

INDEX OF SHEETS:

TITLE SHEET	1
PLAN LEGEND AND DESIGN DESIGNATIONS	2
SCHEMATIC PLAN	3-8
GEOMETRIC PLAN	9-13
CURVE DATA	14-16
CONTROL POINT TABLE	17-20
TYPICAL SECTIONS	21-49
GENERAL NOTES	50-59
MAINTENANCE OF TRAFFIC	
NOTES	60-65, 65A
GENERAL SUMMARY	66
SUBSUMMARIES	67-99
TYPICAL SECTIONS	100-123
DETOUR PLANS	124-130, 130A, 131-136
SIGN DETAILS	137-157
SCHEMATIC PLANS	158-175
PLANS	176-286
CROSSOVER ELEVATIONS	287-290
DRAINAGE PLANS	291-315
CROSS SECTIONS	316-450
PLAN INSERT SHEET	451
GENERAL SUMMARY	452-456
SUBSUMMARIES	457-460
ESTIMATED QUANTITIES	461-488
CALCULATIONS	489-493
PROJECT SITE PLAN	494-500
PLAN AND PROFILE I-490	501-550
PLAN AND PROFILE - W. 7TH STREET	551-552
PLAN AND PROFILE - RAMP E-S (I-77)	553-558
PLAN AND PROFILE - RAMP S-E (I-71)	559-561
PLAN AND PROFILE - RAMP 7-7C	562-564
PLAN AND PROFILE - RAMP C-7	565
PLAN AND PROFILE - RAMP B-C	566
PLAN AND PROFILE - RAMP C-B	567
PLAN AND PROFILE - RAMP E-N (I-77)	568-571
PLAN AND PROFILE - RAMP E-S (I-77)	572-574
PLAN AND PROFILE - RAMP N-E (I-77)	575-576
PLAN AND PROFILE - RAMP N-W (I-77)	577-579
PLAN AND PROFILE - RAMP S-E (I-77)	580-582
PLAN AND PROFILE - RAMP S-W (I-77)	583-584

PLAN AND PROFILE - RAMP W-N (I-77)	585-587
PLAN AND PROFILE - RAMP W-S (I-77)	588-589
CROSS SECTIONS - I-490	590-659
CROSS SECTIONS - WB I-490	660-667
CROSS SECTIONS - EB I-490	668-681
CROSS SECTIONS - W. 7TH STREET	682-687
CROSS SECTIONS - RAMP E-S (I-71)	688-718
CROSS SECTIONS - RAMP S-E (I-71)	719-729
CROSS SECTIONS - RAMP 7-7C	730-741
CROSS SECTIONS - RAMP C-7	742-747
CROSS SECTIONS - RAMP B-C	748-755
CROSS SECTIONS - RAMP C-B	756-759
CROSS SECTIONS - RAMP E-N (I-77)	760-774
CROSS SECTIONS - RAMP E-S (I-77)	775-783
CROSS SECTIONS - RAMP N-E (I-77)	784-797
CROSS SECTIONS - RAMP N-W (I-77)	798-815
CROSS SECTIONS - RAMP S-E (I-77)	816-828
CROSS SECTIONS - RAMP S-W (I-77)	829-839
CROSS SECTIONS - RAMP W-N (I-77)	840-847
CROSS SECTIONS - RAMP W-S (I-77)	848-858
SUPERELEVATION TABLES	859-887
GORE DETAILS	888-897
PAVEMENT JOINT DETAILS	898-901
INTERSECTION DETAILS	902-905
CURB RAMP DETAILS	906-911
PAVEMENT REMOVAL PLAN	912
ROADWAY DETAILS	913-914
PIPE PROFILES	915-934
UNDERDRAIN DETAILS	935-939
DRAINAGE DETAILS	940-942
WATER WORK NOTES & DETAILS	943-945
TRAFFIC CONTROL	946-991
TRAFFIC SURVEILLANCE	992-1002, 1002A, 1002B
LIGHTING	1003-1031
FENCE PLAN	1032-1038
GEOTECHNICAL PROFILES - ROADWAY	1039-1068

DESIGN DESIGNATIONS

	I-490 EB FROM I-71 TO I-77	I-490 EB FROM I-77 TO E. 55TH ST.	I-490 WB FROM I-71 TO E. 55TH ST.
CURRENT YEAR ADT (2023)	38,250	16,450	38,250
DESIGN YEAR ADT (2043)	44,250	9,750	44,250
DESIGN HOURLY VOLUME (2043)	8,050	900	8,050
DIRECTIONAL DISTRIBUTION	70%	52%	70%
TRUCKS (24 HOUR B & C)	8%	8%	8%
TD	4%	6%	4%
DESIGN SPEED	65 MPH	40 MPH	65 MPH
LEGAL SPEED	60 MPH	35 MPH	60 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 URBAN INTERSTATES	01 URBAN INTERSTATE	01 URBAN INTERSTATE
NHS PROJECT	YES	YES	YES

	I-71 SOUTH OF I-490	I-77	W. 7TH ST.
CURRENT YEAR ADT (2023)	86,000	52,000	6,000
DESIGN YEAR ADT (2043)	86,000	67,000	6,000
DESIGN HOURLY VOLUME (2043)	8,600	8,000	700
DIRECTIONAL DISTRIBUTION	70%	70%	53%
TRUCKS (24 HOUR B & C)	4%	9%	9%
TD	2%	3%	11%
DESIGN SPEED	65 MPH	55 MPH	30 MPH
LEGAL SPEED	60 MPH	50 MPH	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	01 URBAN INTERSTATE	01 URBAN INTERSTATE	05 URBAN MAJOR COLLECTOR
NHS PROJECT	YES	YES	NO

BALLOON LEGEND

- AB-# ABANDON
- B-# CONCRETE BARRIER
- BR-# CONCRETE BARRIER REMOVED
- D-# CATCH BASINS, MANHOLES AND INLETS
- DJ-# CATCH BASINS, MANHOLES AND INLETS ADJUSTED/RECONSTRUCTED TO GRADE
- DR-# CATCH BASINS, MANHOLES AND INLETS REMOVED
- DV-# DRIVEWAYS
- E-# EROSION CONTROL
- EX-# EXISTING CATCH BASINS, MANHOLES AND INLETS
- F-# FENCE
- FP-# FILL & PLUG
- FR-# FENCE REMOVED
- G-# GUARDRAIL
- GR-# GUARDRAIL REMOVED
- HR-# HEADWALL REMOVED
- HW-# HEADWALL
- LS-# LANDSCAPING
- P-# DRAINAGE PIPES
- PC-# PIPE CLEANOUT
- PR-# PIPES REMOVED
- R-# MISCELLANEOUS REMOVALS
- SA-# SANITARY MANHOLE
- SJ-# SANITARY STRUCTURE ADJUSTED/RECONSTRUCTED TO GRADE
- SL-# SANITARY LATERAL
- SM-# SEEDING AND MULCHING
- SP-# SANITARY PIPE
- SR-# SANITARY REMOVAL
- U-# UNDERDRAINS
- W-# WATER WORK
- WJ-# WATER WORK ADJUSTED TO GRADE
- WR-# WATER WORK REMOVALS

EXISTING UTILITY SYMBOL LEGEND

- Guy Pole
- Flag Pole
- Utility Pole
- Power Pole
- Yard Light
- Parking Meters
- Parking Meter
- Air Condition Unit
- Guy Wire w/Anchor
- Light Pole
- Light Pedestal
- Electric Marker Post
- Electric Meter
- Electric Transformer
- Electric Pedestal
- Electric Tower
- Electric Outlet
- Electric Pull Box
- Electric Manhole
- Gas Valve
- Gas Service
- Gas Marker Post
- Gas Meter/ Regulator
- Tank (Gas, Propane)
- Fire Hydrant
- Water Valve
- Water Manhole
- Water Well
- Water Meter
- Water Spigot / Tap
- Cistern
- Sprinkler
- Sprinkler Control Box
- Monitoring Well
- Cable TV Pole
- Cable TV Marker Post
- Cable TV Pedestal
- Telephone Pole
- Telephone Marker Post
- Telephone Pedestal
- Telephone Booth/or Drive-Up
- Traffic Lighting Control Box
- Traffic Lighting Pull Box
- Sign
- Curb Inlet
- Catch Basin
- Cleanout
- Sanitary Manhole
- Storm Manhole
- Telephone Manhole

PROPOSED UTILITY SYMBOL LEGEND

- Proposed Catch Basins
- Proposed Manhole
- Manhole Adjusted To Grade
- Proposed Exfiltration Trench
- Proposed Water Valve
- Proposed Fire Hydrant
- Sanitary Manhole Adjusted To Grade
- Proposed Traffic Pullbox
- Proposed Conventional Luminaire
- Proposed Lighting Pullbox
- Proposed Decorative Luminaire
- Proposed Signal Pole Pedestal
- Proposed Signal Pole
- Test Hole location

UTILITY LINE LEGEND

- Water Line
- Gas Line
- Sanitary Line
- Underground Electric
- Propane Line
- Underground Telephone
- Diesel
- Cable TV.
- Signal Wiring

DESIGN AGENCY

 DESIGNER
 ATR
 REVIEWER
 PJF 11-21-23
 PROJECT ID
 107408
 SHEET
 2 TOTAL
 1068

REVISIONS		
NO.	DATE	DESCRIPTION
1	01/15/24	ADDED SHEET 65A

GENERAL (CONTINUED)

ITEM 619 FIELD OFFICE, TYPE C, AS PER PLAN

ALL REQUIREMENTS OF C&MS 619 SHALL APPLY EXCEPT AS MODIFIED HEREIN:

THE FIELD OFFICE SHALL BE A SUITE TYPE OFFICE (NO TRAILER OR MODULAR OFFICE) WITH A MINIMUM OF 4,000 SQUARE FEET AND AT GROUND LEVEL WITH A MINIMUM CEILING HEIGHT OF EIGHT (8) FEET. PROVIDE TWO (2) OUTSIDE DOORS, LOCKABLE VANDAL PROOF CYLINDER TYPE DEAD BOLTS AND LOCKABLE WINDOWS. THE FLOOR SPACE WILL BE DIVIDED INTO TWO RESTROOMS, ONE GENERAL OFFICE AREA (MINIMUM 400 SQUARE FEET), NOT LESS THAN SEVEN INDIVIDUAL OFFICES (MINIMUM 300 SQUARE FEET EACH) AS SEPARATE ENCLOSED ROOMS (NO CUBICLE DIVIDERS WILL BE ACCEPTED), ONE KITCHEN SPACE INCLUDING SINK, REFRIGERATOR, AND MICROWAVE, AND ONE CONFERENCE ROOM (MINIMUM 1000 SQUARE FEET).

FURNISH NEAT, SANITARY, ENCLOSED TOILET ACCOMMODATIONS CONNECTED TO AN EXISTING SANITARY SEWER LINE FOR THE USE OF THE OCCUPANTS OF THE FIELD OFFICE, MEETING APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. FURNISH ASSOCIATED LAVATORY AND SANITARY SUPPLIES. POTABLE HOT AND COLD RUNNING WATER WILL BE PROVIDED IN THE RESTROOM FOR SANITARY PURPOSES.

FURNISH TRASH COLLECTION SERVICE/DUMPSTER.

FURNISH PROFESSIONAL, BONDED, AND INSURED JANITORIAL SERVICE WITH A WEEKLY CLEANING OF THE ENTIRE OFFICE TO INCLUDE THE RESTROOM FACILITIES FOR THE DURATION OF THE PROJECT,

FURNISH BOTTLED DRINKING WATER SERVICE WITH A HOT AND COLD DISPENSER AND ASSOCIATED SUPPLIES.

FURNISH A BOX FOR STORING A NUCLEAR DENSITY GAUGE WITH REQUIREMENTS AS SET FORTH IN C&MS 619.02.

FURNISH AND MAINTAIN A BROADBAND INTERNET CONNECTION CAPABLE OF MINIMUM DOWNLOAD SPEEDS OF 1.0 GB/S. PROVIDE A WIRELESS ROUTER THAT SUPPORTS WI-FI STANDARD 802.11AX (WIFI 6) AND A MINIMUM WIRELESS DATA TRANSFER RATE OF 4000 MB/S. PROVIDE PRE-WIRED ETHERNET ACCESS FOR ALL INDIVIDUAL OFFICES AND THE CONFERENCE ROOM.

FURNISH TEN (10) DESK AND CHAIR SETS, THIRTY (30) STACKABLE CHAIRS, TWENTY (20) WORK TABLES (30" x 72"), AND TWELVE (12) 24- QUART WASTE BASKETS WITH APPROPRIATE SIZED TRASH BAGS.

FURNISH AND INSTALL TWO (2) WALL-MOUNTED 8' x 4' GLASS, MAGNETIC DRY ERASE BOARDS.

FURNISH ONE NEW TELEVISION WITH THE FOLLOWING SPECIFICATIONS:

- a) DIAGONAL SCREEN SIZE - 70" MINIMUM"
- b) NATIVE RESOLUTION - 4K
- c) HDMI PORTS: 3
- d) ALL ACCESSORIES NECESSARY TO OPERATE
- f) ALL HARDWARE AND INSTALLATION NECESSARY TO HANG THE TELEVISION ON THE WALL IN THE CONFERENCE ROOM

THE FIELD OFFICE WILL BE APPROVED IN ADVANCE BY THE ENGINEER AND FULLY OPERATIONAL WITHIN 30 DAYS AFTER THE SIGNING AND EXECUTION OF THE PROJECT OR PRIOR TO THE START OF ANY CONSTRUCTION WORK, WHICHEVER COMES FIRST.

THE DEPARTMENT WILL MEASURE FIELD OFFICE, TYPE C, AS PER PLAN BY THE NUMBER OF MONTHS THE OFFICE IS MAINTAINED. A PARTIAL MONTH AT THE END OF THE PROJECT WILL BE PAID AS A FULL MONTH.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
619	MONTH	FIELD OFFICE, TYPE C, AS PER PLAN

QUANTITIES CARRIED TO GENERAL NOTES SUBSUMMARY ON SHEET 59

ITEM SPECIAL - SURVEY CONTROL VERIFICATION

THE CONTRACTOR SHALL PERFORM THIS WORK TO VERIFY THE PROVIDED SURVEY CONTROL. THE CONTRACTOR WILL PERFORM THE VERIFICATION USING ONE OF THE TWO METHODS BELOW DEPENDENT UPON THE CONTRACTOR'S CHOSEN MEANS OF SURVEY CONTROL TO BE USED ON THE PROJECT. THE WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN OHIO LICENSED SURVEYOR.

- 1) IF USING GPS DEVICES TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL:
 - a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
 - b. PERFORM A SITE CALIBRATION UTILIZING THE AVAILABLE HORIZONTAL AND VERTICAL CONTROL POINTS PROVIDED IN THE PLAN.
 - c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.
- 2) IF USING CONVENTIONAL SURVEY INSTRUMENTATION TO ESTABLISH AND OR PROVIDE SUPPLEMENTAL HORIZONTAL AND VERTICAL SURVEY CONTROL:
 - a. LOCATE VERTICAL CONTROL POINTS PROVIDED IN THE PLANS AND PERFORM A DIFFERENTIAL LEVEL CIRCUIT.
 - b. LOCATE AND OBSERVE ANGLE AND DISTANCE TO ALL AVAILABLE HORIZONTAL CONTROL POINTS PROVIDED IN THE PLAN.
 - c. PROVIDE A REPORT, SIGNED BY AN OHIO LICENSED SURVEYOR, TO THE PROJECT ENGINEER COMPARING THE OBSERVED DATA TO THE PLAN DATA ALONG WITH A NARRATIVE DETAILING ANY DISCREPANCIES FOUND.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID ITEM.

PERMIT

IN THE CITY OF CLEVELAND, ALL PERMITS MUST BE OBTAINED FROM THE DIVISION OF ASSESSMENTS AND LICENSES PRIOR TO BEGINNING ANY WORK WITHIN THE CITY OF CLEVELAND RIGHT OF WAY. PERMITS INCLUDE BUT ARE NOT LIMITED TO STREET OPENING PERMIT, OVERLOAD PERMIT, OBSTRUCTION PERMIT AND/OR SIDEWALK PERMIT AND MAY BE OBTAINED THROUGH THE FOLLOWING CONTACT:

TRAVIS EVANS
DEPARTMENT OF FINANCE
DIVISION OF ASSESSMENTS AND LICENSES
601 LAKESIDE AVENUE, ROOM 122
CLEVELAND, OHIO 44114
PHONE: (216) 664-2174
EMAIL: DALPERMITS@CITY.CLEVELAND.OH.US

ALL STREET OPENING REPAIRS, CURB REPAIRS, AND/OR SIDEWALK REPAIRS EITHER INCIDENTAL TO THE PROJECT OR PART OF THE PROJECT MUST BE PERFORMED IN ACCORDANCE TO CITY OF CLEVELAND STANDARDS. A COPY OF THE STANDARDS CAN BE OBTAINED ON-LINE UNDER THE "FORMS AND PUBLICATIONS" TAB OF THE CAPITAL PROJECTS WEBSITE OR FROM THE DIVISION OF ENGINEERING AND CONSTRUCTION BY CALLING (216) 664-2381.

ALL PERMITS, FEES AND CHARGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEIR ASSOCIATED COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THIS ITEM. THE COST BELOW MAY NOT BE FULLY INCLUSIVE OF ALL PERMIT FEES REQUIRED TO BE PAID. NOTE THAT CLEVELAND WATER DEPARTMENT CHARGES ARE PAID UNDER A SEPARATE ITEM.

FOR BIDDING PURPOSES, THE FOLLOWING FEES AND CHARGES HAVE BEEN ESTIMATED BY THE CITY OF CLEVELAND DIVISION OF ENGINEERING AND CONSTRUCTION ON BEHALF OF THE DIVISION OF ASSESSMENTS AND LICENSES (DAL): \$5,000

DAL HAS ASSIGNED STP NUMBER _____ TO THIS PROJECT. THE AWARDED CONTRACTOR SHALL CONTACT DAL AS DESCRIBED ABOVE, USING THE ASSIGNED STP NUMBER FOR REFERENCE. THE CONTRACTOR SHALL PROVIDE DAL WITH THEIR CERTIFICATE OF INSURANCE (COI) MEETING THE CITY OF CLEVELAND REQUIREMENTS. UPON SUBMITTAL OF THE COI AND RECEIPT OF PAYMENT, DAL WILL ISSUE THE PERMIT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL NOTES SUBSUMMARY:

ITEM SPECIAL - PERMITS LUMP

REVISIONS		
NO.	DATE	DESCRIPTION
1	01/15/24	PERMITS NOTE ADDED

ROADWAY

ITEM 202 - PAVEMENT REMOVED

AS SHOWN ON THE PAVEMENT REMOVAL CALCULATIONS (SHEET 489 TO 492), THE CONTRACTOR SHALL REMOVE ALL PAVEMENTS WHETHER ASPHALT, CONCRETE, OR COMPOSITE UNDER THE PRICE BID FOR ITEM 202 - PAVEMENT REMOVAL (SY).

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.
5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING. SEE TYPICAL PLAN SHEETS 24 - 46 FOR ADDITIONAL INFORMATION.

ITEM 204 - PROOF ROLLING 81 HOUR

PAVEMENT SUBGRADE IMPROVEMENT SCHEDULE						
ALIGNMENT	BEGIN STATION	END STATION	SUBGRADE METHOD	DEPTH OF TREATMENT	SIDE	TREATMENT REASON
C/L R/W & CONST. I-490	933+23.03	985+67.50	CEMENT	14"	L/R	SILT PRESENT
	1020+69.29	1035+00.00	CEMENT	14"	L/R	SILT PRESENT
B/L CONST. EB I-490	2035+00.00	2050+87.73	CEMENT	14"	L/R	SILT PRESENT
B/L CONST. WB I-490	3035+00.00	3049+75.86	CEMENT	14"	L/R	SILT PRESENT
C/L CONST. W. 7TH ST.	10+24.33	14+47.65	CEMENT	14"	L	SILT PRESENT
	3036+66.35	3042+13.54	CEMENT	14"	L/R	
B/L CONST. RAMP E-S (I-71)	3047+21.36	3058+59.21	CEMENT	14"	L/R	
	3058+59.21	3064+68.90	CEMENT	14"	L/R	SILT PRESENT
B/L CONST. RAMP S-E (I-71)	2049+00.00	2052+23.15	CEMENT	14"	L/R	
	2052+23.15	2058+00.00	CEMENT	14"	L/R	SILT PRESENT
B/L CONST. RAMP 7-7C	68+37.92	80+59.02	CEMENT	14"	L/R	SILT PRESENT
B/L CONST. RAMP C-7	81+96.55	85+63.86	CEMENT	14"	L/R	SILT PRESENT
B/L EX. & CONST. RAMP B-C	14+98.42	18+18.79	CEMENT	14"	L/R	
B/L EX. & CONST. RAMP C-B	14+78.03	17+33.88	CEMENT	14"	L/R	
B/L CONST. RAMP E-N (I-77)	734+00.31	746+47.57	CEMENT	14"	L/R	
B/L CONST. RAMP E-S (I-77)	836+08.78	842+23.67	CEMENT	14"	L/R	
B/L CONST. RAMP N-E (I-77)	437+48.58	445+70.00	CEMENT	14"	L/R	
B/L CONST. RAMP N-W (I-77)	120+15.54	131+37.52	CEMENT	14"	L/R	
B/L CONST. RAMP S-E (I-77)	336+00.00	347+00.00	CEMENT	14"	L/R	
B/L CONST. RAMP S-W (I-77)	224+14.63	227+50.07	CEMENT	14"	L/R	
B/L CONST. RAMP W-N (I-77)	625+00.00	631+44.12	CEMENT	14"	L/R	
B/L CONST. RAMP W-S (I-77)	521+21.52	528+83.00	CEMENT	14"	L/R	

PAVING IN THE VICINITY OF EXISTING UTILITIES

CONTRACTOR SHALL SUSPEND THE CEMENT STABILIZED SUBGRADE LAYER WITHIN 10' OF THE EXISTING UTILITIES TO REMAIN, INCLUDING BUT NOT LIMITED TO ODOT I.T.S. FACILITIES.

PHASED CONSTRUCTION SUBGRADE TREATMENT

CONTRACTOR SHALL SUSPEND THE CEMENT STABILIZED SUBGRADE LAYER IN THOSE AREAS WHERE PART-WIDTH CONSTRUCTION RESULTS IN LIMITS WHICH ARE LESS THAN THE MINIMUM WIDTH OF 12' REQUIRED FOR THE CEMENT STABILIZATION EQUIPMENT.

BASED ON THE MAINTENANCE OF TRAFFIC SCHEME INCLUDED IN THESE PLANS, THE FOLLOWING WORK AREAS HAVE BEEN IDENTIFIED, BUT ARE NOT LIMITED TO, AS HAVING WIDTH LESS THAN 12':

MOT PHASE 2A:
RAMP E-N (I-77) STA. 740+61.33 TO STA. 742+23.67
RAMP E-S (I-77) STA. 840+60.61 TO STA. 842+23.67

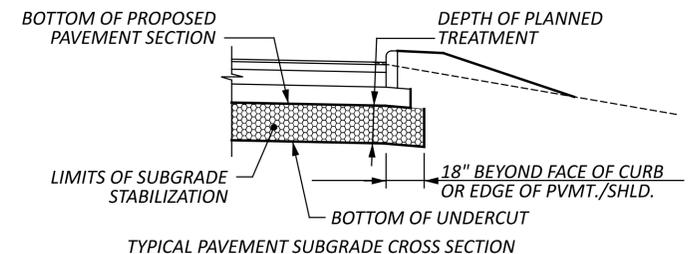
MOT PHASE 5A:
RAMP W-S (I-77) STA. 525+00.00 TO STA. 526+23.93
RAMP W-N (I-77) STA. 625+00.00 TO STA. 626+24.74

WHERE THE CEMENT STABILIZED SUBGRADE LAYER IS SUSPENDED DUE TO WIDTH, THE CONTRACTOR SHALL PROVIDE ITEM 204 - SUBGRADE COMPACTION AND ITEM 204 - GRANULAR EMBANKMENT FOR SUBGRADE TREATMENT IN THESE AREAS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

ITEM 204 - SUBGRADE COMPACTION	322 SQ. YD.
ITEM 204 - GRANULAR EMBANKMENT	125 CU. YD.

SUBGRADE STABILIZATION



CUY-490-0.00 PART 1

MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/30/2024 TIME: 2:49:29 PM USER: pfr
C:\Clients\ORD\2021\2021089\107408-Engineering\Roadway\Sheets\107408_GN002.dgn

GENERAL NOTES

DESIGN AGENCY



DESIGNER
ATR

REVIEWER
PJF 11-21-23

PROJECT ID
107408

SHEET TOTAL
51 1068

CUY-490-0.00 PART 1

MODEL: Plan 2 - Plan 2 [Sheet] PAPER SIZE: 34x22 (in.) DATE: 1/15/2024 TIME: 2:07:39 PM USER: pfr
 C:\Clients\ORD\2021\2021089\107408\Engineering\Roadway\Sheets\107408_GS006.dgn

SHEET NO.	201		203	203	204	204	204	503		601		605		611	611	611	611	611		SPECIAL		
	CLEARING AND GRUBBING		EXCAVATION	EMBANKMENT	SUBGRADE COMPACTION	GRANULAR EMBANKMENT	PROOF ROLLING	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN		TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		6" CONDUIT, TYPE B	6" CONDUIT, TYPE C	6" CONDUIT, TYPE E	6" CONDUIT, TYPE F	PRECAST REINFORCED CONCRETE OUTLET		MISCELLANEOUS METAL		
	LS		CY	CY	SY	CY	hour	LS		SY		FT		FT	FT	FT	FT	EACH		LB		
50	LS																					
51					322	125	81															
52																						
53																						
54																						
55										8		40		200	200	200	240	4		1000		
56																						
57								LS														
58			70241	3009																		
TOTALS CARRIED TO GENERAL SUMMARY		LS	70241	3009	322	125	81	LS		8		40		200	200	200	240	4		1000		
SHEET NO.	618			623		638	638		659	659	659	659	659	659	659	659	659	659			SPECIAL	SPECIAL
	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN			MONUMENT ASSEMBLY, TYPE C		WATER WORK, MISC.: CLEVELAND WATER DEPARTMENT FEES AND CHARGES	WATER WORK, MISC.: CLEVELAND WATER DEPARTMENT AS-BUILT DRAWINGS		SOIL ANALYSIS TEST	TOPSOIL	SEEDING AND MULCHING, CLASS 3B	SEEDING AND MULCHING	REPAIR SEEDING AND MULCHING	INTER-SEEDING	COMMERCIAL FERTILIZER	LIME	WATER	MOWING			SURVEY CONTROL VERIFICATION	PERMITS
	MILE		EACH		LS	LS		EACH	CY	SY	SY	SY	SY	TON	ACRE	MGAL	MSF			LS	LS	
50				30																	LS	LS
51																					LS	LS
52																						
53																						
54	5.58																					
55																						
56																						
57						LS	LS		2	7419	3490	63346	3342	3342	9.33	13.81	370	150				
58																						
TOTALS CARRIED TO GENERAL SUMMARY		5.58		30		LS	LS		2	7419	3490	63346	3342	3342	9.33	13.81	370	150			LS	LS

GENERAL NOTES SUBSUMMARY

DESIGN AGENCY

 GPD GROUP
 DESIGNER
 JAN
 REVIEWER
 PJF 11-21-23
 PROJECT ID
 107408
 SHEET
 59 TOTAL
 1068

REVISIONS		
NO.	DATE	DESCRIPTION
1	01/15/24	PERMITS QUANTITY ADDED

1

1

NOTIFICATIONS AND CONTACTS

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING ENTITIES AT LEAST FOURTEEN (14) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES. INCLUDED IN THE NOTIFICATION SHALL BE THE PROJECTED DATES AND TIME FRAMES OF ANY ROAD CLOSURES OR DETOURS, INCLUDING DETOURS TO THE TOWPATH TRAIL AND IMPACTS TO PARCEL 10-T.

1. ODOT DISTRICT 12
5500 TRANSPORTATION BLVD.
GARFIELD HEIGHTS, OHIO 44125
216-581-2100
2. CITY OF CLEVELAND DEPARTMENT OF PUBLIC WORKS
500 LAKESIDE AVE.
CLEVELAND, OHIO 44114
216-664-2485
3. CITY OF CLEVELAND DIVISION OF FIRE
1645 SUPERIOR AVE., EAST
CLEVELAND, OHIO 44114
216-664-6800
4. CITY OF CLEVELAND DIVISION OF POLICE
1300 ONTARIO ST.
CLEVELAND, OHIO 44113
216-623-5000
5. CITY OF CLEVELAND METROPOLITAN SCHOOLS
1111 SUPERIOR AVE. E, SUITE 1800
CLEVELAND, OHIO 44114
216-838-0000
6. CUYAHOGA COUNTY SHERIFF
1215 W 3RD ST.
CLEVELAND, OHIO 44113
216-443-6000
7. GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
1240 WEST 6TH ST.
CLEVELAND, OHIO 44113-1302
216-356-3270
8. OHIO STATE HIGHWAY PATROL
5225 W 140th ST.
BROOKPARK, OHIO 44142
216-265-1677
9. CUYAHOGA METROPOLITAN HOUSING AUTHORITY
8120 KINSMAN RD.
CLEVELAND, OH 44104
216-348-5000

1 THE FOLLOWING CONTACTS SHALL BE NOTIFIED 48 HOURS PRIOR TO THE TOWPATH TRAIL CLOSURE.

10. CANALWAY PARTNERS
ATT: MERA CARDENAS
PO BOX 609420
CLEVELAND, OH 44109
216-520-1825
11. JEREMY SKAGGS SR.
PARK MANAGER, OHIO & ERIE CANAL RESERVATION
4101 FULTON PARKWAY
CLEVELAND, OHIO 44144
OFFICE: 216-341-1706
MOBILE: 440-523-1241
EMAIL: JDS1@CLEVELANDMETROPARKS.COM

SHOULD ANY OF THE PROJECTED DATES AND TIME FRAMES OF THE START AND END OF THE ROAD CLOSURES CHANGE THROUGHOUT THE DURATION OF THE PROJECT, THE AGENCIES LISTED ABOVE MUST BE NOTIFIED IMMEDIATELY.

SEQUENCE OF CONSTRUCTION

PRE-PHASE 1

PRIOR TO COMMENCING PHASE 1 CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONSTRUCT TEMPORARY PAVEMENT REQUIRED FOR PHASE 1. DURING CONSTRUCTION OF THE TEMPORARY PAVEMENT, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-95.30. ONLY ONE LANE, ADJACENT TO EITHER THE INSIDE OR OUTSIDE SHOULDER MAY BE CLOSED AT ANY ONE TIME IN ACCORDANCE WITH THE MOST UP TO DATE ODOT PERMITTED LANE CLOSURE CHART (SEE LANE VALUE CONTRACT TABLE ON SHEET 61). THIS WORK ZONE SHALL BE REMOVED BY 6 AM DAILY. ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES.

PHASE 1

FROM THE BEGINNING OF THE PROJECT TO THE PEDESTRIAN BRIDGE/W. 11TH STREET THE CONTRACTOR SHALL SHIFT TWO EASTBOUND INTERSTATE 490 LANES TO THE OUTSIDE LANES AND SHOULDER AND ONE WESTBOUND INTERSTATE 490 LANE TO THE OUTSIDE LANE AND SHOULDER. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE MEDIAN DRAINAGE, MEDIAN BARRIER, INSIDE SHOULDERS, AND INSIDE LANES.

PHASE 1 (CONT.)

BETWEEN THE PEDESTRIAN BRIDGE/W. 11TH STREET AND THE END OF THE CUYAHOGA RIVER BRIDGE THE CONTRACTOR SHALL SHIFT THREE EASTBOUND AND WESTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER. BETWEEN THE END OF THE CUYAHOGA RIVER BRIDGE AND THE END OF THE PROJECT THE CONTRACTOR SHALL SHIFT TWO EASTBOUND AND WESTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE MEDIAN DRAINAGE AND MEDIAN BARRIER.

THE CONTRACTOR SHALL SUSPEND CONSTRUCTION OF THE PROPOSED MEDIAN BARRIER JUST EAST OF THE PEDESTRIAN BRIDGE/W. 11TH STREET AND CONSTRUCT THE WEST END CROSSEVER AND ASSOCIATED TEMPORARY PAVEMENT. THE CONTRACTOR SHALL ALSO CONSTRUCT THE EAST END CROSSEVER AND ASSOCIATED TEMPORARY PAVEMENT JUST TO THE EAST OF THE NS RAILROAD BRIDGE. ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES.

IN ORDER TO COMPLETE THE EAST CROSSEVER TEMPORARY PAVEMENT, EAST OF THE N-S RAILROAD BRIDGE. ONE WESTBOUND OPPORTUNITY CORRIDOR LANE SHALL BE CLOSED IN ACCORDANCE WITH THE MOST UP TO DATE ODOT PERMITTED LANE CLOSURE CHART AND PER MT-95.30.

1ST WINTER OVER PHASE

AFTER THE COMPLETION OF PHASE 1, THE CONTRACTOR SHALL WINTER OVER IN THE PHASE 1 TRAFFIC PATTERN.

PRE-PHASE 2

PRIOR TO COMMENCING PHASE 2 CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONSTRUCT TEMPORARY PAVEMENT REQUIRED FOR PHASE 2. DURING CONSTRUCTION OF THE TEMPORARY PAVEMENT, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-95.30. ONLY ONE LANE, ADJACENT TO EITHER THE INSIDE OR OUTSIDE SHOULDER MAY BE CLOSED AT ANY ONE TIME BETWEEN 8 PM – 6 AM OR IN ACCORDANCE WITH THE MOST UP TO DATE ODOT PERMITTED LANE CLOSURE CHART. THIS WORK ZONE SHALL BE REMOVED BY 6 AM DAILY. ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES.

PHASE 2

FROM THE BEGINNING OF THE PROJECT TO THE PEDESTRIAN BRIDGE/W. 11TH STREET THE CONTRACTOR SHALL KEEP EASTBOUND TRAFFIC IN THE PHASE 1 TRAFFIC PATTERN AND SHIFT TWO WESTBOUND INTERSTATE 490 LANES TO THE INSIDE LANE AND SHOULDER. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE WESTBOUND OUTSIDE SHOULDER, AND OUTSIDE LANES.

BETWEEN THE PEDESTRIAN BRIDGE/W. 11TH STREET AND THE END OF THE CUYAHOGA RIVER BRIDGE THE CONTRACTOR SHALL SHIFT THREE EASTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER, SHIFT TWO WESTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER, AND CROSSEVER ONE WESTBOUND LANE ONTO EASTBOUND PAVEMENT. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE WESTBOUND INSIDE SHOULDER AND INSIDE LANES.

BETWEEN THE END OF THE CUYAHOGA RIVER BRIDGE AND THE END OF THE PROJECT THE CONTRACTOR SHALL SHIFT TWO EASTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER AND CROSSEVER ONE WESTBOUND LANE. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE FULL WIDTH WESTBOUND PAVEMENT.

ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES EXCEPT FOR THE FOLLOWING RAMPS/MOVEMENTS WHICH MAY BE CLOSED AND DETOURED DURING RAMP/PAVEMENT RECONSTRUCTION ONLY:

WESTBOUND OPPORTUNITY CORRIDOR TRAFFIC TRYING TO ACCESS I-71 SOUTHBOUND.

1 THE CONTRACTOR SHALL CLOSE AND DETOUR THE TOWPATH TRAIL WHEN WORKING ON THE CUYAHOGA RIVER BRIDGE.

PHASE 2A

ALL TRAFFIC SHALL REMAIN IN THE PHASE 2 TRAFFIC PATTERN, EXCEPT FOR THE GORE AREAS BETWEEN RAMP N-W (I-77)/RAMP S-W (I-77) AND RAMP E-S (I-77)/RAMP E-S (I-77). THE CONTRACTOR SHALL SHIFT ONE LANE OF TRAFFIC TO THE OUTSIDE OF EACH RAMP AND CONSTRUCT THE CENTER GORE AREAS BETWEEN TRAFFIC. THE CONTRACTOR SHALL CLOSE AND DETOUR RAMP S-W (I-77 NB) DURING RAMP / PAVEMENT RECONSTRUCTION ONLY.

PRE-PHASE 3

PRIOR TO COMMENCING PHASE 3 CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONSTRUCT TEMPORARY PAVEMENT REQUIRED FOR PHASE 3. DURING CONSTRUCTION OF THE TEMPORARY PAVEMENT, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-95.30. ONLY ONE LANE, ADJACENT TO EITHER THE INSIDE OR OUTSIDE SHOULDER MAY BE CLOSED AT ANY ONE TIME BETWEEN 8 PM – 6 AM OR IN ACCORDANCE WITH THE MOST UP TO DATE ODOT PERMITTED LANE CLOSURE CHART. THIS WORK ZONE SHALL BE REMOVED BY 6 AM DAILY. ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES.

PHASE 3

FROM THE BEGINNING OF THE PROJECT TO THE PEDESTRIAN BRIDGE/W. 11TH STREET THE CONTRACTOR SHALL KEEP EASTBOUND TRAFFIC IN THE PHASE 1 TRAFFIC PATTERN AND PLACE WESTBOUND TRAFFIC INTO THE PROPOSED TRAFFIC PATTERN. THE CONTRACTOR SHALL NOT CONSTRUCT ANY ROADWAY IMPROVEMENTS IN THIS SECTION OF PAVEMENT.

BETWEEN THE PEDESTRIAN BRIDGE/W. 11TH STREET AND THE END OF THE CUYAHOGA RIVER BRIDGE THE CONTRACTOR SHALL KEEP EASTBOUND TRAFFIC AND THE SINGLE WESTBOUND CROSSED OVER LANE IN THE PHASE 2 TRAFFIC PATTERN AND SHIFT TWO WESTBOUND LANES TO THE INSIDE LANES AND SHOULDER. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE WESTBOUND OUTSIDE SHOULDER AND OUTSIDE LANES.

BETWEEN THE END OF THE CUYAHOGA RIVER BRIDGE AND THE END OF THE PROJECT THE CONTRACTOR SHALL KEEP BOTH EASTBOUND AND WESTBOUND TRAFFIC IN THE PHASE 2 TRAFFIC PATTERN. THE CONTRACTOR SHALL CONTINUE CONSTRUCTION OF ALL PROPOSED ROADWAY IMPROVEMENTS TO THE FULL WIDTH WESTBOUND PAVEMENT.

ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES EXCEPT FOR THE FOLLOWING RAMPS/MOVEMENTS WHICH MAY BE CLOSED AND DETOURED DURING RAMP/PAVEMENT RECONSTRUCTION ONLY:

WESTBOUND EXIT RAMP C-7 TO W. 7TH STREET
WESTBOUND ENTRANCE RAMP B-3 FROM BROADWAY AVE./ROCKEFELLER AVE.
WESTBOUND OPPORTUNITY CORRIDOR TRAFFIC TRYING TO ACCESS I-71 SOUTHBOUND

1 THE CONTRACTOR SHALL CLOSE AND DETOUR THE TOWPATH TRAIL WHEN WORKING ON THE CUYAHOGA RIVER BRIDGE.

PHASE 3A

ALL TRAFFIC SHALL REMAIN IN THE PHASE 3 TRAFFIC PATTERN, EXCEPT FOR THE GORE AREA BETWEEN RAMP E-S (I-71) AND I-490 WB. THE CONTRACTOR SHALL SHIFT ONE LANE OF TRAFFIC TO THE OUTSIDE OF RAMP E-S (I-71) AND ONE LANE OF TRAFFIC TO THE INSIDE OF I-490 WB. THE CONTRACTOR SHALL CONSTRUCT THE CENTER GORE AREA BETWEEN TRAFFIC.

2ND WINTER OVER PHASE

AFTER THE COMPLETION OF PHASE 3, THE CONTRACTOR SHALL WINTER OVER IN THE EXISTING/PROPOSED TRAFFIC PATTERN. SEE TRAFFIC CONTROL PLANS FOR PAVEMENT MARKING PLACEMENT.

PRE-PHASE 4

PRIOR TO COMMENCING PHASE 4 CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONSTRUCT TEMPORARY PAVEMENT REQUIRED FOR PHASE 4. DURING CONSTRUCTION OF THE TEMPORARY PAVEMENT, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-95.30. ONLY ONE LANE, ADJACENT TO EITHER THE INSIDE OR OUTSIDE SHOULDER MAY BE CLOSED AT ANY ONE TIME BETWEEN 8 PM – 6 AM OR IN ACCORDANCE WITH THE MOST UP TO DATE ODOT PERMITTED LANE CLOSURE CHART. THIS WORK ZONE SHALL BE REMOVED BY 6 AM DAILY. ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES.

PHASE 4

FROM THE BEGINNING OF THE PROJECT TO THE PEDESTRIAN BRIDGE/W. 11TH STREET THE CONTRACTOR SHALL KEEP EASTBOUND TRAFFIC IN THE PHASE 1 TRAFFIC PATTERN AND KEEP WESTBOUND TRAFFIC INTO THE PROPOSED TRAFFIC PATTERN. THE CONTRACTOR SHALL NOT CONSTRUCT ANY ROADWAY IMPROVEMENTS IN THIS SECTION OF PAVEMENT.

BETWEEN THE PEDESTRIAN BRIDGE/W. 11TH STREET AND THE END OF THE CUYAHOGA RIVER BRIDGE THE CONTRACTOR SHALL SHIFT THREE WESTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER, SHIFT TWO EASTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER, AND CROSSEVER ONE EASTBOUND LANE ONTO WESTBOUND PAVEMENT. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE EASTBOUND INSIDE SHOULDER AND INSIDE LANES.

PHASE 4 (CONT.)

BETWEEN THE END OF THE CUYAHOGA RIVER BRIDGE AND THE END OF THE PROJECT THE CONTRACTOR SHALL SHIFT TWO WESTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER, SHIFT ONE EASTBOUND LANE TO THE OUTSIDE LANE AND SHOULDER, AND CROSSEVER ONE EASTBOUND LANE ONTO WESTBOUND PAVEMENT. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE EASTBOUND INSIDE SHOULDER AND INSIDE LANES.

ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES.

1 THE CONTRACTOR SHALL CLOSE AND DETOUR THE TOWPATH TRAIL WHEN WORKING ON THE CUYAHOGA RIVER BRIDGE.

PRE-PHASE 5

PRIOR TO COMMENCING PHASE 5 CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONSTRUCT TEMPORARY PAVEMENT REQUIRED FOR PHASE 5. DURING CONSTRUCTION OF THE TEMPORARY PAVEMENT, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-95.30. ONLY ONE LANE, ADJACENT TO EITHER THE INSIDE OR OUTSIDE SHOULDER MAY BE CLOSED AT ANY ONE TIME BETWEEN 8 PM – 6 AM OR IN ACCORDANCE WITH THE MOST UP TO DATE ODOT PERMITTED LANE CLOSURE CHART. THIS WORK ZONE SHALL BE REMOVED BY 6 AM DAILY. ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES.

PHASE 5

FROM THE BEGINNING OF THE PROJECT TO THE PEDESTRIAN BRIDGE/W. 11TH STREET THE CONTRACTOR SHALL SHIFT TWO EASTBOUND INTERSTATE 490 LANES TO THE INSIDE LANES AND SHOULDER AND KEEP WESTBOUND TRAFFIC INTO THE PROPOSED TRAFFIC PATTERN. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE EASTBOUND OUTSIDE SHOULDER AND OUTSIDE LANES.

BETWEEN THE PEDESTRIAN BRIDGE/W. 11TH STREET AND THE END OF THE CUYAHOGA RIVER BRIDGE THE CONTRACTOR SHALL KEEP WESTBOUND TRAFFIC AND THE SINGLE EASTBOUND CROSSED OVER LANE IN THE PHASE 4 TRAFFIC PATTERN AND SHIFT TWO EASTBOUND LANES TO THE OUTSIDE LANES AND SHOULDER. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED ROADWAY IMPROVEMENTS TO THE EASTBOUND OUTSIDE SHOULDER AND OUTSIDE LANES.

ALL RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES EXCEPT FOR THE FOLLOWING RAMPS/MOVEMENTS WHICH MAY BE CLOSED AND DETOURED DURING RAMP/PAVEMENT RECONSTRUCTION ONLY:

EASTBOUND ENTRANCE RAMP 7-C FROM W. 7TH STREET
EASTBOUND EXIT RAMP C-B TO BROADWAY AVE.

1 THE CONTRACTOR SHALL CLOSE AND DETOUR THE TOWPATH TRAIL WHEN WORKING ON THE CUYAHOGA RIVER BRIDGE.

PHASE 5A

ALL TRAFFIC SHALL REMAIN IN THE PHASE 5 TRAFFIC PATTERN, EXCEPT FOR RAMP S-E (I-71) AND BETWEEN THE PEDESTRIAN BRIDGE/W. 11TH STREET AND I-490 EB BEFORE W. 7TH STREET. THE CONTRACTOR SHALL SHIFT ONE LANE OF TRAFFIC TO THE INSIDE OF RAMP S-E (I-71) AND ONE LANE OF TRAFFIC TO THE INSIDE OF I-490 EB. THE CONTRACTOR SHALL CONSTRUCT THE OUTSIDE OF RAMP S-E (I-71) AND THE REMAINING I-490 EB PAVEMENT BETWEEN THE PEDESTRIAN BRIDGE/W. 11TH STREET AND W. 7TH STREET.

PHASE 6

THE CONTRACTOR CLOSE THE INSIDE LANE IN BOTH DIRECTIONS AND THE CROSSEVERS SHALL BE REMOVED AND THE PREVIOUSLY SUSPENDED MEDIAN BARRIER SHALL BE CONSTRUCTED. ALL RAMPS SHALL BE OPEN TO TRAFFIC.

PHASE 7

THE CONTRACTOR SHALL PERFORM PAVEMENT PLANING OPERATIONS, PLACE THE FINAL SURFACE COURSE, AND PLACE THE FINAL PAVEMENT MARKINGS THROUGHOUT THE PROJECT LIMITS. ALL WORK SHALL BE RESTRICTED TO NIGHTTIME HOURS BETWEEN 8 PM AND 6 AM. DURING PAVEMENT PLANING OPERATIONS AND PLACEMENT OF THE FINAL SURFACE COURSE, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-95.30. DURING PLACEMENT OF THE FINAL PAVEMENT MARKINGS, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-99.20.

REVISIONS		
NO.	DATE	DESCRIPTION
1	01/15/24	CANALWAY PARTNERS AND CLE. METROPARKS CONTACT INFO ADDED AND TOWPATH TRAIL CLOSURE ADDED TO SEQUENCE OF CONSTRUCTION PHASES

DESIGN AGENCY



DESIGNER

KRM

REVIEWER

AKF 11-21-23

PROJECT ID

107408

SHEET TOTAL

60 1068

SCHEDULE OF THROUGH LANES TO BE MAINTAINED

ALL LANE CLOSURES MAY ONLY BE IMPLEMENTED AT THE TIMES PERMITTED BY THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" LIST, WHICH IS LOCATED ON THE ODOT WEBSITE:

http://www.dot.state.oh.us/districts/D12/HighwayManagement/Pages/PermittedLaneClosures.aspx

THE LATEST REVISION, AT 14 DAYS PRIOR TO THE BID, SHALL BE IN EFFECT FOR THIS PROJECT.

NO LANE OR SHOULDER CLOSURES SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED, UNLESS DIRECTED BY THE ENGINEER. SHOULDER CLOSURES SHALL ONLY BE ALLOWED AT THE TIMES SPECIFIED FOR LANE CLOSURES.

ANY ROADWAY NOT LISTED SHALL NOT HAVE ANY CLOSURES ON WEEKDAYS FROM 6:00 AM TO 9:00 AM AND 3:00 PM TO 6:00 PM. CONTACT TROY ONESTI, DISTRICT 12 WORK ZONE TRAFFIC MANAGER, AT (216) 584-2204 IF THERE ARE ANY QUESTIONS.

ALL NOTES ON THE PERMITTED LANE CLOSURE TIMES SHALL BE PART OF THE PROJECT.

ITEM 614 - MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

- A MINIMUM OF THREE (3) ELEVEN FOOT (11') LANES OF TRAFFIC ON I-490 (UNLESS OTHERWISE SPECIFIED IN THE PLANS) IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT OR ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, DURING CONSTRUCTION OF THE WORK.
- THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (216) 584-2006 FOURTEEN (14) DAYS PRIOR TO THE BEGINNING OF WORK.
- LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
- WHEN DETOUR SIGNS ARE IN USE, ALL CONFLICTING SIGNS SHALL BE COVERED.
- FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING ANY PERIOD OTHER THAN 6-9 AM AND 3-6 PM SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
- 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.
- A MINIMUM OF ONE LANE OF TRAFFIC ON RAMPS SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED THE CONSECUTIVE CALENDAR DAYS LISTED ON THE LANE VALUE CONTRACT TABLE, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 124 - 136. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT LISTED ON THE LANE VALUE CONTRACT TABLE PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.
- IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS AND PROVISIONS OF THE OMUTCD AND THE FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER SHALL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.
- THE TEMPORARY TRAFFIC CONTROL SHALL BE MAINTAINED THROUGHOUT THIS PROJECT BY THE CONTRACTOR. PERMANENT TRAFFIC CONTROL MAY BE TEMPORARILY RELOCATED AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED, AND IMPROPERLY PLACED SIGNS. ANY WORK DONE BY THE CITY OF CLEVELAND OR THE OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING INSTALLATION, MODIFICATION, REMOVAL AND/OR REPLACEMENT OF PERMANENT TRAFFIC CONTROL DEVICES, AS A RESULT OF WORK DONE BY THE CONTRACTOR SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

ITEM 614 - MAINTAINING TRAFFIC (CONT.)

- NO WORK SHALL BE PERFORMED AND ALL EXISTING MAINLINE I-490 LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

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

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

DAY OF HOLIDAY OR SPECIAL EVENT	TIME ALL MAINLINE I-490 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)	6:00 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

DURING THE SAME PERIOD, 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).

11. IN THE VICINITY OF THE TRAIL THE EXISTING TOWPATH TRAIL SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED EVENTS:

- TOWPATH MARATHON - FIRST WEEKEND OF OCTOBER 2024
- TOWPATH TRAIL LANTERN PARADE - FIRST WEEKEND OF MARCH 2025

- PRIOR TO OPENING TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. UNEVEN LONGITUDINAL JOINTS SHALL BE TREATED IN ACCORDANCE WITH ODOT SCD MT-101.90. AT UNEVEN TRANSVERSE JOINTS, THE CONTRACTOR SHALL PROVIDE TEMPORARY ASPHALT RAMPING TO ENSURE A SMOOTH TRANSITION FOR THE TRAVELING PUBLIC. THE MINIMUM TAPER RATE FOR TEMPORARY RAMPING AT UNEVEN TRANSVERSE JOINTS IS 120:1. PRIOR TO PLACING THE SURFACE COURSE, ALL TEMPORARY RAMPING AND WEDGE MATERIAL SHALL BE REMOVED. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 250 CY

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, CURRENT EDITION, LATEST REVISION. 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.

DRUM REQUIREMENTS

IN ADDITION TO THE REQUIREMENTS OF THE PLANS, SPECIFICATION AND PROPOSAL, DRUMS FURNISHED BY THE CONTRACTOR SHALL BE NEW AND UNUSED AT THE TIME OF ARRIVAL ON THE PROJECT. ANY DRUMS BROUGHT ON THE PROJECT, WHICH HAVE PREVIOUSLY BEEN USED ELSEWHERE, WILL NOT BE ACCEPTED. PAYMENT FOR DRUMS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

LANE VALUE CONTRACT (PN 127)

THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE DESCRIBED CRITICAL LANE/RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED BELOW. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF THE CRITICAL WORK.

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLACE.

LANE VALUE CONTRACT TABLE			
DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME PERIOD
I-490 - BEGIN PROJECT TO SR-176 SPLIT (EB)	PER PLCS	PER LANE/PER MINUTE	\$85
I-490 - SR-176 SPLIT TO BROADWAY (EB)	PER PLCS	PER LANE/PER MINUTE	\$155
I-490 - BROADWAY TO END PROJECT (EB)	PER PLCS	PER LANE/PER MINUTE	\$120
I-490 - END PROJECT TO BROADWAY (WB)	PER PLCS	PER LANE/PER MINUTE	\$265
I-490 - BROADWAY TO I-71 SPLIT (WB)	PER PLCS	PER LANE/PER MINUTE	\$155
I-490 / I-71 SPLIT TO BEGIN PROJECT (WB)	PER PLCS	PER LANE/PER MINUTE	\$125

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 AND CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY:

ITEM 616, WATER 300 MGAL

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 50 EACH HAS BEEN PROVIDED IN THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY.

REVISIONS		
NO.	DATE	DESCRIPTION
1	01/15/24	ADDED #11 TO 614 - MOT NOTE AND MOVED PORTION OF THE LANE VALUE CONTRACT TO NEW NOTE ON NEW SHEET 65A

ITEM 622 - PORTABLE BARRIER, 50", AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 50-INCH PORTABLE BARRIER AT THE LOCATIONS SHOWN ON THE PLANS. FOR DETAILS, SEE SCD RM-4.1.

PORTABLE STEEL BARRIER IS AN APPROVED ALTERNATIVE TO PORTABLE CONCRETE BARRIER. FOR INFORMATION ON APPROVED VENDORS, SEE THE APPROVED PRODUCTS LIST MAINTAINED BY THE OFFICE OF ROADWAY ENGINEERING. PORTABLE BARRIER, 32 INCHES HIGH WITH AN 18-INCH MINIMUM HEIGHT GLARE SCREEN MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TANGENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER. FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER, SEE THE MANUFACTURER'S INSTRUCTIONS. PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622, PORTABLE BARRIER, 50", AS PER PLAN.

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE APPROVED MOT EXCEPTION PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE:

- I-77 SB TO I-490 EB (RAMP N-E)
- I-77 NB TO I-490 WB (RAMP S-W)

A MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD A MINIMUM OF 30 CALENDAR DAYS PRIOR TO IMPLEMENTATION OF EACH APPROVED MOT EXCEPTION. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER AND THE CITY OF CLEVELAND AS WELL AS THE CONTRACTOR, WORKSITE TRAFFIC SUPERVISOR (WTS) AND ANY SUBCONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL.

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 12 / 07 / 2023 FOR PID 107408" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

ANY CHANGES TO THE MOT THAT IMPACT THE PREVIOUSLY APPROVED MOT EXCEPTION LISTED ABOVE SHALL BE APPROVED IN WRITING BY THE MOT EXCEPTION COMMITTEE (MOTEC). IN THE EVENT THAT SUCH CHANGES ARE PROPOSED, THE REQUEST SHALL BE COORDINATED THROUGH THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) A MINIMUM OF 30 CALENDAR DAYS PRIOR TO THE DESIRED IMPLEMENTATION DATE. IF THE DISTRICT AGREES WITH THE PROPOSED CHANGES THE DWZTM SHALL SEEK APPROVAL FROM THE MOTEC. IN THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

ITEM 614 - DETOUR SIGNING

ALL REQUIRED SIGNS AND SUPPORTS SHALL BE FURNISHED, ERECTED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614 - DETOUR SIGNING.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY:

ITEM 614 - DETOUR SIGNING LS

ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY FOR CONSTRUCTION OF THE 12" CONDUIT, TYPE B, AS PER PLAN BETWEEN TWO CONSECUTIVE TRENCH DRAINS. THE CONSTRUCTION METHOD AND BACKFILL MATERIAL SHALL MATCH SUPPLEMENTAL SPECIFICATION 839 - TRENCH DRAIN SYSTEM.

PAYMENT FOR ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 615 - ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN.

DESIGN AGENCY



DESIGNER

KRM

REVIEWER

AKF 11-21-23

PROJECT ID

107408

SHEET TOTAL

61 1068

1 INCENTIVE/DISINCENTIVE CONTRACT (PN 121)

THE CONTRACTOR SHALL COMPLETE ALL CRITICAL WORK AND SAFETY ITEMS ACCORDING TO THE INCENTIVE/DISINCENTIVE CONTRACT TABLE BELOW. IN THE EVENT THE CONTRACTOR IMPEDES THE FLOW OF TRAFFIC SUBSEQUENT TO THE OPENING TO UNRESTRICTED TRAFFIC, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE ACCORDING TO THE INCENTIVE/DISINCENTIVE CONTRACT TABLE.

CRITICAL WORK IS SHOWN BELOW IN THE INCENTIVE/DISINCENTIVE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTION OF WORK OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE AT THEIR FINAL DESIGN WIDTH WITH ALL MARKINGS, RPM'S, AND SAFETY FEATURES INSTALLED, ALONG WITH NO RESTRICTIONS WITHIN 2 FEET OF THE EDGE LINE ON THE SHOULDERS.

INCENTIVE/DISINCENTIVE AMOUNT:
 THE CONTRACTOR WILL BE PAID AN INCENTIVE OR WILL BE ASSESSED A DISINCENTIVE ACCORDING TO THE INCENTIVE/DISINCENTIVE CONTRACT TABLE BELOW.

EXTENSIONS OF TIME WILL BE FOR CALENDAR DAYS AND CALCULATED IN ACCORDANCE WITH C&MS 108.06 EXCEPT AS FOLLOWS: NO EXTENSIONS OF TIME WILL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES (UNLESS SUCH DELAYS ARE INDUSTRY WIDE), AND LABOR STRIKES (UNLESS SUCH STRIKES ARE AREA WIDE).

INCENTIVE/DISINCENTIVE TABLE			
DESCRIPTION OF CRITICAL WORK	COMPLETION DATE	DISINCENTIVE \$ PER DAY	INCENTIVE \$ PER DAY
COMPLETION OF PHASE 1 PRIOR TO WINTER SHUTDOWN	10-15-2024	ASSESSED PER CMS 108.07	\$ 0
COMPLETION OF PHASE 3A PRIOR TO WINTER SHUTDOWN	10-15-2025	ASSESSED PER CMS 108.07	\$ 0

1 FLEXIBLE START WINDOW CONTRACT (PN 129)

THE CONTRACTOR HAS THE NUMBER OF CALENDAR DAYS DESIGNATED IN THE WINDOW CONTRACT TABLE IN WHICH TO COMPLETE ALL ITEMS OF CRITICAL WORK. THE WINDOW CONTRACT TABLE IS LOCATED BELOW. THE CONTRACTOR MAY BEGIN ANY TIME AS IDENTIFIED IN THE WINDOW CONTRACT TABLE AND MUST COMPLETE THE CRITICAL WORK WITHIN THE CALENDAR DAYS DESIGNATED IN THE WINDOW CONTRACT TABLE OR BY THE COMPLETION DATE LISTED IN THE PROPOSAL, WHICHEVER COMES FIRST.

CRITICAL WORK IS SHOWN IN THE WINDOW CONTRACT TABLE.

COMPLETION OF CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTION OF WORK OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE AT THEIR FINAL DESIGN WIDTH WITH ALL MARKINGS, RPM'S, AND SAFETY FEATURES INSTALLED, ALONG WITH NO RESTRICTIONS WITHIN 2 FEET OF THE EDGE LINE ON THE SHOULDERS.

THE CONTRACTOR MUST SCHEDULE THE LATEST START DATE OF THE CRITICAL WORK PRIOR TO THE FOLLOWING CALCULATED DATE:

LATE CRITICAL WORK START DATE = [WORK WINDOW END DATE] - [(CALENDAR DAYS TO COMPLETE) X 1.25]

IF THE CRITICAL WORK IS NOT STARTED BY THE LATE CRITICAL WORK START DATE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE AS DEFINED IN THE WINDOW CONTRACT TABLE FOR EVERYDAY THE CONTRACTOR DOES NOT START THE CRITICAL WORK.

FLEXIBLE START WINDOW CONTRACT (PN 129) (CONTINUED)

IF THE WORK IS NOT COMPLETED WITHIN THE CALENDAR DAYS DESIGNATED IN THE WINDOW CONTRACT TABLE, THE CONTRACTOR WILL BE SUBJECT TO DISINCENTIVES AS IDENTIFIED IN THE CONTRACT CRITICAL WORK TABLE. IF THE WINDOW CONTRACT CRITICAL WORK TABLE DOES NOT DESIGNATE A DISINCENTIVE VALUE, THE CONTRACTOR WILL BE SUBJECT TO THE LIQUIDATED DAMAGES IN ACCORDANCE WITH THE SCHEDULE SET FORTH IN C&MS 108.07.

108.06 C SHALL BE MODIFIED TO THE FOLLOWING AND SHALL BE APPLICABLE ONLY TO THE CRITICAL WORK (AS DEFINED IN THE WINDOW CONTRACT TABLE):

108.06 C EXTENSION TO THE COMPLETION DATE FOR WEATHER OR SEASONAL CONDITIONS. A WEATHER DAY FOR CRITICAL WORK IS DEFINED AS A WORKDAY THAT WEATHER REDUCED PRODUCTION BY MORE THAN 50 PERCENT ON ITEMS OF WORK ON THE CRITICAL PATH FOR CRITICAL WORK. SUBMIT A REQUESTED FOR AN EXTENSION OF TIME FOR A LOST WORKDAY DUE TO WEATHER WITH 2 DAYS OF OCCURRENCE. THE ENGINEER WILL EXTEND THE CALENDAR DAYS TO COMPLETE BY CALENDAR DAYS. THE ENGINEER WILL CONVERT WORKDAYS TO CALENDAR DAYS FOR EACH LOST WORKDAY DUE TO WEATHER BY MULTIPLYING THE NUMBER OF LOST WORKDAYS BY 1.4 FOR A 5-DAY WORK WEEK OR LESS; 1.2 FOR A 6-DAY WORK WEEK; AND 1 FOR A 7-DAY WORK WEEK; AND EXTEND THE CALENDAR DAYS TO COMPLETE BY THE RESULTING NUMBER OF CALENDAR DAYS PLUS ANY HOLIDAYS THE CONTRACTOR DOES NOT NORMALLY WORK THAT OCCUR IN THE EXTENSION PERIOD. WHEN THE CONVERSION OF WORKDAYS TO CALENDAR DAYS RESULTS IN A DECIMAL OF 0.5 OR GREATER, THE ENGINEER WILL ROUND THE NUMBER OF CALENDAR DAYS TO THE NEXT HIGHEST WHOLE NUMBER. WHEN THE CONVERSION RESULTS IN A DECIMAL LESS THAN 0.5, THE ENGINEER WILL DELETE THE DECIMAL PORTION OF THE CALENDAR DAYS.

FLEXIBLE START WINDOW TABLE					
DESCRIPTION OF CRITICAL WORK	CALENDAR DAYS TO COMPLETE	DISINCENTIVE \$ PER DAY	WORK WINDOW		
			START	END	
I-490 - SR-10 WB TO I-71 SB (PH 2 & 3)	210 DAYS (PH 2 & 3)	\$ 3,000	4-1-25	10-15-25	
RAMP C-7 (W. 7TH ST.)	45 DAYS (PH 3)	\$ 3,000	7-1-25	10-15-25	
RAMP B-C (ROCKEFELLER AVE.)	45 DAYS (PH 3)	\$ 8,000	7-1-25	10-15-25	
RAMP 7-7C (W. 7TH ST.)	45 DAYS (PH 5)	\$ 8,000	6-1-26	8-1-26	
RAMP C-B (BROADWAY AVE.)	45 DAYS (PH 5)	\$ 3,000	6-1-26	8-1-26	
RAMP N-E (I-77 SB)	60 DAYS (PH 5)	\$ 1,500	6-1-26	8-1-26	
RAMP S-W (I-77 NB)	45 DAYS (PH 2A)	\$ 8,000	4-1-25	7-1-25	

WORK NEEDED TO REPLACE THE PAVEMENT FOR ALL RAMPS LISTED EXCEPT I-490/SR-10 WB TO I-71 SB

REVISIONS		
NO.	DATE	DESCRIPTION
1	01/15/24	CREATED SHEET, ADDED PN 121, ADDED PN 129, UPDATED DISINCENTIVE \$ AMOUNTS AND ADDED WORK WIDOWS BASED ON ODOT COMMENTS

DESIGN AGENCY



DESIGNER
KRM

REVIEWER
AKF 11-21-23

PROJECT ID
107408

SHEET TOTAL
65A | 1068

SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	59	457	458								01/MS/04	EXT	TOTAL				
ROADWAY																	
61											61	622	25014	61	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1	53
3											3	622	25015	3	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN	53
		5									5	622	25050	5	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
		1									1	622	25051	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN	52
		5									5	622	90000	5	FT	BARRIER, MISC.: CONCRETE BARRIER, TYPE B50, AS PER PLAN	52
	30										30	623	38500	30	EACH	MONUMENT ASSEMBLY, TYPE C	
	LS										LS	SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION	51
	LS										LS	SPECIAL	69098400	LS		PERMITS	51
EROSION CONTROL																	
1,457											1,457	601	21000	1,457	SY	CONCRETE SLOPE PROTECTION	
	8			18							26	601	21050	26	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
				20							20	601	21060	20	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT	
				169							169	601	37501	169	FT	PAVED GUTTER, TYPE 1-2, AS PER PLAN	58
				562							562	601	38501	562	FT	PAVED GUTTER, TYPE 3, AS PER PLAN	58
	2										2	659	00100	2	EACH	SOIL ANALYSIS TEST	
	7,419			1,476							8,895	659	00300	8,895	CY	TOPSOIL	
	3,490										3,490	659	00530	3,490	SY	SEEDING AND MULCHING, CLASS 3B	
	63,346										63,346	659	10000	63,346	SY	SEEDING AND MULCHING	
	3,342										3,342	659	14000	3,342	SY	REPAIR SEEDING AND MULCHING	
	3,342										3,342	659	15000	3,342	SY	INTER-SEEDING	
	9.33										9.33	659	20000	9.33	TON	COMMERCIAL FERTILIZER	
	13.81										13.81	659	31000	13.81	ACRE	LIME	
	370										370	659	35000	370	MGAL	WATER	
	150										150	659	40000	150	MSF	MOWING	
				10,282							10,282	670	00700	10,282	SY	DITCH EROSION PROTECTION	
				LS							LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
				LS							LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
				LS							LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
				375,000							375,000	832	30000	375,000	EACH	EROSION CONTROL	



GENERAL SUMMARY

REVISIONS		
NO.	DATE	DESCRIPTION
1	01/15/24	PERMITS QUANTITY ADDED

DESIGN AGENCY



DESIGNER
JAN

REVIEWER
PJF 11-21-23

PROJECT ID
107408

SHEET TOTAL
453 | 1068

X:\Projects\2022\00100_0001_D12-CUY-490-0\25622-0\Engineer\Structures\CUY490_0100C\Sheets\025622-SFN181991-SN003.dgn 1/12/2024 12:34:33 PM zguo

ITEM 518 - STRUCTURE DRAINAGE, MISC.: SCUPPER GRATE REPLACEMENT:

DESCRIPTION: THIS WORK CONSISTS OF FURNISHING AND INSTALLING A NEW GRATE FOR A "TYPE 1 SCUPPER" IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS ON SHEET 98/120.

MATERIALS: STRUCTURAL STEEL FOR SCUPPER GRATES SHALL BE ASTM A709 GRADE 36 OR 50, GALVANIZED IN ACCORDANCE WITH C&MS 711.02. FURNISH MATERIALS IN CONFORMANCE WITH C&MS 513 AND C&MS 518.

MEASUREMENT AND PAYMENT: THE DEPARTMENT WILL MEASURE THIS WORK BY THE NUMBER OF EACH ACCEPTED IN PLACE. THE BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE SCUPPER GRATE REPLACEMENT. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE BID FOR ITEM 518 - STRUCTURE DRAINAGE, MISC.: SCUPPER GRATE REPLACEMENT.

ITEM 518 - STRUCTURE DRAINAGE, MISC.: BRIDGE DRAINAGE SYSTEM CLEANING:

DESCRIPTION: THIS WORK CONSISTS OF REMOVING SEDIMENT AND DEBRIS FROM THE BRIDGE DECK, THE BRIDGE SEATS AT ALL SUBSTRUCTURES, AND ALL PORTIONS OF THE EXISTING BRIDGE DRAINAGE SYSTEM TO BE REUSED, INCLUDING THE INLETS, CATCH BASINS, AND PIPES OF THE UNDERGROUND STORM SEWER SYSTEM AS SHOWN IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER C&MS 105.16 AND 105.17. ALL DOWNSPOUTS AND SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

EXECUTION: AFTER THE SEDIMENT AND DEBRIS ARE REMOVED, THE EXISTING BRIDGE DRAINAGE SYSTEM SHALL BE FLUSHED WITH CLEAN WATER MAKING CERTAIN THE WATER FLOWS SMOOTHLY. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT PRIOR TO BEGINNING WORK FOR THE PURPOSE OF EXAMINING THE PORTIONS OF THE EXISTING BRIDGE DRAINAGE SYSTEM TO REMAIN AFTER CLEANING TO VERIFY THE CONDITION OF ALL DOWNSPOUTS AND SEWERS. THE CONTRACTOR'S SUPERINTENDENT SHALL ACCOMPANY THE ENGINEER IN MAKING THE DETAILED EXAMINATION OF THE DRAINAGE SYSTEM.

MEASUREMENT AND PAYMENT: THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE BRIDGE DRAINAGE SYSTEM CLEANING. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE BID FOR ITEM 518 - STRUCTURE DRAINAGE, MISC.: BRIDGE DRAINAGE SYSTEM CLEANING.

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN:

THIS ITEM CONSISTS OF CONSTRUCTING REINFORCED CONCRETE APPROACH SLABS WITH INTEGRAL CURBS AND/OR MEDIAN BARRIER IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS, STANDARD DRAWINGS AS-1-15 AND AS-2-15, AND CMS 526.

MEASUREMENT AND PAYMENT: THE DEPARTMENT WILL MEASURE THIS WORK BY THE NUMBER OF SQUARE YARDS ACCEPTED IN PLACE. THE BID PRICE SHALL INCLUDE ALL CONCRETE FOR THE APPROACH SLABS, INTEGRAL CURBS AND/OR MEDIAN BARRIER, EPOXY COATED REINFORCING STEEL, PREFORMED EXPANSION JOINT FILLER, JOINT SEALER, AND ALL OTHER INCIDENTAL MATERIALS, LABOR AND EQUIPMENT REQUIRED TO COMPLETE THE WORK. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE BID FOR ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.

ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN:

THIS WORK CONSISTS OF PATCHING EXISTING REINFORCED CONCRETE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 844, MODIFIED AS FOLLOWS:

WHERE THE AREA OF AN INDIVIDUAL REPAIR, AS DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION, TOTALS LESS THAN FIVE (5) SQUARE FEET, THE INSTALLATION OF GALVANIC ANODES IS NOT REQUIRED, AND THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH C&MS 519.

ANODE SPACING SHALL BE 30" FOR REPAIRS ON EXISTING ABUTMENTS, 28" FOR REPAIRS ON EXISTING PIERS, AND 24" FOR REPAIRS ON EXISTING SUPERSTRUCTURE PARAPETS.

ASBESTOS NOTIFICATION:

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST SURVEYED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION; THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURE.

ODOT SHALL PROVIDE A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO ONE OF THE ADDRESSES BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

ASBESTOS PROGRAM OR ASBESTOS PROGRAM
OHIO EPA, DAPC OHIO EPA, DAPC
P.O. BOX 1049 50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43216-1049 COLUMBUS, OH 43215

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. THE FORM SHALL INCLUDE: 1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED. COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT THE ODOT DISTRICT 12 OFFICE, 5500 TRANSPORTATION BOULEVARD, GARFIELD HEIGHTS, OHIO 44125.

BASIS FOR PAYMENT: THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

SUMMARY OF PROPOSED REHABILITATION WORK:

THE FOLLOWING LIST CONTAINS THE MAJOR ITEMS OF WORK INCLUDED IN THESE PLANS FOR THE REHABILITATION OF THIS STRUCTURE:

- 1. REPLACEMENT OF THE EXISTING APPROACH SLABS.
- 2. REPLACEMENT OF PARAPET TRANSITIONS TO ACCEPT MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 OR TYPE 2, AND REPLACEMENT OF APPROACH GUARDRAIL.
- 3. REPLACEMENT OF THE EXISTING STRIP SEAL OR SLIDING PLATE EXPANSION JOINTS AT THE WEST ABUTMENT, EAST ABUTMENT, ABUTMENT B-C, AND ABUTMENT C-B, AND INTERMEDIATE JOINT 6 ON RAMP C-B WITH NEW STRIP SEAL EXPANSION JOINTS, INCLUDING REPLACEMENT OF THE EXISTING END CROSSFRAMES AND RECONSTRUCTION OF THE TOPS OF THE ABUTMENT BACKWALLS AND PORTIONS OF THE EXISTING DECK SLAB AND PARAPETS AT ALL LOCATIONS.
- 4. REPAIR OF THE EXISTING INTERMEDIATE FINGER EXPANSION JOINTS, JOINTS 1 THRU 5, INCLUDING REPLACEMENT OF MISSING/DAMAGED FINGERS AT JOINTS 2 AND 3.
- 5. REPLACEMENT OF THE EXISTING NEOPRENE DRAINAGE TROUGHS BELOW JOINTS 1 THRU 5 WITH NEW GALVANIZED STEEL DRAINAGE TROUGHS, INCLUDING THE INSTALLATION OF A NEW COLLECTOR PIPE SYSTEM SEPARATE FROM THAT OF THE DECK SCUPPERS, AND REMOVAL OF THE EXISTING NEOPRENE DRAINAGE TROUGH BELOW JOINT 6.
- 6. CLEANOUT OF THE EXISTING DECK SCUPPERS, REPLACEMENT OF ONE EXISTING DECK SCUPPER GRATE, REPLACEMENT OF THE EXISTING DOWNSPOUT PIPE SYSTEM, AND CLEANING OF EXISTING STORM SEWERS.
- 7. MISCELLANEOUS REPAIRS TO THE SUPERSTRUCTURE STEEL, INCLUDING REPLACEMENT OF LOOSE AND MISSING BOLTS, REPAIR OF THE EXISTING INSPECTION SAFETY CABLE SYSTEM, SHIMMING OF THE FLOATING BEARINGS OF THREE (3) BEAMS AT THE WEST ABUTMENT, AND REMOVAL OF EXISTING PIER ACCESS MANHOLES AND LADDERS.
- 8. PAINTING OF THE BEAM/GIRDER ENDS AT THE ABUTMENTS AND INTERMEDIATE EXPANSION JOINTS.
- 9. REPLACEMENT OF THE EXISTING BRIDGE DECK OVERLAY, INCLUDING FULL-DEPTH DECK SLAB REPAIRS.
- 10. SUBSTRUCTURE CONCRETE PATCHING AND CRACK REPAIR.
- 11. SUPERSTRUCTURE AND SUBSTRUCTURE CONCRETE SEALING.
- 12. REPLACEMENT OF THE EXISTING CONCRETE SLOPE PROTECTION AT THE SOUTH COLUMN OF PIER 14R.

SUGGESTED CONSTRUCTION PROCEDURE:

PRE-PHASE WORK, USING INSIDE SHOULDER CLOSURE:

- 1. PERFORM CLEAN-OUT OF ALL SCUPPERS ALONG THE MEDIAN PARAPETS.
- 2. CLEAN ALL DEBRIS FROM INSIDE SHOULDERS IN BOTH DIRECTIONS.

PHASE 1 CONSTRUCTION:

- 1. PHASE 1 CONSTRUCTION ACTIVITIES DO NOT OCCUR ON THE BRIDGE. PLEASE SEE SHEETS 74 AND 75 OF THE MOT PLANS FOR ADDITIONAL INFORMATION.

PHASE 2 CONSTRUCTION:

- 1. IMPLEMENT PHASE 2 MAINTENANCE OF TRAFFIC. SHIFT TRAFFIC AND MAINTAIN THREE LANES OF I-490 TRAFFIC IN EACH DIRECTION ON THE EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS AND THE OUTER PORTION OF THE EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
- 2. SAW CUT THE EXISTING BRIDGE DECK OVERLAY AND THE EXISTING EAST AND WEST ABUTMENT APPROACH SLABS AND TOP OF BACKWALL AT OFFSET OF 36'-7" LEFT OF C I-490.
- 3. PERFORM WORK AT THE WEST ABUTMENT AND EAST ABUTMENT:
 - A. REMOVE INNER PORTIONS OF EXISTING APPROACH SLABS AND MEDIAN PARAPET.
 - B. REMOVE INNER PORTIONS OF EXISTING TOPS OF BACKWALL, EXPANSION JOINTS, AND ENDS OF BRIDGE DECK.
 - C. REMOVE AND REPLACE EXISTING END CROSSFRAMES WITHIN THE SAME LIMITS. RESET BEARINGS OF BEAMS M AND N AFTER EXISTING CROSSFRAME REMOVAL AND BEFORE PROPOSED CROSSFRAME INSTALLATION.
 - D. INSTALL INNER PORTION OF PROPOSED STRIP SEAL EXPANSION JOINTS.
 - E. CONSTRUCT INNER PORTIONS OF PROPOSED ENDS OF DECK, TOPS OF BACKWALL, APPROACH SLABS, AND MEDIAN PARAPETS. BUILD TO LONGITUDINAL CONSTRUCTION JOINT AT OFFSET OF 35'-7" LEFT OF C I-490.
- 4. PERFORM REPAIRS TO INNER PORTIONS OF EXISTING MAINLINE BRIDGE DECK, FINGER JOINTS, AND MEDIAN PARAPETS.

PHASE 3 CONSTRUCTION:

- 1. IMPLEMENT PHASE 3 MAINTENANCE OF TRAFFIC. SHIFT TRAFFIC AND MAINTAIN THREE LANES OF I-490 TRAFFIC IN EACH DIRECTION ON THE EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS AND THE INNER PORTION OF THE EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.



2. REFER TO PART 1 PLANS FOR CLOSURE DURATION AT RAMP C-7 TO W. 7TH ST. TO PERFORM WORK AT THE EXIT RAMP PORTION OF THE WEST ABUTMENT:

- A. REMOVE OUTER PORTION OF EXISTING APPROACH SLAB AND EXISTING PARAPET ON ABUTMENT WINGWALL.
- B. REMOVE OUTER PORTIONS OF EXISTING TOP OF BACKWALL, EXPANSION JOINT, AND END OF BRIDGE DECK.
- C. REMOVE AND REPLACE EXISTING END CROSSFRAMES WITHIN THE SAME LIMITS. RESET BEARING OF BEAM D AFTER EXISTING CROSSFRAME REMOVAL AND BEFORE PROPOSED CROSSFRAME INSTALLATION.
- D. INSTALL OUTER PORTION OF PROPOSED STRIP SEAL EXPANSION JOINT.
- E. CONSTRUCT OUTER PORTION OF PROPOSED END OF DECK, TOP OF BACKWALL, AND APPROACH SLAB. BUILD TO LONGITUDINAL CONSTRUCTION JOINT AT EDGE OF GORE AREA.



2. REFER TO PART 1 PLANS FOR CLOSURE DURATION AT RAMP B-C FROM ROCKEFELLER AVENUE TO PERFORM WORK AT ABUTMENT B-C:

- A. REMOVE EXISTING APPROACH SLAB AND EXISTING NORTH PARAPET ON ABUTMENT WINGWALL.
- B. REMOVE EXISTING TOP OF BACKWALL, EXPANSION JOINT, AND END OF BRIDGE DECK.



DATE 08/05/20
REVIEWED MJL
STRUCTURE FILE NUMBER 1811991

DRAWN PAT/VS
REVISOR REVISED
DESIGNED PAT/VS
CHECKED JAM/CJS

STRUCTURE GENERAL NOTES - 3
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

7/120

18/131



X:\Projects\2020\2022\00100_0001.DWG - CUY-490-01-000 - Engineering\Structures\CUY490_01000\Sheets\025622-SFN81991-SN004.dgn 1/12/2024 12:34:33 PM zguo

PHASE 3 CONSTRUCTION (CONTINUED):

- C. REMOVE AND REPLACE ALL EXISTING END CROSSFRAMES.
- D. INSTALL PROPOSED STRIP SEAL EXPANSION JOINT.
- E. CONSTRUCT PROPOSED END OF DECK, TOP OF BACKWALL, APPROACH SLAB, AND NORTH PARAPET ON ABUTMENT WINGWALL.
- 4. PERFORM REPAIRS TO OUTER PORTIONS EXISTING MAINLINE BRIDGE DECK, FINGER JOINTS, AND EXTERIOR PARAPETS AS REQUIRED TO RE-OPEN THE ENTRANCE AND EXIT RAMPS TO TRAFFIC.
- 5. PERFORM WORK AT THE REMAINING PORTION OF THE WEST ABUTMENT AND AT THE EAST ABUTMENT:
 - A. REMOVE OUTER PORTIONS OF EXISTING APPROACH SLABS AND EXISTING PARAPETS ON ABUTMENT WINGWALLS.
 - B. REMOVE OUTER PORTIONS OF EXISTING TOPS OF BACKWALL, EXPANSION JOINTS, AND ENDS OF BRIDGE DECK.
 - C. REMOVE AND REPLACE EXISTING END CROSSFRAMES WITHIN THE SAME LIMITS.
 - D. INSTALL OUTER PORTIONS OF PROPOSED STRIP SEAL EXPANSION JOINT.
 - E. CONSTRUCT OUTER PORTIONS OF PROPOSED ENDS OF DECK, TOPS OF BACKWALL, APPROACH SLABS, AND PARAPETS ON ABUTMENT WINGWALLS. BUILD TO LONGITUDINAL CONSTRUCTION JOINT AT OFFSET OF 35'-7" LEFT OF C I-490 .
- 6. PERFORM REPAIRS TO REMAINING OUTER PORTIONS OF EXISTING EASTBOUND BRIDGE DECK, FINGER JOINTS, AND EXTERIOR PARAPETS.
- 7. PERFORM CLEAN-OUT OF ALL SCUPPERS ALONG THE EXTERIOR PARAPET.

PHASE 4 CONSTRUCTION:

- 1. IMPLEMENT PHASE 4 MAINTENANCE OF TRAFFIC. SHIFT TRAFFIC AND MAINTAIN THREE LANES OF I-490 TRAFFIC IN EACH DIRECTION ON THE EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS AND THE OUTER PORTION OF THE EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
- 2. SAW CUT THE EXISTING BRIDGE DECK OVERLAY AND THE EXISTING EAST AND WEST ABUTMENT APPROACH SLABS AND TOP OF BACKWALL AT OFFSET OF 37'-7" RIGHT OF C I-490 .
- 3. PERFORM WORK AT THE WEST ABUTMENT AND EAST ABUTMENT:
 - A. REMOVE INNER PORTIONS OF EXISTING APPROACH SLABS AND EXISTING PARAPETS ON ABUTMENT WINGWALLS.
 - B. REMOVE INNER PORTIONS OF EXISTING TOPS OF BACKWALL, EXPANSION JOINTS, AND ENDS OF BRIDGE DECK.
 - C. REMOVE AND REPLACE EXISTING END CROSSFRAMES WITHIN THE SAME LIMITS.
 - D. INSTALL INNER PORTIONS OF PROPOSED STRIP SEAL EXPANSION JOINTS.
 - E. CONSTRUCT INNER PORTIONS OF PROPOSED ENDS OF DECK, TOPS OF BACKWALL, APPROACH SLABS, AND MEDIAN PARAPETS. BUILD TO LONGITUDINAL CONSTRUCTION JOINT AT OFFSET OF 36'-7" RIGHT OF C I-490 .
- 4. PERFORM REPAIRS TO INNER PORTIONS OF EXISTING MAINLINE BRIDGE DECK, FINGER JOINTS, AND MEDIAN PARAPETS.

PHASE 5 CONSTRUCTION:

- 1. IMPLEMENT PHASE 5 MAINTENANCE OF TRAFFIC. SHIFT TRAFFIC AND MAINTAIN THREE LANES OF I-490 TRAFFIC IN EACH DIRECTION ON THE EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS AND THE INNER PORTION OF THE EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
- 2. REFER TO PART 1 PLANS FOR CLOSURE DURATION AT RAMP C-B TO BROADWAY AND TO PERFORM WORK AT ABUTMENT C-B AND JOINT 6:
 - A. REMOVE EXISTING APPROACH SLAB AND EXISTING PARAPETS ON ABUTMENT WINGWALLS.



PHASE 5 CONSTRUCTION (CONTINUED):

- B. REMOVE EXISTING TOP OF BACKWALL, EXPANSION JOINTS, AND ENDS OF BRIDGE DECK.
- C. REMOVE AND REPLACE ALL EXISTING END CROSSFRAMES.
- D. INSTALL PROPOSED STRIP SEAL EXPANSION JOINTS.
- E. CONSTRUCT PROPOSED ENDS OF DECK, TOP OF BACKWALL, APPROACH SLAB, AND PARAPETS ON ABUTMENT WINGWALLS.
- 3. PERFORM REPAIRS TO RAMP C-B BRIDGE DECK AND EXTERIOR PARAPETS AS REQUIRED TO RE-OPEN THE EXIT RAMP TO TRAFFIC.
- 4. PERFORM WORK AT THE WEST ABUTMENT AND AT THE EAST ABUTMENT:
 - A. REMOVE OUTER PORTIONS OF EXISTING APPROACH SLABS AND EXISTING PARAPETS ON ABUTMENT WINGWALLS.
 - B. REMOVE OUTER PORTIONS OF EXISTING TOPS OF BACKWALL, EXPANSION JOINTS, AND ENDS OF BRIDGE DECK.
 - C. REMOVE AND REPLACE EXISTING END CROSSFRAMES WITHIN THE SAME LIMITS.
 - D. INSTALL OUTER PORTIONS OF PROPOSED STRIP SEAL EXPANSION JOINT.
 - E. CONSTRUCT OUTER PORTIONS OF PROPOSED ENDS OF DECK, TOPS OF BACKWALL, APPROACH SLABS, AND PARAPETS ON ABUTMENT WINGWALLS. BUILD TO LONGITUDINAL CONSTRUCTION JOINT AT OFFSET OF 36'-7" RIGHT OF C I-490 .
- 5. PERFORM REPAIRS TO OUTER PORTIONS OF EXISTING EASTBOUND BRIDGE DECK, FINGER JOINTS, AND EXTERIOR PARAPETS.
- 6. PERFORM CLEAN-OUT OF ALL SCUPPERS ALONG THE EXTERIOR PARAPET.

WORK BELOW THE BRIDGE DECK:

WORK BELOW THE BRIDGE DECK IS NOT RESTRICTED TO A SPECIFIC CONSTRUCTION PHASE BUT MAY BE SUBJECT TO COMPLETION OF OTHER WORK AT A GIVEN LOCATION. THIS WORK INCLUDES:

- 1. MODIFY THE BRIDGE DRAINAGE SYSTEM (AFTER SCUPPER CLEANING IS COMPLETE):
 - A. REMOVE EXISTING NEOPRENE DRAINAGE TROUGHS, STEEL ANGLES, AND STEEL COLLECTOR PIPES BELOW JOINTS 1 THRU 5 ON I-490 MAINLINE AND JOINT 6 ON RAMP C-B. INSTALL RETROFIT CLEANOUTS WHERE EXISTING COLLECTOR PIPE WAS CONNECTED TO EXISTING SCUPPER PIPE.
 - B. REMOVE EXISTING STEEL DOWNSPOUT PIPES FROM PIERS.
 - C. PERFORM CLEANOUT OF EXISTING SCUPPER PIPES, INLETS, CATCH BASINS, AND STORM SEWERS TO REMAIN.
 - D. INSTALL PROPOSED GALVANIZED STEEL DOWNSPOUT PIPES ON PIER.
 - E. INSTALL PROPOSED GALVANIZED STEEL DRAINAGE TROUGHS BELOW JOINTS 1 THRU 5 ON I-490 MAINLINE.
 - F. INSTALL PROPOSED GALVANIZED STEEL COLLECTOR PIPES.
- 2. REPLACE LOOSE AND MISSING BOLTS IN SUPERSTRUCTURE FRAMING.
- 3. REPLACE MISSING SAFETY CABLE AND REMOVE SAFETY CABLE ATTACHED TO HANDRAIL AND REATTACH TO SUPPORT.
- 4. PAINT THE BEAM/GIRDER ENDS AT THE ABUTMENTS AND INTERMEDIATE EXPANSION JOINTS (AFTER PROPOSED END CROSSFRAMES, EXPANSION JOINTS, AND/OR PROPOSED DRAINAGE TROUGHS ARE INSTALLED).
- 5. PERFORM SUBSTRUCTURE CONCRETE PATCHING AND CRACK REPAIR.
- 6. PERFORM SUBSTRUCTURE CONCRETE SEALING (AFTER CONCRETE PATCHING AND CRACK REPAIR IS COMPLETE).
- 7. REPLACE CONCRETE SLOPE PROTECTION AT THE SOUTH COLUMN OF PIER 14R.

THE ABOVE IS A SUGGESTED CONSTRUCTION PROCEDURE. THE CONTRACTOR SHALL SUBMIT HIS OR HER PROPOSED CONSTRUCTION PROCEDURE AND SCHEDULE TO THE ENGINEER FOR APPROVAL BEFORE BEGINNING CONSTRUCTION. NO CONSTRUCTION OPERATIONS WILL BE PERMITTED WITHOUT PRIOR APPROVAL.

CSX TRANSPORTATION COORDINATION NOTES:

REFER TO THE CSX TRANSPORTATION PUBLIC PROJECT INFORMATION MANUAL FOR ADDITIONAL REQUIREMENTS NEEDED FOR WORKING ON/ABOVE/ADJACENT TO CSXT. SPECIFIC SECTIONS THAT PERTAIN TO THIS PROJECT ARE SPECIAL PROVISIONS FOR CONSTRUCTION NEAR CSXT PROPERTY, OVERHEAD BRIDGE CRITERIA, CONSTRUCTION SUBMISSION CRITERIA, AND INSURANCE REQUIREMENTS FOR PUBLIC PROJECTS.

CONTRACTOR ACCESS WILL BE LIMITED TO THE IMMEDIATE PROJECT AREA ONLY. THE CSXT RIGHT-OF-WAY OUTSIDE THE PROJECT AREA MAY NOT BE USED FOR CONTRACTOR ACCESS TO THE PROJECT SITE AND NO TEMPORARY AT-GRADE CROSSINGS WILL BE ALLOWED.

THE CONTRACTOR WILL BE REQUIRED TO ABIDE BY THE PROVISIONS OF THE AGENCY/CSXT CONSTRUCTION AGREEMENT. PERIODICALLY, THROUGHOUT THE PROJECT DURATION, THE CONTRACTOR MAY BE REQUIRED TO MEET, DISCUSS AND, IF NECESSARY, TAKE IMMEDIATE ACTION AT THE DISCRETION OF CSXT PERSONNEL AND/OR THEIR AUTHORIZED REPRESENTATIVE, TO COMPLY WITH PROVISIONS OF THAT AGREEMENT AND THESE SPECIFICATIONS.

IT IS THE RESPONSIBILITY OF THE INDIVIDUAL OWNERS OF WIRELINES, PIPELINES, UTILITIES, ETC TO COORDINATE DIRECTLY WITH CSXT REAL ESTATE AND FACILITIES MANAGEMENT (REFM) GROUP. THIS INCLUDES ALL NEW INSTALLATIONS AND THE ADJUSTMENT, MODIFICATION, REMOVAL OR RETIREMENT IN PLACE OF ALL EXISTING FACILITIES.

THE CONTRACTOR MAY NOT USE CSXT RIGHT-OF-WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION WITHOUT PRIOR CSXT APPROVAL. THE CSXT RIGHT-OF-WAY MUST ALWAYS REMAIN CLEAR FOR RAILROAD USE. EQUIPMENT MAY NOT BE POSITIONED TO BLOCK THE RAILROAD ACCESS ROAD, TRACK AREA OR ANY PART OF THE CSXT RIGHT-OF-WAY WITHOUT PRIOR CSXT APPROVAL. ALL MOVEMENTS OF EQUIPMENT WITHIN RAILROAD RIGHT-OF-WAY MUST BE COORDINATED WITH THE RAILROAD FLAGGER.

THE ROADWAY AUTHORITY, OR DESIGNATED CONTRACTOR, SHALL COORDINATE WITH THE RAILROAD WHENEVER THE CONTRACTOR'S WORK ACTIVITIES ARE LOCATED OVER, UNDER OR WITHIN THE RAILROAD'S RIGHT-OF-WAY.

ANY DAMAGE CAUSED BY THE PROJECT WORK TO THE TRACK OR RAILROAD PROPERTY WILL REQUIRE REPAIR IMMEDIATELY UPON NOTIFICATION FROM THE RAILROAD OR THEIR DESIGNATED REPRESENTATIVE. IF THE DAMAGE AFFECTS THE TRACK, TRACK STRUCTURE, RAILROAD FACILITIES, OR TRAIN OPERATIONS AS DETERMINED BY THE RAILROAD, THE REPAIRS WILL BE PERFORMED BY THE RAILROAD AT THE CONTRACTOR'S EXPENSE INCLUDING ALL ASSOCIATED COSTS OF DELAYS TO THE RAILROAD.

DURING TRAIN MOVEMENTS THROUGH THE PROJECT LOCATION, VEHICLES, EQUIPMENT, AND PERSONNEL WILL NOT BE ALLOWED TO OPERATE WITHIN TWENTY-FIVE (25) FEET OF THE TRACK.

CSXT SHALL BE NOTIFIED AT LEAST FIVE (5) DAYS IN ADVANCE OF THE PRE-CONSTRUCTION MEETING.

THE CONTRACTOR SHALL COORDINATE ALL WORK ON, OVER OR ADJACENT TO THE RAILROADS WITHIN THE PROJECT'S LIMITS. THE CONTRACTOR SHALL CONTACT CSX RAILROAD, AT LEAST THIRTY (30) DAYS IN ADVANCE, IN ORDER TO COORDINATE THE NECESSARY WORK. UNDER NO CIRCUMSTANCES SHALL THERE BE ANY WORK WITHIN THE RAILROAD RIGHT-OF-WAY WITHOUT THE PROPER AUTHORIZATION AND/OR FLAG PROTECTION FROM THE RAILROAD.

THE USE OF ACETYLENE GAS IS PROHIBITED FOR USE ON OR OVER CSX PROPERTY. TORCH CUTTING SHALL BE PERFORMED UTILIZING OTHER MATERIALS SUCH AS PROPANE.

CSXT REQUIRES THAT THE CONTRACTOR SUBMIT AND RECEIVE ACCEPTANCE OF A COMPREHENSIVE MEANS & METHODS SUBMITTAL (CSXT CONSTRUCTION SUBMISSION CRITERIA, ISSUED APRIL 2022) DETAILING SCOPE WORK WITHIN CSXT TRACKS OR RIGHT-OF-WAY, OR OTHER WORK WHICH PRESENTS THE POTENTIAL TO AFFECT CSXT PROPERTY OR OPERATIONS TO UNDERTAKING THE WORK.



DATE 08/05/20
REVIEWED MJL
STRUCTURE FILE NUMBER 1811991

DRAWN PAT/VJS
CHECKED JAM/CJS
REVISIONS

STRUCTURE GENERAL NOTES - 4
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

8/120
19/131



X:\Projects\2020\2022\00100_0001_D12-CUY-490-0-25622-400-Engineer\Structures\CUY490_0100C\Sheets\025622_SF\818199_0001.dgn 1/12/2024 12:42:52 PM zguo

FUNDING		ESTIMATED QUANTITIES										CALC. BY: PAT/VS DATE: 08/04/20	
												CHKD. BY: JAM/JDA DATE: 08/05/20	
02/IMS/13	ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	WEST ABUTMENT	EAST ABUTMENT	ABUTMENT B-C	ABUTMENT C-B	PIERS	SUPER-STRUCTURE	GENERAL	REF. SHEET NUMBER
LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN							LS	5/120
1,341	202	22900	1,341	SY	APPROACH SLAB REMOVED							1,341	
50	202	32800	50	SY	CONCRETE SLOPE PROTECTION REMOVED							50	
LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING							LS	
8	503	21100	8	CY	UNCLASSIFIED EXCAVATION	2	2	2	2				
15,248	509	10000	15,248	LB	EPOXY COATED REINFORCING STEEL	3,105	3,648	769	1,715		6,011		
2,000	509	20001	2,000	LB	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING REINFORCEMENT, AS PER PLAN	250	250	125	125	250	1,000		120/120
1,054	510	10000	1,054	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	458	444	52	100				
33	511	34444	33	CY	CLASS QC2 CONCRETE, BRIDGE DECK						33		
4	511	34448	4	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET)						4		
55	511	45710	55	CY	CLASS QC1 CONCRETE, ABUTMENT	17	21	5	12				
21,722	512	10100	21,722	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	231	288	85	112	8,426	12,535	45	
2,723	512	10600	2,723	FT	CONCRETE REPAIR BY EPOXY INJECTION	2	70		36	2,615			
13,102	512	74000	13,102	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	212	247	67	67		12,509		
15,800	513	10201	15,800	LB	STRUCTURAL STEEL MEMBERS, LEVEL UP AS PER PLAN						15,800		6/120
LS	513	95020	LS		STRUCTURAL STEEL, MISC.: INSPECTION SAFETY CABLE SYSTEM REPAIR							LS	6/120
1	513	95030	1	EACH	STRUCTURAL STEEL, MISC.: FINGER JOINT EXPANSION PLATE REPAIR						1		6/120
3	513	95030	3	EACH	STRUCTURAL STEEL, MISC.: FINGER JOINT SINGLE FINGER REPAIR						3		6/120
125	513	95030	125	EACH	STRUCTURAL STEEL, MISC.: REPLACE LOOSE OR MISSING BOLT						125		6/120
41,800	514	00050	41,800	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL						41,800		
41,800	514	00056	41,800	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT						41,800		6/120
43,800	514	00060	43,800	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT						43,800		6/120
43,800	514	00066	43,800	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT						43,800		6/120
40	514	00504	40	MNHR	GRINDING FINES, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL						40		
27	514	10000	27	EACH	FINAL INSPECTION REPAIR						27		
508	516	11210	508	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL						508		
34	516	11211	34	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN						34		81/120
3	516	46701	3	EACH	RESET BEARING, AS PER PLAN						3		6/120
LS	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN							LS	6/120
173	518	62100	173	FT	STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 1						173		6/120
135	518	62100	135	FT	STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 2						135		6/120
135	518	62100	135	FT	STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 3						135		6/120
143	518	62100	143	FT	STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 4						143		6/120
144	518	62100	144	FT	STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 5						144		6/120
2,970	518	62100	2,970	FT	STRUCTURE DRAINAGE, MISC.: 10" GALVANIZED STEEL PIPE, INCLUDING SPECIALS						2,970		6/120
35	518	62200	35	EACH	STRUCTURE DRAINAGE, MISC.: SCUPPER CLEANOUT						35		6/120
1	518	62200	1	EACH	STRUCTURE DRAINAGE, MISC.: SCUPPER GRATE REPLACEMENT						1		7/120
LS	518	63300	LS		STRUCTURE DRAINAGE, MISC.: BRIDGE DRAINAGE SYSTEM CLEANING							LS	7/120
1,140	526	15001	1,140	SY	REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN							1,140	7/120
513	526	90010	513	FT	TYPE A INSTALLATION							513	
50	601	21000	50	SY	CONCRETE SLOPE PROTECTION							50	
ESTIMATED QUANTITIES CONTINUE ON SHEET 10/120													



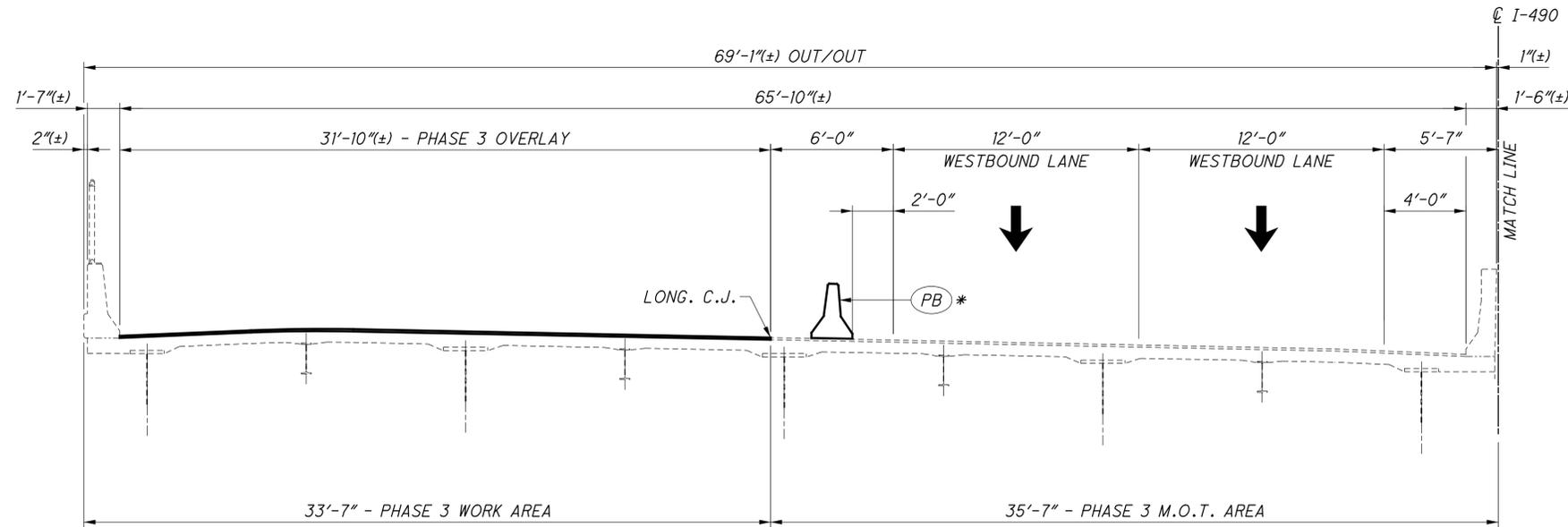
DATE: 08/05/20
 REVIEWED: MJL
 DRAWN: PAT/VS
 DESIGNED: PAT/VS
 CHECKED: JAM/JDA
 STRUCTURE FILE NUMBER: 181991

ESTIMATED QUANTITIES - 1
 BRIDGE NO. CUY-490-0100
 I-490 OVER CUYAHOGA RIVER

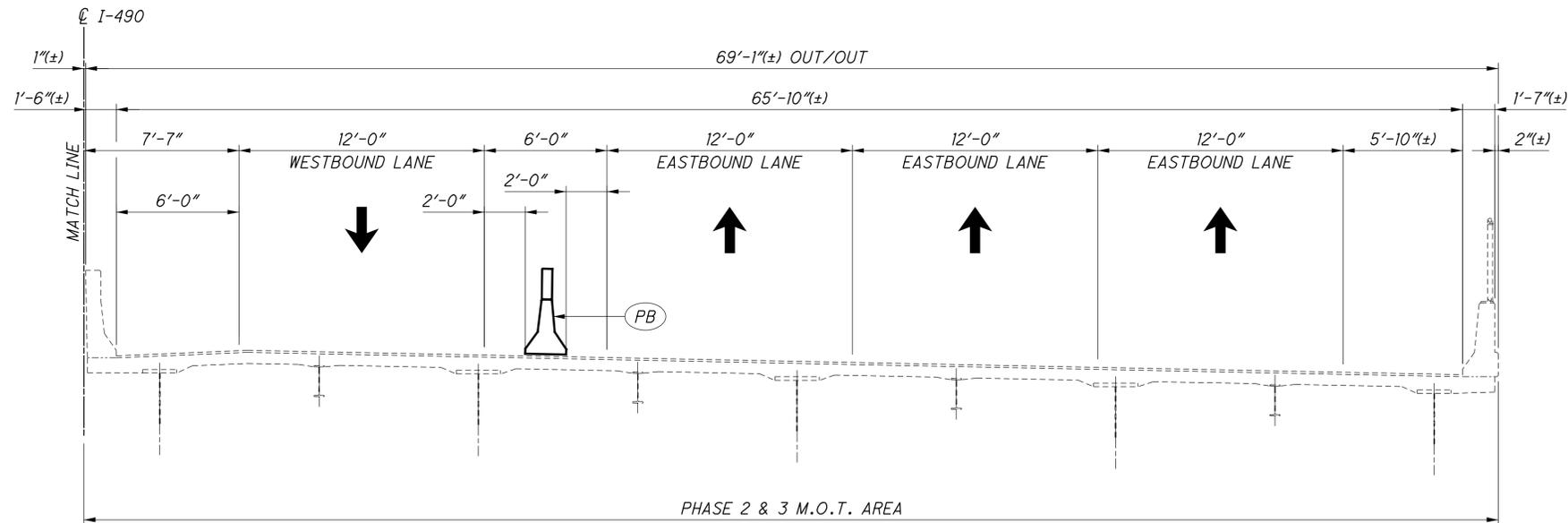
CUY-490-01.00
 PID No. 107408

9/120
 20
 131

X:\Projects\2022\00100_0DOT D12-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SF\N1991_SC005.dgn I/12/2024 4:19:28 PM zguo



LEFT SIDE



RIGHT SIDE

PHASE 3 CONSTRUCTION TRANSVERSE SECTION - UNIT 3

SHOWN AT STA. 999+50(±) IN SPAN 11

LEGEND

- (PB) PORTABLE BARRIER, UNANCHORED, 50" HEIGHT OR 32" HEIGHT WITH 18" GLARE SCREEN
- (PB) * PORTABLE BARRIER, UNANCHORED, 32" HEIGHT ON EXISTING BRIDGE DECK AND ANCHORED ON EXISTING OR PROPOSED APPROACH SLABS

PHASE 3 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS AND INNER PORTION OF EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON OUTER PORTION OF EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 3, CLOSE RAMP C-7 TO W. 7TH ST. AND RAMP B-C FROM ROCKEFELLER AVE. TO PERFORM WORK ON THE RAMPS. REFER TO PART 1 PLANS FOR CLOSURE DURATION.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEETS 7 & 8/120.



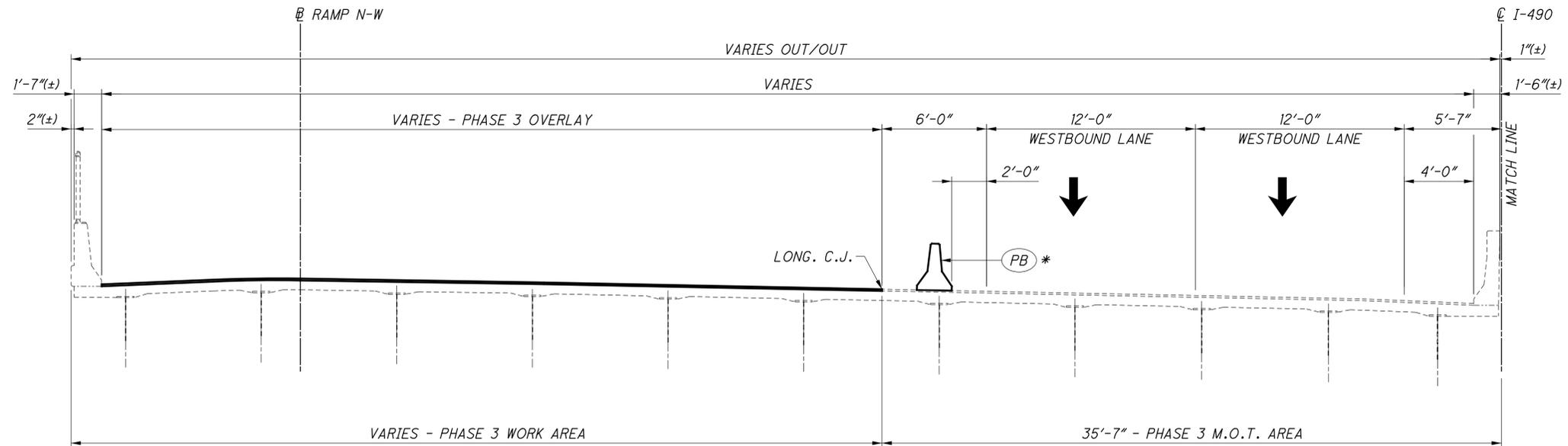
DESIGNED	PAT/JG	CHECKED	MHK/JDA
DRAWN	PAT/JG	REVISED	
REVIEWED	MJL	STRUCTURE FILE NUMBER	181991
DATE	08/05/20		

PHASE CONSTRUCTION DETAILS - 8
 BRIDGE NO. CUY-490-0100
 I-490 OVER CUYAHOGA RIVER

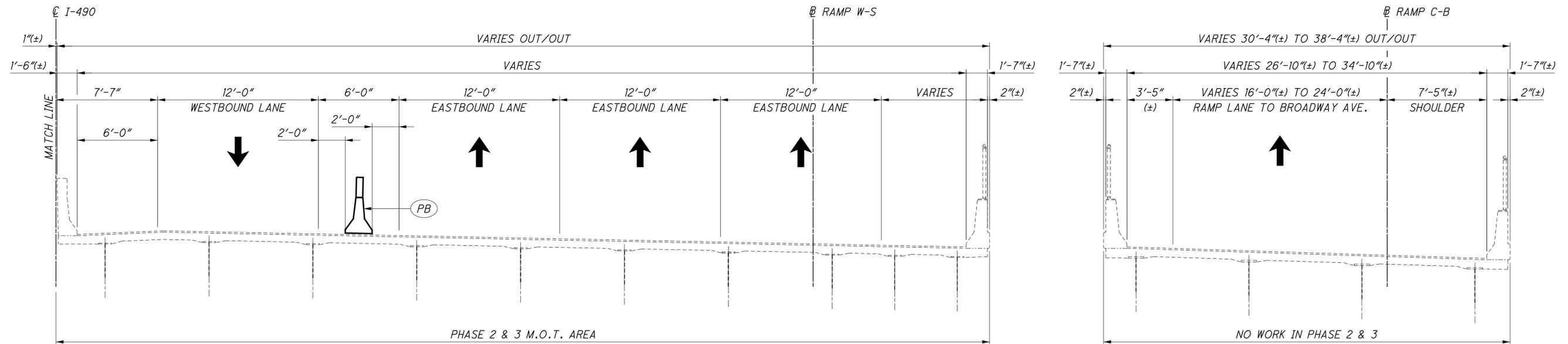
CUY-490-01.00
 PID No. 107408

18 / 120
 29 / 131

X:\Projects\2022\00100_ODOT_DI2-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SF\N181991_SC006.dgn I/12/2024 4:19:28 PM zguo



LEFT SIDE



RIGHT SIDE

PHASE 3 CONSTRUCTION TRANSVERSE SECTION - UNIT 6

SHOWN AT STA. 1018+30(±) IN SPANS 23 & 24

LEGEND

- (PB) PORTABLE BARRIER, UNANCHORED, 50" HEIGHT OR 32" HEIGHT WITH 18" GLARE SCREEN
- (PB) * PORTABLE BARRIER, UNANCHORED, 32" HEIGHT ON EXISTING BRIDGE DECK AND ANCHORED ON EXISTING OR PROPOSED APPROACH SLABS

PHASE 3 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS AND INNER PORTION OF EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON OUTER PORTION OF EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 3, CLOSE RAMP C-7 TO W. 7TH ST. AND RAMP B-C FROM ROCKEFELLER AVE. TO PERFORM WORK ON THE RAMPS. REFER TO PART 1 PLANS FOR CLOSURE DURATION.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEETS 7 & 8/120.



DESIGNED	PAT/JG	CHECKED	MHK/JDA
DRAWN	PAT/JG	REVISED	
REVIEWED	MJL	STRUCTURE FILE NUMBER	181991
DATE	08/05/20		

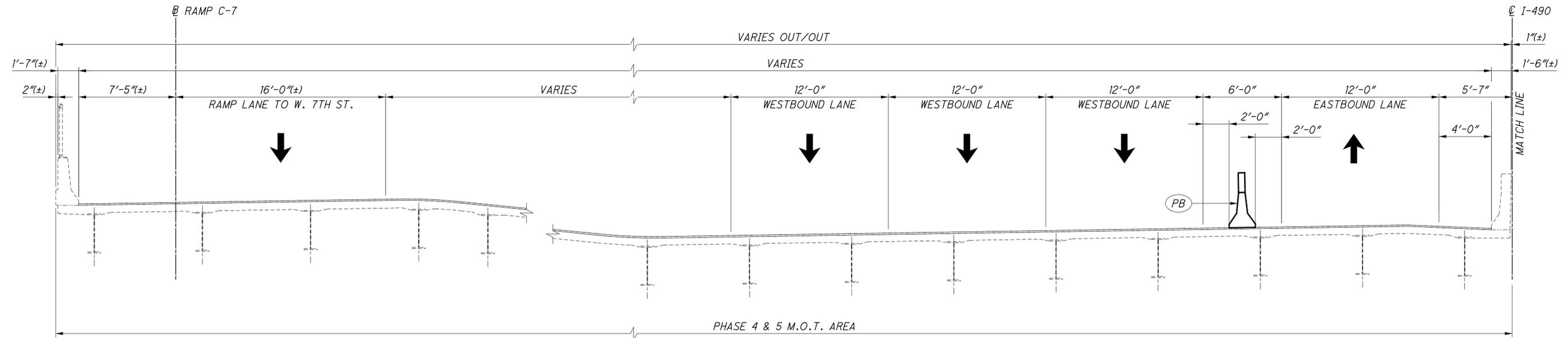
PHASE CONSTRUCTION DETAILS - 9
 BRIDGE NO. CUY-490-0100
 I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
 PID No. 107408

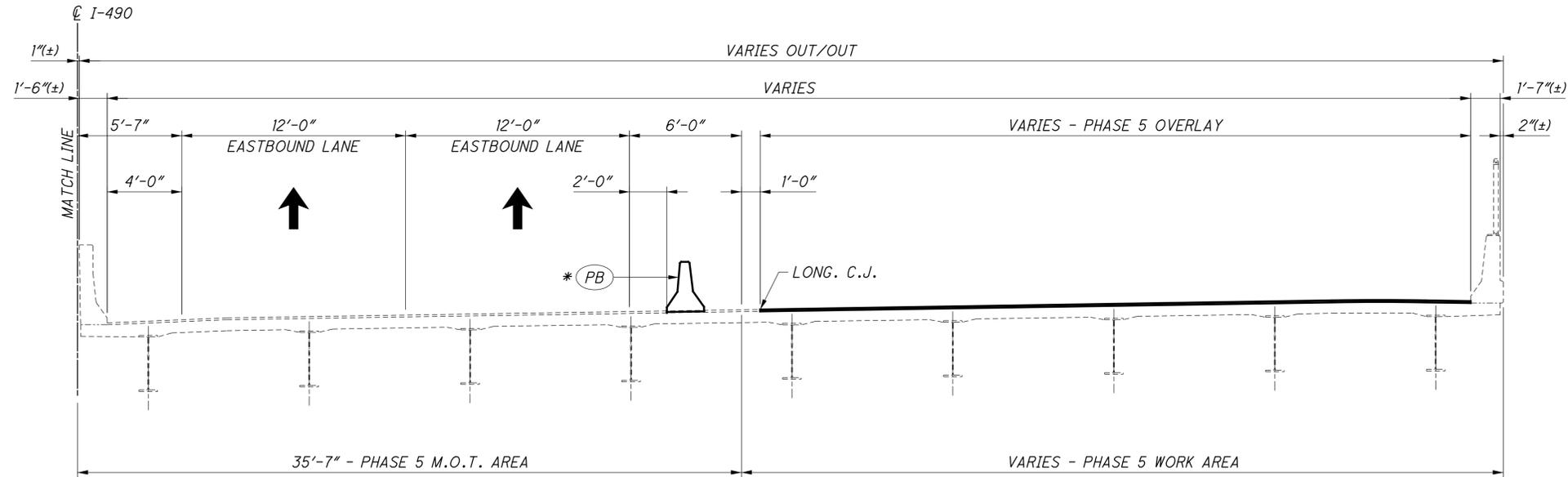
19 / 120

30 / 131

X:\Projects\2020\2022\00100_ODOT_DI2-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SF\N181991_SC010.dgn 1/12/2024 4:19:29 PM zguo



LEFT SIDE



RIGHT SIDE

PHASE 5 CONSTRUCTION TRANSVERSE SECTION - UNIT 1

SHOWN AT STA. 986+80(±) IN SPAN 2

LEGEND

- (PB) PORTABLE BARRIER, UNANCHORED, 50" HEIGHT OR 32" HEIGHT WITH 18" GLARE SCREEN
- (PB)* PORTABLE BARRIER, UNANCHORED, 32" HEIGHT ON EXISTING BRIDGE DECK AND ANCHORED ON EXISTING OR PROPOSED APPROACH SLABS

PHASE 5 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS AND INNER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON OUTER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 5, CLOSE RAMP C-B TO BROADWAY AVE. TO PERFORM WORK ON THE RAMP. DETOUR RAMP TRAFFIC TO THE E. 55TH ST. EXIT. REFER TO PART 1 PLANS FOR CLOSURE DURATION.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEET 8/120.



DESIGNED	PAT/JG	CHECKED	MHK/JDA
DRAWN	PAT/JG	REVISED	
REVIEWED	MJL	STRUCTURE FILE NUMBER	181991
DATE	08/05/20		

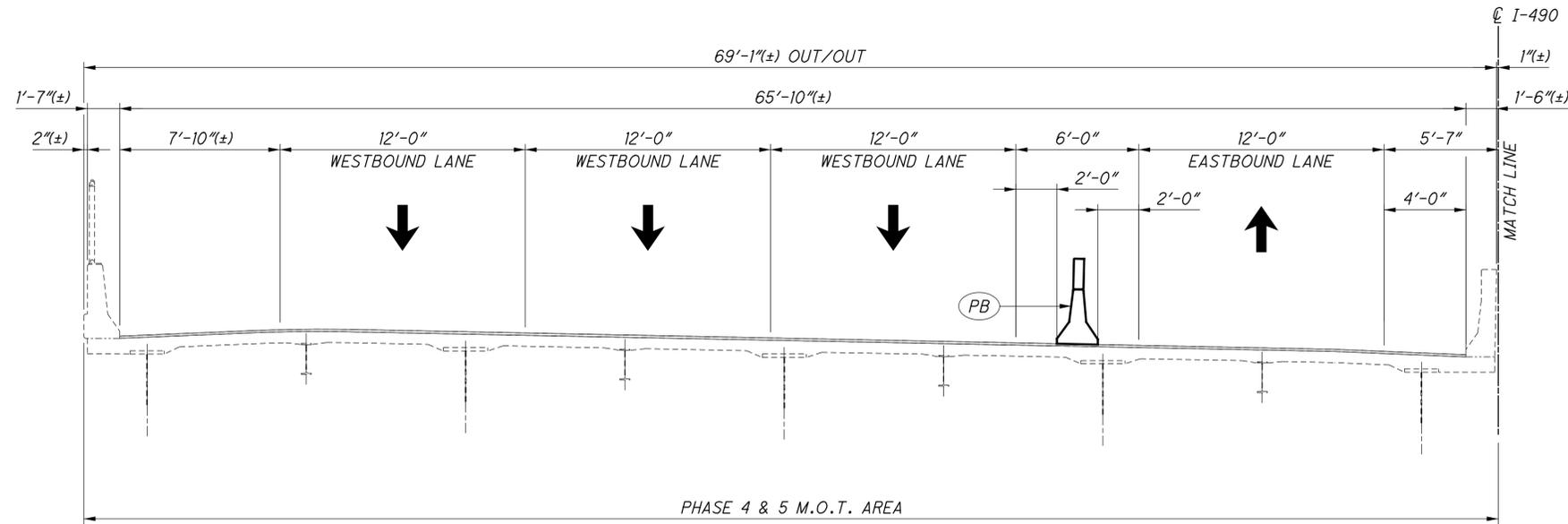
PHASE CONSTRUCTION DETAILS - 13
 BRIDGE NO. CUY-490-0100
 I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
 PID No. 107408

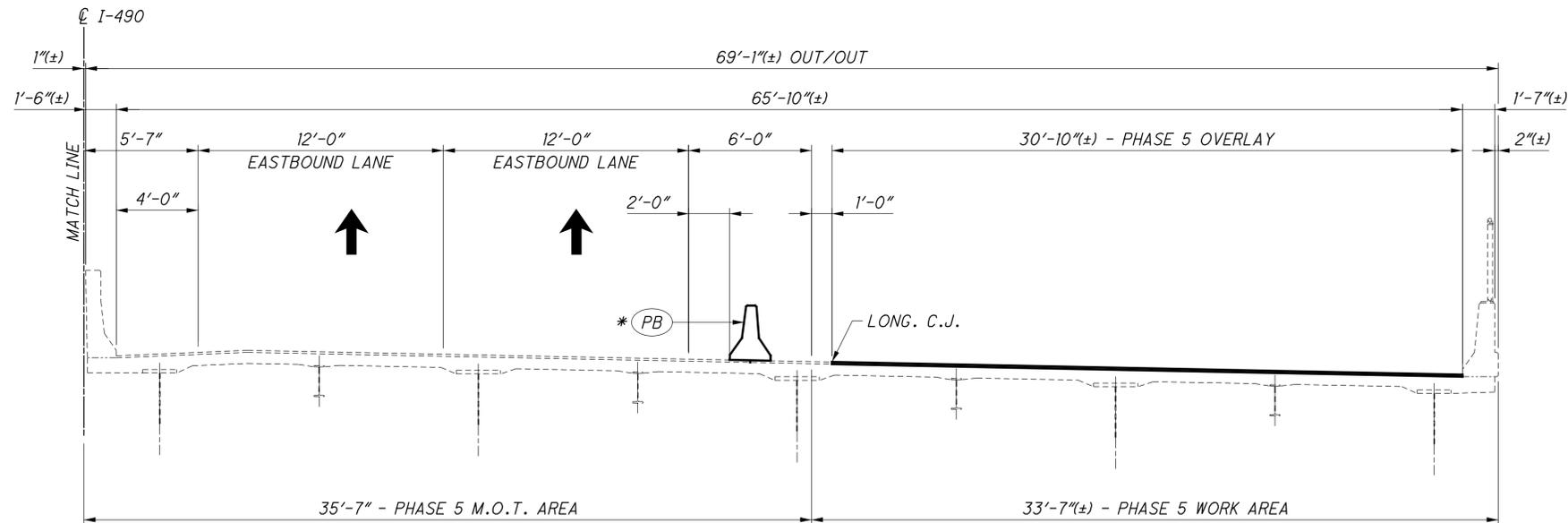
23 / 120

34 / 131

X:\Projects\2022\00100_0DOT_D12-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SF\N181991_SC011.dgn 1/12/2024 4:19:29 PM zguo



LEFT SIDE



RIGHT SIDE

PHASE 5 CONSTRUCTION TRANSVERSE SECTION - UNIT 3

SHOWN AT STA. 999+50(±) IN SPAN 11

LEGEND

- (PB) PORTABLE BARRIER, UNANCHORED, 50" HEIGHT OR 32" HEIGHT WITH 18" GLARE SCREEN
- (PB)* PORTABLE BARRIER, UNANCHORED, 32" HEIGHT ON EXISTING BRIDGE DECK AND ANCHORED ON EXISTING OR PROPOSED APPROACH SLABS

PHASE 5 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS AND INNER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON OUTER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 5, CLOSE RAMP C-B TO BROADWAY AVE. TO PERFORM WORK ON THE RAMP. DETOUR RAMP TRAFFIC TO THE E. 55TH ST. EXIT. REFER TO PART 1 PLANS FOR CLOSURE DURATION.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEET 8/120.



DESIGNED	PAT/JG	CHECKED	MHK/JDA
DRAWN	PAT/JG	REVISED	
REVIEWED	MJL	STRUCTURE FILE NUMBER	181991
DATE	08/05/20		

PHASE CONSTRUCTION DETAILS - 14
 BRIDGE NO. CUY-490-0100
 I-490 OVER CUYAHOGA RIVER

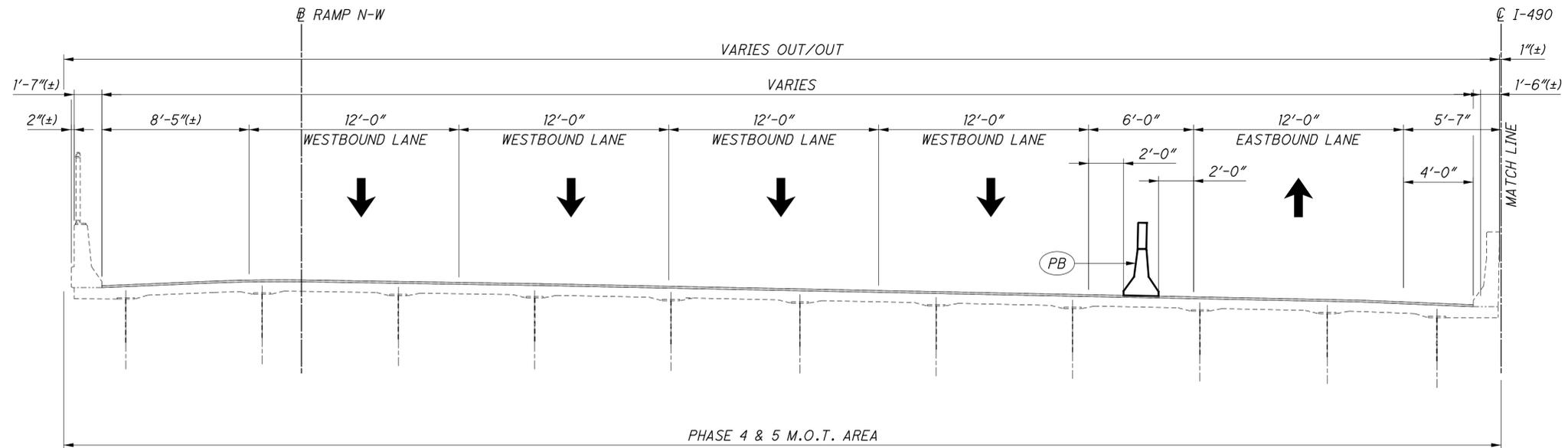
CUY-490-01.00
 PID No. 107408

24 / 120

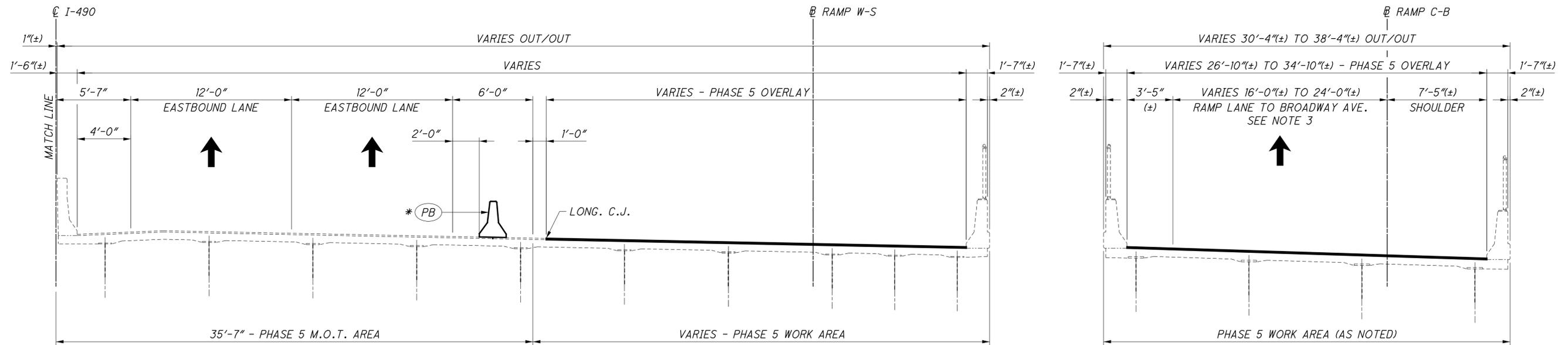
35 / 131



X:\Projects\2020\2022\00100_ODOT_DI2-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SF\N181991_SC012.dgn 1/12/2024 4:19:30 PM Zguo



LEFT SIDE



RIGHT SIDE

PHASE 5 CONSTRUCTION TRANSVERSE SECTION - UNIT 6

SHOWN AT STA. 1018+30(±) IN SPANS 23 & 24

LEGEND

- (PB) PORTABLE BARRIER, UNANCHORED, 50" HEIGHT OR 32" HEIGHT WITH 18" GLARE SCREEN
- (PB)* PORTABLE BARRIER, UNANCHORED, 32" HEIGHT ON EXISTING BRIDGE DECK AND ANCHORED ON EXISTING OR PROPOSED APPROACH SLABS

PHASE 5 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS AND INNER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON OUTER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 5, CLOSE RAMP C-B TO BROADWAY AVE. TO PERFORM WORK ON THE RAMP. DETOUR RAMP TRAFFIC TO THE E. 55TH ST. EXIT. REFER TO PART 1 PLANS FOR CLOSURE DURATION.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEET 8/120.



DESIGNED	PAT/JG	CHECKED	MHK/JDA
DRAWN	PAT/JG	REVISED	
REVIEWED	MJL	STRUCTURE FILE NUMBER	1811991
DATE	08/05/20		

PHASE CONSTRUCTION DETAILS - 15
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

25 / 120

36 / 131