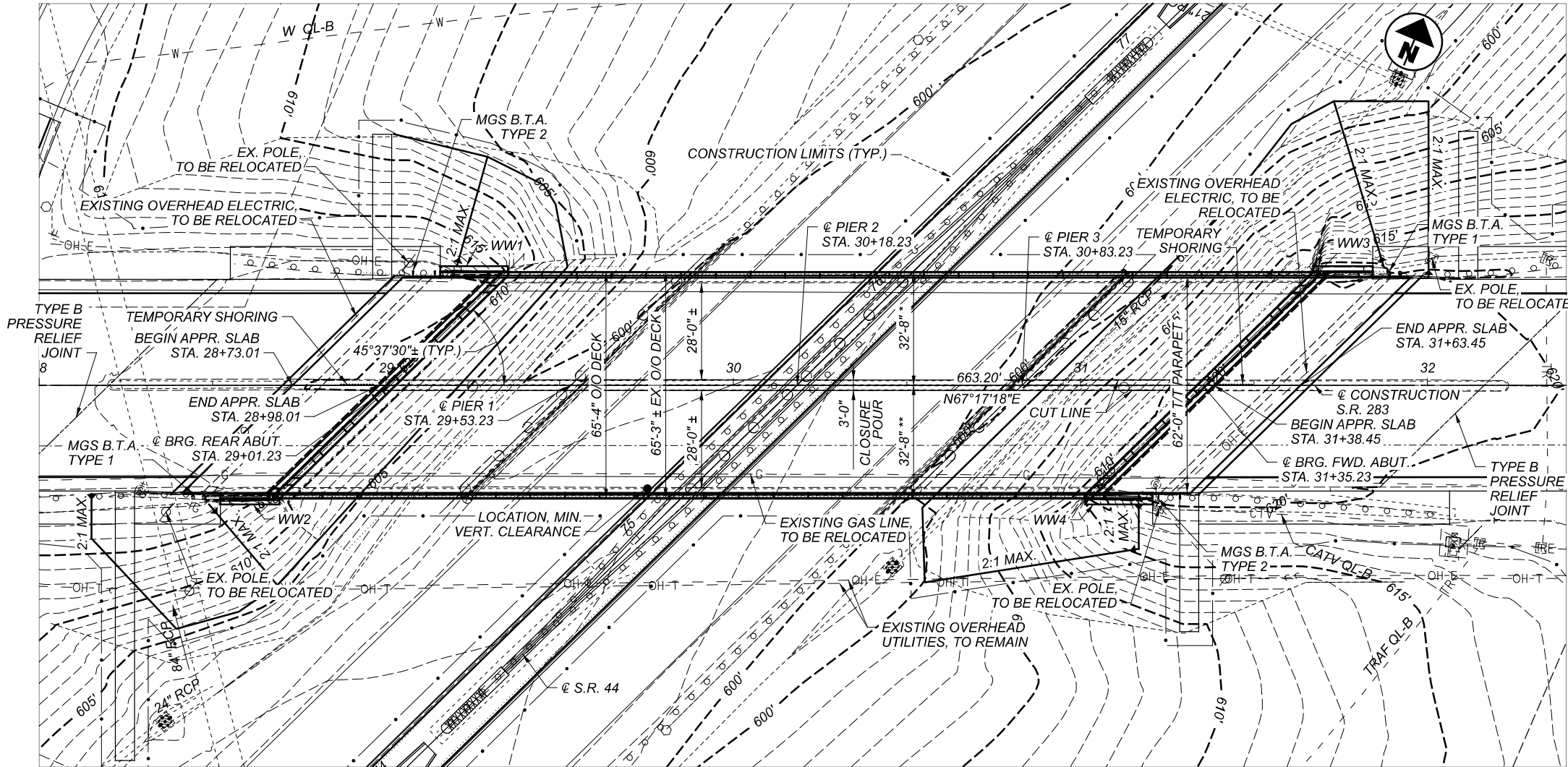
111005

SHEET

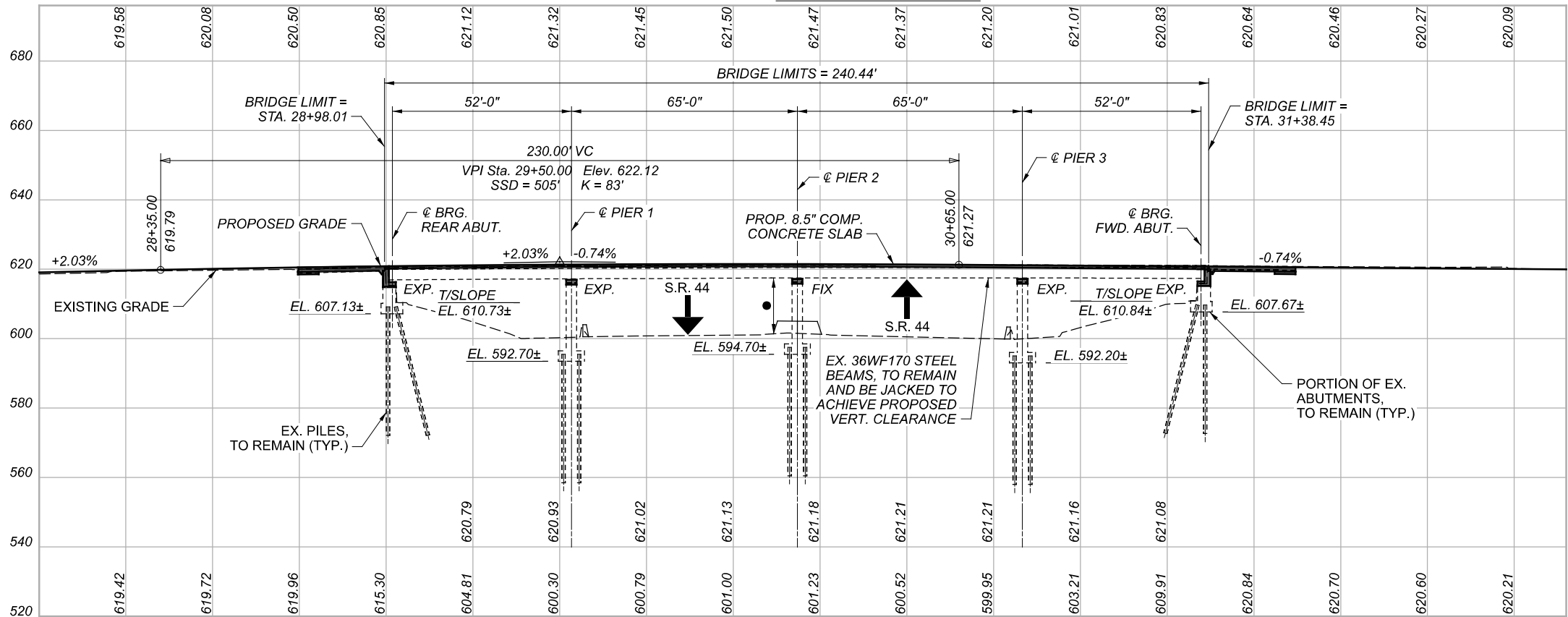
22

TOTAL

84



PLAN ALONG S.R. 283



PROFILE ALONG S.R. 283

BENCHMARK DATA

BM CP10 STA. 27+84.47,	ELEV. 617.51,	OFFSET 40.42', RT
BM CP11 STA. 28+48.74,	ELEV. 618.42,	OFFSET 38.23', LT
BM CP12 STA. 31+88.71,	ELEV. 619.13,	OFFSET 39.75', RT
BM CP13 STA. 32+89.14,	ELEV. 618.10,	OFFSET 74.28', LT

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 2 OF 84.

NOTES

- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES
1. SHALL CONFORM TO PLAN CROSS SECTIONS.
  2. FOR PROPOSED WORK NOTE, SEE SHEET 4 OF 30.

DESIGN TRAFFIC (S.R. 283):

2025 ADT = 11,700	2025 ADTT = 468
2045 ADT = 12,300	2045 ADTT = 492

FIRST POSTS OFF BRIDGE

REAR LEFT = STA. 29+14.49

REAR RIGHT = STA. 28+51.29

FWD. LEFT = STA. 31+85.17

FWD. RIGHT = STA 31+21.97

LEGEND

\* - PHASE 1 CONSTRUCTION

\*\* - PHASE 2 CONSTRUCTION

VERTICAL CLEARANCE:

- EXISTING MINIMUM VERTICAL CLEARANCE = 15'-0 $\frac{1}{2}$ " $\pm$
- REQUIRED MINIMUM VERTICAL CLEARANCE = 15'-6"
- PROPOSED MINIMUM VERTICAL CLEARANCE = 15'-7 $\frac{1}{4}$ "

EXISTING STRUCTURE

TYPE: 4 SPAN CONTINUOUS STEEL BEAM SUPERSTRUCTURE WITH A NON-COMPOSITE CONCRETE DECK AND CONCRETE ABUTMENTS AND PIERS

SPANS: 52'-0" $\pm$ , 65'-0" $\pm$ , 65'-0" $\pm$ , 52'-0" $\pm$  C/C BEARINGS

ROADWAY: 28'-0" F/F SAFETY CURB, EACH DIRECTION

LOADING: H20

SKEW: 45°37'30" $\pm$  L.F.

WEARING SURFACE: 1 $\frac{1}{4}$ " $\pm$  LATEX MODIFIED OVERLAY

APPROACH SLABS: 25'-0" LONG (SPECIAL)

ALIGNMENT: TANGENT

CROWN:  $\frac{3}{16}$ "/FT (EACH SIDE SUPERELEVATED)

STRUCTURE FILE NUMBER: 4302826

DATE BUILT: 7/1/1962

DISPOSITION: STRUCTURE TO BE REHABILITATED

PROPOSED STRUCTURE

TYPE: 4 SPAN CONTINUOUS STEEL BEAM SUPERSTRUCTURE (EXISTING BEAMS) WITH A COMPOSITE CONCRETE DECK AND CONCRETE ABUTMENTS AND PIERS

SPANS: 52'-0" $\pm$ , 65'-0" $\pm$ , 65'-0" $\pm$ , 52'-0" $\pm$  C/C BEARINGS

ROADWAY: 62'-0" TOE/TOE PARAPET

VEHICULAR LIVE LOAD: HL-93

FUTURE WEARING SURFACE: 0 KSF

SKEW: 45°37'30" $\pm$  L.F.

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 25' LONG ( TYPE C INSTALLATION AS-1-15, AS-2-15)

ALIGNMENT: TANGENT

CROWN: 0.016 FT/FT

DECK AREA: 15,710 SF

COORDINATES: LATITUDE 41°43'44.91"

LONGITUDE -81°17'32.33"

REVISED 08/07/25

1

SITE PLAN  
BRIDGE NO. LAK-283-1434  
S.R. 44 UNDER LAKESHORE BLVD



SFN

4302826

DESIGN AGENCY



DESIGNER

CHECKER

YRY

SJM

REVIEWER

DWS 06/09/23

PROJECT ID

111005

SUBSET

1

TOTAL

30

SHEET

55

TOTAL


84

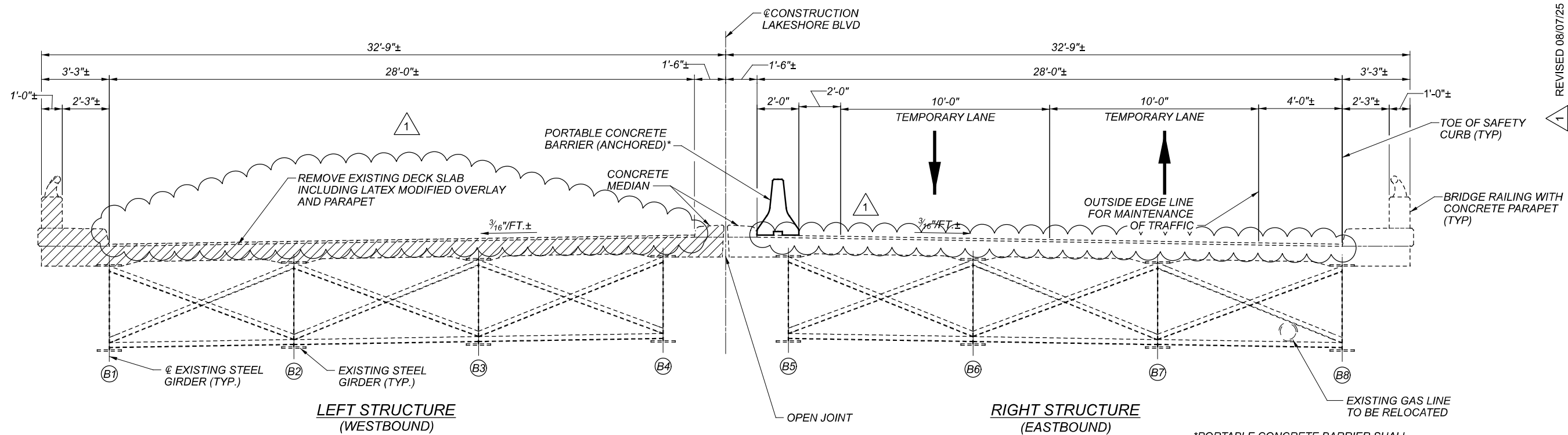
STRUCTURE ESTIMATED QUANTITIES										
01/NHS	ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN SHEET NUMBER
1	202	11203	1	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				1	3 / 30
365	202	22900	365	SQ YD	APPROACH SLAB REMOVED				365	
365	202	23500	365	SQ YD	WEARING COURSE REMOVED (3" THICK)				365	
1	503	11101	1	LUMP	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				1	3 / 30
201	503	21100	201	CU YD	UNCLASSIFIED EXCAVATION	133	68			
166098	509	10000	166098	POUND	EPOXY COATED STEEL REINFORCEMENT	15593	6490	144015		
7013	509	30020	7013	FT	NO. 4 DEFORMED GFRP REINFORCEMENT				7013	
939	509	26000	939	LB	GALVANIZED STEEL REINFORCEMENT	939				
912	510	10001	912	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	600	312			3 / 30
429	511	34446	429	CU YD	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			429		
72	511	34450	72	CU YD	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			72		
36	511	43212	36	CU YD	CLASS QC1 CONCRETE WITH QC/QA, PIER		36			
118	511	45712	118	CU YD	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT	118				
1353	512	10100	1353	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	250	651	452		
21	512	10600	21	FT	CONCRETE REPAIR BY EPOXY INJECTION	21				
87	512	33000	87	SQ YD	TYPE 2 WATERPROOFING	87				
14100	513	10201	14100	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			14100		3 / 30
7914	513	20000	7914	EACH	WELDED STUD SHEAR CONNECTORS			7914		
18750	514	00050	18750	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			18750		
18750	514	00056	18750	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			18750		
19300	514	00060	19300	SQ FT	FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT			19300		
19300	514	00066	19300	SQ FT	FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT			19300		
31	514	00504	31	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			31		
11	514	10000	11	EACH	FINAL INSPECTION REPAIR			11		
186	516	10010	186	FT	ARMORLESS PREFORMED JOINT SEAL				186	
187	516	11210	187	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			187		
112	516	13900	112	SQ FT	2" PREFORMED EXPANSION JOINT FILLER				112	
24	516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14"x14"x2 5/8")			24		14 / 30
16	516	44201	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12"x12"x3 5/8")			16		14 / 30
1	516	47001	1	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				1	4 / 30
225	518	21200	225	CU YD	POROUS BACKFILL WITH GEOTEXTILE FABRIC	225				
240	518	40000	240	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	240				
80	518	40010	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	80				
3100	SPECIAL	51900100	3100	SQ FT	COMPOSITE FIBER WRAP SYSTEM		3100			
106	519	11101	106	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN		106			4 / 30
361	526	25010	361	SQ YD	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")				361	
180	526	90030	180	FT	TYPE C INSTALLATION				180	
944	SPECIAL	53013000	944	SQ FT	FORM LINER			944		4 / 30
450	607	39900	450	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			450		
40	SPECIAL	69070100	40	SQ FT	ASBESTOS ABATEMENT (ALUMINUM RAIL PADS)			40		

CALCULATED BY: AMT 4 / 2023  
CHECKED BY: YRY 6 / 2023

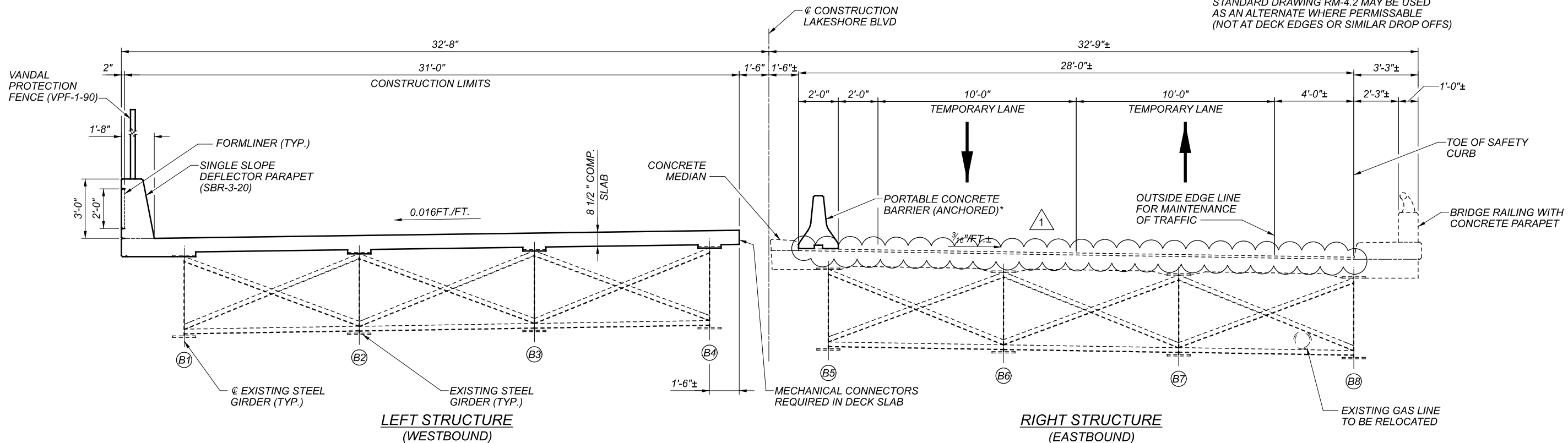
1 REVISED 07/24/25  
2 REVISED 08/07/25

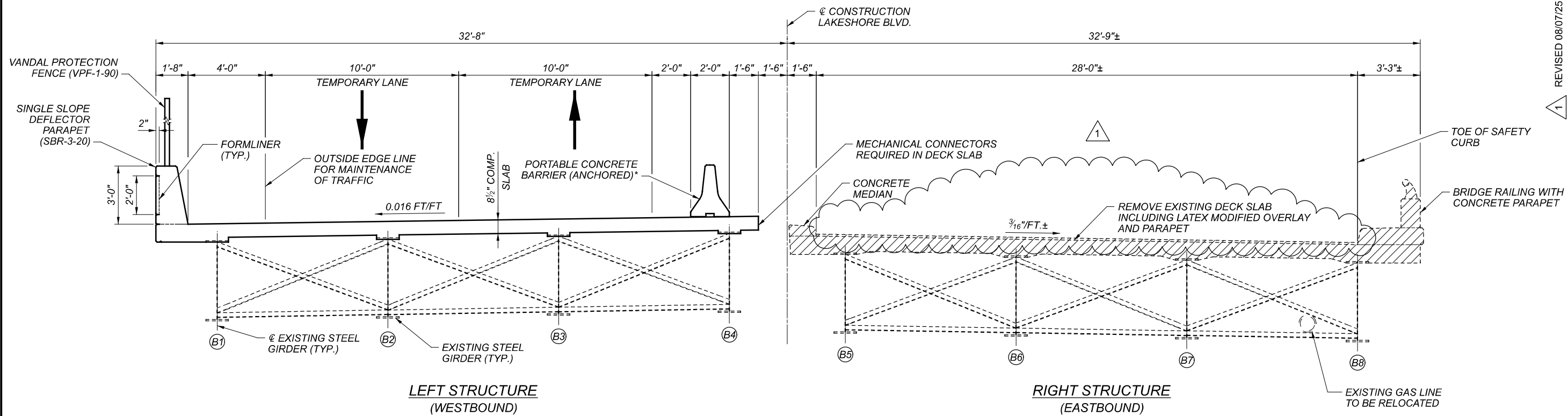
ESTIMATED QUANTITIES  
BRIDGE NO. LAK-283-1434  
S.R. 44 UNDER LAKESHORE BLVD

SFN	
4302826	
DESIGN AGENCY	
	
DESIGNER	CHECKER
NRP	AMT
REVIEWER	
DWS 06/09/23	
PROJECT ID	
111005	
SUBSET	TOTAL
5	30
SHEET	TOTAL
59	84

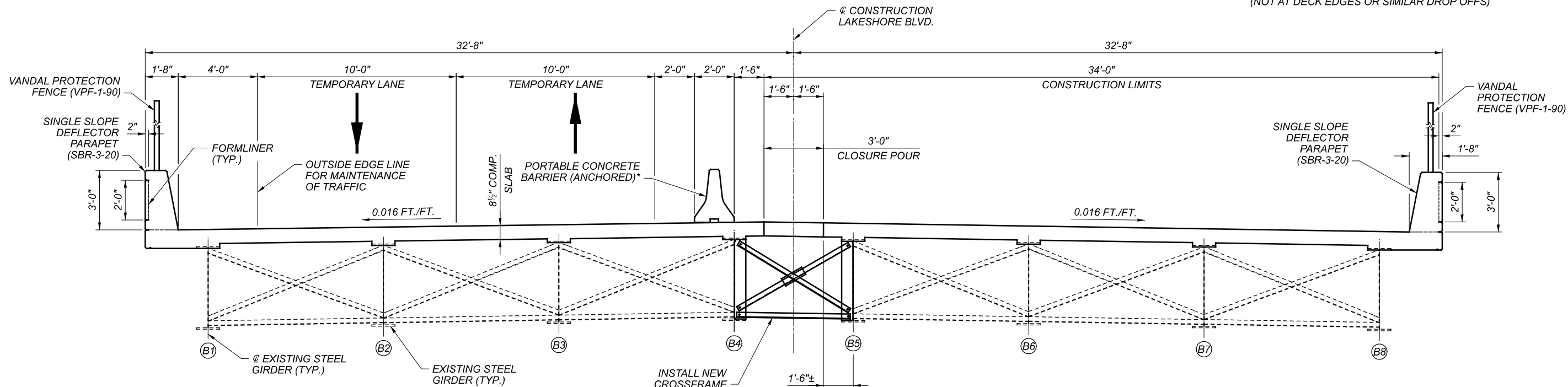


\*PORTABLE CONCRETE BARRIER SHALL BE ANCHORED USING TWO ANCHORS PER SEGMENT AND SHALL CONFORM TO STANDARD DRAWING PCB-91 OR RM-4.2. STANDARD DRAWING RM-4.2 MAY BE USED AS AN ALTERNATE WHERE PERMISSABLE (NOT AT DECK EDGES OR SIMILAR DROP OFFS)





\* PORTABLE CONCRETE BARRIER SHALL BE ANCHORED USING FOUR ANCHORS PER SEGMENT AND SHALL CONFORM TO STANDARD DRAWING PCB-91 OR RM-4.2. STANDARD DRAWING RM-4.2 MAY BE USED AS AN ALTERNATE WHERE PERMISSABLE (NOT AT DECK EDGES OR SIMILAR DROP OFFS)



#### LEGEND

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

#### PHASE 2

- REROUTE PHASE 1 TRAFFIC ONTO PROPOSED LEFT STRUCTURE.
- REMOVE EXISTING RIGHT STRUCTURE DECK SLAB, PARAPETS AND APPROACH SLABS.
- REMOVE PORTIONS OF EXISTING ABUTMENTS AND WINGWALLS ON RIGHT STRUCTURE.
- JACK THE EXISTING RIGHT SUPERSTRUCTURE.

- CONSTRUCT NEW CONCRETE CAPS ON EXISTING RIGHT STRUCTURE ABUTMENTS AND PIERS. WIDEN EXISTING RIGHT ABUTMENT FOOTINGS AND CONSTRUCT NEW TURNBACK WINGWALLS.
- INSTALL NEW ABUTMENT AND PIER BEARINGS ON RIGHT STRUCTURE.
- CONSTRUCT THE RIGHT STRUCTURE DECK SLAB UP TO THE CLOSURE POUR AND THE CORRESPONDING END DIAPHRAGMS.
- CONSTRUCT THE SINGLE SLOPE DEFLECTOR PARAPET ON THE OUTSIDE OF RIGHT STRUCTURE.
- INSTALL THE CROSSFRAMES UNDER THE CLOSURE POUR. CAST THE CLOSURE POUR.
- CONSTRUCT THE REMAINING APPROACH SLABS.
- REMOVE THE PORTABLE CONCRETE BARRIER AND OPEN TO TRAFFIC.

REVISED 08/07/25

1

SEQUENCE OF CONSTRUCTION (PHASE 2)

BRIDGE NO. LAK-283-1434

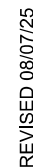
S.R. 44 UNDER LAKESHORE BLVD

SFN  
4302826

DESIGN AGENCY

DESIGNER  
YRYCHECKER  
SJMREVIEWER  
DWS 06/09/23PROJECT ID  
111005SUBSET  
7 TOTAL  
30SHEET  
61 TOTAL  
84





A horizontal timeline diagram with two segments. The left segment is labeled 'PHASE 2 CONSTRUCTION' and spans the years 2018, 2019, and 2020. The right segment is labeled 'PHASE 1 CONSTRUCTION' and spans the years 2020, 2021, and 2022. The segments are separated by a vertical line at the year 2020.

(REAR ABUTMENT SHOWN,  
FORWARD ABUTMENT OPPOSITE HAND)  
(PARAPETS NOT SHOWN)

#5 BAR - 2'-5"  
#6 BAR - 3'-7"

- \* ELEVATION GIVEN AT  $\angle$  BEARING  
\*\* PLACE ALONG SKEW

1. FOR GENERAL NOTES AND ABBREVIATIONS, SEE SHEET 3 AND 4 OF 30.
2. FOR REINFORCING LIST, SEE SHEET 28 OF 30.
3. FOR SECTIONS D-D AND E-E, SEE SHEET 11 OF 30.
4. FOR ELEVATION VIEWS F-F AND G-G AND WINGWALL REINFORCEMENT, SEE SHEET 12 OF 30.

