INDEX OF SHEETS:

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

- W = Water Line
- G = Gas Line
- SAN = Sanitary Line
- E = Underground Electric
- P = Propane Line
- T = Underground Telephone
- D = Diesel
- CATV = Cable TV.
- TR = Signal Wiring

REVISIONS		
NO.	DATE	DESCRIPTION
1	01/15/24	ADDED SHEET 65A
2	02/26/24	ADDED SHEETS 493A-493F
4	04/02/24	ADDED SHEETS 262A-262B

DESIGN AGENCY

GPD GROUP*

DESIGNER ATR

REVIEWER PJF 11-21-23

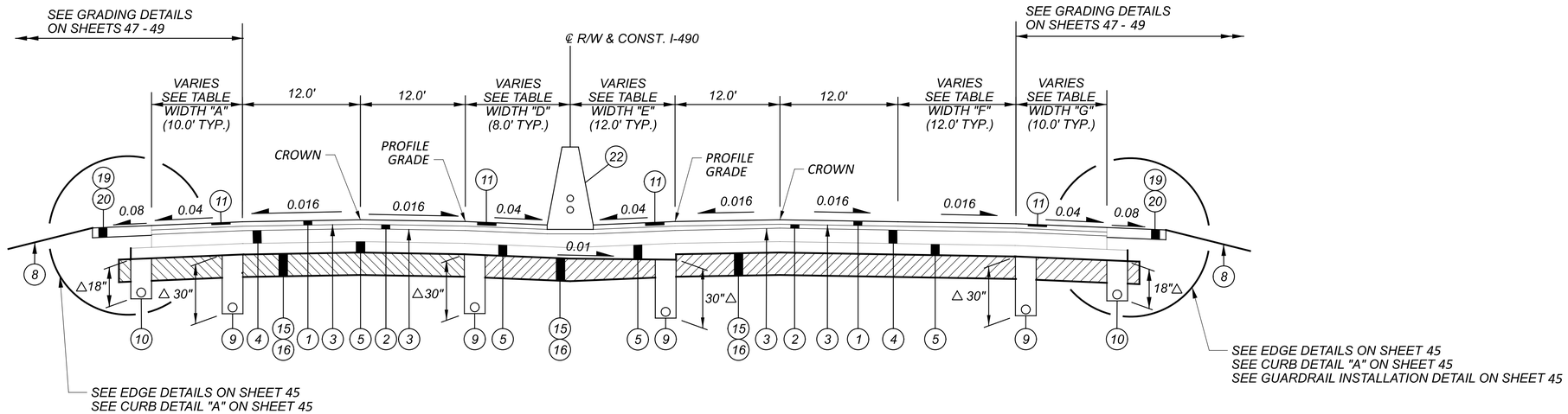
PROJECT ID 107408

SHEET 2 TOTAL 1068

PLAN LEGEND AND DESIGN DESIGNATIONS

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 7:52:45 AM USER: kmonas
O:\Clients\ORD\2021\202108910740840O-Engineering\Roadway\Sheets\107408_GT002.dgn



I-490 NORMAL SECTION

LIMITING STATIONS

WB LANES: STA 933+23.03 TO STA 939+72.56

EB LANES: STA 933+23.03 TO STA 938+52.62

FOR WIDTH TABLE, SEE SHEET 29

△ - OR AS SHOWN IN UNDERDRAIN PLANS, SEE SHEET 935

PROPOSED LEGEND

1. ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG76-22M
2. ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)
3. ITEM 407 - NON-TRACKING TACK COAT
4. ITEM 302 - 7" ASPHALT CONCRETE BASE, PG 64-22, (449)
5. ITEM 304 - 6" AGGREGATE BASE
6. ITEM 452 - 10.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1P WITH QC/QA
7. ITEM 204 - SUBGRADE COMPACTION
8. ITEM 659 - SEEDING AND MULCHING
9. ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC (CONSTRUCT AFTER CEMENT STABILIZATION)
10. ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC (CONSTRUCT AFTER CEMENT STABILIZATION)
11. ITEM 618 - RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN
12. ITEM 606 - GUARDRAIL, TYPE MGS
13. LONGITUDINAL JOINT AS PER BP-2.1
14. ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
15. ITEM 206 - CEMENT
ITEM 206 - CURING COAT
ITEM 206 - CEMENT STABILIZED SUBGRADE, 14" INCHES DEEP (SEE SHEET 51)
16. ITEM 204 - PROOF ROLLING
17. ITEM 441 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN
18. ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN
19. ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN
ITEM 617 - SHOULDER PREPARATION
ITEM 617 - WATER
20. ITEM 408 - PRIME COAT, AS PER PLAN
21. ITEM 609 - CURB, TYPE 4-C
22. ITEM 622 - ~~CONCRETE BARRIER, SINGLE SLOPE, TYPE C1~~ (4" LIGHTING CONDUIT AND 2" ITS CONDUIT PER SCD RM-4.3) △4
23. ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1"=1.5')
24. ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN
25. ITEM 609 - CURB, TYPE 6
26. ITEM 601 - PAVED GUTTER, TYPE 1-2, AS PER PLAN
27. ITEM 601 - CONCRETE SLOPE PROTECTION
28. ITEM 622 - ~~CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN~~ (4" LIGHTING CONDUIT AND 2" ITS CONDUIT PER SCD RM-4.3) △4
29. ITEM 622 - ~~CONCRETE BARRIER, SINGLE SLOPE, TYPE D1~~ (4" LIGHTING CONDUIT AND 2" ITS CONDUIT PER SCD RM-4.3) △4
30. ITEM 608 - 4" CONCRETE WALK
31. ITEM 304 - 3" AGGREGATE BASE
32. ITEM 609 - 4" CONCRETE TRAFFIC ISLAND
33. ITEM 304 - 4" AGGREGATE BASE
34. ITEM 601 - PAVED GUTTER, TYPE 3, AS PER PLAN
35. ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C
36. ITEM 203 - GRANULAR MATERIAL, TYPE C

REVISIONS		
NO.	DATE	DESCRIPTION
△4	04/04/24	UPDATED CONDUITS IN MEDIAN BARRIER

DESIGN AGENCY

GPD GROUP*

DESIGNER NRB

REVIEWER PJF 11-21-23

PROJECT ID 107408

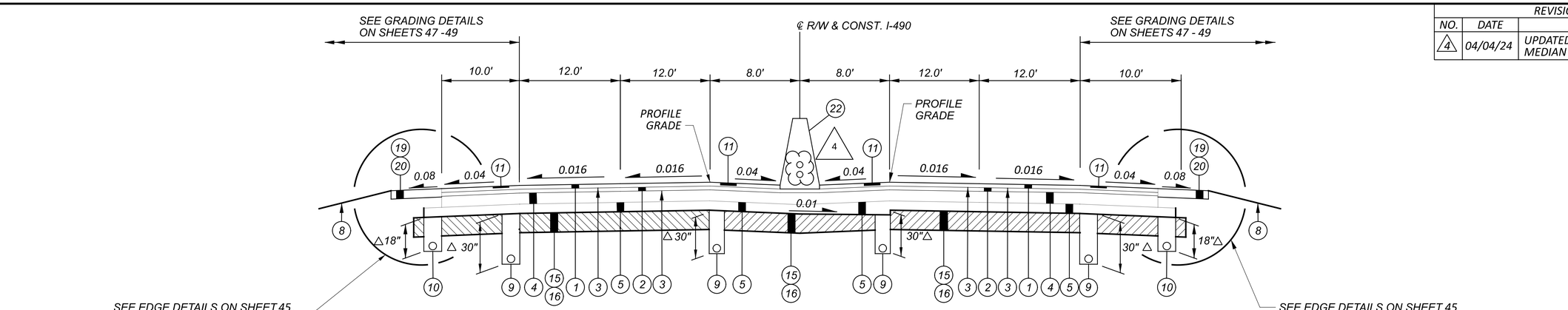
SHEET 24 TOTAL 1068

TYPICAL SECTIONS

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 1:33:02 PM USER: pfry
O:\Clients\ORD\2021\202108910740B400-Engineering\Roadway\Sheets\107408_GY001.dgn

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/04/24	UPDATED CONDUITS IN MEDIAN BARRIER

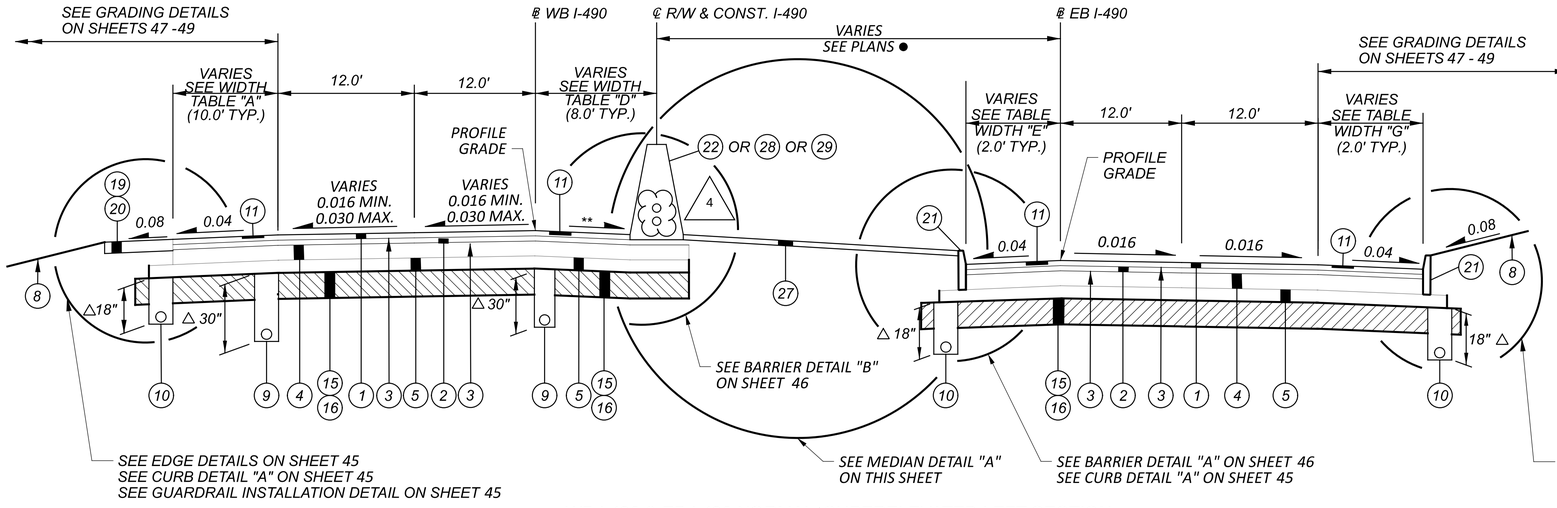


I-490 NORMAL SECTION

LIMITING STATIONS

WB LANES: *STA 1032+73.90 TO STA 1035+00.00*

EB LANES: *STA 1030+94.06 TO STA 1035+00.00*



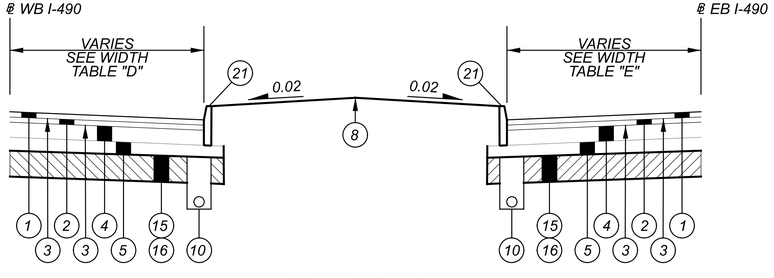
WB I-490 & EB I-490 NORMAL/ SUPERELEVATED LEFT SECTION

LIMITING STATIONS

℄ CONST. WB I-490 *STA 3035+00.00 TO STA. 3049+75.86*

℄ CONST. EB I-490 *STA. 2035+00.00 TO STA. 2050+87.73*

● *STA. 2035+00.00 TO STA. 2050+07.73*
VARIES - SEE CURVES 6, 7, & 8 DATA IN PLANS

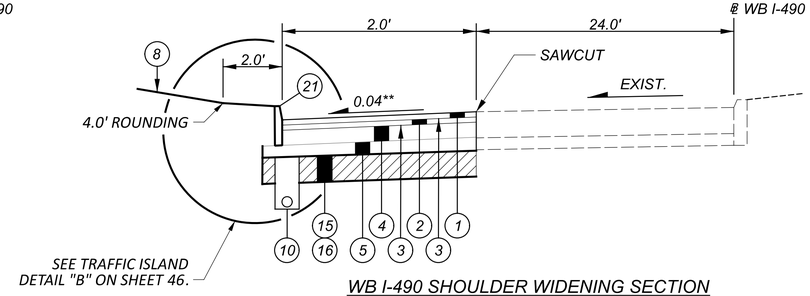


MEDIAN DETAIL "A"

FOR PAVEMENT EDGE EXTENSIONS, SEE CURB DETAIL "A" ON SHEET 45
N.T.S.
LIMITING STATIONS

℄ CONST. WB I-490 *STA 3045+05.00 TO STA. 3049+75.86*

℄ CONST. EB I-490 *STA. 2045+05.33 TO STA. 2050+87.73*



WB I-490 SHOULDER WIDENING SECTION

FOR PAVEMENT EDGE EXTENSIONS, SEE CURB DETAIL "A" ON SHEET 45
N.T.S.
LIMITING STATIONS

℄ CONST. WB I-490:
STA. 3049+75.86 TO STA. 3050+62.68

FOR PROPOSED LEGEND, SEE SHEET 24
FOR WIDTH TABLE, SEE SHEET 29
FOR SUPERELEVATION TABLES, SEE SHEETS 866 - 867

* *0.04 OR RATE OF PAVEMENT SLOPE IF GREATER.*

** *FOR HIGH SIDE SHOULDER SLOPES, SEE SHOULDER DETAIL "A" ON SHEET 45 .*

△ *- OR AS SHOWN IN UNDERDRAIN PLANS, SEE SHEETS 938 - 939*

TYPICAL SECTIONS

DESIGN AGENCY
GPD GROUP

DESIGNER NRB
REVIEWER PJF 11-21-23
PROJECT ID 107408
SHEET 28 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 1:51:27 PM USER: pfry
O:\Clients\ORD\2021\20210891\107408\400-Engineering\Roadway\Sheets\107408_GY005.dgn

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" x72"), 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

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 PROVIDE 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): $1,540

DAL HAS ASSIGNED RECORD NUMBER STP24-00196 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
2	02/15/24	PERMITS NOTE UPDATED
3	03/05/24	EXCAVATION OF SUBGRADE QUANTITY ADDED
4	04/04/24	SUBGRADE NOTE & QUANTITIES UPDATED

QUANTITIES CARRIED TO GENERAL NOTES SUBSUMMARY ON SHEET 59

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	80 HOUR	4

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.

4

PHASED CONSTRUCTION SUBGRADE TREATMENT

CONTRACTOR SHALL SUSPEND THE CEMENT STABLIZED SUBGRADE LAYER IN THOSE AREAS WHERE PART-WIDTH CONSTRUCTION RESULTS IN LIMITS WHICH ARE LESS THAN THE MINIMUM WIDTH OF 12', INCLUDING UNDER MEDIAN BARRIER, 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 1 (MEDIAN BARRIER):
℄ I-490 STA. 961+90.00 TO STA. 985+65.44
℄ I-490 STA. 1020+67.19 TO STA. 1037+00.00
℄ WB I-490 STA. 3037+00.00 TO STA. 3045+05.00

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

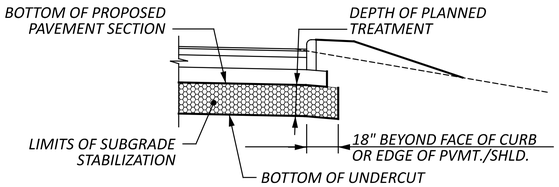
MOT PHASE 5A:
RAMP W-S (I-77) STA. 525+00.00 TO STA. 526+23.93
RAMP W-N (I-77) STA. 625+00.00 TO STA. 626+24.74

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 DEPTH OF TREATMENT FOR THESE AREAS IS ANTICIPATED TO BE 18" UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

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

ITEM 204 - SUBGRADE COMPACTION	2,111 SQ. YD.
ITEM 204 - GRANULAR EMBANKMENT	1,056 CU. YD.
ITEM 204 - EXCAVATION OF SUBGRADE	1,056 CU. YD.

SUBGRADE STABILIZATION



TYPICAL PAVEMENT SUBGRADE CROSS SECTION

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
B/L CONST. RAMP E-S (I-71)	3036+66.35	3042+13.54	CEMENT	14"	L/R	
	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	

GENERAL NOTES

DESIGN AGENCY
GPD GROUP

DESIGNER ATR
REVIEWER PJF 11-21-23
PROJECT ID 107408
SHEET 51 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 4:41:37 PM USER: pfry
O:\Clients\ORD\2021\2021089\107408\400-Engineering\Roadway\Sheets\107408_GN002.dgn

EROSION CONTROL

4

ITEM 601 - PAVED GUTTER, TYPE 1-2, AS PER PLAN

THIS ITEM SHALL CONSIST OF CONSTRUCTING CONCRETE PAVED GUTTER AS PER STANDARD CONSTRUCTION DRAWING DM-2.1 AND THE DETAILS AS SHOWN ON SHEET 46 AT THE LOCATIONS SHOWN IN THE PLANS. THE GUTTER SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN IN THE DETAIL. PEJF (PREFORMED EXPANSION JOINT FILLER) SHALL BE PER CMS 516 AND IS INCLUDED IN THE COST OF THE PAVED GUTTER.

ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE ABOVE-DESCRIBED WORK SHALL BE INCLUDED IN THE CONTRACT PRICE BID PER FOOT FOR ITEM 601 - PAVED GUTTER, TYPE 1-2, AS PER PLAN.

ITEM 601 - PAVED GUTTER, TYPE 3, AS PER PLAN

THIS ITEM SHALL CONSIST OF CONSTRUCTING CONCRETE PAVED GUTTER AS PER STANDARD CONSTRUCTION DRAWING DM-2.1 AND THE DETAILS AS SHOWN ON SHEET 46 AT THE LOCATIONS SHOWN IN THE PLANS. THE GUTTER SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN IN THE DETAIL. PEJF (PREFORMED EXPANSION JOINT FILLER) SHALL BE PER CMS 516 AND IS INCLUDED IN THE COST OF THE PAVED GUTTER. BAFFLES ARE NOT TO BE CONSTRUCTED WITH THIS PAVED GUTTER.

ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE ABOVE-DESCRIBED WORK SHALL BE INCLUDED IN THE CONTRACT PRICE BID PER FOOT FOR ITEM 601 - PAVED GUTTER, TYPE 3, AS PER PLAN.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659, SOIL ANALYSIS TEST	2 EACH
ITEM 659, MOWING	150 M. SQ. FT.
ITEM 659, TOPSOIL	7,419 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	3,490 SQ. YD.
ITEM 659, SEEDING AND MULCHING	63,346 SQ. YD.
ITEM 659, REPAIR SEEDING AND MULCHING	3,342 SQ. YD.
ITEM 659, INTER-SEEDING	3,342 SQ. YD.
ITEM 659, COMMERCIAL FERTILIZER	9.33 TON
ITEM 659, LIME	13.81 ACRES
ITEM 659, WATER	370 M. GAL.

APPLY SEEDING AND MULCHING TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

EARTHWORK

THE FOLLOWING IS A SUMMARY OF ALL EARTHWORK QUANTITIES. EARTHWORK END AREA CALCULATIONS HAVE BEEN PROVIDED ON SHEETS 493A-493F FOR REFERENCE ONLY.

I-490 MAINLINE	
ITEM 203, EXCAVATION	30,524 CU. YD.
ITEM 203, EMBANKMENT	1,978 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	1,525 SQ. YD.
ITEM 659, SEEDING AND MULCHING	17,190 SQ. YD.
EB I-490 BASELINE	
ITEM 203, EXCAVATION	4,243 CU. YD.
ITEM 203, EMBANKMENT	23 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	356 SQ. YD.
ITEM 659, SEEDING AND MULCHING	4,268 SQ. YD.
WB I-490 BASELINE	
ITEM 203, EXCAVATION	5,792 CU. YD.
ITEM 203, EMBANKMENT	290 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	208 SQ. YD.
ITEM 659, SEEDING AND MULCHING	7,533 SQ. YD.
RAMP E-S (I-71)	
ITEM 203, EXCAVATION	2,323 CU. YD.
ITEM 203, EMBANKMENT	140 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	766 SQ. YD.
ITEM 659, SEEDING AND MULCHING	3,694 SQ. YD.

QUANTITIES CARRIED TO GENERAL NOTES SUBSUMMARY ON SHEET 59

EARTHWORK - CONTINUED

RAMP S-E (I-71)	
ITEM 203, EXCAVATION	1,880 CU. YD.
ITEM 203, EMBANKMENT	5 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	116 SQ. YD.
ITEM 659, SEEDING AND MULCHING	903 SQ. YD.
RAMP 7-7C/W. 7TH STREET	
ITEM 203, EXCAVATION	8,549 CU. YD.
ITEM 203, EMBANKMENT	408 CU. YD.
ITEM 659, SEEDING AND MULCHING	11,056 SQ. YD.
RAMP C-7	
ITEM 203, EXCAVATION	363 CU. YD.
ITEM 203, EMBANKMENT	9 CU. YD.
ITEM 659, SEEDING AND MULCHING	588 SQ. YD.
RAMP B-C	
ITEM 203, EXCAVATION	359 CU. YD.
ITEM 203, EMBANKMENT	8 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	29 SQ. YD.
ITEM 659, SEEDING AND MULCHING	260 SQ. YD.
RAMP C-B	
ITEM 203, EXCAVATION	386 CU. YD.
ITEM 203, EMBANKMENT	17 CU. YD.
ITEM 659, SEEDING AND MULCHING	325 SQ. YD.
RAMP E-N (I-77)	
ITEM 203, EXCAVATION	2,383 CU. YD.
ITEM 203, EMBANKMENT	5 CU. YD.
ITEM 659, SEEDING AND MULCHING	2,693 SQ. YD.
RAMP E-S (I-77)	
ITEM 203, EXCAVATION	693 CU. YD.
ITEM 203, EMBANKMENT	10 CU. YD.
ITEM 659, SEEDING AND MULCHING	1,430 SQ. YD.
RAMP N-E (I-77)	
ITEM 203, EXCAVATION	2,433 CU. YD.
ITEM 203, EMBANKMENT	4 CU. YD.
ITEM 659, SEEDING AND MULCHING	2,301 SQ. YD.
RAMP N-W (I-77)	
ITEM 203, EXCAVATION	2,308 CU. YD.
ITEM 203, EMBANKMENT	20 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	309 SQ. YD.
ITEM 659, SEEDING AND MULCHING	2,357 SQ. YD.
RAMP S-E (I-77)	
ITEM 203, EXCAVATION	4,148 CU. YD.
ITEM 203, EMBANKMENT	0 CU. YD.
ITEM 659, SEEDING AND MULCHING, CLASS 3B	181 SQ. YD.
ITEM 659, SEEDING AND MULCHING	4,010 SQ. YD.
RAMP S-W (I-77)	
ITEM 203, EXCAVATION	934 CU. YD.
ITEM 203, EMBANKMENT	2 CU. YD.
ITEM 659, SEEDING AND MULCHING	885 SQ. YD.
RAMP W-N (I-77)	
ITEM 203, EXCAVATION	716 CU. YD.
ITEM 203, EMBANKMENT	5 CU. YD.
ITEM 659, SEEDING AND MULCHING	2,064 SQ. YD.
RAMP W-S (I-77)	
ITEM 203, EXCAVATION	1,106 CU. YD.
ITEM 203, EMBANKMENT	7 CU. YD.
ITEM 659, SEEDING AND MULCHING	1,789 SQ. YD.

THE FOLLOWING GRAND TOTAL HAS BEEN CARRIED TO THE GENERAL NOTES SUBSUMMARY:

ITEM 203, EXCAVATION	69,140 CU. YD.
ADD EXCAVATION FROM VBF	1,476 CU. YD.
	70,616 CU. YD.
ITEM 203, EMBANKMENT	2,931 CU. YD.

REVISIONS		
NO.	DATE	DESCRIPTION
2	02/29/24	UPDATED EARTHWORK QUANTITIES
4	04/04/24	REVISED PAVED GUTTER NOTE AND UPDATED WATER FEES QUANTITY

WATER QUALITY

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTER(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL, AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 AS SPECIFIED IN THE PLANS. ALL DITCHES LOCATED WITHIN LIMITS OF VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL AND NOT HAVE ROUNDING.

ENVIRONMENTAL

ENDANGERED BAT HABITAT REMOVAL

NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO FEDERALLY AND STATE LISTED BAT SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSE OF THE NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT WITH A TRUCK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

BEST MANAGEMENT PRACTICES/SOIL EROSION AND SEDIMENTATION CONTROL

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THEY SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER.

WATER WORK

4

CLEVELAND WATER DEPARTMENT FEES AND CHARGES

THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL CLEVELAND WATER DEPARTMENT FEES AND CHARGES ASSOCIATED WITH THIS PROJECT. A LINE ITEM WITH A FIXED AMOUNT HAS BEEN ADDED TO THE BID FORM. A COPY OF THE CHARGE LETTER WILL BE PROVIDED UPON RECEIPT. PAYMENT WILL BE BASED ON THE CONTRACTOR'S PAID INVOICE TO CLEVELAND WATER DEPARTMENT. FOR BIDDING PURPOSES, THE FOLLOWING FEES AND CHARGES HAVE BEEN ESTIMATED: $20,000. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 638 - WATER WORK, MISC.: CLEVELAND WATER DEPARTMENT FEES AND CHARGES 20,000 EACH

CLEVELAND WATER DEPARTMENT AS-BUILTS

THIS ITEM SHALL INCULDE ALL NECESSARY LABOR AND MATERIAL TO PROVIDE THE CITY OFFICIALS AND THE CITY OF CLEVELAND DIVISION OF WATER WITH ACCURATE AS-BUILT DRAWINGS. THESE DRAWINGS SHALL INCLUDE THE EXACT LOCATION OF ALL NEW VALVES AND HYDRANTS INSTALLED. THE DATE OF VALVE AND HYDRANT INSTALLATION SHALL BE INDICATED ON THE DRAWINGS. THE DRAWINGS SHALL SHOW THE EXACT LIMITS OF THE PIPE THAT WAS INSTALLED. ALL EXCAVATIONS SHALL BE RECORDED WITH LOCATION AND DIMENSIONS, DATE OPENED, DATE BACKFILLED, DATE PAVED AND SHALL BE SHOWN ON THE AS-BUILTS. A REGISTERED PROFESSIONAL ENGINEER SHALL SEAL THE DRAWINGS. AS-BUILTS WILL BE REQUIRED PRIOR TO DISINFECTING THE WATER MAIN. ALL WORK REQUIRED SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR "AS-BUILT DRAWINGS." THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 638 - WATER WORK, MISC.: CLEVELAND WATER DEPARTMENT AS-BUILT DRAWINGS LS

ITEM SPECIAL - 6" FIRE HYDRANT (CLEVELAND)

ALL HYDRANTS SHALL BE "MUELLER-CENTURION", "KENNEDY-GUARDIAN", OR AN APPROVED EQUAL (PAINTED YELLOW). THIS ITEM SHALL INCLUDE ALL NECESSARY EXCAVATION, EMBANKMENT, DEWATERING, SHEETING, PREPARATION OF THE TRENCH BOTTOM, ROCK EXCAVATION, VALVE, VALVE BOX, HYDRANT, 12"x6" TEE, JOINT MATERIAL, BLOCKING, ADJUSTMENT, BEDDING, BACKFILL, TESTING, DISPOSAL OF WASTE AND ALL OTHER EXPENSES WHETHER SPECIFICALLY MENTIONED OR NOT, FOR THE INSTALLATION OF A 6" HYDRANT ASSEMBLY IN ACCORDANCE WITH CLEVELAND WATER DEPARTMENT STANDARDS. SEE SHEET 945 FOR CLEVELAND WATER DEPARTMENT STANDARD CONSTRUCTION DRAWING STD-H06.

HYDRANT ASSEMBLIES SHALL BE EQUIPPED WITH A 4" HPHA HARRINGTON PERMANENT HYDRANT STORZ COUPLING AS MANUFACTURED BY HARRINGTON, INC.

THREADS ON HYDRANTS MUST BE CLEVELAND STANDARD THREAD AND MUST BE APPROVED BY THE FIRE CHIEF. THE CONTRACTOR IS REQUIRED TO SCHEDULE AN INSPECTION WITH THE FIRE CHIEF TO REVIEW FUNCTIONALITY OF ALL HYDRANTS PRIOR TO RECEIVING FINAL APPROVAL.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR EACH HYDRANT ASSEMBLY INSTALLED COMPLETE, TESTED, DISINFECTED, AND READY FOR SERVICE INCLUDING PERMANENT ADAPTERS.

ITEM SPECIAL - FIRE HYDRANT SERVICE LINE EXTENDED AND ADJUSTED TO GRADE (CLEVELAND)

ALL HYDRANTS SHALL BE "MUELLER-CENTURION", "KENNEDY-GUARDIAN", OR AN APPROVED EQUAL (PAINTED YELLOW). THIS ITEM SHALL INCLUDE ALL NECESSARY EXCAVATION, EMBANKMENT, DEWATERING, SHEETING, PREPARATION OF THE TRENCH BOTTOM, ROCK EXCAVATION, HYDRANT, JOINT MATERIAL, BLOCKING, ADJUSTMENT, BEDDING, BACKFILL, TESTING, DISPOSAL OF WASTE AND ALL OTHER EXPENSES WHETHER SPECIFICALLY MENTIONED OR NOT, FOR THE INSTALLATION OF A 6" HYDRANT ASSEMBLY IN ACCORDANCE WITH CLEVELAND WATER DEPARTMENT STANDARDS. SEE SHEET 945 FOR CLEVELAND WATER DEPARTMENT STANDARD CONSTRUCTION DRAWING STD-H02.

HYDRANT ASSEMBLIES SHALL BE EQUIPPED WITH A 4" HPHA HARRINGTON PERMANENT HYDRANT STORZ COUPLING AS MANUFACTURED BY HARRINGTON, INC.

THREADS ON HYDRANTS MUST BE CLEVELAND STANDARD THREAD AND MUST BE APPROVED BY THE FIRE CHIEF. THE CONTRACTOR IS REQUIRED TO SCHEDULE AN INSPECTION WITH THE FIRE CHIEF TO REVIEW FUNCTIONALITY OF ALL HYDRANTS PRIOR TO RECEIVING FINAL APPROVAL.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR EACH HYDRANT ASSEMBLY EXTENDED, SHORTENED AND ADJUSTED TO GRADE COMPLETE, TESTED, DISINFECTED, AND READY FOR SERVICE INCLUDING PERMANENT ADAPTERS.

GENERAL NOTES

DESIGN AGENCY
GPD GROUP*
Copyright Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2022

DESIGNER ATR
REVIEWER PJF 11-21-23
PROJECT ID 107408
SHEET 58 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 2:11:52 PM USER: pfy
O:\Clients\ORD\2021\2021089\107408\400-Engineering\Roadway\Sheets\107408_GN007.dgn

SHEET NO.	201 CLEARING AND GRUBBING		203 EXCAVATION	203 EMBANKMENT	204 SUBGRADE COMPACTION	204 GRANULAR EMBANKMENT	204 PROOF ROLLING	503 COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	204 EXCAVATION OF SUBGRADE	601 TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		605 6" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		611 6" CONDUIT, TYPE B	611 6" CONDUIT, TYPE C	611 6" CONDUIT, TYPE E	611 6" CONDUIT, TYPE F	611 PRECAST REINFORCED CONCRETE OUTLET		SPECIAL MISCELLANEOUS METAL		
	LS		CY	CY	SY	CY	HOUR	LS	CY	SY		FT		FT	FT	FT	FT	EACH		LB		
50	LS																					
51				4	2111	1056	80		1056	4												
52																						
53																						
54																						
55										8		40		200	200	200	240	4		1000		
56																						
57								LS														
58			70616	2931																		
TOTALS CARRIED TO GENERAL SUMMARY	LS		70616	2931	2111	1056	80	LS	1056	8		40		200	200	200	240	4		1000		

SHEET NO.	618 RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN			623 MONUMENT ASSEMBLY, TYPE C		638 WATER WORK, MISC.: CLEVELAND WATER DEPARTMENT FEES AND CHARGES	638 WATER WORK, MISC.: CLEVELAND WATER DEPARTMENT AS-BUILT DRAWINGS		659 SOIL ANALYSIS TEST	659 TOPSOIL	659 SEEDING AND MULCHING, CLASS 3B	659 SEEDING AND MULCHING	659 REPAIR SEEDING AND MULCHING	659 INTER-SEEDING	659 COMMERCIAL FERTILIZER	659 LIME	659 WATER	659 MOWING			SPECIAL SURVEY CONTROL VERIFICATION	SPECIAL PERMITS
	MILE			EACH	4	EACH	LS		EACH	CY	SY	SY	SY	SY	TON	ACRE	MGAL	MSF			LS	LS
50				30																		
51																					LS	LS
52																						
53																						
54	5.58																					
55																						
56																						
57																						
58						20000	LS		2	7419	3490	63346	3342	3342	9.33	13.81	370	150				
TOTALS CARRIED TO GENERAL SUMMARY	5.58			30		20000	LS		2	7419	3490	63346	3342	3342	9.33	13.81	370	150			LS	LS

GENERAL NOTES SUBSUMMARY

REVISIONS

NO.	DATE	DESCRIPTION
1	01/15/24	PERMITS QUANTITY ADDED
2	02/29/24	UPDATED EARTHWORK QUANTITIES
3	03/05/24	EXCAVATION OF SUBGRADE QUANTITY ADDED
4	04/04/24	UPDATED SUBGRADE QUANTITIES & WATER FEES QUANTITY

DESIGN AGENCY

GPD GROUP*

DESIGNER JAN

REVIEWER PJF 11-21-23

PROJECT ID 107408

SHEET 59 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: Plan 2 - Plan 2 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 5:00:36 PM USER: pfry
O:\Clients\ORD\2021\2021089\107408\400-Engineering\Roadway\Sheets\107408_GS006.dgn

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 140" ST.
   BROOKPARK, OHIO 44142
   216-265-1677

9. CUYAHOGA METROPOLITAN HOUSING AUTHORITY
   8120 KINSMAN RD.
   CLEVELAND, OH 44104
   216-348-5000

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

4

PRIOR TO COMMENCING PHASE 1 CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONSTRUCT TEMPORARY PAVEMENT REQUIRED FOR PHASE 1 AND REMOVE ALL EXISTING RUMBLE STRIPS THAT CONFLICT WITH THE TEMPORARY TRAFFIC PATTERNS. 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 CROSSOVER AND ASSOCIATED TEMPORARY PAVEMENT. THE CONTRACTOR SHALL ALSO CONSTRUCT THE EAST END CROSSOVER 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 CROSSOVER 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 CROSSOVER 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 CROSSOVER 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.

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

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 CROSSOVER 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 CROSSOVER 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.

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.

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 CROSSOVERS SHALL BE REMOVED AND THE PREVIOUSLY SUSPENDED MEDIAN BARRIER SHALL BE CONSTRUCTED. ALL RAMPS SHALL BE OPEN TO TRAFFIC.

4

ALL TEMPORARY DRAINAGE ITEMS TO THE INSIDE OF I-490 SHALL BE REMOVED AND RESTORED TO THE PERMANENT CONDITION. TRAFFIC SHALL BE MAINTAINED PER MT-95.30 DURING OFF-PEAK HOURS AND IN ACCORDANCE WITH THE LATEST REVISION OF THE PERMITTED LANE CLOSURE SCHEDULE (PLCS).

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
4	03/27/24	ADDED TO PHASE 1 AND 6 SEQUENCE OF CONSTRUCTION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GPD GROUP®
Copyright© Glaus, Pyle, Schomer, Burns & DeHaven, Inc., 2020

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 60 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: SHEET001 PAPERSIZE: 34x22 (in.) DATE: 3/27/2024 TIME: 10:54:16 AM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MN001.dgn

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:

1. 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.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (216) 584-2006 FOURTEEN (14) DAYS PRIOR TO THE BEGINNING OF WORK.

3. 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.

4. WHEN DETOUR SIGNS ARE IN USE, ALL CONFLICTING SIGNS SHALL BE COVERED.

5. 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.

6. 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. 4

7. 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.

8. 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.

9. 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.)

10. 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 WEDNSDAY
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

12. 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

13. THE CONTRACTOR SHALL MILL 2 INCHES BY 2 FEET WIDE OF THE EXISTING ASPHALT SHOULDER IN ORDER TO REMOVE THE EXISTING RUMBLE STRIPS IN THE AREA WHERE TRAFFIC IS SHIFTED AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL THEN COAT ALL MILLED SURFACES HORIZONTAL AND VERTICAL WITH APPROVED AC LIQUID. NEXT THE CONTRACTOR SHALL PLACE 2 INCHES OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG 76-22M. ALL COST ASSOCIATED WITH THE REMOVAL OF THE EXISTING PAVEMENT AND THE PLACEMENT OF THE SURFACE COURSE SHALL BE INCLUDED IN THE PRICE BID PER FOOT OF THE FOLLOWING ITEM:

ITEM 614, MAINTAINING TRAFFIC, MISC.: REMOVE RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) 9450 FT

RUMBLE STRIPS LOCATED WITHIN A CONCRETE SHOULDER AREA WHICH IS USED TO MAINTAIN TRAFFIC SHALL BE PAVED OVER WITH ASPHALT FOR A SMOOTH SURFACE. IN AREAS OUTSIDE OF THE SHOULDER RECONSTRUCTION LIMITS, THE ASPHALT SHALL BE SUBSEQUENTLY REMOVED AND THE RUMBLE STRIPS EXPOSED TO ORIGINAL CONDITION.

ITEM 614, MAINTAINING TRAFFIC, MISC.: REMOVE RUMBLE STRIPS, SHOULDER (CONCRETE) 2160 FT

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.

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

DRUM REQUIRMENTS

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.

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.

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

4

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
4	03/27/24	ADDED #13 TO ITEM 614 MOT NOTE
4	04/02/24	REMOVED ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GPD GROUP®

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 61 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: SHEET001 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 10:54:07 AM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MN002.dgn

WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER(S)	DIRECTION(S)
WZ - 65263-00	CUY-490-0.00-1.00
WZ - 65264-00	CUY-490-1.00
WZ - 65263-01	CUY-490-1.75-2.28

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS RE MOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

WORK ZONE SPEED ZONES (WZSZS) (CONT.)

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

WITH POSITIVE PROTECTION		
ORIGINAL POSTED SPEED LIMIT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65
65	55	60
60	55	60
55	50	55
WITHOUT POSITIVE PROTECTION		
ORIGINAL POSTED SPEED LIMIT	WORKERS PRESENT	WORKERS NOT PRESENT
70	55	65
65	50	60
60	50	60
55	45	55

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

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY — 42 SNMT

ASSUMING 3 DSL SIGN ASSEMBLIES FOR 12 MONTHS
ASSUMING 2 DSL SIGN ASSEMBLIES FOR 2 MONTHS
ASSUMING 2 DSL SIGN ASSEMBLIES FOR 1 MONTHS

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN — 14 EACH

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY.

EXCAVATION FOR MAINTAINING TRAFFIC 1573 CU. YD.

EMBANKMENT FOR MAINTAINING TRAFFIC 563 CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

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

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

ITEM 614 - WORK ZONE CROSSOVER LIGHTING SYSTEM

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR A SINGLE CROSSOVER, OR OVERLAPPING A PAIR OF CROSSOVERS. THE SYSTEM SHALL BE AS SHOWN ON TRAFFIC SCD MT 100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 725 EXCEPT: THE PERFORMANCE TEST OF 625.19F, AND CERTIFIED DRAWING REQUIREMENT OF 625.06, ARE WAIVED AND USED MATERIALS IN GOOD CONDITION ARE ACCEPTABLE.

POLES WHICH ARE NOT PROTECTED BY GUARDRAIL OR PORTABLE BARRIER SHALL BE LOCATED OUTSIDE THE CLEAR ZONE, AND SHOULD BE LOCATED AT LEAST 30 FEET (PREFERABLY 40 FEET) FROM THE EDGE OF PAVEMENT WHEN POSSIBLE. ADDITIONAL POLE LINES, CABLES AND APPURTENANCES NECESSARY TO FURNISH POWER TO THE LIGHTING SYSTEM SHALL BE INCLUDED IN THIS ITEM. SERVICE POLES SHALL BE POSITIONED WITH THE SAME CONSTRAINTS AS THE LIGHTING POLES AS A MINIMUM.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM THROUGHOUT ALL PHASES OF WORK WHEN THE CROSSOVER ROADWAYS ARE USED. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY.

ITEM 614 - WORK ZONE CROSSOVER LIGHTING SYSTEM — 2 EACH

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.

MAINTENANCE OF CANOE TRAFFIC

CANOE TRAFFIC SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION OF THE PROJECT EITHER THROUGH EXISTING RIVER CHANNEL OR THROUGH PORTAGE TRAIL APPROVED BY THE ENGINEER.

ADEQUATE SIGNING BOTH UPSTREAM AND DOWNSTREAM SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE FOLLOWING TYPE SIGNS ARE CONSIDERED TO BE MINIMUM TREATMENT:

1. APPROXIMATELY ONE-QUARTER MILE UPSTREAM, ADVANCED WARNING TYPE SIGNS ON BOTH BANKS;
2. APPROXIMATELY 300 FEET UPSTREAM, SIGNS SPECIFYING ACTIONS REQUIRED OF CANOEIST ON BOTH BANKS;
3. APPROXIMATELY ONE-QUARTER MILE DOWNSTREAM, ADVANCE WARNING TYPE SIGNS ON BOTH BANKS; AND
4. APPROXIMATELY 300 FEET DOWNSTREAM, SIGNS SPECIFYING ACTIONS REQUIRED OF CANOEIST OF BOTH BANKS.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3.25" INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

CONCRETE MEDIAN BARRIER REPLACEMENT

REMOVING, GRADING AND INSTALLING THE REPLACEMENT BARRIER WITHIN THE PROJECT LIMITS IN A CONTINUOUS ~~OPERATION SHALL BE LIMITED~~ TO 471' LINEAR FEET , SEE DETAIL SHEETS 287-288, ~~SUBJECT TO THE APPROVAL~~ OF THE ENGINEER. THE ~~ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS~~ WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC. THE ABOVE QUANTITY HAS BEEN INCLUDED IN ROADWAY OFFICE CALCULATIONS.

4 4

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

32" PORTABLE BARRIER (ANCHORED OR UNANCHORED), AS PER PLAN

ALL 32" PORTABLE BARRIER (ANCHORED OR UNANCHORED), AS PER PLAN CAN BE SUBSTITUTED FOR 50" PORTABLE BARRIER, AS PER PLAN (ANCHORED OR UNANCHORED). ANY ADDITIONAL COST ASSOCIATED WITH THE CHANGE SHALL BE INCLUDED IN ITEM 622 - PORTABLE BARRIER, ANCHORED, AS PER PLAN OR ITEM 622 - PORTABLE BARRIER, UNANCHORED, AS PER PLAN.

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GPD GROUP*

DESIGNER KRM

REVIEWER AKF 11-21-23

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	MODIFIED CONCRETE MEDIAN BARRIER REPLACEMENT NOTE

PROJECT ID 107408

SHEET 62 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: SHEET001 PAPERSIZE: 34x22 (in.) DATE: 4/5/2024 TIME: 6:04:21 AM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MN003.dgn

WINTER OVER PHASE WORK ZONE PAVEMENT MARKINGS AND CROSSOVER CLOSURE

THE CONTRACTOR SHALL INSTALL THE WINTER OVER WORK ZONE PAVEMENT MARKINGS AND CLOSE THE CROSSOVER WITH PORTABLE BARRIER PER THE TYPICAL SECTIONS FOR THE LAYOUT OF THE WINTER OVER ZONES. TEMPORARY PAVEMENT MARKINGS SHALL BE PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11. THE PORTABLE BARRIER TO CLOSE THE CROSSOVER SHALL BE OVERLAPPED WITH THE MEDIAN BARRIER TO ELIMINATE THE BLUNT END OF THE MEDIAN BARRIER. THE 3RD WINTER OVER PHASE SHALL MATCH THE FINAL PAVEMENT MARKING PLANS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY:

1ST WINTER OVER PHASE QUANTITIES:

ITEM 614 - WORK ZONE LANE LINE, CLASS I, 6"	0.70 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6"	7.79 MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 12"	12648 FT
ITEM 614 - WORK ZONE DOTTED LINE, CLASS I	720 FT

2ND WINTER OVER PHASE QUANTITIES:

ITEM 614 - WORK ZONE LANE LINE, CLASS I, 6"	6.47 MILE
ITEM 614 - WORK ZONE CENTER LINE, CLASS I	0.05 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 4"	0.17 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6"	13.94 MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 12"	11247 FT
ITEM 614 - WORK ZONE DOTTED LINE, CLASS I	4100 FT
ITEM 614 - BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	22 EACH
ITEM 614 - OBJECT MARKER, ONE-WAY	11 EACH
ITEM 622 - PORTABLE BARRIER, 50", AS PER PLAN	510 FT

4

3RD WINTER OVER PHASE QUANTITIES:

ITEM 614 - WORK ZONE LANE LINE, CLASS I, 6"	10.79 MILE
ITEM 614 - WORK ZONE CENTER LINE, CLASS I	0.11 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6"	14.57 MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 12"	15868 FT
ITEM 614 - WORK ZONE DOTTED LINE, CLASS I	8869 FT
ITEM 614 - WORK ZONE STOP LINE	70 FT
ITEM 614 - WORK ZONE LANE ARROW	24 EACH
ITEM 614 - MAINTAINING TRAFFIC, MISC.: LANE REDUCTION ARROW	1 EACH

ITEM 614 - MAINTAINING TRAFFIC, MISC.: LANE REDUCTION ARROW SHALL BE PER THE PERMANENT DESIGN EXCEPT THE MATERIAL SHALL BE WORK ZONE PAVEMENT MARKING CLASS I, 642 PAINT.

WORK ZONE SIGNING

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY FOR THE WORK ZONE SIGNING AS SHOWN ON THE MAINTENANCE OF TRAFFIC ELEVATION DETAILS.

ITEM 630 - SIGN ATTACHMENT ASSEMBLY	14 EACH
ITEM 630 - SIGN, OVERHEAD EXTRUSHEET	824.3 SF

ALL MATERIAL, LABOR AND EQUIPMENT REQUIRED TO INSTALL AND SUBSEQUENTLY REMOVE SOLID WOOD POST SUPPORTS (OR APPROVED EQUAL) FOR WORK ZONE SIGNING SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

ALL MATERIAL, LABOR AND EQUIPMENT TO REMOVE, ADJUST AND/OR RELOCATE EXISTING OVERHEAD MOUNTED SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

ALL REMAINING WORK ZONE SIGNING AND TEMPORARY SUPPORTS NOT SPECIFICALLY ITEMIZED SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

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

NOTIFICAION OF TRAFFIC RESTRICTION

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< = 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

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

NOTICE OF CLOSURE SIGN

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

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

NOTICE OF CLOSURE TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

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

CROSSOVER #1/3/4/6 - #2/5 CONSTRUCTION AND REMOVAL

CROSSOVER CONSTRUCTION SHALL INCLUDE THE PLACEMENT OF A VARIABLE DEPTH ASPHALT PAVEMENT IN THE SHOULDER AREA. SLOTTED DRAINS AND TEMPORARY OUTLETS ARE INCLUDED IN ORDER TO PROMOTE DRAINAGE. THE REQUIREMENTS OF ITEM 611.04BCD SHALL BE WAVED FOR THE FOLLOWING AS PER PLAN TEMPORARY DRAINAGE ITEMS. THE FOLLOWING ITEMS ARE INCLUDED IN THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY FOR THE CROSSOVER CONSTRUCTION:

ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN	452 FT
ITEM 611 - SLOTTED DRAIN, TYPE 1, 12", AS PER PLAN	1150 FT

CROSSOVER REMOVAL SHALL INCLUDE REMOVING THE SLOTTED DRAINS, ALL ASSOCIATED PAVEMENT REPAIR, FILL AND PLUG SLOTTED DRAIN OUTLETS AND PAVEMENT PLANING TO RESTORE THE SURROUNDING PAVED SURFACES TO THEIR ORIGINAL CONDITION AND GRADE. THE FOLLOWING ITEMS ARE INCLUDED IN THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY FOR THE CROSSOVER CONSTRUCTION:

ITEM 202 - PIPE REMOVED	452 FT
ITEM 253 - PAVEMENT REPAIR	1965 SY
ITEM 254 - PAVEMENT PLANING	1170 SY

PAVEMENT REPAIR SHALL INCLUDE THE REMOVAL OF THE TEMPORARY SLOTTED DRAINS IN THE CROSSOVER AREAS. THE CONTRACTOR SHALL SAW CUT A NEAT EDGE ONE (1) FOOT FROM THE EDGE OF THE TEMPORARY SLOTTED DRAINS, REMOVE THE SLOTTED DRAINS, AND REMOVE EXCESS EXISTING PAVEMENT PER C&MS 253.02. THIS TRENCHED AREA SHALL BE REPLACED WITH ASPHALT PAVEMENT TO MATCH THE EXISTING ASPHALT PAVEMENT COMPOSITION, AS DIRECTED BY THE ENGINEER. AFTER BACKFILLING OF THE CAVITY PER C&MS 202.02, THE CONTRACTOR SHALL PROVIDE AN ASPHALT CONCRETE PAVED SURFACE IN THIS AREA BY MATCHING THE EXISTING ASPHALT PAVEMENT COMPOSITION, AS DIRECTED BY THE ENGINEER.

ANY ADDITIONAL ITEMS OF WORK NOT SPECIFICALLY LISTED WHICH ARE REQUIRED TO CONSTRUCT OR REMOVE THE CROSSOVERS SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED IN THE LUMP SUM BID FOR ITEM 615 - ROADS FOR MAINTAINING TRAFFIC.

4

TEMPORARY TROUGHS

TEMPORARY TROUGHS WILL BE ADDED THROUGHOUT THE CORRIDOR TO CONTROL THE SPREAD FOR THE TWO-YEAR STORM DURING CONSTRUCTION. THE LOCATION AND SIZE OF THESE TROUGHS ARE SHOWN IN THE MOT PLANS. WHERE THE TROUGHS ARE PLACED WITHIN EXISTING/PROPOSED PAVEMENT LIMITS, THE PLAN SPECIFIED DEPTH WILL BE MILLED FROM THE TROUGH AREA SHOWN IN THE PLANS. IN LOCATIONS WHERE THE TROUGHS ARE TO BE PLACED WITHIN THE PROPOSED PAVEMENT LIMITS, THE INTERMEDIATE COURSE WILL NOT BE PLACED WITHIN THE TROUGH AREAS UNTIL THE MOT PHASES FOR WHICH THEY ARE REQUIRED ARE COMPLETED.

TEMPORARY TROUGHS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS AND CARRIED TO THE GENERAL SUMMARY.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (DEPTH 1.5")	111 SY

ITEM 301 - STABILIZED CRUSHED AGGREGATE

ITEM 301 - STABILIZED CRUSHED AGGREGATE SHALL BE 2' WIDE AND 6" DEEP AND PLACED ADJACENT TO THE OUTSIDE OF ALL ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A PAVEMENT, EXCEPT WHEN THE PAVEMENT FOR MAINTAINING TRAFFIC HAS A TEMPORARY CURB. THE MAINTENANCE OF TRAFFIC SUB SUMMARIES QUANTITY ITEM 301 - STABILIZED CRUSHED AGGREGATE AND ACCURATELY DISPLAYS THE STATION RANGES WHERE THE ITEM IS REQUIRED.

4

ITEM 615 - ROADS FOR MAINTAING TRAFFIC

ROADS FOR MAINTAINING TRAFFIC WILL BE REQUIRED AT VARIOUS LOCATIONS AS SHOWN IN THE PLANS, AND SHALL BE CONSTRUCTED ACCORDING TO C&MS 615 AND AS DETAILED IN THE PLANS.

FOLLOWING CONSTRUCTION OF PAVEMENTS AND ROADS FOR MAINTAINING TRAFFIC, TEMPORARY FACILITIES SHALL BE REMOVED AS PER C&MS 615.08, AND THE EXISTING TOPOGRAPHY SHALL BE RESTORED, UNLESS OTHERWISE SPECIFIED IN THE PLANS.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND OTHER INCIDENTALS FOR ROADS AND PAVEMENTS FOR MAINTAINING TRAFFIC SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 615 - ROADS FOR MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED IN THE PLANS.

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

ITEM 615 - ROADS FOR MAINTAINING TRAFFIC	LS

4

TEMPORARY DRAINAGE ITEMS

THE REQUIREMENTS OF ITEM 611.04BCD SHALL BE WAVED FOR THE FOLLOWING AS PER PLAN, AS PER PLAN "C" AND AS PER PLAN "D" TEMPORARY DRAINAGE ITEMS. TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS AND CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY.

ITEM 611 - CATCH BASIN, NO. 3A, AS PER PLAN "D"	11 EACH
ITEM 611 - CATCH BASIN, NO. 2-2B, AS PER PLAN "C"	7 EACH
ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN	3489 FT
ITEM 611 - 12" CONDUIT, TYPE C, AS PER PLAN	416 FT
ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	1 EACH
ITEM 611 - SLOTTED DRAIN, TYPE 1, 12", AS PER PLAN	5462 FT

TEMPORARY DRAINAGE REMOVAL SHALL INCLUDE REMOVING THE TEMPORARY SLOTTED DRAINS, TEMPORARY CATCH BASINS, ALL ASSOCIATED PAVEMENT REPAIR, FILL AND PLUG SLOTTED DRAIN OUTLETS AND ANYTHING ELSE NECESSARY TO RESTORE THE SURROUNDING AREA TO THE ORIGINAL OR FINAL CONDITION.

PAVEMENT REPAIR SHALL INCLUDE THE REMOVAL OF THE TEMPORARY SLOTTED DRAINS OUTSIDE THE CROSSOVER AREAS WHERE TEMPORARY DRAINAGE HAD BEEN INSTALLED. THE CONTRACTOR SHALL SAW CUT A NEAT EDGE ONE (1) FOOT FROM THE EDGE OF THE TEMPORARY SLOTTED DRAINS, REMOVE THE SLOTTED DRAINS, AND REMOVE EXCESS EXISTING PAVEMENT PER C&MS 253.02. THIS TRENCHED AREA SHALL BE REPLACED WITH ASPHALT PAVEMENT TO MATCH THE EXISTING OR PROPOSED ASPHALT PAVEMENT COMPOSITION, AS DIRECTED BY THE ENGINEER. AFTER BACKFILLING OF THE CAVITY PER C&MS 202.02, THE CONTRACTOR SHALL PROVIDE AN ASPHALT CONCRETE PAVED SURFACE IN THIS AREA BY MATCHING THE EXISTING OR PROPOSED ASPHALT PAVEMENT COMPOSITION, AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND CARRIED TO THE MAINTENANCE OF TRAFFIC GENERAL SUMMARY TO RESTORE AREAS WHERE TEMPORARY DRAINAGE ITEMS WILL BE REMOVED.

ITEM 253 - PAVEMENT REPAIR	115 SY

ANY ADDITIONAL ITEMS OF WORK NOT SPECIFICALLY LISTED WHICH ARE REQUIRED TO CONSTRUCT OR REMOVE ANY TEMPORARY PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED IN THE LUMP SUM BID FOR ITEM 615 - ROADS FOR MAINTAINING TRAFFIC.

MAINTENANCE OF TRAFFIC NOTES

REVISIONS

NO.	DATE	DESCRIPTION
3	03/14/24	MODIFIED 615 NOTE AND ADDED NOTES
3	03/20/24	MODIFIED WINTER OVER PHASE NOTE
4	03/27/24	ADDED TO TEMPORARY DRAINAGE ITEMS NOTE
4	04/02/24	ADDED 3RD WINTER OVER PHASE TO WINTER OVER NOTE
4	04/02/24	CARRIED CROSSOVER QUANTITIES TO GENEARL SUMMARY
4	04/02/24	MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN" AND ADDED TO TEMP. DRAINGE NOTE
4	04/02/24	MOVED SIGNAL/FLASHER NOTE TO SHEET 65A

DESIGN AGENCY

GPD GROUP

DESIGNER KRM

REVIEWER AKF 11-21-23

PROJECT ID 107408

SHEET 65 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: SHEET001 PAPERSIZE: 34x22 (in.) DATE: 4/5/2024 TIME: 2:06:19 PM USER: kmonas
O:\Clients\ORD\2021\202108910740B\400-Engineering\MOTSheets\107408_MN006.dgn

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, AND SAFETY FEATURES INSTALLED, ALONG WITH NO RESTRICTIONS WITHIN 2 FEET OF THE EDGE LINE ON THE SHOULDER, EXCEPT AS REQUIRED BY THE WINTER OVER #2 TRAFFIC PATTERN. 4

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 (ASPHALT ITEMS ONLY) PRIOR TO WINTER SHUTDOWN~~ 4	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
COMPLETION OF PHASE 5 PRIOR TO WINTER SHUTDOWN 4	10-15-2026	ASSESSED PER CMS 108.07	$ 0

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. 4

FLEXIBLE START WINDOW TABLE

DESCRIPTION OF CRITICAL WORK		CALENDAR DAYS TO COMPLETE	DISINCENTIVE $ PER DAY	WORK WINDOW START	WORK WINDOW END
WORK NEEDED TO REPLACE THE PAVEMENT FOR ALL RAMPS LISTED EXCEPT I-490/SR-10 WB TO I-71 SB	I-490 - SR-10 WB TO I-71 SB (PHASE 2 & 3)	210 DAYS (PHASES 2 & 3)	$ 3,000	BEGIN PHASE 2	END PHASE 3
	RAMP N-E (I-77 SB)	60 DAYS (PHASE 5)	$ 1,500	BEGIN PHASE 5	END PHASE 5
	RAMP S-W (I-77 NB)	45 DAYS (PHASE 2A)	$ 8,000	BEGIN PHASE 2A	END PHASE 2A

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS: 4

1. 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.
2. 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.

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION (CONTINUED) 4

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 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 CRASH 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 STATE OR THE CITY OF CLEVELAND 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 METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS 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 4 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6-8 AM TO 4-6 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.

ANY VEHICULAR TRAFFIC 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:

1. TIME OF NOTIFICATION OF MALFUNCTION;
2. TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;
3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
5. 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.

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
3	03/15/24	MODIFIED CALENDAR DAYS TO COMPLETE RAMP WORK
4	04/02/24	MOVED SIGNAL FLASHER NOTE FROM SHEET 65
4	04/02/24	MODIFIED FLEXIBLE START WINDOW TABLE
4	04/02/24	MODIFIED INCENTIVE/DISNCENTIVE NOTE ADDED

DESIGN AGENCY
GPD GROUP

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 65A TOTAL 1068

MAINTENANCE OF TRAFFIC NOTES

CUY-490-0.00 PART 1

MODEL: SHEET001 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 8:42:24 AM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MN007.dgn

61	62	63	64	65				94	95						PARTICIPATION 01/IMS/04		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
				4										4					4		MAINTENANCE OF TRAFFIC	
				452											452		202	34900	452	FT	PIPE REMOVED	
				2080											2080		253	01000	2080	SY	PAVEMENT REPAIR	
			4	1281											1281		254	01000	1,281	SY	PAVEMENT PLANING, ASPHALT CONCRETE (DEPTH 1.5")	
									281						281		411	10000	281	CY	STABILIZED CRUSHED AGGREGATE	
									2823						2823		606	15050	2823	FT	GUARDRAIL, TYPE MGS	
									3						3		606	26150	3	EACH	ANCHOR ASSEMBLY, MSG TYPE E (MASH 2016)	
									3						3		606	26550	3	EACH	ANCHOR ASSEMBLY, MSG TYPE T	
									3369						3369		609	24510	3369	FT	CURB, TYPE 4-C	
				3941											3941		611	04401	3941	FT	12" CONDUIT, TYPE B, AS PER PLAN	65
				416											416		611	04601	416	FT	12" CONDUIT, TYPE C, AS PER PLAN	65
				6612											6612		611	97011	6612	FT	SLOTTED DRAIN, TYPE 1, 12", AS PER PLAN 4	65
				11											11		611	98181	11	EACH	CATCH BASIN, NO. 3A, AS PER PLAN "D"	65
				7											7		611	98471	7	EACH	CATCH BASIN, NO. 2-2B, AS PER PLAN "C"	65
				1											1		611	98635	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	65
			600												600		614	11110	600	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
								4	1453						1453		614	11630	1453	FT	INCREASED BARRIER DELINEATION	
									53						53		614	12380	53	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
LS															LS		614	12420	LS		DETOUR SIGNING	
	14														14		614	12484	14	EACH	WORK ZONE INCREASED PENALTIES SIGN	
50															50		614	12500	50	EACH	REPLACEMENT SIGN	
	2														2		614	12756	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
								3372							3372		614	12800	3372	EACH	WORK ZONE RAISED PAVEMENT MARKER	
								2970							2970		614	12801	2970	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	63
250									196						446		614	13000	446	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
								4														
				22					3526						3548		614	13310	3548	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
									161						161		614	13312	161	EACH	BARRIER REFLECTOR, TYPE 2 (ONE-WAY)	
				11					3687						3698		614	13350	3698	EACH	OBJECT MARKER, ONE WAY	
				1											1		614	18000	1	EACH	MAINTAINING TRAFFIC, MISC.: LANE REDUCTION ARROW	65
4 9450															9450		614	18030	9450	FT	MAINTAINING TRAFFIC, MISC.: REMOVE RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	61
2160															2160		614	18030	2160	FT	MAINTAINING TRAFFIC, MISC.: REMOVE RUMBLE STRIPS, SHOULDER (CONCRETE)	61
		40													40		614	18601	40	SNMT	~~PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN~~	63
				17.96											17.96		614	20010	17.96	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
								15.53							15.53		614	20056	15.53	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
				0.16				0.18							0.34		614	21000	0.34	MILE	WORK ZONE CENTER LINE, CLASS I	
				0.17				0.33							0.50		614	22000	0.50	MILE	WORK ZONE EDGE LINE, CLASS I, 4"	
				36.30											36.30		614	22010	36.30	MILE	WORK ZONE EDGE LINE, CLASS I, 6"	
							4	64.64							64.64		614	22056	64.64	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
				39763											39763		614	23010	39763	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12"	
								60755							60755		614	23110	60755	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
				13689											13689		614	24000	13689	FT	WORK ZONE DOTTED LINE, CLASS I	
							4	21389							21389		614	24102	21389	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
				70				69							139		614	26000	139	FT	WORK ZONE STOP LINE, CLASS I	
								318							318		614	27010	318	FT	WORK ZONE CROSSWALK LINE, CLASS I, 12"	
								3255							3255		614	28000	3255	FT	WORK ZONE GORE MARKING, CLASS II	
				24				20							44		614	30000	44	EACH	WORK ZONE ARROW, CLASS I	
				LS											LS		615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
									13468						13468		615	20000	13468	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
300															300		616	10000	300	MGAL	WATER	
				510					17790						18300		622	41011	4 18300	FT	PORTABLE BARRIER, 50", AS PER PLAN	61
								4	16						16		622	41060	16	EACH	DUAL PORTABLE BARRIER TRANSITION/TERMINATION	
									96130						96130		622	41101	96130	FT	PORTABLE BARRIER, UNANCHORED, AS PER PLAN	62
									11100						11100		622	41111	11100	FT	PORTABLE BARRIER, ANCHORED, AS PER PLAN	62
				14											14		630	75000	14	EACH	SIGN ATTACHMENT ASSEMBLY	
				824.3											824.3		630	80224	824.3	SF	SIGN, OVERHEAD EXTRUSHEET	
	42														42		808	18700	42	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	

REVISIONS		
NO.	DATE	DESCRIPTION
3	03/05/24	MODIFIED QUANTITY
3	03/14/24	ADDED TEMP. DRAINAGE ITEMS PREV. IN ITEM 615
3	03/20/24	MODIFIED PB ITEMS
4	03/27/24	ADDED PAVEMENT REPAIR AND RUMBLE STRIPS
4	04/02/24	REVISED AND ADDED QUANTITIES FROM SHEET 65
4	04/02/24	ADDED QUANTITY FOR NEW SHEETS 262A - 262B

MAINTENANCE OF TRAFFIC - GENERAL SUMMARY

DESIGN AGENCY

GPD GROUP*

DESIGNER KRM

REVIEWER AKF 11-21-23

PROJECT ID 107408

SHEET 66 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/5/2024 TIME: 2:05:26 PM USER: MLesiter
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MG001.dgn

MAINTENANCE OF TRAFFIC SUBSUMMARY 1 - PHASE 5

SHEET NO.	REF. NO.	LOCATION	STATION FROM	STATION TO	SIDE	614 WORK ZONE RAISED PAVEMENT MARKER, (WHITE)	614 WORK ZONE RAISED PAVEMENT MARKER, (YELLOW)	614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN (WHITE)	614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN (YELLOW)	614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	614 WORK ZONE CENTER LINE, CLASS I	614 WORK ZONE EDGE LINE, CLASS I, 4"	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	614 WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT (WHITE)	614 WORK ZONE STOP LINE, CLASS I	614 WORK ZONE CROSSWALK LINE, CLASS I, 12"	614 WORK ZONE GORE MARKING, CLASS II	614 WORK ZONE ARROW, CLASS I
			FROM	TO		EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH
		PHASE 5 (CONTINUED)																		
255	CH-124	B/L CONST. RAMP W-S	521+97	523+50	LT	8									153					
255	CH-125	C/L R/W & CONST. I-490	1022+00	1024+50	RT										151					
255	CH-126	NOT USED																		
255	CH-127	B/L CONST. RAMP W-N	625+60	628+16	RT	13									256					
255	CH-128	B/L CONST. RAMP W-S	521+97	528+00	LT	31									603					
255	CV-24	C/L R/W & CONST. I-490	1022+00	1024+50	RT														44	
255	CV-25	B/L CONST. RAMP W-S	525+60	528+00	LT														44	
255	EW-142	B/L CONST. RAMP W-S	521+97	529+00	LT	32		4					703							
255	EW-143	C/L R/W &CONST. I-490	1024+50	1033+00	RT								850							
255	EW-144	B/L CONST. RAMP W-N	628+20	632+00	RT	14							380							
255	EY-151	RAMP W-S / RAMP W-N	523+50	632+00	LT/LT	38								850						
255	EY-152	C/L R/W & CONST. I-490	1022+00	1033+00	RT									1001						
256	EW-145	B/L CONST. RAMP W-N	632+00	636+40	RT								440							
256	EW-146	I-490 / OPPOR. CORRIDOR	1033+00	111+50	RT/RT								1423							
256	EW-147	B/L CONST. RAMP S-E	339+50	347+00	RT								750							
256	EY-154	B/L CONST. RAMP W-N	632+00	636+40	LT									440						
256	EY-155	I-490 / OPPOR. CORRIDOR	1033+00	111+50	RT									1423						
256	EY-156	B/L CONST. RAMP S-E	339+50	347+19	LT									769						
257	EW-148	C/L R/W &CONST. I-490	111+50	117+74	RT			45					624							
257	EY-156A	C/L R/W &CONST. I-490	111+50	113+13	RT				10					163						
258	EW-149	B/L CONST. RAMP S-E	2044+74	2050+50	LT/RT								576							
258	EY-157	B/L CONST. RAMP S-E	2044+74	2050+50	LT/RT									576						
259	CH-130	NOT USED																		
259	CDS-2	B/L EX. W. 7TH ST.	10+14	16+50	RT						636									
259	EW-150	B/L EX. W. 7TH ST.	10+14	16+50	LT								636							
259	EW-151	NOT USED																		
259	EY-158	NOT USED																		
259	LA-1	NOT USED																		
259	LA-2	NOT USED																		
259	SL-1	NOT USED																		
260	EW-152	B/L CONST. RAMP W-S	529+00	533+10	RT			10					410							
260	EY-159	B/L CONST. RAMP W-S	529+00	532+10	RT				10					310						
261	EW-153	B/L EX. BROADWAY AVE.	11+21	19+50	LT							829								
262	CH-131	B/L EX. RAMP S-W	2+58	3+43	RT										85					
262	CH-132	B/L CONST. RAMP S-E	334+52	336+00	LT										148					
262	CV-26	B/L CONST. RAMP S-E	334+52	336+00	LT														41	
262	EW-154	B/L CONST. RAMP S-E	333+52	339+50	RT								598							
262	EY-160	B/L CONST. RAMP S-E	336+00	339+50	LT									350						
262A	EW-154A	B/L CONST. RAMP N-E	437+50	447+00	RT								950							
262A	EW-154B	B/L CONST. RAMP S-E	343+00	347+00	RT								400							
262A	EY-160A	B/L CONST. RAMP N-E	437+50	447+00	CL									950						
262A	EY-160B	B/L CONST. RAMP S-E	343+00	347+00	LT									400						
262A	DW-25A	B/L CONST. RAMP S-E	347+00	347+19	LT											19				
262B	DW-25B	B/L CONST. RAMP S-E	347+19	352+95												576				
TOTALS CARRIED TO MAINTENANCE OF TRAFFIC SUBSUMMARY - TOTALS 1						136		59	20		636	829	8740	7232	1396	595			129	

4 4 4

REVISIONS

NO.	DATE	DESCRIPTION
4	04/02/24	ADDED QUANTITY FOR NEW SHEETS 262A - 262B

DESIGN AGENCY
GPD GROUP

DESIGNER
KRM

REVIEWER
AKF 11-21-23

PROJECT ID
107408

SHEET 85 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 10:20:23 AM USER: MLessiter
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MS014.dgn

SHEET NO.	REF. NO.	LOCATION	STATION FROM	STATION TO	SIDE		411 STABILIZED CRUSHED AGGREGATE CY		606 ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016) EACH	606 ANCHOR ASSEMBLY, MGS TYPE T EACH	606 GUARDRAIL, TYPE MGS FT		609 CURB, TYPE 4-C FT		614 INCREASED BARRIER DELINEATION FT	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) EACH	614 BARRIER REFLECTOR, TYPE 1 (ONE-WAY) EACH	614 BARRIER REFLECTOR, TYPE 2 (ONE-WAY) EACH	614 OBJECT MARKER, ONE WAY EACH		615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A SY	614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CY		622 PORTABLE BARRIER, 50", AS PER PLAN FT	622 DUAL PORTABLE BARRIER TRANSITION/TERMINATION EACH	622 PORTABLE BARRIER, UNANCHORED, AS PER PLAN FT	622 PORTABLE BARRIER, ANCHORED, AS PER PLAN FT		
		PHASE 5																												
247	PB-133	B/L EX. RAMP W-S	31+60	33+30	LT												4		4								170			
247	PB-134	C/L R/W & CONST. I-490	931+60	935+50	RT											1	8		8							1	390			
247		C/L R/W & CONST. I-490	931+80	935+50	RT												9		9											
248	PB-135	C/L R/W & CONST. I-490	935+50	948+00	RT												25		25								1250			
248		C/L R/W & CONST. I-490	935+50	948+00	RT												25		25											
249	PB-136	C/L R/W & CONST. I-490	948+00	960+50	RT												25		25								1250			
249	PB-137	RAMP S-E / I-490	2050+50	960+50	LT/RT												20		20								200	800		
249	PB-138	C/L R/W & CONST. I-490	955+70	960+50	LT											1	20		20						480					
249		C/L R/W & CONST. I-490	960+45		CL											1														
249		C/L R/W & CONST. I-490	948+00	955+70	RT												16		16											
250	PB-139	C/L R/W & CONST. I-490	960+50	961+00	LT												2		2						50					
250	PB-140	C/L R/W & CONST. I-490	960+50	961+00	RT												1		1								50			
250	PB-141	C/L R/W & CONST. I-490	960+50	961+00	RT												1		1								50			
250	PB-142	C/L R/W & CONST. I-490	961+00	973+00	RT											1	24		24								1200			
250		C/L R/W & CONST. I-490	960+50	973+00	RT												25		25											
251	PB-143	C/L R/W & CONST. I-490	973+00	985+50	RT												25		25								1250			
251		C/L R/W & CONST. I-490	973+00	985+50	RT												25		25											
252	PB-144	C/L R/W & CONST. I-490	985+50	987+00	RT												3		3								150			
252	PB-144A	C/L R/W & CONST. I-490	986+90	993+50	RT												15		15								660			
252	PB-144B	C/L R/W & CONST. I-490	994+70	998+00	RT											1	8		8								330			
252		C/L R/W & CONST. I-490	985+50	998+00	RT												25		25											
253	PB-145	C/L R/W & CONST. I-490	998+00	1010+50	RT												25		25								1250			
253		C/L R/W & CONST. I-490	998+00	1010+50	RT												25		25											
254	PB-146	C/L R/W & CONST. I-490	1010+50	1022+00	RT												23		23								1150			
254		C/L R/W & CONST. I-490	1010+50	1022+00	RT												23		23											
255	PB-147	B/L CONST. RAMP W-S	522+00	529+00	LT												14		14								700			
255	PB-148	B/L CONST. RAMP W-S	522+70	525+30	LT												6		6								260			
255	PB-149	B/L CONST. RAMP W-S	527+50	528+80	LT											1	3		3							1	130			
255	PB-150	C/L R/W & CONST. I-490	1023+70	1033+00	RT											1	20		20								930			
255	PB-151	B/L CONST. RAMP W-N	627+70	632+00	RT												9		9							1	430			
255		B/L CONST. RAMP W-S	522+58	527+28	LT		18														852									
255		B/L CONST. RAMP W-S	523+58	529+00	RT		21														264									
255		C/L R/W & CONST. I-490	1022+00	1033+00	RT												22		22											
255		B/L CONST. RAMP W-N	628+20	632+00	LT												5	3	8											
				630+50																										
256	PB-152	I-490 / OPPOR. CORRIDOR	1033+00	111+50	RT												29		29								1420			
256	PB-153	B/L CONST. RAMP S-E	339+50	347+00	LT												15		15								750			
256		C/L R/W & CONST. I-490	1033+00	1045+00	RT												24		24											
256		C/L R/W & CONST. I-490	340+80	345+00	RT												6	4	10											
257	PB-154	OPPORTUNITY CORRIDOR	111+50	115+20	RT												8		8								370			
258	PB-155	B/L CONST. RAMP S-E	2046+40	2050+50	LT												9		9								410			
259	PB-156	B/L EX. W. 7TH ST.	10+14	15+14	LT											2	11		11								430	70		
260	PB-157	B/L CONST. RAMP W-S	529+00	532+10	RT											1	7		7								310			
260		B/L CONST. RAMP W-S	529+00	532+20	RT		12														32									
261	PB-158	B/L EX. BROADWAY AVE.	15+50	19+00	RT											1	8		8								350			
262	PB-159	B/L EX. RAMP S-W	3+40	4+60	RT												4		4								120	4		
262	PB-160	B/L CONST. RAMP S-E	335+20	339+50	LT											1	10		10							1	430			
262A	PB-160A	B/L CONST. RAMP N-E	437+70	447+00	RT											1	20		20								930	4		
TOTALS CARRIED TO MAINTENANCE OF TRAFFIC SUBSUMMARY - TOTALS 2							51								4	13	632	7	639	4	1148			530	4	17320	870		

MAINTENANCE OF TRAFFIC SUBSUMMARY 2 - PHASE 5

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 8:58:56 AM USER: MLessiter
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MS106.dgn

NO.	DATE	REVISIONS DESCRIPTION
4	04/02/24	ADDED QUANTITY FOR NEW SHEETS 262A - 262B

DESIGN AGENCY
GPD GROUP
DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 88 TOTAL 1068

SHEET NO.	REF. NO.	LOCATION	SHEET		TOTAL	SIDE		614 WORK ZONE RAISED PAVEMENT MARKER, (WHITE) EACH	614 WORK ZONE RAISED PAVEMENT MARKER, (YELLOW) EACH	614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN (WHITE) EACH	614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN (YELLOW) EACH	614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT FT	614 WORK ZONE CENTER LINE, CLASS I FT	614 WORK ZONE EDGE LINE, CLASS I, 4" FT	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE) FT	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW) FT	614 WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT (WHITE) FT	614 WORK ZONE STOP LINE, CLASS I FT	614 WORK ZONE CROSSWALK LINE, CLASS I, 12" FT	614 WORK ZONE GORE MARKING, CLASS II FT	614 WORK ZONE ARROW, CLASS I EACH							
		PHASE 1 TOTALS CARRIED FROM SHEET	67	OF	1068			54	34	433	149	2121			8407	10686	9200	720			103									
		PHASE 1 TOTALS CARRIED FROM SHEET	68	OF	1068			182	118	99	71	1568			2854	19190	3448						118							
		PHASE 2 TOTALS CARRIED FROM SHEET	70	OF	1068			273	125	148	93	7874			11264	13706	6077	363			50		273							
		PHASE 2 TOTALS CARRIED FROM SHEET	71	OF	1068			204	21			10282			10540	11476	2380	2292			105		21							
		PHASE 2 TOTALS CARRIED FROM SHEET	72	OF	1068			144	71	200	155	2487			11125	11429	2986				152		71							
		PHASE 2 & 2A TOTALS CARRIED FROM SHEET	73	OF	1068			101	55	141	70	148			4790	4636	1381	1001			35		101							
		PHASE 3 TOTALS CARRIED FROM SHEET	76	OF	1068			290	113	65	32	7830			11199	11655	3061				148		290							
		PHASE 3 & 3A TOTALS CARRIED FROM SHEET	77	OF	1068			159	101	32	26	810	285	885	7943	7902	1986				164		159							
		PHASE 4 TOTALS CARRIED FROM SHEET	79	OF	1068			129	70	88	18	7459			10163	10936	3608	2839			302		70							
		PHASE 4 TOTALS CARRIED FROM SHEET	80	OF	1068			133		1		9419			11752	11829	3412	2582	38	130	435	10	133							
		PHASE 4 TOTALS CARRIED FROM SHEET	81	OF	1068			93	81	38		868			12684	13087	2648	300			142		81							
		PHASE 4 TOTALS CARRIED FROM SHEET	82	OF	1068					45	45			4	4040	5039	150		4											
		PHASE 5 TOTALS CARRIED FROM SHEET	84	OF	1068			168	77	237	97	7282			~~9987~~	~~10545~~	3937	~~1689~~			154		77							
		PHASE 5 TOTALS CARRIED FROM SHEET	85	OF	1068			136		59	20		636	829	8740	7232	1396	595			129									
		PHASE 5A TOTALS CARRIED FROM SHEET	86	OF	1068			272	106	131	56	1774			~~7467~~	~~4947~~	5562	~~1041~~			277									
		PHASE 5A TOTALS CARRIED FROM SHEET	87	OF	1068					80	46	519			2856	3266	878		31	188	150	10								
		PHASE 6 TOTALS CARRIED FROM SHEET	90	OF	1068					205	56	10295			6338	7284	4669	3002			272									
		PHASE 6 TOTALS CARRIED FROM SHEET	91	OF	1068			62		31		10930			6993	9343	1950	4365			553									
		PHASE 6 TOTALS CARRIED FROM SHEET	92	OF	1068					3		332			7590	10403	2026				84									
		TOTALS CARRIED TO MAINTENANCE OF TRAFFIC GENERAL SUMMARY						3372	2970	15.53	0.18	0.33	64.64	60755	21389	69	318	3255	20	1394									

CUY-490-0.00 PART 1

MAINTENANCE OF TRAFFIC SUBSUMMARY - TOTALS 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 10:21:20 AM USER: MLesiter
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MS501.dgn

DESIGN AGENCY

GPD GROUP

DESIGNER KRM

REVIEWER AKF 11-21-23

PROJECT ID 107408

SHEET 94 TOTAL 1068

REVISIONS

NO.	DATE	DESCRIPTION
4	04/02/24	ADDED QUANTITY FOR NEW SHEETS 262A - 262B

SHEET NO.	REF. NO.	LOCATION	SHEET		TOTAL	SIDE		411 STABILIZED CRUSHED AGGREGATE		606 ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	606 ANCHOR ASSEMBLY, MGS TYPE T	606 GUARDRAIL, TYPE MGS		609 CURB, TYPE 4-C		614 INCREASED BARRIER DELINEATION	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	614 BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	614 BARRIER REFLECTOR, TYPE 2 (ONE-WAY)	614 OBJECT MARKER, ONE WAY		615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC		622 PORTABLE BARRIER, 50", AS PER PLAN	622 DUAL PORTABLE BARRIER TRANSITION/TERMINATION	622 PORTABLE BARRIER, UNANCHORED, AS PER PLAN	622 PORTABLE BARRIER, ANCHORED, AS PER PLAN	
								CY		EACH	EACH	FT		FT		FT	EACH	EACH	EACH	EACH		SY	CY		FT	EACH	FT	FT	
PHASE 1 TOTALS CARRIED FROM SHEET			69	OF	1068					2	2	2277		2670		583	5	521	48	569		4836	178			1	20380	4850	
PHASE 2 TOTALS CARRIED FROM SHEET			74	OF	1068			61			1	510		510			7	749	31	780		3086	18		7150	1	16710	350	
PHASE 2 & 2A TOTALS CARRIED FROM SHEET			75	OF	1068			128		1		36		189		50	7	257	7	264		3532			880	4	6840	2010	
PHASE 3 & 3A TOTALS CARRIED FROM SHEET			78	OF	1068			8									9	441	25	466		68				2	13570	1590	
PHASE 4 TOTALS CARRIED FROM SHEET			83	OF	1068			33								820	5	680	38	718		798			9230	2	10570	830	
PHASE 5 TOTALS CARRIED FROM SHEET			88	OF	1068			51									13	632	7	639		1148			530	4	17320	870	
PHASE 5A TOTALS CARRIED FROM SHEET			89	OF	1068											4	3	132	5	137	4					2	5360	600	
PHASE 6 TOTALS CARRIED FROM SHEET			93	OF	1068												4	114		114						4	5380		
TOTALS CARRIED TO MAINTENANCE OF TRAFFIC GENERAL SUMMARY								281		3	3	2823		3369		1453	4 53	3526	161	4 3687		13468	196		17790	16	4 96130	11100	

MAINTENANCE OF TRAFFIC SUBSUMMARY - TOTALS 2

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 9:01:08 AM USER: MLessiter
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MS502.dgn

REVISIONS		
NO.	DATE	DESCRIPTION
3	03/05/24	MODIFIED QUANTITY
3	03/20/24	MODIFIED PB ITEMS
4	04/02/24	ADDED QUANTITY FOR NEW SHEETS 262A - 262B

DESIGN AGENCY

GPD GROUP*

DESIGNER KRM

REVIEWER AKF 11-21-23

PROJECT ID 107408

SHEET 95 | TOTAL 1068

SHEET NO.	REF. NO.	LOCATION	STATION FROM	STATION TO	SIDE		254 PAVEMENT PLANING, ASPHALT CONCRETE (12" W x 1.5" D x VARIES L) SY		611 12" CONDUIT TYPE B, AS PER PLAN FT	611 12" CONDUIT TYPE C, AS PER PLAN FT	611 SLOTTED DRAIN, TYPE 1, 12", AS PER PLAN FT	611 CATCH BASIN, NO. 3A, AS PER PLAN "D" EACH	611 CATCH BASIN, NO. 2-2B, AS PER PLAN "C" EACH	611 CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH		
291		C/L R/W & CONST. I-490	934+00	934+20	LT						20	4				4
291	1	C/L R/W & CONST. I-490	934+20	934+86	LT				66							
291	2	C/L R/W & CONST. I-490	934+86		LT			4				1				
291	3	C/L R/W & CONST. I-490	934+86	934+96	LT				10							
291	6	C/L R/W & CONST. I-490	934+32	935+25	RT					93						
291	7	C/L R/W & CONST. I-490	935+25		RT								1			
291		C/L R/W & CONST. I-490	932+25	932+40	RT						15					
291	8	C/L R/W & CONST. I-490	932+40	933+25	RT				85							
291		C/L R/W & CONST. I-490	933+25	933+35	RT						10					
291	9	C/L R/W & CONST. I-490	933+35	934+05	RT				70							
291		C/L R/W & CONST. I-490	934+05	934+15	RT						10					
291	10	C/L R/W & CONST. I-490	934+15	934+85	RT				70							
291		C/L R/W & CONST. I-490	933+85	934+85	LT		11.2									
292		C/L R/W & CONST. I-490	936+00	936+10	LT						10					
292	1	C/L R/W & CONST. I-490	936+10	937+00	LT				90							
292		C/L R/W & CONST. I-490	937+00	937+10	LT						10					
292	2	C/L R/W & CONST. I-490	937+10	938+00	LT				90							
292		C/L R/W & CONST. I-490	938+00	938+10	LT						10					
292	3	C/L R/W & CONST. I-490	938+10	939+00	LT				90							
292		C/L R/W & CONST. I-490	939+00	939+10	LT						10					
292	4	C/L R/W & CONST. I-490	939+10	939+80	LT				70							
292	5	C/L R/W & CONST. I-490	940+14		LT							1				
292	6	C/L R/W & CONST. I-490	939+80	939+91	LT				10							
292		C/L R/W & CONST. I-490	935+50	937+33	RT						183					
292	9	C/L R/W & CONST. I-490	937+33	937+53	RT				20							
292		C/L R/W & CONST. I-490	937+73	940+14	RT						241					
292	12	C/L R/W & CONST. I-490	940+14	940+34	RT				20							
292		C/L R/W & CONST. I-490	936+95	938+00	LT		11.7				105					
292		C/L R/W & CONST. I-490	936+85	938+00	RT		12.8									
292		C/L R/W & CONST. I-490	939+39	939+74	LT		3.9									
292		C/L R/W & CONST. I-490	939+24	939+74	RT		5.6									
293		C/L R/W & CONST. I-490	940+50	940+60	LT						10					
293	1	C/L R/W & CONST. I-490	940+60	941+00	LT				40							
293		C/L R/W & CONST. I-490	941+00	941+10	LT						10					
293	2	C/L R/W & CONST. I-490	941+10	941+30	LT				20							
293	3	C/L R/W & CONST. I-490	941+30		LT							1				
293	4	C/L R/W & CONST. I-490	941+30	941+38	LT				8							
293	7	C/L R/W & CONST. I-490	942+06	942+15	LT				9							
293	8	C/L R/W & CONST. I-490	942+15		LT							1				
293	10	C/L R/W & CONST. I-490	942+86	943+06	LT				20							
293		C/L R/W & CONST. I-490	943+06	945+90	LT						284					
293		C/L R/W & CONST. I-490	940+65	940+80	RT						15					
293	11	C/L R/W & CONST. I-490	940+80	941+00	RT				20							
293	12	C/L R/W & CONST. I-490	941+00		LT							1				
293	13	C/L R/W & CONST. I-490	941+00	941+08	RT				7							
293	15	C/L R/W & CONST. I-490	941+08	941+20	RT				13							
293		C/L R/W & CONST. I-490	941+20	941+75	RT						55					
293	17	C/L R/W & CONST. I-490	941+85	941+97	RT				9							
293	18	C/L R/W & CONST. I-490	941+97		RT							1				
293	19	C/L R/W & CONST. I-490	941+97	942+15	RT				20							
293		C/L R/W & CONST. I-490	942+15	944+60	RT						245					
293	20	C/L R/W & CONST. I-490	944+90		RT							1				
293	21	C/L R/W & CONST. I-490	944+90	945+01	RT				10							
293	23	C/L R/W & CONST. I-490	945+01	945+20	RT				19							
293		C/L R/W & CONST. I-490	945+20	946+60	RT						140					
293	25	C/L R/W & CONST. I-490	942+82	943+02	RT				20							
293		C/L R/W & CONST. I-490	943+02	943+47	RT						45					
293	27	C/L R/W & CONST. I-490	943+53	943+83	RT				30							
293		C/L R/W & CONST. I-490	943+83	945+50	RT						167					
		TEMPORARY DRAINAGE TOTALS CARRIED TO SHEET		99			45.2		936	93	1595	7	1			

MAINTENANCE OF TRAFFIC TEMPORARY DRAINAGE SUBSUMMARY - 1 OF 4

DESIGN AGENCY

GPD GROUP

DESIGNER KRM

REVIEWER AKF 11-21-23

PROJECT ID 107408

SHEET 96 TOTAL 1068

REVISIONS

NO.	DATE	DESCRIPTION
4	04/02/24	REMOVED AND REPLACED TRENCH DRAIN WITH SLOTTED DRAIN AND MADE ALL ITEMS "AS PER PLAN"

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/5/2024 TIME: 2:00:29 PM USER: MLessler
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MS030.dgn

SHEET NO.	REF. NO.	LOCATION	STATION FROM	STATION TO	SIDE	254 PAVEMENT PLANING, ASPHALT CONCRETE (12" W x 1.5" D x VARIES L)	611 12" CONDUIT TYPE B, AS PER PLAN	611 12" CONDUIT TYPE C, AS PER PLAN	611 SLOTTED DRAIN, TYPE 1, 12", AS PER PLAN	611 CATCH BASIN, NO. 3A, AS PER PLAN "D"	611 CATCH BASIN, NO. 2-2B, AS PER PLAN "C"	611 CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN
						SY	FT	FT	FT	EACH	EACH	EACH
293		C/L R/W & CONST. I-490	940+55	941+10	RT	0.3						
293		C/L R/W & CONST. I-490	941+70	942+15	RT	0.3						
293		C/L R/W & CONST. I-490	942+47	942+82	RT	0.2						
293		C/L R/W & CONST. I-490	943+53	944+13	LT	0.3						
294		C/L R/W & CONST. I-490	945+50	945+73	RT				23			
294	2	C/L R/W & CONST. I-490	946+10	946+29	LT		20					
294		C/L R/W & CONST. I-490	946+29	949+73	LT				344			
294	3	C/L R/W & CONST. I-490	949+85		RT					1		
294		C/L R/W & CONST. I-490	949+85	949+94	LT		8					
294	6	C/L R/W & CONST. I-490	949+94	950+47	LT		53					
294		C/L R/W & CONST. I-490	950+47	950+50	LT				3			
294	8	C/L R/W & CONST. I-490	946+90		RT					1		
294	9	C/L R/W & CONST. I-490	946+90	947+00	RT		10					
294	11	C/L R/W & CONST. I-490	947+00	947+19	RT		19					
294		C/L R/W & CONST. I-490	947+19	951+20	RT				401			
294	14	C/L R/W & CONST. I-490	947+00	947+30	RT		30					
294		C/L R/W & CONST. I-490	947+30	950+09	RT				279			
294		C/L R/W & CONST. I-490	946+00	946+40	RT	4.5						
294		C/L R/W & CONST. I-490	947+00	947+95	LT	10.6						
294		C/L R/W & CONST. I-490	950+34	950+89	RT	6.2						
294		B/L EX. RAMP E-S	14+07	14+47	RT	4.5						
294		C/L R/W & CONST. I-490	950+50	950+57	LT				7			
295	1	C/L R/W & CONST. I-490	950+57	950+98	LT		40					
295		C/L R/W & CONST. I-490	950+98	951+08	LT				10			
295	2	C/L R/W & CONST. I-490	951+08	951+49	LT		40					
295		C/L R/W & CONST. I-490	951+49	951+59	LT				10			
295	3	C/L R/W & CONST. I-490	951+59	952+00	LT		40					
295		C/L R/W & CONST. I-490	952+00	952+10	LT				10			
295	4	C/L R/W & CONST. I-490	952+10	952+50	LT		40					
295		C/L R/W & CONST. I-490	952+50	952+60	LT				10			
295	5	C/L R/W & CONST. I-490	952+60	953+00	LT		40					
295		C/L R/W & CONST. I-490	953+00	953+10	LT				10			
295	6	C/L R/W & CONST. I-490	953+10	953+40	LT		30					
295		C/L R/W & CONST. I-490	953+40	953+50	LT				10			
295		C/L R/W & CONST. I-490	950+50	951+20	RT				70			
295		B/L EX. RAMP S-E	17+94	18+09	RT				15			
295	7	B/L EX. RAMP S-E	18+09	18+54	LT		45					
295		B/L EX. RAMP S-E	18+54	18+69	LT				15			
295	8	B/L EX. RAMP S-E	18+69	19+14	LT		45					
295		B/L EX. RAMP S-E	19+14	19+29	LT				15			
295	9	B/L EX. RAMP S-E	19+29	19+74	LT		45					
295		B/L EX. RAMP S-E	20+14	20+24	LT				10			
295	11	B/L EX. RAMP S-E	20+24	20+64	LT		40					
295		B/L EX. RAMP S-E	20+64	20+74	LT				10			
295	12	B/L EX. RAMP S-E	20+74	21+14	LT		40					
295		B/L EX. RAMP S-E	21+14	21+24	LT				10			
295	13	B/L EX. RAMP S-E	21+24	21+63	LT		40					
295	14	B/L EX. RAMP S-E	952+70		RT					1		
295	15	B/L EX. RAMP E-S	952+70	952+92	RT		22					
295	18	C/L R/W & CONST. I-490	951+50	951+65	RT		15					
295		C/L R/W & CONST. I-490	951+65	953+05	RT				140			
295		B/L EX. RAMP E-S	13+45	13+60	RT				15			
295	19	B/L EX. RAMP E-S	12+60	13+45	RT		85					
295		B/L EX. RAMP E-S	12+45	12+60	RT				15			
295	20	B/L EX. RAMP E-S	11+60	12+45	RT		85					
295		B/L EX. RAMP E-S	11+45	11+60	RT				15			
295	21	B/L EX. RAMP E-S	10+60	11+45	RT		85					
295		B/L EX. RAMP E-S	10+45	10+60	RT				15			
295	22	B/L EX. RAMP E-S	9+60	10+45	RT		85					
295		C/L R/W & CONST. I-490	951+50	952+10	LT	6.7						
		TEMPORARY DRAINAGE TOTALS CARRIED TO SHEET		99		33.6	1002		1462	3		

MAINTENANCE OF TRAFFIC TEMPORARY DRAINAGE SUBSUMMARY - 2 OF 4

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/5/2024 TIME: 2:01:41 PM USER: MLessiter
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MS031.dgn

DESIGN AGENCY
GPD GROUP
Copyright© Glaus, Pyle, Schomer, Burns & DeHaven, Inc., 2020

DESIGNER KRM

REVIEWER AKF 11-21-23

PROJECT ID 107408

SHEET 97 TOTAL 1068

REVISIONS

NO.	DATE	DESCRIPTION
4	04/02/24	REMOVED AND REPLACED TRENCH DRAIN WITH SLOTTED DRAIN AND MADE ALL ITEMS "AS PER PLAN"

SHEET NO.	REF. NO.	LOCATION	STATION FROM	STATION TO	SIDE	254 PAVEMENT PLANING, ASPHALT CONCRETE (12" W x 1.5" D x VARIES L) SY	4	611 12" CONDUIT TYPE B, AS PER PLAN FT	611 12" CONDUIT TYPE C, AS PER PLAN FT	611 SLOTTED DRAIN, TYPE 1, 12", AS PER PLAN FT	611 CATCH BASIN, NO. 3A, AS PER PLAN "D" EACH	611 CATCH BASIN, NO. 2-2B, AS PER PLAN "C" EACH	611 CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN EACH	4
296		B/L EX. RAMP E-S	7+55	9+06	RT					151				
296	1	B/L EX. RAMP E-S	7+05	7+55	RT			50						
296		B/L EX. RAMP E-S	3+91	6+60	RT					269				
296		B/L EX. RAMP S-E	21+63	21+74	RT					11				
296	3	B/L EX. RAMP S-E	21+74	22+13	RT			40						
296		B/L EX. RAMP S-E	22+13	22+23	RT					10				
296	4	BL EX. RAMP S-E	22+23	22+64	RT			40						
296		BL EX. RAMP S-E (I-71 NB)	22+64	22+74	RT					10				
296	5	BL EX. RAMP S-E (I-71 NB)	22+74	23+14	RT			40						
296		BL EX. RAMP S-E (I-71 NB)	23+14	23+24	RT					10				
296	6	BL EX. RAMP S-E (I-71 NB)	23+24	23+74	RT			50						
296		BL EX. RAMP S-E (I-71 NB)	24+17	24+32	RT					15				
296	8	BL EX. RAMP S-E (I-71 NB)	24+32	25+17	RT			85						
296		BL EX. RAMP S-E (I-71 NB)	25+17	25+32	RT					15				
296	9	BL EX. RAMP S-E (I-71 NB)	25+32	27+33	RT			201						
297	1	BL EX. RAMP E-S (I-71 SB)	3+51	3+91	RT			40						
297		BL EX. RAMP E-S (I-71 SB)	2+98	3+13	RT					15				
297	3	BL EX. RAMP E-S (I-71 SB)	2+58	2+98	RT			40						
297		BL EX. RAMP E-S (I-71 SB)	2+43	2+58	RT					15				
297	4	BL EX. RAMP E-S (I-71 SB)	1+88	2+43	RT			55						
297		BL EX. RAMP E-S (I-71 SB)	1+73	1+88	RT					15				
297	5	BL EX. RAMP E-S (I-71 SB)	1+03	1+73	RT			70						
297		C/L R/W & CONST. I-490	964+03	964+18	LT					15				
297	7	C/L R/W & CONST. I-490	964+18	964+67	LT			50						
297		C/L R/W & CONST. I-490	964+67	964+82	LT					15				
297	8	C/L R/W & CONST. I-490	964+82	965+31	LT			50						
297		C/L R/W & CONST. I-490	965+31	965+46	LT					15				
297		C/L R/W & CONST. I-490	963+83	965+98	RT	23.9								
298	1	C/L R/W & CONST. I-490	965+46	965+95	LT			50						
298		C/L R/W & CONST. I-490	965+95	966+10	LT					15				
298	2	C/L R/W & CONST. I-490	966+10	966+59	LT			50						
298		C/L R/W & CONST. I-490	966+59	966+74	LT					15				
298	3	C/L R/W & CONST. I-490	966+74	967+23	LT			50						
298		C/L R/W & CONST. I-490	967+23	967+38	LT					15				
298	4	C/L R/W & CONST. I-490	967+38	967+92	LT			55						
298		C/L R/W & CONST. I-490	968+41	969+11	LT					70				
298	6	C/L R/W & CONST. I-490	969+11	969+51	LT			40						
298		C/L R/W & CONST. I-490	969+70	969+80	LT					10				
298	8	C/L R/W & CONST. I-490	969+80	970+00	LT			20						
298	10	C/L R/W & CONST. I-490	970+00	970+20	LT			20						
298		C/L R/W & CONST. I-490	970+20	970+30	LT					10				
298		C/L R/W & CONST. I-490	967+57	967+97	RT	4.5								
298		C/L R/W & CONST. I-490	969+19	969+49	RT	3.4								
299	2	C/L R/W & CONST. I-490	970+54	970+94	LT			40						
299		C/L R/W & CONST. I-490	970+94	973+23	LT					229				
299	4	C/L R/W & CONST. I-490	973+84	974+34	LT			50						
299		C/L R/W & CONST. I-490	974+34	975+47	LT					113				
300	2	C/L R/W & CONST. I-490	976+05	976+50	LT			45						
300		C/L R/W & CONST. I-490	976+50	978+77	LT					227				
300	4	C/L R/W & CONST. I-490	979+08	979+33	LT			26						
300		C/L R/W & CONST. I-490	979+33	985+05	LT					572				
		TEMPORARY DRAINAGE TOTALS CARRIED TO SHEET		99		31.8		1257		1857				

CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/5/2024 TIME: 2:02:59 PM USER: MLessiter
O:\Clients\ORD\2021\2021069\107408\400-Engineering\MOT\Sheets\107408_MS032.dgn

MAINTENANCE OF TRAFFIC TEMPORARY DRAINAGE SUBSUMMARY - 3 OF 4

DESIGN AGENCY

GPD GROUP

DESIGNER KRM

REVIEWER AKF 11-21-23

PROJECT ID 107408

SHEET 98 TOTAL 1068

REVISIONS

NO.	DATE	DESCRIPTION
4	04/02/24	REMOVED AND REPLACED TRENCH DRAIN WITH SLOTTED DRAIN AND MADE ALL ITEMS "AS PER PLAN"

SHEET NO.	REF. NO.	LOCATION	STATION FROM	STATION TO	SIDE		254 PAVEMENT PLANING, ASPHALT CONCRETE (12" W x 1.5" D x VARIES L)		611 12" CONDUIT TYPE B, AS PER PLAN	611 12" CONDUIT TYPE C, AS PER PLAN	611 SLOTTED DRAIN, TYPE 1, 12", AS PER PLAN	611 CATCH BASIN, NO. 3A, AS PER PLAN "D"	611 CATCH BASIN, NO. 2-2B, AS PER PLAN "C"	611 CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN		
							SY		FT	FT	FT	EACH	EACH	EACH		
302		B/L EX. RAMP S-E	14+37	14+52	RT						15					
302	1	B/L EX. RAMP S-E	14+52	15+17	RT			4	65			4			4	
302		B/L EX. RAMP S-E	15+17	15+32	RT						15					
302	2	B/L EX. RAMP S-E	15+32	15+97	RT				65							
302		B/L EX. RAMP S-E	15+97	16+12	RT						15					
302	3	B/L EX. RAMP S-E	16+12	16+77	RT				65							
300		C/L R/W & CONST. I-490	16+77	16+92	RT						15					
300	4	C/L R/W & CONST. I-490	16+92	17+73	RT				80							
303	1	B/L CONST. RAMP N-W	122+75		LT								1			
303	2	B/L CONST. RAMP N-W	122+75	123+10	LT					34						
303	3	B/L CONST. RAMP N-W	123+10		LT							1				
303	4	B/L CONST. RAMP N-W	123+10	123+17	LT				6							
303	6	B/L CONST. RAMP N-W	123+17	123+30	LT				13							
303		B/L CONST. RAMP N-W	123+30	128+18	LT						488					
303	7	B/L CONST. RAMP N-W	123+00		RT								1			
303	8	B/L CONST. RAMP N-W	123+00	123+06	RT					8						
308	2	OPPORTUNITY CORRIDOR	111+77	112+00	RT					30						
308	3	OPPORTUNITY CORRIDOR	111+77		RT								1			
310	1	B/L CONST. RAMP N-W	128+50		LT								1			
310	2	B/L CONST. RAMP N-W	128+44	128+50	LT					6						
312	1	B/L EX. RAMP W-S	6+24		RT								1			
312	2	B/L EX. RAMP W-S	6+24	8+17	RT					190						
313	2	B/L EX. RAMP W-S	8+17	8+74	RT					55						
313	3	B/L EX. RAMP W-S	8+74		RT								1			
313		B/L EX. RAMP W-N	4+19		RT									1		
287		C/L R/W & CONST. I-490	955+73	957+50	RT						177					
287		C/L R/W & CONST. I-490	957+50	957+75	RT				25							
288		C/L R/W & CONST. I-490	957+85	960+45	LT						260					
288		C/L R/W & CONST. I-490	960+45	961+31	LT				87							
289		OPPORTUNITY CORRIDOR	106+61	110+00	LT/RT				340							
289		OPPORTUNITY CORRIDOR	110+00	113+50	RT						350					
290		OPPORTUNITY CORRIDOR	113+50	117+13	RT						363					
TEMPORARY DRAINAGE TOTALS CARRIED BELOW									746	323	1698	1	6	1		
TEMPORARY DRAINAGE TOTALS CARRIED FROM SHEET 96							45.2		936	93	1595	7	1			
TEMPORARY DRAINAGE TOTALS CARRIED FROM SHEET 97							33.6		1002		1462	3				
TEMPORARY DRAINAGE TOTALS CARRIED FROM SHEET 98							31.8		1257		1857					
TEMPORARY DRAINAGE TOTALS CARRIED FROM SHEET ABOVE									746	323	1698	1	6	1		
TOTALS CARRIED TO MOT NOTE - ITEM 614 - ROADS FOR MAITAINING TRAFFIC, AS PER PLAN (FOR INFORMATIONAL PURPOSES ONLY), SEE SHEET 65							110.6		3941	416	6612	11	7	1		

MAINTENANCE OF TRAFFIC TEMPORARY DRAINAGE SUBSUMMARY - 4 OF 4

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REMOVED AND REPLACED TRENCH DRAIN WITH SLOTTED DRAIN AND MADE ALL ITEMS "AS PER PLAN"

DESIGN AGENCY

GPD GROUP

DESIGNER KRM

REVIEWER AKF 11-21-23

PROJECT ID 107408

SHEET 99 TOTAL 1068

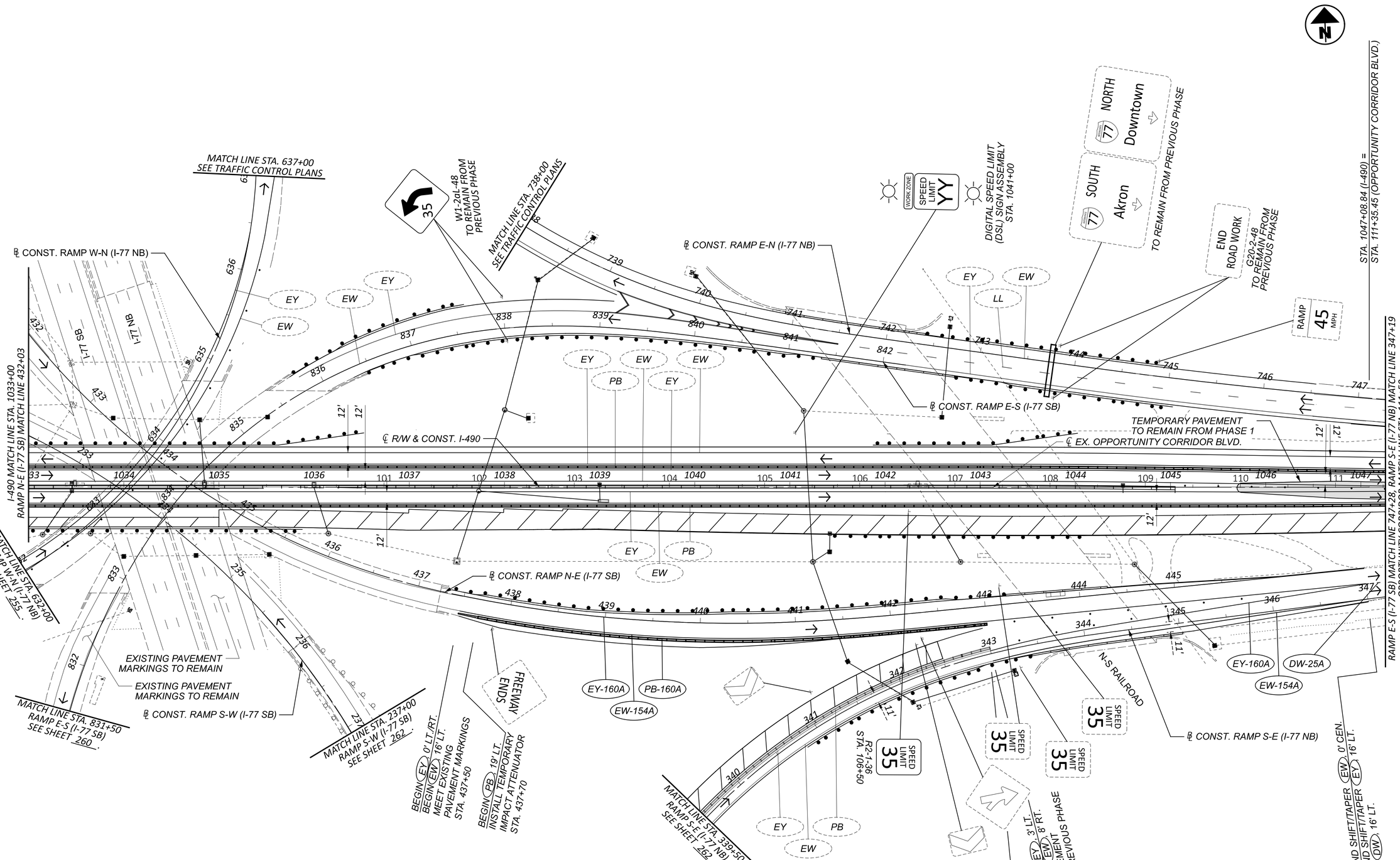
CUY-490-0.00 PART 1

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/5/2024 TIME: 2:04:01 PM USER: MLessiter
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MS033.dgn

4

HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 5 (RAMP OPEN)
I-490 - STA. 1033+00 TO STA. 111+50



MAINTENANCE OF TRAFFIC NOTES:

1. *THE CONTRACTOR SHALL COVER OR REMOVE EXISTING CONFLICTING SIGNING AND COVER OR REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS PRIOR TO CONSTRUCTION.*
2. *FOR MAINTENANCE OF TRAFFIC PLAN LEGEND, SEE SHEET 176*

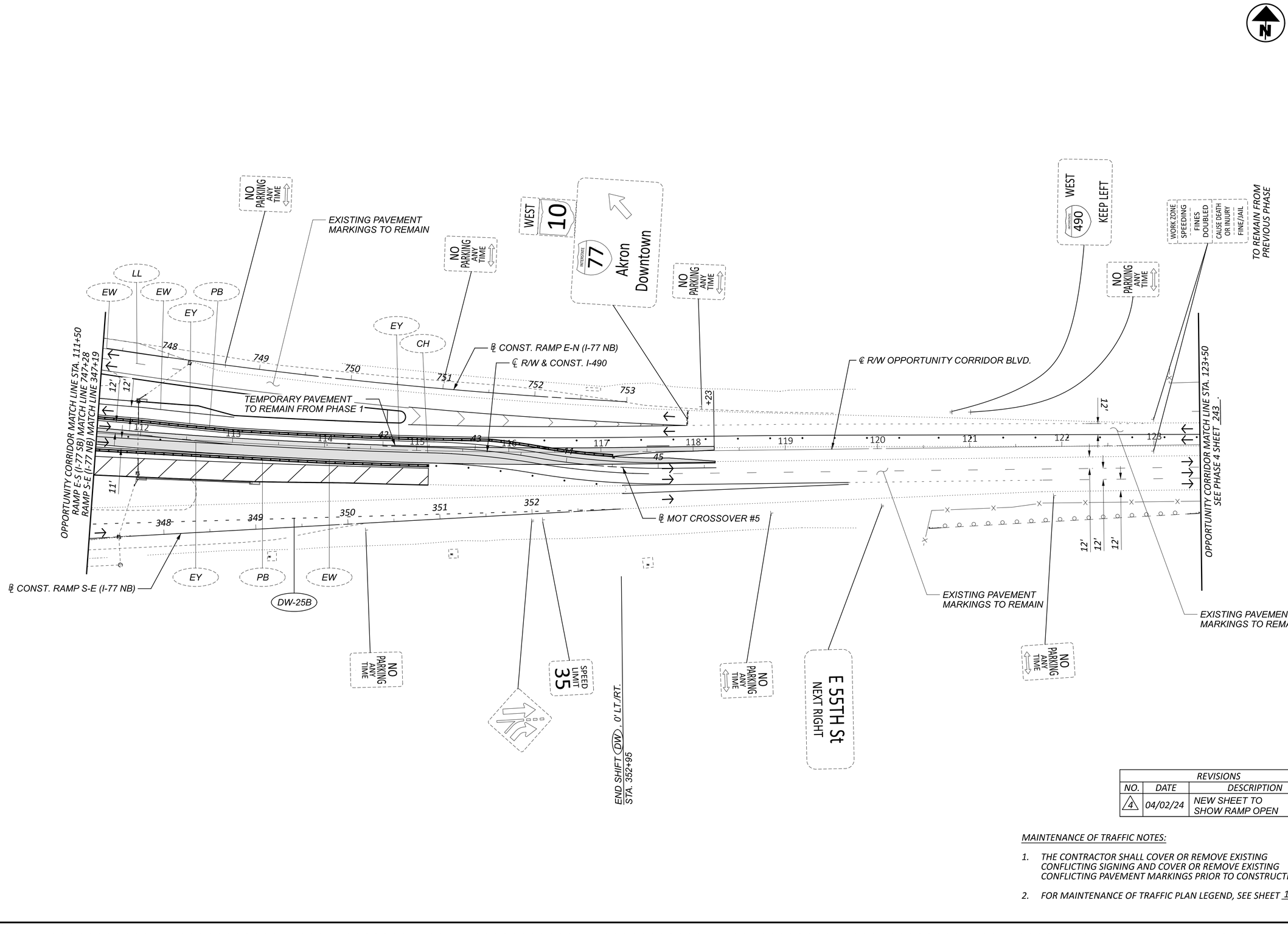
REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	NEW SHEET TO SHOW RAMP OPEN

DESIGN AGENCY
GPD GROUP*

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 262A TOTAL 1068

CUY-490-0.00 PART 1

4



HORIZONTAL SCALE IN FEET
0 25 50 100

MAINTENANCE OF TRAFFIC - PHASE 5 (RAMP OPEN)
OPPORTUNITY CORRIDOR - STA. 111+50 TO 123+50

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	NEW SHEET TO SHOW RAMP OPEN

MAINTENANCE OF TRAFFIC NOTES:

1. *THE CONTRACTOR SHALL COVER OR REMOVE EXISTING CONFLICTING SIGNING AND COVER OR REMOVE EXISTING CONFLICTING PAVEMENT MARKINGS PRIOR TO CONSTRUCTION.*
2. *FOR MAINTENANCE OF TRAFFIC PLAN LEGEND, SEE SHEET 176*

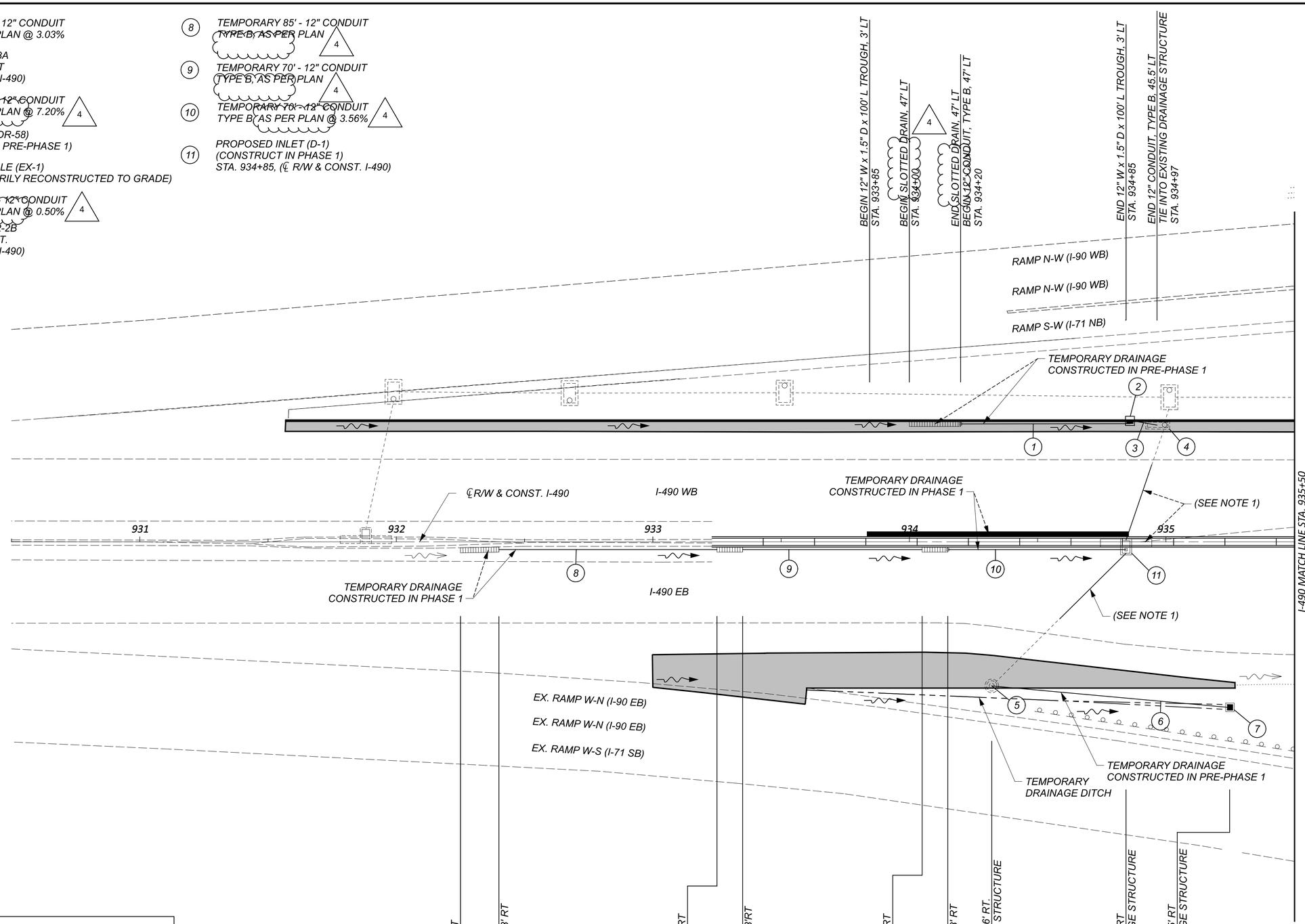
DESIGN AGENCY
GPD GROUP

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 262B TOTAL 1068

CUY-490-0.00 PART 1

MODEL: CLX_OC3 - Plan 14 PAPERSIZE: 34x22 (in.) DATE: 4/3/2024 TIME: 4:39:22 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MP511A.dgn

1. TEMPORARY 66' - 12" CONDUIT TYPE B, AS PER PLAN @ 3.03%
2. TEMPORARY CB-3A STA. 934+86, 48' LT (℄ R/W & CONST. I-490)
3. TEMPORARY 10' - 12" CONDUIT TYPE B, AS PER PLAN @ 7.20% (4)
4. EXISTING INLET (DR-58) (TO BE PLATED IN PRE-PHASE 1)
5. EXISTING MANHOLE (EX-1) (TO BE TEMPORARILY RECONSTRUCTED TO GRADE)
6. TEMPORARY 98' - 12" CONDUIT TYPE C, AS PER PLAN @ 0.50% (4)
7. TEMPORARY CB-2-2B STA. 935+25, 67' RT. (℄ R/W & CONST. I-490)
8. TEMPORARY 85' - 12" CONDUIT TYPE B, AS PER PLAN (4)
9. TEMPORARY 70' - 12" CONDUIT TYPE B, AS PER PLAN (4)
10. TEMPORARY 70' - 12" CONDUIT TYPE B, AS PER PLAN @ 3.56% (4)
11. PROPOSED INLET (D-1) (CONSTRUCT IN PHASE 1) STA. 934+85, (℄ R/W & CONST. I-490)



LEGEND

(4) SLOTTED DRAIN

TROUGH

TEMPORARY DRAINAGE FLOW

EXISTING/PROPOSED DRAINAGE FLOW

MAINTENANCE OF TRAFFIC DRAINAGE NOTE:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.

HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 STA. 930+50 TO STA. 935+50

REVISIONS		
NO.	DATE	DESCRIPTION
3	03/14/24	TROUGH DEPTH UNITS (INCHES) ADDED
4	04/02/24	REPLACED TRENCH DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMPORARY DRAINAGE ITEMS "AS PER PLAN"

DESIGN AGENCY
GPD GROUP
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc., 2020

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 291 TOTAL 1068

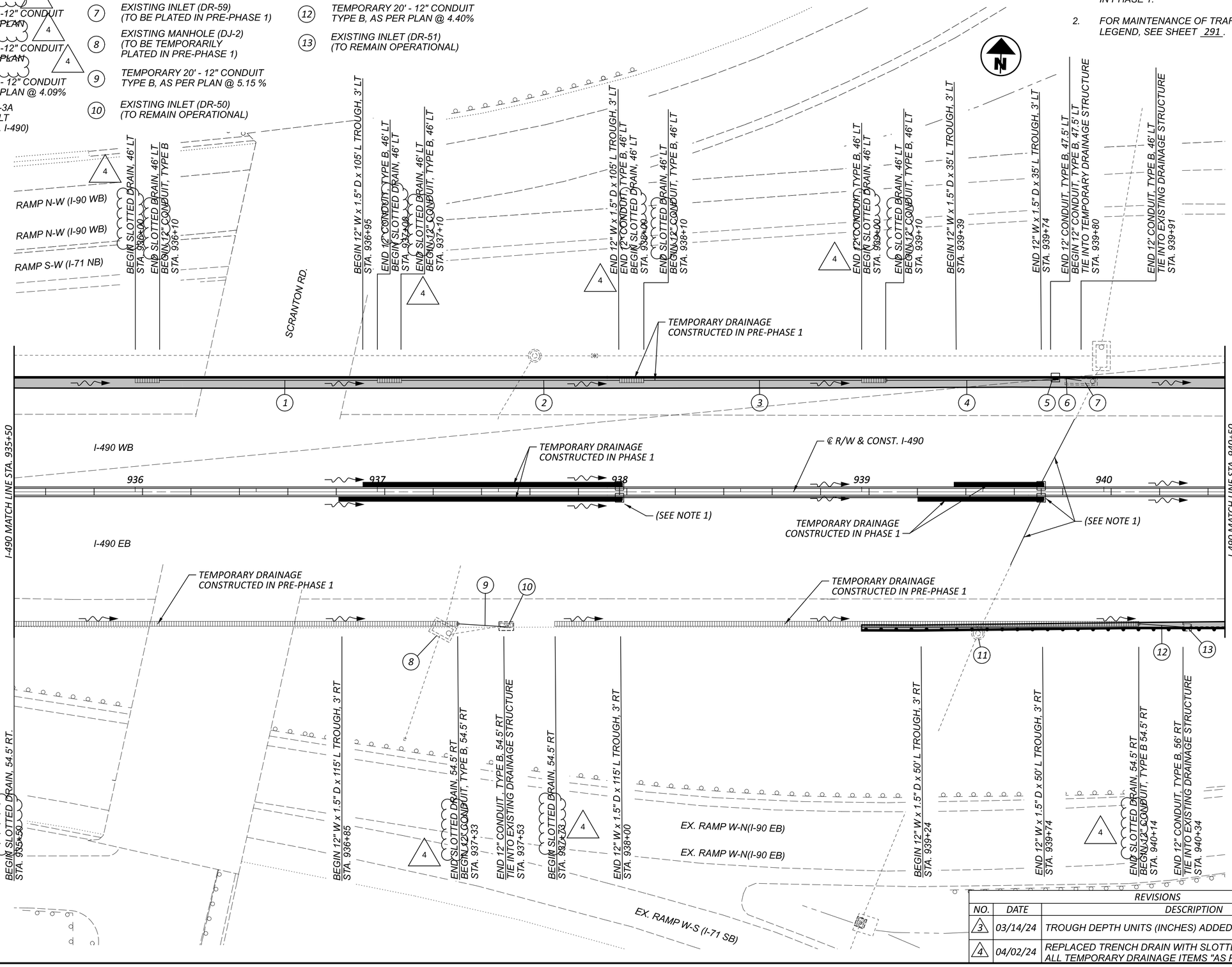
CUY-490-0.00 PART 1

MODEL: 107408_MM002 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 12:21:11 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\x00-Engineering\MOT\Sheets\107408_MM102.dgn

1. TEMPORARY 90' -12" CONDUIT TYPE B, AS PER PLAN
2. TEMPORARY 90' -12" CONDUIT TYPE B, AS PER PLAN
3. TEMPORARY 90' -12" CONDUIT TYPE B, AS PER PLAN
4. TEMPORARY 70' - 12" CONDUIT TYPE B, AS PER PLAN @ 4.09%
5. TEMPORARY CB-3A STA. 939+80, 48' LT (℄ R/W & CONST. I-490)
6. TEMPORARY 10' - 12" CONDUIT TYPE B, AS PER PLAN @ 7.28%
7. EXISTING INLET (DR-59) (TO BE PLATED IN PRE-PHASE 1)
8. EXISTING MANHOLE (DJ-2) (TO BE TEMPORARILY PLATED IN PRE-PHASE 1)
9. TEMPORARY 20' - 12" CONDUIT TYPE B, AS PER PLAN @ 5.15 %
10. EXISTING INLET (DR-50) (TO REMAIN OPERATIONAL)
11. EXISTING MANHOLE (DR-130) (TO BE TEMPORARILY PLATED IN PRE-PHASE 1)
12. TEMPORARY 20' - 12" CONDUIT TYPE B, AS PER PLAN @ 4.40%
13. EXISTING INLET (DR-51) (TO REMAIN OPERATIONAL)

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291 .



HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 - STA. 935+50 TO STA. 940+50

CUY-490-0.00 PART 1

MODEL: 107408_MP1040 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 12:35:49 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM103.dgn

DESIGN AGENCY
GPD GROUP*

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 292 TOTAL 1068

REVISIONS

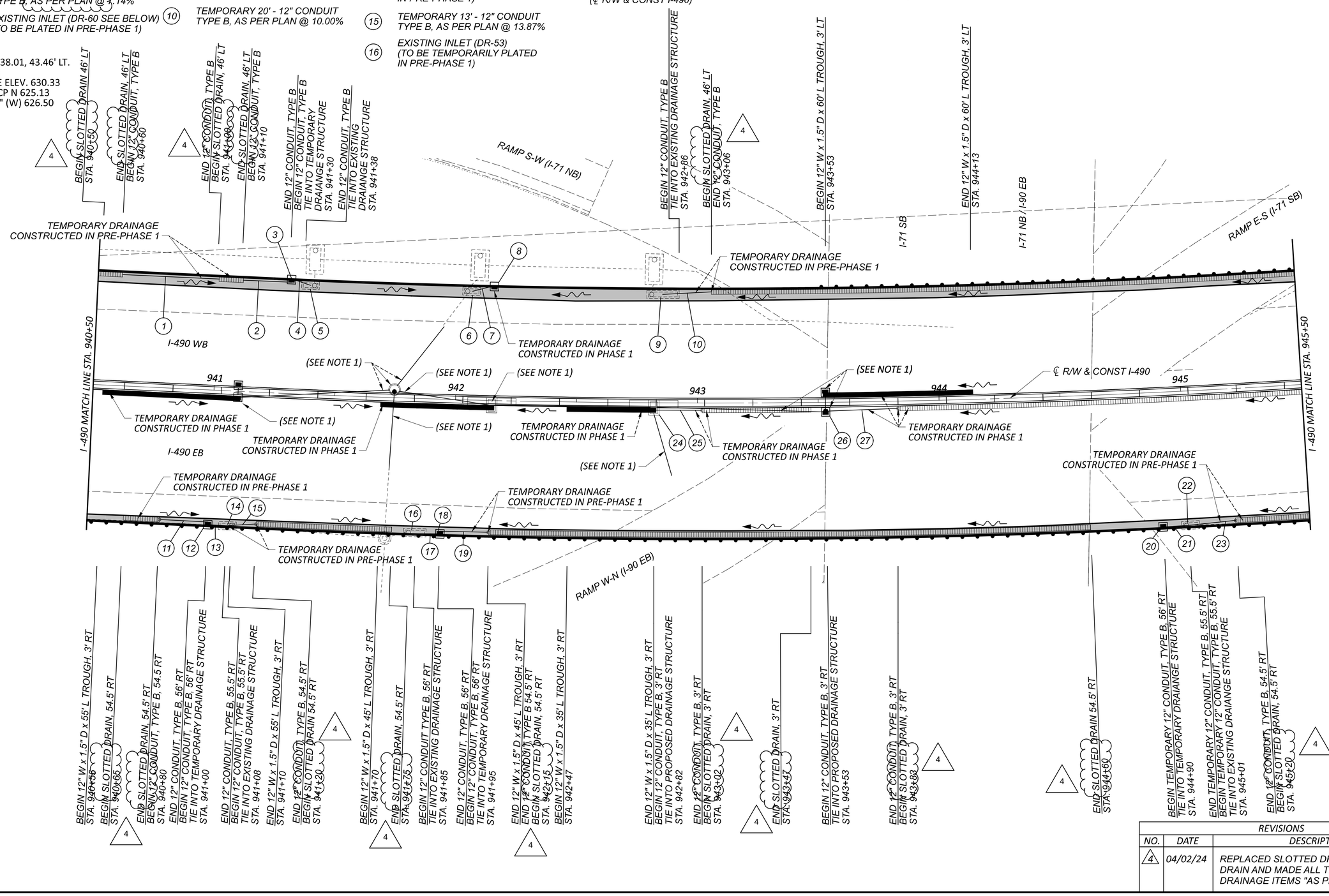
NO.	DATE	DESCRIPTION
3	03/14/24	TROUGH DEPTH UNITS (INCHES) ADDED
4	04/02/24	REPLACED TRENCH DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMPORARY DRAINAGE ITEMS "AS PER PLAN"

1. TEMPORARY 40' - 12" CONDUIT TYPE B, AS PER PLAN
2. TEMPORARY 20' - 12" CONDUIT TYPE B, AS PER PLAN @ 4.00%
3. TEMPORARY CB-3A STA. 941+30, 47.5' LT (℄ R/W & CONST. I-490)
4. TEMPORARY 7' - 12" CONDUIT TYPE B, AS PER PLAN @ 7.14%
5. EXISTING INLET (DR-60 SEE BELOW) (TO BE PLATED IN PRE-PHASE 1)
6. EXISTING INLET (DR-61) (TO BE PLATED IN PRE-PHASE 1)
7. TEMPORARY 8' - 12" CONDUIT TYPE B, AS PER PLAN @ 6.59%
8. TEMPORARY CB-3A STA. 942+15, 47.5' LT (℄ R/W & CONST I-490)
9. EXISTING INLET (DR-62) (TO BE PLATED IN PRE-PHASE 1)
10. TEMPORARY 20' - 12" CONDUIT TYPE B, AS PER PLAN @ 10.00%
11. TEMPORARY 20' - 12" CONDUIT TYPE B, AS PER PLAN @ 2.90%
12. TEMPORARY CB-3A STA. 941+00, 56' RT (℄ R/W & CONST I-490)
13. TEMPORARY 7' - 12" CONDUIT TYPE B, AS PER PLAN @ 3.00%
14. EXISTING INLET (DR-52) (TO BE TEMPORARILY PLATED IN PRE-PHASE 1)
15. TEMPORARY 13' - 12" CONDUIT TYPE B, AS PER PLAN @ 13.87%
16. EXISTING INLET (DR-53) (TO BE TEMPORARILY PLATED IN PRE-PHASE 1)
17. TEMPORARY 9' - 12" CONDUIT TYPE B, AS PER PLAN @ 6.07%
18. TEMPORARY CB-3A STA. 941+97, 57.5' RT (℄ R/W & CONST I-490)
19. TEMPORARY 20' - 12" CONDUIT TYPE B, AS PER PLAN @ 8.62%
20. TEMPORARY CB-3A STA. 944+90, 57.5' RT (℄ R/W & CONST I-490)
21. TEMPORARY 10' - 12" CONDUIT TYPE B, AS PER PLAN @ 10.70%
22. EXISTING INLET (DR-54) (TO BE TEMPORARILY PLATED IN PRE-PHASE 1)
23. TEMPORARY 19' - 12" CONDUIT TYPE B, AS PER PLAN @ 10.16%
24. PROPOSED INLET (D-8) (CONSTRUCTED IN PHASE 1)
25. TEMPORARY 20' - 12" CONDUIT TYPE B, AS PER PLAN @ 8.40%
26. PROPOSED INLET (D-10) (CONSTRUCTED IN PHASE 1)
27. TEMPORARY 30' - 12" CONDUIT TYPE B, AS PER PLAN @ 9.57%

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. *PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.*
2. *FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291.*

DR-60
STA. 941+38.01, 43.46' LT.
EX. I-2-A6
EX. GRATE ELEV. 630.33
EX. 15" RCP N 625.13
TEMP. 12" (W) 626.50



REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REPLACED SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMPORARY DRAINAGE ITEMS "AS PER PLAN"

HORIZONTAL SCALE IN FEET
0 10 20 40

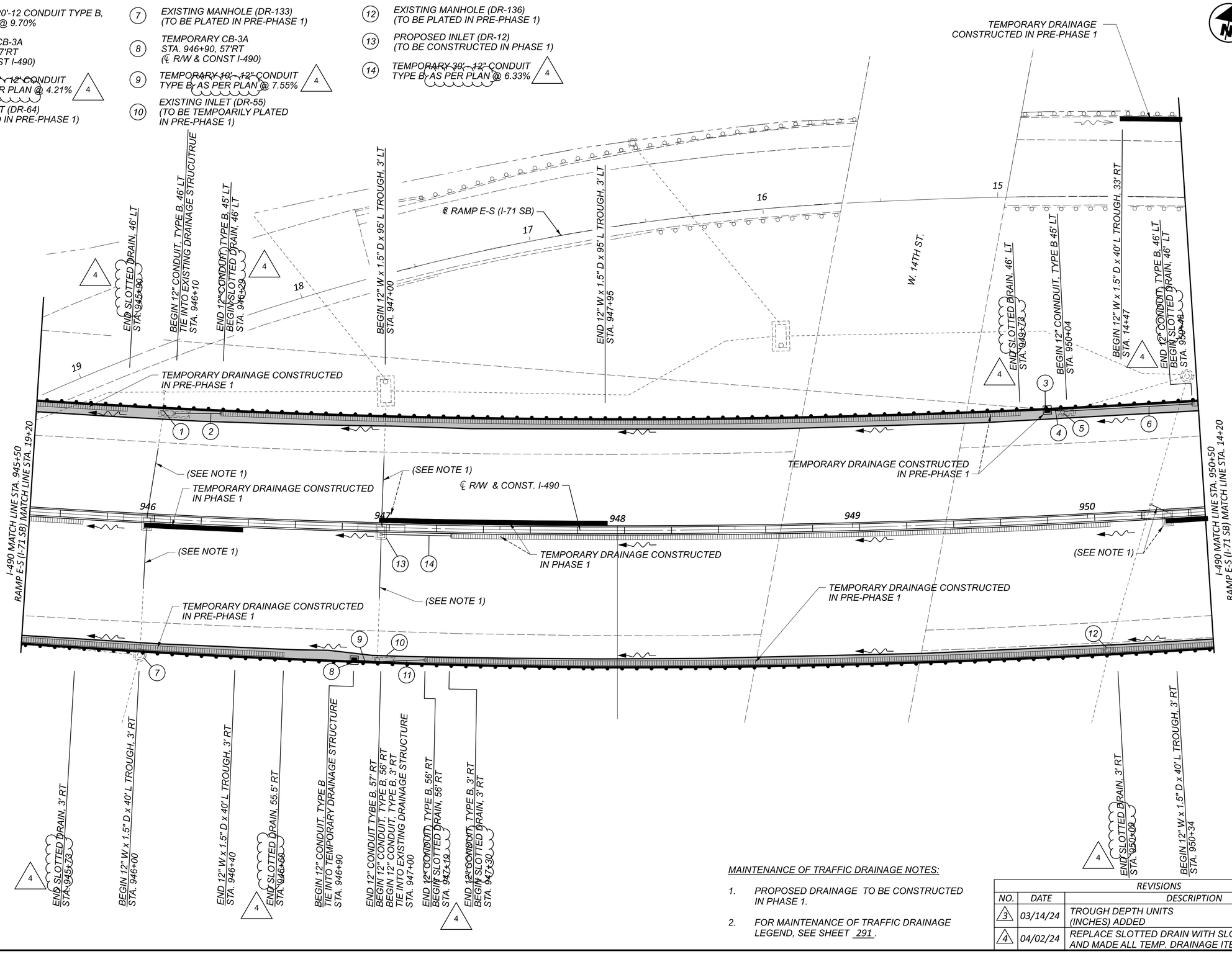
MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 STA. 940+50 TO STA. 945+50

DESIGN AGENCY
GPD GROUP
DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 293 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MP1040-1 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 12:56:29 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM104.dgn

1. EXISTING INLET (DR-63) (TO BE PLATED IN PRE-PHASE 1)
2. TEMPORARY 20'-12 CONDUIT TYPE B, AS PER PLAN @ 9.70%
3. TEMPORARY CB-3A STA. 949+85, 47'RT (℄ R/W & CONST I-490)
4. TEMPORARY 8'- 12" CONDUIT TYPE B, AS PER PLAN @ 4.21%
5. EXISTING INLET (DR-64) (TO BE PLATED IN PRE-PHASE 1)
6. TEMPORARY 53' - 12" CONDUIT TYPE B, AS PER PLAN @ 4.37%
7. EXISTING MANHOLE (DR-133) (TO BE PLATED IN PRE-PHASE 1)
8. TEMPORARY CB-3A STA. 946+90, 57'RT (℄ R/W & CONST I-490)
9. TEMPORARY 10'- 12" CONDUIT TYPE B, AS PER PLAN @ 7.55%
10. EXISTING INLET (DR-55) (TO BE TEMPOARILY PLATED IN PRE-PHASE 1)
11. TEMPORARY 19' - 12" CONDUIT TYPE B, AS PER PLAN @ 10.84%
12. EXISTING MANHOLE (DR-136) (TO BE PLATED IN PRE-PHASE 1)
13. PROPOSED INLET (DR-12) (TO BE CONSTRUCTED IN PHASE 1)
14. TEMPORARY 30'- 12" CONDUIT TYPE B, AS PER PLAN @ 6.33%



MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291 .

REVISIONS		
NO.	DATE	DESCRIPTION
3	03/14/24	TROUGH DEPTH UNITS (INCHES) ADDED
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

HORIZONTAL SCALE IN FEET
0 10 20 40

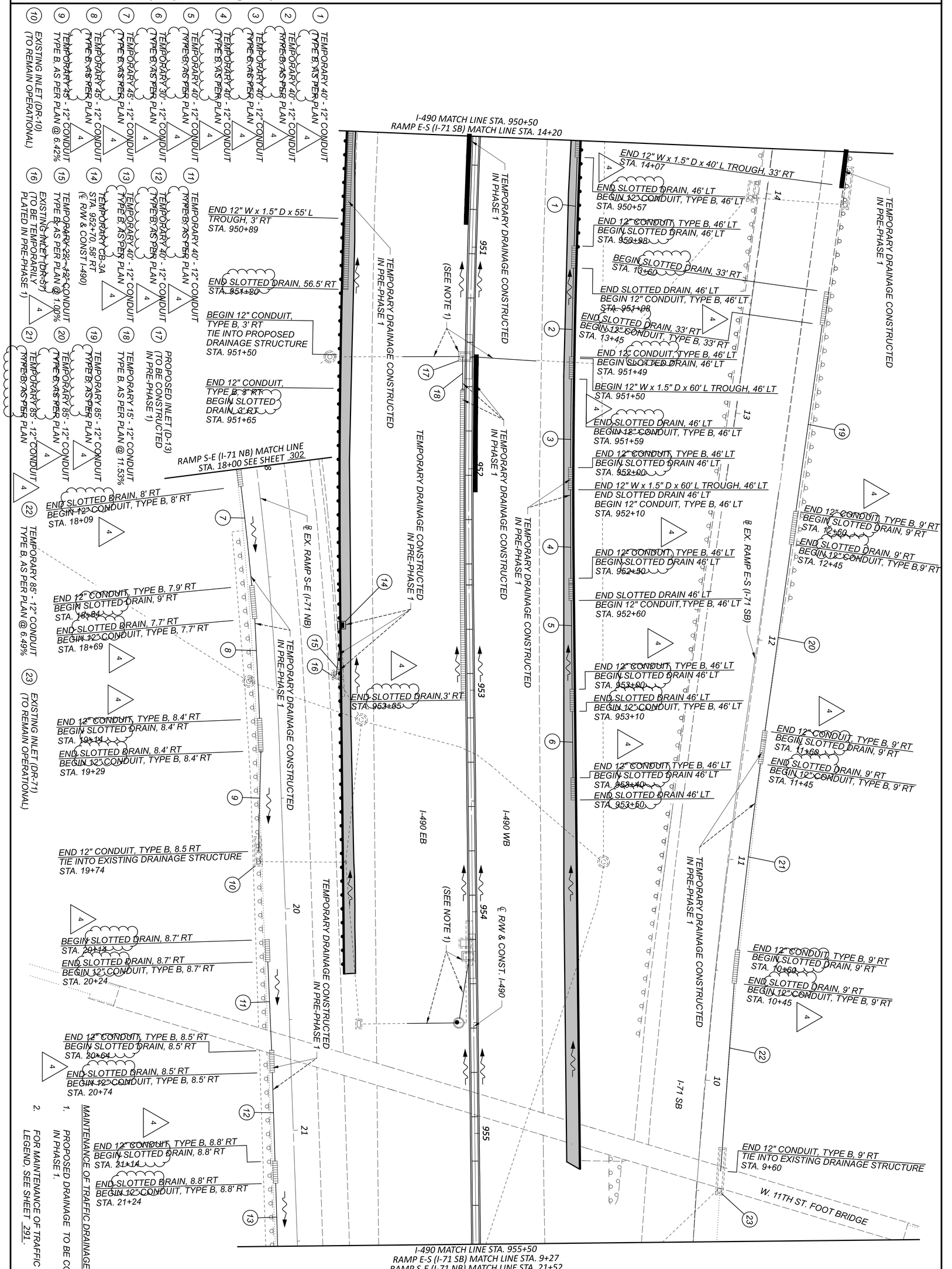
MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1 I-490 - STA. 945+50 TO STA. 950+50

DESIGN AGENCY
GPD GROUP
DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 294 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MP1040-2 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 1:14:09 PM USER: kmonas
C:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM105.dgn

MODEL: 107408_MP104D-3 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 1:34:41 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM106.dgn



MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291.

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

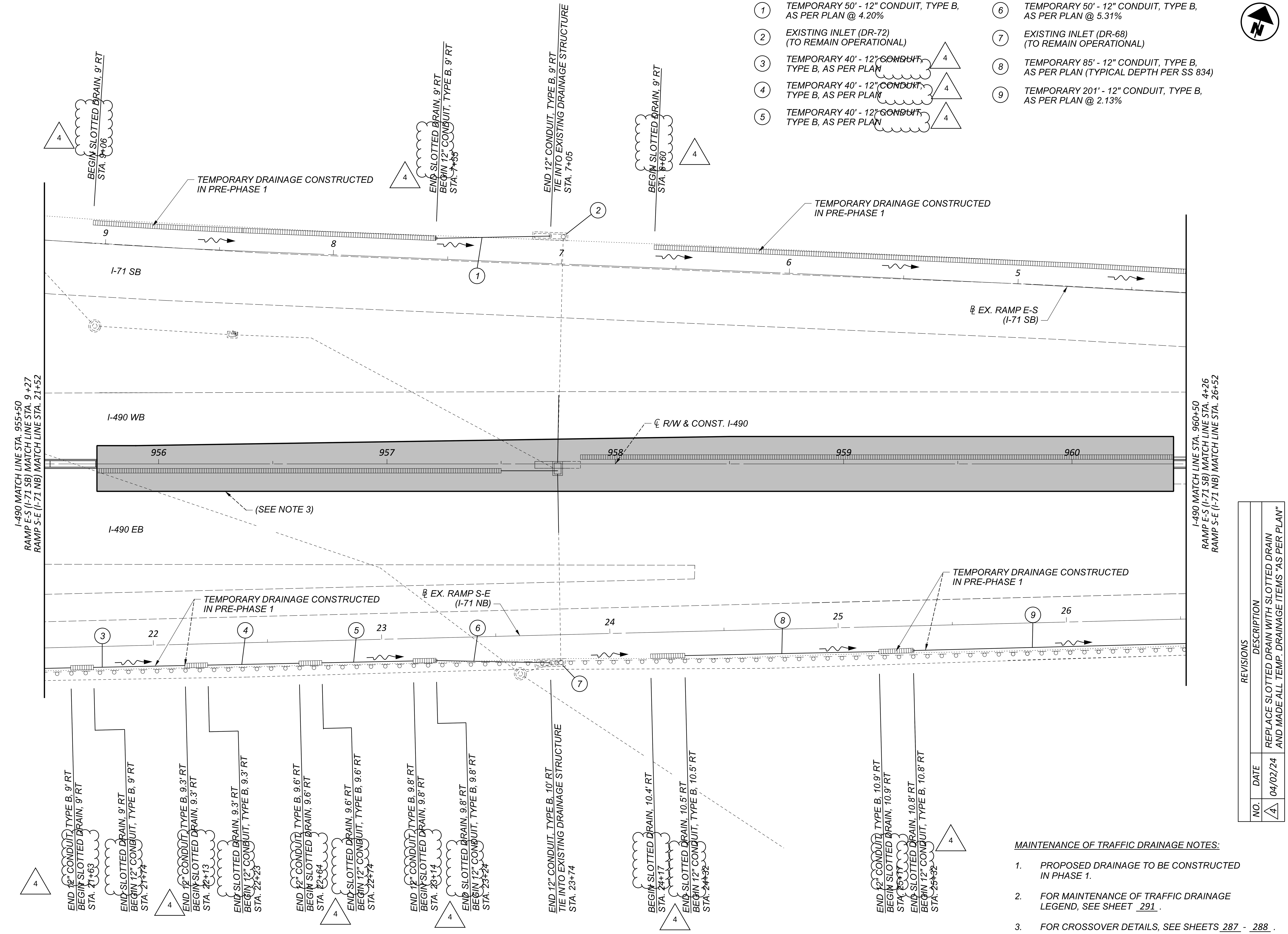
DESIGNER: KRM
REVIEWER: AKF 11-21-23
PROJECT ID: 107408
SHEET: 295 TOTAL: 1068
DESIGN AGENCY: GPD GROUP

MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 - STA. 950+50 TO STA. 955+50

HORIZONTAL SCALE IN FEET
0 20
10 40

MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 - STA. 955+50 TO STA. 960+50

1. TEMPORARY 50' - 12" CONDUIT, TYPE B, AS PER PLAN @ 4.20%
2. EXISTING INLET (DR-72) (TO REMAIN OPERATIONAL)
3. TEMPORARY 40' - 12" CONDUIT, TYPE B, AS PER PLAN
4. TEMPORARY 40' - 12" CONDUIT, TYPE B, AS PER PLAN
5. TEMPORARY 40' - 12" CONDUIT, TYPE B, AS PER PLAN
6. TEMPORARY 50' - 12" CONDUIT, TYPE B, AS PER PLAN @ 5.31%
7. EXISTING INLET (DR-68) (TO REMAIN OPERATIONAL)
8. TEMPORARY 85' - 12" CONDUIT, TYPE B, AS PER PLAN (TYPICAL DEPTH PER SS 834)
9. TEMPORARY 201' - 12" CONDUIT, TYPE B, AS PER PLAN @ 2.13%



MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291.
3. FOR CROSSOVER DETAILS, SEE SHEETS 287 - 288.

REVISIONS

NO.	DATE	DESCRIPTION
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

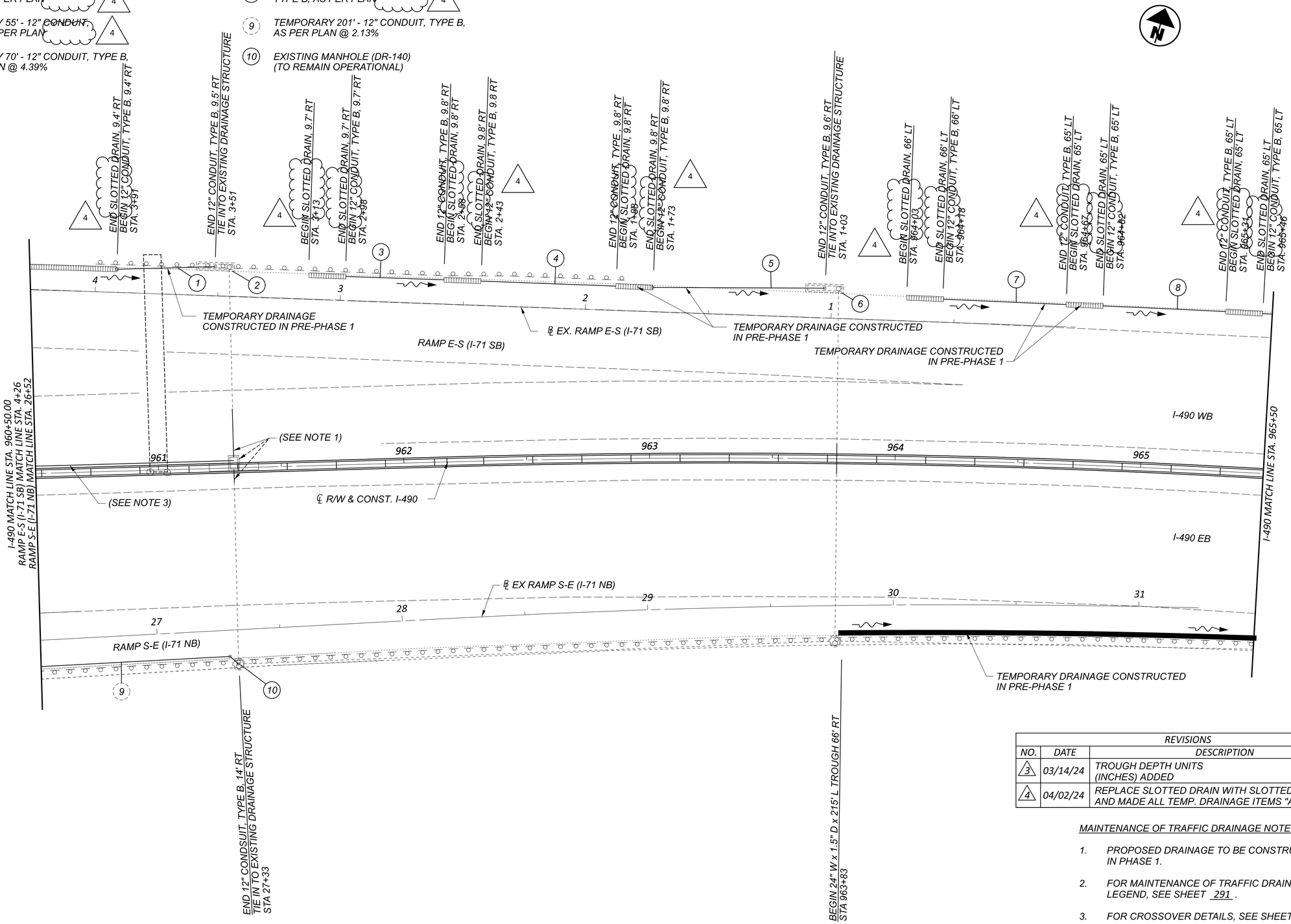
DESIGN AGENCY: GPD GROUP

DESIGNER: KRM
REVIEWER: AKF 11-21-23
PROJECT ID: 107408
SHEET 296 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MP104D-4 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 1:58:32 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM107.dgn

1. TEMPORARY 40' - 12 " CONDUIT, TYPE B, AS PER PLAN @ 5.85%
2. EXISTING INLET (DR-73) (TO REMAIN OPERATIONAL)
3. TEMPORARY 40' - 12" CONDUIT, TYPE B, AS PER PLAN
4. TEMPORARY 55' - 12" CONDUIT, TYPE B, AS PER PLAN
5. TEMPORARY 70' - 12" CONDUIT, TYPE B, AS PER PLAN @ 4.39%
6. EXISTING INLET (DR-74) (TO REMAIN OPERATIONAL)
7. TEMPORARY 50' - 12" CONDUIT, TYPE B, AS PER PLAN
8. TEMPORARY 50' - 12" CONDUIT, TYPE B, AS PER PLAN
9. TEMPORARY 201' - 12" CONDUIT, TYPE B, AS PER PLAN @ 2.13%
10. EXISTING MANHOLE (DR-140) (TO REMAIN OPERATIONAL)



REVISIONS		
NO.	DATE	DESCRIPTION
3	03/14/24	TROUGH DEPTH UNITS (INCHES) ADDED
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291 .
3. FOR CROSSOVER DETAILS, SEE SHEETS 287 - 288 .

HORIZONTAL SCALE IN FEET
0 10 20 40

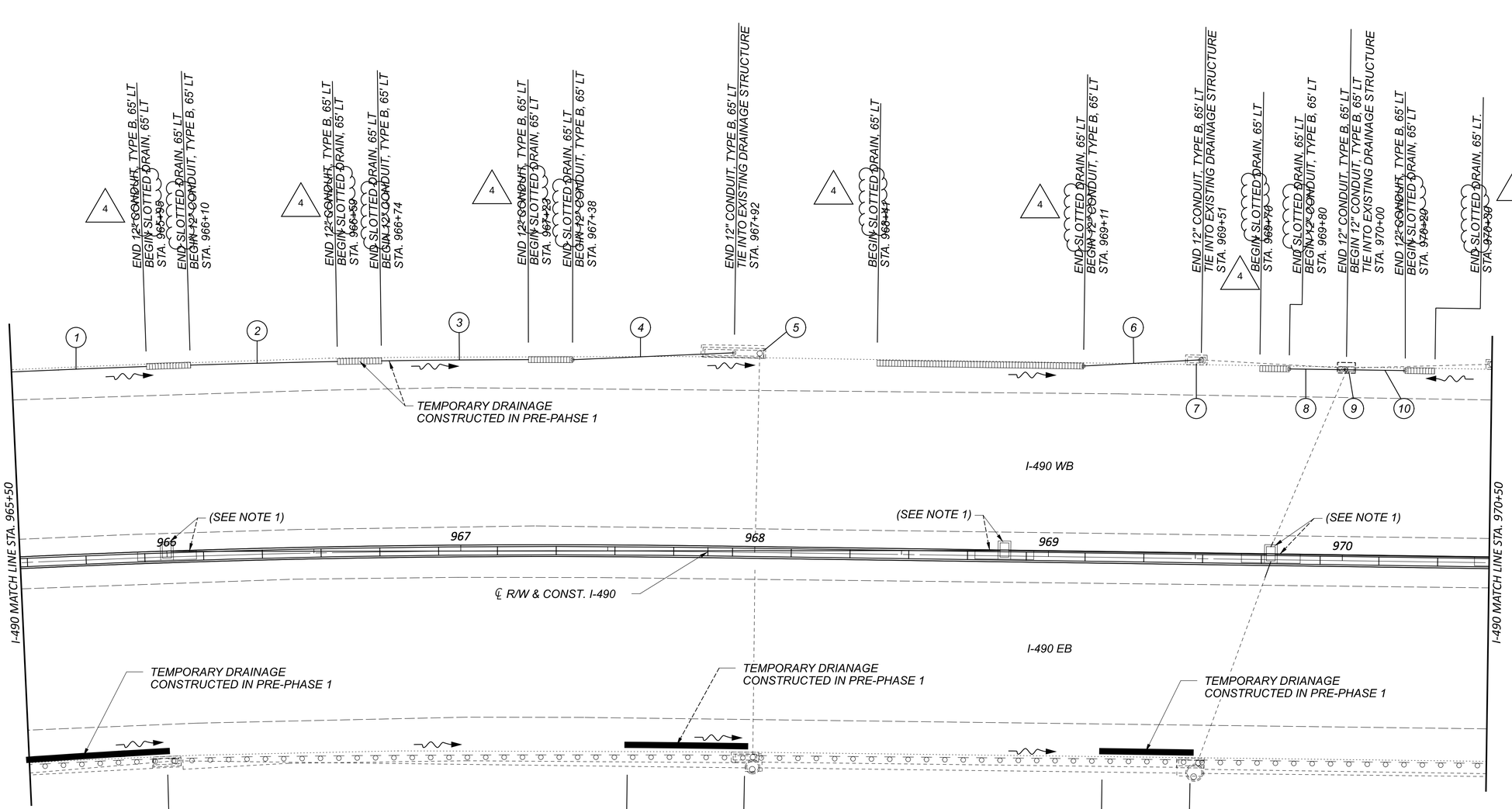
MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 - STA. 960+50 TO STA. 965+50

DESIGN AGENCY
GPD GROUP
Copyright© Glaus, Pyle, Schomer, Burns & DeWeese, Inc., 2020

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 297 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MP1040-5 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 2:17:38 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM108.dgn



1. TEMPORARY 50' - 12" CONDUIT, TYPE B, AS PER PLAN (4)
2. TEMPORARY 50' - 12" CONDUIT, TYPE B, AS PER PLAN (4)
3. TEMPORARY 50' - 12" CONDUIT, TYPE B, AS PER PLAN (4)
4. TEMPORARY 55' - 12" CONDUIT, TYPE B, AS PER PLAN @ 6.43%
5. EXISTING INLET (DR-200) (TO REMAIN OPERATIONAL)
6. TEMPORARY 40' - 12" CONDUIT, TYPE B, AS PER PLAN @ 5.48%
7. EXISTING INLET (DR-83) (TO REMAIN OPERATIONAL)
8. TEMPORARY 20' - 12" CONDUIT, TYPE B, AS PER PLAN @ 12.08%
9. EXISTING INLET (DR-143) (TO REMAIN OPERARTIONAL)
10. TEMPORARY 20' - 12" CONDUIT, TYPE B, AS PER PLAN @ 12.22%

REVISIONS		
NO.	DATE	DESCRIPTION
3	03/14/24	TROUGH DEPTH UNITS (INCHES) ADDED
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291 .

MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 - STA. 965+50 TO STA. 970+50

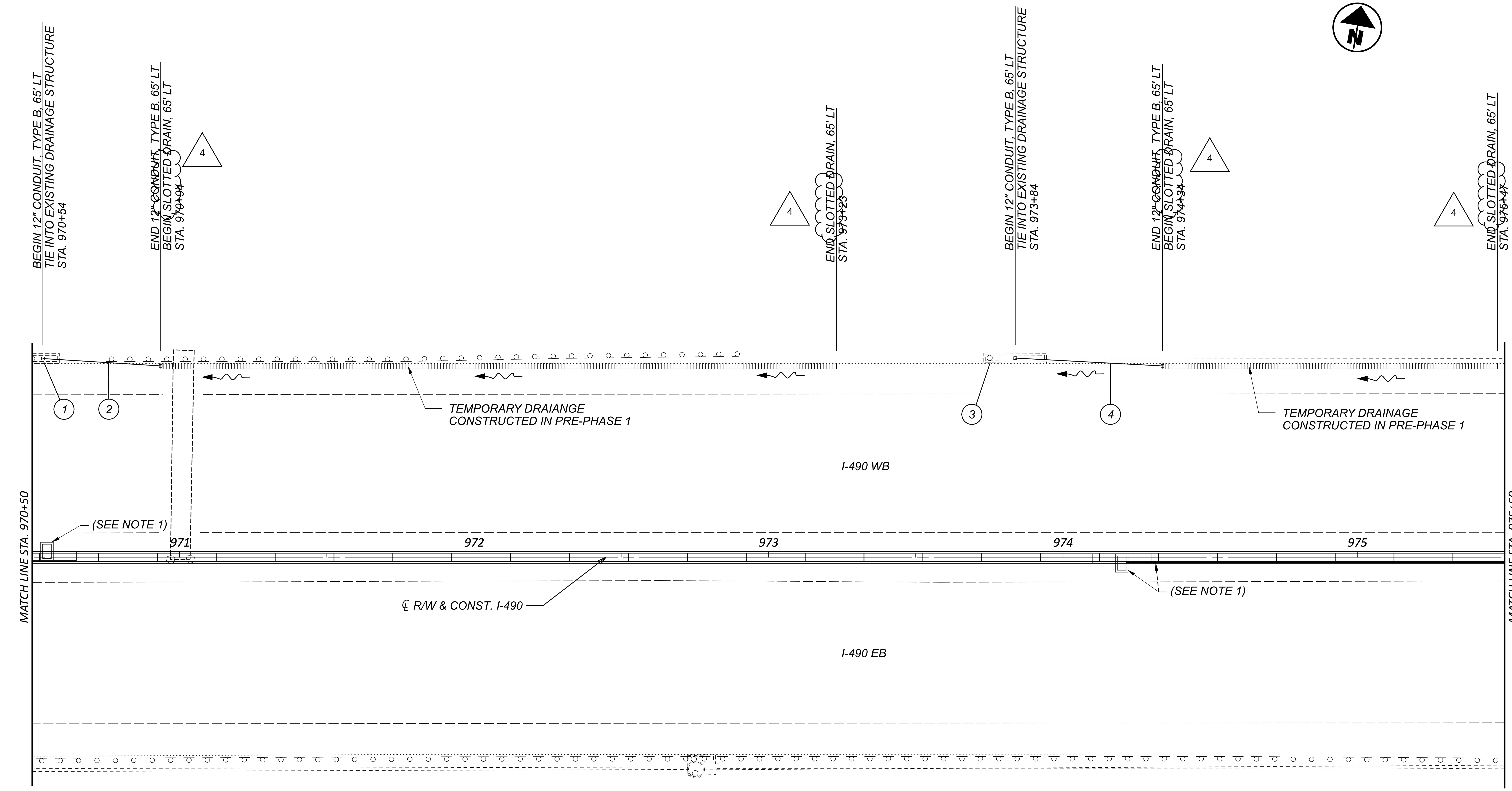
HORIZONTAL SCALE IN FEET
0 10 20 40

DESIGN AGENCY
GPD GROUP

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 298 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MP1040-6 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 2:54:39 PM USER: kmonas
O:\Clients\ORD\2021\20210893\107408\400-Engineering\MOT\Sheets\107408_MM109.dgn



1. EXISTING INLET (DR-84) (TO REMAIN OPERATIONAL)
2. TEMPORARY 40' - 12" CONDUIT, TYPE B, AS PER PLAN @ 5.50%
3. EXISTING INLET (DR- 86) (TO REMAIN OPERATIONAL)
4. TEMPORARY 50' 12" CONDUIT TYPE B, AS PER PLAN @ 5.77%

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291 .

HORIZONTAL SCALE IN FEET 0 10 20 40

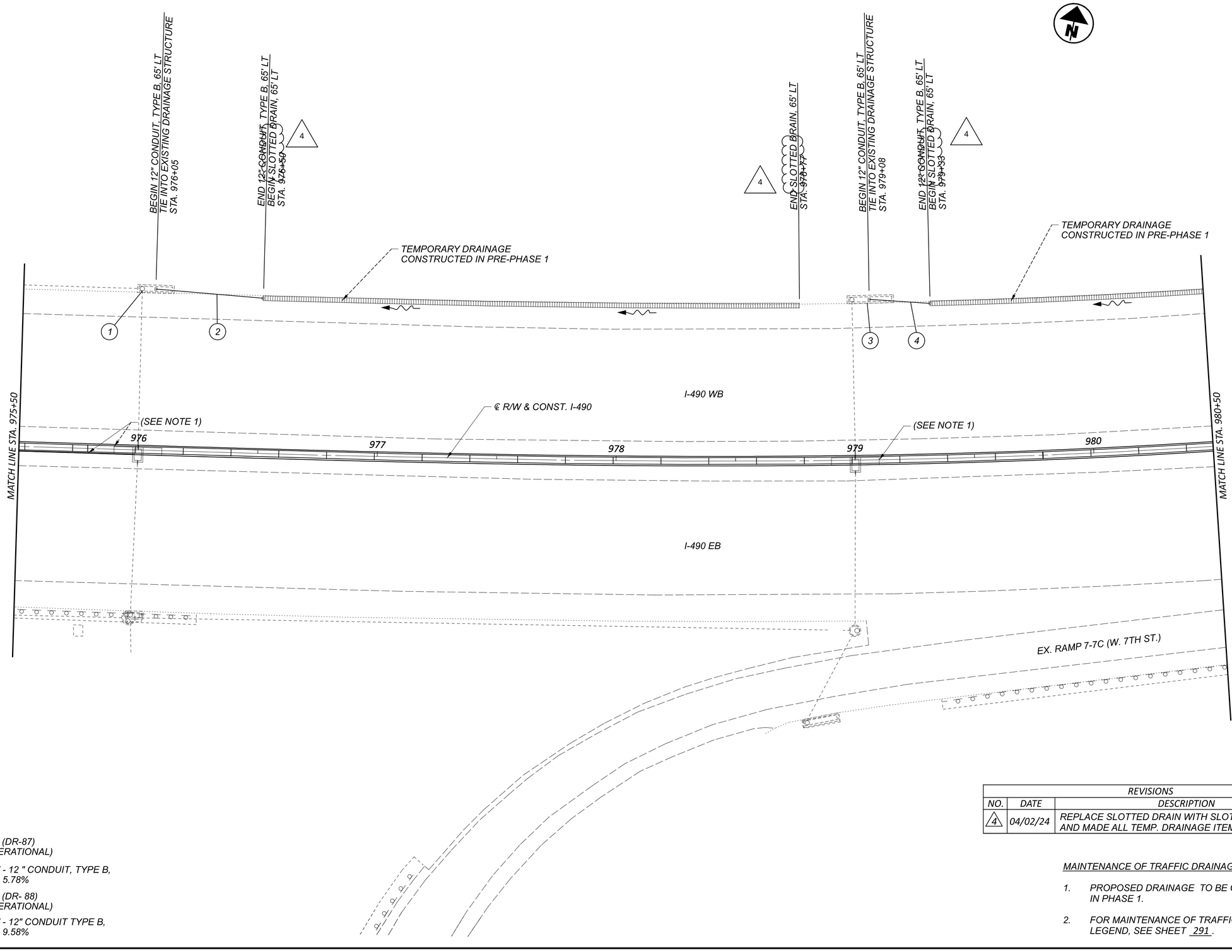
MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 - STA. 970+50 TO STA. 975+50

DESIGN AGENCY
GPD GROUP

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 299 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MP104D-7 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 3:05:29 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM110.dgn



REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

1. EXISTING INLET (DR-87) (TO REMAIN OPERATIONAL)
2. TEMPORARY 45' - 12 " CONDUIT, TYPE B, AS PER PLAN @ 5.78%
3. EXISTING INLET (DR- 88) (TO REMAIN OPERATIONAL)
4. TEMPORARY 26' - 12" CONDUIT TYPE B, AS PER PLAN @ 9.58%

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291 .

HORIZONTAL SCALE IN FEET
0 10 20 40

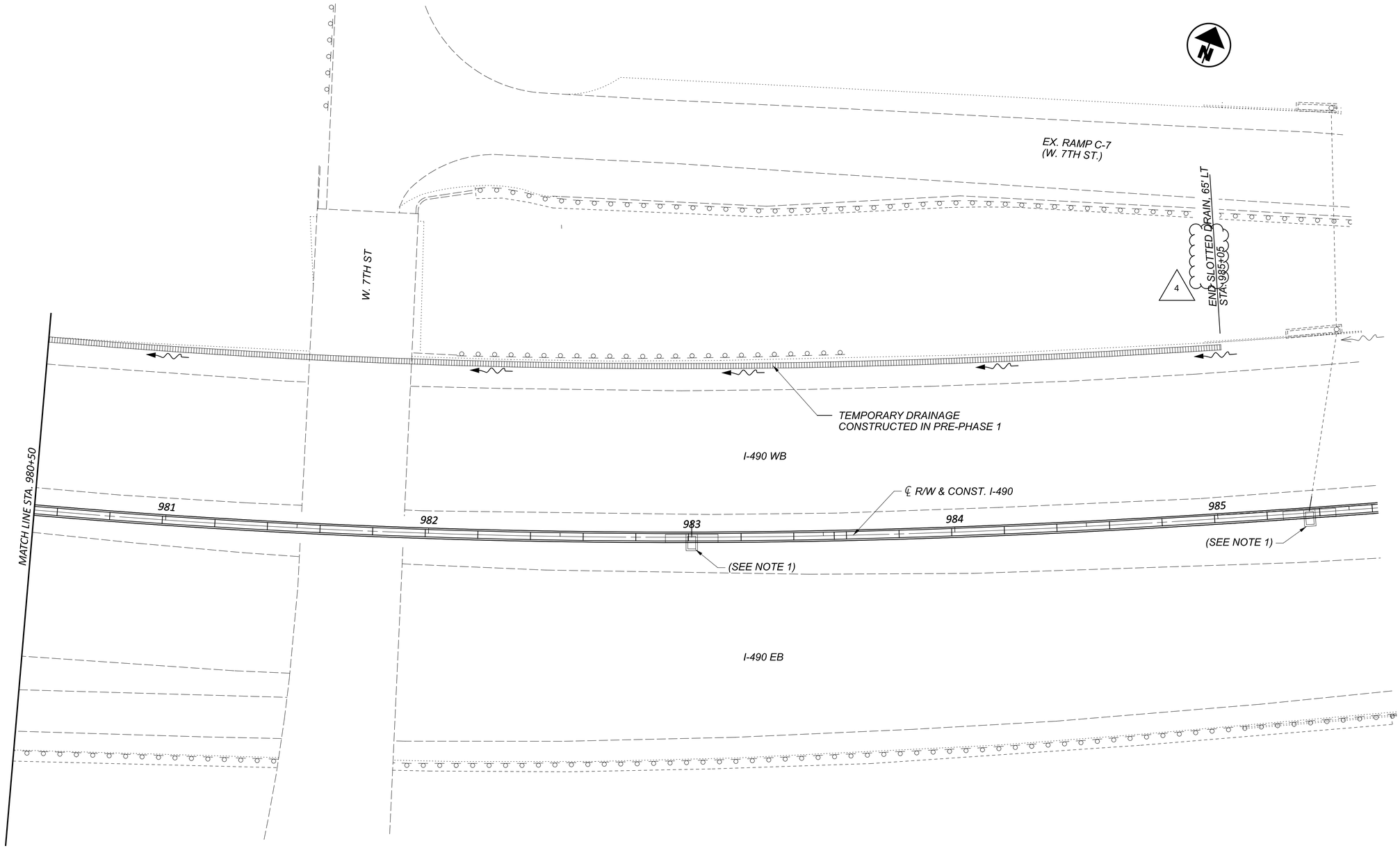
MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 - STA. 975+50 TO STA. 980+50

CUY-490-0.00 PART 1

MODEL: 107408_MP1040-8 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 3:13:28 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM111.dgn

DESIGN AGENCY
GPD GROUP
Copyright© Glaus, Pyle, Schomer, Burns & DeHaven, Inc., 2020

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 300 TOTAL 1068



REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. *PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.*
2. *FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291.*

HORIZONTAL SCALE IN FEET
0 10 20 40

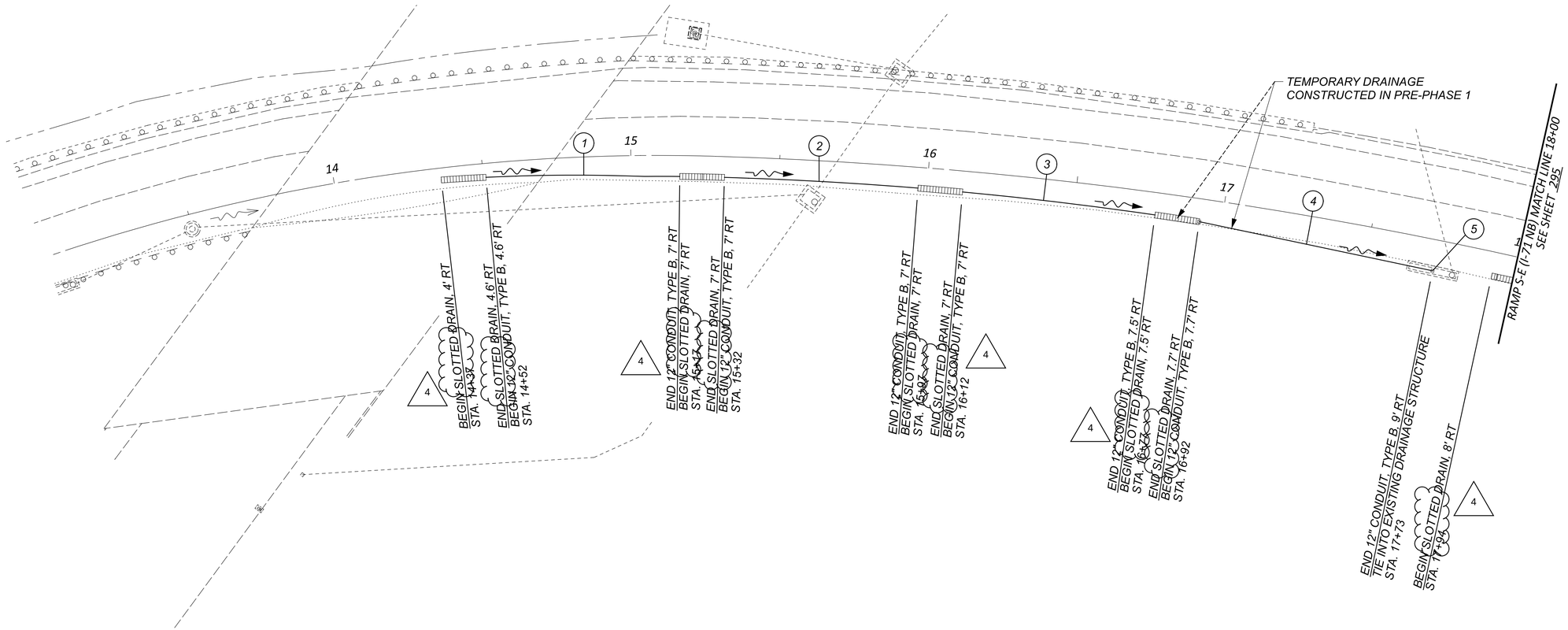
MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
I-490 - STA. 980+50 TO STA. 985+50

DESIGN AGENCY
GPD GROUP*
Copyright© Glace, Falk, Schirmer, Ibarra & Delaware, Inc., 2020

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 301 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MP104D-9 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 3:22:33 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM112.dgn



1. TEMPORARY 65' -12" CONDUIT, TYPE B, AS PER PLAN (4)
2. TEMPORARY 65' -12" CONDUIT, TYPE B, AS PER PLAN (4)
3. TEMPORARY 65' -12" CONDUIT, TYPE B, AS PER PLAN (4)
4. TEMPORARY 80' -12" CONDUIT, TYPE B AS PER PLAN @ 5.43%
5. EXISTING INLET (DR-66) (TO REMAIN OPERATIONAL)

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED IN PHASE 1.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291.

HORIZONTAL SCALE IN FEET
0 10 20 40

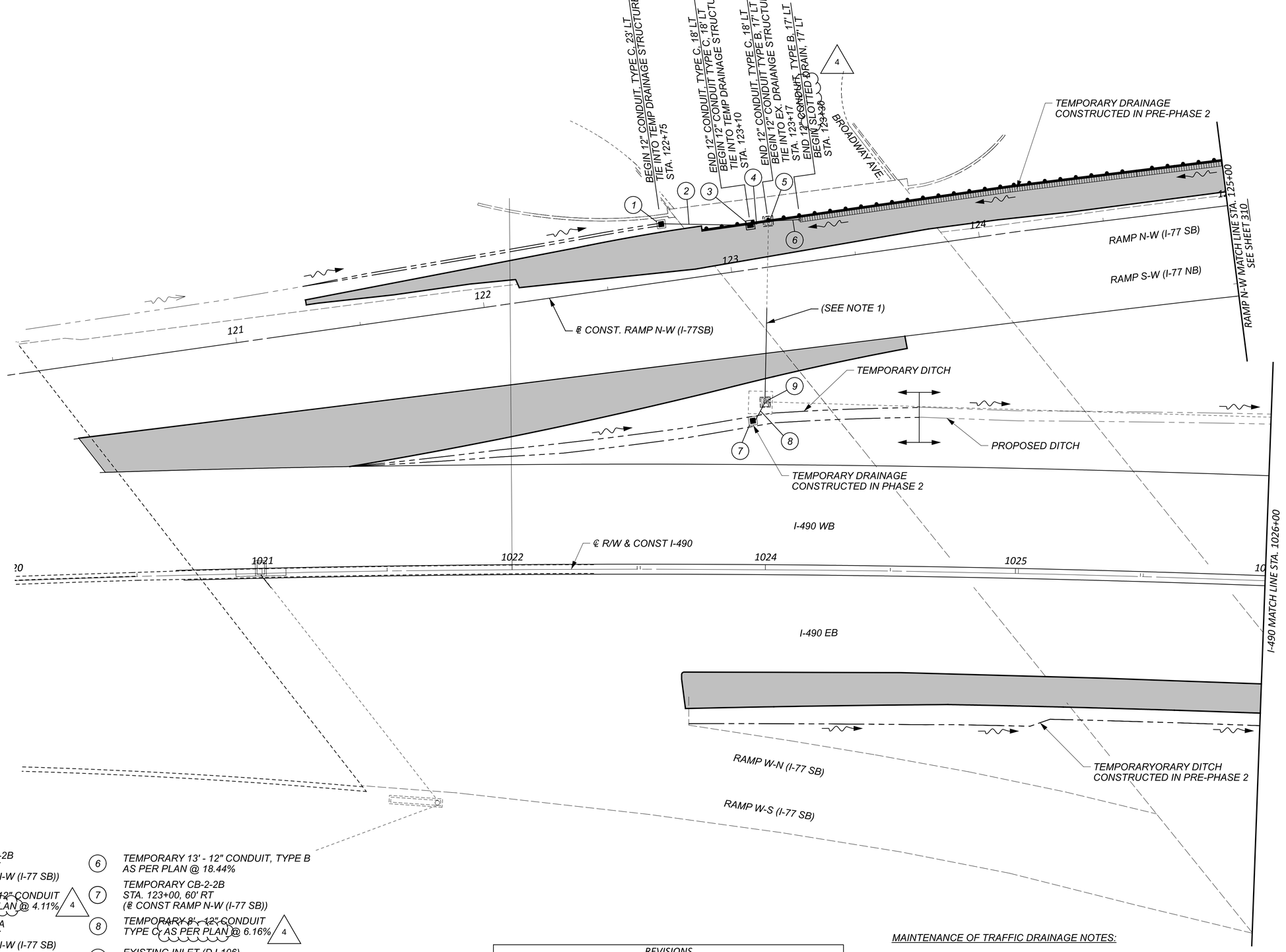
MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 1 & PHASE 1
RAMP S-E (I-71 NB) - BEGIN TO STA. 18+00

DESIGN AGENCY
GPD GROUP
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2020

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 302 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408-MM113 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 3:56:14 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\v00-Engineering\MOT\Sheets\107408_MM113.dgn



1. TEMPORARY CB-2-2B
   STA. 122+75, 23' LT
   (℄ CONST. RAMP N-W (I-77 SB))
2. TEMPORARY 34' - 12" CONDUIT
   TYPE C, AS PER PLAN @ 4.11% (4)
3. TEMPORARY CB-3A
   STA. 123+10, 18' LT
   (℄ CONST. RAMP N-W (I-77 SB)
4. TEMPORARY 6' - 12" CONDUIT
   TYPE C, AS PER PLAN @ 2.00% (4)
5. EXISTING INLET (DR-115)
   (TO BE PLATED IN PRE-PHASE 2)
6. TEMPORARY 13' - 12" CONDUIT, TYPE B
   AS PER PLAN @ 18.44%
7. TEMPORARY CB-2-2B
   STA. 123+00, 60' RT
   (℄ CONST RAMP N-W (I-77 SB))
8. TEMPORARY 8' - 12" CONDUIT
   TYPE C, AS PER PLAN @ 6.16% (4)
9. EXISTING INLET (DJ-106)
   (TO BE PLATED IN PHASE 2)

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED PRIOR TO PHASE 2 AND PRE-PHASE 2.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291 .

HORIZONTAL SCALE IN FEET
0 10 20 40

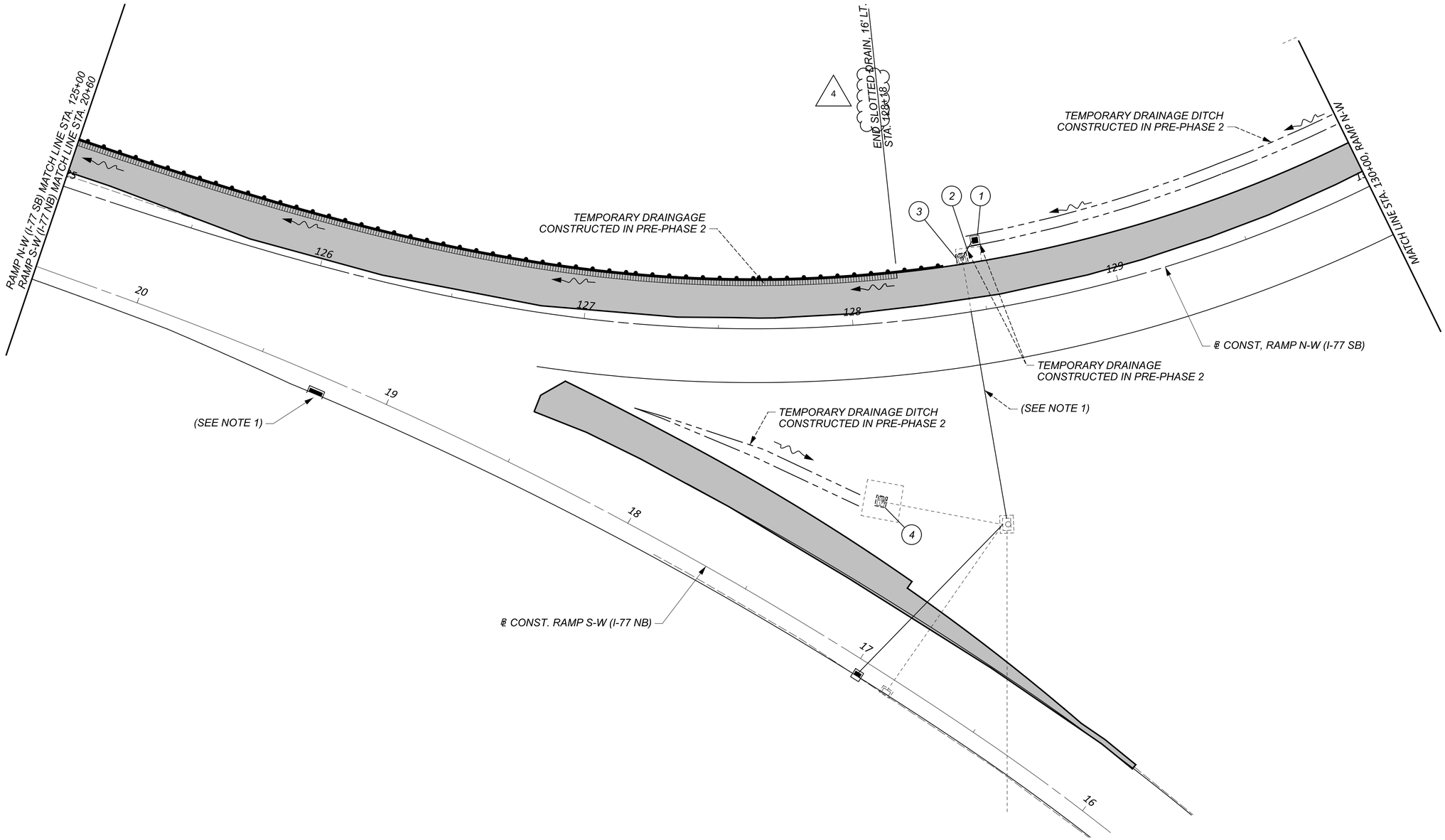
MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 2 & PHASE 2
I-490 BEGIN TO 1026+00

DESIGN AGENCY
GPD GROUP

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 303 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MM201 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 4:11:13 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM201.dgn



1. TEMPORARY CB-2-2B
   STA. 128+50, 26' LT
   (℄ CONST. RAMP N-W (I-77SB))
2. TEMPORARY 8"~12" CONDUIT
   TYPE C AS PER PLAN @ 6.35%
3. EXISTING INLET (DR-116)
   (TO BE PLATED IN PRE-PHASE 2)
4. EXISTING INLET (EX-11)
   (TO REMAIN OPERATIONAL)

4

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	REPLACE SLOTTED DRAIN WITH SLOTTED DRAIN AND MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. PROPOSED DRAINAGE TO BE CONSTRUCTED PRIOR TO PHASE 2 AND PRE-PHASE 2.
2. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291.

HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 2
RAMP N-W (I-77) STA. 125+00 TO STA. 130+00

DESIGN AGENCY
GPD GROUP*
Copyright© Glaus, Pyle, Schomer, Burns & DeHaven, Inc., 2020

DESIGNER	KRM
REVIEWER	AKF 11-21-23
PROJECT ID	107408
SHEET	310
TOTAL	1068

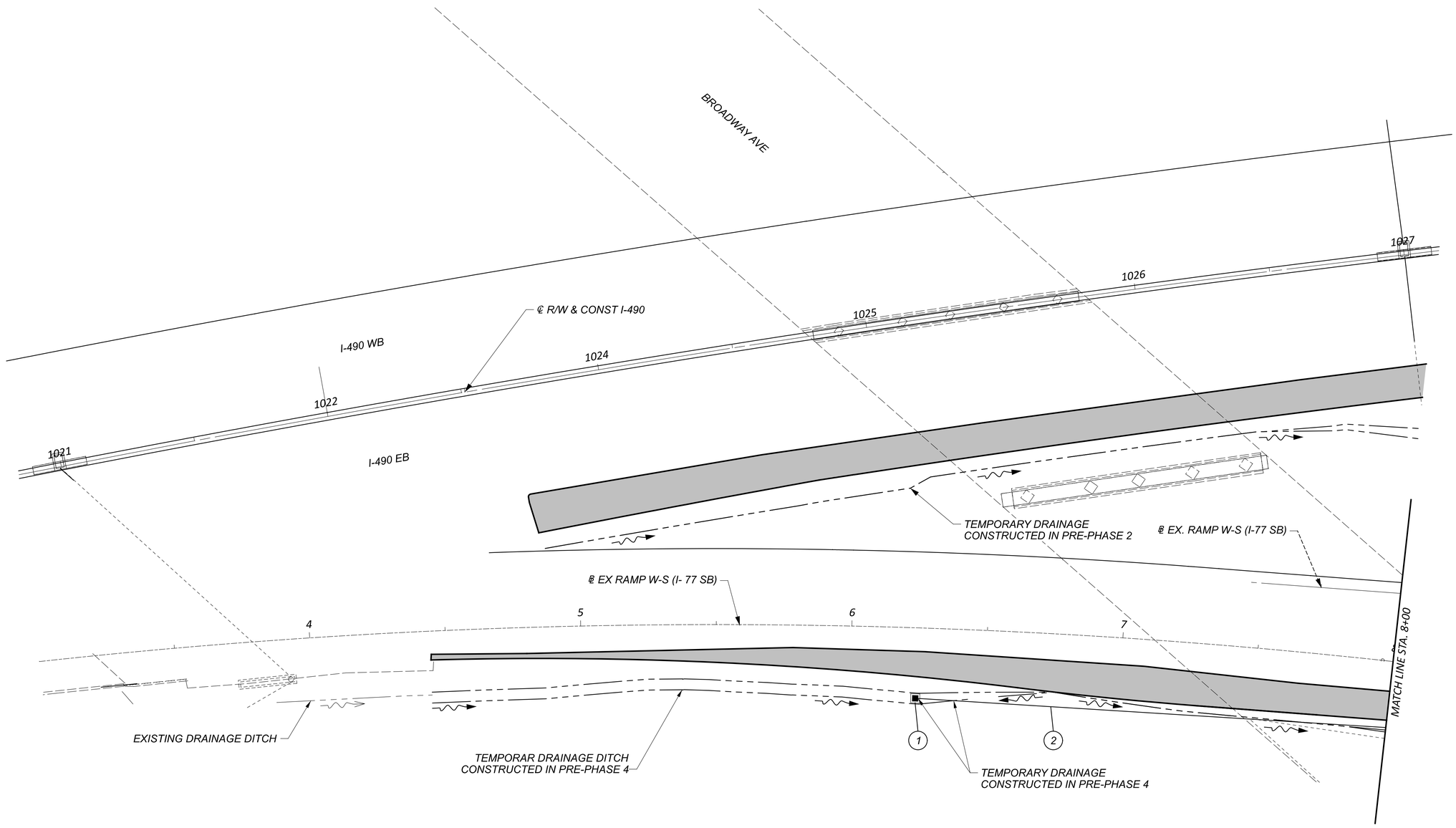
CUY-490-0.00 PART 1

MODEL: 107408_MM208 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 4:22:45 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM208.dgn

1 TEMPORARY CB 2-2B
STA. 6+24, 26' RT.
(℄ EX. RAMP W-S (I-77 SB))

2 TEMPORARY 190' - 12" CONDUIT
TYPE C, AS PER PLAN @ 1.41%

4



REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291 .

HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 4
RAMP W-S (I-77 SB) BEGIN TO STA. 8+00

DESIGN AGENCY
GPD GROUP

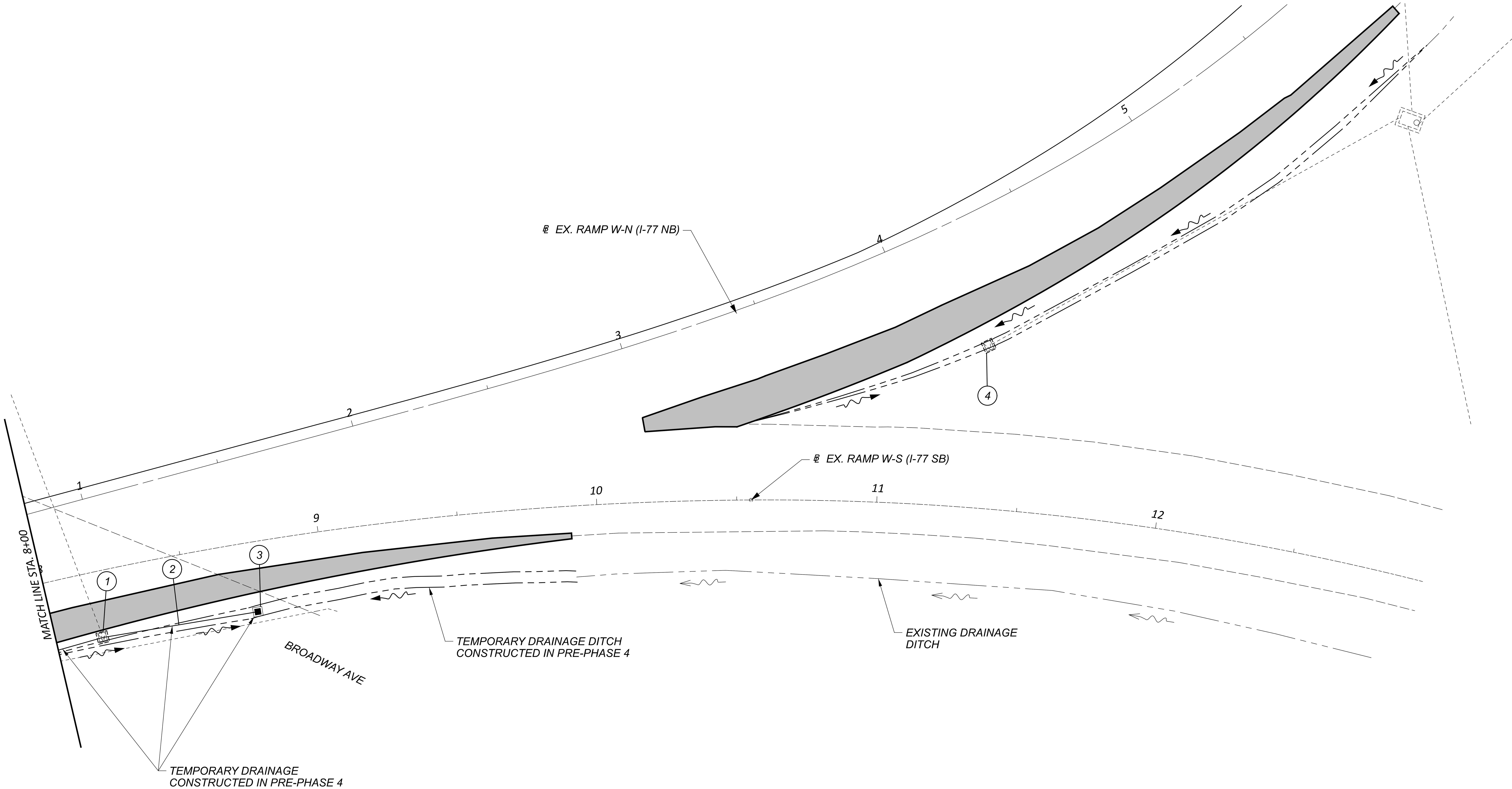
DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 312 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MM401 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 4:27:22 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\d00-Engineering\MOT\Sheets\107408_MM401.dgn

MAINTENANCE OF TRAFFIC - TEMPORARY DRAINAGE - PRE-PHASE 4
RAMP W-S (I-77 SB) STA. 8+00 TO END

HORIZONTAL SCALE IN FEET
0 10 20 40



(1) EXISTING INLET (DR-119) (TO BE TEMPORARILY PLATED IN PRE-PHASE 4)

(2) TEMPORARY 55' - 12" CONDUIT TYPE C, AS PER PLAN @ 1.75% (4)

(3) TEMPORARY CB 2-2B STA. 8+74, 25' RT. (℄ EX. RAMP W-S (I-77 SB))

(4) EXISTING INLET (DJ-120) (TO BE TEMPORARILY RECONSTRUCTED TO GRADE IN PRE-PHASE 4)

MAINTENANCE OF TRAFFIC DRAINAGE NOTES:

1. FOR MAINTENANCE OF TRAFFIC DRAINAGE LEGEND, SEE SHEET 291.

REVISIONS		
NO.	DATE	DESCRIPTION
4	04/02/24	MADE ALL TEMP. DRAINAGE ITEMS "AS PER PLAN"

DESIGN AGENCY
GPD GROUP®

DESIGNER KRM
REVIEWER AKF 11-21-23
PROJECT ID 107408
SHEET 313 TOTAL 1068

CUY-490-0.00 PART 1

MODEL: 107408_MM402 PAPERSIZE: 34x22 (in.) DATE: 4/2/2024 TIME: 4:37:55 PM USER: kmonas
O:\Clients\ORD\2021\2021089\107408\400-Engineering\MOT\Sheets\107408_MM402.dgn

SHEET NUM. OFFICE CALCS		59		457		459							PART. 01/IMS/04	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
																		ROADWAY	
		LS											LS	201	11000	LS		CLEARING AND GRUBBING	50
				146,031									146,031	202	23000	146,031	SY	PAVEMENT REMOVED	51
				1,225									1,225	202	30000	1,225	SF	WALK REMOVED	
				9									9	202	30600	9	SY	CONCRETE MEDIAN REMOVED	
				8,796									8,796	202	30700	8,796	FT	CONCRETE BARRIER REMOVED	
				140									140	202	30800	140	SY	TRAFFIC ISLAND REMOVED	
				17,483									17,483	202	32000	17,483	FT	CURB REMOVED	
				7,908									7,908	202	35100	7,908	FT	PIPE REMOVED, 24" AND UNDER	
				257									257	202	35200	257	FT	PIPE REMOVED, OVER 24"	
				13,152									13,152	202	38000	13,152	FT	GUARDRAIL REMOVED	
				2									2	202	47800	2	EACH	IMPACT ATTENUATOR REMOVED	
				13									13	202	58000	13	EACH	MANHOLE REMOVED	
				28									28	202	58100	28	EACH	CATCH BASIN REMOVED	
				61									61	202	58200	61	EACH	INLET REMOVED	
						163							163	SPECIAL	20270110	163	FT	PIPE CLEANOUT, 24" AND UNDER	55
						798							798	SPECIAL	20270120	798	FT	PIPE CLEANOUT, 27" TO 48"	55
				10,034									10,034	202	75000	10,034	FT	FENCE REMOVED	
		70,616											70,616	203	10000	70,616	CY	EXCAVATION	
		2,931											2,931	203	20000	2,931	CY	EMBANKMENT	
				750									750	203	35120	750	CY	GRANULAR MATERIAL, TYPE C	
		2,111		205								4	2,316	204	10000	2,316	SY	SUBGRADE COMPACTION	51
		1,056											1,056	204	21000	1,056	CY	GRANULAR EMBANKMENT	51
		80											80	204	45000	80	HOUR	PROOF ROLLING	51
		1,056	4										1,056	204	13000	1,056	CY	EXCAVATION OF SUBGRADE	51
4,356													4,356	206	10500	4,356	TON	CEMENT	
144,043													144,043	206	11000	144,043	SY	CURING COAT	
144,043	4												144,043	206	15020	144,043	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	
																	4		
145													145	209	15001	145	STA	RESHAPING UNDER GUARDRAIL, AS PER PLAN	52
				12,078									12,078	606	15050	12,078	FT	GUARDRAIL, TYPE MGS	
				125									125	606	15150	125	FT	GUARDRAIL, TYPE MGS HALF POST SPACING	
				2									2	606	26050	2	EACH	ANCHOR ASSEMBLY, MGS TYPE B	52
				23									23	606	26150	23	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	52
				16									16	606	26550	16	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
				26									26	606	35002	26	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
				11									11	606	35102	11	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
				1									1	606	60050	1	EACH	IMPACT ATTENUATOR, TYPE 3 (BIDIRECTIONAL) (72" WIDTH)	52
				11,119									11,119	607	23000	11,119	FT	FENCE, TYPE CLT	
				11,119									11,119	607	70000	11,119	FT	FENCELINE SEEDING AND MULCHING	
				1,152									1,152	608	10000	1,152	SF	4" CONCRETE WALK	
				687									687	608	52000	687	SF	CURB RAMP	
720													720	622	10100	720	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1	
				640									640	622	10120	640	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C	
				31									31	622	10121	31	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C, AS PER PLAN	52
4,930													4,930	622	10140	4,930	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1	
30													30	622	10141	30	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN	52
				712									712	622	10160	712	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
				78									78	622	10161	78	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN	52
34													34	622	10200	34	EACH	BARRIER TRANSITION	
				3									3	622	24840	3	EACH	CONCRETE BARRIER END SECTION, TYPE B	
1													1	622	24850	1	EACH	CONCRETE BARRIER END SECTION, TYPE B1	
				14									14	622	25000	14	EACH	CONCRETE BARRIER END SECTION, TYPE D	
				2									2	622	25001	2	EACH	CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN	52
6													6	622	25006	6	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1	
				1									1	622	25009	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C, AS PER PLAN	53

REVISIONS

NO.	DATE	DESCRIPTION
2	02/29/24	UPDATED EARTHWORK QUANTITIES
3	03/18/24	EXCAVATION OF SUBGRADE QUANTITY ADDED. UPDATED QUANTITIES FOR: PAVEMENT REMOVED; BARRIER REMOVED; CURB REMOVED; CONCRETE BARRIER, SINGLE SLOPE, TYPE C1; BARRIER TRANSITION; AND CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1.
4	04/04/24	UPDATED SUBGRADE TREATMENT QUANTITIES

GENERAL SUMMARY

CUY-490-0.00 PART 1

MODEL: Plan 2 - Plan 2 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 5:10:10 PM USER: pfry
O:\Clients\ORD\2021\202108910740B\400-Engineering\Roadway\Sheets\107408_GG001.dgn

DESIGN AGENCY
GPD GROUP

DESIGNER JAN

REVIEWER PJF 11-21-23

PROJECT ID 107408

SHEET 452 TOTAL 1068

SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
OFFICE CALCS		59		457	458	459	460						01/IMS/04		EXT	TOTAL			SHEET NO.
																		DRAINAGE	
							5						5	611	99500	5	EACH	INLET, MISC.: INLET, NO. 8 FOR SINGLE SLOPE BARRIER, TYPE C	55
							14						14	611	99574	14	EACH	MANHOLE, NO. 3	
							1						1	611	99575	1	EACH	MANHOLE, NO. 3, AS PER PLAN	55
							11						11	611	99654	11	EACH	MANHOLE ADJUSTED TO GRADE	
							2						2	611	99660	2	EACH	MANHOLE RECONSTRUCTED TO GRADE	
							6						6	611	99661	6	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN "A"	57
							4						4	611	99661	4	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN "B"	57
		4				9							13	611	99710	13	EACH	PRECAST REINFORCED CONCRETE OUTLET	
		1,000											1,000	SPECIAL	61199820	1,000	LB	MISCELLANEOUS METAL	55
																		PAVEMENT	
4,938													4,938	254	01000	4,938	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.5")	
25,848													25,848	302	56000	25,848	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
24,312				2									24,314	304	20000	24,314	CY	AGGREGATE BASE	
15,133													15,133	407	20000	15,133	GAL	NON-TRACKING TACK COAT	
1,356													1,356	408	10001	1,356	GAL	PRIME COAT, AS PER PLAN	54
679													679	441	70801	679	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	52
11,871													11,871	442	00100	11,871	CY	ANTI-SEGREGATION EQUIPMENT	
6,433													6,433	442	10080	6,433	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
5,548													5,548	442	10301	5,548	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG76-22M	54
8,366													8,366	452	14022	8,366	SY	10.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
16,185													16,185	609	24510	16,185	FT	CURB, TYPE 4-C	
2,384													2,384	609	26000	2,384	FT	CURB, TYPE 6	
218													218	609	50000	218	SY	4" CONCRETE TRAFFIC ISLAND	
206													206	617	10101	206	CY	COMPACTED AGGREGATE, AS PER PLAN	54
3,745													3,745	617	20000	3,745	SY	SHOULDER PREPARATION	
11													11	617	25000	11	MGAL	WATER	
		5.58											5.58	618	40601	5.58	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	54
					1								1	638	10480	1	EACH	**WATER WORK** FIRE HYDRANT REMOVED	
					1								1	SPECIAL	63820750	1	EACH	6" FIRE HYDRANT (CLEVELAND)	58
					1								1	SPECIAL	63820762	1	EACH	FIRE HYDRANT SERVICE LINE EXTENDED AND ADJUSTED TO GRADE (CLEVELAND)	58
		LS											LS	638	98100	LS		WATER WORK, MISC.:CLEVELAND WATER DEPARTMENT AS-BUILT DRAWINGS	58
	4	20,000											20,000	638	98000	20,000	EACH	WATER WORK, MISC.:CLEVELAND WATER DEPARTMENT FEES AND CHARGES	58

GENERAL SUMMARY

CUY-490-0.00 PART 1

MODEL: Plan 2 - Plan 2 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/4/2024 TIME: 5:24:02 PM USER: pfry
C:\Clients\ORD\2021\202108\107408\400-Engineering\Roadway\Sheets\107408_GG004.dgn

REVISIONS

NO.	DATE	DESCRIPTION
4	04/04/24	UPDATED WATER FEES QUANTITY

DESIGN AGENCY

GPD GROUP

DESIGNER JAN

REVIEWER PJF 11-21-23

PROJECT ID 107408

SHEET 455 TOTAL 1068

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	01-20-23
AS-2-15	REVISED	01-20-23
BR-1-13	REVISED	01-17-14
EXJ-4-87	REVISED	01-20-23
GSD-1-19	DATED	01-15-21
PCB-91	REVISED	07-17-20
RB-1-55	DATED	07-19-13
VPF-1-90	REVISED	01-20-23

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	DATED	04-21-23
844	DATED	04-20-18
848	DATED	01-15-21

DESIGN SPECIFICATIONS:

THE EXISTING STRUCTURE WAS DESIGNED IN CONFORMANCE WITH THE "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, DATED 1969, INCLUDING THE 1970 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING:

HS20-44 CASE I AND THE ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 0.030 KIPS PER SQUARE FOOT

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI

STRUCTURAL STEEL - ASTM A572 GRADE 50, YIELD STRENGTH 50 KSI (EXISTING)
STRUCTURAL STEEL - ASTM A709 GRADE 50, YIELD STRENGTH 50 KSI (PROPOSED)

MONOLITHIC WEARING SURFACE:

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

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE OWNER WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

EXISTING STRUCTURE PLANS:

PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 12, 5500 TRANSPORTATION BLVD., GARFIELD HEIGHTS, OH 44125-5396, TEL 216-581-2100. EXISTING PLANS MAY ALSO BE DOWNLOADED AT THE FOLLOWING LINK: ftp://ftp.dot.state.oh.us/pub/Contracts/Attach

USCG ENVIRONMENTAL COMMITMENTS:

1. SCAFFOLDING UNDER THE BRIDGE IS AUTHORIZED BUT MUST NOT EXTEND MORE THAN 4-FEET BELOW LOW STEEL.

2. LIGHTING OF THE BOTTOM AND FOUR-CORNERS OF THE SCAFFOLDING WITH STEADY BURNING YELLOW LIGHTS IS REQUIRED SO THAT APPROACHING VESSELS ARE WARNED OF THE TEMPORARY REDUCTION IN CLEARANCE.

3. SNOOPER VEHICLES OR OTHER MANLIFTS ARE AUTHORIZED AND WILL REQUIRE SPOTTERS TO WARN WORKERS OF APPROACHING VESSELS AND TO MOVE MANLIFTS TO ALLOW VESSELS TO PASS IS REQUIRED.

4. USE OF BARGES OR FALSEWORK MUST BE AUTHORIZED BY THE USCG WITH A MINIMUM OF 30 DAYS ADVANCED NOTICE OF DEPLOYMENT.

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

DESCRIPTION: WORK TO BE PAID FOR UNDER THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING STRUCTURE COMPONENTS AS DETAILED IN THE PLANS AND AS DIRECTED BY THE ENGINEER. THE REMOVALS SHALL INCLUDE BUT NOT NECESSARILY BE LIMITED TO THE FOLLOWING:

1. PORTIONS OF EXISTING BRIDGE DECK SLAB AND CONCRETE PARAPETS AS SHOWN IN THE PLANS, INCLUDING SAW CUTTING.

2. PORTIONS OF EXISTING ABUTMENT BACKWALLS AND WINGWALLS AS SHOWN IN THE PLANS, INCLUDING SAW CUTTING.

3. EXISTING STEEL END CROSSFRAMES, STEEL END DAMS, AND SLIDING PLATE OR STRIP SEAL EXPANSION JOINTS AT ALL ABUTMENTS AND JOINT 6 AS SHOWN IN THE PLANS.

4. EXISTING NEOPRENE DRAINAGE TROUGHS AND STEEL ANGLES BELOW JOINTS 1 THRU 6, INCLUDING ALL DIRT AND DEBRIS CONTAINED WITHIN.

5. EXISTING STEEL PIPE COLLECTORS AND DOWNSPOUTS AS SHOWN IN THE PLANS, INCLUDING ALL DIRT AND DEBRIS CONTAINED WITHIN.

6. EXISTING PIER ACCESS LADDERS AND MANHOLES IN BRIDGE DECK AS SHOWN IN THE PLANS.

7. EXISTING ITEMS NOTED TO BE REMOVED FOR REPAIRS TO EXISTING FINGER JOINTS, EXISTING INSPECTION SAFETY CABLE SYSTEM, AND EXISTING SCUPPER GRATES AS SHOWN IN THE PLANS.

8. MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER.

THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

4 PROTECTION OF RAILWAY TRACK: A TEMPORARY SHIELD SHALL BE PROVIDED OVER THE RAILWAY TRACK AREA DURING DEMOLITION. SEE SECTION "D" OF CSX TRANSPORTATION COORDINATION NOTE ON SHEET 8A OF 120 FOR DETAILS.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL GIRDER, STEEL STRINGER, ETC.), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (CON'T):

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18-INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

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

ITEM 509 - CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING REINFORCEMENT, AS PER PLAN:

REPLACE ALL EXISTING REINFORCING STEEL BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

APPLY AN EPOXY-URETHANE SEALER TO THE EXPOSED CONCRETE SURFACES OF THE FOLLOWING BRIDGE ELEMENTS:

1. ABUTMENTS: ALL FACES OF BACKWALLS, BRIDGE SEAT, BREASTWALLS, WINGWALLS, AND PARAPETS (REMOVE EXISTING SEALER).

2. PIERS 4L, 4R, 9L, 9R, 12L, 12R, 15L, 15R, 20L AND 20R: ALL FACES OF CAPS AND COLUMNS, INCLUDING TOP OF CAP (DO NOT REMOVE EXISTING SEALER).

3. PIERS 7L, 7R AND 8R: ALL FACES OF COLUMNS, GROUND LINE TO THE BOTTOM OF CAP (DO NOT REMOVE EXISTING SEALER).

4. PIERS 13L, 13R, 14L AND 14R: ALL FACES OF CAPS AND COLUMNS, EXCLUDING TOP OF CAP (NO EXISTING SEALER).

5. PIERS 6L, 6R, 10L, 10R, AND CAPS OF PIERS 7L AND 7R: AREAS OF CONCRETE PATCHING REPAIR ONLY (OVERLAP EXISTING SEALER SIX INCHES ON ALL SIDES OF REPAIR AREA PERIMETER).

6. SUPERSTRUCTURE: PARAPETS AND DECK EDGES, SEE SHEETS 11/120 AND 12/120 FOR LIMITS (REMOVE EXISTING SEALER).

7. APPROACH SLABS: PARAPETS (NEW WORK, NO EXISTING SEALER).

COMPLETE ALL CRACK REPAIR AND CONCRETE PATCHING ON A GIVEN STRUCTURE ELEMENT BEFORE SEALING. THE COLOR OF THE FINISH COAT FOR ALL SURFACES SHALL BE FEDERAL COLOR NUMBER 595B-27778 (LIGHT NEUTRAL, SEMIGLOSS).

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

DESIGNED	PAT/VS	REVIEWED	MJL
DRAWN	PAT/VS	DATE	08/05/20
CHECKED	JAM/CJS	REVISED	
		STRUCTURE FILE NUMBER	1811991

STRUCTURE GENERAL NOTES - 1
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

5 / 120

16 / 131

4 03/29/2024

X:\Projects\2020\2022\00100 ODOT D12-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SFN1811991_SN001.dgn 3/29/2024 5:47:08 PM zguo

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

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, JUNCTION BOX, CONDUIT, 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 625 - SPECIAL - MAINTAIN EXISTING LIGHTING

DESCRIPTION: THIS ITEM CONSISTS OF RESTORING THE LIGHTING THAT IS DISTURBED IN THE COURSE OF WORK.

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 RESTORATION OF DISTURBED LIGHTING. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE BID FOR ITEM 625 - SPECIAL - MAINTAIN EXISTING LIGHTING.

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

4

1. IMPLEMENT PHASE 1 MAINTENANCE OF TRAFFIC. MAINTAIN THREE LANES OF I-490 TRAFFIC IN EACH DIRECTION ON THE EXISTING OUTER PORTIONS OF THE EASTBOUND AND WESTBOUND DIRECTIONS ON THE DECK AND APPROACH SLABS.
2. PERFORM WORK AT THE WEST ABUTMENT AND EAST ABUTMENT:
   A. REMOVE EXISTING MEDIAN BARRIER ON EXISTING ABUTMENT APPROACH SLABS AND ON ABUTMENT BACKWALLS.
   B. REMOVE EXISTING APPROACH SLAB AND SLEEPER SLAB TO LIMITS OF PROPOSED MEDIAN BARRIER ON APPROACH SLAB AND REMOVE TOPS OF EXISTING ABUTMENT BACKWALL TO LIMITS OF PROPOSED MEDIAN BARRIER ON ABUTMENT BACKWALL. ADDITIONAL APPROACH SLAB AND TOPS OF ABUTMENT BACKWALL MAY BE REMOVED TO WITHIN 10'-0" OF CENTERLINE I-490 ON THE WESTBOUND SIDE.
   C. CONSTRUCT PROPOSED ABUTMENT BACKWALL UNDER PROPOSED ABUTMENT MEDIAN BARRIER, SLEEPER SLAB AND APPROACH SLAB UNDER PROPOSED APPROACH SLAB MEDIAN TRANSITION BARRIER.
   D. CONSTRUCT MEDIAN BARRIERS ATOP NEW ABUTMENT BACKWALL AND APPROACH SLAB SEGMENTS.

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 ℄ I-490.

4

3. PERFORM WORK AT THE WEST ABUTMENT AND EAST ABUTMENT:
   A. REMOVE REMAINING INNER PORTIONS OF EXISTING APPROACH SLABS.
   B. REMOVE REMAINING 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, AND APPROACH SLABS. BUILD TO LONG-ITUDINAL CONSTRUCTION JOINT AT OFFSET OF 35'-7" LEFT OF ℄ 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.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

DESIGNED	DRAWN	REVIEWED	DATE
PAT/VS	PAT/VS	MJL	08/05/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAM/CJS		1811991	

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

CUY-490-01.00
PID No. 107408

4 03/29/2024

PHASE 3 CONSTRUCTION (CONTINUED):

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.

3. 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.

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 ℄ 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 ℄ I-490.

3. PERFORM WORK AT THE WEST ABUTMENT AND EAST ABUTMENT:

A. REMOVE REMAINING INNER PORTIONS OF EXISTING APPROACH SLABS.

B. REMOVE REMAINING 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, AND APPROACH SLABS. BUILD TO LONG-ITUDINAL CONSTRUCTION JOINT AT OFFSET OF 36'-7" RIGHT OF ℄ I-490.

4

PHASE 4 CONSTRUCTION (CONTINUED):

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 AVENUE TO PERFORM WORK AT ABUTMENT C-B AND JOINT 6:

A.REMOVE EXISTING APPROACH SLAB AND EXISTING PARAPETS ON ABUTMENT WINGWALLS.

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 ℄ 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.

PHASE 5 CONSTRUCTION (CONTINUED):

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.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

DESIGNED PAT/VS
DRAWN PAT/VS
CHECKED JAM/CJS
REVIEWED MJL
DATE 08/05/20
REVISED
STRUCTURE FILE NUMBER 1811991

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

CUY-490-01.00
PID No. 107408

4 03/29/2024

FUNDING	ESTIMATED QUANTITIES												
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	201	11000	LS		CLEARING AND GRUBBING							LS	
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	
90	202	75266	90	FT	VANDAL PROTECTION FENCE REMOVED AND RESET						90		
LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING							LS	
8	503	21100	8	CY	UNCLASSIFIED EXCAVATION	2	2	4 2	2				
4 15,296	509	10000	15,296 4	LB	EPOXY COATED REINFORCING STEEL	3,052	3,749	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
4 1,062	510	10000	1,062 4	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	462	448	52	100				
33	511	34444	33	CY	CLASS QC2 CONCRETE, BRIDGE DECK		4				33		
5	511	34448	5	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET)						5		
55	511	45710	55	CY	CLASS QC1 CONCRETE, ABUTMENT	17	21	5	12			4	
4 21,531	512	10100	21,531 4	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	231	288	85	112	8,426	12,344	45	
2,123	512	10600	2,123	FT	CONCRETE REPAIR BY EPOXY INJECTION	2	70		36	2,615			
12,908	512	74000	12,908	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	212	247	67	67		12,315		
15,800	513	10201	15,800	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, 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 FINS, 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
1,032	526	15001	1,032	SY	REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN							1,032	7/120
481	526	90010	481	FT	TYPE A INSTALLATION							481	

ESTIMATED QUANTITIES CONTINUE ON SHEET 10/120

CALC. BY: PAT/VS DATE: 08/04/20
CHKD. BY: JAM/JDA DATE: 08/05/20

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

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

CUY-490-01.00
PID No. 107408

4 03/29/2024

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
50	601	21000	50	SY	CONCRETE SLOPE PROTECTION							50	
LS	SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING							LS	7/120
724	844	10001	724	SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN		15		54	655			
58,030	848	10000	58,030	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION (2.50" THICK)						58,030		
58,030	848	20000	58,030	SY	SURFACE PREPARATION USING HYDRODEMOLITION						58,030		
403	848	30000	403	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY						403		
2,902	848	50000	2,902	SY	HAND CHIPPING						2,902		
LS	848	50100	LS		TEST SLAB							LS	
65	848	50200	65	CY	FULL DEPTH REPAIR						65		
10	848	50201	10	CY	FULL DEPTH REPAIR, AS PER PLAN						10		63/120
58,030	848	50321	58,030	SY	EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN						58,030		11 TO 13/120

4

INDEX OF STRUCTURE PLANS

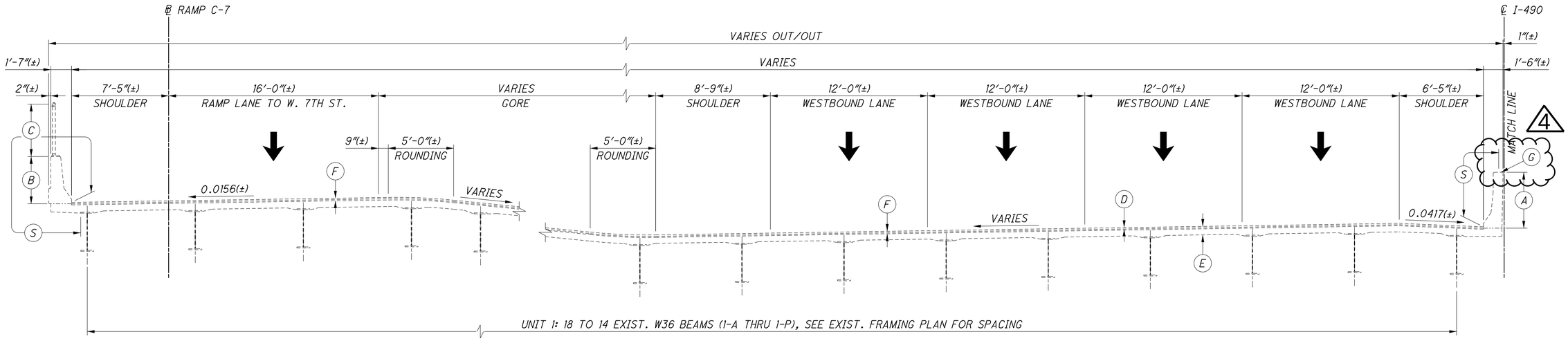
DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

DESIGNED PAT/VS | DRAWN PAT/VS | REVIEWED MJL | DATE 08/05/20
CHECKED JAM | REVISED | STRUCTURE FILE NUMBER 1811991

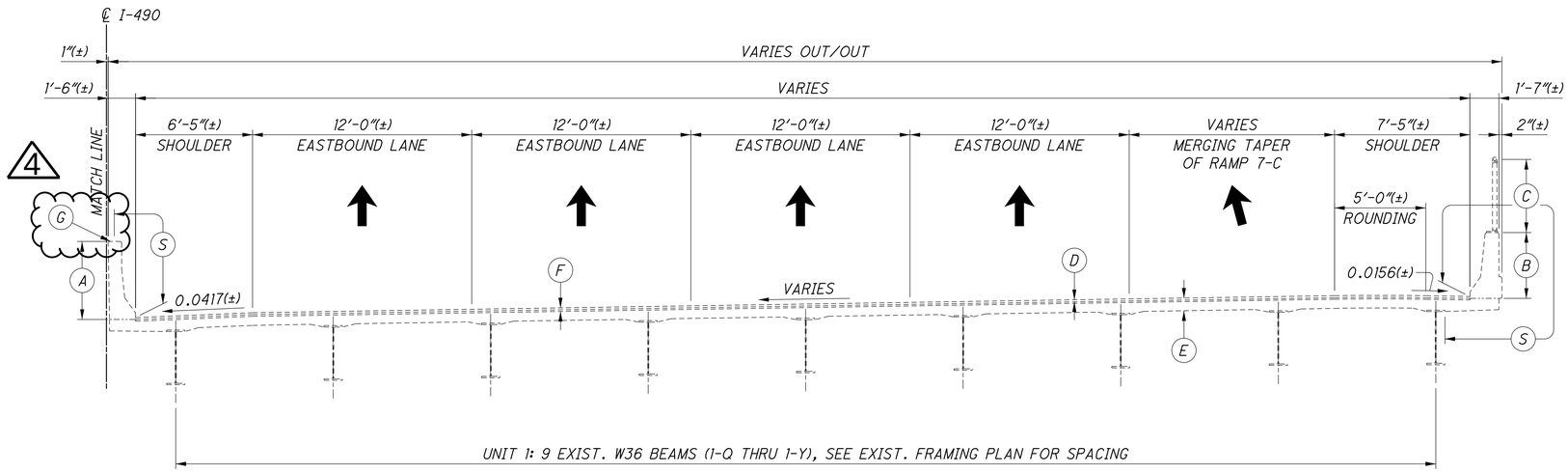
ESTIMATED QUANTITIES - 2
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

4 03/29/2024



LEFT SIDE



RIGHT SIDE

EXISTING TRANSVERSE SECTION - UNIT 1

SHOWN AT STA. 986+80(±) IN SPAN 2

LEGEND

- (A) EXIST. 4'-3¼"(±) MEDIAN PARAPET
- (B) EXIST. 3'-7¼"(±) EXTERIOR PARAPET
- (C) EXIST. 4'-0"(±) VANDAL PROTECTION FENCE
- (D) EXIST. 1¼"(±) LATEX MODIFIED CONCRETE WEARING SURFACE (1986 ORIGINAL CONSTRUCTION) OR EXIST. 1½"(±) MICRO-SILICA MODIFIED CONCRETE OVERLAY (1998 AND 2021 WEARING SURFACE REPAIRS)
- (E) EXIST. REINFORCED CONCRETE DECK SLAB, 7¾"(±) MIN. TO 8¼"(±) MAX. TOTAL THICKNESS INCLUDING WEARING SURFACE, SEE EXIST. BRIDGE PLANS FOR MORE INFORMATION
- (F) 2½"(±) TOTAL THICKNESS OF EXIST. OVERLAY AND CONCRETE LAYER BELOW THE OVERLAY TO BE REMOVED PER ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN.
- (G) EXIST. MEDIAN BARRIER NEOPRENE COVER 4
- (S) REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

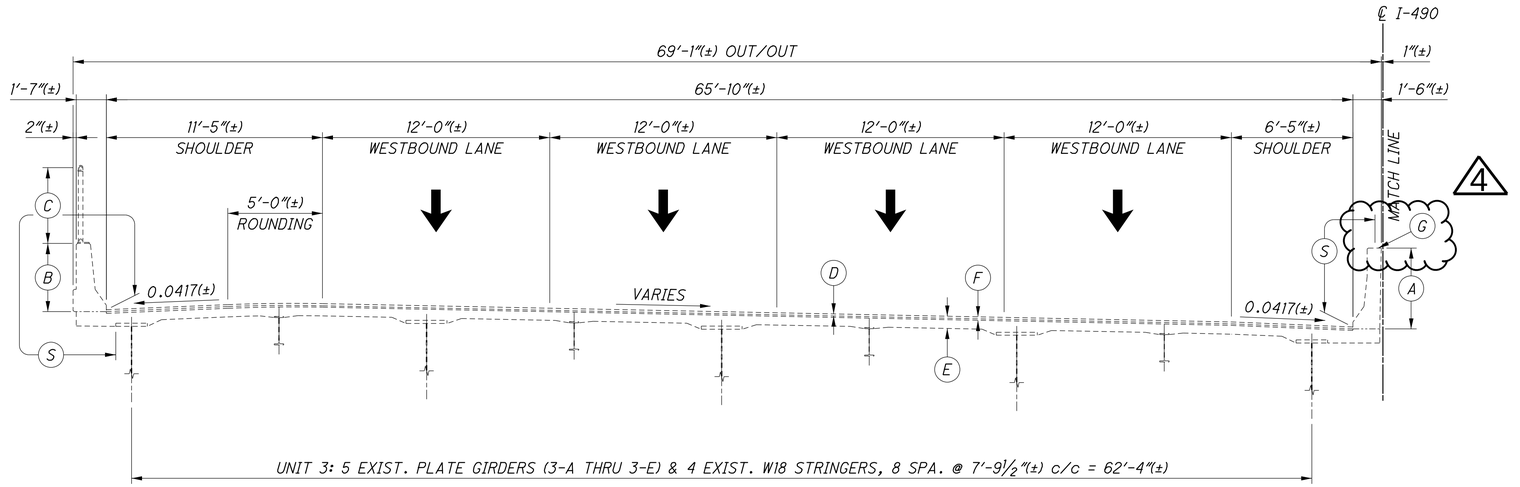
PHASE CONSTRUCTION DETAILS - 1
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

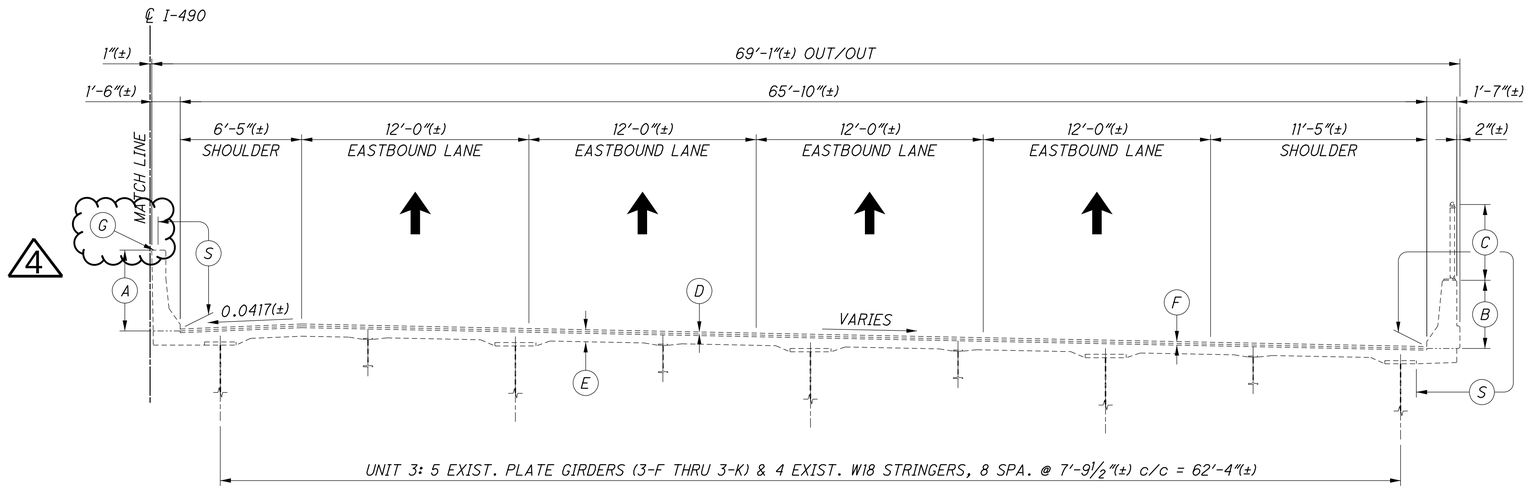
11 / 120

22 / 131

4 03/29/2024



LEFT SIDE



RIGHT SIDE

EXISTING TRANSVERSE SECTION - UNIT 3

SHOWN AT STA. 999+50(±) IN SPAN 11

LEGEND

- (A) EXIST. 4′-3¼″(±) MEDIAN PARAPET
- (B) EXIST. 3′-7¼″(±) EXTERIOR PARAPET
- (C) EXIST. 4′-0″(±) VANDAL PROTECTION FENCE
- (D) EXIST. 1¼″(±) LATEX MODIFIED CONCRETE WEARING SURFACE (1986 ORIGINAL CONSTRUCTION) OR EXIST. 1½″(±) MICRO-SILICA MODIFIED CONCRETE OVERLAY (1998 AND 2021 WEARING SURFACE REPAIRS)
- (E) EXIST. REINFORCED CONCRETE DECK SLAB, 7¾″(±) MIN. TO 8¼″(±) MAX. TOTAL THICKNESS INCLUDING WEARING SURFACE, SEE EXIST. BRIDGE PLANS FOR MORE INFORMATION
- (F) 2½″(±) TOTAL THICKNESS OF EXIST. OVERLAY AND CONCRETE LAYER BELOW THE OVERLAY TO BE REMOVED PER ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN.
- (G) EXIST. MEDIAN BARRIER NEOPRENE COVER 4
- (S) REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

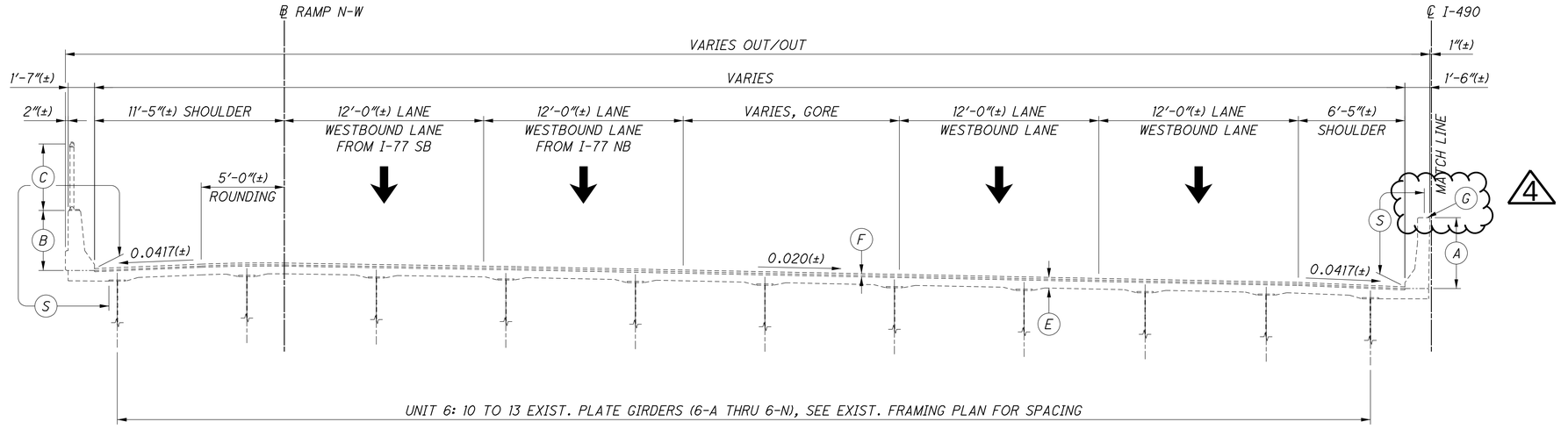
PHASE CONSTRUCTION DETAILS - 2
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

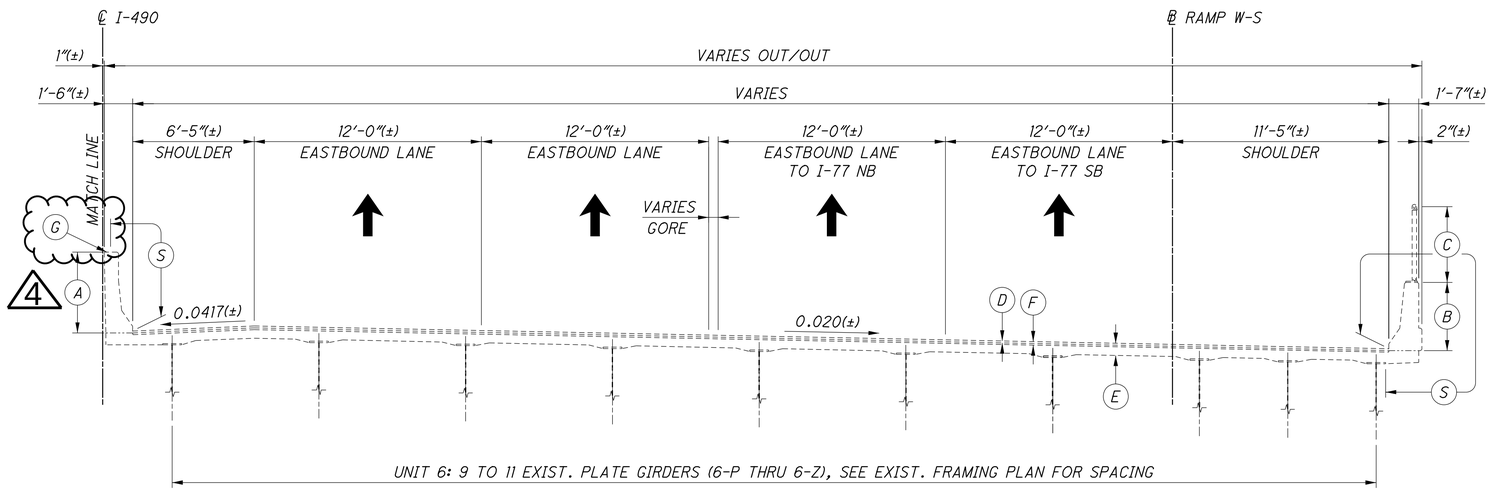
12 / 120

23 / 131

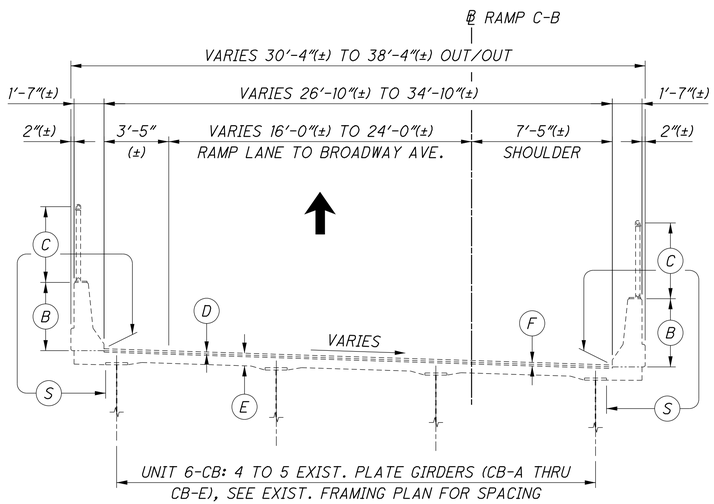
4 03/29/2024



LEFT SIDE



RIGHT SIDE



EXISTING TRANSVERSE SECTION - UNIT 6

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

LEGEND

- (A) EXIST. 4'-3¼"(±) MEDIAN PARAPET
- (B) EXIST. 3'-7¼"(±) EXTERIOR PARAPET
- (C) EXIST. 4'-0"(±) VANDAL PROTECTION FENCE
- (D) EXIST. 1¼"(±) LATEX MODIFIED CONCRETE WEARING SURFACE (1986 ORIGINAL CONSTRUCTION) OR EXIST. 1½"(±) MICRO-SILICA MODIFIED CONCRETE OVERLAY (1998 AND 2021 WEARING SURFACE REPAIRS)
- (E) EXIST. REINFORCED CONCRETE DECK SLAB, 7¾"(±) MIN. TO 8¼"(±) MAX. TOTAL THICKNESS INCLUDING WEARING SURFACE, SEE EXIST. BRIDGE PLANS FOR MORE INFORMATION
- (F) 2½"(±) TOTAL THICKNESS OF EXIST. OVERLAY AND CONCRETE LAYER BELOW THE OVERLAY TO BE REMOVED PER ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN.
- (G) EXIST. MEDIAN BARRIER NEOPRENE COVER 4
- (S) REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

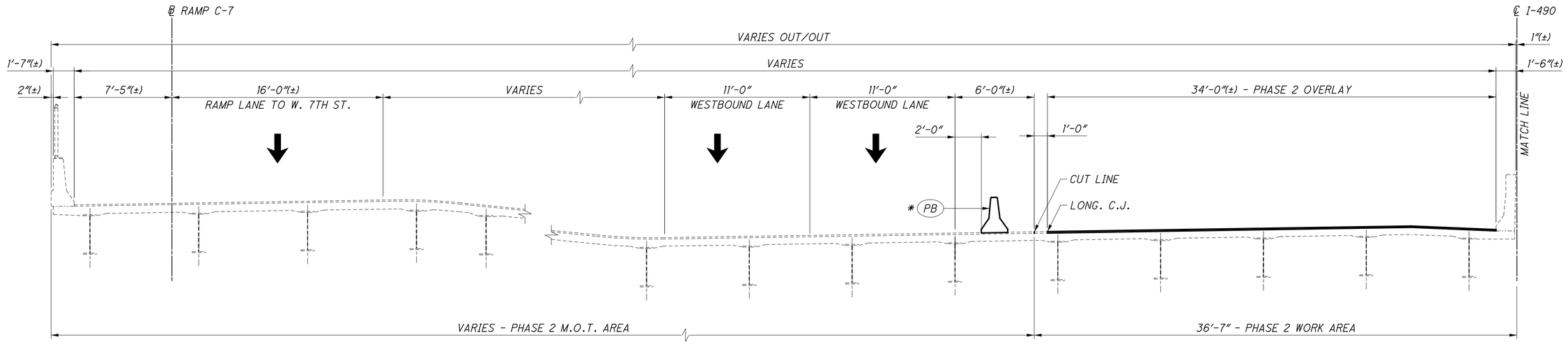
PHASE CONSTRUCTION DETAILS - 3
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

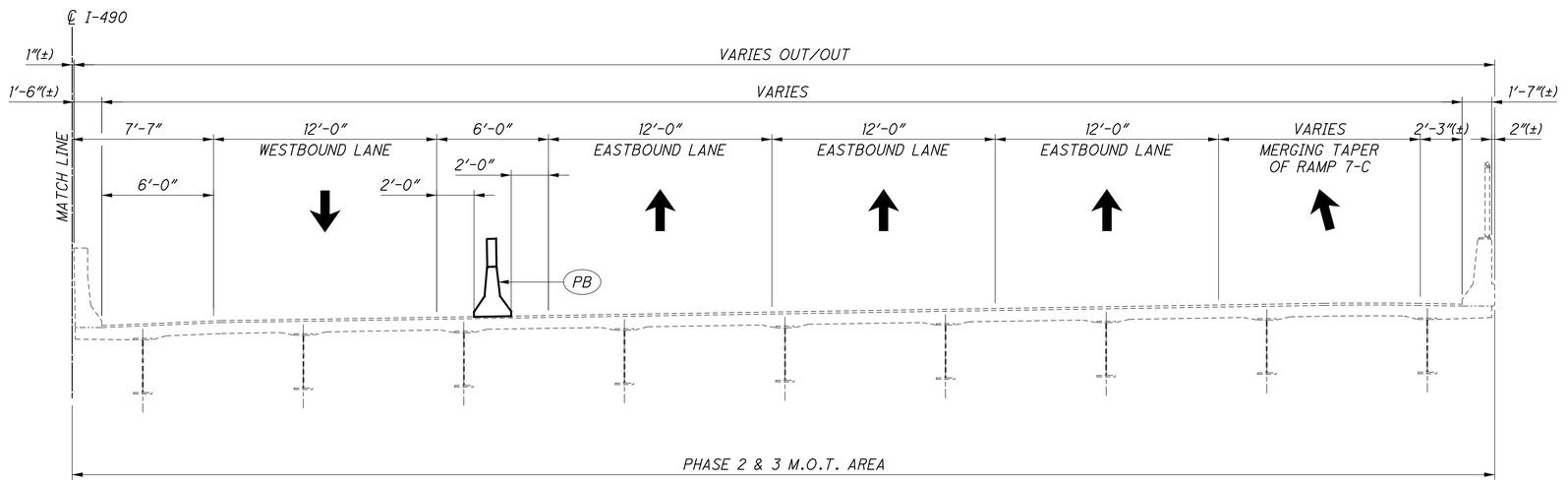
13 / 120

24 / 131

4 03/29/2024



LEFT SIDE



RIGHT SIDE

PHASE 2 CONSTRUCTION TRANSVERSE SECTION - UNIT 1

SHOWN AT STA. 986+80(±) IN SPAN 2

4 NOTE: CONSTRUCT PROPOSED MEDIAN BARRIER ON APPROACH SLAB, APPROACH SLAB AND SLEEPER SLAB BELOW MEDIAN BARRIER, ABUTMENT BACKWALL, AND MEDIAN BARRIER ON ABUTMENT BACKWALL IN PHASE 1.

FOR PHASE 1 CONSTRUCTION OF ABUTMENT BACKWALL AND MEDIAN BARRIER ON ABUTMENT BACKWALL, SEE SHEETS 29 & 55/120.

FOR PHASE 1 CONSTRUCTION OF APPROACH SLAB MEDIAN BARRIER AND PHASE 2 CONSTRUCTION OF APPROACH SLAB, SEE SHEETS 114 & 117/120.

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 2 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS AND OUTER PORTION OF EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON INNER PORTION OF EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 2, ALL ENTRANCE AND EXIT RAMPS ARE TO REMAIN OPEN TO TRAFFIC AT ALL TIMES.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEET 7/120.

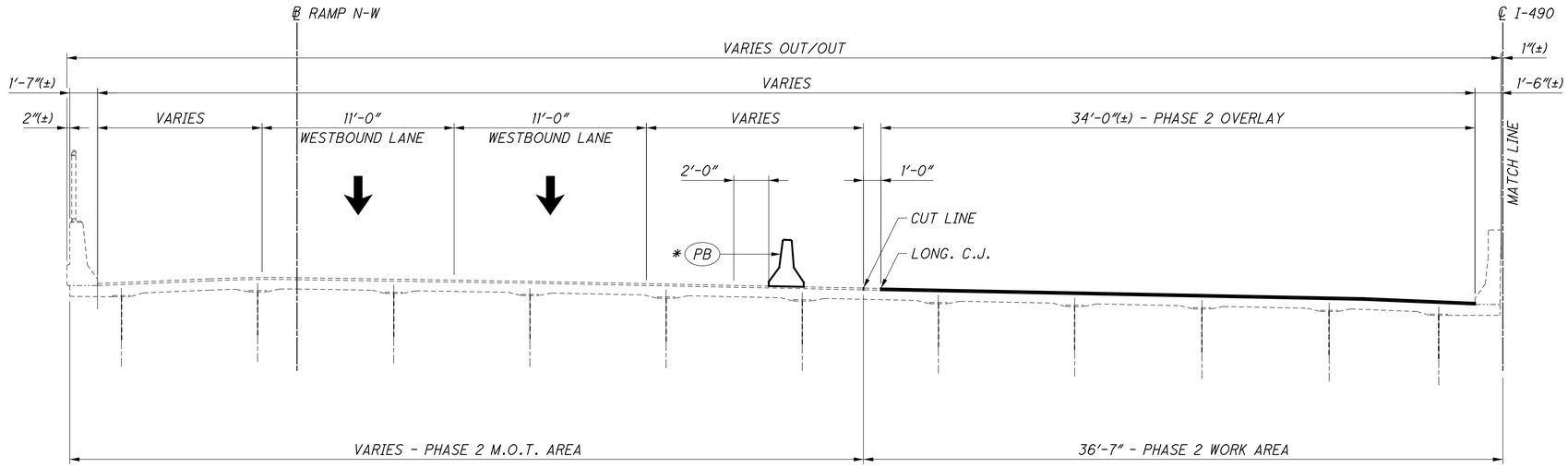
DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

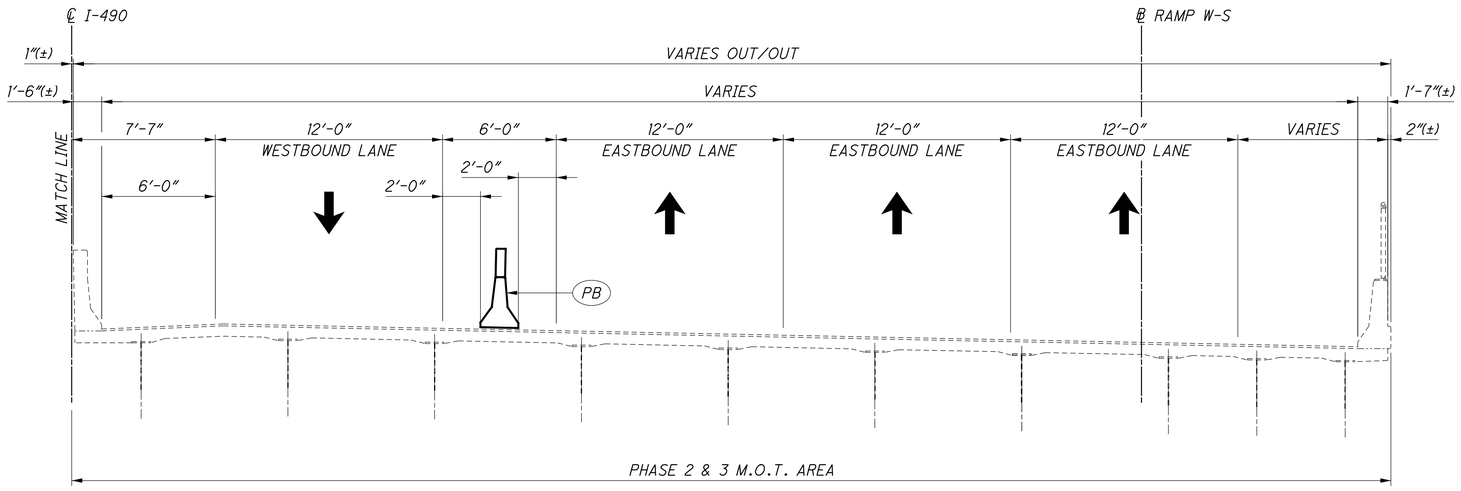
PHASE CONSTRUCTION DETAILS - 4
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

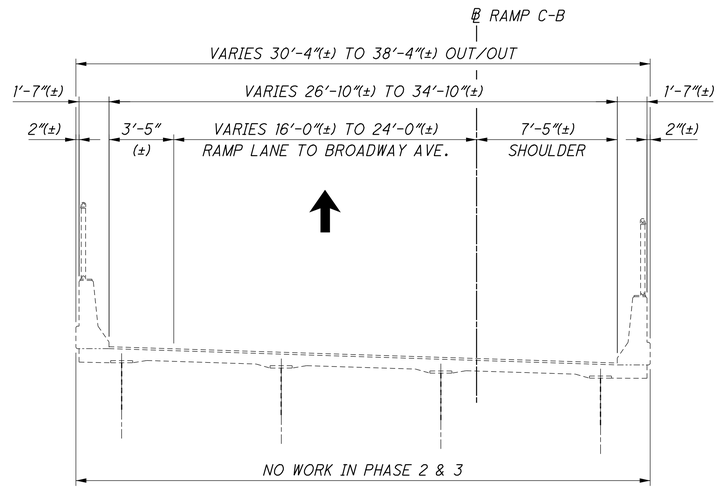
CUY-490-01.00
PID No. 107408

4 03/29/2024



LEFT SIDE





RIGHT SIDE

PHASE 2 CONSTRUCTION TRANSVERSE SECTION - UNIT 6

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

4

NOTE: CONSTRUCT PROPOSED MEDIAN BARRIER ON APPROACH SLAB, APPROACH SLAB AND SLEEPER SLAB BELOW MEDIAN BARRIER, ABUTMENT BACKWALL, AND MEDIAN BARRIER ON ABUTMENT BACKWALL IN PHASE 1.

FOR PHASE 1 CONSTRUCTION OF ABUTMENT BACKWALL AND MEDIAN BARRIER ON ABUTMENT BACKWALL, SEE SHEETS 29 & 55/120.

FOR PHASE 1 CONSTRUCTION OF APPROACH SLAB MEDIAN BARRIER AND PHASE 2 CONSTRUCTION OF APPROACH SLAB, SEE SHEETS 114 & 117/120.

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 2 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS AND OUTER PORTION OF EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON INNER PORTION OF EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 2, ALL ENTRANCE AND EXIT RAMPS ARE TO REMAIN OPEN TO TRAFFIC AT ALL TIMES.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEET 7/120.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

PHASE CONSTRUCTION DETAILS - 6
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

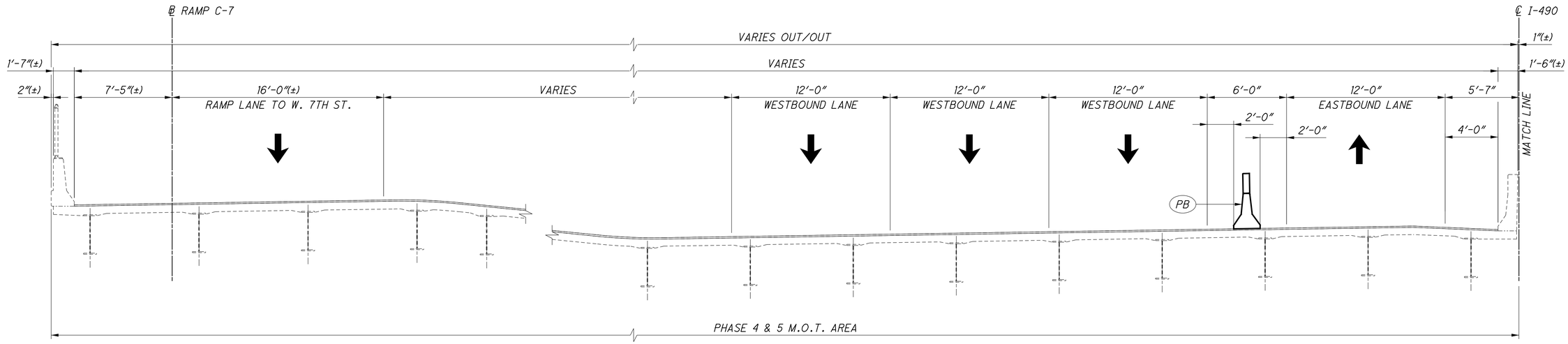
CUY-490-01.00
PID No. 107408

16/120

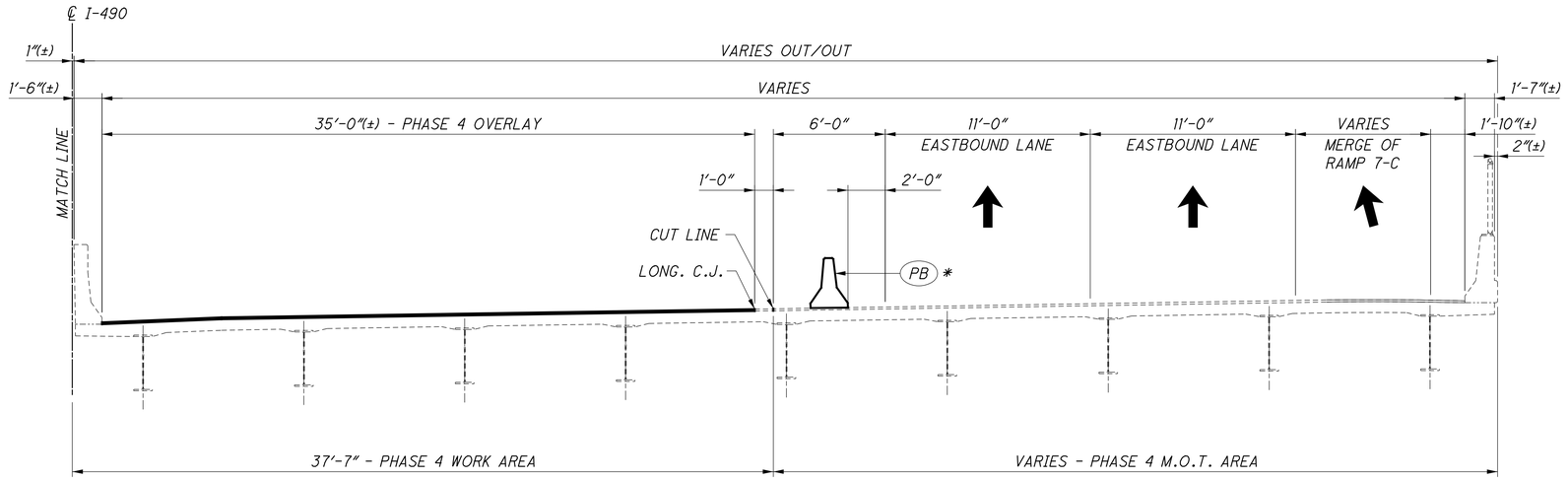
27/131

4 03/29/2024

X:\Projects\2020\2022\10000 ODOT D12-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SFN1811991_SC009.dgn 3/29/2024 3:37:23 PM zguo



LEFT SIDE



RIGHT SIDE

PHASE 4 CONSTRUCTION TRANSVERSE SECTION - UNIT 1

SHOWN AT STA. 986+80(±) IN SPAN 2

4 NOTE: CONSTRUCT PROPOSED MEDIAN BARRIER ON APPROACH SLAB, APPROACH SLAB AND SLEEPER SLAB BELOW MEDIAN BARRIER, ABUTMENT BACKWALL, AND MEDIAN BARRIER ON ABUTMENT BACKWALL IN PHASE 1.

FOR PHASE 1 CONSTRUCTION OF ABUTMENT BACKWALL AND MEDIAN BARRIER ON ABUTMENT BACKWALL, SEE SHEETS 29 & 55/120.

FOR PHASE 1 CONSTRUCTION OF APPROACH SLAB MEDIAN BARRIER AND PHASE 4 CONSTRUCTION OF APPROACH SLAB, SEE SHEETS 113 & 116/120.

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 4 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS AND OUTER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON INNER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 4, ALL ENTRANCE AND EXIT RAMPS ARE TO REMAIN OPEN TO TRAFFIC AT ALL TIMES.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEET 8/120.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

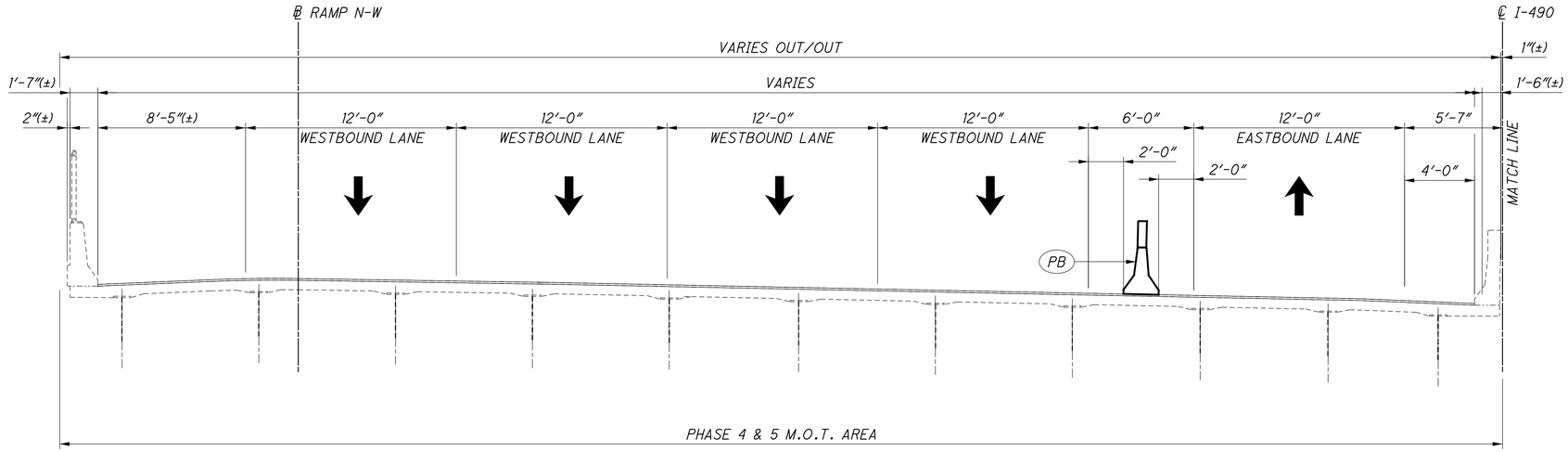
PHASE CONSTRUCTION DETAILS - 10
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

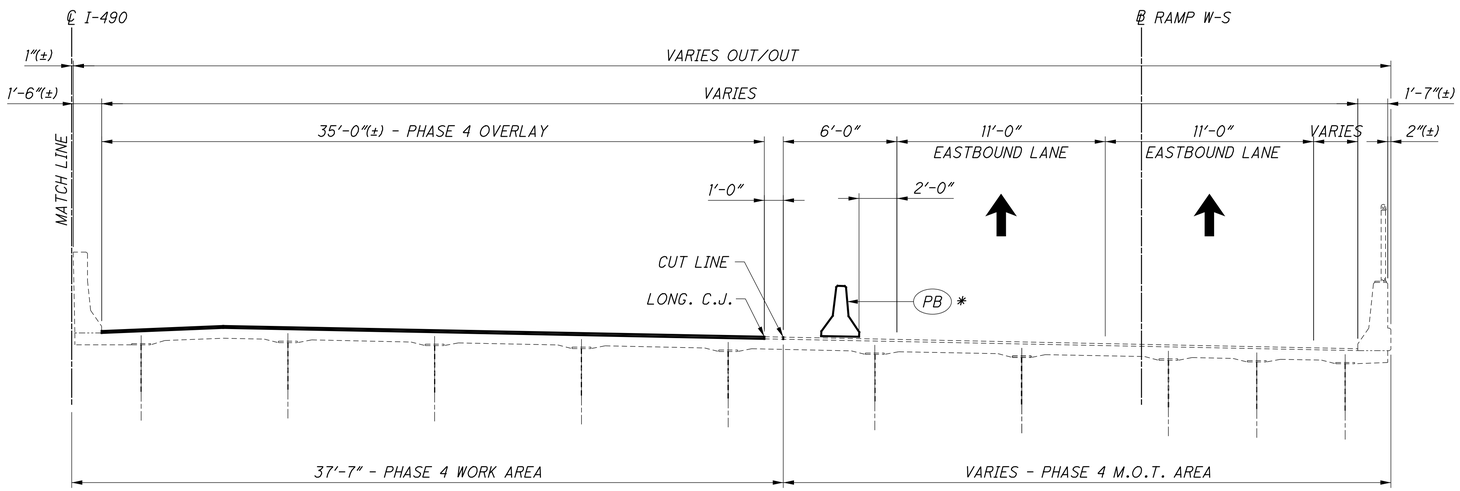
20/120

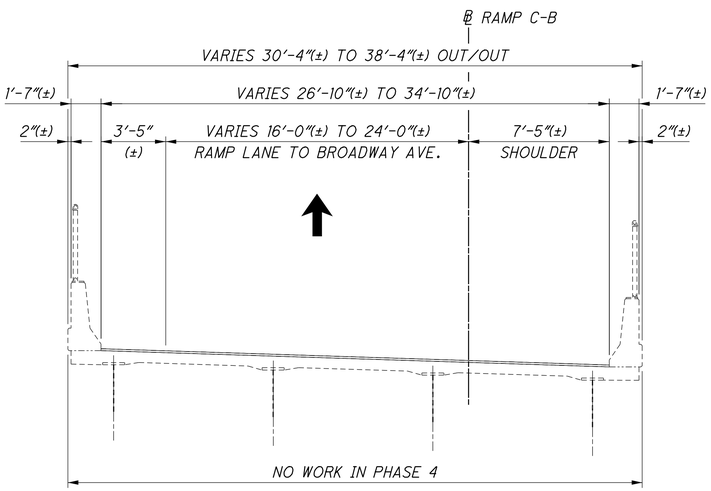
31/131

4 03/29/2024



LEFT SIDE





RIGHT SIDE

PHASE 4 CONSTRUCTION TRANSVERSE SECTION - UNIT 6

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

4

NOTE: CONSTRUCT PROPOSED MEDIAN BARRIER ON APPROACH SLAB, APPROACH SLAB AND SLEEPER SLAB BELOW MEDIAN BARRIER, ABUTMENT BACKWALL, AND MEDIAN BARRIER ON ABUTMENT BACKWALL IN PHASE 1.

FOR PHASE 1 CONSTRUCTION OF ABUTMENT BACKWALL AND MEDIAN BARRIER ON ABUTMENT BACKWALL, SEE SHEETS 29 & 55/120.

FOR PHASE 1 CONSTRUCTION OF APPROACH SLAB MEDIAN BARRIER AND PHASE 4 CONSTRUCTION OF APPROACH SLAB, SEE SHEETS 113 & 116/120.

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 4 CONSTRUCTION

1. MAINTAIN I-490 TRAFFIC AS SHOWN ON EXISTING WESTBOUND BRIDGE DECK AND APPROACH SLABS AND OUTER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
2. PERFORM WORK ON INNER PORTION OF EXISTING EASTBOUND BRIDGE DECK AND APPROACH SLABS.
3. DURING PHASE 4, ALL ENTRANCE AND EXIT RAMPS ARE TO REMAIN OPEN TO TRAFFIC AT ALL TIMES.
4. FOR DETAILS OF WORK IN THIS PHASE, SEE SUGGESTED CONSTRUCTION PROCEDURE ON SHEET 8/120.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

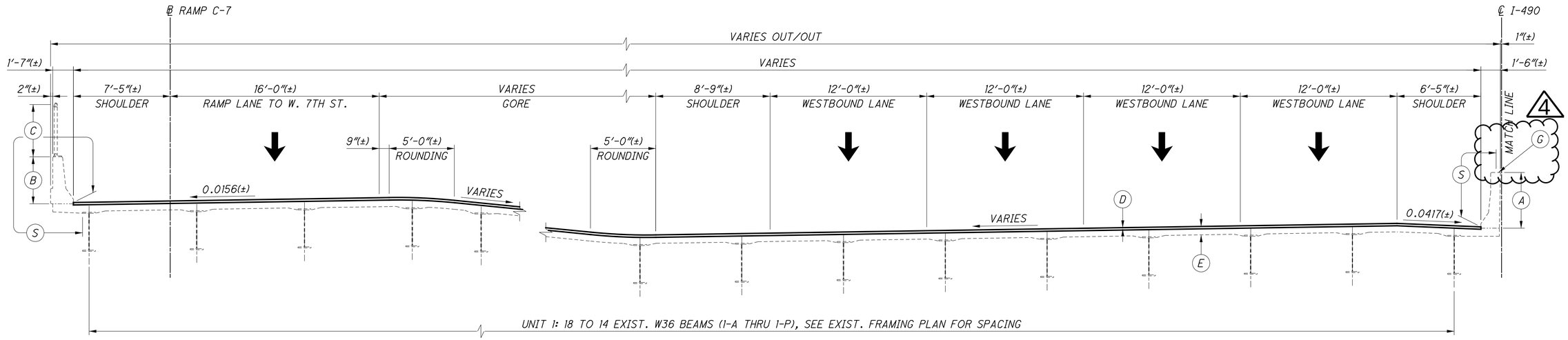
PHASE CONSTRUCTION DETAILS - 12
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

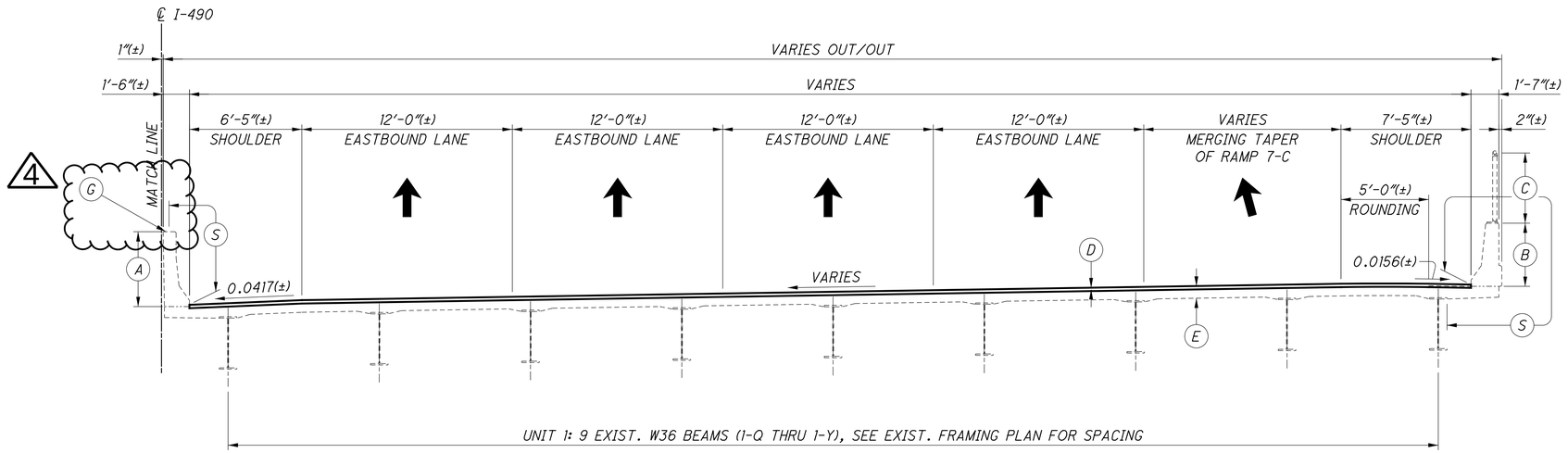
22/120

33/131

4 03/29/2024



LEFT SIDE



RIGHT SIDE

PROPOSED TRANSVERSE SECTION - UNIT 1

SHOWN AT STA. 986+80(±) IN SPAN 2

LEGEND

- (A) EXIST. 4'-3¼"(±) MEDIAN PARAPET
- (B) EXIST. 3'-7¼"(±) EXTERIOR PARAPET
- (C) EXIST. 4'-0"(±) VANDAL PROTECTION FENCE
- (D) PROP. 2½" MICRO-SILICA MODIFIED CONCRETE OVERLAY
- (E) EXIST. REINFORCED CONCRETE DECK SLAB, 7¾"(±) MIN. TO 8¼"(±) MAX. TOTAL THICKNESS INCLUDING WEARING SURFACE, SEE EXIST. BRIDGE PLANS FOR MORE INFORMATION
- (G) MEDIAN BARRIER NEOPRENE COVER TO REMAIN 4
- (S) REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

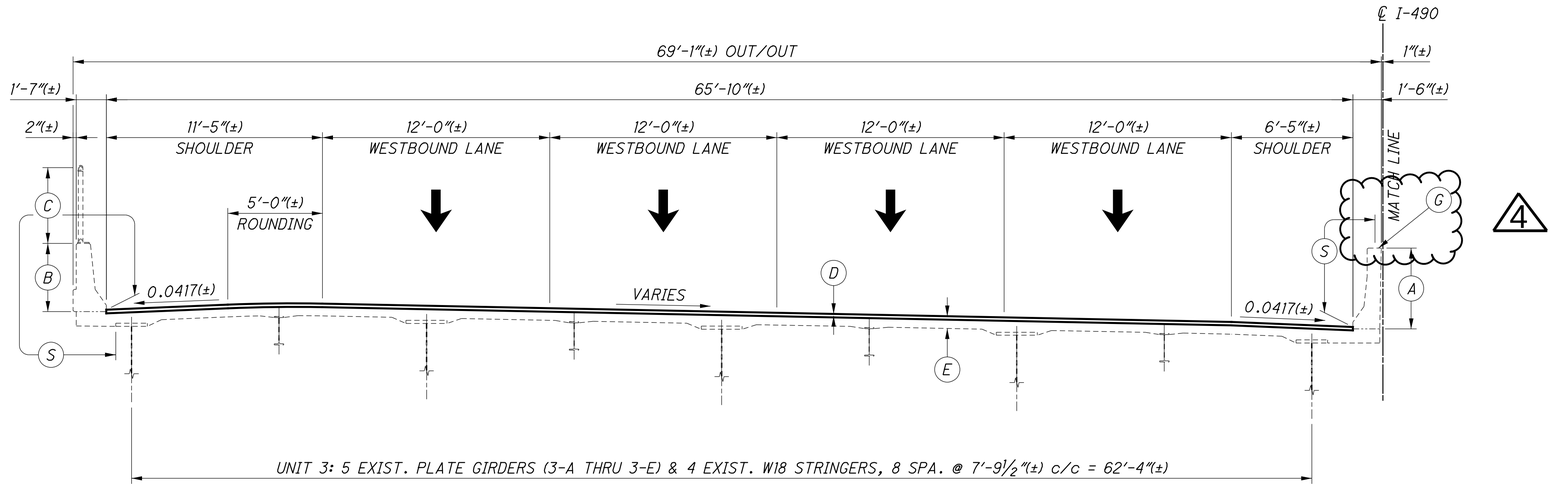
DESIGNED	DRAWN	REVIEWED	DATE
PAT	PAT	MJL	08/05/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAM		1811991	

PHASE CONSTRUCTION DETAILS - 16

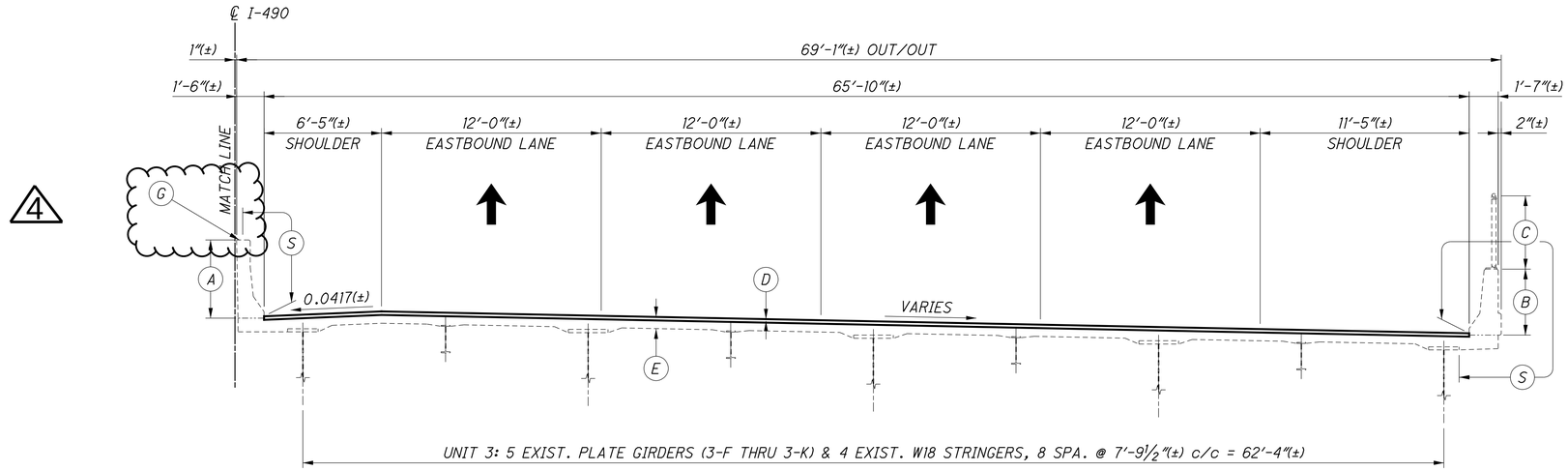
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

4 03/29/2024



LEFT SIDE



RIGHT SIDE

PROPOSED TRANSVERSE SECTION - UNIT 3

SHOWN AT STA. 999+50(±) IN SPAN 11

LEGEND

- (A) EXIST. 4′-3¼″(±) MEDIAN PARAPET
- (B) EXIST. 3′-7¼″(±) EXTERIOR PARAPET
- (C) EXIST. 4′-0″(±) VANDAL PROTECTION FENCE
- (D) PROP. 2½″ MICRO-SILICA MODIFIED CONCRETE OVERLAY
- (E) EXIST. REINFORCED CONCRETE DECK SLAB, 7¾″(±) MIN. TO 8¼″(±) MAX. TOTAL THICKNESS INCLUDING WEARING SURFACE, SEE EXIST. BRIDGE PLANS FOR MORE INFORMATION
- (G) MEDIAN BARRIER NEOPRENE COVER TO REMAIN 4
- (S) REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

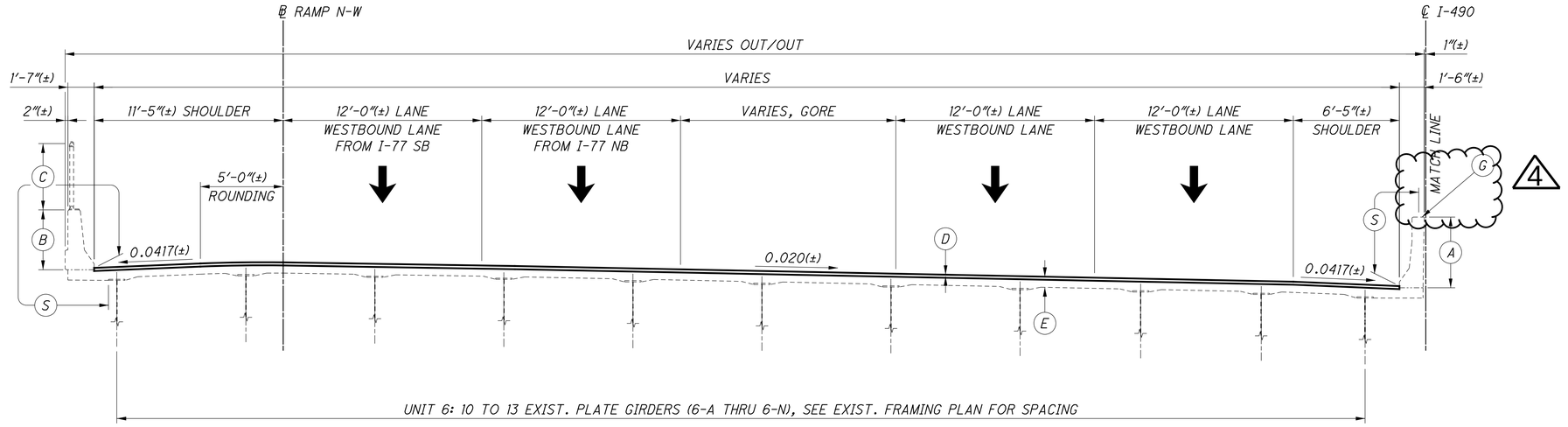
DESIGNED	DRAWN	REVIEWED	DATE
PAT	PAT	MJL	08/05/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAM		1811991	

PHASE CONSTRUCTION DETAILS - 17

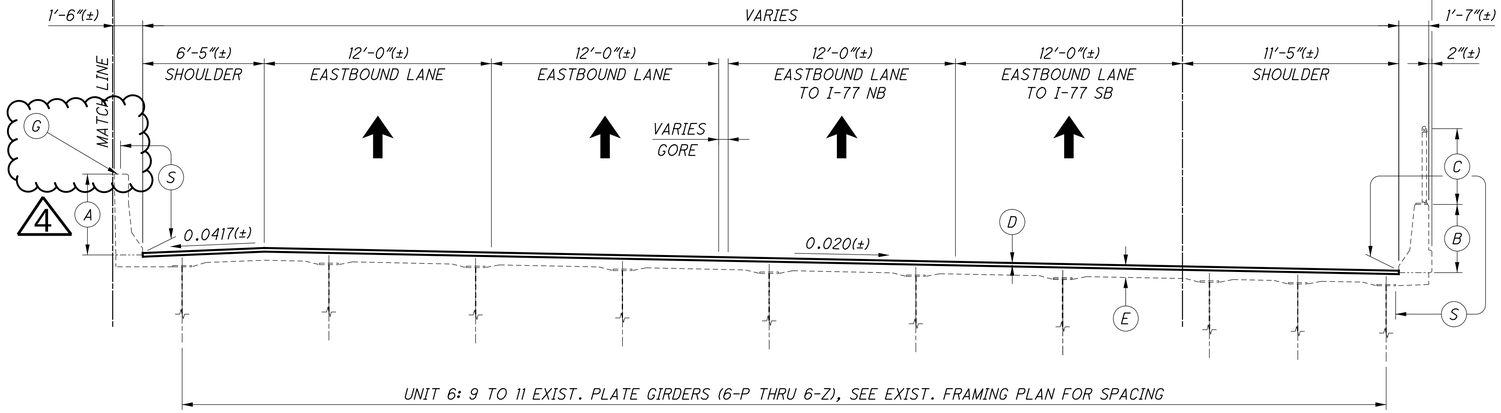
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

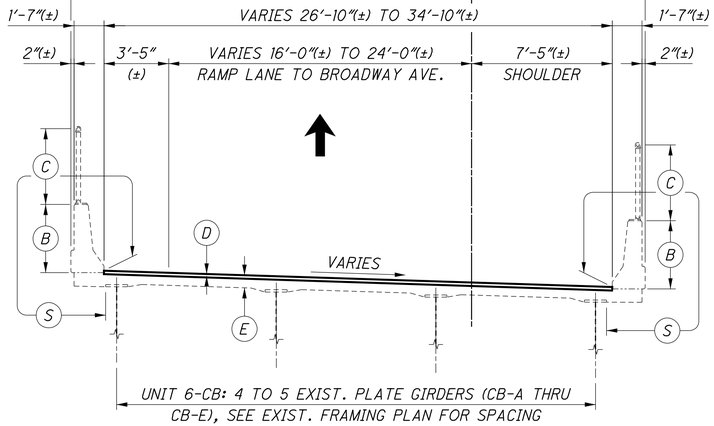
4 03/29/2024



LEFT SIDE



RIGHT SIDE



UNIT 6-CB: 4 TO 5 EXIST. PLATE GIRDERS (CB-A THRU CB-E), SEE EXIST. FRAMING PLAN FOR SPACING

PROPOSED TRANSVERSE SECTION - UNIT 6

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

LEGEND

- (A) EXIST. 4'-3¼"(±) MEDIAN PARAPET
- (B) EXIST. 3'-7¼"(±) EXTERIOR PARAPET
- (C) EXIST. 4'-0"(±) VANDAL PROTECTION FENCE
- (D) PROP. 2½" MICRO-SILICA MODIFIED CONCRETE OVERLAY
- (E) EXIST. REINFORCED CONCRETE DECK SLAB, 7¾"(±) MIN. TO 8¼"(±) MAX. TOTAL THICKNESS INCLUDING WEARING SURFACE, SEE EXIST. BRIDGE PLANS FOR MORE INFORMATION
- (G) MEDIAN BARRIER NEOPRENE COVER TO REMAIN 4
- (S) REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES AND SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

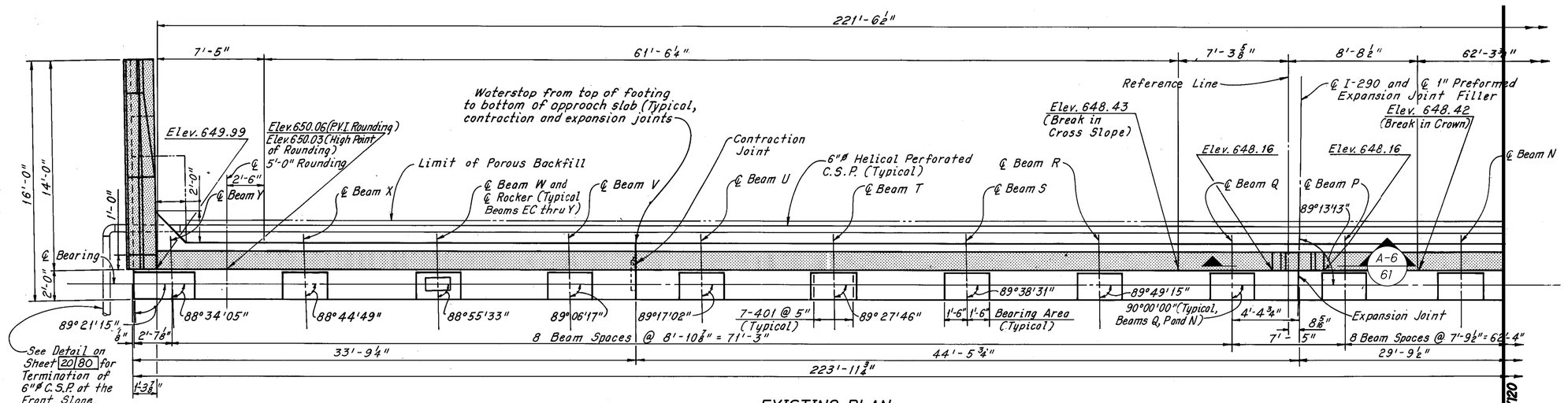
DESIGNED	DRAWN	REVIEWED	DATE
PAT	PAT	MJL	08/05/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JAM		1811991	

PHASE CONSTRUCTION DETAILS - 18

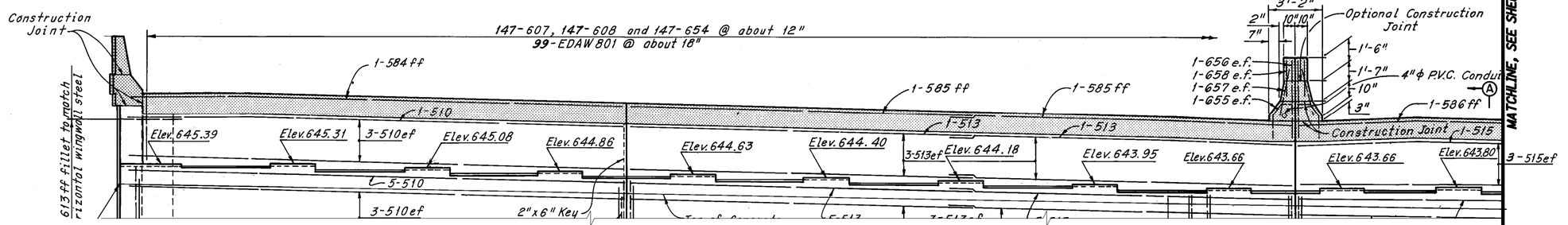
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

4 03/29/2024



EXISTING PLAN



LEGEND

- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN
- AREA OF DELAMINATION TO BE REPAIRED PER ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN
- [X] AREA OF CONCRETE DELAMINATION LOCATION NUMBER
- ⟨X⟩ EXISTING CRACK TO BE REPAIRED LOCATION NUMBER
- (*) THREADED MECHANICAL CONNECTOR, PROVIDING 3'-1" MIN. LAP, SHALL BE RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL AND THE COST SHALL BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL FOR PAYMENT

ESTIMATED PATCHING QUANTITIES		
LOCATION	WIDTH X HEIGHT	AREA (SF)
	NO	
	DETERIORATION	
	NOTED	
TOTAL AREA MEASURED		-
TOTAL AREA ESTIMATED *		-

* SEE NOTE 3

ESTIMATED CRACK REPAIR QUANTITIES		
LOCATION	DESCRIPTION	LENGTH
	NO	
	DETERIORATION	
	NOTED	
TOTAL LENGTH MEASURED		-
TOTAL LENGTH ESTIMATED *		-

* SEE NOTE 3

NOTES

1. EXISTING PLAN AND ELEVATION VIEW LINE WORK ON THIS SHEET COMES FROM SCANS OF THE 1986 RECORD PLANS. REFERENCES TO I-290 SHOULD BE REPLACED WITH I-490.
2. PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST 2018. THE EXACT DIMENSIONS AND LOCATIONS OF PATCHES AND CRACK REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.
3. ESTIMATED PATCHING AND CRACK REPAIR QUANTITIES HAVE BEEN INCREASED BY 50 OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.
4. FOR PARAPET REPLACEMENT DETAILS, SEE SHEET 61/120.
5. THE MINIMUM LAP LENGTH FOR ABUTMENT REINFORCING STEEL SHALL BE 2'-5" FOR #5 BARS.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

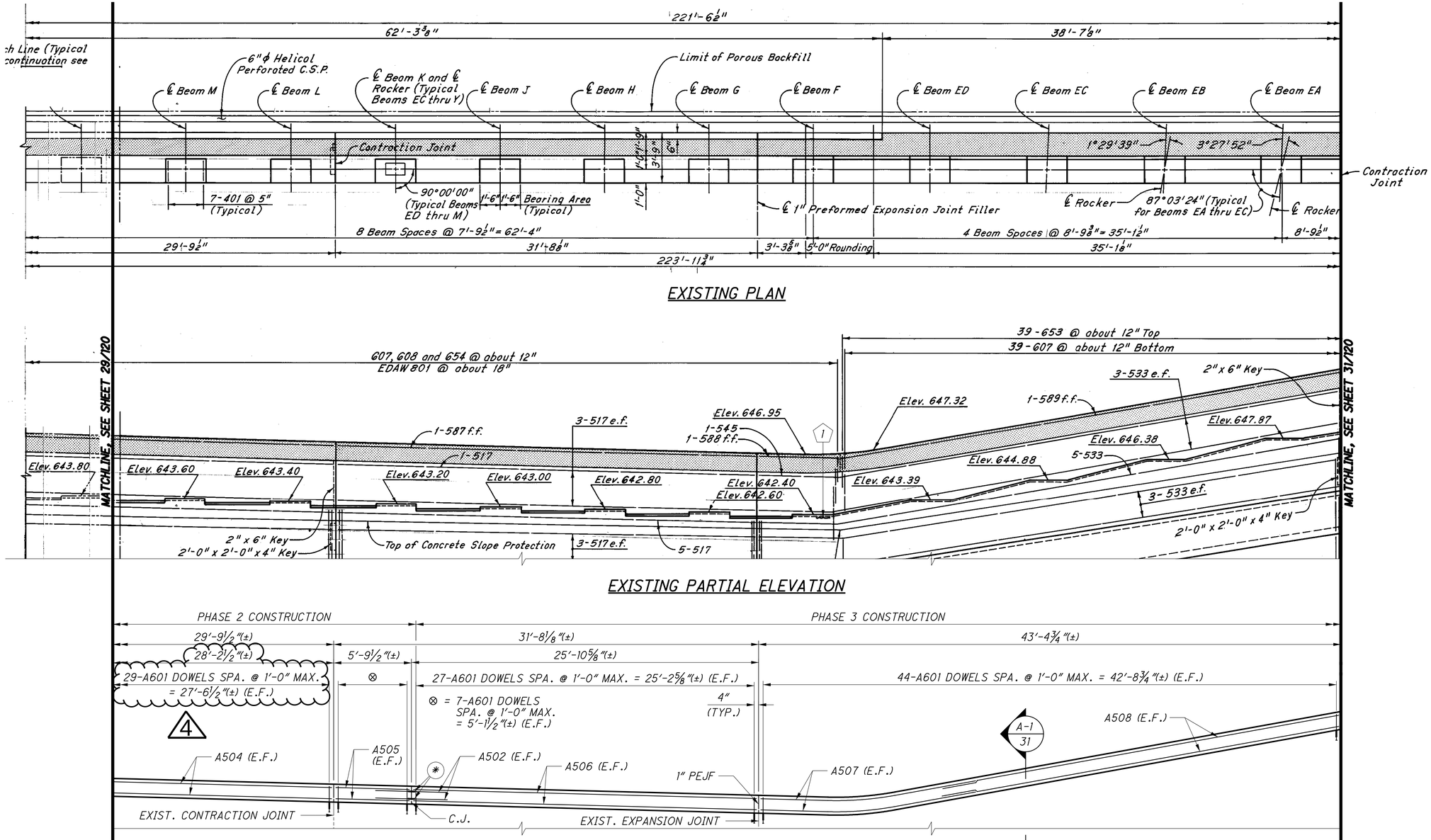
WEST ABUTMENT REPAIR DETAILS - 1
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

29/120
40/131

4 03/29/2024

X:\Projects\2020\2022\00000 ODOT D12-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100\Sheets\CUY490_0100_SFN1811991_S 001.dgn 3/29/2024 3:37:34 PM zguo



EXISTING PLAN

EXISTING PARTIAL ELEVATION

PROPOSED PARTIAL ELEVATION

LEGEND

- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN
- AREA OF DELAMINATION TO BE REPAIRED PER ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN
- [X] AREA OF CONCRETE DELAMINATION LOCATION NUMBER
- ⟨X⟩ EXISTING CRACK TO BE REPAIRED LOCATION NUMBER
- (*) THREADED MECHANICAL CONNECTOR, PROVIDING 3'-1" MIN. LAP, SHALL BE RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL AND THE COST SHALL BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL FOR PAYMENT

ESTIMATED PATCHING QUANTITIES		
LOCATION	WIDTH X HEIGHT	AREA (SF)
	NO	
	DETERIORATION	
	NOTED	
TOTAL AREA MEASURED		-
TOTAL AREA ESTIMATED *		-

* SEE NOTE 3

ESTIMATED CRACK REPAIR QUANTITIES		
LOCATION	DESCRIPTION	LENGTH
1	STEM	1.00'
TOTAL LENGTH MEASURED		1.00'
TOTAL LENGTH ESTIMATED *		1.50'

* SEE NOTE 3

NOTES

1. EXISTING PLAN AND ELEVATION VIEW LINE WORK ON THIS SHEET COMES FROM SCANS OF THE 1986 RECORD PLANS. REFERENCES TO I-290 SHOULD BE REPLACED WITH I-490.
2. PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST 2018. THE EXACT DIMENSIONS AND LOCATIONS OF PATCHES AND CRACK REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.
3. ESTIMATED PATCHING AND CRACK REPAIR QUANTITIES HAVE BEEN INCREASED BY 50 OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.
4. FOR PARAPET REPLACEMENT DETAILS, SEE SHEET 61/120.
5. THE MINIMUM LAP LENGTH FOR ABUTMENT REINFORCING STEEL SHALL BE 2'-5" FOR #5 BARS.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

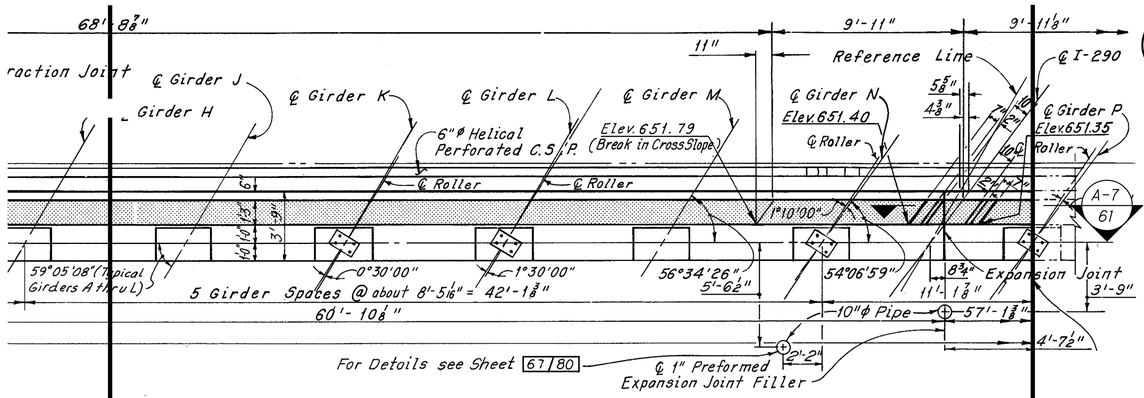
WEST ABUTMENT REPAIR DETAILS - 2
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

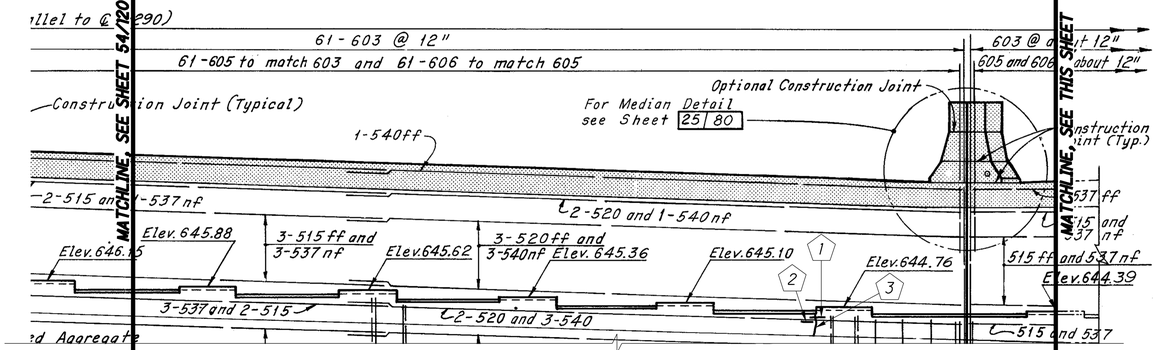
30/120

41/131

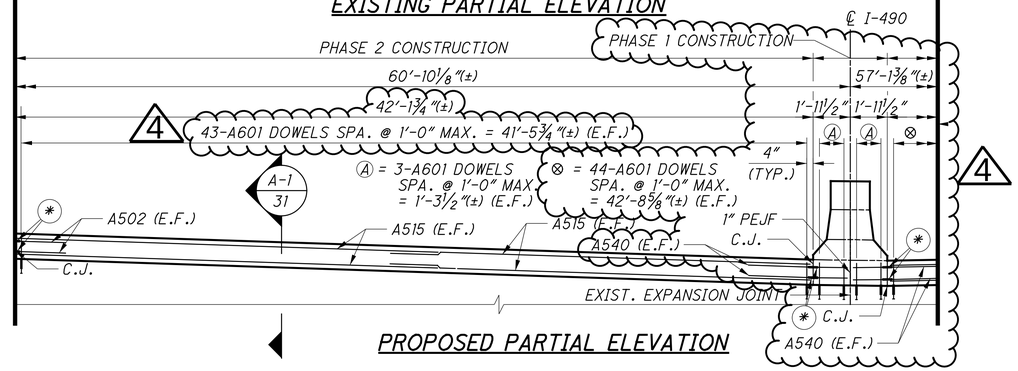
4 03/29/2024



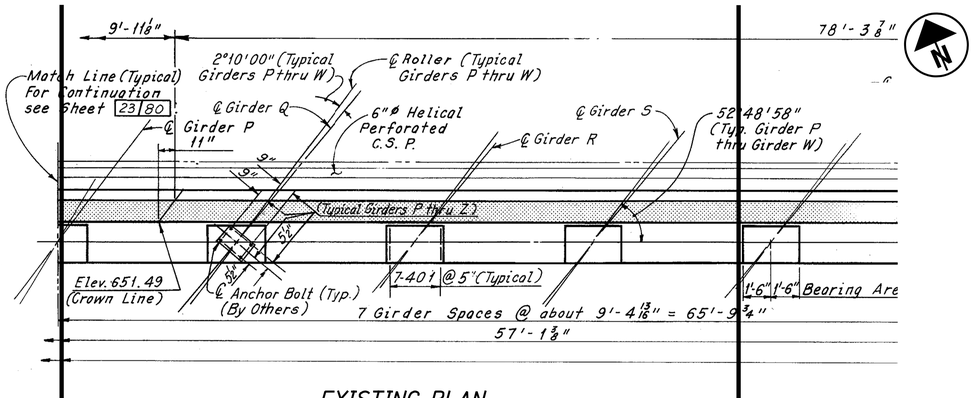
EXISTING PLAN



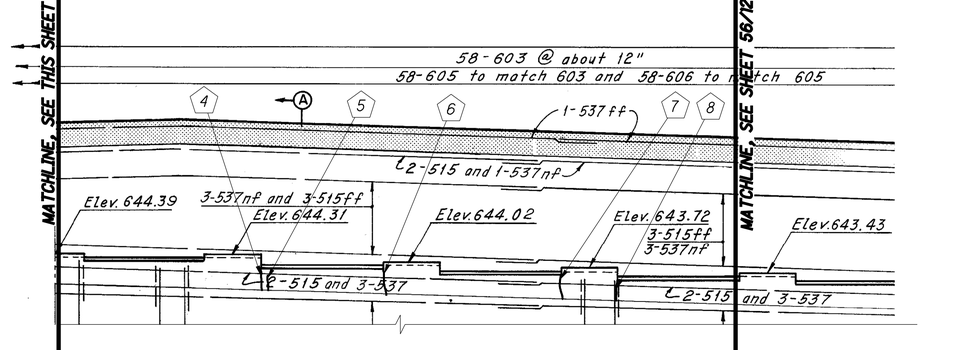
EXISTING PARTIAL ELEVATION



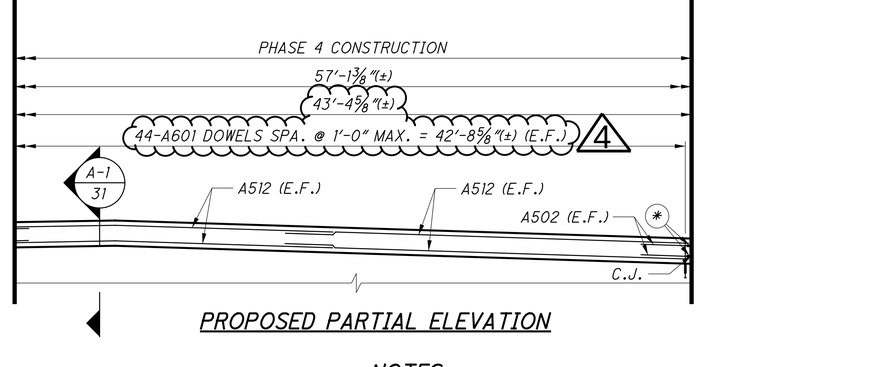
PROPOSED PARTIAL ELEVATION



EXISTING PLAN



EXISTING PARTIAL ELEVATION



PROPOSED PARTIAL ELEVATION

LEGEND

- ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN
- AREA OF DELAMINATION TO BE REPAIRED PER ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN
- [X] AREA OF CONCRETE DELAMINATION LOCATION NUMBER
- ⟨X⟩ EXISTING CRACK TO BE REPAIRED LOCATION NUMBER
- (*) THREADED MECHANICAL CONNECTOR, PROVIDING 3'-1" MIN. LAP, SHALL BE RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL AND THE COST SHALL BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL FOR PAYMENT

ESTIMATED PATCHING QUANTITIES		
LOCATION	WIDTH X HEIGHT	AREA (SF)
	NO	
	DETERIORATION	
	NOTED	
TOTAL AREA MEASURED		-
TOTAL AREA ESTIMATED *		-

* SEE NOTE 3

ESTIMATED CRACK REPAIR QUANTITIES		
LOCATION	DESCRIPTION	LENGTH
1	STEM	1.50'
2	STEM	1.00'
3	STEM	2.50'
4	STEM	3.50'
5	STEM	2.50'
6	STEM	3.50'
7	STEM	3.00'
8	STEM	3.00'
TOTAL LENGTH MEASURED		20.50'
TOTAL LENGTH ESTIMATED *		30.75'

* SEE NOTE 3

NOTES

1. EXISTING PLAN AND ELEVATION VIEW LINE WORK ON THIS SHEET COMES FROM SCANS OF THE 1986 RECORD PLANS. REFERENCES TO I-290 SHOULD BE REPLACED WITH I-490.
2. PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST 2018. THE EXACT DIMENSIONS AND LOCATIONS OF PATCHES AND CRACK REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.
3. ESTIMATED PATCHING AND CRACK REPAIR QUANTITIES HAVE BEEN INCREASED BY 50 OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.
4. FOR PARAPET REPLACEMENT DETAILS, SEE SHEET 61/120.
5. THE MINIMUM LAP LENGTH FOR ABUTMENT REINFORCING STEEL SHALL BE 2'-5" FOR #5 BARS.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

DESIGNED JAM/JG
DRAWN JAM/JG
CHECKED CJS/PAT
REVIEWED MJL 08/05/20
REVISED
STRUCTURE FILE NUMBER 1811991

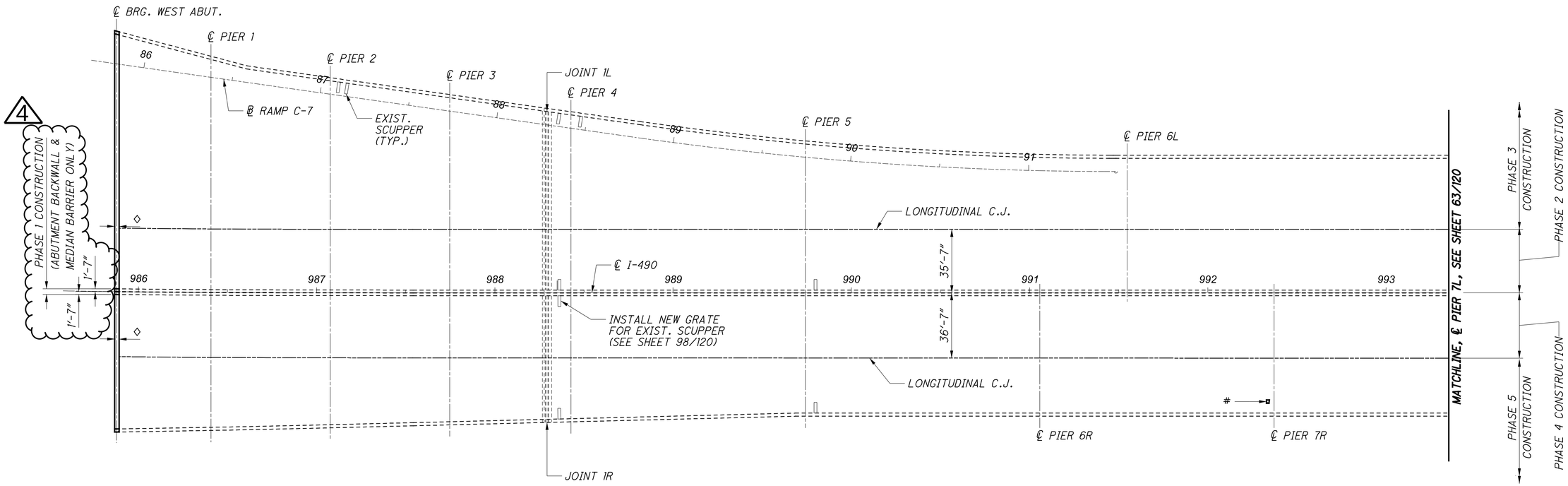
EAST ABUTMENT REPAIR DETAILS - 2
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

55/120
66/131

4 03/29/2024

X:\Projects\2020\2022\00100 ODOT D12-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SFN181991_SF002.dgn 3/29/2024 3:40:31 PM zguo



DECK PLAN

LEGEND

#	FULL DEPTH REPAIR OF PIER ACCESS MANHOLE LOCATION, SEE SHEET 69/120.
◇	PORTION OF EXISTING DECK SLAB TO BE REMOVED AND RECONSTRUCTED FOR EXPANSION JOINT REPLACEMENT

NOTES

1. REMOVE THE EXISTING CONCRETE OVERLAY BY HYDRODEMOLITION IN ACCORDANCE WITH ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN.
2. PLACE MICRO SILICA CONCRETE OVERLAY IN ACCORDANCE WITH ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

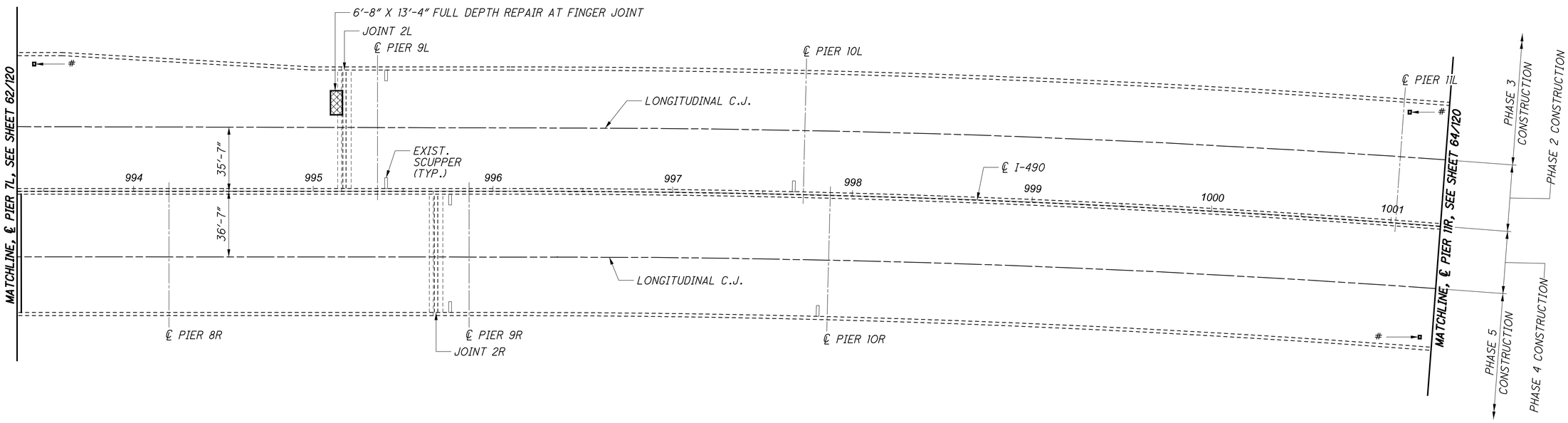
DESIGNED	DRAWN	REVIEWED	DATE
JAM/JG	JAM/JG	MJL	08/05/20
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PAT/JDA		1811991	

WEARING SURFACE REPAIR DETAILS - 1
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

62/120
73/131

4 03/29/2024



DECK PLAN

LEGEND

\# FULL DEPTH REPAIR OF PIER ACCESS MANHOLE LOCATION, SEE SHEET 69/120.

◇ PORTION OF EXISTING DECK SLAB TO BE REMOVED AND RECONSTRUCTED FOR EXPANSION JOINT REPLACEMENT

NOTES

1. REMOVE THE EXISTING CONCRETE OVERLAY BY HYDRODEMOLITION IN ACCORDANCE WITH ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN.
2. PLACE MICRO SILICA CONCRETE OVERLAY IN ACCORDANCE WITH ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION.
4. 3. 10 CY OF FULL DEPTH REPAIR OVER WATER TO BE USED AS DIRECTED BY THE ENGINEER PER ITEM 848 - FULL DEPTH REPAIR, AS PER PLAN.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

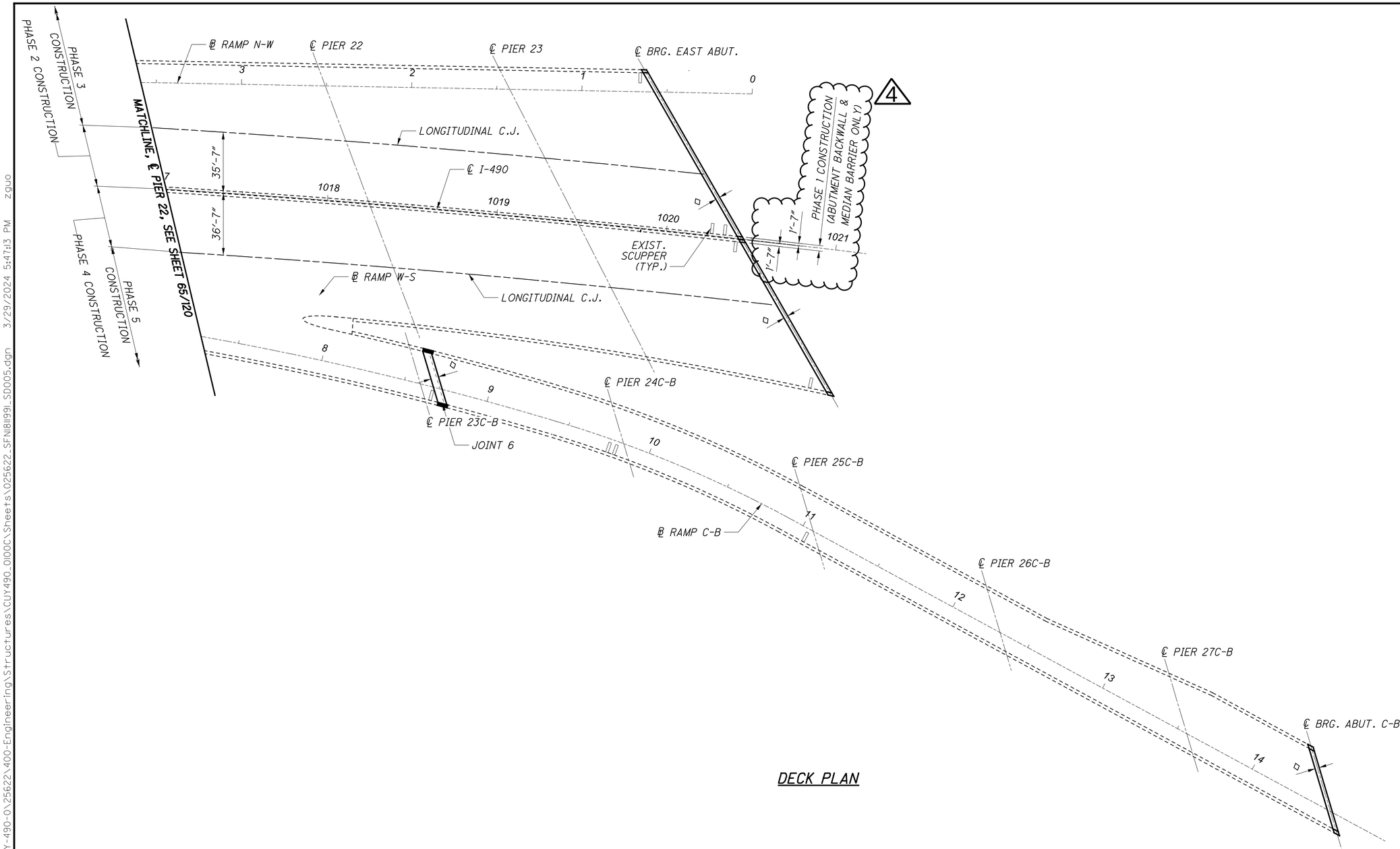
DESIGNED JAM/JG
DRAWN JAM/JG
REVIEWED MJL
DATE 08/05/20
CHECKED PAT/JDA
REVISED
STRUCTURE FILE NUMBER 1811991

WEARING SURFACE REPAIR DETAILS - 2
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

63/120
74/131

4 03/29/2024



DECK PLAN

LEGEND

\# FULL DEPTH REPAIR OF PIER ACCESS MANHOLE LOCATION, SEE SHEET 69/120.

◇ PORTION OF EXISTING DECK SLAB TO BE REMOVED AND RECONSTRUCTED FOR EXPANSION JOINT REPLACEMENT

NOTES

1. REMOVE THE EXISTING CONCRETE OVERLAY BY HYDRODEMOLITION IN ACCORDANCE WITH ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN.
2. PLACE MICRO SILICA CONCRETE OVERLAY IN ACCORDANCE WITH ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

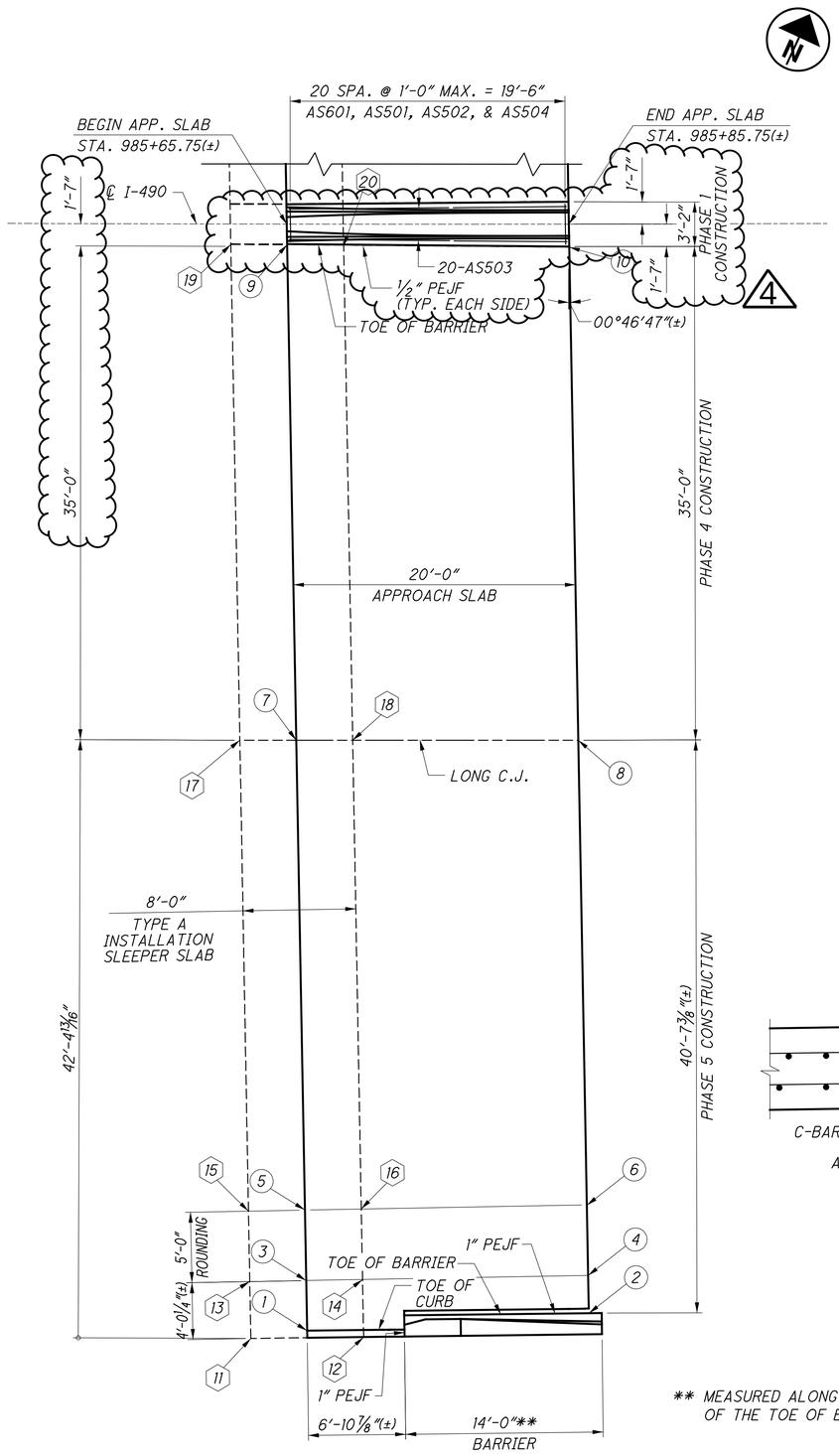
WEARING SURFACE REPAIR DETAILS - 5
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

66/120

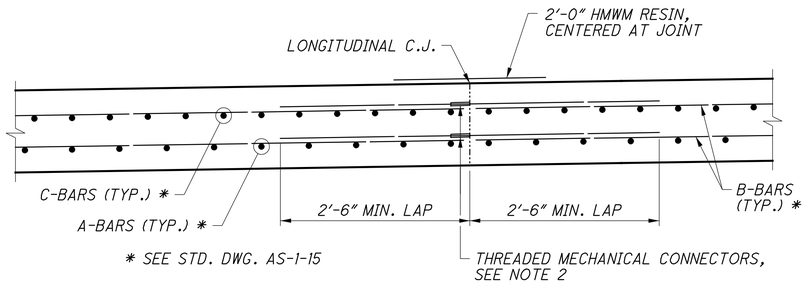
77/131

4 03/29/2024



PLAN - REAR APPROACH SLAB

** MEASURED ALONG THE INSIDE FACE OF THE TOE OF BARRIER



APPROACH SLAB CONSTRUCTION JOINT DETAIL

APPROACH SLAB ELEVATIONS		
LOCATION		REAR
1	STATION	985+66.84
	OFFSET	78.44
	ELEVATION	648.97
2	STATION	985+86.58
	OFFSET	77.21
	ELEVATION	649.17
3	STATION	985+66.84
	OFFSET	74.88
	ELEVATION	648.93
4	STATION	985+86.54
	OFFSET	74.52
	ELEVATION	649.13
5	STATION	985+66.71
	OFFSET	69.89
	ELEVATION	648.90
6	STATION	985+86.46
	OFFSET	69.55
	ELEVATION	649.10
7	STATION	985+66.04
	OFFSET	36.58
	ELEVATION	648.08
8	STATION	985+85.91
	OFFSET	36.58
	ELEVATION	648.39
9	STATION	985+65.33
	OFFSET	1.45 (4)
	ELEVATION	647.20
10	STATION	985+85.33
	OFFSET	1.63 (4)
	ELEVATION	647.61

SLEEPER SLAB ELEVATIONS		
LOCATION		REAR
11	STATION	985+62.90
	OFFSET	78.99
	ELEVATION	647.95
12	STATION	985+70.80
	OFFSET	78.89
	ELEVATION	648.00
13	STATION	985+62.82
	OFFSET	74.96
	ELEVATION	647.92
14	STATION	985+70.72
	OFFSET	74.81
	ELEVATION	647.95
15	STATION	985+62.72
	OFFSET	69.97
	ELEVATION	647.75
16	STATION	985+70.63
	OFFSET	69.81
	ELEVATION	647.88
17	STATION	985+62.03 (4)
	OFFSET	36.58
	ELEVATION	646.91
18	STATION	985+69.98 (4)
	OFFSET	36.58
	ELEVATION	647.06
19	STATION	985+61.30
	OFFSET	1.45 (4)
	ELEVATION	646.02
20	STATION	985+69.30
	OFFSET	1.48 (4)
	ELEVATION	646.20

ALL ELEVATIONS ARE ±

NOTES

1. ELEVATIONS SHOWN ON THIS SHEET ARE TO BE FIELD VERIFIED AND ADJUSTED TO MATCH THE EXISTING STRUCTURE.
2. THREADED MECHANICAL CONNECTORS SHALL BE RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL. COST SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
3. SEAL THE LONGITUDINAL CONSTRUCTION JOINT WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM). THE WIDTH OF THE SEALING SHALL BE TWO FEET (2'), CENTERED OVER THE JOINT. PAYMENT SHALL BE MADE UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
4. FOR REINFORCING STEEL LIST, SEE SHEET 120/120.
5. FOR MEDIAN BARRIER ELEVATION, SEE SHEET 118/120. (4)

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

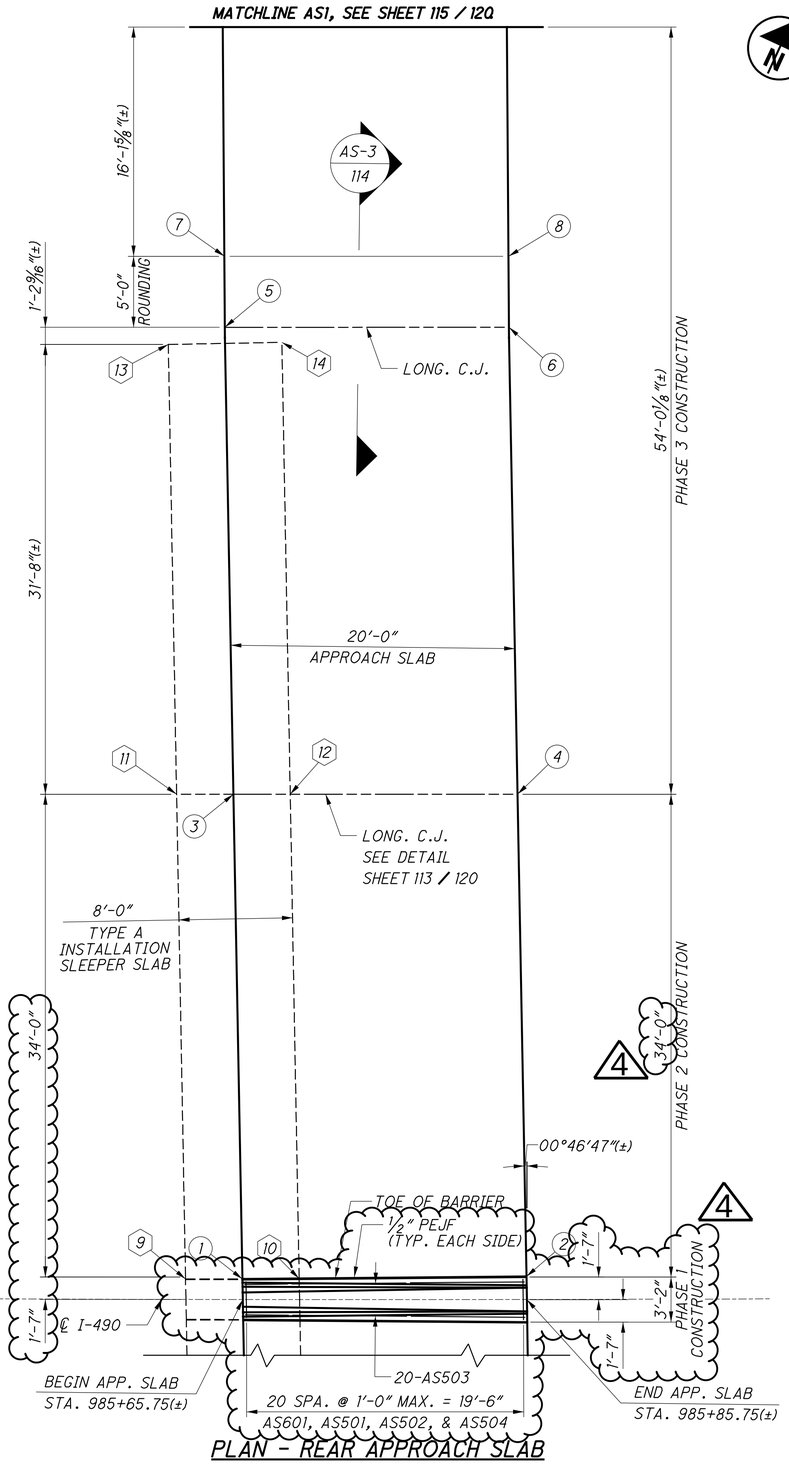
DESIGNED KJS/JG
DRAWN DAF/JG
CHECKED CLH/JDA
REVISED
REVIEWED MJL DATE 08/05/20
STRUCTURE FILE NUMBER 1811991

WEST ABUTMENT APPROACH SLAB DETAILS - 1
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

113/120
124/131

4 03/29/2024

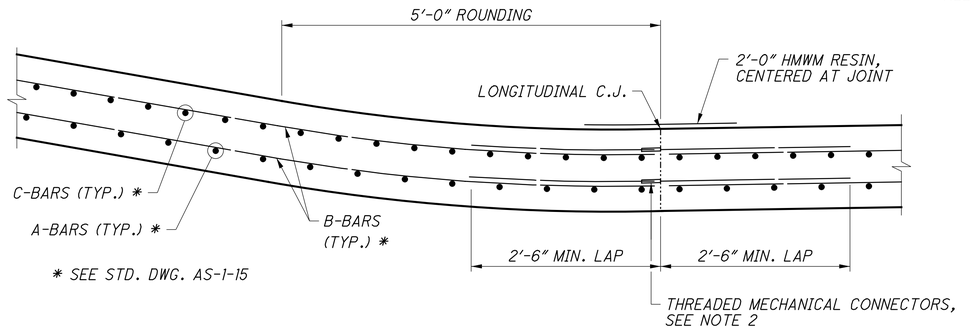


PLAN - REAR APPROACH SLAB

APPROACH SLAB ELEVATIONS		
LOCATION		REAR
1	STATION	985+65.40
	OFFSET	-1.45 4
	ELEVATION	647.13
2	STATION	985+85.45
	OFFSET	-1.63 4
	ELEVATION	647.54
3	STATION	985+64.72
	OFFSET	-35.58
	ELEVATION	646.52
4	STATION	985+84.86
	OFFSET	-35.58
	ELEVATION	647.09
5	STATION	985+64.07
	OFFSET	-68.46
	ELEVATION	645.92
6	STATION	985+84.29
	OFFSET	-68.46
	ELEVATION	646.55
7	STATION	985+64.02
	OFFSET	-73.46
	ELEVATION	646.30
8	STATION	985+84.26
	OFFSET	-73.46
	ELEVATION	646.88

SLEEPER SLAB ELEVATIONS		
LOCATION		REAR
9	STATION	985+61.43
	OFFSET	-1.45 4
	ELEVATION	645.95 4
10	STATION	985+69.44
	OFFSET	-1.49
	ELEVATION	646.14 4
11	STATION	985+60.71
	OFFSET	-35.58
	ELEVATION	645.26
12	STATION	985+68.76
	OFFSET	-35.58 4
	ELEVATION	645.50
13	STATION	985+60.04
	OFFSET	-67.24
	ELEVATION	644.62
14	STATION	985+68.13
	OFFSET	-67.40
	ELEVATION	644.90

ALL ELEVATIONS ARE ±



* SEE STD. DWG. AS-1-15

SECTION AS-3 / 114

NOTES

1. ELEVATIONS SHOWN ON THIS SHEET ARE TO BE FIELD VERIFIED AND ADJUSTED TO MATCH THE EXISTING STRUCTURE.
2. THREADED MECHANICAL CONNECTORS SHALL BE RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL. COST SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
3. SEAL THE LONGITUDINAL CONSTRUCTION JOINT WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM). THE WIDTH OF THE SEALING SHALL BE TWO FEET (2'), CENTERED OVER THE JOINT. PAYMENT SHALL BE MADE UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
4. FOR REINFORCING STEEL LIST, SEE SHEET 120/120.
5. FOR MEDIAN BARRIER ELEVATION, SEE SHEET 118/120. 4

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

DESIGNED KJS/JG
DRAWN DAF/JG
CHECKED CLH/JDA
REVIEWED MJL
DATE 08/05/20
REVISED
STRUCTURE FILE NUMBER 1811991

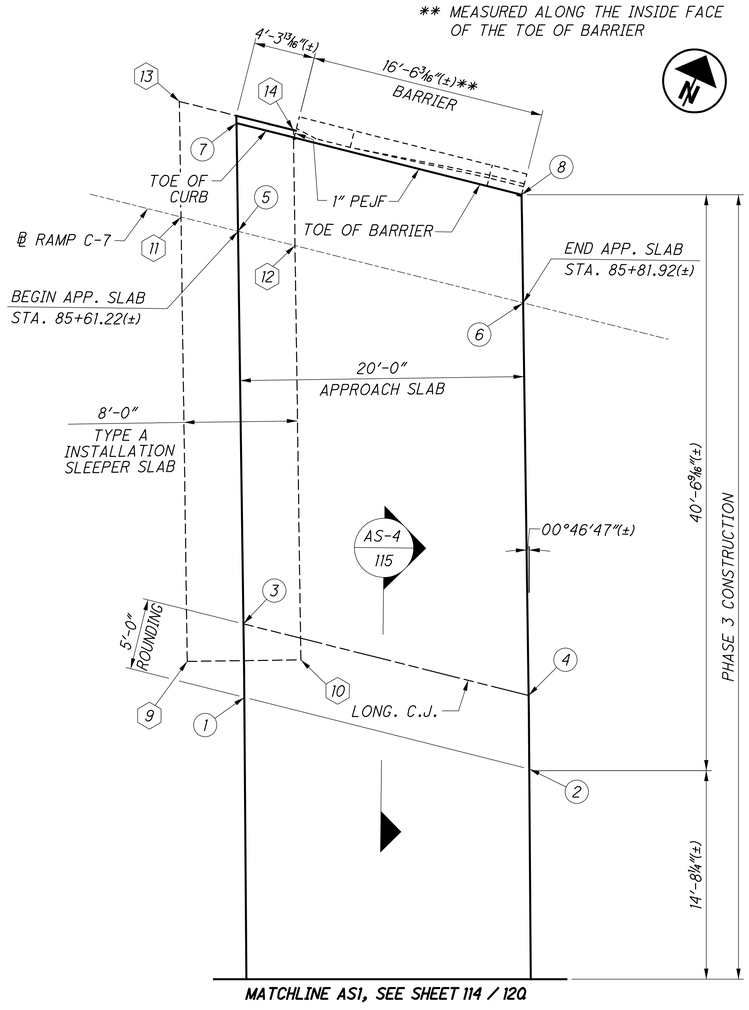
WEST ABUTMENT APPROACH SLAB DETAILS - 2
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

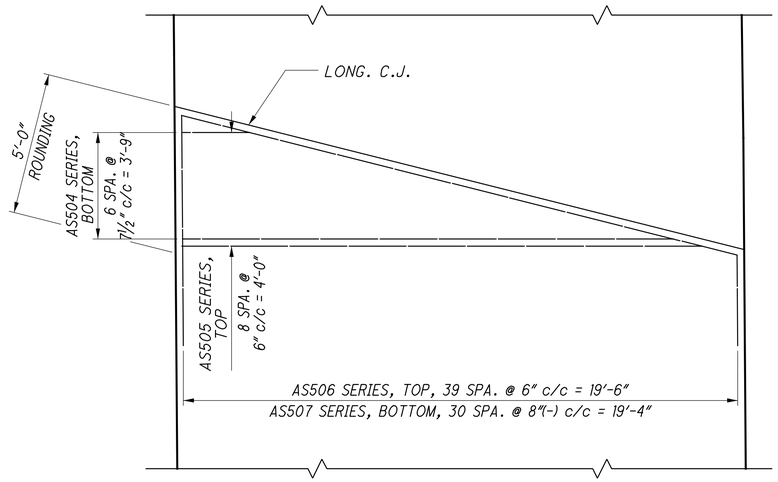
114 / 120
125 / 131

4 03/29/2024

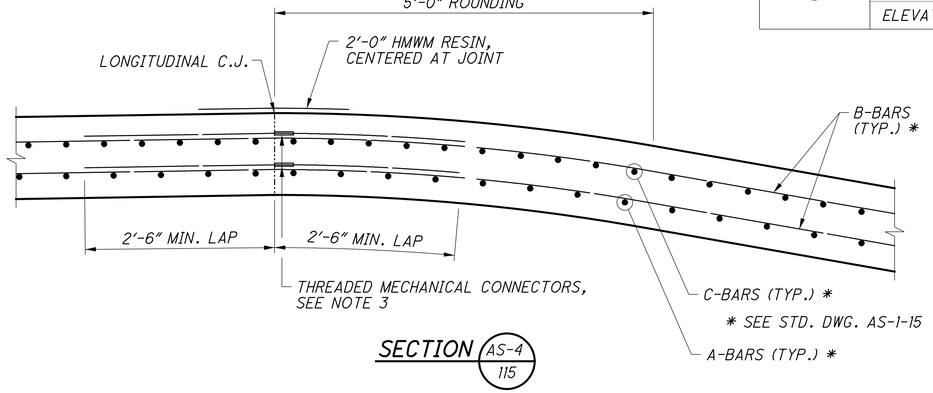
X:\Projects\2020\2022\00100 ODOT DI2-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SFN1811991_SM021.dgn 3/29/2024 3:58:51 PM zguo



PLAN - REAR APPROACH SLAB



PART PLAN - REAR APPROACH SLAB REINFORCING



SECTION AS-4 / 115

APPROACH SLAB ELEVATIONS		
LOCATION		REAR
1	STATION	985+63.69
	OFFSET	-109.44
	ELEVATION	649.26
2	STATION	985+84.09
	OFFSET	-104.41
	ELEVATION	649.43
3	STATION	985+84.09
	OFFSET	-114.61
	ELEVATION	649.68
4	STATION	985+84.06
	OFFSET	-109.57
	ELEVATION	649.85
5	STATION	985+63.18
	OFFSET	-142.25
	ELEVATION	652.34
6	STATION	985+83.70
	OFFSET	-137.21
	ELEVATION	652.17
7	STATION	985+63.05
	OFFSET	-149.87
	ELEVATION	653.02
8	STATION	985+83.60
	OFFSET	-144.83
	ELEVATION	652.80

SLEEPER SLAB ELEVATIONS		
LOCATION		REAR
9	STATION	985+59.59
	OFFSET	-111.96
	ELEVATION	648.53
10	STATION	985+67.74
	OFFSET	-112.09
	ELEVATION	648.36
11	STATION	985+59.06
	OFFSET	-143.25
	ELEVATION	651.29
12	STATION	985+67.29
	OFFSET	-141.25
	ELEVATION	651.23
13	STATION	985+58.92
	OFFSET	-151.39
	ELEVATION	651.99
14	STATION	985+67.16
	OFFSET	-149.39
	ELEVATION	651.90

ALL ELEVATIONS ARE ±

NOTES

1. ELEVATIONS SHOWN ON THIS SHEET ARE TO BE FIELD VERIFIED AND ADJUSTED TO MATCH THE EXISTING STRUCTURE.
2. THIS DRAWING PROVIDES DETAILS TO SUPPLEMENT THE STANDARD DRAWING. FOR APPROACH SLAB REINFORCING STEEL AND DETAILS NOT SHOWN, REFER TO STANDARD DRAWING AS-1-15.
3. THREADED MECHANICAL CONNECTORS SHALL BE RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL. COST SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
4. SEAL THE LONGITUDINAL CONSTRUCTION JOINT WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM). THE WIDTH OF THE SEALING SHALL BE TWO FEET (2'), CENTERED OVER THE JOINT. PAYMENT SHALL BE MADE UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
5. FOR REINFORCING STEEL LIST, SEE SHEET 120/120.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

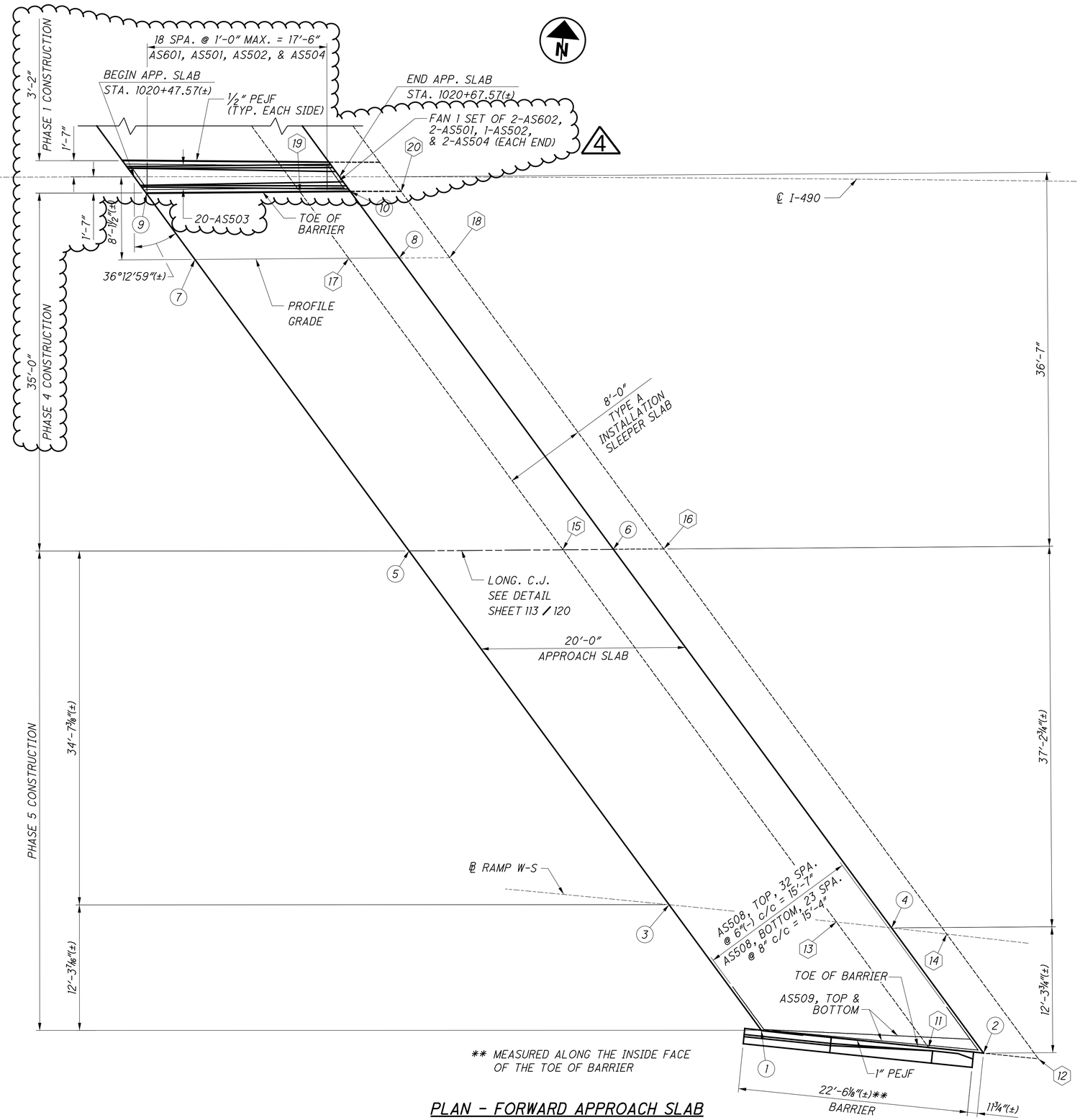
DESIGNED KJS/MHK | DRAWN DAF/MHK | REVIEWED MJL | DATE 08/05/20
CHECKED CLH/PAT | REVISED | STRUCTURE FILE NUMBER 1811991

WEST ABUTMENT APPROACH SLAB DETAILS - 3
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

115/120

126/131



PLAN - FORWARD APPROACH SLAB

APPROACH SLAB ELEVATIONS		
LOCATION		FORWARD
1	STATION	1021+09.30
	OFFSET	83.31
	ELEVATION	648.43
2	STATION	1021+31.34
	OFFSET	85.37
	ELEVATION	646.91
3	STATION	1021+00.08
	OFFSET	71.09
	ELEVATION	648.11
4	STATION	1021+22.11
	OFFSET	73.21
	ELEVATION	647.32
5	STATION	1020+74.44
	OFFSET	36.58
	ELEVATION	649.41
6	STATION	1020+94.69
	OFFSET	36.58
	ELEVATION	648.89
7	STATION	1020+53.26
	OFFSET	8.09
	ELEVATION	650.49
8	STATION	1020+73.25
	OFFSET	7.94
	ELEVATION	650.10
9	STATION	1020+48.52
	OFFSET	1.45
	ELEVATION	650.67
10	STATION	1020+68.53
	OFFSET	1.63
	ELEVATION	650.19

SLEEPER SLAB ELEVATIONS		
LOCATION		FORWARD
11	STATION	1021+25.89
	OFFSET	84.87
	ELEVATION	645.92
12	STATION	1021+36.78
	OFFSET	85.86
	ELEVATION	645.71
13	STATION	1021+16.65
	OFFSET	72.67
	ELEVATION	646.23
14	STATION	1021+27.55
	OFFSET	73.75
	ELEVATION	646.14
15	STATION	1020+89.66
	OFFSET	36.58
	ELEVATION	647.86
16	STATION	1020+99.72
	OFFSET	36.58
	ELEVATION	647.69
17	STATION	1020+68.26
	OFFSET	7.98
	ELEVATION	649.13
18	STATION	1020+78.23
	OFFSET	7.89
	ELEVATION	648.86
19	STATION	1020+63.56
	OFFSET	1.50
	ELEVATION	649.24
20	STATION	1020+73.46
	OFFSET	1.45
	ELEVATION	648.93

ALL ELEVATIONS ARE ±

NOTES

1. ELEVATIONS SHOWN ON THIS SHEET ARE TO BE FIELD VERIFIED AND ADJUSTED TO MATCH THE EXISTING STRUCTURE.
2. THIS DRAWING PROVIDES DETAILS TO SUPPLEMENT THE STANDARD DRAWING. FOR APPROACH SLAB REINFORCING STEEL AND DETAILS NOT SHOWN, REFER TO STANDARD DRAWING AS-1-15.
3. THREADED MECHANICAL CONNECTORS SHALL BE RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL. COST SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
4. SEAL THE LONGITUDINAL CONSTRUCTION JOINT WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM). THE WIDTH OF THE SEALING SHALL BE TWO FEET (2'), CENTERED OVER THE JOINT. PAYMENT SHALL BE MADE UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
5. FOR REINFORCING STEEL LIST, SEE SHEET 120/120.
6. FOR MEDIAN BARRIER ELEVATION, SEE SHEET 118/120.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

DESIGNED KJS/MHK
DRAWN DAF/MHK
CHECKED CLH/PAT
REVIEWED MJL
DATE 08/05/20
REVISED
STRUCTURE FILE NUMBER 1811991

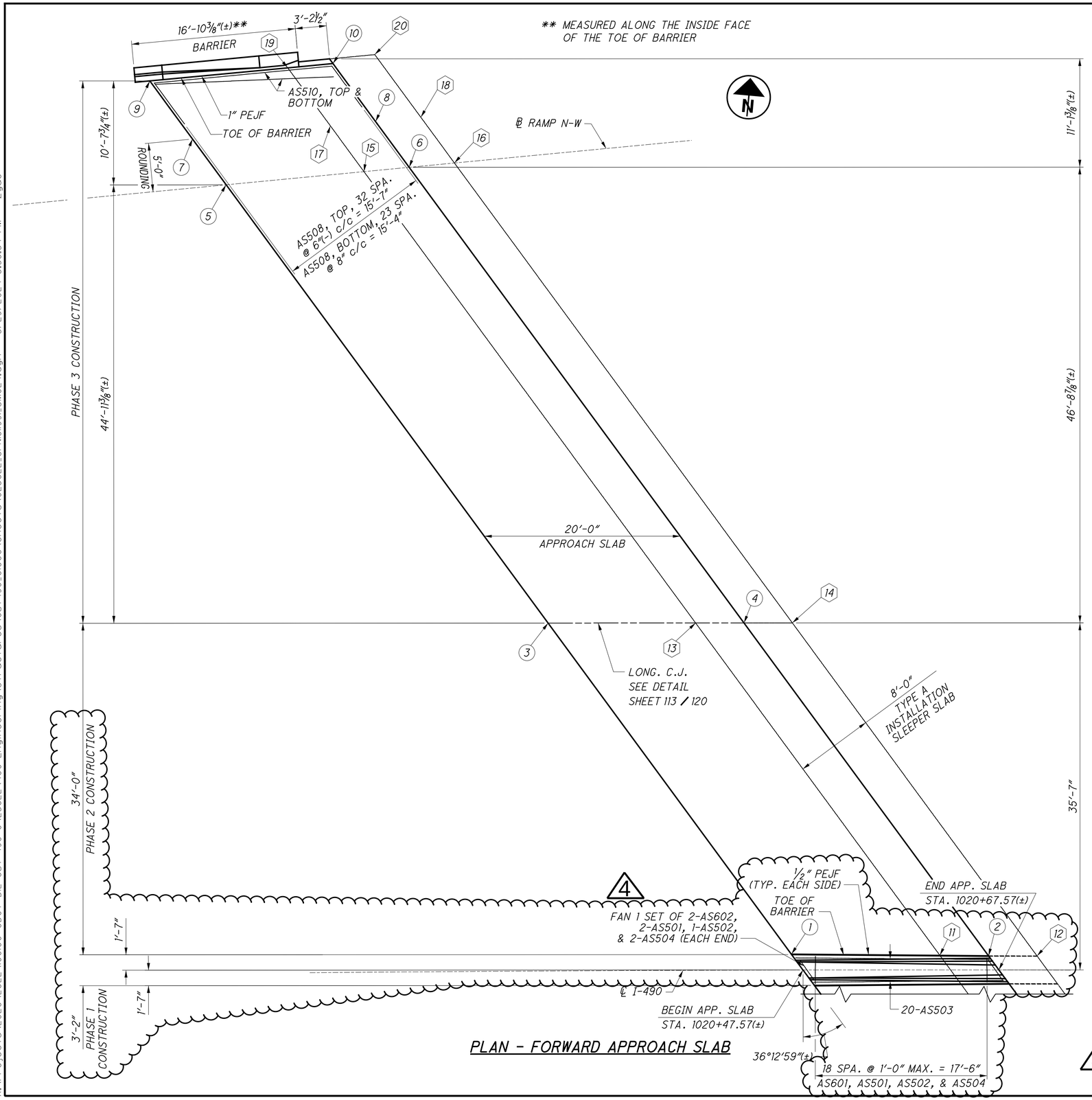
EAST ABUTMENT APPROACH SLAB DETAILS - 1
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

116/120
127/131

4 03/29/2024

X:\Projects\2020\2022\00100 ODOT D12-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SFN181991_SM023.dgn 3/29/2024 3:58:54 PM zguo



PLAN - FORWARD APPROACH SLAB

APPROACH SLAB ELEVATIONS

LOCATION		FORWARD
1	STATION	1020+46.14
	OFFSET	-1.63
	ELEVATION	650.75
2	STATION	1020+66.36
	OFFSET	-1.45
	ELEVATION	650.24
3	STATION	1020+21.64
	OFFSET	-35.58
	ELEVATION	651.71
4	STATION	1020+41.59
	OFFSET	-35.58
	ELEVATION	651.30
5	STATION	1019+88.97
	OFFSET	-80.87
	ELEVATION	652.99
6	STATION	1020+07.55
	OFFSET	-82.50
	ELEVATION	652.76
7	STATION	1019+85.61
	OFFSET	-85.60
	ELEVATION	653.28
8	STATION	1020+04.18
	OFFSET	-87.22
	ELEVATION	652.94
9	STATION	1019+81.35
	OFFSET	-91.60
	ELEVATION	653.58
10	STATION	1019+99.91
	OFFSET	-93.20
	ELEVATION	653.28

SLEEPER SLAB ELEVATIONS

LOCATION 4		FORWARD
11	STATION	1020+61.37
	OFFSET	-1.48
	ELEVATION	649.32
12	STATION	1020+71.33
	OFFSET	-1.45
	ELEVATION	649.02
13	STATION	1020+36.66
	OFFSET	-35.58
	ELEVATION	650.35
14	STATION	1020+46.53
	OFFSET	-35.58
	ELEVATION	650.13
15	STATION	1020+02.96
	OFFSET	-82.09
	ELEVATION	651.74
16	STATION	1020+12.14
	OFFSET	-82.91
	ELEVATION	651.66
17	STATION	1019+99.59
	OFFSET	-86.81
	ELEVATION	651.92
18	STATION	1019+08.76
	OFFSET	-87.62
	ELEVATION	651.81
19	STATION	1019+95.33
	OFFSET	-92.80
	ELEVATION	652.27
20	STATION	1020+04.15
	OFFSET	-94.08
	ELEVATION	652.16

ALL ELEVATIONS ARE ±

NOTES

1. ELEVATIONS SHOWN ON THIS SHEET ARE TO BE FIELD VERIFIED AND ADJUSTED TO MATCH THE EXISTING STRUCTURE.
2. THIS DRAWING PROVIDES DETAILS TO SUPPLEMENT THE STANDARD DRAWING. FOR APPROACH SLAB REINFORCING STEEL AND DETAILS NOT SHOWN, REFER TO STANDARD DRAWING AS-1-15.
3. THREADED MECHANICAL CONNECTORS SHALL BE RICHMOND SCREW ANCHOR THREADED DOWEL BAR ASSEMBLY, LENTON REBAR SPLICING MECHANISM, OR APPROVED EQUAL. COST SHALL BE INCLUDED FOR PAYMENT WITH ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
4. SEAL THE LONGITUDINAL CONSTRUCTION JOINT WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM). THE WIDTH OF THE SEALING SHALL BE TWO FEET (2'), CENTERED OVER THE JOINT. PAYMENT SHALL BE MADE UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.
5. FOR REINFORCING STEEL LIST, SEE SHEET 120/120.
4. 6. FOR MEDIAN BARRIER ELEVATION, SEE SHEET 118/120.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

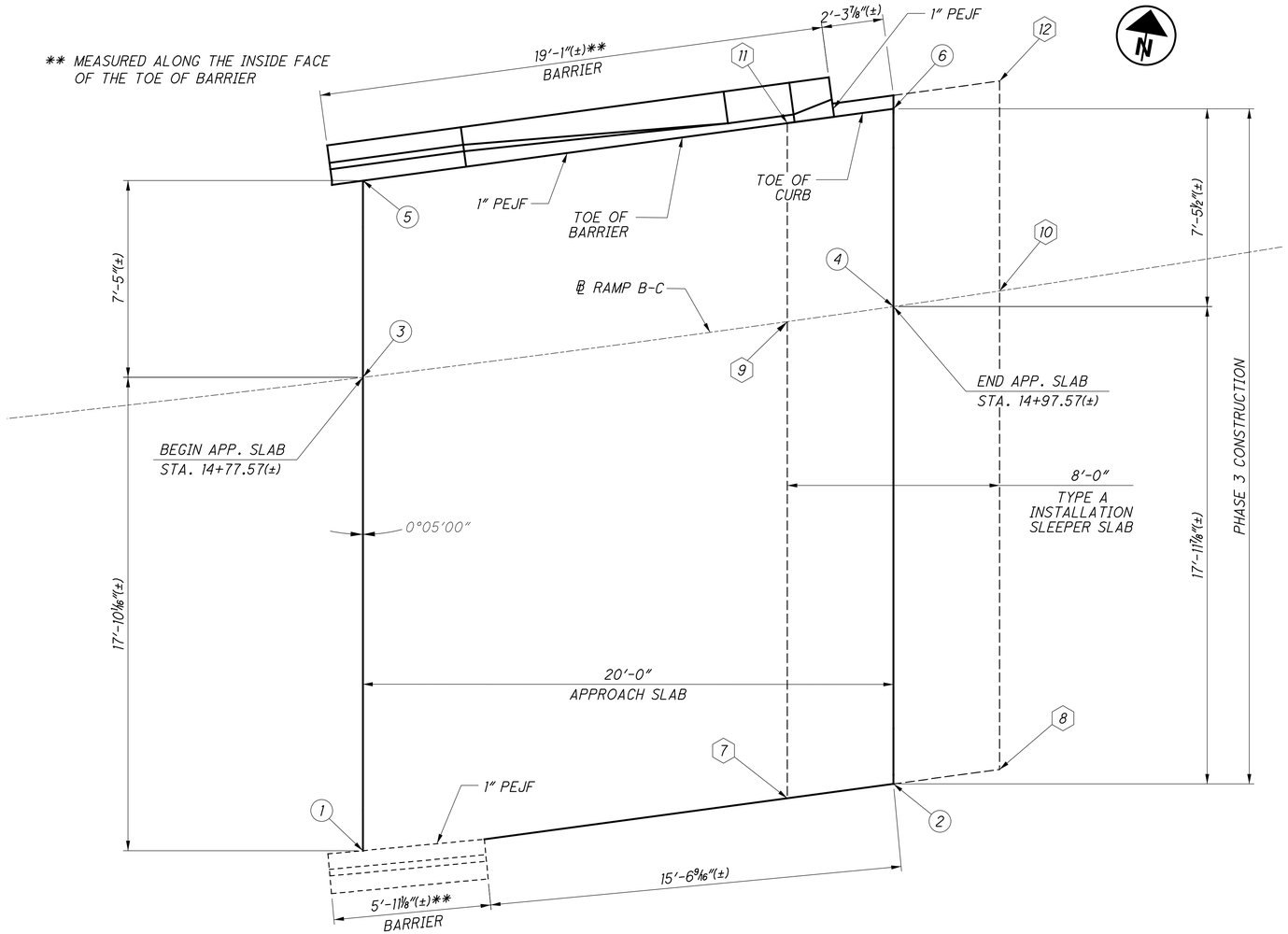
DESIGNED KJS/MHK
DRAWN DAF/MHK
CHECKED CLH/PAT
REVIEWED MJL
DATE 08/05/20
REVISED
STRUCTURE FILE NUMBER 1811991

EAST ABUTMENT APPROACH SLAB DETAILS - 2
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

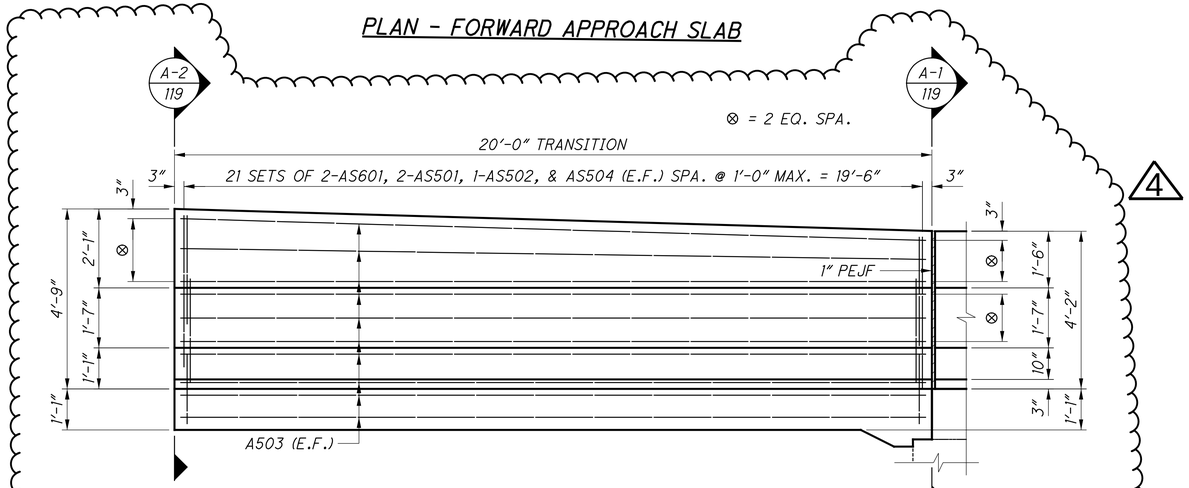
CUY-490-01.00
PID No. 107408

117 / 120
128 / 131

4 03/29/2024



PLAN - FORWARD APPROACH SLAB



TYPICAL MEDIAN BARRIER ON APPROACH SLAB ELEVATION

MEDIAN BARRIER AT REAR APPROACH SLAB SHOWN,
MEDIAN BARRIER AT FORWARD APPROACH SLAB SIMILAR

4

APPROACH SLAB ELEVATIONS		
LOCATION		FORWARD
1	STATION	14+75.44
	OFFSET	17.71
	ELEVATION	666.47
2	STATION	14+95.24
	OFFSET	17.81
	ELEVATION	666.23
3	STATION	14+77.61
	OFFSET	0.00
	ELEVATION	666.00
4	STATION	14+97.75
	OFFSET	0.00
	ELEVATION	666.08
5	STATION	14+78.48
	OFFSET	-7.36
	ELEVATION	665.75
6	STATION	14+98.83
	OFFSET	-7.38
	ELEVATION	666.00

SLEEPER SLAB ELEVATIONS		
LOCATION		FORWARD
7	STATION	14+91.20
	OFFSET	17.79
	ELEVATION	665.20
8	STATION	14+99.17
	OFFSET	17.84
	ELEVATION	665.11
9	STATION	14+93.71
	OFFSET	0.00
	ELEVATION	664.99
10	STATION	15+01.79
	OFFSET	0.00
	ELEVATION	665.02
11	STATION	14+94.75
	OFFSET	-7.41
	ELEVATION	664.87
12	STATION	15+05.41
	OFFSET	-7.82
	ELEVATION	664.91

ALL ELEVATIONS ARE ±

NOTES

1. ELEVATIONS SHOWN ON THIS SHEET ARE TO BE FIELD VERIFIED AND ADJUSTED TO MATCH THE EXISTING STRUCTURE.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

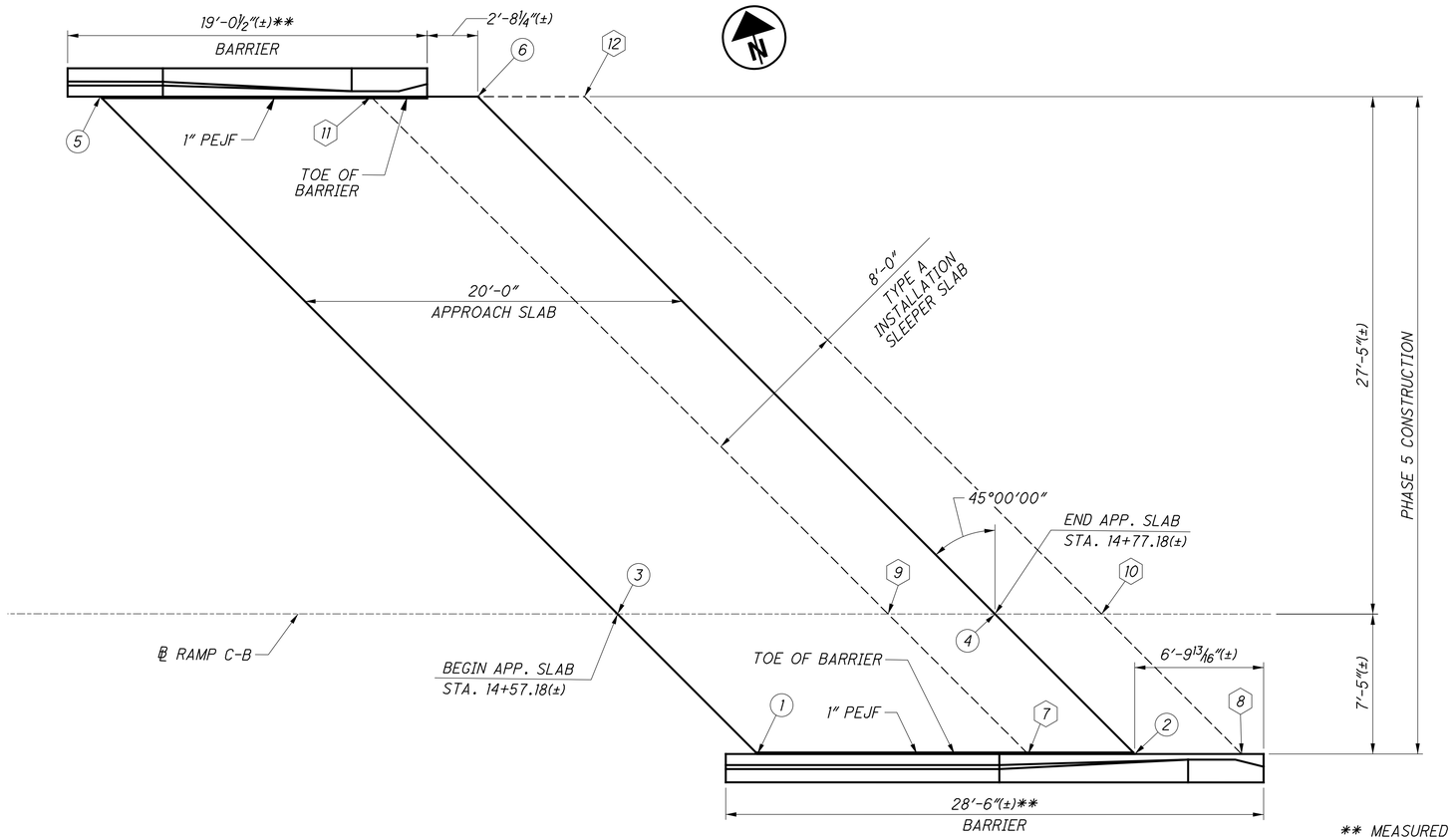
DESIGNED KJS/VS | DRAWN DAF/VS | REVIEWED MJL | DATE 08/05/20
CHECKED CLH/JDA | REVISED | STRUCTURE FILE NUMBER 1811991

ABUTMENT B-C APPROACH SLAB DETAILS
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

118/120
129/131

4 03/29/2024



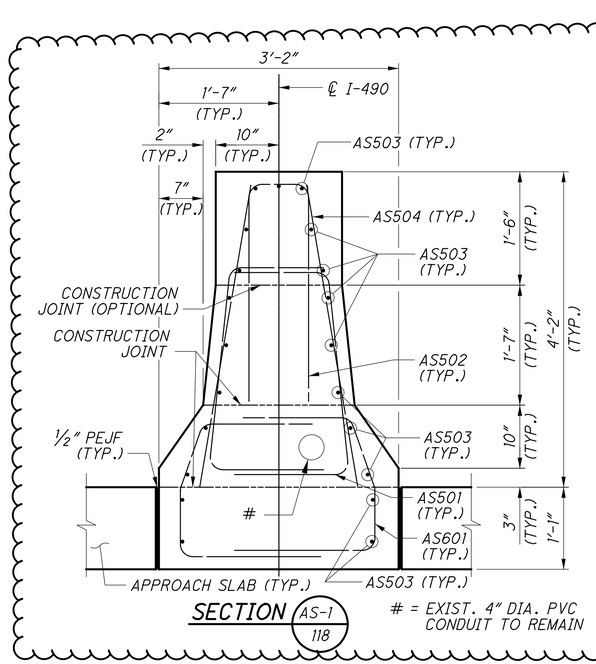
** MEASURED ALONG THE INSIDE FACE OF THE TOE OF BARRIER

PLAN - FORWARD APPROACH SLAB

APPROACH SLAB ELEVATIONS		
LOCATION		REAR
1	STATION	14+64.60
	OFFSET	7.42
	ELEVATION	667.82
2	STATION	14+84.60
	OFFSET	7.42
	ELEVATION	668.65
3	STATION	14+57.18
	OFFSET	0.00
	ELEVATION	667.61
4	STATION	14+77.18
	OFFSET	0.00
	ELEVATION	668.39
5	STATION	14+29.76
	OFFSET	-27.41
	ELEVATION	666.97
6	STATION	14+49.76
	OFFSET	-27.41
	ELEVATION	667.57

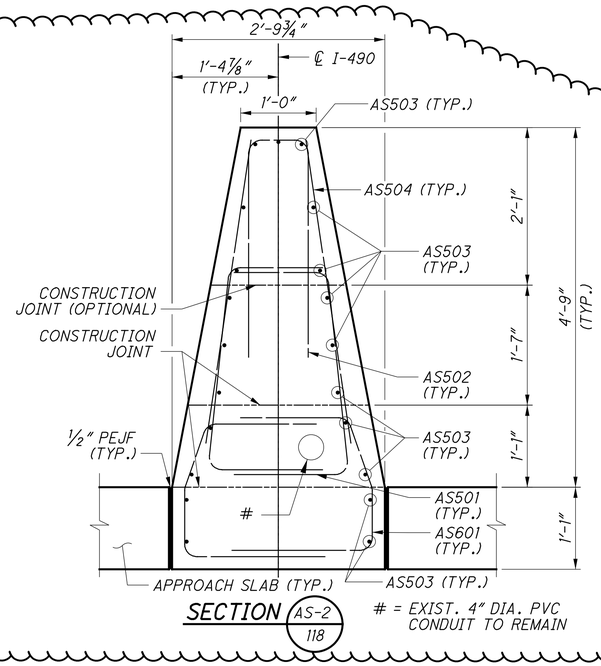
SLEEPER SLAB ELEVATIONS		
LOCATION		REAR
7	STATION	14+78.96
	OFFSET	7.42
	ELEVATION	667.34
8	STATION	14+90.21
	OFFSET	7.42
	ELEVATION	667.81
9	STATION	14+71.52
	OFFSET	0.00
	ELEVATION	667.09
10	STATION	14+82.84
	OFFSET	0.00
	ELEVATION	667.53
11	STATION	14+44.11
	OFFSET	-27.41
	ELEVATION	666.32
12	STATION	14+55.40
	OFFSET	-27.41
	ELEVATION	666.66

ALL ELEVATIONS ARE (±)



SECTION AS-1 / 118

= EXIST. 4" DIA. PVC CONDUIT TO REMAIN



SECTION AS-2 / 118

= EXIST. 4" DIA. PVC CONDUIT TO REMAIN

4

NOTES

1. ELEVATIONS SHOWN ON THIS SHEET ARE TO BE FIELD VERIFIED AND ADJUSTED TO MATCH THE EXISTING STRUCTURE.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

DESIGNED KJS | DRAWN DAF/JG | REVIEWED MJL | DATE 08/05/20
CHECKED CLH/JDA | REVISED | STRUCTURE FILE NUMBER 1811991

ABUTMENT C-B APPROACH SLAB DETAILS
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

119 / 120
130 / 131

4 03/29/2024

X:\Projects\2020\2022\10000 000T DI2-CUY-490-0\25622\400-Engineering\Structures\CUY490_0100C\Sheets\025622_SFN1811991_SM026.dgn 3/29/2024 3:58:56 PM zguo

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	SERIES INC.
ABUTMENTS										
A501	4	31'-5"	131	STR						
A502	16	7'-6"	125	STR						
A503	4	18'-7"	78	STR						
A504	4	15'-2"	63	STR						
A505	4	5'-5"	23	STR						
A506	4	25'-6"	106	STR						
A507	4	16'-5"	68	STR						
A508	4	30'-4"	127	STR						
A509	4	38'-5"	160	STR						
A510	8	27'-1"	226	STR						
A511	4	16'-4"	68	STR						
A512	8	22'-9"	190	STR						
A513	4	11'-5"	48	STR						
A514	8	24'-3"	202	STR						
A515	8	22'-2"	185	STR						
A516	NOT USED									
A517	NOT USED									
A518	4	25'-2"	105	STR						
A519	8	26'-2"	218	STR						
A520	6	3'-0"	321	16	2'-5"					0.75"
	SER OF 15	TO 3'-10"			TO 3'-3"					
A521	24	13'-10"	346	STR						
A522	12	5'-7"	70	25	1'-10"	2'-5"	1'-4"	0'-2"	0'-5"	
A523	12	5'-8"	71	STR						
A524	36	10'-0"	375	STR						
A525	39	7'-0"	285	23	0'-8"	3'-3"	3'-0"			
A526	2	13'-8"	29	STR						
A527	6	2'-6"	16	STR						
A528	4	4'-9"	20	STR						
A529	2	16'-6"	34	STR						
A530	6	6'-8"	42	STR						
A531	4	8'-11"	37	STR						
A532	2	20'-8"	43	STR						
A533	12	4'-8"	58	STR						
A534	8	6'-11"	58	STR						
A535	4	18'-9"	78	STR						
A536	6	14'-2"	89	STR						
A537	4	16'-5"	68	STR						
A538	2	28'-2"	59	STR						
A539	8	4'-8"	39	STR						
A540	8	5'-1"	42	STR						
A601	1,060	2'-6"	3,980	1	0'-9"	1'-11"				
	6	3'-10"				3'-0"				
A602	SER OF 15	TO 4'-8"	575	1	1'-0"	TO 3'-10"				0.75"
A603	36	3'-10"	207	1	1'-0"	3'-0"				
A604	4	4'-11"	30	24	0'-5"	2'-2"				
A605	4	5'-4"	32	23	0'-8"	2'-5"	2'-2"			
A606	4	3'-5"	21	14	1'-0"	1'-3"	0'-8"	0'-6"	0'-7"	
A607	8	4'-4"	52	1	1'-0"	3'-6"				
A608	4	5'-2"	31	24	0'-7"	2'-2"				
A609	4	5'-4"	32	23	0'-8"	2'-5"	2'-2"			
A610	4	3'-7"	22	14	1'-0"	1'-3"	0'-8"	0'-7"	0'-9"	
		TOTAL	9,285	LBS						

REINFORCING STEEL LIST

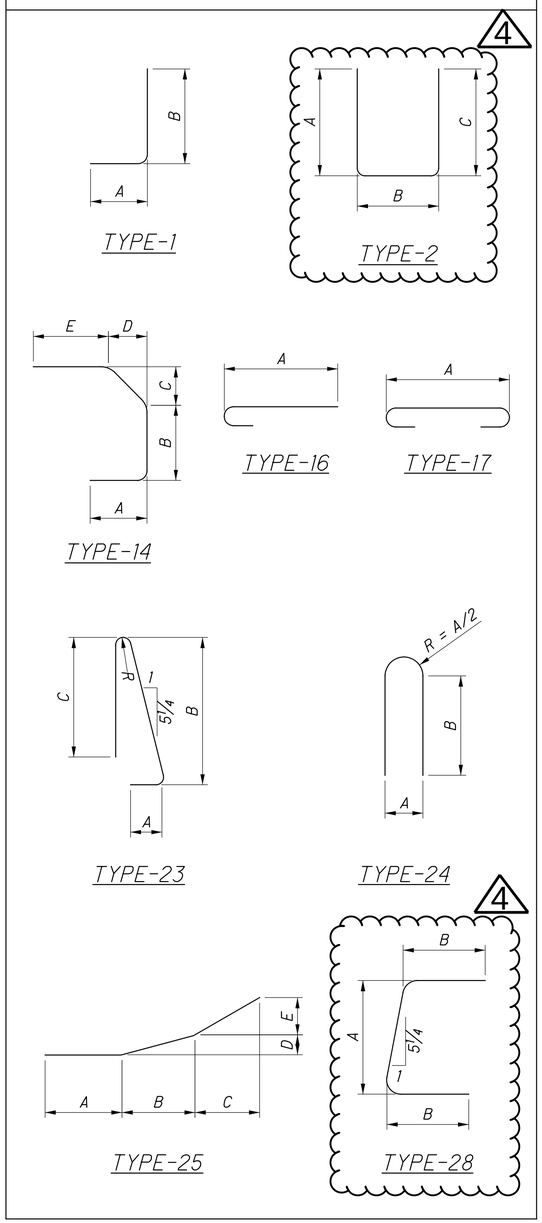
MARK	NO.	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	SERIES INC.
SUPERSTRUCTURE										
S501	36	7'-0"	263	23	0'-8"	3'-3"	3'-0"			
S502	48	3'-0"	150	14	1'-0"	0'-10"	0'-8"	0'-6"	0'-7"	
S503	48	2'-4"	117	1	1'-0"	1'-6"				
S504	12	4'-10"	60	24	0'-4"	2'-2"				
S505	12	5'-4"	67	23	0'-8"	2'-5"	2'-2"			
S601	156	5'-8"	1,328	17	4'-4"					
S602	76	30'-0"	3,425	STR						
S603	20	20'-0"	601	STR						
		TOTAL	6,011	LBS						

APPROACH SLABS

AS501	84	5'-1"	445	28	2'-9"	1'-3"				
AS502	42	6'-3"	274	2	2'-11"	0'-8"	2'-11"			
AS503	40	19'-8"	820	STR						
AS504	84	5'-3"	460	STR						
AS601	84	4'-9"	599	14	1'-10"	0'-10"	0'-11"	0'-4"	1'-5"	
		TOTAL	2,598	LBS						

CONCRETE REINFORCEMENT WEIGHTS AND TOTALS FOR THE APPROACH SLABS ARE PROVIDED FOR INFORMATION ONLY. THE CONCRETE REINFORCEMENT LISTED ABOVE IS REQUIRED IN ADDITION TO THE CONCRETE REINFORCEMENT SHOWN IN ODOT STANDARD DRAWING AS-1-15. INCLUDE ALL CONCRETE REINFORCEMENT FOR APPROACH SLABS FOR PAYMENT WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=13"), AS PER PLAN.

BENDING DIAGRAMS



CONCRETE REINFORCEMENT NOTES

1. SERIES BARS - EACH BAR VARIES BY TABULATED AMOUNT.
2. ALL DIMENSIONS ARE OUT TO OUT.
3. TYPE 'STR' INDICATES A STRAIGHT BAR.
4. THE BAR SIZE NUMBER IS INDICATED IN THE 'MARK' COLUMN. THE FIRST ONE OR TWO DIGITS OF EACH MARK INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, A501 IS A #5 BAR SIZE AND P1001 IS A #10 BAR SIZE.
5. ALL CONCRETE REINFORCEMENT SHALL BE EPOXY COATED.

DLZ
614 W. SUPERIOR AVE., SUITE 1000 • CLEVELAND, OHIO 44113

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

CONCRETE REINFORCEMENT LIST
BRIDGE NO. CUY-490-0100
I-490 OVER CUYAHOGA RIVER

CUY-490-01.00
PID No. 107408

4 03/29/2024