STATE OHIO

DEPARTMENT

OF

TRANSPORTATION

DESIGN DESIGNATION

= 95,150= 133,2102011 D.V.H. **⇒** 13,210 = 55% = 5.7% = 50 MPHDESIGN SPEED LEGAL SPEED = 50 MPH

SUPERELEVATION

FUNCTIONAL CLASSIFICATION = URBAN FREEWAY

APPROVAL DATE DESIGN EXCEPTION SHOULDER WIDTH 06-06-91 06-06-91 VERTICAL ALIGNMENT STOPPING SIGHT DISTANCE 06-06-91

06-06-91

MIGROFILMED

SUM-8-0.38A

CITY OF AKRON SUMMIT COUNTY

•				·	/
CONVENTIONAL	SIGNS				PROJECT STA. 524+14.40
CENTERLINE — — — — — — — — — — — — — — — — — — —	-X - X - X - X - X - X - X - X - X - X	WATER LINE (PROPOSED) — FIRE HYDRANT (EXISTING) — FIRE HYDRANT (PROPOSED) — GAS VALVE (EXISTING) — — MANHOLE (EXISTING) — — MANHOLE (EXISTING) — — INLET OR CATCH BASIN (EXI INLET OR CATCH BASIN (PROPOSED) —	6" WM 6" WM 6" WM ————	NORTH ST. ADAM BOOK ST. ADAM FOR	EVANS EVANS EVANS
STORM SEWER (EXISTING) — — — — — STORM SEWER (PROPOSED) — — — —	16" STM. 16" STM. O DRAWINGS	WATER VALVE (FROI OOLD)		BUCHT CARROL ST. ST. EXCHA	NGE ST. ARCINGTON
TITLE SHEET	COMPUTATIONS ROADWAY PLANS			BEACON ST. OTHSTO	
TYPICAL SECTIONS				SPICE SPICE	(76) IST.
GENERAL NOTES	TRAFFIC CONTROL PLA	ANS 82-89,89A		1-77	FOURTH ST. Z
MAINTENANCE OF TRAFFIC 9-69	STRUCTURE OVER 20'	SPAN 90-95	BEGIN PROJECT STA. 441+39.00	777	1 TENDE
MAINTENANCE OF TRAFFIC DETAILS 70,71				LOVERS LANE	
GENERAL SUMMARY	3		UNDERGROUND UTILITIES	LOCATION M	
LINE DATA BEGIN PROJECT SUSPEND PROJECT RESUME PROJECT END PROJECT TOTAL LENGTH OF PROJECT	STA. 441+39.00 STA. 455+62.97 STA. 456+96.03 STA. 524+14.40 1.542MILES OR 8142.34 LIN.F	·T.	2 WORKING DAYS BEFORE YOU DIG CALL-800-362-2764 (TOLL FREE) OHIO UTILITIES PROTECTION SERVICE NON MEMBERS MUST BE CALLED DIRECTLY	PORTION TO BE IMPROVED — — — — — — — — — — — — — — — — — — —	
ADD FOR WORK	0.007 MILES OR 37.50 LIN.F	T.		PROFILE: — HORIZONTAL= 0 20'	VERTICAL = 0 5
LENGTH OF WORK	1.549 MILES OR 8179.84 LIN.F	न्त ्र		CROSS SECTIONS: HORIZONTAL= 5,	VERTICAL = 0 5,
PLANS PREPARED AND RECOMMEN	NDED BY:		· STANDARD DRAWIN	ICC	SUDDI EMENTIAL

AS-1-81 11-27-81 TC-52.10 4-3-79 TC-12.30 1-20-84

GR-1.2 5-6-91 TC-52.20 4-3-79 TC-31.21 3-6-79

NOTE: ALL REFERENCES TO FEDERAL PROJECT NO. F-54(31) SHALL BE CONSIDERED TO READ AS FEDERAL PROJECT NO. NH-54(31).

F.H.W.A. REGION STATE 95 NH -54(31) OHIO

SUMMIT COUNTY SUM-8-0.38A

LIMITED ACCESS

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

1991 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY, EXCEPT AS NOTED ON SHEETS 9-71 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

CONSTRUCTION DIVISION MANAGER, CITY OF AKRON DATE: 2-3-92 David J Celik /MLM DIRECTOR OF PUBLIC SERVICE, CITY OF AKRON CITY ENGINEER, CITY OF AKRON APPROVED: David R. Drego gaa

DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION DATE: 4-27-92

APPROVED: B.D. Hammin (LT ENGINEER, BUREAU OF BRIDGES AND STRUCTURES DATE: 5/12/92

DATE: 6/11/32

DIRECTOR, DEPARTMENT OF TRANSPORTATION

DATE: 6-11-92

SPECIFICATIONS SUPPLEMENTIAL 8-1-78 | MT-98.12 8-25-89 | CB-3 5-1-79 GR-2.1 4-13-90 924 12-14-88 5-6-91 MT-98.13 8-25-89 CB-3A 5-1-79 GR- 4.1 3-18-92 2-10-87 10-2-89 931 5-6-91 10-1-87 MT-98.14 8-25-89 CB-6 5-1-79 | GR- 4.2. 933 5-6-91 MT-98.15 8-25-89 I-2A 12-18-84 5-31-88 MT-99.10 11-14-86 MH-1 12-18-84 BP-10 1-30-84 MT-101.60 4-1-90 MH-3 12-18-84 TC-41.10 8-29-84 HL-30.11 5-1-87 3-18-92 5-6-91 TC-41.20 3-26-79 TC-82.10 8-29-84

903

1-1-69

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

STEPHANIE A. JONES P.E. No. 51365 PROJECT:

SUM-8-0.38A

JDJ&A, INC

CONSULTING ENGINEERS.....ARCHITECTS.....PLANNERS

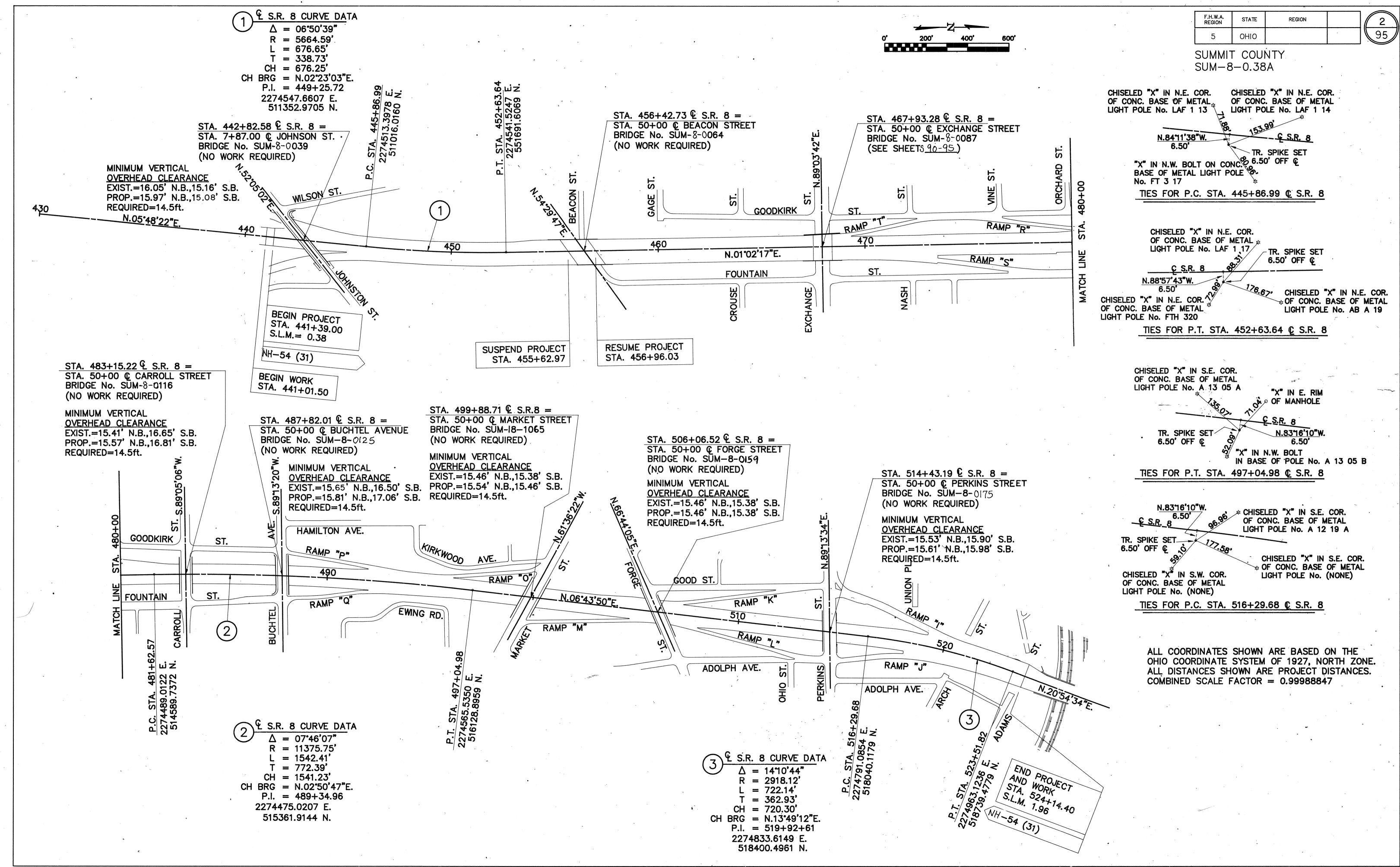
DATE OF LETTING

2162 FRONT ST.

_19__, CONTRACT No._

CUYAHOGA FALLS, OHIO

DATE

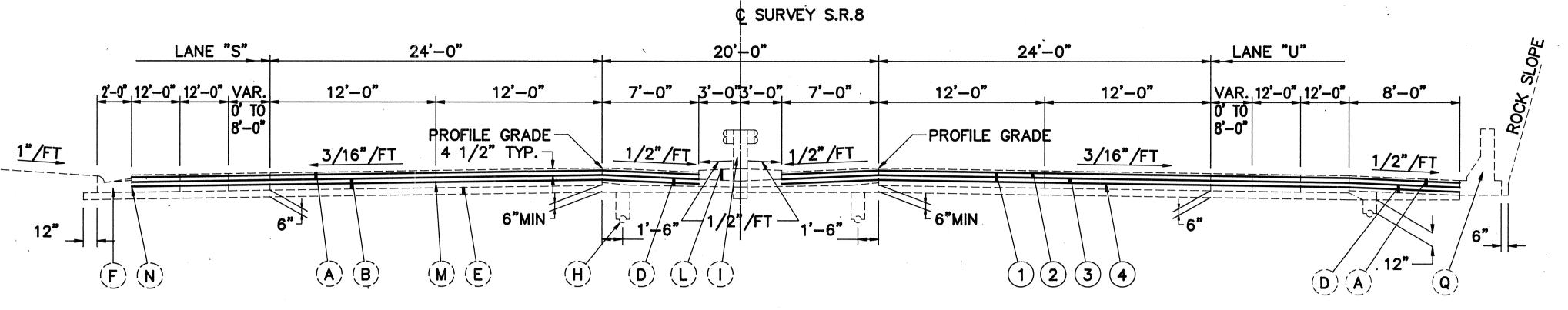


TYPICAL SECTIONS TYPE 446

F.H.W.A. REGION 3

5 OHIO 95

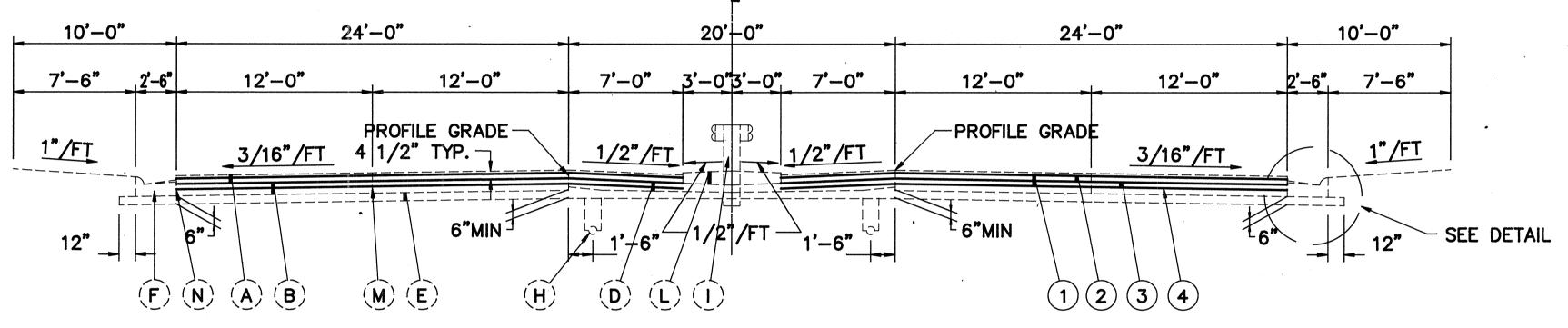
SUMMIT COUNTY SUM-8-0.38A



NORTH EXPRESSWAY

STA. 442+72.00 TO STA. 445+86.99 (LEFT SIDE ONLY) = 314.99 LIN.FT. STA. 444+96.00 TO STA. 445+86.99 (RIGHT SIDE ONLY) = 90.99 LIN.FT.

¢ SURVEY S.R.8



NORTH EXPRESSWAY

STA. 441+39.00 TO STA. 442+72.00 (LEFT SIDE ONLY) = 133.00 LIN.FT. STA. 441+39.00 TO STA. 444+96.00 (RIGHT SIDE ONLY) = 357.00 LIN.FT.

EXISTING LEGEND

- (A) ASPHALT CONCRETE (4 1/2" AVG.)
- (B) 9" CONCRETE BASE
- 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (D) POROUS BASE COURSE
- (E) SUBBASE
- (F) TYPE 2 CURB & GUTTER
- (G) TYPE 6 CURB
- (H) UNDERDRAIN
- (I) GUARDRAIL, BARRIER TYPE 5
- (J) GUARDRAIL, TYPE 5
- (K) CONCRETE BARRIER MEDIAN
- (L) TYPE 2 CONCRETE MEDIAN PAVEMENT
- (M) LONGITUDINAL JOINT
- (N) LONGITUDINAL KEY JOINT WITHOUT TIE BARS

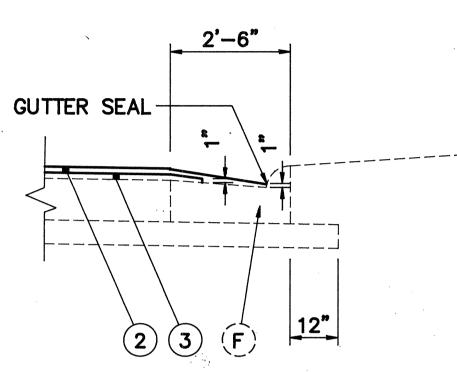
- (Q) CONCRETE BARRIER, TYPE D
- (R) 310 VARIES 3" MIN. SUB-BASE, TYPE II
- (S) 304 9" AGGREGATE BASE
- (T) 301 3" BITUMINOUS AGGREGATE BASE, AC-20, RT-11, OR RT-12
- (U) SPECIAL DRAINAGE CONNECTION, No. 8 AGGREGATE
- (W) 409 COVER AGGREGATE NO. 8 • 0.008 CY./SY.

PROPOSED LEGEND

- 1 254 PAVEMENT PLANING BITUMINIOUS (4 1/2" AVG.)
- 2 446 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20
- 3 446 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, AC-20
- (4) 407 TACK COAT USING \$5924, AS PER PLAN
- (5) 203 LINEAR GRADING METHOD 1 OR 2

NOTE:

IT IS INTENDED THAT THE EXISTING SUPERELEVATION RATE ON THE PAVEMENT & SHOULDERS SHALL BE MAINTAINED. ALL CROSS SLOPES SHOWN ARE THE NORMAL SLOPES.

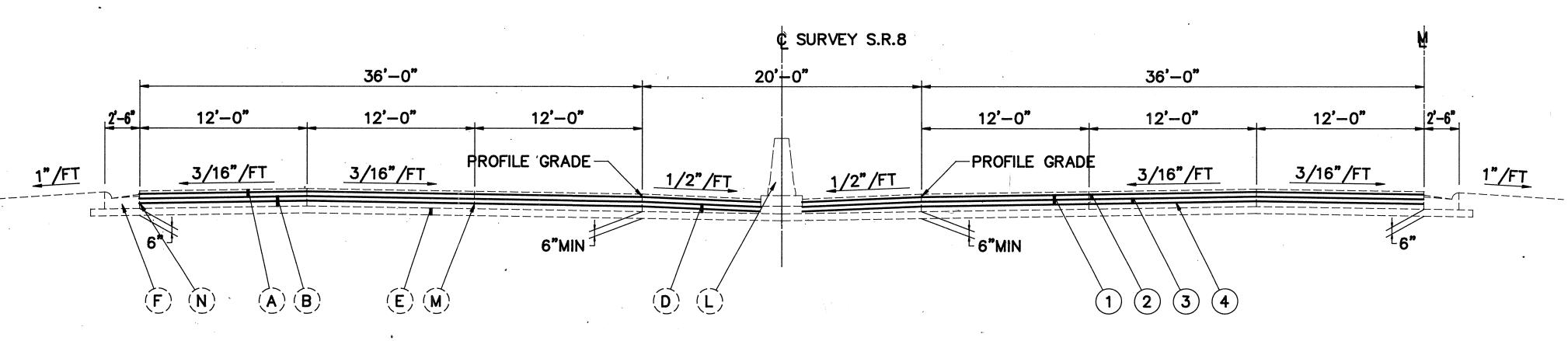


SPECIAL CARE SHALL BE TAKEN DURING CONSTRUCTION TO OBTAIN MAXIMUM COMPACTION OF BITUMINOUS CONCRETE IN GUTTERS.

GUTTER FINISH DETAIL

F.H.W.A. REGION . 4
5 OHIO 95

SUMMIT COUNTY SUM-8-0.38A



NORTH EXPRESSWAY

STA. 513+21.00 TO STA. 519+13.50 (LEFT SIDE) = 592.50 LIN.FT.

STA. 513+21.00 TO STA. 519+52.45 (RIGHT SIDE) = 631.45 LIN.FT.

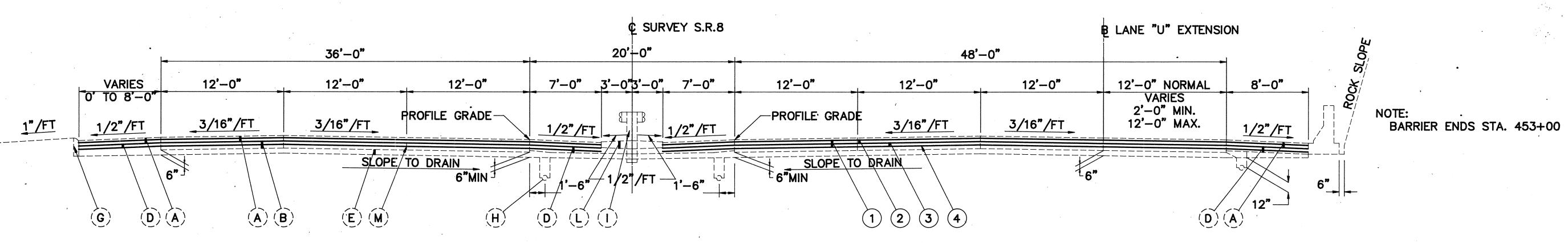
EAST EXCHANGE STREET STRUCTURE

STA. 467+51.47 TO STA. 468+42.97 = 91.50 LIN.FT.

BEACON STREET STRUCTURE
STA. 455+62.97 TO STA. 456+96.03 = 133.06 LIN.FT.

MARKET STREET STRUCTURE

STA. 467+51.47 TO STA. 468+42.97 = 91.5 LIN.FT.

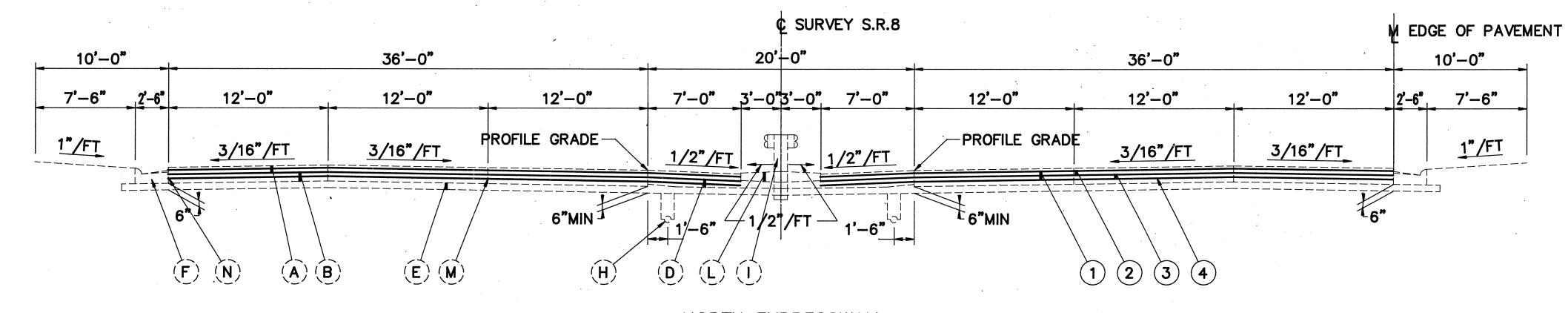


NORTH EXPRESSWAY

STA. 445+86.99 TO STA. 454+30.00 (RIGHT SIDE ONLY) = 713.01 LIN.FT. STA. 454+30.00 TO STA. 455+62.97 = 132.97 LIN.FT. STA. 456+96.03 TO STA. 467+51.47 = 1055.44 LIN.FT. STA. 468+42.97 TO STA. 473+48.03 (RIGHT SIDE ONLY) = 505.06 LIN.FT.

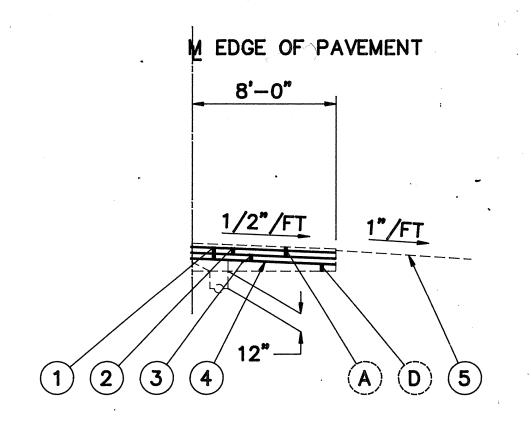
NOTE

1) SEE SHEET 3 FOR LEGEND.



NORTH EXPRESSWAY

STA. 445+86.99 TO STA. 454+30.00 (LEFT SIDE ONLY) = 713.01 LIN.FT. STA. 468+42.97 TO STA. 473+48.03 (LEFT SIDE ONLY) = 505.06 LIN.FT. STA. 473+48.03 TO STA. 513+21.00 \mathbb{Q} = 3972.97 LIN.FT.**



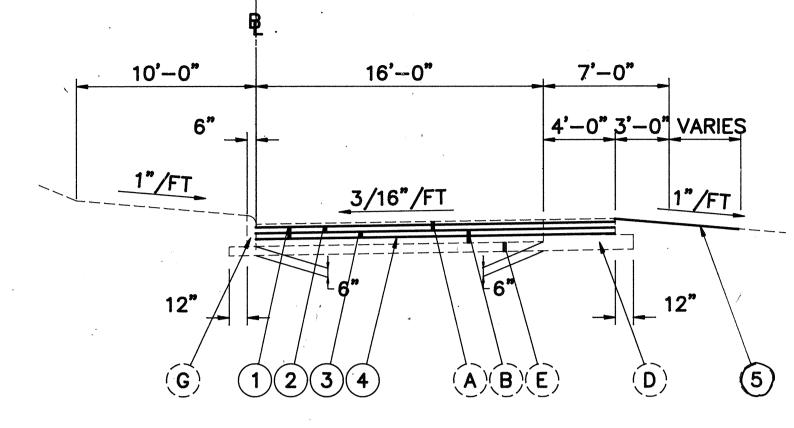
NORTH EXPRESSWAY

RAMPS TO CARROL STREET BRIDGE

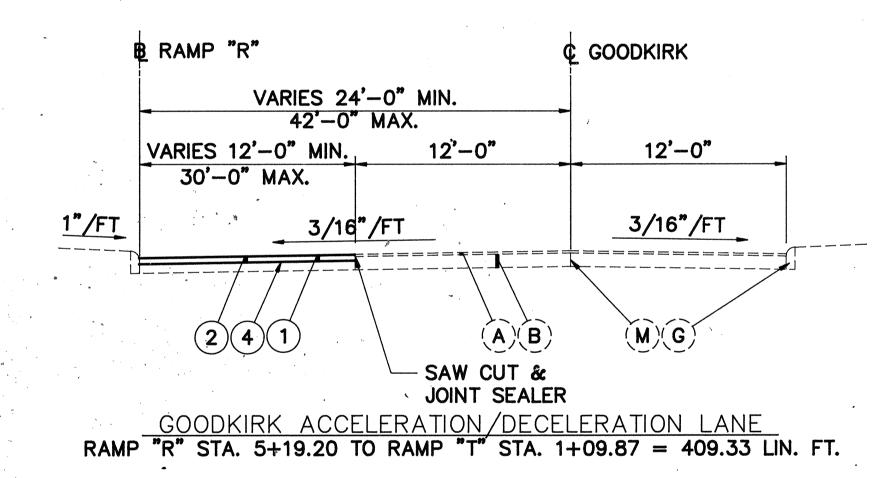
** STA. 473+48.03 TO STA.479+26.00

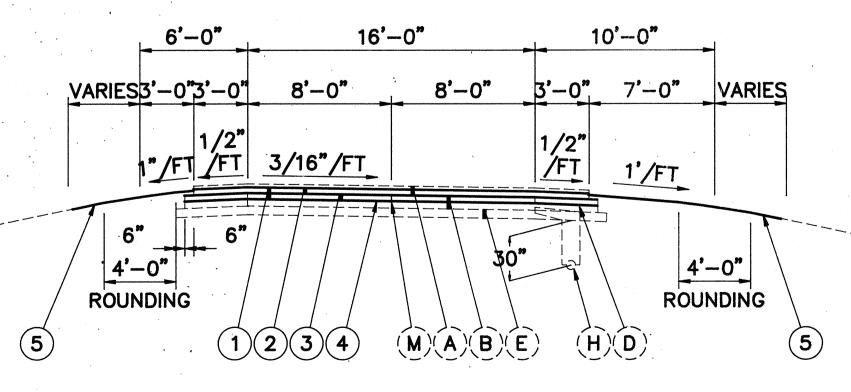
(RIGHT SIDE ONLY) = 577.97 LIN.FT.

TYPICAL SECTIONS TYPE 446



STA. 4+80.13 TO $\frac{\text{RAMP "K"}}{\text{STA. 8+29.00}} = 348.87 \text{ LIN. FT.}$ STA. 2+01.29 TO STA. 6+50.20 = 448.91 LIN. FT.

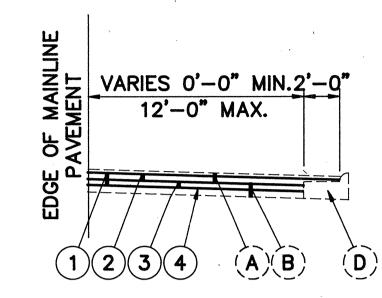




STA. 0+00.00 TO STA. 3+42.26 = 342.26 LIN.FT.

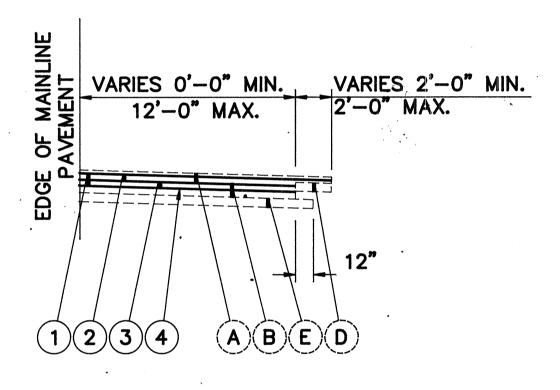
F.H.V.A. STATE REGION. 5

SUMMIT COUNTY SUM-8-0.38A



TYPICAL SECTION

RAMP ACCELERATION/DECELERATION LANE



TYPICAL SECTION

RAMP "S" ACCELERATION/DECELERATION LANES

STA. 453+00.00 TO STA.473+48.03 (RIGHT SIDE ONLY) = 2048.03 LIN.FT.

NOTES

1) SEE SHEET ___3 FOR LEGEND.

2) FOR LIMITING STATION OF ITEM 203 LINEAR GRADING METHOD 1 OR 2 SEE SHEET 81.



(G) (E)(B)(A)

16'-0"

3/16"/FT_

STA. 2+21.96 TO STA. 5+49.00 = 327.04 LIN. FT.

 $\frac{\text{RAMP "O"}}{\text{STA. 0+39.00 TO STA. 4+50.00}} = 411 \text{ LIN.FT.}$

STA. 3+03.00 TO STA. 7+12.00 = 409 LIN.FT.

STA. 0+21.00 TO STA. 4+14.00 = 393 LIN.FT.

STA. 5+00.00 TO

16'-0"

3/16"/FT

42

RAMP "R"

STA. 3+52.64 TO STA. 5+19.20 = 166.56 LIN.FT.

STA. 1+09.87 TO STA. 3+37.01 = 227.14 LIN. FT.

STA. 5+19.20

7'-0"

1"/FT

12"

4321

10'-0"

1"/FT

STA. 1+09.87 TO STA.3+37.01 RAMP "R"

10'-0"

1'/FT

STA. 3+52.64 TO STA. 5+00.00

7'-0"

VARIES3'-0", 4'-0"

12"

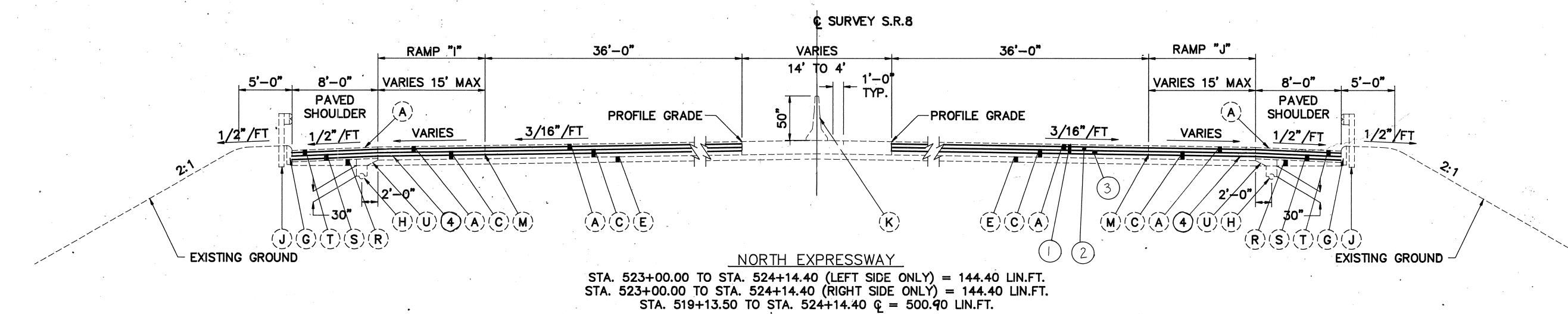
 (\mathbf{g})

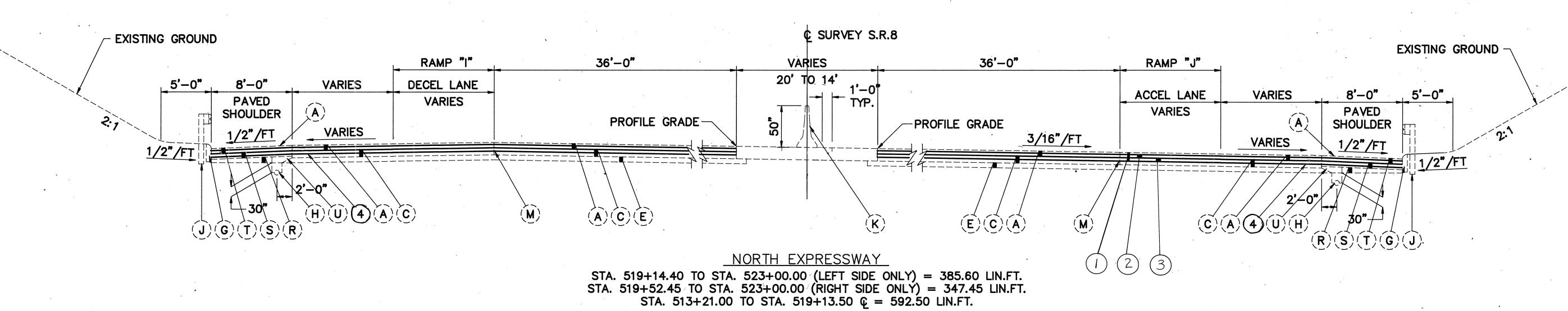
1"/FT

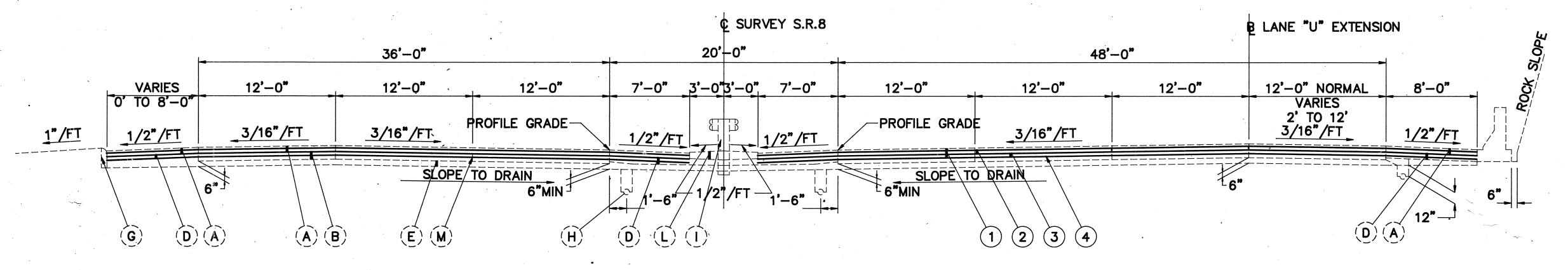
TYPICAL SECTIONS
TYPE 446

F.H.W.A. REGION 6
5 OHIO 95

SUMMIT COUNTY SUM-8-0.38A







NORTH EXPRESSWAY

STA. 445+86.99 TO STA. 453+50.00 (RIGHT SIDE ONLY) = 763.01 LIN.FT.

NOTE: BARRIER ENDS STA. 453+00

GENERAL NOTES

STATE REGION 95 OHIO

SUMMIT COUNTY SUM-8-0.38A

PROJECT DESCRIPTION

THIS PROJECT IS TO CONSIST OF. BUT NOT LIMITED TO. THE PAVEMENT PLANING OF THE EXISTING MAINLINE AND RAMPS' ASPHALT SURFACES. PARTIAL DEPTH PAVEMENT REPAIR, PARTIAL DEPTH JOINT REPAIR, LEVELING WITH 1-3/4" ITEM 446, TYPE 2 ASPHALT CONCRETE, PLACING 1-1/4" ITEM 446, TYPE I ASPHALT CONCRETE SURFACE COURSES AND LINEAR GRADING. STRUCTURE SUM-8-00.87. EAST EXCHANGE STREET BRIDGE SOUTHBOUND DECK ONLY SHALL HAVE THE EXISTING ASPHALT REMOVED. MINOR DECK REHABILITATION AND MINOR STRUCTURE REPAIRS. DAMAGED DRAINAGE STRUCTURE WILL BE REPAIRED AND THE DRAINAGE SYSTEM WILL BE CLEANED AS REQUIRED. NEW PAVEMENT MARKINGS WILL BE PLACED AS PART OF THIS PROJECT.

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING COURSE SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PREVIOUS CONSTRUCTION PLANS SHOWING THE ORIGINAL ALIGNMENT AND PROFILE GRADE ARE ON FILE FOR INSPECTION, IF NECESSARY, AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 4 OFFICE, 705 OAKWOOD STREET, RAVENNA, OHIO 44266, AS PROJECT NUMBER SUM 5-11.94, SUM 5-19.95, SUM 18R-12.10 SUM 8-1.75/1.95. THE ORIGINAL MAINLINE AND RAMPS WERE TYPICALLY OVERLAID WITH 1-1/2" ASPHALT, THE PROPOSED PAVEMENT PROFILE SHALL REMAIN 3" ABOVE THE EXISTING CONCRETE BASE AS SPECIFIED AND DETAILED ON THE PLANS WITH THE EXCEPTION OF MINOR LEVELING VARIATIONS.

FIELD OFFICE

THE FIELD OFFICE SHALL NOT BE LOCATED WITHIN THE L/A OR R/W LIMITS OF STATE ROUTE 8, I-77, I-76, OR STATE ROUTE 59.

STAGING AND STORAGE AREA

FOR SAFETY PURPOSES, NO MATERIALS OR EQUIPMENT SHALL BE STORED OR PARKED IN THE MEDIAN OR WITHIN FIFTY (50) FEET OF THE OUTSIDE EDGE OF PAVEMENT. UNLESS BEHIND EXISTING GUARDRAIL.

NO PRIVATE VEHICLES BELONGING TO THE CONTRACTOR'S EMPLOYEES AND TO ODOT PERSONNEL, PERMANENTLY ASSIGNED TO THE PROJECT, SHALL BE PARKED WITHIN THE LIMITS OF THE HIGHWAY PROJECT. ALL PARKING WILL BE DONE AT THE APPROVED CONTRACTOR'S STAGING AREA. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING TRANSPORTATION VEHICLES TO TRANSPORT PERSONNEL FROM THE STAGING AREA TO THE WORK SITE. NO GUARDRAIL SHALL BE INSTALLED BY THE CONTRACTOR FOR THE EXPRESS PURPOSE OF PROTECTING A STORAGE OR STAGING AREA.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

SANITARY SEWERS AND STORM SEWERS CITY OF AKRON SEWER MAINTENANCE 1055 HOME AVENUE AKRON, OHIO 216-375-2666

WATERLINES CITY OF AKRON 65 SOUTH HIGH STREET AKRON, OHIO 216-375-2420

ELECTRIC OHIO EDISON 76-SOUTH MAIN STREET AKRON, OHIO 216-384-4712

TELEPHONE OHIO BELL TELEPHONE COMPANY 2525 STATE ROAD CUYAHOGA FALLS, OHIO 216-922-2529

NATURAL GAS EAST OHIO GAS COMPANY 2100 EASTWOOD AVENUE AKRON, OHIO 216-497-5130

WARNER CABLE 2655 BRITTAIN ROAD AKRON, OHIO 216-633-1875

EMERGENCY PHONE NUMBERS

THE FOLLOWING PHONE NUMBERS CAN BE USED IN CASE OF AN EMERGENCY. THESE AGENCIES WILL PROVIDE INFORMATION RELATING TO CHEMICALS.

- 1. CHEMICAL TRANSPORTATION EMERGENCY CENTER 1-800-424-9300
- 2. ENVIRONMENTAL PROTECTION AGENCY HOTLINE 1-800-282-0272

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

PAVEMENT CROWN

SUPERELEVATED CURVES SHALL BE BUILT WITHOUT CROWN. THE CROWN SHALL BE WORKED OUT OF THE PAVEMENT IN THE PORTION BETWEEN THE BEGINNING OF THE TRANSITION AND THE POINT WHERE THE SUPERELEVATION EQUALS TWICE THE CROWN.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN TEN (10) FEET OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS. OR TO THE RIGHT OF WAY LINE. IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS.

ITEM SPECIAL - PRESSURE RELIEF JOINT

A QUANTITY OF 350 L.F. OF ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE A HAS BEEN PROVIDED AND SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS. A QUANTITY OF 200 L.F. OF ITEM 605 -AGGREGATE DRAINS HAS BEEN PROVIDED FOR THE PURPOSE OF DRAINING THE PRESSURE RELIEF JOINTS. AND SHALL BE USED AS DIRECTED BY THE ENGINEER.

DITCH CLEANING

THE CONTRACTOR SHALL CLEAN SECTIONS OF THE EXISTING DITCH LINE THAT ARE HEAVILY SILTED AS DIRECTED BY THE ENGINEER. THE MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 203.05. PAYMENT SHALL BE ACCORDING TO THE ACTUAL NUMBER OF LINEAR FEET OF DITCH CLEANING DONE BY THE CONTRACTOR. MEASURED ALONG THE CENTERLINE OF THE DITCH.

PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR REMOVAL AND DISPOSAL OF MATERIAL AND FURNISHING ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THIS ITEM:

ITEM 203 - DITCH CLEANOUT 2000 L.F.

NONE OF THE ABOVE WORK SHALL BE PERFORMED UNTIL AUTHORIZED IN WRITING BY THE ENGINEER.

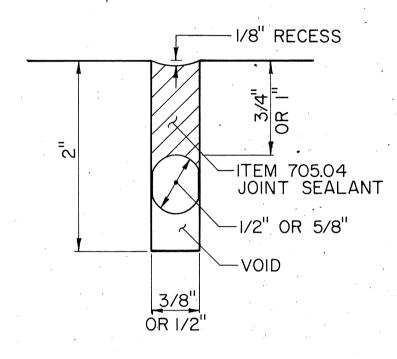
ITEM 403 - ASPHALT CONCRETE, AC-20, SPOT LEVELING

A QUANTITY OF 400 C.Y. FOR "ITEM 403 - ASPHALT CONCRETE, AC-20, SPOT LEVELING "SHALL BE USED FOR SPOT LEVELING IN WHEEL RUT AREAS, AS DIRECTED BY THE ENGINEER.

ITEM SPECIAL - SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS, 705.04 (SEE PROPOSAL NOTE)

A QUANTITY OF 36,000 LIN.FT. OF ITEM SPECIAL - SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE PROVIDED FOR USE. AS DIRECTED BY THE ENGINEER. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROPOSAL NOTE ON SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS. (SEE PROPOSAL NOTE)

SAW AND SEAL ABOVE JOINTS AND REPAIRS



TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER. FOR TEMPORARY EROSION AND SEDIMENT CONTROL **MEASURES:**

100 EACH 207 STRAW OR HAY BALES 659 COMMERCIAL FERTILIZER 0.03 TON. 659 REPAIR SEEDING AND MULCHING <u>571</u> S.Y. 2 M. GAL.

ITEM 203. LINEAR GRADING

659 WATER

LINEAR GRADING WORK LISTED AS EITHER METHOD 1 OR METHOD 2 IS DESCRIBED WITH DETAILS. CALCULATIONS AND QUANTITIES ON 81 ROADWAY DETAILS. THIS WORK SHALL BE COORDINATED WITH ALL OTHER WORK ACTIVITIES WITHIN THIS PLAN AND SHALL BE SUBJECT TO THE REQUIREMENTS AND SPÉCIFICATIONS THEREOF.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT. AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE, AND THE CONTRACTOR. ALONG WITH LOCAL REPRESENTATIVES. SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE PERTINENT SPECIAL ITEMS OF THE CONTRACT.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES AND/OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THIS PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVÍSIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT OTHER PROJECT MAY BE ONGOING IN AREAS IMMEDIATELY ADJACENT TO THE PROJECT LIMITS OF THIS PROJECT. IF WORK IS UNDERWAY ON AN ADJACENT PROJECT OR PROJECTS. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE ADJACENT PROJECT OR IN ACCORDANCE WITH 105.07, THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS, A MUTUALLY ACCEPTABLE WORK SCHEDULE, SUBJECT TO THE APPROVAL OF THE ENGINEER. CONTRACTOR SHALL RECEIVE DAILY APPROVAL FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREAS, OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER.

COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

ITEM SPECIAL-PIPE CLEANOUT

EXISTING SEWERS SHALL BE CLEANED OUT AS DIRECTED BY THE THIS WORK SHALL CONSIST OF THE REMOVAL OF ALL MATERIAL FROM THE INSIDE OF THE EXISTING PIPE AND RELATED INLETS OR BASINS. THE MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 203.05. LIMITS OF PIPE CLEANING SHALL EXTEND TO THE FIRST INLET DOWNSTREAM BEYOND THE PROJECT LIMITS.

THE LOCATION, TYPE, DEPTH AND SIZE OF ALL EXISTING PIPES ARE SHOWN AS NEARLY EXACT AS THE AVAILABLE INFORMATION WILL PERMIT THE STATE OF OHIO WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS IN SIZES ENCOUNTERED DURING CONSTRUCTION. PAYMENT FOR ANY WORK REQUIRED TO DETERMINE EXACT SIZES AND LOCATIONS SHALL BE INCLUDED IN THE PRICE BID PER LINEAL FOOT FOR "ITEM SPECIAL-PIPE CLEANOUT". THE FOOTAGE TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF LINEAR FEET OF EXISTING PIPE CLEANED OUT, AS DIRECTED BY THE ENGINEER. PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR REMOVAL AND DISPOSAL OF MATERIAL FOUND AND FURNISHING OF ALL LABOR. EQUIPMENT. TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

THE FOLLOWING QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR THIS ITEM:

ITEM SPECIAL-PIPE CLEANOUT, 12" 750 L.F. ITEM SPECIAL-PIPE CLEANOUT, 15" 1000 L.F. <u>250</u> L.F. ITEM SPECIAL-PIPE CLEANOUT, 18"

NONE OF THE ABOVE DESCRIBED WORK SHALL BE PERFORMED UNTIL AUTHORIZED IN WRITING BY THE ENGINEER.

ITEM 604 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN

THIS WORK SHALL BE PERFORMED AFTER ITEM 202 - PIPE ČLEANOUT AND ITEM 254 - PAVEMENT PLANING HAVE BEEN PERFORMED. THE ENGINEER WILL INSPECT THE EXISTING APPURTENANCE AND DETERMINE THE REQUIRED ADJUSTMENT NECESSARY. THE EXISTING FRAMES SHALL BE CAREFULLY REMOVED AND CLEANED, THEN RESET IN A BED OF CONCRETE OR MORTAR TO AN ELEVATION AS DIRECTED BY THE ENGINEER.

A QUANTITY HAS BEEN ESTIMATED FOR THE ANTICIPATED NUMBER OF CATCH BASINS REQUIRING ADJUSTMENT AND IS LISTED BELOW:

ITEM 604 CATCH BASIN RECONSTRUCTED TO GRADE, 8 EACH AS PER PLAN

ITEM 202 MANHOLES, CATCH BASINS, AND INLETS REMOVED OR ABANDONED

THIS WORK SHALL BE PERFORMED AFTER ITEM 202 - PIPE CLEANOUT AND ITEM 203 DITCH CLEANOUT HAVE BEEN PERFORMED. THE ENGINEER WILL INSPECT THE EXISTING APPURTENANCE AND DETERMINE IT'S SALVAGEABILITY. IF THE APPURTENANCE IS NOT SALVAGEABLE, IT WILL BE REMOVED OR ABANDONED AS DIRECTED BY THE ENGINEER. THE CASTING SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY CITY FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 202 ITEM LISTED BELOW:

ITEM 202 CATCH BASIN OR INLET ABANDONED 2 EACH ITEM 202 CATCH BASIN OR INLET REMOVED 2 EACH 1 EACH ITEM 202 MANHOLE ABANDONED

GENERAL NOTES

F.H.W.A. REGION STATE PROJECT 8
5 OHIO 95

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ITEM 407 - TACK COAT, USING SS924 AS PER PLAN

THE TACK COAT AND COVER AGGREGATE OPERATION SHALL BE DETERMINED AS PER SPECIFICATION 407.05. PLAN QUANTITIES INDICATE AVERAGE APPLICATION RATES OF 0.075 GALLONS PER SQUARE YARD OF TACK COAT.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY OF BUILDING PORTIONS OF THIS PROJECT UNDER TRAFFIC AND CONSTRUCTING THE FULL PAVEMENT WIDTH IN STAGES, EXTREME CARE SHALL BE TAKEN TO PREVENT THE CONSTRUCTION OF A BUTT JOINT ON CENTERLINE IN THE BASE COURSES. LONGITUDINAL JOINTS SHALL BE LAPPED AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-5.

MEDIAN PAVEMENT ON APPROACH SLABS

THE WIDTH AND TYPE OF MEDIAN PAVEMENT ON APPROACH SLABS SHALL BE TRANSITIONAL FROM THE STANDARD SECTION USED ON THE APPROACH PAVEMENT TO THE SECTION USED ON THE BRIDGE WITHIN THE LIMITS OF THE APPROACH SLAB.

<u>ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT</u>

A QUANTITY OF <u>6620</u> S.Y. FOR "ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT" HAS BEEN PROVIDED FOR USED AS DIRECTED BY THE ENGINEER. THE AREAS ARE TO BE REMOVED IN ACCORDANCE WITH ITEM 202 OF THE SPECIFICATIONS AND SHALL BE OUTLINED BY SAWING FULL DEPTH OF WHICH A QUANTITY OF <u>8000</u> L.F. FOR "ITEM 252 - FULL DEPTH PAVEMENT SAWING" HAS BEEN PROVIDED FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR

A QUANTITY OF <u>9750</u> S.Y. FOR "ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR" HAS BEEN PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE MINIMUM DEPTH OF REMOVAL SHALL BE 4".

ITEM 825 - CRACK SEALING, TYPE 1

A QUANTITY OF 12000 LBS. OF ITEM 825 - CRACK SEALING, TYPE I SHALL BE PROVIDED FOR USE, AS DIRECTED BY THE ENGINEER.

ITEM 304 - AGGREGATE BASE, AS PER PLAN

MATERIALS FURNISHED FOR THIS ITEM SHALL EXCLUDE ALL SLAG EXCEPT GRANULATED SLAG OR CRUSHED AIR-COOLED BLAST FURNACE SLAG. (THE MAXIMUM TOTAL PERCENT PASSING THE NO. 200 SIEVE FOR 304 SHALL BE 8 PERCENT AS OPPOSED TO THE 13 PERCENT SHOWN IN 304.02.)

AT THE CONTRACTOR'S OPTION, CRUSHED CONCRETE OBTAINED FROM CONCRETE PAVEMENT ON THIS PROJECT OR PROJECTS CONSTRUCTED UNDER ODOT SPECIFICATIONS MAY BE USED FOR ITEM 304 AGGREGATE BASE. ALL CRUSHED CONCRETE PASSING THE NO. 4 SIEVE SHALL BE REPLACED BY MATERIAL OBTAINED FROM APPROVED SOURCES. THE RECYCLED CONCRETE PAVEMENT SHALL NOT CONTAIN MORE THAN 1.0% RECYCLED ASPHALT PAVEMENT. ALL OTHER REQUIREMENTS OF 304 AND 703.04 SHALL APPLY.

WATERING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09:

ITEM 659 - WATER

25 M.GAL.

DUST CONTROL

IN THE CASE OF SAND BLASTING AND/OR THE CLEANING OF BRIDGE DECKS PRIOR TO PLACEMENT OF THE OVERLAY AND PAVEMENT GRINDING, THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ADDITIONAL WORK, SUPPLY ADDITIONAL EQUIPMENT OR ERECT TEMPORARY PROTECTIVE SCREENING TO PROTECT ADJACENT TRAFFIC AND PROPERTY FROM DUST ORIGINATING FROM THESE OPERATIONS.

THE CONTRACTOR SHALL SUBMIT HIS METHOD OF CONTROLLING DUST FOR APPROVAL TO THE ENGINEER AND THE CITY OF AKRON AT LEAST ONE (1) WEEK PRIOR TO BEGINNING WORK. THESE PROVISIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE PROJECT. THIS REQUIREMENT IS IN ADDITION TO THE PROVISIONS OF SECTION 107.12 OF THE SPECIFICATIONS AND SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATION TO PROTECT AND RESTORE PROPERTY FROM HIS OTHER OPERATIONS.

N CONJENCTION WITH AND IN ADDITION TO THE PROVISIONS OF 401.10, HE SPREADING EQUIPMENT USED FOR PLACING THE 446 COORSES ON THE AINLINE AND RAMPS ON THIS PROJECT STALL MAVE ACTOMATIC CONTROL YSTEMS WHICH MAINTAIN THE SCRIED OR STRIKEOFF IN A CONSISTENT OSITION RELATIVE TO PROFILE IND CROSS-SLOPE REFERENCES. THE EFERENCES SHALL BE SUCH THAT CONTROL OF THE SCREED OR STRIKEOFF OSITION IS REASONABLY INDEPENDENT OF IRREGULARITIES IN THE NDERLYING SURFACE AND OF SPREADER OPERATION.

HE AUTOMATIC CONTROL SYSTEM, PROPOSED FOR USE, SHALL BE SUBJECT O APPROVAL BY THE ENGINEER. SHOULD THE SYSTEM IN OPERATION ECOME ERRATIC OR INOPERATIVE, ACCEPTABLE MEASURES SHALL BE

UNDERCUTTING SUBGRADE AND SUBBASE

IN PAVEMENT REPLACEMENT AREAS, THE CONTRACTOR SHALL REMOVE THE SUBBASE, AS REQUIRED BY THE ENGINEER AND BACKFILL WITH ITEM 304, AS PER PLAN. FILTER FABRIC, TYPE D, 712.09 SHALL BE PLACED ON SUBGRADE, AT LOCATIONS WHERE EXISTING SUBBASE MATERIAL WAS REMOVED. NO REMOVAL OF THE EXISTING SUBGRADE SHALL BE DONE. AGGREGATE DRAINS SHALL BE PLACED, AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE WITH THIS ITEM:

ITEM 304 - AGGREGATE BASE, AS PER PLAN
ITEM 605 - AGGREGATE DRAINS, AS PER PLAN
ITEM SPECIAL - FILTER FABRIC, TYPE D, 712.09
200 C.Y.
200 C.Y.
200 C.Y.
200 C.Y.
200 C.Y.

ITEM 605 UNDERDRAINS, AND ITEM 603 6" CONDUIT

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 603 - 6" CONDUIT, TYPE F, 707.17 NONPERFORATED, ASTM 3034 SDR35 OR SS931 250 L.F.

ITEM 605 - 6" UNCLASSIFIED UNDERDRAINS 750 L.F.

ITEM 605 - AGGREGATE DRAINS, AS PER PLAN

THE BACKFILL MATERIAL, FOR AGGREGATE DRAINS WITH THE ABOVE DESCRIPTION, SHALL BE EXCLUSIVELY NO. 8 NATURAL AGGREGATE OR AIR-COOLED BLAST FURNACE SLAG. NO SAND OR OTHER TYPES OF SLAG WILL BE PERMITTED.

FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT

(10' MIN.)

EXISTING CONCRETE

OF 304 (MIN.)

EXISTING SUBBASE

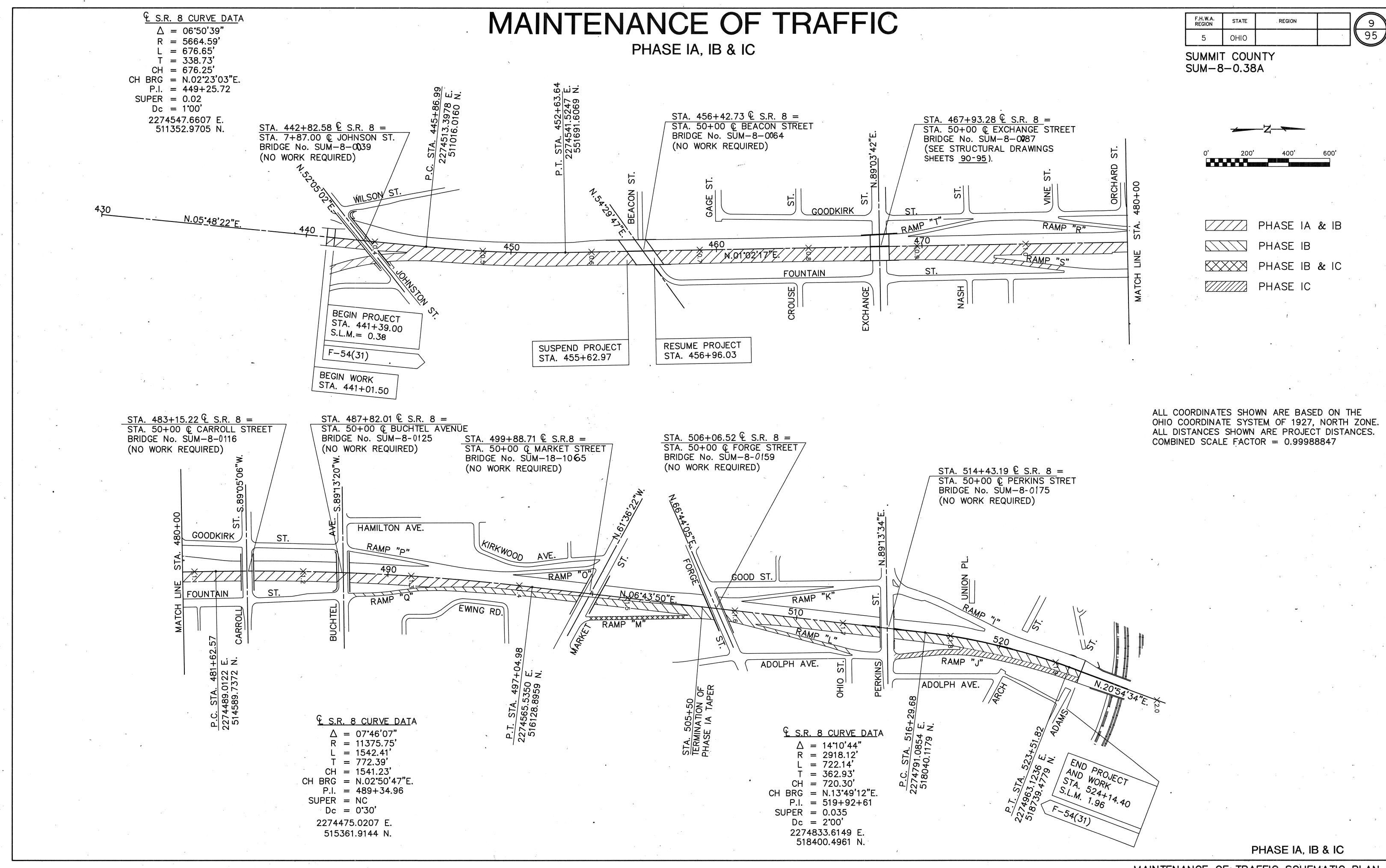
PAVEMENT

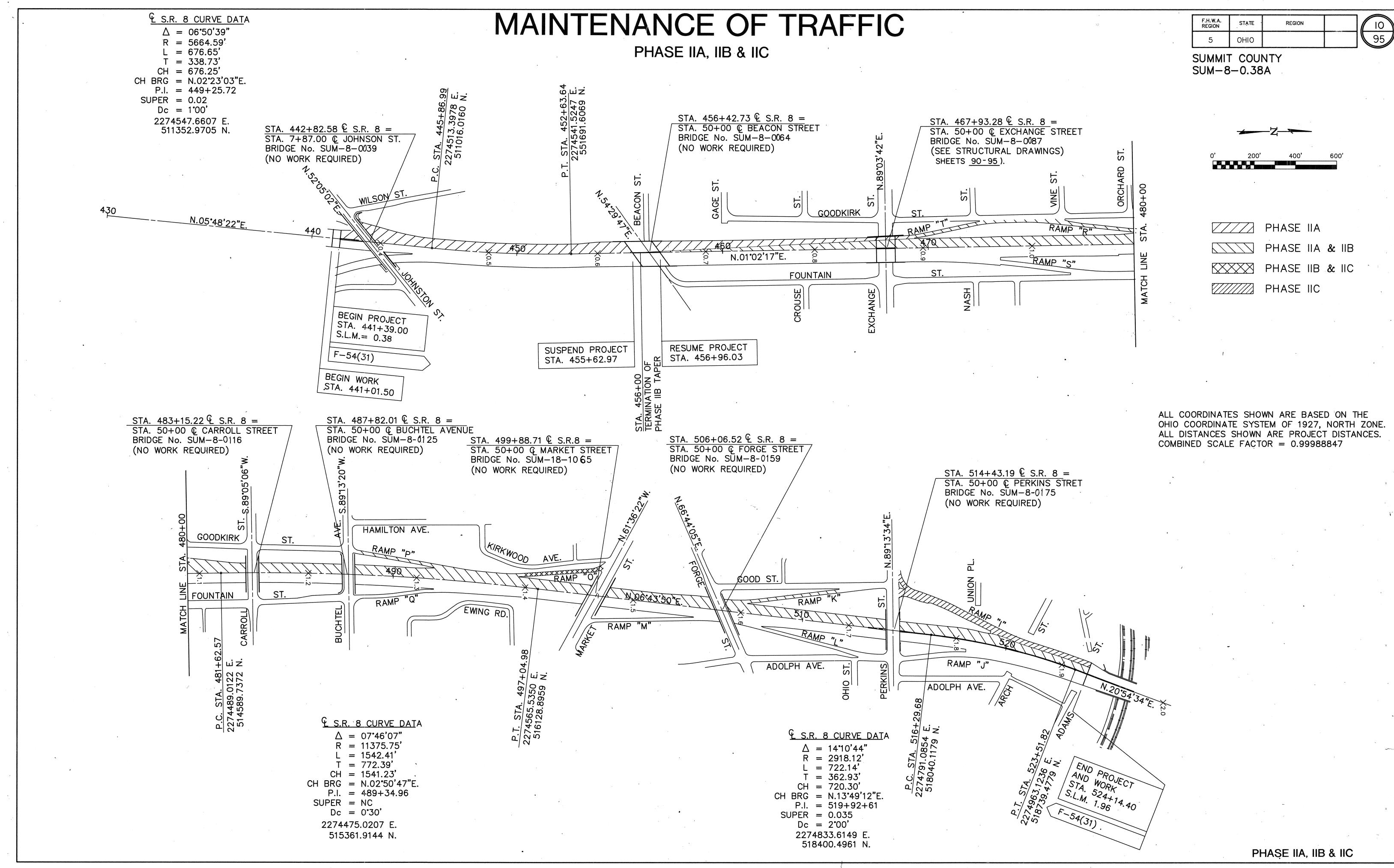
TO REPLACE EXISTING

SUBBASE AS REQUIRED

BY THE ENGINEER.

NOTE: THE MINIMUM REPAIR LENGTH (L) FOR THIS
PROJECT SHALL BE 10'-0". THE ESTIMATED
QUANTITIES REFLECT THIS 10'-0" LENGTH
FOR EACH REPAIR.





MAINTENANCE OF TRAFFIC-GENERAL NOTES & DETAILS

F.H.W.A. REGION STATE PROJECT 11
5 OHIO 95

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MAINTENANCE OF TRAFFIC

THE FOLLOWING CONDITIONS AND RESTRICTIONS SHALL BE ENFORCED AND WILL BE ADHERED TO DURING THE PROJECT. NO DEVIATION WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF THE DIRECTOR.

- 1. THE CONTRACTOR SHALL GIVE THE ENGINEER AND THE DISTRICT TRAFFIC ENGINEER A MINIMUM OF EIGHTEEN (18) DAYS NOTICE PRIOR TO STARTING WORK.
- 2. THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL, OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC CONTROL DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE, SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRECONSTRUCTION MEETING. THE DESIGNATED INDIVIDUALS SHALL HAVE NO OTHER CONSTRUCTION RELATED DUTIES. THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BIDDER ITEM 614 MAINTAINING TRAFFIC.
- 3. THE CONTRACTOR SHALL NOTIFY THE CITY OF AKRON T.M.P. COORDINATOR AND THE ENGINEER OF THE START OF CONSTRUCTION FOUR (4) WEEKS PRIOR TO THE BEGINNING OF SAID CONSTRUCTION. DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF AKRON T.M.P. COORDINATOR AND THE ENGINEER OF ANY LANE CHANGES, RAMP CLOSURES, END OF CONSTRUCTION, ETC., THREE (3) WEEKS PRIOR TO THE CHANGE OF CONDITION OCCURRING. THIS INFORMATION WILL BE DISSEMINATED TO THE MAJOR LOCAL MEDIA, POLICE AND FIRE PROTECTION AGENCIES, ETC., BY THE CITY OF AKRON T.M.P. COORDINATOR.
- 4. CONTRACTOR'S EQUIPMENT-OPERATION AND STORAGE: THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC, WHERE PRACTICAL. A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST 1 AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY, OTHERWISE, THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA; THE LOCATIONS OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER, WHEN PARKING ALONG THE HIGHWAY. THE EQUIPMENT SHALL BE PARKED EITHER 50 FEET FROM THE EDGE OF THE PAVEMENT OR 6-1/2 FEET BEHIND EXISTING OR PROPOSED GUARDRAIL AFTER PLACEMENT WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. NO EQUIPMENT SHALL BE PARKED IN

THE MEDIAN OF THE HIGHWAY UNLESS IT IS STORED BEHIND A PORTABLE CONCRETE BARRIER. ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA.

5. <u>STAGING AND STORAGE</u>:

- A. NO PRIVATE VEHICLES (BELONGING TO THE CONTRACTOR'S EMPLOYEES OR TO ODOT PERSONNEL PERMANENTLY ASSIGNED TO THE PROJECT) SHALL BE PARKED WITHIN THE L/A LIMITS OF THE HIGHWAY PROJECT. ALL PARKING WILL BE DONE AT THE APPROVED CONTRACTOR'S STAGING AREA. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING SHUTTLE VEHICLES TO TRANSPORT CONTRACTOR PERSONNEL FROM THE STAGING AREA TO THE WORK SITE.
- B. A STAGING AREA SHALL BE APPROVED BY THE PROJECT ENGINEER AND THE CITY OF AKRON.

6. PROTECTION OF WORK AREAS:

- A. OPEN TRENCHES SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH BARRICADES AT ALL TIMES. PLACEMENT OF BASE AND PAVEMENT SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATION. THE LENGTH OF OPEN TRENCH SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.
- B. ALL TRAFFIC CONTROL DEVICES, WARNING AND INFORMATIONAL SIGNS REQUIRED INSIDE THE WORK LIMITS, SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR. COST OF THIS TO BE INCLUDED IN THE PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.
- THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY FLAGS, WORKERS, BARRICADES, SIGNS, SIGN SUPPORTS, BREAKAWAY BEAM CONNECTIONS, CONCRETE FOR EMBEDDED FOUNDATIONS, AND ALL SHALL BE UTILIZED IN CONFORMANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, LATEST REVISION. THIS WILL ALSO INCLUDE SOME MODIFICATIONS OF EXISTING OVERHEAD SIGNS. WHEN NO LONGER NECESSARY, THE CONTRACTOR SHALL RESTORE SIGNS TO ORIGINAL LEGENDS, AND REMOVE ALL GROUND MOUNTED SIGNS AND SUPPORTS THAT WERE ERECTED AS PART OF THIS WORK. ALL WORK INCLUDING THE FURNISHING, ERECTING, MAINTAINING AND REMOVAL OF SIGNS, SUPPORTS AND LEGEND REVISIONS WILL BE INCLUDED WITH THE ITEM 614 MAINTAINING TRAFFIC.
- DURING THE WINTER MONTHS (NOVEMBER 15 TO MARCH 15), CONSTRUCTION SHALL BE HALTED AND THE PROJECT SHALL HAVE ALL LANES, STRUCTURES AND RAMPS OPEN TO TRAFFIC. ALL SIGNS AND OVERLAYS OVER GUIDE SIGNS WHICH ARE USED TO DETOUR TRAFFIC SHALL ALSO BE REMOVED DURING THE WINTER MONTHS.
- E. TEMPORARY PAVEMENT MARKINGS SHALL BE AS PER STANDARD DRAWINGS MT-99.10 DATED 11/14/86.
- F. DURING THE PLACEMENT OF TEMPORARY PAVEMENT MARKINGS, ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
- G. THE CONTRACTOR SHALL INSTALL AND SUBSEQUENTLY RESET FOR EACH CONSTRUCTION PHASE ALL TRAFFIC CONTROL DEVICES NECESSARY FOR MAINTAINING TRAFFIC DURING OFF PEAK TRAFFIC PERIODS. (7:00 PM TO 6:00 AM WEEKDAYS OR ON WEEKENDS 7:00 PM FRIDAY TO 6:00 AM MONDAY).
- H. THE TYPE 'A' FLASHING BARRICADE WARNING LIGHTS SHALL BE MOUNTED ON NOTED SIGNS AT ALL TIMES, AND SHALL BE INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.
- 7. AT LEAST ONE NORTHBOUND EXIT RAMP AND ENTRANCE RAMP AND ONE SOUTHBOUND EXIT RAMP AND ENTRANCE RAMP SHALL BE OPEN AT ALL TIMES. RAMPS 'K', 'L', 'M', 'O', 'P', 'Q', 'R', 'S' AND 'T' SHALL HAVE ALL CONSTRUCTION COMPLETED INCLUDING PERMANENT SIGNING AND STRIPING BEFORE BEING REOPENED TO TRAFFIC.

THE CITY WILL BE RESPONSIBLE FOR THE ERECTION AND REMOVAL OF TEMPORARY SIGNS ON SURFACE STREETS ADVISING MOTORISTS OF ALTERNATE ROUTES DURING THE TIME RAMPS ARE TEMPORARILY CLOSED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ERECTION AND REMOVAL OF BARRICADES ON THE RAMPS WHICH ARE TEMPORARILY CLOSED AS INDICATED IN THESE PLANS. THE TRAFFIC SAFETY INSPECTOR SHALL NOTIFY THE CITY THREE WORKING DAYS PRIOR TO WHEN THE TEMPORARY RAMP CLOSURE IS IN PLACE OR IS TO BE REMOVED.

- 8. NIGHTTIME LANE RESTRICTIONS SHALL NOT BE PERMITTED UNLESS THE CONTRACTOR IS EITHER REMOVING PAVEMENT MATERIAL OR PLACING NEW PAVEMENT MATERIAL. NIGHTTIME LANE RESTRICTIONS SHALL ALSO BE PERMITTED AS REQUIRED FOR THE CURING OF JOINT REPAIR MATERIALS.
- 9. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE-HALF HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS OR LANE REDUCTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET.
- 10. IN ADDITION TO THE REQUIREMENTS OF 614 WORK ZONE PAVEMENT MARKINGS, MT-99.10 AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH TEMPORARY PAVEMENT MARKINGS) ALL LANE LINES, EDGE LINES OR CHANNELIZING LINES THAT WERE REMOVED DURING THE PAVEMENT REMOVAL OPERATIONS, QUANTITIES FOR SUCH REPLACEMENT ARE CARRIED, AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

- 11. A QUANTITY OF 1200 C.Y. OF 404 BITUMINUOUS CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT OR SHOULDERS PRIOR TO RESURFACING, AS DIRECTED BY THE ENGINEER. QUANTITY IS CARRIED TO SHEET 73 SS921 HPM MAY BE USED AS AN ALTERNATE IF 404 IS NOT AVAILABLE.
- 12. ITEM SPECIAL LAW ENFORCEMENT OFFICER WITH PATROL CAR: THE CONTRACTOR SHALL PROVIDE THE SERVICE OF LAW ENFORCEMENT OFFICERS (L.E.O.) WITH A PATROL CAR, AT THE ENGINEER'S REQUEST, FOR THE PURPOSE OF CONTROLLING THROUGH TRAFFIC. THE L.E.O. WITH A PATROL CAR SHALL BE UTILIZED DURING INSTALLATION AND REMOVAL OF TRAFFIC CONTROL DEVICES FOR LANE CLOSURES AND AS AUTHORIZED BY THE ENGINEER.

INFORMATION REGARDING ARRANGEMENTS AND PAYMENTS BY THE CONTRACTOR FOR THE L.E.O. MAY BE OBTAINED BY CONTACTING OHIO HIGHWAY PATROL, 660 EAST MAIN STREET, COLUMBUS, OHIO, TELEPHONE: 614-466-2300.

IF AFTER CONTACTING THE OHIO HIGHWAY PATROL, IT IS DETERMINED THAT THEY CANNOT SUPPLY THE L.E.O., THEN AN AUTHORIZED MUNICIPAL OR COUNTY POLICE OFFICER, EQUIPPED WITH A MARKED AND FLASHER-LIGHT EQUIPPED OFFICIAL POLICE OR PATROL CAR SHALL BE PROVIDED.

THIS REQUIREMENT DOES NOT PRECLUDE THE CONTRACTORS USE OF AN L.E.O. FOR OTHER PURPOSES OF CONTROLLING TRAFFIC AS APPROVED BY THE ENGINEER. THE L.E.O. SHALL BE CONSIDERED AN EMPLOYEE OF THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER ACTIONS. ALTHOUGH EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THE L.E.O. PLACEMENT AND HIS/HER ACTIVITIES. PAYMENT SHALL BE AT THE UNIT PRICE BID FOR THE ACTUAL NUMBER OF HOURS FOR ITEM SPECIAL—LAW ENFORCEMENT OFFICER WITH PATROL CAR.

ITEM SPECIAL-LAW ENFORCEMENT OFFICER WITH PATROL CAR 1440 HOURS

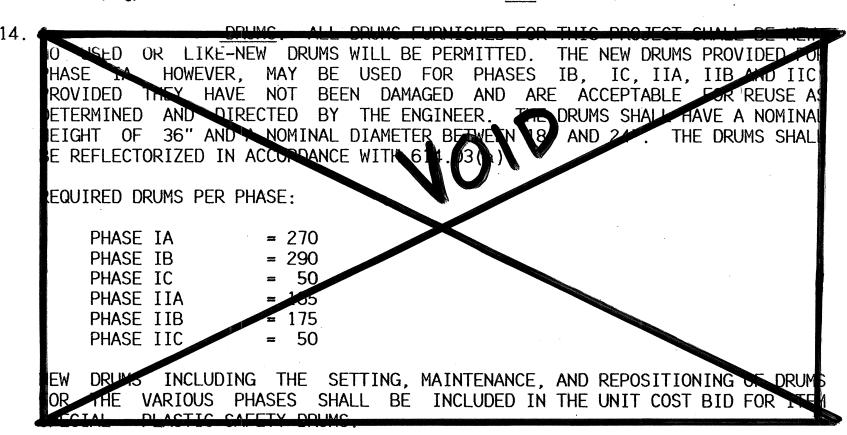
13. ITEM SPECIAL - REPLACEMENT SIGNS: FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLAN, SPECIFICATION, AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE BID PRICE PER SQUARE FOOT FOR ITEM SPECIAL - REPLACEMENT SIGNS AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED SIGNS, HARDWARE, AND SUPPORTS AND PROVIDING NECESSARY REPLACEMENT HARDWARE, SUPPORTS, NECESSARY HARDWARE AND MISCELLANEOUS ITEMS NEEDED TO ERECT THE REPLACEMENT SIGN. REPLACEMENT SIGNS SHALL BE NEW. SUPPORTS AND HARDWARE MAY BE SALVAGED SUBJECT TO THE APPROVAL OF THE ENGINEER.

AN ESTIMATED QUANTITY OF ITEM 614 - REPLACEMENT SIGNS HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPEC- REPLACEMENT SIGNS

160 SQ. FT.



MAINTENANCE OF TRAFFIC-GENERAL NOTES & DETAILS

F.H.W.A. REGION STATE PROJECT 12
5 OHIO 95

SUMMIT COUNTY SUM-8-0.38A

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15.	ITEM SPECIAL - REPLACEMENT DRUMS: DRUMS FURNISHED BY THE CONTRACTOR IN	
	ACCORDANCE WITH THE REQUIREMENT OF THE PLAN, SPECIFICATION, AND PROPOSAL	
	WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE	
	CONTRACTOR SHALL BE REPLACED WITH NEW DRUMS WHEN ORDERED BY THE ENGINEER	
,	AND PAID FOR UNDER ITEM SPECIAL - REPLACEMENT DRUMS. PAYMENT FOR EACH NEW	
	DRUM SHALL INCLUDE (1) THE COST OF REMOVING AND DISPOSING OF THE DAMAGED	
	DRUM AND (2) PROVIDING, MAINTAINING, REPOSITIONING AND SUBSEQUENTLY	
	DEMOVING THE DEDIACEMENT ODIM IN ACCORDANCE WITH THE CONTRACT DEGLIDEMENTS	

AN ESTIMATED QUANTITY OF ITEM SPECIAL - REPLACEMENT DRUMS HAS BEEN CARRIED TO THE MAINTENANCE OF TRAFFIC SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL - REPLACEMENT DRUMS

100 EACH

16. ITEM 614 - WORK ZONE

SIGNS

FOR THE ORIGINAL DRUMS. NO USED OR LIKE NEW DRUMS WILL BE PERMITTED

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENT OF THE PLAN, SPECIFICATIONS, AND PROPOSAL WHICH ARE NEEDED FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE FURNISHED WHEN ORDERED BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE BID PRICE PER SQUARE FOOT FOR ITEM 614 WORK ZONE SIGN AND SHALL INCLUDE THE COST OF PROVIDING NECESSARY HARDWARE, SUPPORTS, SIGNS, LABOR AND INCIDENTALS NEEDED TO ERECT SIGNS.

AN ESTIMATED QUANTITY FOR ITEM 614 WORK ZONE GENERAL SUMMARY:

SIGNS CARRIED TO THE

ITEM 614 - WORK ZONE

SNS

200 SQ. FT.

- 17. METHOD OF PAYMENT: PAYMENT FOR THE MAINTENANCE OF TRAFFIC ITEMS, UNLESS SPECIFIED SEPARATELY, SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS TO COMPLETE THE WORK AS DETAILED IN THE PLANS.
 - ITEM 301 BITUMINOUS AGGREGATE BASE, AS PER PLAN, 160 C.Y.
 - ITEM 404 BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC, 1200 C.Y. (CARRIED TO SH. 11)
- ITEM 614 TEMPORARY LANE LINES, CLASS I, 642 PAINT 6.70 MILES
- ITEM 614 TEMPORARY CHANNELIZING LINES, CLASS I, 642 PAINT 1560 L.F.
- ITEM 614 TEMPORARY EDGE LINES, CLASS I WHITE, 642 PAINT 3.82 MILES
- ITEM 614 TEMPORARY EDGE LINES, CLASS I YELLOW, 642 PAINT 3.81 MILES
- ITEM 614 TEMPORARY STOP LINE, CLASS I, 642 PAINT, 20 L.F.
- ITEM 614 TEMPORARY CROSSWALK LINE, CLASS I, 642 PAINT, 65 L.F.
- ITEM 614 TEMPORARY LANE ARROW, CLASS I, 642 PAINT, 2 EA.
- ITEM 614 TEMPORARY WORD ON PAVEMENT, 72", CLASS I, 642 PAINT, 1 EA.
- ITEM 614 WORK ZONE

SIGNS <u>200</u> SQ. FT.

ITEM 614 - MAINTAINING TRAFFIC

LUMP SUM

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR 1440 HRS-(CARRIED TO 5H. 11)

ITEM SPEC. - REPLACEMENT DRUMS

100 EA.

ITEM SPEC. - REPLACEMENT SIGNS

160 SQ. FT.-(CARRIED TO 5H.11)

ALL OTHER WORK REQUIRED FOR TRAFFIC MAINTENANCE, EXCEPT PROVIDING LAW ENFORCEMENT OFFICERS, SHALL BE INCLUDED WITH PAYMENT FOR ITEM 614, MAINTAINING TRAFFIC.

18. ALTERNATE MAINTENANCE OF TRAFFIC PLANS

THE CONTRACTOR MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING BY THE ODOT DISTRICT CONSTRUCTION ENGINEER AND THE CITY OF AKRON.

20. NON WORKING DAYS

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

NEW YEARS DAY
MEMORIAL DAY
FOURTH OF JULY WEEKEND
(6:00 A.M. JULY 3RD TO
9:00 P.M. JULY 6TH)

LABOR DAY
THANKSGIVING DAY
CHRISTMAS DAY

DAY OF WEEK

TIMES ALL LANES MUST

BE OPEN TO TRAFFIC

FULL CLOSURES PERMITTED

	T.
SUNDAY	FULL CLOSURES PERMITTED ALL DAY
MONDAY	6:00 A.M. TO 6:00 P.M.
TUESDAY	6:00 A.M. TO 6:00 P.M.
WEDNESDAY	6:00 A.M. TO 6:00 P.M.
THURSDAY	6:00 A.M. TO 6:00 P.M.
FRIDAY	6:00 A.M. TO 6:00 P.M.
SATURDAY	FULL CLOSURES PERMITTED ALL DAY
	l ,

THERE SHALL NOT BE ANY EXTENSIONS DUE TO WEATHER OR MATERIAL DELAYS WHATSOEVER.

SHALL THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

- 21. TRAFFIC SHALL NOT BE CROSSED OVER THE MEDIAN AT ANY TIME.
- 22. IN AREAS OF LANE CLOSURES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING THE EXISTING SHOULDER NEXT TO THE TRAVEL ED LANE TO AN ELEVATION NOT MORE THAN ONE (1) INCH BELOW EXISTING PAVEMENT ELEVATION AND MAINTAINING THE SHOULDERS IN A SAFE CONDITION FOR THE DURATION OF THE PROJECT.
- 23. AT 6:00 A.M., AT THE COMPLETION OF WORK FOR THE NIGHT, ALL DRUMS, BARRICADES, SIGNS, EQUIPMENT, VEHICLES, MATERIALS, L.E.O.'S, WORKERS AND ALL ITEMS RELATED TO THE PERFORMANCE AND EXECUTION OF THE WORK SHALL HAVE ALREADY BEEN REMOVED AND THE CLASS I PAINT STRIPING ALREADY APPLIED, AND THE ROADWAY. WITH ALL LANES, OPENED TO FULL TRAFFIC.
- 24. AT THE COMPLETION OF EACH WORK PERIOD, I.E., NIGHT OR WEEKEND, ALL STRIPING MUST HAVE ALREADY BEEN APPLIED, CONTINUOUS WITH THE ADJACENT SECTIONS. ALL STRIPING AND MARKING SHALL BE CLASS I, PAINT, INSTALLED AND PAID FOR AS PER ITEM 614. ALL TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL MARKINGS; I.E., STRIPING, SHALL HAVE BEEN APPLIED TO THE ROADWAY SURFACE PRIOR TO THE RE-OPENING OF ANY PORTION OF THE EXPRESSWAY CLOSED FOR ANY PARTICULAR PHASE OF THE WORK. AT NO TIME WILL ANY CLOSED PORTION OF THE EXPRESSWAY BE RE-OPENED WITHOUT COMPLETE PAVEMENT MARKINGS, WHETHER IT IS THE MILLED PORTLAND CEMENT CONCRETE PAVEMENT SURFACE, THE INTERMEDIATE LEVELLING COURSE OR THE WEARING SURFACE COURSE.

25. LIGHTS AND SIGNS AT ADJACENT ROAD INTERSECTIONS

THE CONTRACTOR SHALL, IN ADDITION TO THE GENERAL REQUIREMENTS OF ITEM 614 ON THE PROJECT, PERFORM THE FOLLOWING:

PROVIDE, ERECT, AND MAINTAIN STANDARD 48' X 30' SIZE "ROAD CLOSED" SIGN SUPPORTS, AND LIGHTS AT THE FOLLOWING LOCATIONS DURING PERIOD(S) IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

LOCATION	DESCRIPTION	PHASE(S)
RAMP "R"	CENTRAL INTERCHANGE, 76 EASTBOUND TO S.R. 8 NORTHBOUND	IA, IB
RAMP "U"	CENTRAL INTERCHANGE, 76 WESTBOUND TO S.R. 8 NORTHBOUND	IA, IB
S.R. 8	MAINLINE, NORTHBOUND LANE STA 422+85	IA, IB
RAMP "M"	EAST MARKET STREET ENTRANCE RAMP TO S.R. 8 NORTHBOUND	IB, IC
"J"	PERKINS STREET ENTRANCE RAMP TO S.R. 8 NORTHBOUND	IC
S.R. 8	MAINLINE SOUTHBOUND LANE STA 519+10	IIA, IIB
RAMP "K"	PERKINS STREET ENTRANCE RAMP TO S.R. 8 SOUTHBOUND	IIA, IIB
RAMP "O"	EAST MARKET STREET ENTRANCE RAMP S.R. 8 SOUTHBOUND	IIA, IIB, IIC
RAMP "T"	GOODKIRK STREET TO S.R. 8 SOUTHBOUND	IIA

SIGN SUPPORTS AND LIGHTS FOR "ROAD CLOSED" SIGNS SHALL BE AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR PROVIDING, ERECTING, MAINTAINING, AND REMOVING LIGHTS, SIGNS, AND SIGN SUPPORTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

26. THE CITY OF AKRON WILL ALLOW TRAFFIC ON THE EXPOSED CONCRETE PAVEMENT DURING THE HOURS OF 6:00 A.M. TO 7:00 P.M. IN THE EVENT OF PAVEMENT FAILURE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY PATCHING OF THE FAILED SCTION. SEE NOTE 11. SHEET 11.

MAINTENANCE OF TRAFFIC-GENERAL NOTES & DETAILS

F.H.W.A. REGION STATE PROJECT 13

5 OHIO . 95

SUMMIT COUNTY SUM-8-0.38A

SEQUENCE OF OPERATION

GENERAL

THE PROJECT SHALL BE CONSTRUCTED DURING THE SIX (6) PHASES LISTED BELOW. THE CONTRACTOR WILL BE PERMITTED TO CLOSE EITHER THE NORTHBOUND OR THE SOUTHBOUND LANES OF STATE ROUTE 8 AT SEPARATE TIMES; NEVER SIMULTANEOUSLY. THE CONTRACTOR MUST COMPLETE ONE PHASE PRIOR TO STARTING ANOTHER. ONLY AREAS CLOSED TO THROUGH TRAFFIC SHALL BE WORKED ON.

THE CONTRACTOR SHALL PROVIDE ALL THE MATERIALS, INCLUDING SIGNAGE, NECESSARY TO COMPLETE THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ERECTING AND MAINTAINING ALL THE SIGNAGE CALLED FOR IN THE PLANS WITHIN THE L/A OF I-77, I-76 AND S.R. I, INCLUDING THE CONNECTING EXIT AND ENTRANCE RAMPS. THE CITY SHALL ERECT AND MAINTAIN THE SIGNAGE SUPPLIED BY THE CONTRACTOR ON S.R. 59 AND ALONG THE DETOUR ROUTES OUTSIDE OF THE L/A OF I-77, I-76 AND S.R. 8.

PORTIONS OF STATE ROUTE 8, AS INDICATED IN THE PLANS, MAY BE CLOSED WEEKDAYS (MONDAY EVENING THROUGH FRIDAY MORNING) FROM 7:00 P.M. THAT EVENING UNTIL 6:00 A.M. FRIDAY MORNING, AND FROM 7:00 P.M. FRIDAY EVENING TO 6:00 A.M. THE FOLLOWING MONDAY MORNING, UNLESS OTHERWISE INDICATED IN THESE PLANS. ALL LANES SHALL BE OPEN TO THROUGH TRAFFIC BY 6:00 A.M. EVERY WEEKDAY. ALL PLASTIC SAFETY DRUMS AND TYPE III BARRICADES SHALL BE REMOVED; ALL APPROPRIATE SIGNAGE SHALL BE COVERED; ALL TRAVELED SURFACE SHALL BE SMOOTH AND FREE OF LOOSE DEBRIS, ALL TRANSITION BETWEEN MILLED AND PAVED SURFACES SHALL BE TAPERED AS PER STANDARD CONSTRUCTION DRAWING BP-5 TO ENSURE SMOOTH TRANSITIONS; ALL PAVEMENT MARKINGS, TEMPORARY OR PERMANENT SHALL BE IN PLACE PRIOR TO REOPENING S.R. 8 TO TRAFFIC AFTER EACH AND EVERY DAY AND/OR NIGHT'S CONSTRUCTION ACTIVITIES. SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE ABOVE MENTIONED REQUIREMENTS., THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

PHASE IA

PORTIONS OF STATE ROUTE 8 NORTHBOUND WILL BE CLOSED TO THROUGH TRAFFIC AT THE LOCATION AND METHODS INDICATED ON SHEETS 14-27. AND AS DESCRIBED BELOW:

- 1. THE SIGNAGE WITHIN THE L/A OF I-77, I-76 AND S.R. 8 DIRECTING THE TRAFFIC FLOWING ON S.R. 8 NORTHBOUND SHALL BE UNCOVERED AND PLACED AS SHOWN ON THE PLANS.
- 2. RAMP "R" OF THE CENTRAL INTERCHANGE SHALL BE CLOSED BY POSITIONING THE BARRELS AND BARRICADE AS INDICATED IN THE PLANS.
- 3. RAMP "U" OF THE CENTRAL INTERCHANGE SHALL BE CLOSED BY POSITIONING THE BARRELS AND BARRICADE AS INDICATED IN THE PLANS.
- 4. THE NORTHBOUND LANES OF S.R. 8 SHALL BE CLOSED SOUTH OF THE CENTRAL INTERCHANGE BY POSITIONING THE BARRELS AND BARRICADE AS INDICATED IN THE PLANS.
- 5. BARRELS SHALL BE PLACED IN THE NORTHBOUND TRAVEL LANES ON S.R. 8 NORTH OF BUCHTEL AVENUE AS INDICATED IN THE PLANS, TRANSITIONING TRAFFIC ENTERING S.R. 8 NORTHBOUND ON RAMP "Q" BACK INTO THE EXISTING TRAVELED

UPON THE COMPLETION OF THE REQUIREMENTS CALLED FOR IN THE MAINTENANCE OF TRAFFIC PLANS FOR REDIRECTING THE FLOW OF TRAFFIC, MILLING AND PAVING OPERATIONS, (AS WELL AS THE OTHER TASKS CALLED FOR IN THE PLAN) MAY BEGIN. ALL MAINTENANCE OF TRAFFIC DEVICES MUST BE REMOVED BY 6:00 A.M. WEEKDAYS, ALLOWING THE UNRESTRICTED FLOW OF TRAFFIC ON S.R. 8. THE REMOVAL OF MAINTENANCE OF TRAFFIC EQUIPMENT SHALL BE PERFORMED BY REVERSING THE ORDER OF PLACEMENT.

PHASE IB

PORTIONS OF STATE ROUTE 8 NORTHBOUND WILL BE CLOSED TO THROUGH TRAFFIC AT THE LOCATIONS AND METHODS INDICATED IN THE PLANS ON SHEET <u>28-43</u> AND AS DESCRIBED BELOW:

- 1. THE SIGNAGE WITHIN THE L/A OF I-77, I-76 AND S.R. 8 DIRECTING THE TRAFFIC FLOWING ON S.R. 8 NORTHBOUND SHALL BE UNCOVERED AND PLACED AS SHOWN ON THE PLANS.
- 2. RAMP "R" OF THE CENTRAL INTERCHANGE SHALL BE CLOSED BY POSITIONING THE BARRELS AND BARRICADE AS INDICATED IN THE PLANS.
- 3. RAMP "U" OF THE CENTRAL INTERCHANGE SHALL BE CLOSED BY POSITIONING THE BARRELS AND BARRICADE AS INDICATED IN THE PLANS.
- 4. THE NORTHBOUND LANES OF S.R. 8 SHALL BE CLOSED SOUTH OF THE CENTRAL INTERCHANGE BY POSITIONING THE BARRELS AND BARRICADE AS INDICATED IN THE PLANS.

- 5. RAMP "Q", THE ENTRANCE RAMP ON BUCHTEL AVENUE FOR S.R. 8 NORTHBOUND, SHALL BE CLOSED USING TYPE III BARRICADE AS INDICATED ON THE PLANS.
- 6. RAMP "M", THE ENTRANCE RAMP ON EAST MARKET STREET FOR S.R. 8 NORTHBOUND, SHALL BE CLOSED USING TYPE III BARRICADE AS INDICATED ON THE PLANS.
- 7. BARRELS SHALL BE PLACED IN THE NORTHBOUND TRAVEL LANES OF S.R. 8 NORTH OF PERKINS STREET AS INDICATED IN THE PLANS TRANSITIONING TRAFFIC ENTERING S.R. 8 NORTHBOUND VIA RAMP "J" INTO THE EXISTING TRAVEL LANES

UPON THE COMPLETION OF THE REQUIREMENTS CALLED FOR IN THE MAINTENANCE OF TRAFFIC PLANS FOR REDIRECTING THE FLOW OF TRAFFIC, MILLING AND PAVING OPERATIONS, (AS WELL AS THE OTHER TASKS CALLED FOR IN THE PLAN) MAY BEGIN. ALL MAINTENANCE OF TRAFFIC DEVICES MUST BE REMOVED BY 6:00 A.M. WEEKDAYS, ALLOWING THE UNRESTRICTED FLOW OF TRAFFIC ON S.R. 8. THE REMOVAL OF MAINTENANCE OF TRAFFIC EQUIPMENT SHALL BE PERFORMED BY REVERSING THE ORDER OF PLACEMENT.

PHASE IC

THIS PHASE DEALS WITH THE WORK NOT PERFORMED DURING PHASE IB ON RAMP "J", THE ENTRANCE RAMP FROM PERKINS STREET TO S.R. 8 NORTHBOUND. AFTER THE COMPLETION OF PHASES IA, IB AND IC, NO FURTHER WORK OF ANY KIND SHALL BE PERFORMED ON THE NORTHBOUND LANES OF STATE ROUTE 8. TRAFFIC SHALL BE REDIRECTED FROM RAMP "J" AS SHOWN IN THE PLANS ON SHEETS 44-47 AND AS LISTED BELOW.

- 1. THE SIGNAGE WITHIN THE L/A OF I-77, I-76 AND S.R. 8 DIRECTING THE TRAFFIC FLOWING ON S.R. 8 NORTHBOUND SHALL BE UNCOVERED AND PLACED AS SHOWN ON THE PLANS.
- 2. RAMP "M", THE ENTRANCE RAMP ON EAST MARKET STREET FOR S.R. 8 NORTHBOUND SHALL BE CLOSED BY POSITION BARRICADES AS INDICATED IN THE PLANS.
- 3. RAMP "J", THE ENTRANCE RAMP ON PERKINS STREET FOR S.R. 8 NORTHBOUND SHALL BE CLOSED BY POSITIONING THE BARRELS AND BARRICADE AS INDICATED IN THE PLANS.

UPON THE COMPLETION OF THE REQUIREMENTS CALLED FOR IN THE MAINTENANCE OF TRAFFIC PLANS FOR REDIRECTING THE FLOW OF TRAFFIC, MILLING AND PAVING OPERATIONS, (AS WELL AS THE OTHER TASKS CALLED FOR IN THE PLAN) MAY BEGIN. ALL MAINTENANCE OF TRAFFIC DEVICES MUST BE REMOVED BY 6:00 A.M. WEEKDAYS, ALLOWING THE UNRESTRICTED FLOW OF TRAFFIC ON S.R. 8. THE REMOVAL OF MAINTENANCE OF TRAFFIC EQUIPMENT SHALL BE PERFORMED BY REVERSING THE ORDER OF PLACEMENT.

PHASE IIA

PORTIONS OF STATE ROUTE 8 SOUTHBOUND WILL BE CLOSED TO THROUGH TRAFFIC AT THE LOCATIONS AND METHODS INDICATED ON SHEETS 48-52 AND AS DESCRIBED BELOW:

- 1. THE SIGNAGE WITHIN THE L/A OF S.R. 8 DIRECTING TRAFFIC FLOWING ON S.R. 8 SOUTHBOUND SHALL BE UNCOVERED AND PLACED AS SHOWN IN THE PLANS.
- 2. RAMP "T", THE ENTRANCE RAMP FROM GOODKIRK STREET TO S.R. 8 SOUTHBOUND SHALL BE CLOSED BY POSITIONING BARRELS AND BARRICADES AS INDICATED IN THE PLANS.
- 3. RAMP "O", THE ENTRANCE FROM EAST MARKET STREET TO S.R. 8 SOUTHBOUND, SHALL BE CLOSED BY POSITIONING THE BARRICADES AS INDICATED IN THE PLANS.
- 4. RAMP "K", THE ENTRANCE RAMP FROM GOODKIRK STREET TO S.R. 8 SOUTHBOUND, SHALL BE CLOSED BY POSITIONING THE BARRICADES AS INDICATED IN THE PLANS.
- 5. THE SOUTHBOUND LANES OF S.R. 8 SHALL BE CLOSED NORTH OF PERKINS STREET BY POSITIONING THE BARRELS AND BARRICADES AS INDICATED IN THE PLANS, DIRECTING TRAFFIC TO EXIT S.R. 8 BY USING RAMP "T".

UPON THE COMPLETION OF THE REQUIREMENTS CALLED FOR IN THE MAINTENANCE OF TRAFFIC PLANS FOR REDIRECTING THE FLOW OF TRAFFIC, MILLING AND PAVING OPERATIONS, (AS WELL AS THE OTHER TASKS CALLED FOR IN THE PLAN) MAY BEGIN. ALL MAINTENANCE OF TRAFFIC DEVICES MUST BE REMOVED BY 6:00 A.M. WEEKDAYS, ALLOWING THE UNRESTRICTED FLOW OF TRAFFIC ON S.R. 8. THE REMOVAL OF MAINTENANCE OF TRAFFIC EQUIPMENT SHALL BE PERFORMED BY REVERSING THE ORDER OF PLACEMENT.

PHASE IIB

PORTIONS OF STATE ROUTE 8 SOUTHBOUND WILL BE CLOSED TO THROUGH TRAFFIC AT THE LOCATIONS AND METHODS INDICATED ON SHEETS 53-58 AND AS DESCRIBED BELOW:

- 1. THE SIGNAGE WITHIN THE L/A OF S.R. 8 DIRECTING TRAFFIC FLOWING ON S.R. 8 SOUTHBOUND SHALL BE UNCOVERED AND PLACED AS SHOWN IN THE PLANS.
- 2. RAMP "T", THE ENTRANCE RAMP FROM GOODKIRK STREET TO S.R. 8 SOUTHBOUND, SHALL HAVE BARRELS POSITIONED AS CALLED FOR IN THE PLANS ALLOWING TRAFFIC TO ENTER S.R. 8 SOUTHBOUND.
- 3. RAMP "O", THE ENTRANCE FROM EAST MARKET STREET TO S.R. 8 SOUTHBOUND, SHALL BE CLOSED BY POSITIONING THE BARRICADES AS INDICATED IN THE PLANS.
- 4. RAMP "K", THE ENTRANCE RAMP FROM GOODKIRK STREET TO S.R. 8 SOUTHBOUND, SHALL BE CLOSED BY POSITIONING THE BARRICADES AS INDICATED IN THE PLANS.
- 5. THE SOUTHBOUND LANES OF S.R. 8 SHALL BE CLOSED NORTH OF PERKINS STREET BY POSITIONING THE BARRELS AND BARRICADES AS INDICATED IN THE PLANS, DIRECTING TRAFFIC TO EXIT S.R. 8 BY USING RAMP "T".

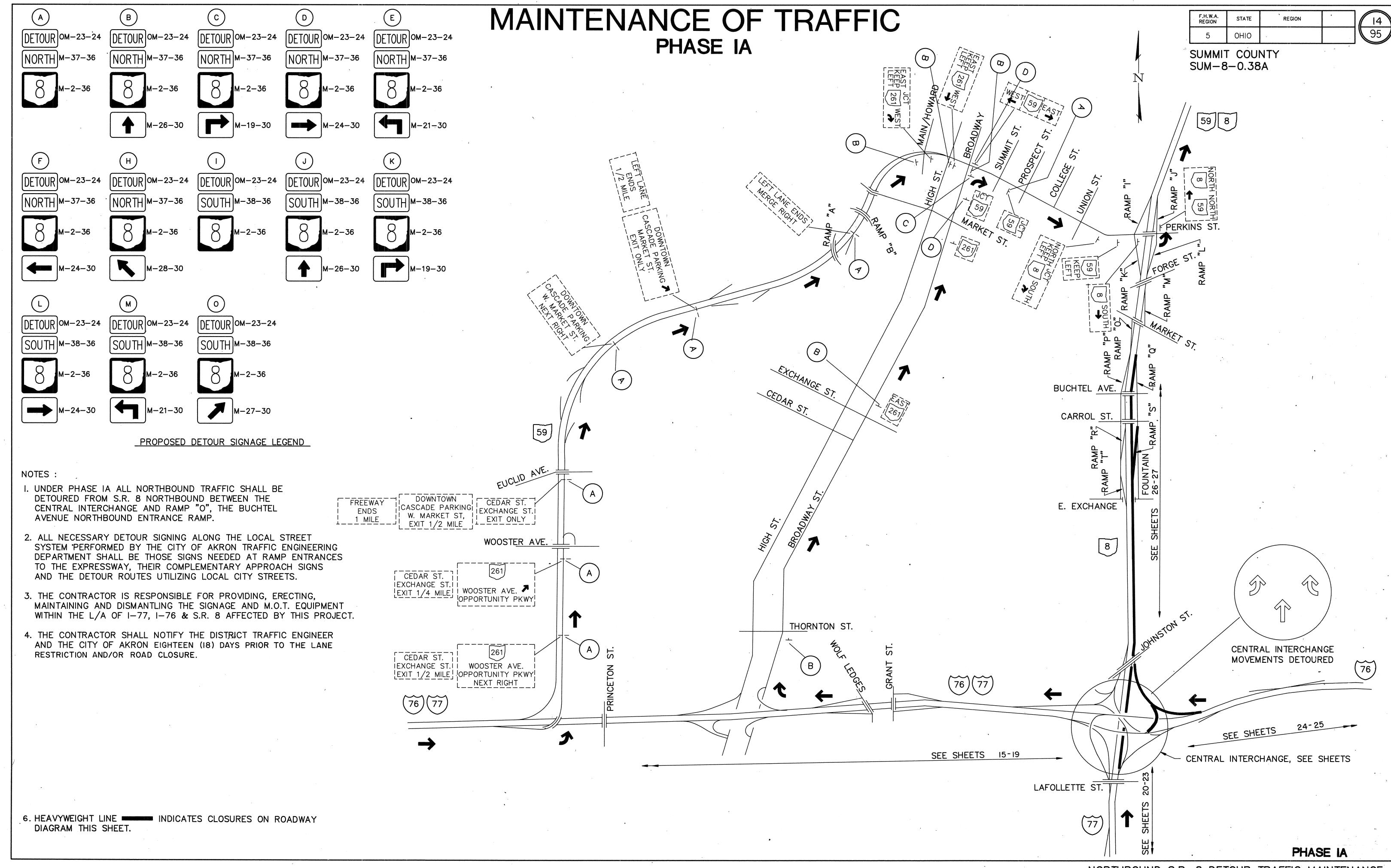
UPON THE COMPLETION OF THE REQUIREMENTS CALLED FOR IN THE MAINTENANCE OF TRAFFIC PLANS FOR REDIRECTING THE FLOW OF TRAFFIC, MILLING AND PAVING OPERATIONS, (AS WELL AS THE OTHER TASKS CALLED FOR IN THE PLAN) MAY BEGIN. ALL MAINTENANCE OF TRAFFIC DEVICES MUST BE REMOVED BY 6:00 A.M. WEEKDAYS, ALLOWING THE UNRESTRICTED FLOW OF TRAFFIC ON S.R. 8. THE REMOVAL OF MAINTENANCE OF TRAFFIC EQUIPMENT SHALL BE PERFORMED BY REVERSING THE ORDER OF PLACEMENT.

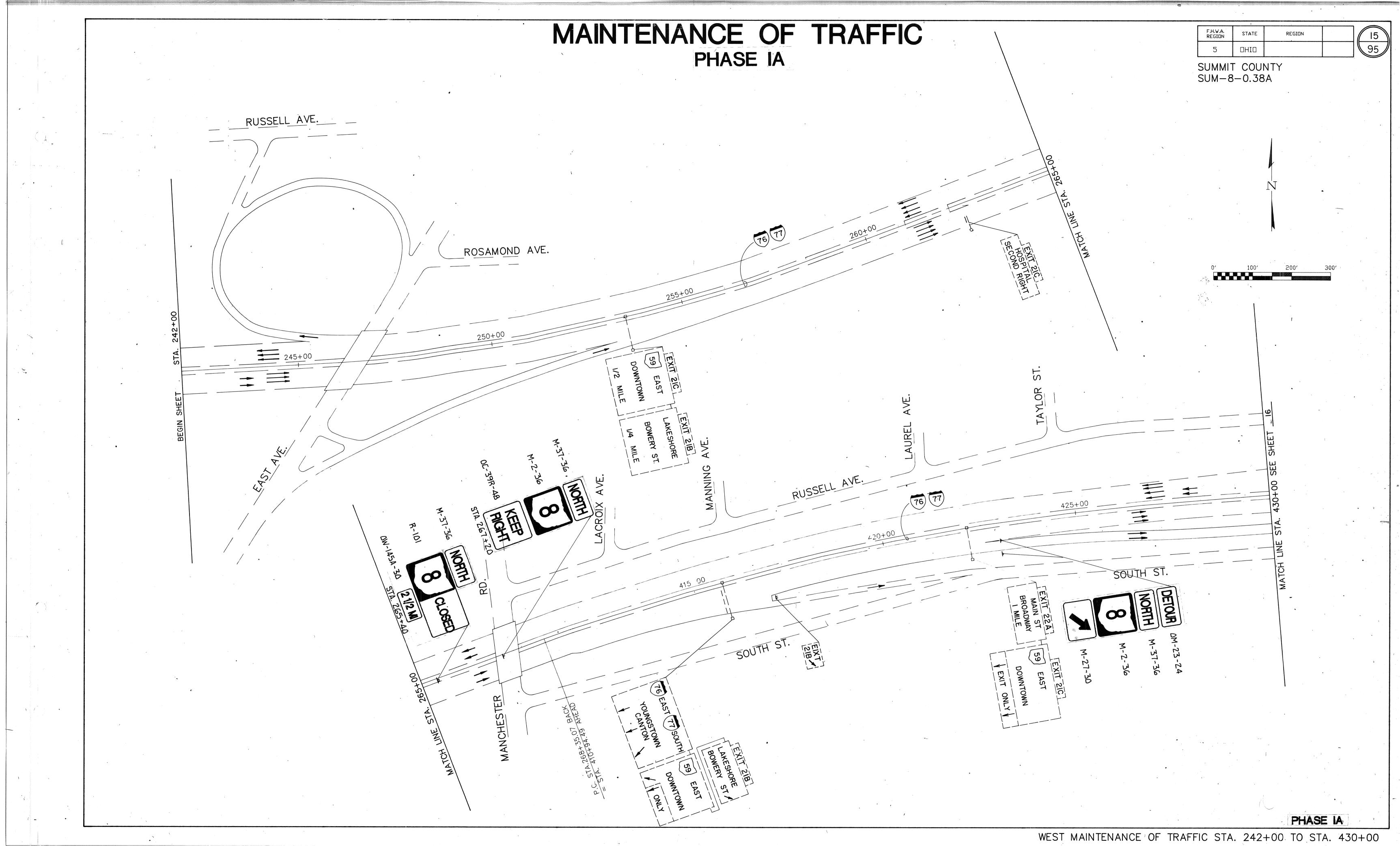
PHASE IIC

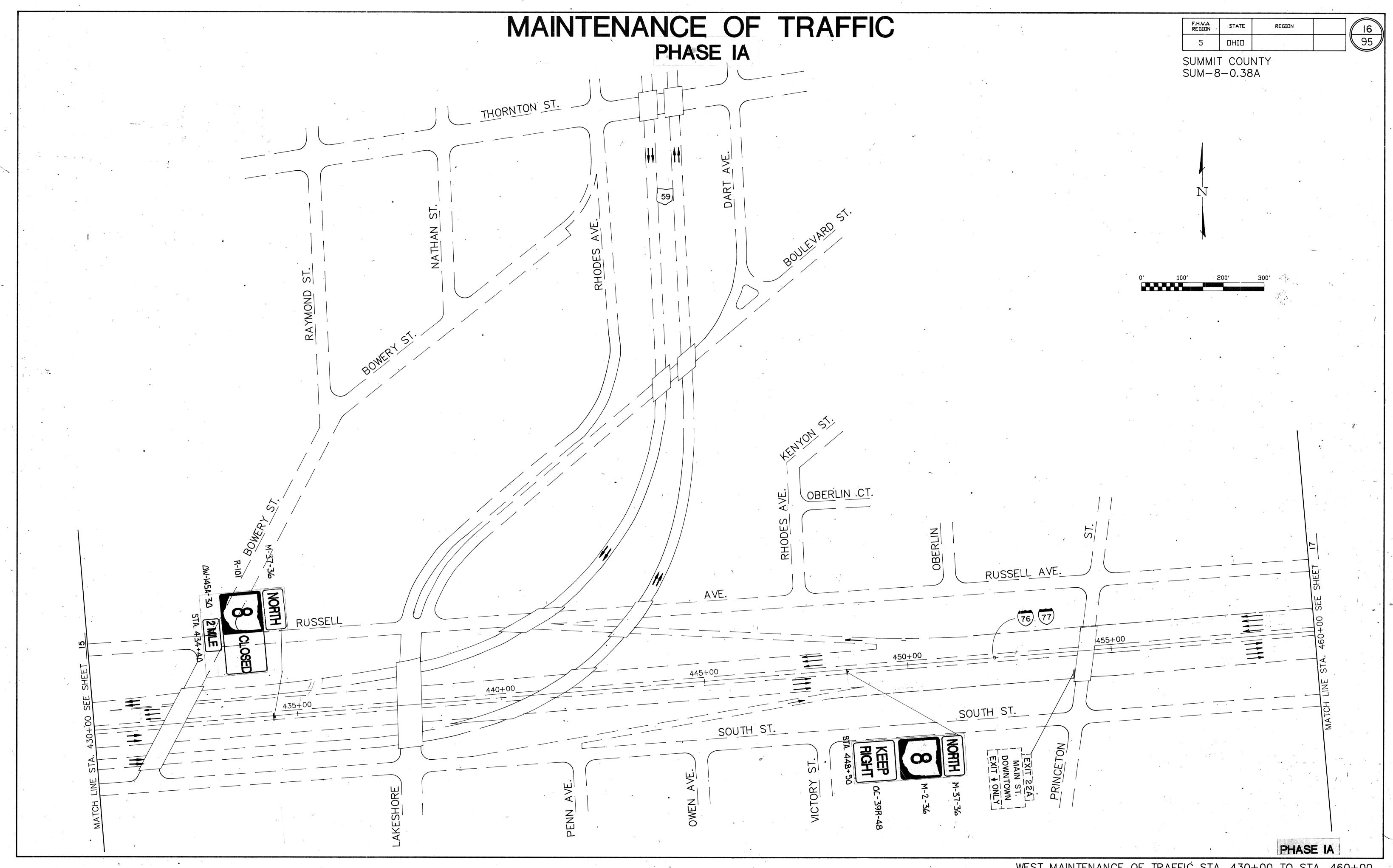
THIS PHASE DEALS WITH THE WORK NOT PERFORMED DURING PHASE IIB ON RAMP "I", THE EXIT RAMP FROM S.R. 8 SOUTHBOUND TO PERKINS STREET. AFTER THE COMPLETION OF PHASES IIA, IIB, AND IIC, NO FURTHER WORK OF ANY KIND SHALL BE PERFORMED ON THE SOUTHBOUND LANES OF S.R. 8. TRAFFIC SHALL BE REDIRECTED FROM RAMP "I" AS SHOWN IN THE PLANS ON SHEETS 59-62 AND AS LISTED BELOW.

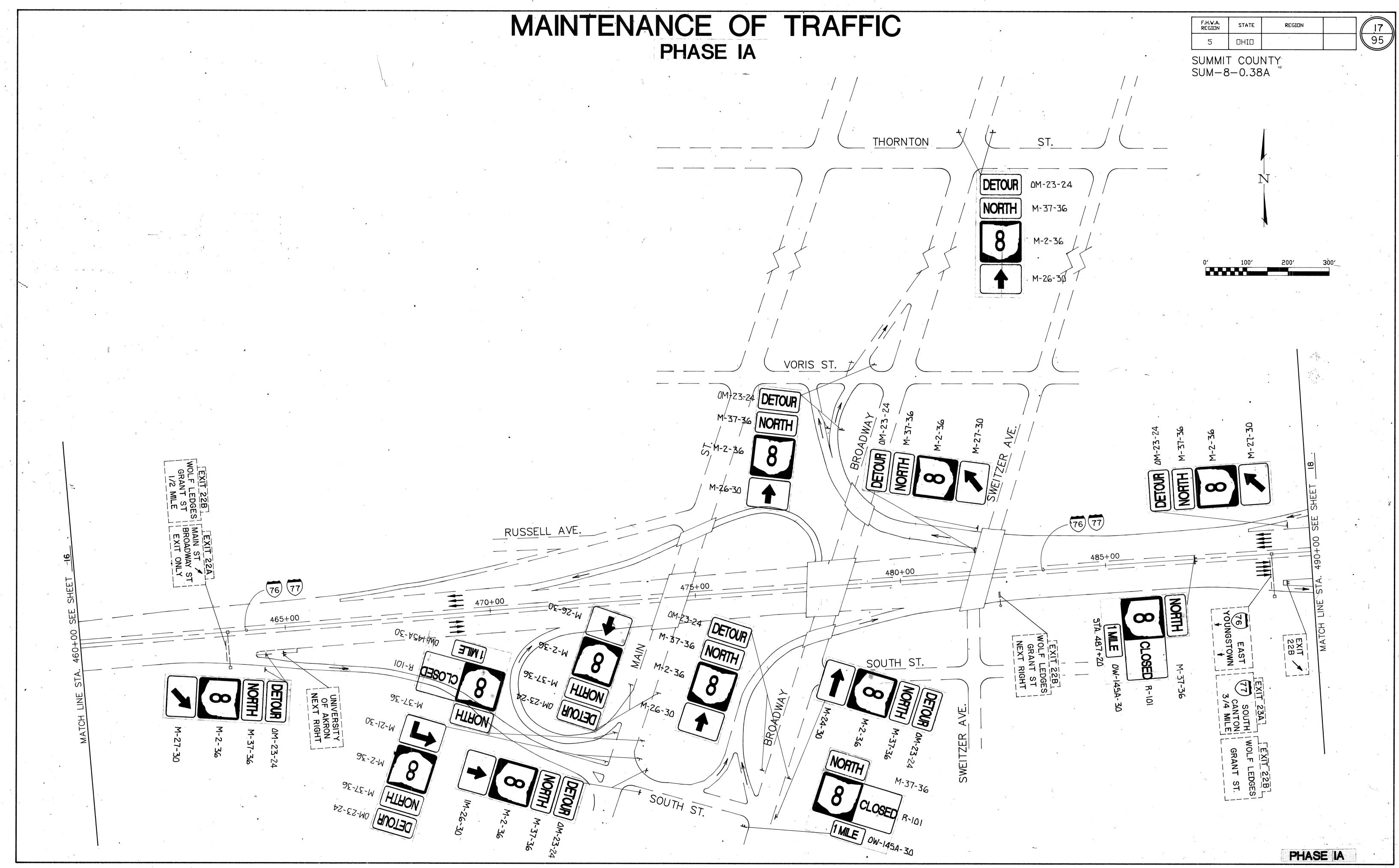
- 1. THE SIGNAGE WITHIN THE L/A OF S.R. 8 DIRECTING TRAFFIC FLOWING ON S.R. 8 SOUTHBOUND SHALL BE UNCOVERED AND PLACED AS SHOWN IN THE PLANS.
- 2. RAMP "O", THE ENTRANCE FROM EAST MARKET STREET TO S.R. 8 SOUTHBOUND, SHALL BE CLOSED BY POSITIONING THE BARRICADES AS INDICATED IN THE
- 3. RAMP "I", THE EXIT RAMP FROM S.R. 8 SOUTHBOUND TO PERKINS STREET SHALL BE CLOSED BY PLACING THE BARRELS AND BARRICADES AS SHOWN IN THE PLANS.

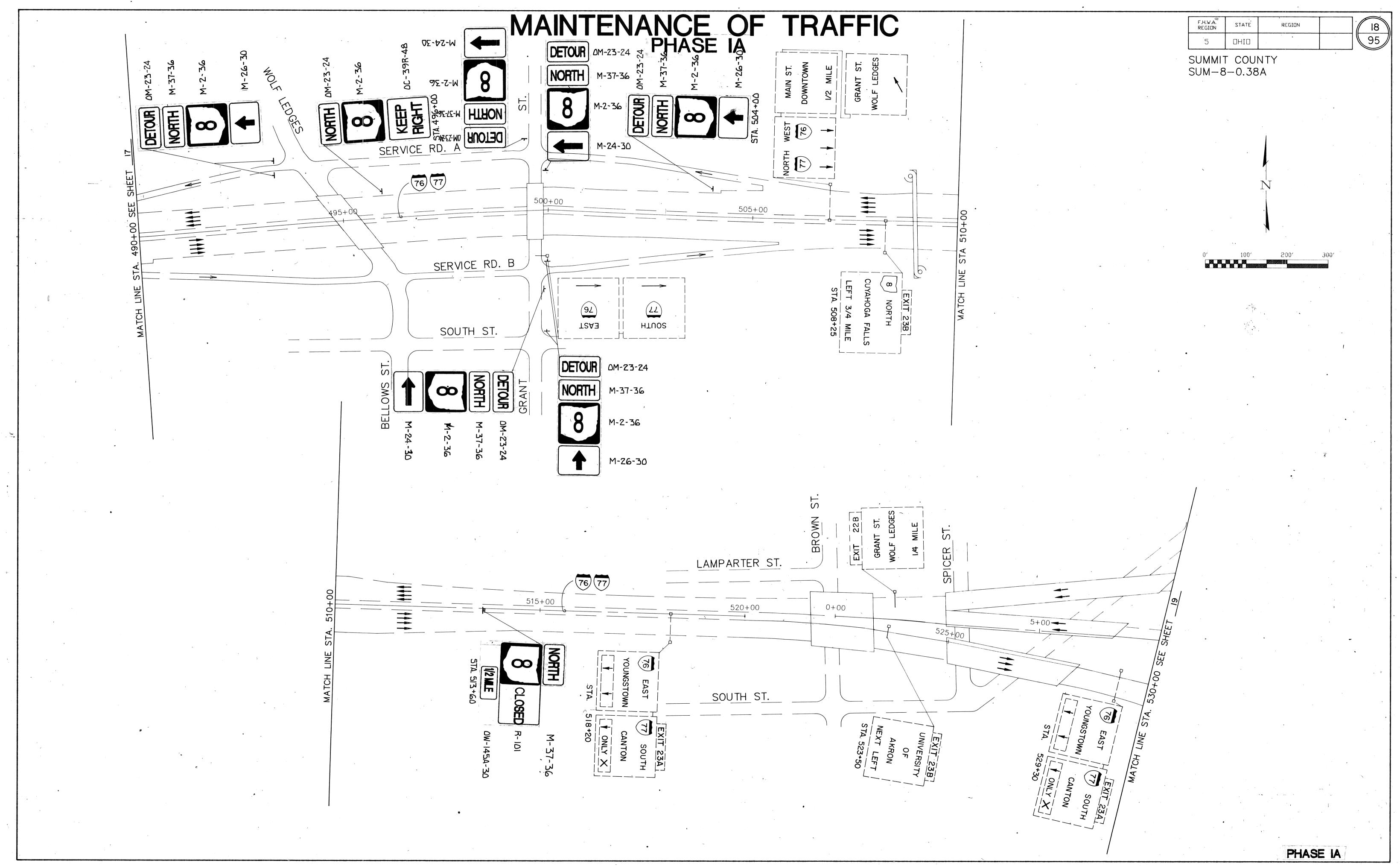
UPON THE COMPLETION OF THE REQUIREMENTS CALLED FOR IN THE MAINTENANCE OF TRAFFIC PLANS FOR REDIRECTING THE FLOW OF TRAFFIC, MILLING AND PAVING OPERATIONS, (AS WELL AS THE OTHER TASKS CALLED FOR IN THE PLAN) MAY BEGIN. ALL MAINTENANCE OF TRAFFIC DEVICES MUST BE REMOVED BY 6:00 A.M. WEEKDAYS, ALLOWING THE UNRESTRICTED FLOW OF TRAFFIC ON S.R. 8. THE REMOVAL OF MAINTENANCE OF TRAFFIC EQUIPMENT SHALL BE PERFORMED BY REVERSING THE ORDER OF PLACEMENT.

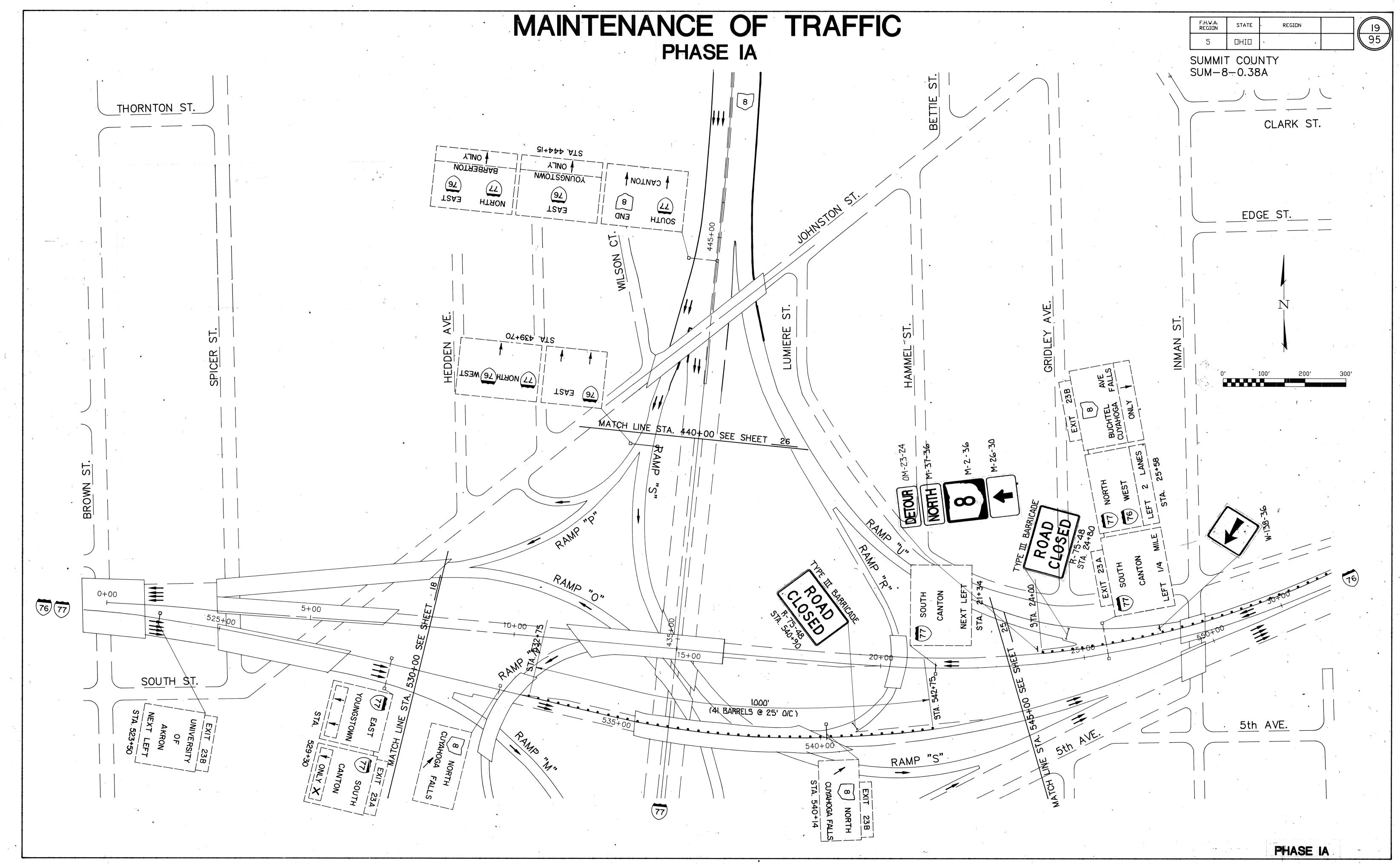


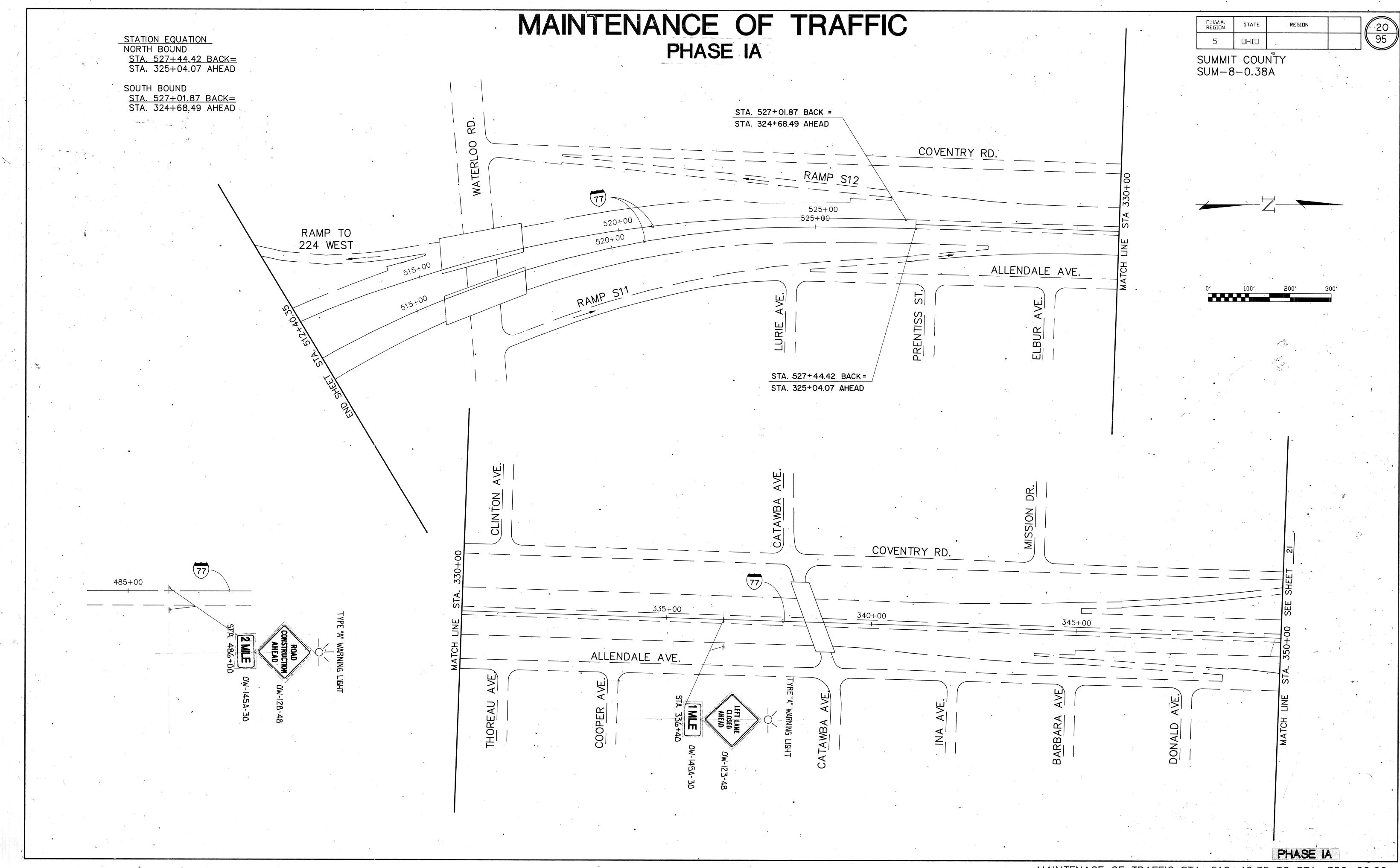


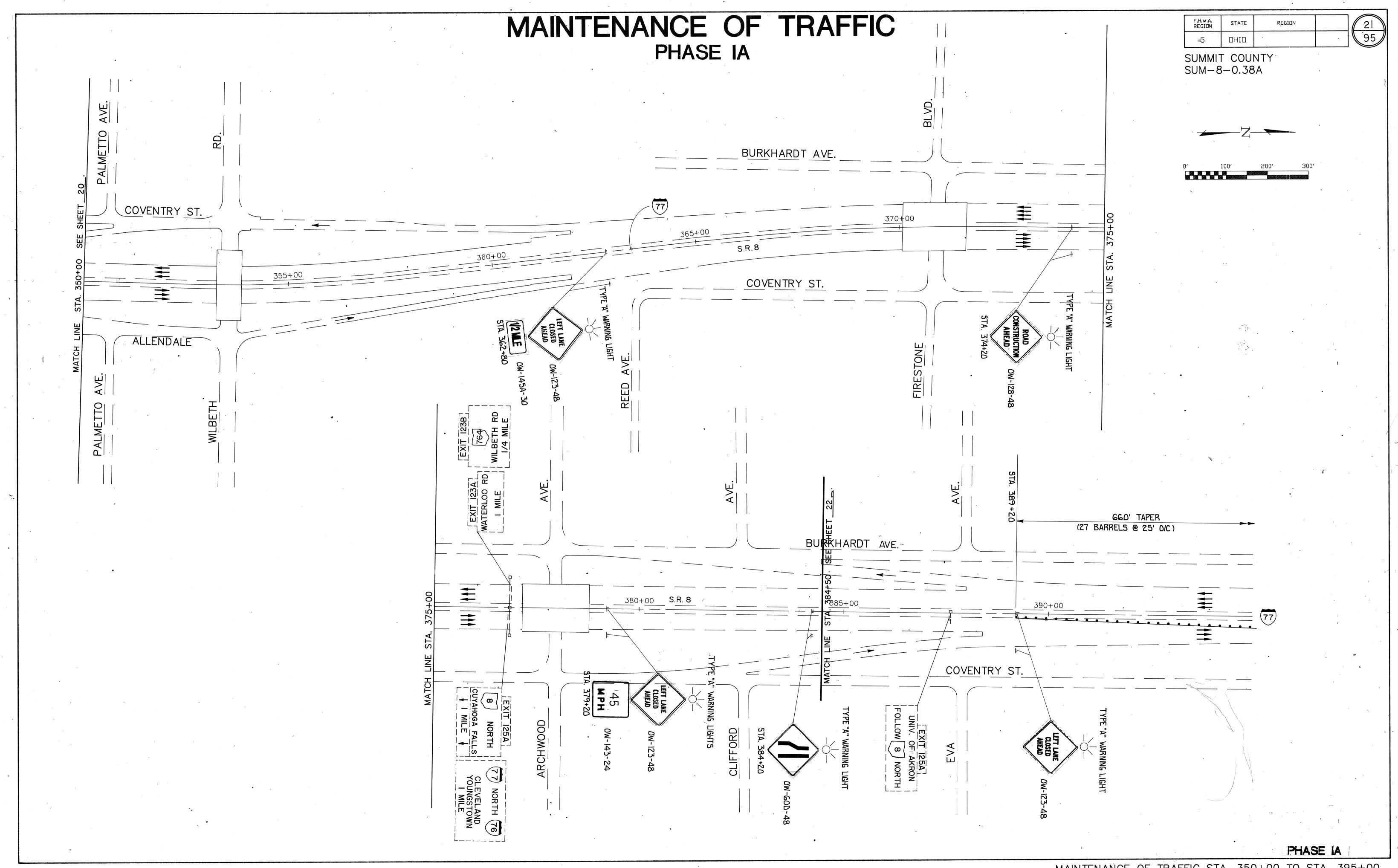


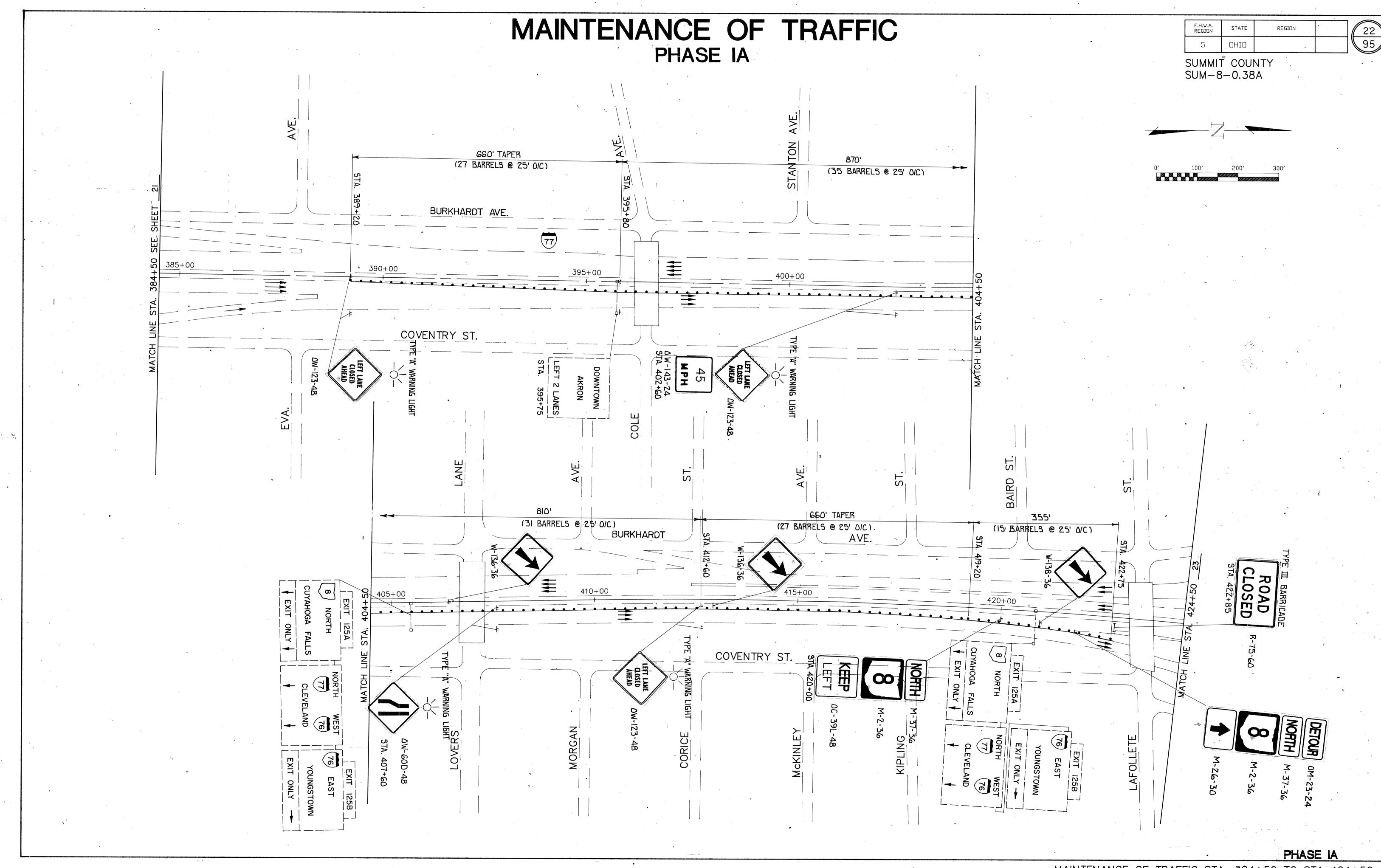


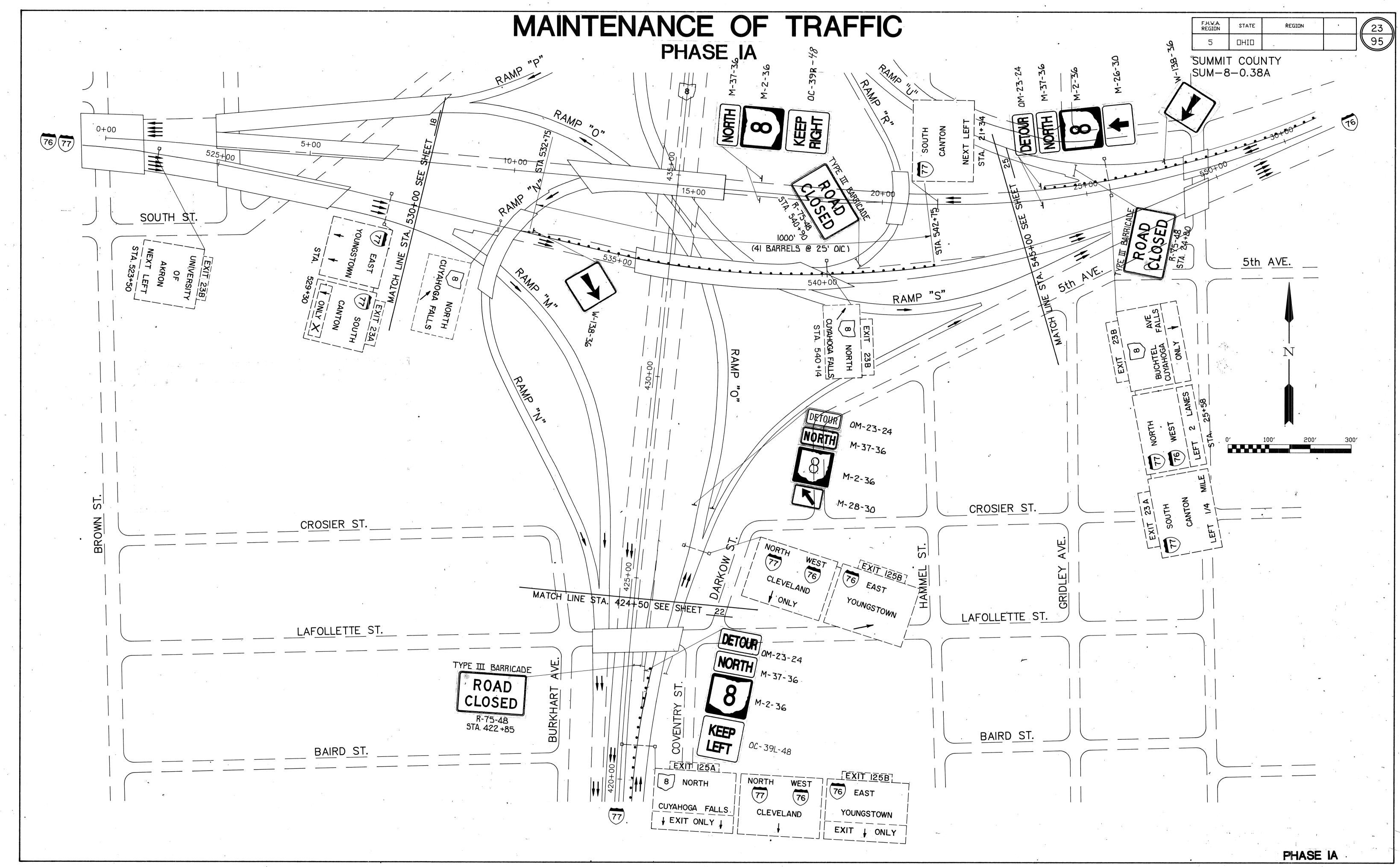


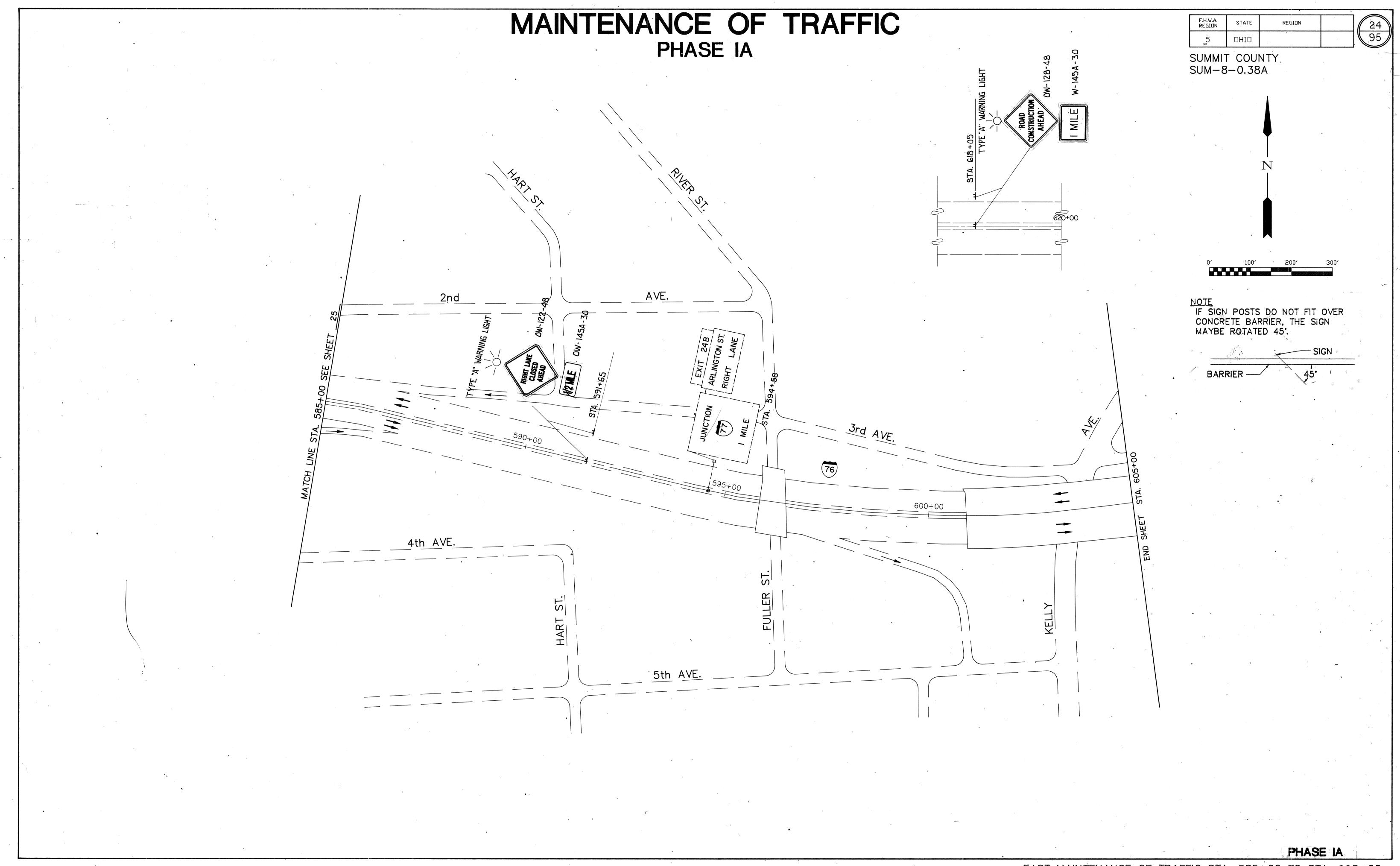


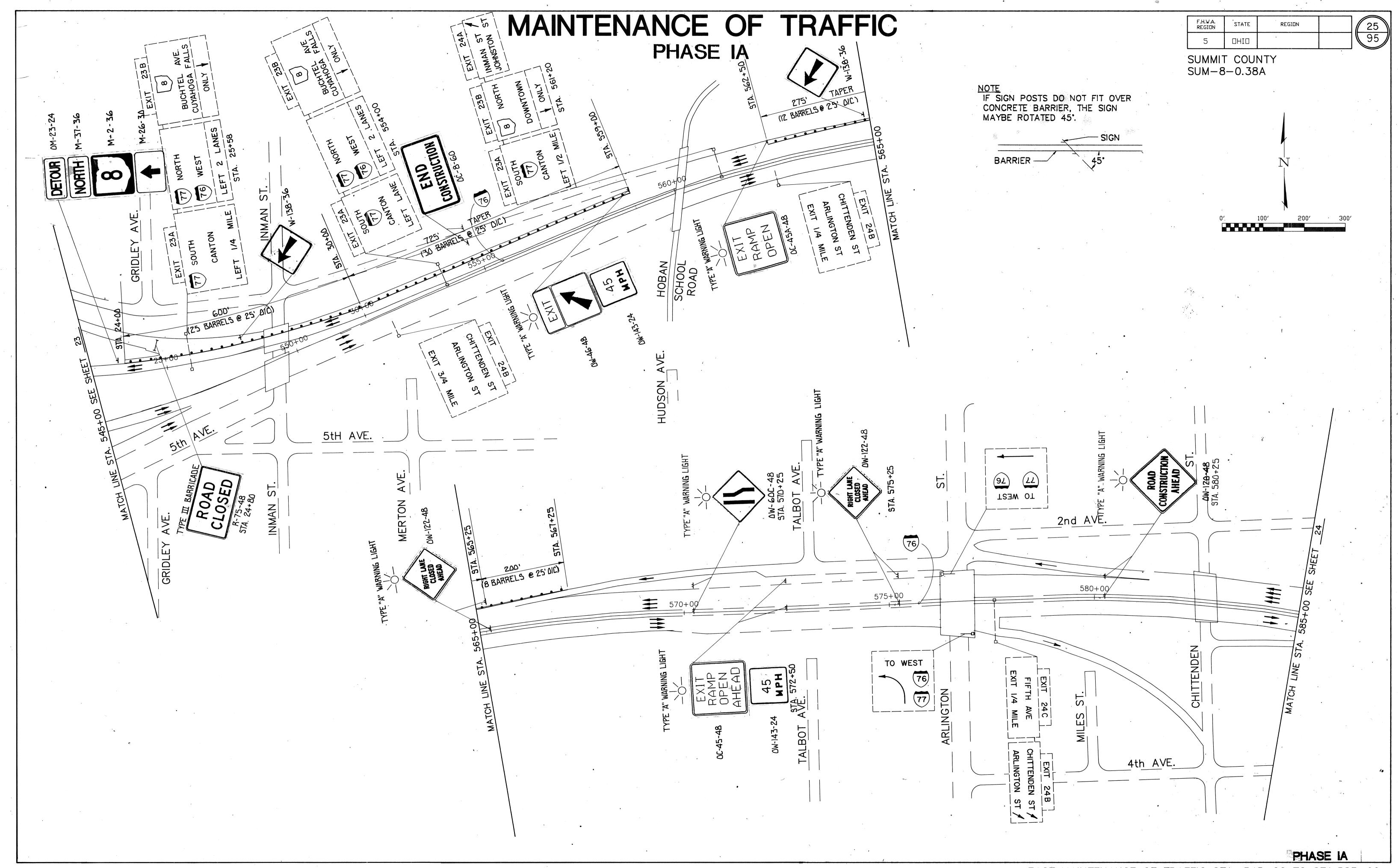


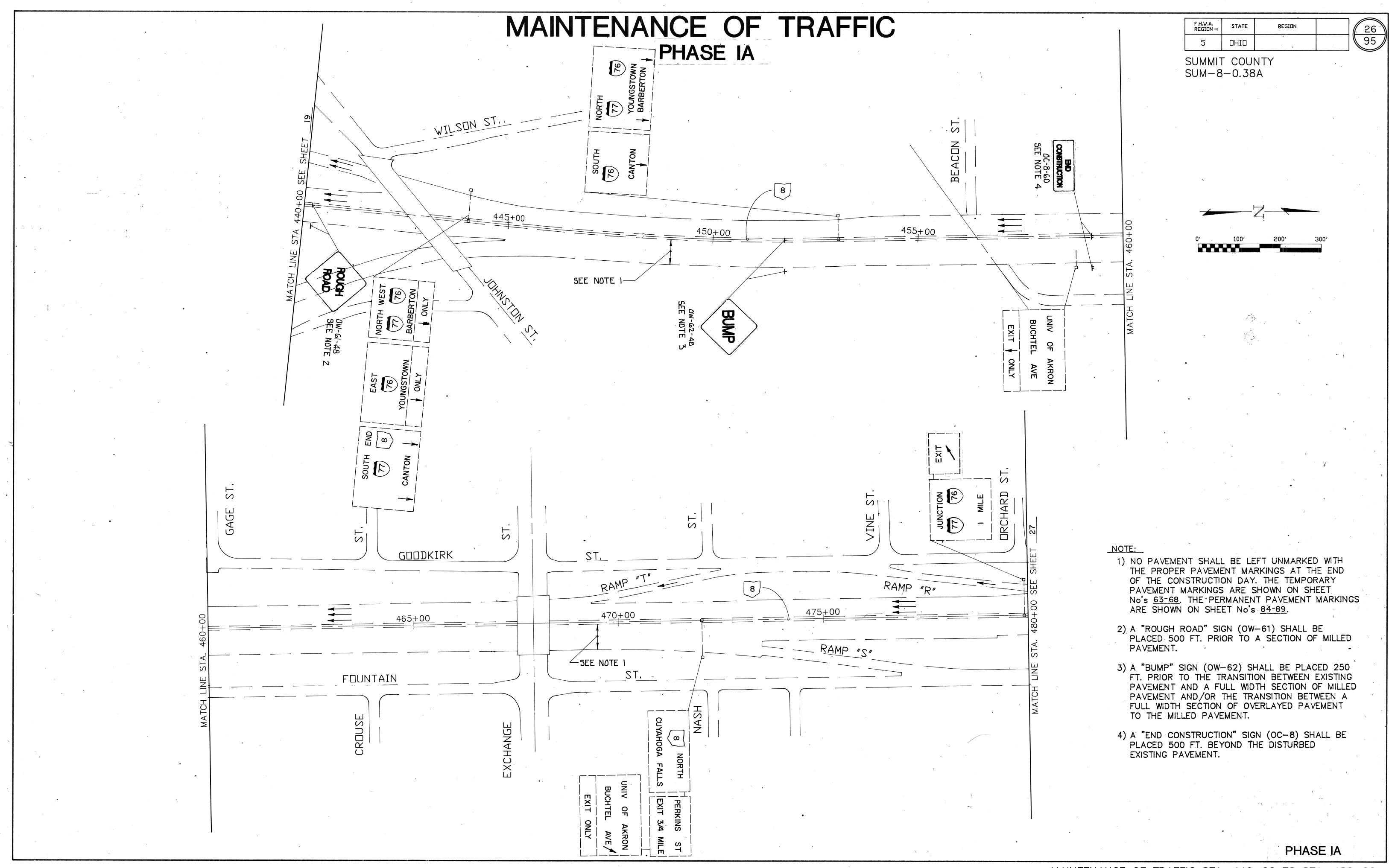


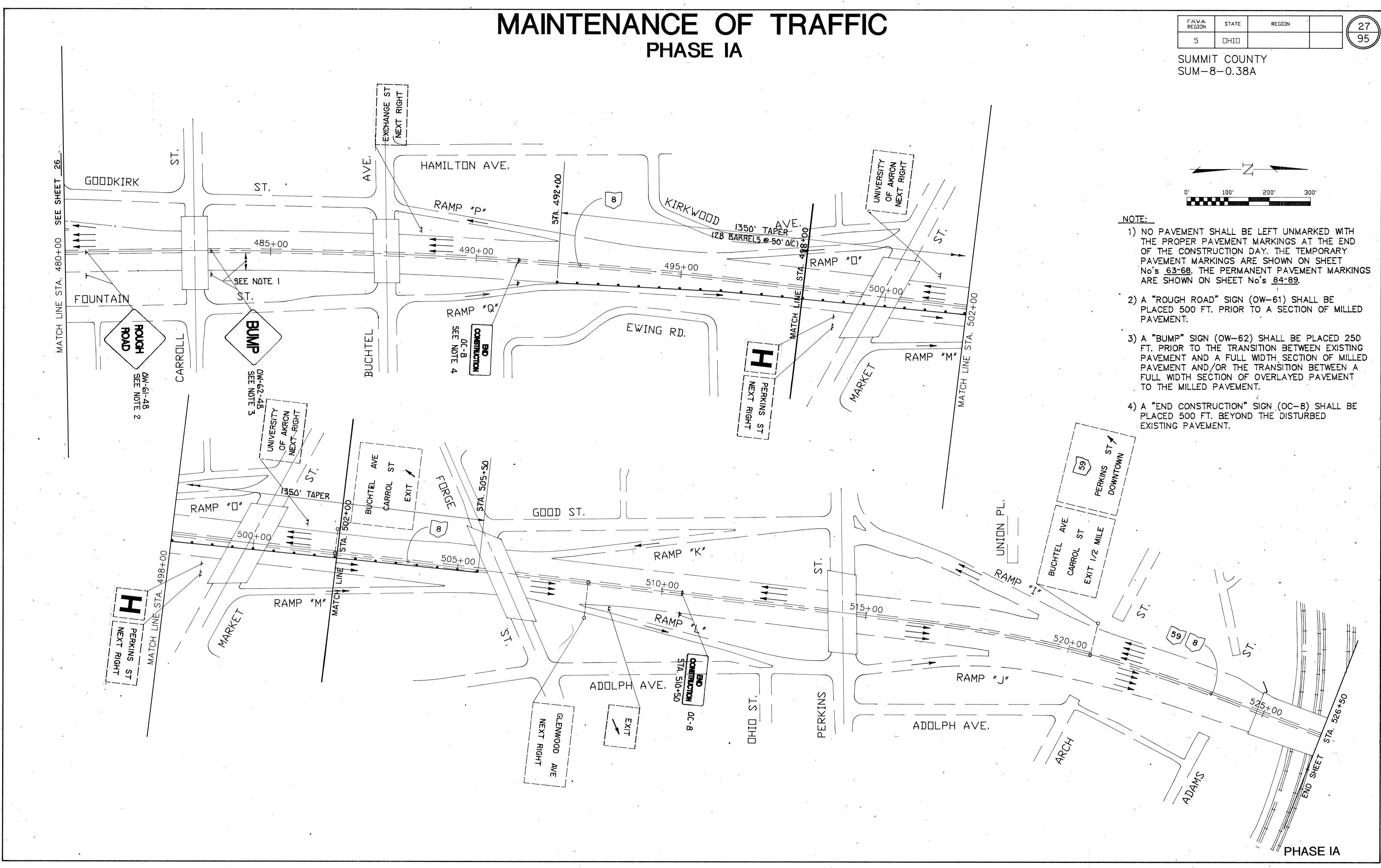


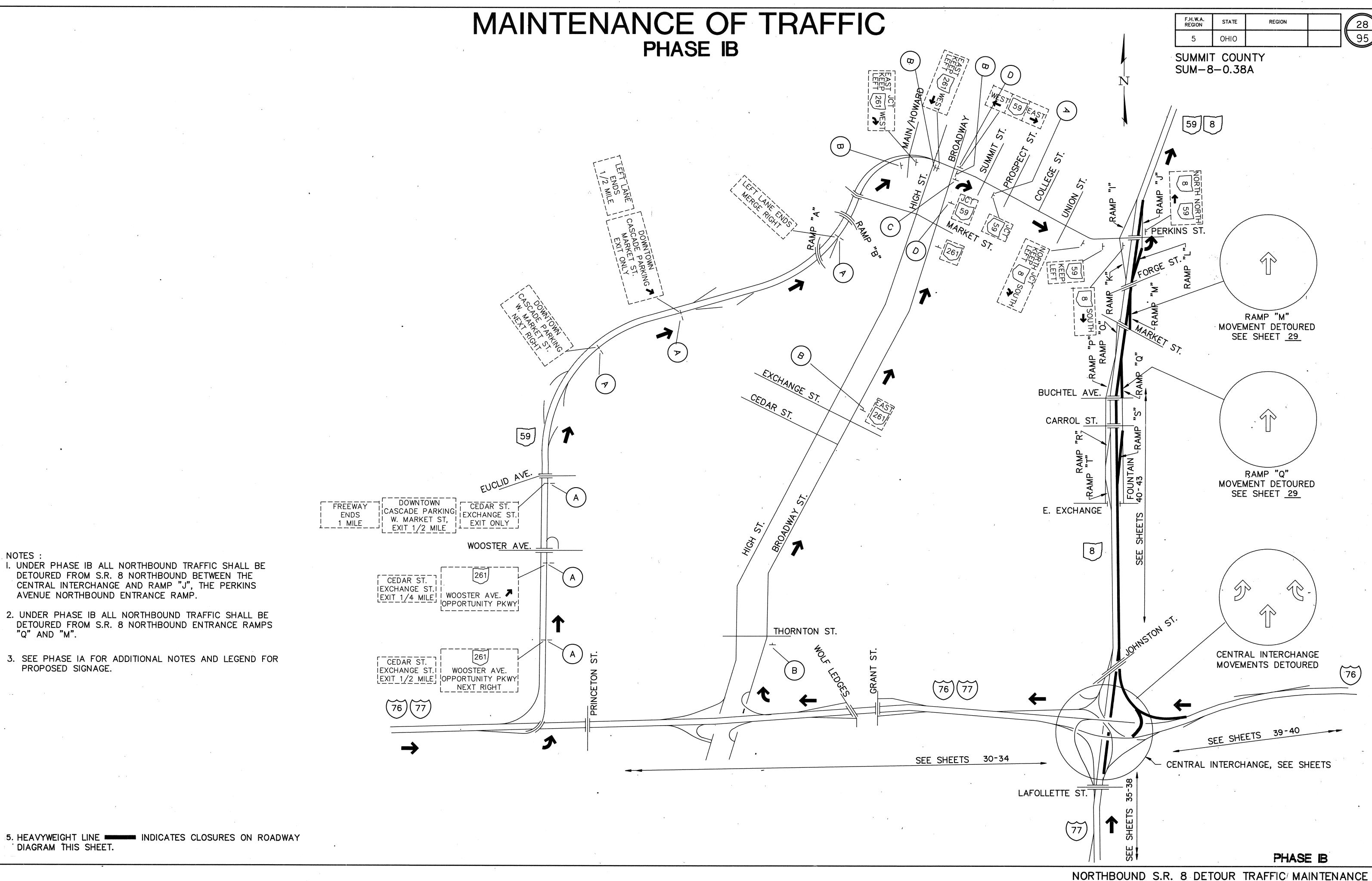


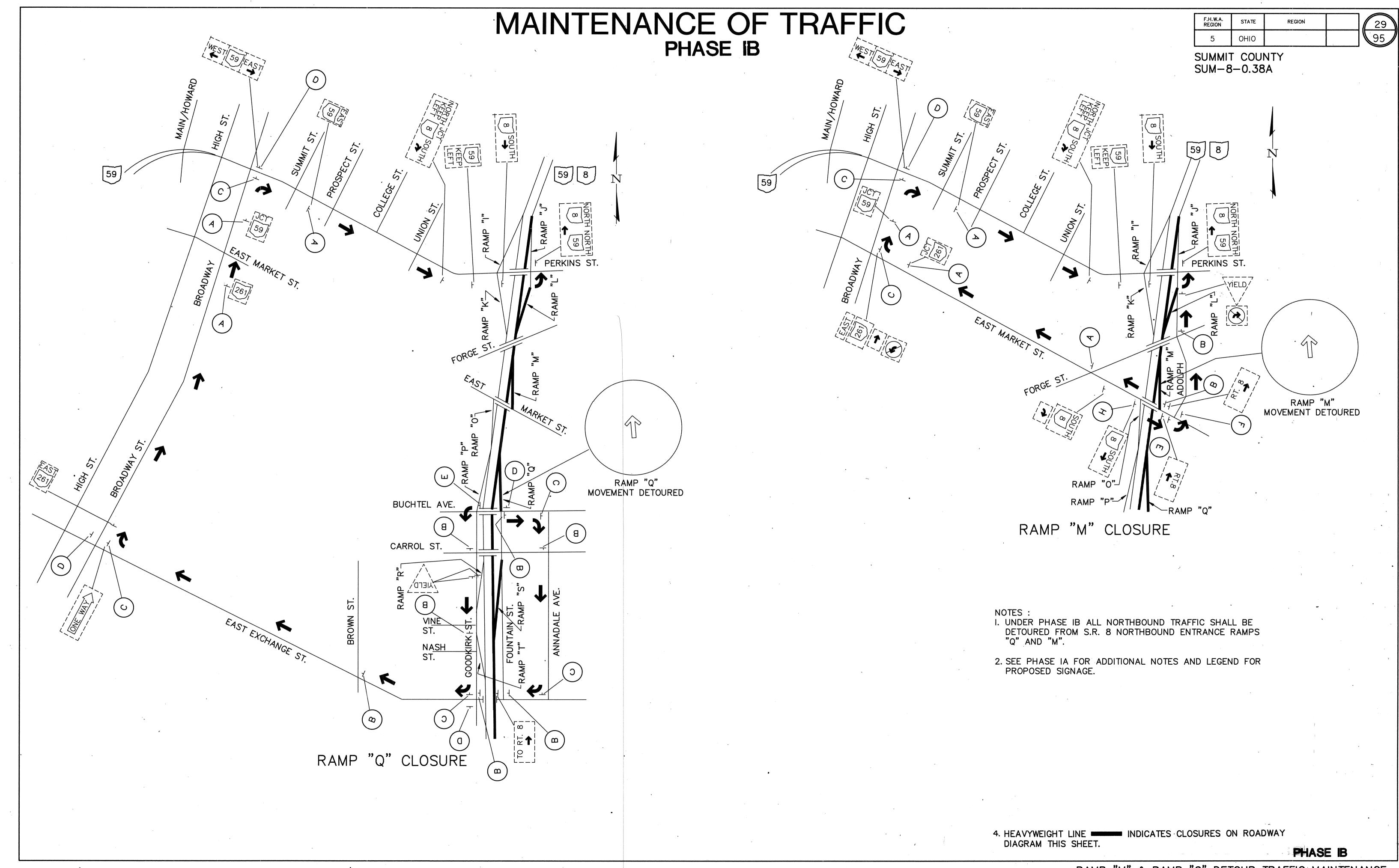


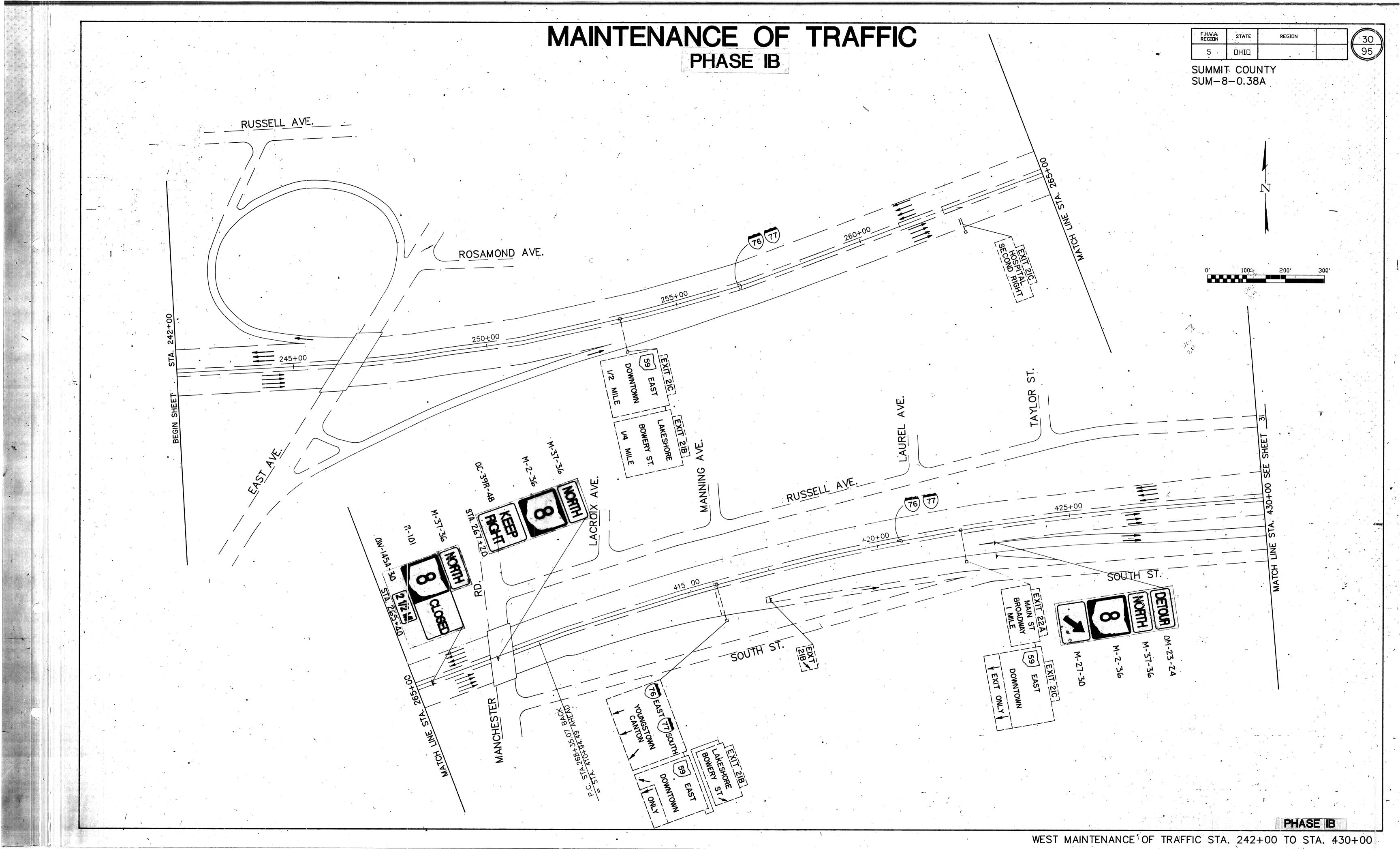


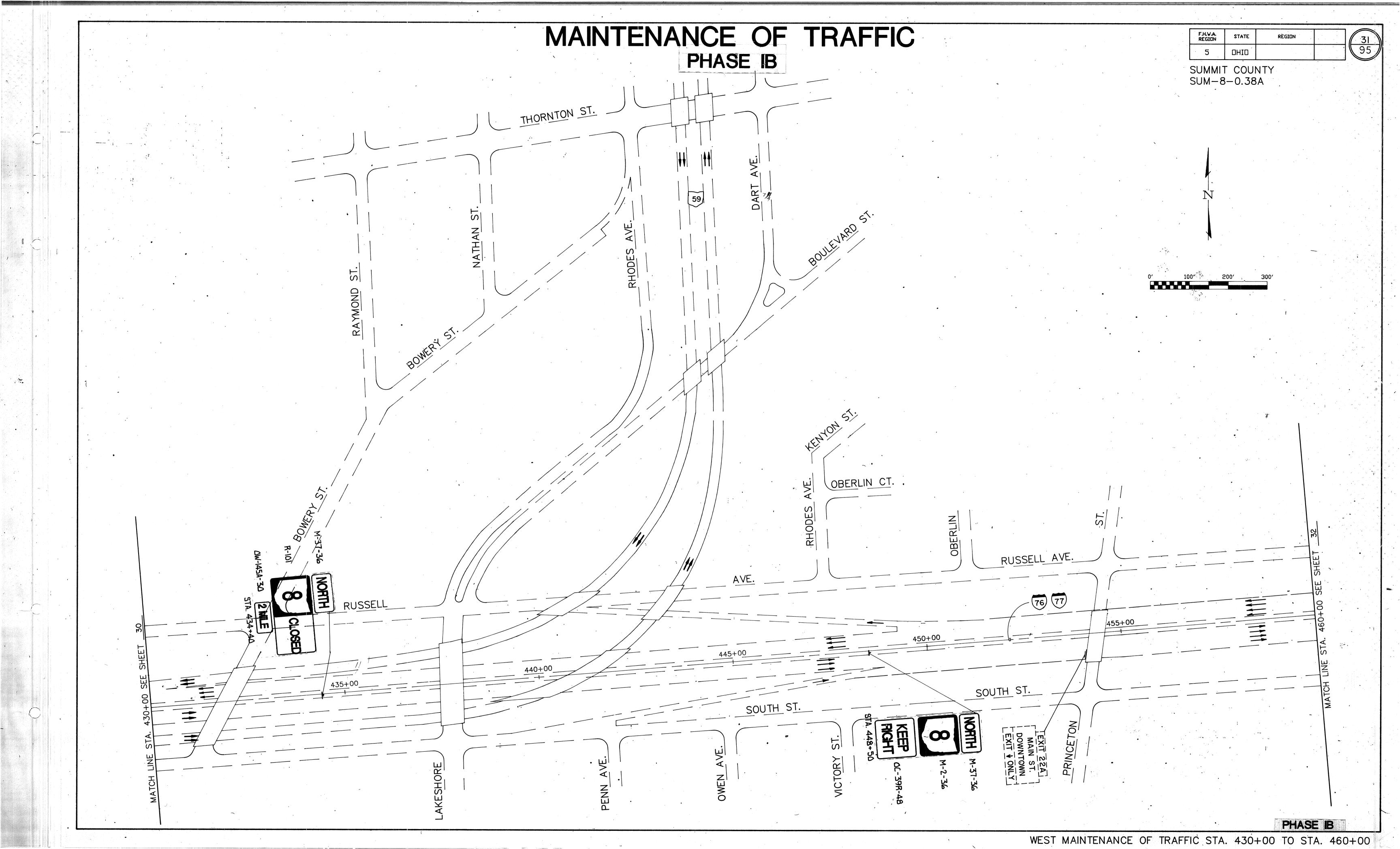


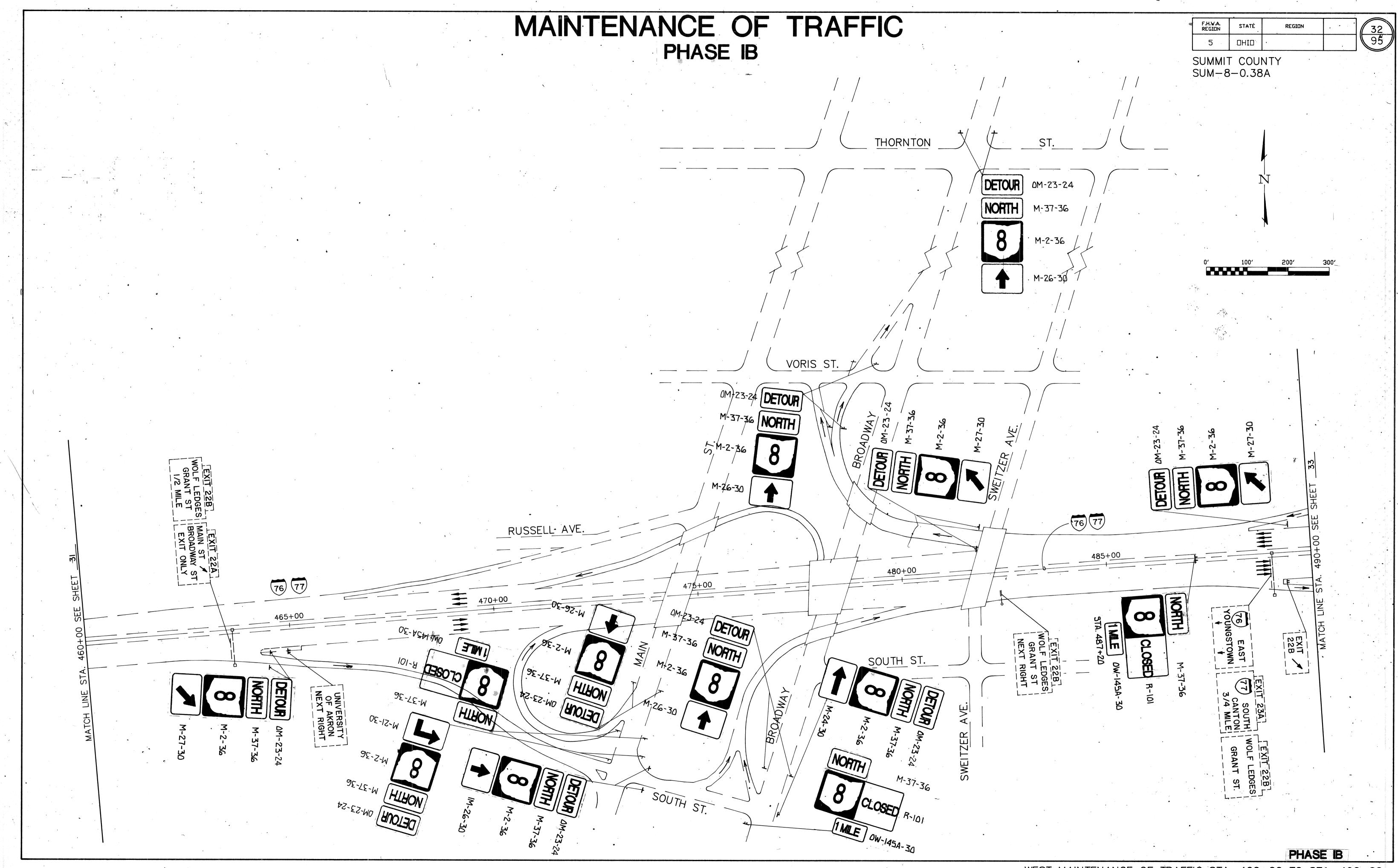


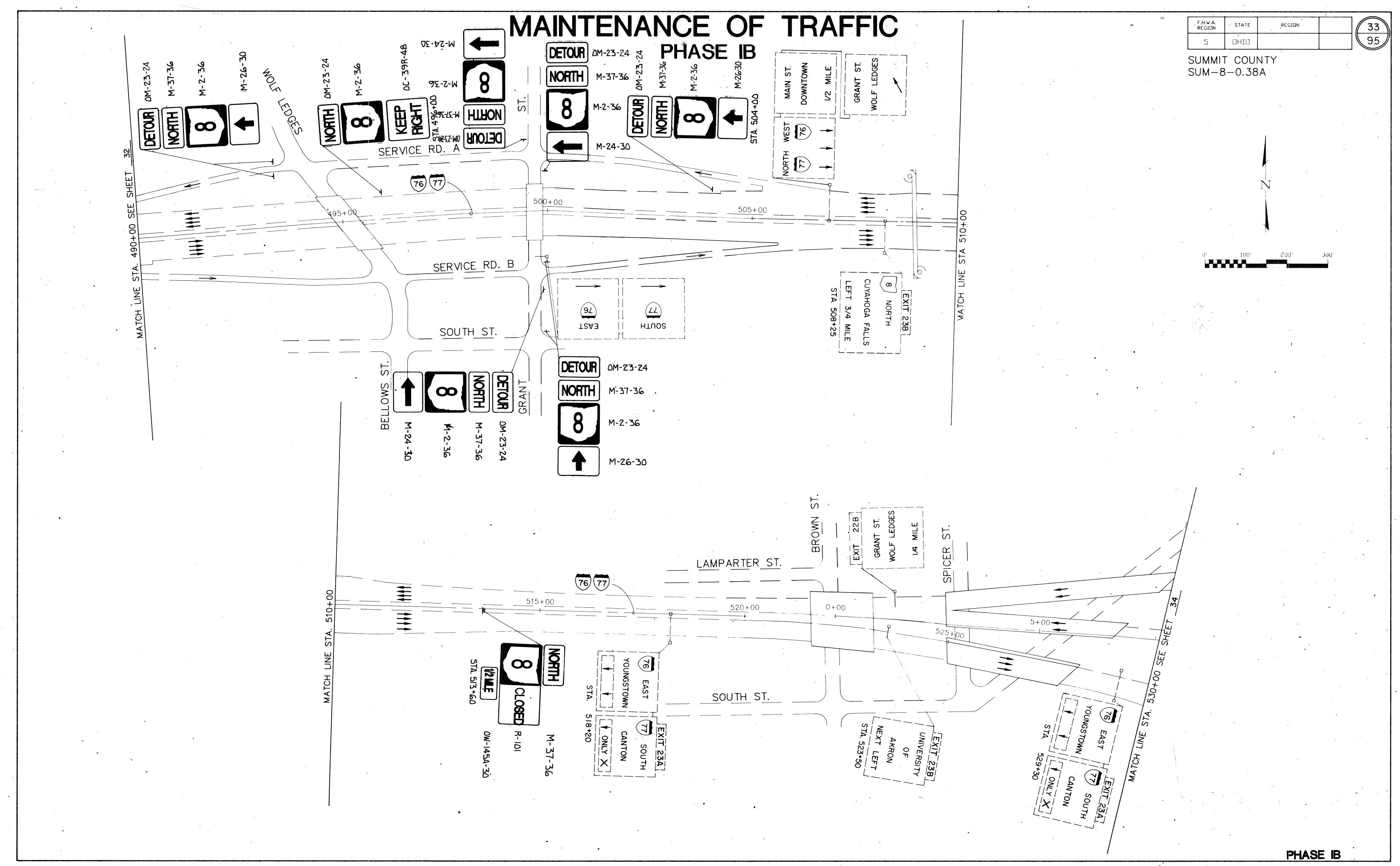


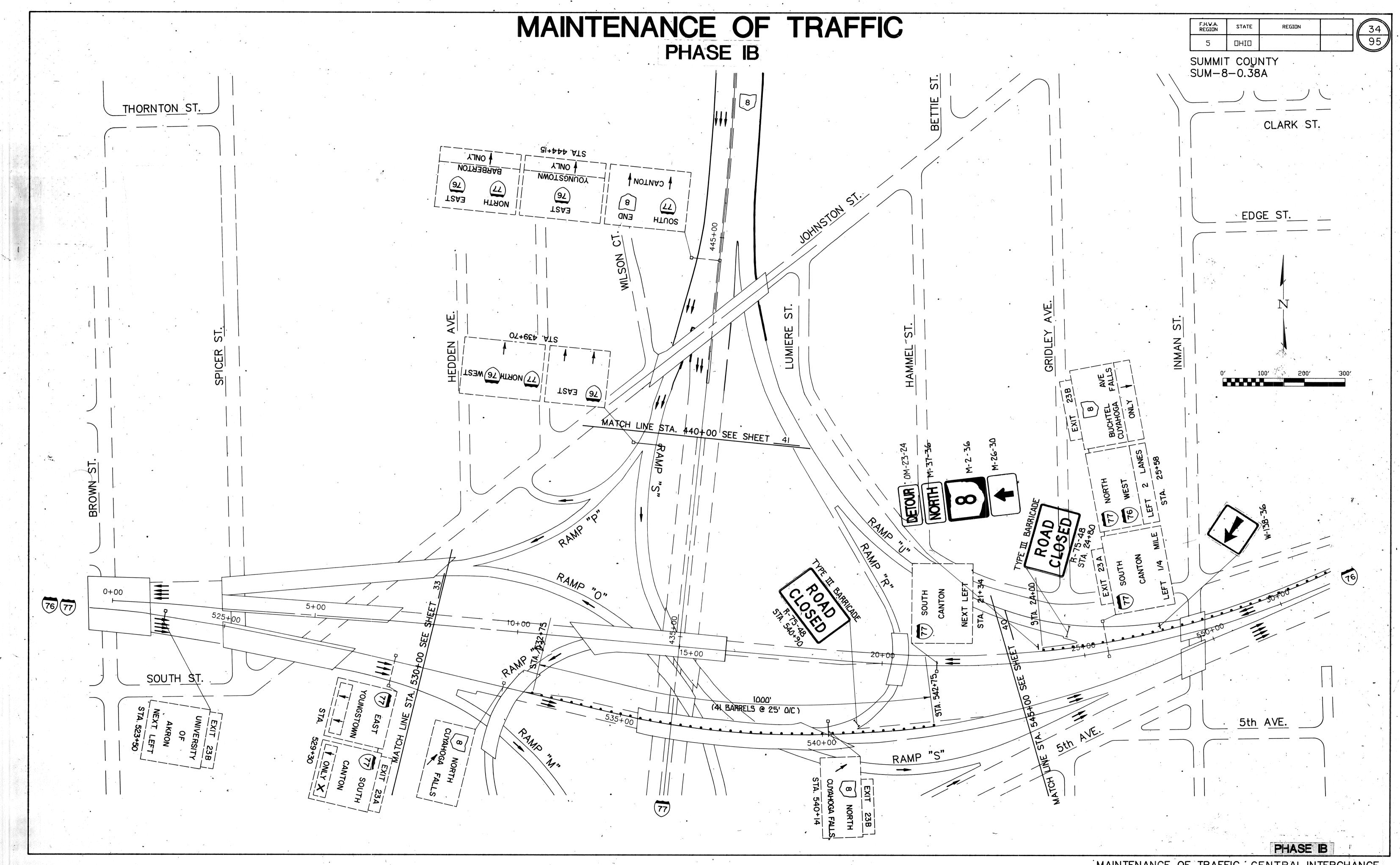


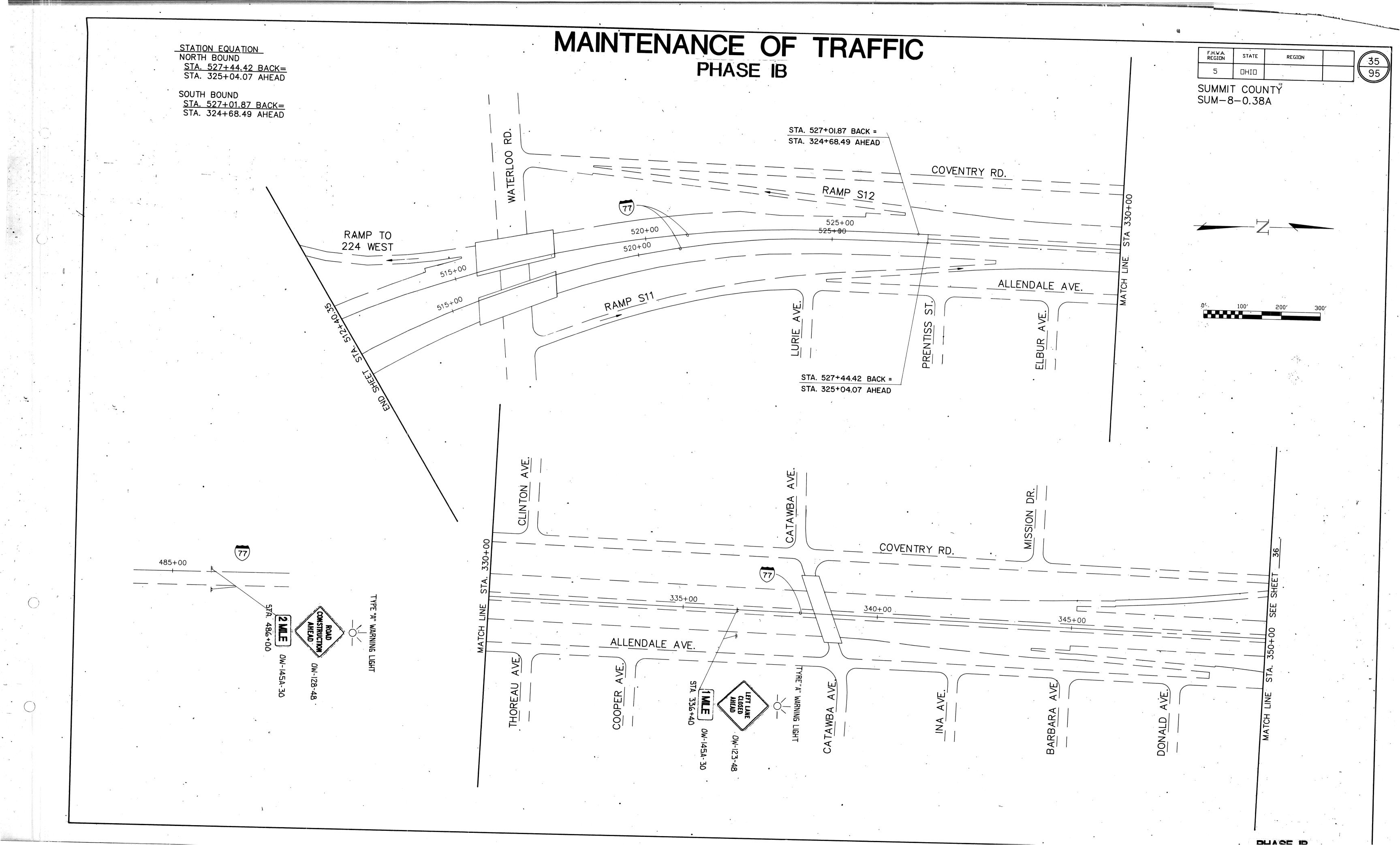


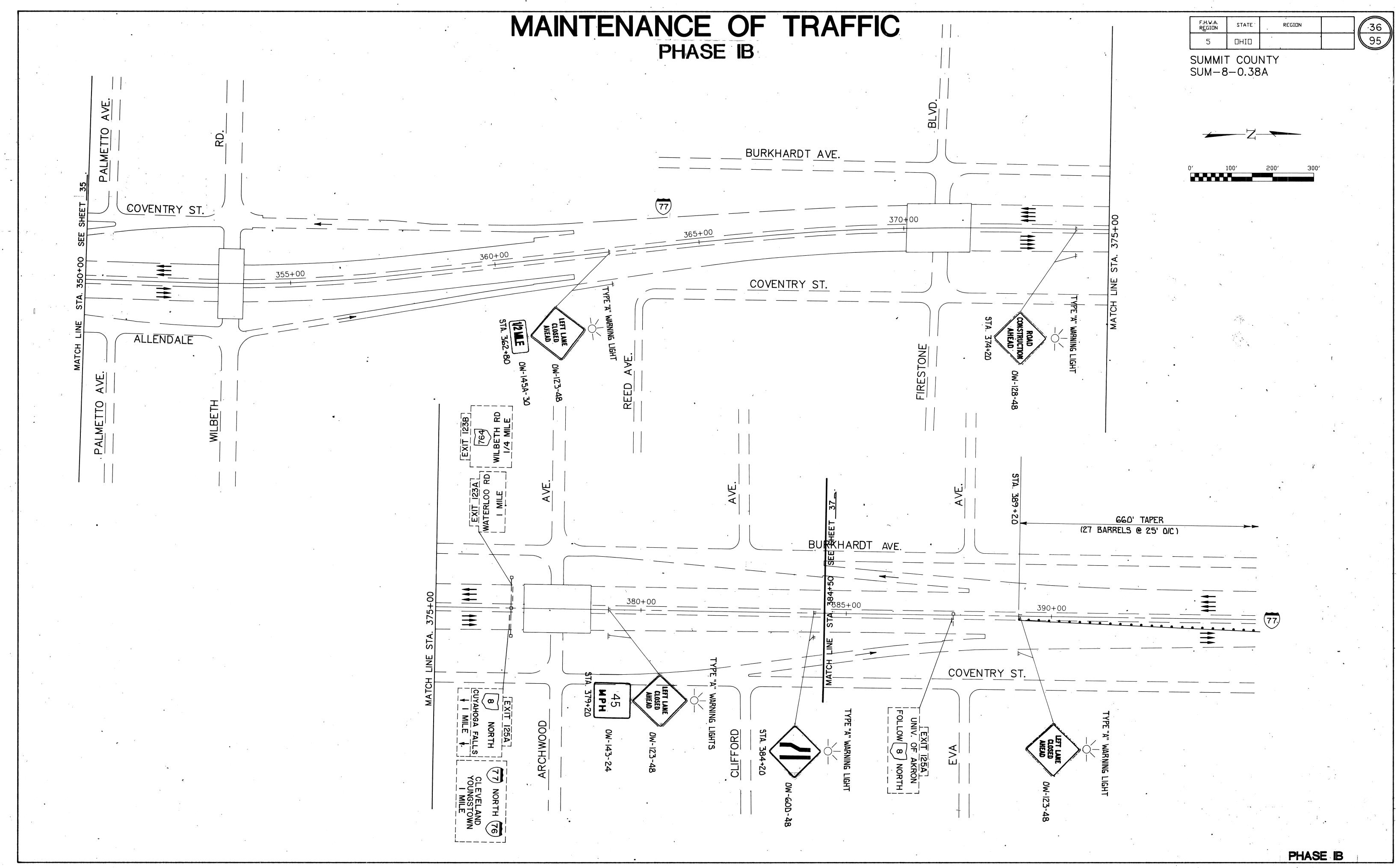


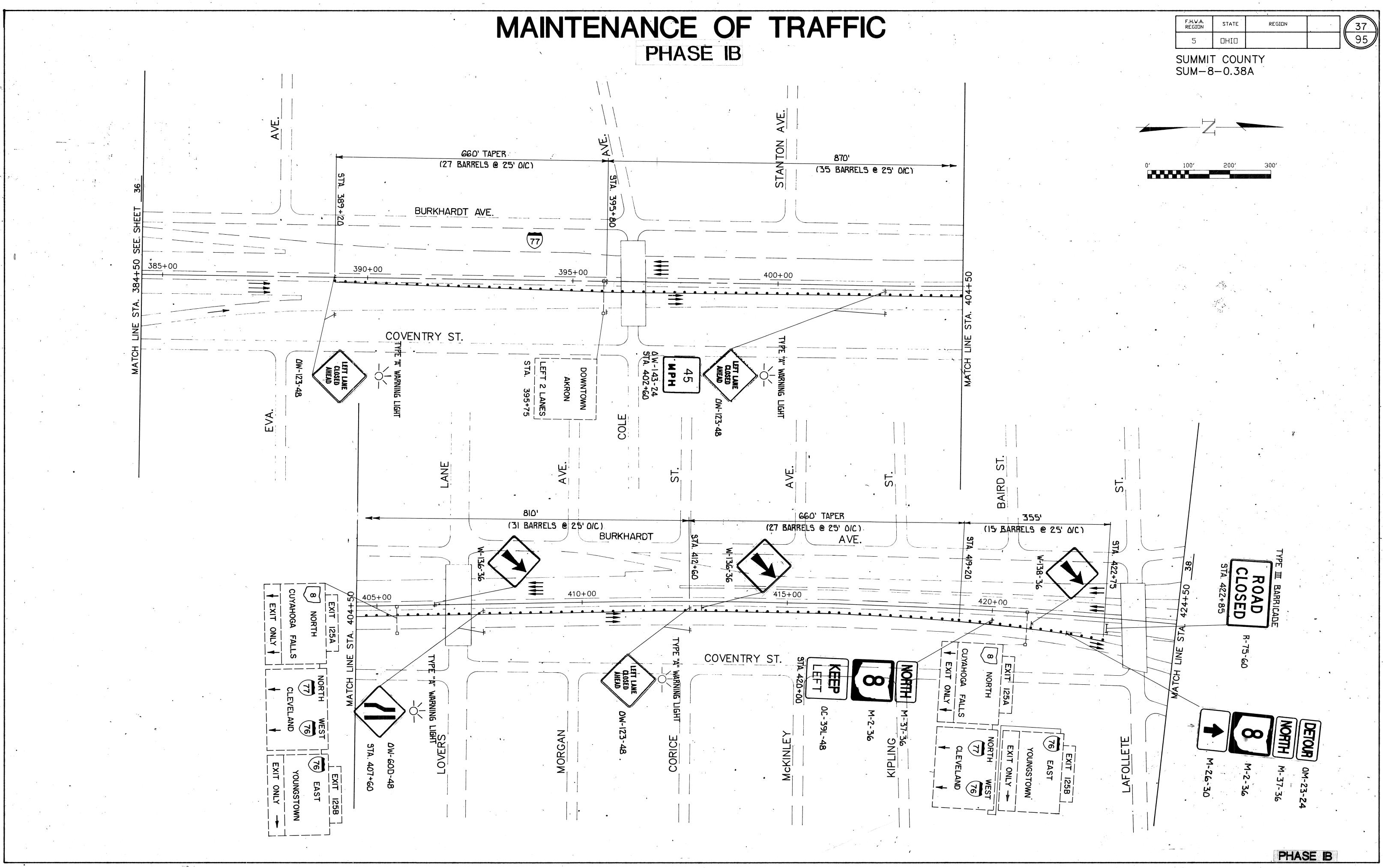


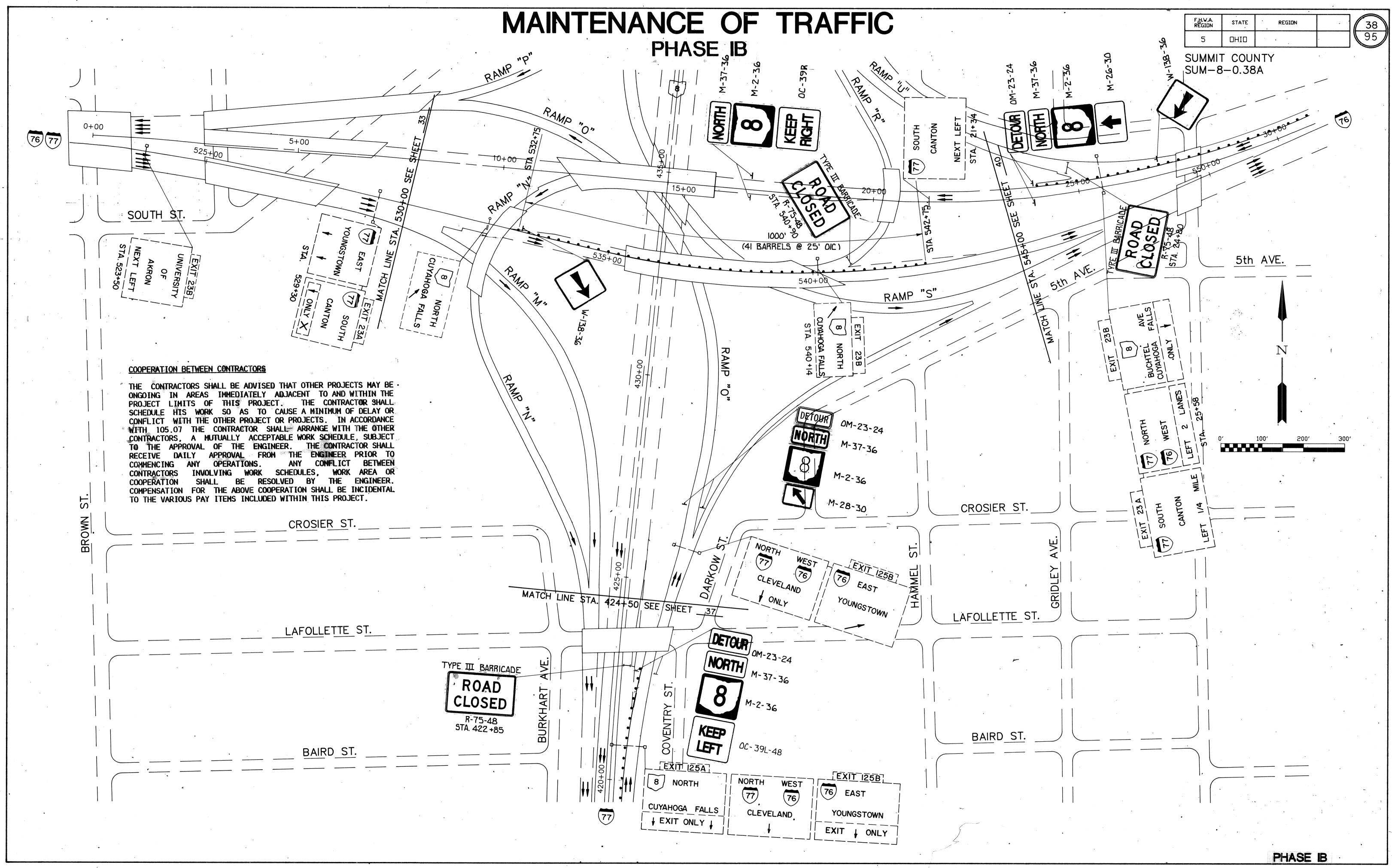


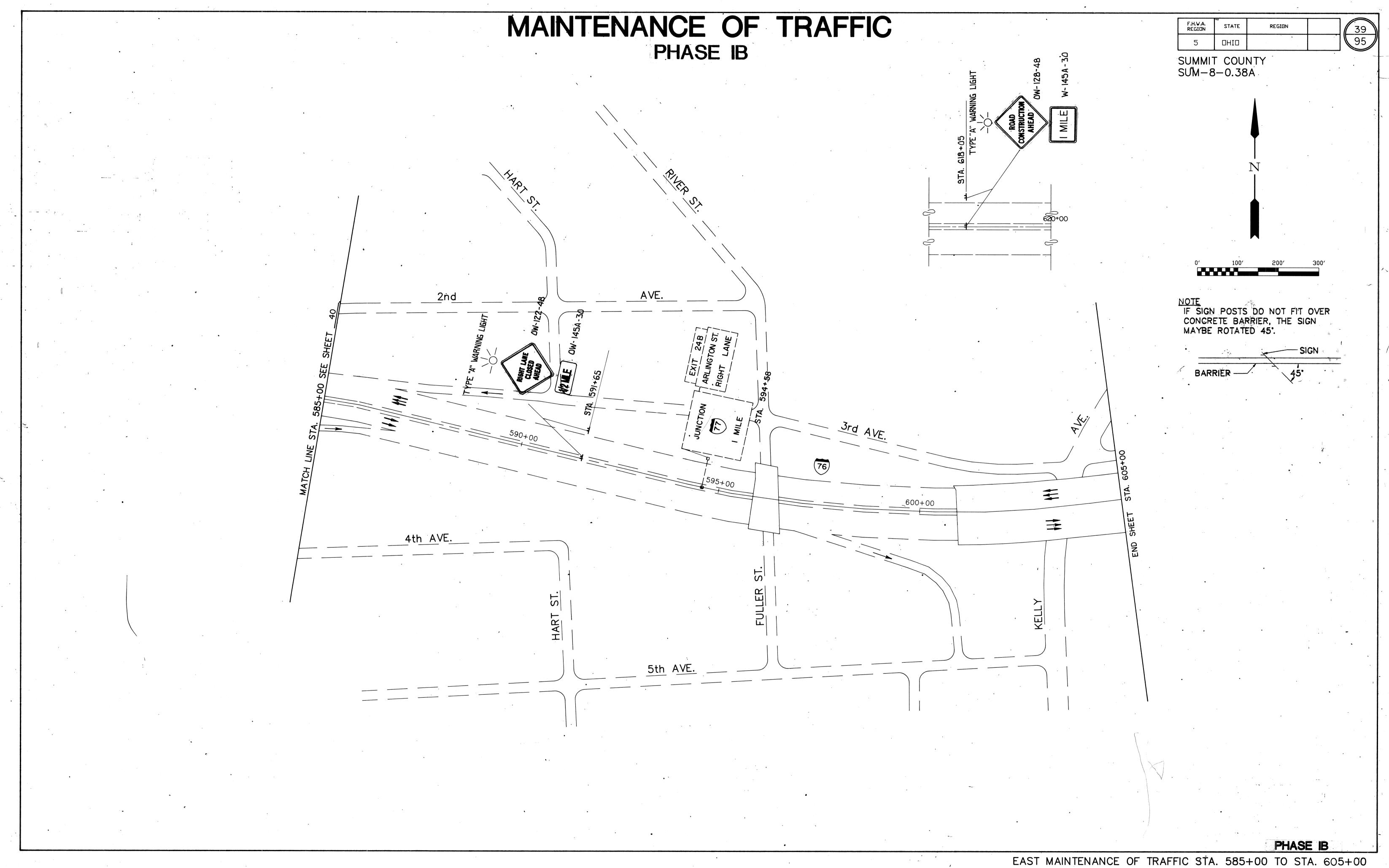


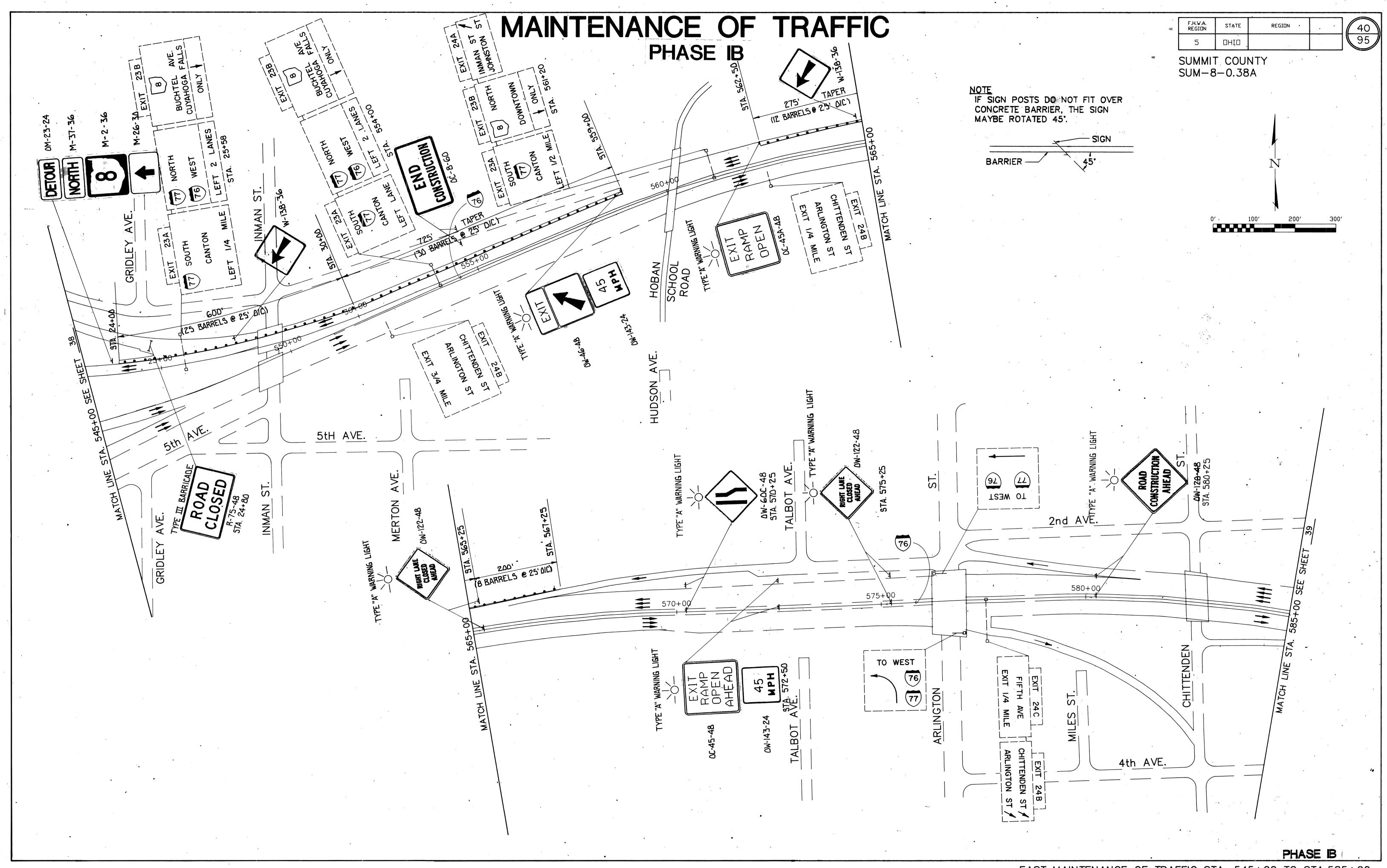


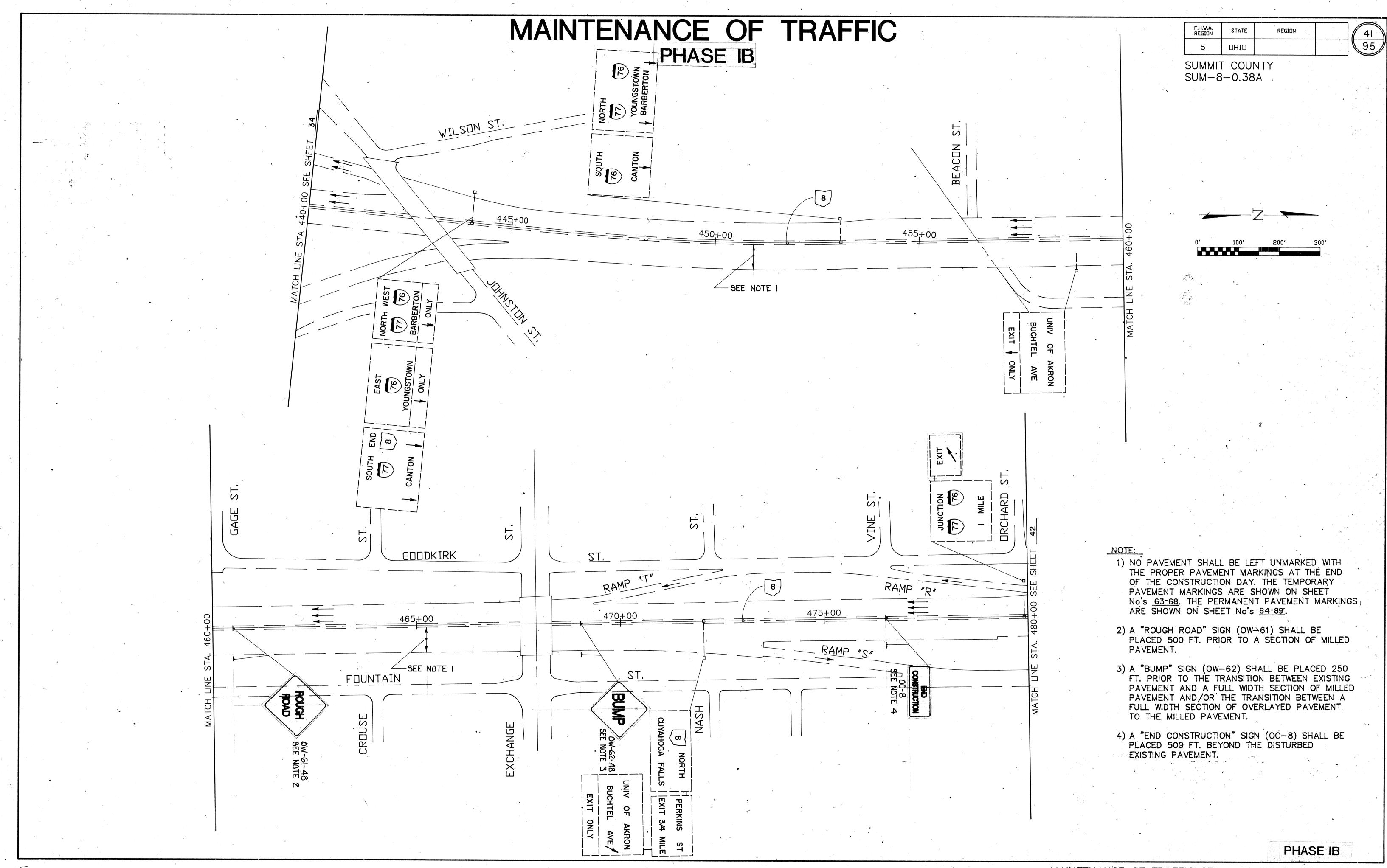


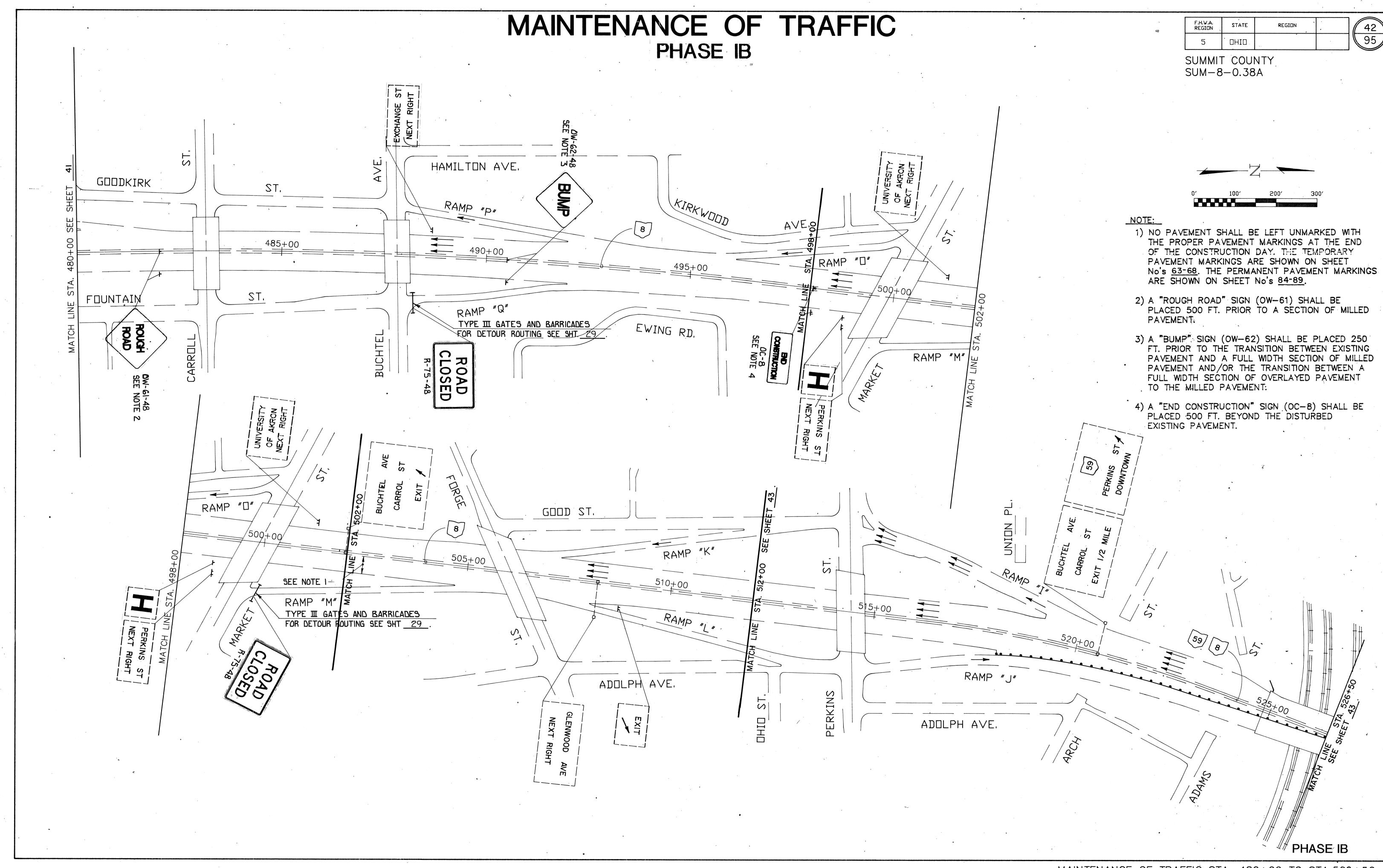


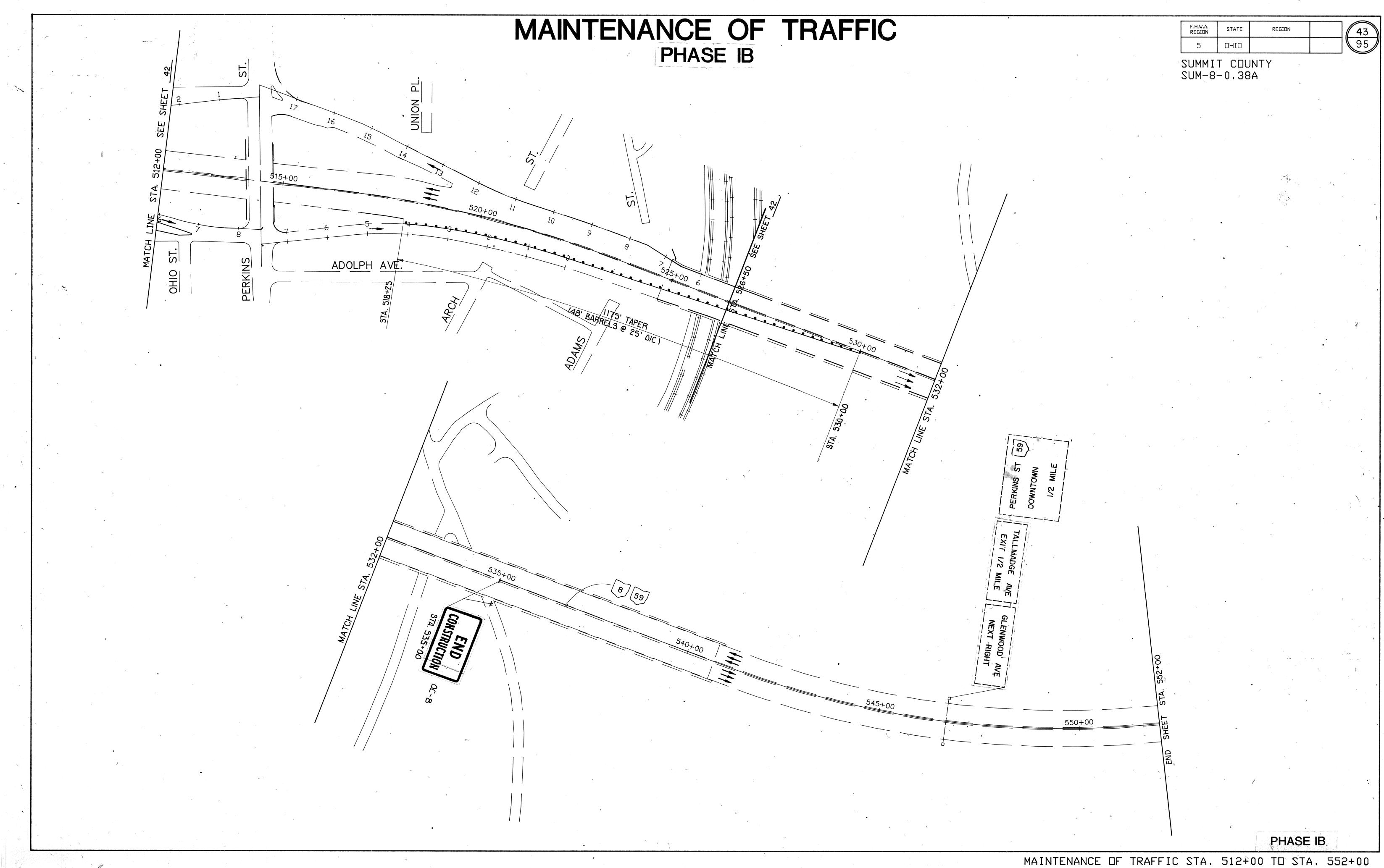


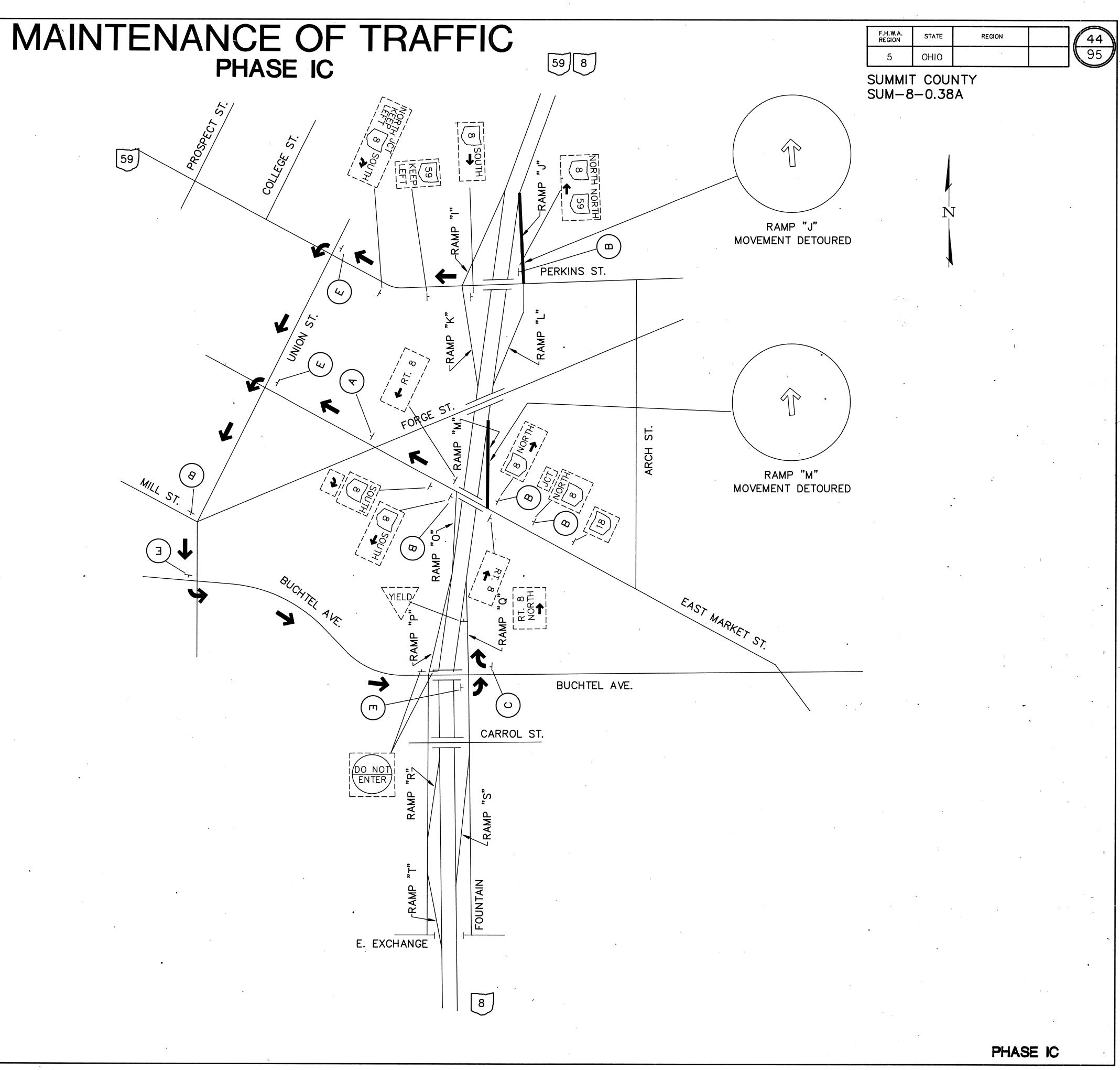








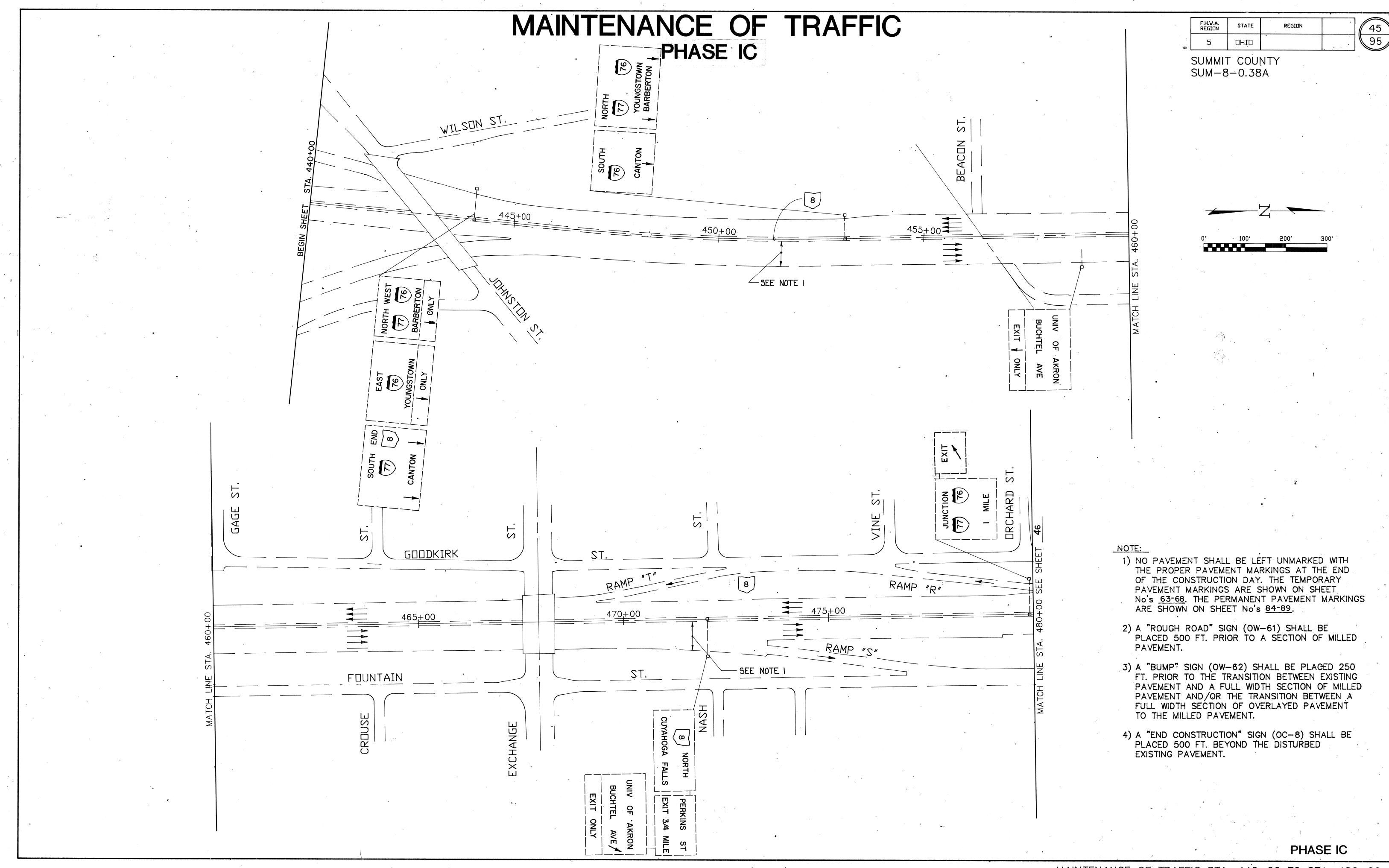


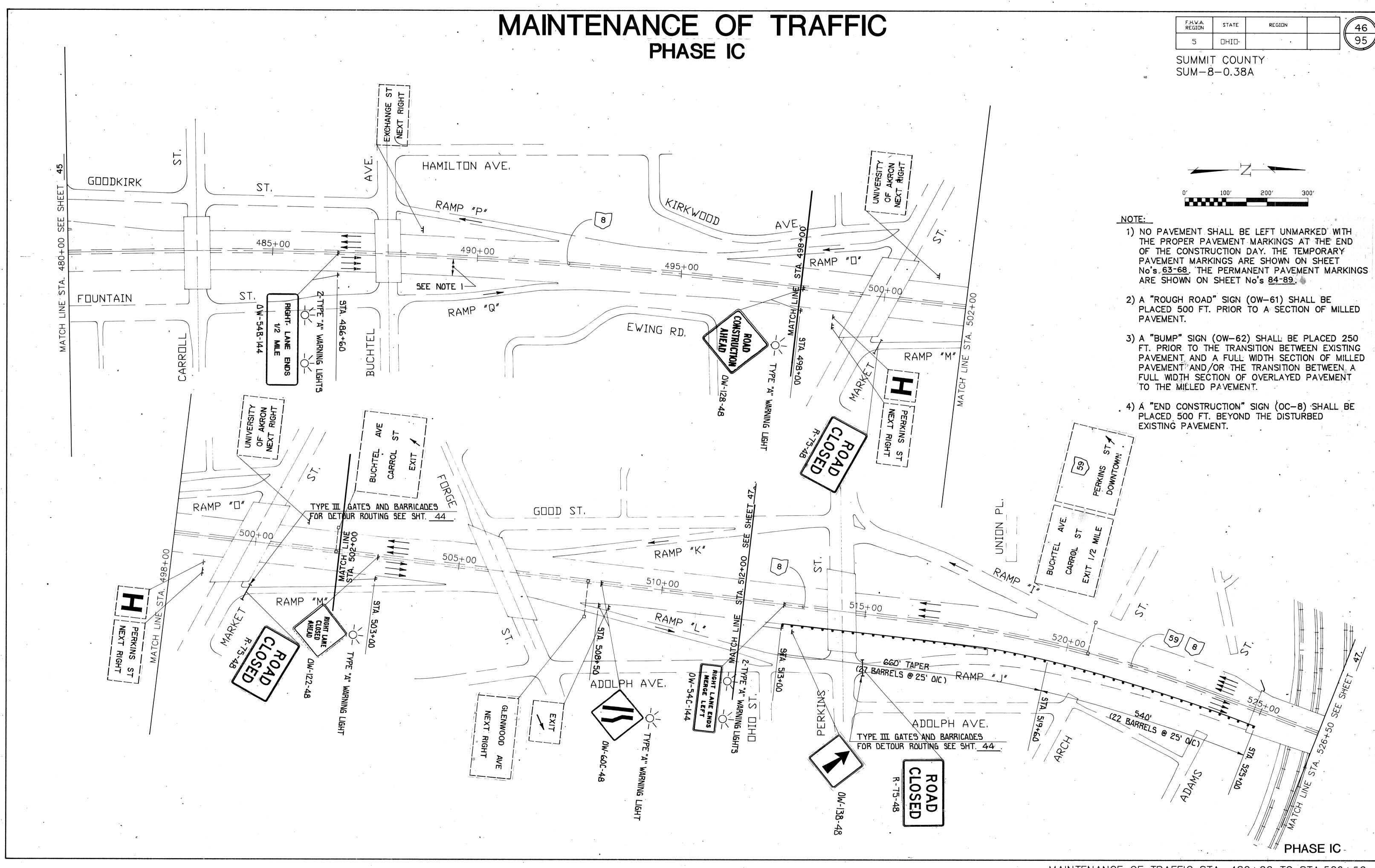


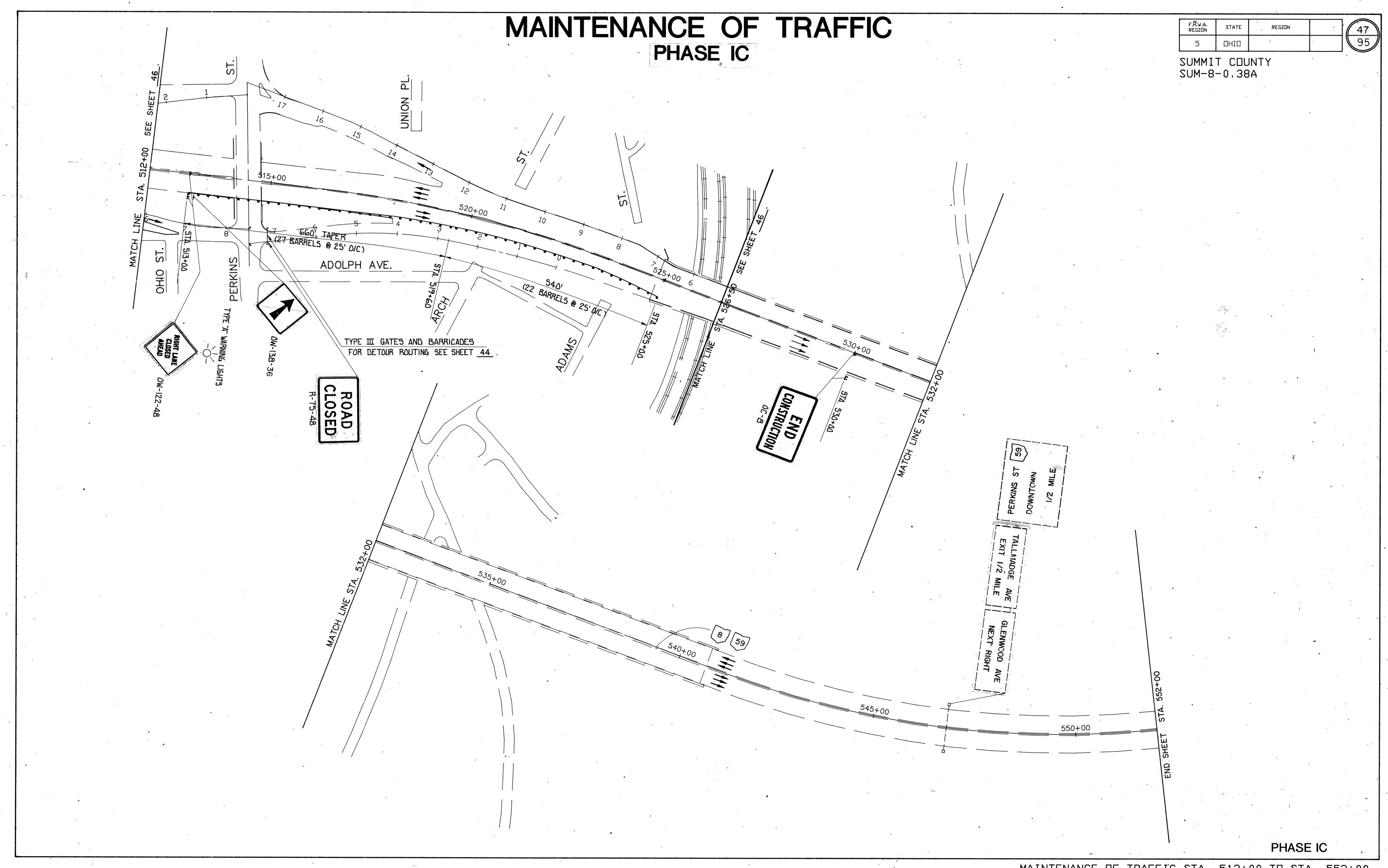
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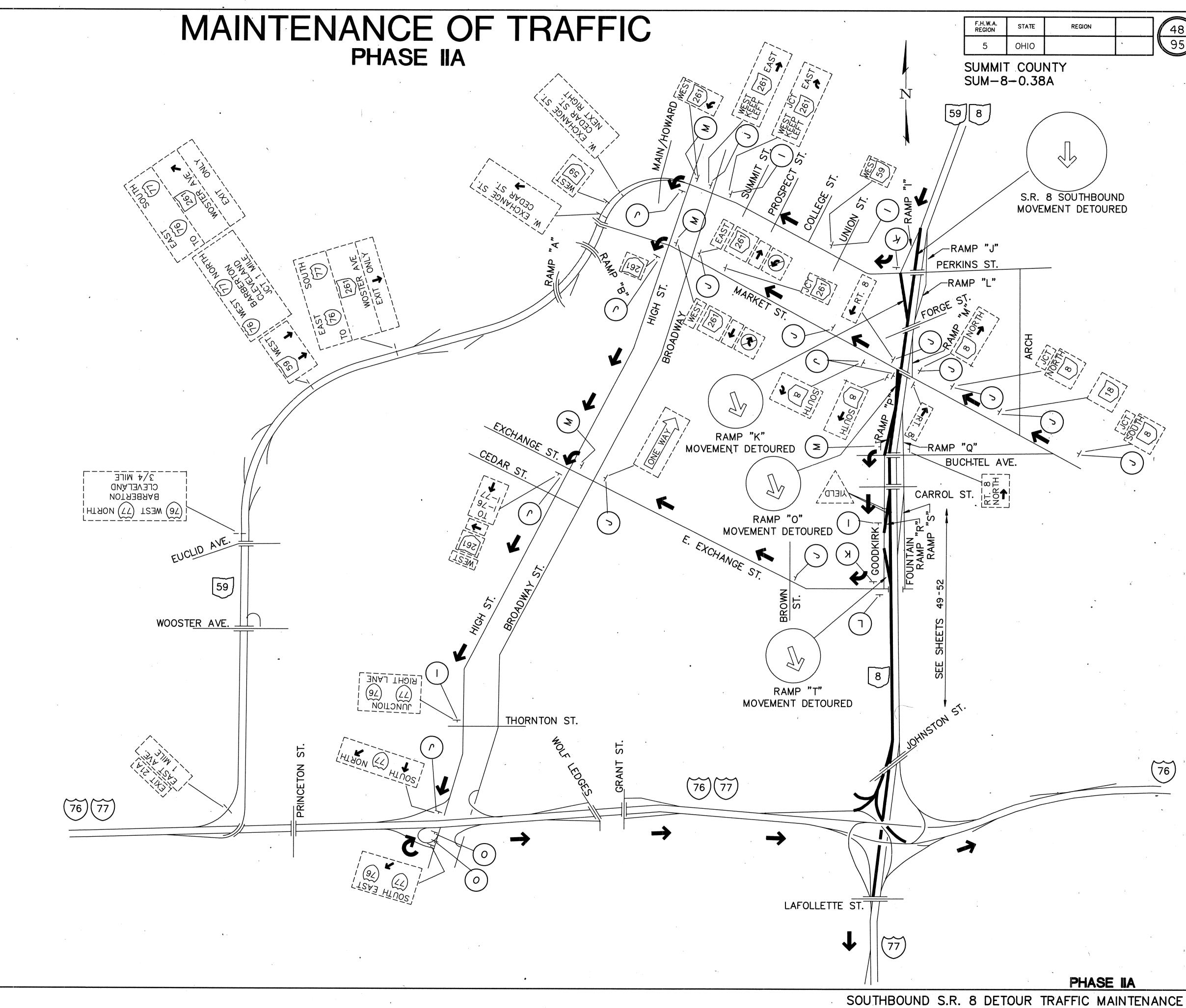
- I. UNDER PHASE IC ALL NORTHBOUND TRAFFIC SHALL BE DETOURED FROM THE S.R. 8 NORTHBOUND ENTRANCE RAMP "J".
- 2. ALL MOVEMENT ON RAMP "M", MARKET ST. NORTHBOUND, SHALL BE DETOURED.
- 3. SEE PHASE IA FOR ADDITIONAL NOTES AND LEGEND FOR PROPOSED SIGNAGE.

5. HEAVYWEIGHT LINE INDICATES CLOSURES ON ROADWAY DIAGRAM THIS SHEET.

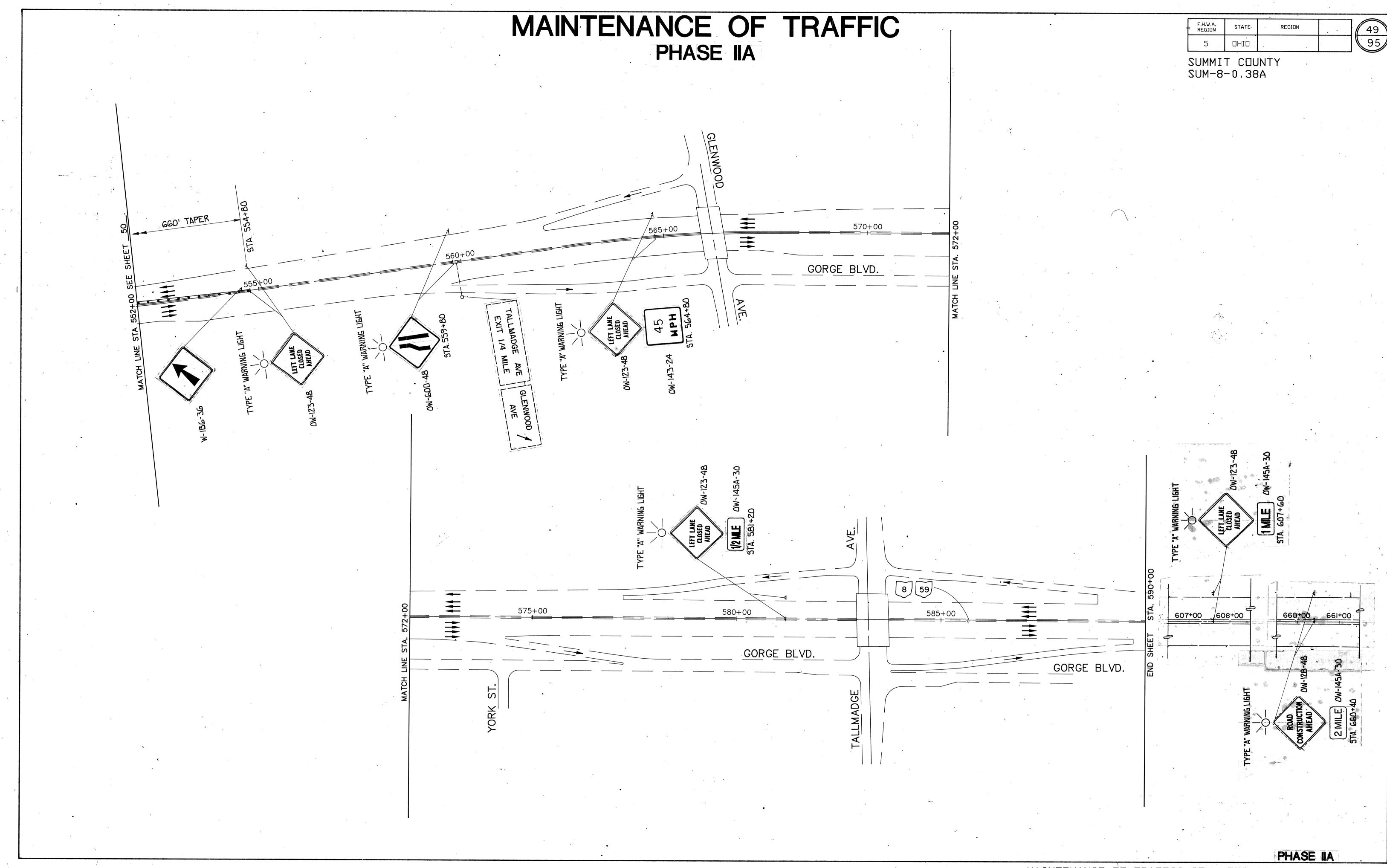


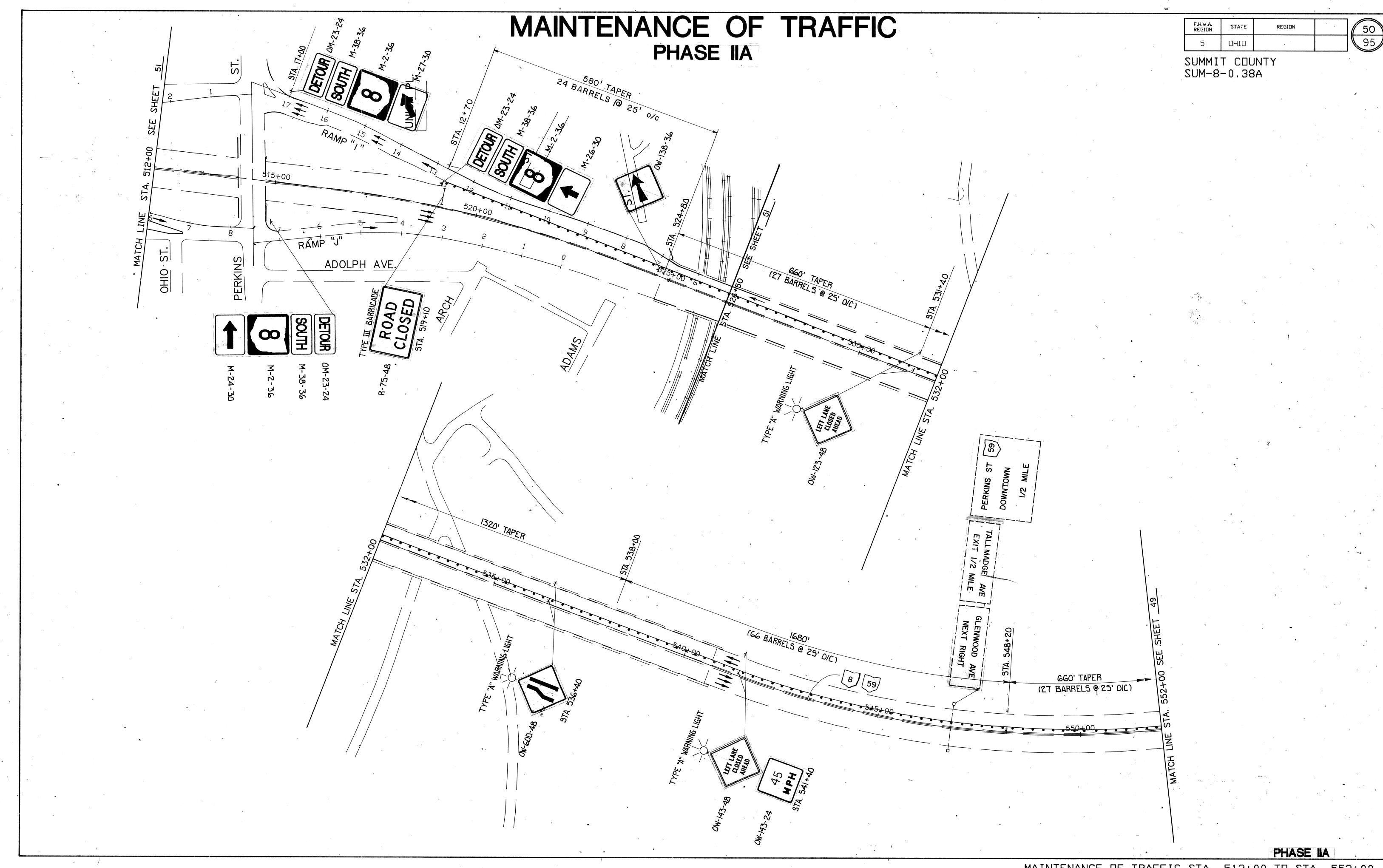


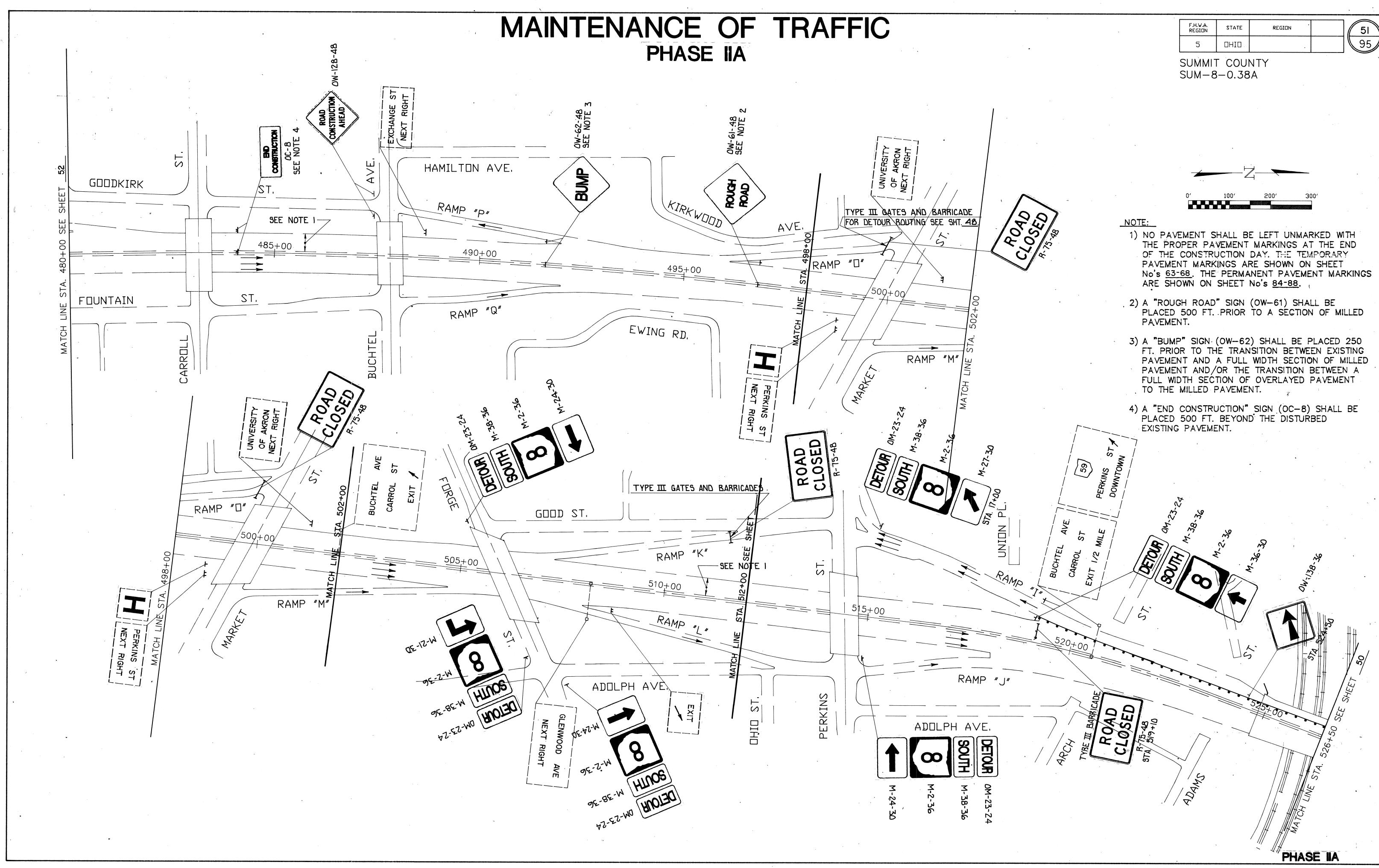


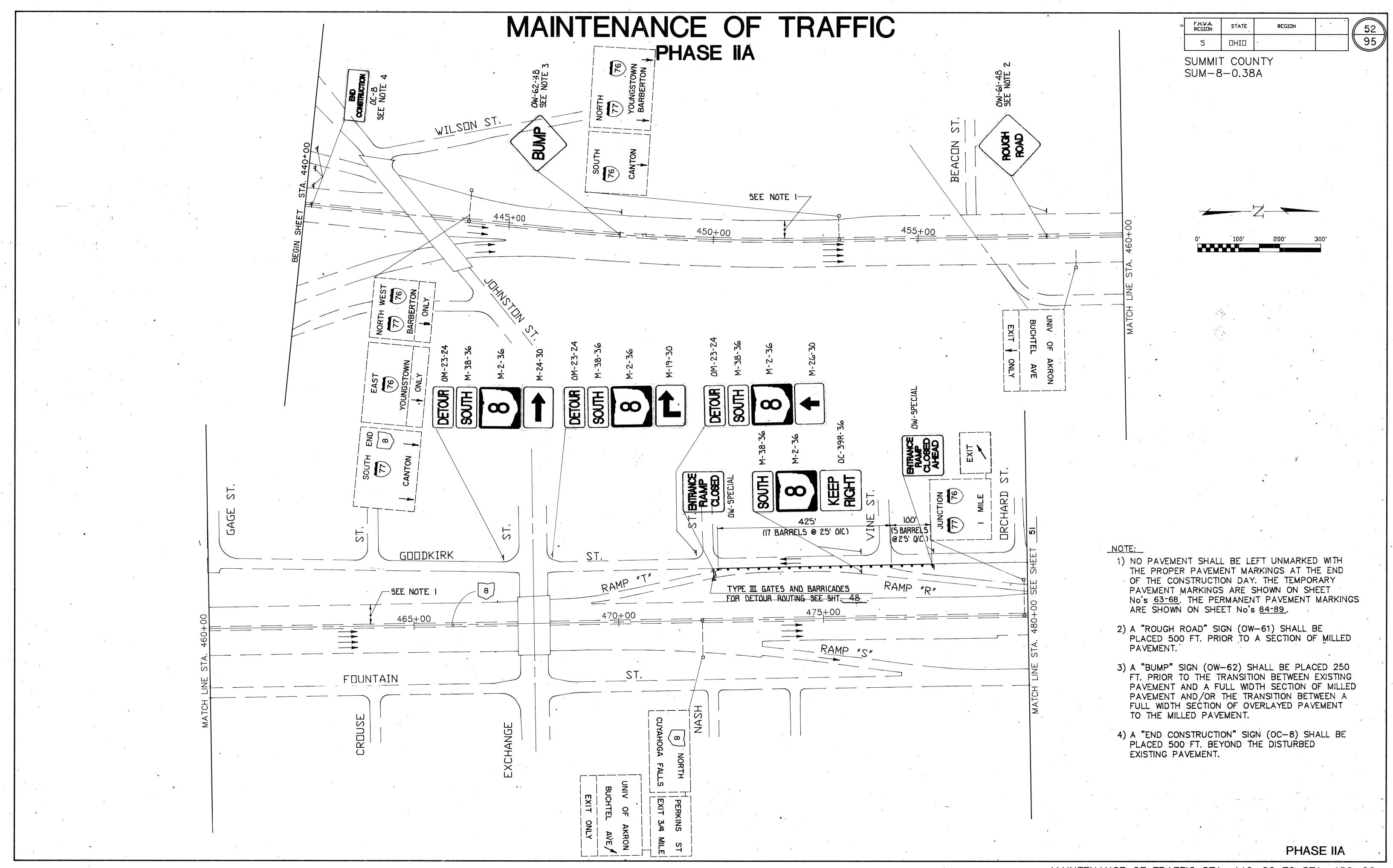


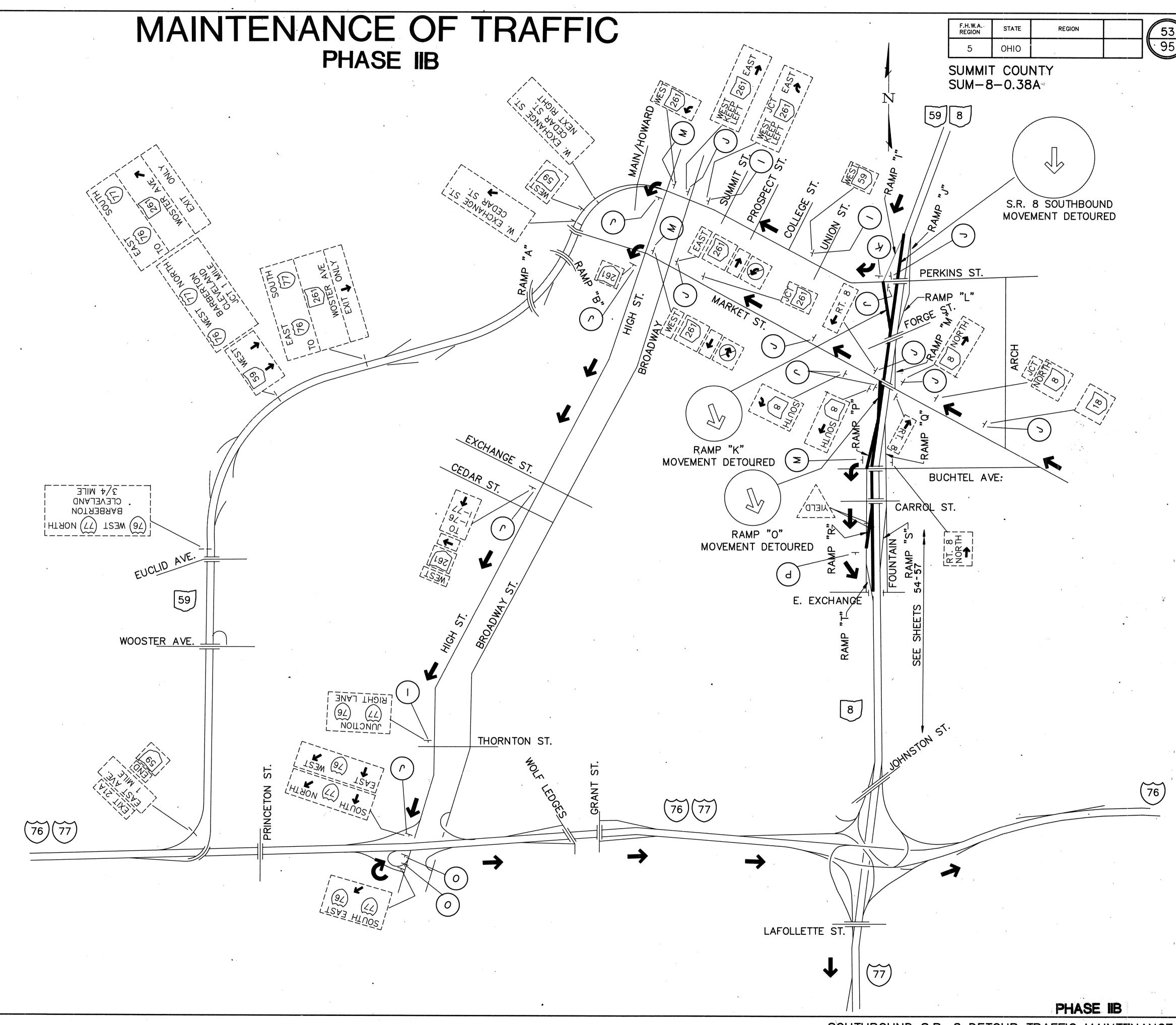
- NOTES: 1. UNDER PHASE IIA ALL SOUTHBOUND TRAFFIC SHALL BE DETOURED FROM S.R. 8 SOUTHBOUND BETWEEN RAMP "I", THE PERKINS STREET SOUTHBOUND EXIT RAMP AND THE CENTRAL INTERCHANGE.
- 2. ALL SOUTHBOUND TRAFFIC SHALL BE DETOURED FROM THE S.R. 8 SOUTHBOUND ENTRANCE RAMPS "K", "O" & "T", GOOD ST., E. MARKET ST. AND GOODKIRK ST. RESPECTIVELY.
- 3. SEE PHASE IA FOR ADDITIONAL NOTES AND LEGEND FOR PROPOSED SIGNAGE.







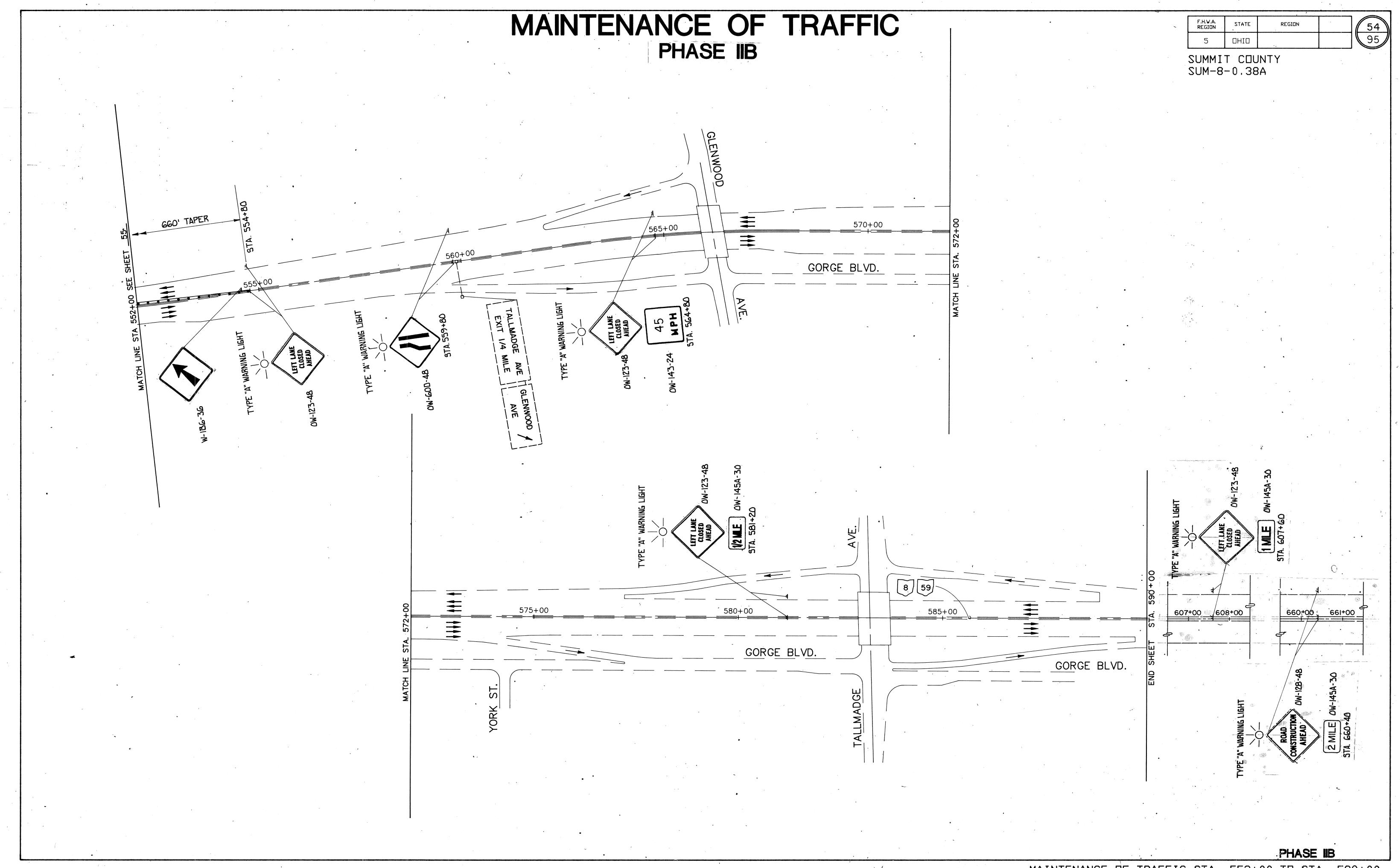


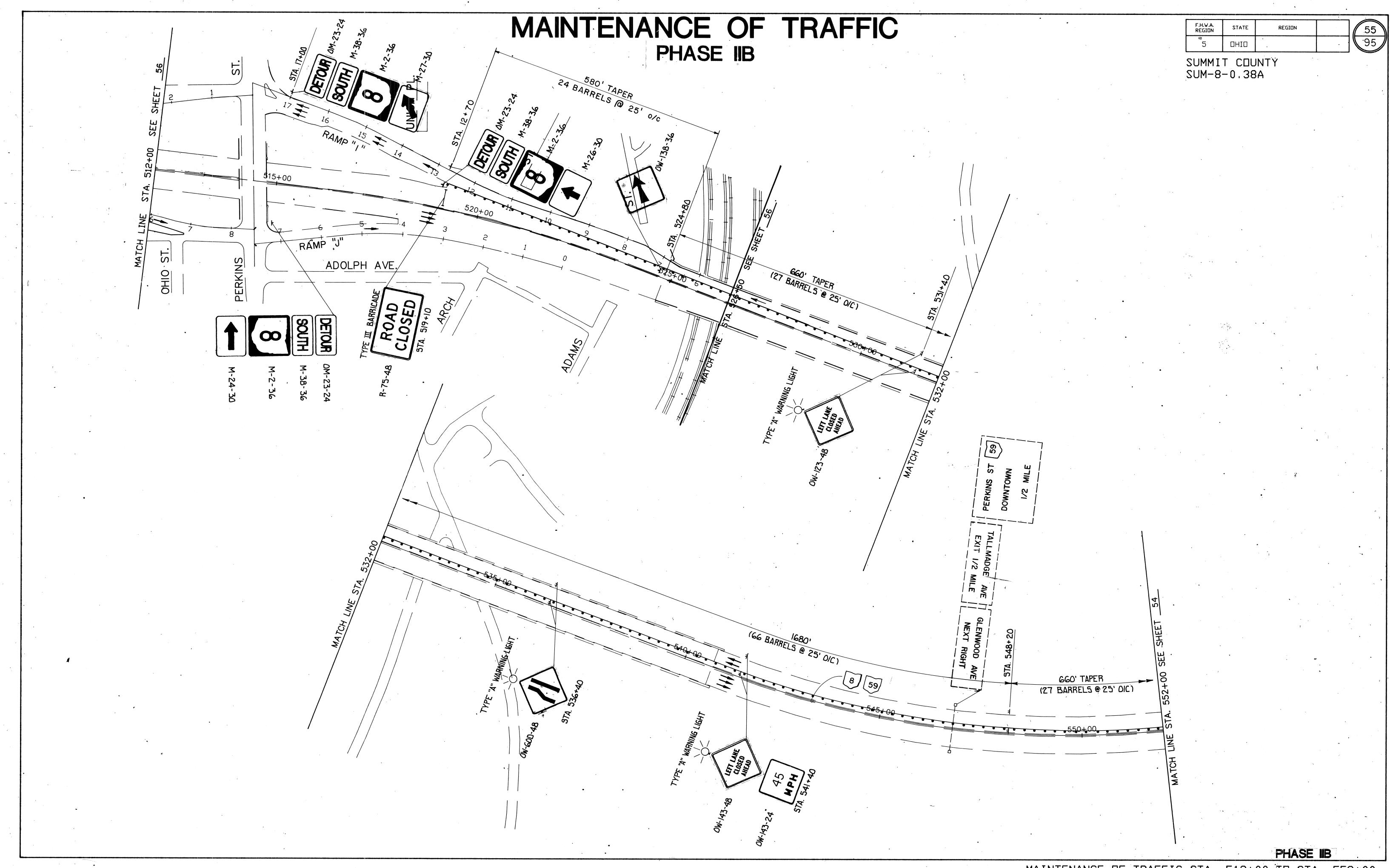


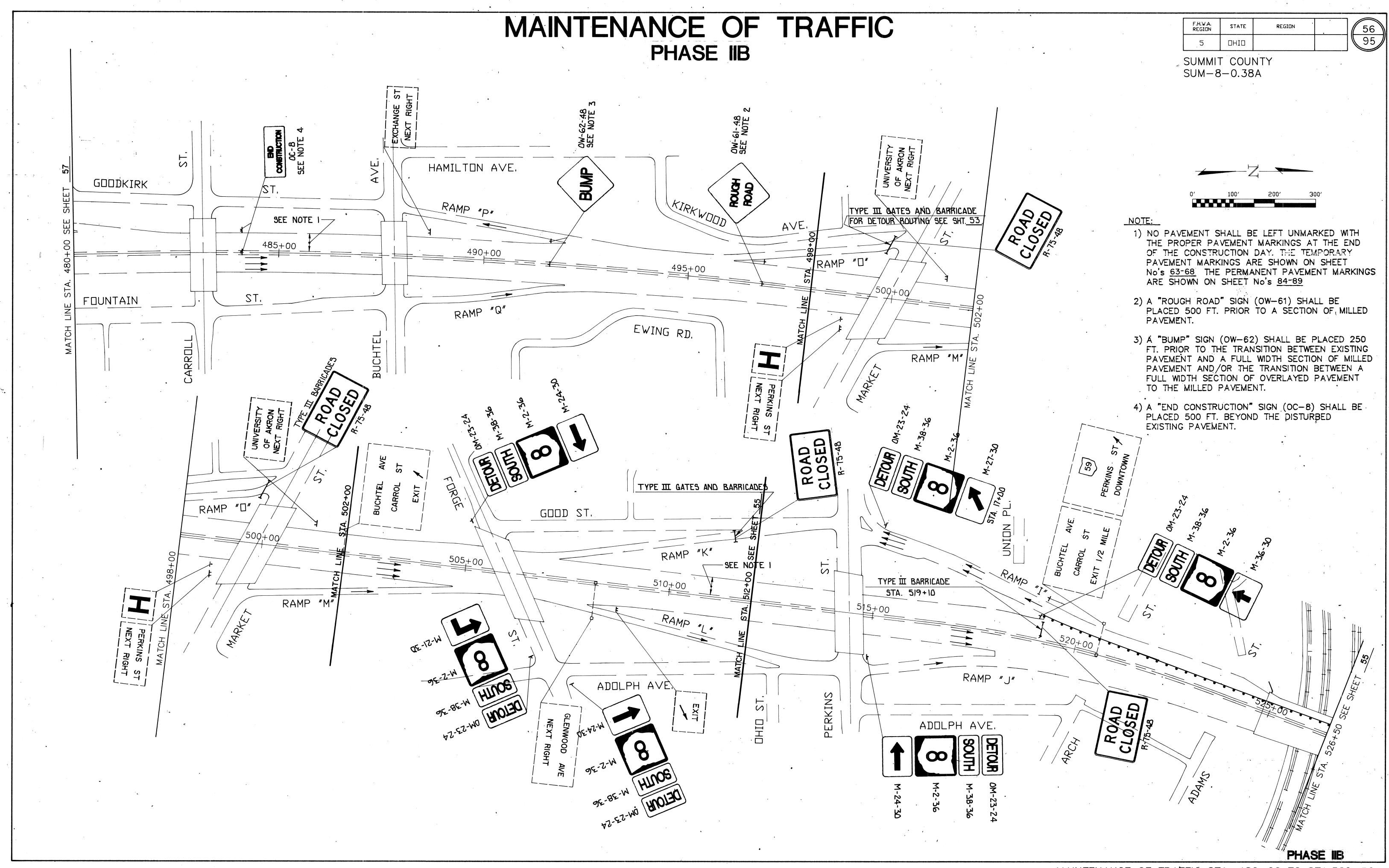
NOTES:

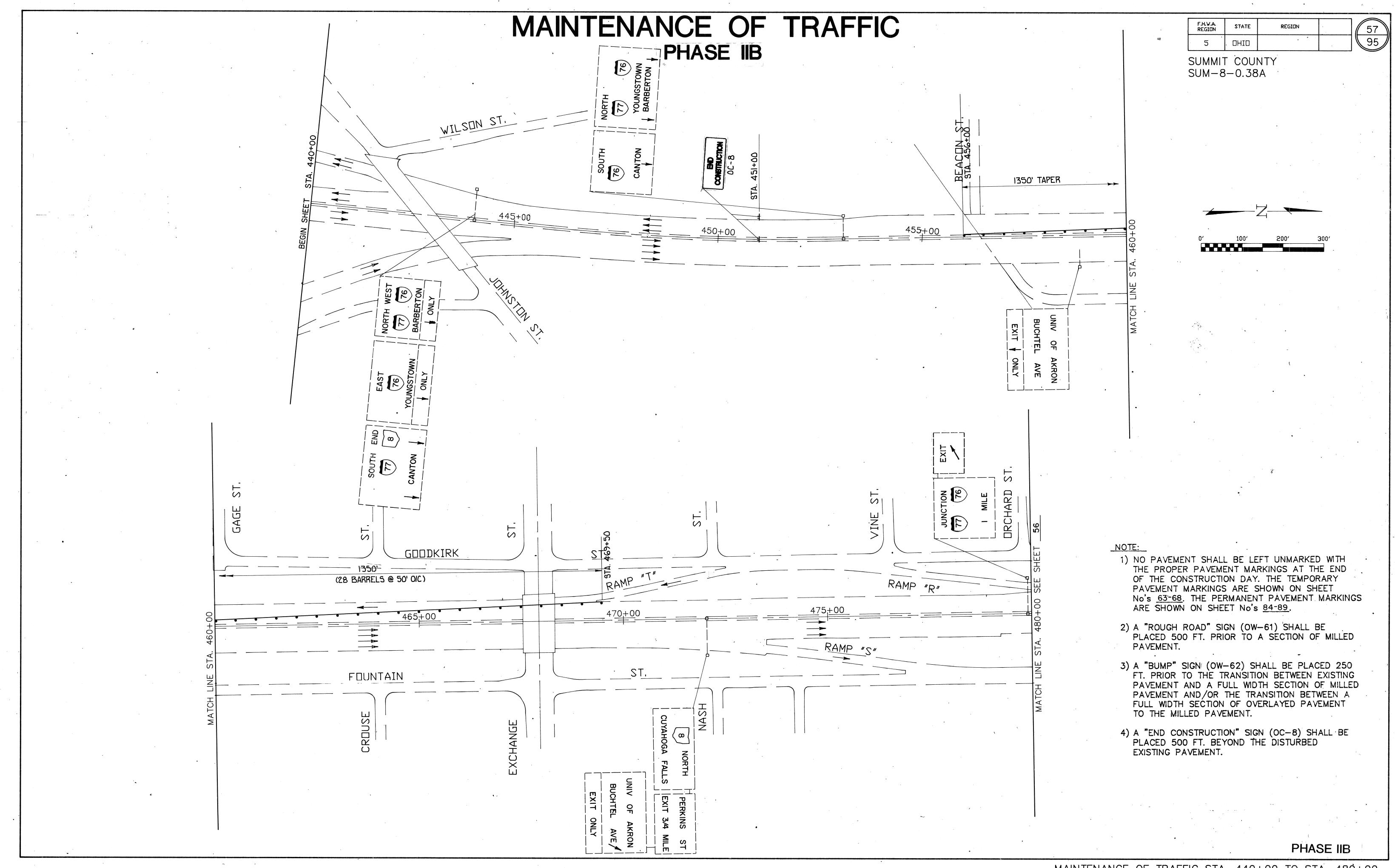
1. UNDER PHASE IIB ALL SOUTHBOUND TRAFFIC SHALL BE DETOURED FROM S.R. 8 SOUTHBOUND BETWEEN RAMP "I", THE PERKINS STREET SOUTHBOUND EXIT RAMP AND THE S.R. 8 SOUTHBOUND ENTRANCE RAMP "T", AT GOODKIRK ST.

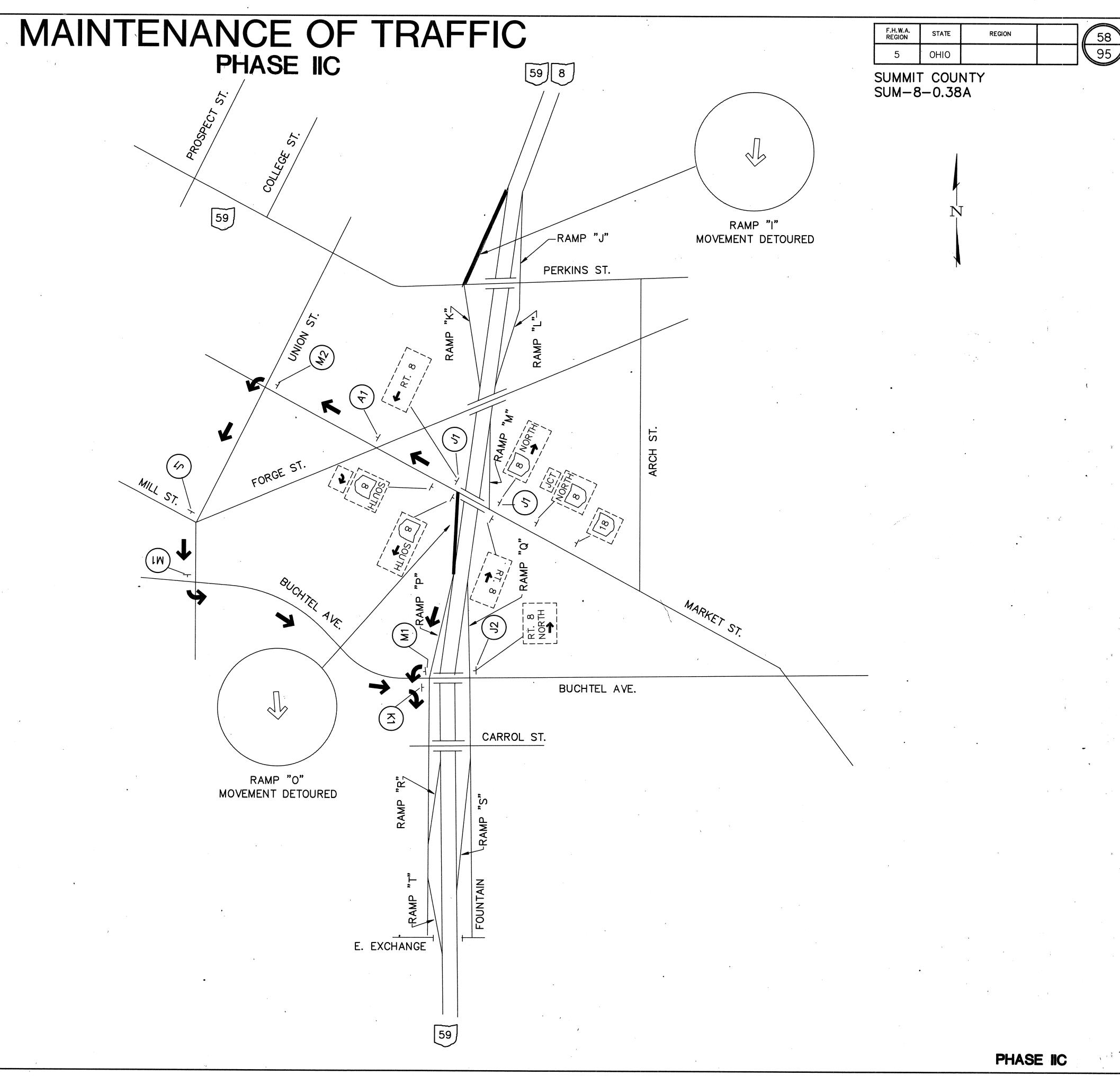
- 2. ALL SOUTHBOUND TRAFFIC SHALL BE DETOURED FROM THE S.R. 8 ENTRANCE RAMPS, RAMP "K" AT GOOD ST. AND RAMP "O" AT EAST MARKET ST.
- 3. SEE PHASE IA FOR ADDITIONAL NOTES AND LEGEND FOR PROPOSED SIGNAGE.





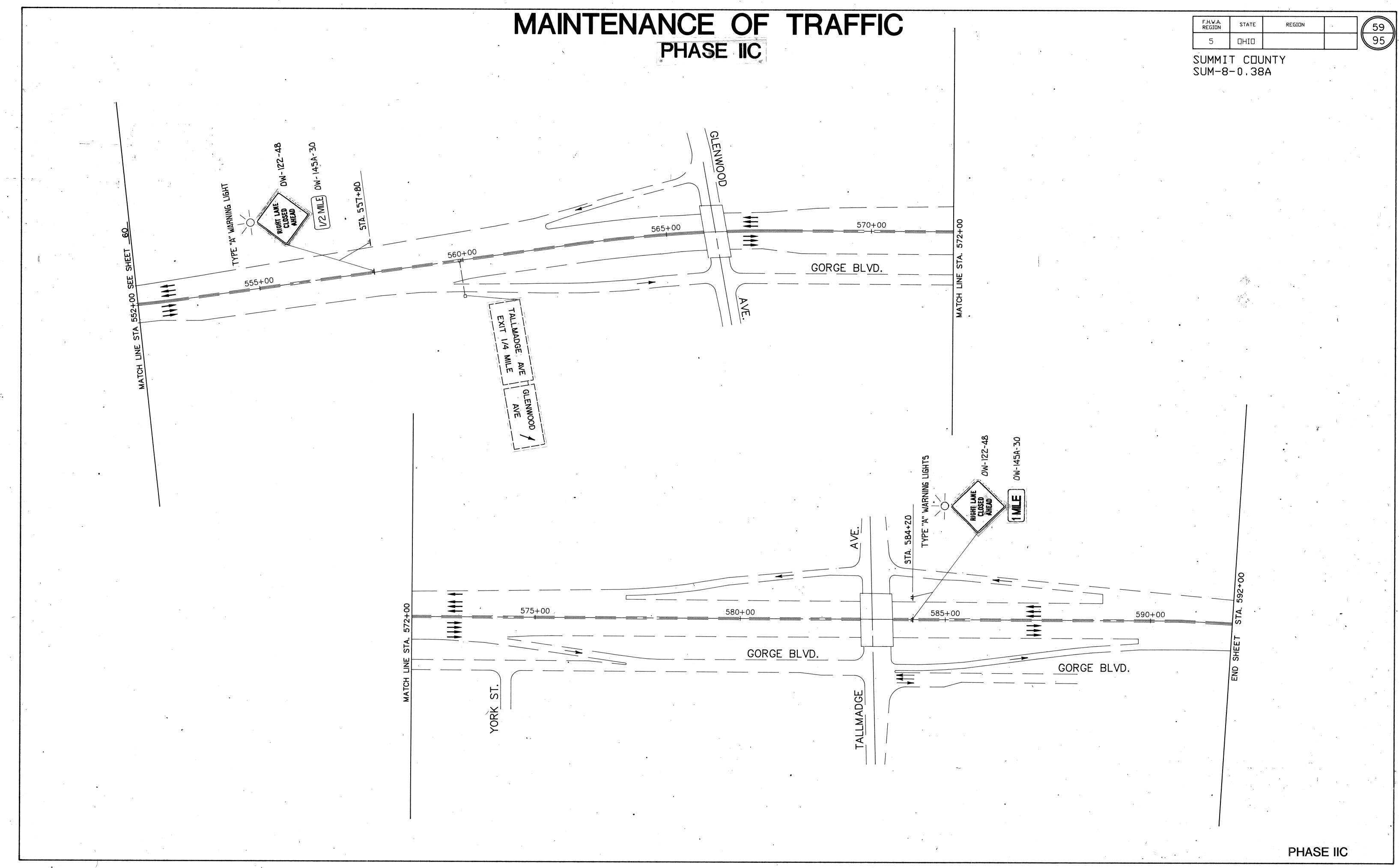


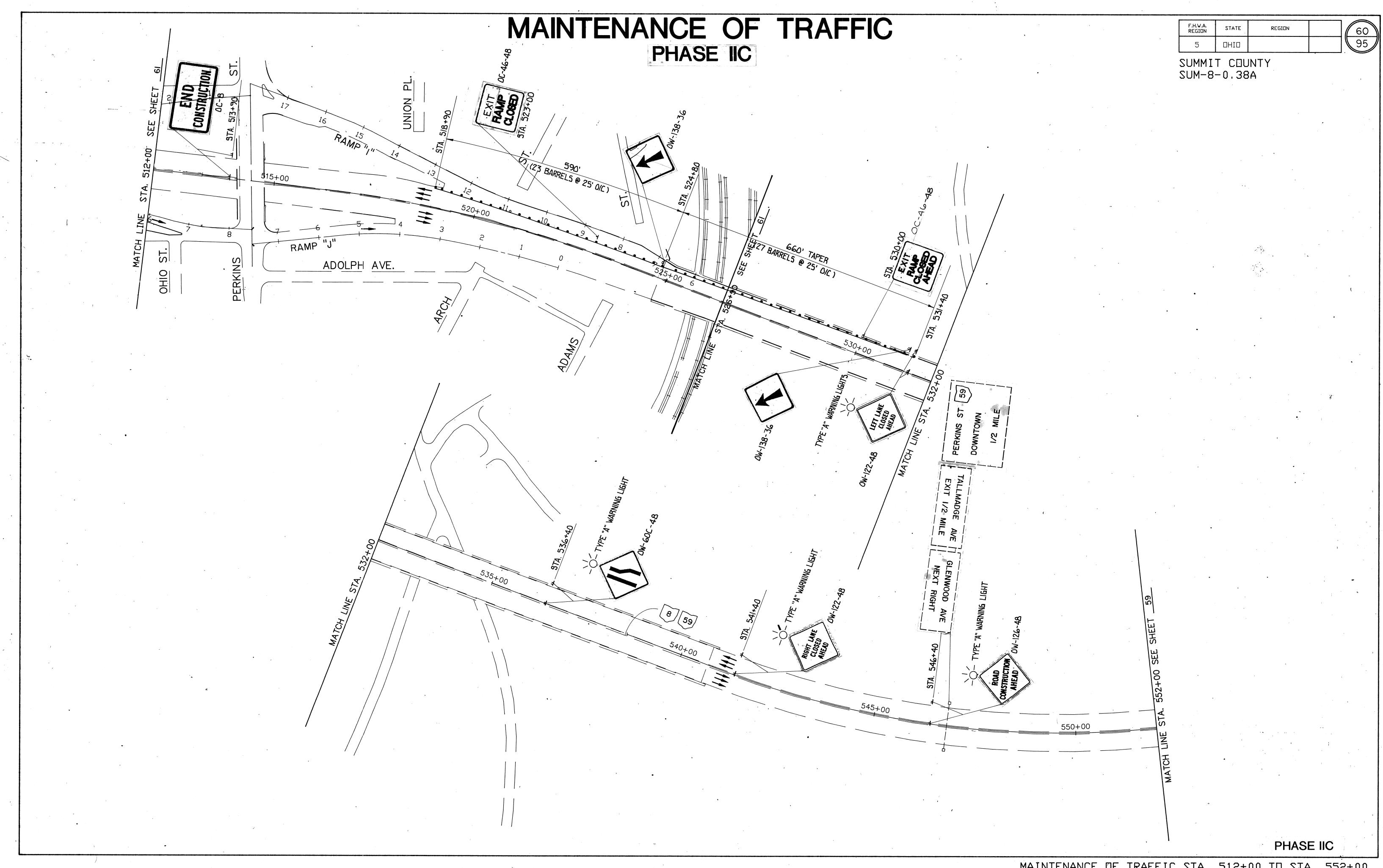


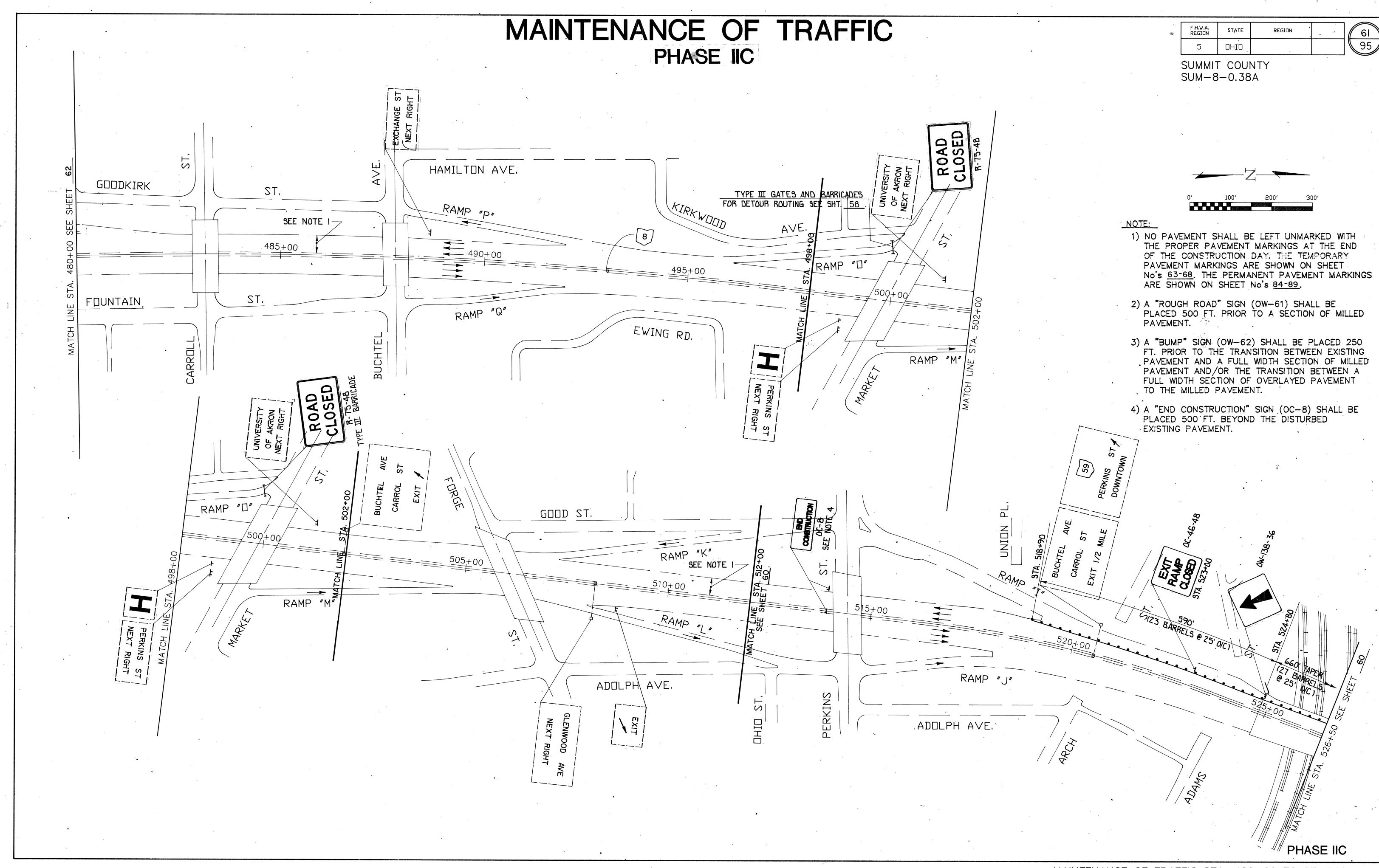


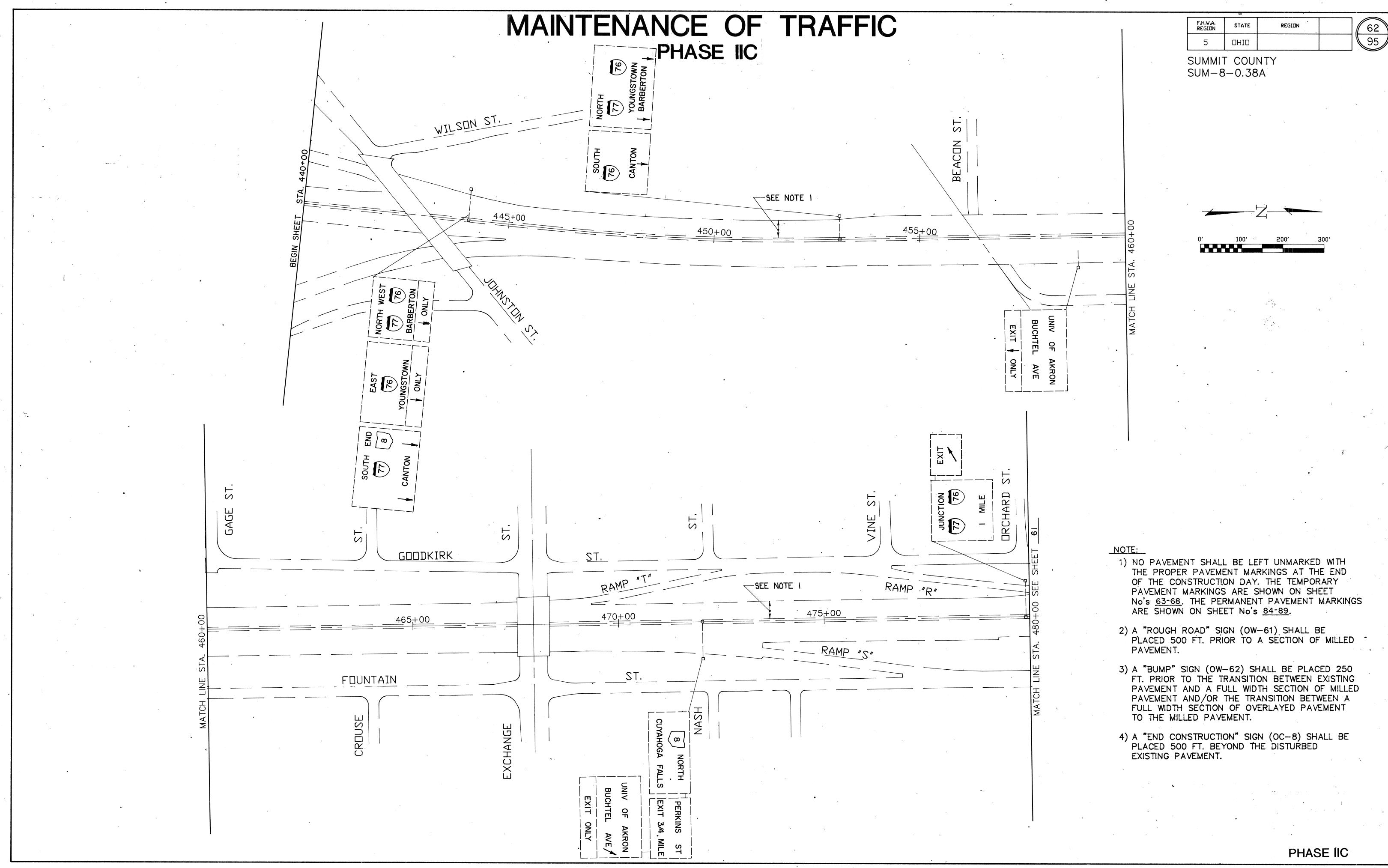
NOTES:

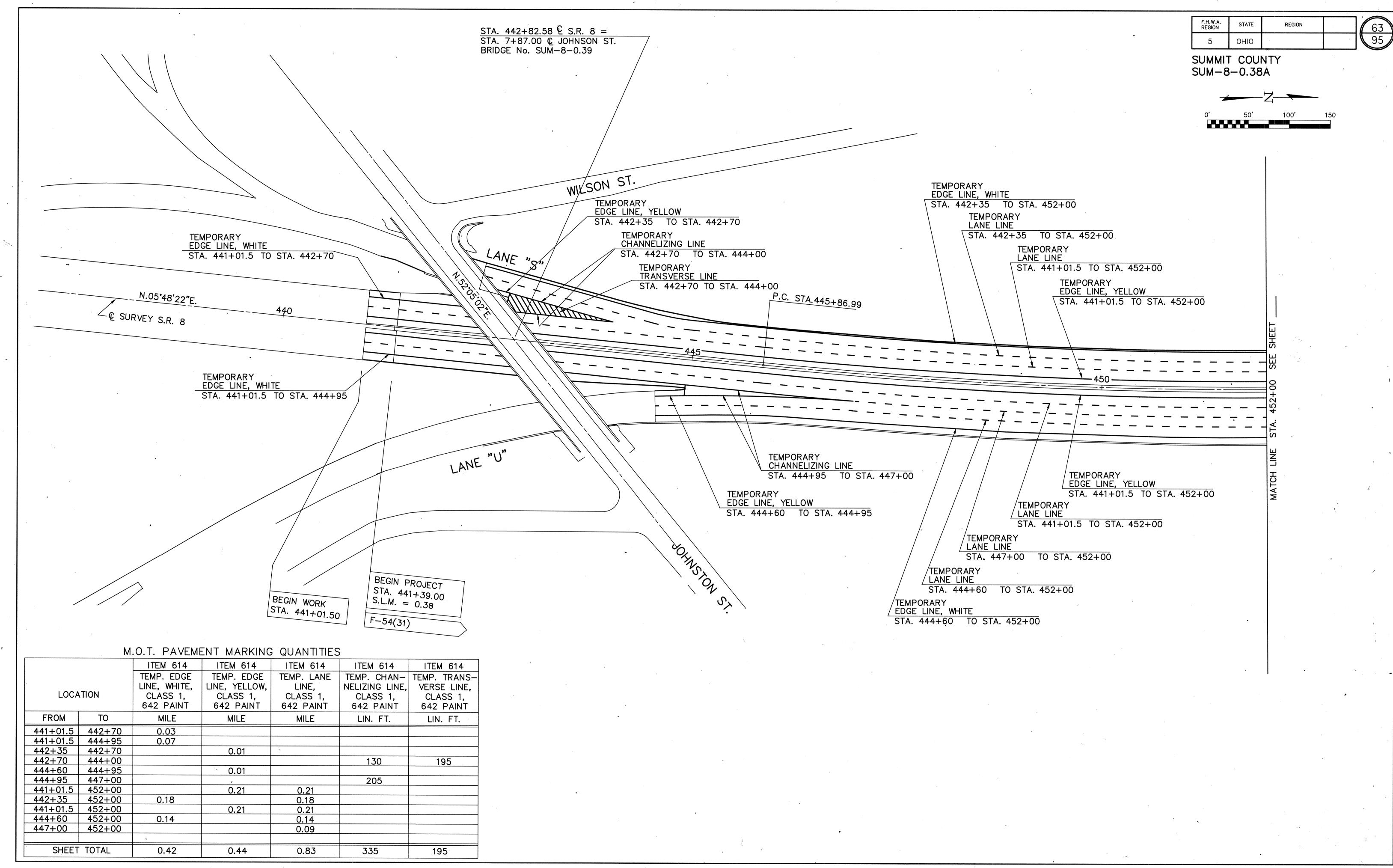
- 1. ALL S.R. 8 SOUTHBOUND TRAFFIC SHALL BE DETOURED FROM RAMP "I", PERKINS ST. SOUTHBOUND ENTRANCE RAMP.
- 2. ALL S.R. 8 SOUTHBOUND TRAFFIC SHALL BE DETOURED FROM RAMP "O", THE MARKET ST. SOUTHBOUND ENTRANCE RAMP.
- 3. SEE PHASE IA FOR ADDITIONAL NOTES AND LEGEND FOR PROPOSED SIGNAGE.

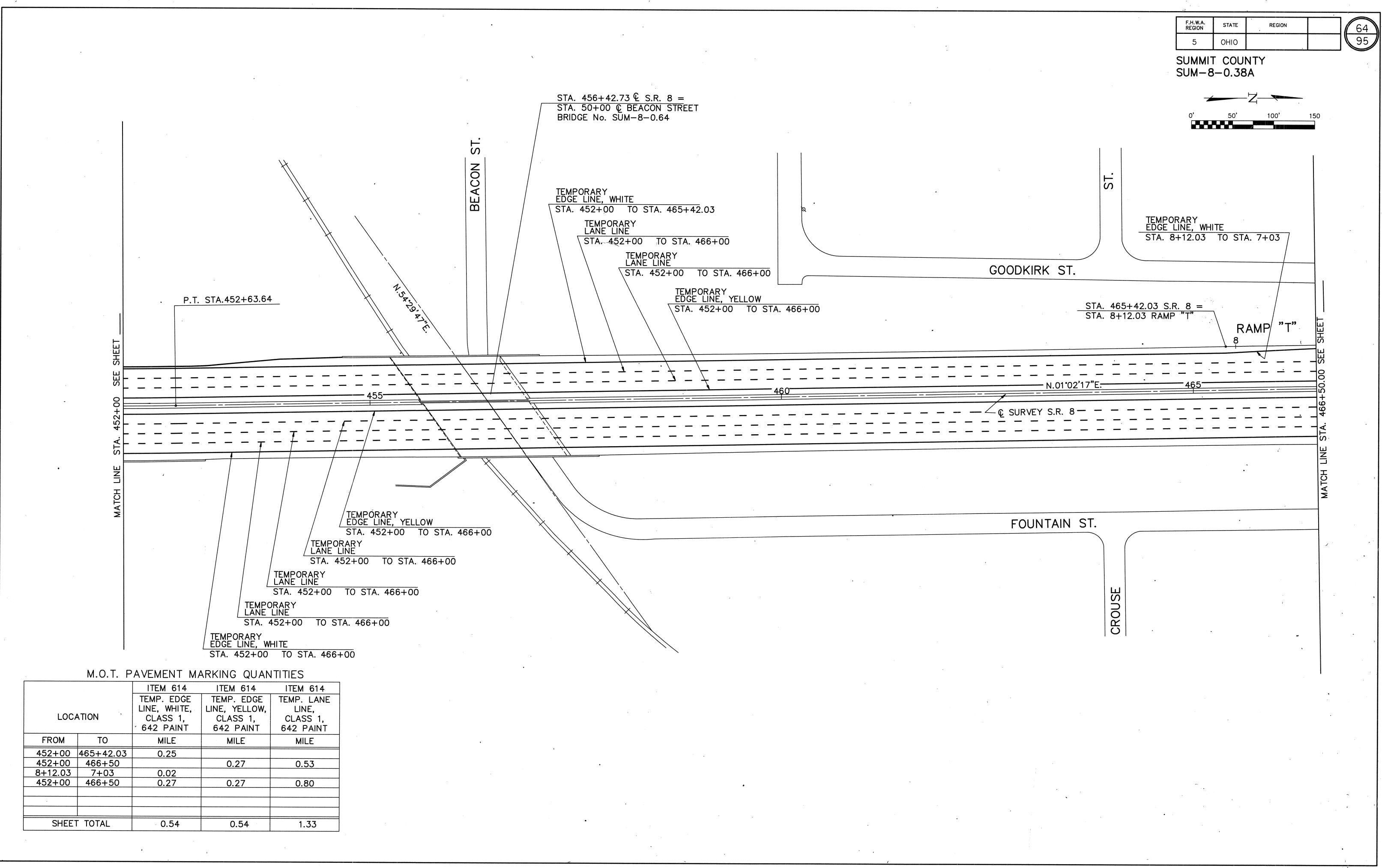


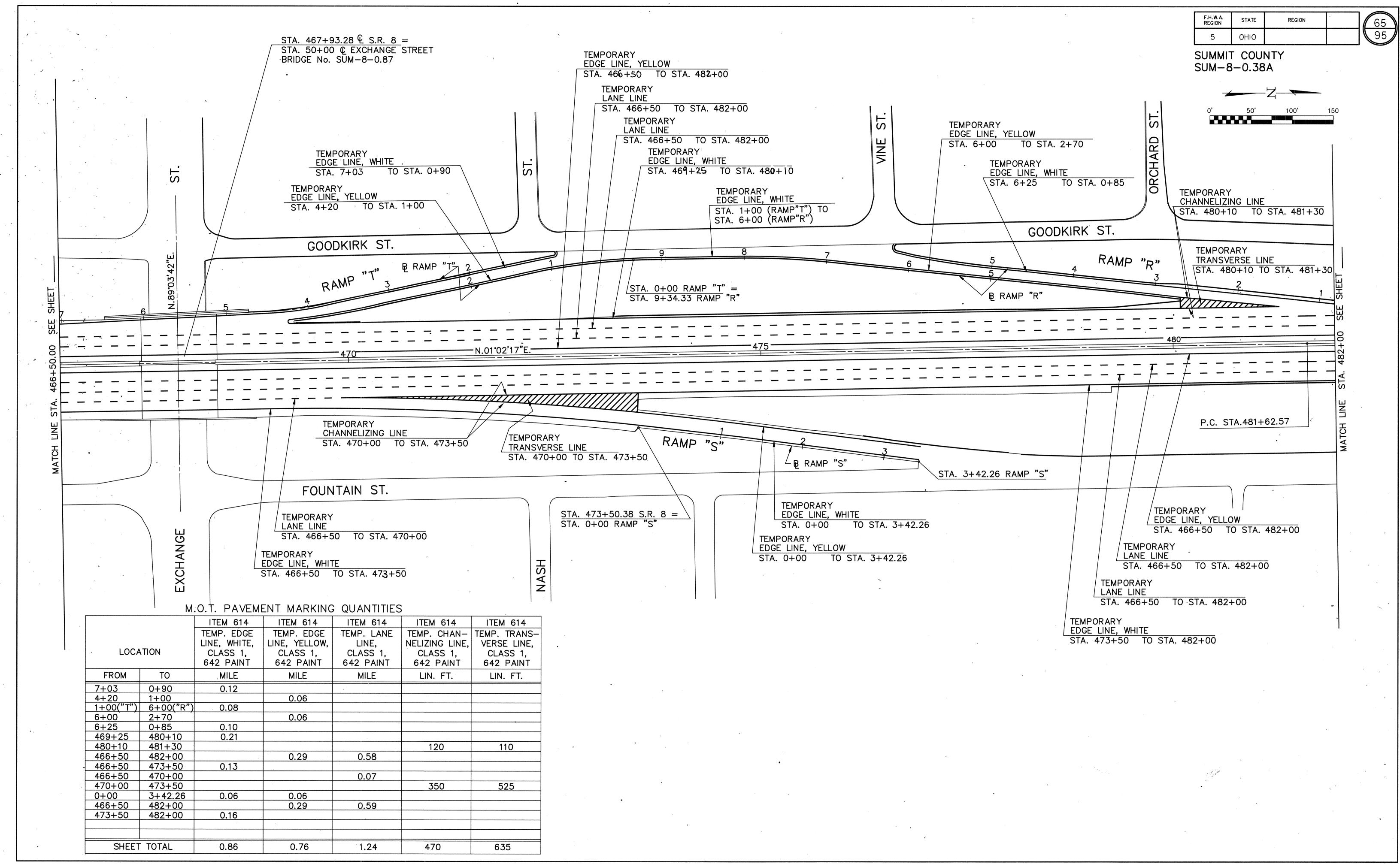


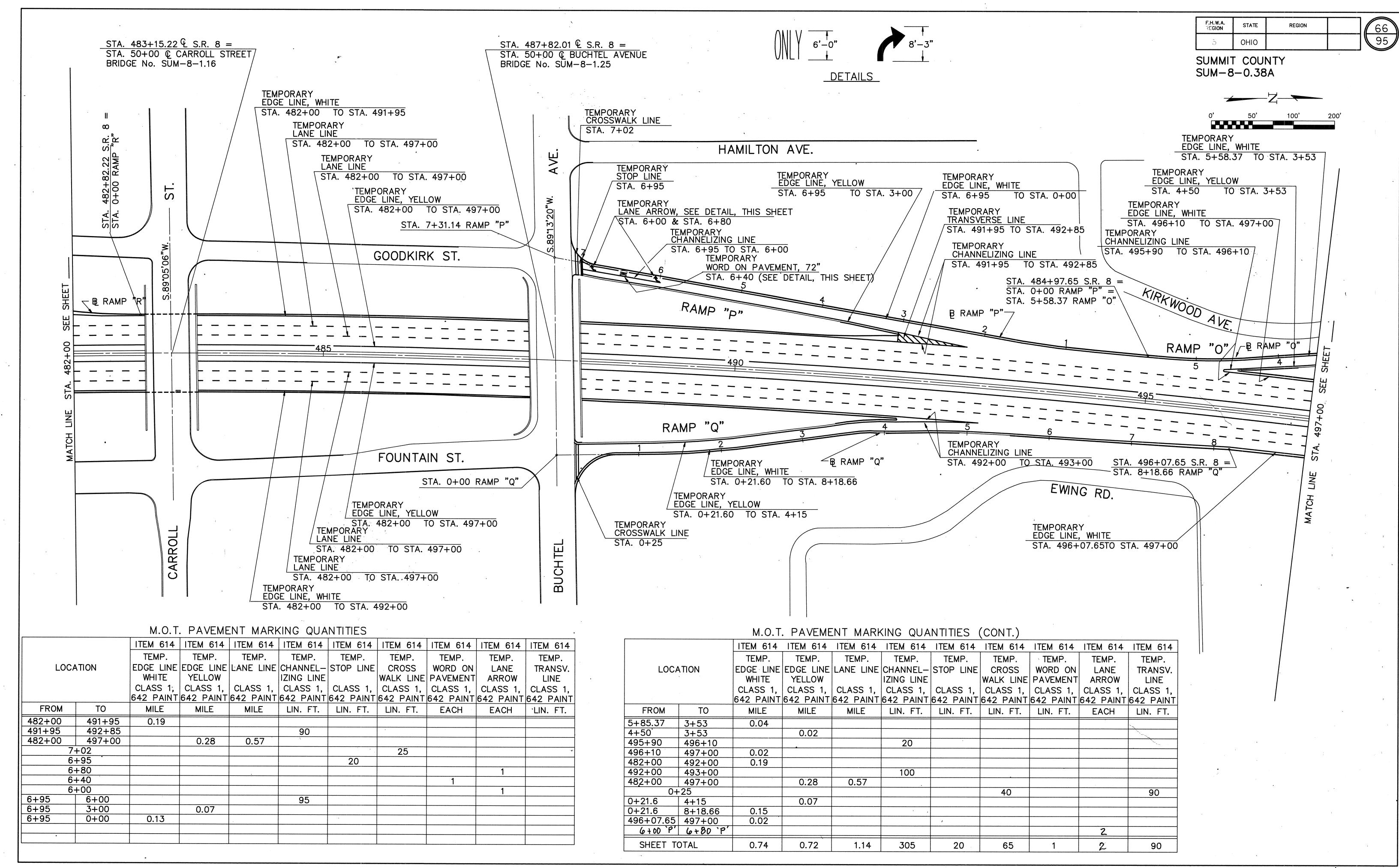


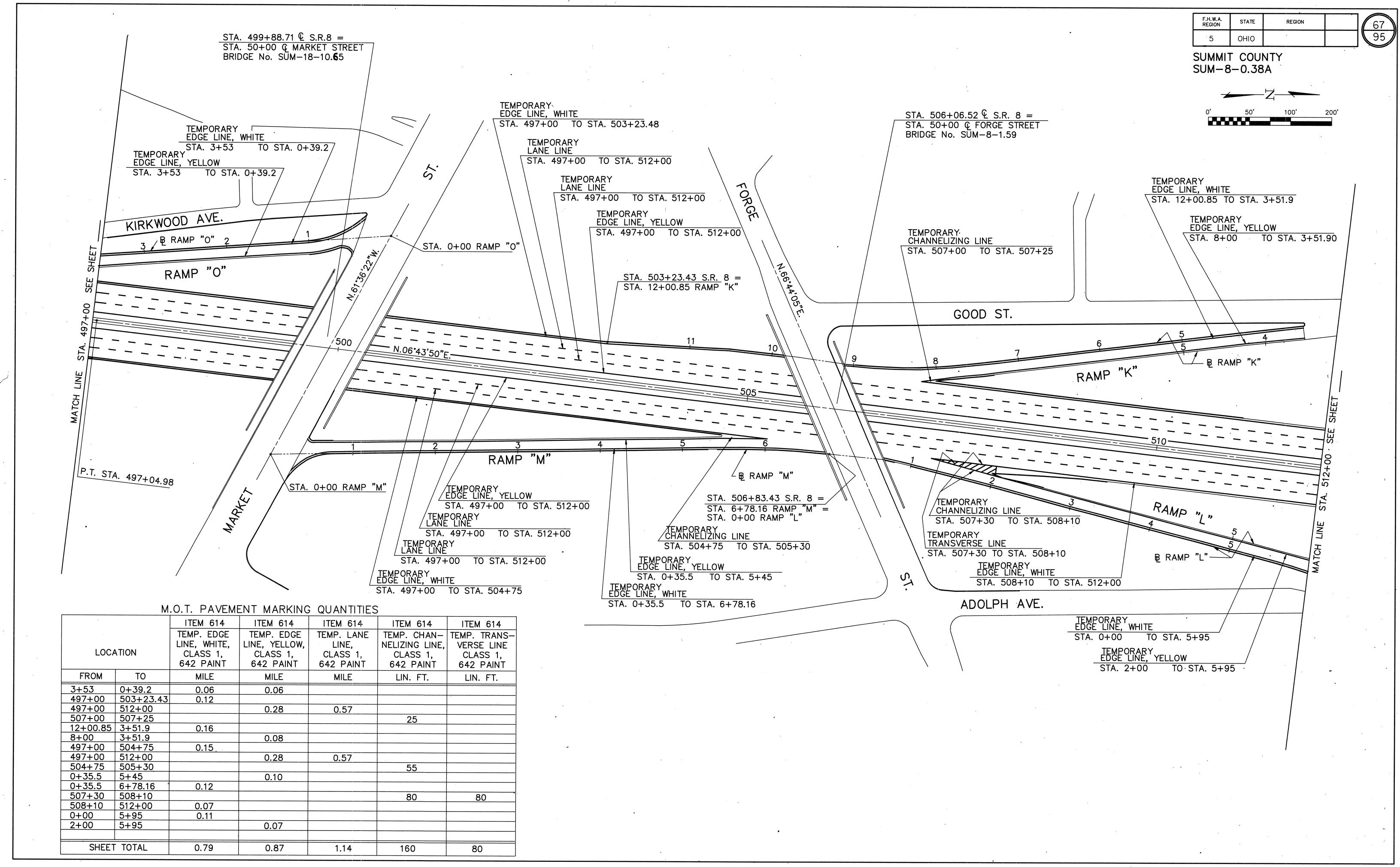


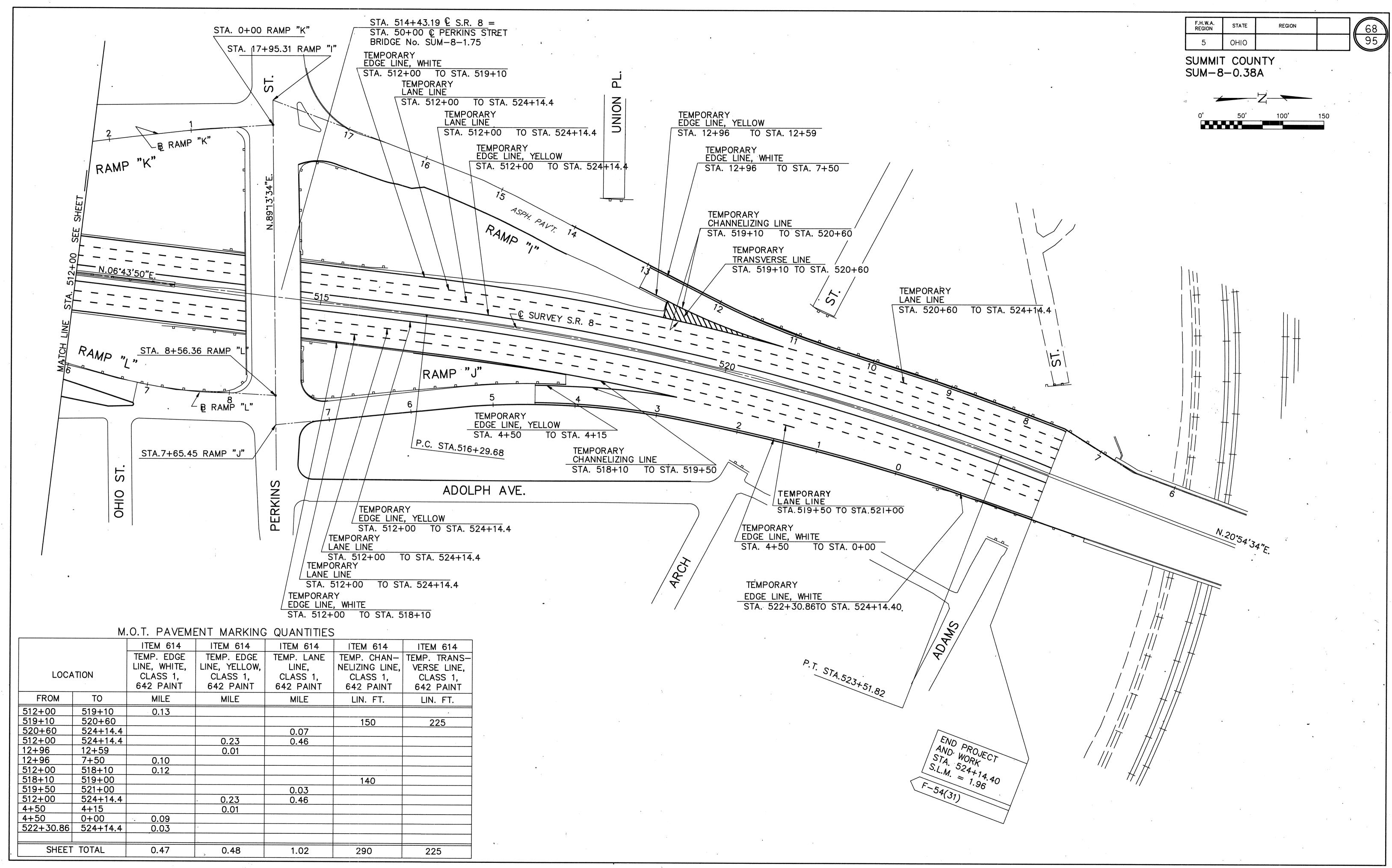












BY DATE
CALC. DLD 9-91
CHECKED PAK 9-91

	F.H.W.A. REGION	STATE	PROJECT		69
,	5	OHIO "		,	95

SUMMIT COUNTY SUM-8-0.38A

	ESTIMATED	QUANT	TIES				
g mga para A. A	DECORUPTION:			LOCATION			
ITEM	DESCRIPTION	SHEET No.	PHASE	FROM TO	UNIT	QUANTITY	TOTAL
	· ·						
614	TEMPORARY EDGE LINE, WHITE, CLASS 1, 642 PAINT	63	ALL	441+01.5 452+00	MILE	0.42	
		64	ALL	452+00 466+50	MILE	0.54	
	·	65	ALL	466+50 482+00	MILE	0.86	
		66	ALL	482+00 497+00	MILE	0.74	
		67	ALL ALL	497+00 512+00 512+00 524+14.4	MILE MILE	0.79	
			ALL	312+00 32++1+.+	IVIILL	0.47	3.82
614	TEMPORARY EDGE LINE, YELLOW, CLASS 1, 642 PAINT	63	ALL	441+01.5 452+00	MILE	0.44	
		64	ALL	452+00 466+50	MILE	0.54	
		65	ALL	466+50 482+00	MILE	0.76	
		66	ALL	482+00 497+00	MILE	0.72	
······································		67	ALL	497+00 512+00	MILE	0.87	•
		68	ALL	512+00 524+14.4	MILE	0.48	7 01
						 	3.81
614	TEMPORARY LANE LINE, CLASS 1, 642 PAINT	63	ALL	441+01.5 452+00	MILE	0.83	
		64	ALL	452+00 466+50	MILE	1.33	
		65	ALL	466+50 482+00	MILE	1.24	
	·	66	ALL	482+00 497+00	MILE	1.14	
		67	ALL	497+00 512+00	MILE	1.14	·
		68	ALL	512+00 524+14.4	MILE	1.02	
	•					-	6.70
614	TEMPORARY CHANNELIZING LINE, CLASS 1, 642 PAINT	63	ALL	441+01.5 452+00	LIN.FT.	335	
	12M 31/M 31/M 21/M 21/M 21/M 21/M 31/M 1	05	<u> </u>	741101.5 452100	LIIN.I I.	333	
		65	ALL	466+50 482+00	LIN.FT.	470	
		66	ALL	482+00 497+00	LIN.FT.	305	
		67	ALL	497+00 512+00	LIN.FT.	160	
		68	ALL	512+00 524+14.4	LIN.FT.	290	
							1560
614	TEMPORARY STOP LINE, CLASS 1, 642 PAINT	66	II A IID	6105	LINICT	,	
017	TEMPORARY STOP LINE, CLASS 1, 042 PAINT	6 6	IIA, IIB	6+95	LIN.FT.	20	20
							20
614	TEMPORARY CROSSWALK LINE, CLASS 1, 642 PAINT	66	IIA, IIB	7+02	LIN.FT.	25	
		66	IIA, IIB	0+25	LIN.FT.	40	
	į			·	•		65
614	TEMPODADY WORD ON DAYEMENT 70" OLACO 1 CAO DAINT		11 4 115	0.40	pan A and A		
614	TEMPORARY WORD ON PAVEMENT, 72", CLASS 1, 642 PAINT	66	IIA, IIB	6+40	EACH	1	
		-					I
614	TEMPORARY LANE ARROW, CLASS 1, 642 PAINT	66	IIA, IIB	6+00	EACH	1 1	
		66		6+80	EACH	 i 	3
					- • •	-	2
01.1	TEMPORARY TRANSCRIPTOR CONTRACTOR						
614	TEMPORARY TRANSVERSE LINE, CLASS 1, 642 PAINT	63	<u>ALL</u>	442+70 444+00	LIN.FT.	195	•
		65	ALL	480+10 481+30	LIN.FT.	110	
		65	ALL	470+00 473+50	LIN.FT.	525	
		66 67	ALL ALL	492+00 493+00	LIN.FT.	90	· · · · · · · · · · · · · · · · · · ·
		68	ALL	507+30 508+10 519+10 520+60	LIN.FT.	80 225	•
			<u> </u>	JISTIU JZUTOU	LIIVII I.	225	1225
		,		•	•		
						<u> </u>	

TEMPORARY SIGN SUPPORT

REQUIREMENTS

A PLACEMENT OF SIGNS WHICH WILL REMAIN MORE THAN ONE DAY:

- 1) LATERAL PLACEMENT TO NEAREST EDGE OF SIGNS SHALL BE AS FOLLOWS:
- a) ON THE RIGHT SIDE OF THE ROAD FOR APPROACHING TRAFFIC (EXCEPT FOR DUAL MOUNTED SIGNS AND SIGNS DESIGNATED IN THE PLANS FOR LEFT SIDE MOUNTING).
- b) CURBED ROADWAY -

MINIMUM 2 FT. BEHIND FACE OF CURB.

- c) UNCURBED ROADWAY-12 FT. FROM EDGE OF TRAFFIC LANE OR 6 FT. FROM EDGE OF PAVED OR USEABLE SHOULDER, WHICHEVER IS GREATER.
- d) BEHIND GUARDRAIL OR BARRIER PREFERABLY 2 FT. BEHIND FACE OF GUARDRAIL (MINIMUM I FT.) FOR SIGNS ON CLASS A SUPPORTS: 4 FT. FOR CLASS B OR C SUPPORTS I FT. BEHIND FACE OF CONCRETE BARRIER UNLESS BARRIER TOP MOUNTING IS REQUIRED BY THE PLAN.
- 2) VERTICAL CLEARANCE OF SIGNS, MEASURED ABOVE ROADWAY ELEVATION; SHALL BE AS FOLLOWS:
- a) RURAL 5 FT. WHEN PARKED CARS, CONSTRUCTION EQUIPMENT, ETC WILL NOT OBSCURE SIGN VISIBILITY.
- b) RURAL AREAS WITH PARKED CARS OR CONSTRUCTION EQUIPMENT 7 FT.
- c) URBAN 7 FT.
- d) CARE SHALL BE TAKEN TO ASSURE THAT SIGNS WILL NOT BE OBSCURED BY CONSTRUCTION EQUIPMENT, TREES, WEEDS OR OTHER OBSTACLES. BRUSH, WEEDS OR GRASS WITHIN THE RIGHT OF WAY SHALL BE TRIMMED AS NECESSARY. SIGNS SHALL NORMALLY BE VISIBLE TO TRAFFIC 400 TO 600 FT. IN ADVANCE OF THE SIGN.
- 3) SUPPORTS FOR SIGNS WHICH WILL REMAIN IN PLACE MORE THAN ONE DAY SHALL BE FIXED RATHER THAN PORTABLE EXCEPT IN SITUATIONS WHERE THE SIGN MUST REST ON PERMANENT PAVEMENT OR OTHER SURFACE WHICH WOULD BE DAMAGED BY INSERTION OF POST TYPE SUPPORTS.

B. PLACEMENT OF SIGNS WHICH WILL REMAIN FOR ONE DAY OR LESS:

- I) SAME AS A-I ABOVE EXECPT THAT SIGNS MAY BE PLACED ON THE ROADWAY ONLY IF THEY DO NOT INTRUDE INTO A TRAFFIC LANE IN USE.
- 2) MINIMUM OF 1 FT. ABOVE ROADWAY

C. CLASSES OF SUPPORTS:

ALL TEMPORARY SIGN SUPPORTS SHALL BE OF THE FOLLOWING TYPES:

I) CLASS A:

SUPPORTS SHALL BE USED FOR EXPOSED LOCATIONS ON HIGHWAYS WHERE TRAFFIC APPROACH SPEEDS OF 40 MPH AND HIGHER ARE ENCOUNTERED. THEY ARE ALSO SUITABLE FOR USE IN ALL OTHER LOCATIONS.

2) CLASS B:

SUPPORTS SHALL BE USED FOR EXPOSED LOCATIONS ON HIGHWAYS WHERE TRAFFIC APPROACH SPEEDS OF LESS THAN 40 MPH ARE ENCOUNTERED. THEY ARE ALSO SUITABLE FOR USE IN ALL APPLICATIONS DEFINED FOR CLASS C SUPPORTS.

3) CLASS C:

SUPPORTS MAY ONLY BE USED WHERE FULLY PROTECTED BY GUARDRAIL, CONCRETE BARRIER AND IN LOCATIONS POSITIVELY PROTECTED FROM TRAFFIC SUCH AS ON RETAINING WALLS OR WHERE TRAFFIC APPROACH SPEEDS ARE LESS THAN 25 MPH.

D. TRAFFIC APPROACH SPEEDS:

TRAFFIC APPROACH SPEEDS SHALL BE THE LOCALLY POSTED SPEED (NOT ADVISORY SPEED SIGNS) OR THE MEASURED ACTUAL (85TH PERCENTILE) SPEED (IF AVAILABLE) OF APPROACHING TRAFFIC, WHICHEVER IS HIGHER, ADJACENT TO THE SIGN LOCATION.

TABLE

APPROACH SPEED (MPH)	COMPLETELY PROTECTED BY GUARDRAIL OR BARRIER	PARTLY PROTECTED BY GUARDRAIL OR BARRIER **	GREATER THAN 30' FROM EDGE OF PAVEMENT	WITHIN 30' FROM EDGE OF PAVEMENT	
40 AND HIGHER	A, B OR C	A OR B	A OR B **	A ONLY	
26 TO 39	A, B OR C	A OR B	A OR B	A OR B	
0 TO 25	A, B OR C	A, B OR C	A, B OR C	A, B OR C	

- * IF SUPPORTS ARE BEHIND GUARDRAIL BUT NOT FULLY 5.5' BEHIND FACE OF RAIL OR IF SIGN IS NOT I'BEHIND FACE OF CONCRETE BARRIER.
- ** 30' CRITERION IS BASED UPON STRAIGHT ROADWAY AND A SLOPE OF 6:1 OR FLATTER.

 SUPPORTS ON THE OUTSIDE OF CURVES OR LOCATED DOWN A SLOPE (STEEPER THAN 6:1)

 WILL REQUIRE USE OF CLASS A SUPPORTS.

E. BALLASTING

BALLASTING OF PORTABLE SUPPORTS SHALL BE WITH SANDBAGS PLACED WITHIN 1 FT. OF THE GROUND. IN NO CASE SHALL HARD OBJECTS BE USED FOR BALLAST.

F STRENGTH OF SIGN SUPPORTS

THE CONTRACTOR SHALL CHOOSE SIGN SUPPORTS OF ADEQUATE STRENGTH AND WITH ADEQUATE FOUNDATIONS AND ANCHORAGE TO SUPPORT THE SIGN SIZES ERECTED. PROPRIETARY DEVICES SHALL NOT BE LOADED BEYOND THE LIMITS RECOMMENDED BY THE MANUFACTURER. SLIP BASE TYPE BREAKAWAY BEAM CONNECTIONS SHALL BE AT LEAST PARTIALLY EMBEDDED IN CONCRETE CONSISTING OF A 1 FT. DEEP BY 12" DIAMETER COLLAR. SIGN SUPPORTS WHICH FAIL UNDER TYPICAL WIND LOAD CONDITIONS SHALL BE IMMEDIATELY MODIFIED OR REPLACED WITH A SUPPORT OF ADEQUATE STRENGTH.

G. PROHIBITED SUPPORTS

THE FOLLOWING SUPPORT TYPES SHALL NOT BE PERMITTED ON PROJECTS:

- I) SUPPORTS FABRICATED FROM AUTOMOTIVE AXLE DIFFERENTIAL ASSEMBLIES AND SIMILARLY HEAVY ASSEMBLIES WHICH CANNOT BE CONSIDERED BREAKAWAY TYPE.
- 2) SUPPORTS CONSISTING OF VERTICAL POSTS WITH ANGLED BRACES MADE FROM DRIVEPOST OR OTHER RIGID ELEMENTS.

SUMMIT COUNTY SUM-8-0.38A OHIO

FHWA
REGION 5

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CLASS A SUPPORTS

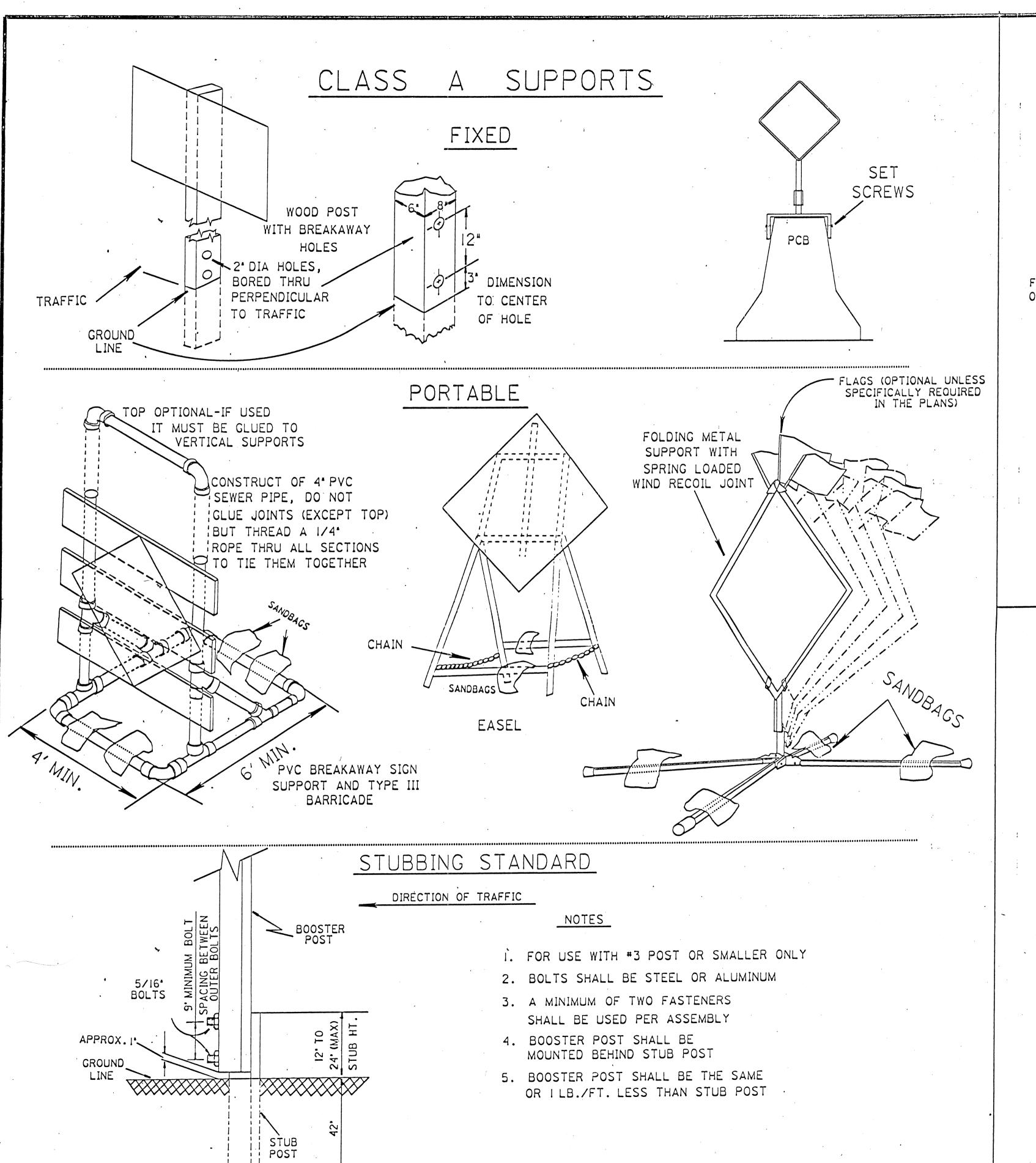
FIXED SUPPORTS

- 1) ALL #2, #3, AND #4 POST WHEN INSTALLED SINGLY OR IN PAIRS ACCORDING TO THE DETAILS OF TC-41.20. THE NUMBER OF SUPPORTS SHALL BE AS SHOWN ON TC-52.10 AND TC-52.20.
- 2) THE FOLLOWING POST TYPES, WHEN INSTALLED SINGLY, BY IMBEDMENT OR DRIVING INTO EARTH TO A DEPTH OF ABOUT 42 INCHES:
 - a) UP TO 4" X 4" WOOD
- b) UP TO 2 INCH DIAMETER SCHEDULE 40 STEEL PIPE
- c) UP TO 3 INCH DIAMETER SCHEDULE 40 ALUMINUM PIPE
- d) UP TO 21/4INCH SQUARE, 12 GAUGE WALL, PUNCHED STEEL POST
- e) UP TO 6" X 8" WOOD WITH BREAKAWAY HOLES SHOWN BELOW
- 3) THE FOLLOWING POST TYPES WHEN INSTALLED IN PAIRS WITH LESS THAN 7 FT. BETWEEN POSTS, BY IMBEDMENT OR DRIVING INTO EARTH TO A DEPTH OF ABOUT 42 INCHES:
 - a) UP TO 4" X 4" WOOD
- b) UP TO 2 INCH DIAMETER SCHEDULE 40 STEEL PIPE
- c) UP TO 3 INCH DIAMETER SCHEDULE 40 ALUMINUM PIPE
- d) UP TO 2 INCH SQUARE, 14 GAUGE WALL, PUNCHED STEEL POST
- 4) FIXED TYPE III BARRICADES:
- 5) ALL BREAKAWAY CONNECTION BEAM SUPPORTS, WHEN INSTALLED ACCORDING TO THE PROPER DETAILS SHOWN ON TC-41.10 WITH A MINIMUM CLEAR DISTANCE BETWEEN SUPPORTS OF 7 FT. FOR SUPPORTS LARGER THAN W6 X 9.
- 6) ANY BREAKAWAY POST OR POST AND CONNECTION WHICH HAS BEEN CRASH TESTED AND APPROVED BY THE FHWA AS SATISFYING THE BREAKAWAY CRITERIA DESCRIBED IN 630.06.

(CONTINUED ON SHT. 71)

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE C & M SPECIFICATIONS AS WELL AS IN ACCORDANCE WITH PART 7 OF THE OMUTCD. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS TO PROVIDE THIS METHOD OF TRAFFIC CONTROL SHALL BE INCLUDED IN THE LUMP SUM BID FOR 614 MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

REVISED BY: CN DATE:	4/24/91
210510	DATE 05/07/90
TEMPORARY SIGN SUPPORT	
PLAN INSERT SHEET	·



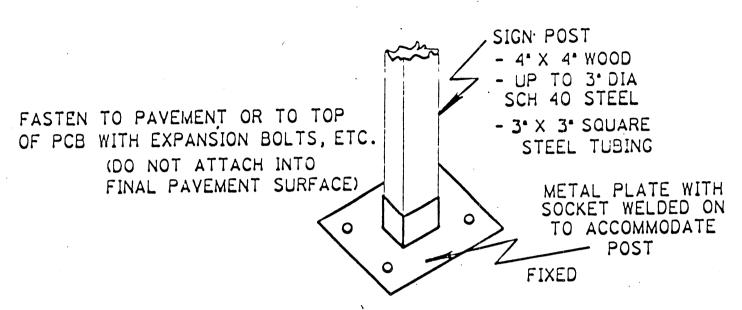
SUMMIT COUNTY SUM-8-0.38 A

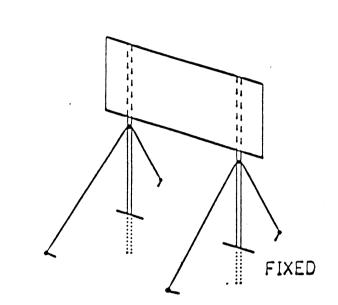
OHIO FHWA

REGION

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SUPPORTS

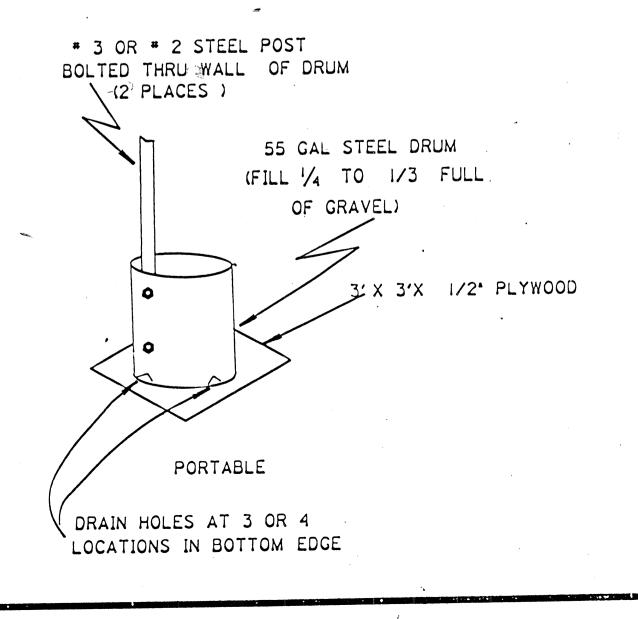




ANY CLASS A SIGN POST WITH GUY WIRES ADDED TO INCREASE SIGN CARRYING ABILITY. (GUY WIRES SHALL NOT BE HEAVIER THAN 1/8" DIA. BRAIDED CABLE. GUY ANCHORS SHALL NOT EXTEND MORE THAN 6" ABOVE GROUND SURFACE).

CLASS C SUPPORTS

- I. ALL BEAM TYPE SUPPORTS WITHOUT BREAKAWAY CONNECTIONS.
- 2. SUPPORTS SIMILAR TO BUT LARGER THAN PERMITTED FOR CLASS A OR B.
- 3. THE STEEL DRUM(S) SHOWN BELOW MAY BE USED ONLY WHEN LOCATED BEHIND GUARDRAIL OR BARRIER.



ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE C & M SPECIFICATIONS AS WELL AS IN ACCORDANCE WITH PART 7 OF THE OMUTCD. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS TO PROVIDE THIS METHOD OF TRAFFIC CONTROL SHALL BE INCLUDED IN THE LUMP SUM BID FOR 614 MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

REVISED BY: CN DATE:	4/24/91
210511	DATE 05/07/90
TEMPORARY SIGN SUPPORT	
PLAN INSERT SHEET	

MAINTENANCE OF TRAFFIC

GENERAL SUMMARY

F.H.W.A. REGION STATE OHIO

		क्रा ्राह्म	CHECKED [1. E.S.] 1/92
	FUNDING # 100% CITY	FUNDING # STATE & FEDERAL	SUMMIT COUNTY SUM-8-0.38A
ITEM	SHEET NUMBER	SHEET NUMBER	FUNDING FUNDING LITEM GRAND LINES DECORPORATION
-	7	7 8 74 89A 91	FUNDING FUNDING ITEM GRAND UNIT 100% STATE & ITEM EXT. TOTAL UNIT DESCRIPTION
			CITY FEDERAL ROADWAY
201		Lump	LUMP 201 11000 LUMP CLEARING AND GRUBBING
202		6232	6232 202 23500 6232 SQ.YD. WEARING COURSE REMOVED
202 202 202 202		2 2	6232 202 23500 6232 SQ.YD. WEARING COURSE REMOVED 2 202 58300 2 EACH CATCH BASIN OR INLET REMOVED 2 202 58600 2 EACH CATCH BASIN OR INLET ABANDONED
606		112.5	1 202 58700 1 EACH MANHOLE ABANDONED 112.5 606 13000 112.5 LIN. FT. GUARDRAYL, TYPE 5 1901 203 12000 1901 CU.YD. EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
203 203 203 203 203 203 203	2000	1901 635	635 203 20000 635 CU.YD. EMBANKMENT
203		13	2000 203 55000 2000 LIN.FT. DITCH CLEANOUT 13 203 60200 13 STA. LINEAR GRADING, METHOD 1 (SEE SHEET 81) 13 13 14 14 15 15 15 15 15 15
604		39 1	39 203 60204 39 STA. LINEAR GRADING, METHOD 2 (SEE SHEET 81) 1 606 25000 1 EACH ANCHOR ASSEMBLY, TYPE A
606		1	1 606 26500 1 EACH ANCHOR ASSEMBLY, TYPET
			PAVEMENT
251 251		9750	9750 251 01000 9750 SQ.YD. PARTIAL DEPTH PAVEMENT REPAIR 880 251 01200 880 SQ.YD. PARTIAL DEPTH PAVEMENT JOINT REPAIR
252 252 .		9930	9930 252 01000 9930 SQ.YD. FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT (SEE SHEET 8) 23000 252 01500 23000 LIN.FT. FULL DEPTH PAVEMENT SAWING (SEE SHEET 8)
254		94087	94087 254 01000 94087 SQ.YD. PAVEMENT PLANING, BITUMINOUS
304 304		200 523 20	7//3 304 20001 7//2 CHYD ACCRECATE DASE AS DED DIAN (CCCC)
407		400	743 304 20001 743 CU.YD. AGGREGATE BASE, AS PER PLAN (SEE SHEET 8) 400 403 25000 400 CU.YD. ASPHALT CONCRETE, AC-20, SPOT LEVELING 7530 407 13901 7530 GAL. TACK COAT USING SS 924, AS PER PLAN (SEE SHEET 8)
408		1570	1570 408 10000 1570 GAL. BITUMINOUS PRIME COAT
446		4880	4880 446 01200 4880 CU.YD. ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, AC-20
446		3485	3485 446 01400 3485 CU.YD. ASPHALI CONCRETE SURFACE COURSE, TYPE 1, AC-20
SPEC.		36000	159 448 14101 159 CU.YD. ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, AS PER PLAN (UNDER GUARDRAIL) (SEE SHEET 81)
SPEC.		350	36000 SPEC. 45014000 36000 LIN.FT. SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINT, 705.04 350 SPEC. 45130000 350 LIN.FT. PRESSURE RELIEF JOINT, TYPE A
825		12000	250 31 LC. 45130000 350 LIN. 1. PRESSORE RELIEF JOINT, TIPE A
(01)		75	75 GII 98100 75 SQ.YD. APPROACH SLAB, MISC.: REPAIRS
0.72			DRAINAGE
SPEC. SPEC.	750 1000 250		750 SPEC. 20270100 750 LIN.FT. PIPE CLEANOUT, 12" 1000 SPEC 20270100 1000 LIN.FT. PIPE CLEANOUT, 15"
603		250	250 SPEC. 20270100 250 LIN.FT. PIPE CLEANOUT, 18"
605		8 750	250 SPEC 20270100 250 LIN.FT. PIPE CLEANOUT 18"
605		200 550	150 150
SPEC.		250	250 SPEC. 69012000 250 SQ.YD. FILTER FABRIC, TYPE D, 712.09
			200 SI 20. 03012000 200 SQ. ID. TIETER TABRIC, TIPE D, 712.09
			EROSION CONTROL
207		100	100 207 70000 100 EACH STRAW OR HAY BALES
659 659		571	11405 659 10000 11405 SQ.YD. SEEDING AND MULCHING
659 659 659		0.63 1.03 5.13	1.06 659 20000 1.06 TON COMMERCIAL FERTILIZER 5.13 659 30000 5.13 TON AGRICULTURAL LIMING
659		2 25	27 659 35000 27 M.GAL. WATER
	N. C.		

GENERAL SUMMARY

BY DATE CALC. DLD 1/92 CHECKED TES 1/92

F.H.W.A. REGION STATE, PROJECT. 73
5 OHIO 95

SUMMIT COUNTY SUM-8-0.38A

			SHEET	ŅUMBEF	?		1754	ITEM	GRAND	1 15 11 -	DECODIDATION.
ITEM 7	\ 11	12 69		82	83	89 A	IIEN	EXT.	TOTAL	UNIT	DESCRIPTION
		,									MAINTENANCE OF TRAFFIC
301	1	60					301	10003	160	CU.YD.	BASE, BITUMINOUS AGGREGATE, AC-20, AS PER PLAN (SEE SHEET 8)
404	1200						404	35000	1200	CU.YD.	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC
SPEC.	1440	20						. 61411100		HR.	LAW ENFORCEMENT OFFICER WITH PATROL CAR
SPEC.	160						/ SPEC	6141250	160	SQ.FT.	
SPEC.		00						. 6141260		EACH	REPLACEMENT DRUM
614 614		.70 6.70 63 7.63					614 614	20100 22100	13.40		TEMPORARY LANE LINE, CLASS 1, 642 PAINT TEMPORARY EDGE LINE, CLASS 1, 642 PAINT
614	****	60 1560					614	23200	3120	LIN.FT	TEMPORARY CHANNELIZING LINE, CLASS 1, 642 PAINT
614 614		25 1225					614	25200 26200	2450	LIN.FT LIN.FT.	TEMPORARY TRANVERSE LINE, CLASS 1, 642 PAINT TEMPORARY STOP LINE, CLASS 1, 642 PAINT
614 614		5 65 2 2			THE REAL PROPERTY OF THE PROPE			27200 30200		LIN.FT. EACH	TEMPORARY CROSSWALK LINE, CLASS 1, 642 PAINT TEMPORARY LANE ARROW, CLASS 1, 642 PAINT
614		1 1					614	31200	2	EACH	TEMPORARY WORD ON PAVEMENT, 72", CLASS 1, 642 PAINT
			.,								TRAFFIC CONTROL
603				40		·	603	00400	40	LIN.FT	
625				200			625		•	LIN.FT.	CONDUIT, 3", 713.04
625 625				120 200			625 625	25900	. 120	LIN.FT.	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, SIZE: 3" TRENCH
625 625				8 4			625 625	30700	8	EACH	PULL BOX, 713.08, 18"
630				T		7 7				EACH	GROUND ROD
630 630						3. 6 56	630 630	06400	56	CU.YDS.	GROUND MOUNTED SUPPORT S 4 X 7.7 BEAM
630						- 4	630 630	20600	l	EACH	BREAKAWAY BEAM CONNECTION OVERHEAD SIGN SUPPORT TYPE TC-12.30, DESIGN #6, 26 FT. ARM
630 630						.211	630 630		2/1	SQ.FT. EACH	SIGN EXTRUSHEET TYPE G REMOVAL OF OVERHEAD MOUNTED SIGN & STORAGE
630		`				/ l	630	87400		EACH	REMOVAL OF OVERHEAD MOUNTED SIGN & DISPOSAL
63I 63I						·	631 631	84000 84300		EACH EACH	SIGN SERVICE SIGN WIRED
631 631						2	63 I 63 I	85100 87202	2	EACH EACH	DISCONNECT SWITCH WITH ENCLOSURE, TYPE X BALLAST, TYPE CMRI-175-480, INTEGRAL MERCURY VAPOR LUMINAIRE, TYPE TC-31.21 WITH 175 WATT LAMP
631 632	-			480	,	2	63I 632	89200 27500	2 480	EACH LIN. FT.	MERCURY VAPOR LUMINAIRE, TYPE TC-31.21 WITH 175 WATT LAMP LOOP DETECTOR PAVEMENT CUTTING
632 632				336 144			632 632		336 144	LIN. FT.	LOOP DETECTOR WIRE, TYPE E LOOP DETECTOR LEAD-IN CABLE
632				2			632	72000 89800		CU.YD.	
- 632			A	12			632				
633				2			633	65001	2	EACH	SIGNALIZATION, MISC: PIEZOCABLE CLASS II, AXLE SENSOR CABINET WITHOUT CONTROLLER, AS PER PLAN, PREWIRED, PEDESTAL MOUNTING, TYPE G (SEE SHEET 82)
Jan. 1 to a water											
642					7.63	· · ·	642	00102	7.63	MILE	EDGE LINE, TYPE 2
642					6.70 1560		642	00202	6.7	MILE	LANE LINE, TYPE 2
642					20	·	642	00502	20	LIN. FT.	CHANNELIZING LINE, TYPE 2 STOP LINE, TYPE 2 CROSSWALK LINE TYPE 2
642 642					1275		642 642	00702	65 122 <i>5</i>	LIN.FT.	CROSSWALK LINE, TYPE 2 TRANSVERSE LINE, TYPE 2
.642			,	,	2 I	,	642 642	01402	2	EACH	WORD ON PAVEMENT, 72, TYPE 2
	,	-				2	802	00100	2	EACH	BARRIER REFLECTOR, TYPE A FOR STRUCTURE REPAIR QUANTITIES, SEE SHEET 91
614	Li	IMP					614	11000	LUMP	*	MAINTAINING TRAFFIC
619 LumP							619	15010	LUMP		FIELD OFFICE, TYPE B
623							623	10000	LUMP		CONSTRUCTION LAYOUT STAKES
624		,					624	10000	LUMP		MOBILIZATION
						•					

ITEM 202 WEARING COURSE REMOVED

MAINLINE

(441+39-441+01.5)(44)(2)	==	3300
(455+43.8-454+62.10)(53)	=	4330
(455+86.27-455+00.47)(65)	=	5577
(457+58.53-456+76.85)(53)	_ =	4329
(458+05.12-457+19.33)(65)	=	5577
(467+51.47-466+88.97)(65)	222	4062.5
(467+51.47-466+93.97)(53)	<i>*</i>	3047.5
(469+05.47-468+42.97)(65)	=	4062.5
(469+42.97-468+42.97)(65)	=	6500
(524+13.84-523+76.34)(58)(2)	=	<u>4350</u>
	=	45135.5

<u>RAMPS</u>

	LANE S	(0+37.5-0.00)(22)	=	825
	LANE U	(0+37.5-0.00)(38)	=	1425
	RAMP R	(3+05-2+67.5)(16)	=	600
	RAMP, Q	(0+59.14-0+21.64)(20)		•
		+5(5.6-8.6/2)+50		
		(40-67.8/2)	22	1061.50
	RAMP P	(7+10.15-6+68.17)(20)		
		+5(6.1-8.7/2)+35		
		(27-46.6/2)	=	977.85
	RAMP M	(0+87.05-0+35.48)(20)		•
		+5(13.9-11.6/2)+70		•
		(35.4-65.2/2)	=	1267.9
	RAMP 0	(0+87.17-0+39.19)(20)		
		+115(33.5-65.3/2)+15(24)	=	1417.35
	RAMP L	(6+87.5-6+50)(16)	=	600
	RAMP K	(4+48.10-4+10.60)(16)	=	600
	RAMP J	(4+50.06-4+12.56)(27)	=	1012.5
,	RAMP I	(12+95.32-12+58.32)(31)	=	1162.5
				10949.5
	· · · · · · · · · · · · · · · · · · ·			

(45135.5+10949.5)(1/9) = 6232 S.Y.

ITEM 203 LINEAR GRADING

	METHOD 1		I METHOD 2	
RAMP	LIMITING STATION	LIN. FT.	LIMITING STATION	LIN. FT.
"S"	3+43 0+00	343	 473+48 453+00	2048
"P"	4+35 3+03	132	7+10 4+35	275
"Q"	4+14 2+35	179	2+35 0+21	214
"0"	4+50 2+90	160	2+90 0+39	251
"M"	5+50 4+25	125	 4+25 0+36	389
"L"	3+70 1+95	175	l 3+70 6+88	318
"K"	8+00 6+45	155	l 6+45 3+52	293
"J"		0	4+58.56 4+12.56	37.5
"I"	12+95.82 12+58.32	37.5		0
		1306.5		3825.5

TOTAL = 1306.5 + 3825 = 5132 L.F. = 52 STA.

ITEM 203 EXCAVATION

TOTAL LENGTH = 5132 AVE. WIDTH = 10' FT. AVE. CUT = 1 FT.

TOTAL = (5132)(10)(1/27) = 1901 C.Y.

ITEM 203 EMBANKMENT

MAJORITY OF LINEAR GRADING WILL BE PERFORMED BY METHOD 2. A SMALL AMOUNT OF FILL WILL BE REQUIRED DUE TO PROPOSED 8" OF PAVED SHOULDER.

AVE. FILL = 4 INCHES

TOTAL = (5132)(10)(4/324) = 635 C.Y.

QUANTITY

CALCULATIONS

CALC. BY: D.L.D
DATE: I/92 CHECKED BY T.E.S DATE: 1/92 F.H.W.A. REGION STATE 95 OHIO

SUMMIT COUNTY SUM - 8 - 0.38 A

(102640)(0.10 LBS/SF)(1/2000) = 5.13 TONS

(102640)(0.12 GAL/SF)(2 APPLICATIONS) = 24.6 M.GAL

= 2 M.GAL (TO SH. 7)

= 25 M.GAL (TO G.S.)

ITEM 659 AGRICULTURAL LIMING

SEE ITEM 203 LINEAR GRADING

SEE ITEM 203 LINEAR GRADING.

SEE ITEM 659 REPAIR SEEDING.

AREA = 102640 S.F.

ITEM 659 WATER

ITEM 251 PARTIAL DEPTH PAVEMENT JOINT REPAIR

A CONTINGENCY QUANTITY AS SHOWN IN THE GENERAL NOTES.

ASSUME A JOINT EVERY 15' OF PROJECT . (8275)(1/15) = 550 JOINTS (E/W)

(2)(550)(2')(36)(10%)(1/9) = 880 S.Y.

ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR

A CONTINGENCY QUANTITY AS SHOWN IN THE GENERAL NOTES.

BEGIN WORK 441+39 END WORK 524+13.84 = 8275 FT.

(ASSUME 10% OF PAVEMENT WILL NEED REPAIRED. (8275)(53')(2)(0.10)(1/9) = 9750 S.Y.

ITEM 252 FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT

A CONTINGENCY QUANTITY AS SHOWN IN THE GENERAL NOTES.

ASSUME 10% OF PANELS ARE BAD.

PANEL WIDTH = 36 FT. (2)(8275)(36)(15%)(1/9) = 9930 S.Y.

ITEM 252 FULL DEPTH PAVEMENT SAWING

A CONTINGENCY QUANTITY AS SHOWN IN THE GENERAL NOTES.

SEE ITEM 252 FULL DEPTH RIGID PAVEMENT REMOVAL

AREA = 9930 S.Y. = 89370 S.F.

PANEL AREA = 36X10 = 360 S.F.

NO. PANELS = 89,370/360 = 248 PANELS

SAWING PER PANEL = 2X36 + 2x10 = 92 L.F.

92(248) = 22,816 L.F. SAWING = USE 23,000 L.F.

ITEM 254 PAVEMENT PLANING, BITUMINOUS

MAINLINE

(442+72-441+39)(33)	=	4389
(444+96-441+39)(33)	=	11781
(445+86.99-442+72)(31+32)	236	19844.4
(445+86,99-444+96)(31+36)	=	6096.3
(454+62.1-445+86.99)(45)	#	39380
(455+02.53-445+86.99)(64)	==	58594.6
(466+93.97-457+56.47)(51)	, ==	47812.5
(466+87.97-458+05.12)(64)	. 25	56502.4
(473+48.03-469+05.47)(<u>64+90</u>)	==	34077.1
2		
(473+48.03-469+42.97)(45)	=	18227.7
(513+21-473+48.03)(45+45)	=	357567.3
(523+76.34-513+21)(47+47)	=	99202
		753474

"K"	(8+29-3+89.4)(20)+(10+50-8+29)(16)	
¥	+(12+00.85-10+50)(0+12)(1/2) =	13233.1
"L"	(2+00-0+00)(16)(6+50-2+00)(20) =	12200.0
"M"	(6+78.16-5+50)(16)+(5+50-0.87.05)(20)=	11309.6
"0"	(5+58.37-4+50)(16)+(4+50-0+87.17)(20)=	8990.5
"P"	(3+03-0+00)(16)+(6+68.17-3+03)(20) =	12151.4
"Q"	(8+18.66-6+18.66)(0+2)(1/2)+	
•	(6+18.66-4+14)(16)+(4+14-0+59.14)(20)=	11571.8
"R"	(9+34.33-6+19.2)(12+24X1/2)+	
•	(6+19.2-3+05)(16)	10699.5
"S"	(3+04.76-0+00)(22)	6704.7
"T"	(0+90.13-0+00)(12+16)(1/2)+	
	(4+14-0+90.13)(16)	6443.7
		93304.3

(753474+93304.3)(1/9) = 94087 S.Y.

ITEM 659 SEEDING AND MULCHING

SEE ITEM 203 LINEAR GRADING

LENGTH 5132 L.F. AVE. WIDTH 20 FT.

AREA = (5132)(20)(1/9) = 11405 S.Y.

ITEM 659 REPAIR SEEDING AND MULCHING

5% OF PERMANENT SEEDED AREA (11405)(0.05) = 571 S.Y.

ITEM 659 COMMERCIAL FERTILIZER

AREA = 102640 S.F.

(5132)(0.24 GAL/SF) = 1232 GAL.

(102640)(0.02 LB/SF)(1/2000) = 1.03 TONS-(TO GEN, SUM,) (5132)(0.01 LBS/SF)(1/2000) = 0.03 TONS-(T0 6H.7)1.06 TONS

TOTAL 27 M.GAL

ITEM 304 AGGREGATE BASE

SEE ITEM 203 - LINEAR GRADING

TOTAL LENGTH = 5132 FT.

WIDTH = 5'-6"

(5132)(5.5)(6/324) = 523 C.Y.

ITEM 407 TACK COAT (USING 55,924)

SEE ITEM 446

AREA = 902898 S.F. (902898)(1/9)(0.075 GAL/SY) = 7530 GAL.

ITEM 408 PRIME COAT

(5132)(5.5)(1/9)(0.5 GAL/SY) = 1570 GAL.

ITEM 446 ASPHALT CONCRETE SURFACE COURSE TYPE 1, AC-20

SEE ITEM 202 WEARING COURSE REMOVED AND ITEM 254 PAVEMENT PLANING, BITUMINOUS.

ITEM 202 AREA = 56119 S.F. ITEM 254 AREA = <u>846779</u> S.F. 902898 S.F.

(902898)(1-1/4" / 324) = 3485 C.Y.

ITEM 446 ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2. AC-20

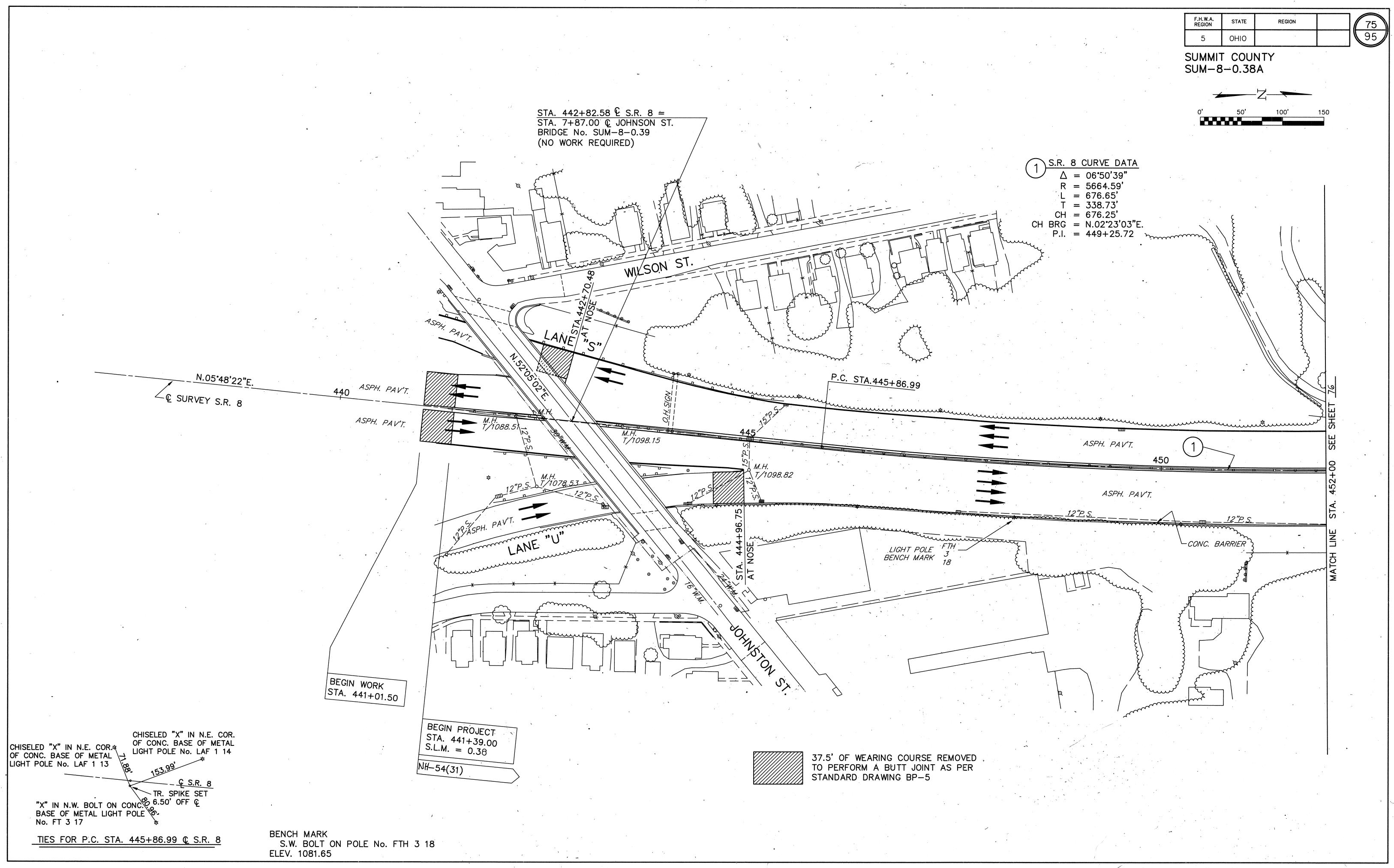
(902898)(1-3/4 / 324) = 4880 C.Y.

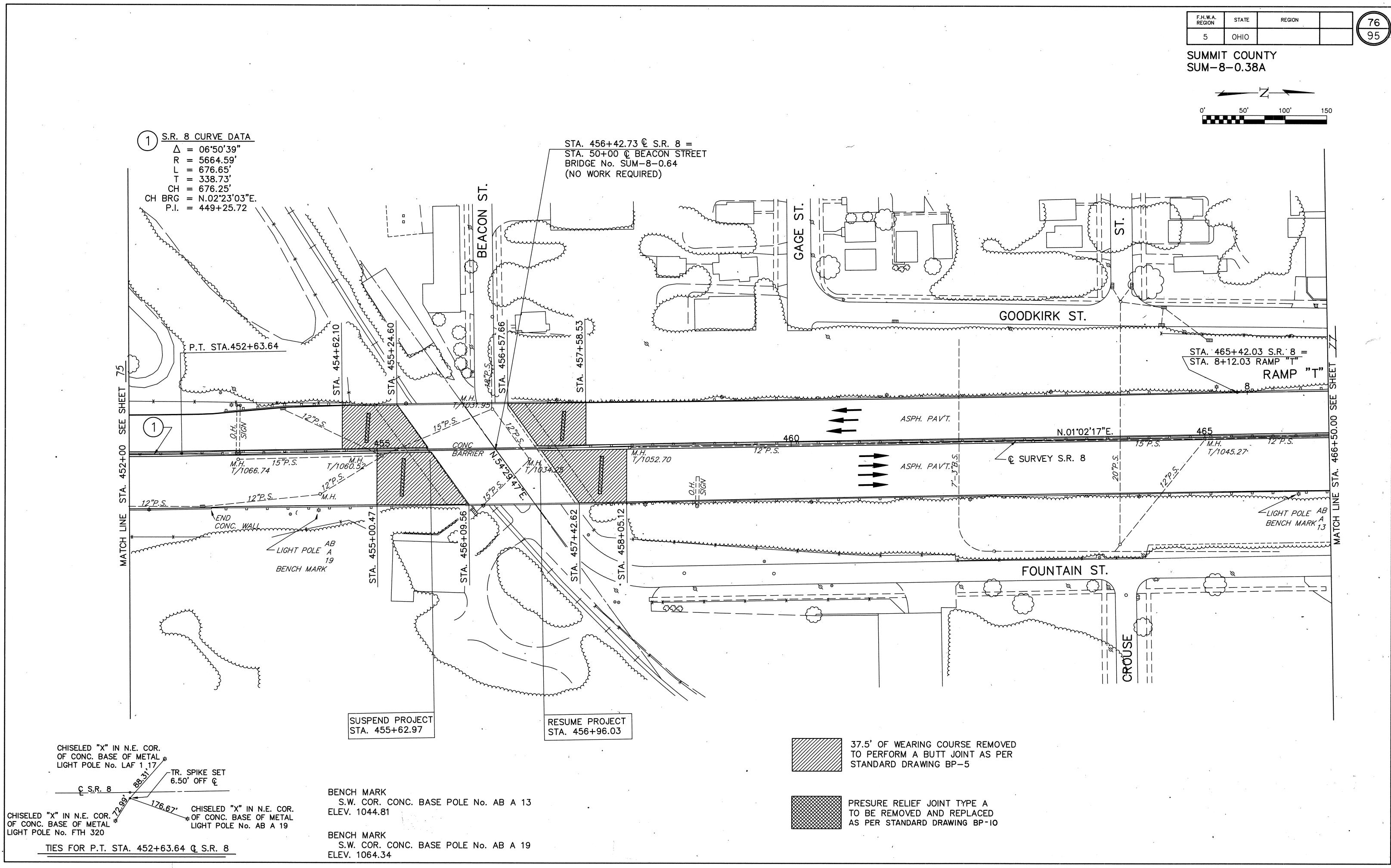
ITEM 448 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, AS PER PLAN, (UNDER GUARDRAIL)

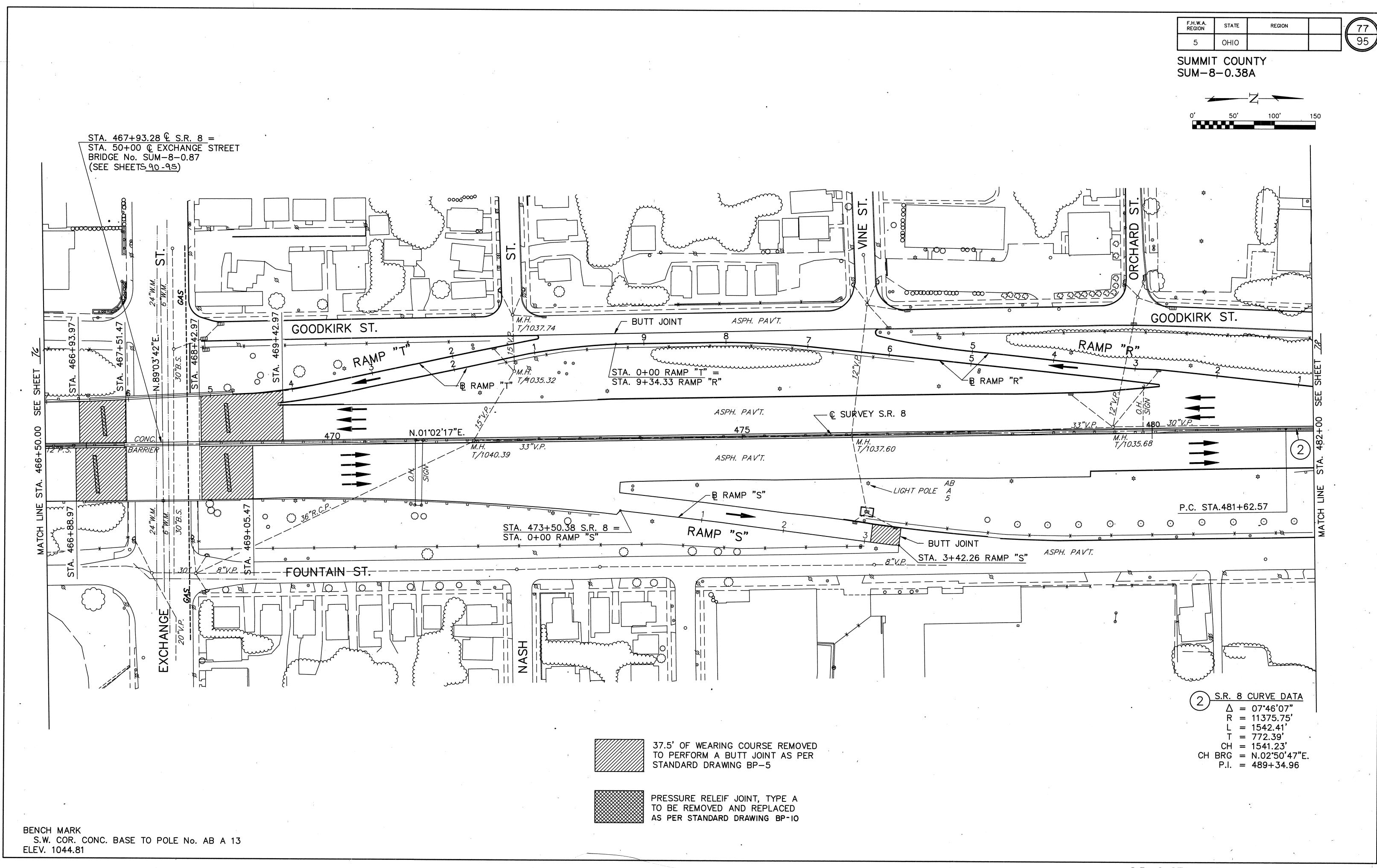
SEE ITEM 203 - LINEAR GRADING

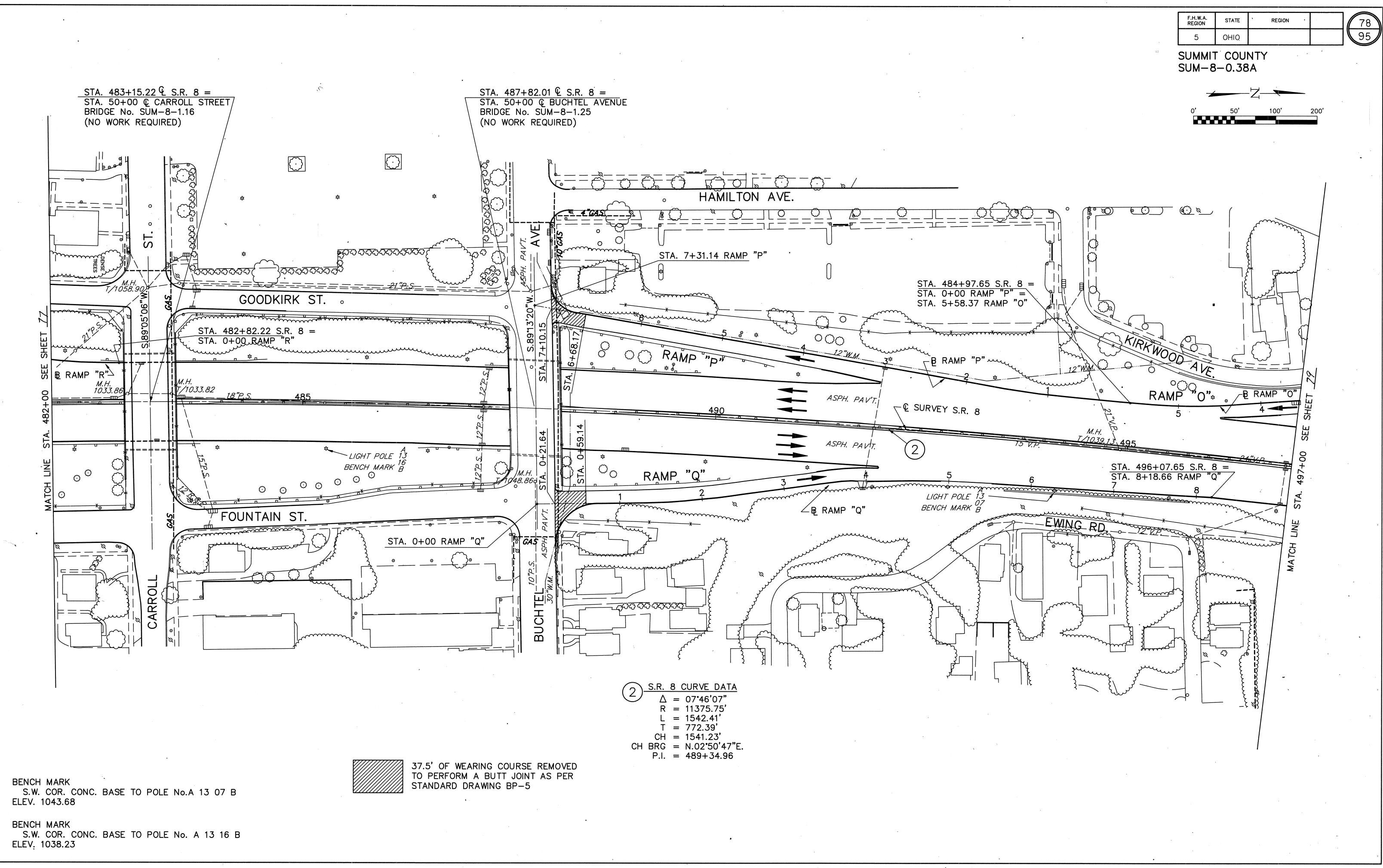
LENGTH = 5132 WIDTH = 5'

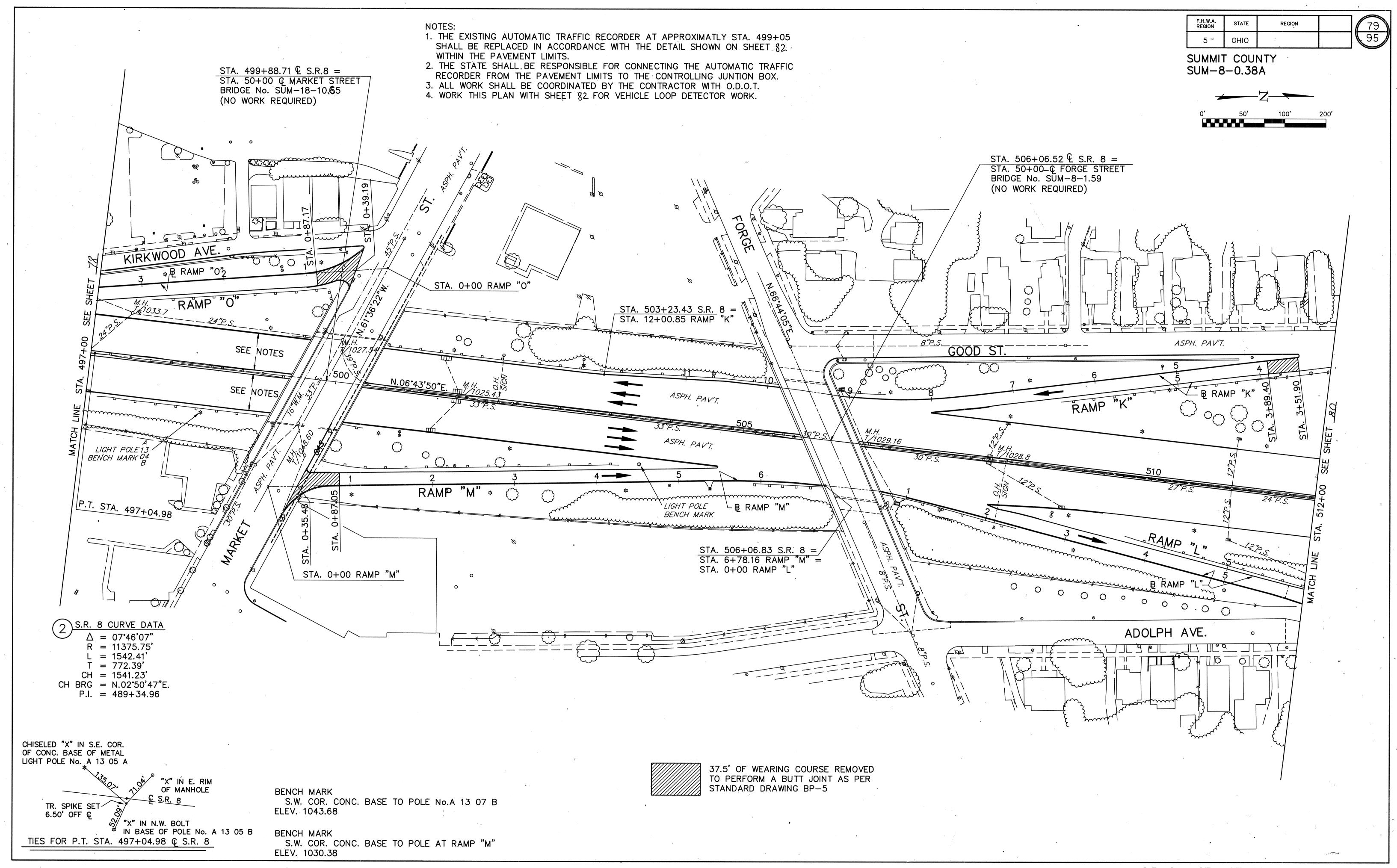
(5132)(5)(2/324) = 159 C.Y.

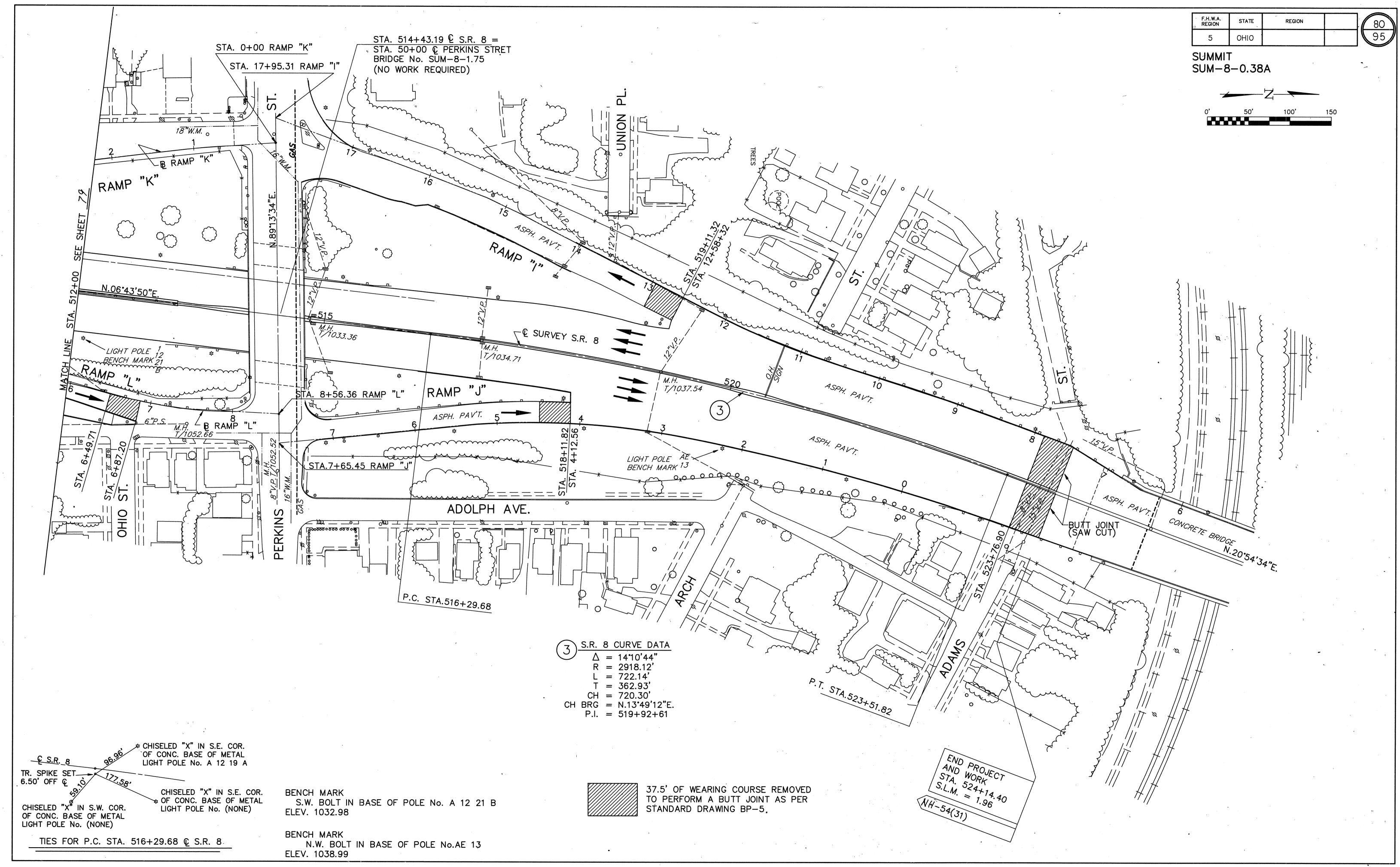








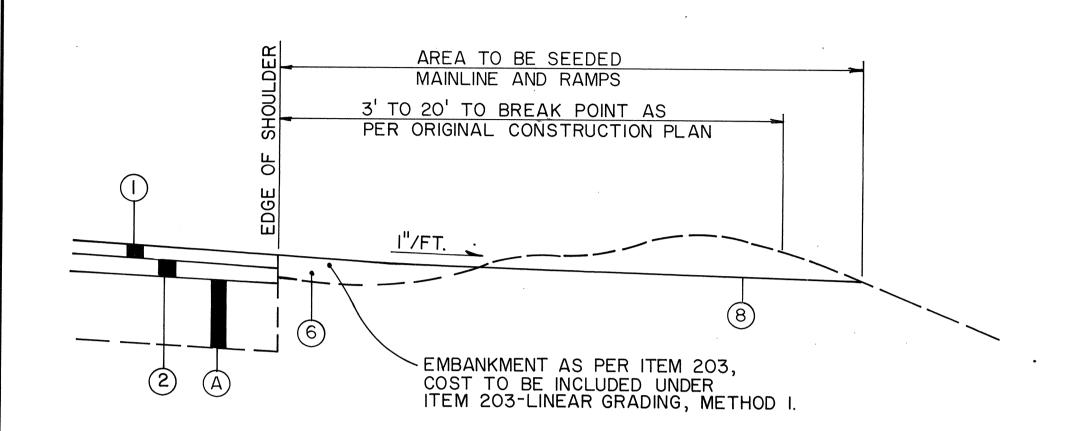




LINEAR GRADING

SUMMIT COUNTY SUM-8-0.38A

METHOD I



	I METHOD 1	
RAMP	LIMITING STATION	LIN. FT.
"S"	3+43 0+00	343
"P"	 4+35 3+03	132
"Q"	4+14 2+35	179
" 0"	4+50 2+90	160
"M"	5+50 4+25	125
"L"	3+70 1+95	175
"K"	8+00 6+45	155
"J"		0
"I"	12+95.82 12+58.32	37.5
		1306.5 = 13 STA 8

ITEM 203 - LINEAR GRADING - METHOD 1

THIS WORK SHALL BE PERFORMED IN AREAS WITHOUT CURB OR GUARDRAIL AS SPECIFIED ON SHEET <u>81</u>.

THIS ITEM SHALL CONSIST OF EXCAVATING TOPSOIL, PLACING GRANULAR MATERIAL AND APPLYING HERBICIDE AS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING:

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTIBLE GRANULAR MATERIAL CONFORMING TO 203.02 AND SHALL BE PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

HERBICIDE SHALL BE TREFLAN E.C., SPIKE OR AN APPROVED EQUAL AND SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S LABEL INSTRUCTIONS.

ONLY PROPERLY LICENSED PERSONNEL SHALL APPLY HERBICIDES AS REQUIRED BY THE OHIO REVISED CODE.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203, LINEAR GRADING - METHOD 1.

BCARRIED TO SH. 74.

S'-O" (MIN.) 2'-O" MAINLINE OUTSIDE RAMP SHOULDER INSIDE RAMP SHOULDER 2" 1"/FT. 1"/FT.

METHOD 2

	METHOD 2	11	
RAMP	LIMITING STATION		LIN. FT. I
"S"	473+48 453+00		2048
"P"	7+10 4+35	;	275
"Q"	2+35 0+21		214
"O"	2+90 0+39	; ;	251
"M"	4+25 0+36	1,	389
"L"	3+70 6+88	!	318
"K"	6+45 3+52	· .	293
"J"	4+58.56 4+12.56	:	37.5
"I"		: :	_0_
			3825.5 = 39 STA ⊛

LEGEND

(B)

- 1 446 11/4" ASPHALT CONCRETE SURFACE COURSE, TYPE I, AC-20
- 2) 446 | 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, AC-20
- 3 SOIL STERILIZER (SEE THIS SHEET)
- (4) 408 PRIME COAT

 \bigcirc

5 448 2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, (UNDER GUARDRAIL), AS PER PLAN

- 203 EMBANKMENT AS PER ITEM 203, COST TO BE INCLUDED UNDER ITEM 203-LINEAR GRADING METHOD I OR 2
- 7) 304 6" AGGREGATE BASE, As Per Plan
- 8) 659 SEEDING & MULCHING
- A EXISTING PAVEMENT
 - EXISTING GUARDRAIL

ITEM 203 - LINEAR GRADING - METHOD 2

THIS WORK WILL BE PERFORMED IN AREAS WITH EXISTING GUARDRAIL AS SPECIFIED ON SHEET 8).

THIS ITEM SHALL CONSIST OF EXCAVATING TOPSOIL, PLACING GRANULAR MATERIAL, PLACING ITEM 448 FOR THE PAVED SHOULDER, AND APPLYING HERBICIDE AS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING:

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTIBLE GRANULAR MATERIAL CONFORMING TO 203.02 AND SHALL BE PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

HERBICIDE SHALL BE TREFLAN E.C., SPIKE OR AN APPROVED EQUAL AND SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S LABEL INSTRUCTIONS.

ONLY PROPERLY LICENSED PERSONNEL SHALL APPLY HERBICIDES AS REQUIRED BY THE OHIO REVISED CODE.

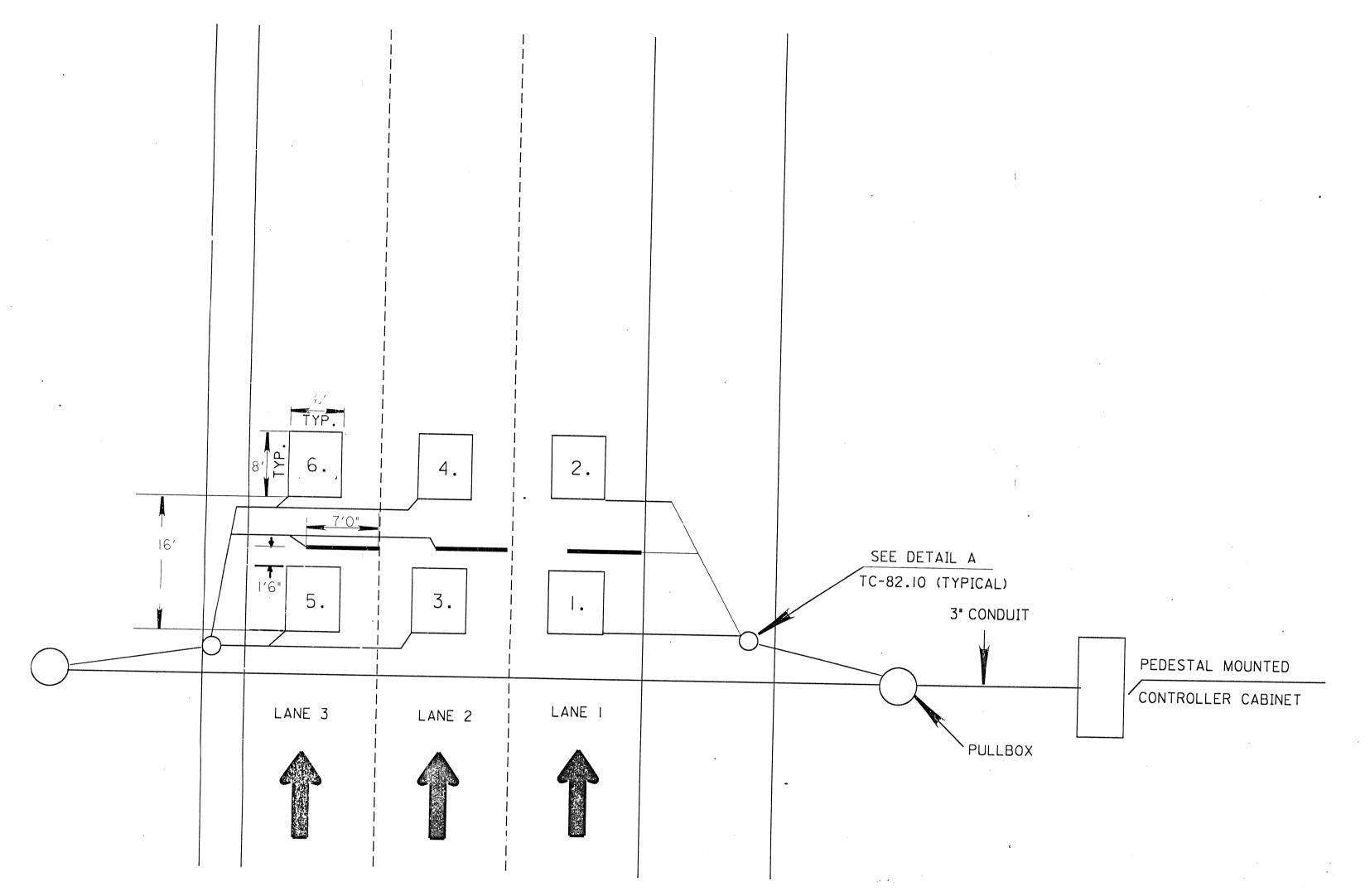
ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203, LINEAR GRADING - METHOD 2.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (UNDER GUARDRAIL), AS PER PLAN

THIS ITEM SHALL CONSIST OF PAVING UNDER THE EXISTING GUARDRAIL IN AREAS SPECIFIED ON SHEET 81 AND IN ACCORDANCE WITH THE FOLLOWING:

PAVING SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH AND MANNER AS SPECIFIED ON SHEET 81.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (UNDER GUARDRAIL), AS PER PLAN.



AUTOMATIC TRAFFIC RECORDER INSTALLATION 6 LANE SECTION

OPPOSITE DIRECTION TO BE THE SAME

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION
603	00400	40	LIŅ. FT.	4" CONDUIT, TYPE E
625	25500	200	LIN. FT.	CONDUIT, 3", 713.04
625	25900	120	LIN. FT.	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 3"
625	29000	- 200	LIN. FT.	TRENCH TRENCH
625	30700	8	EACH	PULL BOX, 713.08, 18"
625	32000	4	EACH	GROUND ROD
632	27500	480	LIN. FT.	LOOP DETECTOR PAVEMENT CUTTING
		,		
632	64900	336	LIN. FT.	LOOP DETECTOR WIRE, TYPE E
632	65200 -	144	LIN. FT.	LOOP DETECTOR LEAD-IN CABLE
632	72000	2	CU. YD.	CONCRETE FOR ANCHOR BASE FOUNDATION
632	89800	2	EACH	PEDESTAL, 3', TRANSFORMER BASE
				-, -,OI OINMEN DAGE
632	90400	12	EACH	PIEZOCABLE CLASS II AXLE SENSOR
633	650 01	2	EACH	CABINET, WITHOUT CONTROLLER, PREWIRED, PEDESTAL MOUNTING, TYPE G, AS PER PLAN
				PEDESTAL MOUNTING, TYPE G, AS PER PLAN

QUANTITIES CARRIED TO GENERAL SUMMARY SHEET 73.

SUMMIT COUNTY

BY _____
DATE ____

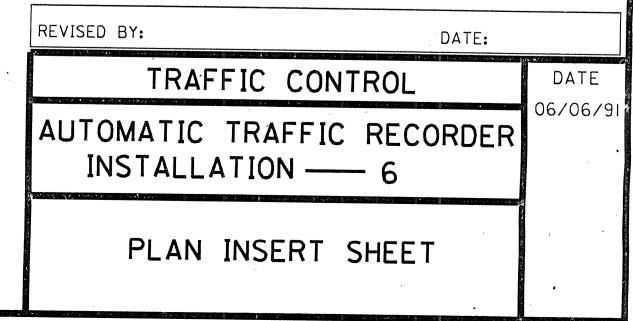
CHKD
BY _____
DATE ____
DATE ____

SUM-8-0.38A

OHIO 82
FHWA 5
REGION 5

<u>NOTES</u>

- 1. ALL LOOPS SHALL BE 6'X 8'. LOOPS SHALL BE SPACED 16'0" FROM LEADING EDGE TO LEADING EDGE. INSTALLATION OF LOOPS SHALL CONFORM TO TC-82.10.
- 2. THE PIEZOCABLE CLASS II AXLE SENSOR SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTION. THE END OF A PIEZOCABLE CLASS II AXLE SENSOR SHALL NOT BE INSTALLED WITHIN SIX (6) INCHES OF A LONGITUDINAL JOINT. PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH FOR ITEM 632 PIEZOCABLE CLASS II AXLE SENSOR AND SHALL INCLUDE ALL MATERIAL, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS MECESSARY FOR EACH INSTALLATION, IN PLACE COMPLETE AND ACCEPTED.
- 3. THE CABINET SHALL BE CLEAN CUT IN DESIGN AND APPEARANCE AND SHALL CONFORM TO THE FOLLOWING:
 - A. IT SHALL BE MADE OF ACCEPTABLE STRENGTH ALUMINUM (NATURAL FINISH).
 - B. THE MINIMUM USEABLE INSIDE DIMENSIONS SHALL BE: HEIGHT 30", WIDTH 19", AND DEPTH 13".
 - C. HINGED DOOR SHALL BE PROVIDED ON THE FRONT OF THE CABINET WHICH SHALL INCLUDE SUBSTANTIALLY THE FULL AREA OF THE FRONT OF THE CABINET.
 - D. THE DOOR SHALL BE FULLY GASKETED SO THAT WHEN CLOSED IT SHALL FIT CLOSELY TO THE GASKETING MATERIAL, MAKING THE CABINET WEATHER RESISTANT. A ONE POINT LATCH SHALL BE PROVIDED FOR THIS PURPOSE.
 - E. THE DOOR SHALL BE PROVIDED WITH AN ACCEPTABLE STRONG LOCK WITH PERMANENT LUBRICATION AND A WEATHERPROOF TAB AND FURNISHED WITH TWO KEYS.
 - F. THE DOOR PINS SHALL BE GREASE-LUBRICATED AND OF A NON-CORRODING STEEL MATERIAL.
 - G. THE CABINET SHALL CONTAIN ONE SHELF FOR SUPPORT OF TRAFFIC COUNTING EQUIPMENT. SHELF TO BE CENTERED AT 15 INCHES FROM THE TOP OF THE CABINET.
- H. THE CABINET SHALL INCLUDE A VENT.
- I. TWO EACH 12 WIRE TERMINAL BLOCKS 6 INCHES FROM BOTTOM OF CABINET CENTERED ON BACK PANEL (PENN UNION # 6012 OR APPROVED EQUAL).
- . J. MOUNTING FACILITIES SHALL INCLUDE ONE BACK PANEL WITH 5 HOLES (ALUMINUM).
- ALL PIECES SHALL BE SMOOTH AND FREE FROM FLAWS, CRACKS, BLOWHOLES AND OTHER IMPERFECTIONS.
 THE CABINET SHALL BE ORIENTED SO THAT THE DOOR OPENS TOWARD THE ROADWAY.
- 4. CABLE AND WIRE SHALL BE IDENTIFIED IN ACCORDANCE WITH 632.04. IDENTIFICATION SHALL INCLUDE THE DIRECTION OF TRAVEL (i.e., NB, WB) AND THE LOOP NUMBER AS SHOWN. EACH CABLE AND WIRE SHALL HAVE 5'O" COILED IN THE CONTROLLER CABINET FOR CONNECTION BY OTHERS.
- 5. ADJACENT LOOPS (TRANSVERSE AND LONGITUDINAL) SHALL BE INSTALLED IN OPPOSITE DIRECTIONS, i.e., LANE I, LOOP I AND LANE 2, LOOP 4 CLOCKWISE; LANE I, LOOP 2 AND LANE 2, LOOP 3 COUNTERCLOCKWISE.
- 6. REFERENCE IS MADE TO STANDARD DRAWING HL-30.11 FOR DETAILS OF DRAINING PULLBOXES. UNDERDRAINS FOR PULLBOXES SHALL BE USED AS DIRECTED BY THE ENGINEER AND SHALL BE PROVIDED WHERE THE LENGTH REQUIRED FOR A SATISFACTORY OUTLET DOES NOT EXCEED APPROXIMATELY 20 FEET. AN ESTIMATED QUANTITY OF 40 LINEAR FEET OF ITEM 603, 4 CONDUIT TYPE E IS INCLUDED IN THE GENERAL SUMMARY FOR THIS PURPOSE.
- 7. FIVE (5) WORKING DAYS PRIOR TO THE SCHEDULED INSTALLATION, THE CONTRACTOR SHALL CONTACT MR. JAMES ROBSON AT 614-466-3727.(ODOT, TECHNICAL SERVICES)
- 8. ALL ITEMS SHALL CONFORM TO C & MESPECIFICATIONS 625, 713, 632, 732, 633 AND 733, UNLESS OTHERWISE SPECIFIED.
- 9. ON AN EIGHT LANE SECTION, LANES I AND 2 SHALL BE SAWED TO ONE SIDE OF THE ROADWAY AND LANES 3 AND 4 SHALL BE SAWED TO THE OTHER.



BY DATE
CALC. DLD 9-91
CHECKED PAK 9-91

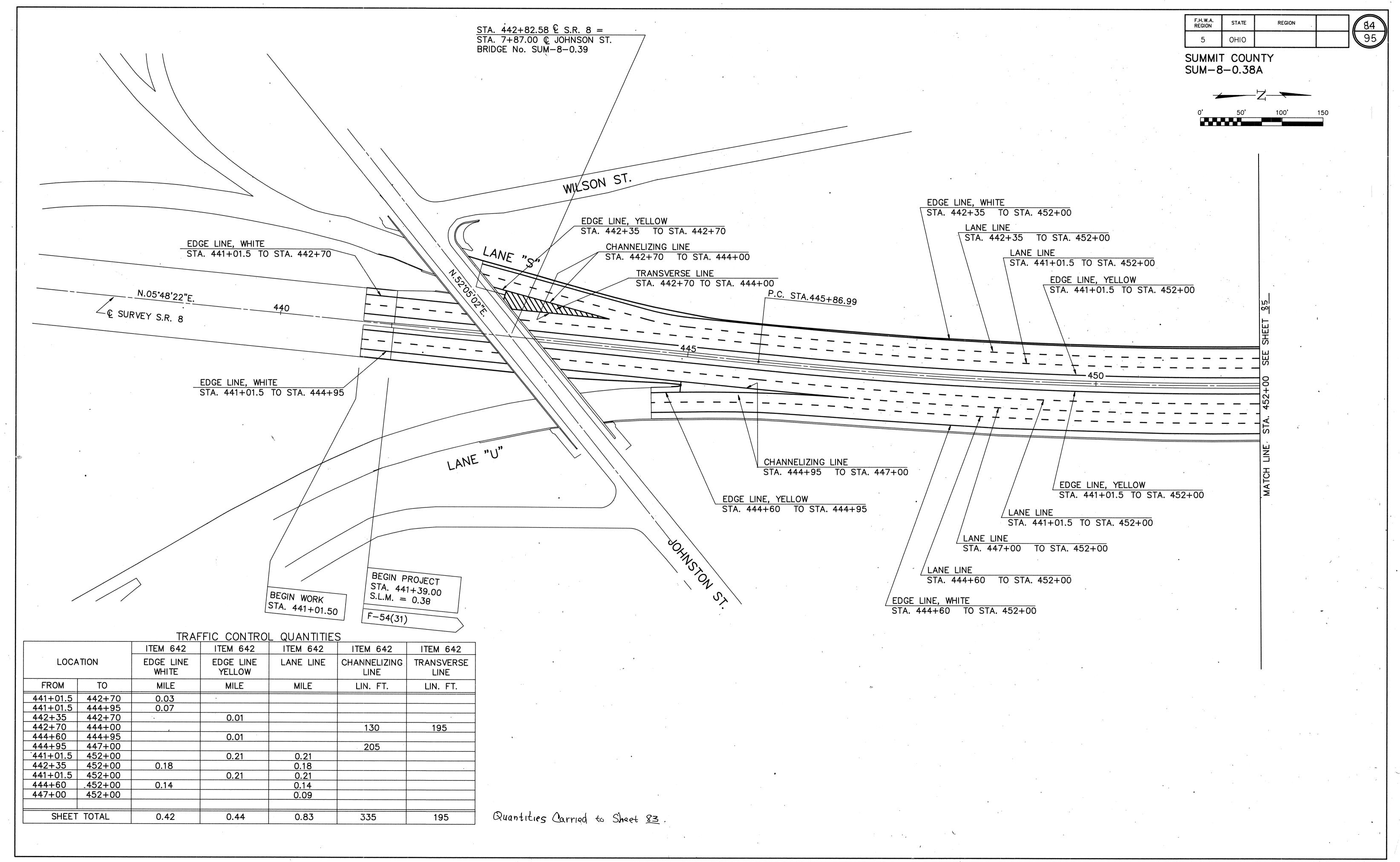
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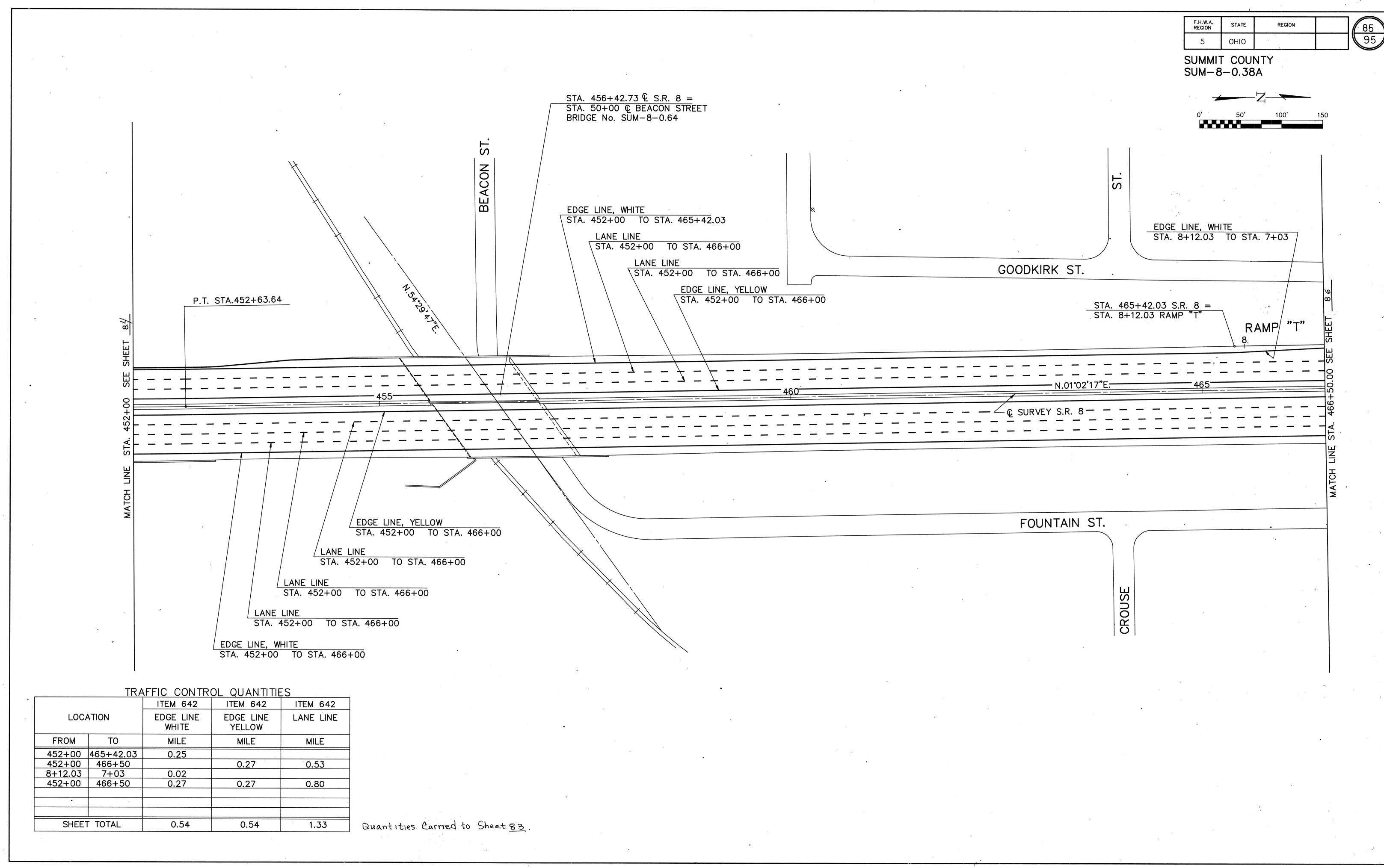
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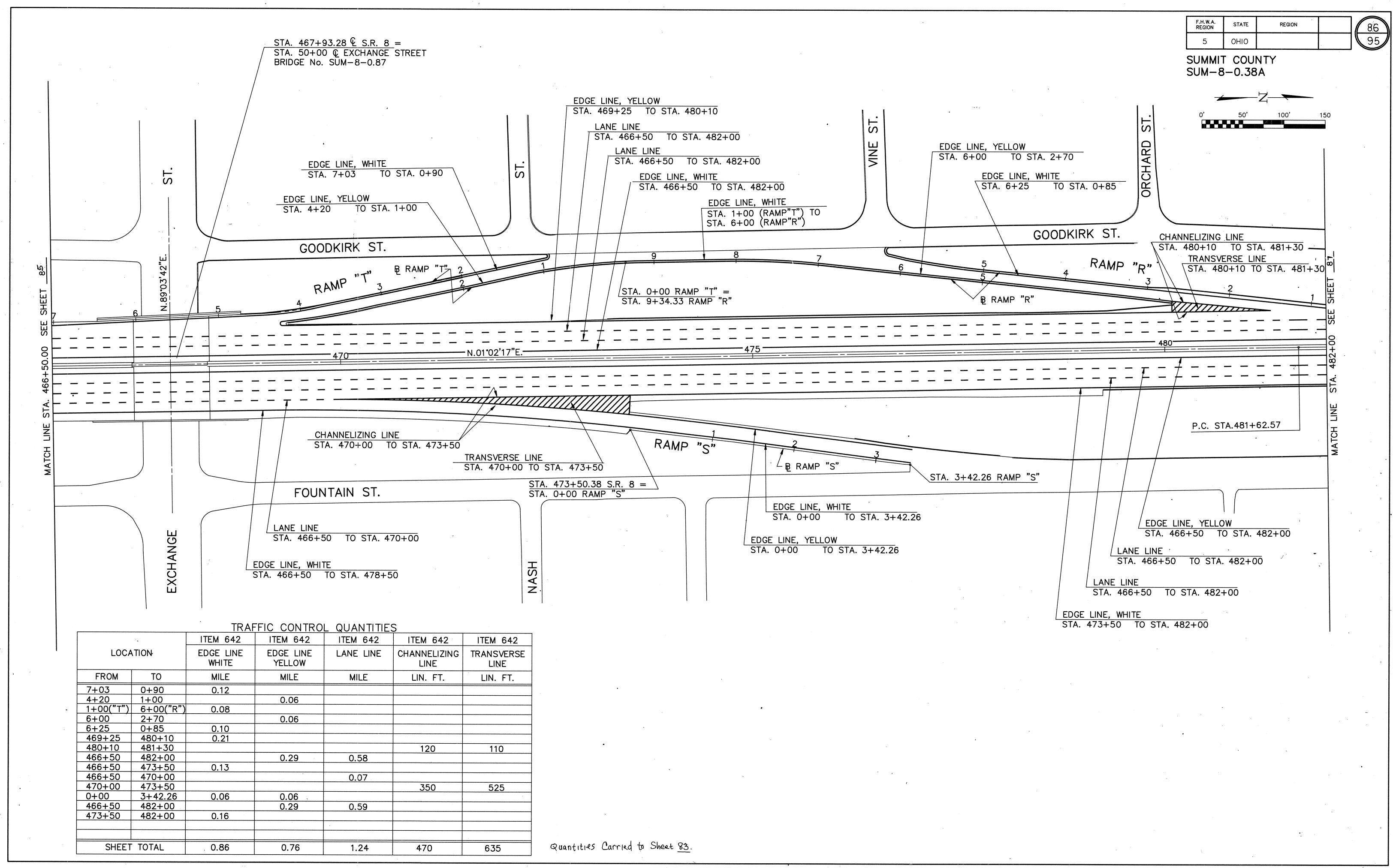
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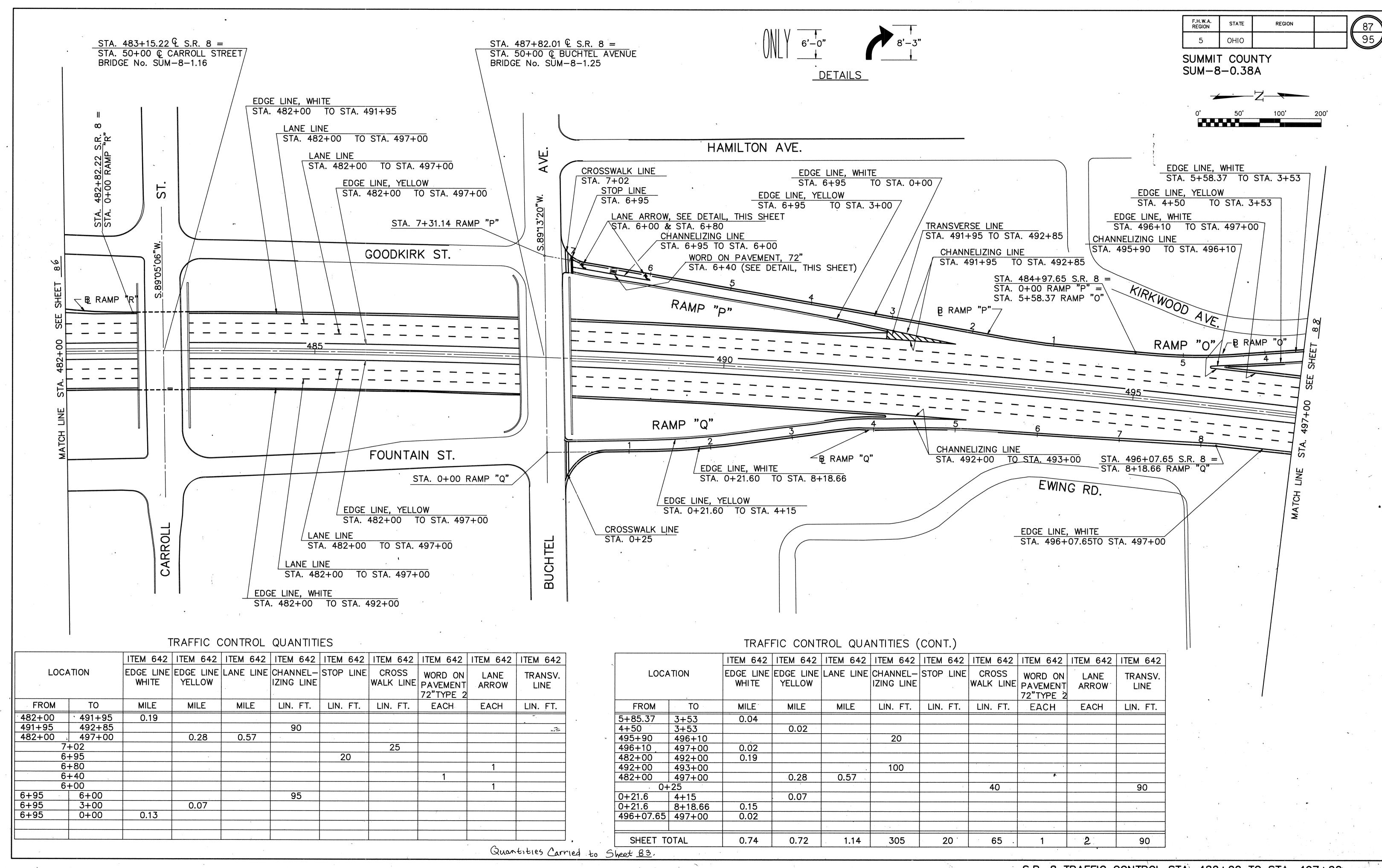
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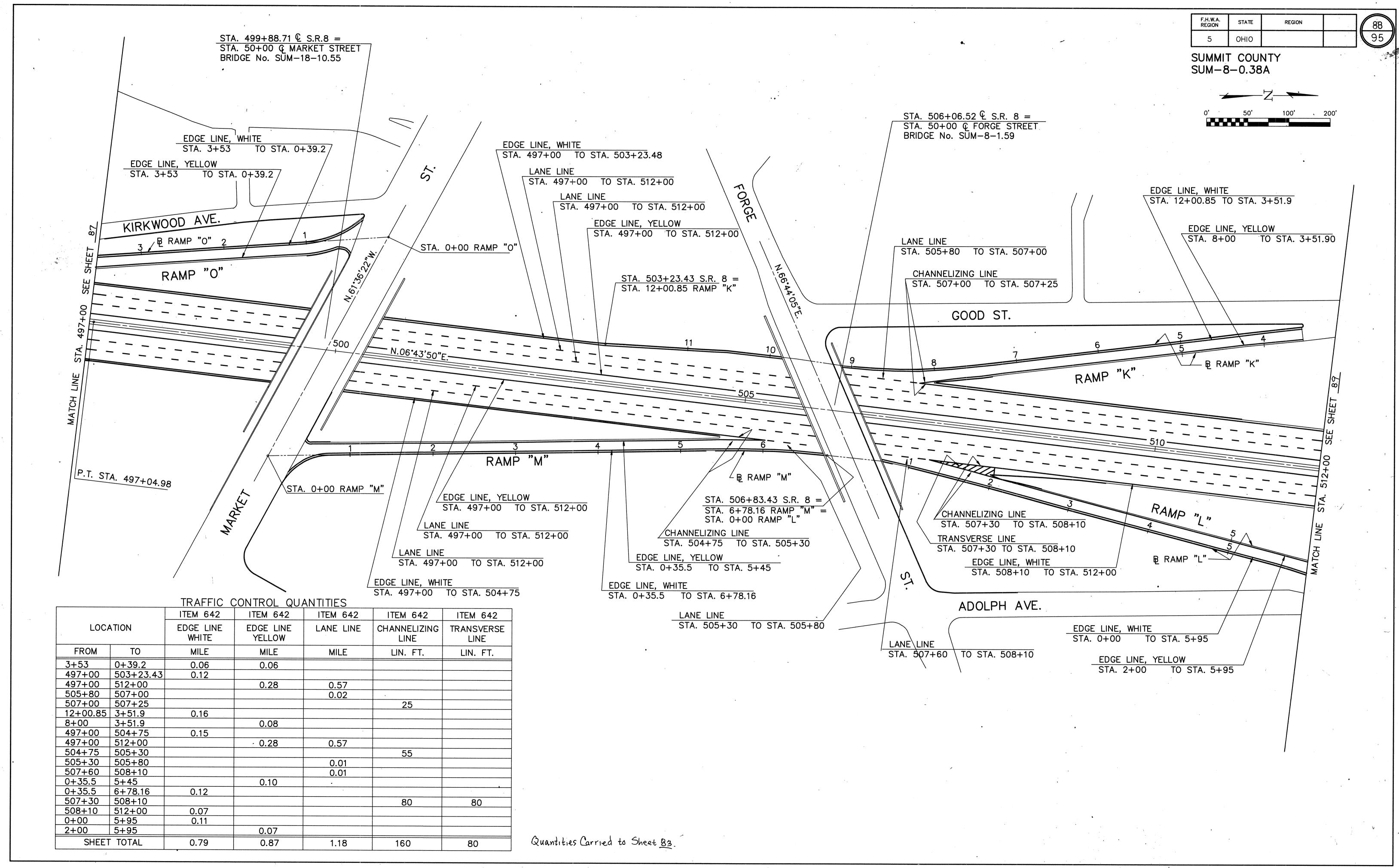
	ESTIMATE	QUANTITIES				
		0.1557. \	LOCATION			
ITEM	DESCRIPTION	SHEET No.	FROM TO	UNIT	QUANTITY	TOTAL
642	EDGE LINE, WHITE, TYPE 2	84	441+01.5 452+00	MILE	0.42	
:		85	452+00 466+50	MILE	0.54	
		86	466+50 482+00	MILE	0.86	
		87	482+00 497+00	MILE	0.74	
		88	497+00 512+00 512+00 524+14.4	MILE MILE	0.79	
The state of the s		0(-)	312+00 324+14.4	IVIILL	0.47	3.82
				,		
642	EDGE LINE, YELLOW, TYPE 2	84	441+01.5 452+00	MILE	0.44	
		85	452+00 466+50	MILE	0.54	
		86	466+50 482+00	MILE	0.76	
		87	482+00 497+00	MILE	0.72	
:		88	497+00 512+00 512+00 524+14.0	MILE MILE	0.87	
		0.9	312+00 324+14.0	WILL	0.40	3.81
						J.J1
642	LANE LINE, TYPE 2	84	441+01.5 452+00	MILE	0.83	
	. •	85	452+00 466+50	MILE	1.33	
		86	466+50 482+00	MILE	1.24	
		87	482+00 497+00	MILE	1.14	,
	-	88	497+00 512+00	MILE	1.14	
	•	89	512+00 524+14.4	MILE	1.02	6.70
			•			0.70
642	CHANNELIZING LINE, TYPE 2	84	441+01.5 452+00	LIN.FT.	335	
	·	85	452+00 466+50	LIN.FT.		
	3	86	466+50 - 482+00	LIN.FT.	470	
)	87	482+00 497+00	LIN.FT.	305	
	*	88	497+00 512+00	LIN.FT.	160	
	· · · · · · · · · · · · · · · · · · ·	89	512+00 524+14.4	LIN.FT.	290	1560
						1300
642	STOP LINE, TYPE 2	87	6+95	LIN.FT.	20	·
S 90					4	20
	New Total Control of the Control of		,			
642	CROSSWALK LINE, TYPE 2	87	7+02	LIN.FT.	. 25	
		87	0+25	LIN.FT.	40	65
,						65
642	WORD ON PAVEMENT, 72", TYPE 2	87	6+40	EACH	1 1	
	•			•		1
					-	
642	LANE ARROW, TYPE 2	87	6+00	EACH	1 1	
		87	6+80	EACH	1 1	2
					1	
642	TRANSVERSE LINE, TYPE 2	84	442+70 444+00	LIN.FT.	195	
		86	480+10 481+30	LIN.FT.	110	·
		86	470+00 473+50	LIN.FT.	525	·
		87	492+00 493+00	LIN.FT.	90	
		88	507+30 508+10	LIN.FT.	80	•
		89	519+10 520+60	LIN.FT.	225	- 1225
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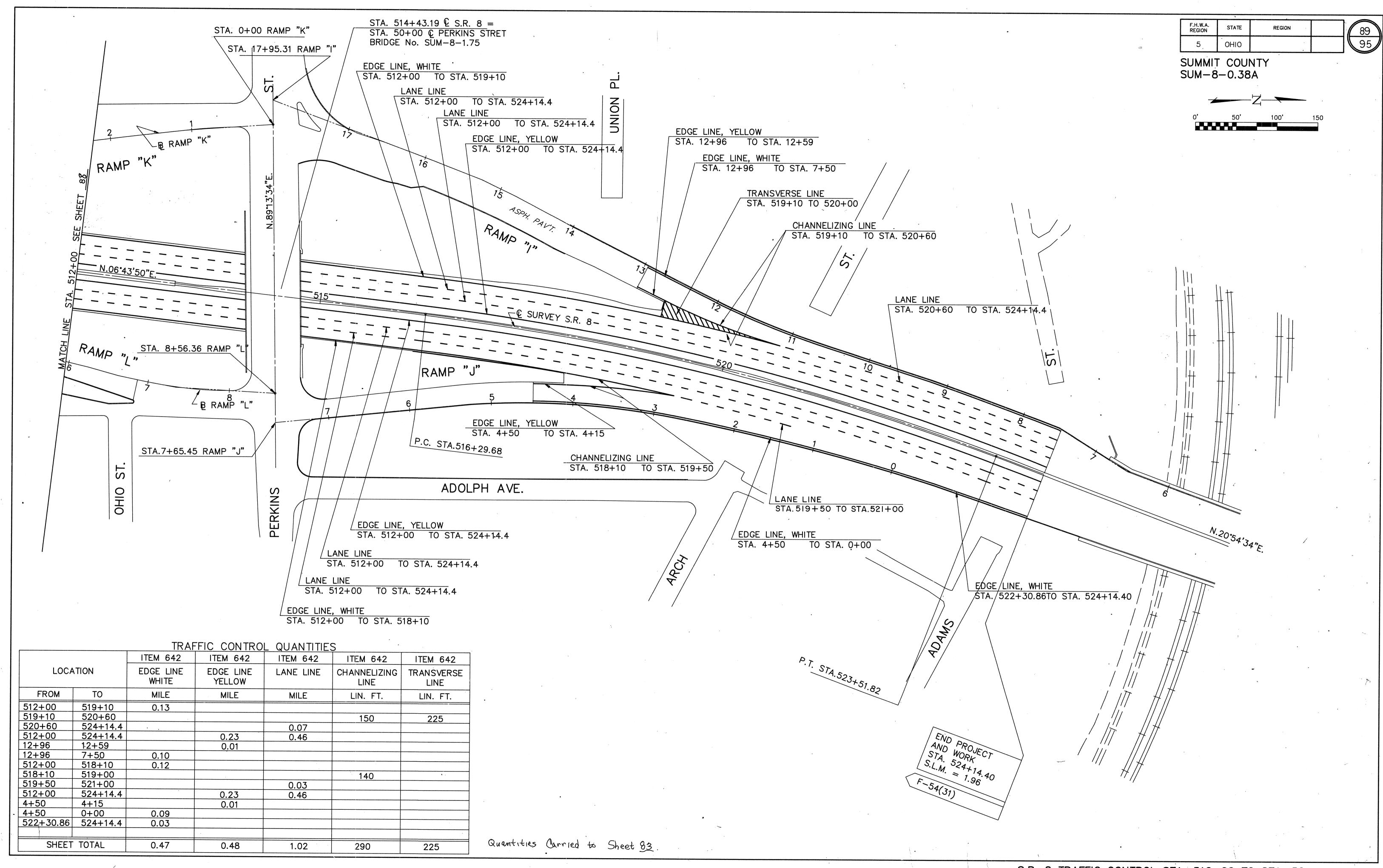


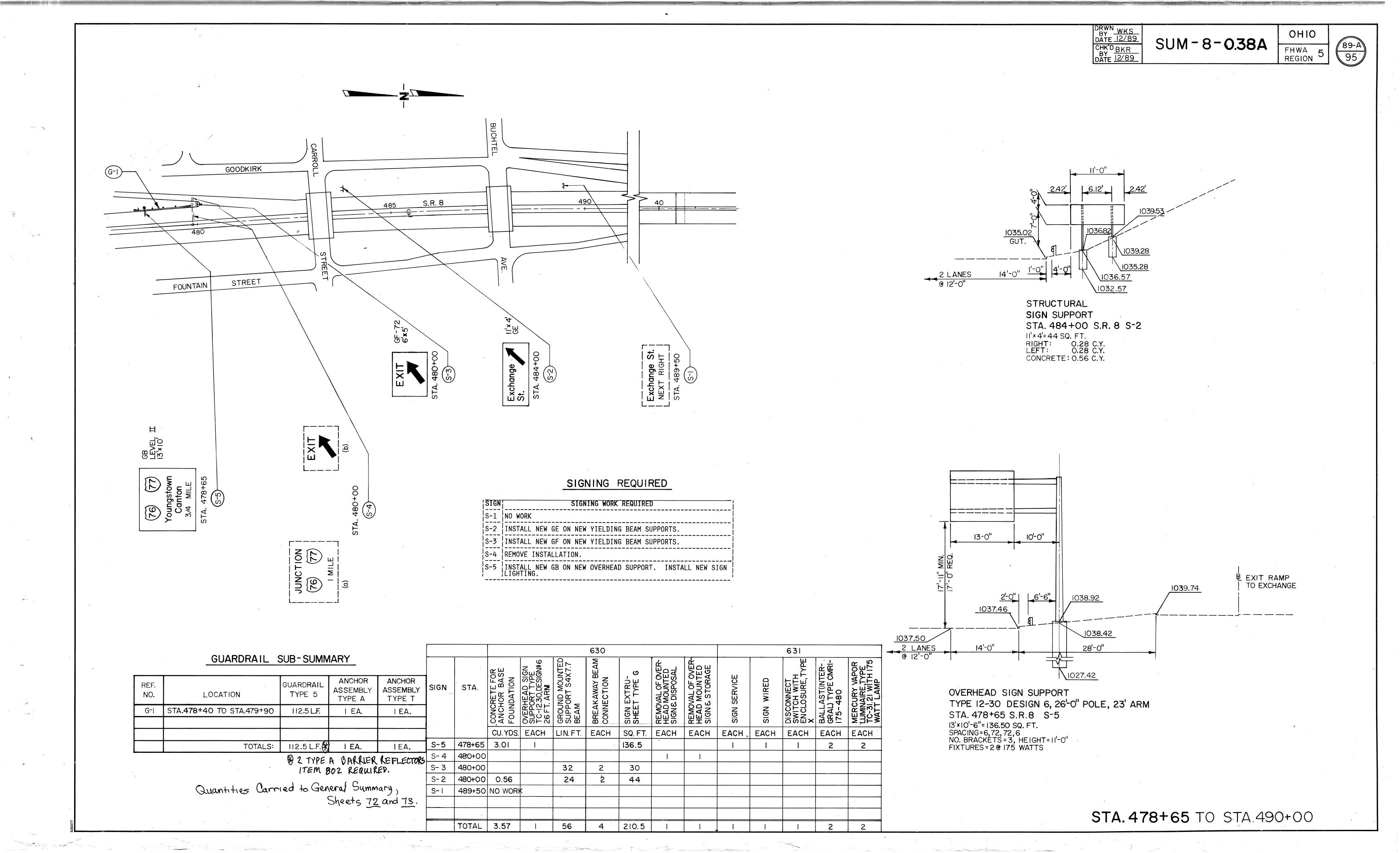


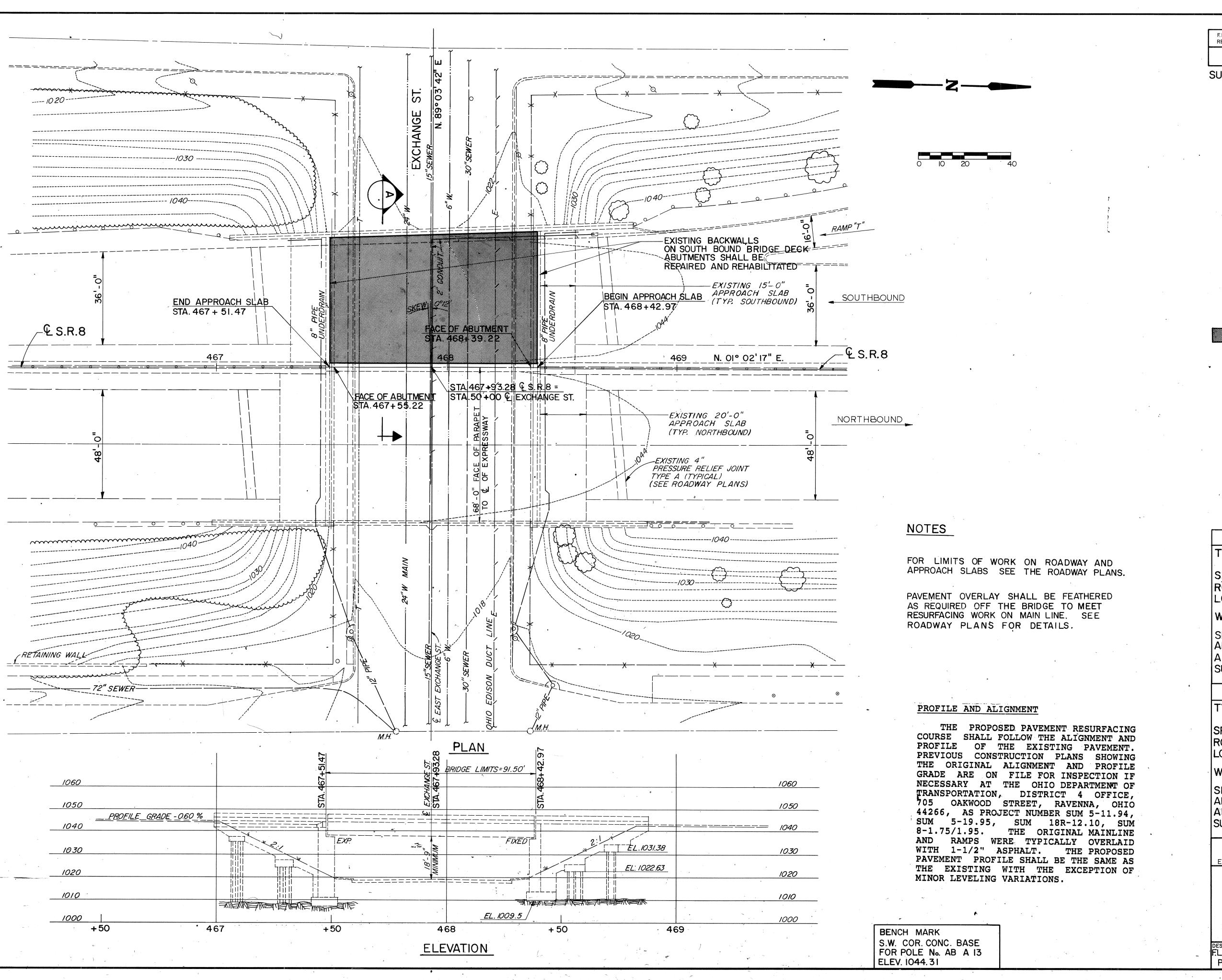












F.H.W.A. REGION STATE PROJECT 90
5 OHIO 95

SUM.-8-0.38 A

DESIGN DESIGNATION

1991 A.D.T. = 95,150 2011 A.D.T. = 133,210 2011 D.H.V. = 13,320 D. = 55% T. = 57%

INDICATES AREA IN WHICH THE EXISTING 4" ASPHALTIC CONCRETE OVERLAY IS TO BE REMOVED AND REPLACED WITH I 1/4" OF 446 TYPE I AND I 1/4" 446 TYPE 2, WITH TYPE D MEMBRANE WATERPROOFING.

I.) NO WORK ON NORTHBOUND DECK.

EXISTING STRUCTURE

TYPE : SIMPLE SPAN STEEL GIRDER WITH CONCRETE DECK AND SUBSTRUCTURE.

SPANS: 86'- 6"± ROADWAY: VARIES

ROADWAY: VARIES
LOADING: HS 20 - 44 CASE I AND THE ALT. MILITARY
LOADING.

WEARING SURFACE : LATEX MOD. CONC. OVERLAY N.B.; ASPHALTIC CONC. S.B.

SKEW: 0° 12' L.F.

APPROACH SLAB: AS-1-72 (20'-0" N.B.)
ALIGNMENT: TANGENT (15'-0" S.B.,
SUPERELEVATION: NONE

PROPOSED STRUCTURE

TYPE: SIMPLE SPAN STEEL GIRDER WITH CONCRETE DECK AND SUBSTRUCTURE

SPANS: 86'-6"±

ROADWAY: VARIES

LOADING: HS 20-44 CASE I AND THE ALT MILITARY LOADING.

WEARING SURFACE: NO CHANGE N.B.(L.M.C.OVERLAY)

NEW 2 1/2" ASPHALTIC CONC. OVERLAY S.B.

SKEW: 0° 12' L.F

APPROACH SLAB: AS-1-72 (20'-0" N.B.)

APPROACH SLAB: AS-1-72 (20'-0" N.B.)
ALIGNMENT: TANGENT (15'-0" S.B., 1953)
SUPERELEVATION: NONE

JOHN DAVID JONES & ASSOC., INC. 1 /6
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
INEERS ARCHITECTS PLANNERS

SITE PLAN

AKRON EXPRESSWAY SYSTEM
EXCHANGE STREET OVERPASS
BRIDGE NO. SUM-8-0087

DESIGNED	DRAWN	TRACED	CHECKED	REVIEW	ED DATE	REVISED
F.L.K. P.A.K.	D. B.	<u> </u>	J.R.O	PA.K.	ED DATE JAN-10-91	· ·

GENERAL NOTES

DESIGN SPECIFICATIONS

THE DECK RESURFACING AND WORK ON THIS STRUCTURE CONFORM TO THE "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1989, INCLUDING THE 1990 AND 1991 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING

HS20-44 CASE I AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES

CONCRETE CLASS S - COMPRESSIVE STRENGTH: 4500 PSI CONCRETE CLASS C - COMPRESSIVE STRENGTH: 4000 PSI REINFORCING STEEL - ASTM A615, A616, A617 - GRADE 60, FY=60,000 PSI STRUCTURAL STEEL ASTM A36 - FY=36.000 PSI

DECK PROTECTION METHOD

TYPE D MEMBRANE WATERPROOFING ASPHALTIC CONCRETE OVERLAY - 446. TYPES I AND II AC-20 SEALING OF PARAPET SURFACES (EPOXY)

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/OR 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 513.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

REPLACEMENT OF EXISTING REINFORCING STEEL: ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT HIS 'COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE OF 2000 POUNDS IS INCLUDED IN ITEM 509 EPOXY COATED REINFORCING STEEL, GRADE 60 FOR THIS PURPOSE.

MAINTENANCE OF TRAFFIC: THE CONTRACTOR SHALL SAFEGUARD THE TRAVELLING PUBLIC BY PROVIDING PLATFORMS. NETS OR OTHER SUITABLE PROTECTION. HIS PROPOSED METHOD SHALL BE SUBMITTED TO THE DIRECTOR WHOSE WRITTEN APPROVAL SHALL BE REQUIRED BEFORE THE WORK BEGINS.

WORK SHALL ONLY BE PERFORMED WHEN ALL MAINLINE TRAFFIC IS DETOURED DURING SELECT HOURS AT NIGHT AND WEEKENDS ON THIS SECTION OF ROADWAY DURING PHASE IIA AND PHASE IIB. SEE THE MAINTENANCE OF TRAFFIC PLANS AND ROADWAY PLANS FOR DETAILS AND COORDINATION. -

UTILITY LINES: ALL EXPENSE INVOLVED IN WORKING WITH ANY AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS OF SAID UTILITIES. THE CONTRACTOR AND OWNERS ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

PROPOSED WORK

ITEM 202 - PORTIONS OF STRUCTURES REMOVED

THIS WORK SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE FOLLOWING:

1) BRIDGE DECK JOINT EXTENSION BARS. GRIND SMOOTH TO ORIGINAL JOINT

THE EXISTING REINFORCING SHALL BE PRESERVED AND/OR MODIFIED AS SHOWN ON THE

PAYMENT FOR THE WORK DESCRIBED SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED.

APPROACH SLABS

UPON REMOVAL OF THE ASPHALTIC CONCRETE OVERLAY ON THE APPROACH SLABS, AND IT HAS BEEN DETERMINED BY THE ENGINEER VIA HIS VISUAL INSPECTION OF THE EXPOSED SLAB, THAT THE APPROACH SLAB SHALL BE REMOVED. REPAIRED FULL-DEPTH. PARTIAL-DEPTH OR REPLACED. THERE HAVE BEEN PROVIDED IN THE GENERAL SUMMARY THE FOLLOWING CONTINGENCY ITEMS:

<u>ITEM</u> 202	<u>DESCRIPTION</u> APPROACH SLAB REMOVED, AS PER PLAN	QUANTITY 255	<u>UNIT</u> SQ.YD
304	AGGREGATE BASE, As Per Plan	20	C.Y.
611 611	APPROACH SLAB, MISC.: REPAIRS REINFORCED CONCRETE APPROACH SLAB (T=15") AS PER PLAN	20 75 255	C.Y. SQ.YD SQ.YD

THIS WORK SHALL CONSIST OF FULL OR PARTIAL DEPTH REMOVAL OF THE EXISTING DETERIORATED PAVEMENT; CORRECTION OF THE SUBBASE AND SUBGRADE, FURNISHING AND PLACING DOWELS; REPLACEMENT WITH PORTLAND CEMENT CONCRETE: AND RESTORATION OF AFFECTED SHOULDERS.

ESTIMATED QUANTITIES & GENERAL NOTES

IN THE EVENT THE ENGINEER DETERMINES TOTAL REPLACEMENT OF THE APPROACH SLAB IS NECESSARY, IT SHALL BE PERFORMED UNDER ITEM 611, REINFORCED CONCRETE APPROACH SLAB (T = 15"), (AS-1-81), AS PER PLAN. SAID WORK SHALL INCLUDE ALL TASKS NECESSARY TO INSTALL NEW SLABS, REINFORCING GRADING AND DETAILS, MATERIALS, LABOR AND EQUIPMENT.

THIS WORK SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF 611. IN ADDITION, THE PAVEMENT REMOVAL, SUBGRADE AND SUBBASE CORRECTION, GROUT, PLACING OF DOWELS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 803.02, 803.03, 803.04, 803.05 AND 803.09. THE RIGID REPLACEMENT SHALL NOT BE PLACED UNTIL THE GROUT AROUND THE DOWELS HAS HARDENED.

THESE ITEMS AND QUANTITIES HAVE BEEN CARRIED FORWARD TO THE STRUCTURES SUMMARY.

MATERIAL AND EQUIPMENT STORAGE

NO MATERIALS, VEHICLES OR EQUIPMENT SHALL BE STORED WITHIN THE MEDIAN, THE CLOSURE OR WITHIN THIRTY (30) FEET OF THE OUTSIDE EDGE OF THE EXISTING PAVEMENT. THIS NOTE ESPECIALLY APPLIES TO ALL PRIVATE VEHICLES WHICH SHALL NOT BE PARKED WITHIN THE RIGHT OF WAY.

RIGHT OF WAY

ALL WORK WILL BE PERFORMED WITHIN THE EXISTING RIGHT OF WAY.

ITEM 519 - PATCHING CONCRETE STRUCTURES

THIS ITEM SHALL BE USED TO MAKE STRUCTURAL REPAIRS TO THE DETERIORATED BACKWALLS. BEAM SEATS AND EXPOSED FACES OF ABUTMENTS AND WINGWALLS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE FOR PROTECTION AS NECESSARY AND MAINTENANCE OF TRAFFIC AND AS DIRECTED BY THE ENGINEER.

ITEM SPECIAL- SEALING OF CONCRETE SURFACES (EPOXY)

THE EXPOSED SURFACE OF THE CURB AND PARAPET ON THE WEST SIDE OF THE SOUTHBOUND BRIDGE DECK SHALL BE SEALED ALONG THE ENTIRE LENGTH OF THE BRIDGE SUPERSTRUCTURE TO THE LIMITS SHOWN IN THE PLANS.

PAYMENT SHALL BE ON A SQUARE YARD BASIS AND SHALL INCLUDE ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND INCIDENTALS TO EXECUTE AND COMPLETE THE WORK TO THE SATISFACTION AND APPROVAL OF THE ENGINEER.

ITEM 850 - FULL DEPTH REPAIRS

A CONTINGENCY QUANTITY FOR THIS ITEM HAS BEEN INCLUDED FOR FULL-DEPTH REPAIR OF THE EXISTING CONCRETE DECK. THIS ITEM SHALL BE PERFORMED ONLY AT THE DIRECTION OF THE ENGINEER UPON COMPLETION OF HIS INSPECTION OF THE DECK AFTER THE REMOVAL OF THE EXISTING ASPHALTIC CONCRETE OVERLAYS.

ITEM 202 - WEARING COURSE REMOVED

THIS ITEM IS TO BE USED FOR THE REMOVAL OF THE EXISTING ASPHALTIC CONCRETE OVERLAYS. WEARING COURSES. INTERMEDIATE, OR BASE COURSES AND ASPHALTIC CONCRETE PATCHES FROM THE EXISTING SOUTHBOUND BRIDGE DECK AND APPROACH SLABS.

DUST CONTROL

IN CASE OF SAND BLASTING AND/OR THE CLEANING OF BRIDGE DECKS PRIOR TO PLACEMENT OF THE OVERLAY AND PAVEMENT GRINDING, THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ADDITIONAL WORK; SUPPLY ADDITIONAL EQUIPMENT OR ERECT TEMPORARY PROTECTIVE SCREENING TO PROTECT ADJACENT TRAFFIC AND PROPERTY FROM THE DUST ORIGINATING FROM THESE OPERATIONS. THE CONTRACTOR SHALL SUBMIT HIS METHOD OF CONTROLLING DUST FOR APPROVAL TO THE ENGINEER AT LEAST ONE WEEK PRIOR TO BEGINNING WORK. THESE PROVISIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE PROJECT. THIS REQUIREMENT IS IN ADDITION TO THE PROVISIONS OF SECTION 107.12 OF THE SPECIFICATIONS AND SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATION TO PROTECT PROPERTY FROM HIS OTHER OPERATIONS, AND RESTORE IT IF DAMAGED.

ITEM 519 - BRIDGE DECK SURFACE PREPARATION, MISC.: CLEANING DECK AFTER REMOVAL OF OVERLAY, COMPLETION OF PATCHING.

THE BRIDGE DECK SURFACE SHALL BE PREPARED IN ACCORDANCE WITH 401.12, CONDITIONING EXISTING SURFACE. THE DECK SHALL BE CLEANED WITH A VACUUM TYPE APPARATUS APPROVED BY THE ENGINEER. THE USE OF THIS APPARATUS IS TO MINIMIZE DUST AND OBJECTIONAL AIRBORNE MATERIAL. IN NO CASE SHALL THE MATERIAL BE REMOVED BY DIRECT COMPRESSED AIR.

ITEM 516 - BEARING DEVICES, MISCELLANEOUS: CLEAN OUT DEBRIS

THE WORK UNDER THIS ITEM SHALL CONSIST OF THE CLEANING OF ALL DEBRIS AND ACCUMULATIONS ON AND AROUND THE BEARING DEVICES ON BOTH THE NORTH AND SOUTH ABUTMENTS SUPPORTING THE SOUTHBOUND BRIDGE DECK.

ITEM 518 - STRUCTURE DRAINAGE, MISCELLANEOUS: CLEANOUT, AS PER PLAN

THE WORK UNDER THIS ITEM SHALL CONSIST OF THE CLEANOUT OF THE FOLLOWING STRUCTURE DRAINAGE SYSTEMS ON THE SOUTHBOUND BRIDGE DECK AND ITS SUPPORTING NORTH AND SOUTH ABUTMENTS.

- DECK DRAINAGE PIPES
- DECK GUTTERS
- DECK WEEPHOLES
- ABUTMENT SEAT GUTTERS AND DRAINS
- DECK SCUPPERS

STATE REGION OHIO

91

SUMMIT COUNTY SUM-8-0.38 A

ESTIMATED QUANTITIES

CALCULATED BY PAK DATE 10/22/91 CHECKED BY BCK DATE 10/23/91

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SUPER STRUCTURE	ABUTMENT	PIERS	GENERAL
202	11200	LUMP		PORTIONS OF STRUCTURE REMOVED				LUMP
202	22901	255	SQ. YD.	APPROACH SLAB REMOVED, AS PER PLAN				255
202	23500	555	SQ. YD.	WEARING COURSE REMOVED	555	:	•	
,	- * · · ·							. ^
¥ 304	2000	20	CU. YD.	AGGREGATE BASE, AS PER PLAN				20
					I			
446	01400	22	CU. YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 AC-ZO	22			
446	01200	22	CU. YD.	ASPHAUT CONCRÉTE INTERMEDITATE COURSE	22			
	,			TYPE 2, AC-20				
					1			
509	1580)	2000	LBS.	EPOXY COATED REINFORCING STEEL, GRADE 60, AS PER PLAN				2000
512	55800	555	SQ. YD.	TYPE D WATERPROOFING	555			
SPECIAL	51267502	120	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY) (SEE PROPOSAL NOTE) STRUCTURAL STEEL EXPANSION JOINT,	120		-	
516	12201	112	L. F.	AS PER PLAN BEARING DEVICE, MISCELLANEOUS:	112			
516	46930	LUMP		CLEAN OUT DEBRIS STRUCTURE DRAINAGE, MISCELLANEOUS:				LUMP
518	63300	Lump		CLEANOUT, AS PER PLAN				LUMP
519	11100	750	SQ. FT.	PATCHING CONCRETE SURFACES BRIDGE DECK SURFACE PREPARATION,	250	500		
Special	51912800	5 55	Sq. YD.	MISC: CLEANING DECK AFTER REMOVAL OF OVERLAY, COMPLETION OF PATCHING				555
* 611	25001	255	SQ. YD.	REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN	,			255
*611	98100	75	SQ.YD.	APPROACH SLAB, MISC: REPAIRS				75
850	30000	35		FULL DEPTH REPAIR	25			10
SPECIAL	5 2 2300	175	SQ. YD.	PATCHING CONCRETE BRIDGE DECK TYPE B (See Proposal Note)	125			50

^{*}These Quantities were Carried to General Summary Sheet 72.

THIS WORK SHALL BE PAID ON A LUMP SUM BASIS FOR ALL LABOR, MATERIAL, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

ITEM 516 - STRUCTURAL STEEL EXPANSION JOINT, AS PER PLAN

THE WORK UNDER THIS ITEM SHALL CONSIST OF GRINDING SMOOTH THE REMAINING ORIGINAL BRIDGE DECK JOINT PLATES AND ANGLES AS DIRECTED BY THE ENGINEER AFTER REMOVAL OF THE VERTICAL EXTENSION BARS AND THE VISUAL INSPECTION BY THE ENGINEER THEREOF.

SPECIAL - PATCHING CONCRETE BRIDGE DECK, TYPE B

THIS ITEM SHALL CONSIST OF FURNISHING THE NECESSARY LABOR, MATERIALS AND EQUIPMENT TO REPAIR CONCRETE BRIDGE DECKS. TOP & BOTTOM. INCLUDING THE REMOVAL OF ALL LOOSE UNSOUND CONCRETE, BITUMINOUS PATCHES, SURFACE PREPARATION, BONDING COAT AND THE MIXING. PLACING, FINISHING AND CURING OF THE MORTAR OR CONCRETE PATCHES. FULL DEPTH REPAIRS WHERE REQUIRED, SHALL BE PERFORMED UNDER ODOT CMS ITEM 850, FULL DEPTH REPAIRS.

MAINTENANCE OF TRAFFIC ON EAST EXCHANGE STREET SHALL BE PROVIDED BY THE CONTRACTOR AS PER ODOT CMS 104.04 AND 105.14, AND AS DIRECTED BY THE ENGINEER.

JOHN DAVID JONES & ASSOC., INC. 2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221 ARCHITECTS PLANNERS

ESTIMATED **QUANTITIES** & GENERAL

AKRON EXPRESSWAY SYSTEM EXCHANGE STREET OVERPASS BRIDGE No. SUM-8-0087

DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED PA.K D.E.N

J.R.O B.C.K 10/23/91

