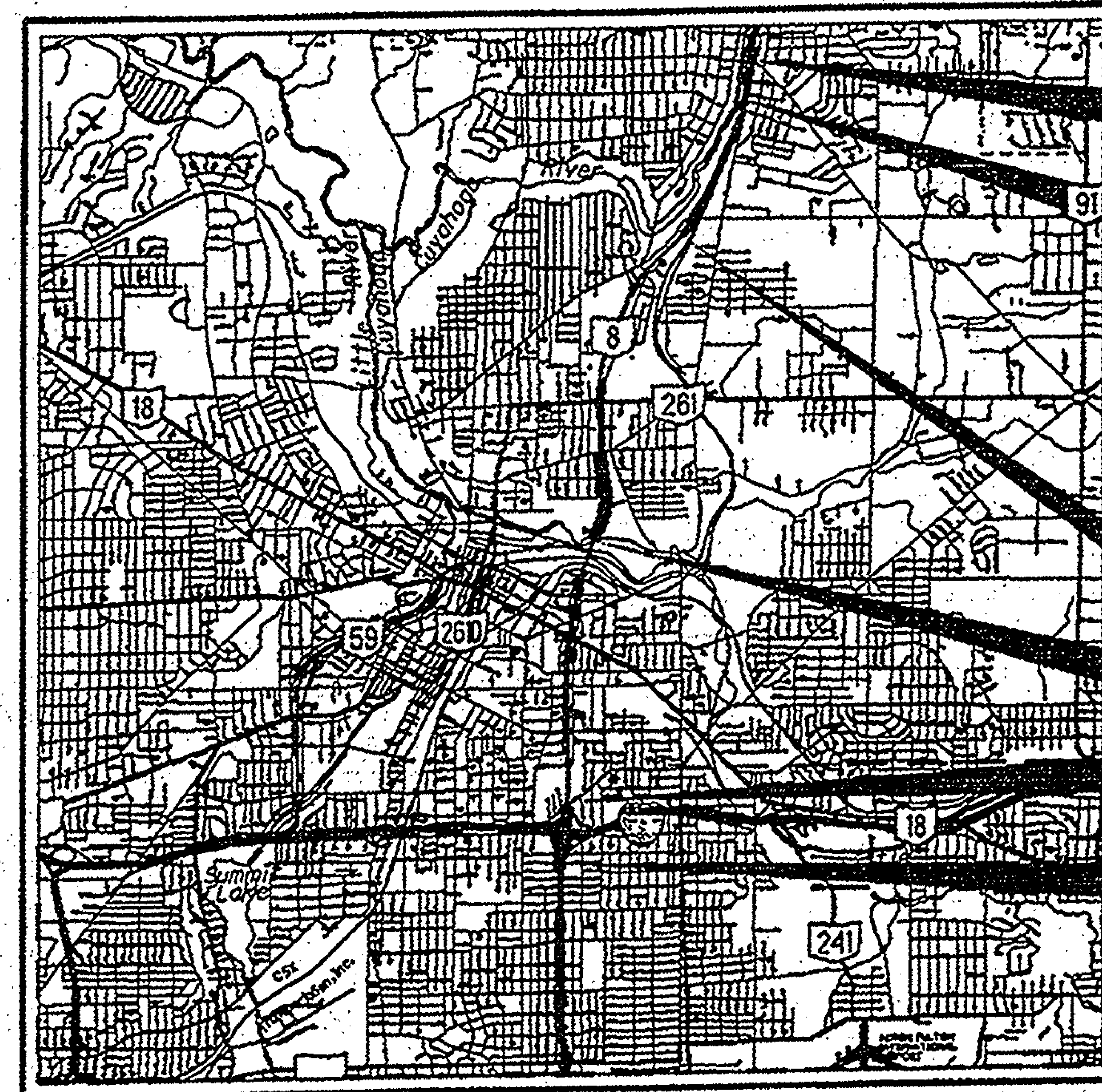
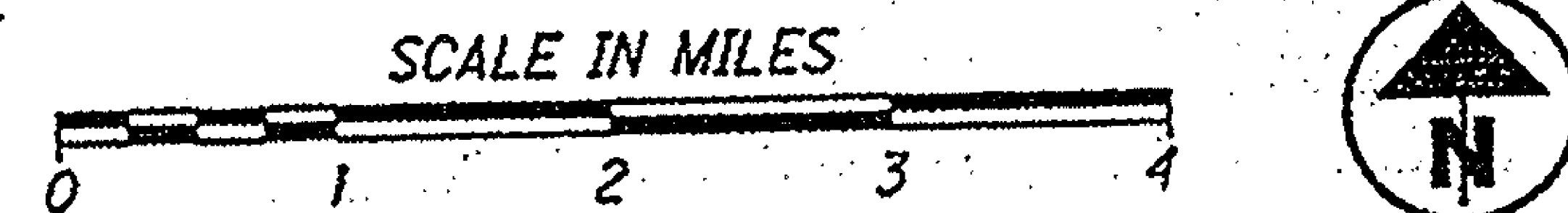


SUM - SR-8-0.00/2.13
120045 PID-77880
Dist 4 1/26/2012
Contract Proposal Available
@www.contracts.dot.state.oh.us



LOCATION MAP
LATITUDE: 41°6'18" LONGITUDE: 81°29'58"



PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
STATE & FEDERAL ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

CURRENT ADT (2010) 99025
TRUCKS (24 HOUR B&C) 9%
LEGAL SPEED 55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:
OTHER FREEWAY AND EXPRESSWAY
NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:
ODOT --- DISTRICT 4
2088 S. ARLINGTON RD
AKRON, OH 44306

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

SUM - 8 - (0.00)(2.13)(5.43)

CITY OF AKRON SUMMIT COUNTY

INDEX OF SHEETS:

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PROJECT DESCRIPTION

IMPROVEMENT OF 2.70 MILES OF SR 8 BY RESURFACING
INCLUDING PAVEMENT PLANING, GUARDRAIL REPLACEMENT,
MINOR LIGHTING AND STRUCTURE REPAIRS.

PROJECT EARTH DISTURBED AREA: 0.00 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)

LIMITED ACCESS

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

2010 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 APPROVED THESE PLANS AND DECLARE THAT
THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE
THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT
PROVISIONS FOR THE MAINTENANCE AND SAFETY OF
TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND
ESTIMATES.

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	10/19/07	MT-95.32	7/17/09	TC-7.65	1/21/11	TC-71.10	1/21/11			800	10/21/11
BP-8.1	4/16/05	MT-95.50	4/17/09	TC-12.30	1/21/11	TC-72.20	10/16/09			832	5/5/09
		MT-98.10	7/17/09	TC-15.115	1/21/11	TC-73.10	1/19/01			843	4/18/03
			7/17/09	TC-16.21	1/21/11					848	1/21/11
GR-1.1	7/16/04	MT-98.11	7/17/09	TC-21.10	1/19/07	BR-1	7/19/02				
GR-2.1	1/16/04	MT-98.20	7/17/09	TC-22.20	1/21/11	EXJ-2-81	7/19/02				
GR-3.1	10/16/09	MT-98.22	7/17/09	TC-41.20	1/19/01	EXJ-4-81	7/19/02				
GR-3.2	10/16/09	MT-98.28	7/17/09	TC-41.30	1/19/07	GSD-1-96	7/19/02				
GR-4.2	1/19/07	MT-98.29	7/17/09	TC-41.40	7/16/04						
		MT-99.20	1/16/09	TC-41.50	1/19/07						
RM-4.3	10/16/09	MT-101.60	4/17/09	TC-42.10	1/19/07	HL-20.14	10/16/09				
RM-4.5	10/16/09	MT-101.90	1/16/09	TC-42.20	1/21/11						
RM-4.6	4/16/10			TC-51.11	1/21/11						
				TC-51.12	4/20/01						
MT-35.10	4/20/01			TC-52.10	1/19/07						
MT-95.30	7/17/09			TC-52.20	1/19/07						
MT-95.31	7/17/09										

ENGINEERS SEAL:

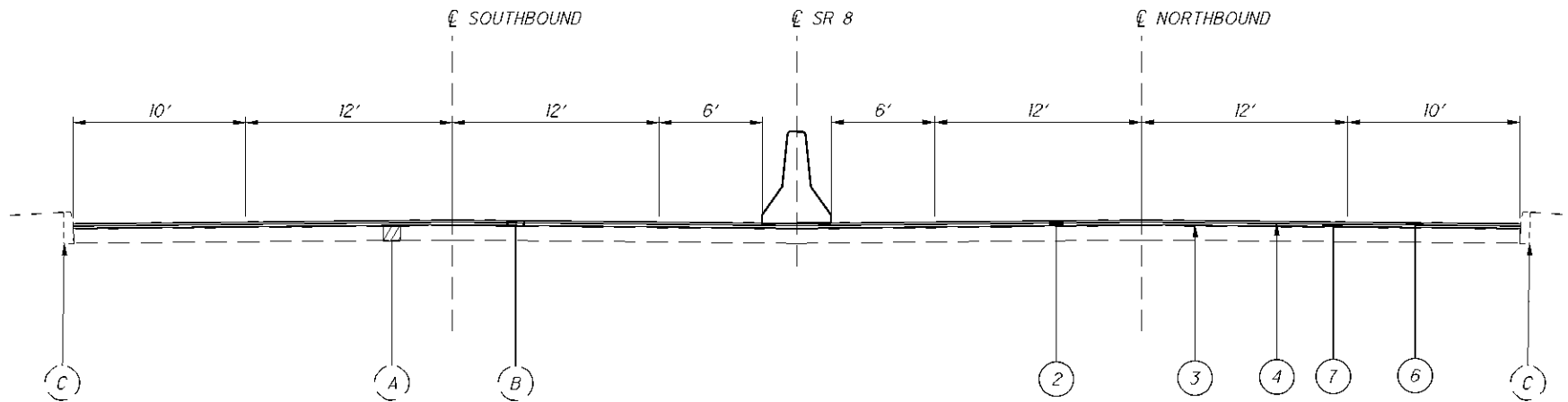
STATE OF OHIO
DOUGLAS
YARD
E-58044
REGISTERED PROFESSIONAL ENGINEER
SIGNED: [Signature]
DATE: 02/16/11

APPROVED [Signature]
DATE: 2/16/11 DISTRICT DEPUTY DIRECTOR

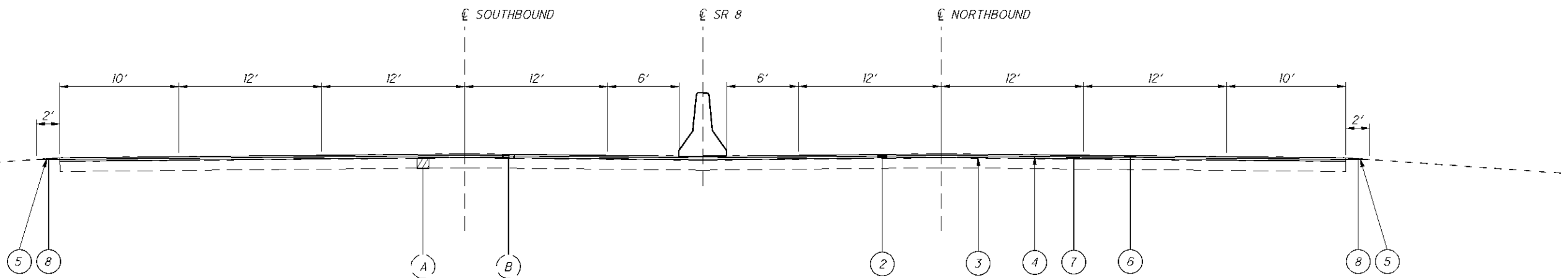
APPROVED [Signature]
DATE: 8-26-11 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E110(172)
PID NO. 77880
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
SUM - 8 - 0.00/ 2.13
1/49

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SECTION APPLIES:
SLM 0.00 TO SLM 0.40

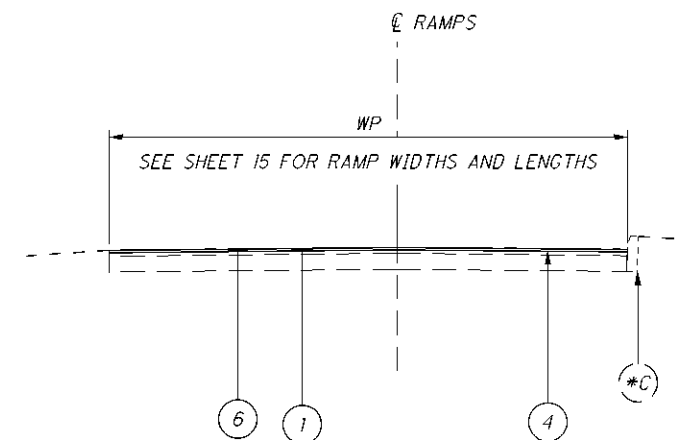


SECTION APPLIES:
SLM 0.40 TO SLM 0.63
SLM 2.13 TO SLM 4.30

LEGEND

- (1) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=1 1/2")
- (2) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=3 1/4")
- (3) ITEM 407 - TACK COAT @ 0.15 GAL/SY
- (4) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE @ 0.04 GAL/SY
- (5) ITEM 408 - PRIME COAT, AS PER PLAN @ 0.40 GAL/SY
- (6) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE B (448) (T = 1 1/2")
- (7) ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, TYPE B (448) (T=1 3/4")
- (8) ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

- (A) EXISTING CONCRETE BASE
- (B) EXISTING ASPHALT CONCRETE (T = 5"+)
- (C) EXISTING CURB



SECTION APPLIES:
RAMP A - GLENWOOD
RAMP B - GLENWOOD
RAMP C - SR 261
RAMP D - SR 261
RAMP E - SR 261
RAMP F - SR 261
RAMP A - CUYAHOGA FALLS
RAMP B - CUYAHOGA FALLS

*CURB VARIES
DEPENDING ON RAMP
LOCATION

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UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEAD-QUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)

OGPUPS 1-800-925-0988

ODOT 330-786-3145 KEN GREENE

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AT&T
The Ohio Bell Telephone Company
ATTN: Harold Maynard
2933 Salt Spring Road
Youngstown, OH 44509
330-270-8816

City of Akron
Public Utilities Bureau Citi Center
ATTN: George Thomas
P.O. Box 3665
Akron, OH 44309
330-375-2831 ext: 6418
330-375-2831 Fax

Dominion East Ohio Gas
ATTN: Mary Long
320 Springside Drive
Suite 320
Akron, OH 44333
330-664-2409
888-504-0126 Fax

Ohio Edison
ATTN: Steve Vanchoff
1910 W. Market Street Building 1
Akron, OH 44313
330-384-4750
330-384-4723 Fax

Time Warner Cable
ATTN: Christine Lienhardt
530 South Main St.
Suite 1751
Akron, OH 44311
330-633-9203

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS (AT LEAST 3 DAYS PRIOR TO PERFORMING THE WORK CONTACT THE TRAFFIC OFFICE AT 330-786-3147 TO CONFIRM THE WIDTHS):

ROUTE	S.L.M. TO S.L.M.	LANE WIDTH
8	0.00 TO 0.40	12'
8	2.13 TO 4.30	12'

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

TRAFFIC COUNTERS

THE CONTRACTOR WILL CONTACT THE TRAFFIC MONITORING SECTION, FIELD MANAGER AT 614 -275-1382, FOURTEEN (14) CALENDAR DAYS PRIOR TO WORK INVOLVING THE TRAFFIC DATA COLLECTION SITE AT ATR #564 LOCATED ON SR 8 AT LOG POINT 3.96.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

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

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

ITEM 618 - RUMBLE STRIPS, (ASPHALT CONCRETE)

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE ALONG SR 8 WITHIN THE PROJECT LIMITS, FROM S.L.M. 2.13 TO S.L.M 4.30. OFFSET "A" AND "B" SHALL FOLLOW THE OFFSET DIMENSION TABLE AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-9.1 FOR THIS ITEM OF WORK.

ITEM 618 RUMBLE STRIPS, (ASPHALT CONCRETE), 8.68 MILES

ITEM 408 - PRIME COAT, AS PER PLAN

THE CONTRACTOR WILL APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID PRIME COAT MATERIAL ONTO THE EDGE OF THE PAVEMENT OR EDGELINE. CARE ALSO SHALL BE TAKEN TO AVOID SPRAYING LIQUID PRIME COAT MATERIAL ONTO DRIVEWAY APRONS, MAILBOX APPROACHES OR ANY PEDESTRIAN AREAS. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

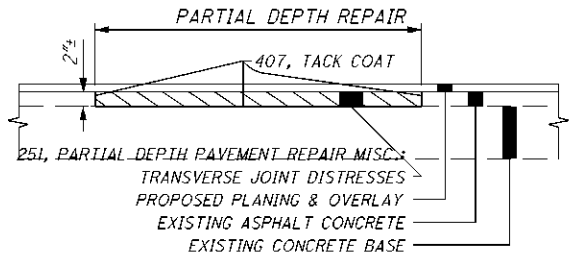
MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1-1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, MISC.: TRANSVERSE JOINT DISTRESSES

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO REPAIR THE TRANSVERSE JOINT DISTRESSES AFTER MILLING. REPAIR THE TRANSVERSE JOINT LOCATIONS EXHIBITING DISTRESSES AND PLACING ITEM 448 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR DISTRESSES TRANSVERSE JOINT WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF CUBIC YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

251, PARTIAL DEPTH REPAIR MISC.: TRANSVERSE JOINT DISTRESSES 50 CU. YD.



ITEM 254 - PATCHING PLANED SURFACE

A QUANTITY OF SURFACE PATCHING HAS BEEN INCLUDED IN THE PLAN TO REPLACE UNSOUND PAVEMENT RESULTING FROM PLANING. THE QUANTITY OF ITEM 254 PATCHING PLANED SURFACE SHALL BE DONE AS DIRECTED BY THE PROJECT ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

ITEM 254 - PATCHING PLANED SURFACE, 1000 SQ. YD.

SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: MEDIAN BARRIER REPAIR

THIS ITEM WILL BE USED TO REPAIR THE DETERIORATED MEDIAN BARRIER ABOVE THE INLETS ALONG SR 8 AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PERFORMED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE STRUCTURES AND AS MODIFIED HEREIN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: MEDIAN BARRIER REPAIR AND WILL BE PAID FOR BY THE SQUARE YARD.

CALCULATED
LMB
CHECKED

GENERAL NOTES

SUM - 8 - 0.00 / 2.13

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ITEM 606 - ANCHOR ASSEMBLY, TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING GUARDRAIL END TERMINALS, OR AN APPROVED EQUAL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE AT WWW.DOT.STATE.OH.US/DRRC/ UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS:

1. THE ET-2000 (1997) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE ET-2000 (1997) SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF TWO 25'-0" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. NO.	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SSI42	ET2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/PL POSTS 1-4	4/12/00	7/31/00
SSI41	ET2000 PLUS PLAN, ELEVATION AND SECTION 25'-0" RAIL, HBA POSTS 1-4	2/29/00	7/31/00
SSI58	ET2000 PLUS 50'-0" WITH 12'-6" PANELS AND HBA POSTS 1-4 PLAN, ELEVATION AND SECTION	5/22/00	7/31/00
SS330	ET2000 PLUS 50'-0" WITH FOUR FOUNDATION TUBES AND FOUR CRT POSTS	3/28/06	3/29/06
SS373	ET2000 PLUS 50'-0" WITH 7 SYT POSTS AND ONE HBA POST	6/20/09	1/20/09

2. THE SKT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 2516 MALLORY LANE, STOW, OHIO, 44224, (TELEPHONE: 330-346-0721).

THE LENGTH OF THE SKT-350 SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF FOUR 12'-6" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. NO.	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SKT-4M	SEQUENTIAL KINKING TERMINAL (SKT-350) ASSEMBLY WITH 4 FOUNDATION TUBES	12/11/97	3/6/98
SKT HINGED CRT	SEQUENTIAL KINKING TERMINAL (SKT-350) FOUR POSTS ARE STEEL HINGED AND FIVE POSTS ARE CRT	4/30/06	5/23/06
SKT-SP	SEQUENTIAL KINKING TERMINAL (SKT-350 A SEVEN POST OPTION USING STANDARD STEEL POST	3/30/09	3/4/09

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, APPROXIMATELY 18" X 18", OR 12" X 18" IF APPLIED TO A RECTANGULAR ET-2000 "PLUS" EXTRUDER HEAD.

REFER TO THE MANUFACTURER'S INSTRUCTION REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4-INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27-3/4-INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4-INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

BARRIER REFLECTORS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS DIRECTED BY THE ENGINEER FOR INSTALLING/REPLACING BARRIER REFLECTORS ON ALL EXISTING BARRIER RUNS WITHIN THE PROJECT LIMITS.
202, REMOVAL MISC.: BARRIER REFLECTOR, 110 EACH
626, BARRIER REFLECTOR, TYPE A, 115 EACH
626, BARRIER REFLECTOR, TYPE B, 296 EACH

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING 209, LINEAR GRADING AS PER PLAN, AND PAVING UNDER THE GUARDRAIL USING 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22, UNDER GUARDRAIL, AS PER PLAN.

ITEM 209, LINEAR GRADING AS PER PLAN, SHALL CONSIST OF EXCAVATING TOPSOIL, AND PLACING GRANULAR MATERIAL.

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

- METHOD A:
1. SET GUARDRAIL POSTS
 2. PLACE ITEM 448
- METHOD B:
1. PLACE ITEM 448
 2. BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
 3. SET GUARDRAIL POSTS
 4. PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 448, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, PG 64-22, UNDER GUARDRAIL, AS PER PLAN.

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MAINTENANCE OF TRAFFIC

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

1. A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK IN ACCORDANCE WITH THE LANE CLOSURES NOTE HERIN.
2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2211, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
3. 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 SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET. WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS.
4. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
5. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.
6. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.
7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEED ONE (1) MILE URBAN.
8. ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
9. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.
10. A QUANTITY OF 30 CU. YDS. OF 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
10. THE INTERMEDIATE COURSE WILL BE PLACED NO LATER THEN 10 DAYS AFTER THE PAVEMENT PLANING IS COMPLETE.

11. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.
14. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGN HAS BEEN INCLUDED IN THE PLAN. THIS QUANTITY SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING SIGNS: W8-1 [BUMP], W6-3 [TWO-WAY TRAFFIC], W8-H13 [NO EDGE LINES], R4-1 [DO NOT PASS], R4-2 [PASS WITH CARE], W8-11 [UNEVEN LANES]. THESE QUANTITIES SHALL BE AS PER 614.04.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

- PHASE I - PLANED SURFACE
- 614, WORK ZONE CENTER LINE, CLASS II, 0.10 MILE
 - 614, WORK ZONE LANE LINE, CLASS II, 6.54 MILE
 - 614, WORK ZONE STOP LINE, CLASS I, 221 FT
 - 614, WORK ZONE CHANNELIZING LINE, CLASS I, 5491 FT
 - 614, WORK ZONE MARKING SIGN, 52 EACH
- PHASE II - INTERMEDIATE COURSE
- 614, WORK ZONE LANE LINE, CLASS II, 6.54 MILE
 - 614, WORK ZONE CHANNELIZING LINE, CLASS I, 5491 FT
- PHASE III - SURFACE COURSE
- 614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT 0.10 MILE
 - 614, WORK ZONE LANE LINE, CLASS III, 642 PAINT, 6.54 MILE
 - 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT, 221 FT
 - 614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT, 5491 FT
- TO BE USED AS DIRECTED BY THE ENGINEER
- 614, WORK ZONE EDGE LINE, CLASS III, 642 PAINT, 14.38 MILE

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

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 ONE 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 OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. 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. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/ SUPERVISOR HAS BEEN GRANTED.

TRAFFIC CONTROL INSPECTOR

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 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 SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

WINTER TRAFFIC LIMITATIONS

ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 1. NOVEMBER 14 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND DISINCENTIVES OF \$1300 SHALL BE ASSESSED FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR MAY CLOSE LANES PRIOR TO APRIL 1 WITH WRITTEN APPROVAL FROM THE DISTRICT CONSTRUCTION ENGINEER.

LANE CLOSURES

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMITTED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.

THE CHART CAN BE FOUND AT:
<http://plcm.dot.state.oh.us>

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF \$1300 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

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

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
AKRON MARATHON	BRIDGESTONE INVITATIONAL GOLF TOURNAMENT
THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:	
DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$1300 FOR EACH HOUR THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

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ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 400 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

OVERLAYING OF SIGNS

WHERE THE PLANS CALL FOR A PERMANENT SIGN TO BE OVERLAYED, THE CONTRACTOR SHALL DO SO IN SUCH A MANNER AS TO AVOID DAMAGING THE PERMANENT SIGN WHEN THE OVERLAY IS REMOVED. THE OVERLAY SHALL BE TOTALLY OPAQUE. THE USE OF ADHESIVE TAPE APPLIED DIRECTLY TO A SIGN FACE IS STRICTLY PROHIBITED. THE OVERLAYS MAY BE RIVETED TO THE PERMANENT SIGN. THE CONTRACTOR SHALL PROVIDE ALL OF THE PLAQUES, SIGNS AND SIGN PANELS NECESSARY.

MAINTENANCE OF SHOULDERS

THE USE OF SHOULDERS TO MAINTAIN TRAFFIC IS PROHIBITED. SHOULD ANY EXISTING OR NEW SHOULDER AREAS BECOME DAMAGED OR DESTROYED DUE TO THE CONTRACTOR'S NEGLIGENCE OR FAILURE TO PROVIDE ADEQUATE SIGNS, BARRICADES, CONES, FLAGGERS OR OTHER TRAFFIC CONTROL DEVICES, THE RESTORATION OF THE SHOULDERS WILL BE AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, 4 PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS), ON SITE, FOR THE DURATION OF TIME SPECIFIED IN THIS NOTE, EACH SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. THIS LIST IS AVAILABLE ON THE ODOT WEBSITE AT <http://www.dot.state.oh.us/divisions/constructionmgt/materials/pages/portable-changeable.aspx> THE CLASS A UNITS SHALL HAVE A MINIMUM LEGIBILITY DISTANCE OF 650 FEET.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETRO-REFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. THE PCMS SHOULD BE LOCATED BEHIND GUARDRAIL WHEREVER POSSIBLE. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

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

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE CONTRACTOR. A LIST OF ALL PROPOSED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SIGN SHALL HAVE TWO DIFFERENT MEMORIES (PROM AND RAM) AND CAPABILITY TO STORE UP TO 99 MESSAGES IN EACH MEMORY. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. IN ORDER TO CONVEY A MAXIMUM OF INFORMATION AT A SINGLE GLANCE, ONLY THREE LINE PRESENTATION FORMATS WITH A MAXIMUM OF SIX MESSAGE PHASES WILL BE PERMITTED. NORMALLY, ONLY A MAXIMUM OF THREE MESSAGE PHASES SHOULD BE EMPLOYED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

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

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL [IN ACTIVE CELLULAR AREAS] ALLOW REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614. THE CONTRACTOR SHALL PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 614.02.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE BID FOR EACH DAY OF ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

614 PORTABLE CHANGEABLE MESSAGE SIGN,
AS PER PLAN, 90 DAY

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**ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)
STRUCTURE: SUM-8-0276**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED ONE WEEKEND (7:00PM FRIDAY TO 6:00AM MONDAY), WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 11. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$1500 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

SUM-8-0276 AND SUM-261-1188 WILL NOT BE CLOSED CONCURRENTLY.

**ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)
STRUCTURE: SUM-261-1188**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED ONE WEEKEND (7:00PM FRIDAY TO 6:00AM MONDAY), WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 12. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$1500 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

SUM-8-0276 AND SUM-261-1188 WILL NOT BE CLOSED CONCURRENTLY.

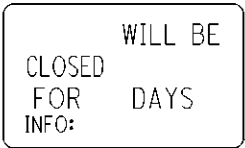
**ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR),
RAMP C (SR 8 NORTH TO SR 261)**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 1 NIGHT (10:00PM TO 6:00AM), WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 10. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$1500 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

RAMP C WILL NOT BE CLOSED CONCURRENTLY WITH SUM-8-0276 OR SUM-261-1188.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

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



W20-H13-60

DETOUR NOTIFICATION [CITY]

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) AND THE CITY OF AKRON (330-375-2851) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

ITEM 622, PORTABLE CONCRETE BARRIER

PORTABLE CONCRETE BARRIER SHALL BE USED TO CLOSE THE SHOULDER FOR THE BARRIER REPLACEMENT OFF OF STRUCTURE SUM-8-1729 AS PER OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FIGURE 6H-5 (TA-5), SEE SHEETS 16A, 16B & 43A FOR DETAILS. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 622, PORTABLE CONCRETE BARRIER 1200 FEET

ITEM 614, BARRIER REFLECTORS AND/OR OBJECT MARKERS

BARRIER REFLECTORS AND/OR OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE CONCRETE BARRIER USED FOR TRAFFIC CONTROL. BARRIER REFLECTORS, OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO CMS 626, EXCEPT THAT THE SPACING SHALL BE 50 FEET. AN ESTIMATED QUANTITY OF 24 EACH OF ITEM 614 BARRIER REFLECTOR, TYPE B AND 24 EACH OF ITEM 614 OBJECT MARKER, 1-WAY HAVE BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

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

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS. THE APPROVED LIST IS AVAILABLE AT THE "ROADWAY STANDARDS: PROPRIETARY ROADSIDE SAFETY DEVICES" WEB PAGE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

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

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

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

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

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

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

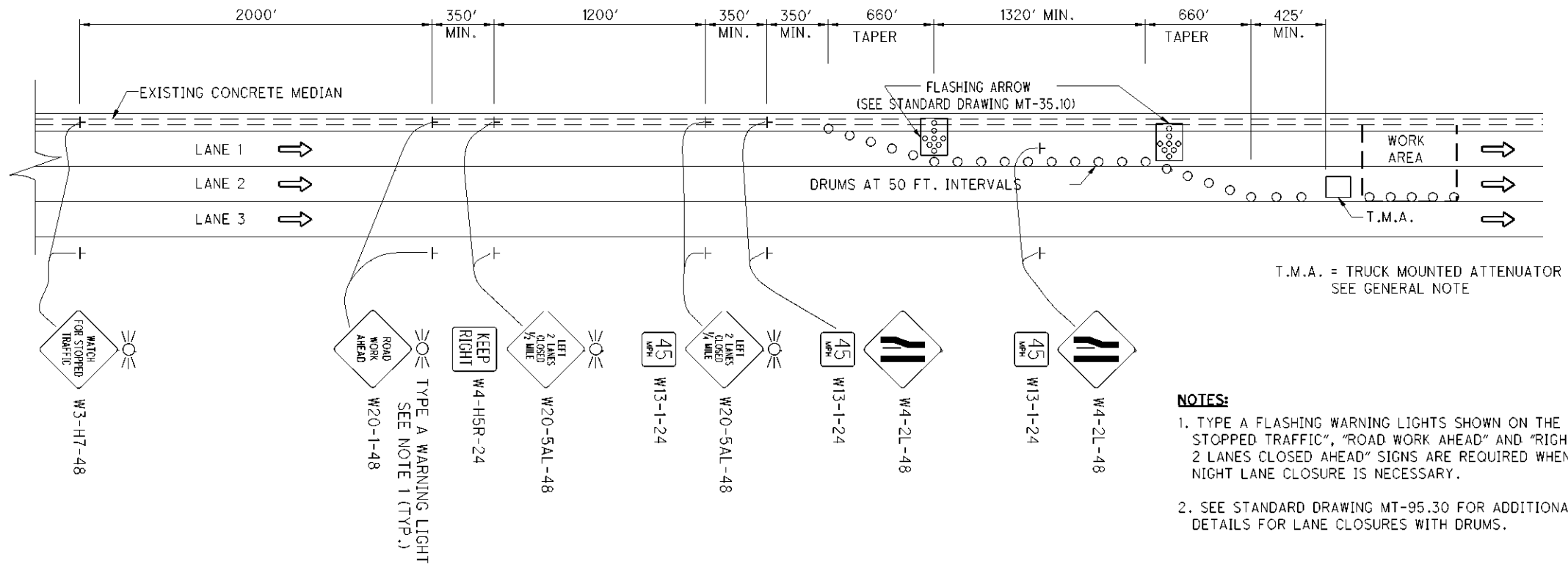
ITEM 622, WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) 1 EACH

MAINTENANCE OF TRAFFIC

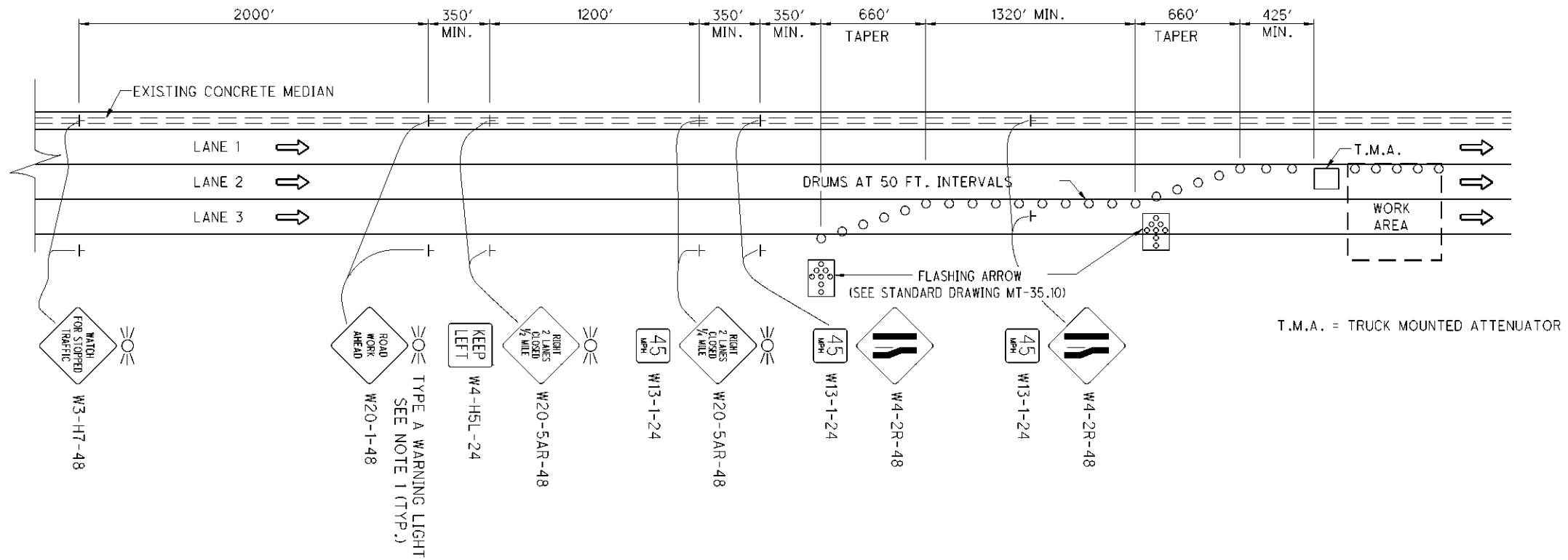
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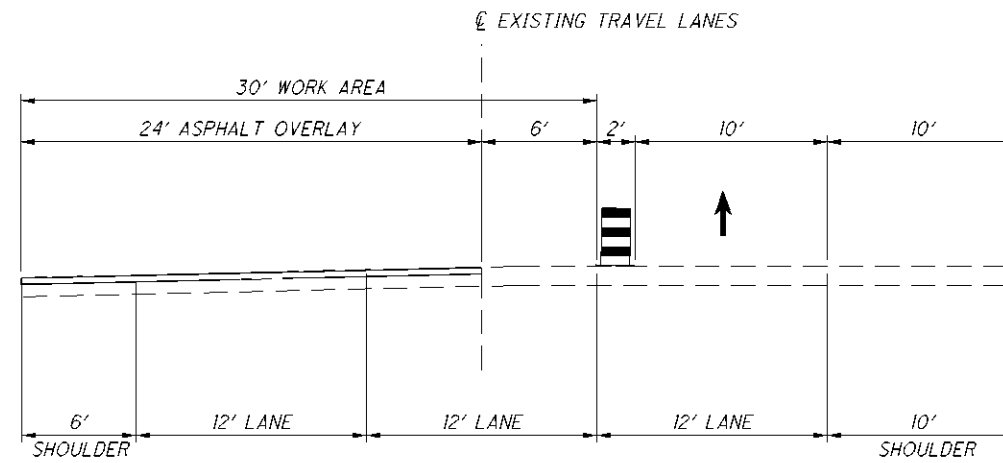


LEFT 2 LANES CLOSED FOR 3 LANES SAME DIRECTION

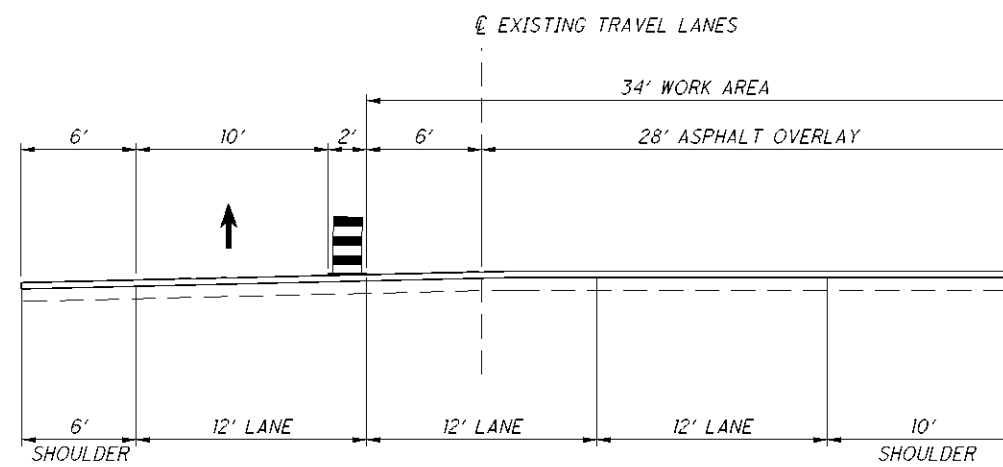


RIGHT 2 LANES CLOSED FOR 3 LANES SAME DIRECTION

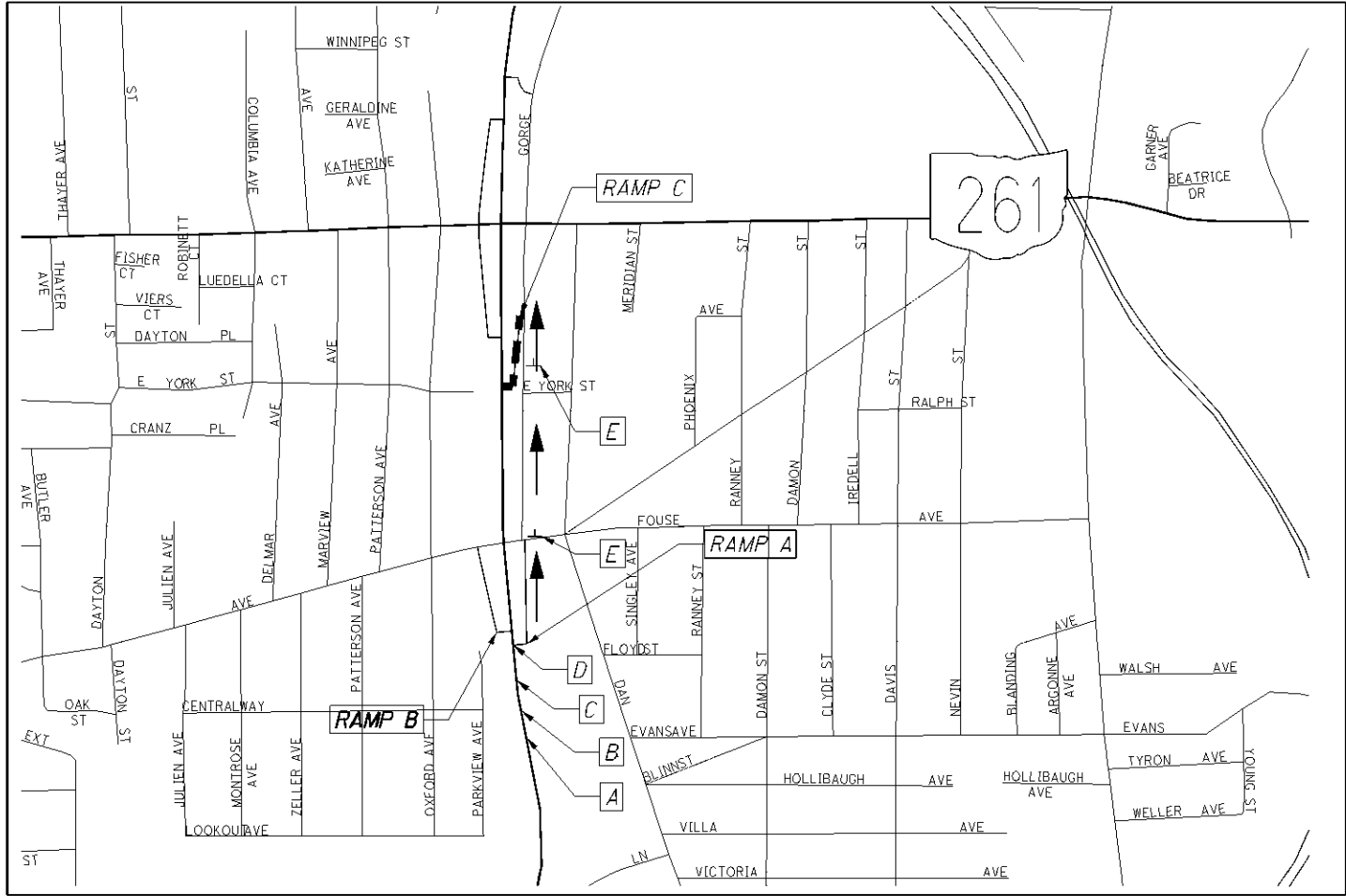
STRUCTURE SUM-8-0396 OVER GORGE BLVD.
NORTHBOUND LANES SHOWN, SOUTHBOUND LANES SIMILAR



PHASE 1



PHASE 2



DETOUR PLAN FOR RAMP C (SR 8 TO SR 261)

--- CLOSED PER STANDARD CONSTRUCTION DRAWING MT-98.29

← OFFICIAL DETOUR ROUTE: RAMP A / GORGE BLVD / SR 261

A

PORTABLE CHANGEABLE MESSAGE SIGN

MESSAGES:

1 - TALLMADGE
RAMP
CLOSED

2 - USE
GLENWOOD
AVE

B

Tallmadge Ave
CLOSED
EXIT 1/2 MILE

Glenwood Ave
EXIT 1/4 MILE

C

Tallmadge Ave
CLOSED
EXIT 1/4 MILE

Glenwood Ave

D

PORTABLE CHANGEABLE MESSAGE SIGN

MESSAGES:

1 - TALLMADGE
RAMP
CLOSED

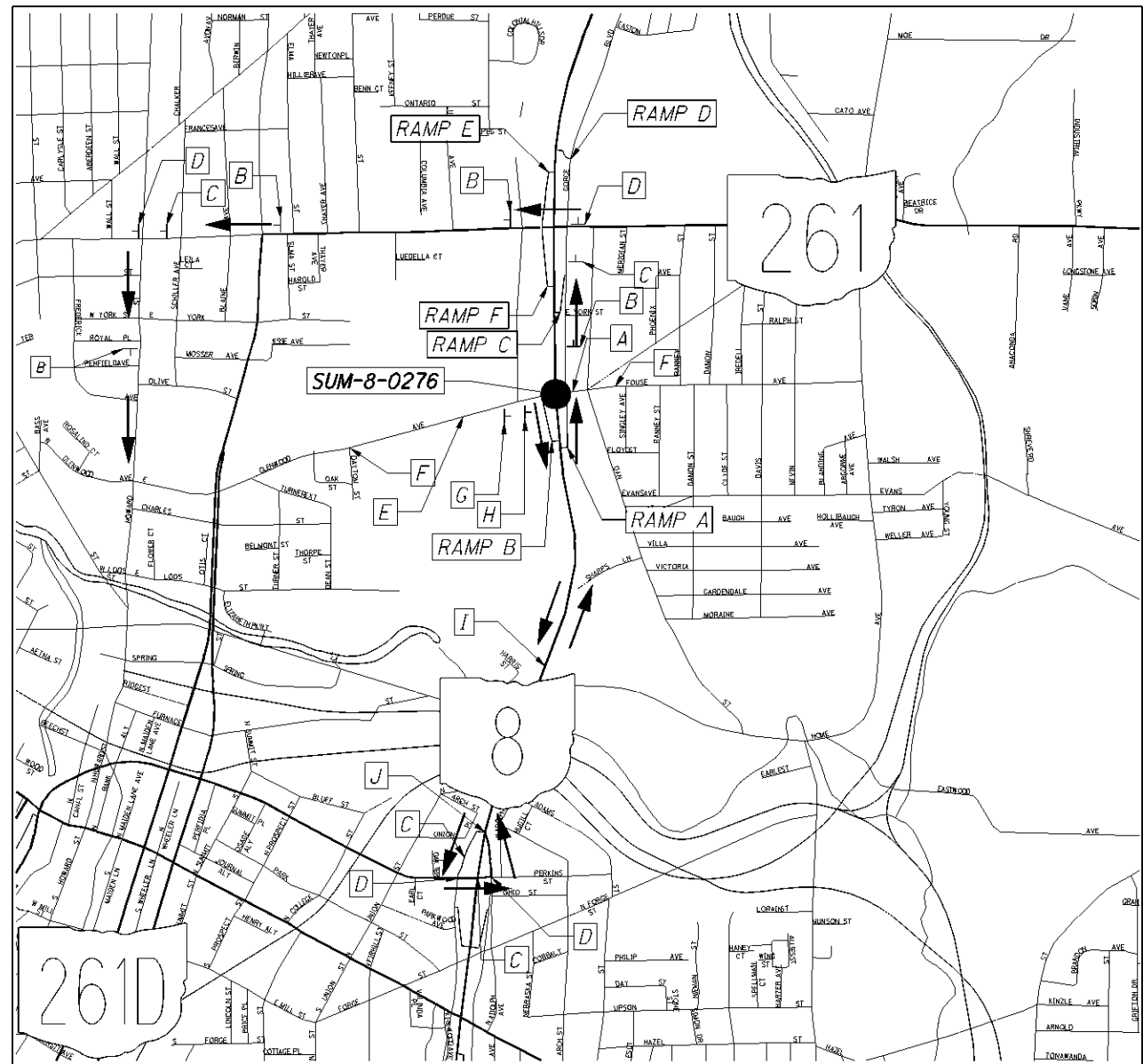
2 - USE
GLENWOOD
AVE

E

DETOUR
M4-8-30

261
M1-4-37.5

↑
M6-3-30



DETOUR PLAN FOR STRUCTURE SUM-8-0276

● CLOSED PER STANDARD CONSTRUCTION DRAWING MT-101.60

← OFFICIAL DETOUR ROUTE (GLENWOOD AVE EASTBOUND): RAMP B / SR 8 SOUTH / PERKINS ST EAST / SR 8 NORTH

← OFFICIAL DETOUR ROUTE (GLENWOOD AVE WESTBOUND): GORGE BLVD / SR 261 WEST / N HOWARD ST

CONFORM TO:
OHIO DEPARTMENT OF UNIFORM
TRAFFIC CONTROL DEVICES
TYPICAL APPLICATION 20

A

PORTABLE CHANGEABLE MESSAGE SIGN

MESSAGES:

1 - GLENWOOD
CLOSED

2 - USE
GORGE
TO 261

B

GLENWOOD

D3-1-24



C

GLENWOOD

D3-1-24



D

GLENWOOD

D3-1-24



M4-9L-30

E

PORTABLE CHANGEABLE MESSAGE SIGN

MESSAGES:

1 - GLENWOOD
CLOSED

2 - USE
SR 8 TO
PERKINS

F



W20-3-36

G

GLENWOOD

D3-1-24



M4-9-30

H

GLENWOOD

D3-1-24



M4-9R-30

I

DETOUR

M4-8-30

GLENWOOD

D3-1-24



J

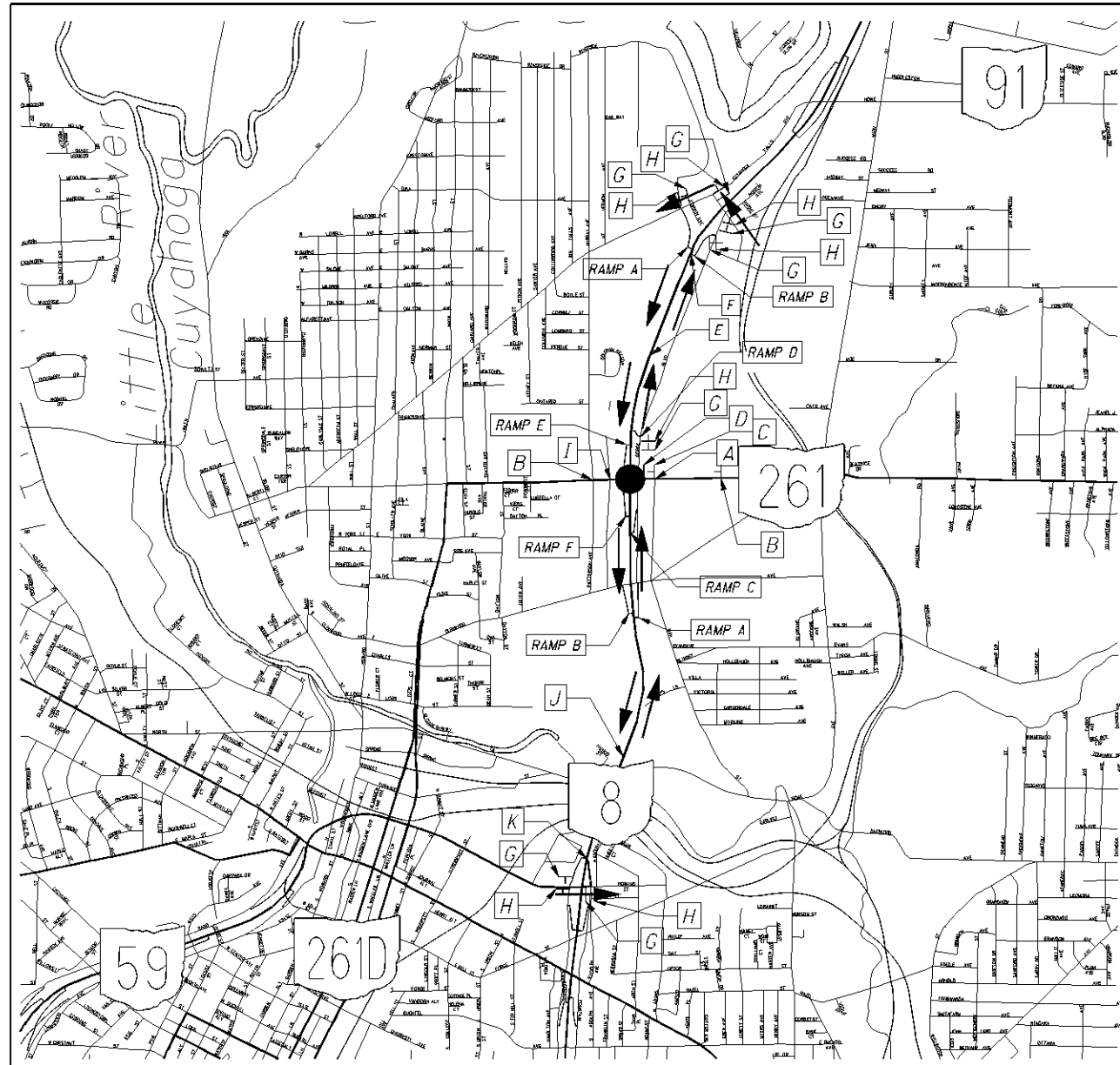
DETOUR

M4-8-30

GLENWOOD

D3-1-24





DETOUR PLAN FOR STRUCTURE SUM-261-1188

● CLOSED PER STANDARD CONSTRUCTION DRAWING MT-101.60

- ← OFFICIAL DETOUR ROUTE (SR 261 WESTBOUND): GORGE BLVD / RAMP D / SR 8 NORTH / CUYAHOGA FALLS AVE / RAMP A / SR 8 SOUTH
- ← OFFICIAL DETOUR ROUTE (SR 261 EASTBOUND): RAMP F / SR 261 SOUTH / PERKINS ST EAST / SR 8 NORTH

CONFORM TO:
OHIO DEPARTMENT OF UNIFORM
TRAFFIC CONTROL DEVICES
TYPICAL APPLICATION 20

PORTABLE CHANGEABLE MESSAGE SIGN

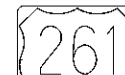
MESSAGES:

1 - SR 261
CLOSED

2 - USE
GORGE
TO 8



W20-3-36



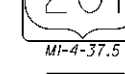
MI-4-37.5



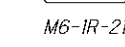
M5-1R-21



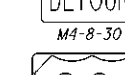
M4-8-30



MI-4-37.5

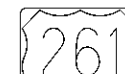


M6-1R-21



MI-4-37.5

CUYAHOGA FALLS
AVE



MI-4-37.5

CUYAHOGA FALLS
AVE



G



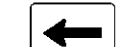
MI-4-37.5



M5-1L-21



MI-4-37.5



M6-1L-21

PORTABLE CHANGEABLE MESSAGE SIGN

MESSAGES:

1 - SR 261
CLOSED

2 - USE
8 TO
PERKINS ST

H

I



MI-4-37.5

59 TO 18
Perkins St
NEXT RIGHT

J



MI-4-37.5

59 TO 18
Perkins St



DETOUR PLAN - SUM-261-1188

SUM-8-0.00/2.13

12
49

CALCULATED
LMB
CHECKED

SHEET NUMBER												PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE	CALCULATED	LMB	CHECKED
3	4	15	16	16A	18		43A					PROJ.	100% CITY		EXT	TOTAL			SHEET NO.			
																		ROADWAY				
												LUMP		201	11000	LUMP		CLEARING AND GRUBBING				
				111								111		202	23000	111	SQ YD	PAVEMENT REMOVED				
				662								662		202	30700	662	FT	CONCRETE BARRIER REMOVED				
			11107	75								11182		202	38000	11182	FT	GUARDRAIL REMOVED				
	110											110		202	98100	110	EACH	REMOVAL MISC. BARRIER REFLECTOR				
			10									10		203	10000	10	CU YD	EXCAVATION				
			112									112		209	60201	112	STATION	LINEAR GRADING, AS PER PLAN				4
												60		SPEC	51911710	60	SQ YD	PATCHING CONCRETE STRUCTURES, MISC.: MEDIAN BARRIER REPAIR				3
			9708	25								9733		606	13000	9733	FT	GUARDRAIL, TYPE 5				
			100									100		606	13050	100	FT	GUARDRAIL, TYPE 5A				
			21	1								22		606	26100	22	EACH	ANCHOR ASSEMBLY, TYPE E				
			14									14		606	26500	14	EACH	ANCHOR ASSEMBLY, TYPE T				
			3	1								4		606	35000	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1				
			21									21		606	35100	21	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2				
8.68												8.68		618	40600	8.68	MILE	RUMBLE STRIPS, (ASPHALT CONCRETE)				
			70									70		622	10160	70	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D				
			2									2		622	25000	2	EACH	CONCRETE BARRIER END SECTION, TYPE D				
			2									2		622	25010	2	EACH	CONCRETE BARRIER END SECTION, TYPE D, REINFORCED				
				622								622		622	90000	622	FT	BARRIER, MISC.: CONCRETE BARRIER RETROFIT				16A
					LUMP							LUMP		SPEC	69098400	LUMP		MISC.: CLEARING AND GRUBBING				18
																		EROSION CONTROL				
												1000		832	30000	1000	EACH	EROSION CONTROL				
																		PAVEMENT				
50												50		251	98000	50	CU YD	PARTIAL DEPTH REPAIR, MISC.: TRANSVERSE JOINT DISTRESSES				
		188419										188419		254	01000	188419	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, (T- 3 1/4")				
		11295										11295		254	01000	11295	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, (T= 1 1/2")				
1000			10	31								1000		254	01600	1000	SQ YD	PATCHING PLANED SURFACE				
												41		301	46000	41	CU YD	ASPHALT CONCRETE BASE, PG64-22				
				19								19		304	20000	19	CU YD	AGGREGATE BASE				
		29958										29958		407	10000	29958	GALLON	TACK COAT				
		7537		5								7542		407	14000	7542	GALLON	TACK COAT FOR INTERMEDIATE COURSE				
		2291										2291		408	10001	2291	GALLON	PRIME COAT, AS PER PLAN				3
		8322										8322		442	20050	8322	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (448)				
		9160										9160		442	20250	9160	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448)				
			140									140		448	46061	140	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64-22, AS PER PLAN				4
				10								10		448	47020	10	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22				
		325										325		617	10101	325	CU YD	COMPACTED AGGREGATE, AS PER PLAN				3
																		LIGHTING				
												3		625	00450	3	EACH	CONNECTION, FUSED PULL APART				
												3		625	00460	3	EACH	CONNECTION, UNFUSED PULL APART				
												2		625	00480	2	EACH	CONNECTION, UNFUSED PERMANENT				
												8		625	10614	8	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE				
												1278		625	23200	1278	FT	NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE				
												92		625	23400	92	FT	NO. 10 AWG POLE AND BRACKET CABLE				
												75		625	25910	75	FT	CONDUIT CLEANED AND CABLES REMOVED				
												1		625	29930	1	EACH	MEDIAN JUNCTION BOX				
												2		625	29940	2	EACH	BARRIER JUNCTION BOX				
												3		625	32000	3	EACH	GROUND ROD				
												2		625	35011	2	EACH	REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN				43A
												1		625	75801	1	EACH	DISCONNECT CIRCUIT, AS PER PLAN				43A

GENERAL SUMMARY

SUM - 8 - 0.00 / 2.13

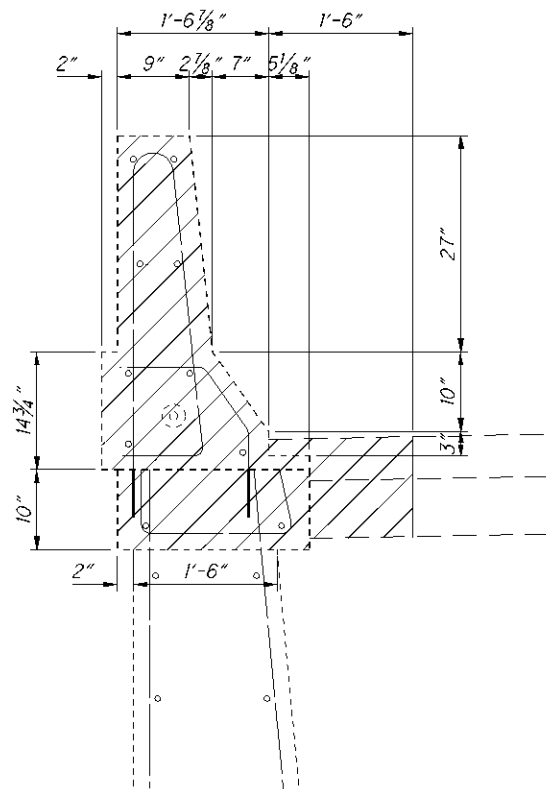
13
49

SHEET NUMBER												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	4			17	18	19	20	21	22	23	24	PROJ.	100% CITY						
																		TRAFFIC CONTROL	
					1			1				1	1	625	32000	2	EACH	GROUND ROD	
	411											411		626	00100	411	EACH	BARRIER REFLECTOR	
						228	218	256	164	103	170		1139	630	03100	1139	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
					63.5	66	31	0	0	0	0		160.5	630	06400	160.5	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	
					43	80	0	0	38	0	0		160	630	07600	160	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12	
					0	0	36	36	34	34	34		140	630	08004	140	FT	ONE WAY SUPPORT, NO. 3 POST	
					37	35	0	2	0	0	0		74	630	06210	74	FT	GROUND MOUNTED SUPPORT, PIPE	
					0	0	10	9	6	10	10		35	630	08600	35	EACH	SIGN POST REFLECTOR	
					6	8	2	0	2	0	0		18	630	09000	18	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
					2	2	0	0	0	0	0		4	630	09050	4	EACH	TRIANGULAR SLIP BASE CONNECTION	
					1							1		630	20500	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	
					9	6	6	0	0	0	0		21	630	75000	21	EACH	SIGN ATTACHMENT ASSEMBLY	
					0	0	0	3	4	4	0		7	630	79100	7	EACH	SIGN HANGER ASSEMBLY, MAST ARM	
					2	1	0	1	2	2	0		6	630	79500	6	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
					172	170.3	143.3	178.2	145.9	140.5	140.5		950.2	630	80100	950.2	SQ FT	SIGN, FLAT SHEET	
					156	170	18	0	50	0	0		394	630	80200	394	SQ FT	SIGN, GROUND MOUNTED EXTRUSHEET	
				70	372	418	320	0	0	0	0	70	1110	630	80224	1180	SQ FT	SIGN, OVERHEAD EXTRUSHEET	
					6	8	2	0	2	2	0		18	630	84500	18	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
				1				1				1	1	630	84510	2	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
					2	2	0	0	0	0	0		4	630	84600	4	EACH	GROUND MOUNTED PIPE SUPPORT FOUNDATION	
					11	14	14	17	15	26	26		97	630	84900	97	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
					2	2	0	0	2	0	0		6	630	85400	6	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
					21	20	18	13	9	14	14		95	630	86002	95	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
					0	4	0	0	2	0	0		6	630	86102	6	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
					3		0	0	0	0	0		3	630	86292	3	EACH	REMOVAL OF GROUND MOUNTED WOODEN BOX BEAM SUPPORT AND DISPOSAL	
				3								3		630	87100	3	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION	
					4	3	3	3	4	4	0		17	630	87400	17	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
					2	1	0	1	2	2	0		6	630	87500	6	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	
				1				1				1	1	630	89706	2	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-12.30	
				2									2	630	89902	2	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC CONTROL ITEM, BEAM SUPPORT FOUNDATION	
				2	6	4	4	0	0	0	0	2	14	631	94200	16	EACH	REMOVAL OF LUMINAIRE AND DISPOSAL	
				5	0	1	2	0	0	0	0	5	3	631	94304	8	EACH	REMOVAL OF DISCONNECT SWITCH AND DISPOSAL	
				1	3	2	2	0	0	0	0	1	7	631	94406	8	EACH	REMOVAL OF SIGNS WIRED	
				5	0	1	2	0	0	0	0	5	3	631	94413	8	EACH	REMOVAL OF SIGN SERVICE AND DISPOSAL, AS PER PLAN	18
				14.38								14.38		646	10000	14.38	MILE	EDGE LINE	
				6.54								6.54		646	10100	6.54	MILE	LANE LINE	
				0.10								0.1		646	10200	0.1	MILE	CENTER LINE	
				5491								5491		646	10300	5491	FT	CHANNELIZING LINE	
				221								221		646	10400	221	FT	STOP LINE	
				191								191		646	10500	191	FT	CROSSWALK LINE	
				6								6		646	20000	6	EACH	RAILROAD SYMBOL MARKING	
				14								14		646	20300	14	EACH	LANE ARROW	
				330								330		646	20500	330	FT	DOTTED LINE	

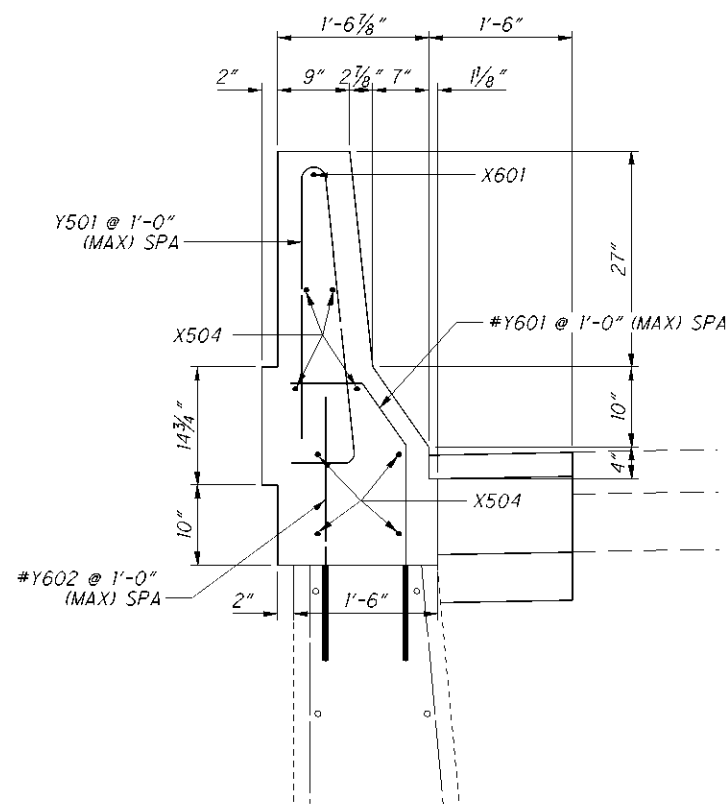
[illegible]

ROUTE	SIDE	SLM TO SLM			202	202	203	209	301	448	606	606	606	606	606	606	606	606	622	622	622	622			
					CONCRETE BARRIER REMOVED	GUARDRAIL REMOVED	EXCAVATION	LINEAR GRADING, AS PER PLAN	ASPHALT CONCRETE BASE, PG64-22, T=9"	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64- 22, AS PER PLAN	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE 5A	ANCHOR ASSEMBLY, TYPE B	ANCHOR ASSEMBLY, TYPE E	ANCHOR ASSEMBLY, TYPE T		BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 2	IMPACT ATTENUATOR, TYPE 1 (UNIDIRECTIONAL)	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	BARRIER TRANSITION	CONCRETE BARRIER END SECTION, TYPE D	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D		
					FT	FT	CU YD	STATION	CU YD	CU YD	FT	FT	EACH	EACH	EACH		EACH	EACH	EACH	FT	EACH	EACH	EACH		
SR 8 NB	RT	0.19	TO	0.21		100		1.00		1.26	50			1			1								
SR 8 NB	RT	0.37	TO	0.41		212.5		2.13		2.68	150			1	1										
SR 8 NB	RT	0.58	TO	0.64	34	287.5	2	2.75	2	3.46	275						1	1		1	1				
SR 8 NB	RT	2.13	TO	2.51		1462.5		14.63		18.42	1450				1		1								
SR 8 NB	RT	2.57	TO	2.59		150		1.50		1.89	87.5			1	1										
SR 8 NB	RT	2.70	TO	2.73		150		1.50		1.89	100			1			1								
SR 8 NB	RT	2.85	TO	2.88		150		1.50		1.89	87.5			1	1										
SR 8 NB	RT	3.03	TO	3.04		125		1.75		2.20	125				1										
SR 8 NB	RT	3.45	TO	3.48		150		1.50		1.89	100		1		1										
SR 8 NB	RT	3.72	TO	3.73		150		1.50		1.89	100		1		1										
SR 8 NB	RT	3.93	TO	3.97		175		1.88		2.36	150		1				1								
SR 8 NB	RT	3.99	TO	4.04		325	3	2.63	3	3.31	262.5						1	1		20		1	1		
SR 8 NB	RT	4.22	TO	4.25		150	7	1.00	7	1.26	50			1			1			50		1	1		
SR 8 SB	LT	0.26	TO	0.28		100		1.00		1.26	50			1			1								
SR 8 SB	LT	0.60	TO	0.64		200		2.00		2.52	137.5	50			1		1								
SR 8 SB	LT	2.30	TO	2.55		512.5		5.13		6.45	462.5				1		1								
SR 8 SB	LT	2.74	TO	2.76		150		1.63		2.05	125		1				1								
SR 8 SB	LT	3.06	TO	3.08		150		1.50		1.89	112.5		1				1								
SR 8 SB	LT	3.17	TO	3.38		1150		11.50		14.48	1087.5			1	1										
SR 8 SB	LT	3.43	TO	3.45		150		1.50		1.89	100		1		1										
SR 8 SB	LT	3.96	TO	3.85		625		6.25		7.87	562.5	50			1		1								
SR 8 SB	LT	3.98	TO	4.05		500		5.25		6.61	487.5		1				1								
RAMP A	SE	GLENWOOD				487.5		4.63		5.82	412.5			1			1								
RAMP B	SW	GLENWOOD				325		3.25		4.09	312.5				1		1								
RAMP C	SE	SR 261				200		2.00		2.52	150			1											
RAMP E	NW	SR 261				375		4.00		5.04	350						1	1							
RAMP F	SW	SR 261				362.5		3.63		4.56	350				1		1								

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REMOVAL LIMITS



CONCRETE BARRIER RETROFIT DETAIL

MARK	LENGTH	TYPE	DIMENSIONS				
			A	B	C	D	E
Y501	6'-2 3/8"	23	8"	3'-1"	2'-10"		
Y502	4'-1"	16	3'-6"				
Y503	4'-0"	16	3'-5"				
Y504	3'-11"	16	3'-4"				
Y505	3'-10"	16	3'-3"				
Y506	3'-9"	16	3'-2"				
Y507	3'-8"	16	3'-1"				
Y508	3'-7"	16	3'-0"				
Y509	3'-6"	16	2'-11"				
Y510	3'-5"	16	2'-10"				
Y511	3'-4"	16	2'-9"				
Y512	3'-3"	16	2'-8"				
Y513	3'-0"	STR					
#Y601	3'-8 3/4"	13	2'-3"	7 3/4"	5 1/2"	9"	
#Y602	2'-9"	STR					
#Y603	2'-3"	STR					
#Y604	2'-0"	STR					
X501	10'-0"	STR					
X502	5'-8"	25	1'-10"	2'-5"	1'-4 1/4"	1 1/2"	5"
X503	5'-8"	STR					
X504	*	STR					
X601	*	STR					

THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, P601 IS A NO. 6 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.

ALL REINFORCING STEEL TO BE EPOXY COATED

CONCRETE BARRIER RETROFIT

REMOVE AND REPLACE 607' OF CONCRETE BARRIER ON TOP OF WALL "B" (SR8 NORTHBOUND - SLM 5.36 TO STRUCTURE SUM-8-0547 OVER BROAD BLVD) AND 55' OF CONCRETE BARRIER ON TOP OF WALL "2" (SR8 NORTHBOUND - STRUCTURE SUM-8-0547 OVER BROAD BLVD TO SIGN SUPPORT SLM 5.50). REMOVAL OF EXISTING BARRIER WILL BE PAID FOR UNDER ITEM 202, CONCRETE BARRIER REMOVED. REPLACE CONCRETE BARRIER AS DETAILED AND PER STANDARD CONSTRUCTION DRAWING BR-1. CLASS S CONCRETE, EPOXY COATED REINFORCING STEEL, AND DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT WILL BE USED.

SAWCUT 1/4 INCH DEEP CONTROL JOINTS ALONG THE PERIMETER OF THE BARRIER AS SOON AS THE SAW CAN BE OPERATED WITHOUT DAMAGING THE CONCRETE.

USE AN EDGE GUIDE, FENCE OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE BARRIER. THE JOINT WIDTH WILL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF 1/4 INCH.

PLACE CONTROL JOINTS AT A MINIMUM OF 6'-0" AND A MAXIMUM OF 10'-0" CENTERS.

SEAL THE PERIMETER OF THE CONTROL JOINT TO A MINIMUM DEPTH OF ONE INCH WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM ONE-HALF INCH OF BOTH THE INSIDE AND OUTSIDE FACES OF THE BARRIER UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

AFTER COMPLETION OF THE CONCRETE BARRIER RETROFIT, INSTALL A BRIDGE TERMINAL ASSEMBLY AS PER STANDARD CONSTRUCTION DRAWING GR-3.1 AT SLM 5.36.

THE PRICE FOR ITEM 622, BARRIER, MISC.: CONCRETE BARRIER RETROFIT WILL INCLUDE THE COST OF REINFORCING STEEL, DOWEL HOLES, CONCRETE, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CONCRETE BARRIER RETROFIT WORK. THE EXTRA COST FOR THE CONCRETE AND REINFORCING STEEL FOR THE 2 NEW RETROFITTED PILASTERS WILL BE INCIDENTAL TO ITEM 622, BARRIER, MISC.: CONCRETE BARRIER RETROFIT. SEE STANDARD CONSTRUCTION DRAWING HL-20.14 FOR ALL PILASTER DETAILS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE ESTIMATED QUANTITIES:

ITEM 202 - PAVEMENT REMOVED III SY
ITEM 202 - CONCRETE BARRIER REMOVED 662 FT
ITEM 202 - GUARDRAIL REMOVED 75 FT
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (T = 10") 31 CY
ITEM 304 - AGGREGATE BASE (T = 6") 19 CY
ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE @ 0.04 GAL/SY 5 GAL
ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-22 (T = 3") 10 CY
ITEM 606 - GUARDRAIL, TYPE 5 25 FT
ITEM 606 - ANCHOR ASSEMBLY, TYPE E 1 EACH
ITEM 606 - BRIDGE TERMINAL ASSEMBLY, TYPE 1 1 EACH
ITEM 622 - BARRIER MISC.: CONCRETE BARRIER RETROFIT 662 FT

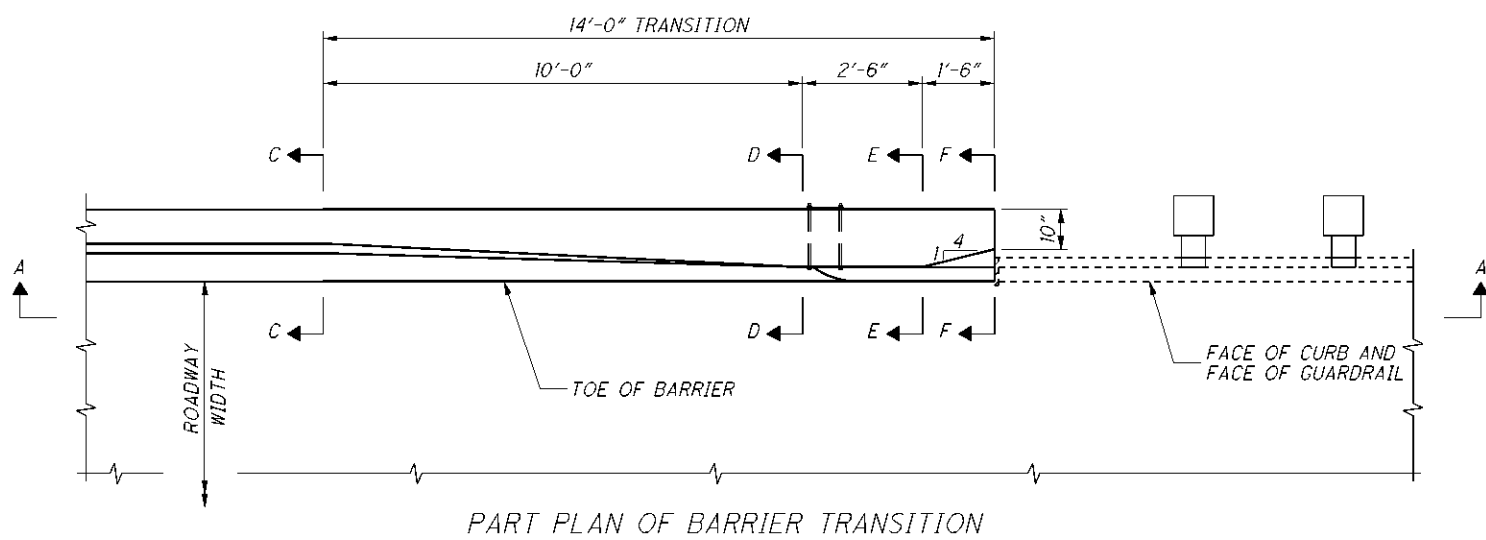
CALCULATED
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CONCRETE BARRIER RETROFIT

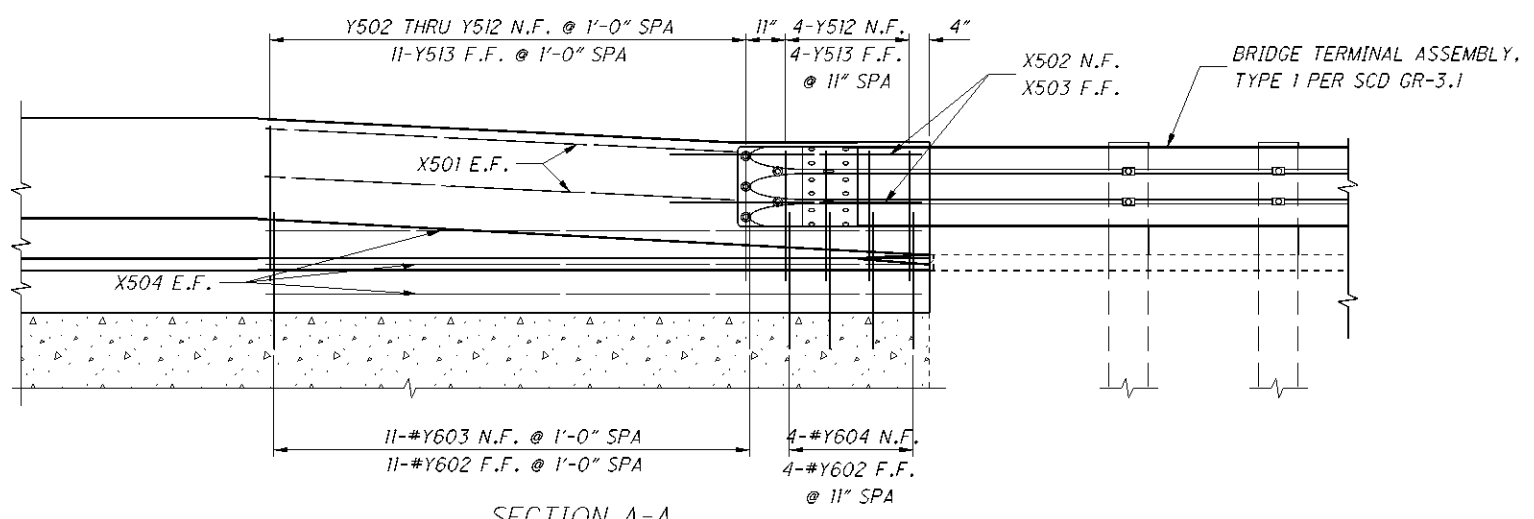
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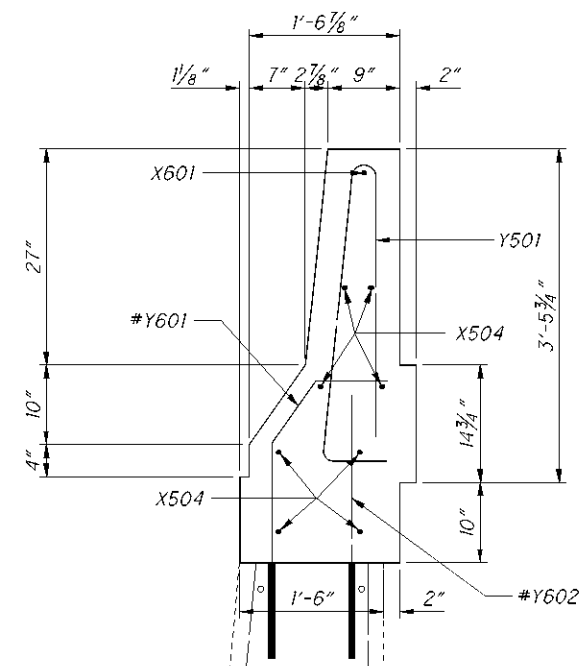
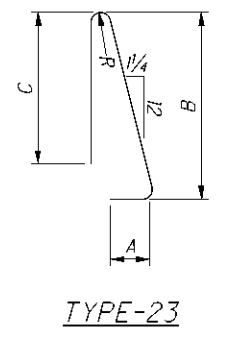
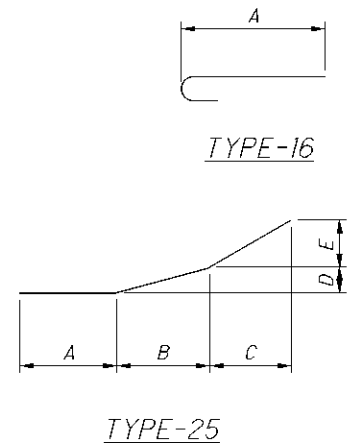
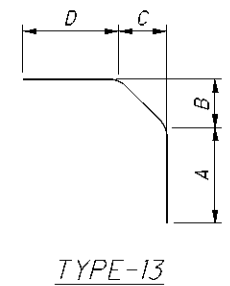


PART PLAN OF BARRIER TRANSITION

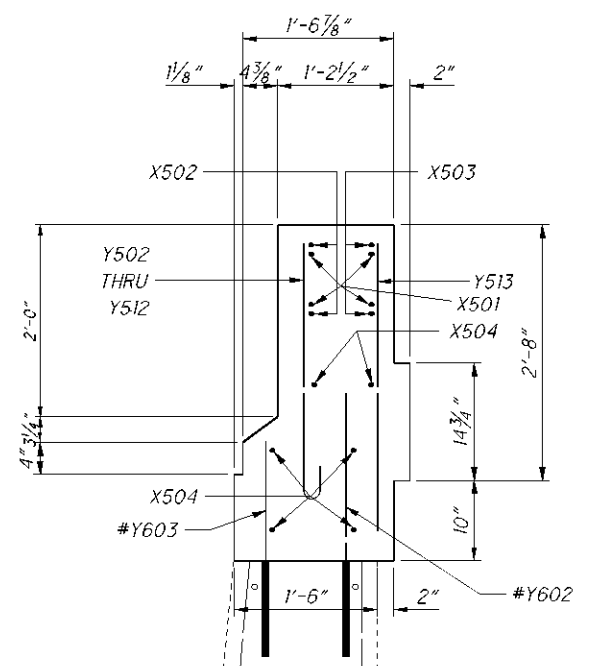


SECTION A-A

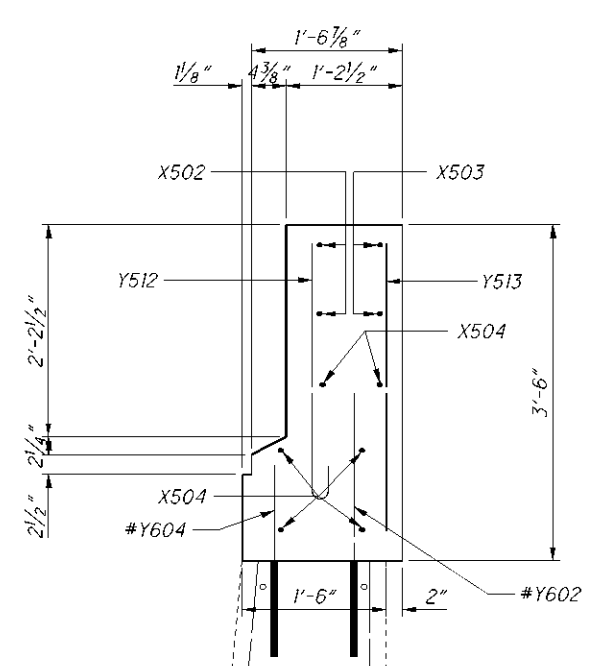
LEGEND:
N.F. - NEAR FACE
F.F. - FAR FACE
E.F. - EACH FACE
(TYP) - TYPICAL
SPA - SPACING
- DOWEL HOLE WITH NONSHRINK, NONMETALLIC GROUT, 12" DEEP (TYP)
* - LENGTH OF PROPOSED BARRIER (TO BE FIELD MEASURED)
LAP LENGTHS PER CMS 509.07



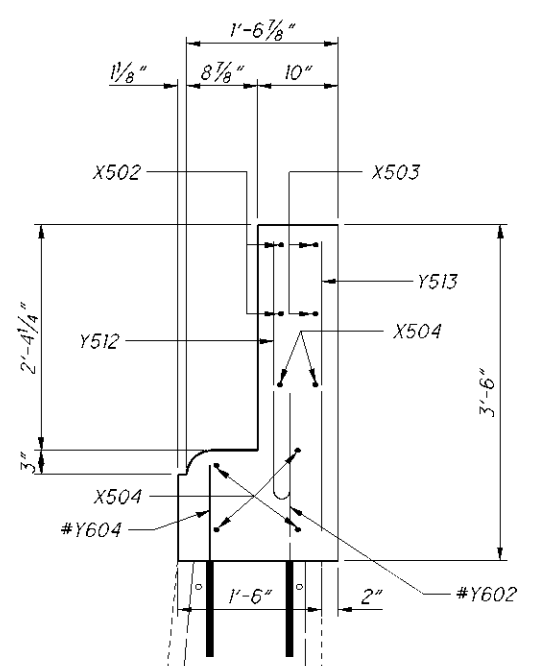
SECTION C-C



SECTION D-D

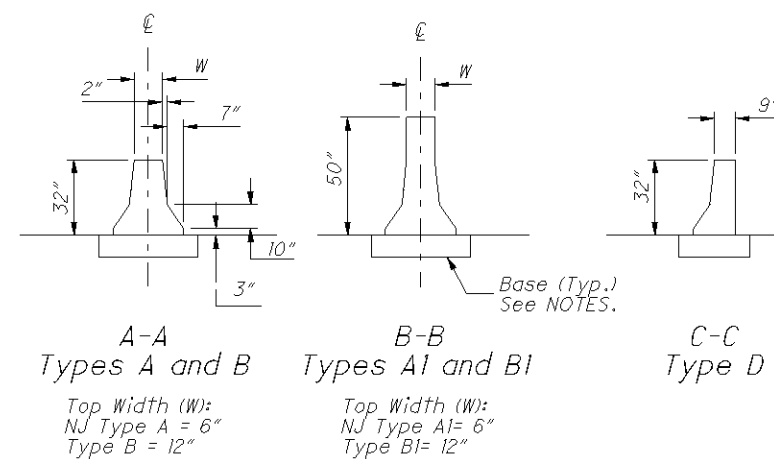
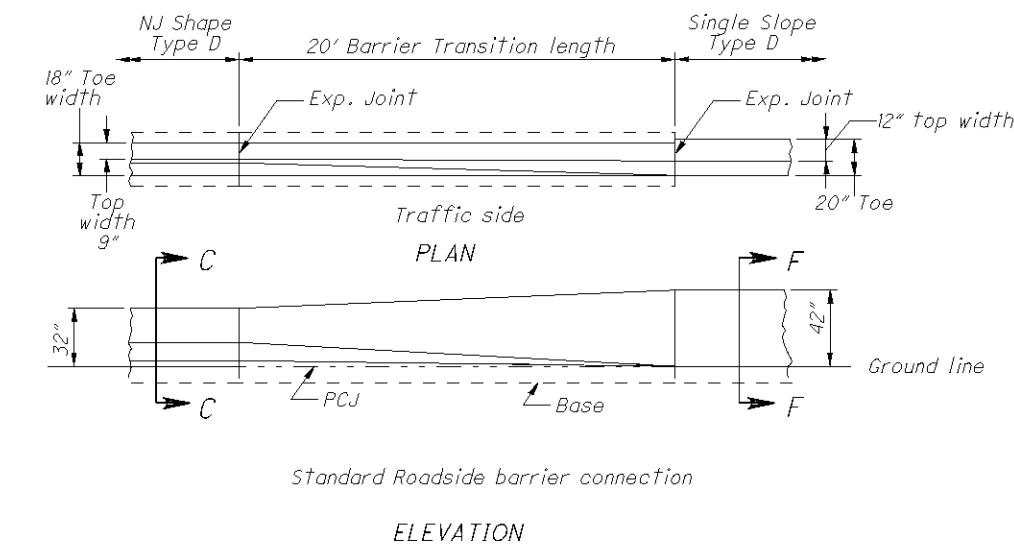
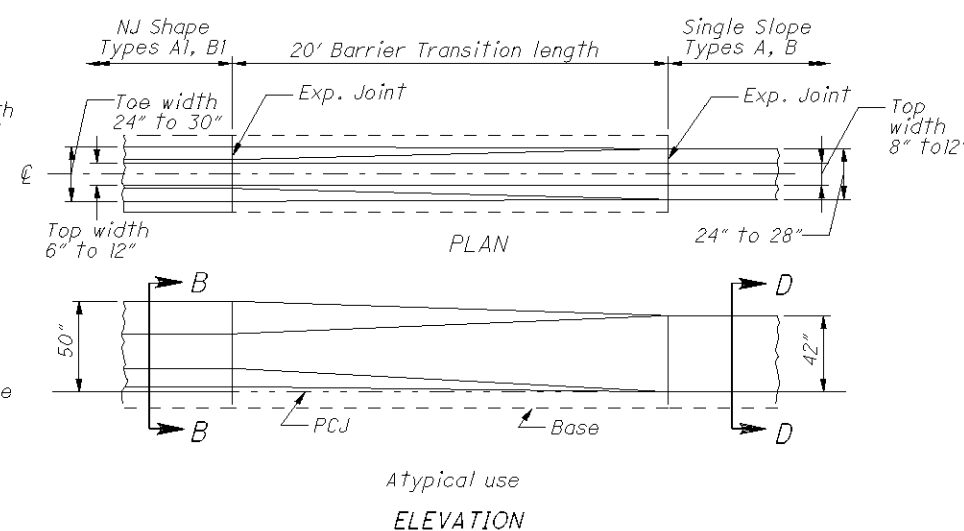
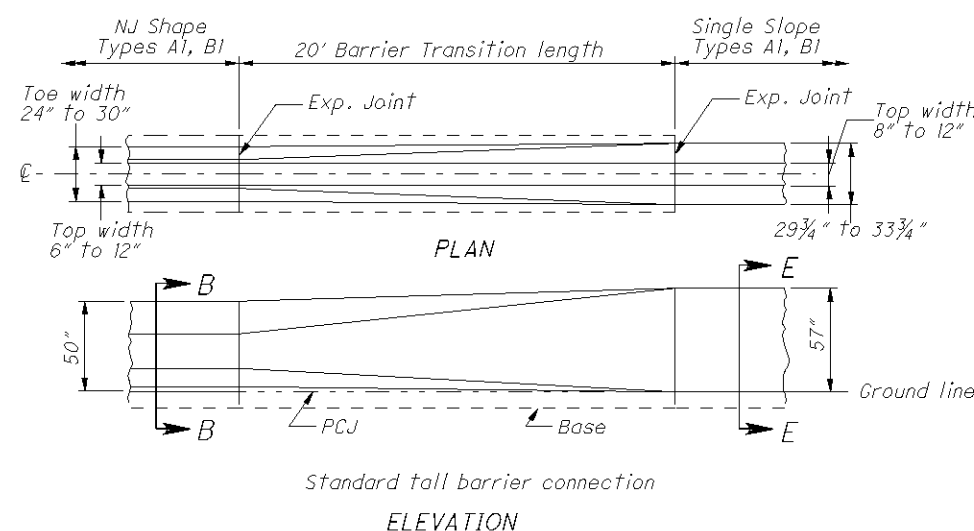
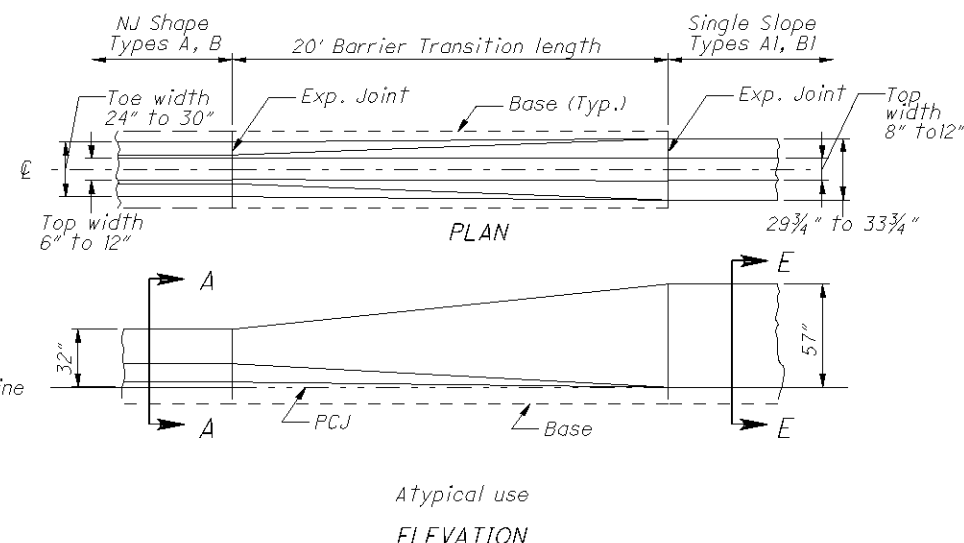
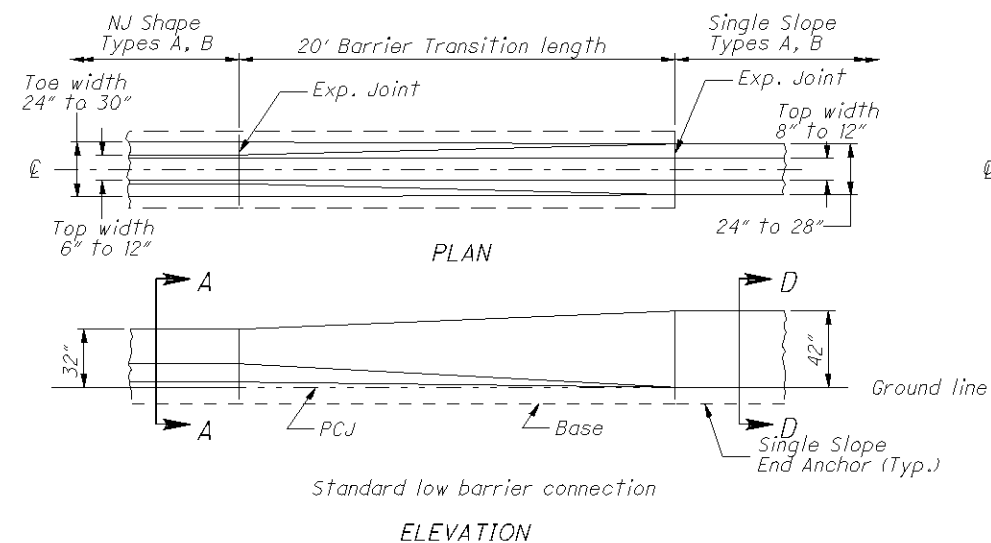


SECTION E-E



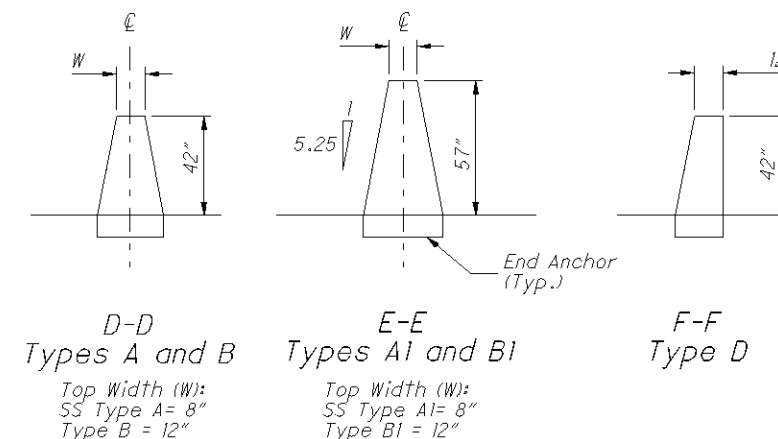
SECTION F-F

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NJ SHAPE SECTIONS

See Plan Insert sheets for specific NJ Shape Concrete barrier details.



SINGLE SLOPE SECTIONS

See SCD RM-4.3 and RM-4.5 for specific Single Slope concrete barrier details.

NOTES

GENERAL: This insert details the Barrier Transition, to connect existing NJ Concrete Barrier (safety shape) to a new run of Single Slope Concrete Barrier at locations shown on the plans. For NJ barrier shape and other details see the respective plan insert sheets. For Single Slope barrier details, see SCD RM-4.3 (RM-4.5 for Type D).

ADJACENT CONCRETE BARRIER RUNS: Remove any tapered end sections, Impact attenuators, or other guardrail hardware from existing barrier end. The barrier to barrier transition is not intended to be used at transition sections (those shown on SCD RM-4.4), Inlets, or on Type C or CI Barrier. If proposed adjacent single slope barrier is Type A or A1, the Barrier Transition should contain horizontal reinforcing steel similar to that required in the respective single slope barrier. Reinforcement is not shown and should be detailed separately. The adjacent single slope end should be terminated with a reinforced End Anchor as detailed on the SCDs.

BARRIER FACE TRANSITION: To prevent vehicle snagging, a smooth transition from the safety shape face to the single slope face is made over a 20' length. The actual shape of the Transition is dependent on both the adjacent NJ barrier and the single slope barrier Types, as detailed on the plans. The contractor and Engineer will agree on a construction method to ensure a smooth barrier face.

MATERIALS: Materials are same for those shown on RM-4.3 and RM-4.5, except that cast-in-place is the only acceptable method. Edges may be chamfered or radiused as shown on those drawings.

CONCRETE BASE: Construct base as shown on the NJ shape insert sheets, including the methods detailing the footing joint, Permissible Construction Joint (PCJ), and Dowelling requirements. The width of the base matches the existing NJ barrier.

JOINTS: Construct joints as shown on respective barrier drawings.

RACEWAYS: When specified, place raceway(s) to match raceway elevation in adjoining segments. Place to obtain maximum concrete cover.

METRIC UNITS: Refer to respective barrier drawings or inserts for metric dimensions.

PAYMENT: This Barrier Transition shall include all material and labor needed to construct this 20' section, including any raceways, reinforcing steel, dowels and other necessary incidentals. Payment shall be made at the unit price for Item 622 - Barrier Transition, Each.

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CENTER LINE														GENERAL SPEC: 640	
MATERIAL TYPE:															
CTY	ROUTE	TRUE LOG	FROM		TRUE LOG	TO		TOTAL MILES	EQUIVALENT SOLID LINE		COMMENTS				
SUM	8		STRUCTURE # 0276					0.05	0.05						
SUM	261		STRUCTURE # 1188					0.05	0.05						
TOTAL								0.10	0.10						

LANE LINE														
CTY	ROUTE	TRUE LOG	FROM		TRUE LOG	TO		TOTAL MILES	4" LANE LINE		COMMENTS			
									DASHED	SOLID				
SUM	8	0.00	BEGIN SR 8		0.69	BEACON ST.		1.84						
SUM	8	2.13	AC&Y RXR		4.30	CUYAHOGA FALLS CORP.		4.58						
SUM	8		STRUCTURE # 0276					0.05						
SUM	261		STRUCTURE # 1188					0.07						
TOTAL								6.54						

EDGE LINE																	
CTY	ROUTE	TRUE LOG	FROM		TRUE LOG	TO		WHITE EDGE LINE			YELLOW EDGE LINE			COMMENTS			
								TOTAL	HIGHWAY	RAMP	TOTAL	HIGHWAY	RAMP				
SUM	8	0.00	BEGIN SR 8		0.69	BEACON ST.		1.38	1.38		1.38	1.38					
SUM	8	2.13	AC&Y RXR		4.30	CUYAHOGA FALLS CORP.		5.74	4.34	1.40	5.74	4.34	1.40				
SUM	8		STRUCTURE #0276					0.08	0.08								
SUM	261		STRUCTURE #1188					0.06	0.06								
TOTAL								7.26	5.86	1.40	7.12	5.72	1.40				

AUXILIARY																				
CTY	ROUTE LOCATION	TRUE LOG	CHANNEL LINE	STOP LINE	TRANSVERSE DIAGONAL LINES		CROSS WALK LINES	WORD ON PVMT ONLY		LANE ARROWS				SYMBOL MARKINGS				ISLAND MARKING	DOTTED LINES	COMMENTS
					WHITE	YELLOW		72"	96"	TURN LEFT	TURN RIGHT	THRU	COMB.	RxR	SCHOOL					
					FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT		
SUM	SR 8 NB TO GLENWOOD		534	26									2	2						
SUM	SR 8 SB FROM GLENWOOD		180																	
SUM	SR 8 NB TO TALLMADGE AVE.		473	47			126						2	2						
SUM	SR 8 SB FROM TALLMADGE		216																	
SUM	SR 8 NB FROM TALLMADGE		191																	
SUM	SR 8 SB TO TALLMADGE AVE.		826	28			65						2	2						
SUM	SR 8 NB TO GORGE BLVD.		728	34																
SUM	SR 8 NB FROM HOWE RD.		132																	
SUM	SR 8 NB TO HOWE RD		698	32																
SUM	SR 8 SB FROM HOWE RD.		205																	
SUM	STRUCTURE # 1188		225	54						6										
SUM	STRUCTURE #0276		83							2										
SUM	SLM 0.63-0.56																330			
SUM	SLM 0.40-0.56		1000																	
TOTAL			5491	221			191			8			6	6			330			

PAVEMENT MARKING SUBSUMMARY

SUM-8-0.00/ 2.13

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49

CALCULATED
LMB
CHECKED

PAVEMENT MARKING SUBSUMMARY

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49

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ITEM 690 - SPECIAL, MISC.: CLEARING AND GRUBBING

THIS ITEM IS INTENDED TO BE USED TO CLEAR ALL GROWTH IN FRONT OF HIGHWAY SIGNS THAT MAY IMPEDE ITS VIEWING BY MOTORISTS.

IN ADDITION TO THE REQUIREMENTS OF 201, THE CONTRACTOR WILL REMOVE STUMPS AT LEAST 6 INCHES BELOW GROUND SURFACE AND THE WORK WILL NOT INCLUDE SCALPING. THE AREA TO BE CLEARED AND GRUBBED WILL BE DELINEATED IN THE WORK ORDER.

PAYMENT WILL BE AT THE UNIT BID PRICE PER ACRE CLEARED AND GRUBBED AND WILL INCLUDE BACKFILLING HOLES AND REMOVING ALL TREES AND STUMPS.

SIGN LEGEND

ALL EXTRUSHEET SIGNS WILL BE DESIGNED USING TYPE E MODIFIED ALPHABET.

ITEM 630 - REMOVAL OF MISC. TRAFFIC CONTROL ITEM, BEAM SUPPORT FOUNDATION

A CONTINGENCY QUANTITY HAS BEEN PROVIDED FOR THIS WORK TO BE USED FOR REMOVAL OF BEAM SUPPORT FOUNDATIONS, AS DIRECTED BY THE ENGINEER, WHEREVER NEEDED THROUGHOUT THE PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 630 - REMOVAL OF MISC. TRAFFIC CONTROL ITEM, BEAM SUPPORT FOUNDATION, 2 EACH

SIGN PLACEMENT

THE EXACT LOCATIONS OF SIGNS ARE TO BE STAKED AND CHECKED BY THE ENGINEER PRIOR TO PLACEMENT TO INSURE CLEARANCE OF DRIVES, ROADWAYS AND OTHER OBSTACLES. IF THERE ARE ANY CONFLICTS, THEY ARE TO BE ADJUSTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS IS INCIDENTAL TO ALL 630 ITEMS.

ITEM 631 - REMOVAL OF SIGN SERVICE AND DISPOSAL, AS PER PLAN

THE CONTRACTOR SHALL REMOVE THE SIGN SERVICE AND OTHER MISCELLANEOUS COMPONENTS FROM OVERHEAD AND STRUCTURE MOUNTED SIGN SUPPORTS.

IF ANY SUPPORTS RECEIVE POWER FROM A NEARBY UTILITY POLE, THE CONTRACTOR SHALL REMOVE THE POWER DROP OR CONNECTION AND NOTIFY THE UTILITY THAT IT IS BEING DISCONNECTED.

TWO (2) CABLE SPLICE KITS SHALL BE PROVIDED AS A PART OF THIS PAY ITEM FOR EACH LOCATION WHERE SIGN LIGHTING AND SIGN SERVICE IS BEING REMOVED. THEY ARE TO BE USED TO PROPERLY RESTORE THE CONTINUITY OF THE MAIN POWER FEED AT THE PULL BOX WHERE THE SIGN SERVICE SUPPLIED POWER TO THE SIGN LOCATION. SIGN SERVICE WIRING IS NOT TO BE CUT AND CAPPED. SIGN SERVICE FROM THE DISCONNECT SWITCH SHALL BE COMPLETELY REMOVED. THE PULL BOX SHALL REMAIN IN PLACE.

ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE OF EACH FOR ITEM 631-REMOVAL OF SIGN SERVICE AND DISPOSAL, AS PER PLAN.

SIGNING SUBSUMMARY - PROJECT COST

REF NO.	SHEET NO.	SLM	SIDE	CODE * PLYWOOD # YELLOW/GREEN ## WHITE ON BROWN	SIZE (INCHES)																			
							EACH		EACH		SQ FT		EACH	EACH	EACH	EACH		EACH	EACH	EACH	EACH			
		2.27	LT	E1-H1	84X24						14													
				EX SUPPORT															1		1			
			RT	E1-H1	84X24						14				1									
		2.61	RT	EX SUPPORT															1		1			
				E1-H5	84X24						14				1									
		2.88	RT	EX SUPPORT															1		1			
				E1-H1	84X24						14				1									
		3.20	LT	E1-H5	84X24						14													
				EX SUPPORT														2	1	1	1			
		3.75	RT	EX SUPPORT															1		1			
15a	27	3.94	LT	E1-H1-180			1		1				1	2		1								
TOTALS CARRIED TO SHEET 9999							0	1	0	1	0	70	0	1	2	3	1	0	2	5	1	5	0	0

SIGNING SUBSUMMARY

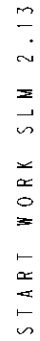
SIGNING SUBSUMMARY



[illegible]

SEE SHEET

FOR GLENWOOD DETAILS



LEGEND

(R) REMOVE AND
 RE-ERECT SIGN
 * - 100% AKRON
 FUNDING

* - 100% AKRON FUNDING

EX-NO WORK

EX-REMOVE

EX-REPLACE
WITH NEW

NEW

SIGN POST
REFLECTOR

MATCHLINE SLM 2.80

SUM-8-0.00/2.13

SR 8 SIGNING PLAN
SLM 2.13 TO SLM 2.80

CALCULATED	
LAB	
CHECKED	



25
MPH

*
W13-2-48
pole mtd



EX-NO WORK

EX-REMOVE

EX-REPLACE
WITH NEW

NEW

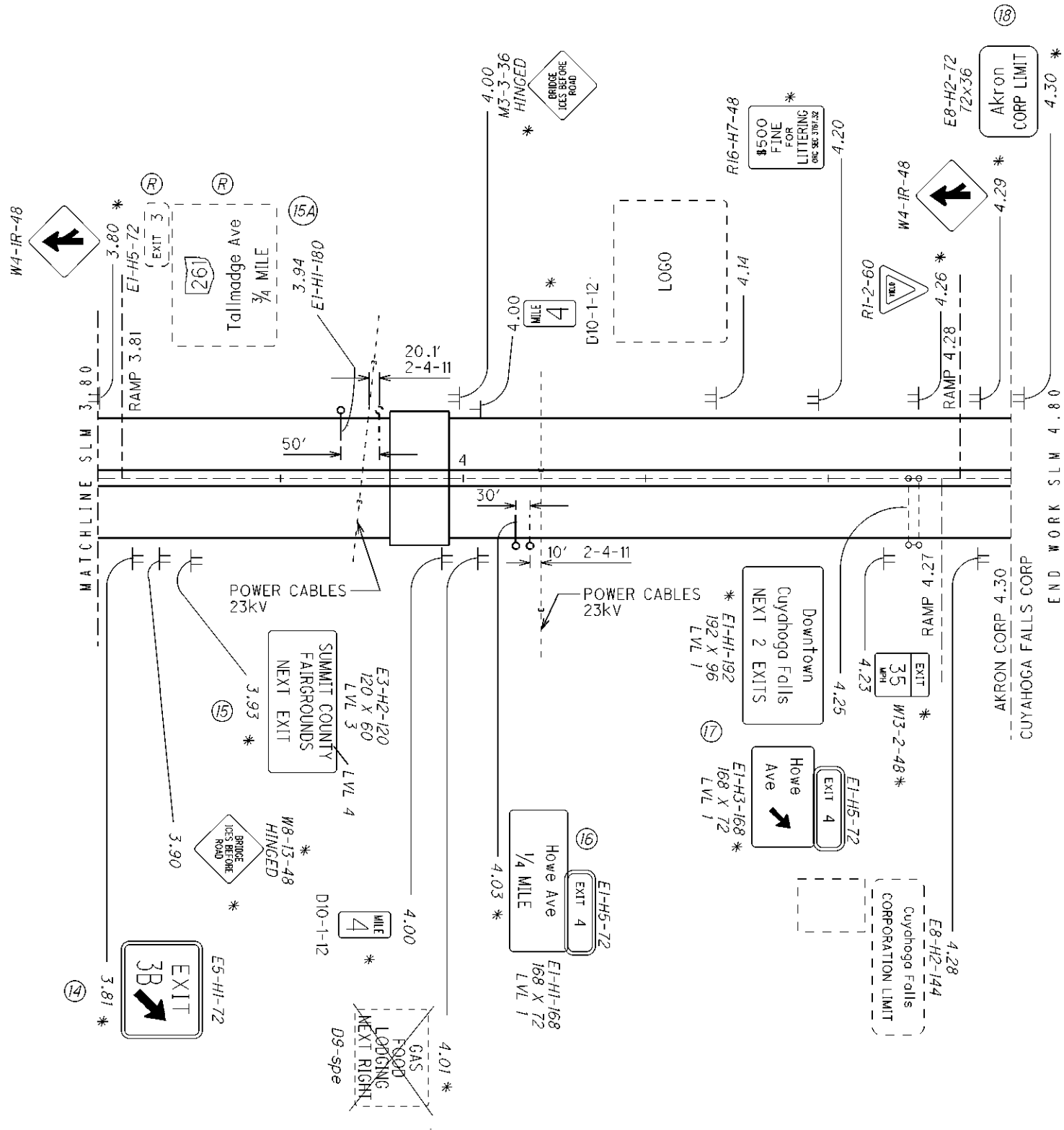
SIGN POST
REFLECTOR

SUM-8 - 0.00 / 2.13

SR 8 SIGNING PLAN
SLM 2.80 TO SLM 3.80

CALCULATED	
LAB	
CHECKED	

HORIZONTAL
SCALE IN FEET



LEGEND

Ⓡ

REMOVE AND RE-ERECT SIGN

*

100% AKRON FUNDING

EX-NO WORK

EX-REMOVE

EX-REPLACE WITH NEW

NEW

SIGN POST REFLECTOR

CALCULATED
LAB
CHECKED

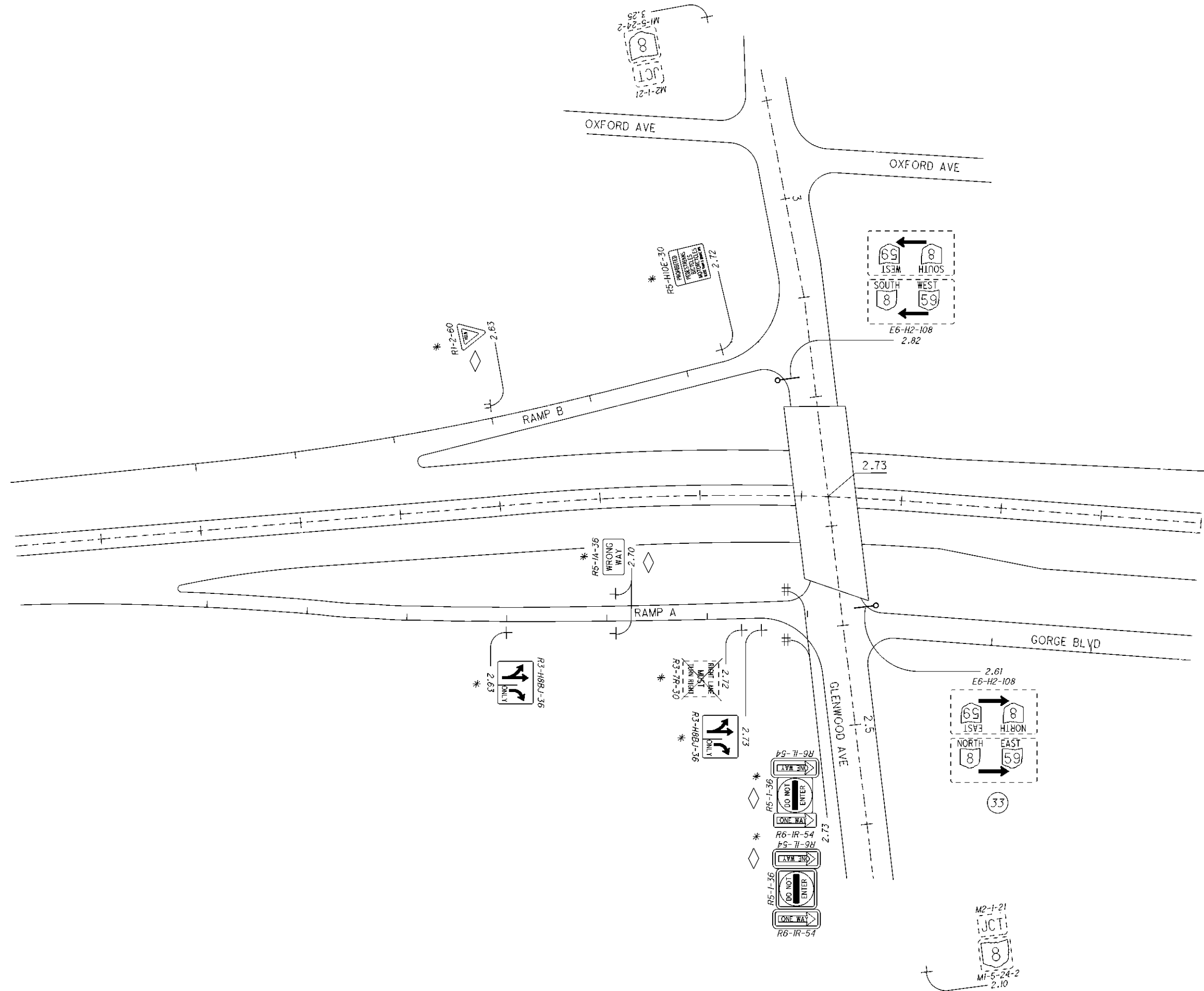
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SR 8 SIGNING PLAN

SLM 3.80 TO SLM 4.80

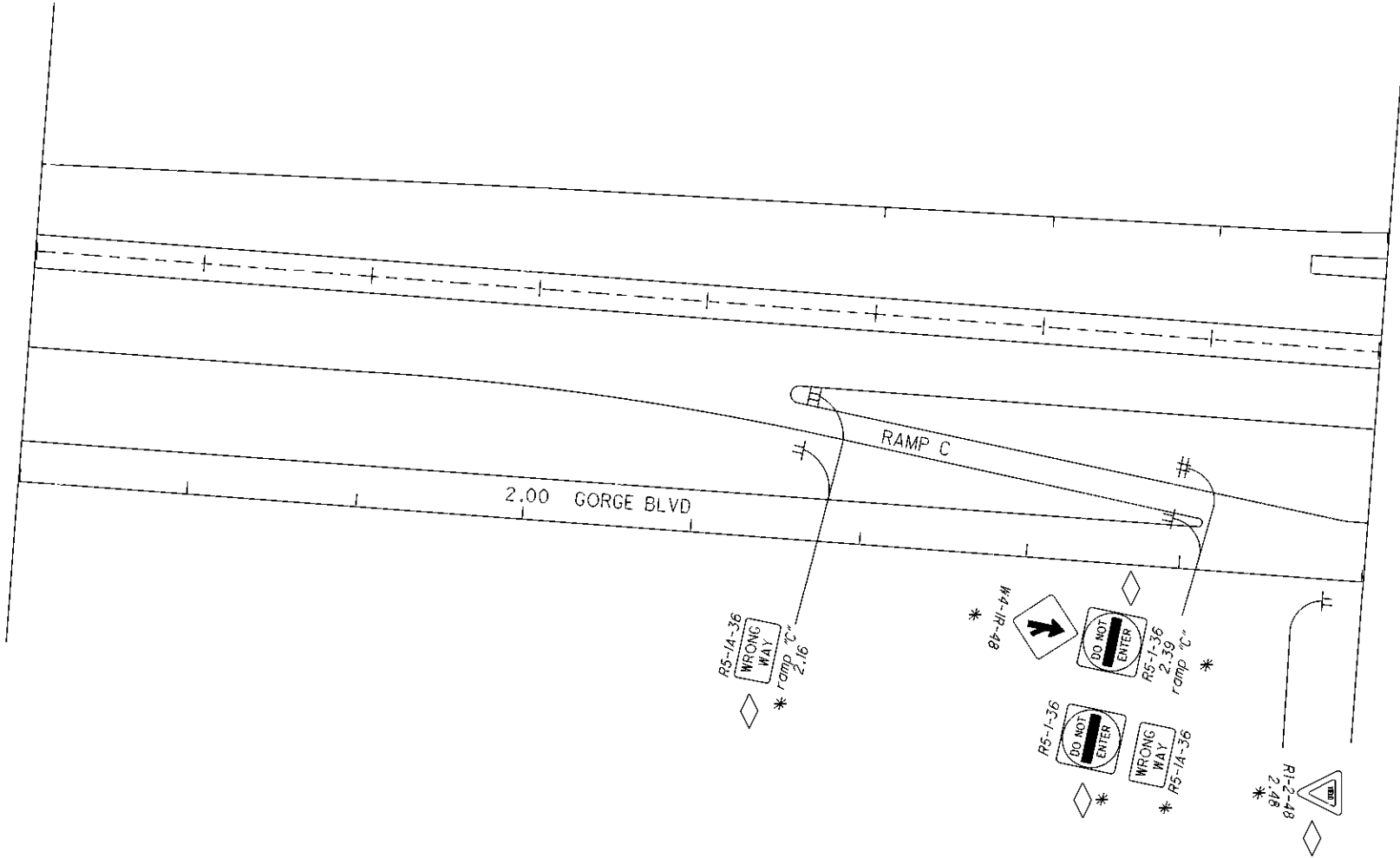
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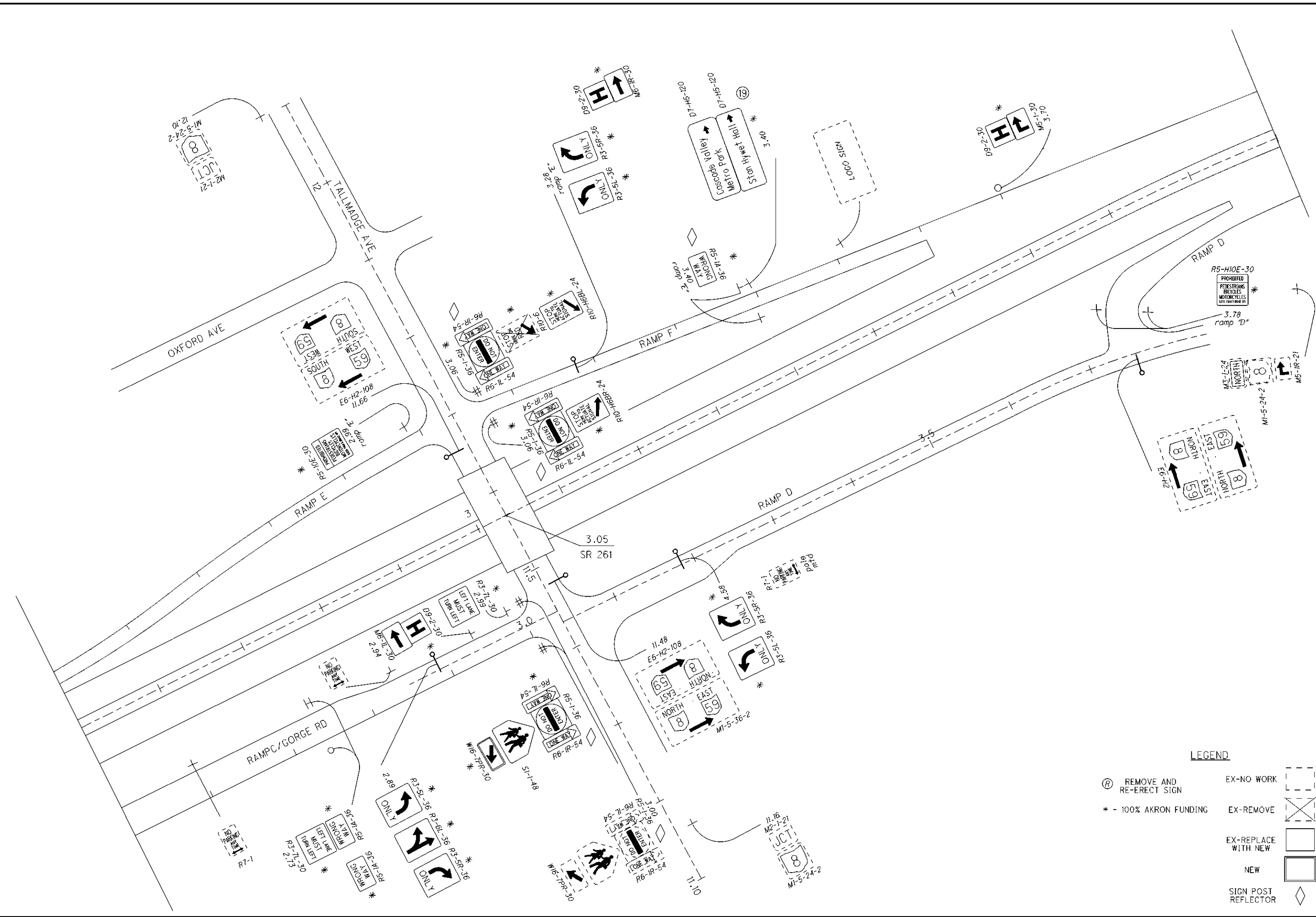
LEGEND

- | | | |
|------------------------------|---------------------|---|
| (R) REMOVE AND RE-ERECT SIGN | EX-NO WORK |  |
| * - 100% AKRON FUNDING | EX-REMOVE |  |
| | EX-REPLACE WITH NEW |  |
| | NEW |  |
| | SIGN POST REFLECTOR |  |



LEGEND

(R) REMOVE AND RE-ERECT SIGN	EX-NO WORK	
* - 100% AKRON FUNDING	EX-REMOVE	
	EX-REPLACE WITH NEW	
	NEW	
	SIGN POST REFLECTOR	



LEGEND

- | | | |
|------------------------------|---------------------|--|
| (R) REMOVE AND RE-ERECT SIGN | EX-NO WORK | |
| * - 100% AKRON FUNDING | EX-REMOVE | |
| | EX-REPLACE WITH NEW | |
| | NEW | |
| | SIGN POST REFLECTOR | |

CALCULATED

LAB

CHECKED

0

25

50

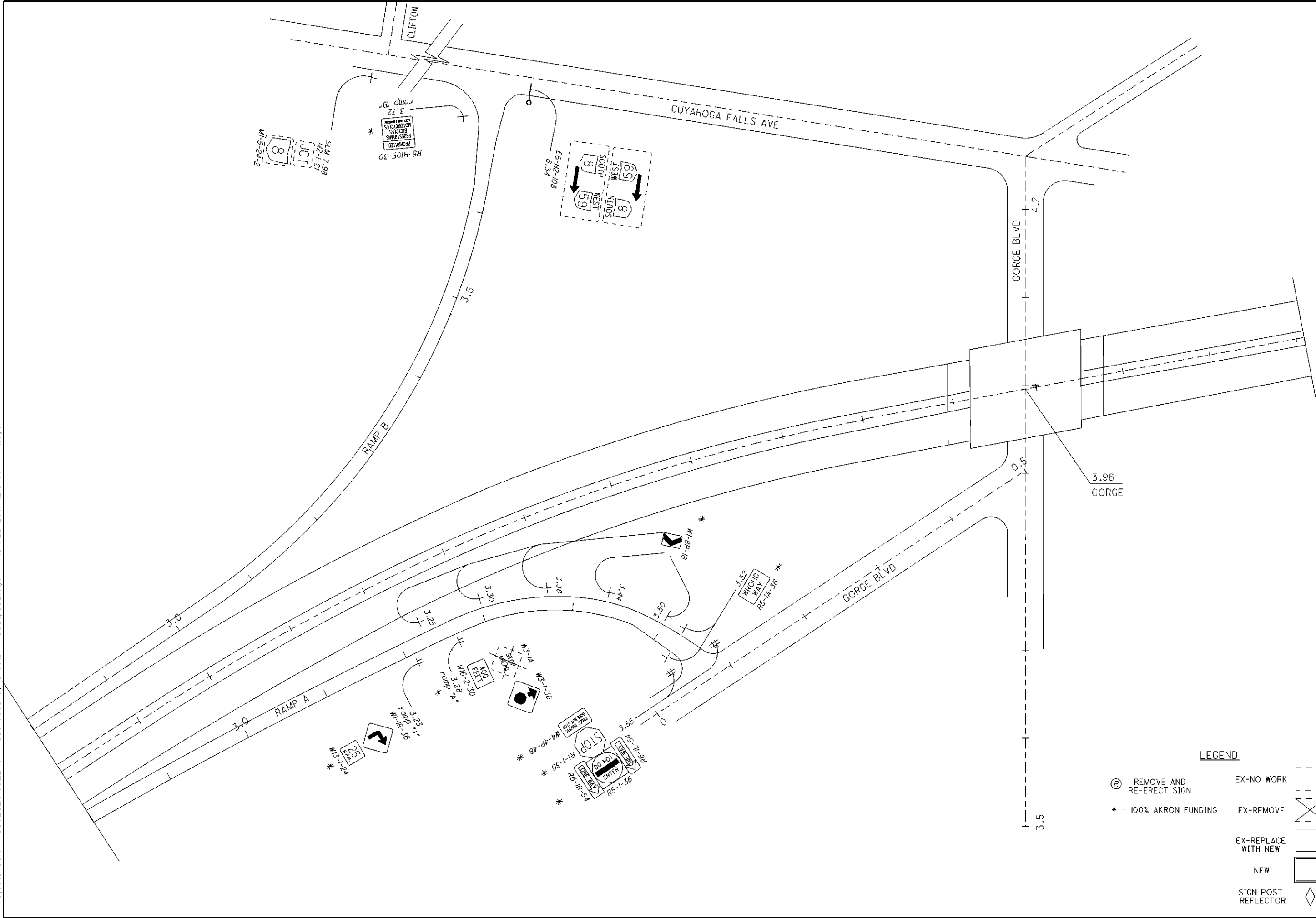
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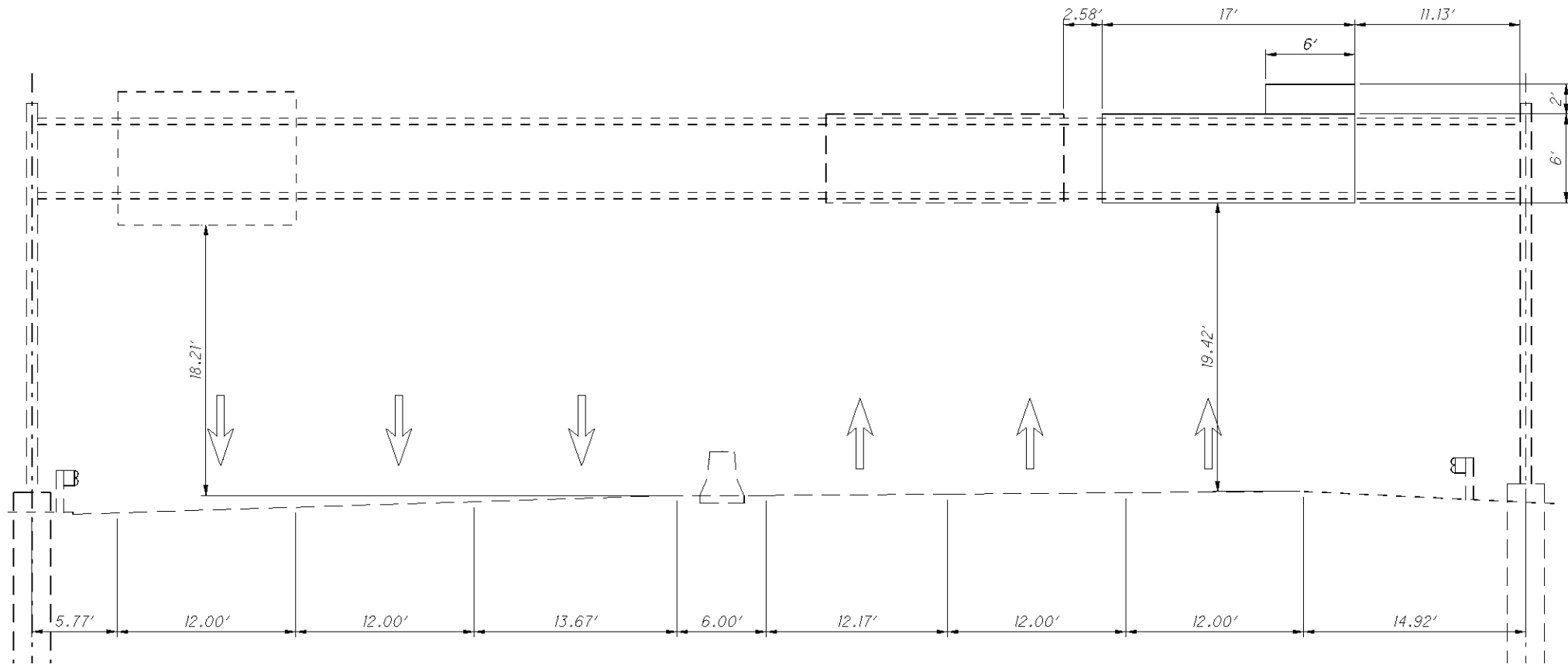
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SR 261 INTERCHANGE

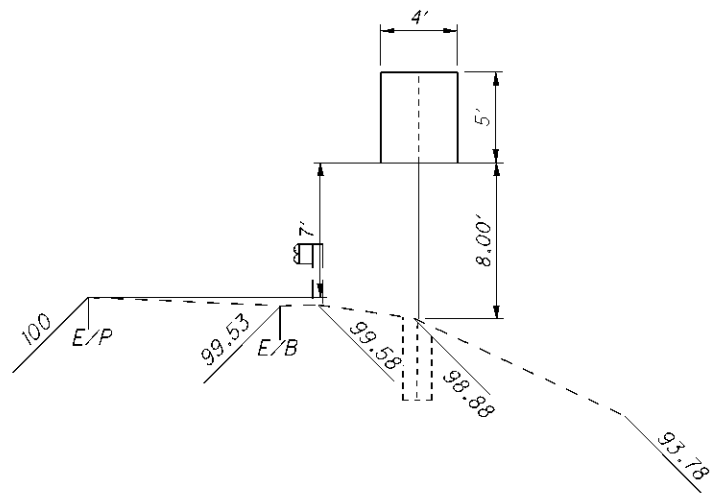
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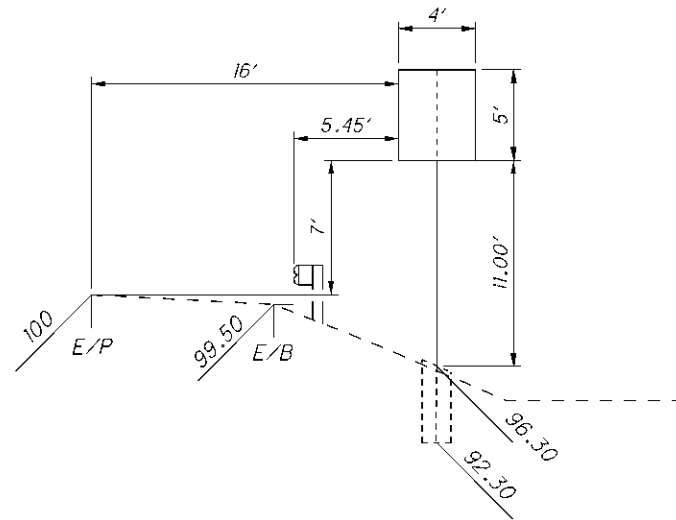




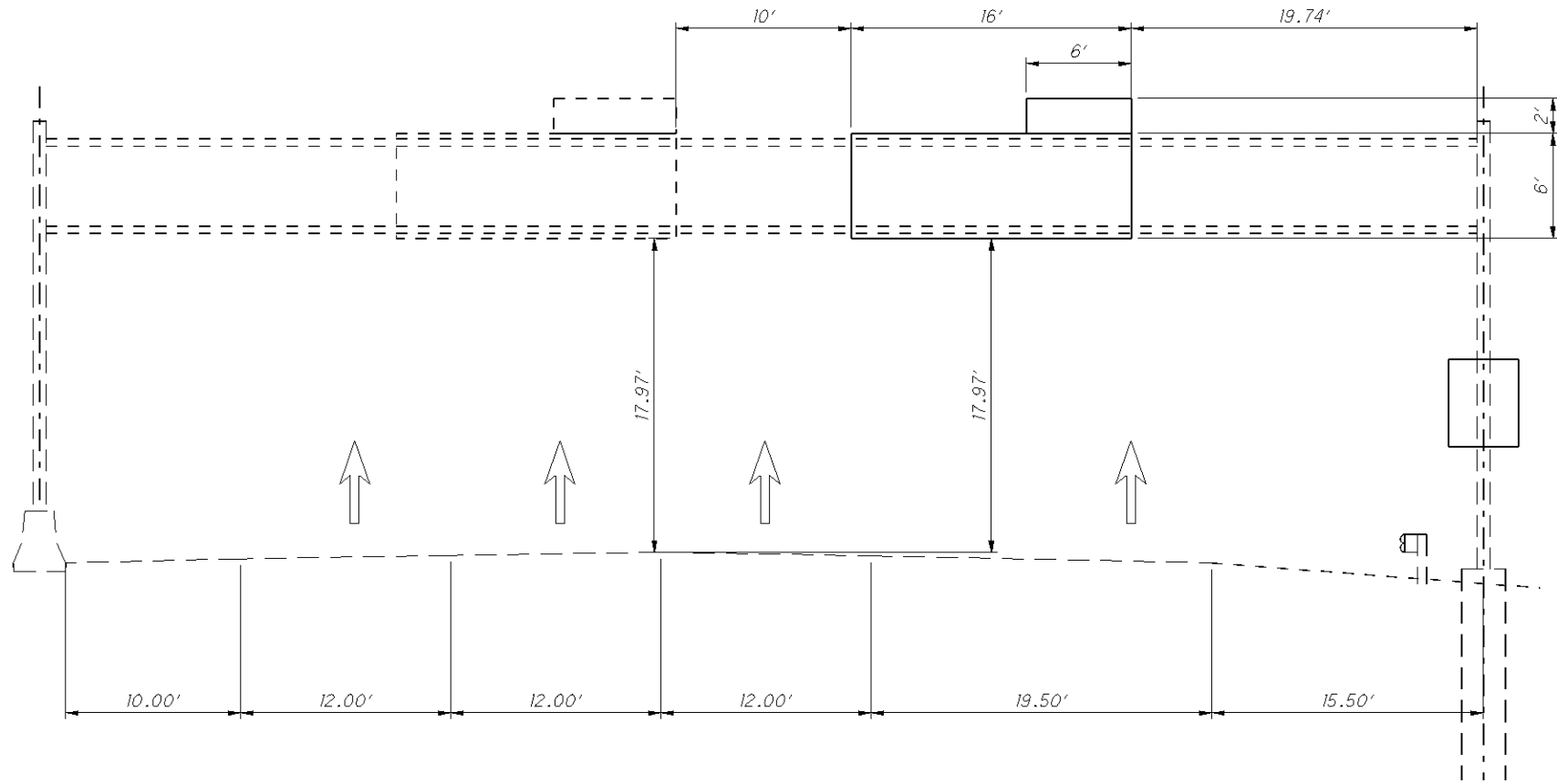
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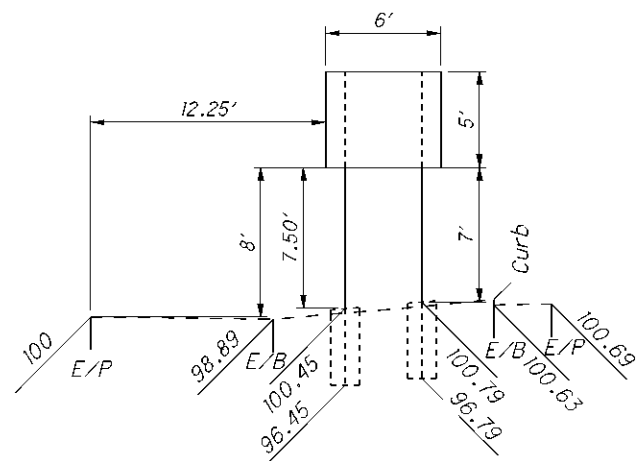
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SLM 2.31, SR 8 SB
GROUND MOUNTED SUPPORT PIPE
PIPE = 17'
TRIANGULAR SLIP BASE CONNECTION



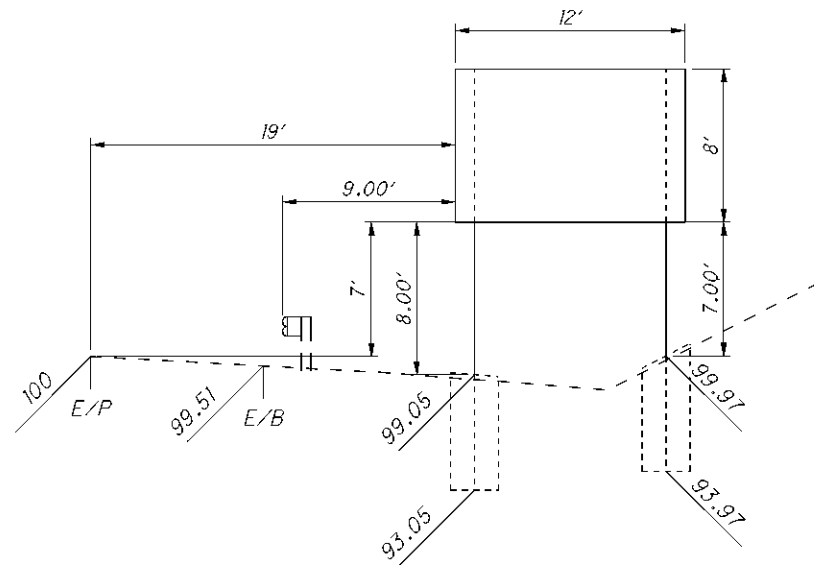
SIGN No. 2
SLM 2.35, SR 8 NB
GROUND MOUNTED SUPPORT PIPE
PIPE = 20'
TRIANGULAR SLIP BASE CONNECTION



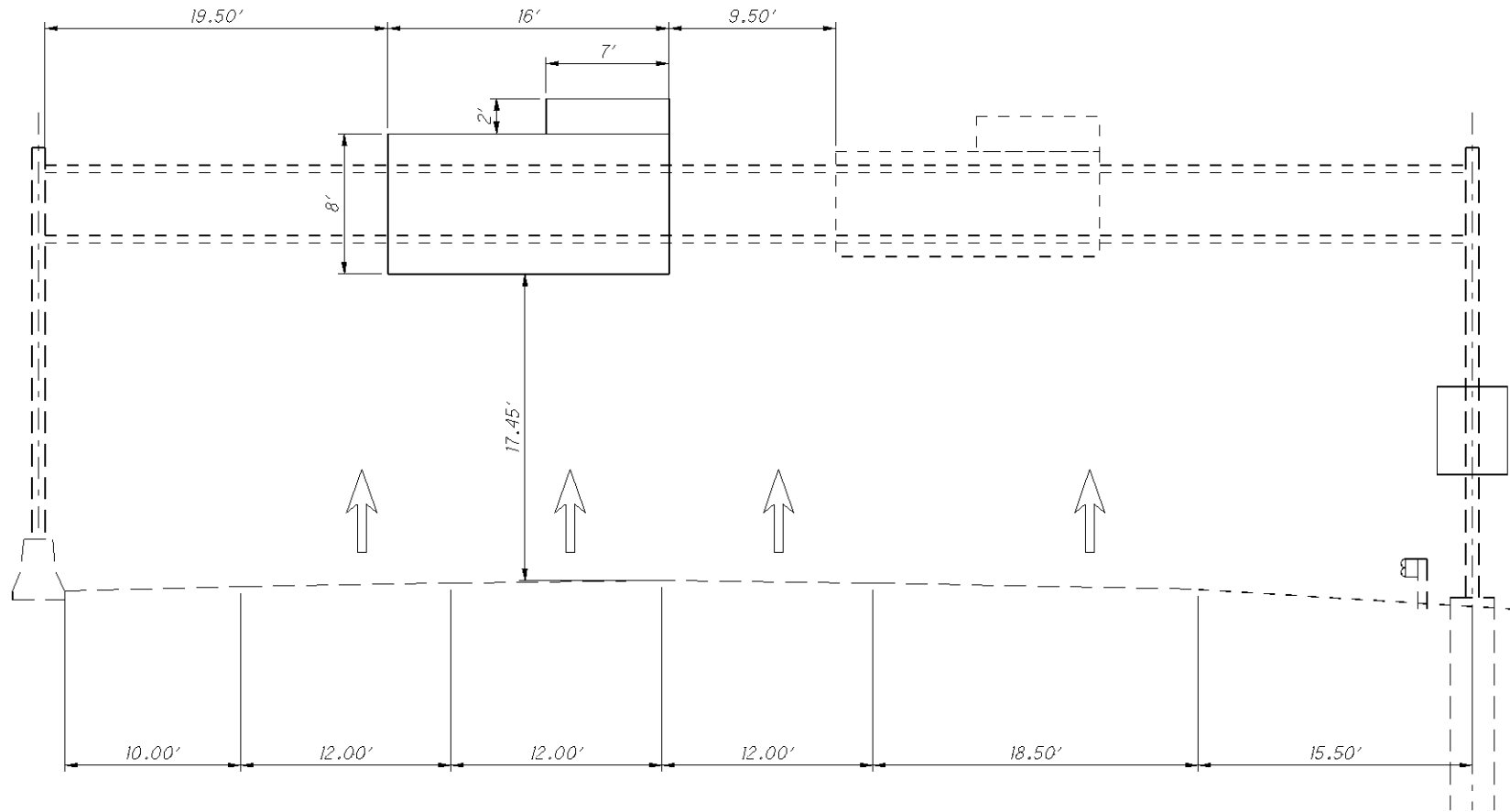
SIGN No. 3
SLM 2.61, SR 8 NB



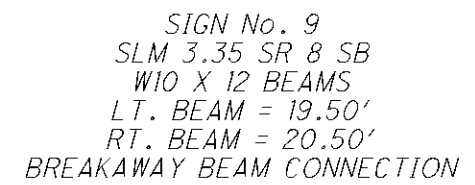
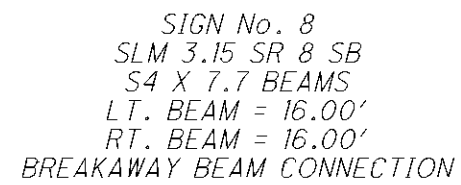
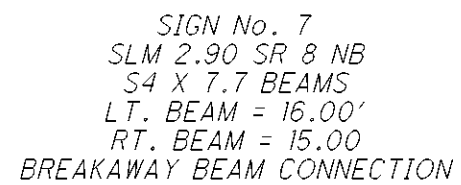
SIGN No. 4
SLM 2.63, SR 8 NB
S4 X 7.7 BEAMS
LT. BEAM = 16.50'
RT. BEAM = 16.00'
BREAKAWAY BEAM CONNECTION

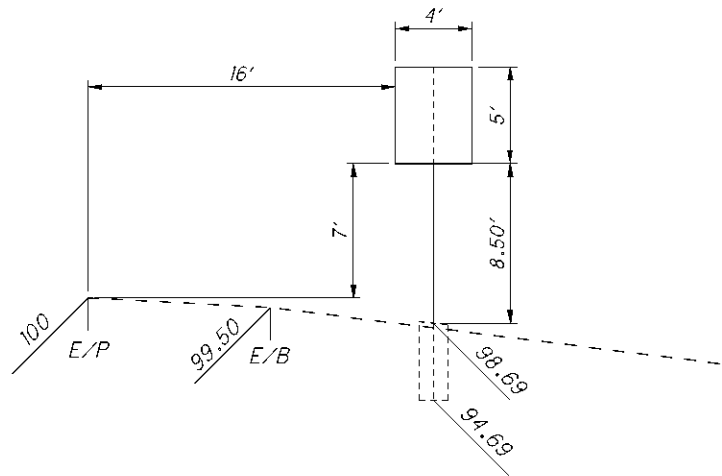


SIGN No. 5
SLM 2.73 SR 8 SB
W10 X 12 BEAMS
LT. BEAM = 22.00'
RT. BEAM = 21.00'
BREAKAWAY BEAM CONNECTION

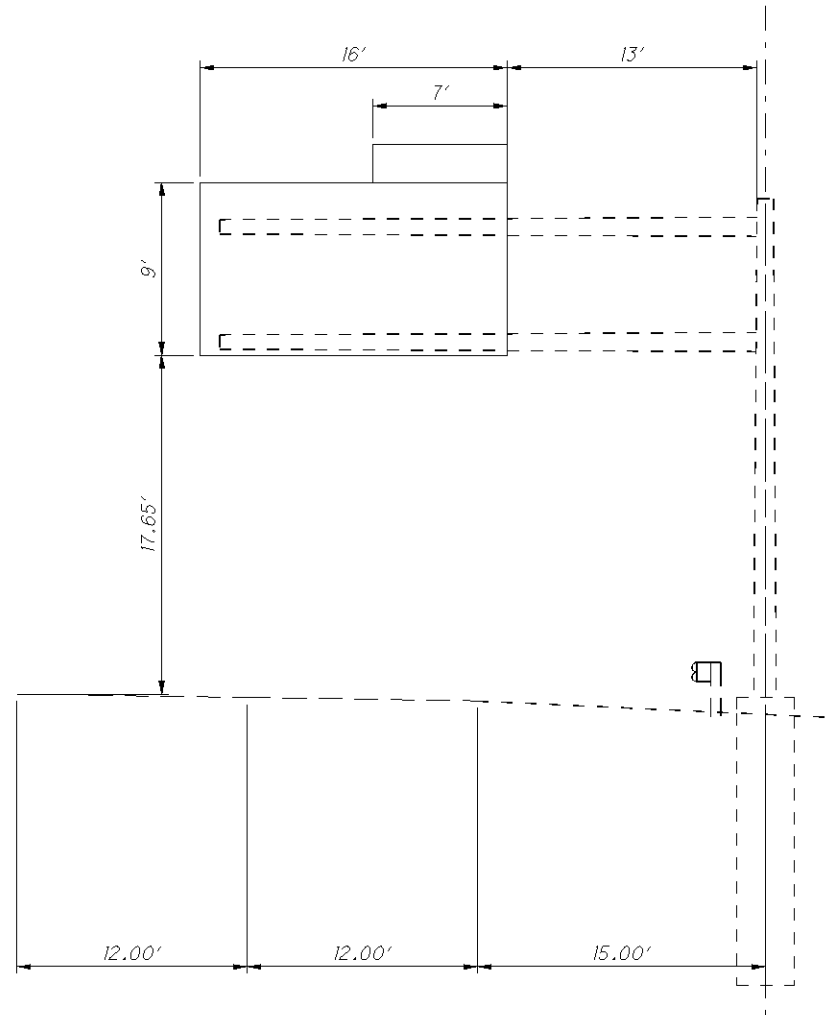


SIGN No. 6
SLM 2.88, SR 8 NB

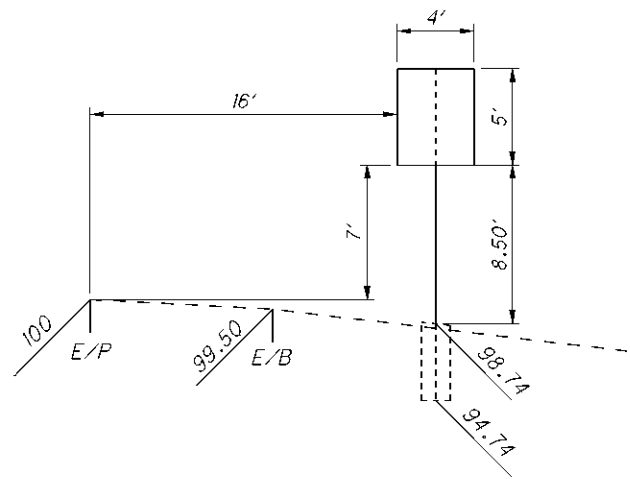




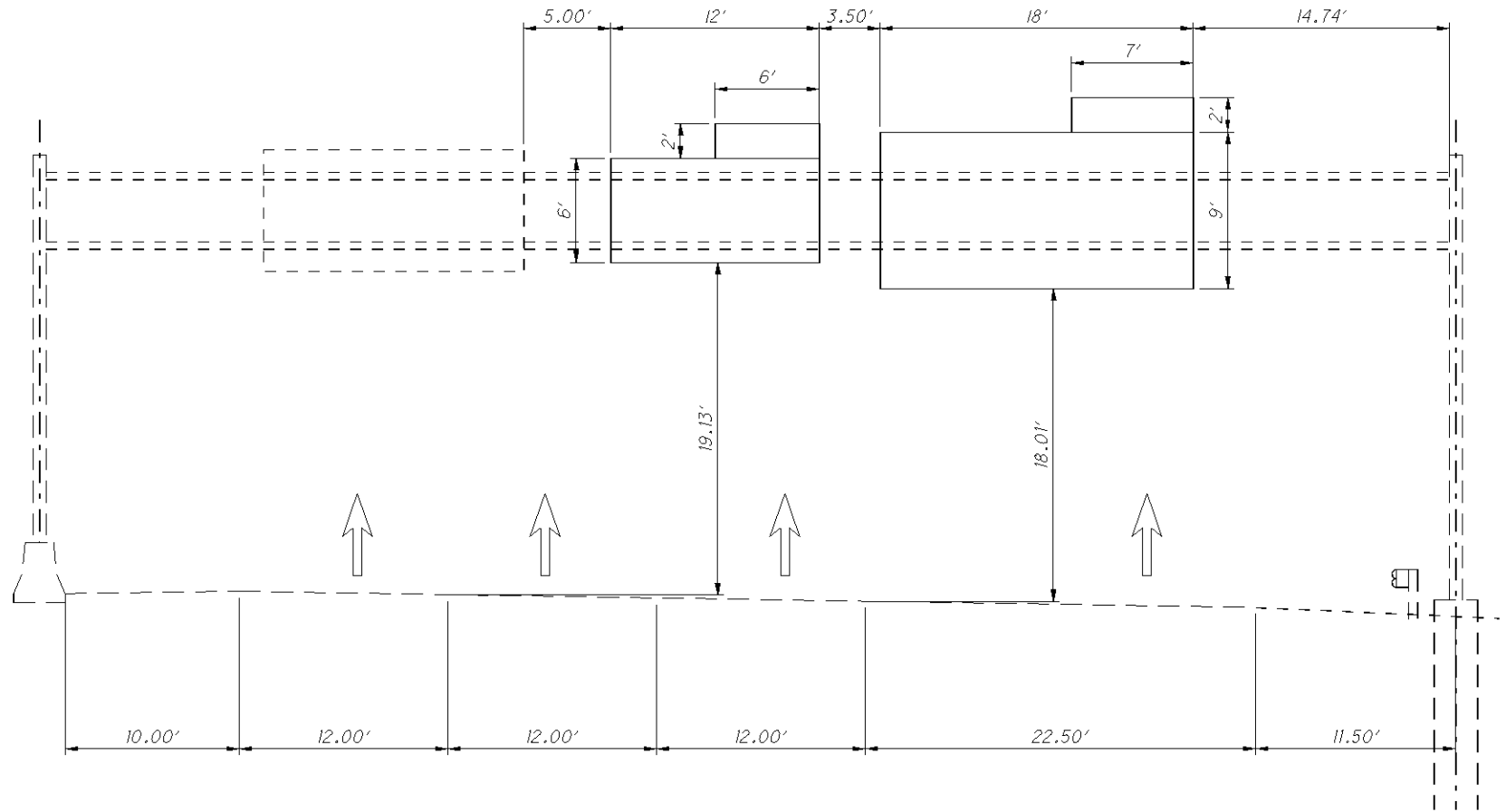
SIGN No. 10
SLM 3.39, SR 8 NB
GROUND MOUNTED SUPPORT PIPE
PIPE = 17.50'
TRIANGULAR SLIP BASE CONNECTION



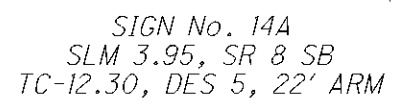
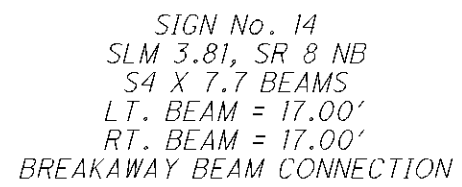
SIGN No. 11
SLM 3.47, SR 8 NB

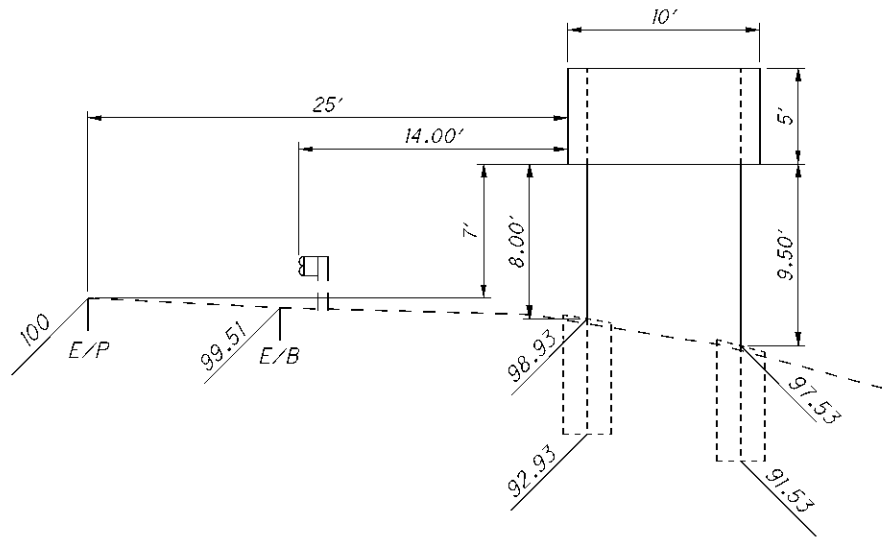


SIGN No. 12
SLM 3.52, SR 8 SB
GROUND MOUNTED SUPPORT PIPE
PIPE = 17.50'
TRIANGULAR SLIP BASE CONNECTION

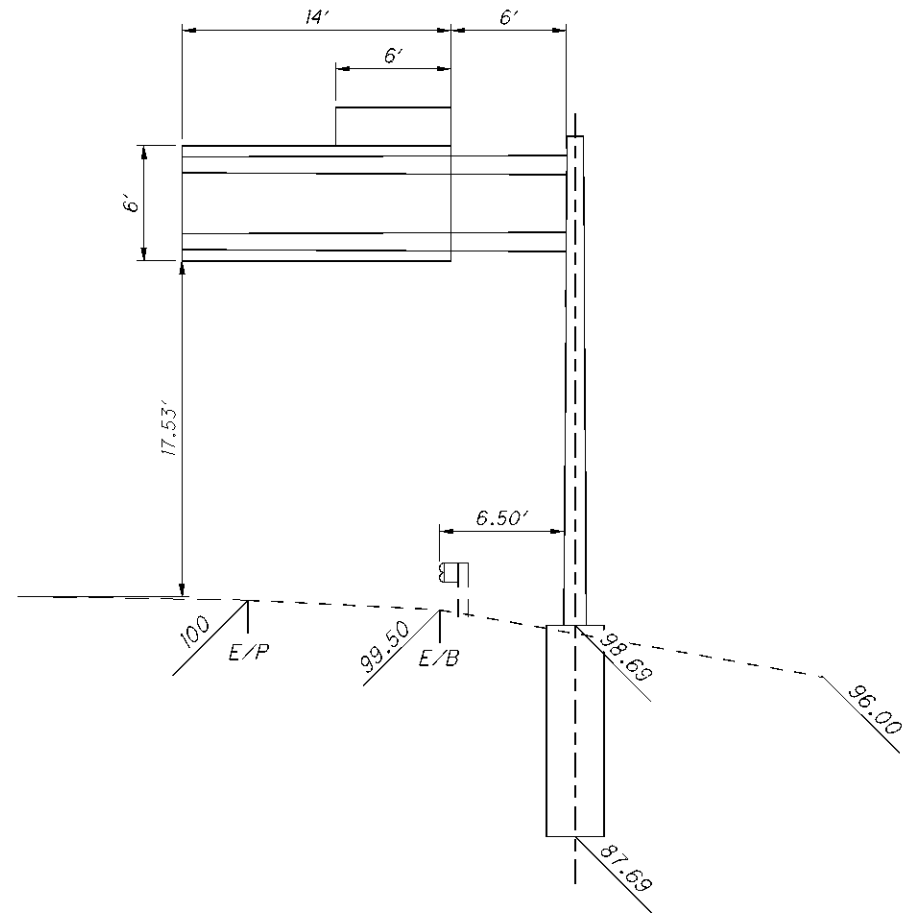


SIGN No. 13
SLM 3.75, SR 8 NB

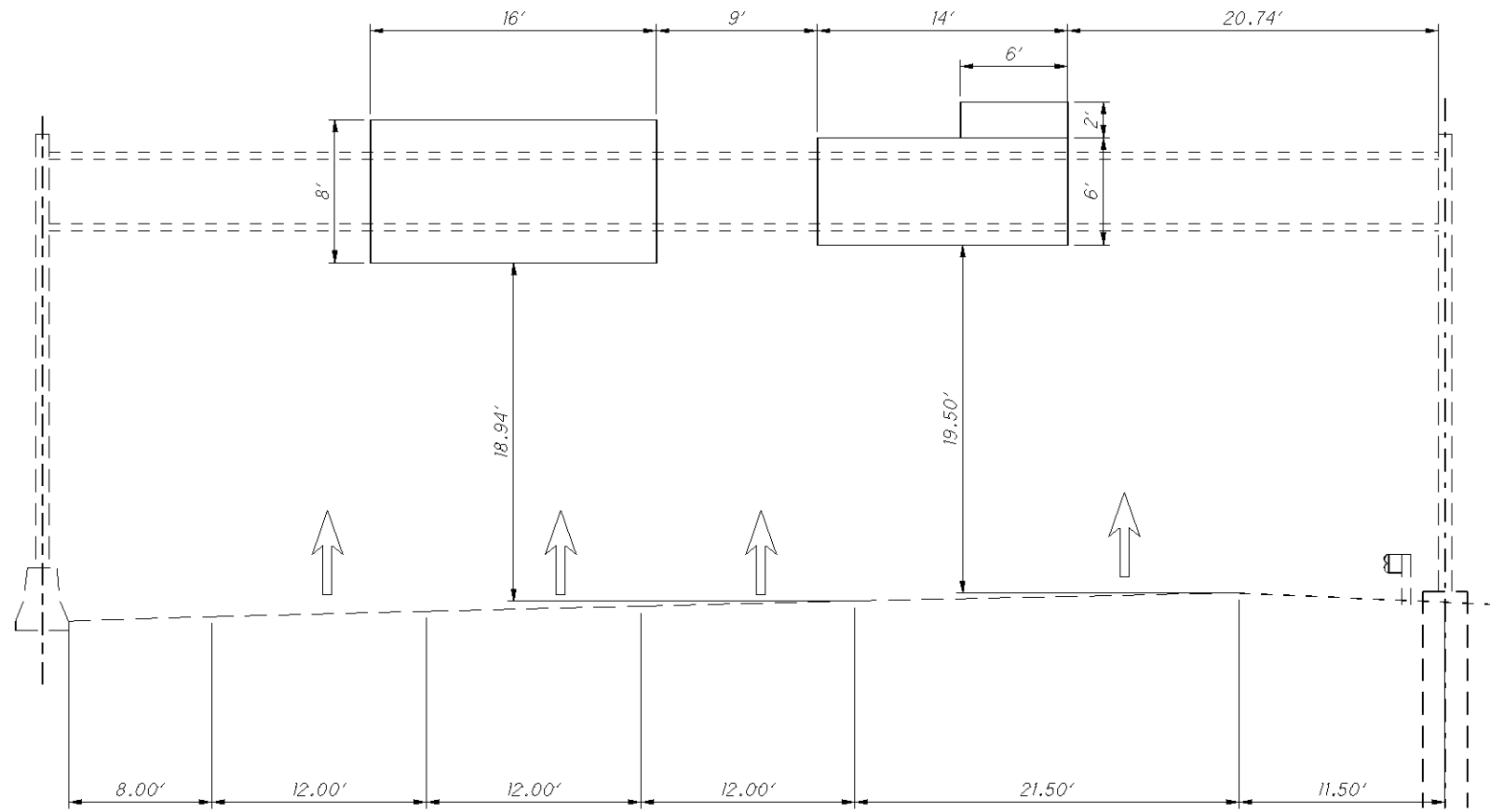




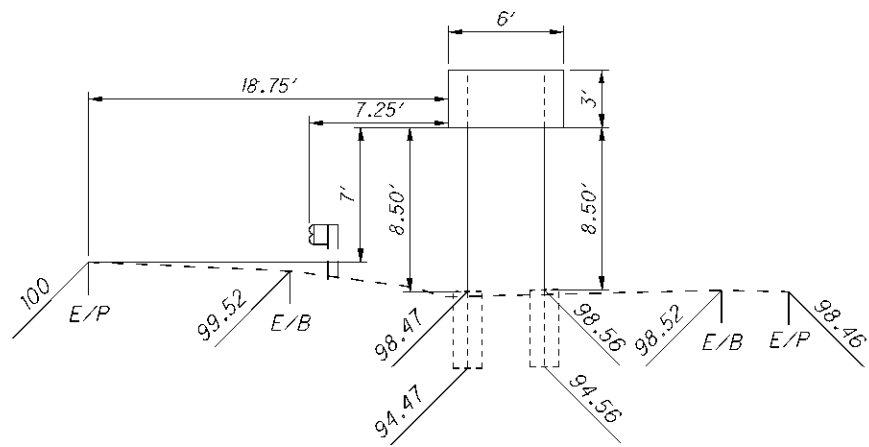
SIGN No. 15
SLM 3.93, SR 8 NB
W10 X 12 BEAMS
LT. BEAM = 19.00'
RT. BEAM = 20.50'
BREAKAWAY BEAM CONNECTION



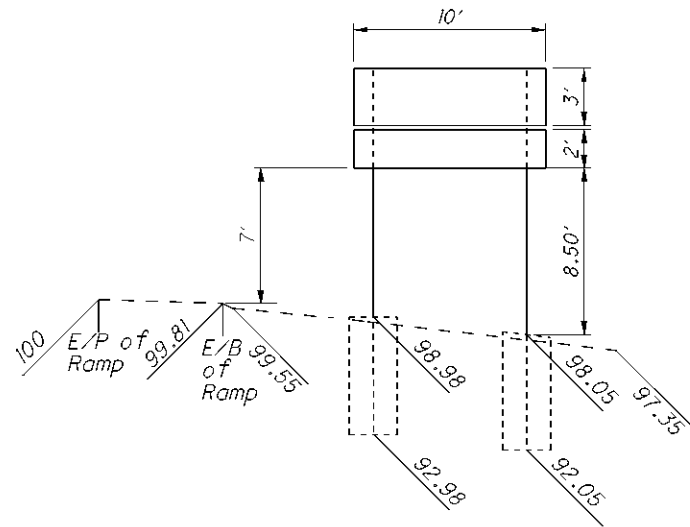
SIGN No. 16
SLM 4.03, SR 8 NB
TC-12.30, DES 5, 20' ARM



SIGN No. 17
SLM 4.25, SR 8 NB



SIGN No. 18
SLM 4.30 SR 8 SB
S4 X 7.7 BEAMS
LT. BEAM = 15.50'
RT. BEAM = 15.50'
BREAKAWAY BEAM CONNECTION



SIGN No. 19
SLM 3.40 RAMP F
W10 X 12 BEAMS
LT. BEAM = 18'
RT. BEAM = 19.5'
BREAKAWAY BEAM CONNECTION

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

- EXJ-2-81 DATED/REVISED 7-19-02
- EXJ-4-87 DATED/REVISED 7-19-02
- GSD-1-96 DATED/REVISED 7-19-02

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

- 843 DATED 4-18-03
- 848 DATED 4-16-10

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION, INCLUDING THE 2002 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

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

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

PROPOSED WORK

- SUM-8-0199
- NEW STRUCTURE IDENTIFICATION SIGNS
- SUM-8-0276
- REMOVE EXISTING CONCRETE WEARING SURFACE AND REPLACE WITH A CONCRETE OVERLAY INCLUDING THE APPROACH SLABS
 - PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE
 - REPLACE THE EXISTING EXPANSION JOINT SEALS
 - STRUCTURE CLEANING
 - REPAIR PAINT STRUCTURAL STEEL
 - REFURBISH 2 BEARINGS AT THE REAR ABUTMENT
 - SEAL ALL EXPOSED CONCRETE SURFACES OF THE ABUTMENTS, BACKWALLS, WINGWALLS, PIERS, AND PARAPETS
 - CLEARING AND GRUBBING 10' WITHIN THE STRUCTURE FOR SEALING OPERATIONS
 - NEW STRUCTURE IDENTIFICATION SIGNS

- SUM-8-0396
- PATCH EXISTING CONCRETE BRIDGE DECK
 - PLACE AN ASPHALT CONCRETE OVERLAY ON THE PATCHED CONCRETE BRIDGE DECK AND APPROACH SLABS
 - PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE
 - REMOVE ALL SPALLED AREAS OF THE BOTTOM DECK FLOOR AND SEAL WITH EPOXY-URETHANE
 - REPLACE ALL GLARE SCREENS ON THE MEDIAN PARAPET
 - REPLACE BROKEN CROSS FRAME AT THE FORWARD RIGHT
 - PAINT STRUCTURAL STEEL
 - REPAIR EROSION AT THE FORWARD RIGHT WINGWALL
 - SEAL ALL EXPOSED CONCRETE SURFACES OF THE ABUTMENTS, BACKWALLS, WINGWALLS, PIERS, AND PARAPETS
 - CLEARING AND GRUBBING 10' WITHIN THE STRUCTURE FOR SEALING OPERATIONS
 - NEW STRUCTURE IDENTIFICATION SIGNS

- SUM-261-1188
- REMOVE EXISTING CONCRETE WEARING SURFACE AND REPLACE WITH A CONCRETE OVERLAY INCLUDING THE APPROACH SLABS
 - PATCH ALL UNSOUND AREAS OF THE SUBSTRUCTURE
 - REPLACE THE EXISTING EXPANSION JOINT SEALS
 - STRUCTURE CLEANING
 - REPAIR PAINT STRUCTURAL STEEL
 - SEAL ALL EXPOSED CONCRETE SURFACES OF THE ABUTMENTS, BACKWALLS, WINGWALLS, PIERS, PARAPETS, AND SIDEWALKS
 - CLEARING AND GRUBBING 10' WITHIN THE STRUCTURE FOR SEALING OPERATIONS
 - NEW STRUCTURE IDENTIFICATION SIGNS

ITEM 201, CLEARING AND GRUBBING

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

ITEM 203, BORROW

THIS ITEM WILL BE USED TO REPAIR THE EROSION AT THE FORWARD RIGHT EMBANKMENT BEHIND THE WINGWALL OF STRUCTURE SUM-8-0396.

THIS WORK WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 203, BORROW. THIS PRICE WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 513 - STRUCTURAL STEEL, MISC.: REPLACEMENT OF DAMAGED CROSS FRAME

THIS WORK CONSISTS OF REPLACING THE DAMAGED CROSS FRAME AT THE FORWARD RIGHT ABUTMENT OF STRUCTURE SUM-8-0396. ADDITIONAL INFORMATION CAN BE FOUND ON STANDARD CONSTRUCTION DRAWING GSD-1-96.

THIS ITEM WILL INCLUDE SUPPLYING NEW STEEL AND WELDING IT BACK TO THE ORIGINAL POSITION OF THE EXISTING STEEL THAT IS BEING REPLACED. AFTER REMOVAL, ALL WELDS WILL BE GROUND SMOOTH IN PREPARATION OF WELDING THE STEEL IN PLACE. ALL STEEL TO BE REPLACED WILL BE FIELD MEASURED TO VERIFY SIZE AND LENGTHS PRIOR TO ORDERING MATERIAL. THE NEW CROSS FRAME ANGLE STEEL WILL BE WELDED TO THE BEAM ON BOTH SIDES OF THE VERTICAL LEG AND ON THE TOP SIDE OF THE HORIZONTAL LEG. ALL WELDS TO THE CROSS FRAME ANGLE WILL BE WELDED USING A 1/4" CONTINUOUS FILLET WELD. STEEL MEMBERS TO BE FABRICATED UNDER THIS ITEM WILL NOT REQUIRE SHOP DRAWINGS PRIOR TO FABRICATION. AISC CERTIFICATION IS NOT REQUIRED. THE CONTRACTOR WILL TAKE THE NECESSARY FIELD MEASUREMENTS TO VERIFY MEASUREMENTS BEFORE ORDERING MATERIALS. THE ENGINEER WILL HAVE THE AUTHORITY AND THE RESPONSIBILITY FOR ENSURING THAT THE NEW STEEL IS ACCEPTABLE. AFTER FABRICATION THE PAY WEIGHTS SHALL BE COMPUTED IN COMPLIANCE WITH ITEM 513 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM EXCEPT FOR PAINT WILL BE INCLUDED FOR PAYMENT UNDER ITEM 513 - STRUCTURAL STEEL MISC.: REPLACEMENT OF DAMAGED CROSS FRAME.

ITEM 512, TYPE 3 WATERPROOFING, AS PER PLAN

APPLY THE PRIMER COAT AT A RATE OF 0.10 TO 0.20 GALLONS (0.50 TO 0.70 LITERS) OF ASPHALT MATERIAL PER SQUARE YARDS (SQUARE METERS), OR AS PER THE MANUFACTURER'S WRITTEN SPECIFICATIONS.

SUM-8-(0.00)(2.13) PID No. 77880	1 / 6	STRUCTURE GENERAL NOTES BRIDGE NO.: SUM-8-0199, SUM-8-0276, SUM-8-0396, AND SUM-261-1188 NORTH ST, GORGE BLDV, & CUY. RIVER, GLENWOOD AVE, GORGE BLVD, AND SR8/SR89				DESIGNED LMP CHECKED	DRAWN LMP REVISED	REVIEWED TJP STRUCTURE FILE NUMBER	DATE 12-09-10	DESIGN AGENCY ODOT --- DISTRICT 4 PRODUCTION

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ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN
ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN
ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
ITEM 848 - FULL DEPTH REPAIR, AS PER PLAN

THESE ITEMS SHALL BE PERFORMED PER SUPPLEMENTAL SPECIFICATION "BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRO DEMOLITION" WITH THE FOLLOWING REVISIONS:

THE THICKNESS OF THE CONCRETE OVERLAY REMOVED, ASPHALT WEARING COURSE REMOVED, PROPOSED OVERLAY, AND THE DEPTH OF HYDRODEMOLITION SHALL BE AS SPECIFIED IN THE PLANS.

CONSTRUCTION JOINTS WILL NOT BE PERMITTED IN THE WHEEL LINE.

(SEE 848.12) THE COMPONENTS OF THE MICRO-SILICA MODIFIED CONCRETE SHALL BE PROPORTIONED AS FOLLOWS.

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

AGG TYPE	FINE AGG (LB)	#8 COARSE AGG (LB)	#8 AGG TOTAL (LB)	CEMENT CONTENT (LB)	MICRO SILICA (LB)	WATER TO CEMENT-ITIOUS RATIO	AIR CONTENT +/- 2%	FIBER (1 1/2" POLYPROPYLENE) (LB)
GRAVEL	1410	1430	2840	600	50	0.4	0	1
LIME STONE	1410	1450	2860	600	50	0.4	0	1
SLAG	1300	1350	2650	600	50	0.4	0	1

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127

** FIBER MESH SHALL BE 100% VIRGIN POLYPROPYLENE IN A FIBRILLATED-NETWORK FORM AND SHALL BE 1 1/2" IN LENGTH

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, MICRO-SILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED. FIBER MESH WEIGHTS NOT INCLUDED IN MIX DESIGN.

ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED BY ASTM C127

ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

(SEE 848.21) THE FINAL DECK SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF A RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

(SEE 848.23) FULL DEPTH REPAIR IS NOT REQUIRED IF LESS THAN ONE HALF OF THE DECK ORIGINAL CONCRETE THICKNESS IS SOUND.

(SEE 848.29) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER. AFTER THE 24 HOUR WET CURE, THE FINISHED OVERLAY SURFACE SHALL BE CURED BY SPRAYING A UNIFORM APPLICATION OF CURING MATERIAL OF 705.07, TYPE 1 OR 1D, AS PER CMS 511.17 METHOD (B) MEMBRANE CURING. IF THE CURING COMPOUND CAN NOT BE PLACED WITHIN THE SAME SHORT TERM CLOSURE PERIOD AS THE OVERLAY, THE CONTRACTOR MAY ALLOW TRAFFIC ONTO THE OVERLAY, AND SHALL, AT THE NEXT AVAILABLE SHORT TERM CLOSURE PERIOD, APPLY THE MEMBRANE CURING COMPOUND.

(SEE 848.29) TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE UNTIL AFTER THE COMPLETION OF THE 24 HOUR WET CURE, AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 600 PST (4.2 Mpa).

(SEE 848.30) THE OVERLAY SURFACE EVAPORATION RATE REQUIREMENTS ARE IN EFFECT FROM 9:30 AM TO 11:00 PM. THEY ARE NOT IN EFFECT FROM 11:00 PM TO 11:00 AM.

(SEE 848.31) FOR EACH PHASE, THE CONTRACTOR SHALL PROVIDE ENOUGH MATERIAL FOR TWO BEAM BREAKS EACH AT 12 HOURS, 24 HOURS, 36 HOURS, AND 48 HOURS. THE DEPARTMENT WILL PERFORM THE BEAM BREAK TESTS AND DOCUMENT THE TIME OF THE POUR, THE TIME OF THE BEAM BREAK TESTS, AND THE MODULUS OF RUPTURE FOR EACH BEAM UNTIL THE MODULUS OF RUPTURE OF THE TWO TESTS IS NOT LESS THAN 650 PSI (4.5 Mpa). TRAFFIC IS ALLOWED ON THE OVERLAY AT 600 PSI (4.5 Mpa).

ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

SUM-8-(0.00)(2.13)
PID No. 77880

3/6

46
46

STRUCTURE GENERAL NOTES
BRIDGE NO.: SUM-8-0199, SUM-8-0276, SUM-8-0396, AND SUM-261-1188
NORTH ST, GORGE BLDV, & CUY. RIVER, GLENWOOD AVE, GORGE BLVD, AND SR8/SR59

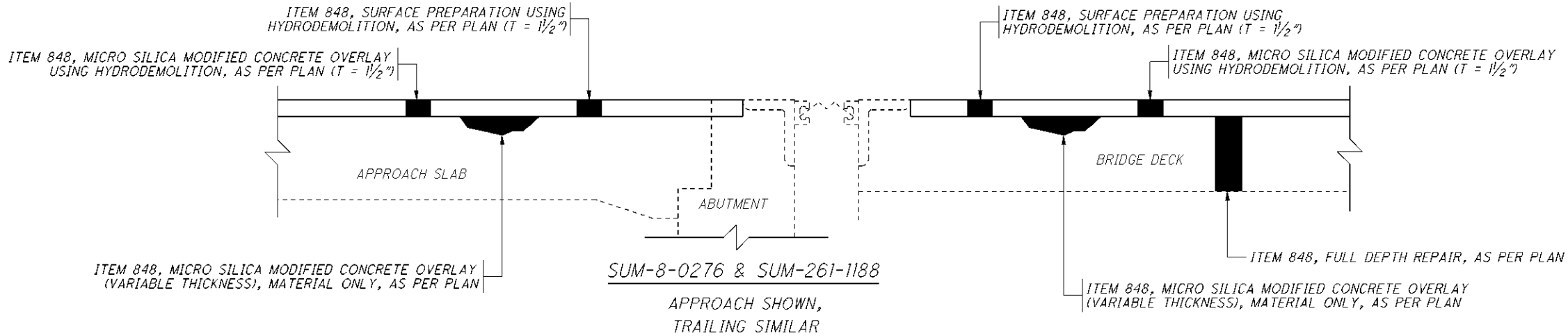
DESIGNED	LMP	CHECKED
DRAWN	LMP	REVISED
REVIEWED	TJP	STRUCTURE FILE NUMBER

DATE	12-09-10
STRUCTURE FILE NUMBER	

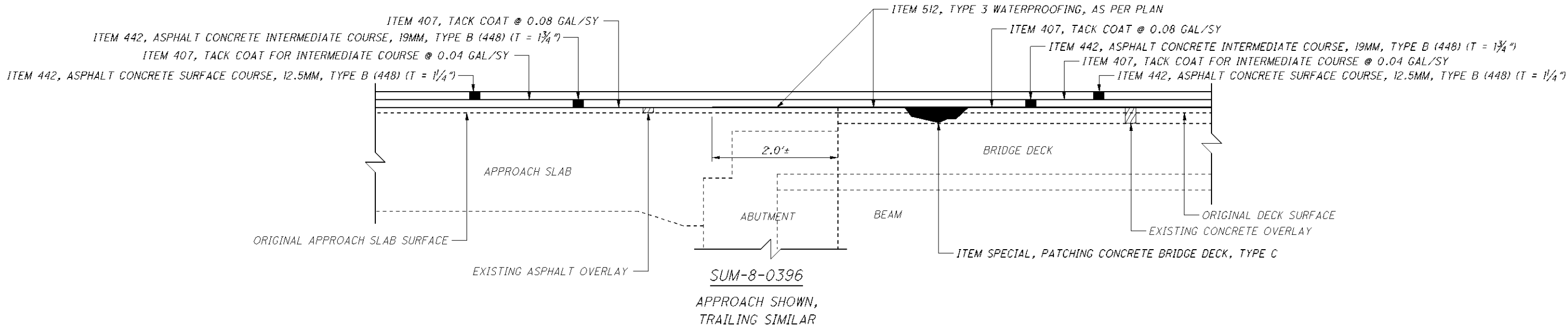
DESIGN AGENCY
ODOT --- DISTRICT 4
PRODUCTION

CALC:	LMP	DATE:	12/8/2010
CHECKED:	TJP	DATE:	12/9/2010

ESTIMATED QUANTITIES												
BRIDGE NO. / STRUCTURE FILE NO.								ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET
SUM-8-0199 SFN 7700369		SUM-8-0276 SFN 7700393		SUM-8-0396 SFN 7700555		SUM-261-1188 SFN 7700423						
		LUMP		LUMP		LUMP		201	11001		CLEARING AND GRUBBING, AS PER PLAN	1/6
				5				203	40000	CU YD	BORROW	
				163				407	10000	GALLON	TACK COAT	
				83				407	14000	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
				87				442	20050	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (448)	
				101				442	20250	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448)	
		1486		1106		1634		512	10100	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
				1532				512	33011	SQ YD	TYPE 3 WATERPROOFING, AS PER PLAN	1/6
		1486		110		1179		512	74000	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
				55				513	90000	POUND	STRUCTURAL STEEL, MISC.: REPLACEMENT OF DAMAGED CROSS FRAME	1/6
				LUMP				514	00100		SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	
				LUMP				514	00200		FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	
				LUMP				514	00300		FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	
				LUMP				514	00400		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	
				29				514	00504	MAN HOUR	GRINDING FINIS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL	
				12				514	10000	EACH	FINAL INSPECTION REPAIR	
		150				150		514	27700	SQ FT	FIELD PAINTING, MISC.: REPAIR PAINTING	2/6
		92						516	01301	FT	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN	2/6
						132		516	10901	FT	ELASTOMERIC COMPRESSION SEAL, AS PER PLAN	2/6
		2						516	45305	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	2/6
		LUMP						516	47001		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	2/6
		300		150		300		519	11101	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2/6
				45				SPEC	51912304	SQ YD	PATCHING CONCRETE BRIDGE DECK - TYPE C	
				LUMP				SPEC	53000200		STRUCTURE, MISC.: CONCRETE SPALL REMOVAL	2/6
		LUMP				LUMP		SPEC	53000200		STRUCTURE, MISC.: STRUCTURE CLEANING	2/6
				126				622	80000	FT	GLARE SCREEN	
				126				622	90000	FT	BARRIER, MISC.:GLARE SCREEN REMOVAL	2/6
15		30		15		30		630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
2		4		2		4		630	80100	SQ FT	SIGN, FLAT SHEET	
2				1		2		630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
		1		1				630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
		150		100		150		843	50000	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
		823				1170		848	10001	SQ YD	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN(T = 1 1/2")	3/6
		823				1170		848	20001	SQ YD	SURFACE PREPARATION USING HYDRO DEMOLITION, AS PER PLAN	3/6
		28				39		848	30001	CU YD	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	3/6
		25				35		848	50000	SQ YD	HAND CHIPPING	
		LUMP				LUMP		848	50100		TEST SLAB	
		1				1		848	50201	CU YD	FULL DEPTH REPAIR, AS PER PLAN	3/6



BRIDGE NUMBER	BRIDGE DECK										APPROACH SLABS									
	LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECK AREA	848	848	848	848	848	848		LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)	848	848	848	848		
				MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T = 1 1/2")	SURFACE PREPARATION USING HYDRO DEMOLITION, AS PER PLAN	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	HAND CHIPPING	TEST SLAB	FULL DEPTH REPAIR, AS PER PLAN						MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T = 1 1/2")	SURFACE PREPARATION USING HYDRO DEMOLITION, AS PER PLAN	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	HAND CHIPPING		
	FT	FT	SQ YD	SQ YD	SQ YD	CU YD	SQ YD	LUMP	CU YD		FT	FT	SQ YD		SQ YD	SQ YD	CU YD	SQ YD		
SUM-8-0276	120.90	46.00	617.93	617.93	617.93	20.60	18.54	LUMP	1.00		20.00	46.00	102.22	REAR	102.22	102.22	3.41	3.07		
											20.00	46.00	102.22	FWD	102.22	102.22	3.41	3.07		
SUM-261-1188	119.54	66.00	876.63	876.63	876.63	29.22	26.30	LUMP	1.00		20.00	66.00	146.67	REAR	146.67	146.67	4.89	4.40		
											20.00	66.00	146.67	FWD	146.67	146.67	4.89	4.40		



BRIDGE NUMBER	BRIDGE DECK											APPROACH SLABS													
	LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECK AREA	407	407	442	442	512	SPEC				LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)		407	407	442	442	512			
				TACK COAT @ 0.08 GAL/SY	TACK COAT FOR INTERMEDIATE COURSE	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (448) (T = 1 1/2")	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = 1 3/4")	TYPE 3 WATERPROOFING, AS PER PLAN	PATCHING CONCRETE BRIDGE DECK - TYPE C		TACK COAT @ 0.08 GAL/SY	TACK COAT FOR INTERMEDIATE COURSE					ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (448) (T = 1 1/2")	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (448) (T = 1 3/4")	TYPE 3 WATERPROOFING, AS PER PLAN						
				GALLON	GALLON	CU YD	CU YD	SQ YD	SQ YD		GALLON	GALLON					CU YD	CU YD	SQ YD						
				FT	FT	SQ YD	GALLON	GALLON	CU YD	CU YD	SQ YD	SQ YD						FT	FT	SQ YD		GALLON	GALLON	CU YD	CU YD
SUM-8-0396	126.06	106.00	1484.71	118.78	59.39	61.86	72.17	1484.71	44.54				25.00	106.00	294.44	REAR	21.67	11.78	12.27	14.31	23.56				
													25.00	106.00	294.44	FWD	21.67	11.78	12.27	14.31	23.56				

DESIGN AGENCY		ODOT --- DISTRICT 4	
PRODUCTION			
REVIEWED	DATE	12-09-10	STRUCTURE FILE NUMBER
TJP			
DRAWN	LMP	REVISD	
DESIGNED	LMP	CHECKED	
SUPERSTRUCTURE DETAILS			
BRIDGE NO.: SUM-8-0199, SUM-8-0276, SUM-8-0396, AND SUM-261-1188			
NORTH ST., GORGE BLDV, & CUY. RIVER, GLENWOOD AVE, GORGE BLDV, AND SR8/SR59			
SUM-8-(0.00)(2.13)		PID No. 77880	
48	49		

