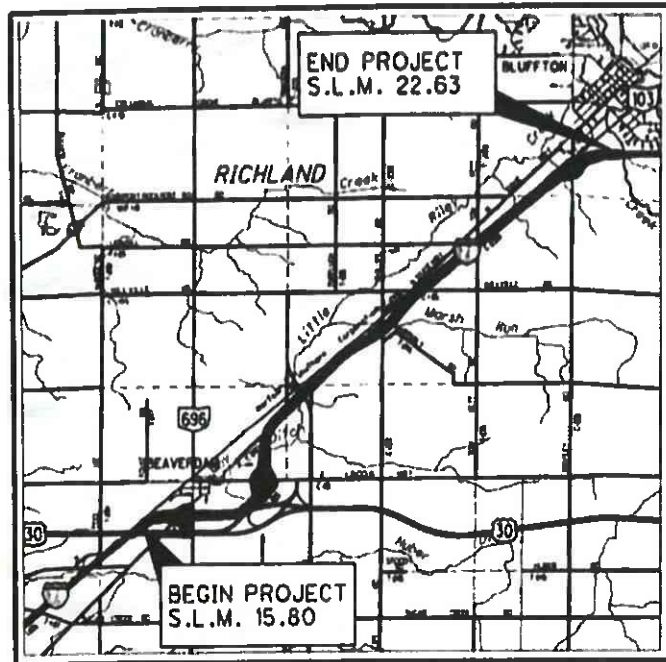


ALL - IR IR 75 15.80 (PART 1 & 2)
200001 PID - 94214
Dist 1 1/23/2020

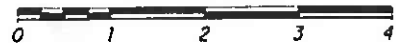
Contract Proposal Available @
www.contracts.dot.state.oh.us/home



LOCATION MAP

LATITUDE: 40°51'18" LONGITUDE: 83°56'27"

SCALE IN MILES



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

DESIGN DESIGNATION

CURRENT ADT (2020L) 35,500
DESIGN YEAR ADT (2040L) 40,000
DESIGN HOURLY VOLUME (2040) 3,600
DIRECTIONAL DISTRIBUTION 54%
TRUCKS (24 HOUR B&C) 28%
Td 17%
DESIGN SPEED 70 MPH
LEGAL SPEED 70 MPH
DESIGN FUNCTIONAL CLASSIFICATION:
01 INTERSTATE (RURAL)
NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig
OHIO811.org
Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:

DISTRICT NO. 1
OHIO DEPARTMENT OF TRANSPORTATION

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
ALL-75-15.80, PART 1
VILLAGE OF BEAVERDAM
VILLAGE OF BLUFFTON
RICHLAND TOWNSHIP
ALLEN COUNTY

FOR PART 2, SEE ALL/HAN-75-22.66/0.00

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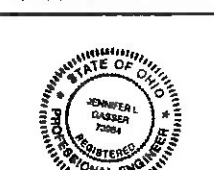
ENGINEERS SEAL:

FOR MAINTENANCE
OF TRAFFIC ONLY



SIGNED: *Matthew J. Cornett*
DATE: 9/19/19

ENGINEERS SEAL:



SIGNED: *Jennifer L. Dabner*
DATE: 9-20-19

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-2.1	7/17/15	F-2.1	7/20/18	HL-30.21	1/17/14	MT-98.30	7/21/17	TC-41.50	10/18/13	900-2019	10/18/19	WATERWAY	
BP-2.5	7/19/13	F-3.4	7/19/13	HL-30.22	1/17/14	MT-99.20	4/19/19	TC-42.10	10/18/13	808	1/18/19	PERMITS	
BP-3.1	7/18/14			HL-60.21	7/20/18	MT-100.00	1/15/16	TC-42.20	10/18/13	809	1/18/19	CONDITIONS	
BP-9.1	1/18/19	MGS-1.1	1/19/18	HL-60.31	1/18/19	MT-101.60	1/20/17	TC-51.11	1/15/16	821	4/20/12	9/16/19	
		MGS-2.1	1/19/18			MT-101.70	7/20/18	TC-51.12	1/15/16	825	1/18/19		
CB-3.3	1/15/16	MGS-4.2	7/19/13	MT-95.30	4/19/19	MT-101.75	7/15/16	TC-52.10	10/18/13	832	10/19/18		
CB-3.4	1/15/16	MGS-6.2	1/19/18	MT-95.40	1/20/17	MT-101.80	1/16/15	TC-52.20	7/20/18	836	1/19/18		
		RM-1.1	7/18/14	MT-95.45	4/19/19	MT-101.90	7/21/17	TC-61.10	1/17/14	848	1/20/17		
HW-1.1	7/20/18	RM-4.1	7/21/17	MT-95.50	7/21/17	MT-102.10	1/18/19	TC-61.30	1/20/17	896	7/21/17		
HW-2.1	7/20/18	RM-4.2	4/18/14	MT-95.70	7/20/18	MT-102.20	4/19/19	TC-64.10	1/20/17	902	12/31/12		
HW-2.2	7/20/18			MT-95.72	7/20/18	MT-102.30	10/16/15	TC-65.10	1/17/14	908	10/20/17		
		AS-1-15	7/17/15	MT-95.82	7/19/13	MT-104.10	10/16/15	TC-65.11	7/21/17	916	1/19/18		
MH-1.1	1/15/16	EXJ-4-87	1/19/18	MT-98.10	1/20/17	MT-105.10	7/19/13	TC-71.10	1/19/18	921	4/20/12		
MH-1.2	1/15/16	GSD-1-19	1/18/19	MT-98.11	4/19/19			TC-72.20	7/20/18	996	7/15/16		
DM-1.1	7/21/17			MT-98.20	4/19/19	TC-21.10	7/21/17	TC-73.20	7/21/17				
DM-1.2	1/18/13	HL-10.31	1/19/18	MT-98.21	7/18/14	TC-21.20	7/20/18	TC-81.21	1/18/19				
DM-4.1	1/18/18	HL-20.11	4/21/17	MT-98.22	1/20/17	TC-41.10	7/19/13	TC-83.10	1/19/18				
DM-4.3	1/15/16	HL-20.21	1/19/18	MT-98.28	1/20/17	TC-41.20	10/18/13	TC-83.20	7/21/17				
		HL-30.11	1/18/19	MT-98.29	1/20/17	TC-41.30	10/18/13	TC-85.20	7/20/18				

PROJECT DESCRIPTION

PLANING AND RESURFACING OF 0.74 MILES FROM S.L.M. 15.80 TO S.L.M. 16.54 AND 5.07 MILES FROM S.L.M. 17.59 TO S.L.M. 22.66 OF I.R. 75, INCLUDING JOINT REPAIR, TOTAL RECONSTRUCTION OF 1.05 MILES OF I.R. 75 FROM S.L.M. 16.54 TO S.L.M. 17.59, INCLUDING PARTIAL REPLACEMENT OF RAMPS AT S.R. 696

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 42.5 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 10.0 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 60.0 ACRES

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.

2019 SPECIFICATIONS

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

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

CONFORMED SET

APPROVED: *Charles A. Brown*
DATE: 9/13/19 DISTRICT DEPUTY DIRECTOR

APPROVED: *Paul M. Dabner*
DATE: 9/23/19 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.
E150 (424)

PID NO.
94214

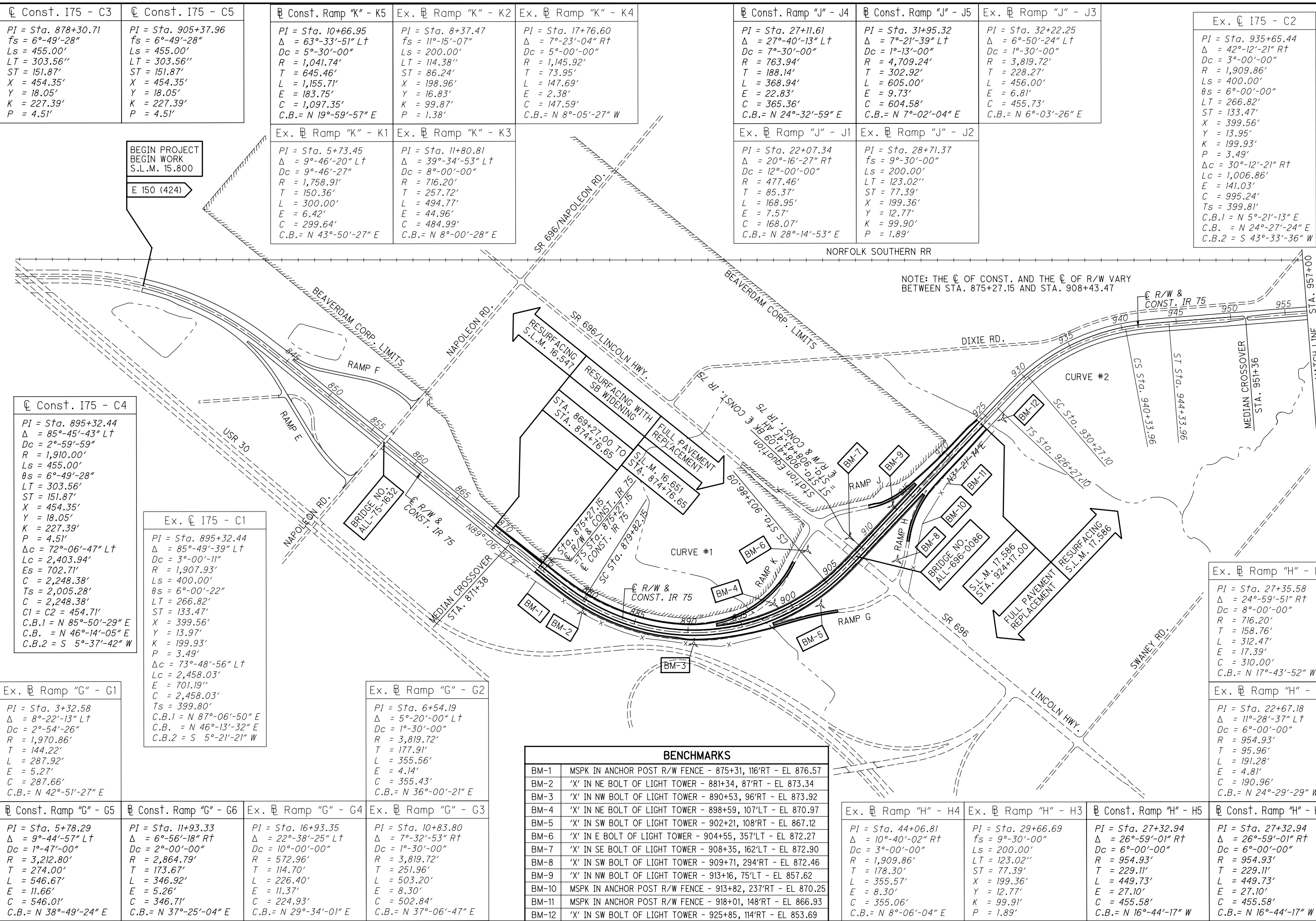
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

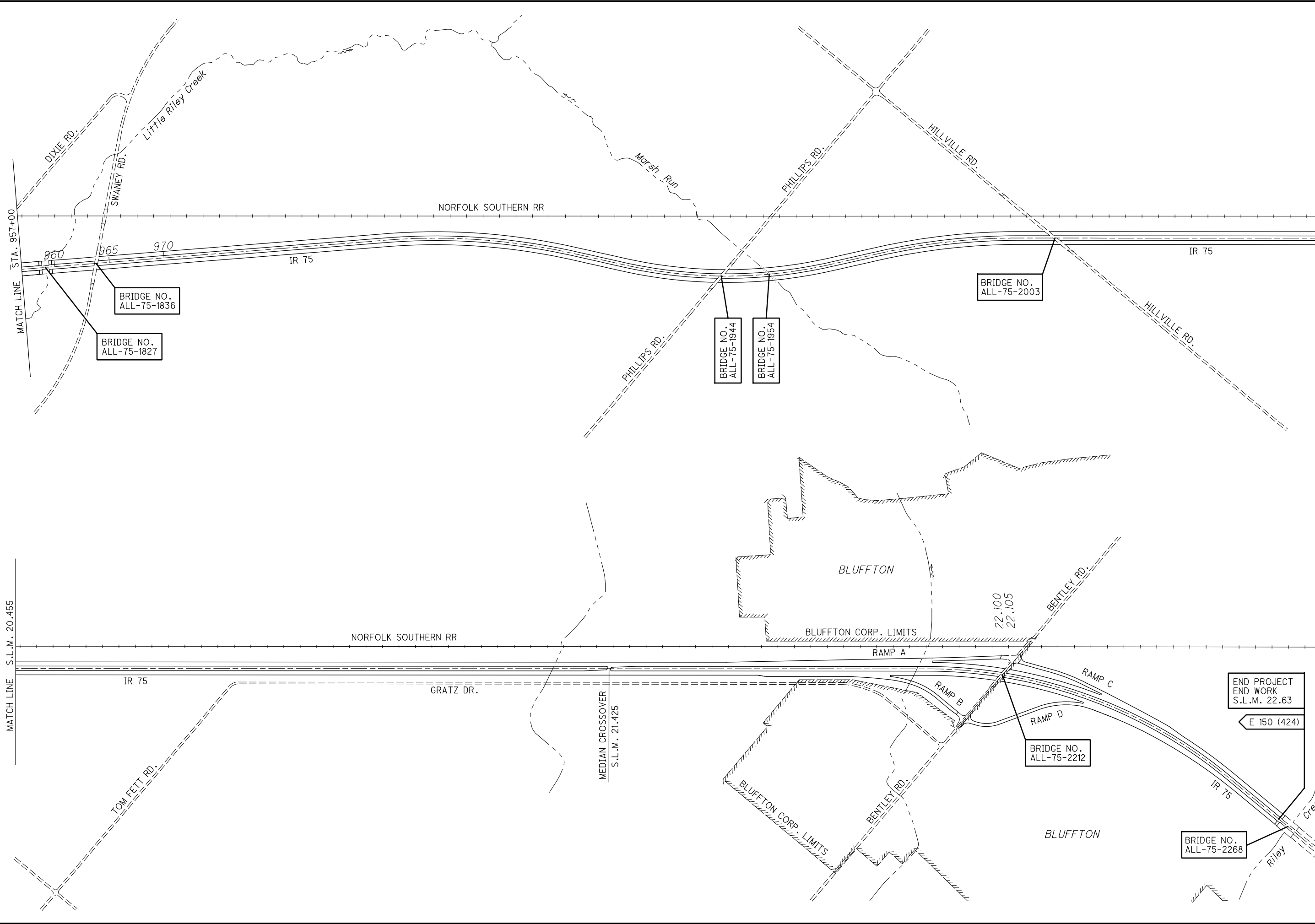
ALL-75-15.80

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188

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CALCULATED
NUV
CHECKED
MJM

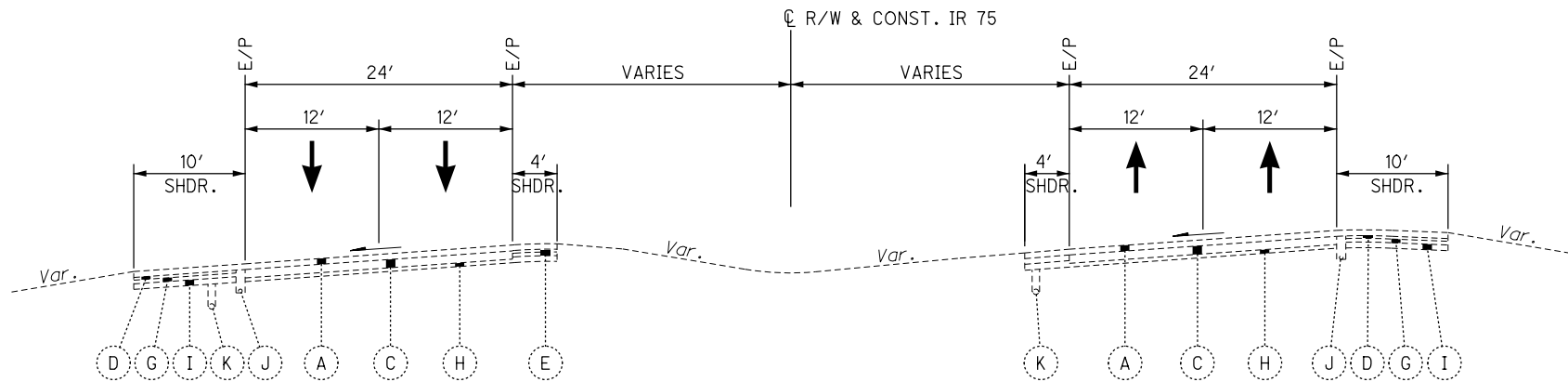
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HORIZONTAL
SCALE IN FEET

3
188

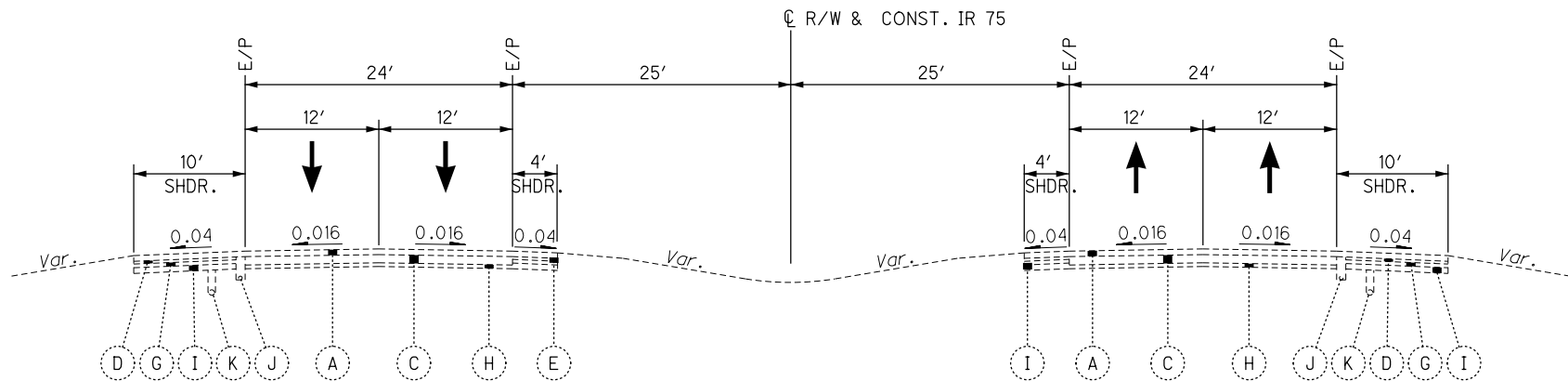
ALL-75-15.80

SCHEMATIC PLAN

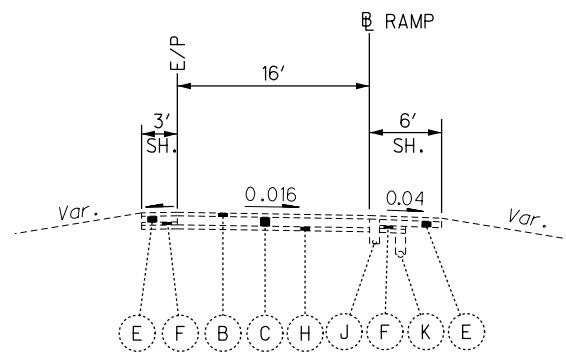
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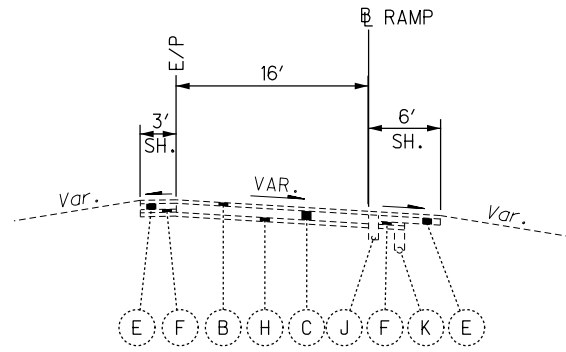
SUPERELEVATED SECTION
STA. 875+00 TO STA. 897+52 = 2252 FT



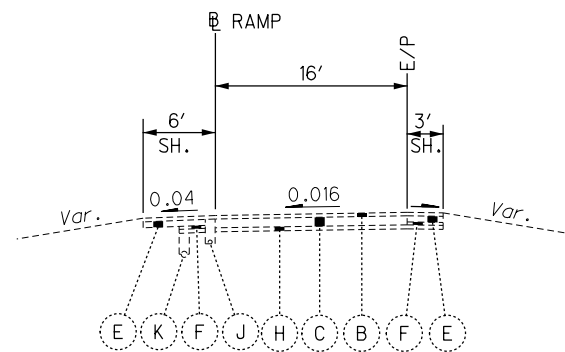
NORMAL SECTION
STA. 874+76.65 TO STA. 875+00 = 23.35 FT
STA. 920+00 TO STA. 924+17 = 417 FT



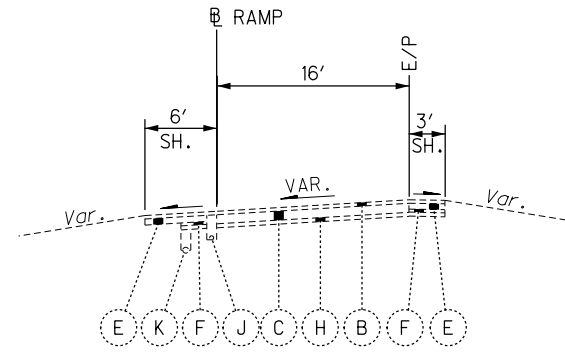
NORMAL RAMP SECTION
RAMP G - STA. 13+75.00 TO STA. 14+28.57 = 53.57 FT
RAMP H - STA. 24+71.33 TO STA. 25+00.00 = 28.67 FT



SUPERELEVATED RAMP SECTION
RAMP G - STA. 9+00.00 TO STA. 13+75.00 = 475.00 FT
RAMP H - STA. 25+00.00 TO STA. 29+63.00 = 463.00 FT



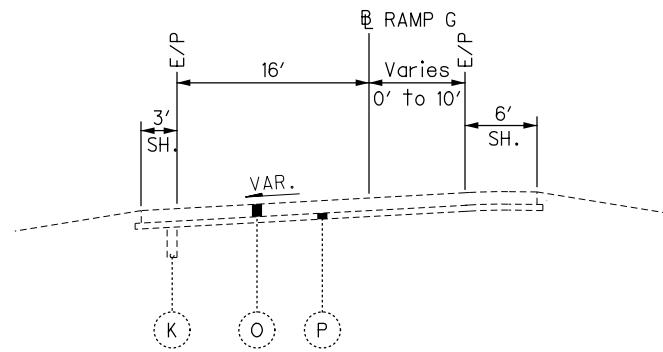
NORMAL RAMP SECTION
RAMP K - STA. 15+00.00 TO STA. 16+01.03 = 101.03 FT



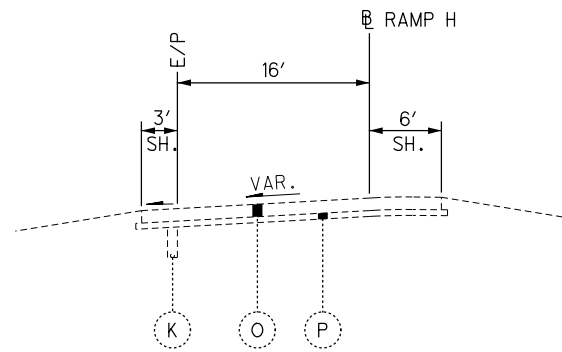
SUPERELEVATED RAMP SECTION
RAMP J - STA. 26+30.09 TO STA. 29+90.00 = 359.91 FT
RAMP K - STA. 7+08.00 TO STA. 15+00.00 = 792.00 FT

EXISTING LEGEND

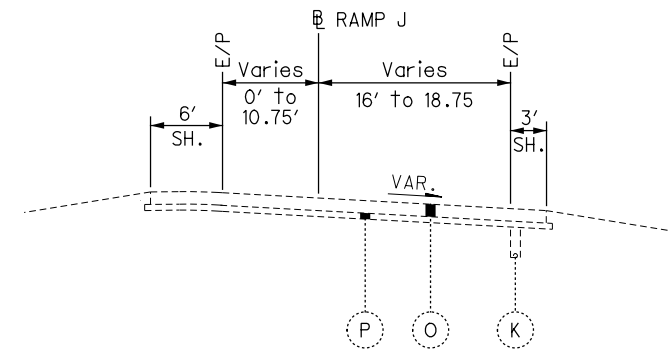
- A 6 1/4"± ASPHALT CONCRETE
- B 3 1/4"± ASPHALT CONCRETE
- C 9"± REINFORCED CONCRETE PAVEMENT
- D 3"± WATERPROOFED AGGREGATE BASE
- E 6"± WATERPROOFED AGGREGATE BASE
- F 3"± AGGREGATE BASE
- G 4"± AGGREGATE BASE
- H 4"± SUBBASE
- I 6"± SUBBASE
- J SHALLOW PIPE UNDERDRAIN
- K 6" SHALLOW PIPE UNDERDRAIN
- L MEDIUM BARRIER
- M 9" CONCRETE BASE
- N CABLE RAIL
- O 12.5"± NON-REINFORCED CONCRETE PAVEMENT
- P 6"± AGGREGATE BASE



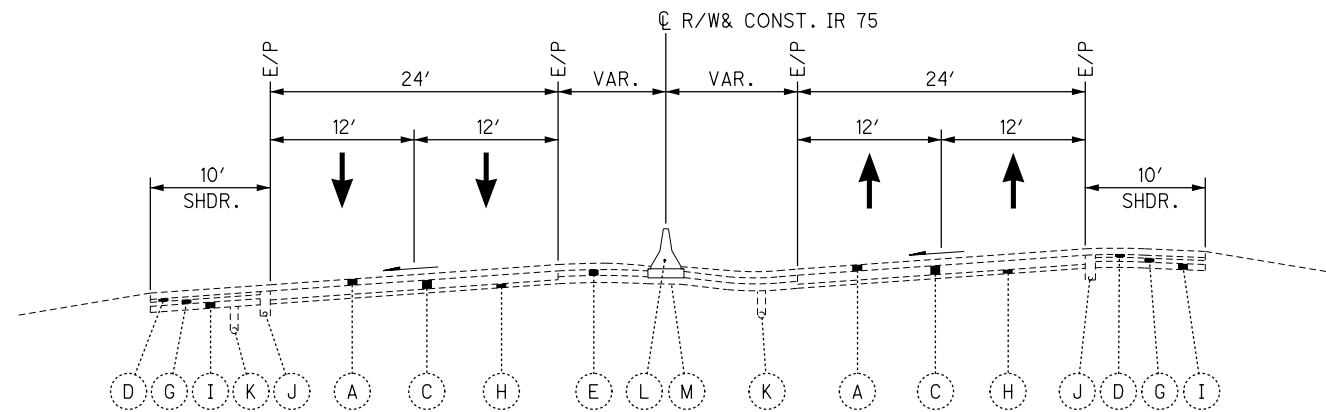
SUPERELEVATED RAMP SECTION
RAMP G - STA. 14+28.57 TO STA. 20+01.43 = 572.86 FT



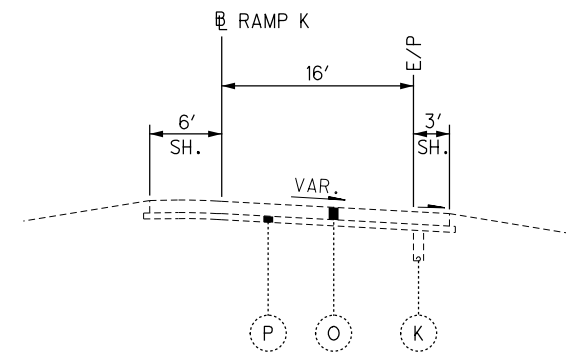
SUPERELEVATED RAMP SECTION
RAMP H - STA. 20+14.77 TO STA. 24+71.33 = 456.56 FT



SUPERELEVATED RAMP SECTION
RAMP J - STA. 20+14.45 TO STA. 26+30.09 = 615.64 FT

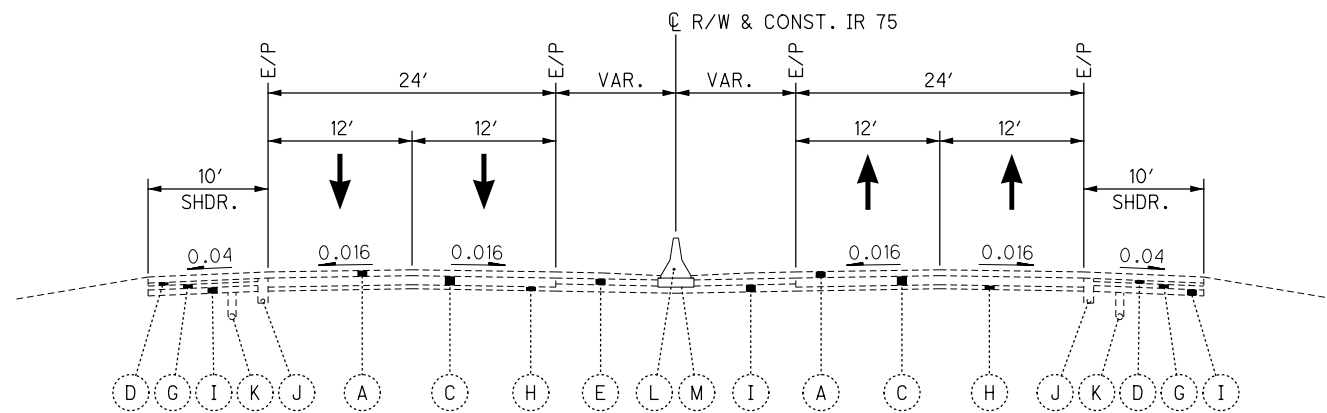


SUPERELEVATED SECTION
STA. 897+52 TO STA. 909+00 = 1148 FT

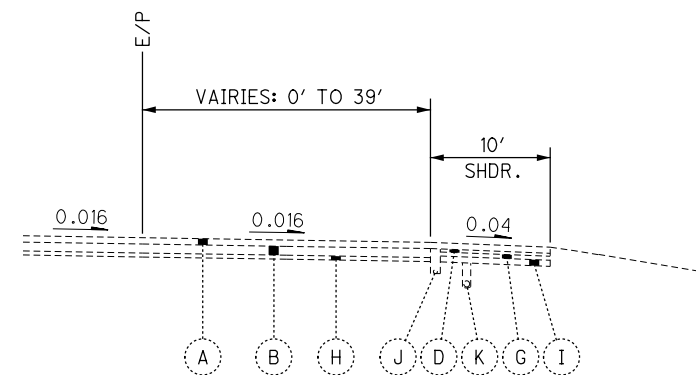


SUPERELEVATED RAMP SECTION
RAMP K - STA. 16+01.03 TO STA. 20+09.58 = 408.55 FT

For Existing Legend, See Sheet 4

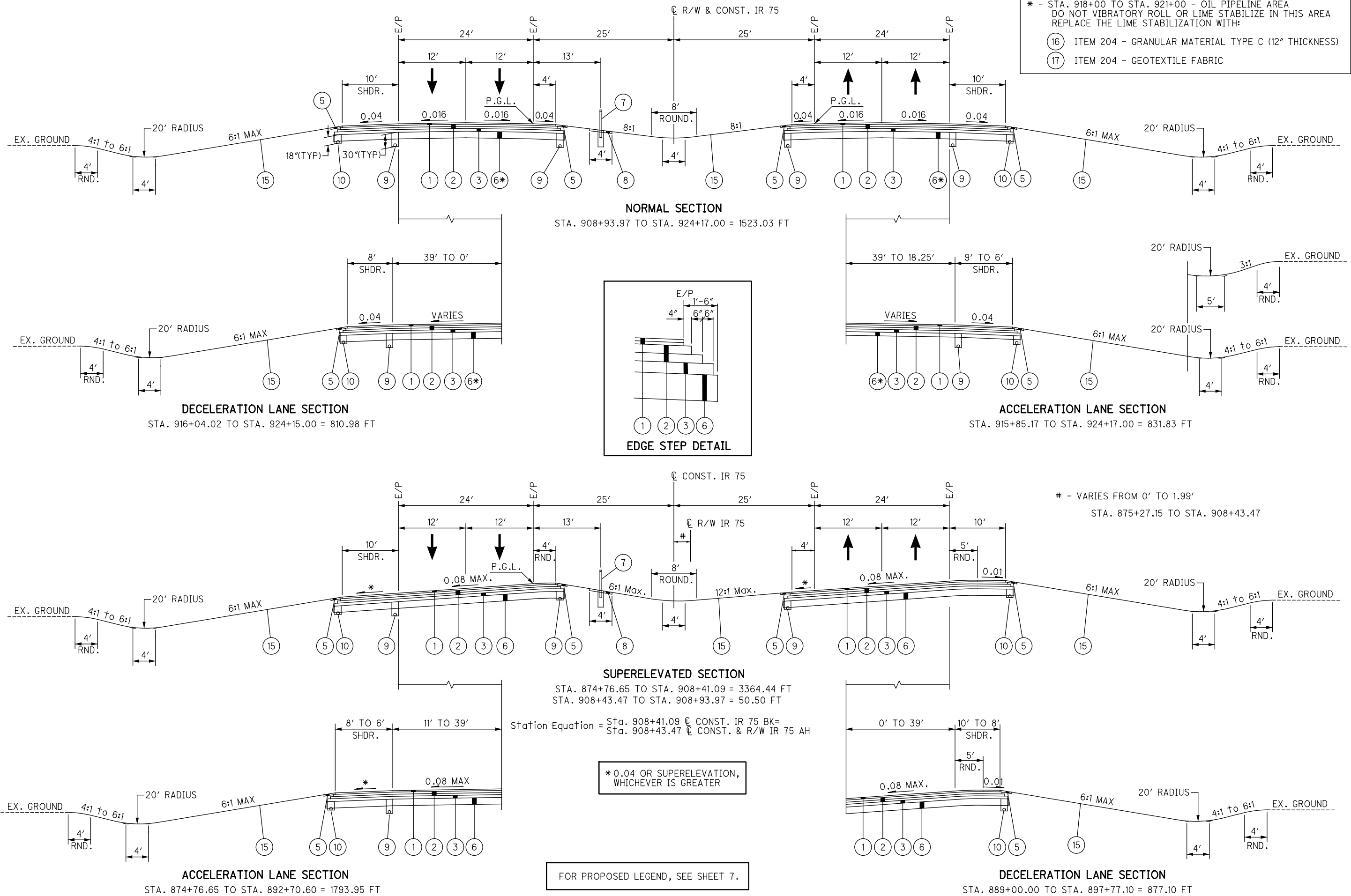


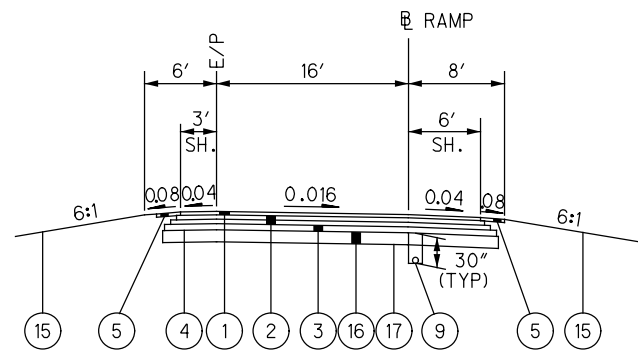
NORMAL SECTION
STA. 909+00 TO STA. 920+00 = 1100 FT



SPEED CHANGE LANE
RAMP G - STA. 890+58 TO STA. 898+58 = 800 FT
RAMP H - STA. 916+17 TO STA. 932+58 = 1641 FT
RAMP J - STA. 915+94 TO STA. 924+00 = 806 FT
RAMP K - STA. 878+26 TO STA. 893+18 = 1492 FT

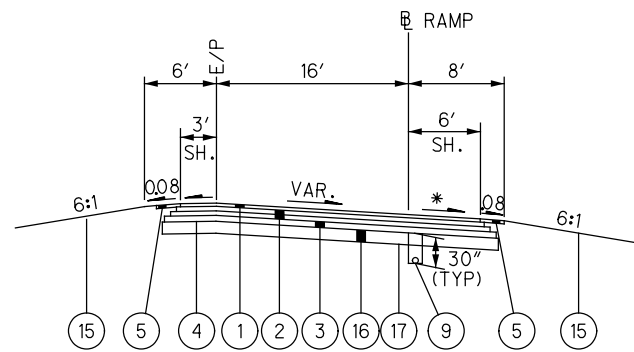
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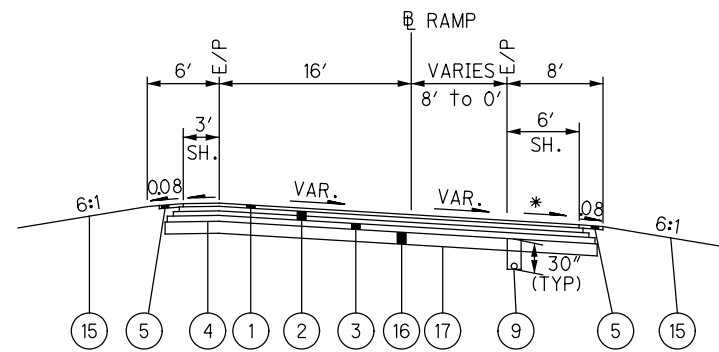
NORMAL RAMP SECTION

RAMP G - STA. 14+14.29 TO STA. 14+28.57 = 14.28 FT



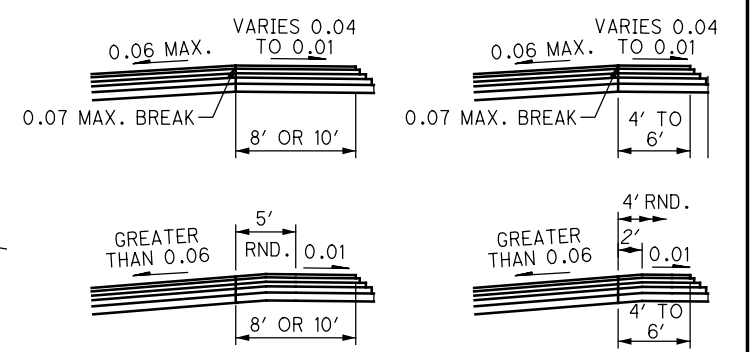
SUPERELEVATED RAMP SECTION

RAMP G - STA. 8+30.61 TO STA. 14+14.29 = 53.68 FT
 RAMP H - STA. 24+71.33 TO STA. 29+13.95 = 42.62 FT
 RAMP J - STA. 26+30.00 TO STA. 29+93.74 = 363.74 FT
 RAMP K - STA. 6+80.48 TO STA. 16+01.03 = 920.55 FT

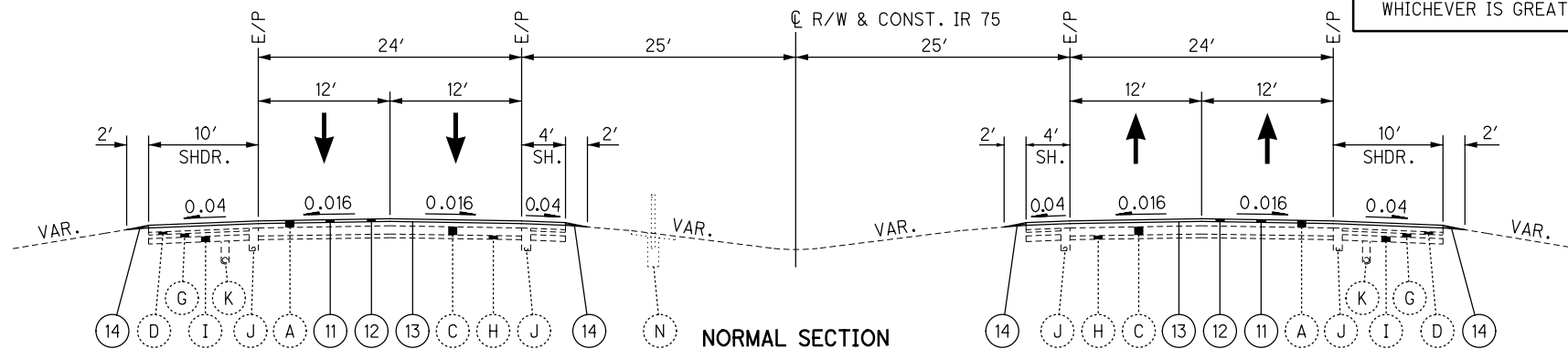


SUPERELEVATED RAMP SECTION

RAMP J - STA. 25+23.47 TO STA. 26+30.00 = 106.53 FT

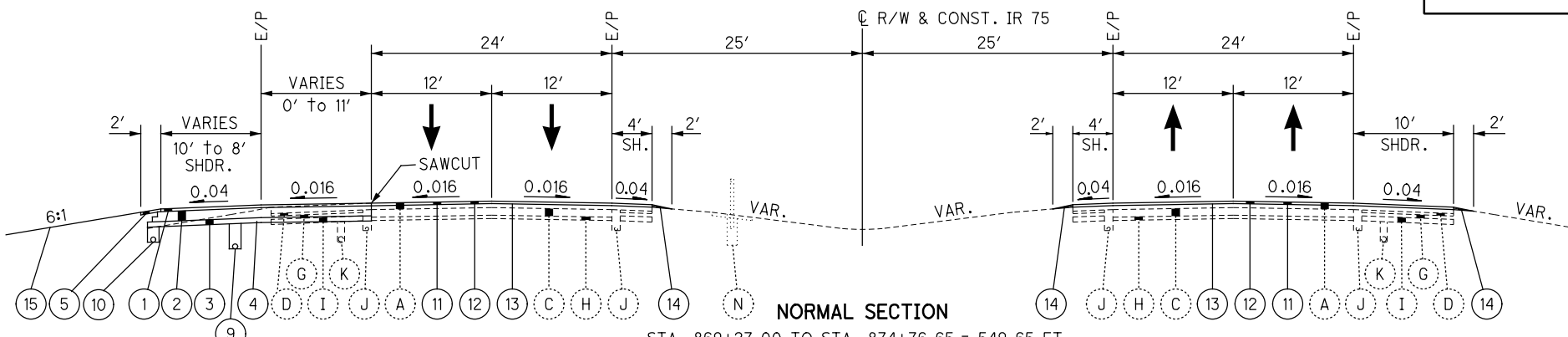


SHOULDER SLOPES ON HIGH SIDE OF SUPERELEVATED SECTIONS



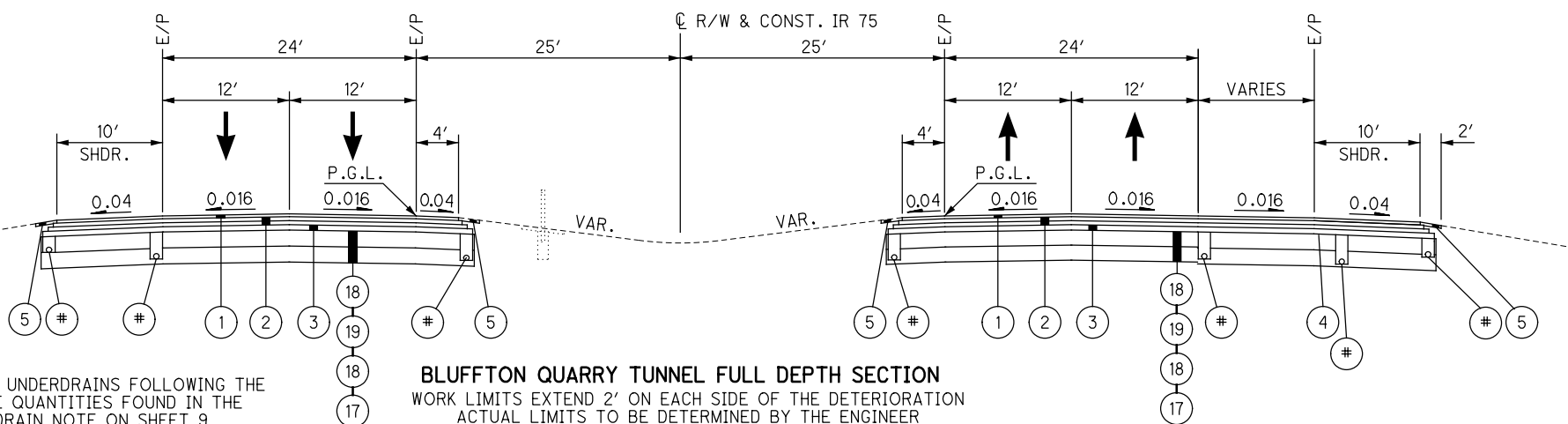
NORMAL SECTION

S.L.M. 15.800 TO S.L.M. 16.547 (STA. 869+27) = 0.747 MILE
 S.L.M. 17.586 (STA. 924+17) TO S.L.M. 22.656 = 5.070 MILE



NORMAL SECTION

STA. 869+27.00 TO STA. 874+76.65 = 549.65 FT



BLUFFTON QUARRY TUNNEL FULL DEPTH SECTION

WORK LIMITS EXTEND 2' ON EACH SIDE OF THE DETERIORATION
 ACTUAL LIMITS TO BE DETERMINED BY THE ENGINEER
 MINIMUM WIDTH = 10'

- RESTORE EXISTING UNDERDRAINS FOLLOWING THE NOTE AND USING THE QUANTITIES FOUND IN THE EXISTING UNDERDRAIN NOTE ON SHEET 9

* 0.04 OR SUPERELEVATION, WHICHEVER IS GREATER

FOR EXISTING LEGEND, SEE SHEET 7.

PROPOSED LEGEND

- ① ITEM 442 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)
 ITEM 407 - NON-TRACKING TACK COAT
 ITEM 442 - 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448)
 ITEM 407 - NON-TRACKING TACK COAT
- ② ITEM 301 - 9" ASPHALT CONCRETE BASE, PG64-22 (IN TWO 4.5" LIFTS)
 ITEM 407 - NON-TRACKING TACK COAT
- ③ ITEM 304 - 6" AGGREGATE BASE
- ④ ITEM 204 - SUBGRADE COMPACTION
- ⑤ ITEM 617 - 3-1/4" COMPACTED AGGREGATE
- ⑥ ITEM 614 - LIME STABILIZED SUBGRADE, 14" DEEP
- ⑦ ITEM 606 - SPECIAL - CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION
- ⑧ ITEM SPECIAL - MISC.: NO MOW STRIP
- ⑨ ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
- ⑩ ITEM 605 - 6" BASE PIPE UNDERDRAIN
- ⑪ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=1-1/2")
- ⑫ ITEM 442 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)
- ⑬ ITEM 407 - NON-TRACKING TACK COAT
- ⑭ ITEM 617 - COMPACTED AGGREGATE (1-1/2" AVG THICKNESS)
- ⑮ ITEM 659 - SEEDING AND MULCHING
- ⑯ ITEM 204 - GRANULAR MATERIAL TYPE C (12" THICKNESS)
- ⑰ ITEM 204 - GEOTEXTILE FABRIC
- ⑱ ITEM 204 - GRANULAR MATERIAL TYPE C (18" THICKNESS)
- ⑲ ITEM 204 - GEOGRID

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UTILITIES

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

BUCKEYE PARTNERS, LP
1020 BUCKEYE ROAD
LIMA, OH 45804
MARTIN WHITE 419-993-8008

AMERICAN ELECTRIC POWER
369 E. O’CONNER AVE.
LIMA, OH 45801
DAN WILSON 419-998-5103

COM NET/INDEPENDENT FIBER
13888 COUNTY ROAD 25A
WAPAKONETA, OH 45895
RANDY PLAISIER 419-739-3120

VILLAGE OF BEAVERDAM
101 W. MAIN ST.
BEAVERDAM, OH 45808
MIKE LEIS 419-643-4231

DOMINION EAST OHIO GAS
150 S. JACKSON ST.
LIMA, OH 45801
DAN STECHSCHULTE 419-860-2148

CENTURYLINK COMMUNICATIONS
122 S. ELIZABETH ST.
LIMA, OH 45801
DAVE SPURGEON 419-226-6220

ODOT DISTRICT ONE
1885 N. MCCULLOUGH STREET
LIMA, OHIO 45801
CURT SYBERT 419-999-6926

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.

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.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

EXISTING PLANS

EXISTING PLANS ENTITLED ALL-75-9.60 & ALL/HAN-75-18.28/0.00 MAY BE INSPECTED IN THE ODOT DISTRICT 1 OFFICE IN LIMA.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

PROFILE AND ALIGNMENT

IN THE PLANING AND RESURFACING PORTION OF THIS PROJECT, PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT UNLESS OTHERWISE SHOWN IN THE PLANS. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITION-ING ON ODOT PROJECTS. THE CENTERLINE PLATS CONTAIN THE TABLE WITH PROJECT CONTROL INFORMATION. USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL -
POSITIONING METHOD: ODOT VRS NETWORK (2011)
MONUMENT TYPE: VARIOUS MONUMENTS

VERTICAL POSITIONING -
ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12A

HORIZONTAL POSITIONING & BASIS OF BEARINGS -
REFERENCE FRAME: NAD83 (2011 ADJ)
ELLIPSOID: GRS 80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: 1983 U.S. STATE PLANE, OHIO NORTH
COMBINED SCALE FACTOR: 1.000000 (AT GRID)
ORIGIN OF COORDINATE
SYSTEM: N/A (AT GRID)

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

CLEARING AND GRUBBING

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

	SIZES	NO. TREES	NO. STUMPS	TOTAL
	18”	8	0	8
	30”	1	0	1

SEEDING AND MULCHING

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

ITEM 606 - SPECIAL - CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION
ITEM 606 - SPECIAL - CABLE BARRIER, ANCHOR ASSEMBLY

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A GIBRALTER HIGH TENSION FOUR CABLE GUARDRAIL SYSTEM AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING’S WEB PAGE. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, SPECIAL - CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION AND ITEM ITEM 606, SPECIAL - CABLE BARRIER, ANCHOR ASSEMBLY AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL HIGH TENSION CABLE GUARDRAIL SYSTEM NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

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

SYSTEMS SHALL HAVE A MAXIMUM DEFLECTION OF 8 FEET AND THE MAXIMUM LONGITUDINAL DISTANCE BETWEEN POSTS SHALL BE 15 FEET.

INSTALLATION WILL BE A FOUR CABLE HIGH TENSION SYSTEM INSTALLED IN SOCKETED POSTS FOUNDATION WITH A FOUR FOOT WIDE “NO MOW STRIP”.

CONTRACTOR SHALL PROVIDE DELINEATORS ON THE POSTS AT A MINIMUM INTERVAL OF 100 FEET AND ON ALL ANCHOR TERMINALS.

TRANSITIONS TO W-BEAM GUARDRAIL ARE NOT ALLOWED.

REFER TO MANUFACTURER FOR MAXIMUM OFFSET FROM BREAK POINT.

TORPEDO OR BULLET SPLICES ARE NOT ALLOWED. ALL CABLE SPLICES SHALL BE A SWAGED OR OPEN BODY DESIGN THAT ALLOWS FOR ANNUAL INSPECTION BETWEEN THE WEDGE AND STRANDS OF CABLE.

POSTS ARE SET IN SOCKETED CONCRETE FOUNDATIONS AND SHALL NOT BE PERMANENTLY INSTALLED UNTIL THEIR RESPECTIVE RUNS OF TENSIONED CABLE GUARDRAIL ARE READY FOR FINAL CONNECTION TO THE END TERMINAL ASSEMBLY. THE CONTRACTOR SHALL REPLACE ANY POSTS DAMAGED DURING INSTALLATION AS DETERMINED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

ITEM 690 SPECIAL - MISC.: NO MOW STRIP

THE CONTRACTOR SHALL INSTALL A 4 FOOT WIDE BY 4 INCH DEPTH NO MOW STRIP WITH MATERIALS CONFORMING TO ITEM 608 - CONCRETE WALK.

THE NO MOW STRIP SHALL BE PLACED ON THE COMPACTED EARTH AND CONSTRUCTED USING CLASS C CONCRETE WITH A CURING COMPOUND MEETING THE SPECIFICATIONS OF 705.07 OF THE CMS. THE NO MOW STRIP SHALL BE INTEGRAL TO THE SOCKETED CONCRETE FOUNDATION.

THE NO MOW STRIP SHALL HAVE A TRANSVERSE JOINT EVERY EIGHT FEET AND AN EXPANSION JOINT EVERY 100 FEET. THE JOINTS AND MATERIALS TO CONSTRUCT THE JOINTS SHALL CONFORM TO 608.03 (C) OF THE CMS.

IF MATERIAL FROM THE EXCAVATION OF THE MOW STRIP AND THE SOCKETED CONCRETE FOUNDATION IS WASTED ADJACENT TO THE NO MOW STRIP THE AREA SHALL BE SEEDED AND MULCHED TO THE SPECIFICATIONS OF CMS 659. SEEDING WILL BE INCLUDED IN THE UNIT COST FOR
ITEM 690 SPECIAL - MISC.: NO MOW STRIP

ITEMS 253 - PAVEMENT REPAIR

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING MAINLINE ASPHALT PAVEMENT AREAS OR PAVED SHOULDER AREAS OF EXISTING PAVEMENT FAILURES.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS, DEPTHS, AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIRS SHALL BE COMPLETED PRIOR TO THE PLANING OF THE ROADWAY. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE MATERIALS SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.01.

ITEM 301 MATERIAL SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLANING AND PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD OF ITEM 253 PAVEMENT REPAIR.

ITEM 253 - PAVEMENT REPAIR 350 CY

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

PART OF THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 50 FT. BETWEEN S.L.M. 19.00 AND THE END OF WORK. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING AN FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

EXPRESS PROCESSING CENTER
THE FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
AIR TRAFFIC AIRSPACE BRANCH ASW-520
2601 MEACHAN BLVD.
FORT WORTH, TX 76137-4298

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
614-387-2346

POST CONSTRUCTION STORM WATER TREATMENT

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

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REVIEW OF DRAINAGE FACILITIES

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

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

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

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE RIGHT OF WAY LIMITS BY ITEM 611 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 611 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 611, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

611, 8" CONDUIT, TYPE F	50 FT
611, 12" CONDUIT, TYPE F	50 FT

EXISTING UNDERDRAINS

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

601, TIED CONCRETE BLOCK MAT, TYPE 1	4 SY
611 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	50 FT
611, PRECAST REINFORCED CONCRETE OUTLET	2 EACH
605 6" UNCLASSIFIED PIPE UNDERDRAINS	300 FT

ITEM 832 - EROSION CONTROL

THE QUANTITY BELOW HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR EROSION CONTROL.

ITEM 832 EROSION CONTROL = 150,000 EACH

PROTECTION OF INCOMPLETE WORK

ANY HAZARD DURING NON-WORKING HOURS SHALL BE ADEQUATELY PROTECTED WITH DRUMS OR BARRICADES, OR AS DIRECTED BY THE ENGINEER. FOR ANY SUCH WORK REQUIRED, IT SHALL BE CONSIDERED AS INCIDENTAL AND INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE REPAIR ITEMS.

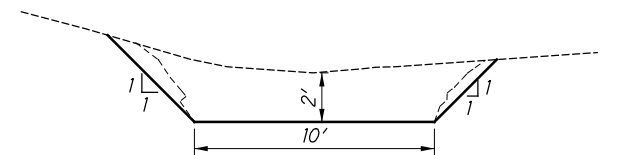
ITEM 202 REMOVAL MISC.: CONCRETE NO MOW STRIP

THE CONTRACTOR SHALL REMOVE THE EXISTING 4 FOOT WIDE BY 4 INCH DEEP NO MOW STRIP. THE VOID CREATED BY THE REMOVAL SHALL BE BACK FILLED ACCORDING TO C&MS 202.02 AND GRADED AS NECESSARY TO ALLOW FOR SAFE TRAVERSAL DURING CONSTRUCTION TO THE SATISFACTION OF THE PROJECT ENGINEER. PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE REMOVAL AND THE DISPOSAL OF THE MATERIALS.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER FOOT OF ITEM 202 REMOVAL MISC.: CONCRETE NO MOW STRIP

DITCH UNDERCUT

AN UNDERCUT HAS BEEN SHOWN IN THE CROSS SECTIONS AND INCLUDED IN THE QUANTITIES FOR ITEM 203 EXCAVATION AND EMBANKMENT TO REMOVE AND REPLACE UNDESIREED MATERIAL FROM THE EXISTING DITCH BOTTOMS. THE 1:1 SIDE SLOPE SHOWN IS NOT REQUIRED. THIS TYPICAL SECTION HAS BEEN USED TO CALCULATE THE NOTED ITEM 203 QUANTITIES ASSUMING A VERTICAL FACE CANNOT BE REALISTICALLY CONSTRUCTED. ALL MATERIAL REMOVED FROM THESE AREAS MUST BE WASTED. PAYMENT FOR AREAS SHALL BE AT THE UNIT COSTS FOR ITEM 203 EXCAVATION AND EMBANKMENT.



ITEM 202 SPECIAL - STRUCTURE REMOVED - EXISTING SHEET PILING

THE CONTRACTOR SHALL REMOVE THE EXISTING SHEET PILING PLACED DURING THE PRIOR CONSTRUCTION OF THE SR 696 BRIDGE. THE EXISTING SHEET PILING RUNS PARALLEL WITH SR 696 (PERPENDICULAR WITH I.R. 75) AND WAS USED TO CONSTRUCT THE SR 696 BRIDGE PART WIDTH. THE PILING SHALL BE REMOVED ACCORDING TO C&MS 202.03 FOR AREAS NOT UNDER THE PROPOSED PAVEMENT AND TO A DEPTH OF 4' BELOW THE FINAL PAVEMENT ELEVATION FOR AREAS UNDER THE PAVEMENT. PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE REMOVAL AND THE DISPOSAL OF THE MATERIALS. THE VOID CREATED BY THE REMOVAL SHALL BE FILLED PER C&MS 203.

PAYMENT WILL BE FOR THE LUMP SUM OF ITEM 202 SPECIAL - STRUCTURE REMOVED EXISTING SHEET PILING

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

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

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

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

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

ITEM 606, AS PER PLAN

ALL REFERENCES IN THE PLANS TO:

1.) ITEM 606, GUARDRAIL, TYPE MGS, AS PER PLAN
ITEM 606, GUARDRAIL, BARRIER DESIGN, TYPE MGS, AS PER PLAN

REQUIRE STEEL POSTS AND APPROVED COMPOSITE OR POLYMER ALTERNATIVE BLOCKOUTS. THE BLOCKOUTS SHALL BE FROM THE APPROVED PRODUCTS LIST THAT IS MAINTAINED BY THE OFFICE OF ROADWAY ENGINEERING. THE STEEL POSTS AND APPROVED ALTERNATIVE MGS BLOCKOUTS SHALL BE PROVIDED AND INSTALLED PER CMS 606 AND ALL PERTINENT STANDARD DRAWINGS. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE STEEL POSTS AND APPROVED ALTERNATIVE MGS BLOCKOUTS SHALL BE INCLUDED IN THE UNIT BIDS FOR THE FOLLOWING ITEMS:

ITEM 606, GUARDRAIL, TYPE MGS, AS PER PLAN
ITEM 606, GUARDRAIL, BARRIER DESIGN, TYPE MGS, AS PER PLAN

ITEM 202 - CABLE BARRIER REMOVED, AS PER PLAN

EXISTING CABLE RAIL SHALL BE REMOVED AS PER C&MS SECTION 202.09. IN ADDITION TO THESE REQUIREMENTS, THE CONTRACTOR SHALL SEPARATE THE HAIRPINS, LOCKPLATES, AND POSTS FOR SALVAGE BY ODOT FORCES. STORE THE SALVAGED ITEMS AT THE BEAVERDAM OUTPOST, SWANEY RD. BEAVERDAM, OHIO. CONTACT ERIC PFENNING, ROADWAY SERVICES ENGINEER AT 419-999-6893 FOR PICKUP OF THE SALVAGED ITEMS. REMAINING ITEMS NOT TO BE SALVAGED AND REMOVED AS PART OF THIS ITEM SHALL BE DISPOSED OF IN ACCORDANCE WITH C&MS 202.

ITEM 606 - SPECIAL - CABLE BARRIER TENSIONING

THIS ITEM SHALL CONSIST OF RE-TENSIONING AN EXISTING CABLERAIL SYSTEM TO MEET NCHRP 350 TEST LEVEL-3 REQUIREMENTS AFTER IT HAS PARTIALLY REMOVED AND A NEW ANCHOR ASSEMBLY HAS BEEN INSTALLED. THE PAY ITEM SHALL INCLUDE THE TENSIONING OF ALL THE CABLES, INCLUDE THE ENTIRE LENGTH OF THE RAIL SYSTEM, AND NOT BE BID FOR EACH INDIVIDUAL CABLE.

THIS BID ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, TOOLS, MATERIALS AND INCIDENTALS NECESSARY TO CERTIFY A PROPER TENSION.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

OIL PIPELINES

THERE ARE EXISTING OIL PIPELINES WITHIN THE PROJECT AREA FROM STA. 918+00 TO 921+00. THERE SHALL BE NO VIBRATORY ROLLING OR LIME STABILIZATION COMPLETED IN THIS AREA. LIME STABILIZATION WILL BE REPLACED WITH 12" OF ITEM 204 GRANULAR MATERIAL, TYPE C AND ITEM 204 GEOTEXTILE FABRIC. THE PAVEMENT SUBSUMMARY REFLECTS THE MATERIAL CHANGE.

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630 - SPECIFIC SERVICE AND TOURIST-ORIENTED
DIRCTIONAL SIGNS REMOVAL AND REINSTALLATION
LOGO & TODS

IN THE EVENT THAT THIS PROJECT NECESSITATES THE REMOVAL OF ANY SPECIFIC SERVICE (LOGO) SIGNS AND/OR TOURIST ORIENTED DIRECTIONAL SIGNS (TODS) THAT ARE NOT SPECIFICALLY DESCRIBED IN OTHER ITEMS OF WORK, THE CONTRACTOR SHALL CAREFULLY REMOVE SUCH SIGNS. REMOVED LOGO SIGNS AND TODS SHALL BE IMMEDIATELY REERECTED ON APPROVED TEMPORARY SUPPORTS IN THE SAME GENERAL VICINITY ALONG THE ROADWAY TO BE VIEWED BY THE MOTORING PUBLIC. UNLESS THE ORIGINAL SUPPORTS WILL BE REUSED, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE SUPPORTS & FOUNDATIONS IN ACCORDANCE WITH ITEM 630.12. THE CONTRACTOR SHALL NOTIFY OHIO LOGOS, INC. AT (800) 860-5646 AT LEAST 60 DAYS PRIOR TO PROJECT COMPLETION TO ALERT THEM THAT ONE OR MORE LOGO SIGNS AND/OR TODS ARE ON TEMPORARY SUPPORTS. OHIO LOGOS, INC.. WILL MAKE ARRANGEMENTS TO HAVE THE SIGNS INSTALLED ON PERMANENT SUPPORTS AT THE COMPLETION OF THE PROJECT.

ENVIRONMENTAL COMMITMENTS

THE ENVIRONMENTAL DOCUMENT WAS APPROVED 02/07/19 AND CONTAINED THE FOLLOWING CONSTRUCTION RELATED ITEMS THAT THE CONTRACTOR AND PROJECT ENGINEER ARE TO ENSURE ARE CARRIED OUT.

1. AN ASBESTOS SURVEY OF THE ALL-SR 696-0.97 BRIDGE STRUCTURE, SCHEDULED FOR RENOVATION, WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DID NOT DETECT REGULATED ASBESTOS-CONTAINING MATERIALS ON THE STRUCTURE.
2. ODOT WILL ACQUIRE ALL NECESSARY WATERWAY PERMITS PRIOR TO THE START OF CONSTRUCTION. CONDITIONS OF THESE PERMITS WILL BE PROVIDED IN THE CONTRACT AS SPECIAL PROVISIONS. ODOT WILL PROVIDE THE WATERWAY PERMITS TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL THE SPECIAL PROVISIONS OF THE WATERWAY PERMITS THROUGHOUT THE DURATION OF THE CONTRACT.

ITEM 653 - TOPSOIL FURNISHED AND PLACED, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS FOR SITE PREPARATION AS PER C&MS 659.10, THE CONTRACTOR SHALL CLEAR AND GRUB THE AREA AS PER C&MS 201. PERFORM SCALPING TO A DEPTH OF 4 INCHES EVEN THOUGH EXCAVATION OR EMBANKMENT IS NOT REQUIRED. MAINTAIN THE EXISTING TOPOGRAPHY AFTER THE 4 INCHES OF PROPOSED TOPSOIL IS PLACED IN AREAS WHERE EXCAVATION OR EMBANKMENT IS NOT REQUIRED.

ALL WORK, MATERIALS, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE ABOVE DESCRIBED WORK SHALL BE INCIDENTAL TO THE PLACEMENT OF THE TOPSOIL AND INCLUDED IN THE COST OF ITEM 653 - TOPSOIL FURNISHED AND PLACED, AS PER PLAN.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES

THE FOLLOWING QUANTITES HAVE BEEN PROVIDED FOR THE REMOVAL OF THE EXISTING COATINGS AND SEALING OF THE BRIDGE CARRYING S.R. 696 OVER IR-75.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	- 1200 SY
ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	- 1197 SY

THE EXISTING CONCRETE SHALL BE SEALED ON THE ABUTMENTS, PARAPETS, EXISTING OUTSIDE I-BEAM FACES, PIER, AND COPING. THE LINCOLN HIGHWAY LOGOS AND AREAS WITH FORMLINED CONCRETE SHALL NOT BE SEALED. AREAS OF UNSEALED CONCRETE EXPOSED WHEN THE TRANSITIONS TO THE EXISTING CONCRETE BARRIER ARE REMOVED SHALL ALSO BE SEALED. THE SEALER COLOR SHALL BE WHITE. THE FOLLOWING TABLE DETAILS THE QUANTITIES.

LOCATION	QUANTITY
REAR ABUTMENT	80 SY
FORWARD ABUTMENT	80 SY
SUPERSTRUCTURE	872 SY
PIER	88 SY
COPING ON MSE WALLS	80 SY

LOCATION OF NEW POST AND SIGN

NEW FOUNDATION/BEAM SUPPORTS SHALL BE LOCATED WITHIN A MAXIMUM OF 5' IN FRONT OR A MAXIMUM OF 5' BEHIND EXISTING SIGN LOCATION, UNLESS APPROVED BY THE ENGINEER.

ITEM 630 - SIGNING MISC.: REMOVAL SIGN
FOUNDATION, AS PER PLAN

THE REMOVAL OF EXISTING FOUNDATIONS AS SET FORTH IN THE PLANS WILL BE COMPLETE REMOVAL, INCLUDING ALL CONCRETE AND HARDWARE. THE VOID WILL BE FILLED IN WITH BACKFILL UP TO 12" TO GRADE AND TOPSOIL WILL BE USED TO FILL VOID UPTO GRADE.

ALL WORK, MATERIALS, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE ABOVE DESCRIBED WORK SHALL BE INCIDENTAL TO THE REMOVAL OF FOUNDATIONS. PLACEMENT OF THE TOPSOIL INCLUDED IN THE COST OF ITEM 630 - SIGNING MISC.: REMOVAL SIGN FOUNDATION, AS PER PLAN

ITEM 253 - PAVEMENT REPAIR MISC.: SHOULDER REPAIR
FOR MOT

THIS ITEM OF WORK SHALL CONSIST OF THE PAVEMENT REPAIR OF THE EXISTING MAINLINE PAVED SHOULDER AREAS FOR MAINTENANCE OF TRAFFIC OPERATIONS.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIRS SHALL BE COMPLETED PRIOR TO SHIFT TRAFFIC ONTO THE SHOULDERS. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE ESTIMATED QUANTITY FOR THESE REPAIRS IS BASED ON DIMENSIONS OF 4' WIDE BY 4" THIS REPAIRS AT VARIOUS LOCATIONS ALONG THE ENTIRE LENGTH OF THE SHOUDERS. THE MATERIALS REMOVED SHALL BE DISPOSED ON IN ACCORDANCE WITH 203.01.

ITEM 301 MATERIAL SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLANNING AND PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LOABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD OF THE ITEM 253 PAVEMENT REPAIR, MISC: SHOULDER REPAIR FOR MOT

ITEM 253 - PAVEMENT REPAIR, MISC.: SHOULDER REPAIR FOR MOT	150 CY
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PERSONAL PROTECTIVE EQUIPMENT (PPE)

THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF SECTIONS XXIV AND XXXIV OF THE OHIO DEPARTMENT OF TRANSPORTATION SAFETY & HEALTH STANDARD OPERATING PROCEDURE 220-006(SP) EFFECTIVE: NOVEMBER 1, 2018 (EXCEPT AS AMENDED BELOW) AND ALL SUBSEQUENT UPDATES POSTED AT THE FOLLOWING WEB SITE:

HTTP://WWW.DOT.STATE.OH.US/POLICY/
POLICIESANDSOPS/220-006(SP).pdf

XXIV. HEAD PROTECTION (HARD HATS)

ALL PERSONS WITHIN THE RIGHT-OF-WAY OF ANY HIGHWAY OR ANY OTHER TYPE OF ROADWAY OR CONSTRUCTION SITE WHO ARE EXPOSED TO EITHER TRAFFIC (VEHICLES USING THE HIGHWAY FOR PURPOSES OF TRAVEL) OR CONSTRUCTION EQUIPMENT WITHIN THE WORK AREA, REGARDLESS OF JOB TYPE, SHALL WEAR APPROPRIATE HEAD PROTECTION. ALL HARD HATS MUST MEET OR EXCEED ANSI Z89.1-2009 CLASS CLASS E-G REQUIREMENTS.

XXXIV. SAFETY APPAREL AND VEST (HIGH VISIBILITY)

ALL PERSONS WITHIN THE RIGHT-OF-WAY OF ANY HIGHWAY OR ANY OTHER TYPE OF ROADWAY OR CONSTRUCTION SITE WHO ARE EXPOSED TO EITHER TRAFFIC (VEHICLES USING THE HIGHWAY FOR PURPOSES OF TRAVEL) OR CONSTRUCTION EQUIPMENT WITHIN THE WORK AREA, REGARDLESS OF JOB TYPE, SHALL WEAR A HIGH-VISIBILITY SAFETY VEST THAT MEETS THE PERFORMANCE CLASS II OR CLASS III REQUIREMENTS OF THE ANSI/ISEA 107-2015 PUBLICATION ENTITLED "AMERICAN NATIONAL STANDARD FOR HIGH VISIBILITY SAFETY APPAREL AND ACCESSORIES".

WORKERS MAY WEAR AN ANSI CLASS II OR ANSI CLASS III APPROVED RAIN SUIT OR JACKET WITHOUT A SAFETY VEST OVER IT.

ITEM 614, MAINTAINING 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:

A MINIMUM OF TWO ELEVEN FOOT LANES OF TRAFFIC IN EACH DIRECTION ON I.R. 75 SHALL BE MAINTAINED BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, OR ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC. A REDUCTION IN THE NUMBER OF LANES ON I.R. 75 IS ALLOWED AS LONG AS IT IS IN COMPLIANCE WITH THE NOTES LISTED HEREIN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN 72 HOURS PRIOR TO A SCHEDULED DISRUPTION OF TRAFFIC.

PERMITTED LANE CLOSURES

LANE CLOSURES WILL ONLY BE PERMITTED BETWEEN 7:00 PM AND 7:00 AM. THE ONLY EXCEPTION TO THIS TIME FRAME WILL BE FOR FOUR CLOSURE PERIODS (ONE FOR EACH LANE OF TRAVEL) IN WHICH THE CONTRACTOR CAN CLOSE A LANE BEGINNING AT 7:00 PM ON SUNDAY AND MUST HAVE BOTH LANES OPEN BY 7:00 AM ON FRIDAY. THE FOUR LANE CLOSURE PERIODS MUST TAKE PLACE PRIOR TO MEMORIAL DAY.

THE INTENT OF THE FOUR LANE CLOSURE PERIOD IS TO ALLOW FOR PERFORMING AND COMPLETING THE BRIDGE WORK ON HAN-75-0124 L&R FROM ALL/HAN-75-22.66/0.00 PART 2. HOWEVER, THE CONTRACTOR WILL BE PERMITTED TO EXTEND THE WORK ZONE/LANE CLOSURE DURING THESE PERIODS IN ORDER TO PERFORM JOINT REPAIRS ALONG IR-75. NO EXTENSIONS TO THE LANE CLOSURE PERIOD WILL BE PERMITTED TO ACCOMMODATE JOINT REPAIRS.

NO WORK WITHIN ACTIVE TRAVEL LANES OR WHICH WILL SLOW TRAFFIC ON I.R. 75 IS PERMITTED AT ANY OTHER TIMES.

RAMP TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR CLOSURE PERIODS SPECIFIED IN THE SEQUENCE OF CONSTRUCTION.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING SAFE AND EFFECTIVE TRAFFIC CONTROL 24 HOURS A DAY FOR THE DURATION OF THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR. THIS CONSISTS OF NOTIFYING THE OHIO STATE PATROL AFTER ENCOUNTERING ANY ACCIDENTS OR DISABLED VEHICLES OR OBJECTS HINDERING THE FLOW OF TRAFFIC.

UNLESS PHYSICALLY IMPOSSIBLE, ALL CONSTRUCTION EQUIPMENT SHALL EXIT ALL WORK ZONES FROM THE DOWNSTREAM END OF THE WORK ZONE OR BY INTERCHANGE RAMPS.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO DIRECTLY TRANSPORT OR OPERATE EQUIPMENT ACROSS THE OPEN LANES OF I.R. 75. THE CONTRACTOR WILL NOT BE PERMITTED TO UTILIZE THE EMERGENCY TURN-AROUNDS AS PART OF THE HAUL ROUTE.

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

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

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
EASTER	THANKSGIVING
MEMORIAL DAY	
(OTHER HOLIDAY OR EVENT)	

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 7:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY	(THANKSGIVING ONLY)
	6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY

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

ITEM 614 - 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 OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN A 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 IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

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 120 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 A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

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 CONTRACTOR. 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.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING THE 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. 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.

NOTIFICATION OF TRAFFIC RESTRICTIONS

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

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

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

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

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

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

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND 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. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

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

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 1 HOUR FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

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

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

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT. THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. 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. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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

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

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 18 SIGN MONTHS

ASSUMING 2 PCMS SIGNS FOR 6 MONTHS
& 6 PCMS SIGNS FOR 1 MONTH

MAINTAINING TRAFFIC NEAR RUMBLE STRIPS - RESURFACING

TRAFFIC IS NOT PERMITTED TO RUN ON OR CROSS OVER ANY RUMBLE STRIPS AT ANY TIME. RUMBLE STRIPS MUST BE FILLED WHEN THEY CONFLICT WITH THE MAINTENANCE OF TRAFFIC LANE CONFIGURATION. THIS INCLUDES LOCATIONS OF LANE SHIFTS ENTERING AND EXITING A WORK ZONE, AS WELL AS CONFLICTING RUMBLE STRIPS AT THE EXIT AND ENTRANCE RAMPS. THE RUMBLE STRIPS SHALL BE FILLED OR ELIMINATED BY PLANING AND PAVING TO PROVIDE A SMOOTH RIDE TO THE SATISFACTION OF THE PROJECT ENGINEER. ONCE TRAFFIC IS RETURNED TO ITS FINAL LANE CONFIGURATION, THE RUMBLE STRIPS THAT WERE REMOVED IN ANY EXISTING PAVEMENT SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION TO THE SATISFACTION OF THE PROJECT ENGINEER.

PAYMENT FOR ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ALTERNATE METHODS - RESURFACING

IF THE CONTRACTOR SO ELECTS, THEY MAY SUBMIT ALTERNATE METHODS FOR MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DISTRICT CONSTRUCTION ENGINEER. ALLOW 2 WEEKS FOR REVIEW WITH NO DELAY TO THE PROJECT. NO ADDITIONAL MONEY WILL BE PAID FOR ALTERNATE METHODS.

MAINTAINING TRAFFIC AT PLANED AND PAVED AREAS - RESURFACING

THE CONTRACTOR SHALL ARRANGE OPERATIONS SO THAT TRAFFIC IS RETURNED TO AN AREA WHEN PAVING IS COMPLETE. NO I.R. 75 TRAFFIC SHALL BE ALLOWED TO OPERATE ON A PLANED SURFACE. ALL REQUIRED WORK ZONE PAVEMENT MARKINGS SHALL BE PLACED PRIOR TO OPENING THE AREA TO TRAFFIC.

REMOVAL OF PAVEMENT MARKINGS

THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS ALONG THE WORK ZONE. THE CONTRACTOR SHALL ORGANIZE HIS WORK TO REQUIRE ONLY THE REMOVAL OF CONFLICTING PAVEMENT MARKINGS ALONG ONE LANE IN EACH DIRECTION OF THE ROADWAY. THE LINE TYPE MAY VARY THROUGHOUT THE ZONE. PAYMENT TO REMOVE THESE MARKINGS AND ANY OTHER CONFLICTING MARKINGS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

WORK ZONE MARKINGS AND SIGNS - RESURFACING

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 614 - WORK ZONE MARKING SIGN	= 21 EACH
ITEM 614 - WORK ZONE LANE LINE, CLASS I, 6"	= 14 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6"	= 31 MILE
ITEM 614 - WORK ZONE STOP LINE, CLASS I	= 120 FT

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WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

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

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

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

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

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

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN
21 EACH

TRENCH FOR WIDENING

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

DUST CONTROL

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

ITEM 616, WATER 350 M. GAL.

WORK ZONE SPEED ZONES (WZSZS)

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

WZSZ REVISION NUMBER	COUNTY-ROUTE-SECTION	DIRECTION
WZ-10133	ALL-75-15.80	NB & SB

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

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

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

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

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

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

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

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

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

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
36 SIGN MNTH
ASSUMING 2 DSL SIGN ASSEMBLIES FOR
6 MONTHS
ASSUMING 12 DSL SIGN ASSEMBLIES FOR
2 MONTHS

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

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

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE REQUIRED FOR EXIT RAMP CLOSURES. W20-H13 SIGNS ARE ACCEPTABLE FOR ENTRANCE RAMP CLOSURES.

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

NOTIFICATION TIME FRAME TABLE		
ITEM	DURATION OF CLOSURE	NOTIFICATION DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

RAMP WILL BE
CLOSED
FOR DAYS
INFO: 419-999-6803

W20-H13-60

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 50 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

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TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT

OHIO TIM IS OHIO’S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

1.

SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.
2.

SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.
3.

PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND AT WWW.OHIOTIM.COM.
4.

SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:

A.

COLLABORATE WITH ODOT AND SAFETY FORCES;

B.

SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND

C.

RECOMMEND WAYS TO INCORPORATE NECESSARY EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.
5.

CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

6.

CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:

A.

IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:

I.

LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL

II.

NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN

III.

ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN

IV.

ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN

V.

ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN

VI.

THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE

B.

FOLLOWING AN INCIDENT/CRASH:

I.

INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

II.

RECOMMEND ROADWAY REPAIR NEEDS.

III.

PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

IV.

ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).
- ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.
- DELINEATION OF PORTABLE AND PERMANENT BARRIER
- BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE “CRIMPED.” PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLESTACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 TWO-WAY 1460 EACH

ITEM 614, OBJECT MARKER, TWO-WAY 730 EACH

ITEM 614, INCREASED BARRIER DELINEATION 14,310 FEET

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.
- ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM
- THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR A SINGLE CROSSOVER, OR OVERLAPPING A PAIR OF CROSSTOVERS. THE SYSTEM SHALL BE AS SHOWN ON TRAFFIC SCD MT-100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 725 EXCEPT: THE PERFORMANCE TEST OF 625.19F, AND CERTIFIED DRAWING REQUIREMENT OF 625.04, ARE WAIVED AND USED MATERIALS IN GOOD CONDITION ARE ACCEPTABLE.

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

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM THROUGHOUT ALL PHASES OF WORK WHEN THE CROSSOVER ROADWAYS ARE USED.

ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM, 2 EA

PN 127 – LANE VALUE CONTRACT

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

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

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLACE.
- | LANE VALUE CONTRACT TABLE | | | |
|--|------------------------|-----------|-------------------------------|
| DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED | RESTRICTED TIME PERIOD | TIME UNIT | DISINCENTIVE \$ PER TIME UNIT |
| 2 LANES OF ALL/HAN IR 75 | SEE NOTES | EACH HOUR | \$9,500 |
| RAMPS FROM S.R. 696 TO IR 75 | SEE NOTE ON SHEET 16 | EACH DAY | \$7,500 |
| RAMPS TO S.R. 696 FROM IR 75 | SEE NOTE ON SHEET 16 | EACH DAY | \$7,500 |
| RAMP FROM NAPOLEAN RD TO IR 75 | 5 DAYS | EACH DAY | \$1,000 |
| RAMP TO NAPOLEAN RD FROM IR 75 | 5 DAYS | EACH DAY | \$1,000 |
| RAMPS FROM BENTLEY RD TO IR 75 | 5 DAYS | EACH DAY | \$1,000 |
| RAMPS TO BENTLEY RD FROM IR 75 | 5 DAYS | EACH DAY | \$1,000 |
- CALCULATED
TDP

CHECKED
MJC

MAINTENANCE OF TRAFFIC NOTES

ALL -75 -15.80

14
188

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WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A PREQUALIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE TRAINED IN ACCORDANCE WITH CMS 614.03, SHALL HAVE SUCCESSFULLY COMPLETED ODOT ADMINISTERED WTS TESTING (AND RE-TESTING WHEN APPLICABLE) AND BE LISTED ON THE ODOT PREQUALIFIED WTS ROSTER. PREQUALIFICATION EXPIRES EVERY 5 YEARS. RE-TESTING SHALL BE SUCCESSFULLY REPEATED EVERY 5 YEARS TO REMAIN PREQUALIFIED.

THE NAME OF THE PREQUALIFIED WTS AND RELATED 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE (SECONDARY) WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY; HOWEVER THE PRIMARY WTS SHALL REMAIN THE POINT OF CONTACT AT ALL TIMES. ANY ALTERNATE (SECONDARY) WTS IS SUBJECT TO THE SAME TRAINING, PREQUALIFICATION AND OTHER REQUIREMENTS OUTLINED WITHIN THIS PLAN NOTE. AT ALL TIMES THE ENGINEER, OR ENGINEER'S REPRESENTATIVES, MUST BE INFORMED OF WHO THE PRIMARY WTS (AND SECONDARY WTS, IF APPLICABLE) IS AT THE CURRENT TIME.

THE WTS POSITION HAS THE PRIMARY RESPONSIBILITY OF IMPLEMENTING THE TRAFFIC MANAGEMENT PLAN (TMP), MONITORING THE SAFETY AND MOBILITY OF THE ENTIRE WORK ZONE, AND CORRECTING TEMPORARY TRAFFIC CONTROL (TTC) DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE WTS, AND ALTERNATE WTS WHEN ON DUTY, SHALL HAVE SUFFICIENT AUTHORITY TO EFFECTIVELY CARRY OUT THE IDENTIFIED WTS RESPONSIBILITIES AND DUTIES. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS.
2. BE ON SITE FOR ALL EMERGENCY TTC NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF AND EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TTC DEVICES.
3. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TTC MANAGEMENT IS DISCUSSED.
4. BE AVAILABLE ON SITE FOR OTHER MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST.
5. BE AWARE OF ALL EXISTING AND PROPOSED TTC OPERATIONS OF THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS, AND ENSURE COORDINATION OCCURS BETWEEN THEM TO ELIMINATE CONFLICTING TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL.
6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). THE WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE LEOS ARE ON THE PROJECT.

7. COORDINATE AND FACILITATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS THE WORK ZONE TCC FOR IMPLEMENTING THE PHASE SWITCH. SUBMIT A WRITTEN DETAIL OF MOT OPERATIONS AND SCHEDULE OF EVENTS TO IMPLEMENT THE SWITCH BETWEEN PHASE PLANS TO THE ENGINEER 5 CALENDAR DAYS PRIOR TO THIS MEETING.
8. BE PRESENT, ON SITE FOR, AND INVOLVED WITH, EACH TTC SET UP/TAKE DOWN AND EACH PHASE CHANGE IN ACCORDANCE WITH CMS 614.03.
9. ON CONTINUAL BASIS ENSURE THAT THE TTC ZONE AND ALL RELATED DEVICES ARE INSTALLED, MAINTAINED, AND REMOVED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
10. ON A CONTINUAL BASIS FACILITATE CORRECTIVE ACTION(S) NECESSARY TO BRING DEFICIENT TTC ZONES AND ALL RELATED DEVICES INTO COMPLIANCE WITH CONTRACT DOCUMENTS IN THE TIMEFRAME DETERMINED BY THE ENGINEER.
11. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TTC DEVICES AND TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, PERFORM ONE WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:
 - A. INITIAL TTC SETUP (DAY AND NIGHT REVIEW).
 - B. DAILY TTC SETUP AND REMOVAL.
 - C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TTC SETUP.
 - D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA AND WITHIN THE INFLUENCE AREA(S) APPROACHING THE WORK ZONE.
 - E. REMOVAL OF TTC DEVICES AT THE END OF A PHASE OR PROJECT.
 - F. ALL OTHER EMERGENCY TTC NEEDS.
12. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN # 11 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORK DAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED OR COMPLETED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THE CURRENT CA-D-8 DOCUMENT CAN BE FOUND ON THE OFFICE OF CONSTRUCTION ADMINISTRATION'S INSPECTION FORMS WEBSITE.

13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL DEDUCT:

- A. THE PRORATED DAILY AMOUNT OF ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY IN WHICH THE WTS FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. THE PRORATED DAILY AMOUNT WILL BE EQUAL TO THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC DIVIDED BY THE DIFFERENCE BETWEEN THE ORIGINAL COMPLETION DATE AND THE FIRST DAY OF WORK, IN CALENDAR DAYS.
- B. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A TTC ISSUE IS IDENTIFIED IN THE FIELD AND IS NOT CORRECTED IN THE GIVEN TIMEFRAME PER THE ENGINEER. DEDUCTION B SHALL NOT APPLY TO SITUATIONS COVERED BY DEDUCTION C.
- C. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A LANE OR RAMP IS BLOCKED (FULLY OR PARTIALLY) WITHOUT TTC, AS DETERMINED BY THE ENGINEER. THIS DEDUCTION SHALL BE IN ADDITION TO ANY OTHER DISINCENTIVES ESTABLISHED FOR UNAUTHORIZED LANE USE.

FOR DAYS IN WHICH MORE THAN ONE DEDUCTION LISTED ABOVE OCCUR, THE HIGHEST DEDUCTION AMOUNT WILL APPLY.

IF THREE OR MORE TOTAL DAYS RESULT IN TTC ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05. UPON REMOVAL THE ENGINEER SHALL NOTIFY ODOT CENTRAL OFFICE (WTSPREQUALIFICATION@DOT.OHIO.GOV) TO REGISTER A REMOVAL AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS. THREE REMOVALS SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY PREVIOUSLY PREQUALIFIED WTS.

PAYMENT FOR THE ABOVE REQUIREMENTS, RESPONSIBILITIES AND DUTIES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 618 - RUMBLE STRIPS (ASPHALT CONCRETE), AS PER PLAN

THE CONTRACTOR SHALL MILL 2 INCHES DEEP BY 2 FEET WIDE OF THE EXISTING ASPHALT SHOULDER IN ORDER TO REMOVE THE EXISTING RUMBLE STRIPS ALONG I.R. 75 IN THE AREA WHERE TRAFFIC IS SHIFTED ONTO OR ACROSS THE RUMBLE STRIPS. THE CONTRACTOR SHALL THEN COAT ALL MILLED SURFACES HORIZONTAL AND VERTICAL WITH APPROVED AC LIQUID. NEXT THE CONTRACTOR SHALL PLACE 2 INCHES OF ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22.

AN ESTIMATED QUANTITY OF 13,550 FEET HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE AREAS SHOWN IN THE MOT PLANS. THIS QUANTITY DOES NOT INCLUDE THE RESURFACING AREAS COVERED BY THE NOTE ON SHEET 12.

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 615, AT THE COMPLETION OF PHASE 4 THE CONTRACTOR SHALL REMOVE THE PORTION OF THE TEMPORARY PAVEMENT BEYOND THE LIMITS OF THE EXISTING OR PROPOSED SHOULDERS. PORTIONS OF THE TEMPORARY PAVEMENT USED TO RECONSTRUCT THE EXISTING SHOULDERS SHALL REMAIN IN PLACE.

ITEM 614, REPLACEMENT SIGN

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

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

AN ESTIMATED QUANTITY OF 10 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

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

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

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

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

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

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

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

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

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE BEEN APPROVED BY THE MOT EXCEPTION COMMITTEE (MOTEC) OR THE PROJECT IMPACT ADVISORY COUNCIL (PIAC) PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE:
PHASE 1 RAMP CLOSURES (K&G) SHALL BE A MAXIMUM OF 5 DAYS
PHASE 2 RAMP CLOSURES (K&J) SHALL BE A MAXIMUM OF 14 DAYS
PHASE 3 RAMP CLOSURES (G&H) SHALL BE A MAXIMUM OF 14 DAYS

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

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 12/14/2018 FOR PID 94214" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

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

FLOODLIGHTING

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

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

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

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

PORTABLE STEEL BARRIER IS AN APPROVED ALTERNATIVE TO PORTABLE CONCRETE BARRIER. FOR INFORMATION ON APPROVED VENDORS, SEE THE APPROVED PRODUCTS LIST MAINTAINED BY THE OFFICE OF ROADWAY ENGINEERING.

PORTABLE BARRIER, 32 INCHES HIGH WITH AN 18-INCH MINIMUM HEIGHT GLARE SCREEN MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

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

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER, SEE THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622, PORTABLE BARRIER, 50", AS PER PLAN.

SEQUENCE OF CONSTRUCTION

RESURFACING AND FULL DEPTH PHASING MAY BE PERFORMED TOGETHER OR INDEPENDENTLY. IF A LANE CLOSURE IS IN PLACE FOR THE RESURFACING SECTION IT SHALL BE CONTINUED THROUGH THE FULL DEPTH/CONTRA FLOW SECTION. ACCESS TO RAMPS SHALL BE MAINTAINED AT ALL TIMES UNLESS DURING THE PERMITTED RAMP CLOSURE WINDOW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING FULL DEPTH AND RESURFACING WORK SUCH THAT ALL NOTES AND PROVISIONS HERE IN ARE ADHERED TO. ALL TRAFFIC CONTROL MODIFICATIONS NECESSARY TO ACCOMMODATE THE CONTRACTOR'S SCHEDULED WORK ORDER SHALL BE APPROVED BY THE ENGINEER.

FULL DEPTH PHASING

PHASE 1
PRIOR TO FULL DEPTH CONSTRUCTION OF I.R. 75, THE CONTRACTOR SHALL CONSTRUCT THE PROPOSED CULVERT NEAR STA. 897+00 AND TEMPORARY PAVEMENT NECESSARY TO MAINTAIN TRAFFIC IN THE SUBSEQUENT PHASES. THIS SHALL INCLUDE REPLACEMENT OF EXISTING SHOULDER PAVEMENT IN AREAS WHERE EXISTING SHOULDERS WILL BE UTILIZED TO MAINTAIN TRAFFIC IN PHASES 2 AND 3 AS SHOWN IN THE PLANS.

CONSTRUCT WEST HEADWALL AND AS MUCH OF BOX CULVERT AS POSSIBLE WITHOUT CLOSING RAMP K.

CLOSE RAMP K FOR A MAXIMUM OF 5 DAYS USING DETOUR ON SHEET 20. CONTINUE CONSTRUCTION OF BOX CULVERT.

CONSTRUCT BOX UNDER MAINLINE USING SHIFTS, SHOULDER AND LANE CLOSURES DURING PERMITTED LANE CLOSURE PERIODS. TRAFFIC SHALL BE MAINTAINED WITH APPLICABLE STANDARD CONSTRUCTION DRAWINGS.

CLOSE RAMP G FOR 5 DAYS MAX USING DETOUR ON SHEET 17. COMPLETE CONSTRUCTION OF BOX CULVERT.

ALL ITEMS REQUIRED TO SAFELY MAINTAIN TRAFFIC DURING CONSTRUCTION OF THE BOX CULVERT INCLUDING, BUT NOT LIMITED TO: TEMPORARY PAVEMENT, PORTABLE BARRIER, TEMPORARY PAVEMENT MARKINGS, AND IMPACT ATTENUATORS SHALL BE PAID FOR UNDER THE LUMP SUM ITEM 614 - MAINTAINING TRAFFIC.

PHASE 2
PRIOR TO THE START OF THIS PHASE, COMPLETE ALL TEMPORARY TRAFFIC CONTROL AS SHOWN IN THE PLANS. PRIOR TO PLACING TRAFFIC ON THE NB INSIDE SHOULDER, PLANE AND OVERLAY SHOULDER AS NEEDED TO ENSURE POSITIVE DRAINAGE AND ELIMINATE PONDING UNDER THE SR 696 STRUCTURE. ALL WORK NECESSARY TO ELIMINATE PONDING SHALL BE PAID FOR UNDER THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC. SHIFT I.R. 75 NB TRAFFIC ONTO THE OUTSIDE SHOULDER AND CROSSOVER THE INSIDE LANE OF I.R. 75 SB TO THE INSIDE SHOULDER AND TEMPORARY PAVEMENT OF I.R. 75 NB. SHIFT OUTSIDE LANE OF I.R. 75 SB TO INSIDE LANE OF I.R. 75 SB. CONSTRUCT PORTIONS OF THE I.R. 75 SB PAVEMENT WHILE MAINTAINING RAMPS J AND K AS SHOWN IN THE PLANS.

RAMPS J AND K MAY BE CLOSED FOR UP TO 14 CONSECUTIVE CALENDAR DAYS TO COMPLETE OUTSIDE PAVEMENT AND RAMP CONSTRUCTION. TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEETS 19 AND 20.

PHASE 3
PRIOR TO THE START OF THIS PHASE, COMPLETE ALL TEMPORARY TRAFFIC CONTROL AS SHOWN IN THE PLANS. SHIFT BOTH I.R. 75 SB LANES ONTO THE PAVEMENT CONSTRUCTED IN PHASE 2. SHIFT AND CROSSOVER I.R. 75 NB TRAFFIC TO THE LOCATION OF I.R. 75 SB TRAFFIC IN PHASE 2. PHASE 2 PORTABLE BARRIER MAY REMAIN IN THE PHASE 2 LOCATION. CONSTRUCT PORTIONS OF THE I.R. 75 NB PAVEMENT WHILE MAINTAINING RAMPS G AND H AS SHOWN IN THE PLANS.

RAMPS G AND H MAY BE CLOSED FOR UP TO 14 CONSECUTIVE CALENDAR DAYS TO COMPLETE OUTSIDE PAVEMENT AND RAMP CONSTRUCTION. TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEETS 17 AND 18.

CONSTRUCT OUTSIDE SHOULDERS, RAMP ACCELERATION AND DECELERATION LANES, RAMPS, AND PART OF I.R. 75 NB PAVEMENT.

PHASE 4
BOTH SB LANES REMAIN IN PHASE 3 CONFIGURATION. SHIFT BOTH NB LANES ONTO NEW PAVEMENT CONSTRUCTED DURING PHASE 3. MAINTAIN ALL RAMPS AS SHOWN IN THE PLANS

CONSTRUCT ALL REMAINING INSIDE PAVEMENT, REMOVE MEDIAN WALL, GRADE THE MEDIAN AND INSTALL REMAINING DRAINAGE.

RESURFACING PHASING
A SINGLE LANE IN EACH DIRECTION MAY BE MAINTAINED DURING THE ALLOWABLE TIMES ON THE PERMITTED LANE CLOSURE NOTE. ALL LANE CLOSURES SHALL BE ACCORDING TO APPLICABLE STANDARD CONSTRUCTION DRAWINGS AND THE NOTES AND DETAILS HEREIN. TWO LANES IN EACH DIRECTION MUST BE MAINTAINED DURING NOT PERMITTED TIMES ON THE PERMITTED LANE CLOSURE SCHEDULE. RAMPS MAY BE CLOSED AS DETAILED IN THE PLANS.

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A

DETOUR
1500 FT
W20-2-48

B

DETOUR
M4-8-30
696
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
↑
M6-3-30

C

DETOUR
M4-8-30
696
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
↗
M5-2-30

D

DETOUR
M4-8-30
696
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
↗
M6-2-30

E

DETOUR
M4-8-30
696
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
←
M5-1-30

F

DETOUR
M4-8-30
696
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
←
M6-1L-30

G

DETOUR
M4-8-30
696
MI-5-45-3
TO
M4-5-30
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MI-4-36-2
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M5-1-30

H

DETOUR
M4-8-30
696
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
→
M6-1-30

I

END
DETOUR
M4-8a-24
696
MI-5-45-3

L

TYPE A
ROAD
WORK
AHEAD
W20-1-48

M

TYPE A
EXIT
CLOSED
AHEAD
E5-H2C-48

N

EXIT
CLOSED
E5-2A-48

J

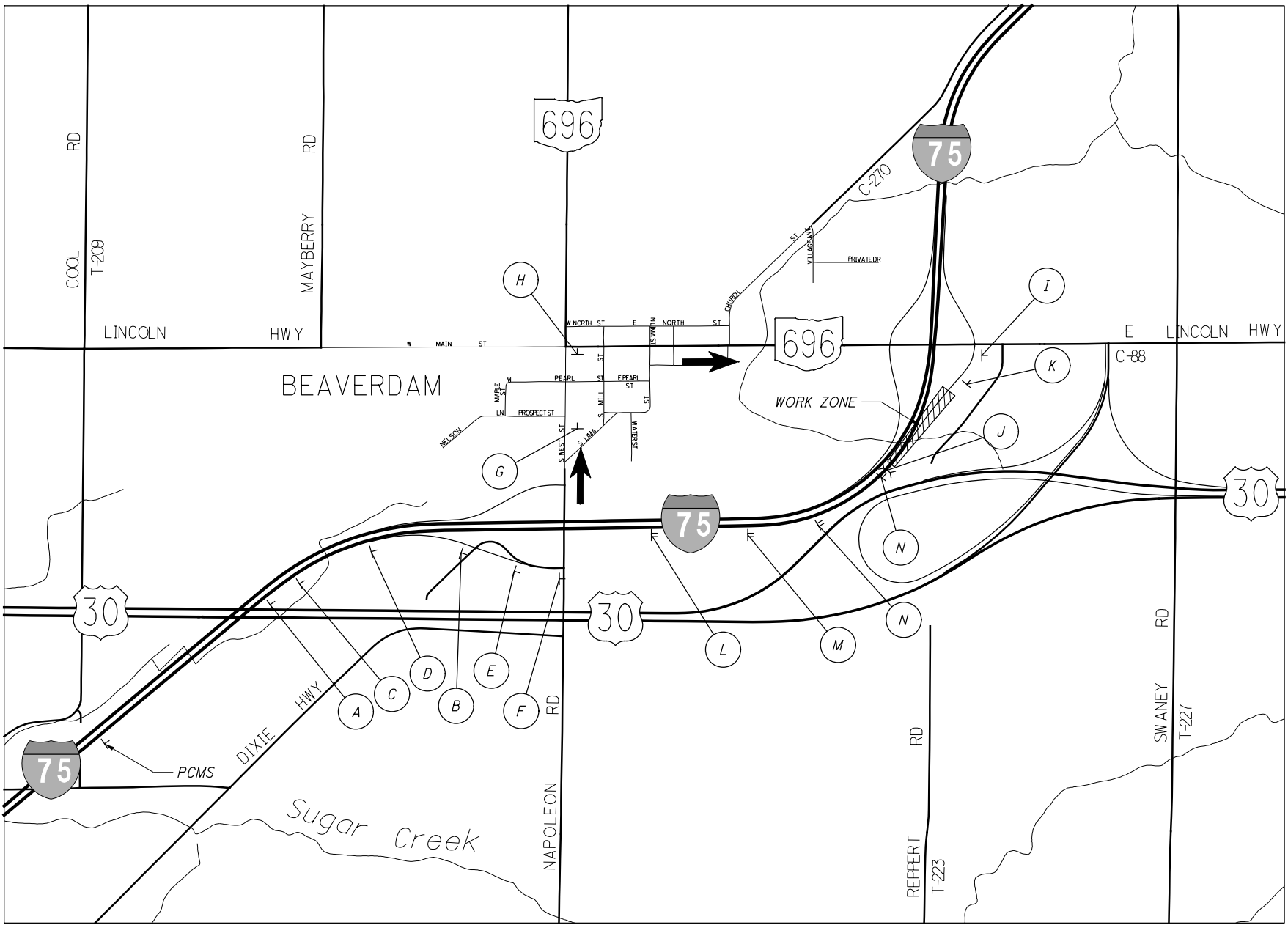
ROAD
CLOSED
R11-2-48 MOUNTED ON
TYPE III BARRICADE
BARRICADE STRIPES SHALL
SLOPE TOWARD CENTERLINE
OF ROAD PER MT-101.60 2A

K

RAMP WILL BE
CLOSED
FOR DAYS
INFO: 419-999-6803
W20-H13-60

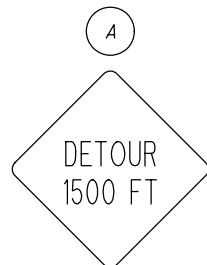
NOTE: FOR PHASE 1 USE 5 DAYS. FOR PHASE 3 USE 14 DAYS.
THE CONSTRUCTOR IS TO SUPPLY THE DATE.

NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

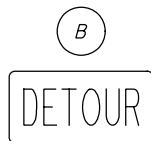


PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES
EXIT 135 CLOSED
FOLLOW DETOUR EXIT 134

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W20-2-48



M4-8-30



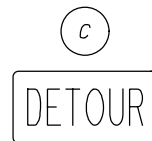
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M1-1-36-2



M6-3-30



M4-8-30



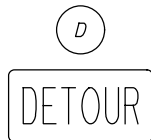
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M1-1-36-2



M5-1-30



M4-8-30



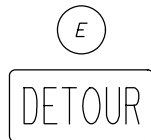
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M1-1-36-2



M6-1L-30



M4-8-30



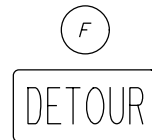
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M1-1-36-2



M5-1-30



M4-8-30



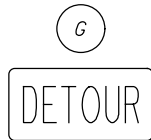
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M1-1-36-2



M6-1-30



M4-8-30



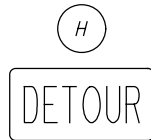
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M1-1-36-2



M5-2-30



M4-8-30



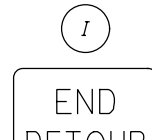
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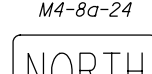
M1-1-36-2



M6-2-30



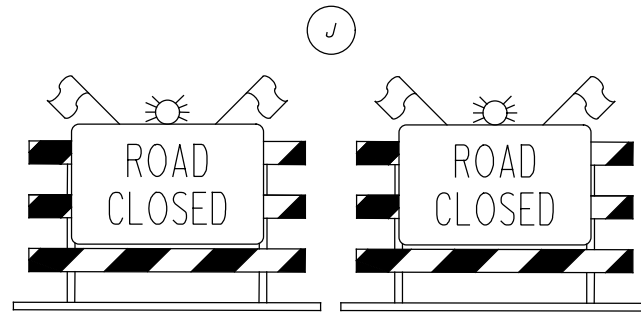
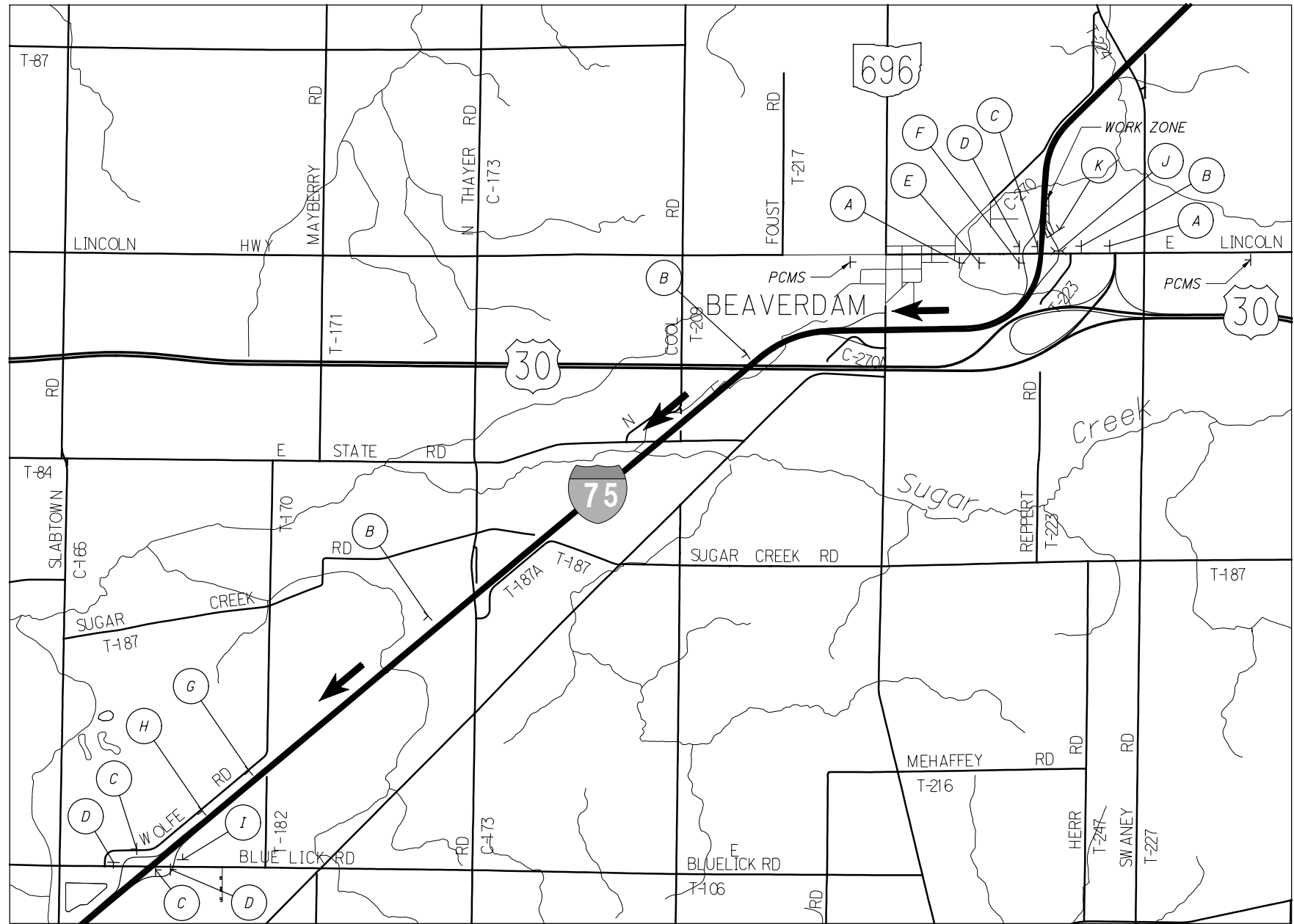
M4-8a-24



M3-1-36



M1-1-24-2



R11-2-48 MOUNTED ON
TYPE III BARRICADE
BARRICADE STRIPES SHALL
SLOPE TOWARD CENTERLINE
OF ROAD PER MT-101.60 2A



W20-H13-60
NOTE: THE CONTRACTOR IS
TO SUPPLY THE DATE.

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES	
IR 75 NB ENT RAMP CLOSED	
FOLLOW DETOUR	

NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

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A

DETOUR
1500 FT
W20-2-48

B

DETOUR
M4-8-30
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
↑
M6-3-30

C

DETOUR
M4-8-30
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
↗
M5-2-30

D

DETOUR
M4-8-30
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
↗
M6-2-30

E

DETOUR
M4-8-30
MI-5-45-3
TO
M4-5-30
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MI-4-36-2
↖
M5-1-30

F

DETOUR
M4-8-30
MI-5-45-3
TO
M4-5-30
30
MI-4-36-2
←
M6-1L-30

G

END
DETOUR
M4-8a-24
MI-5-45-3

H

TYPE A
ROAD
WORK
AHEAD
W20-1-48

I

TYPE A
EXIT
CLOSED
AHEAD
E5-H2C-48

J

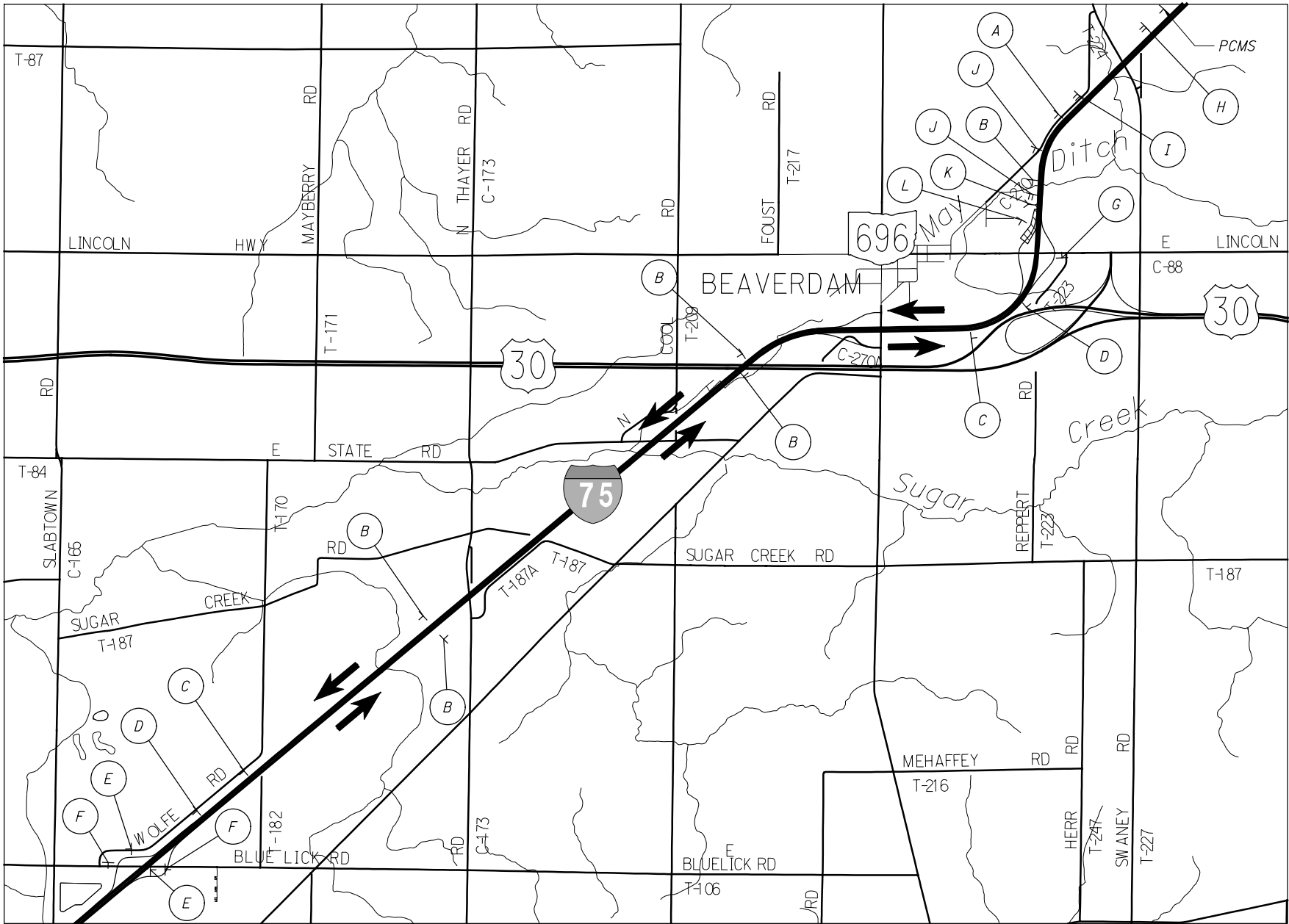
EXIT
CLOSED
E5-2A-48

K

R11-2-48 MOUNTED ON
TYPE III BARRICADE
BARRICADE STRIPES SHALL
SLOPE TOWARD CENTERLINE
OF ROAD PER MT-101.60 2A

L

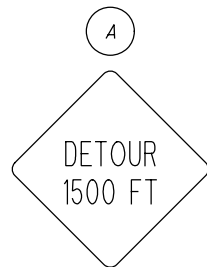
RAMP WILL BE
CLOSED
FOR DAYS
INFO: 419-999-6803
W20-H13-60
NOTE: THE CONTRACTOR IS
TO SUPPLY THE DATE.



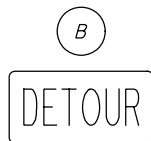
NOTE: PLACE SIGNS AT RAMP J CLOSURE PER SCD MT-98.29

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES
EXIT 135 CLOSED
FOLLOW DETOUR

NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.



W20-2-48



M4-8-30



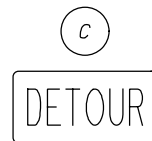
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M1-1-36-2



M6-3-30



M4-8-30



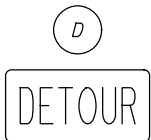
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M1-1-36-2



M5-1-30



M4-8-30



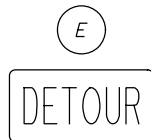
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M1-1-36-2



M6-1L-30



M4-8-30



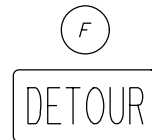
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M1-1-36-2



M5-1-30



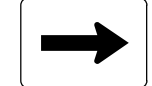
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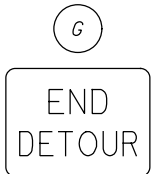
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M1-1-36-2



M6-1-30



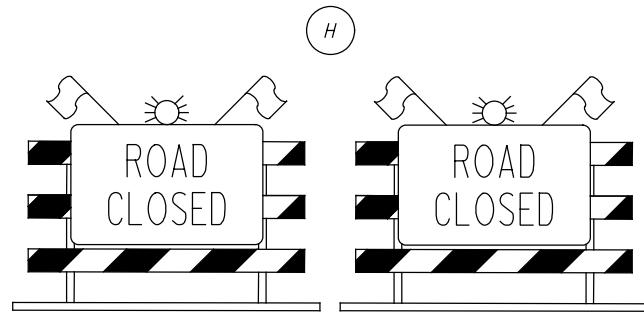
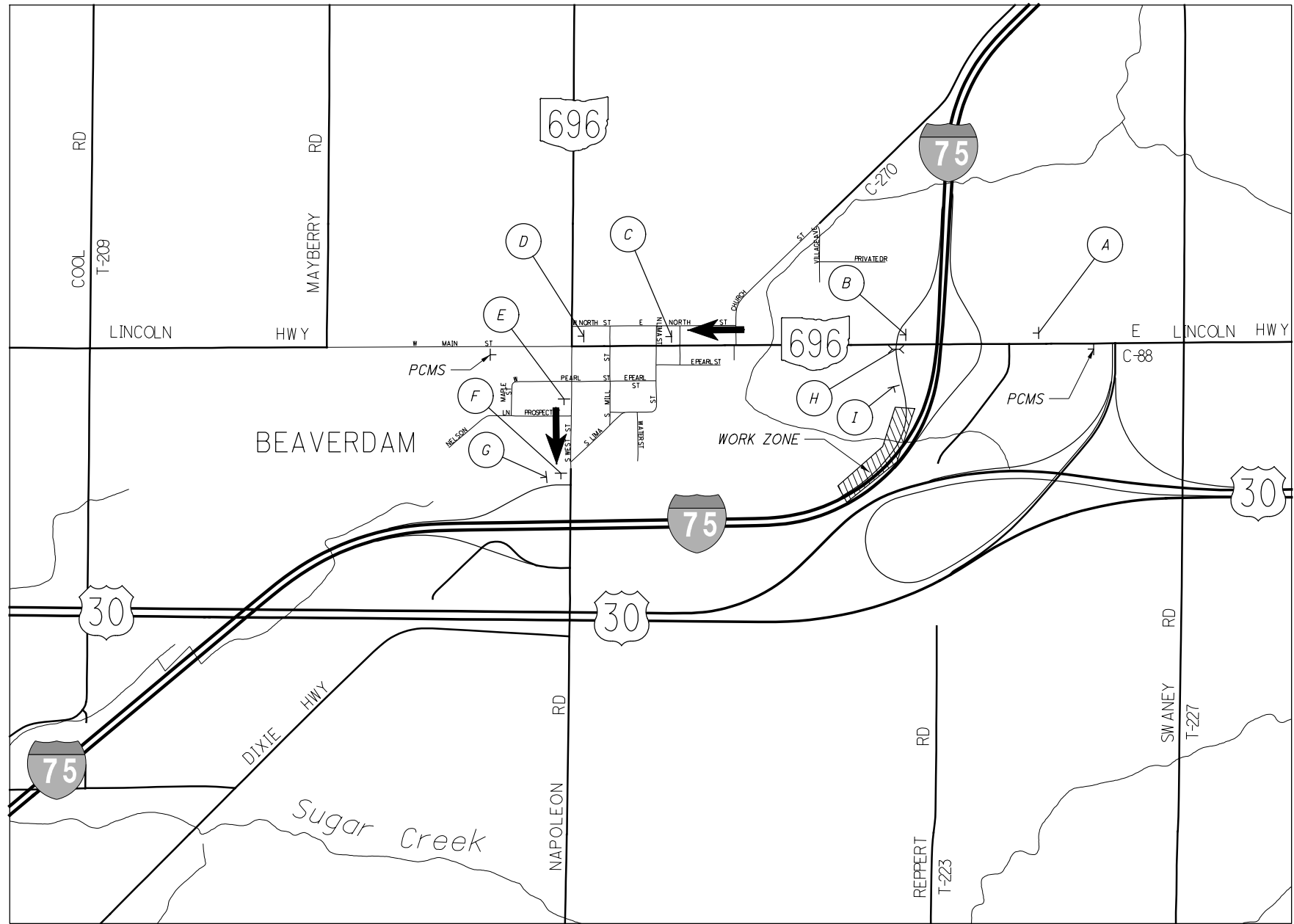
M4-8a-24



M3-3-36



M1-1-36-2



R11-2-48 MOUNTED ON
TYPE III BARRICADE
BARRICADE STRIPES SHALL
SLOPE TOWARD CENTERLINE
OF ROAD PER MT-101.60 2A



W20-H13-60

NOTE: FOR PHASE 1 USE 5 DAYS. FOR PHASE 2 USE 14 DAYS.
THE CONSTRUCTOR IS TO SUPPLY THE DATE.

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES	
IR 75 SB ENT RAMP CLOSED	
FOLLOW DETOUR	

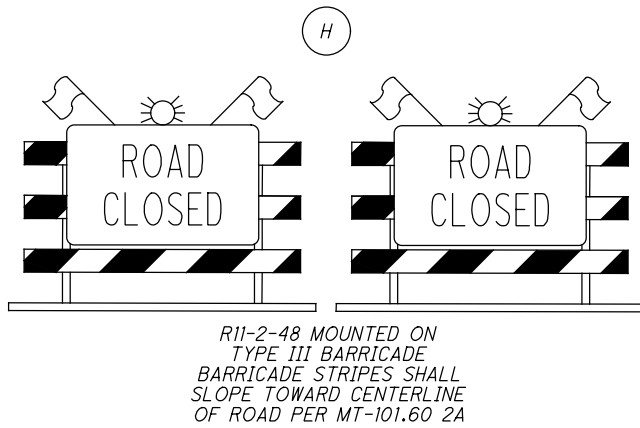
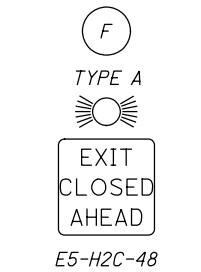
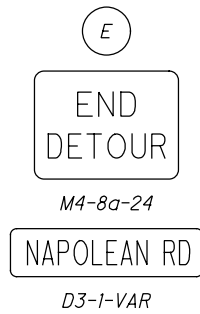
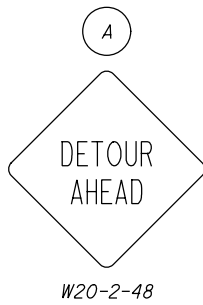
NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

CALCULATED
TDP
CHECKED
MJC

MAINTENANCE OF TRAFFIC - RAMP K DETOUR PLAN

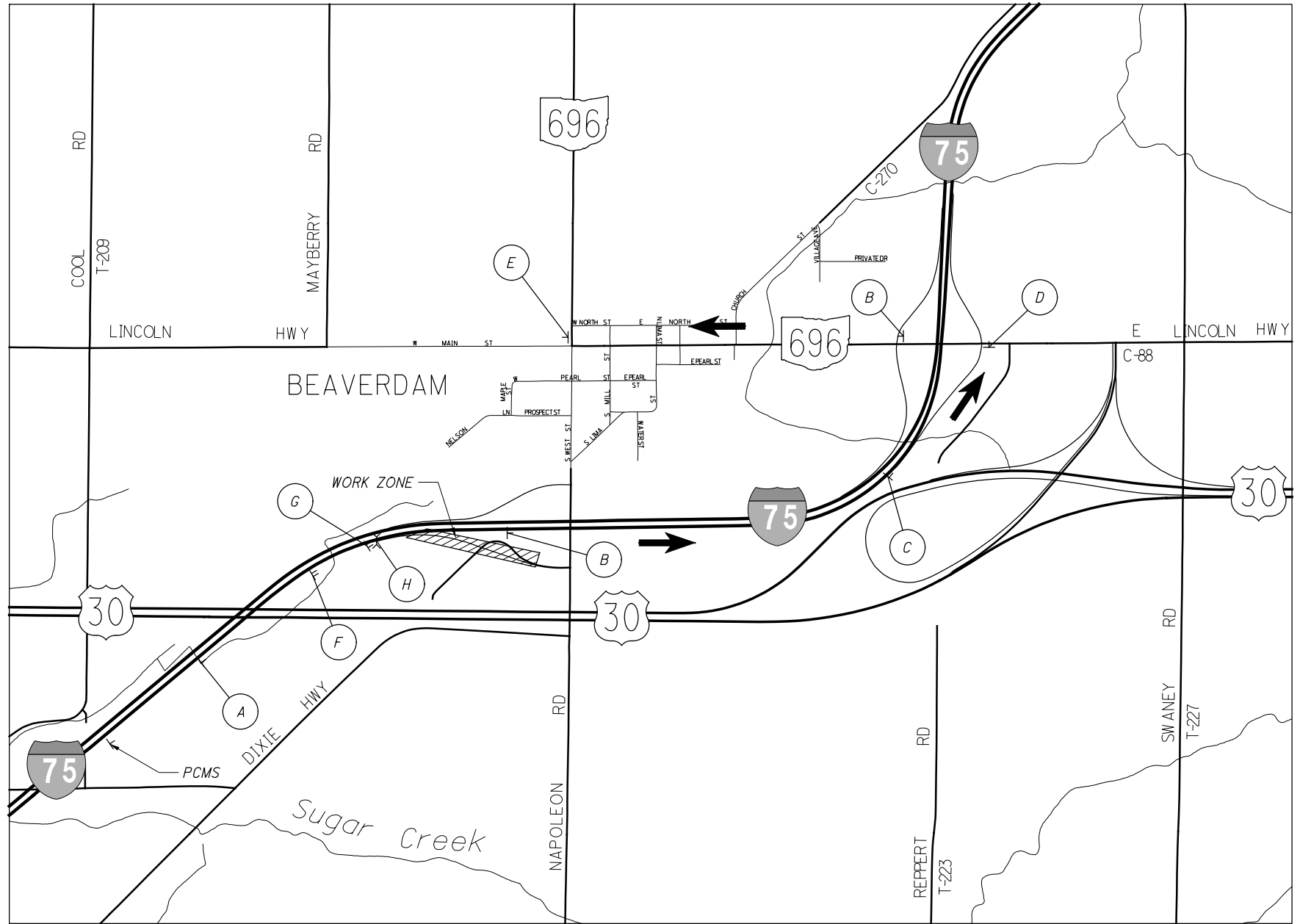
ALL-75-15.80

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R11-2-48 MOUNTED ON
TYPE III BARRICADE
BARRICADE STRIPES SHALL
SLOPE TOWARD CENTERLINE
OF ROAD PER MT-101.60 2A

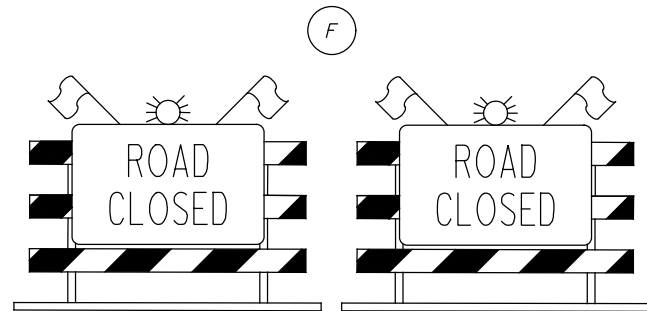
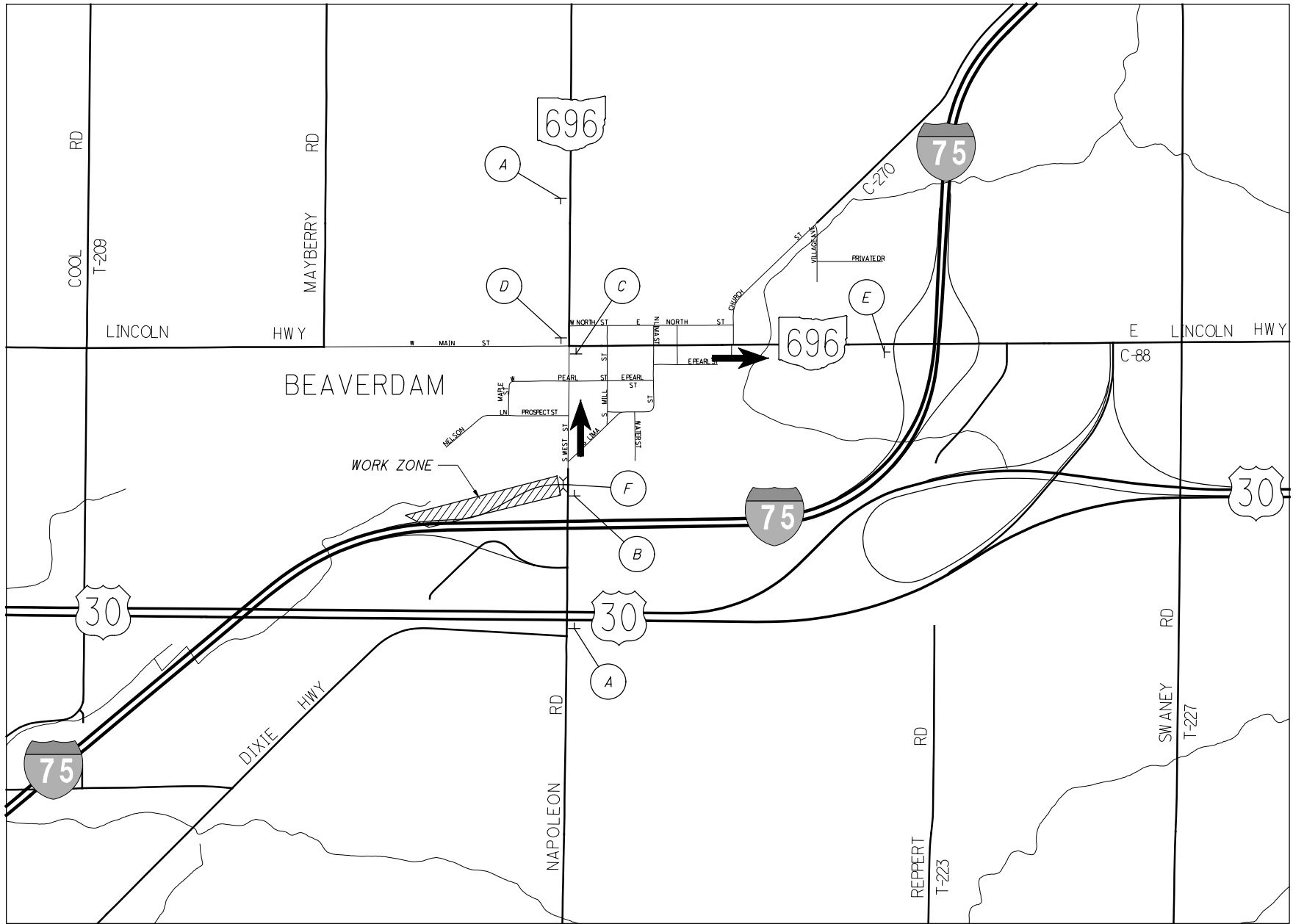
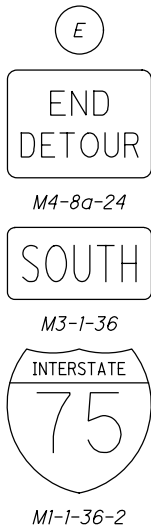
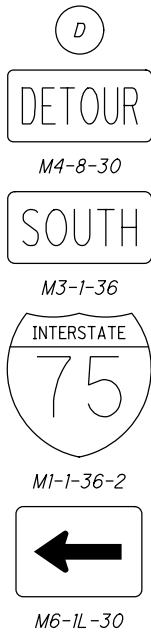
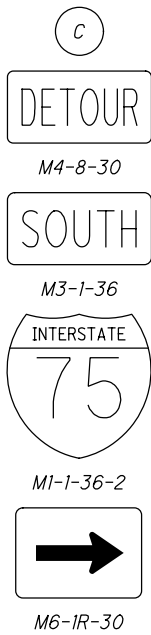
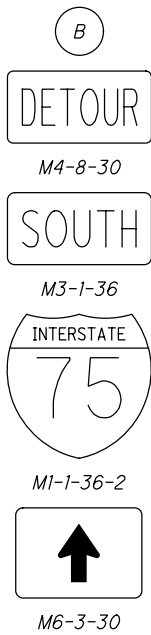
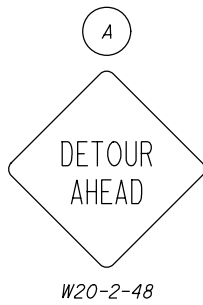
NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - DETOUR SIGNING.



NOTE: PLACE SIGNS AT RAMP E CLOSURE PER SCD MT-98.29.
MAINTAIN ACCESS FROM RAMP E TO N DIXIE HWY AT ALL TIMES.

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES
EXIT 134 CLOSED
FOLLOW DETOUR EXIT 135

P:\94214-ALL-75-15.80\Design\M0T\Sheets\94214_MD006.dgn Sheet 9/19/2019 9:29:59 AM sbing



R11-2-48 MOUNTED ON
TYPE III BARRICADE
BARRICADE STRIPES SHALL
SLOPE TOWARD CENTERLINE
OF ROAD PER MT-101.60 2A

NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - DETOUR SIGNING.

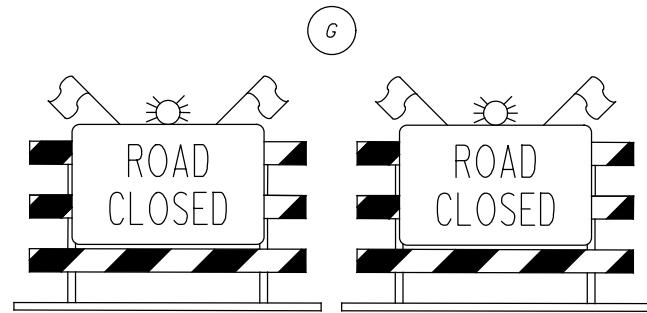
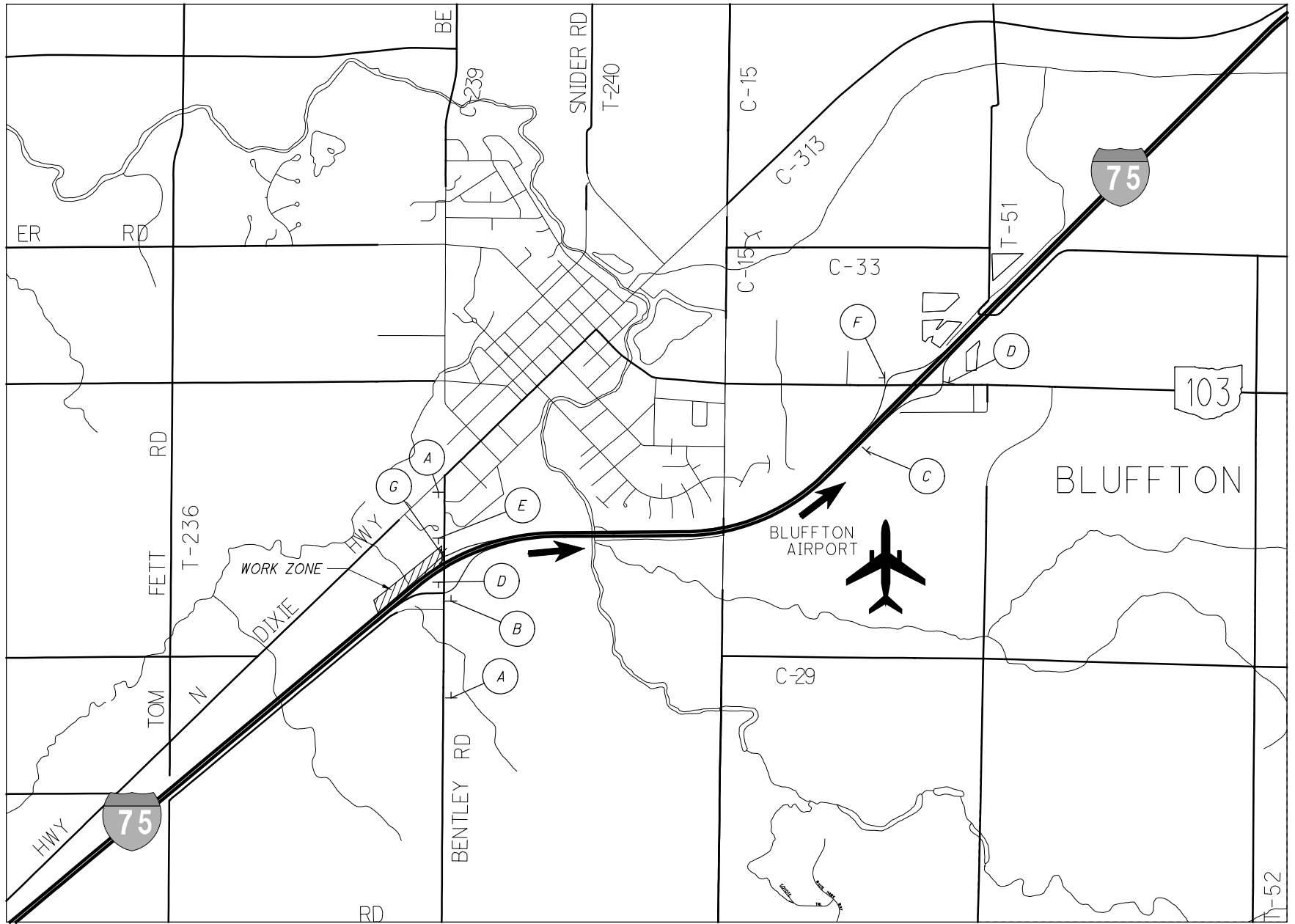
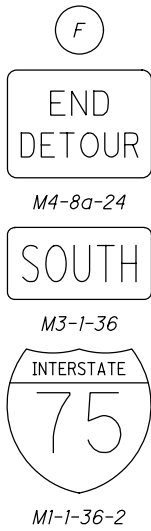
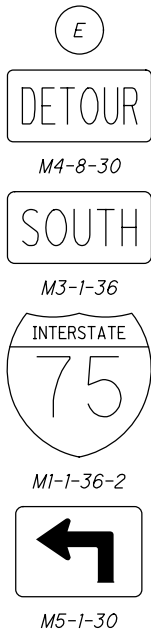
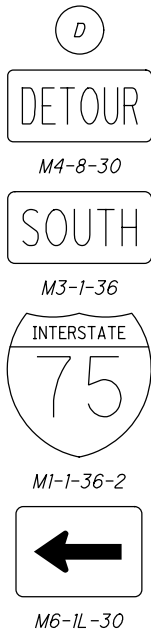
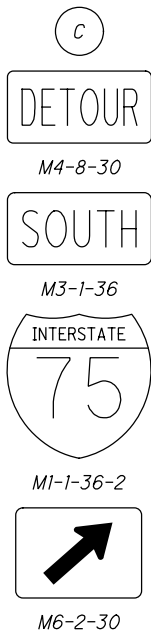
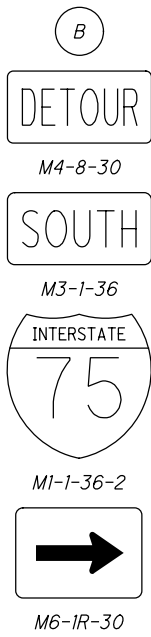
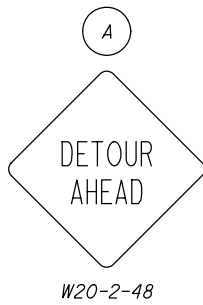
CALCULATED
SMB
CHECKED
MJC

MAINTENANCE OF TRAFFIC - RAMP F DETOUR PLAN

ALL -75-15.80

20B
188

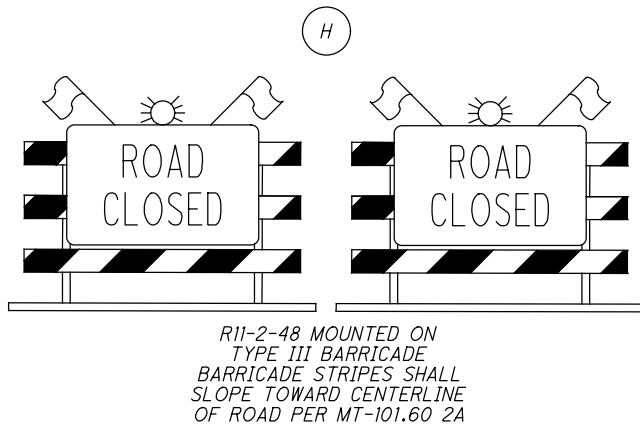
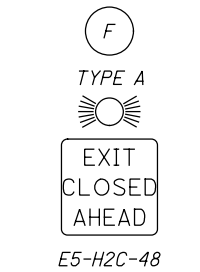
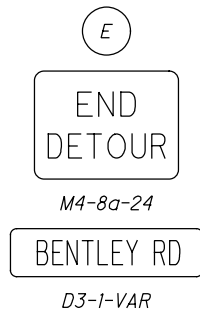
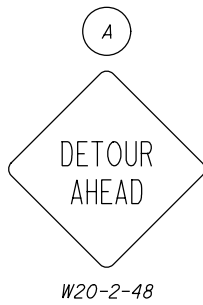
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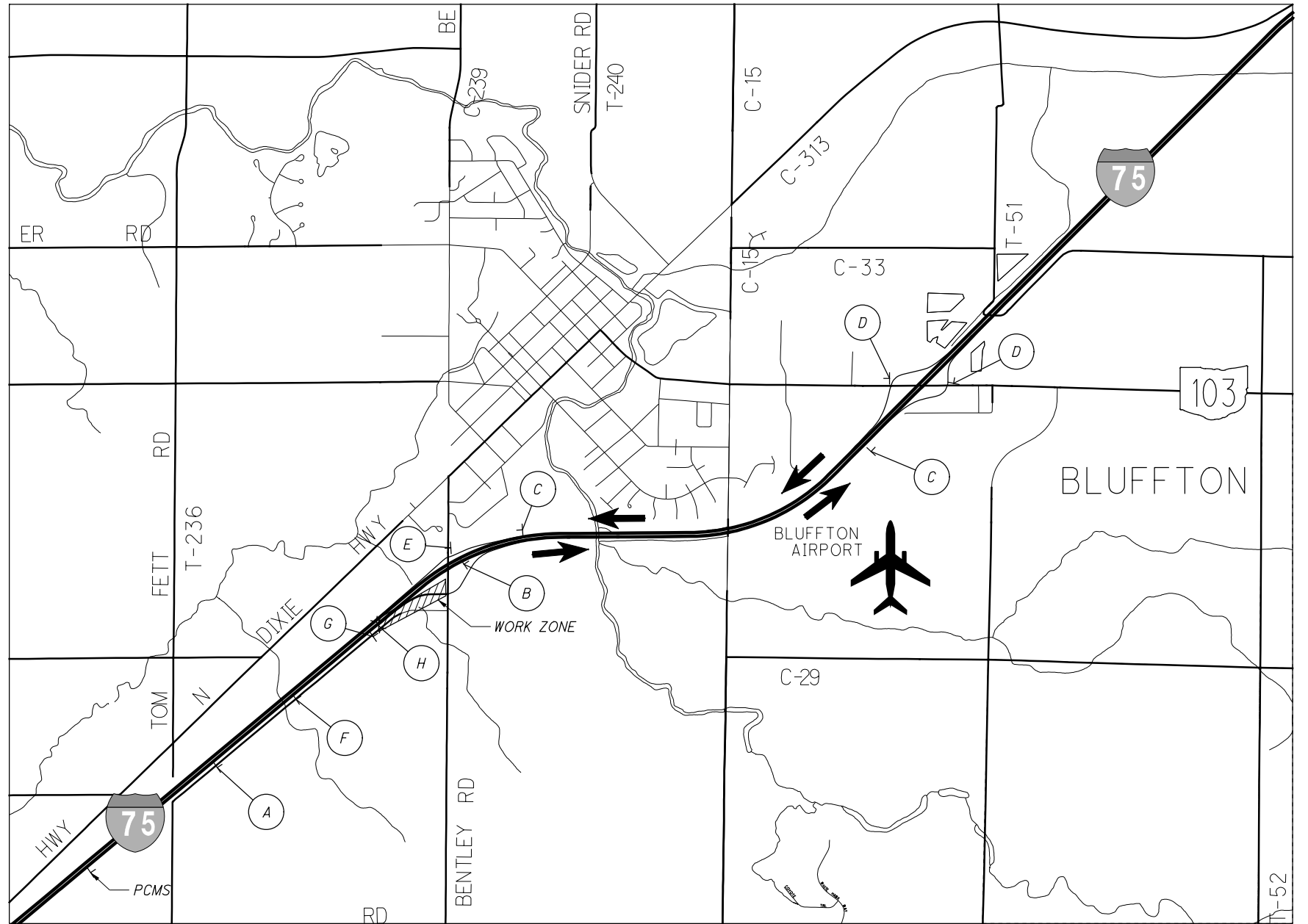
R11-2-48 MOUNTED ON
TYPE III BARRICADE
BARRICADE STRIPES SHALL
SLOPE TOWARD CENTERLINE
OF ROAD PER MT-101.60 2A

NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - DETOUR SIGNING.

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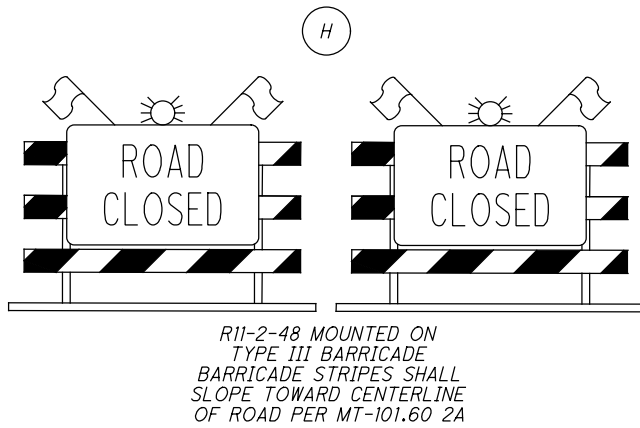
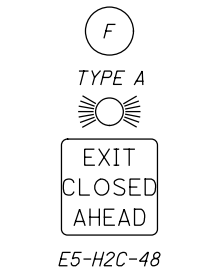
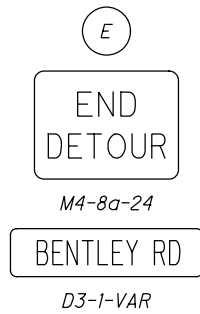
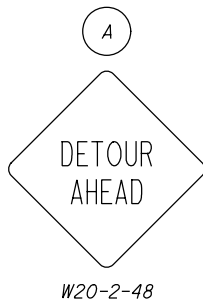
NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - DETOUR SIGNING.



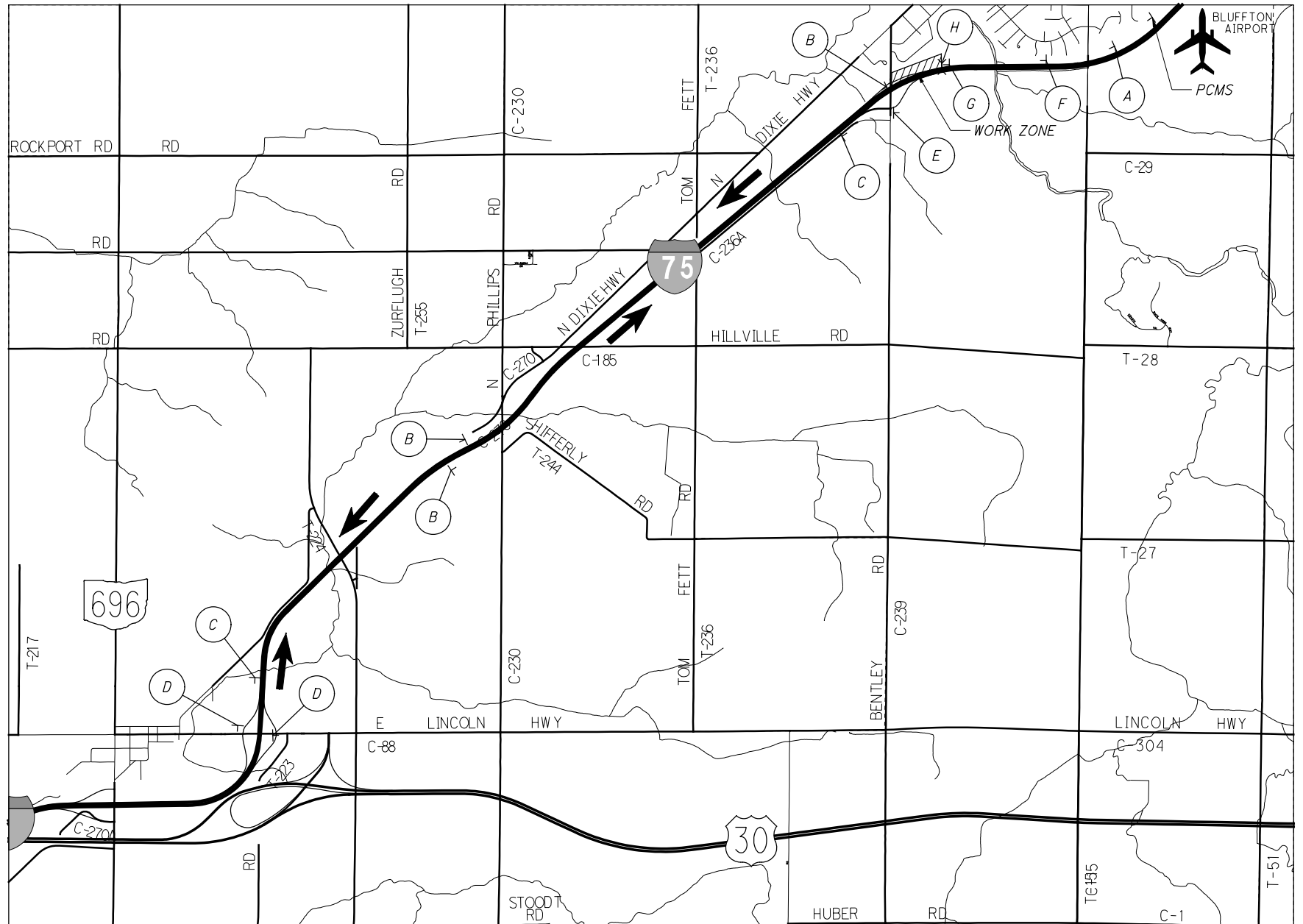
NOTE: PLACE SIGNS AT RAMP B CLOSURE PER SCD MT-98.29.

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES
EXIT 140 CLOSED
FOLLOW DETOUR EXIT 142

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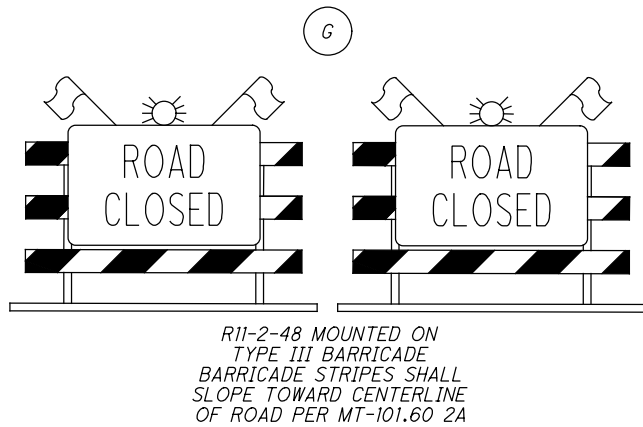
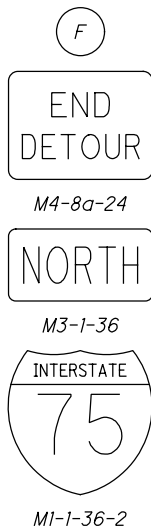
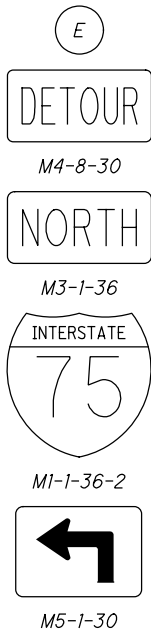
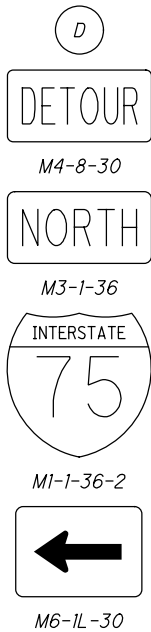
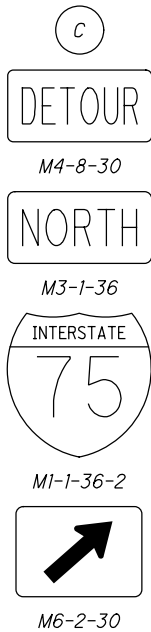
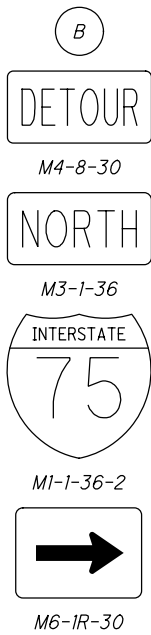
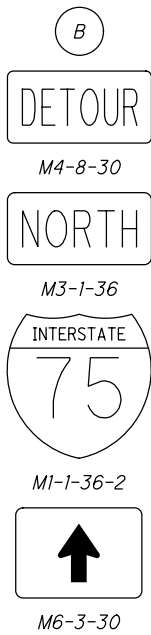
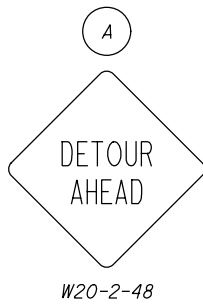
NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - DETOUR SIGNING.



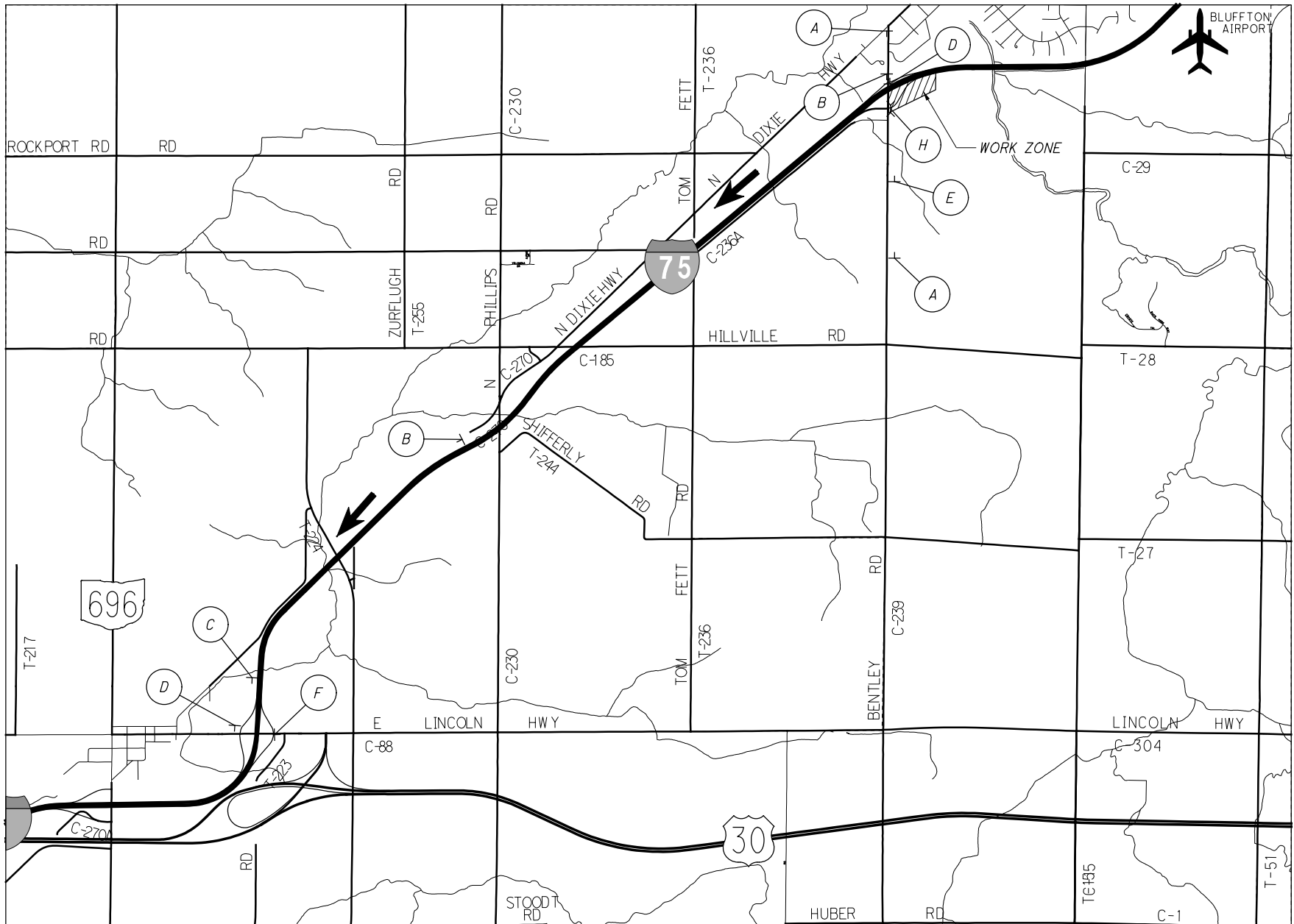
NOTE: PLACE SIGNS AT RAMP B CLOSURE PER SCD MT-98.29.

PORTABLE CHANGEABLE MESSAGE SIGNS RECOMMENDED MESSAGES
EXIT 140 CLOSED
FOLLOW DETOUR EXIT 135

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NOTE:
THE ERECTION, MAINTENANCE, AND REMOVAL OF ALL DETOUR
SIGNING SHALL BE PAID FOR UNDER THE LUMP SUM CONTRACT
PRICE FOR ITEM 614 - DETOUR SIGNING.

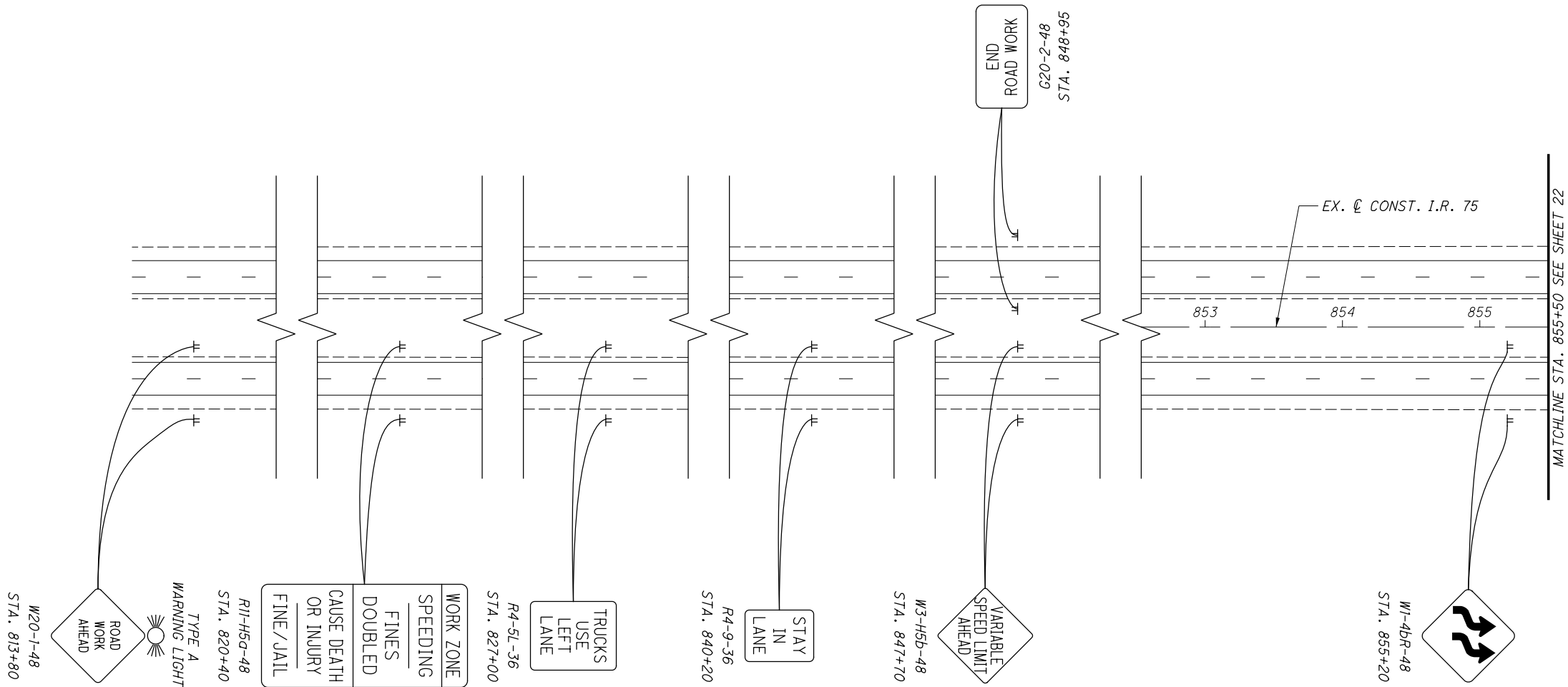


LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

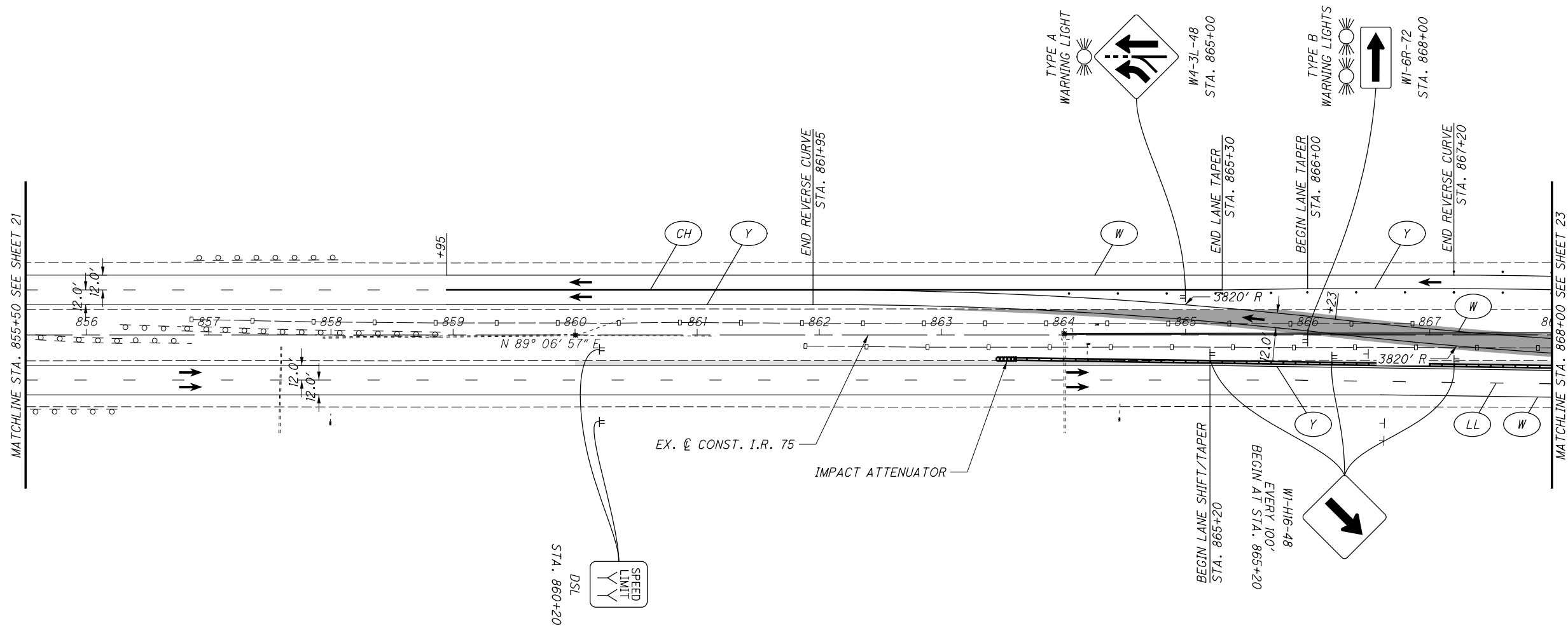
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE



 SHOULDER REHABILITATION COMPLETED PRIOR TO THE START OF THIS PHASE

 TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

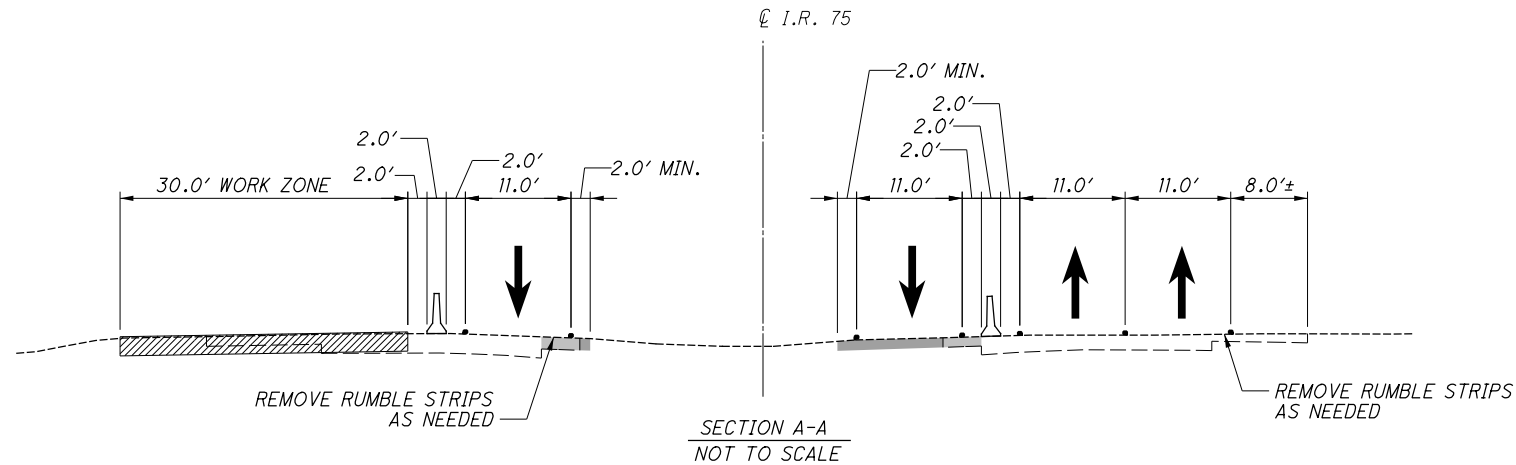
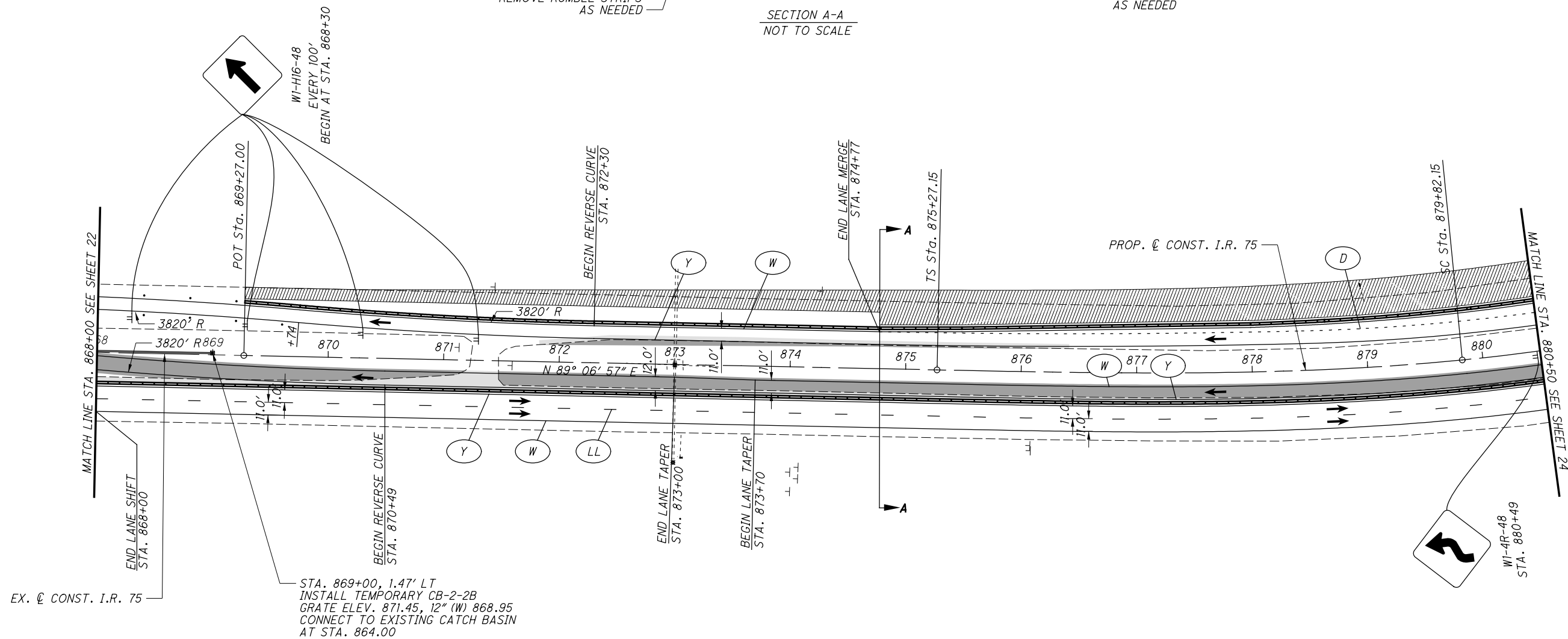


LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE



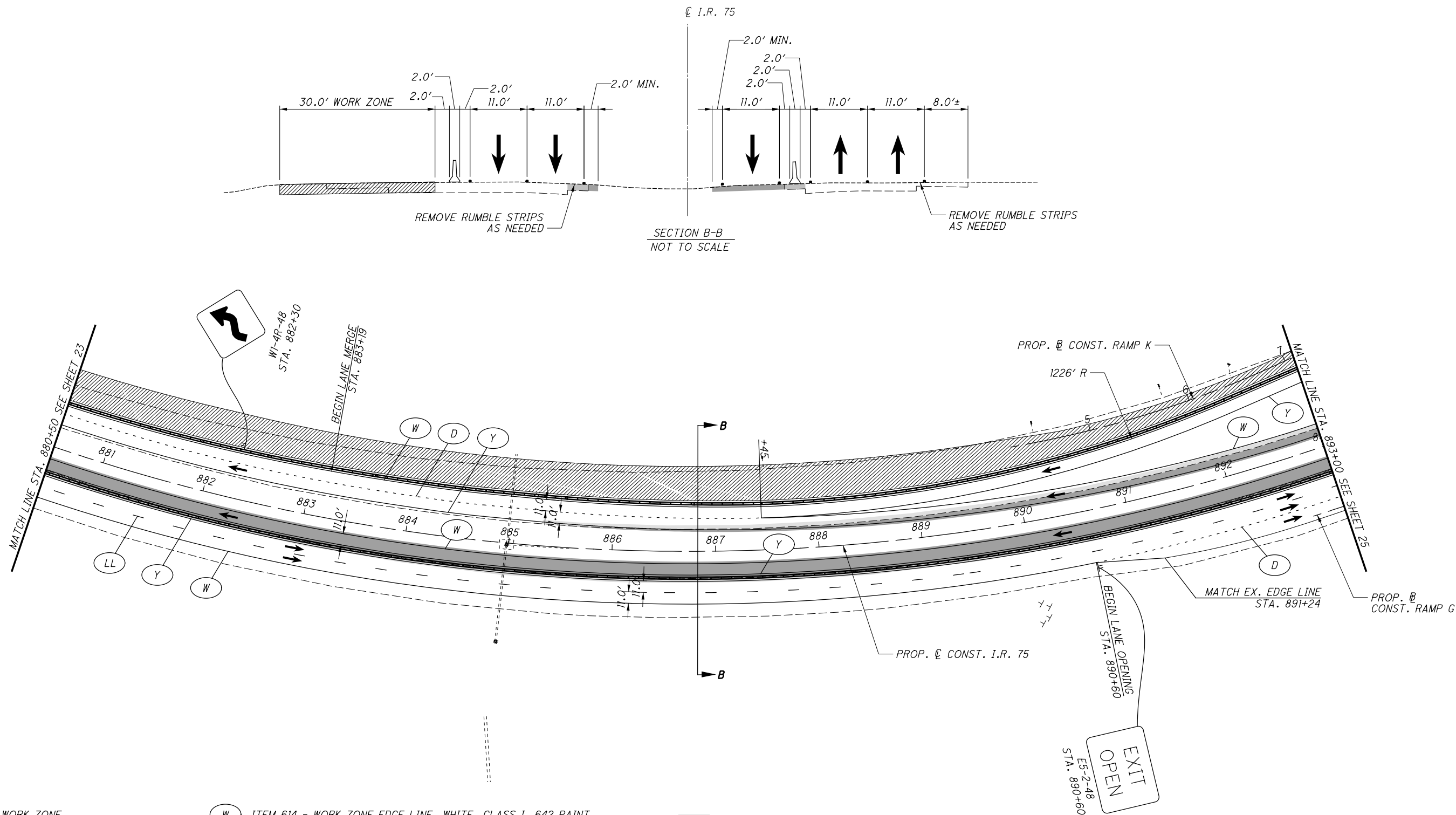
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LEGEND

- WORK ZONE
- CONSTRUCTION BARREL
- DIRECTION OF TRAVEL
- TYPE 3 BARRICADE
- PORTABLE BARRIER

- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

- SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
- TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE



MAINTENANCE OF TRAFFIC PHASE 2
I.R. 75 STA. 880+50 TO STA. 893+00

ALL-75-15.80

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TYPE A
WARNING LIGHT


ROAD
WORK
AHEAD


W20-1-48

WORK ZONE
SPEEDING
FINES
DOUBLED
CAUSE DEATH
OR INJURY
FINE/JAIL


R11-H5a-24

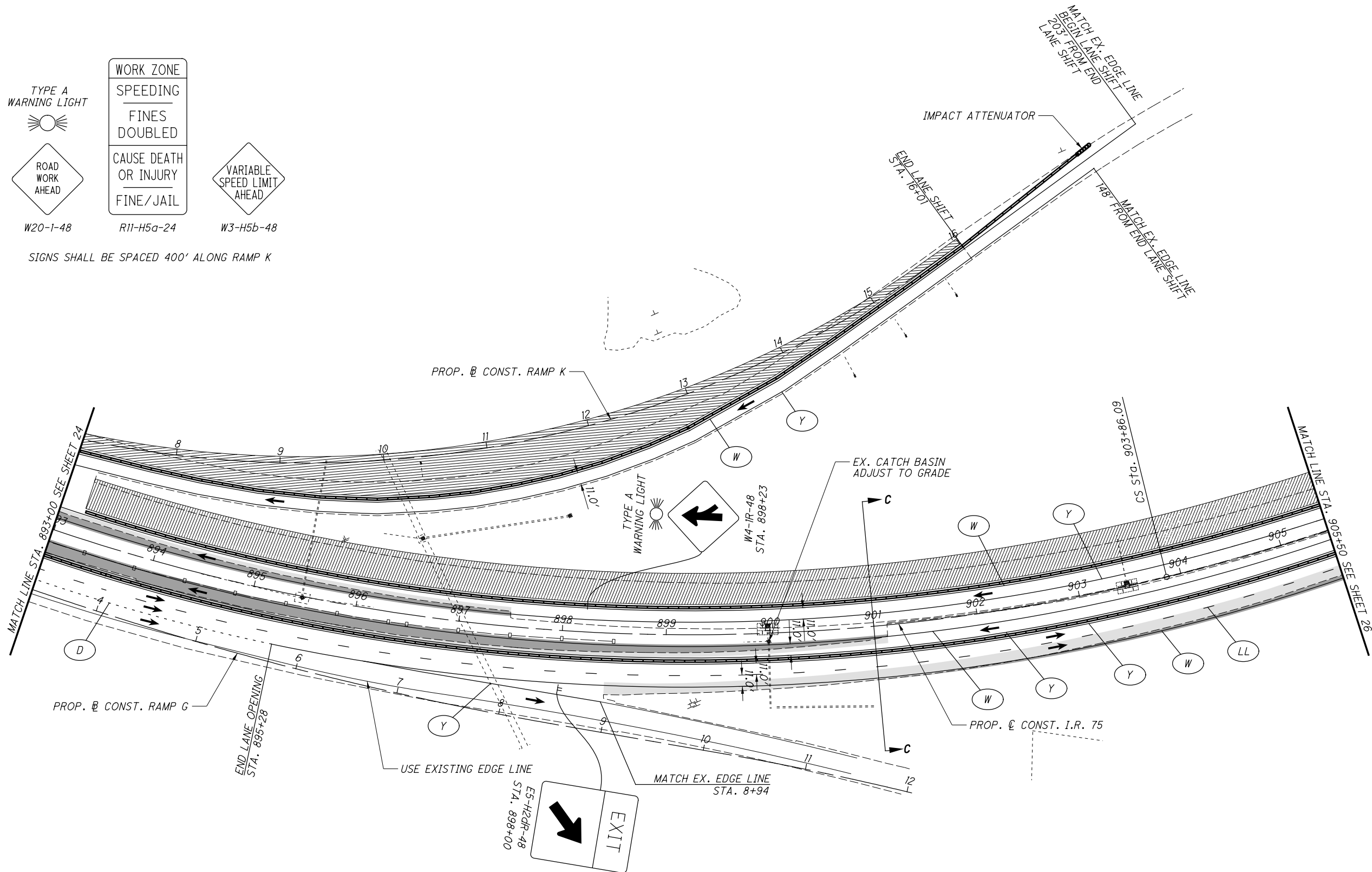
VARIABLE
SPEED LIMIT
AHEAD


W3-H5b-48

SIGNS SHALL BE SPACED 400' ALONG RAMP K

LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



PRIOR TO PLACING TRAFFIC ON THE NB INSIDE SHOULDER, PLANE AND OVERLAY SHOULDER AS NEEDED TO ENSURE POSITIVE DRAINAGE AND ELIMINATE PONDING UNDER THE SR 696 STRUCTURE. ALL WORK NECESSARY TO ELIMINATE PONDING SHALL BE PAID FOR UNDER THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

LEGEND

- WORK ZONE
- CONSTRUCTION BARREL
- DIRECTION OF TRAVEL
- TYPE 3 BARRICADE
- PORTABLE BARRIER

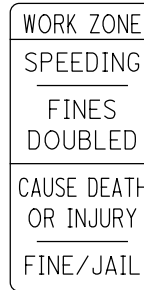
- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

- SHOULDER REHABILITATION COMPLETED PRIOR TO THE START OF THIS PHASE
- TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

TYPE A WARNING LIGHT



W20-1-48



R11-H5a-24



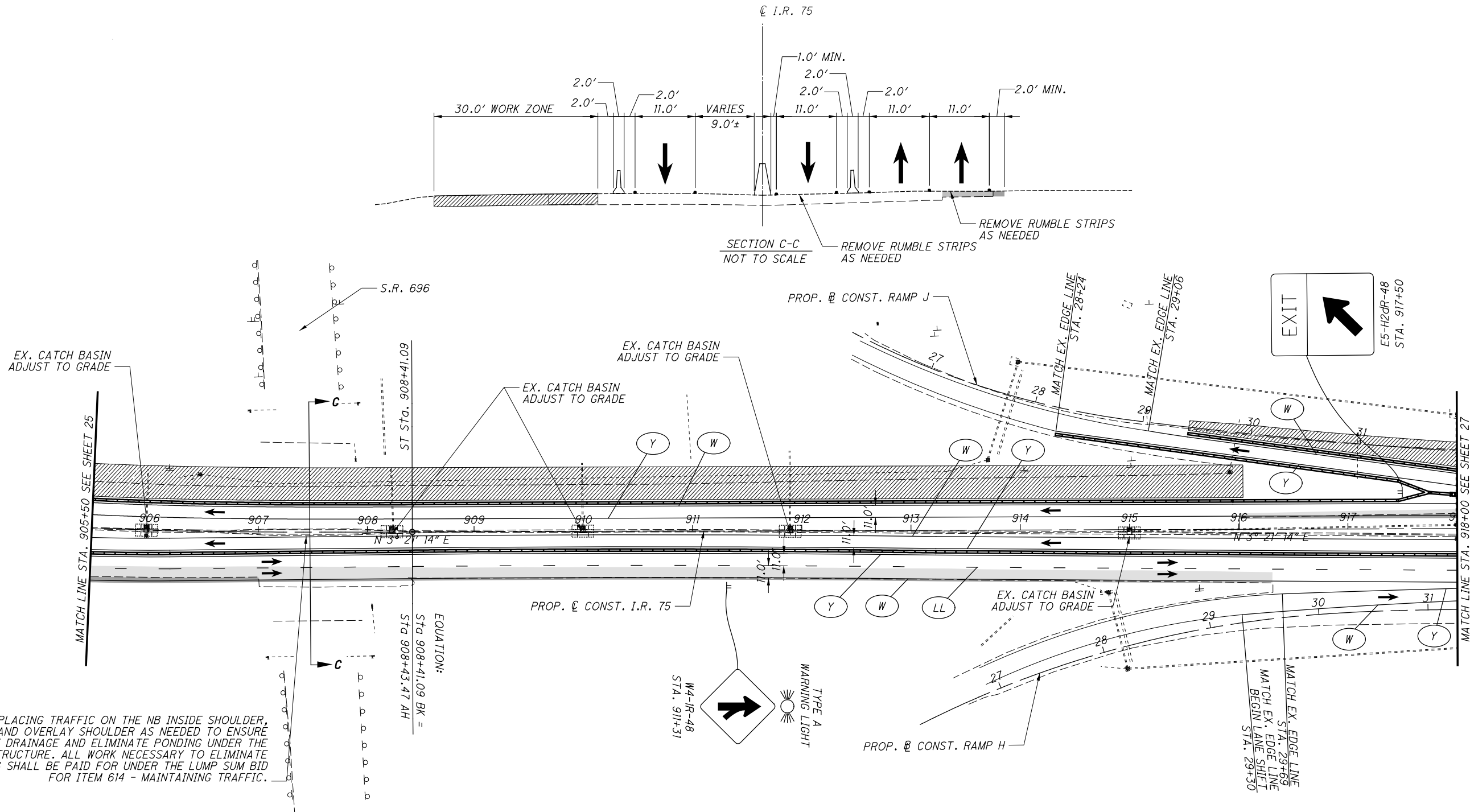
W3-H5b-48

SIGNS SHALL BE SPACED 400' ALONG RAMP H

MAINTENANCE OF TRAFFIC PHASE 2
I.R. 75 STA. 905+50 TO STA. 918+00

ALL-75-15.80

26
188



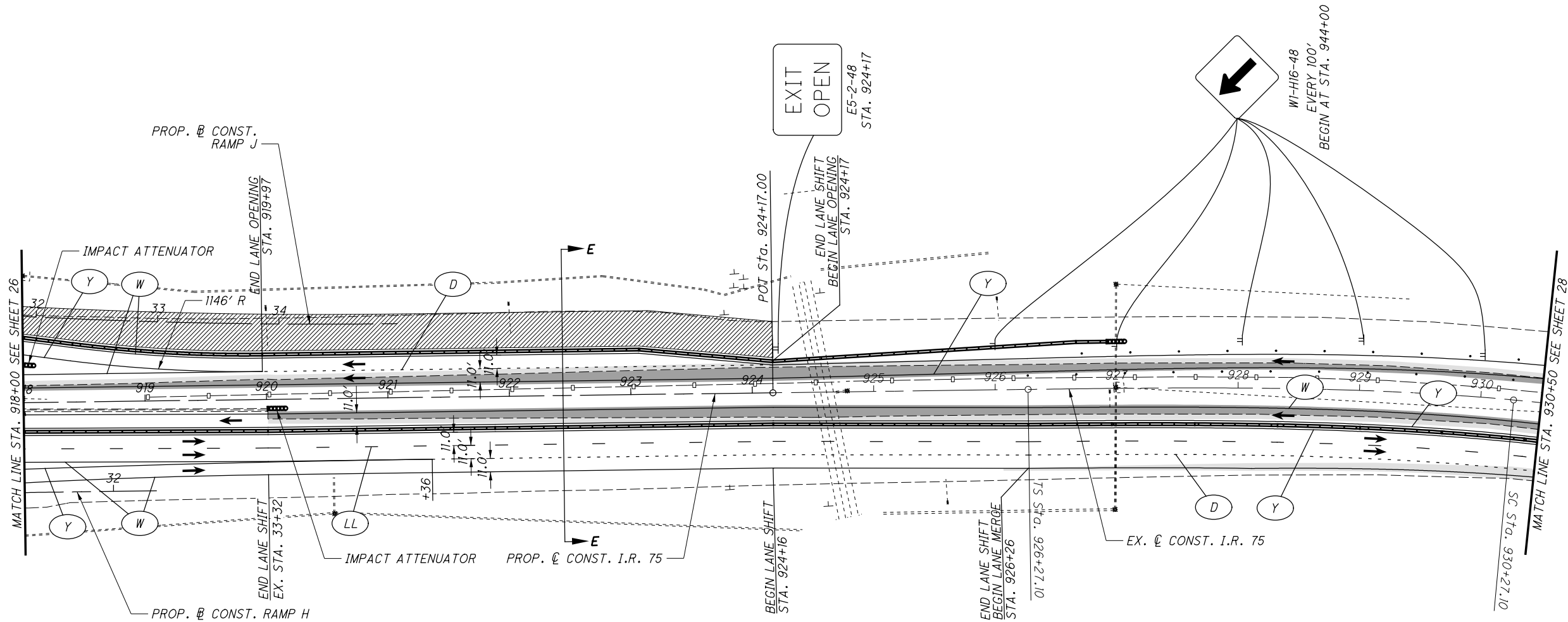
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LEGEND

- WORK ZONE
- CONSTRUCTION BARREL
- DIRECTION OF TRAVEL
- TYPE 3 BARRICADE
- PORTABLE BARRIER

- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

- SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
- TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

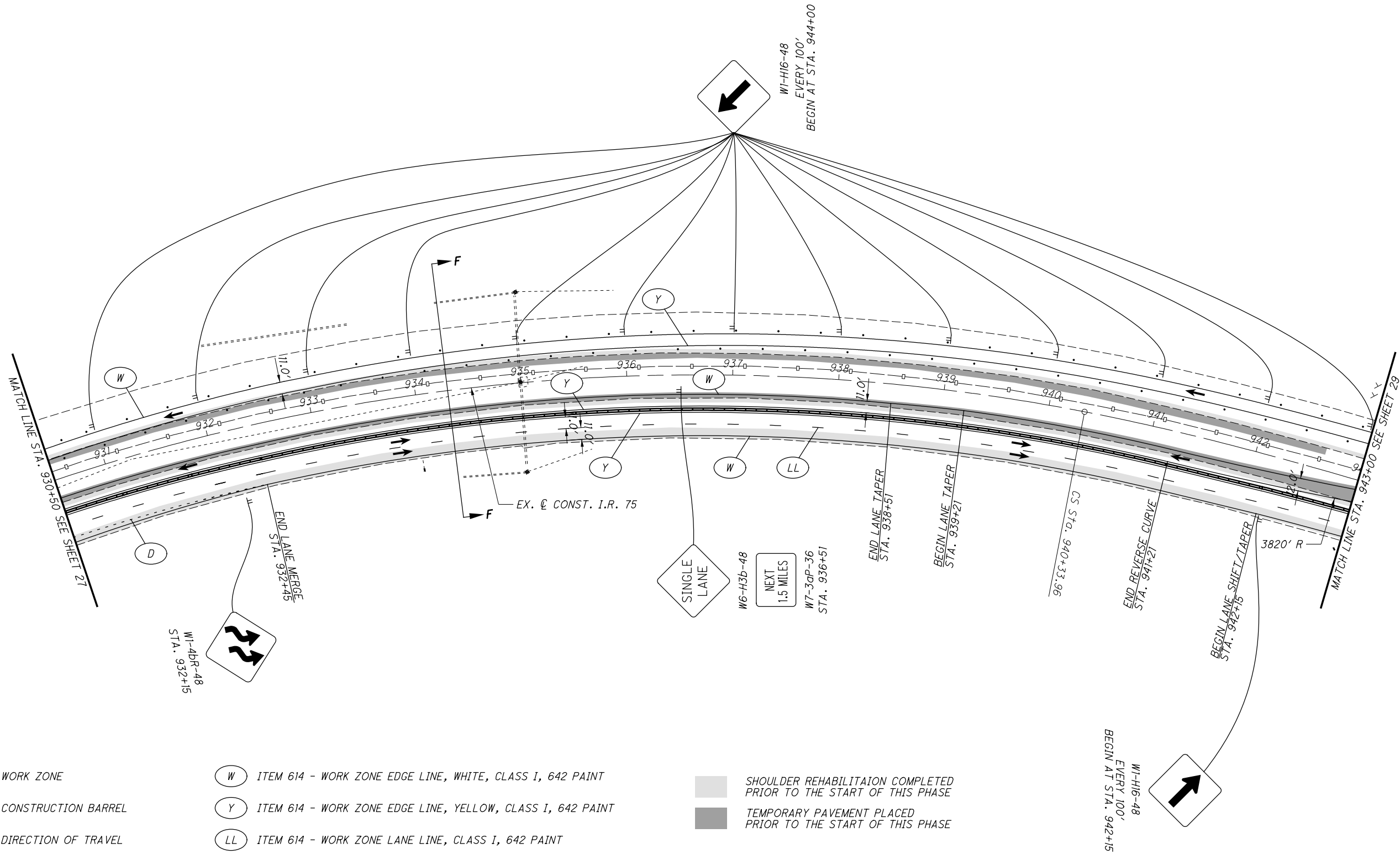


LEGEND

- WORK ZONE
- CONSTRUCTION BARREL
- DIRECTION OF TRAVEL
- TYPE 3 BARRICADE
- PORTABLE BARRIER

- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

- SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
- TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

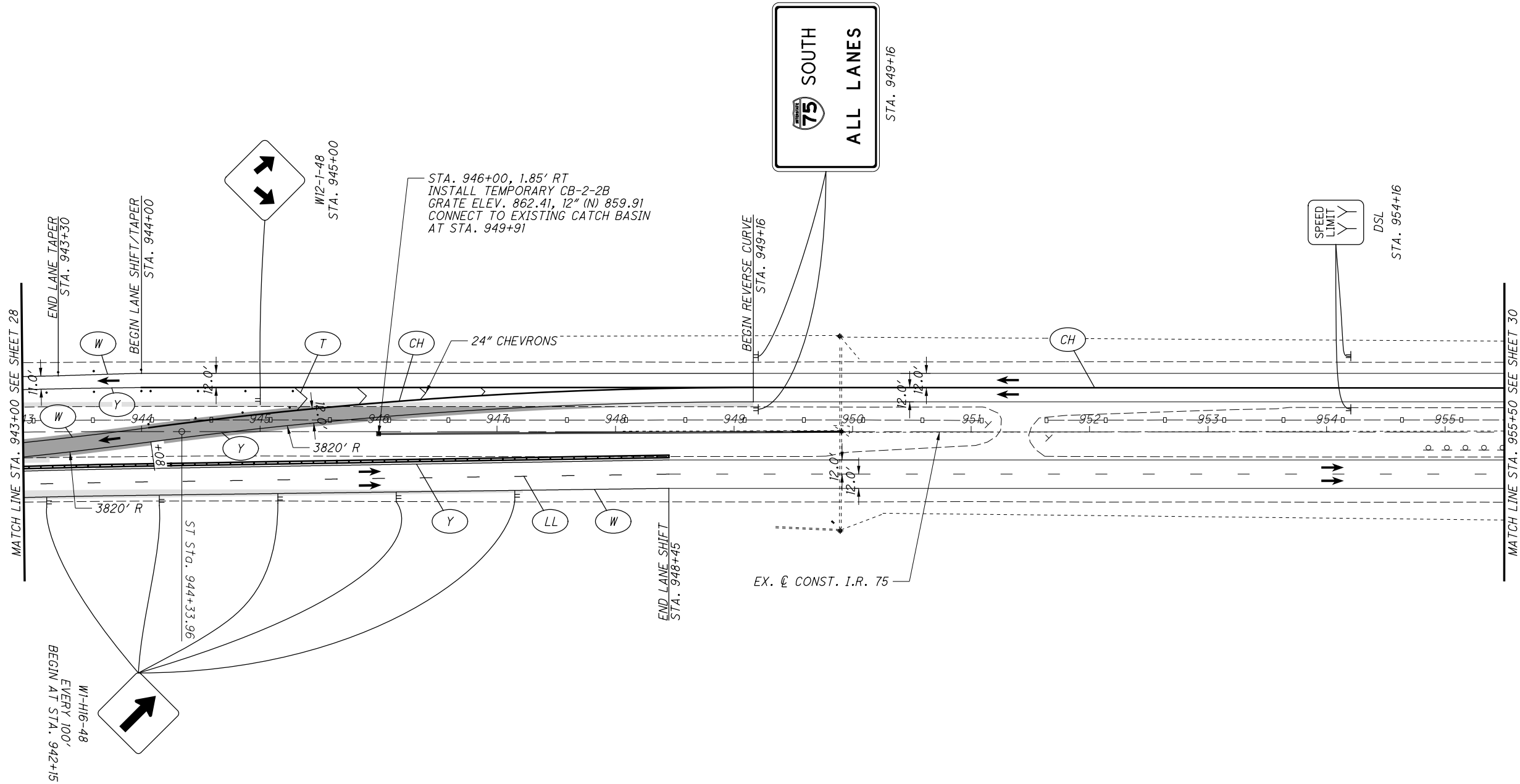


LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
-  SHOULDER REHABILITATION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

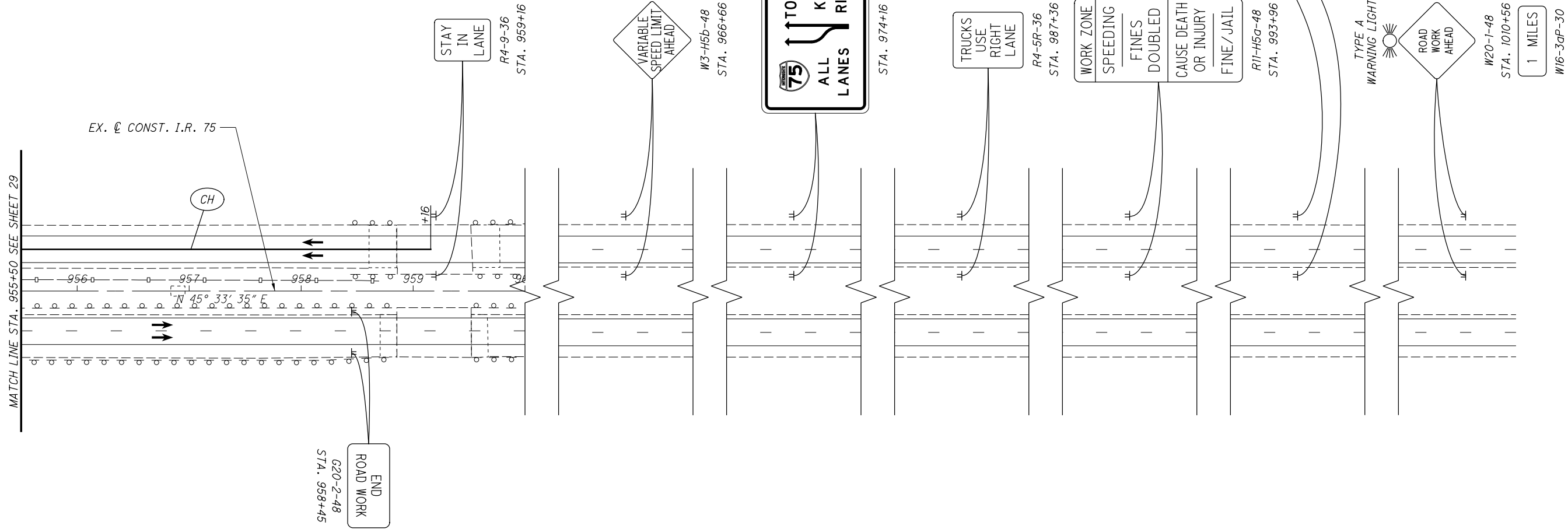


LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

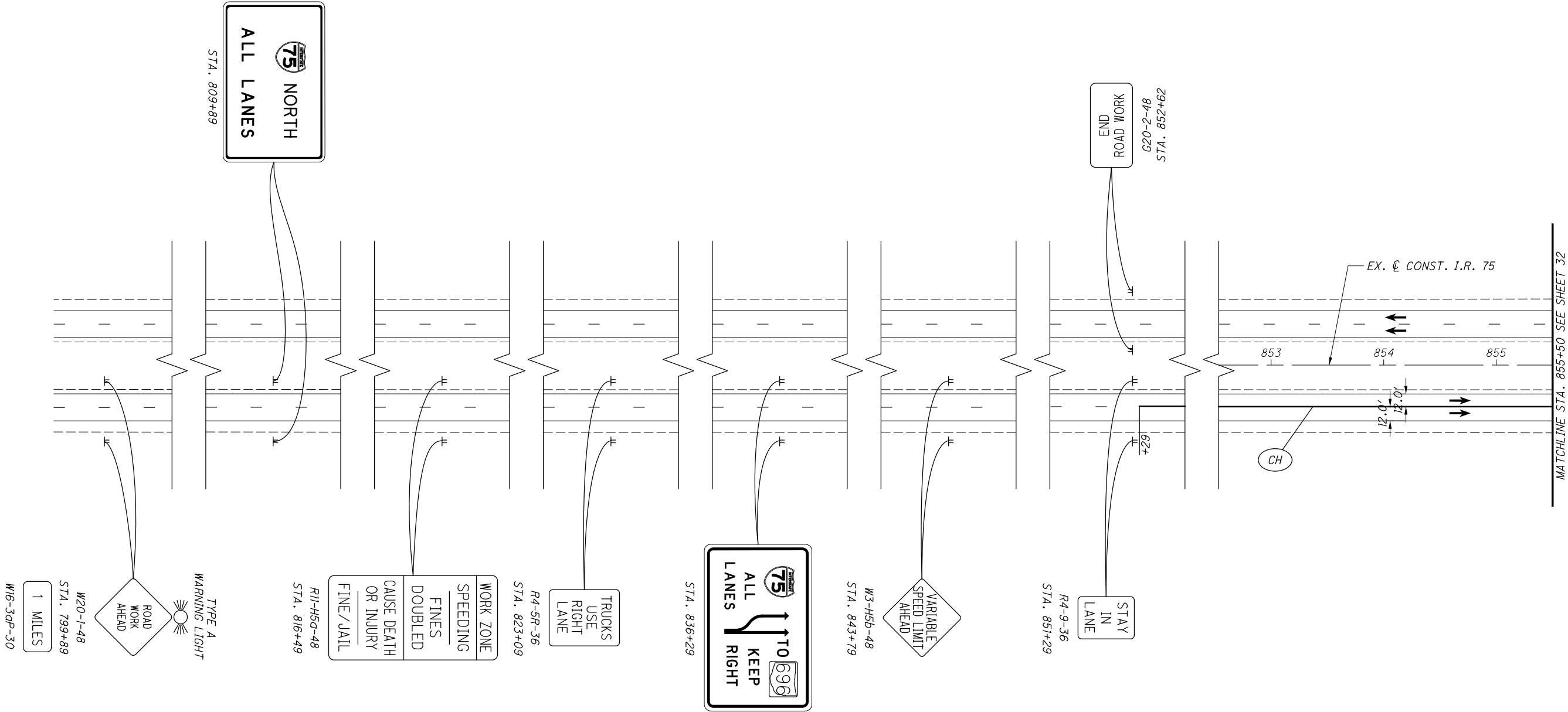


LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

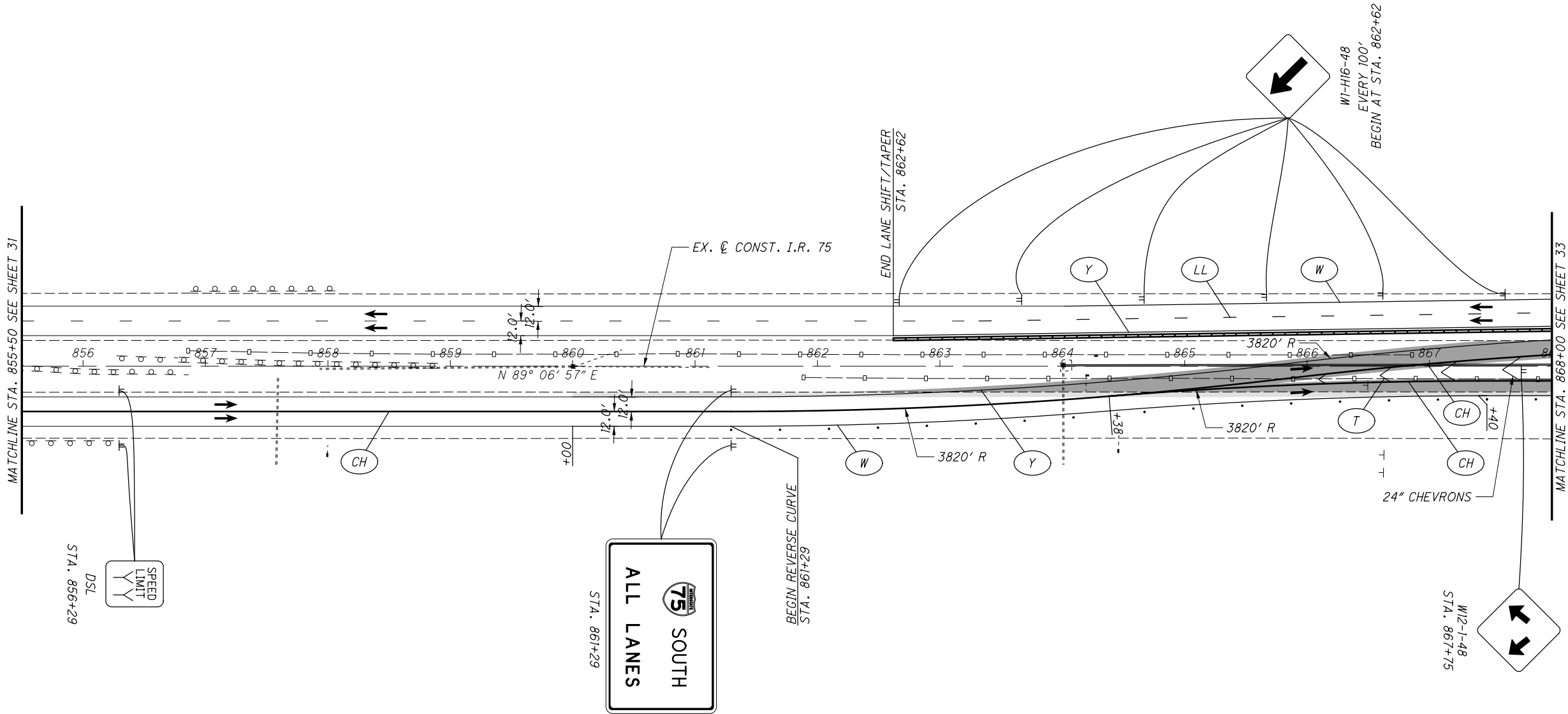


LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT
-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

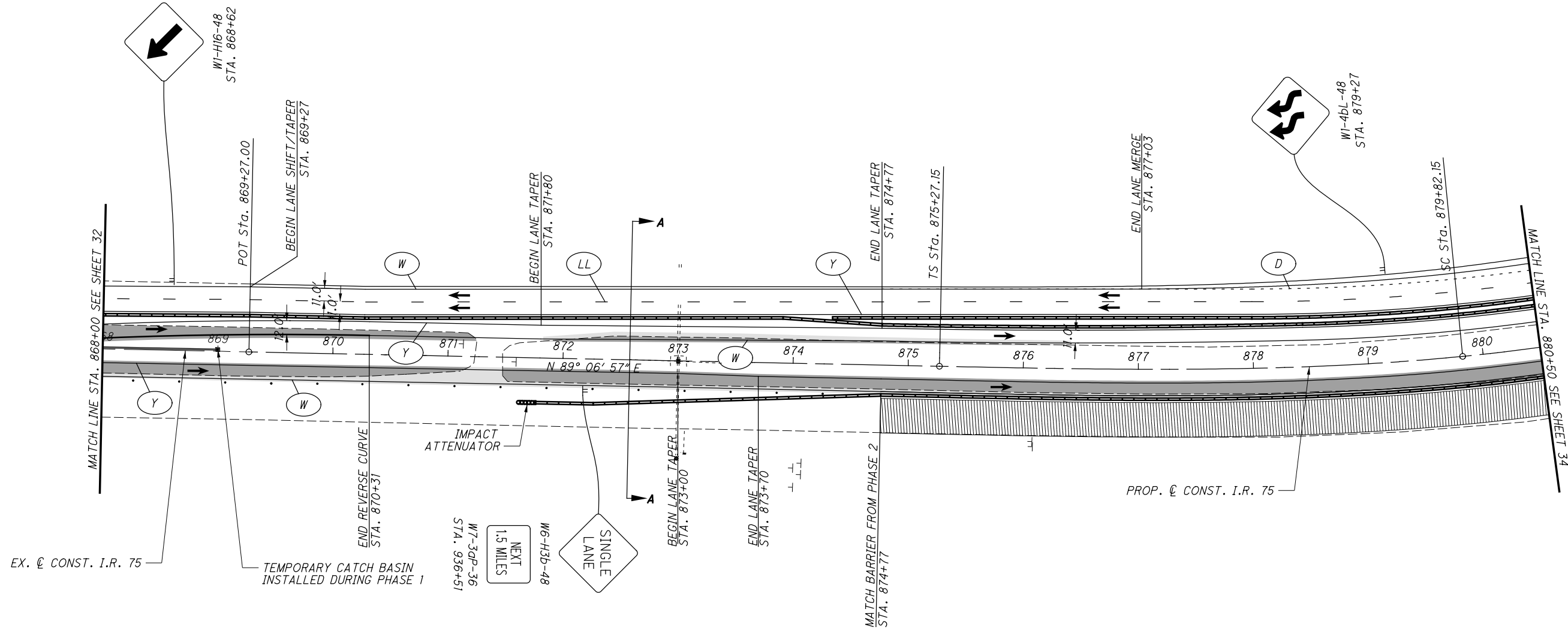


LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE



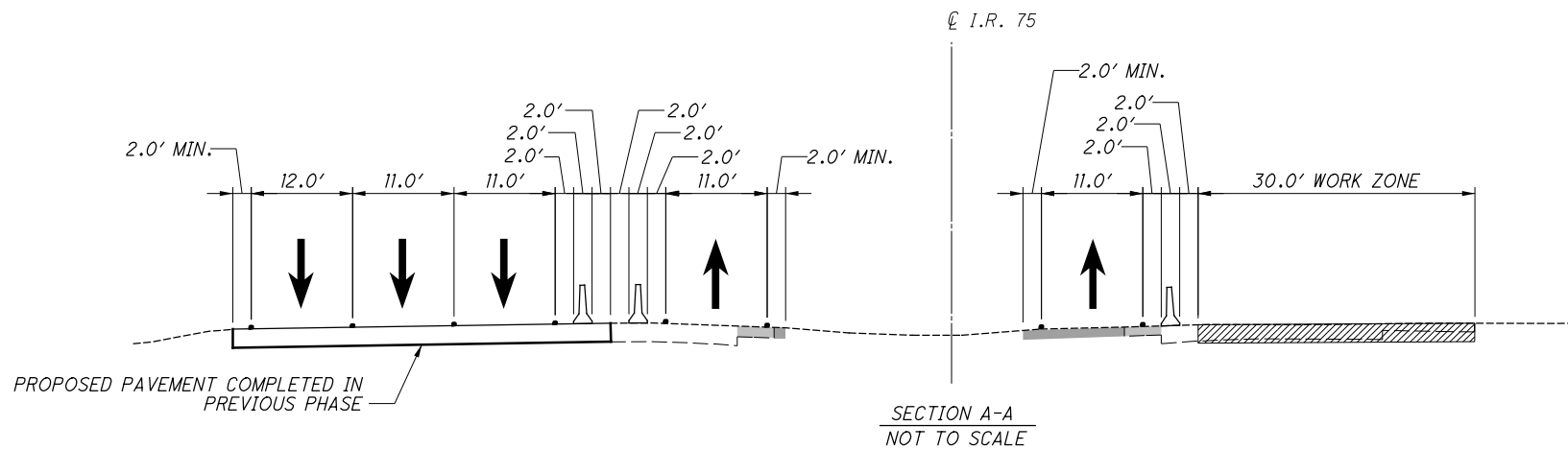
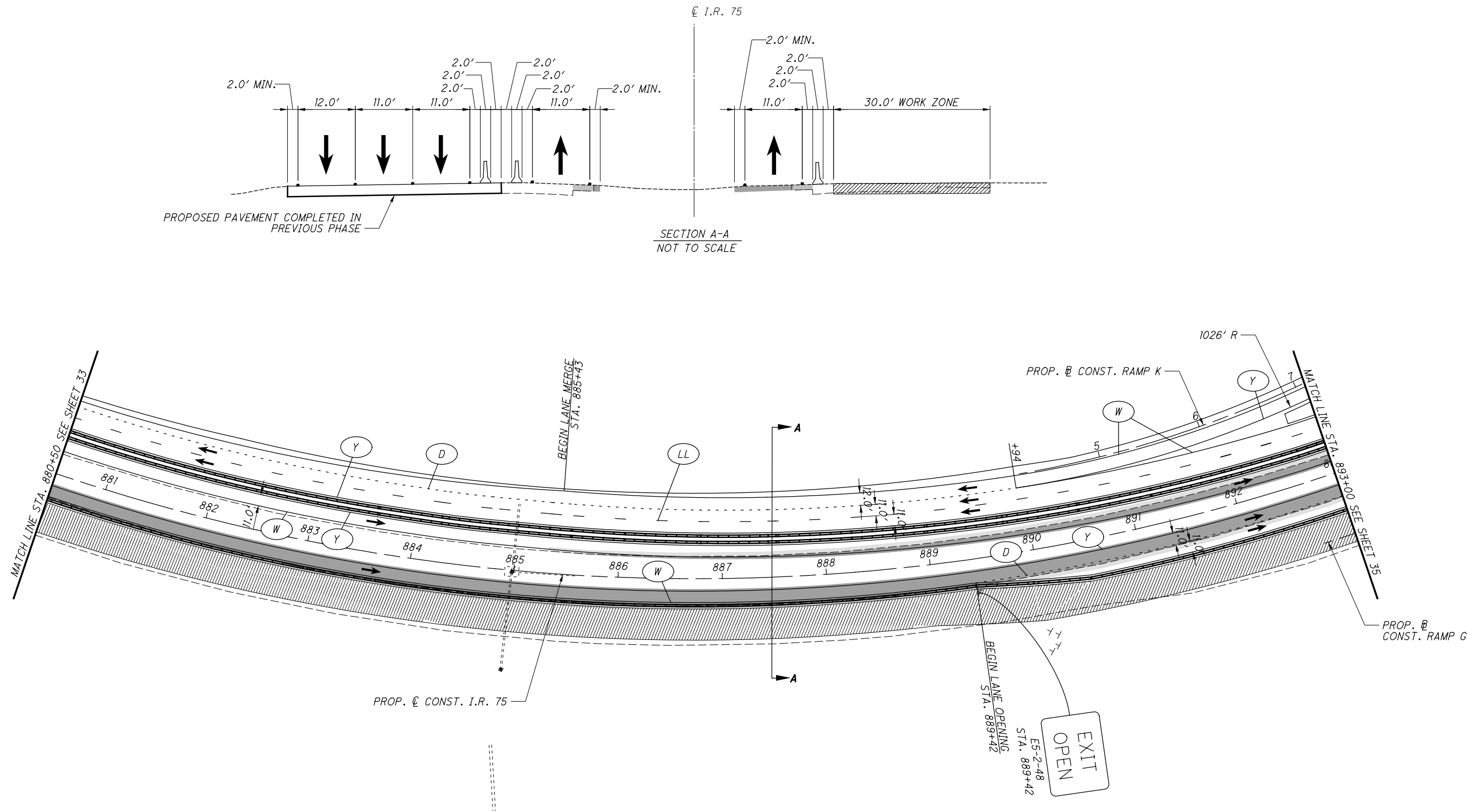
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LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE



P:\94214_ALL-75-15.80\Design\M0T\Sheets\94214_MP304.dgn Sheet 9/19/2019 9:30:17 AM sbing



W20-1-48



R11-H5a-24



W3-H5b-48

SIGNS SHALL BE SPACED 400' ALONG RAMP K

LEGEND



WORK ZONE



CONSTRUCTION BARREL



DIRECTION OF TRAVEL



TYPE 3 BARRICADE



PORTABLE BARRIER



ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT



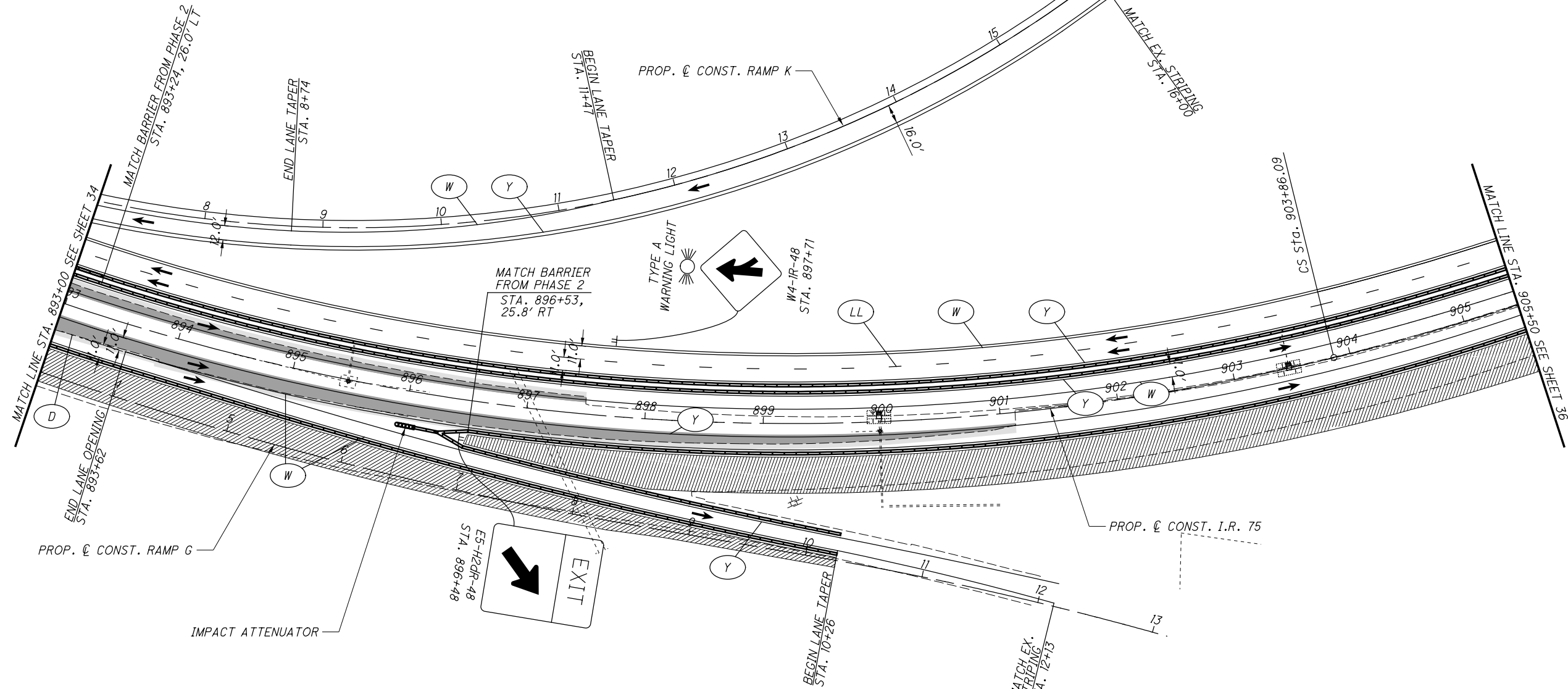
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE



TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE



CALCULATED
SMB
CHECKED
MJC

MAINTENANCE OF TRAFFIC PHASE 3
I.R. 75 STA. 890+00 TO STA. 905+50

ALL -75-15.80

LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

TYPE A
WARNING LIGHT



W20-1-48

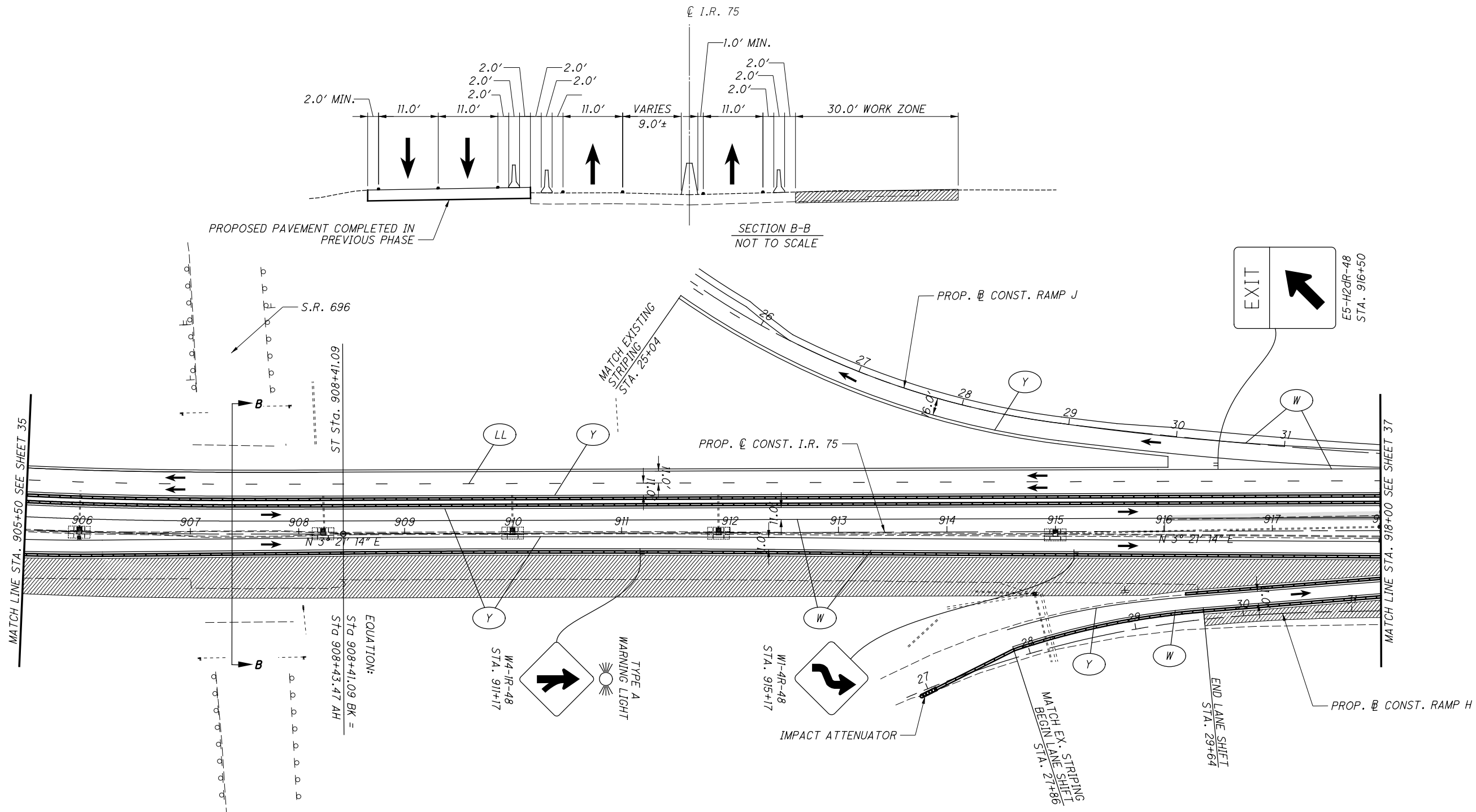
WORK ZONE
SPEEDING
FINES
DOUBLED
CAUSE DEATH
OR INJURY
FINE/JAIL

R11-H5a-24



W3-H5b-48

SIGNS SHALL BE SPACED 400' ALONG RAMP H



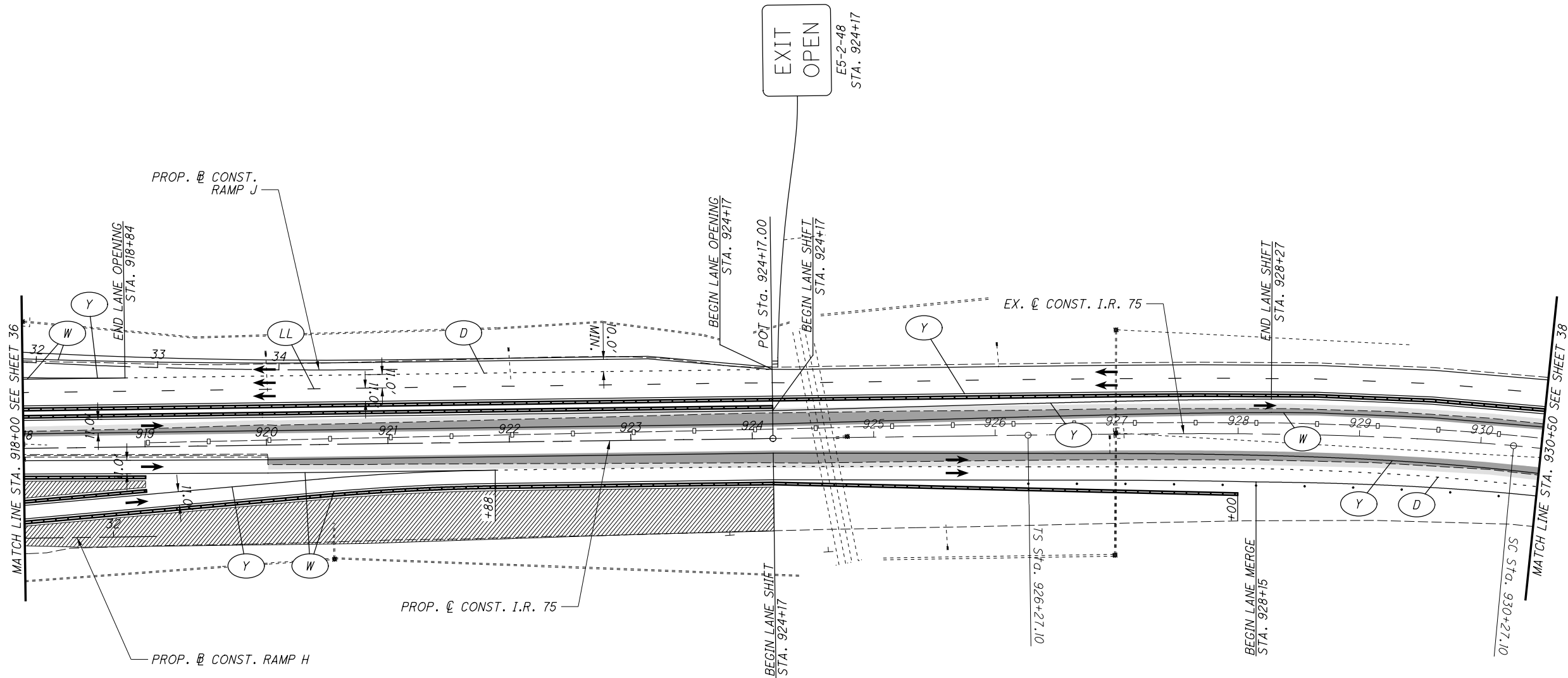
P:\94214_ALL-75-15.80\Design\M0T\Sheets\94214_MP306.dgn Sheet 9/19/2019 9:30:19 AM sbing

LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE



MAINTENANCE OF TRAFFIC PHASE 3
I.R. 75 STA. 918+00 TO STA. 930+50

ALL -75-15.80

37
188

CALCULATED
SMB
CHECKED
MJC

0 50 100
HORIZONTAL
SCALE IN FEET

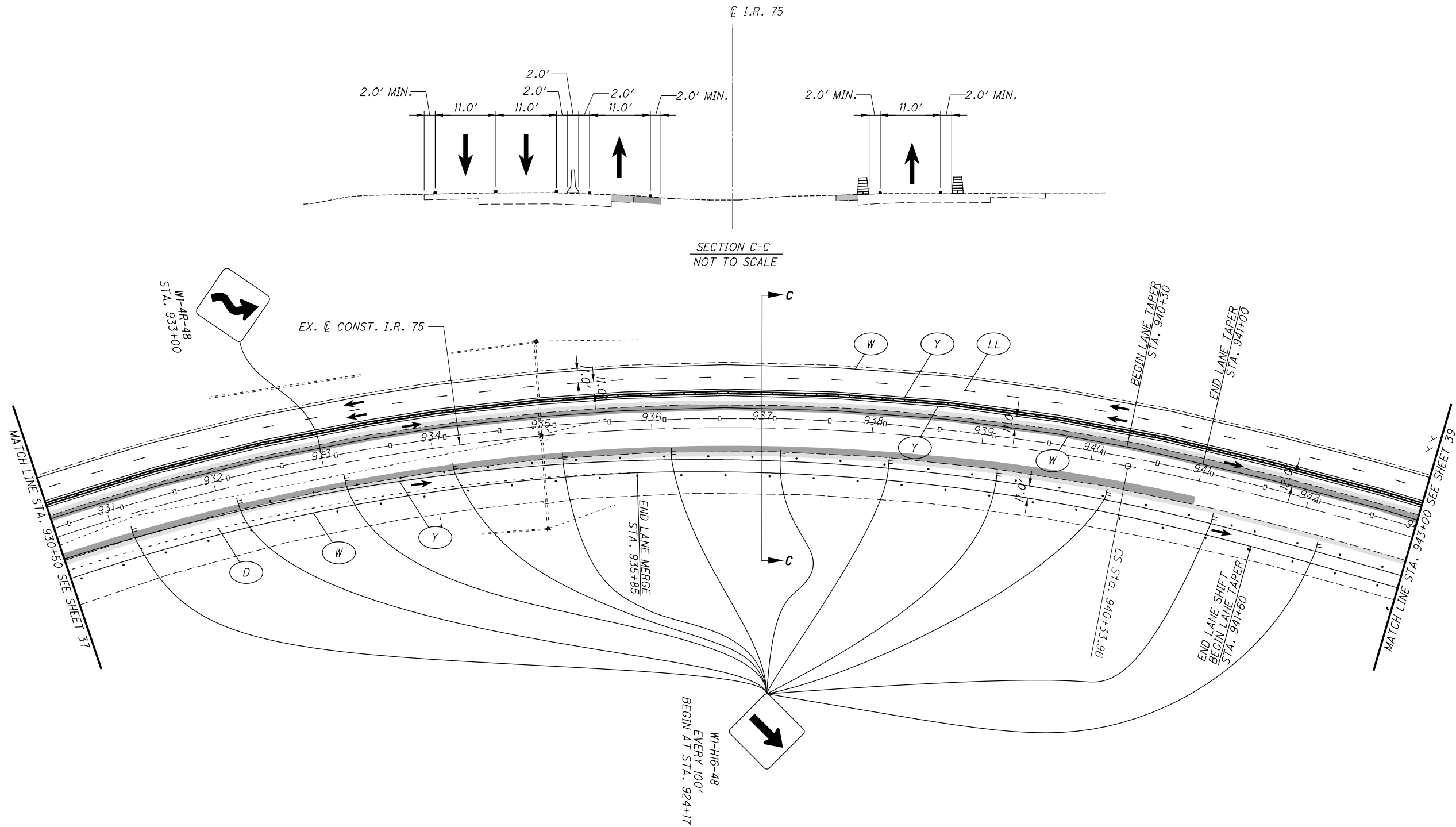
N

LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE

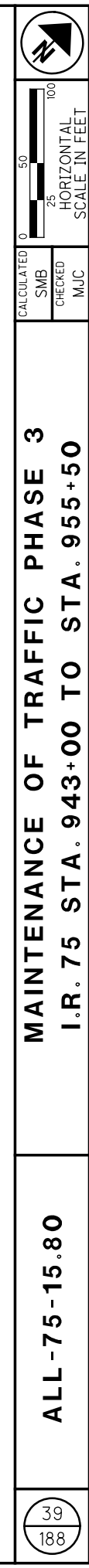




W	ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
Y	ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
LL	ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
D	ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
CH	ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

SHOULDER REHABILITATION COMPLETED
PRIOR TO THE START OF THIS PHASE

TEMPORARY PAVEMENT PLACED
PRIOR TO THE START OF THIS PHASE

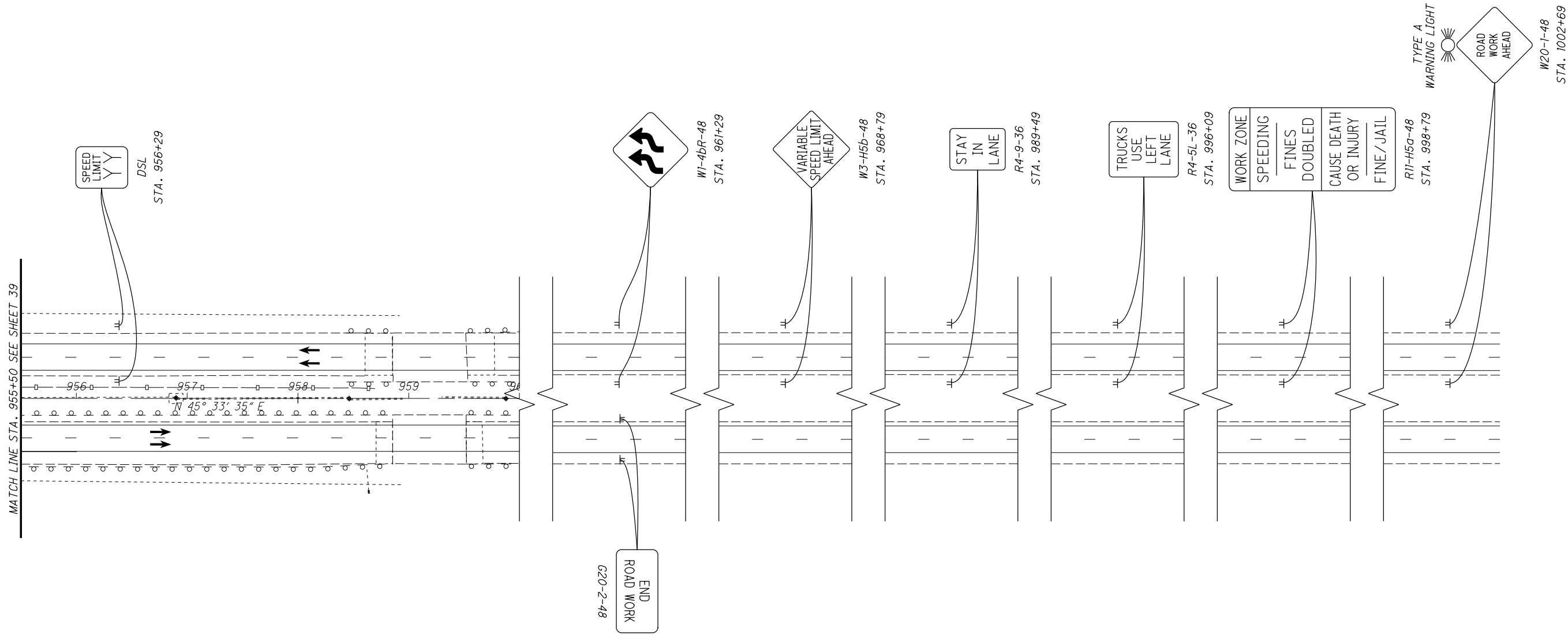


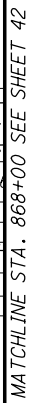
LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT

-  SHOULDER REHABILITAION COMPLETED PRIOR TO THE START OF THIS PHASE
-  TEMPORARY PAVEMENT PLACED PRIOR TO THE START OF THIS PHASE





LEGEND



WORK ZONE



CONSTRUCTION BARREL



DIRECTION OF TRAVEL



TYPE 3 BARRICADE



PORTABLE BARRIER



ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT



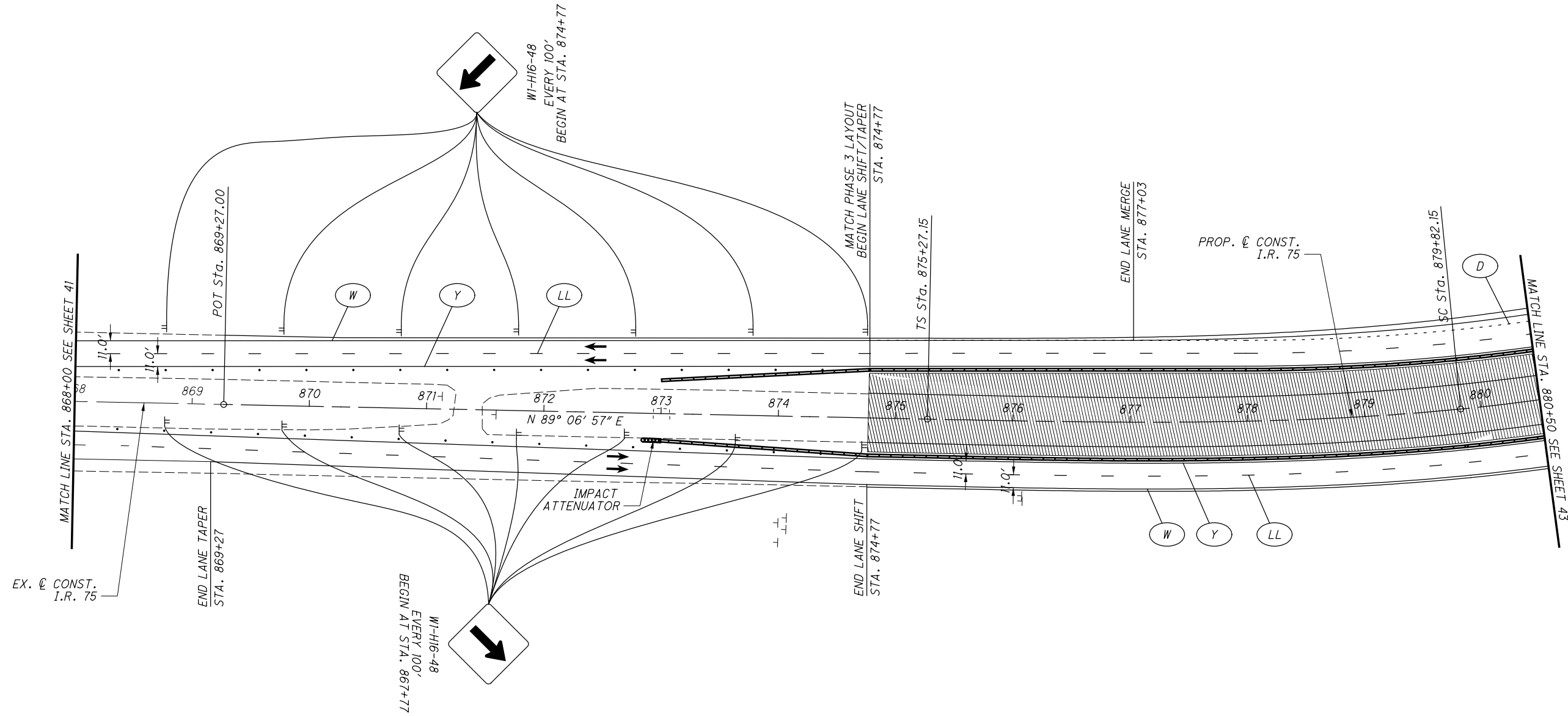
ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT



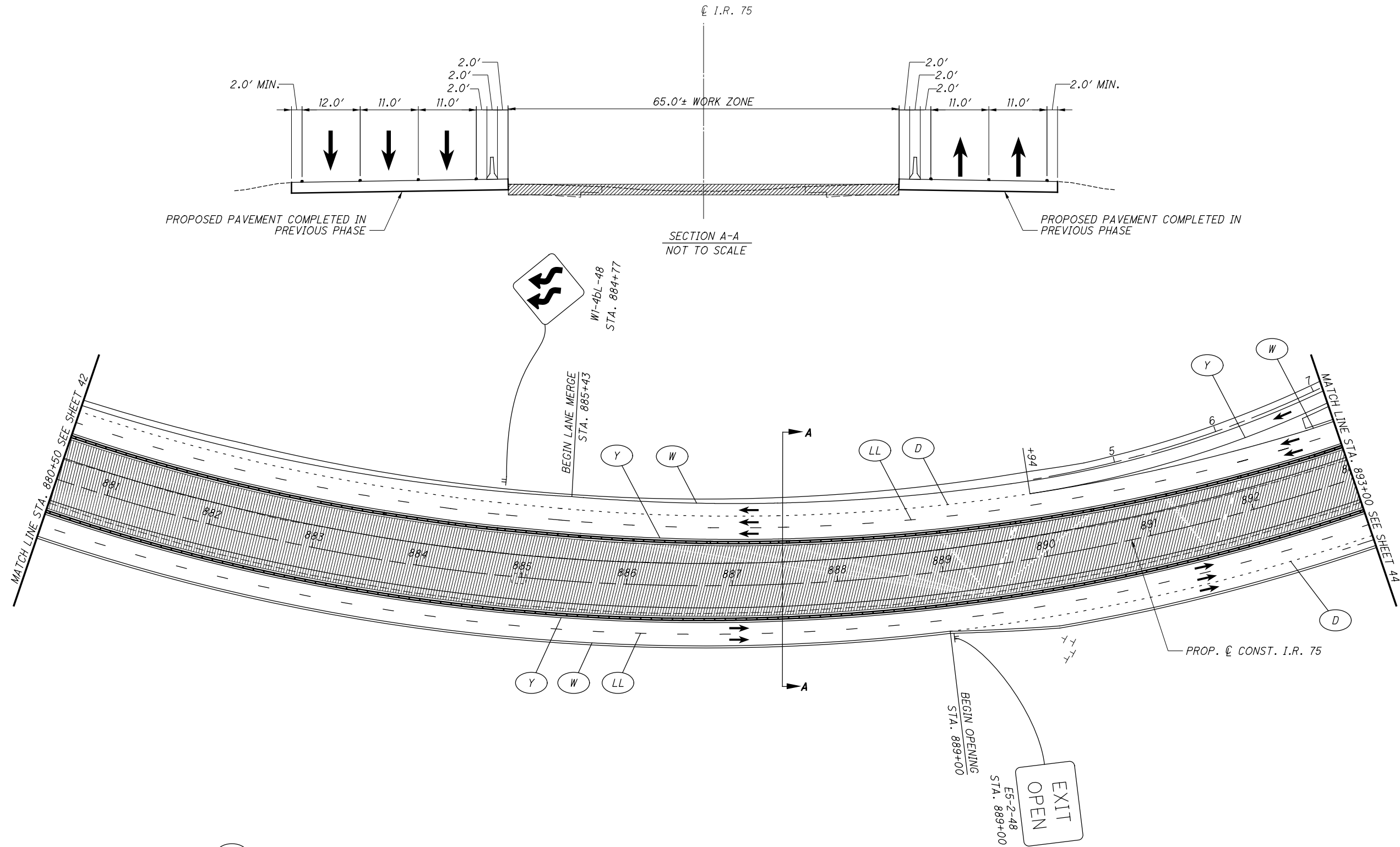
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



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TYPE A
WARNING LIGHT



W20-1-48

WORK ZONE
SPEEDING
FINES
DOUBLED
CAUSE DEATH
OR INJURY
FINE/JAIL

R11-H5a-24



W3-H5b-48

SIGNS SHALL BE SPACED 400' ALONG RAMP K

LEGEND



WORK ZONE



CONSTRUCTION BARREL



DIRECTION OF TRAVEL



TYPE 3 BARRICADE



PORTABLE BARRIER



ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT



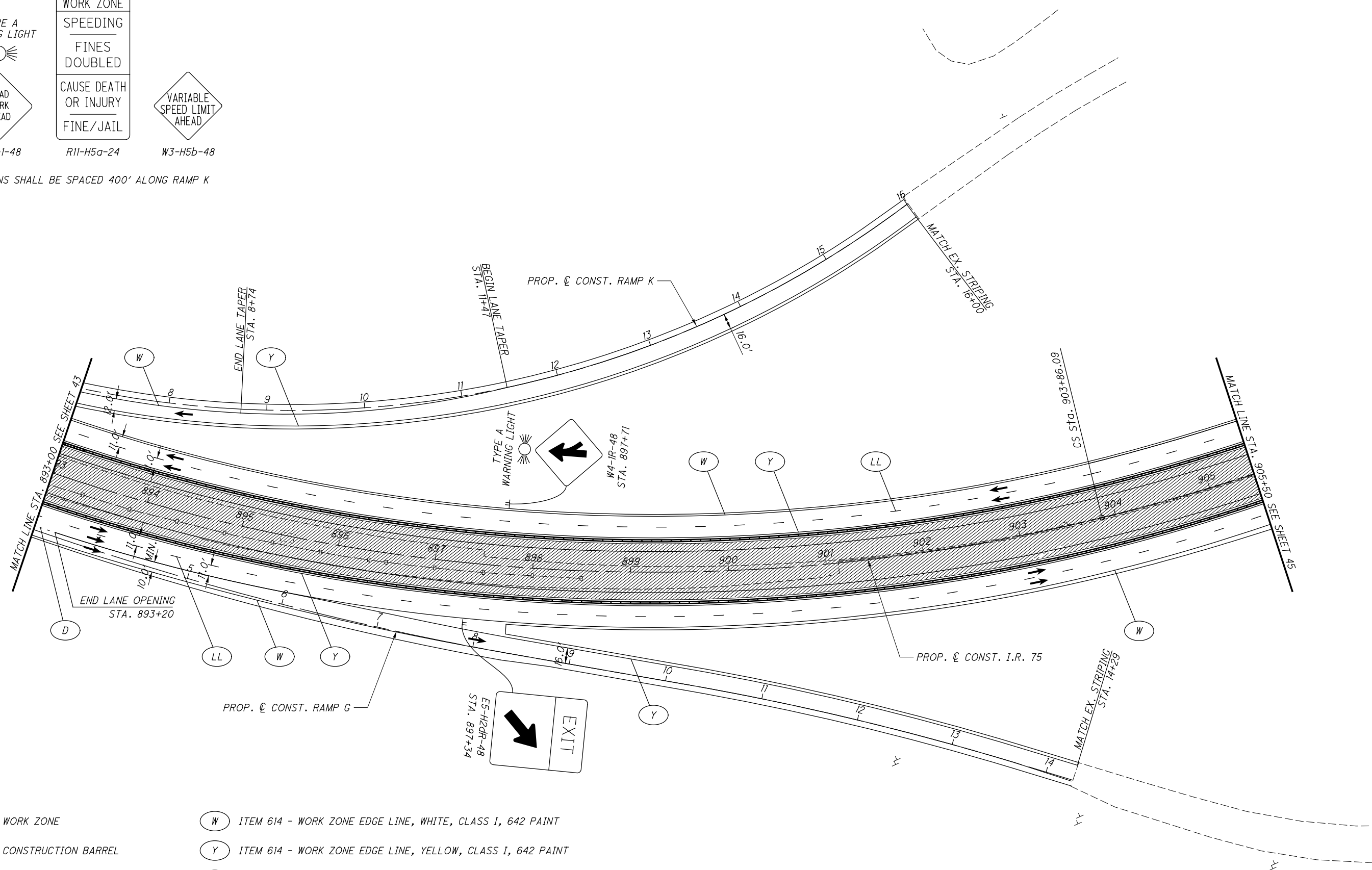
ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



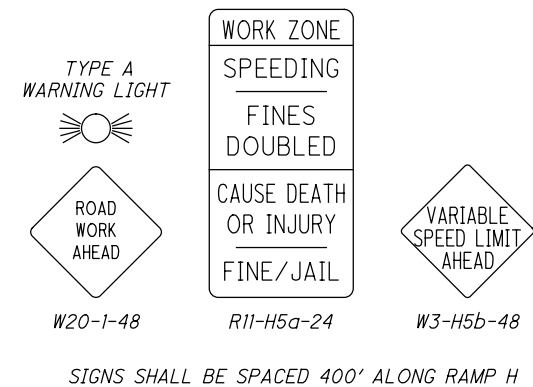
MAINTENANCE OF TRAFFIC PHASE 4
I.R. 75 STA. 890+00 TO STA. 905+50

ALL -75-15.80

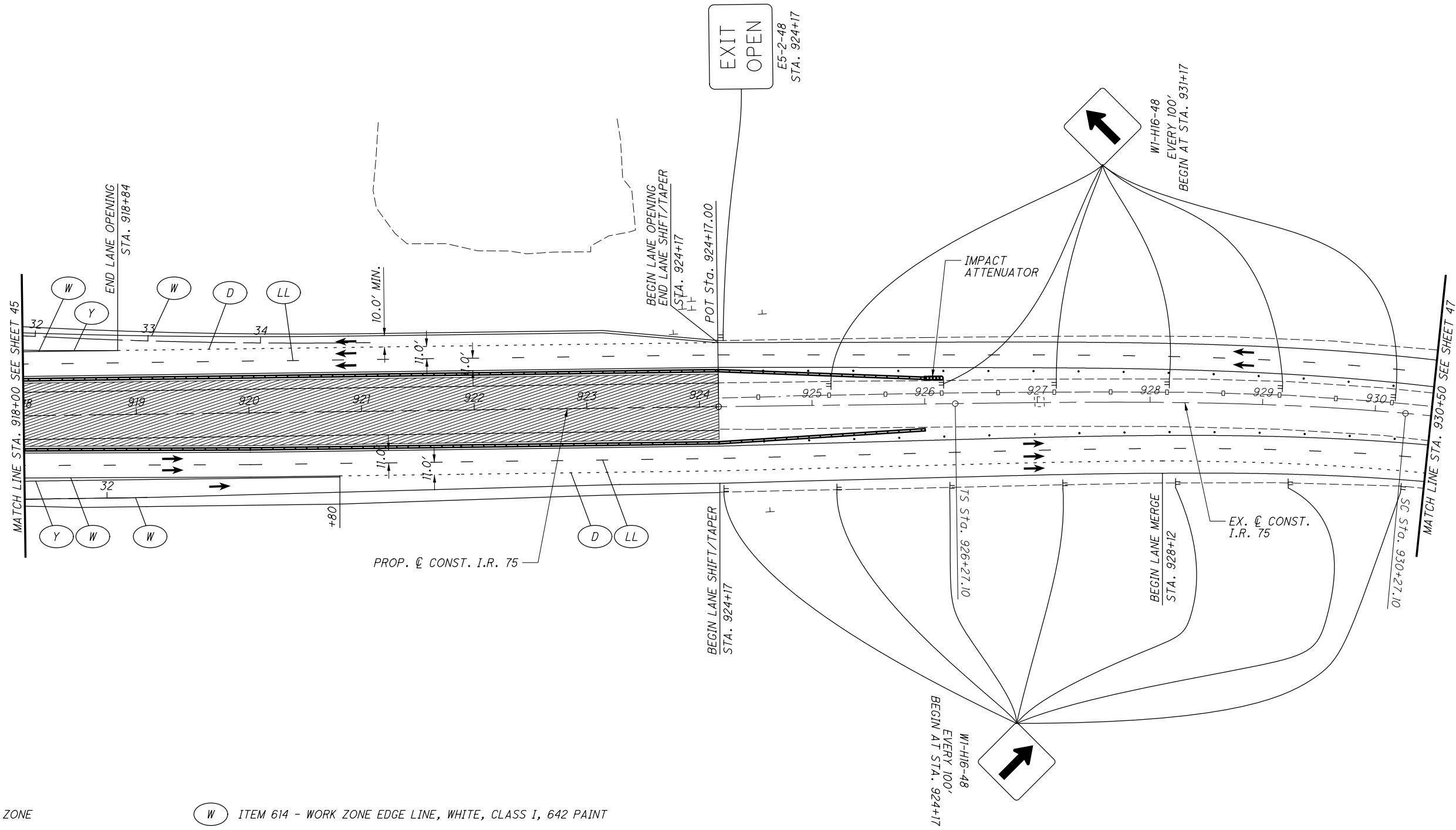
44
188



CALCULATED
SMB
CHECKED
MJC



- (W) ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- (Y) ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- (LL) ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- (D) ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
- (CH) ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



LEGEND



WORK ZONE



CONSTRUCTION BARREL



DIRECTION OF TRAVEL



TYPE 3 BARRICADE



PORTABLE BARRIER



ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT



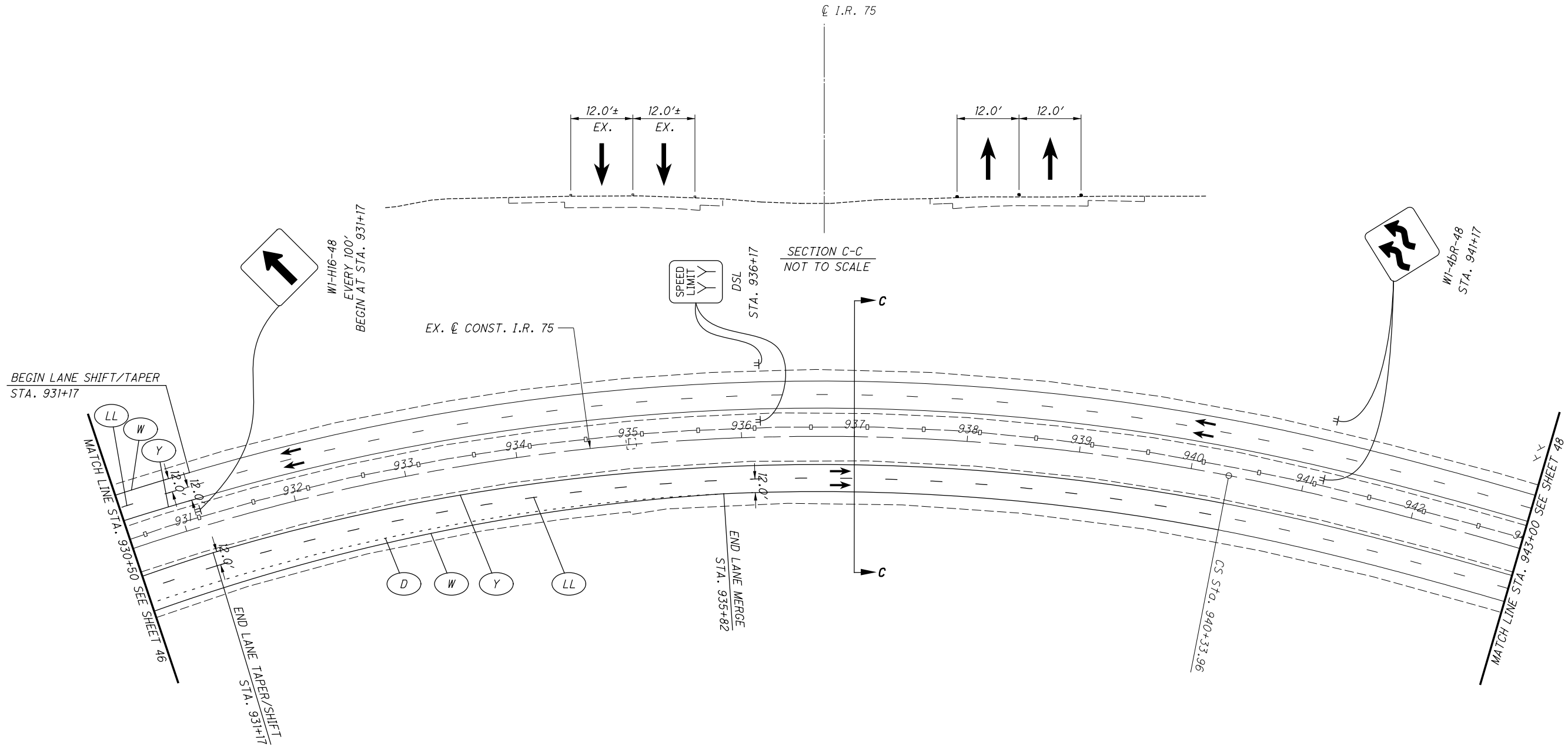
ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT



ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT



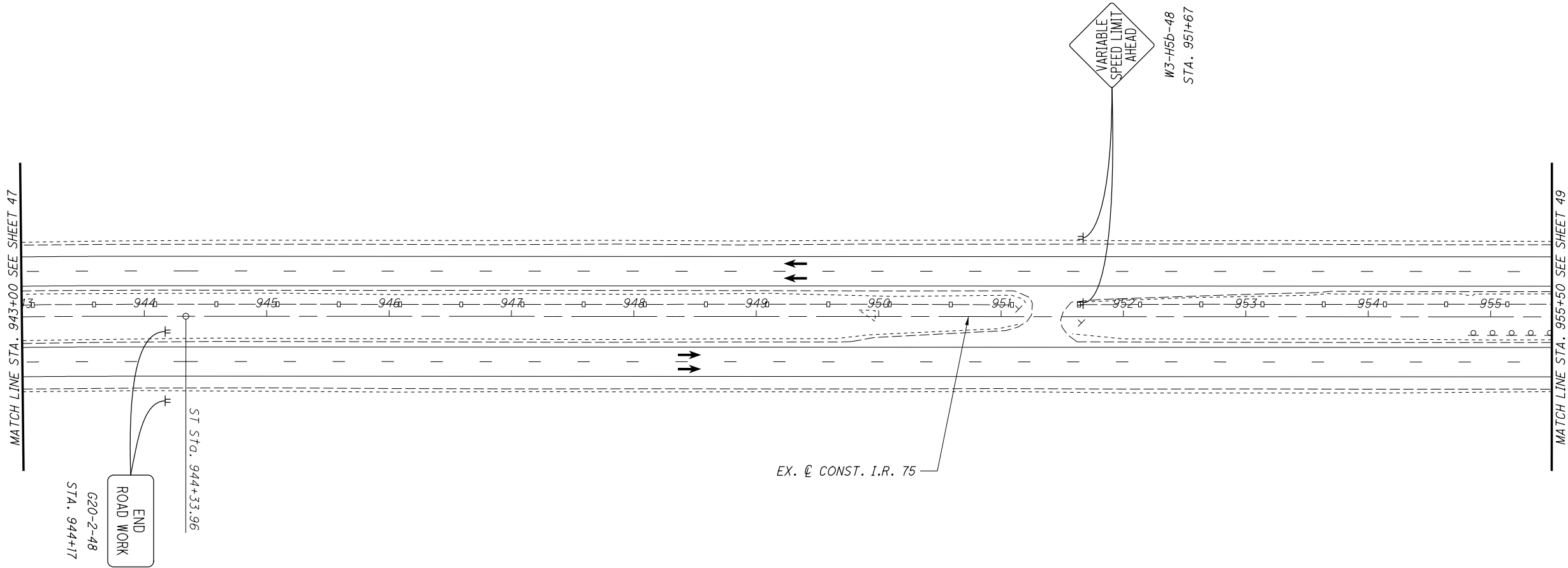
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

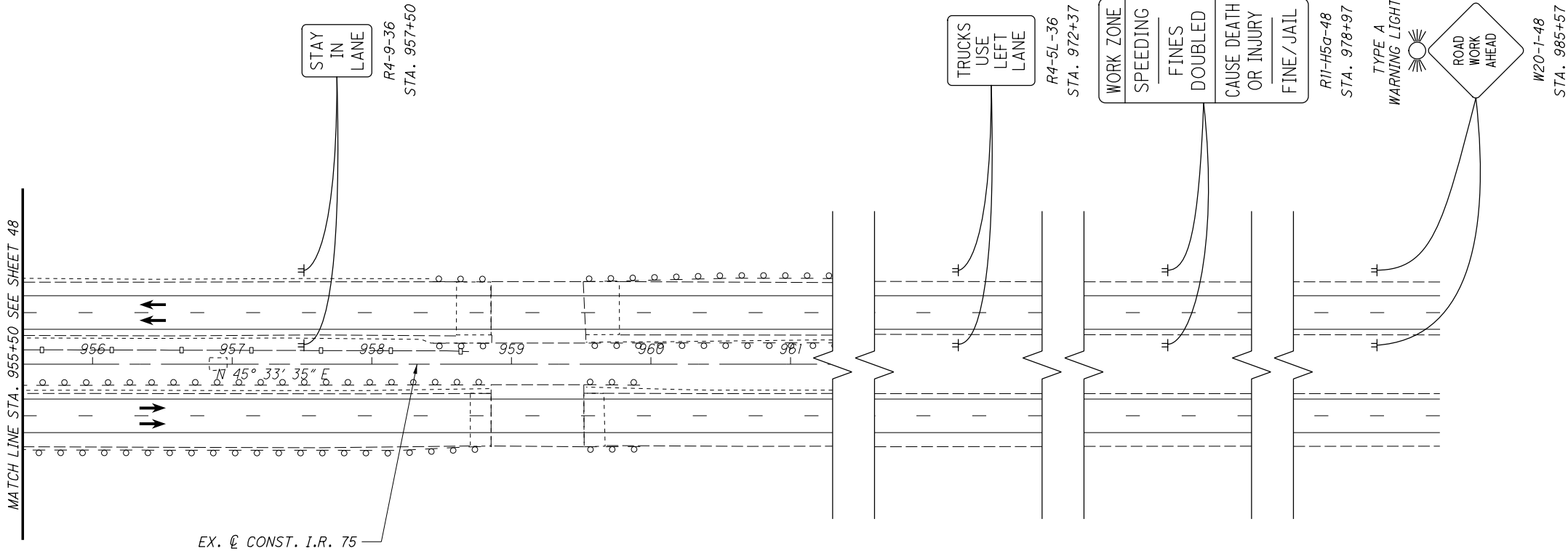
-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



LEGEND

-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

-  ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT
-  ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT



P:\94214_ALL-75-15.80\Design\M0T\Sheets\94214_MM201b.dgn Sheet 9/19/2019 9:30:28 AM sbing

CURVE 1
P.I. Sta. 202+13.94
 $\Delta = 6^\circ 25' 52''$ (RT)
 $Dc = 1^\circ 30' 17''$
 $R = 3,808.00'$
 $T = 213.94'$
 $L = 427.42'$
 $E = 6.00'$
 $C = 427.20'$
C.B. = S $87^\circ 40' 07''$ E

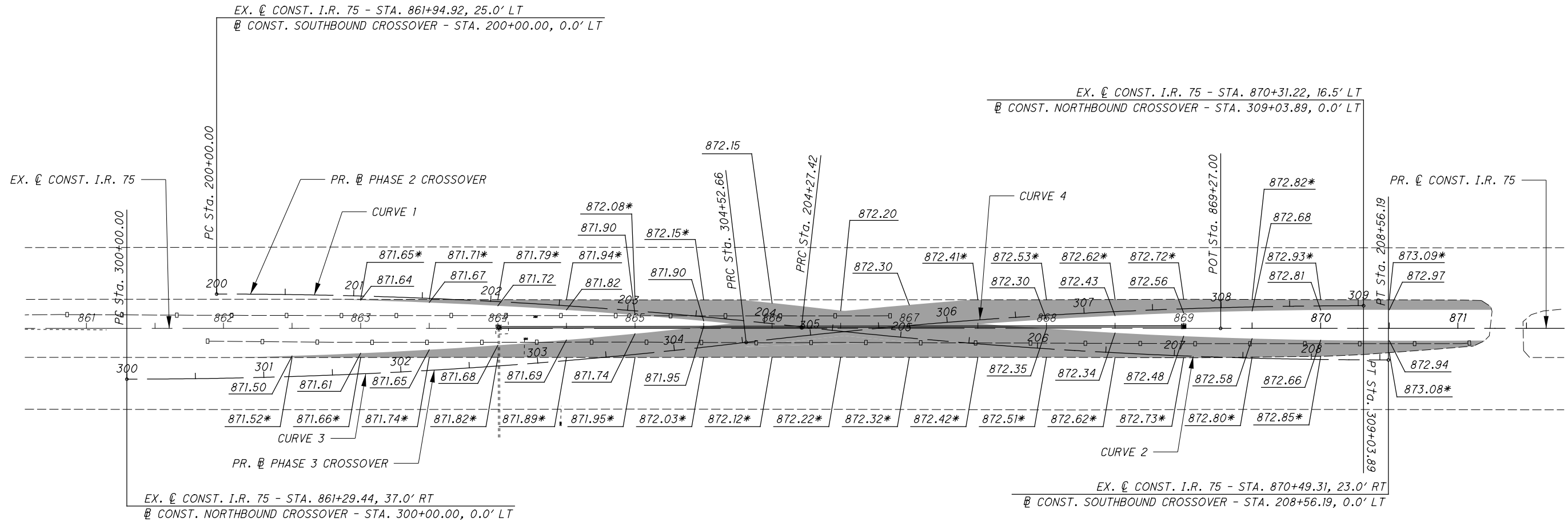
CURVE 2
P.I. Sta. 206+42.03
 $\Delta = 6^\circ 25' 52''$ (LT)
 $Dc = 1^\circ 30' 00''$
 $R = 3,820.00'$
 $T = 214.61'$
 $L = 428.77'$
 $E = 6.02'$
 $C = 428.54'$
C.B. = S $87^\circ 40' 07''$ E

CURVE 3
P.I. Sta. 302+26.59
 $\Delta = 6^\circ 47' 22''$ (LT)
 $Dc = 1^\circ 30' 00''$
 $R = 3,820.00'$
 $T = 226.59'$
 $L = 452.66'$
 $E = 6.71'$
 $C = 452.39'$
C.B. = N $85^\circ 43' 16''$ E

CURVE 4
P.I. Sta. 306+78.54
 $\Delta = 6^\circ 47' 22''$ (RT)
 $Dc = 1^\circ 30' 17''$
 $R = 3,808.00'$
 $T = 225.88'$
 $L = 451.24'$
 $E = 6.69'$
 $C = 450.97'$
C.B. = N $85^\circ 43' 16''$ E

LEGEND

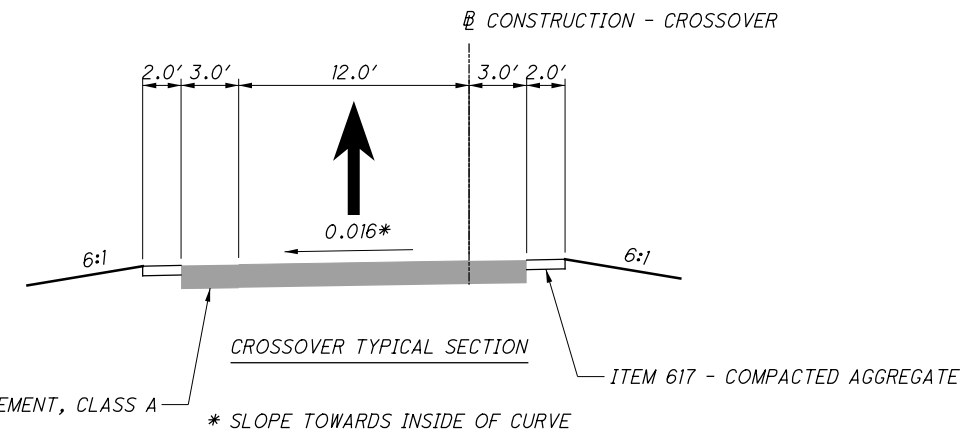
ITEM 615 - TEMPORARY PAVEMENT, CLASS A



* DENOTES EXISTING ELEVATION

NOTES:

1. ELEVATIONS ARE AT 50' INTERVALS BASED ON THE EXISTING $\mathcal{C}$ OF I.R. 75 UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS PRIOR TO THE CONSTRUCTION OF THE CROSSOVER.



CURVE 1
P.I. Sta. 201+43.18
 $\Delta = 4^\circ 17' 36''$ (LT)
Dc = 1° 30' 00"
R = 3,820.00'
T = 143.18'
L = 286.24'
E = 2.68'
C = 286.17'
C.B. = N 40° 03' 29" E

CURVE 2
P.I. Sta. 205+41.57
 $\Delta = 7^\circ 38' 54''$ (RT)
Dc = 1° 30' 00"
R = 3,820.00'
T = 255.34'
L = 509.92'
E = 8.52'
C = 509.54'
C.B. = N 41° 44' 08" E

CURVE 3
P.I. Sta. 302+39.90
 $\Delta = 7^\circ 11' 13''$ (RT)
Dc = 1° 30' 00"
R = 3,820.00'
T = 239.90'
L = 479.16'
E = 7.53'
C = 478.85'
C.B. = N 48° 39' 28" E

CURVE 4
P.I. Sta. 307+02.49
 $\Delta = 6^\circ 41' 30''$ (LT)
Dc = 1° 30' 00"
R = 3,820.00'
T = 223.32'
L = 446.14'
E = 6.52'
C = 445.88'
C.B. = N 48° 54' 20" E

LEGEND

ITEM 615 - TEMPORARY PAVEMENT, CLASS A

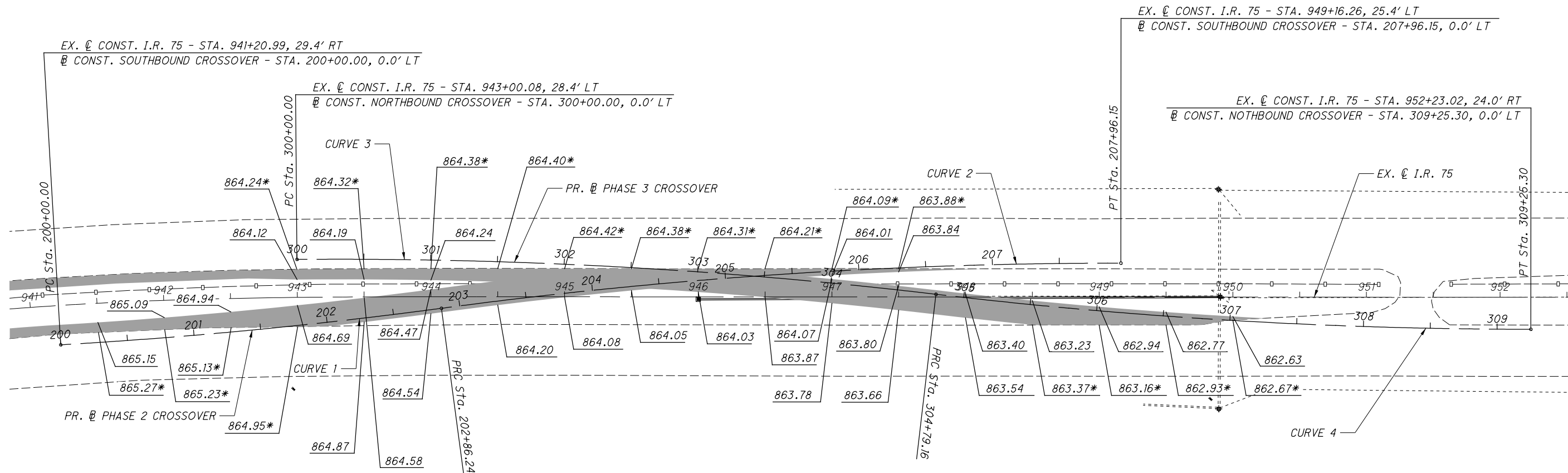


CALCULATED
SMB
CHECKED
MJC

MAINTENANCE OF TRAFFIC PLAN
I.R. 75 - CROSSOVER DETAIL

ALL -75-15.80

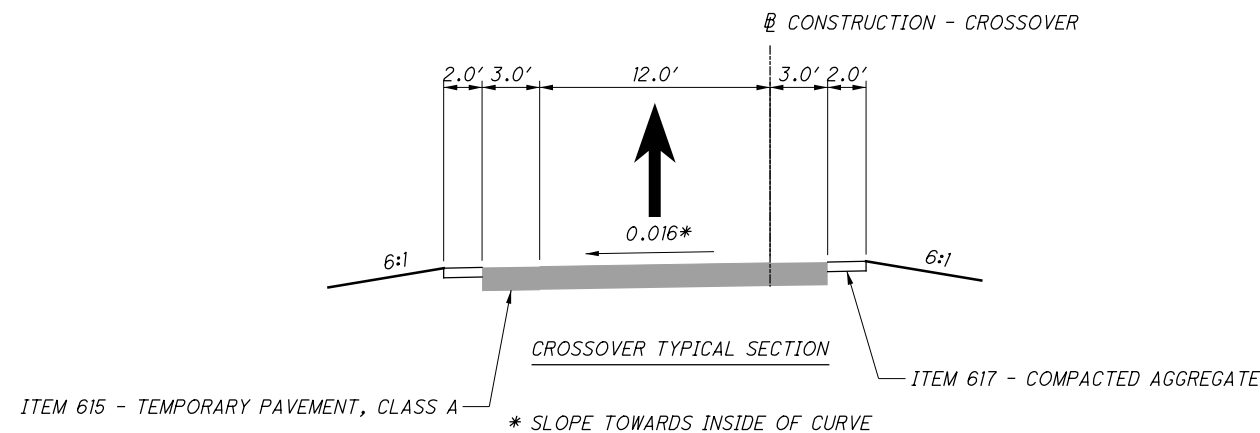
50A
188



* DENOTES EXISTING ELEVATION

NOTES:

1. ELEVATIONS ARE AT 50' INTERVALS BASED ON THE EXISTING $\mathcal{C}$ OF I.R. 75 UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS PRIOR TO THE CONSTRUCTION OF THE CROSSOVER.



51
188

$$\frac{54}{188}$$

$$\frac{55}{188}$$


$$\frac{56}{188}$$

I:\Project\data\94214\Design\Roadway\Sheets\94214_GG004.dgn Sheet 9/30/2019 10:52:42 AM tboleba

SHEET NUM.									PART.					ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED JLG	CHECKED	TAB
10	11	12	13	14	16	51	143	166	01/SAF/PV	02/IMS/PV	03/IMS/PV	04/BRO/BR	05/SAE/OT									
								130					130	632	69800	130	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG				
								2					2	632	70001	2	EACH	POWER SERVICE, AS PER PLAN	164			
								1					1	632	75481	1	EACH	SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 10 POLE, WITH MAST ARMS TC-81.21 DESIGN 14 AND DESIGN 11, AS PER PLAN	164			
								2					2	632	77230	2	EACH	SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.21 MAST ARM (GREATER THAN 59' IN LENGTH)				
								1					1	632	80502	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 11, 40' ARM				
								1					1	632	80620	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13, 50' ARM				
								1					1	632	80620	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13, 54' ARM				
								1					1	632	80628	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 14, 61' ARM				
								2					2	632	90103	2	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION FOR STORAGE, AS PER PLAN	164			
								2					2	632	90400	2	EACH	SIGNALIZATION, MISC.:LED BLANK OUT SIGN	164			
								2					2	633	65520	2	EACH	CABINET, TYPE 332				
								2					2	633	67100	2	EACH	CABINET FOUNDATION				
								2					2	633	67200	2	EACH	CONTROLLER WORK PAD				
								2					2	633	75001	2	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	164			
								6					6	809	69000	6	EACH	ADVANCE RADAR DETECTION				
								4					4	809	69100	4	EACH	STOP LINE RADAR DETECTION				
								2					2	809	69122	2	EACH	ATC V6.24 CONTROLLER				
																		STRUCTURE REPAIR (SFN 0202681)				
1,200												1,200		512	10100	1,200	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)				
1,197												1,197		512	74000	1,197	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES				
																		MISCELLANEOUS STRUCTURE (CULVERT FILE NO. 1979569)				
							LS			LS				202	11000	LS		STRUCTURE REMOVED				
							LS			LS				503	11100	LS		COFFERDAMS AND EXCAVATION BRACING				
							2,706			2,706				509	10000	2,706	LB	EPOXY COATED REINFORCING STEEL				
							9			9				511	46011	9	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN	143			
							24			24				511	46511	24	CY	CLASS QC1 CONCRETE, FOOTING, AS PER PLAN	143			
							46			46				512	10100	46	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)				
							878			878				512	33000	878	SY	TYPE 2 WATERPROOFING				
							28			28				516	13600	28	SF	1" PREFORMED EXPANSION JOINT FILLER				
							279			279				613	41200	279	CY	LOW STRENGTH MORTAR BACKFILL				
																		MAINTENANCE OF TRAFFIC				
						9,097				9,097				202	23000	9,097	SY	PAVEMENT REMOVED				
						891				891				611	04400	891	FT	12" CONDUIT, TYPE B				
						2				2				611	98470	2	EACH	CATCH BASIN, NO. 2-2B				
						6				6				611	98630	6	EACH	CATCH BASIN ADJUSTED TO GRADE				
	120									120				614	11110	120	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE				
				14,310						14,310				614	11630	14,310	FT	INCREASED BARRIER DELINEATION				
						10				10				614	12338	10	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)				
		21								21				614	12460	21	EACH	WORK ZONE MARKING SIGN				
			21							21				614	12484	21	EACH	WORK ZONE INCREASED PENALTIES SIGN				
										10				614	12500	10	EACH	REPLACEMENT SIGN				
										50				614	12600	50	EACH	REPLACEMENT DRUM				
						2				2				614	12756	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM				
										1,460				614	13310	1,460	EACH	BARRIER REFLECTOR, TYPE 1TWO WAY				
										730				614	13360	730	EACH	OBJECT MARKER, TWO WAY				
										18				614	18601	18	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	12			
										14				614	20010	14	MILE	WORK ZONE LANE LINE, CLASS I, 6"				
						4.27				4.27				614	20110	4.27	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT				
										31				614	22010	31	MILE	WORK ZONE EDGE LINE, CLASS I, 6"				
						25.95				25.95				614	22110	25.95	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT				
										5,323				614	23210	5,323	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT				
						8,828				8,828				614	24200	8,828	FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT				
						175				175				614	25200	175	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT, 12"				
										120				614	26000	120	FT	WORK ZONE STOP LINE, CLASS I				
						22,967				22,967				615	20001	22,967	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	11			

GENERAL SUMMARY

ALL -75 -15.80

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02/IMS/PV					
EARTHWORK & SEEDING					
SHEET	LOCATION	203		204	659
		EXCAVATION	EMBANKMENT	EXCAVATION	SEEDING AND MULCHING
NO.	ROUTE	CY	CY	CY	SY
MAINLINE	I.R. 75				
74		0	0	0	0
75		481	234	0	1748
76		775	496	0	2078
77		920	654	0	2641
78		2332	788	0	4162
79		3422	569	0	4261
80		3196	571	0	4109
81		2117	468	0	3320
82		2321	494	0	4144
83		2160	457	0	4075
84		1869	359	0	3482
85		1218	118	0	3076
86		965	468	0	3234
87		1419	1062	0	3888
88		2213	525	0	5038
89		6036	781	0	9712
90		15422	936	0	12178
91		9453	879	0	7619
92		2832	1289	0	4803
93		8111	1128	0	8505
94		4458	977	0	6704
95		1771	615	0	2572
96		798	66	0	1189
97		1595	127	0	2520
98		2166	244	0	4433
99		2369	444	0	5461
100		1884	381	0	5372
101		193	27	0	740
RAMP G					
104		286	630	18	1071
105		277	419	140	1664
106		344	10	208	1483
107		123	3	82	607
RAMP H					
109		0	0	0	0
110		352	8	134	1306
111		935	34	156	1409
112		1227	54	171	1778
RAMP J					
115		0	0	0	0
116		338	207	120	993
117		375	311	156	1772
118		969	418	203	1696
RAMP K					
120		506	107	73	534
121		1044	252	135	1091
122		708	302	76	1364
123		713	286	93	1003
124		553	244	153	1103
125		135	35	105	843
TO SHEET SUBSUMMARY		91381	18477	2023	140781

02/IMS/PV					
SEEDING & MULCHING					
659	SEEDING AND MULCHING	=	147146	SY	
659	COMMERCIAL FERTILIZER	=	19.9	TON	
	(147146)(9)(1/1000)(30)(1/2000)				
659	WATER	=	88.3	M GAL	
	(2)(147146)(1/1000)(300)(1/1000)				
QUANTITIES CARRIED TO SHEET SUBSUMMARY					

02/IMS/PV											
EROSION CONTROL											
REFERENCE	SHEET	STATION	STATION	SIDE	WIDTH	653	659		670		836
						TOPSOIL FURNISHED AND PLACED, AS PER PLAN	SEEDING AND MULCHING	TOPSOIL	DITCH EROSION PROTECTION	SLOPE EROSION PROTECTION	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1
						CY	SY	CY	SY	SY	SY
EC1	137	872+68	874+57	CL	7.5'				158		
EC2	138	883+43	884+93	CL	7.5'				125		
EC3	138-139	888+93	890+43	CL	7.5'				125		
EC4	139	893+93	895+43	CL	7.5'				125		
EC5	139	895+16.6	895+42.6	RT	7.5'				21.7		
EC6	139	895+86	897+42.8	RT	7.5'				130.7		
EC7	139	895+93	897+43	CL	7.5'				125		
EC8	139	897+57.2	898+18.4	RT	7.5'				51		
EC9	139	897+93	899+43	CL	7.5'				125		
EC10	139	902+38.5		RT	7.5'				20.8		
EC11	139-140	898+00	906+50	LT	VARIES			1552		13969	
EC12	139-140	899+25	906+50	RT	VARIES			736		6623	
EC13	139-140	902+65	906+50	RT	VARIES	351	3164			3164	
EC14	140	905+65	906+50	LT	VARIES	32	291			291	
EC15	140	904+00	905+54.2	LT	7.5'				128.5		
EC16	140	904+06	905+56	CL	7.5'				125		
EC17	140	904+11.7	905+56.2	RT	7.5'				120.4		
EC18	140	905+70.2	906+50.3	LT	7.5'				66.8		
EC19	140	905+70	906+00	CL	7.5'				51.8		
EC20	140	905+69.8	906+50	RT	7.5'				66.8		
EC21	140	908+25	911+50	LT	VARIES	146	1313			1313	
EC22	140	908+25	911+50	LT	VARIES			255		2298	
EC23	140	908+43.1	909+93	LT	7.5'				125		
EC24	140	909+00	909+93	CL	7.5'				105.6		
EC25	140	908+50	909+93	RT	7.5'				119.1		
EC26	140	908+50	914+00	RT	VARIES			1019		9173	
EC27	140	908+50	911+69.2	RT	VARIES	177	1597			1597	
EC28	140	911+43	912+93	LT	7.5'				125		
EC29	140	911+43	912+93	CL	7.5'				125		
EC30	140	911+43	912+93	RT	7.5'				125		
EC31	140	912+09.7	915+93	RT	14.5'						697
EC32	140	911+80.7	913+77.4	LT	11'				265.7		
EC33	140	913+07	914+00	RT	7.5'				77.5		
EC34	140	913+07	914+50	LT	7.5'				119.2		
EC35	140	912+00	914+50	LT	VARIES			131		1179	
EC36	140-141	916+43	917+93	LT	7.5'				125		
EC37	140-141	916+60	918+10	RT	7.5'				125		
EC38	140-141	916+43	917+93	CL	7.5'				125		
EC39	141	918+24	919+50	RT	7.5'				105		
TO GENERAL SUMMARY						706	6365	3693	3234	39607	697

CALCULATED
JLG

CHECKED
IMK

SUB - SUMMARY

ALL - 75 - 15.80

58
188

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###	SHEET NO.	STATION		SIDE	202		601		602	611																				BENDS	CALCULATED	JLG	CHECKED	MEK
					PIPE REMOVED, 24" AND UNDER	CATCH BASIN REMOVED	TIED CONCRETE BLOCK MAT, TYPE 1	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	CONCRETE MASONRY	6" CONDUIT, TYPE F	10" CONDUIT, TYPE F	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	18" CONDUIT, TYPE B	24" CONDUIT, TYPE B	24" CONDUIT, TYPE C	30" CONDUIT, TYPE B	30" CONDUIT, TYPE C	36" CONDUIT, TYPE C	42" CONDUIT, TYPE B	42" CONDUIT, TYPE C	48" CONDUIT, TYPE C	CATCH BASIN, NO. 8	CATCH BASIN, NO. 8A	MANHOLE, NO. 3	MANHOLE, NO. 3, 60" I.D.	MANHOLE, NO. 3, 72" I.D.	MANHOLE, NO. 3, 84" I.D.	PRECAST REINFORCED CONCRETE OUTLET					
		FROM	TO																															
D1	65	873+00		LT	85	1		2	0.46						91								1											
D2	65	873+00		RT	10											10																		
D3	66	885+00		LT	88	1		1.6	0.46						110								1											
D4	66	885+00		RT	91				0.46						90																			
D5	66	884+96		RT		1																												
D6	68	890+50		LT				1.3	0.33					109									1											
D7	68	895+50		LT	134	1								85									1											
D8	68	895+50		LT				1.1	0.33					78									1											
D9	68	896+55.7	897+49	LT	143	2							91										1											
D10	68	897+09.6	897+50	CL		1							40										1											
D11	68	897+50	899+50	CL									200										1											
D12	68	900+00		RT	80	2																												
D13	68	900+02.2	900+91.1	RT	95																													
D14	68	902+38.5	902+52.6	RT	20							20																				10"X45°		
D15	68&70	902+38.5	905+63	RT									341										1											
D16	70	905+63		RT									86										1											
D17	70	905+63	906+90	RT											130									1										
D18	70	905+63	906+85	LT											122									1										
D19	70	906+00		LT	62	2																												
D20	70	906+46.1	913+70.7	LT	722	1																												
D21	70	906+85	906+88	LT	5						13																					6"X15°		
D22	70	906+85	908+00	LT											114										1									
D23	70	907+87.9	908+00	LT	5						17																					6"X45°		
D24	70	907+98.3	908+00	LT	11						12																					6"X15°		
D25	70	908+15.5	908+16.0	LT	18		1.8		0.27				10																					
D26	70	906+85	907+03.3	RT	5						22																					6"X45°		
D27	70	906+85	908+25	RT											136										1									
D28	70	908+04.6	908+05.0	RT	7		1.8				4																			1				
D29	70	908+12.6	908+25	RT	5						24																					6"X45°		
D30	70	908+22.3		LT	55	1																												
D31	70	908+00	910+00	LT																														
D32	70	908+25	910+00	RT												174									1									
D33	70	910+00		RT	59	1							83										1			1								
D34	70	910+00	913+00	LT																				1										
D35	70	910+96.2	910+97.3	LT	44		1.8				20													1							1			
D36	70	910+00	913+00	RT																					1									
D37	70	911+89.5		LT	71	1																												
D38	70	913+00		LT																														
D39	70	913+00		RT												87								1										
D40	70	913+00	914+17.4	RT	40											85								1										
D41	70	914+17.4	917+40.3	RT																71								1						
D42	70	914+00	915+00.8	RT	226	1																												
D43	70&72	917+40.3	916+00	RT	557	1																							1					
D44	70	916+00		RT									26											1										
D45	70&72	916+00	918+00	RT																									1					
D46	70	913+70.7	914+02.5	LT	173	2																												
D47	70&72	915+00	918+00	LT	300	1																												
D48	70&72	913+98.4	918+00	LT	403																													
D49	70	915+91.9	916+01.2	LT	50	1																												
TOTALS CARRIED TO SHEET 60					3564	21	5.4	6	2.31	112	20	169	708	272	291	686	172	798	117	71	162	200	12	7	3	1	1	2	2					

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REF. NO.	SHEET NO.	STATION		SIDE	202		601		602	611																							BENDS
					PIPE REMOVED, 24" AND UNDER	CATCH BASIN REMOVED	TIED CONCRETE BLOCK MAT, TYPE 1	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	CONCRETE MASONRY	6" CONDUIT, TYPE F	10" CONDUIT, TYPE F	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	18" CONDUIT, TYPE B	24" CONDUIT, TYPE B	24" CONDUIT, TYPE C	30" CONDUIT, TYPE B	30" CONDUIT, TYPE C	36" CONDUIT, TYPE C	42" CONDUIT, TYPE B	42" CONDUIT, TYPE C	48" CONDUIT, TYPE C	CATCH BASIN, NO. 8	CATCH BASIN, NO. 8A	MANHOLE, NO. 3	MANHOLE, NO. 3, 60" I.D.	MANHOLE, NO. 3, 72" I.D.	MANHOLE, NO. 3, 84" I.D.	PRECAST REINFORCED CONCRETE OUTLET				
		FROM	TO		FT	EACH	SY	CY	CY	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH			
D50	72	918+00		LT	101						104										1												
D51	72	918+00		RT	13	2					128										1												
D52	72	918+00	918+17.0	RT								25									1												
D53	72	918+00	924+68.4	RT			23.6	10.8												716							1						
D54	72	920+54.8		RT	30	1																											
D55	72	920+54.8	924+40	RT	386	1																											
D56	72	918+00	924+33.2	LT	636	1																											
TOTALS THIS SHEET					1166	5	0	23.6	10.8	0	0	232	25	0	0	0	0	0	0	0	0	716	3	0	0	0	0	1	0				
TOTALS FROM SHEET 59					3564	21	5.4	6	2.31	112	20	169	708	272	291	686	172	798	117	71	162	200	12	7	3	1	1	2	2				
TOTALS TO GENERAL SUMMARY					4730	26	5	30	13.1	112	20	401	733	272	291	686	172	798	117	71	162	916	15	7	3	1	1	3	2				

01/SAF/PV																	
ROADWAY																	
REF NO.	SHEET	STATION	STATION	SIDE	202			606							620	626	690
					CONCRETE BARRIER REMOVED	CABLE BARRIER REMOVED, AS PER PLAN	REMOVAL MISC.: CONCRETE NO MOW STRIP	GUARDRAIL, TYPE MGS, AS PER PLAN	GUARDRAIL, BARRIER DESIGN, TYPE MGS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE T	IMPACT ATTENUATOR, TYPE 1 BIDIRECTIONAL	SPECIAL - CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION	SPECIAL - CABLE BARRIER, ANCHOR ASSEMBLY	SPECIAL - CABLE BARRIER, TENSIONING	DELINEATOR, POST GROUND MOUNTED	BARRIER REFLECTOR, TYPE 2, BI-DIRECTIONAL	SPECIAL - MISC.: NO MOW STRIP
					FT	FT	FT	FT	FT	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH
1R	65	861+50	866+87	LT.		537	537										
2R	65	861+87.4	871+02.3	RT.		914.9	914.9										
3R	65,66 &68	872+39	898+51	RT.		2612	2612										
4R	72	919+01.3	951+10.3	C		3209	3209										
5R	68&70	897+52	907+10*	C	958												
6R	70&72	907+90*	920+00	C	1210												
1GC	65	861+50	862+00	LT.									1	1		50	
2GC	65	861+00	871+00	RT.								1000	2			1000	
3GC	65,66 &68	871+49.4	901+00	RT.								2950.6	2			2950.6	
4GC	68,70 &72	900+00	926+00	RT.								2600	2			2600	
5GC	72	925+00	951+10.3	C								2610.3	2			2610.3	
1GR	70	906+04.1, 0' RT	907+97.3, 8' RT	RT.				75	75	1	1				1	3	
2GR	70	907+01.2, 8' LT	908+94.6, 0' LT	LT.				75	75	1	1				1	3	
TO SHEET SUBSUMMARY					2168	7273	7273	150	150	2	2	9161	9	1	2	6	9211

* - THE BARRIER BETWEEN STATIONS 907+10 TO 907+90 AT THE SR 696 BRIDGE PIER SHALL REMAIN. THE BARRIER SHALL BE SAW CUT LEAVING A SMOOTH SURFACE THAT WILL BE SEALED UNDER ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

SUB - SUMMARY

ALL -75 -15.80

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02/IMS/PV																
UNDERDRAINS																
REFERENCE	SHEET	STATION	STATION	601	605			611			BENDS AND BRANCHES					OUTLET LOCATION
				TIED CONCRETE BLOCK MAT, TYPE 1	6" SHALLOW PIPE UNDERDRAINS	6" BASE PIPE UNDERDRAINS	6" UNCLASSIFIED UNDERDRAINS	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	6" CONDUIT, TYPE F	PRECAST REINFORCED CONCRETE OUTLET	CAP	CROSS	TEE	BEND	WYE	
				SY	FT	FT	CY	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	
1UD	65	869+27, 59' LT	872+81.5, 64' LT			354.5		10			1		1	1	1	STA. 872+85, 87' LT.
2UD	65	869+27, 49' LT	872+85, 56.2 ' LT	1.8	358.1			30.5		1	2		1			
3UD	65&66	872+81.5, 64' LT	878+96.3, 76.1' LT			601.8		10	10				1	1	1	STA. 879+00, 95.5' LT
4UD	65&66	873+02.8, 56.5' LT	879+00, 68' LT	1.8	592.1			27.4		1	1	1				
5UD	65&66	874+78.6, 49' LT	879+00, 49' LT			419.4		19.1					1			
6UD	65&66	874+78.6, 21' LT	880+38.8, 21' LT			557.1		187					1	3		CB @ 873+00
7UD	65&66	874+76.7, 21' RT	877+21.7, 21' RT			245.5		28					1	1		OUTLET TO 8UD
8UD	65&66	874+76.7, 49' RT	879+82.2, 49' RT		492.5						1		1			CONNECT TO EXISTING UD AT STA, 874+76.65
9UD	65&66	874+76.7, 59' RT	879+82.2, 59' RT			492.5										
10UD	66	877+21.7, 21' RT	884+94.1, 21' RT		780.0			27.2			1		1	1		CB @ 885+00
11UD	66	878+96.3, 76.1' LT	884+97.5, 82' LT			576.3		9.9			1		1	1	1	STA. 884+97.5, 106' LT
12UD	66	879+00, 68' LT	884+96.9, 74' LT	1.8	574.6			30.5		1	1	1				
13UD	66	879+00, 49' LT	884+85, 49' LT			570.2		25					1			
14UD	66	880+38.8, 21' LT	884+85, 21' LT			441.3		25					1	1		CB @ 885+00
15UD	66	879+82.2, 59' RT	884+85, 59' RT	1.8		518.4				1			1			STA. 884+85, 81.5' RT
16UD	66&68	885+02.3, 82' LT	890+31.3, 81' LT			506.4		11.1			1		1	1	1	STA. 890+35, 104.75' LT
17UD	66&68	885+03.5, 74' LT	890+35, 74.2' LT	1.8	511.1			30.5		1	1	1				
18UD	66&68	884+85, 49' LT	890+35, 49' LT			535.9		25.2					1			
19UD	66&68	884+85, 21' LT	890+35, 21' LT			544		27.1					1	1		CB @ 890+50
20UD	66&68	885+04, 21' RT	890+35, 21' RT		536.9			27.2			1		1	1		CB @ 890+50
21UD	66&68	884+85, 59' RT	894+59.3, 72.8' RT			1007.7		9.9					1	1	1	STA. 894+63.6, 95.5' RT
22UD	68	890+00, 49' RT	894+63.6, 49' RT	1.8		475.5		46.5		1	1		1			
23UD	68	890+31.3, 81' LT	894+18.6, 113.6' LT	1.8		370.9		22		1			1			STA. 894+14.6, 135.3' LT
24UD	68	891+00, 59' LT	895+31.5, 59' LT			418.1		12.1			1		1	1	1	CB @ 895+50, 84.5' LT
25UD	68	890+35, 49' LT	895+35, 49' LT		487.2			41.4					1			
26UD	68	890+35, 21' LT	895+35, 21' LT			494.5		27.1					1	1		CB @ 895+50
27UD	68	890+35, 21' RT	895+35, 21' RT		505.5			27.2					1	1		CB @ 895+50
28UD	68	894+18.6, 113.6' LT	895+47.6, 137.2' LT			122.9					1					STA. 894+14.6, 135.3' LT
29UD	68	895+52.5, 138.2' LT	895+98.9, 148.3' LT	1.8		44.1		25.2		1	2		1			STA. 895+58.6, 165.4' LT
30UD	68	896+17.1, 152.4' LT	902+40.7, 359.9' LT	1.8	582.8			51.3		1				3		STA. 896+08.2, 184.3' LT
31UD	68	895+31.5, 59' LT	896+59.4, 59' LT				123.9				1					CB @ 895+50, 84.5' LT
32UD	68	895+35, 49' LT	896+65.3, 49' LT				126.9				1					
33UD	68	895+35, 21' LT	899+35, 21' LT			395.6		27.1					1	1		CB @ 899+50
34UD	68	895+35, 21' RT	899+35, 21'RT		384.4			27.2	20				1	1		CB @ 899+50
35UD	68	896+00, 49' RT	902+38.5, 49' RT			654.9		64			1			1		CB @ 902+38.5, 114.6' RT
36UD	68	894+63.6, 49' RT	897+76.8, 72' RT		323.7						1					STA. 894+63.6, 95.5' RT
37UD	68	894+59.3, 72.8' RT	897+14.5, 89.8' RT			262.9					1					
38UD	68	897+94.3, 96' RT	901+77.8, 193.9' RT	1.8	424.5			86.7		1	1		1			STA. 902+00, 112.1' RT
39UD	68&70	896+75.4, 59' LT	905+59.4, 59' LT			857.6		11.1			1		1	1	1	CB @ 905+63, 81' LT
40UD	68&70	896+82.6, 49' LT	905+63, 49' LT		858.7			32			1		1			
41UD	68&70	899+35, 21' LT	905+48, 21' LT			607							1	1		CB @ 905+63
42UD	68&70	899+35, 21' RT	905+48, 21' RT		619.4			27.2					1	1		CB @ 905+63
43UD	68	897+77.1, 59' RT	902+35.1, 59' RT			472.1		9.9			1		1	1	1	CB @ 902+38.5, 114.6' RT
44UD	68&70	902+35.1, 59' RT	908+24, 59' RT			600.6		4					1	1	1	MH @ 908+25, 65' RT
45UD	68&70	901+77.8, 193.9' RT	903+01.3, 260.6' RT		153.4											STA. 902+00, 112.1' RT
QUANTITIES TO SHEET 62				18	8185	13147	251	1103	30	10	25	3	33	27	9	

CALCULATED	JLG	CHECKED	IMK
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02/IMS/PV																			CALCULATED	JLG	CHKD	INM																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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SUB - SUMMARY

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188

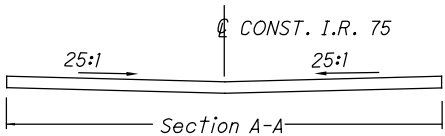
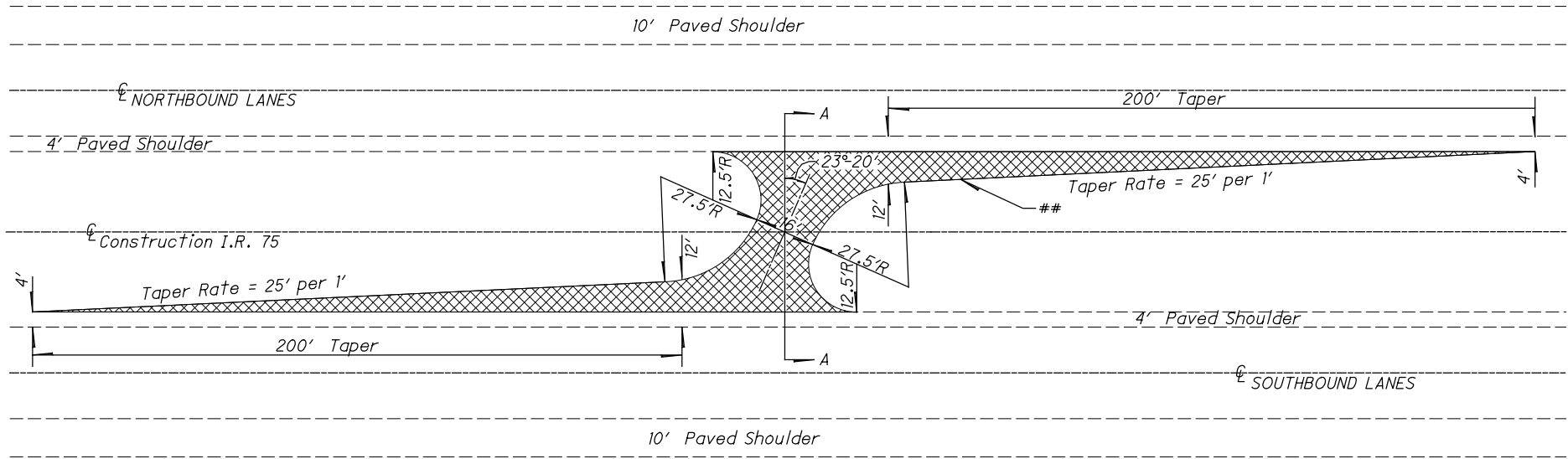
I:\Project\data\94214\Design\Roadway\Sheets\94214_GS006.dgn Sheet 9/20/2019 2:22:42 PM tbolemba

STATION RANGE			SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202	204	204	204		204	206	206	206		301	304	407	442	442	442	617	618
								PAVEMENT REMOVED	SUBGRADE COMPACTION	GRANULAR MATERIAL, TYPE C (12" DEPTH)	GEOTEXTILE FABRIC		PROOF ROLLING	LIME STABILIZED SUBGRADE, 14 INCHES DEEP	LIME	CURING COAT		ASPHALT CONCRETE BASE, PG64-22 (9"DEPTH)	AGGREGATE BASE (6" DEPTH)	NON-TRACKING TACK COAT	ANTI-SEGREGATION EQUIPMENT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448)	COMPACTED AGGREGATE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)
02/IMS/PV				FT	FT	SY	SY	SY	SY	CY	SY		hour	SY	TON	SY		CY	CY	GAL	CY	CY	CY	CY	MILE
874+76.65		889+00.00	NB	1423.35	38.00	6009.70		6094.04										1548.68		661.07	342.66	250.40	292.14	57.11	0.54
					39.17	6194.74													340.71						
					40.67	6431.96													1071.99						
					41.00	6484.15							3.24	6484.15	195.74	6484.15									
889+00.00		897+77.10	NB	877.10	38.00	3703.31		3766.04												407.36	211.15	154.30	180.02	17.60	0.17
					38.58	3759.84												939.96		206.79					
					39.33	3832.93													638.82						
					39.50	3849.49							1.92	3849.49	116.21	3849.49									
897+77.10		915+85.17	NB	1808.07	38.00	7634.07		8513.36												839.75	435.28	318.09	371.10	72.55	0.68
					39.17	7869.12												1967.28		432.80					
					40.67	8170.47													1361.74						
					41.00	8236.76							4.12	8236.76	248.65	8236.76									
915+85.17		924+17.00	NB	831.83	38.00	3512.17		4005.62												386.34	200.26	146.34	170.73	16.69	0.16
					38.58	3565.78												891.44		196.12					
					39.33	3635.10													605.85						
					39.50	3650.81							1.83	3650.81	110.21	3650.81									
918+00 to 921+00 OIL LINE CORRECTIONS				300.00	39.50	1316.67				438.89	1316.67		-0.66	-1316.67	-39.75	-1316.67									
874+76.65		892+70.60	SB	1793.95	38.00	7574.46		7447.68												833.19	431.88	315.60	368.20	71.98	0.34
					38.58	7690.07												1922.52		422.95					
					39.33	7839.56													1306.59						
					39.50	7873.45							3.94	7873.45	237.68	7873.45									
892+70.60		916+04.02	SB	2333.42	38.00	9852.22		10964.96												1083.74	561.75	410.51	478.93	93.62	0.88
					39.17	10155.56												2538.89		558.56					
					40.67	10544.47													1757.41						
					41.00	10630.02							5.32	10630.02	320.89	10630.02									
916+04.02		924+17.00	SB	812.98	38.00	3432.58		9498.36												377.58	195.72	143.02	166.86	16.31	0.15
					38.58	3484.97												871.24		191.67					
					39.33	3552.72													592.12						
					39.50	3568.08							1.78	3568.08	107.71	3568.08									
918+00 to 921+00 OIL LINE CORRECTIONS				300.00	39.50	1316.67				438.89	1316.67		-0.66	-1316.67	-39.75	-1316.67									
SR 696 RAMP G EXIT																									
889+00.00		897+77.10		877.10	VARIES		1472.47	1387.77												161.97	137.05	61.35	71.58	17.60	
							1531.60											382.90		84.24					
							1607.65												267.94						
							1624.56						0.81	1624.56	49.04	1624.56									
8+30.61		14+28.57		597.96	25.00	1661.00		1492.09												182.71	95.97	69.21	80.74	23.99	
					26.17	1738.73												434.68		95.63					
					27.67	1838.39													306.40						
					28.00	1860.32			1860.32	620.11	1860.32		0.93												
SR 696 RAMP H ENTRANCE																									
24+71.33		29+13.95		442.62	25.00	1229.50		1636.00												135.25	71.04	51.23	59.77	17.76	
					26.17	1287.04												321.76		70.79					
					27.67	1360.81													226.80						
					28.00	1377.04			1377.04	459.01	1377.04		0.69												
915+85.17		924+17.00		831.83	VARIES		2056.04	2431.66												226.16	133.62	85.67	99.95	16.69	
							2109.81											527.45		116.04					
							2179.39												363.23						
							2194.75		2194.75				1.10	2194.75	66.25	2194.75									
918+00 to 921+00 OIL LINE CORRECTIONS				300.00			759.25			253.08	759.25		-0.38	-759.25	22.92	759.25									
SR 696 RAMP J EXIT																									
25+23.47		26+30.00		106.53	VARIES		370.63	373.18												40.77	23.88	15.44	18.02	4.27	
							384.71											96.18		21.16					
							402.83												67.14						
							406.86		406.86	135.62	406.86		0.20												
26+30.00		29+93.74		363.74	25.00	1010.39		1039.73												111.14	58.38	42.10	49.12	14.59	
					26.17	1057.68												264.42		58.17					
					27.67	1118.30													186.38						
					28.00	1131.64			1131.64	377.21	1131.64		0.57												
916+04.02		924+15.00		810.98	VARIES		1351.97	1398.67												148.72	106.72	56.33	65.72	16.27	
							1404.46											351.12		77.25					
							1472.24												245.37						
							1487.62						0.74	1487.62	44.91	1487.62									
918+00 to 921+00 OIL LINE CORRECTIONS				300.00			499.03			166.34	499.03		-0.25	-499.03	15.06	499.03									
02/IMS/PV SUBTOTALS								60049	6971	2889	8667		25	45708	1456	48225		13059	8998	8469	3005	2120	2473	457	2.93

63 188		ALL-75-15.80	PAVEMENT SUBSUMMARY	CALCULATED
				TAB
				CHECKED
				JLG

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STATION RANGE			SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW / 9	CADD GENERATED AREA	202	204	204	204	204	204	206	206	206	254	301	304	407	442	442	442	617	618
				PAVEMENT REMOVED	SUBGRADE COMPACTION	GRANULAR MATERIAL, TYPE C (12" DEPTH)	GEOTEXTILE FABRIC	GEOGRID	PROOF ROLLING	LIME STABILIZED SUBGRADE, 14 INCHES DEEP	LIME	CURING COAT	PAVEMENT PLANING, ASPHALT CONCRETE 1 1/2" DEPTH	ASPHALT CONCRETE BASE, PG64-22 (9"DEPTH)	AGGREGATE BASE (6" DEPTH)	NON-TRACKING TACK COAT	ANTI-SEGREGATION EQUIPMENT	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448)	COMPACTED AGGREGATE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)				
																						FT	FT	SY	SY
03/IMS/PV																									
SLM 15.800	TO	SLM 16.547	NB	3944.16	38.00	16653.12											16653.12			1415.52	438.24	693.88		158.25	1.49
869+27.00		874+76.65	NB	549.65	38.00	2320.74											2320.74			197.26	61.07	96.70		22.05	0.21
SLM 17.586		SLM 22.630	NB	26632.32	38.00	112447.57											112447.57			9558.04	2959.15	4685.32		1068.58	10.09
SLM 15.800	TO	SLM 16.547	SB	3944.16	38.00	16653.12											16653.12			1415.52	438.24	693.88		158.25	1.49
869+27.00		874+76.65	SB	549.65	28.00	1710.02											1710.02			145.35	61.07	71.25		22.05	0.21
SLM 17.586		SLM 22.630	SB	26632.32	38.00	112447.57											112447.57			9558.04	2959.15	4685.32		1068.58	10.09
S.R. 696/LINCOLN HIGHWAY																									
RAMP H		ENTRANCE																							
SLM 17.586		SLM 17.715		682.97	8.63	654.89														55.67	27.29	27.29			
Napoleon Rd																									
E		Exit					7000.00										7000.00			0.00	201.88	0.00		39.51	
F		Entrance					6625.00										6625.00			0.00	217.08	0.00		29.63	
Bentley Rd.																									
A		Entrance					6025.00										6025.00			0.00	226.25	0.00		16.67	
B		Exit					4400.00										4400.00			0.00	136.08	0.00		25.93	
C		Entrance					4100.00										4100.00			0.00	123.21	0.00		20.00	
D		Exit					6280.00										6280.00			0.00	209.38	0.00		27.16	
MEDIAN CROSSOVERS																									
871+38.00							295.00										295.00			0.00		0.00			
951+36.00							335.00										335.00			0.00		0.00			
0+21.43							295.00										295.00			0.00		0.00			
BLUFFTON QUARRY TUNNEL							370.00	370	370	370	370	370						92.50	61.67	40.70		15.42	17.99		
03/IMS/PV SUBTOTALS								370	370	370	370	370	0	0	0	0	297587	92	62	22386	8058	10969	18	2657	23.58
02/IMS/PV SUBTOTALS								60049	6971	2889	8667	0	25	45708	1456	48225	0	13059	8998	8469	3005	2120	2473	457	2.93
01/SAF/PV SUBTOTALS								6416	2864	955	2864	0	4	5176	156	5176	0	1905	1327	1228	451	306	357	84	0.44
TOTALS CARRIED TO GENERAL SUMMARY								66835	10205	4214	11901	370	29	50884	1612	53401	297587	15056	10387	32083	11514	13395	2848	3198	26.95



 - Median Crossover Area to be Planed and Resurfaced

MEDIAN CROSSOVERS FOR ASPHALT SURFACE COURSE
STA 871+38.00
STA 951+36.00
S.L.M. 0+21.43
##- Graphically Determined Areas

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PROJECT DATA			
TOTAL AREA (EXISTING RIGHT OF WAY)	= 53.5 ACRES ▽	IMPERVIOUS (PAVED) AREA FOR POST CONSTRUCTION SITE	= 12.0 ACRES
TOTAL AREA (INCLUDING PROPOSED RIGHT OF WAY)	= 55.5 ACRES ▽	RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE	= 0.7
PROJECT EARTH DISTURBED AREA	= 42.6 ACRES	RUNOFF COEFFICIENT FOR POST CONSTRUCTION SITE	= 0.7
ESTIMATED CONTRACTOR EARTH DISTRURBED AREA	= 15.0 ACRES	POST CONSTRUCTION BMP: VEGETATED FILTER STRIPS ARE PROVIDED TO MEET NPDES POST CONSTRUCTION REQUIREMENTS.	
NOTICE OF INTENT AREA	= 57.6 ACRES	IMMEDIATE RECEIVING WATERS:	May Ditch
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE	= 12.5 ACRES	SUBSEQUENT RECEIVING WATERS:	Little Riley Creek

BMP TYPE/NAME	MAX. PAVEMENT WIDTH (FT)	AVG. FILTER STRIP WIDTH (FT)	BEGIN			END			EDA TREATMENT CREDIT (ACRES)
			STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE	
VEGETATED FILTER STRIP #1	Less than 22	154	898+00	N 40.830850	W 83.962501	906+50	N 40.833028	W 83.962460	3.0
VEGETATED FILTER STRIP #2	Less than 22	41	899+25	N 40.830954	W 83.961725	902+10	N 40.831664	W 83.961058	0.3
VEGETATED FILTER STRIP #3	Less than 22	36	900+00	N 40.831181	W 83.961714	906+50	N 40.832970	W 83.961239	0.5
VEGETATED FILTER STRIP #4	Less than 22	118	902+65	N 40.831860	W 83.961208	906+50	N 40.832921	W 83.960214	1.3
VEGETATED FILTER STRIP #5	Less than 22	107	908+25	N 40.833483	W 83.962143	911+50	N 40.834362	W 83.961932	0.8
VEGETATED FILTER STRIP #6	Less than 22	169	908+50	N 40.833477	W 83.959986	914+00	N 40.835017	W 83.960923	2.4
VEGETATED FILTER STRIP #7	Less than 22	50	912+00	N 40.834503	W 83.962024	914+50	N 40.835177	W 83.961639	0.3
TOTAL TREATMENT									8.6
TREATMENT REQUIRED⊕									8.5

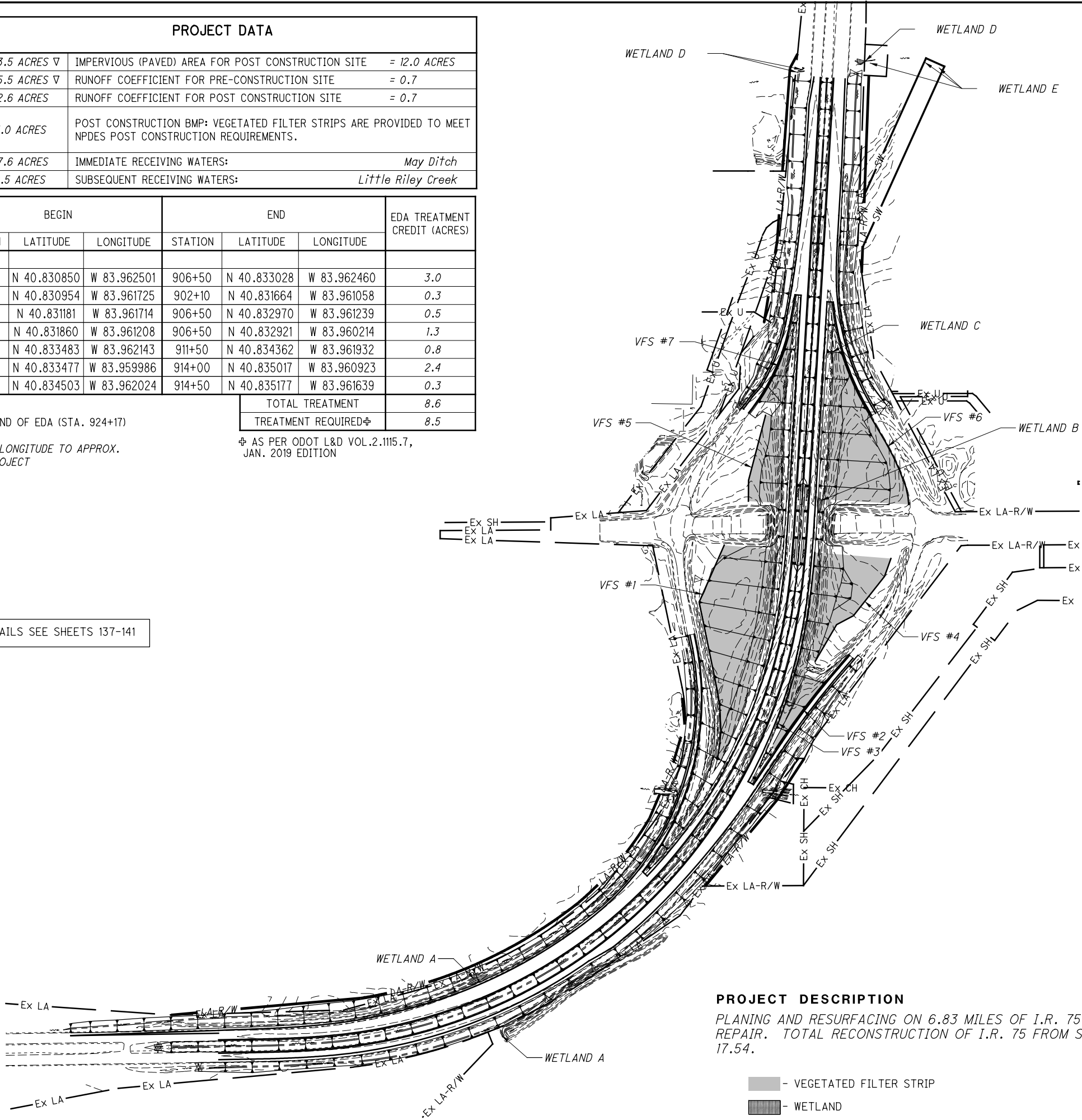
▽ AREA CALCULATED FROM BEGINNING OF EDA (STA. 869+27) TO END OF EDA (STA. 924+17)

USGS MAP: BEAVERDAM QUADRANGLE
LONGITUDE: W83° 56' 27" *
LATITUDE: N40° 51' 18" *

*LATITUDE AND LONGITUDE TO APPROX.
CENTER OF PROJECT

⊕ AS PER ODOT L&D VOL.2.1115.7,
JAN. 2019 EDITION

FOR BMP DETAILS SEE SHEETS 137-141



PROJECT DESCRIPTION

PLANING AND RESURFACING ON 6.83 MILES OF I.R. 75, INCLUDING JOINT REPAIR. TOTAL RECONSTRUCTION OF I.R. 75 FROM S.L.M. 16.54 TO 17.54.

- VEGETATED FILTER STRIP
- WETLAND

CALCULATED
IMK
CHECKED
JLG

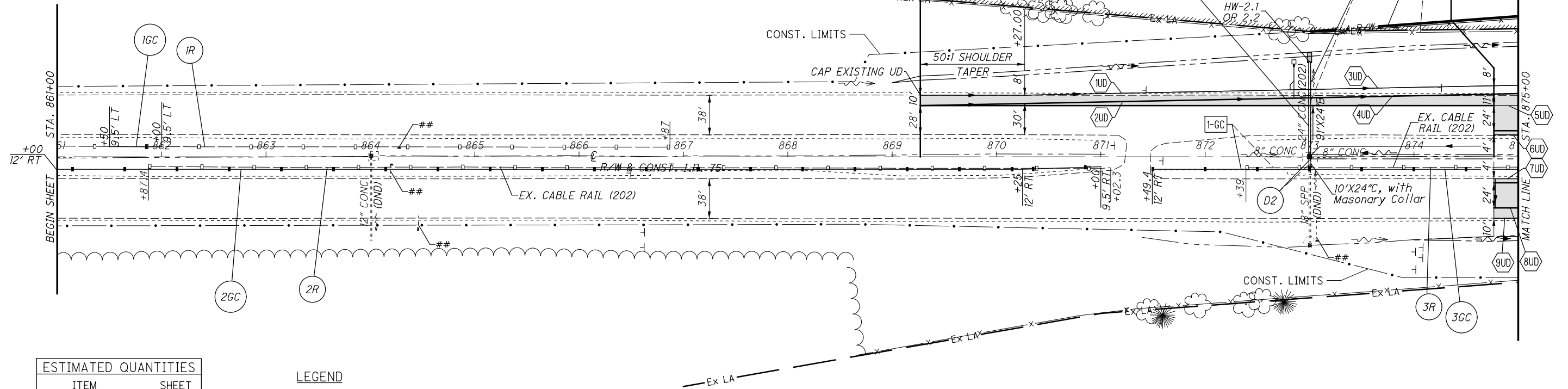
0200400

HORIZONTAL
SCALE IN FEET

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BEGIN PROJECT
BEGIN WORK
S.L.M. 15.80

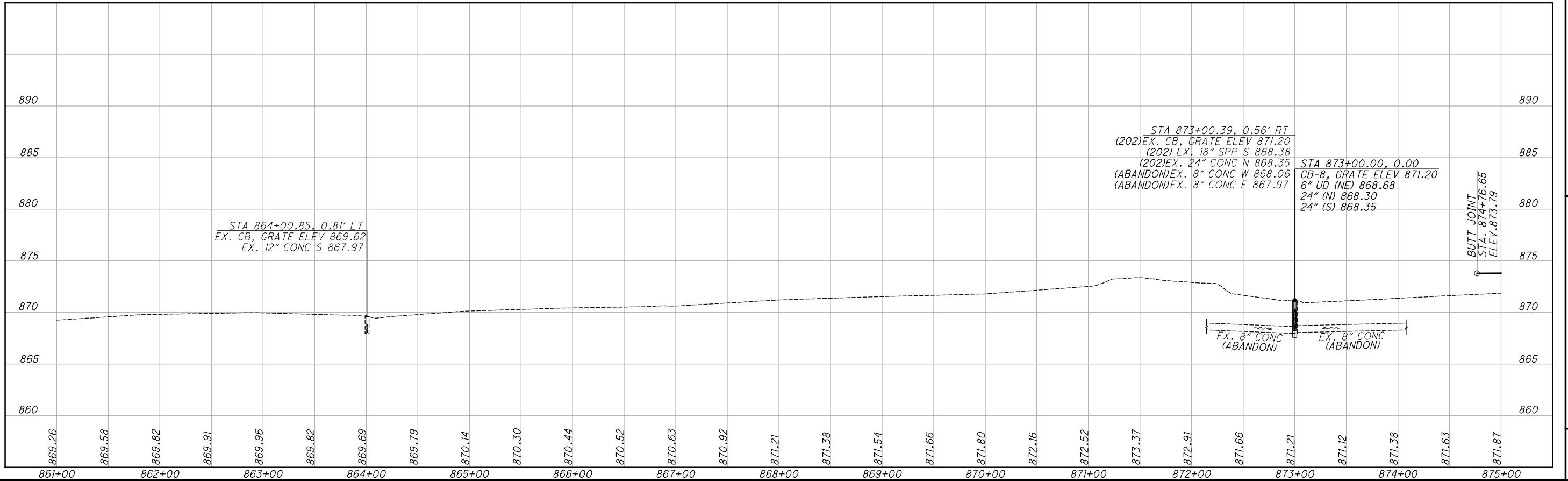
E 101 (066)



ESTIMATED QUANTITIES	
ITEM	SHEET
UNDERDRAIN - UD	61-62
CABLERAIL - GC	60
DRAINAGE - D	59-60
ROADWAY - R	60

LEGEND

- FULL DEPTH (REMOVAL)
- ## - UNDERDRAIN OUTLET (DND)



RESURFACING
S.L.M. 16.547

RESURFACING W/
SB WIDENING

RESURFACING W/
SB WIDENING

FULL PAVEMENT
REPLACEMENT



0 50 100
25
HORIZONTAL
SCALE IN FEET

CALCULATED
JLG
CHECKED
XXX

PLAN AND PROFILE SHEET
STA. 861+00 TO STA. 875+00

ALL -75-15.80

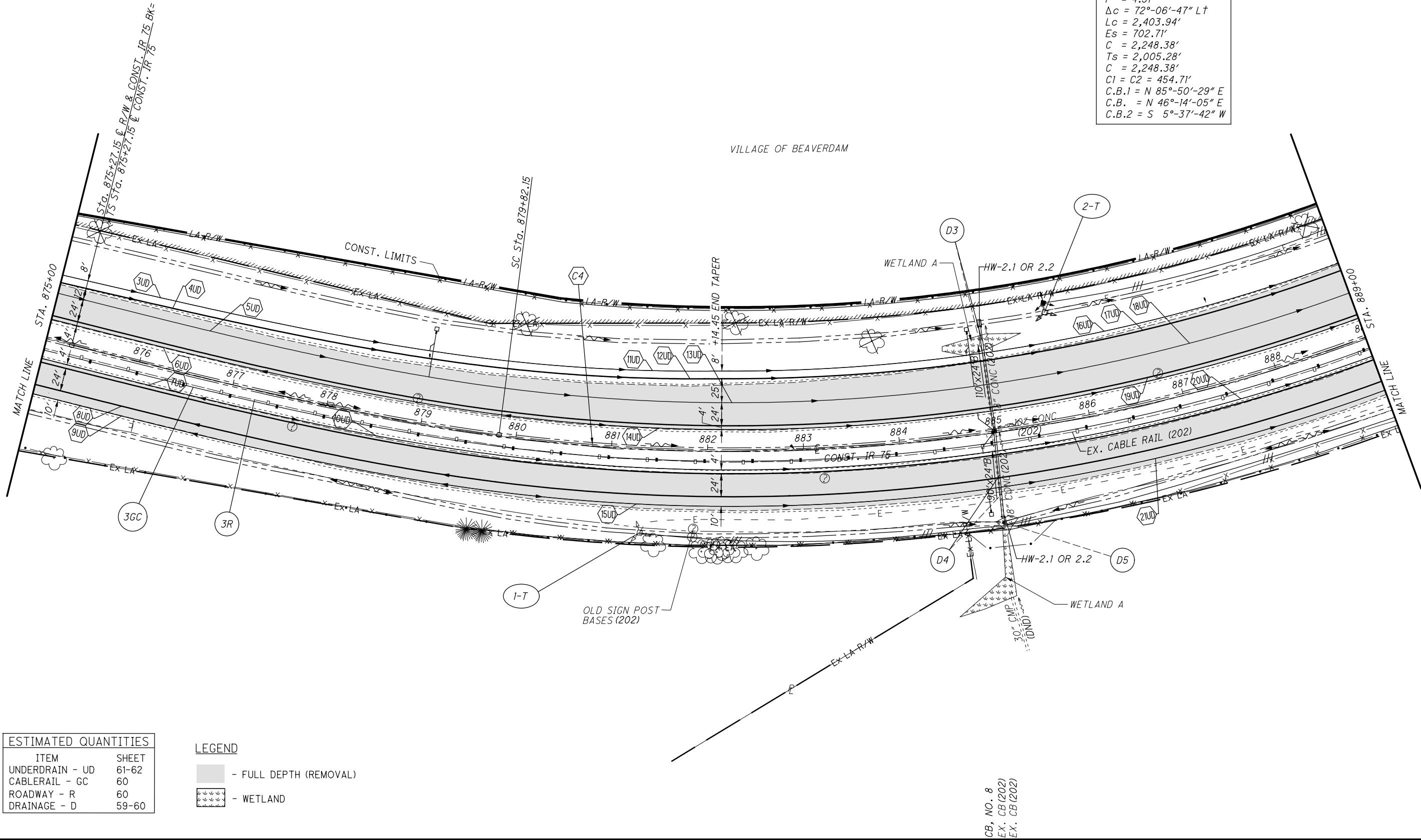
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188

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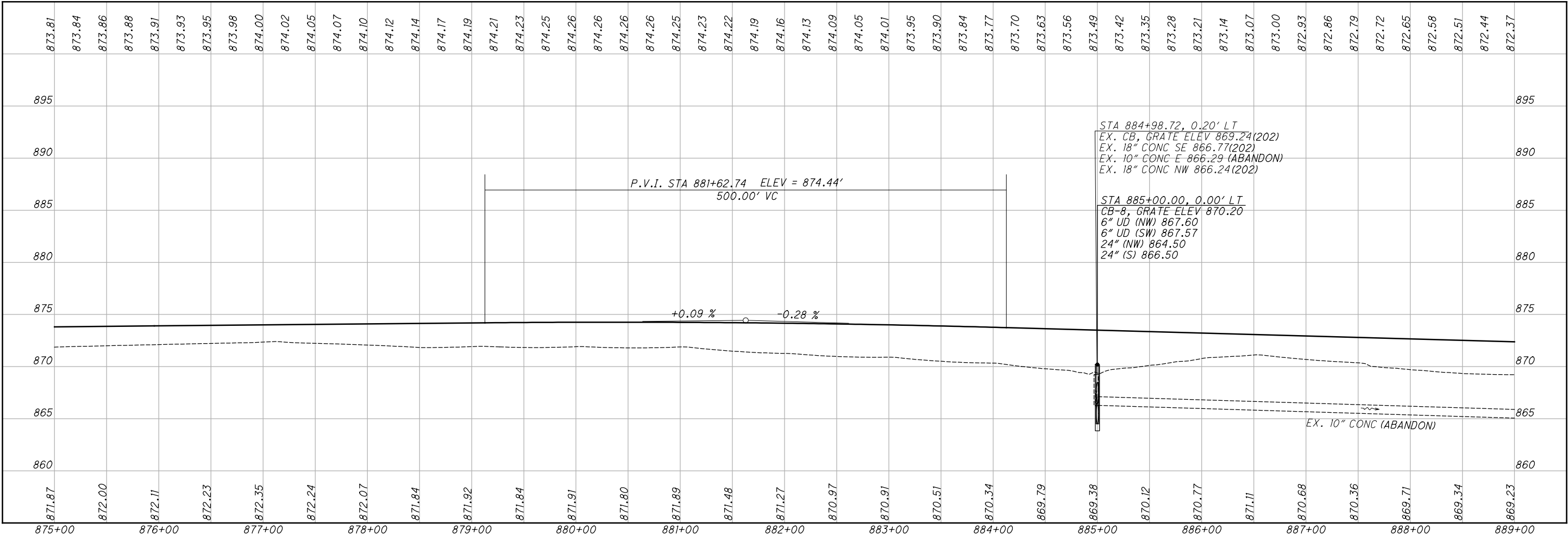
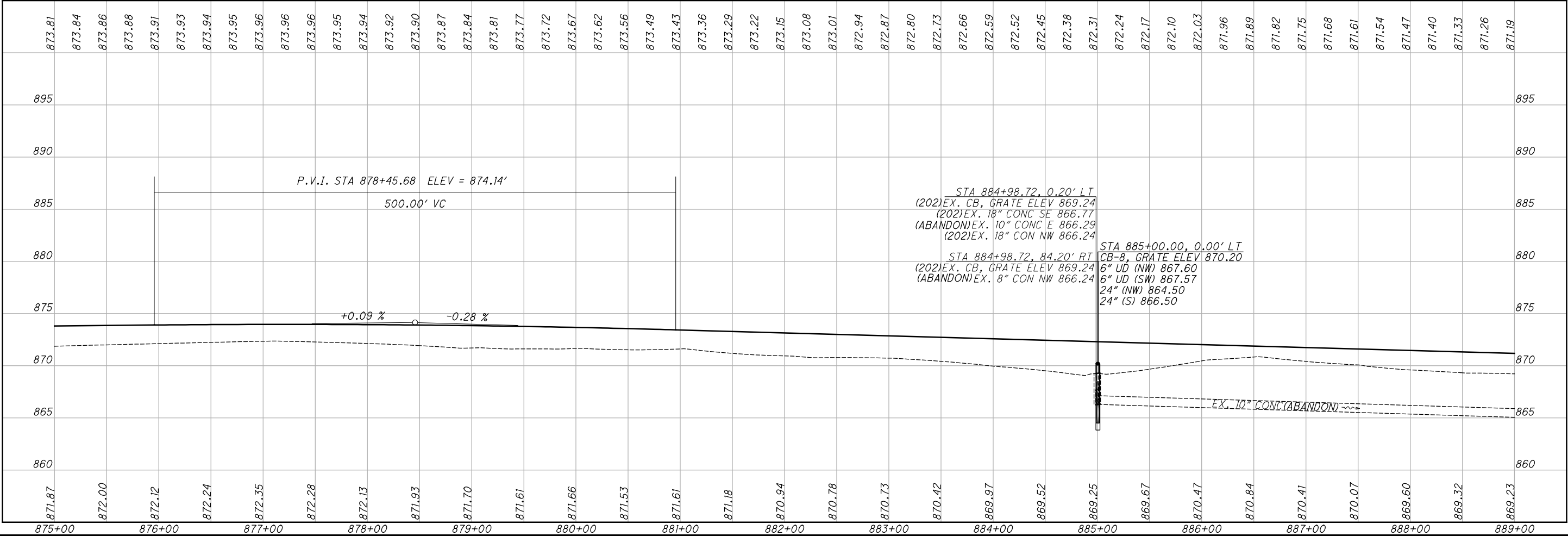
ESTIMATED QUANTITIES	
ITEM	SHEET
UNDERDRAIN - UD	61-62
CABLERAIL - GC	60
ROADWAY - R	60
DRAINAGE - D	59-60

LEGEND

- FULL DEPTH (REMOVAL)
- WETLAND



Const. I75 - C4	
PI = Sta. 895+32.44	
$\Delta = 85^{\circ}-45'-43''$ LT	
$Dc = 2^{\circ}-59'-59''$	
$R = 1,910.00'$	
$Ls = 455.00'$	
$\theta_s = 6^{\circ}-49'-28''$	
$LT = 303.56'$	
$ST = 151.87'$	
$X = 454.35'$	
$Y = 18.05'$	
$K = 227.39'$	
$P = 4.51'$	
$\Delta c = 72^{\circ}-06'-47''$ LT	
$Lc = 2,403.94'$	
$Es = 702.71'$	
$C = 2,248.38'$	
$Ts = 2,005.28'$	
$C = 2,248.38'$	
$C1 = C2 = 454.71'$	
$C.B.1 = N 85^{\circ}-50'-29'' E$	
$C.B. = N 46^{\circ}-14'-05'' E$	
$C.B.2 = S 5^{\circ}-37'-42'' W$	



$PI = Sta. 895+32.44$
 $\Delta = 85^{\circ}-45'-43'' \text{ L}\dagger$
 $D = 2^{\circ}-59'-59''$
 $R = 1,910.00'$
 $LS = 455.00'$
 $\theta S = 6^{\circ}-49'-28''$
 $LT = 303.56'$
 $ST = 151.87'$
 $X = 454.35'$
 $Y = 18.05'$
 $K = 227.39'$
 $P = 4.51'$
 $\Delta c = 72^{\circ}-06'-47'' \text{ L}\dagger$
 $LC = 2,403.94'$
 $ES = 702.71'$
 $C = 2,248.38'$
 $TS = 2,005.28'$
 $C = 2,248.38'$
 $CI = C2 = 454.71'$
 $C.B.1 = N \ 85^{\circ}-50'-29'' E$
 $C.B. = N \ 46^{\circ}-14'-05'' E$
 $C.B.2 = S \ 5^{\circ}-37'-42'' W$

 - FULL DEPTH (REMOVAL)

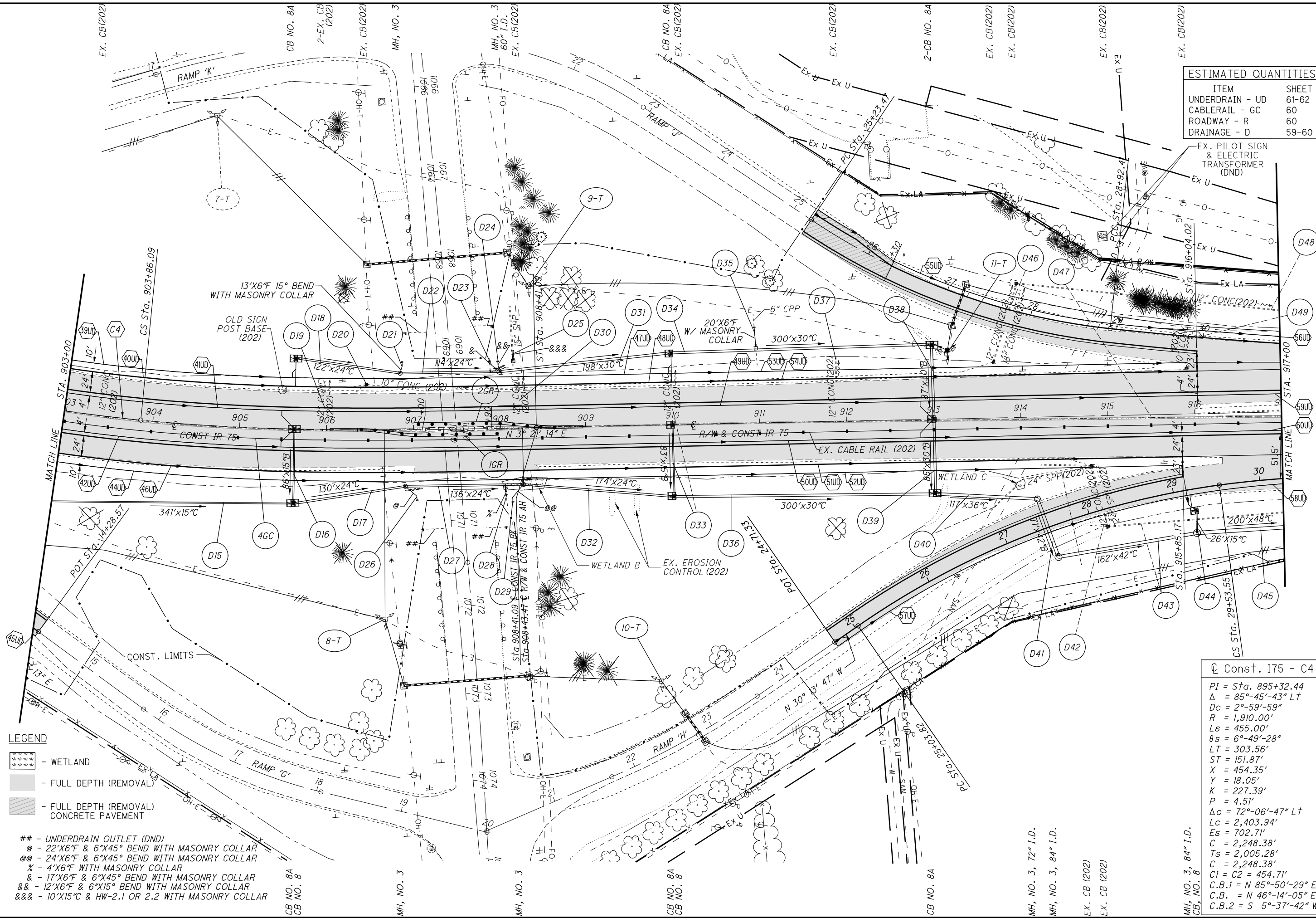
ESTIMATED QUANTITIES	
ITEM	SHEET
UNDERDRAIN - UD	61-62
CABLERAIL - GC	60
ROADWAY - R	60
DRAINAGE	59-60
CULVERT DETAILS	142-148

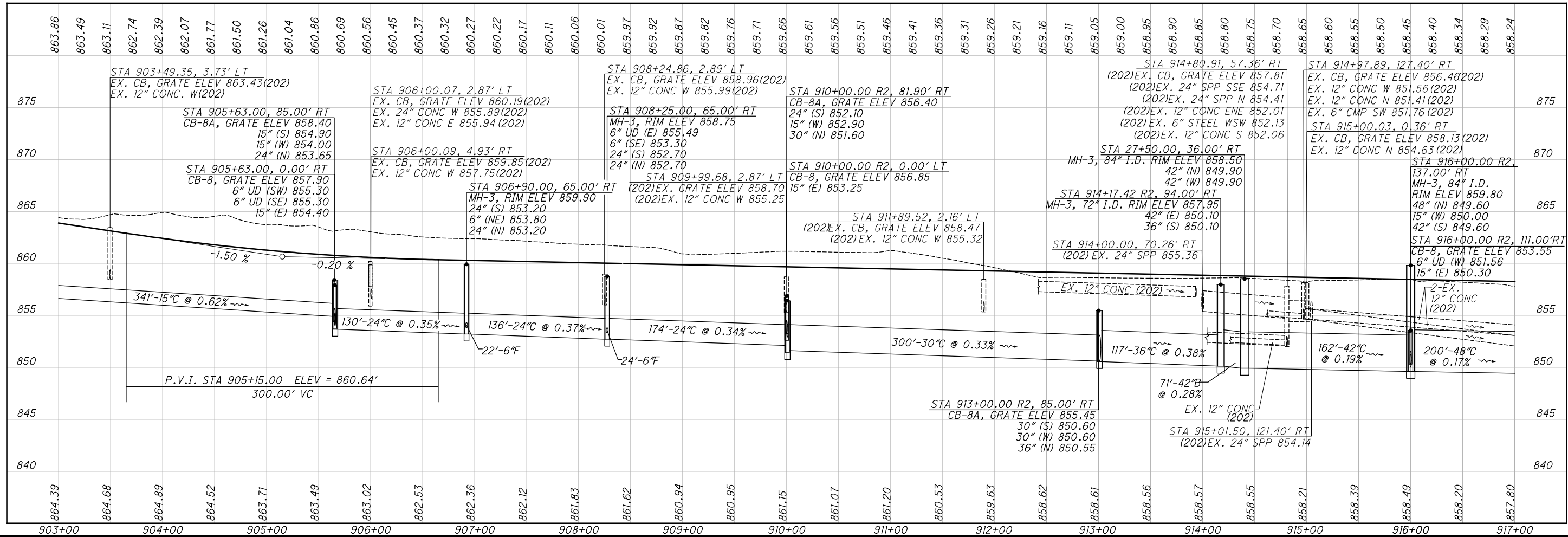
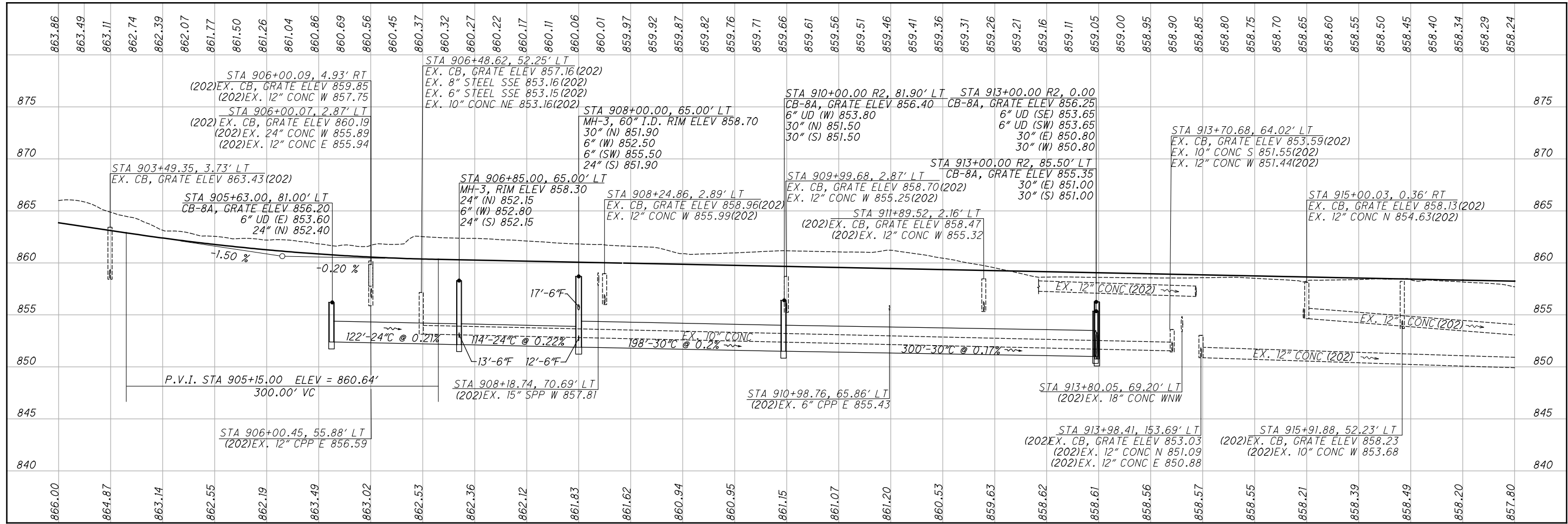
CALCULATED JLG CHECKED TAB  HORIZONTAL SCALE IN FEET	

PLAN & PROFILE
STA. 889+00 to STA. 903+00

ALL-75-15.80

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CB NO. 8
MH NO. 3, 84" I.D.
EX. CB (2) (202)
CB NO. 8

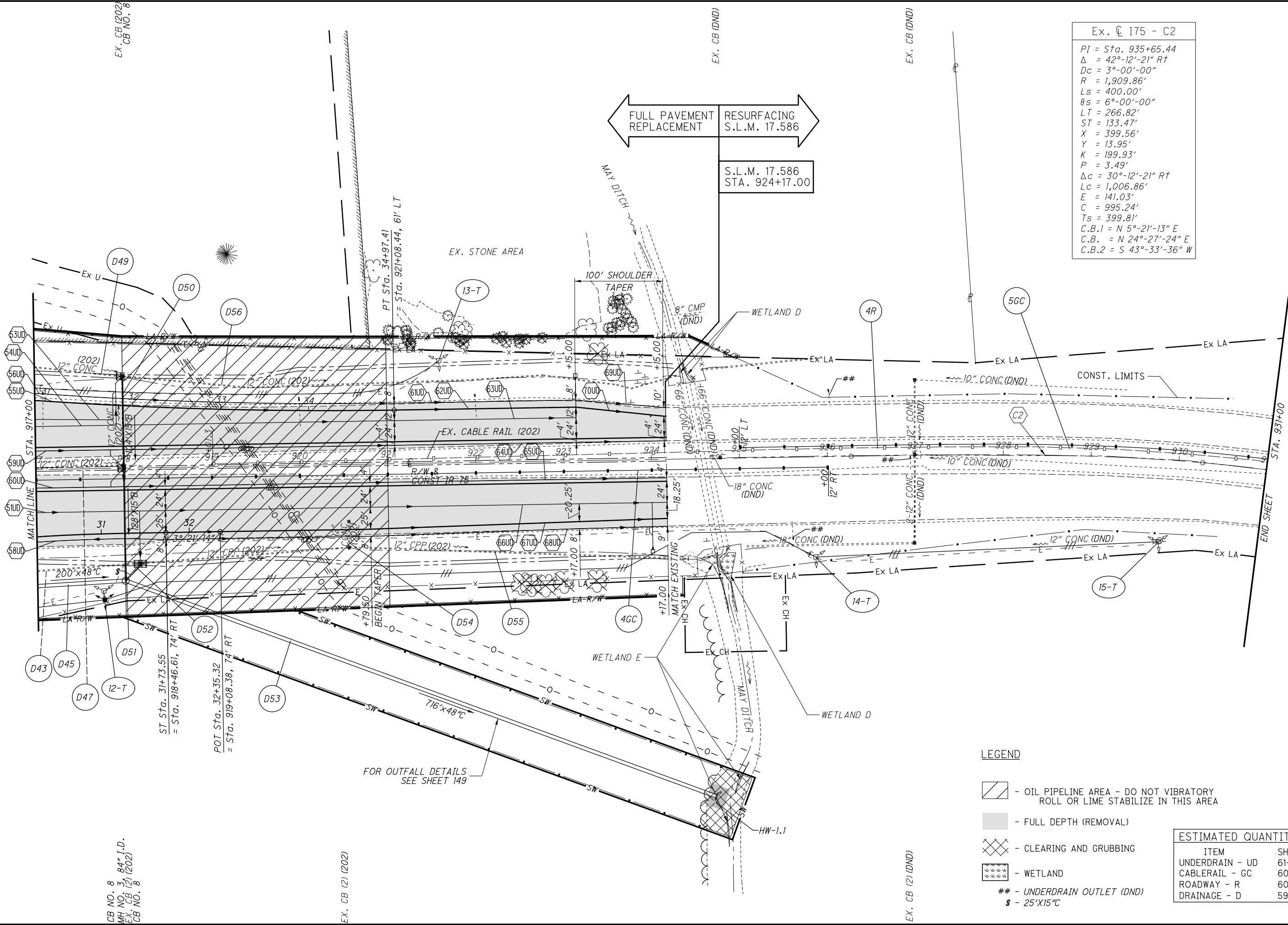
EX. CB (202)
CB NO. 8

EX. CB (2) (202)

EX. CB (DND)

EX. CB (2) (DND)

EX. CB (DND)

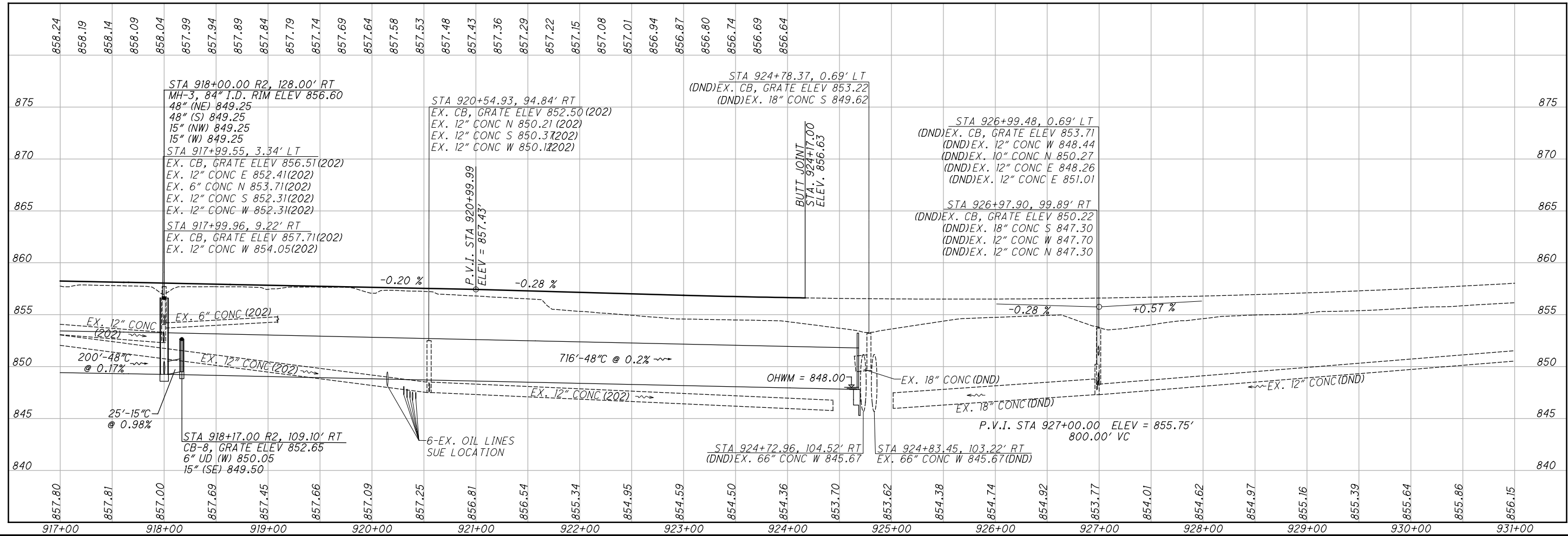
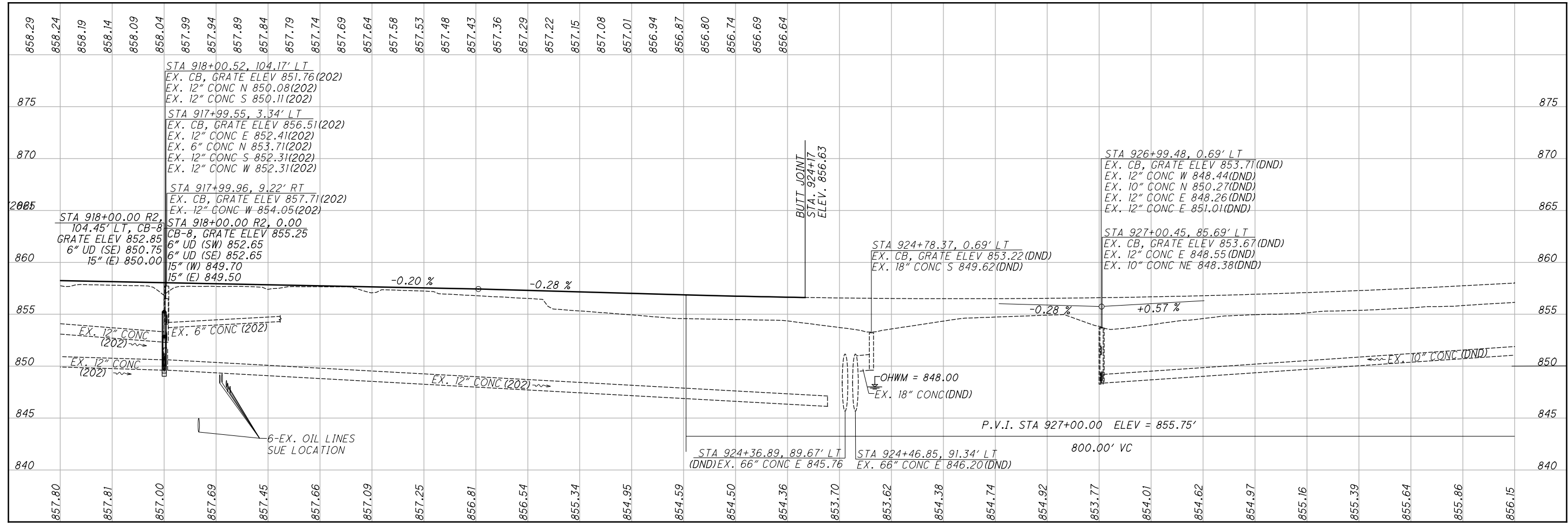


Ex. C 175 - C2	
PI = Sta. 935+65.44	
$\Delta = 42^{\circ}-12'-21''$ R $\dagger$	
$D_c = 3^{\circ}-00'-00''$	
$R = 1,909.86'$	
$L_s = 400.00'$	
$\theta_s = 6^{\circ}-00'-00''$	
$L_T = 266.82'$	
$ST = 133.47'$	
$X = 399.56'$	
$Y = 13.95'$	
$K = 199.93'$	
$P = 3.49'$	
$\Delta_c = 30^{\circ}-12'-21''$ R $\dagger$	
$L_c = 1,006.86'$	
$E = 141.03'$	
$C = 995.24'$	
$T_s = 399.81'$	
$C.B.1 = N\ 5^{\circ}-21'-13''\ E$	
$C.B. = N\ 24^{\circ}-27'-24''\ E$	
$C.B.2 = S\ 43^{\circ}-33'-36''\ W$	

LEGEND

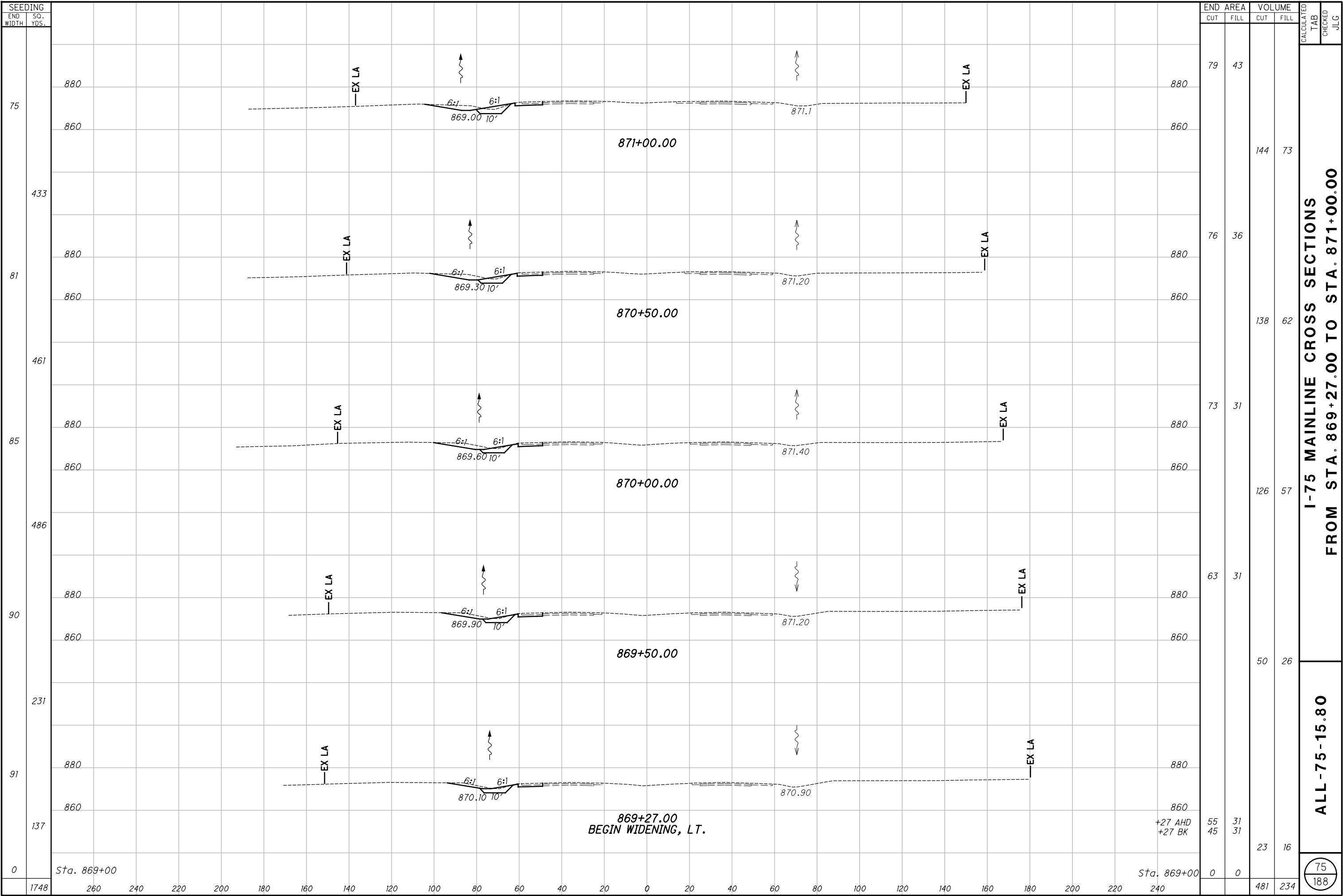
- OIL PIPELINE AREA - DO NOT VIBRATORY ROLL OR LIME STABILIZE IN THIS AREA
- FULL DEPTH (REMOVAL)
- CLEARING AND GRUBBING
- WETLAND
- UNDERDRAIN OUTLET (DND)
- 25'X15' C

ESTIMATED QUANTITIES	
ITEM	SHEET
UNDERDRAIN - UD	61-62
CABLERAIL - GC	60
ROADWAY - R	60
DRAINAGE - D	59-60

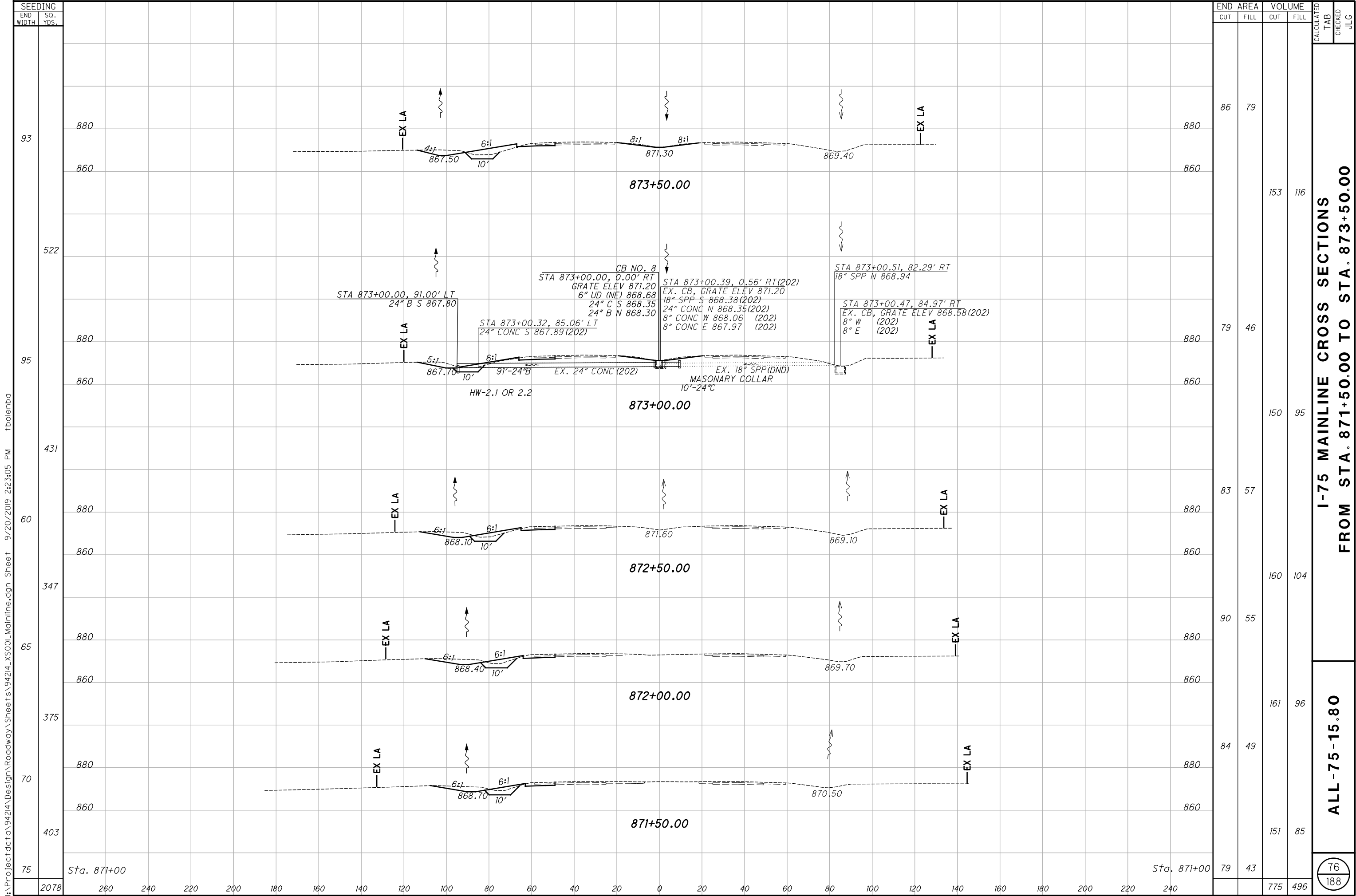


74
188

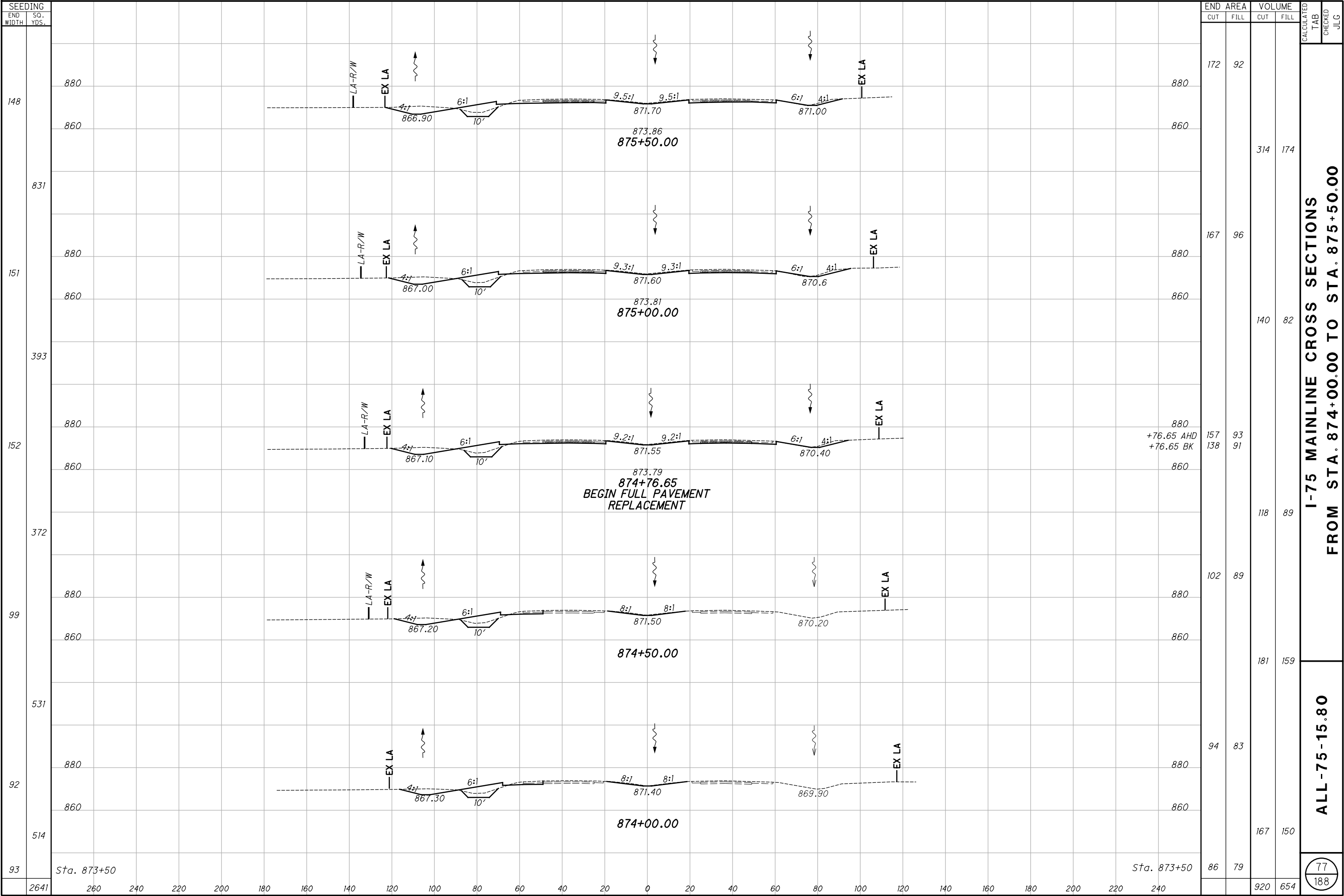
I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00L_Mainline.dgn Sheet 9/20/2019 2:23:03 PM tboleba



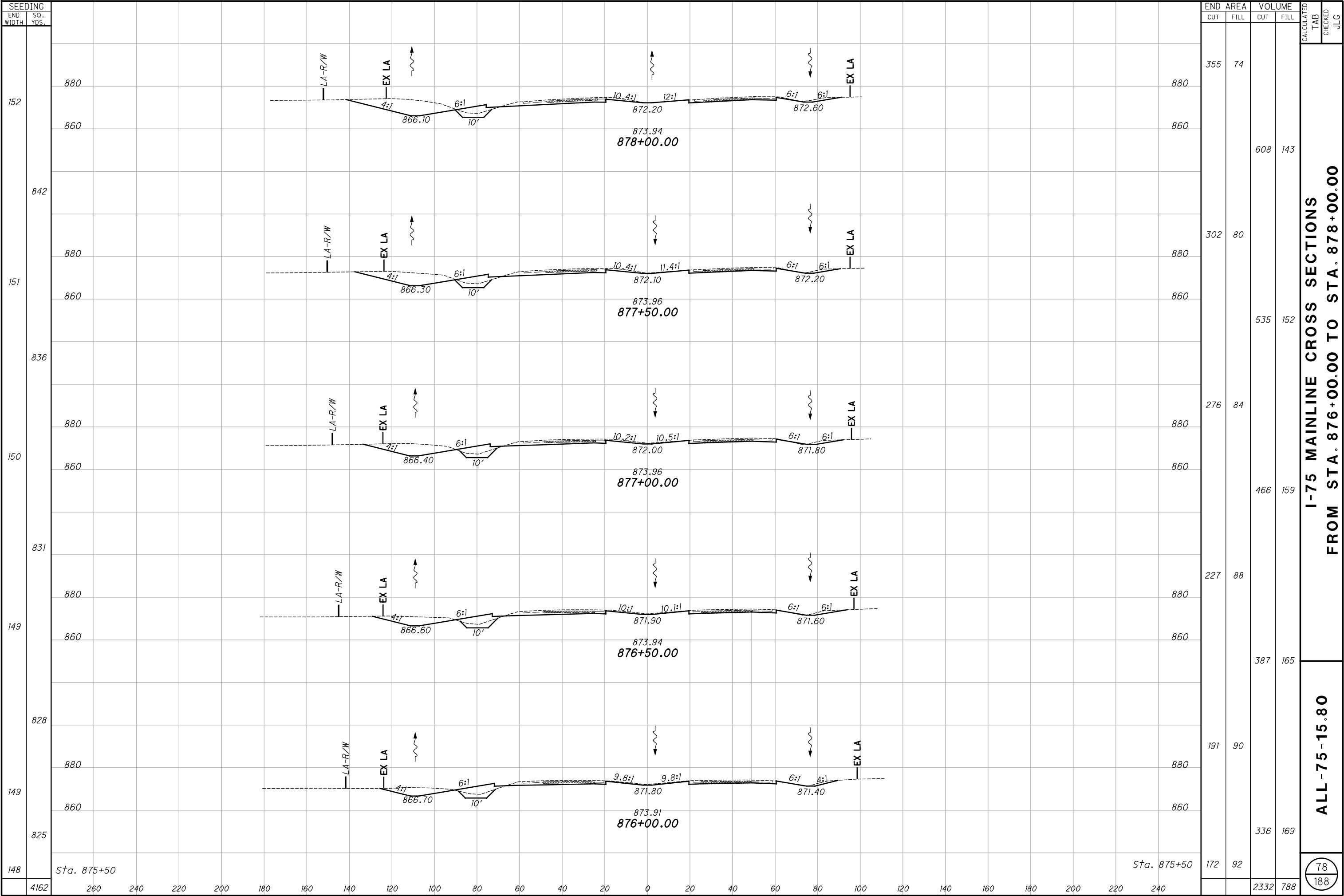
I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00L_Mainline.dgn Sheet 9/20/2019 2:23:05 PM tboleba



I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:06 PM tbolemba



I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:07 PM tboleba

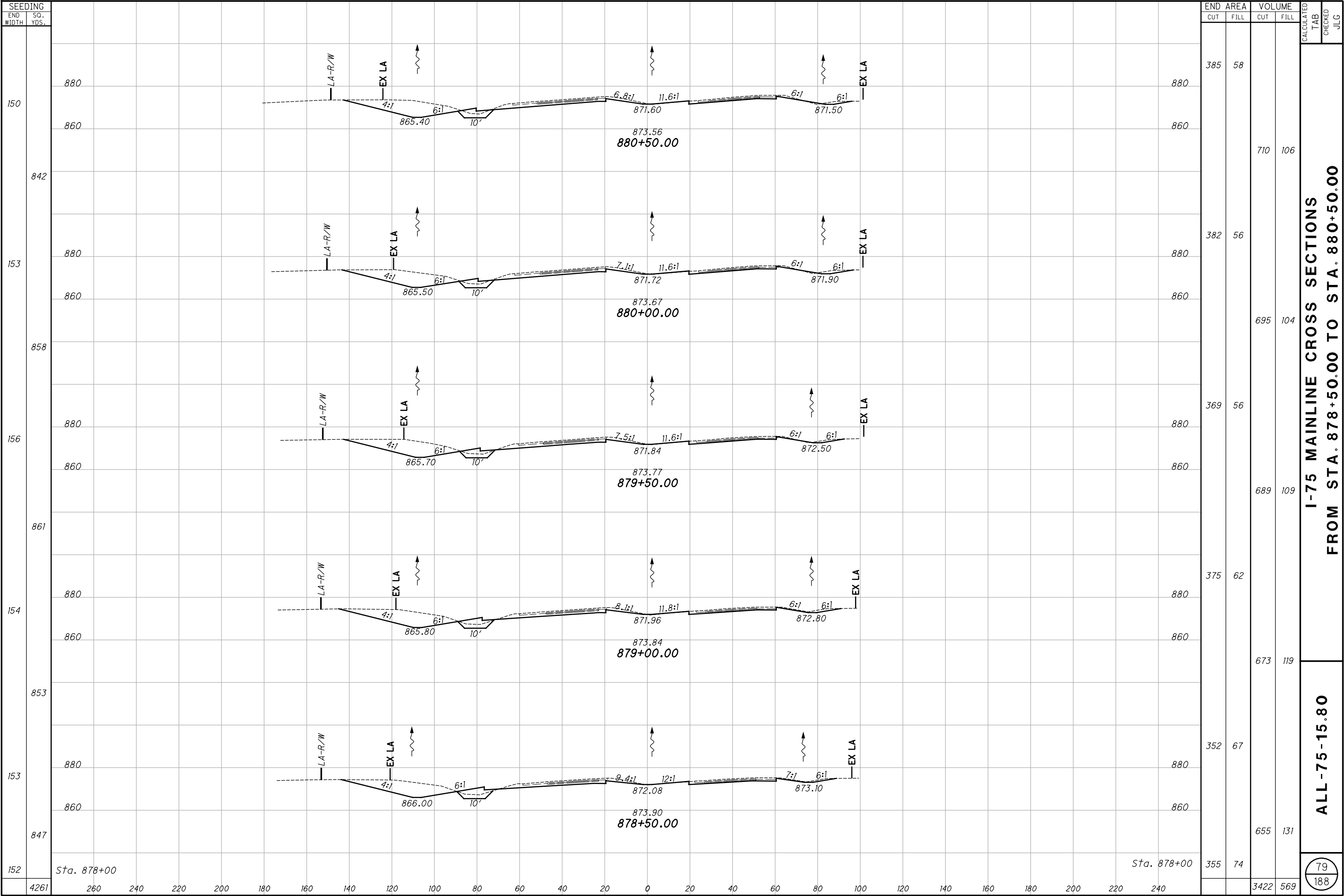


ALL -75-15.80

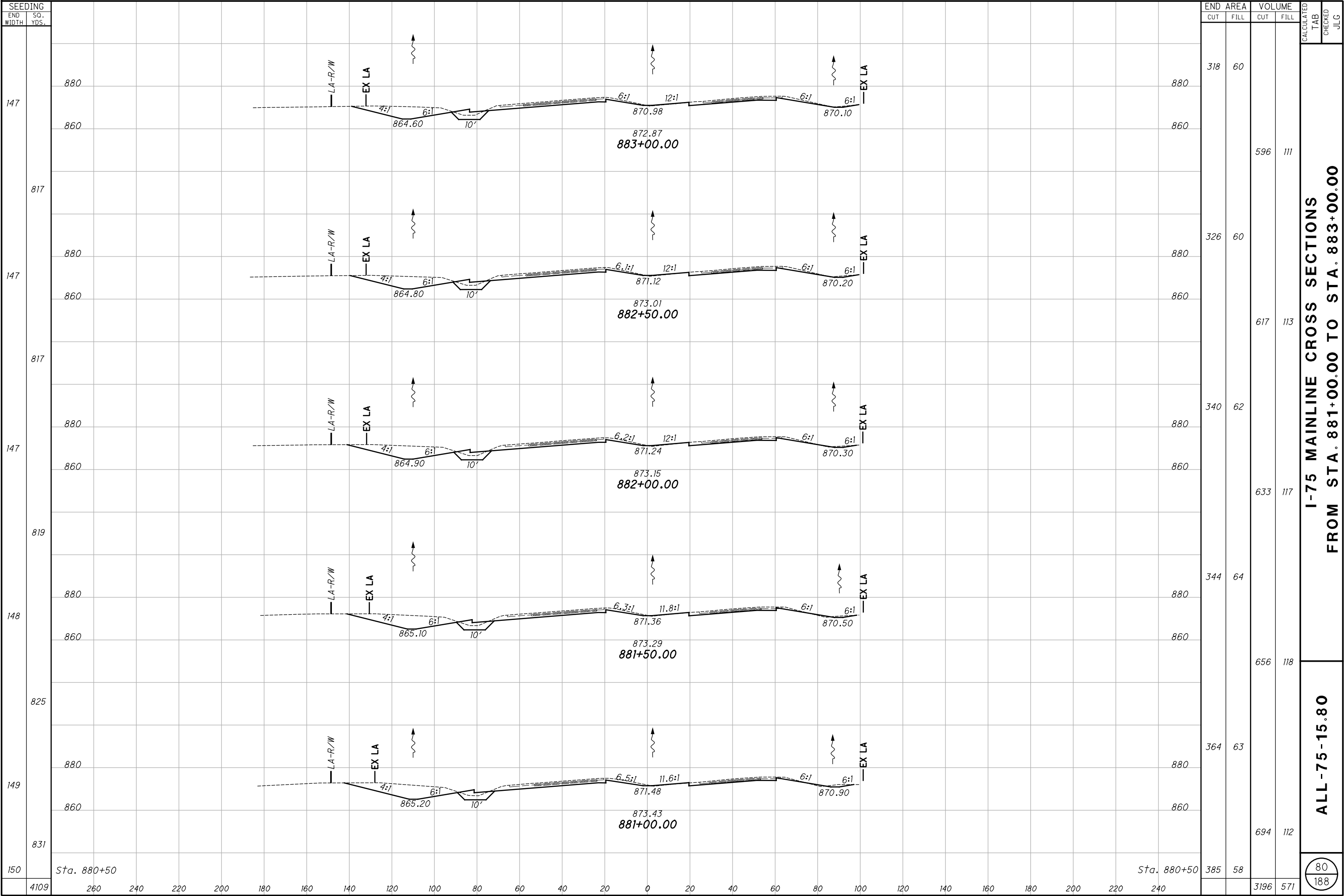
I-75 MAINLINE CROSS SECTIONS
FROM STA. 876+00.00 TO STA. 878+00.00

78
188

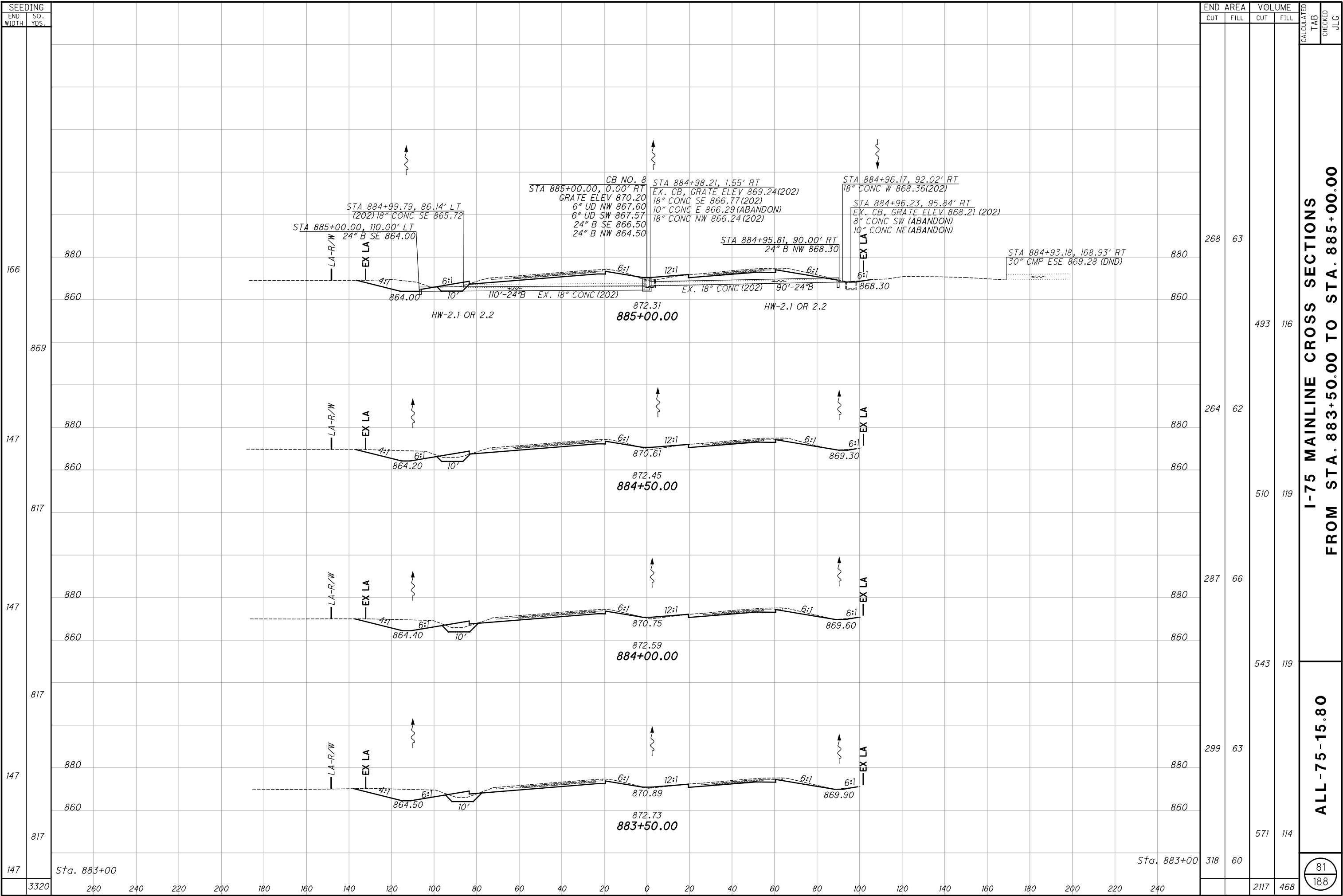
I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:09 PM tboleba



I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:10 PM tboleba



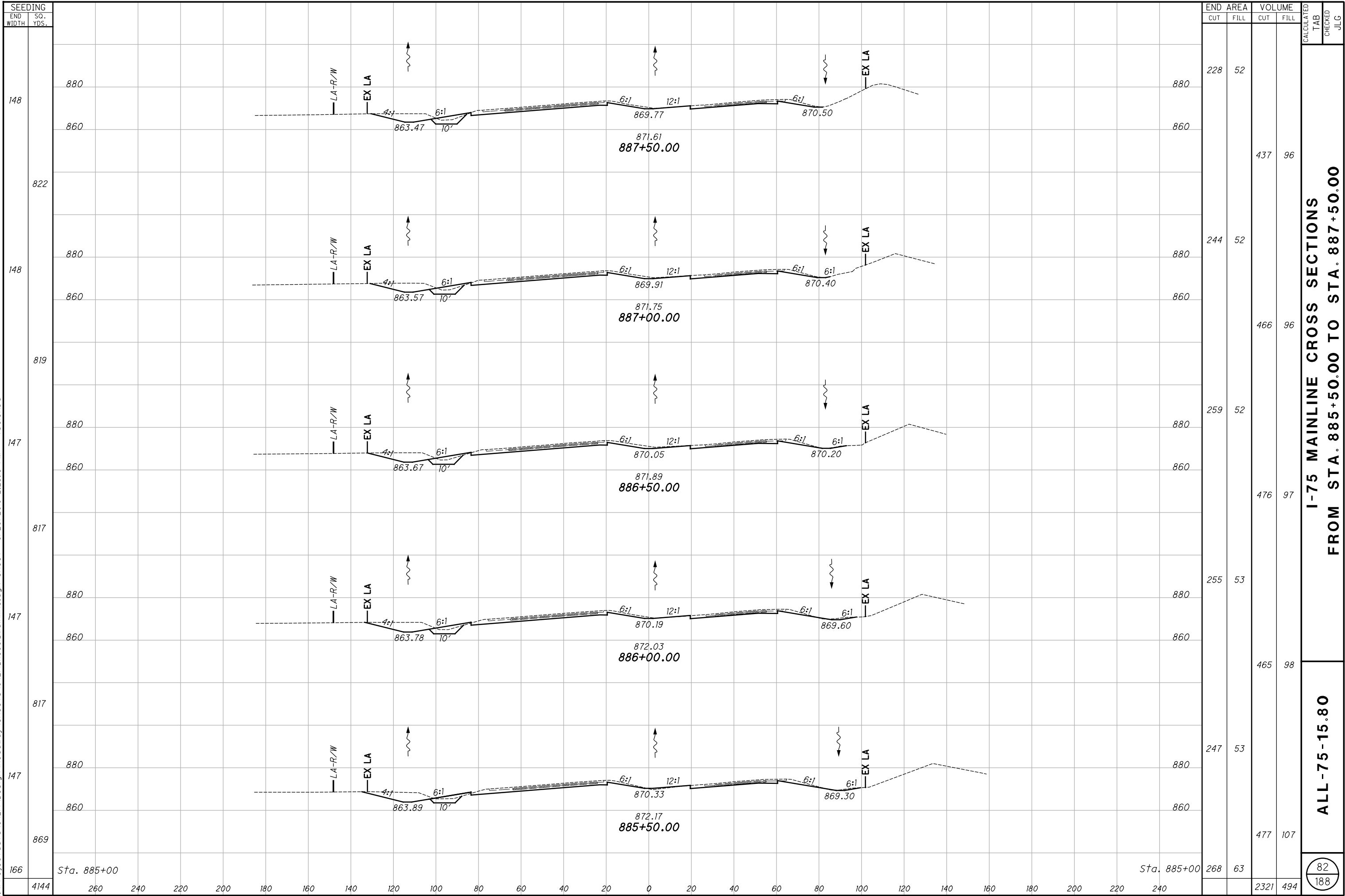
I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:12 PM tboleba



I-75 MAINLINE CROSS SECTIONS
FROM STA. 883+50.00 TO STA. 885+00.00

ALL -75-15.80
81
188

I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:13 PM tboleba



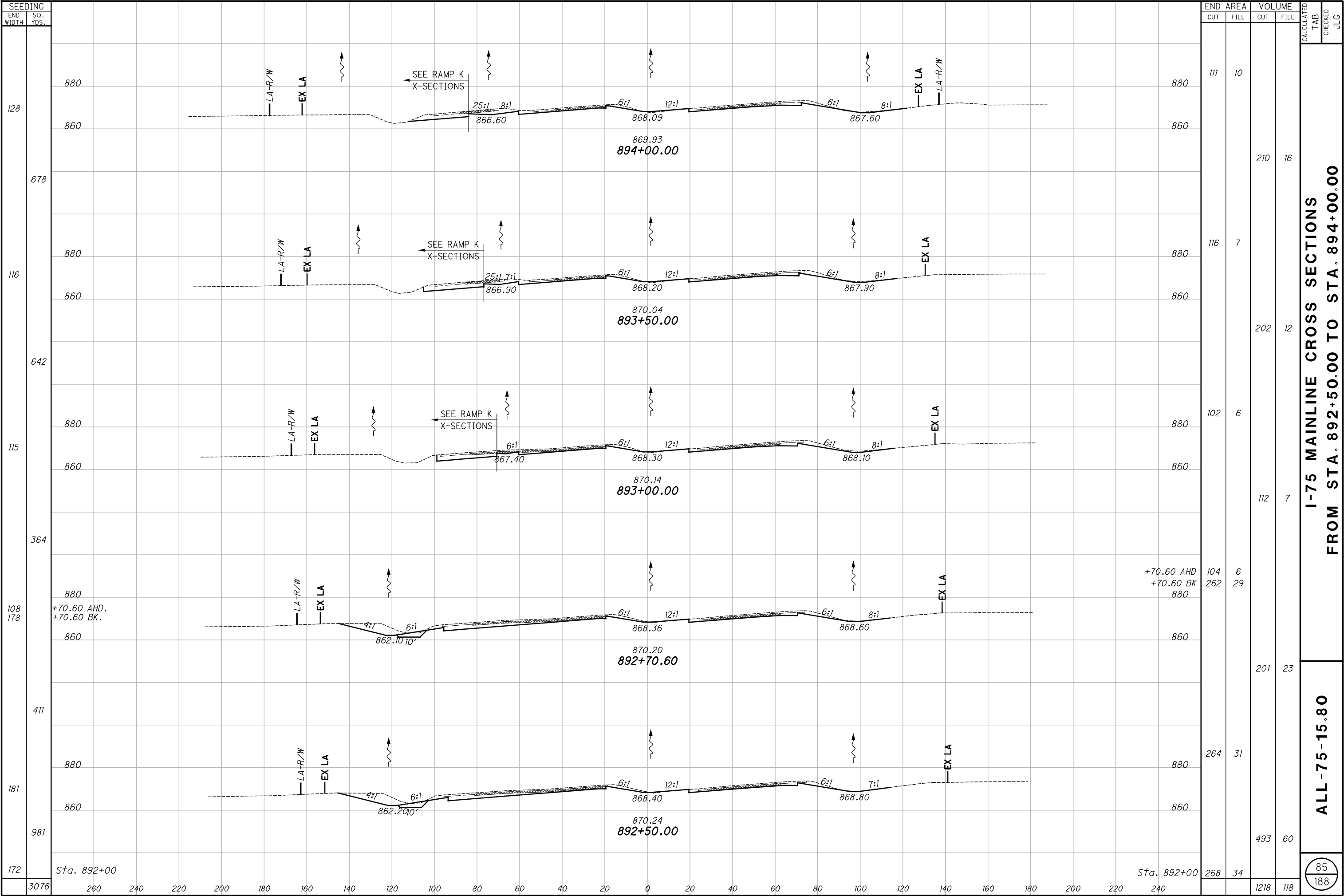
I-75 MAINLINE CROSS SECTIONS
FROM STA. 885+50.00 TO STA. 887+50.00

ALL -75-15.80

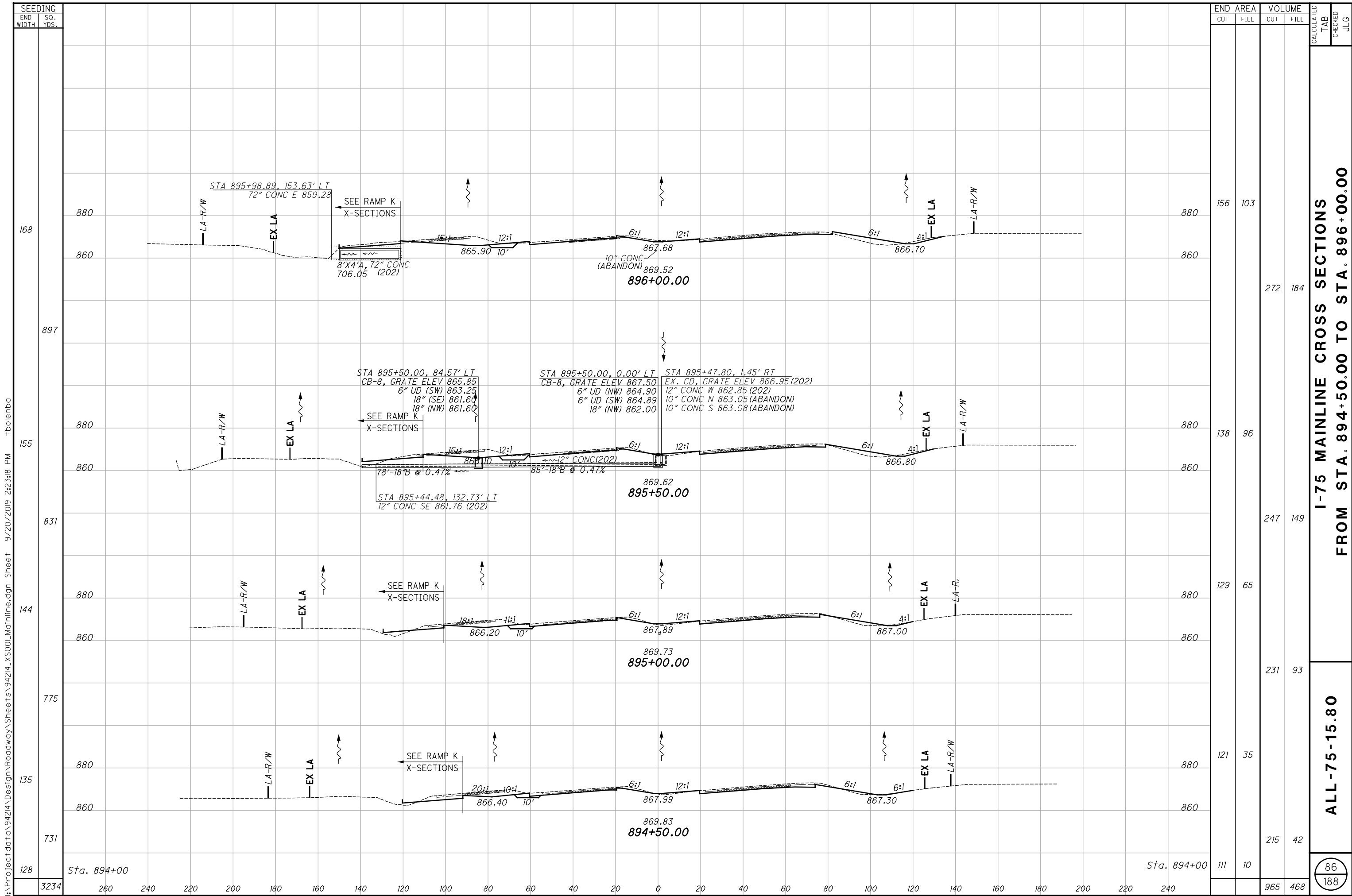
82
188

83
188

I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:17 PM tboleba



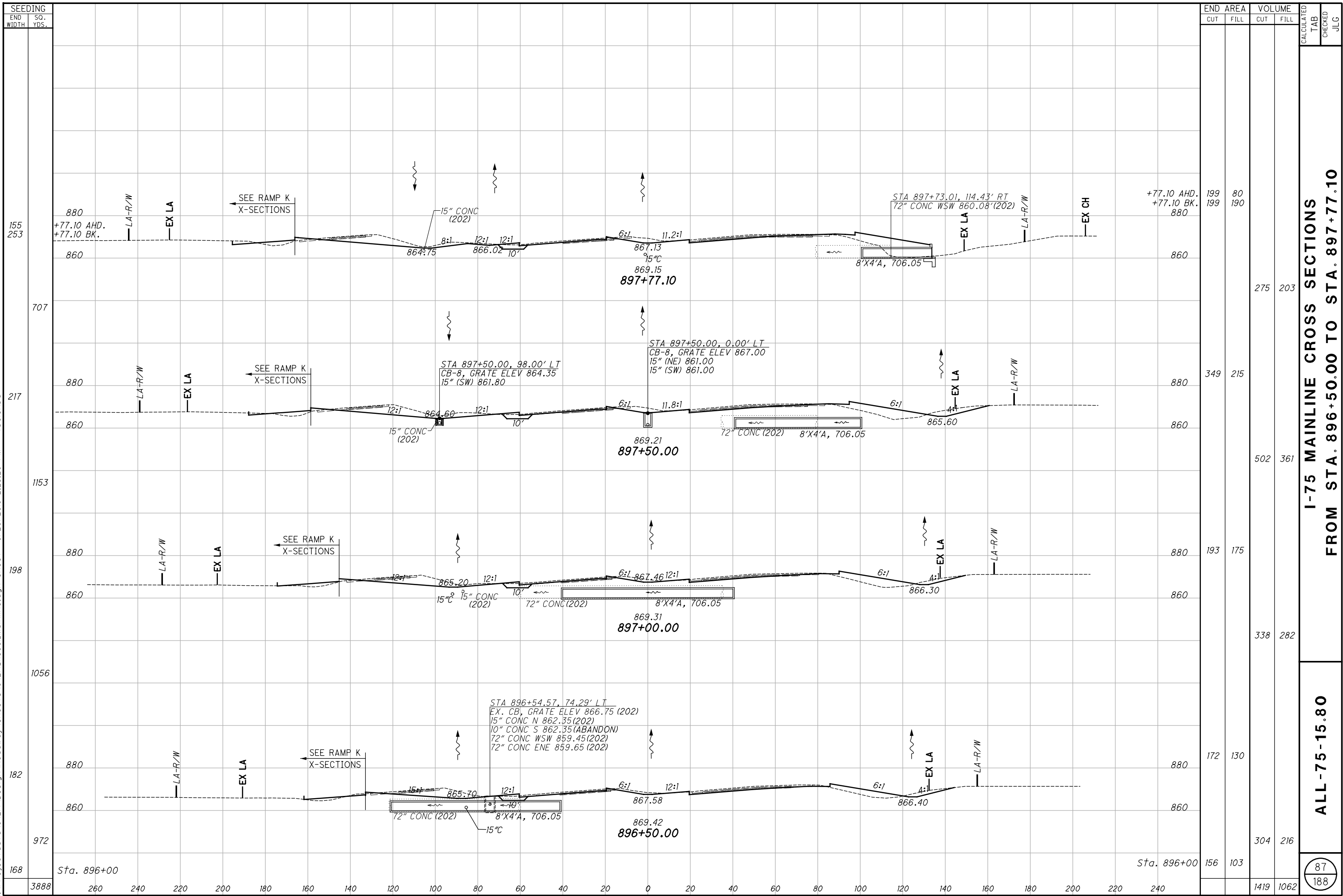
I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:18 PM tboleba



I-75 MAINLINE CROSS SECTIONS
FROM STA. 894+50.00 TO STA. 896+00.00

ALL -75-15.80

I:\Project\data\Design\Roadway\Sheets\94214_X500_Mainline.dgn Sheet 9/20/2019 2:23:20 PM tboleba

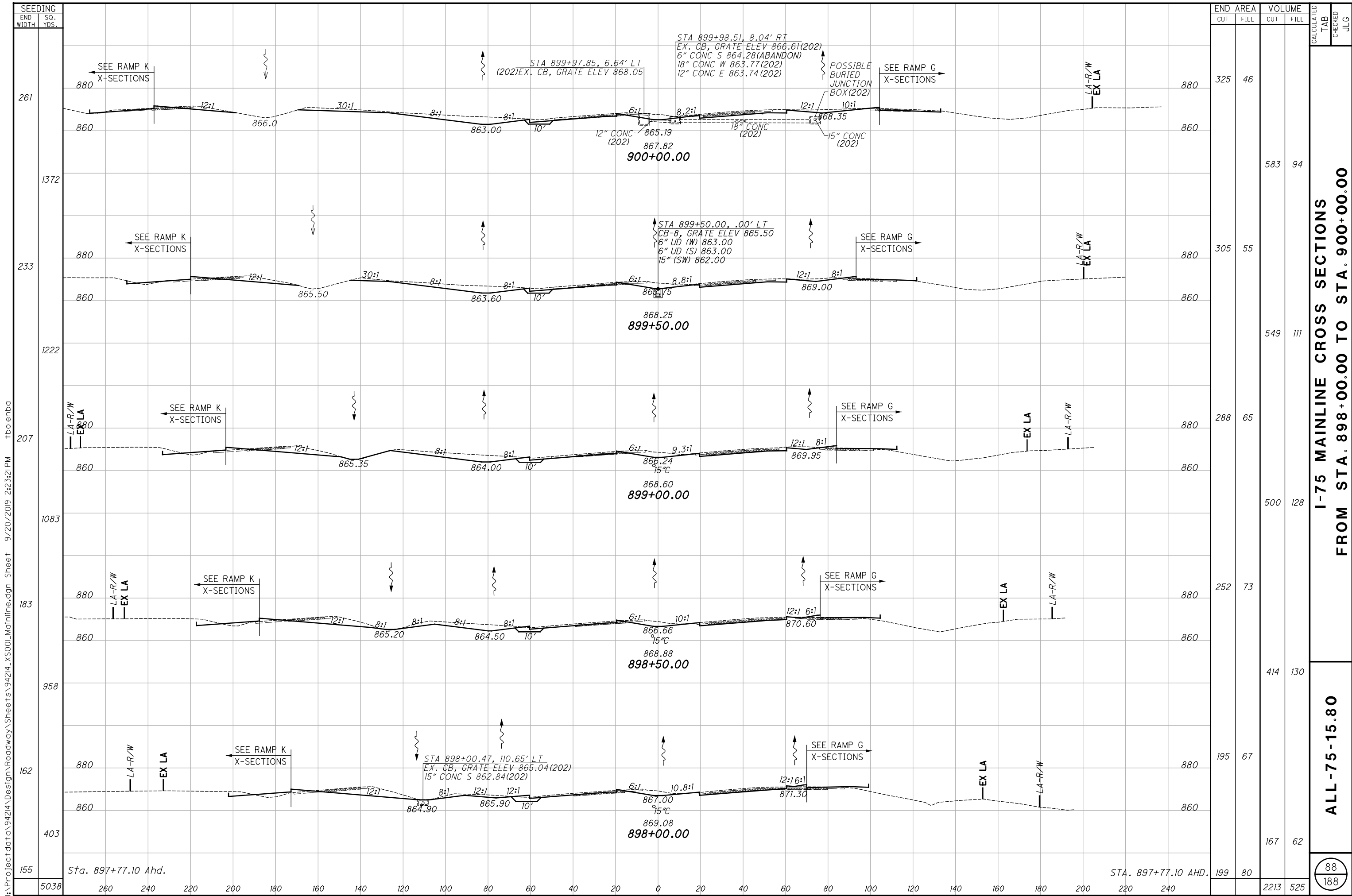


I-75 MAINLINE CROSS SECTIONS
FROM STA. 896+50.00 TO STA. 897+77.10

ALL -75-15.80

87
188

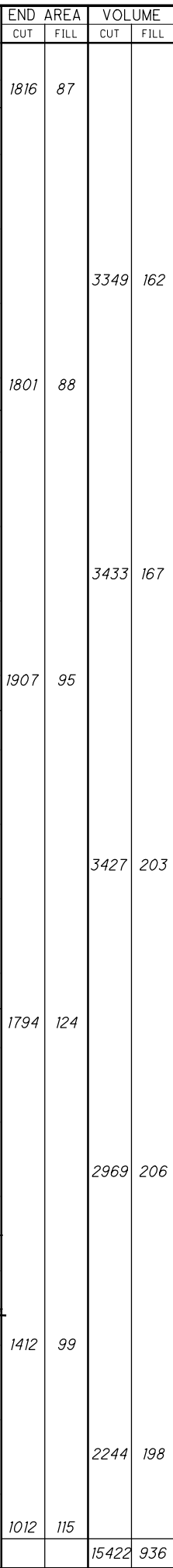
I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:21PM tboleba



I-75 MAINLINE CROSS SECTIONS
FROM STA. 898+00.00 TO STA. 900+00.00

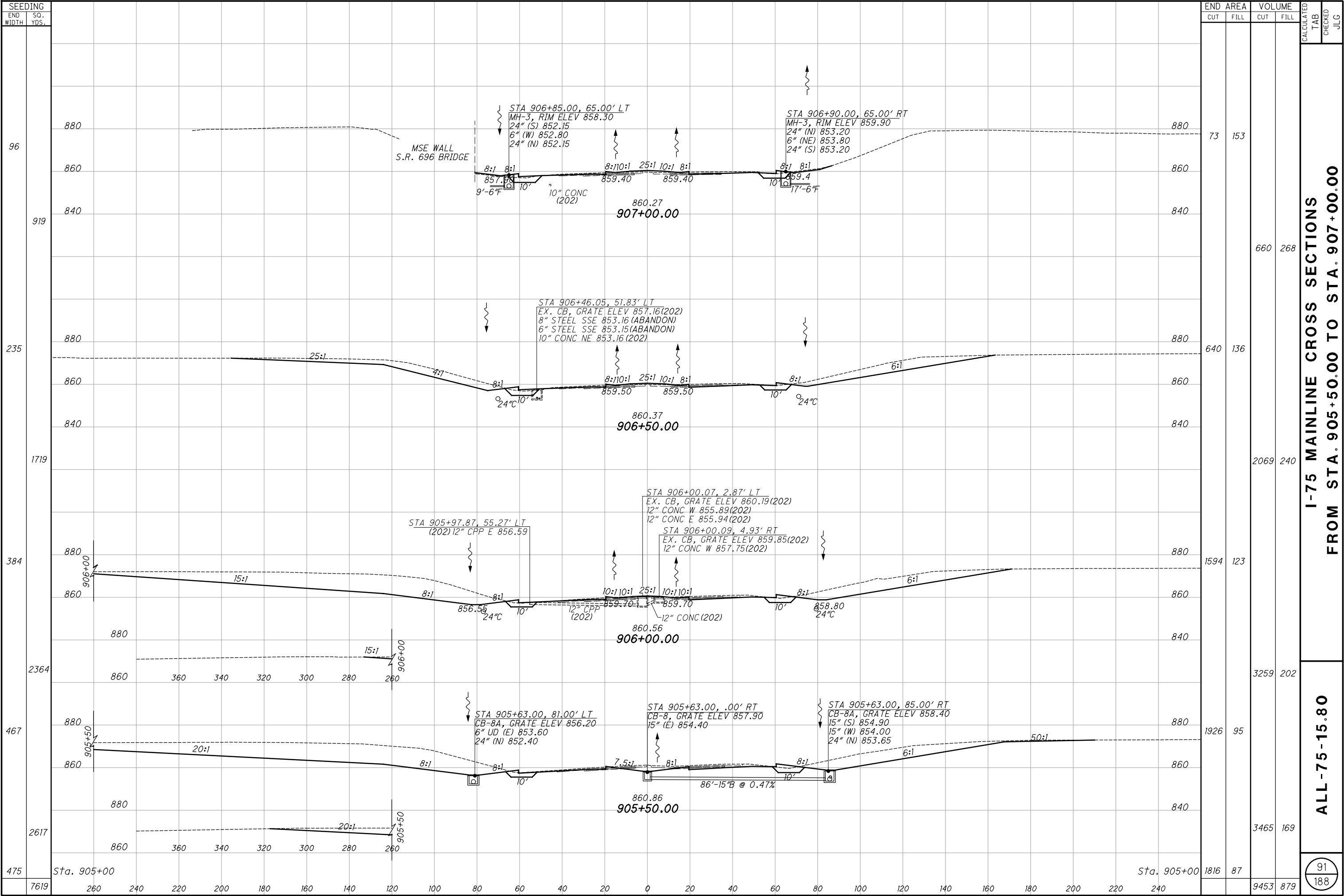
ALL -75-15.80

88
188

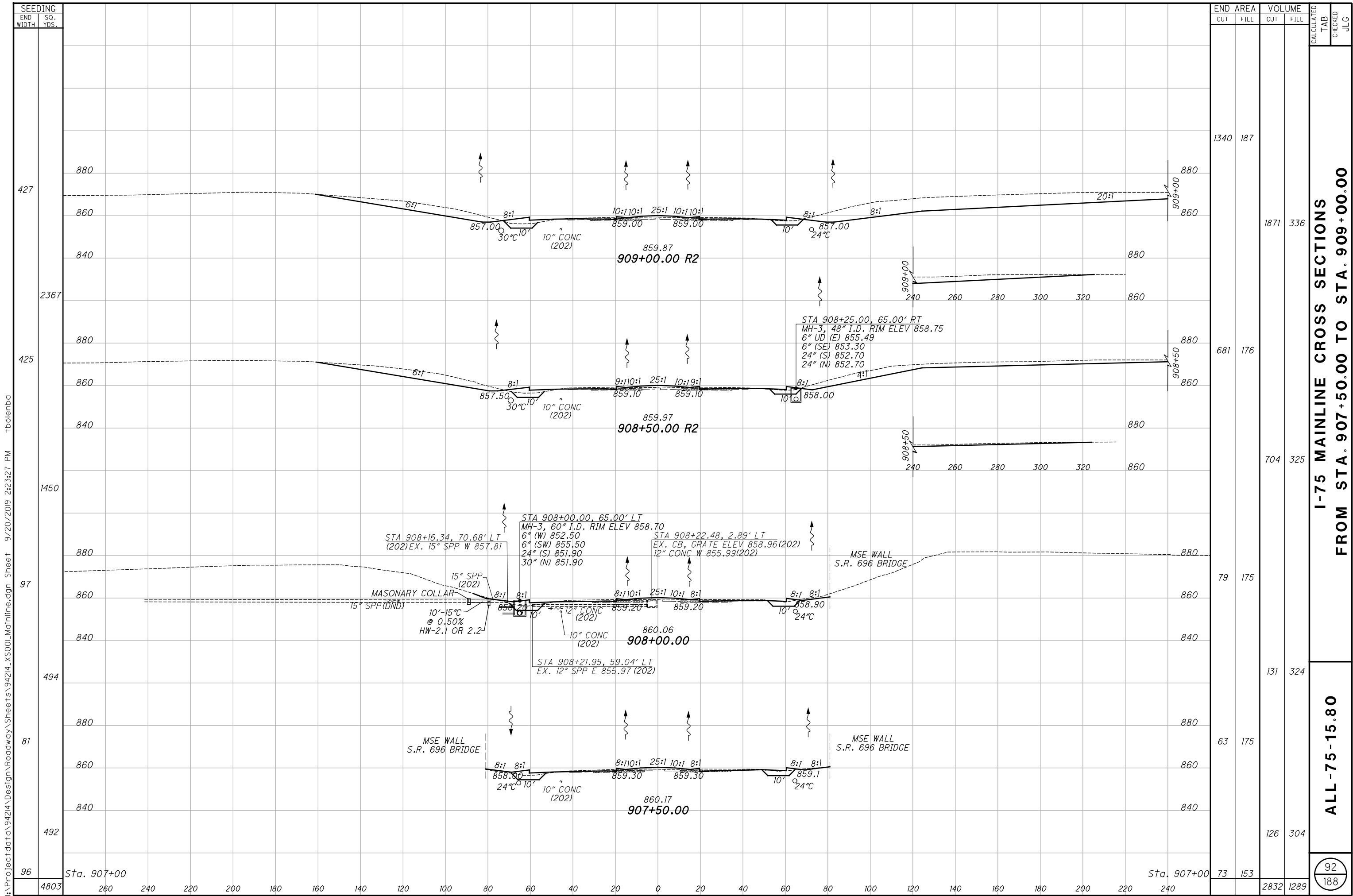


90 188 ALL - 75 - 15.80

I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:26 PM tboleba



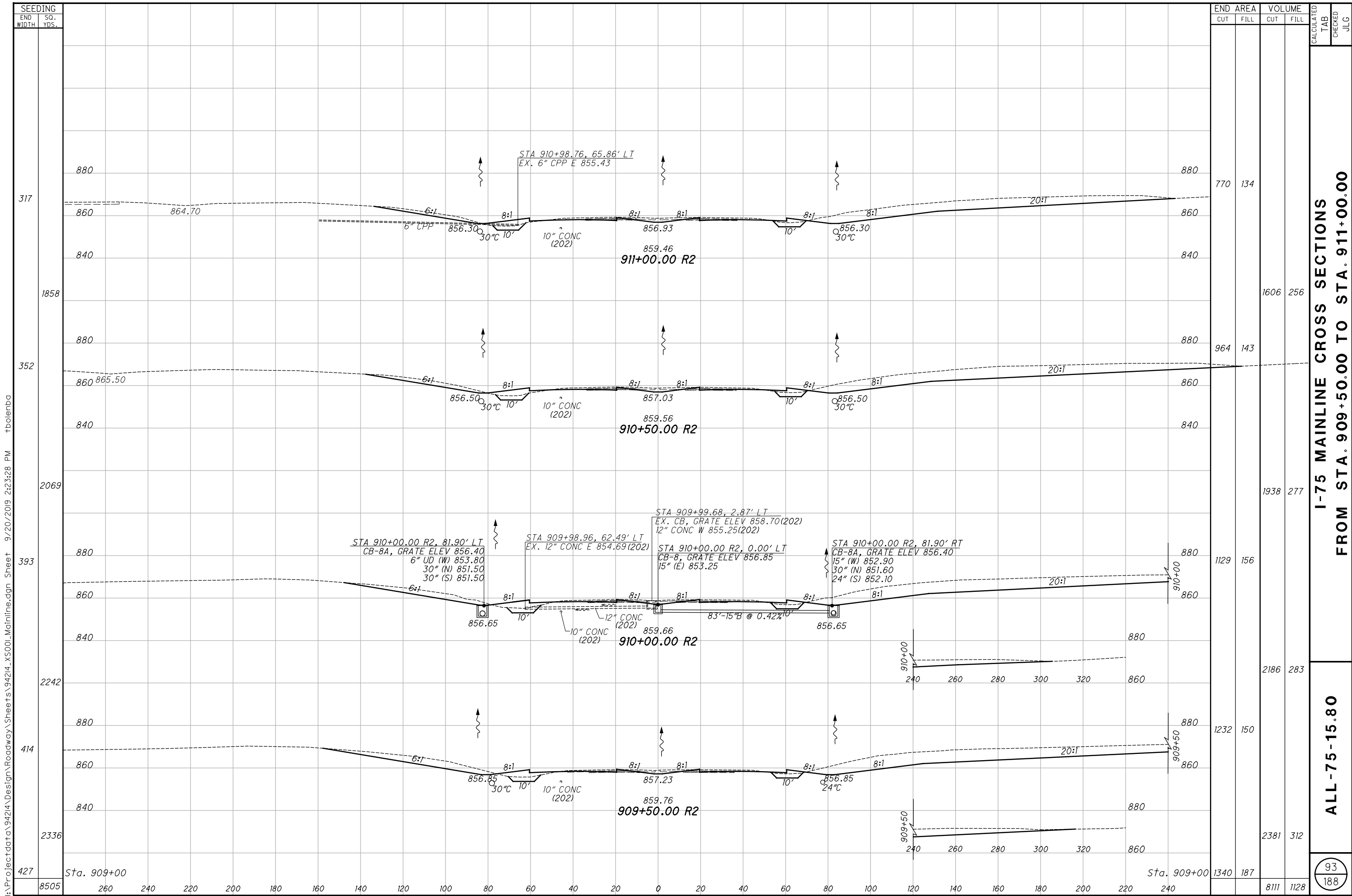
I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:27 PM tbolemba

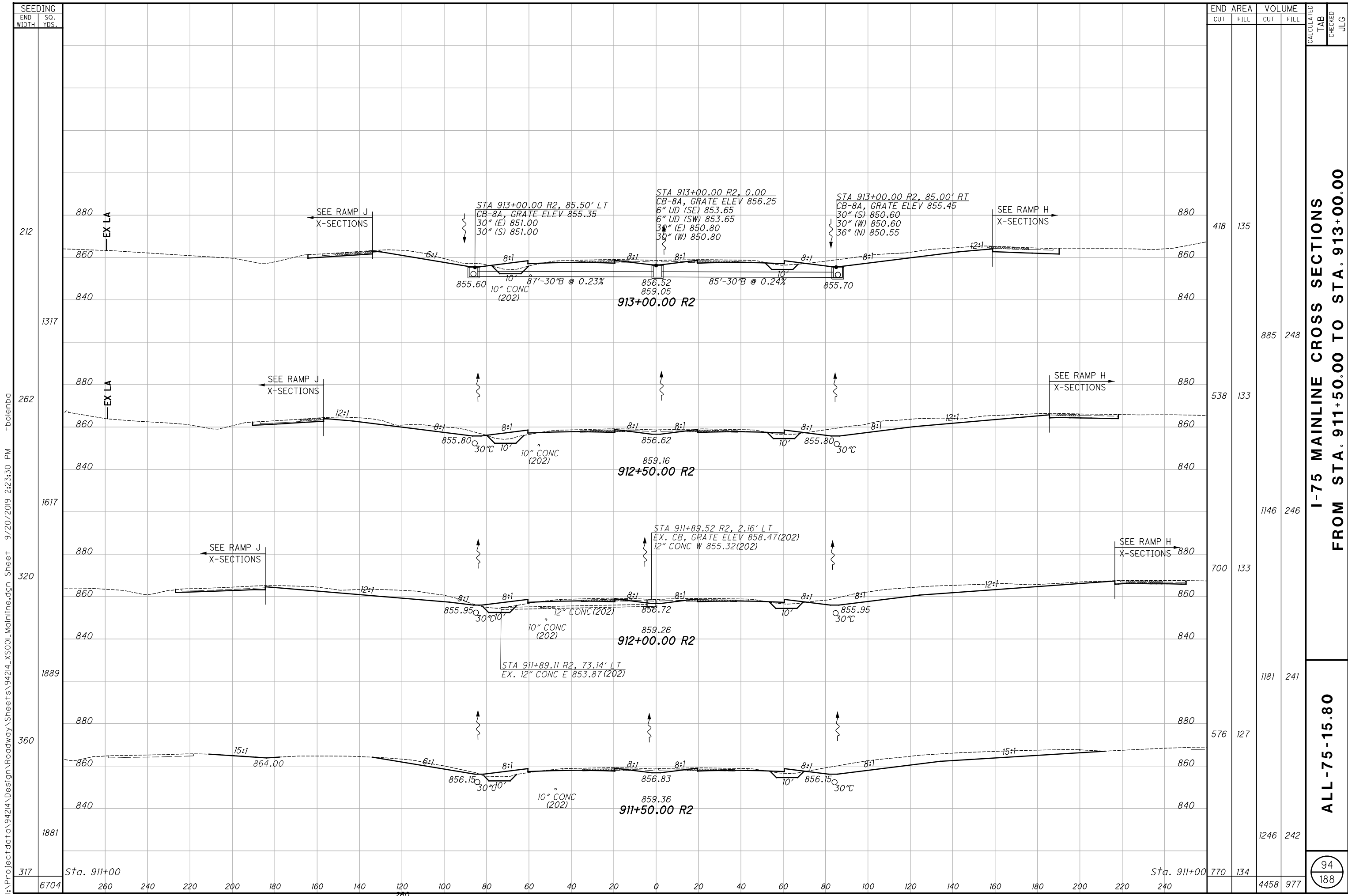


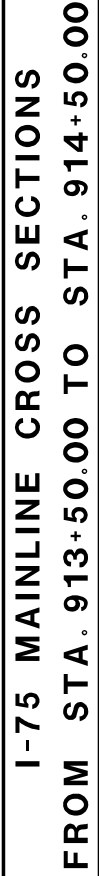
I-75 MAINLINE CROSS SECTIONS
FROM STA. 907+50.00 TO STA. 909+00.00

ALL -75-15.80

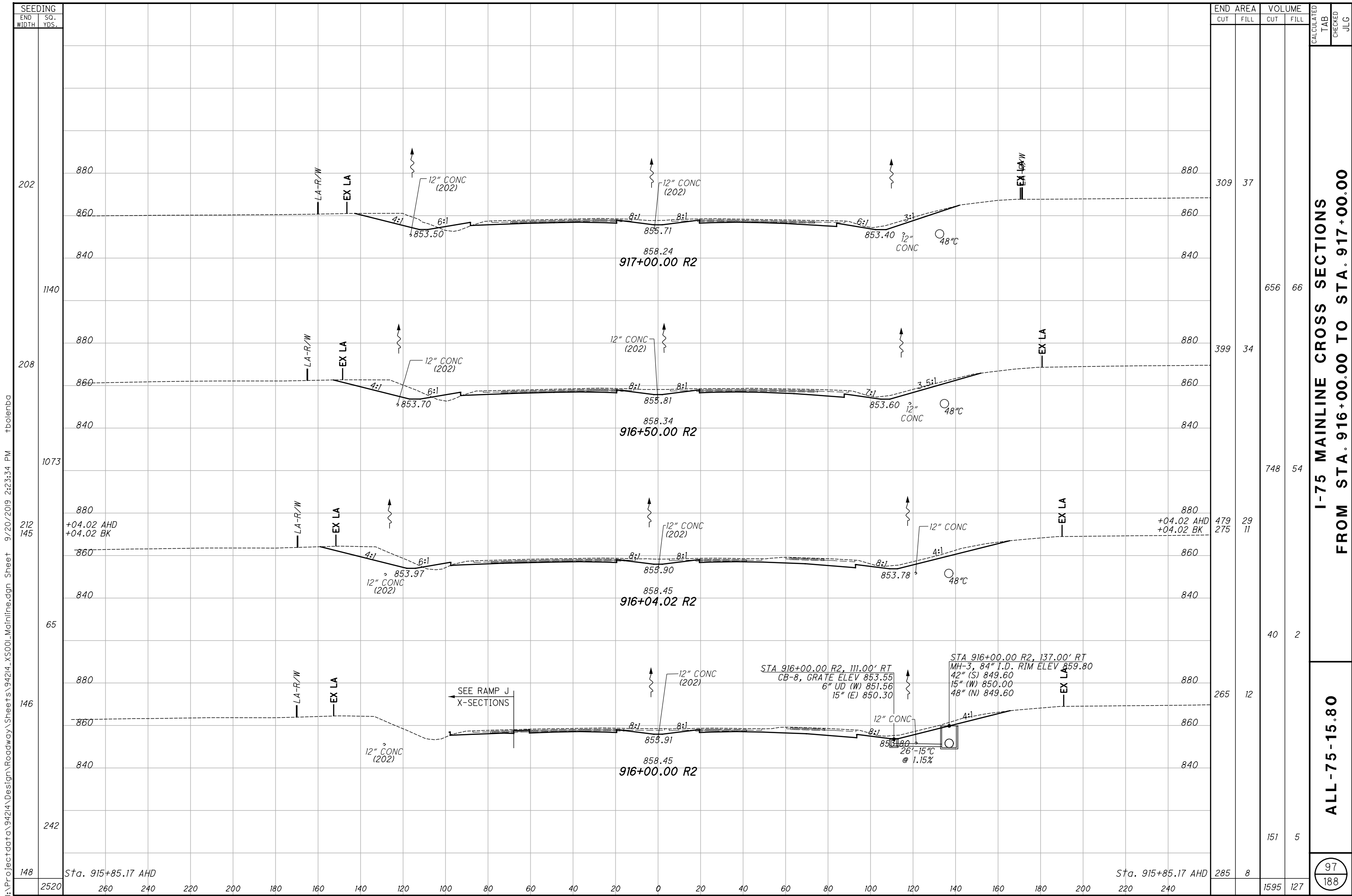
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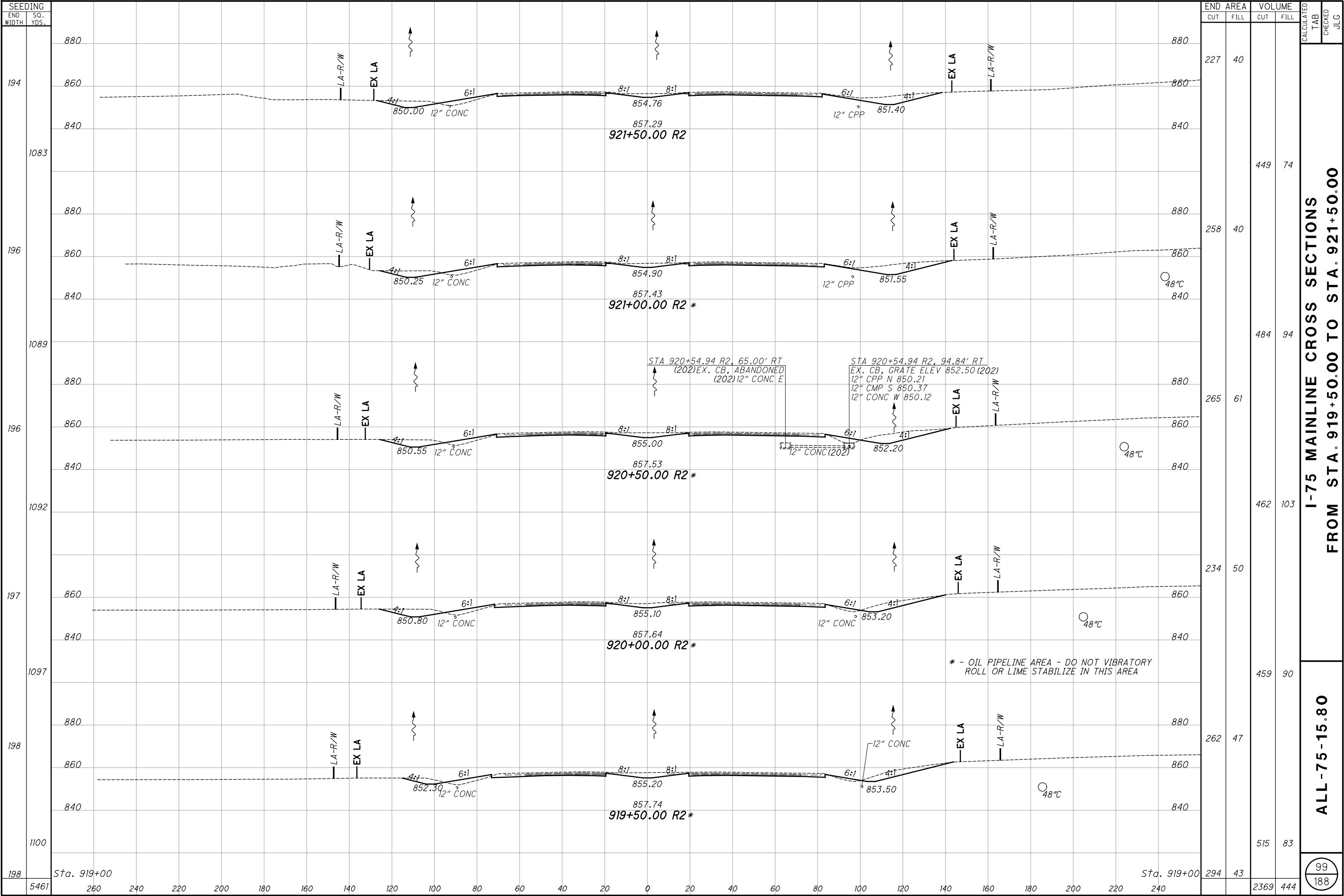
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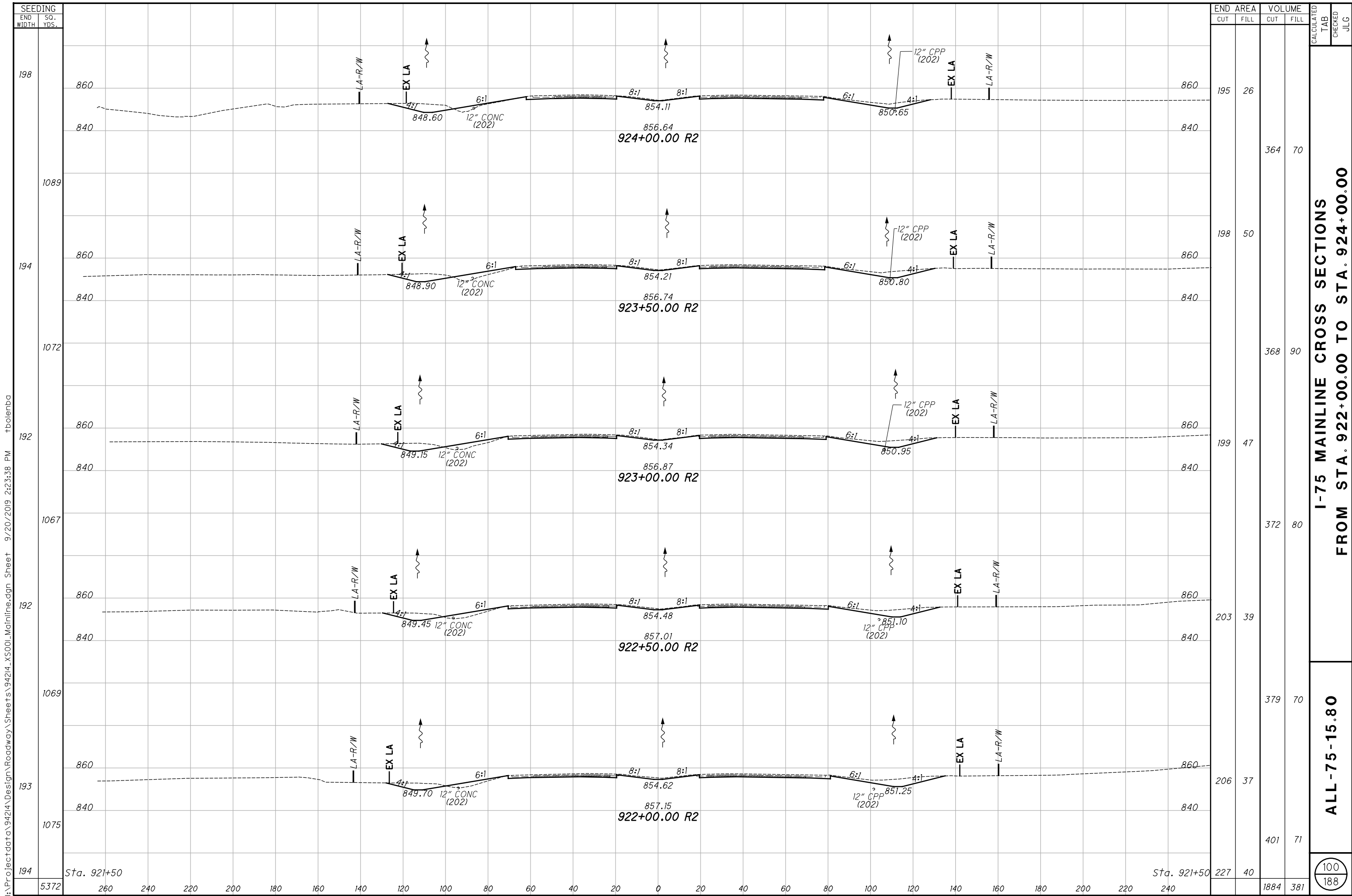
I-75 MAINLINE CROSS SECTIONS
FROM STA. 916+00.00 TO STA. 917+00.00

ALL -75-15.80

I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:37 PM tbalenba



I:\Project\data\94214\Design\Roadway\Sheets\94214_XS00_Mainline.dgn Sheet 9/20/2019 2:23:38 PM tbalenba



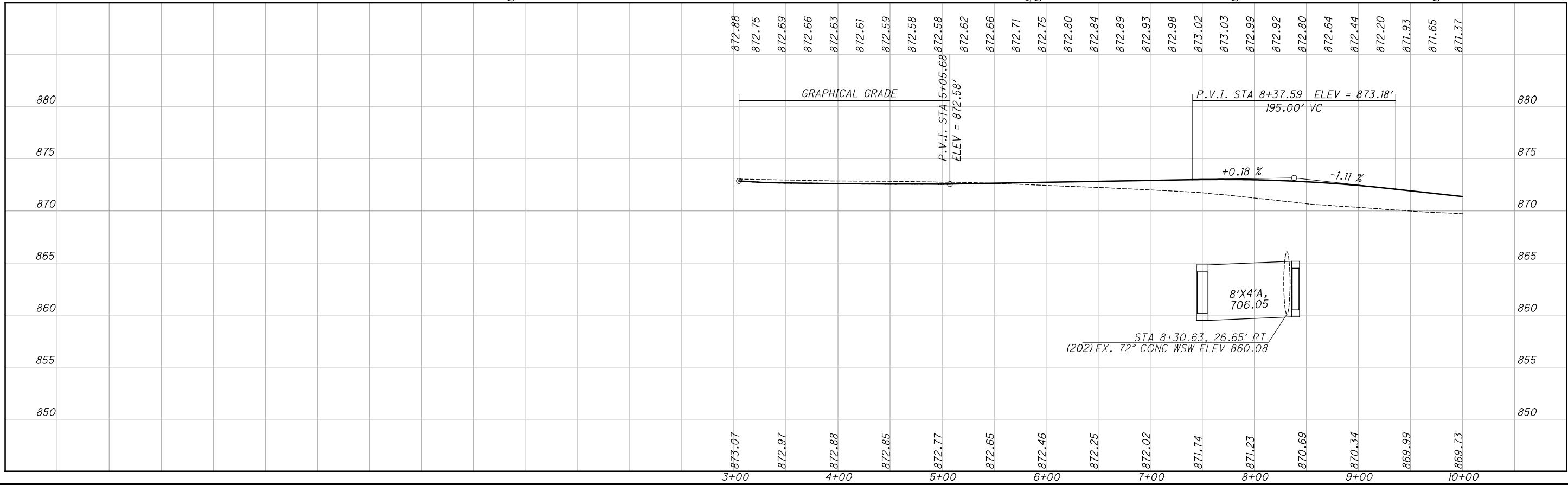
I-75 MAINLINE CROSS SECTIONS
FROM STA. 922+00.00 TO STA. 924+00.00

ALL -75-15.80

100
188

101
188

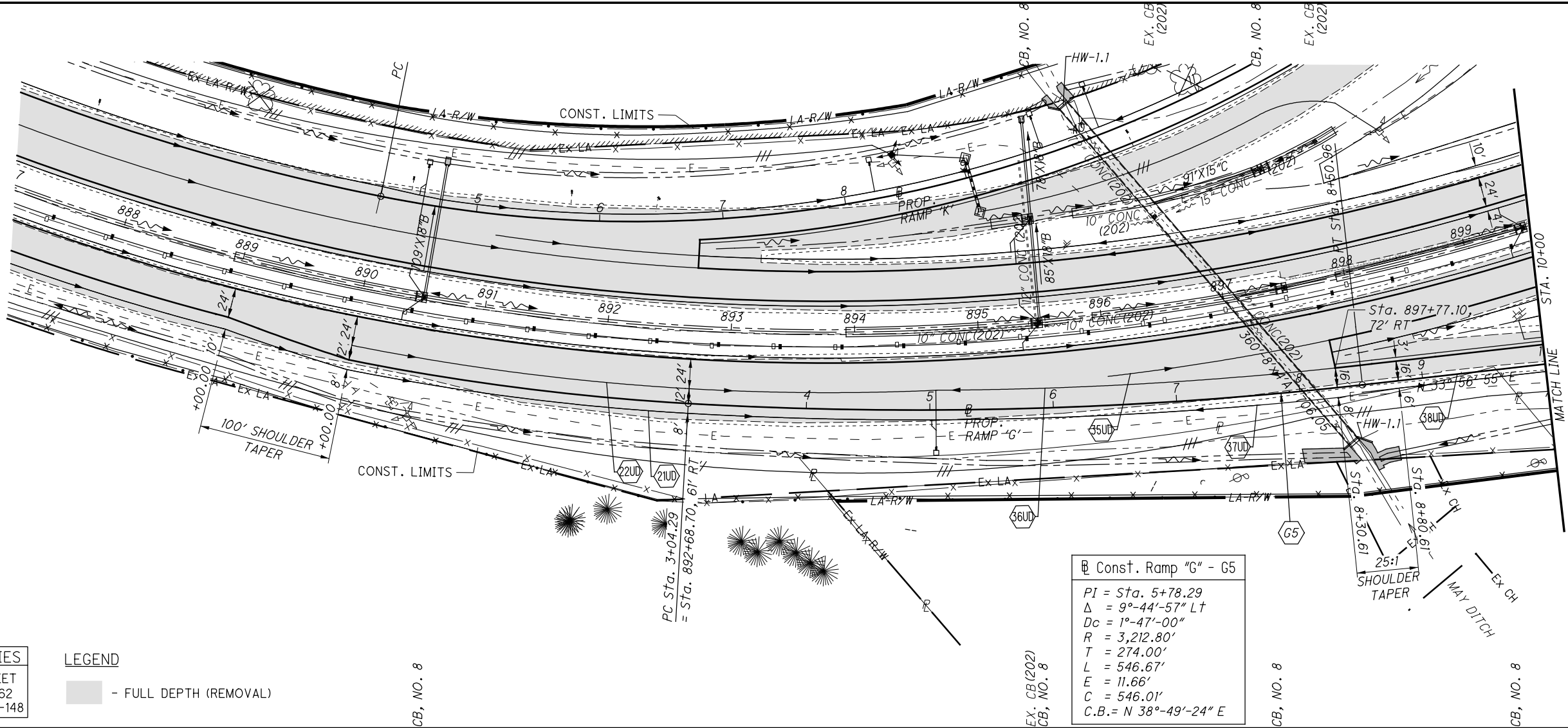
I:\Project\data\94214\Design\Roadway\Sheets\94214_GP010_Ramp6.dgn Sheet 9/20/2019 2:23:43 PM tboleba



ESTIMATED QUANTITIES	
ITEM	SHEET
UNDERDRAIN - UD	61-62
CULVERT	142-148

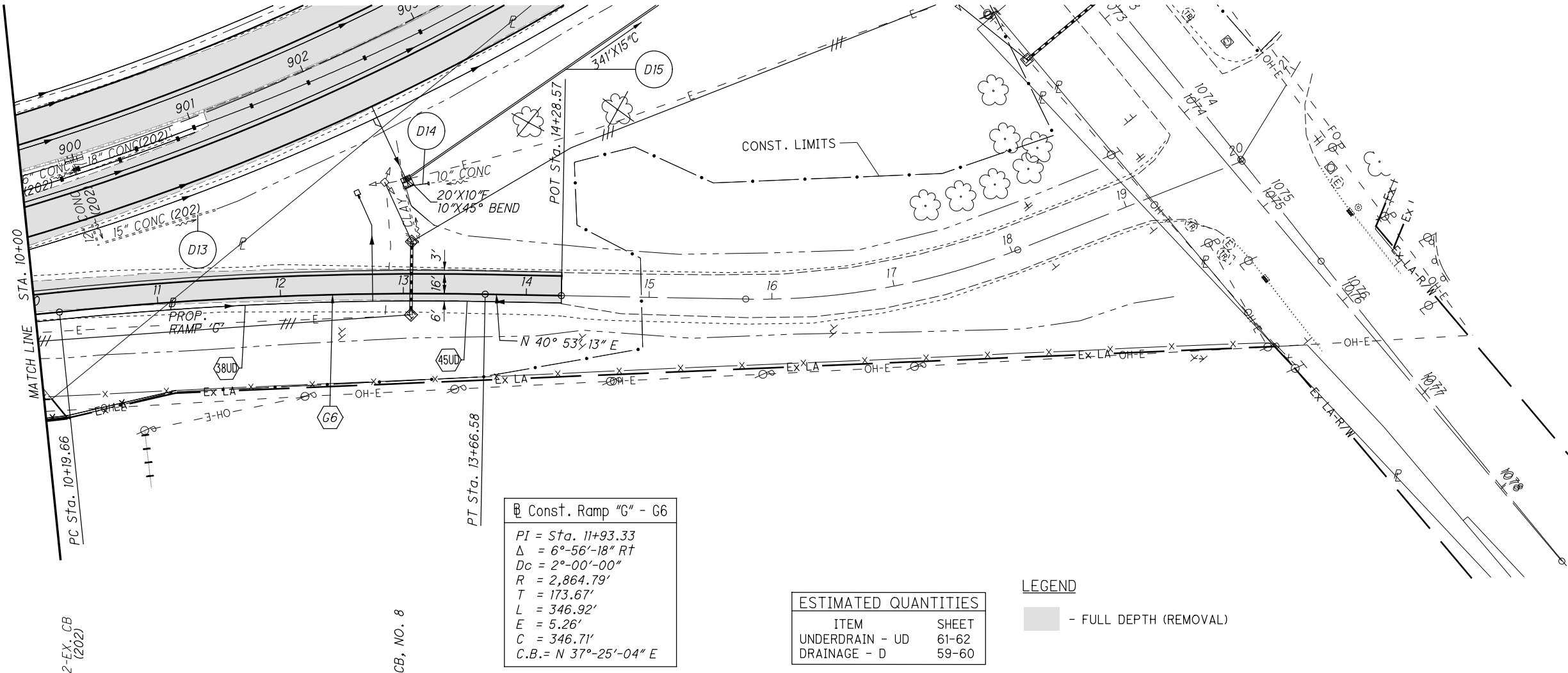
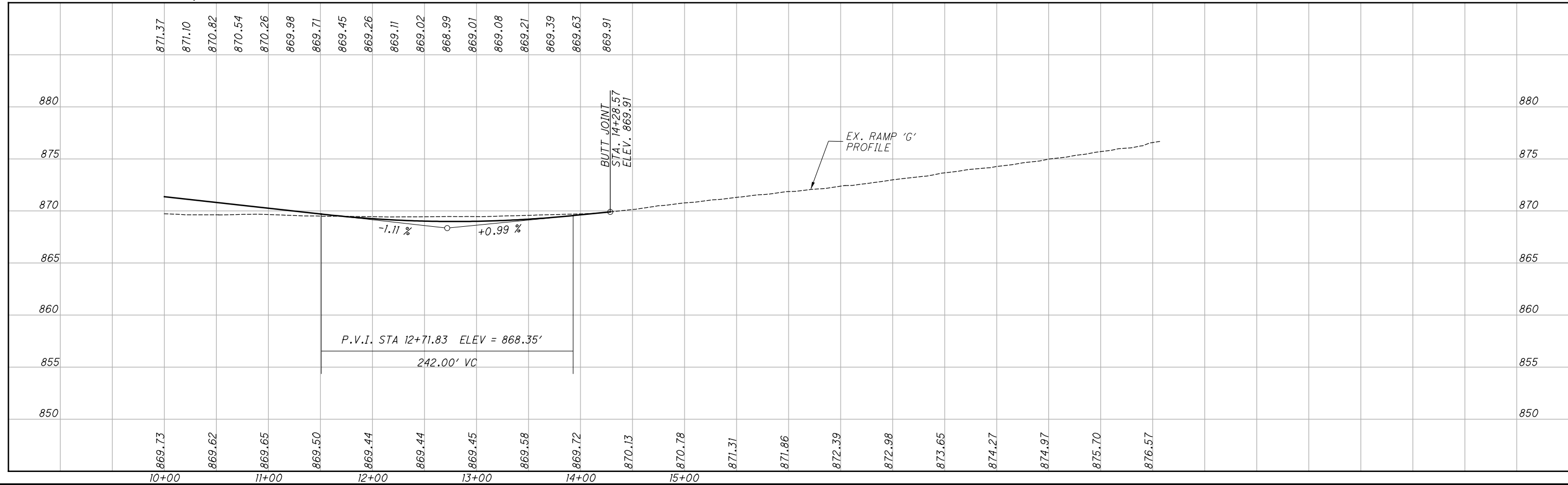
LEGEND

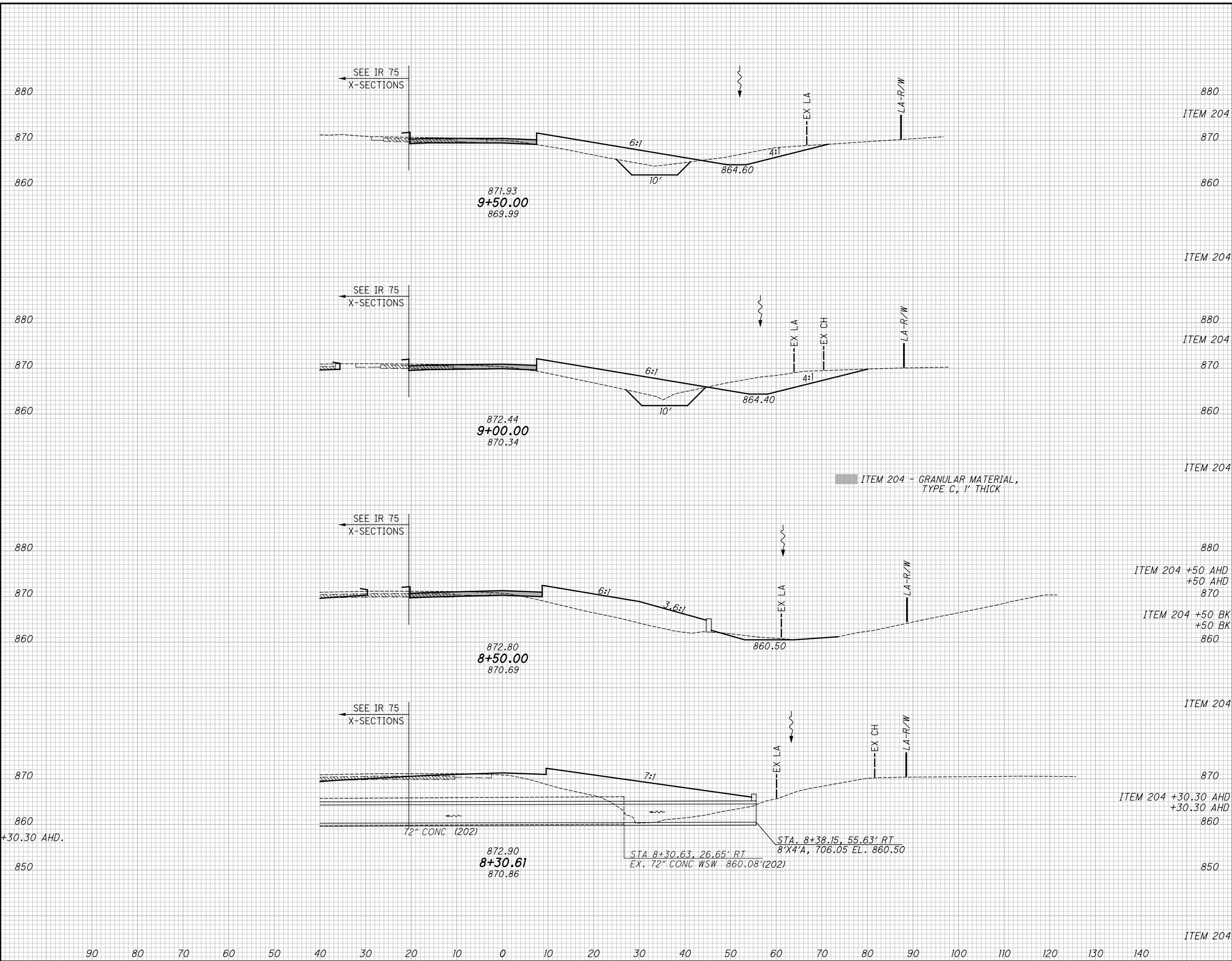
■ - FULL DEPTH (REMOVAL)



Const. Ramp "G" - G5

PI = Sta. 5+78.29
 $\Delta = 9^{\circ}-44'-57''$ LT
Dc = $1^{\circ}-47'-00''$
R = 3,212.80'
T = 274.00'
L = 546.67'
E = 11.66'
C = 546.01'
C.B. = N $38^{\circ}-49'-24''$ E

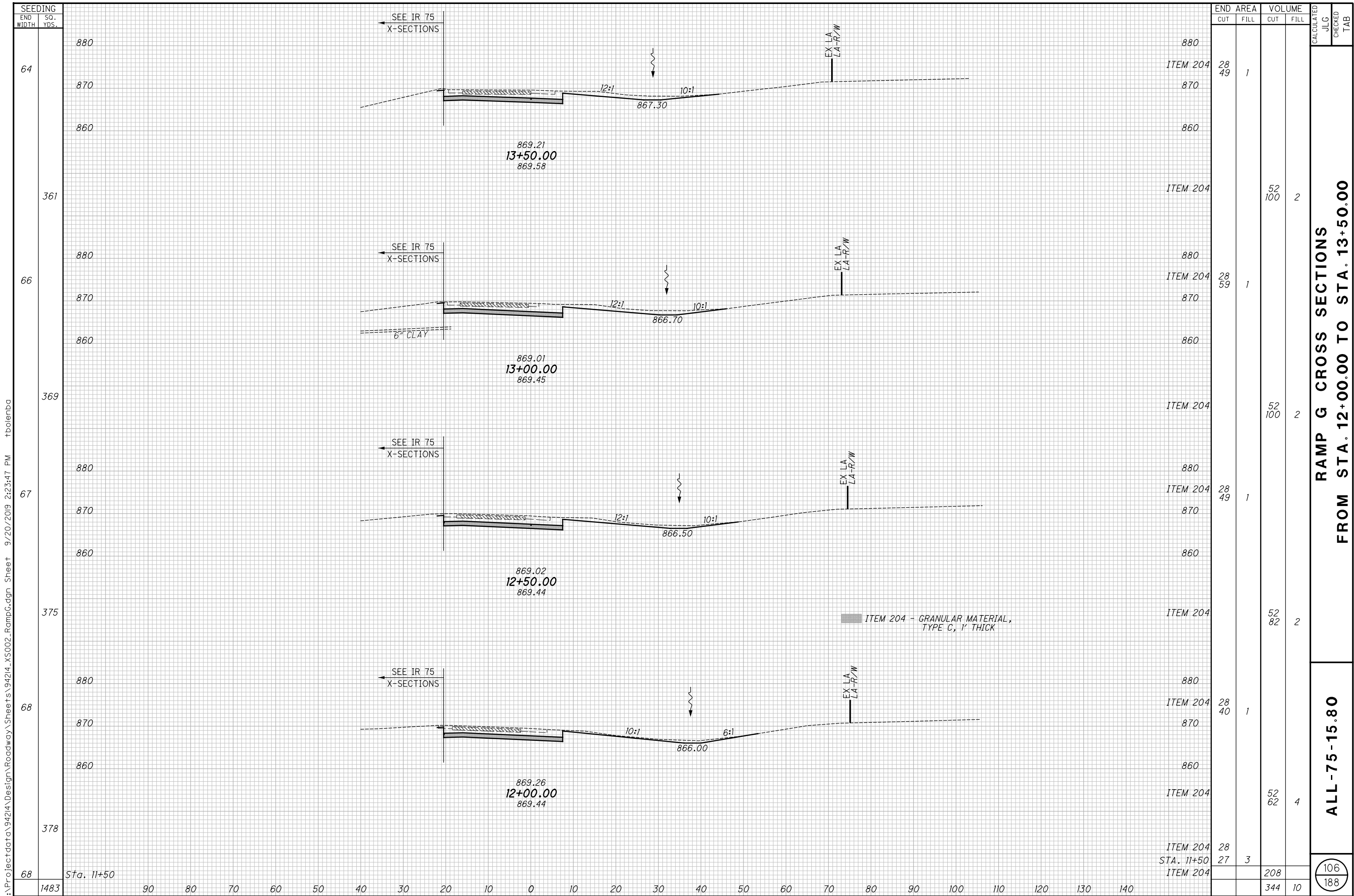




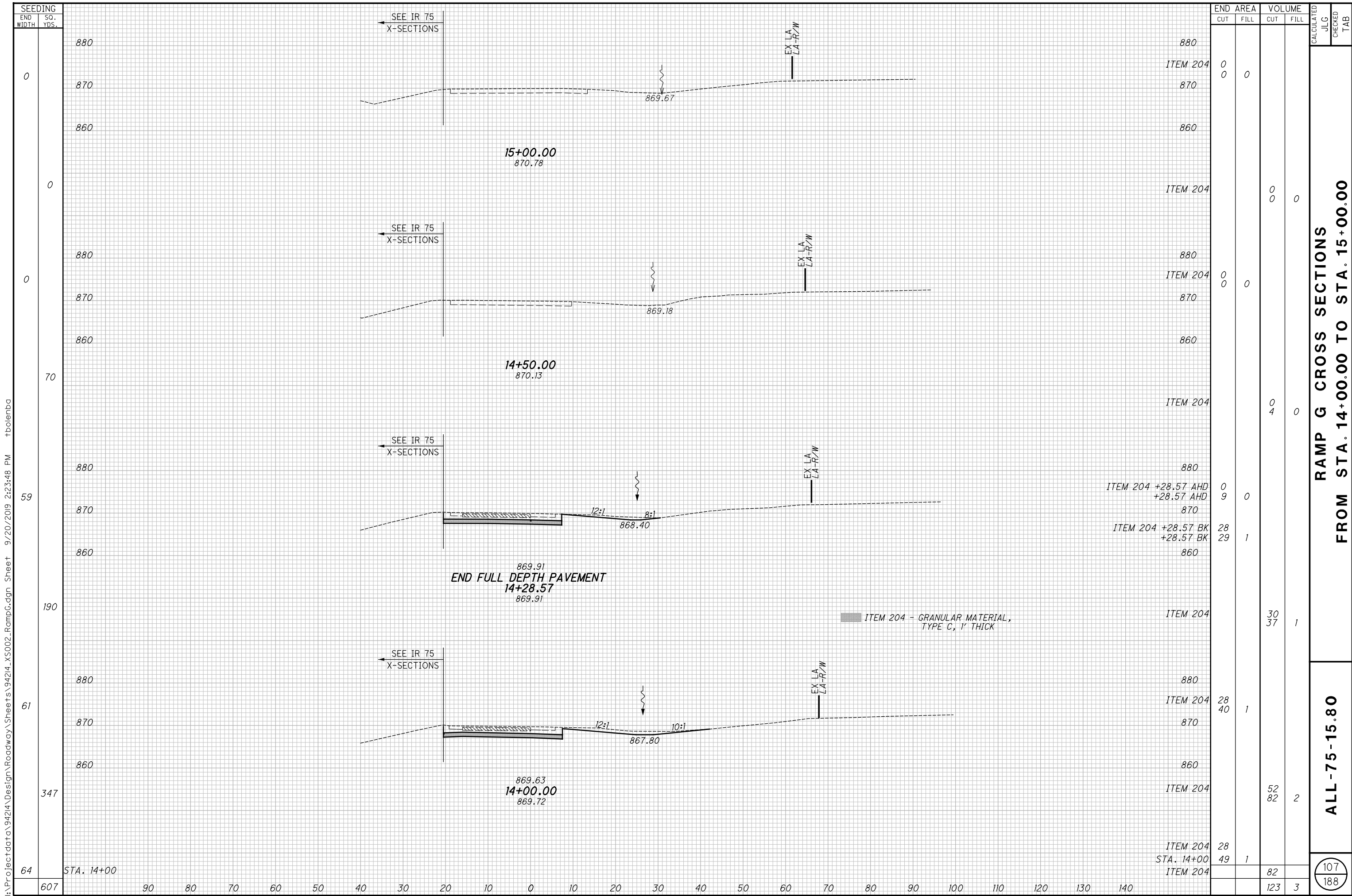
END AREA		VOLUME		CALCULATED	CHECKED	TAB
CUT	FILL	CUT	FILL			
7 72	119			RAMP G CROSS SECTIONS FROM STA. 8+30.30 TO STA. 9+50.00		
5 113	146	11 171	245			
		7 112	275			
3 8	151					
0 8	151					
0 0	150	0 3	110	ALL -75-15.80		
		18				
		286	630			

$$\frac{105}{188}$$

I:\Project\data\94214\Design\Roadway\Sheets\94214_XS002_RampG.dgn Sheet 9/20/2019 2:23:47 PM tboleba



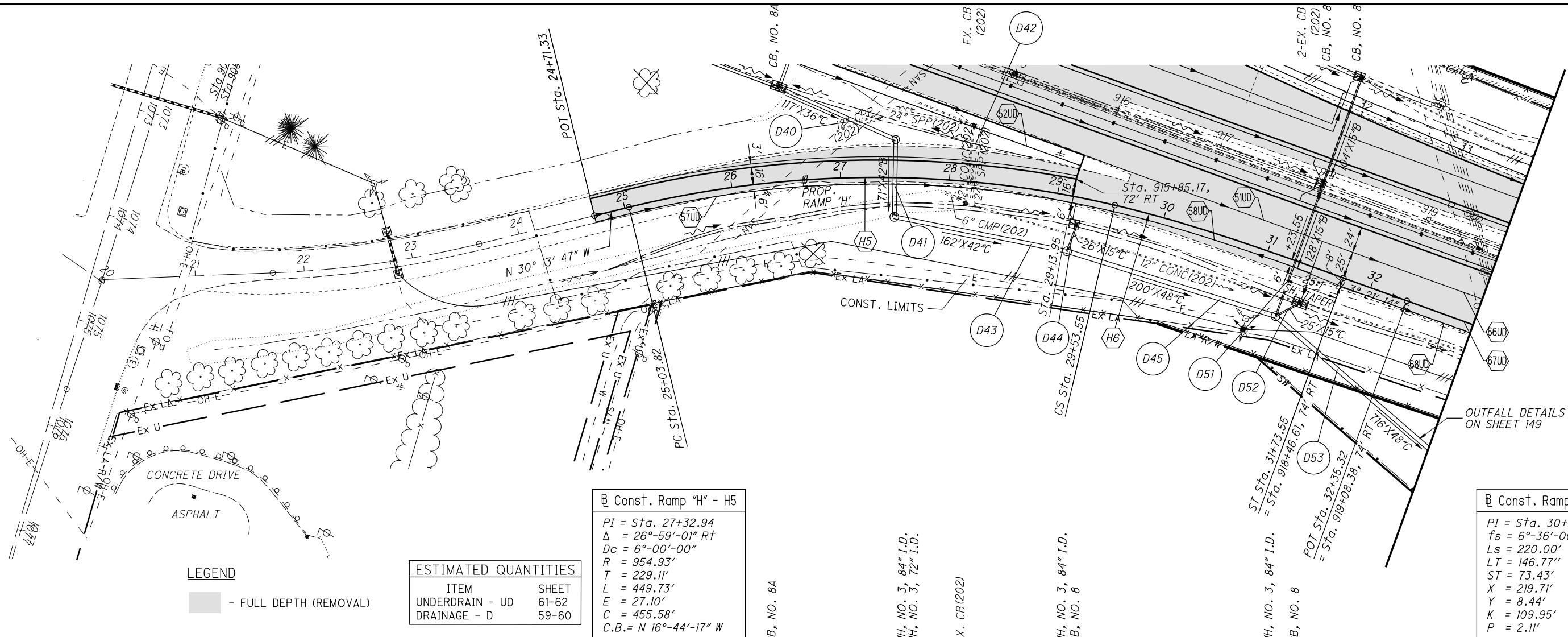
I:\Project\data\94214\Design\Roadway\Sheets\94214_XS002_RampG.dgn Sheet 9/20/2019 2:23:48 PM tboleba



RAMP G CROSS SECTIONS
FROM STA. 14+00.00 TO STA. 15+00.00

ALL -75-15.80

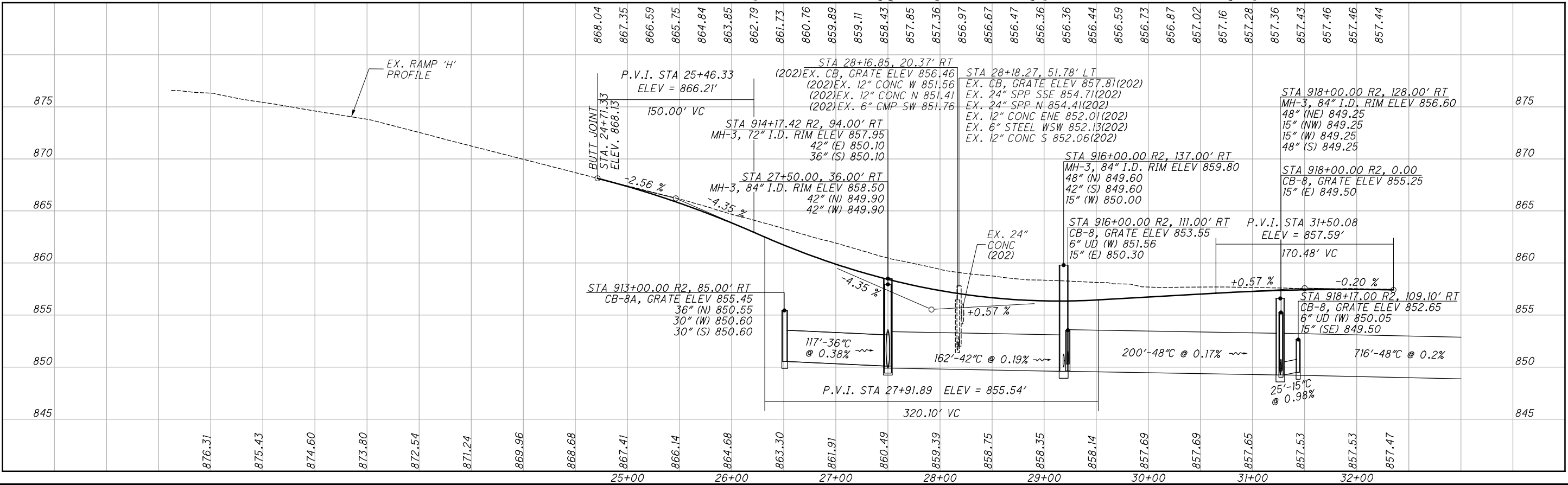
107
188



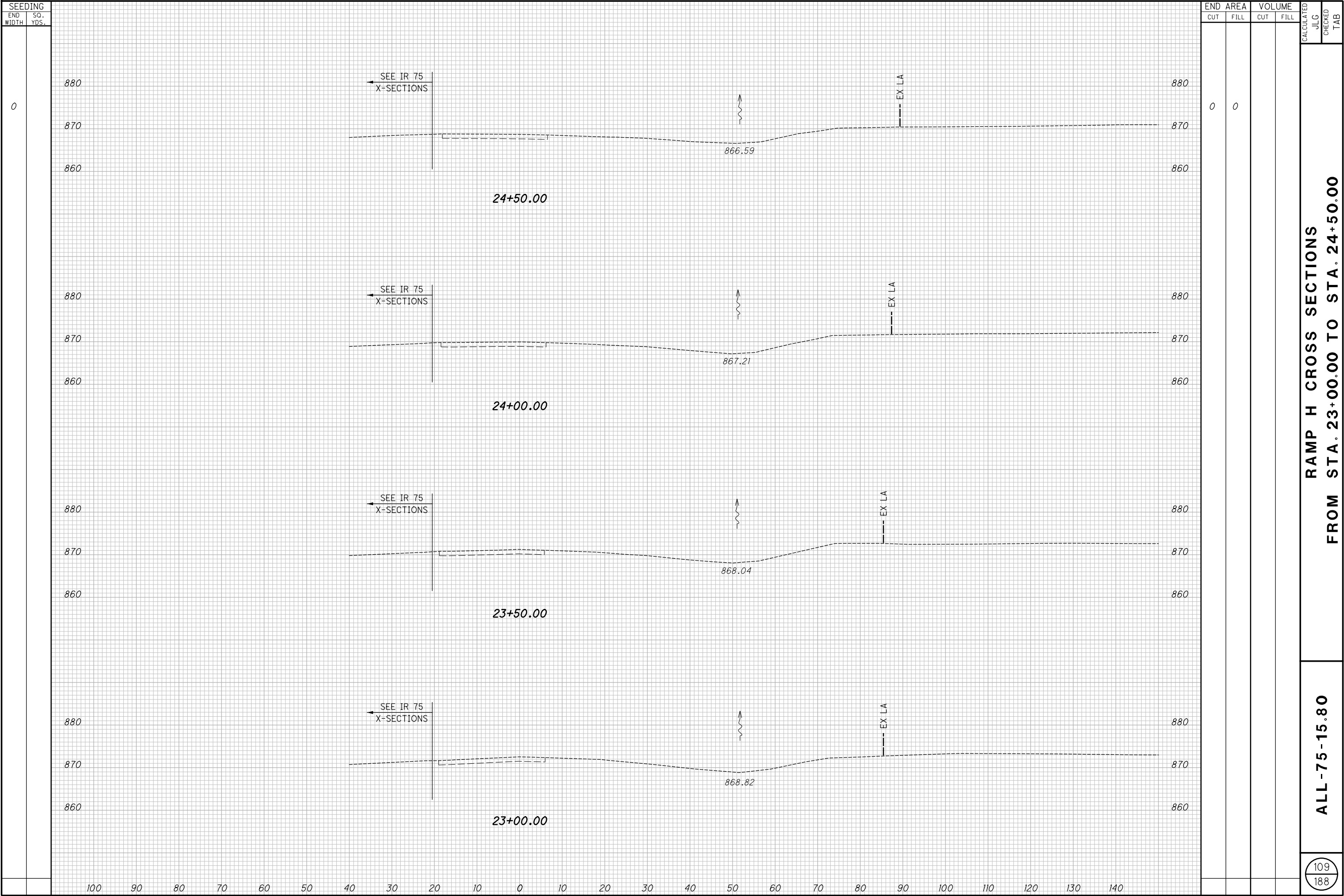
ESTIMATED QUANTITIES		
ITEM		SHEET
UNDERDRAIN - UD		61-62
DRAINAGE - D		59-60

Const. Ramp "H" - H5
PI = Sta. 27+32.94
Δ = 26°-59'-01" RT
Dc = 6°-00'-00"
R = 954.93'
T = 229.11'
L = 449.73'
E = 27.10'
C = 455.58'
C.B. = N 16°-44'-17" W

Const. Ramp "H" - H6
PI = Sta. 30+26.98
fs = 6°-36'-00"
Ls = 220.00'
LT = 146.77"
ST = 73.43'
X = 219.71'
Y = 8.44'
K = 109.95'
P = 2.11'



I:\Project\data\94214\Design\Roadway\Sheets\94214_XS003_RampH.dgn Sheet 9/20/2019 2:23:51 PM tboleba

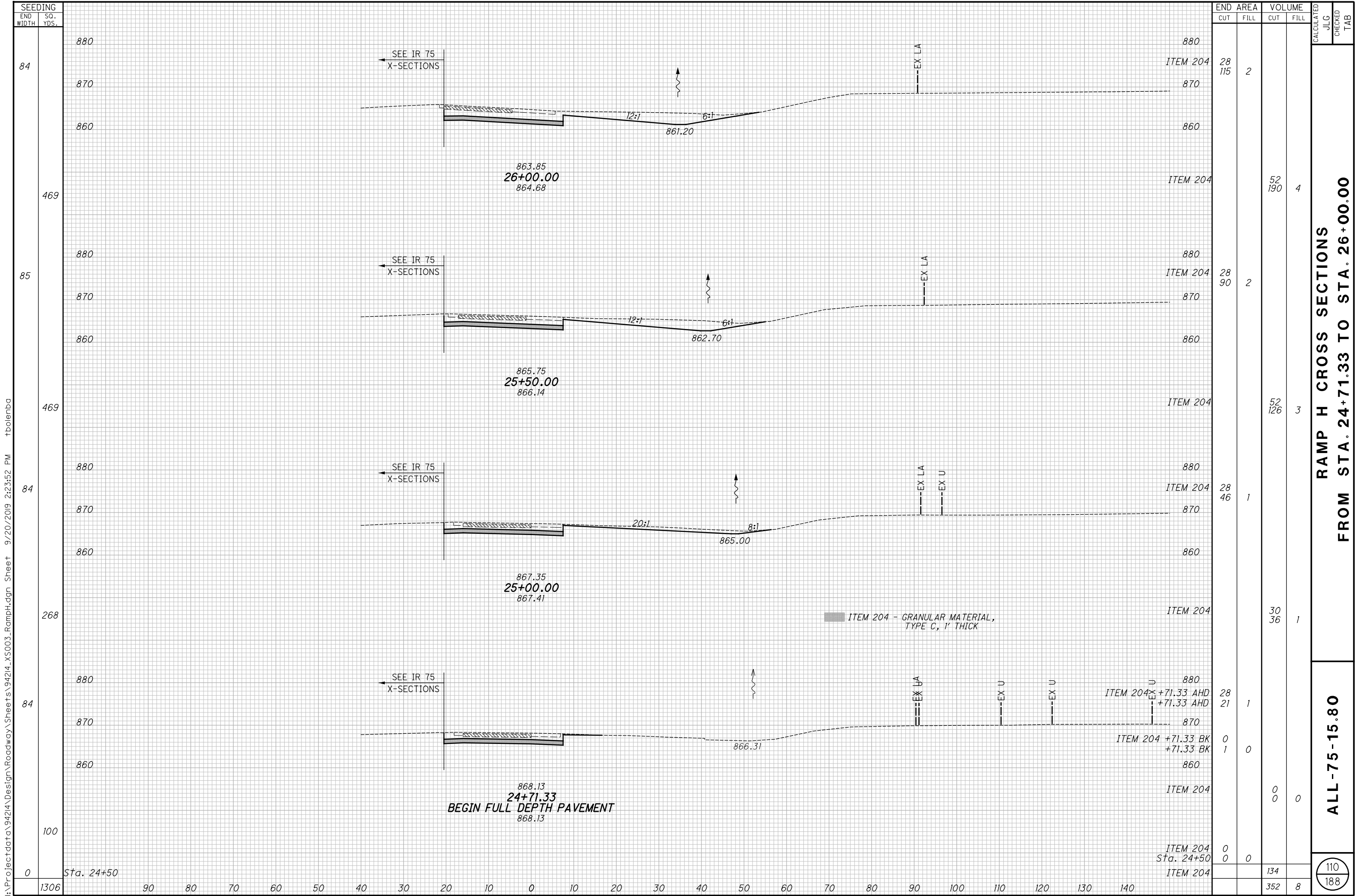


RAMP H CROSS SECTIONS
FROM STA. 23+00.00 TO STA. 24+50.00

ALL -75-15.80

109
188

I:\Project\data\94214\Design\Roadway\Sheets\94214_XS003_RampH.dgn Sheet 9/20/2019 2:23:52 PM tboleba







I:\Project\data\94214\Design\Roadway\Sheets\94214_GPO13_Ramp\J.dgn Sheet 9/20/2019 2:23:57 PM tbolemba

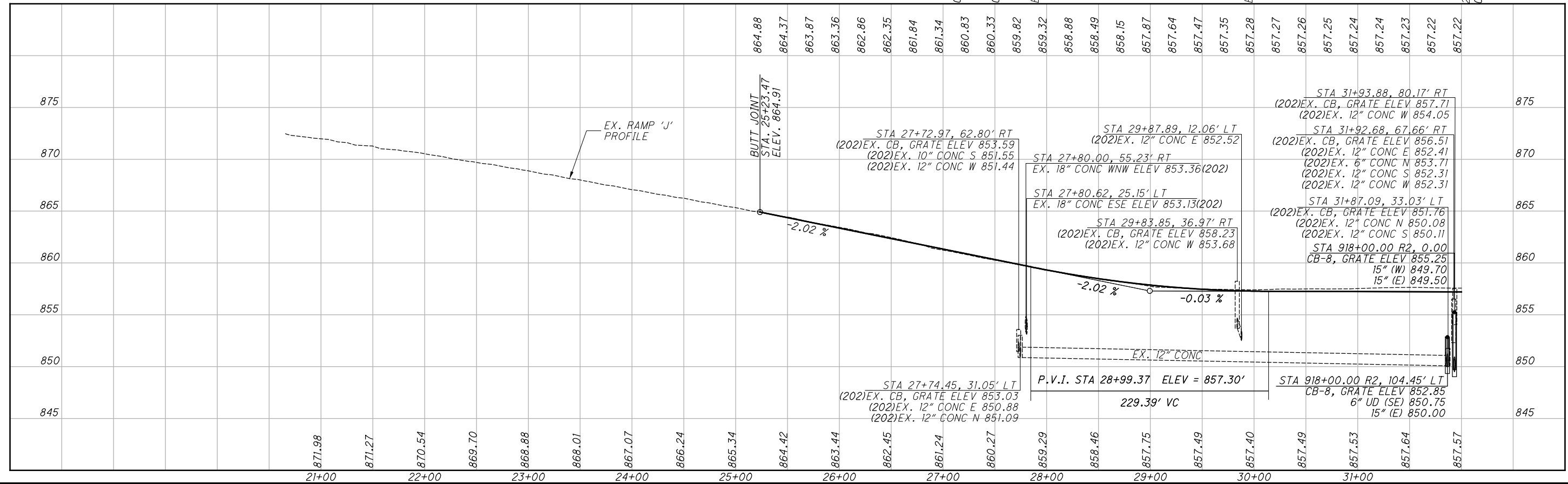
ESTIMATED QUANTITIES	
ITEM	SHEET
UNDERDRAIN - UD	61-62
DRAINAGE - D	59-60

LEGEND

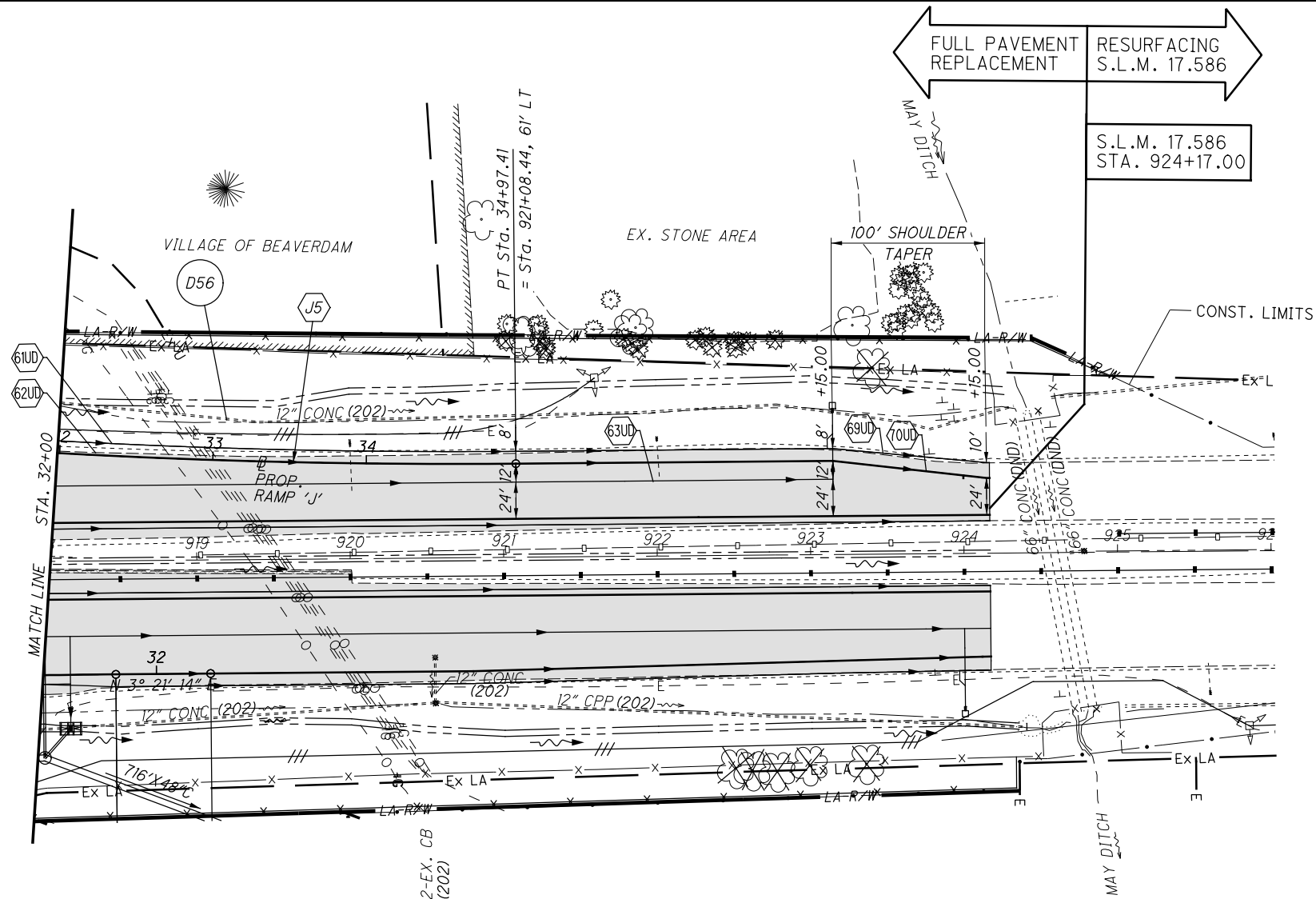
- FULL DEPTH (REMOVAL)
- CONCRETE PAVEMENT (REMOVAL)

Const. Ramp "J" - J4
 $PI = Sta. 27+11.61$
 $\Delta = 27^{\circ}-40'-13" LT$
 $Dc = 7^{\circ}-30'-00"$
 $R = 763.94'$
 $T = 188.14'$
 $L = 368.94'$
 $E = 22.83'$
 $C = 365.36'$
 $C.B. = N 24^{\circ}-32'-59" E$

Const. Ramp "J" - J5
 $PI = Sta. 31+95.32$
 $\Delta = 7^{\circ}-21'-39" LT$
 $Dc = 1^{\circ}-13'-00"$
 $R = 4,709.24'$
 $T = 302.92'$
 $L = 605.00'$
 $E = 9.73'$
 $C = 604.58'$
 $C.B. = N 7^{\circ}-02'-04" E$

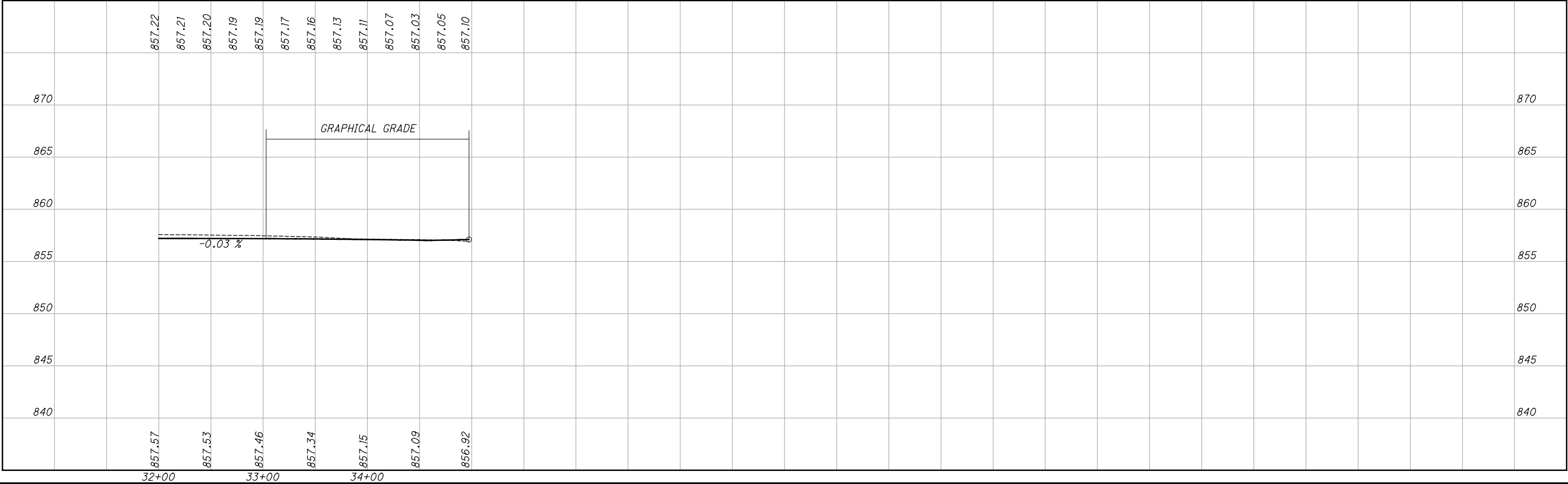


I:\Project\data\94214\Design\Roadway\Sheets\94214_GP014_Ramp.J.dgn 9/20/2019 2:23:58 PM tbolemba



ESTIMATED QUANTITIES	
ITEM	SHEET
UNDERDRAIN - UD	61-62
DRAINAGE - D	59-60

LEGEND	
	- FULL DEPTH (REMOVAL)



Const. Ramp "J" - J5
 $PI = Sta. 31+95.32$
 $\Delta = 7^{\circ}-21'-39" L$
 $DC = 1^{\circ}-13'-00"$
 $R = 4,709.24'$
 $T = 302.92'$
 $L = 605.00'$
 $E = 9.73'$
 $C = 604.58'$
 $C.B. = N 7^{\circ}-02'-04" E$

I:\Project\data\94214\Design\Roadway\Sheets\94214_XS004_RampJ.dgn Sheet 9/20/2019 2:23:58 PM tboleba

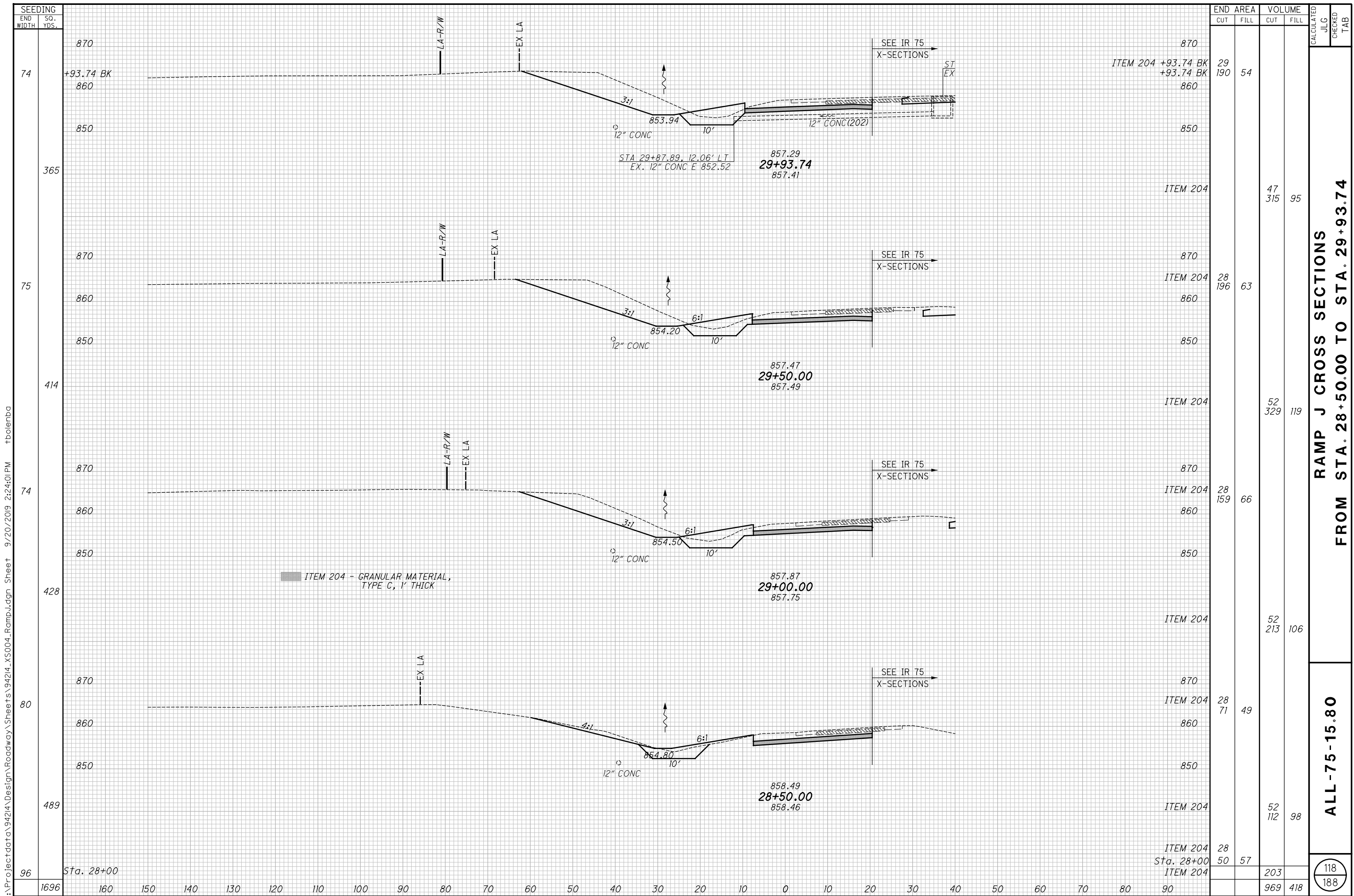


RAMP J CROSS SECTIONS
FROM STA. 23+50.00 TO STA. 25+00.00

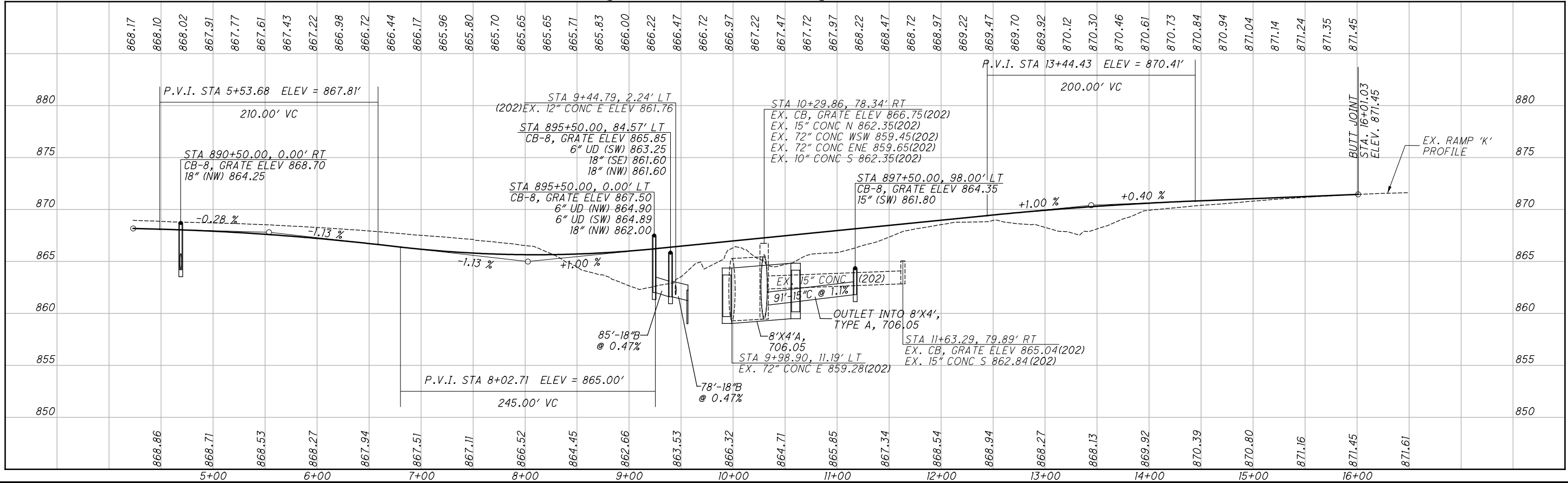
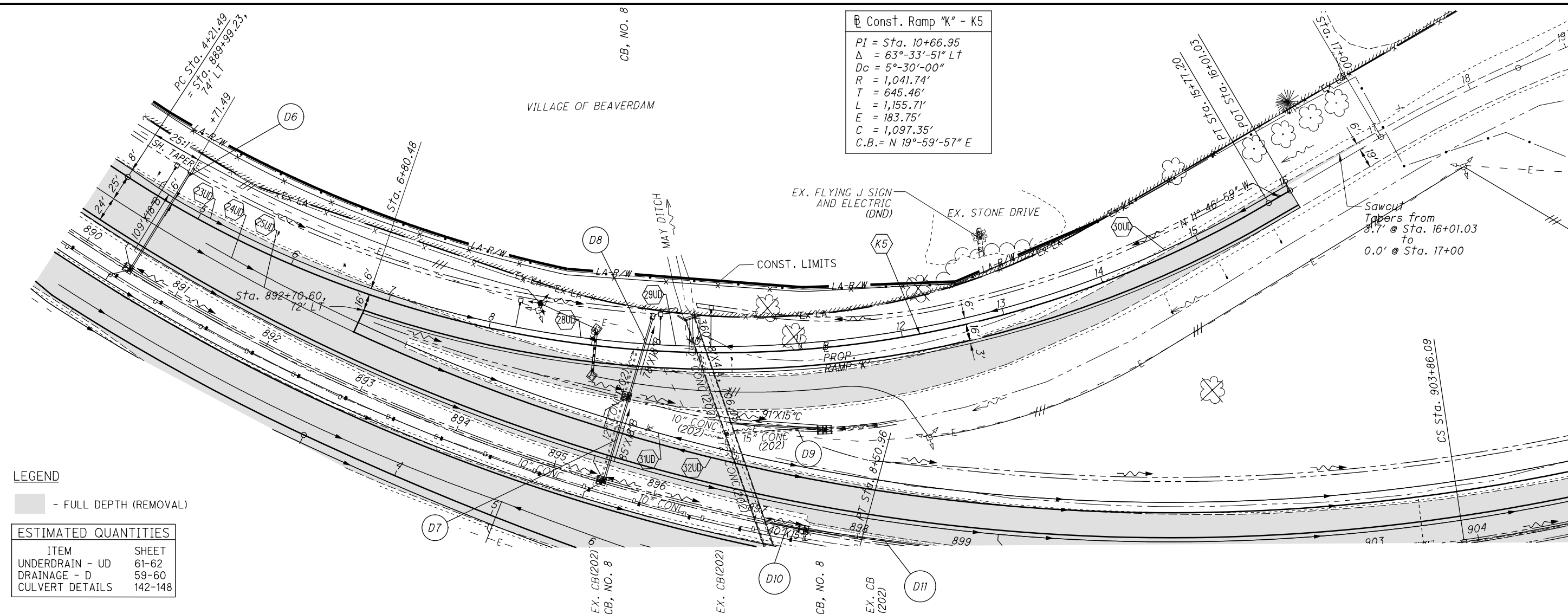
ALL -75 -15.80



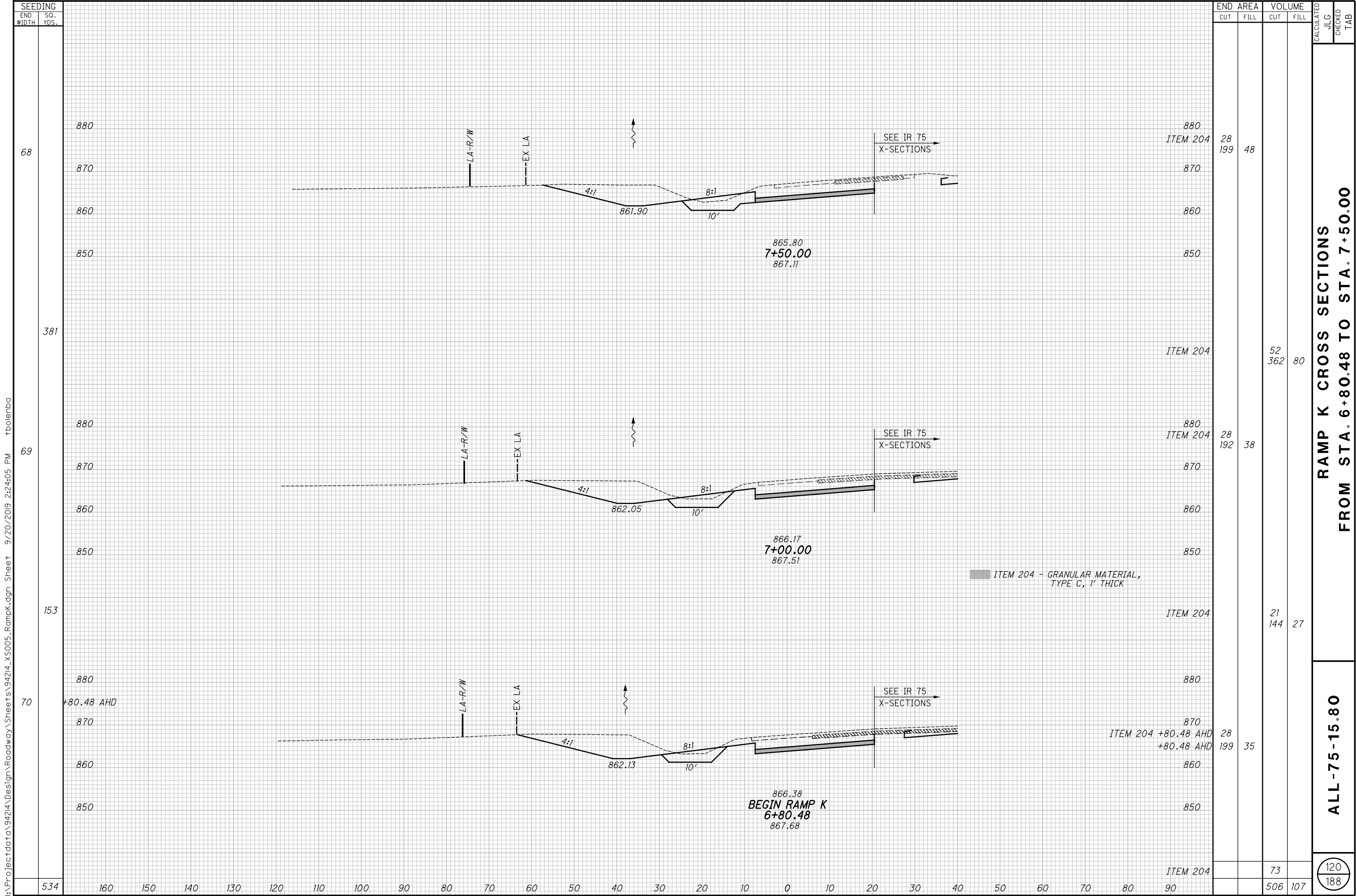
117
188



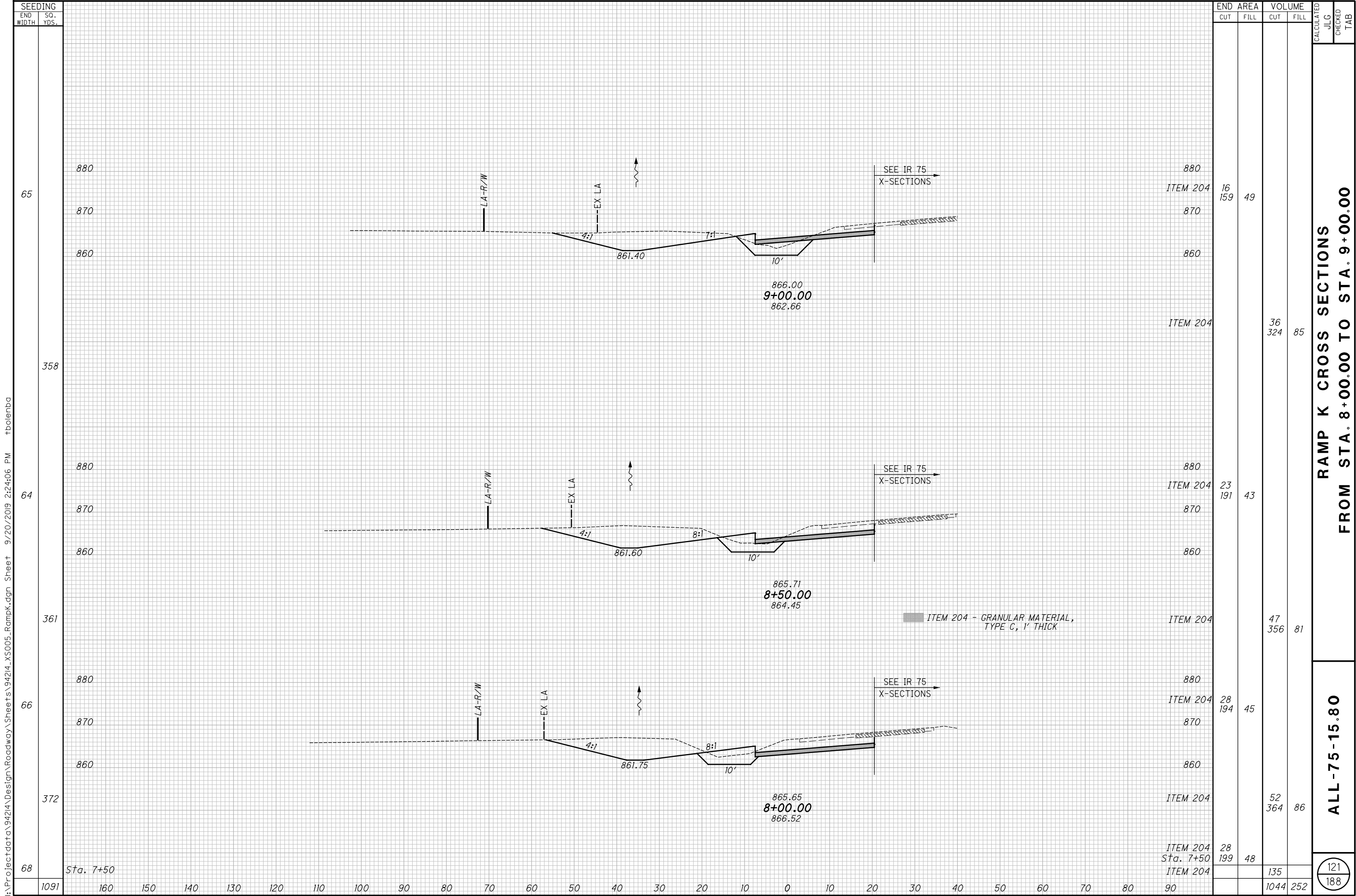
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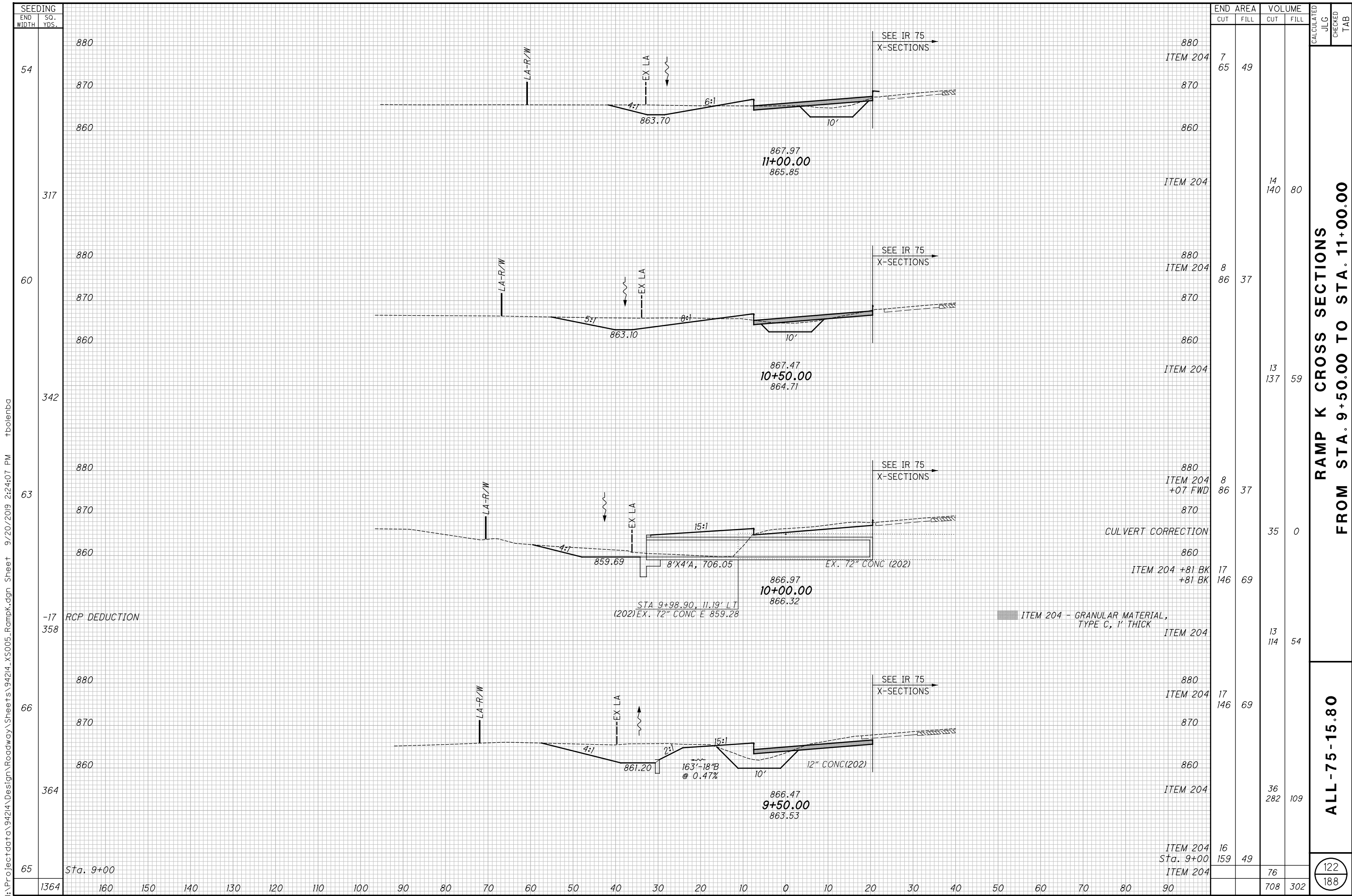
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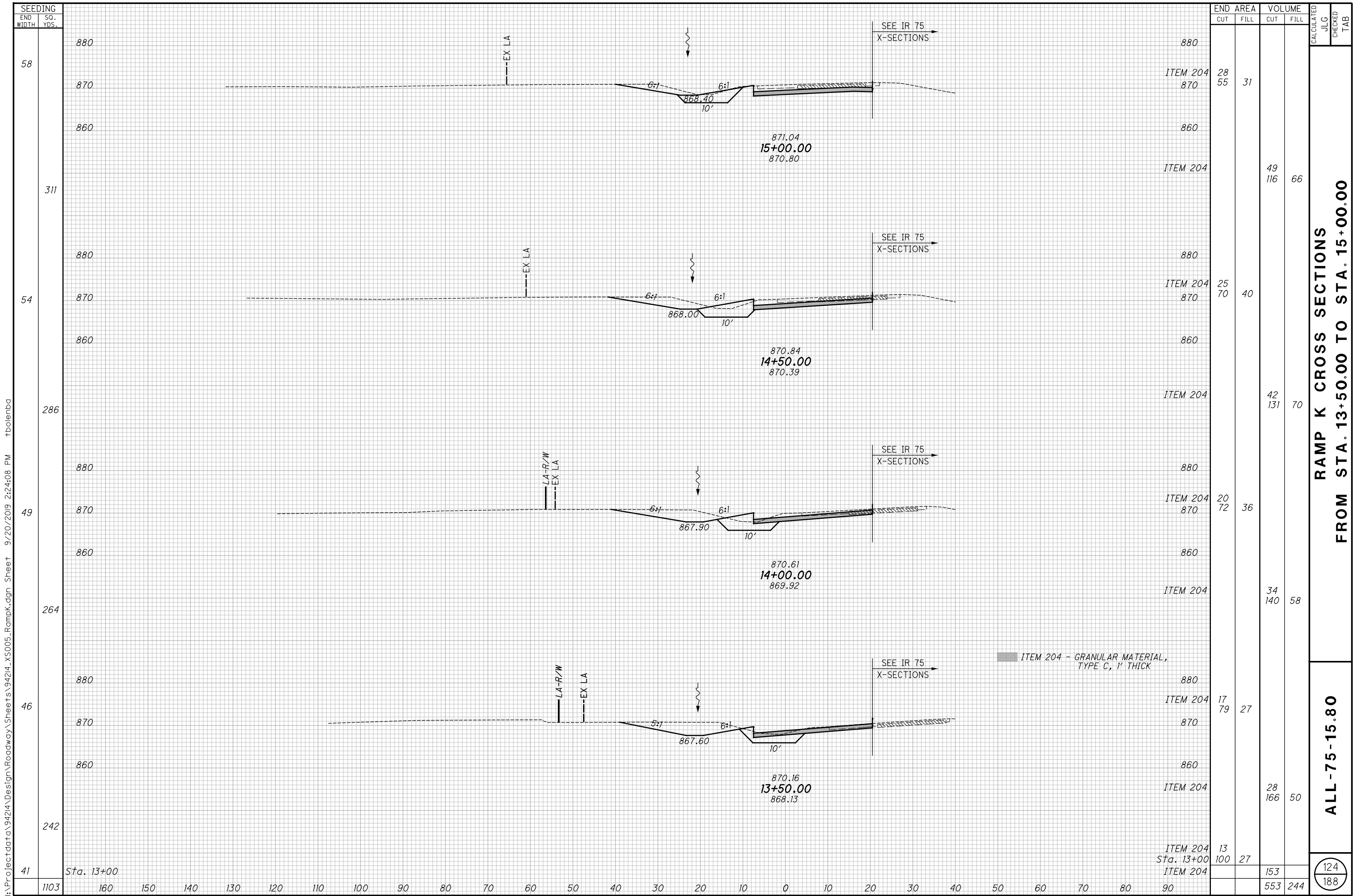
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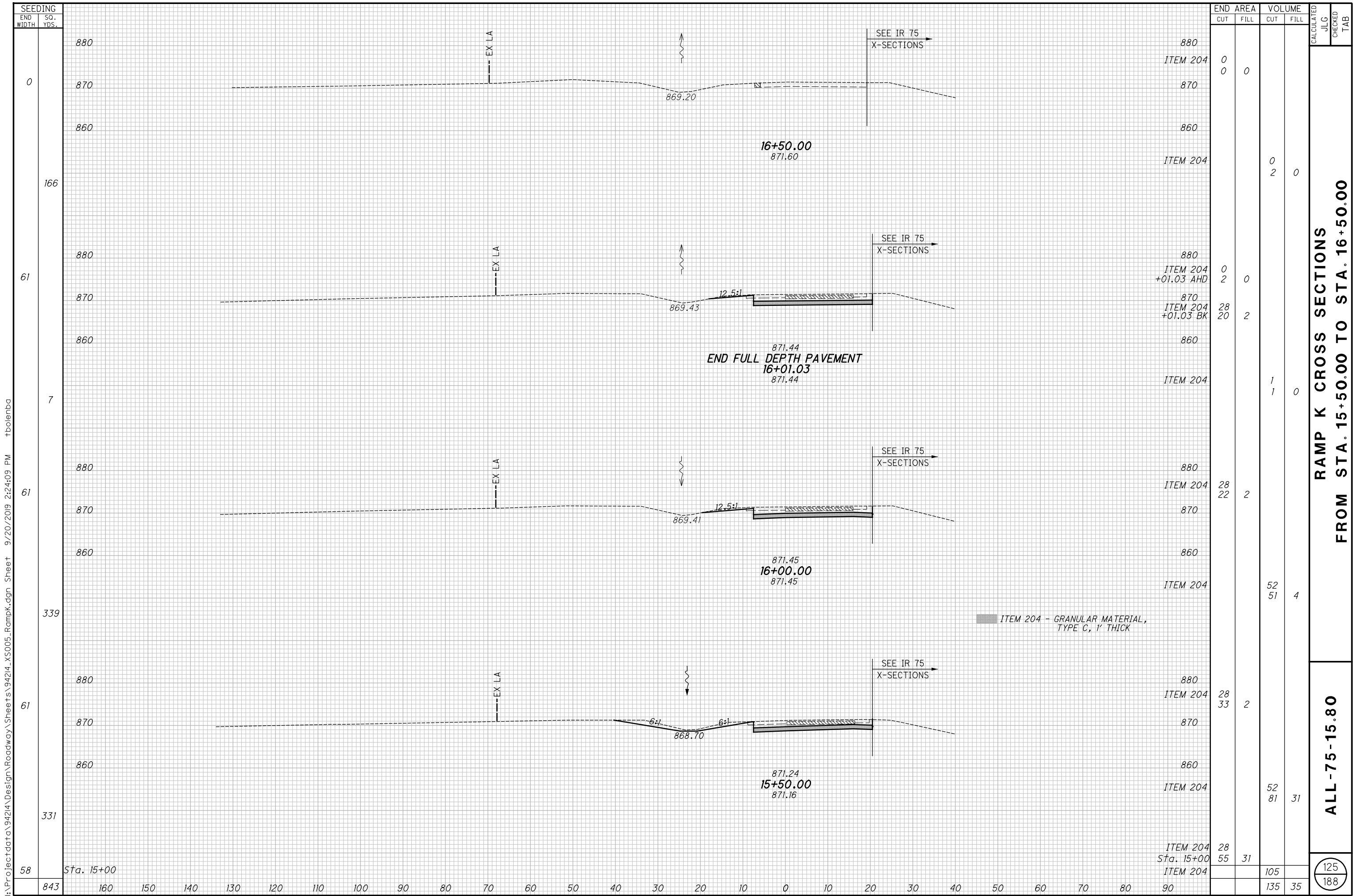
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I:\Project\data\94214\Design\Roadway\Sheets\94214_XS005_RampK.dgn Sheet 9/20/2019 2:24:08 PM tboleba



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I:\Project\data\94214\Design\Roadway\Sheets\94214_GE001.dgn Sheet 9/20/2019 2:24:10 PM tboleba

SUPERELEVATION TABLE																				CALCULATED	MJM	CHECKED	JLG
P.I. STA. 895+32.44										Dc = 2° 59'59"										SUPERELEVATION TABLE			
REMARKS	STATION	NORTHBOUND INSIDE EDGE (PROFILE GRADE)		NORTHBOUND CENTERLINE OF LANES					NORTHBOUND OUTSIDE EDGE OF OUTSIDE LANE					NORTHBOUND OUTSIDE EDGE OF DECEL. LANE					REMARKS	SUPERELEVATION TABLE			
		OFFSET	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION	ELEVATION					
N.C.	874+76.65	25	873.79	12		0.0160	0.19	873.98	12	263	-0.0160	-0.19	873.79						N.C.	SUPERELEVATION TABLE			
	875+00	25	873.81	12		0.0160	0.19	874.00	12	263	-0.0086	-0.10	873.90										
	875+25	25	873.84	12		0.0160	0.19	874.03	12	263	-0.0007	-0.01	874.02							SUPERELEVATION TABLE			
T.S.	875+27.15	25	873.84	12		0.0160	0.19	874.03	12	263	0.0000	0.00	874.03						T.S.				
	875+50	25	873.86	12		0.0160	0.19	874.05	12	263	0.0072	0.09	874.14							SUPERELEVATION TABLE			
	875+75	25	873.88	12		0.0160	0.19	874.07	12	263	0.0152	0.18	874.25										
	875+77.65	25	873.89	12	263	0.0160	0.19	874.08	12	263	0.0160	0.19	874.27							SUPERELEVATION TABLE			
	876+00	25	873.91	12	263	0.0195	0.23	874.14	12	263	0.0195	0.23	874.38										
	876+25	25	873.93	12	263	0.0235	0.28	874.21	12	263	0.0235	0.28	874.49							SUPERELEVATION TABLE			
	876+50	25	873.94	12	263	0.0274	0.33	874.27	12	263	0.0274	0.33	874.60										
	876+75	25	873.95	12	263	0.0314	0.38	874.33	12	263	0.0314	0.38	874.70							SUPERELEVATION TABLE			
	877+00	25	873.96	12	263	0.0354	0.42	874.38	12	263	0.0354	0.42	874.81										
	877+25	25	873.96	12	263	0.0393	0.47	874.43	12	263	0.0393	0.47	874.90							SUPERELEVATION TABLE			
	877+50	25	873.96	12	263	0.0433	0.52	874.48	12	263	0.0433	0.52	875.00										
	877+75	25	873.95	12	263	0.0472	0.57	874.52	12	263	0.0472	0.57	875.08							SUPERELEVATION TABLE			
	878+00	25	873.94	12	263	0.0512	0.61	874.55	12	263	0.0512	0.61	875.17										
	878+25	25	873.92	12	263	0.0551	0.66	874.58	12	263	0.0551	0.66	875.24							SUPERELEVATION TABLE			
	878+50	25	873.90	12	263	0.0591	0.71	874.61	12	263	0.0591	0.71	875.32										
	878+75	25	873.87	12	263	0.0630	0.76	874.63	12	263	0.0630	0.76	875.38							SUPERELEVATION TABLE			
	879+00	25	873.84	12	263	0.0670	0.80	874.64	12	263	0.0670	0.80	875.45										
	879+25	25	873.81	12	263	0.0710	0.85	874.66	12	263	0.0710	0.85	875.51							SUPERELEVATION TABLE			
	879+50	25	873.77	12	263	0.0749	0.90	874.67	12	263	0.0749	0.90	875.57										
	879+75	25	873.72	12	263	0.0789	0.95	874.67	12	263	0.0789	0.95	875.61							SUPERELEVATION TABLE			
S.C.	879+82.15	25	873.71	12		0.0800	0.96	874.67	12		0.0800	0.96	875.63						S.C				
	880+00	25	873.67	12		0.0800	0.96	874.63	12		0.0800	0.96	875.59							SUPERELEVATION TABLE			
	880+25	25	873.62	12		0.0800	0.96	874.58	12		0.0800	0.96	875.54										
	880+50	25	873.56	12		0.0800	0.96	874.52	12		0.0800	0.96	875.48							SUPERELEVATION TABLE			
	880+75	25	873.49	12		0.0800	0.96	874.45	12		0.0800	0.96	875.41										
	881+00	25	873.43	12		0.0800	0.96	874.39	12		0.0800	0.96	875.35							SUPERELEVATION TABLE			
	881+25	25	873.36	12		0.0800	0.96	874.32	12		0.0800	0.96	875.28										
	881+50	25	873.29	12		0.0800	0.96	874.25	12		0.0800	0.96	875.21							SUPERELEVATION TABLE			
	881+75	25	873.22	12		0.0800	0.96	874.18	12		0.0800	0.96	875.14										
	882+00	25	873.15	12		0.0800	0.96	874.11	12		0.0800	0.96	875.07							SUPERELEVATION TABLE			
	882+14.45	25	873.11	12		0.0800	0.96	874.07	12		0.0800	0.96	875.03										
	882+25	25	873.08	12		0.0800	0.96	874.04	12		0.0800	0.96	875.00							SUPERELEVATION TABLE			
	882+50	25	873.01	12		0.0800	0.96	873.97	12		0.0800	0.96	874.93										
	882+75	25	872.94	12		0.0800	0.96	873.90	12		0.0800	0.96	874.86							SUPERELEVATION TABLE			
	883+00	25	872.87	12		0.0800	0.96	873.83	12		0.0800	0.96	874.79										
	883+25	25	872.80	12		0.0800	0.96	873.76	12		0.0800	0.96	874.72							SUPERELEVATION TABLE			
	883+50	25	872.73	12		0.0800	0.96	873.69	12		0.0800	0.96	874.65										
	883+75	25	872.66	12		0.0800	0.96	873.62	12		0.0800	0.96	874.58							SUPERELEVATION TABLE			
	884+00	25	872.59	12		0.0800	0.96	873.55	12		0.0800	0.96	874.51										
	884+25	25	872.52	12		0.0800	0.96	873.48	12		0.0800	0.96	874.44							SUPERELEVATION TABLE			
	884+50	25	872.45	12		0.0800	0.96	873.41	12		0.0800	0.96	874.37										
	884+75	25	872.38	12		0.0800	0.96	873.34	12		0.0800	0.96	874.30							SUPERELEVATION TABLE			
	885+00	25	872.31	12		0.0800	0.96	873.27	12		0.0800	0.96	874.23										
	885+25	25	872.24	12		0.0800	0.96	873.20	12		0.0800	0.96	874.16							SUPERELEVATION TABLE			
	885+50	25	872.17	12		0.0800	0.96	873.13	12		0.0800	0.96	874.09										
	885+75	25	872.10	12		0.0800	0.96	873.06	12		0.0800	0.96	874.02							SUPERELEVATION TABLE			
	886+00	25	872.03	12		0.0800	0.96	872.99	12		0.0800	0.96	873.95										
	886+25	25	871.96	12		0.0800	0.96	872.92	12		0.0800	0.96	873.88							SUPERELEVATION TABLE			
	886+50	25	871.89	12		0.0800	0.96	872.85	12		0.0800	0.96	873.81										
	886+75	25	871.82	12		0.0800	0.96	872.78	12		0.0800	0.96	873.74							SUPERELEVATION TABLE			
	887+00	25	871.75	12		0.0800	0.96	872.71	12		0.0800	0.96	873.67										
	887+25	25	871.68	12		0.0800	0.96	872.64	12		0.0800	0.96	873.60							SUPERELEVATION TABLE			
	887+50	25	871.61	12		0.0800	0.96	872.57	12		0.0800	0.96	873.53										
	887+75	25	871.54	12		0.0800	0.96	872.50	12		0.0800	0.96	873.46							SUPERELEVATION TABLE			
	888+00	25	871.47	12		0.0800	0.96	872.43	12		0.0800	0.96	873.39										
	888+25	25	871.40	12		0.0800	0.96	872.36	12		0.0800	0.96	873.32							SUPERELEVATION TABLE			

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SUPERELEVATION TABLE																				CALCULATED	MJM	CHECKED	JLG
P.I. STA. 895+32.44										Dc = 2° 59'59"													
	REMARKS	SOUTHBOUND OUTSIDE EDGE OF ACCEL. LANE					SOUTHBOUND OUTSIDE EDGE OF OUTSIDE LANE					SOUTHBOUND CENTERLINE OF LANES					SOUTHBOUND INSIDE EDGE (PROFILE GRADE)		STATION	REMARKS			
		ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	OFFSET					
N.C.		873.61	-0.18	-0.0160		10.99	873.79	-0.19	-0.0160		12	873.98	0.19	0.0160	263	12	873.79	25	874+76.65	N.C.			
		873.54	-0.18	-0.0160		11.46	873.72	-0.19	-0.0160		12	873.91	0.10	0.0086	263	12	873.81	25	875+00				
		873.46	-0.19	-0.0160		11.96	873.66	-0.19	-0.0160		12	873.85	0.01	0.0007	263	12	873.84	25	875+25				
T.S.		873.46	-0.19	-0.0160		12	873.65	-0.19	-0.0160		12	873.84	0.00	0.0000	263	12	873.84	25	875+27.15	T.S.			
		873.38	-0.20	-0.0160		12.45	873.58	-0.19	-0.0160		12	873.77	-0.09	-0.0072	263	12	873.86	25	875+50				
		873.30	-0.21	-0.0160		12.93	873.51	-0.19	-0.0160		12	873.70	-0.18	-0.0152	263	12	873.88	25	875+75				
		873.30	-0.21	-0.0160		12.98	873.51	-0.19	-0.0160	263	12	873.70	-0.19	-0.0160	263	12	873.89	25	875+77.65				
		873.18	-0.26	-0.0195		13.42	873.44	-0.23	-0.0195	263	12	873.68	-0.23	-0.0195	263	12	873.91	25	876+00				
		873.04	-0.33	-0.0235		13.90	873.37	-0.28	-0.0235	263	12	873.65	-0.28	-0.0235	263	12	873.93	25	876+25				
		872.90	-0.39	-0.0274		14.38	873.29	-0.33	-0.0274	263	12	873.62	-0.33	-0.0274	263	12	873.95	25	876+50				
		872.76	-0.47	-0.0314		14.86	873.23	-0.38	-0.0314	263	12	873.60	-0.38	-0.0314	263	12	873.98	25	876+75				
		872.61	-0.54	-0.0354		15.34	873.15	-0.42	-0.0354	263	12	873.58	-0.42	-0.0354	263	12	874.00	25	877+00				
		872.45	-0.62	-0.0393		15.82	873.08	-0.47	-0.0393	263	12	873.55	-0.47	-0.0393	263	12	874.02	25	877+25				
		872.31	-0.70	-0.0433		16.29	873.01	-0.52	-0.0433	263	12	873.53	-0.52	-0.0433	263	12	874.05	25	877+50				
		872.14	-0.79	-0.0472		16.77	872.94	-0.57	-0.0472	263	12	873.50	-0.57	-0.0472	263	12	874.07	25	877+75				
		871.99	-0.88	-0.0512		17.24	872.87	-0.61	-0.0512	263	12	873.49	-0.61	-0.0512	263	12	874.10	25	878+00				
		871.82	-0.98	-0.0551		17.71	872.80	-0.66	-0.0551	263	12	873.46	-0.66	-0.0551	263	12	874.12	25	878+25				
		871.65	-1.07	-0.0591		18.18	872.72	-0.71	-0.0591	263	12	873.43	-0.71	-0.0591	263	12	874.14	25	878+50				
		871.48	-1.18	-0.0630		18.65	872.66	-0.76	-0.0630	263	12	873.41	-0.76	-0.0630	263	12	874.17	25	878+75				
		871.30	-1.28	-0.0670		19.11	872.58	-0.80	-0.0670	263	12	873.39	-0.80	-0.0670	263	12	874.19	25	879+00				
		871.12	-1.39	-0.0710		19.56	872.51	-0.85	-0.0710	263	12	873.36	-0.85	-0.0710	263	12	874.21	25	879+25				
		870.93	-1.50	-0.0749		20.05	872.43	-0.90	-0.0749	263	12	873.33	-0.90	-0.0749	263	12	874.23	25	879+50				
S.C.		870.74	-1.62	-0.0789		20.52	872.36	-0.95	-0.0789	263	12	873.30	-0.95	-0.0789	263	12	874.25	25	879+75				
		870.68	-1.65	-0.0800		20.65	872.33	-0.96	-0.0800		12	873.29	-0.96	-0.0800		12	874.25	25	879+82.15	S.C			
		870.66	-1.68	-0.0800		20.98	872.34	-0.96	-0.0800		12	873.30	-0.96	-0.0800		12	874.26	25	880+00				
		870.62	-1.72	-0.0800		21.45	872.34	-0.96	-0.0800		12	873.30	-0.96	-0.0800		12	874.26	25	880+25				
		870.59	-1.75	-0.0800		21.92	872.34	-0.96	-0.0800		12	873.30	-0.96	-0.0800		12	874.26	25	880+50				
		870.55	-1.79	-0.0800		22.39	872.34	-0.96	-0.0800		12	873.30	-0.96	-0.0800		12	874.26	25	880+75				
		870.50	-1.83	-0.0800		22.85	872.33	-0.96	-0.0800		12	873.29	-0.96	-0.0800		12	874.25	25	881+00				
		870.44	-1.87	-0.0800		23.32	872.31	-0.96	-0.0800		12	873.27	-0.96	-0.0800		12	874.23	25	881+25				
		870.40	-1.90	-0.0800		23.79	872.30	-0.96	-0.0800		12	873.26	-0.96	-0.0800		12	874.22	25	881+50				
		870.33	-1.94	-0.0800		24.26	872.27	-0.96	-0.0800		12	873.23	-0.96	-0.0800		12	874.19	25	881+75				
		870.26	-1.98	-0.0800		24.73	872.24	-0.96	-0.0800		12	873.20	-0.96	-0.0800		12	874.16	25	882+00				
		870.23	-2.00	-0.0800		25	872.23	-0.96	-0.0800		12	873.19	-0.96	-0.0800		12	874.15	25	882+14.45				
		870.21	-2.00	-0.0800		25	872.21	-0.96	-0.0800		12	873.17	-0.96	-0.0800		12	874.13	25	882+25				
		870.17	-2.00	-0.0800		25	872.17	-0.96	-0.0800		12	873.13	-0.96	-0.0800		12	874.09	25	882+50				
		870.13	-2.00	-0.0800		25	872.13	-0.96	-0.0800		12	873.09	-0.96	-0.0800		12	874.05	25	882+75				
		870.09	-2.00	-0.0800		25	872.09	-0.96	-0.0800		12	873.05	-0.96	-0.0800		12	874.01	25	883+00				
		870.03	-2.00	-0.0800		25	872.03	-0.96	-0.0800		12	872.99	-0.96	-0.0800		12	873.95	25	883+25				
		869.98	-2.00	-0.0800		25	871.98	-0.96	-0.0800		12	872.94	-0.96	-0.0800		12	873.90	25	883+50				
		869.92	-2.00	-0.0800		25	871.92	-0.96	-0.0800		12	872.88	-0.96	-0.0800		12	873.84	25	883+75				
		869.85	-2.00	-0.0800		25	871.85	-0.96	-0.0800		12	872.81	-0.96	-0.0800		12	873.77	25	884+00				
		869.78	-2.00	-0.0800		25	871.78	-0.96	-0.0800		12	872.74	-0.96	-0.0800		12	873.70	25	884+25				
		869.71	-2.00	-0.0800		25	871.71	-0.96	-0.0800		12	872.67	-0.96	-0.0800		12	873.63	25	884+50				
		869.64	-2.00	-0.0800		25	871.64	-0.96	-0.0800		12	872.60	-0.96	-0.0800		12	873.56	25	884+75				
		869.57	-2.00	-0.0800		25	871.57	-0.96	-0.0800		12	872.53	-0.96	-0.0800		12	873.49	25	885+00				
		869.50	-2.00	-0.0800		25	8																

SUPERELEVATION TABLE
SOUTHBOUND IR 75

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SUPERELEVATION TABLE																				CALCULATED	MJM	CHECKED	JLG	
P.I. STA. 895+32.44										Dc = 2° 59'59"														
REMARKS	STATION	NORTHBOUND INSIDE EDGE (PROFILE GRADE)		NORTHBOUND CENTERLINE OF LANES					NORTHBOUND OUTSIDE EDGE OF OUTSIDE LANES					NORTHBOUND OUTSIDE EDGE OF DECEL. LANE					REMARKS					
		OFFSET	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION	ELEVATION						
	888+50	25	871.33	12		0.0800	0.96	872.29	12		0.0800	0.96	873.25											
	888+75	25	871.26	12		0.0800	0.96	872.22	12		0.0800	0.96	873.18											
	889+00	25	871.19	12		0.0800	0.96	872.15	12		0.0800	0.96	873.11	0		0.0800	0.00	873.11						
	889+25	25	871.12	12		0.0800	0.96	872.08	12		0.0800	0.96	873.04	3		0.0800	0.24	873.28						
	889+50	25	871.05	12		0.0800	0.96	872.01	12		0.0800	0.96	872.97	6		0.0800	0.48	873.45						
	889+75	25	870.98	12		0.0800	0.96	871.94	12		0.0800	0.96	872.90	9		0.0800	0.72	873.62						
PC Ramp K	889+99.23	25	870.91	12		0.0800	0.96	871.87	12		0.0800	0.96	872.83	11.86		0.0800	0.95	873.78						
	890+00	25	870.91	12		0.0800	0.96	871.87	12		0.0800	0.96	872.83	12		0.0800	0.96	873.79						
	890+25	25	870.84	12		0.0800	0.96	871.80	12		0.0800	0.96	872.76	12		0.0800	0.96	873.72						
	890+50	25	870.77	12		0.0800	0.96	871.73	12		0.0800	0.96	872.69	12		0.0800	0.96	873.65						
	890+75	25	870.70	12		0.0800	0.96	871.66	12		0.0800	0.96	872.62	12		0.0800	0.96	873.58						
	891+00	25	870.63	12		0.0800	0.96	871.59	12		0.0800	0.96	872.55	12		0.0800	0.96	873.51						
	891+25	25	870.56	12		0.0800	0.96	871.52	12		0.0800	0.96	872.48	12		0.0800	0.96	873.44						
	891+50	25	870.49	12		0.0800	0.96	871.45	12		0.0800	0.96	872.41	12		0.0800	0.96	873.37						
	891+75	25	870.42	12		0.0800	0.96	871.38	12		0.0800	0.96	872.34	12		0.0800	0.96	873.30						
	892+00	25	870.35	12		0.0800	0.96	871.31	12		0.0800	0.96	872.27	12		0.0800	0.96	873.23						
	892+21.17	25	870.30	12		0.0800	0.96	871.26	12		0.0800	0.96	872.22	12	233	0.0800	0.96	873.18						
	892+25	25	870.29	12		0.0800	0.96	871.25	12		0.0800	0.96	872.21	12	233	0.0786	0.94	873.15						
	892+50	25	870.24	12		0.0800	0.96	871.20	12		0.0800	0.96	872.16	12	233	0.0697	0.84	873.00						
	892+68.70	25	870.20	12		0.0800	0.96	871.16	12		0.0800	0.96	872.12	12	233	0.0630	0.76	872.88	PCC Ramp G					
	892+75	25	870.19	12		0.0800	0.96	871.15	12		0.0800	0.96	872.11											
	893+00	25	870.14	12		0.0800	0.96	871.10	12		0.0800	0.96	872.06											
	893+25	25	870.09	12		0.0800	0.96	871.05	12		0.0800	0.96	872.01											
	893+50	25	870.04	12		0.0800	0.96	871.00	12		0.0800	0.96	871.96											
	893+75	25	869.98	12		0.0800	0.96	870.94	12		0.0800	0.96	871.90											
	894+00	25	869.93	12		0.0800	0.96	870.89	12		0.0800	0.96	871.85											
	894+25	25	869.88	12		0.0800	0.96	870.84	12		0.0800	0.96	871.80											
	894+50	25	869.83	12		0.0800	0.96	870.79	12		0.0800	0.96	871.75											
	894+75	25	869.78	12		0.0800	0.96	870.74	12		0.0800	0.96	871.70											
	895+00	25	869.73	12		0.0800	0.96	870.69	12		0.0800	0.96	871.65											
	895+25	25	869.67	12		0.0800	0.96	870.63	12		0.0800	0.96	871.59											
	895+50	25	869.62	12		0.0800	0.96	870.58	12		0.0800	0.96	871.54											
	895+75	25	869.57	12		0.0800	0.96	870.53	12		0.0800	0.96	871.49											
	896+00	25	869.52	12		0.0800	0.96	870.48	12		0.0800	0.96	871.44											
	896+25	25	869.47	12		0.0800	0.96	870.43	12		0.0800	0.96	871.39											
	896+50	25	869.42	12		0.0800	0.96	870.38	12		0.0800	0.96	871.34											
	896+75	25	869.36	12		0.0800	0.96	870.32	12		0.0800	0.96	871.28											
	897+00	25	869.31	12		0.0800	0.96	870.27	12		0.0800	0.96	871.23											
	897+25	25	869.26	12		0.0800	0.96	870.22	12		0.0800	0.96	871.18											
	897+50	25	869.21	12		0.0800	0.96	870.17	12		0.0800	0.96	871.13											
	897+75	25	869.15	12		0.0800	0.96	870.11	12		0.0800	0.96	871.07											
	898+00	25	869.08	12		0.0800	0.96	870.04	12		0.0800	0.96	871.00											
	898+25	25	868.99	12		0.0800	0.96	869.95	12		0.0800	0.96	870.91											
	898+50	25	868.88	12		0.0800	0.96	869.84	12		0.0800	0.96	870.80											
	898+75	25	868.75	12		0.0800	0.96	869.71	12		0.0800	0.96	870.67											
	899+00	25	868.60	12		0.0800	0.96	869.56	12		0.0800	0.96	870.52											
	899+25	25	868.43	12		0.0800	0.96	869.39	12		0.0800	0.96	870.35											
	899+50	25	868.25	12		0.0800	0.96	869.21	12		0.0800	0.96	870.17											
	899+75	25	868.04	12		0.0800	0.96	869.00	12		0.0800	0.96	869.96											
	900+00	25	867.82	12		0.0800	0.96	868.78	12		0.0800	0.96	869.74											
	900+25	25	867.58	12		0.0800	0.96	868.54	12		0.0800	0.96	869.50											
	900+50	25	867.32	12		0.0800	0.96	868.28	12		0.0800	0.96	869.24											
	900+75	25	867.04	12		0.0800	0.96	868.00	12		0.0800	0.96	868.96											
	901+00	25	866.74	12		0.0800	0.96	867.70	12		0.0800	0.96	868.66											
	901+25	25	866.42	12		0.0800	0.96	867.38	12		0.0800	0.96	868.34											
	901+50	25	866.09	12		0.0800	0.96	867.05	12		0.0800	0.96	868.01											
	901+75																							

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SUPERELEVATION TABLE																				CALCULATED	MJM	CHECKED	JLG
P.I. STA. 895+32.44										Dc = 2° 59'59"													
REMARKS	SOUTHBOUND OUTSIDE EDGE OF ACCEL. LANE					SOUTHBOUND OUTSIDE EDGE OF OUTSIDE LANE					SOUTHBOUND CENTERLINE OF LANES					SOUTHBOUND INSIDE EDGE (PROFILE GRADE)		STATION	REMARKS				
	ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	OFFSET						
	868.59	-2.00	-0.0800		25	870.59	-0.96	-0.0800		12	871.55	-0.96	-0.0800		12	872.51	25	888+50					
	868.52	-2.00	-0.0800		25	870.52	-0.96	-0.0800		12	871.48	-0.96	-0.0800		12	872.44	25	888+75					
	868.45	-2.00	-0.0800		25	870.45	-0.96	-0.0800		12	871.41	-0.96	-0.0800		12	872.37	25	889+00					
	868.38	-2.00	-0.0800		25	870.38	-0.96	-0.0800		12	871.34	-0.96	-0.0800		12	872.30	25	889+25					
	868.31	-2.00	-0.0800		25	870.31	-0.96	-0.0800		12	871.27	-0.96	-0.0800		12	872.23	25	889+50					
	868.24	-2.00	-0.0800		25	870.24	-0.96	-0.0800		12	871.20	-0.96	-0.0800		12	872.16	25	889+75					
PC Ramp K	868.18	-2.00	-0.0800		25	870.18	-0.96	-0.0800		12	871.14	-0.96	-0.0800		12	872.10	25	889+99.23					
						870.17	-0.96	-0.0800		12	871.13	-0.96	-0.0800		12	872.09	25	890+00					
						870.10	-0.96	-0.0800		12	871.06	-0.96	-0.0800		12	872.02	25	890+25					
						870.03	-0.96	-0.0800		12	870.99	-0.96	-0.0800		12	871.95	25	890+50					
						869.96	-0.96	-0.0800		12	870.92	-0.96	-0.0800		12	871.88	25	890+75					
						869.89	-0.96	-0.0800		12	870.85	-0.96	-0.0800		12	871.81	25	891+00					
						869.82	-0.96	-0.0800		12	870.78	-0.96	-0.0800		12	871.74	25	891+25					
						869.75	-0.96	-0.0800		12	870.71	-0.96	-0.0800		12	871.67	25	891+50					
						869.68	-0.96	-0.0800		12	870.64	-0.96	-0.0800		12	871.60	25	891+75					
						869.61	-0.96	-0.0800		12	870.57	-0.96	-0.0800		12	871.53	25	892+00					
						869.57	-0.96	-0.0800		12	870.53	-0.96	-0.0800		12	871.49	25	892+21.17					
						869.56	-0.96	-0.0800		12	870.52	-0.96	-0.0800		12	871.48	25	892+25					
						869.51	-0.96	-0.0800		12	870.47	-0.96	-0.0800		12	871.43	25	892+50					
						869.47	-0.96	-0.0800		12	870.43	-0.96	-0.0800		12	871.39	25	892+68.70	PCC Ramp G				
						869.46	-0.96	-0.0800		12	870.42	-0.96	-0.0800		12	871.38	25	892+75					
						869.41	-0.96	-0.0800		12	870.37	-0.96	-0.0800		12	871.33	25	893+00					
						869.36	-0.96	-0.0800		12	870.32	-0.96	-0.0800		12	871.28	25	893+25					
						869.30	-0.96	-0.0800		12	870.26	-0.96	-0.0800		12	871.22	25	893+50					
						869.25	-0.96	-0.0800		12	870.21	-0.96	-0.0800		12	871.17	25	893+75					
						869.20	-0.96	-0.0800		12	870.16	-0.96	-0.0800		12	871.12	25	894+00					
						869.15	-0.96	-0.0800		12	870.11	-0.96	-0.0800		12	871.07	25	894+25					
						869.10	-0.96	-0.0800		12	870.06	-0.96	-0.0800		12	871.02	25	894+50					
						869.05	-0.96	-0.0800		12	870.01	-0.96	-0.0800		12	870.97	25	894+75					
						868.99	-0.96	-0.0800		12	869.95	-0.96	-0.0800		12	870.91	25	895+00					
						868.94	-0.96	-0.0800		12	869.90	-0.96	-0.0800		12	870.86	25	895+25					
						868.89	-0.96	-0.0800		12	869.85	-0.96	-0.0800		12	870.81	25	895+50					
						868.84	-0.96	-0.0800		12	869.80	-0.96	-0.0800		12	870.76	25	895+75					
						868.79	-0.96	-0.0800		12	869.75	-0.96	-0.0800		12	870.71	25	896+00					
						868.74	-0.96	-0.0800		12	869.70	-0.96	-0.0800		12	870.66	25	896+25					
						868.68	-0.96	-0.0800		12	869.64	-0.96	-0.0800		12	870.60	25	896+50					
						868.63	-0.96	-0.0800		12	869.59	-0.96	-0.0800		12	870.55	25	896+75					
						868.56	-0.96	-0.0800		12	869.52	-0.96	-0.0800		12	870.48	25	897+00					
						868.48	-0.96	-0.0800		12	869.44	-0.96	-0.0800		12	870.40	25	897+25					
						868.37	-0.96	-0.0800		12	869.33	-0.96	-0.0800		12	870.29	25	897+50					
						868.25	-0.96	-0.0800		12	869.21	-0.96	-0.0800		12	870.17	25	897+75					
						868.11	-0.96	-0.0800		12	869.07	-0.96	-0.0800		12	870.03	25	898+00					
						867.95	-0.96	-0.0800		12	868.91	-0.96	-0.0800		12	869.87	25	898+25					
						867.77	-0.96	-0.0800		12	868.73	-0.96	-0.0800		12	869.69	25	898+50					
						867.57	-0.96	-0.0800		12	868.53	-0.96	-0.0800		12	869.49	25	898+75					
						867.35	-0.96	-0.0800		12	868.31	-0.96	-0.0800		12	869.27	25	899+00					
						867.11	-0.96	-0.0800		12	868.07	-0.96	-0.0800		12	869.03	25	899+25					
						866.86	-0.96	-0.0800		12	867.82	-0.96	-0.0800		12	868.78	25	899+50					
						866.59	-0.96	-0.0800		12	867.55	-0.96	-0.0800		12	868.51	25	899+75					
						866.29	-0.96	-0.0800		12	867.25	-0.96	-0.0800		12	868.21	25	900+00					
						866.98	-0.96	-0.0800		12	867.94	-0.96	-0.0800		12	868.90	25	900+25					
						866.65	-0.96	-0.0800		12	867.61	-0.96	-0.0800		12	868.57	25	900+50					
						866.30	-0.96	-0.0800		12	867.26	-0.96	-0.0800		12	868.22	25	900+75					
						864.94	-0.96	-0.0800		12	865.90	-0.96	-0.0800		12	866.86	25	901+00					
						864.56	-0.96	-0.0800		12	865.52	-0.96	-0.0800		12	866.48	25	901+25					
						864.19	-0.96	-0.0800		12	865.15	-0.96	-0.0800		12	866.11	25	901+50					
						863.81	-0.96	-0.0800		12	864.77	-0.96	-0.0800		12	865.73	25	901+75					
						863.44	-0.96	-0.0800		12	864.40	-0.96	-0.0800		12	865.36	25	902+00					
						863.06	-0.96	-0.0800		12	864.02	-0.96	-0.0800		12	864.98	25	902+25					

SUPERELEVATION TABLE

SOUTHBOUND IR 75

ALL -75 -15.80

129
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SUPERELEVATION TABLE
SOUTHBOUND IR 75

ALL -75 -15.80

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SUPERELEVATION TABLE																												CALCULATED	MJM
P.I. STA. 895+32.44														Dc = 2° 59'59"														CHECKED	JLG
REMARKS	SOUTHBOUND OUTSIDE EDGE OF OUTSIDE LANE					SOUTHBOUND CENTERLINE OF LANES					SOUTHBOUND INSIDE EDGE (PROFILE GRADE)		STATION	NORTHBOUND INSIDE EDGE (PROFILE GRADE)		NORTHBOUND CENTERLINE OF LANES					NORTHBOUND OUTSIDE EDGE OF OUTSIDE LANE					REMARKS			
	ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	TRANSITION RATE	WIDTH	ELEVATION	OFFSET		OFFSET	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION	ELEVATION	WIDTH	TRANSITION RATE	CROSS SLOPE	ELEVATION CORRECTION	ELEVATION				
	862.69	-0.96	-0.0800		12	863.65	-0.96	-0.0800		12	864.61	25	902+50	25	864.61	12		0.0800	0.96	865.57	12		0.0800	0.96	866.53				
	862.32	-0.96	-0.0800		12	863.28	-0.96	-0.0800		12	864.24	25	902+75	25	864.24	12		0.0800	0.96	865.20	12		0.0800	0.96	866.16				
	861.94	-0.96	-0.0800		12	862.90	-0.96	-0.0800		12	863.86	25	903+00	25	863.86	12		0.0800	0.96	864.82	12		0.0800	0.96	865.78				
	861.57	-0.96	-0.0800		12	862.53	-0.96	-0.0800		12	863.49	25	903+25	25	863.49	12		0.0800	0.96	864.45	12		0.0800	0.96	865.41				
	861.19	-0.96	-0.0800		12	862.15	-0.96	-0.0800		12	863.11	25	903+50	25	863.11	12		0.0800	0.96	864.07	12		0.0800	0.96	865.03				
	860.82	-0.96	-0.0800		12	861.78	-0.96	-0.0800		12	862.74	25	903+75	25	862.74	12		0.0800	0.96	863.70	12		0.0800	0.96	864.66				
C.S.	860.66	-0.96	-0.0800		12	861.62	-0.96	-0.0800		12	862.58	25	903+86.09	25	862.58	12		0.0800	0.96	863.54	12		0.0800	0.96	864.50	C.S.			
	860.52	-0.93	-0.0778	263	12	861.46	-0.93	-0.0778	263	12	862.39	25	904+00	25	862.39	12	263	0.0778	0.93	863.32	12	263	0.0778	0.93	864.26				
	860.30	-0.89	-0.0738	263	12	861.18	-0.89	-0.0738	263	12	862.07	25	904+25	25	862.07	12	263	0.0738	0.89	862.96	12	263	0.0738	0.89	863.84				
	860.09	-0.84	-0.0699	263	12	860.93	-0.84	-0.0699	263	12	861.77	25	904+50	25	861.77	12	263	0.0699	0.84	862.61	12	263	0.0699	0.84	863.45				
	859.92	-0.79	-0.0659	263	12	860.71	-0.79	-0.0659	263	12	861.50	25	904+75	25	861.50	12	263	0.0659	0.79	862.29	12	263	0.0659	0.79	863.08				
	859.77	-0.74	-0.0620	263	12	860.52	-0.74	-0.0620	263	12	861.26	25	905+00	25	861.26	12	263	0.0620	0.74	862.00	12	263	0.0620	0.74	862.75				
	859.65	-0.70	-0.0580	263	12	860.34	-0.70	-0.0580	263	12	861.04	25	905+25	25	861.04	12	263	0.0580	0.70	861.74	12	263	0.0580	0.70	862.43				
	859.56	-0.65	-0.0541	263	12	860.21	-0.65	-0.0541	263	12	860.86	25	905+50	25	860.86	12	263	0.0541	0.65	861.51	12	263	0.0541	0.65	862.16				
	859.49	-0.60	-0.0501	263	12	860.09	-0.60	-0.0501	263	12	860.69	25	905+75	25	860.69	12	263	0.0501	0.60	861.29	12	263	0.0501	0.60	861.89				
	859.45	-0.55	-0.0462	263	12	860.01	-0.55	-0.0462	263	12	860.56	25	906+00	25	860.56	12	263	0.0462	0.55	861.11	12	263	0.0462	0.55	861.67				
	859.44	-0.51	-0.0422	263	12	859.94	-0.51	-0.0422	263	12	860.45	25	906+25	25	860.45	12	263	0.0422	0.51	860.96	12	263	0.0422	0.51	861.46				
	859.45	-0.46	-0.0382	263	12	859.91	-0.46	-0.0382	263	12	860.37	25	906+50	25	860.37	12	263	0.0382	0.46	860.83	12	263	0.0382	0.46	861.29				
	859.50	-0.41	-0.0343	263	12	859.91	-0.41	-0.0343	263	12	860.32	25	906+75	25	860.32	12	263	0.0343	0.41	860.73	12	263	0.0343	0.41	861.14				
	859.54	-0.36	-0.0303	263	12	859.91	-0.36	-0.0303	263	12	860.27	25	907+00	25	860.27	12	263	0.0303	0.36	860.63	12	263	0.0303	0.36	861.00				
	859.59	-0.32	-0.0264	263	12	859.90	-0.32	-0.0264	263	12	860.22	25	907+25	25	860.22	12	263	0.0264	0.32	860.54	12	263	0.0264	0.32	860.85				
	859.63	-0.27	-0.0224	263	12	859.90	-0.27	-0.0224	263	12	860.17	25	907+50	25	860.17	12	263	0.0224	0.27	860.44	12	263	0.0224	0.27	860.71				
	859.67	-0.22	-0.0185	263	12	859.89	-0.22	-0.0185	263	12	860.11	25	907+75	25	860.11	12	263	0.0185	0.22	860.33	12	263	0.0185	0.22	860.55				
	859.70	-0.19	-0.0160	263	12	859.89	-0.19	-0.0160	263	12	860.08	25	907+90.59	25	860.08	12	263	0.0160	0.19	860.27	12	263	0.0160	0.19	860.46				
	859.71	-0.19	-0.0160		12	859.90	-0.16	-0.0130	263	12	860.06	25	908+00	25	860.06	12		0.0160	0.19	860.25	12	263	0.0130	0.16	860.41				
	859.76	-0.19	-0.0160		12	859.95	-0.06	-0.0051	263	12	860.01	25	908+25	25	860.01	12		0.0160	0.19	860.20	12	263	0.0051	0.06	860.26				
S.T. STA. EQ.	859.79	-0.19	-0.0160		12	859.98	0.00	0.0000	263	12	859.98	25	908+41.09	25	859.98	12		0.0160	0.19	860.17	12	263	0.0000	0.00	860.17	S.T. STA. EQ.			
													908+43.47																
	859.80	-0.19	-0.0160		12	859.99	0.02	0.0021	263	12	859.97	25	908+50	25	859.97	12		0.0160	0.19	860.16	12	263	-0.0021	-0.02	860.14				
	859.85	-0.19	-0.0160		12	860.04	0.12	0.0100	263	12	859.92	25	908+75	25	859.92	12		0.0160	0.19	860.11	12	263	-0.0100	-0.12	859.99				
N.C.	859.87	-0.19	-0.0160		12	860.06	0.19	0.0160	263	12	859.87	25	908+93.97	25	859.87	12		0.0160	0.19	860.06	12	263	-0.0160	-0.19	859.87	N.C.			

SUPERELEVATION TABLE
NORTHBOUND AND SOUTHBOUND IR 75

ALL-75-15.80

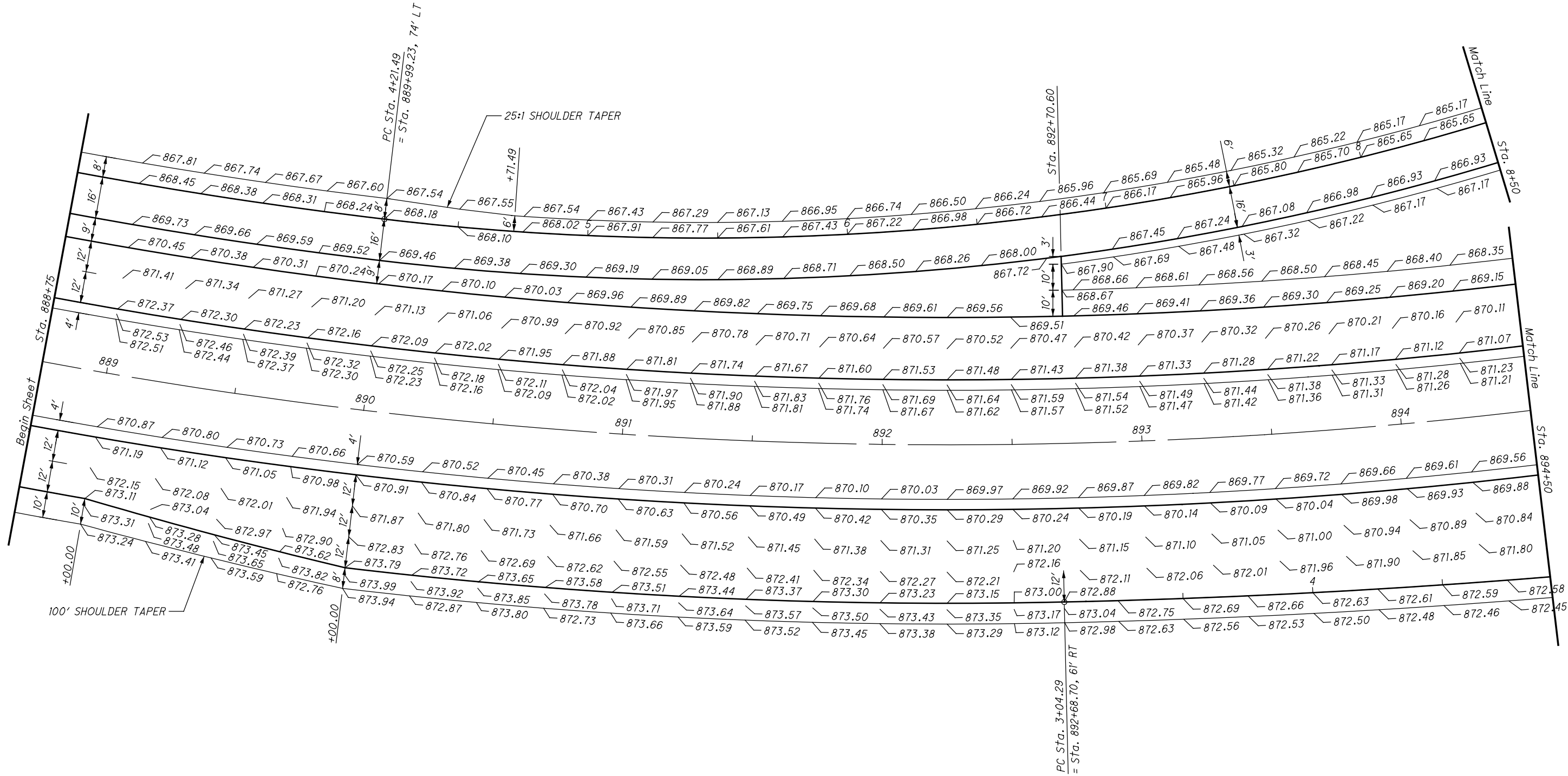
130
188

SUPERELEVATION TABLE
NORTHBOUND AND SOUTHBOUND IR 75

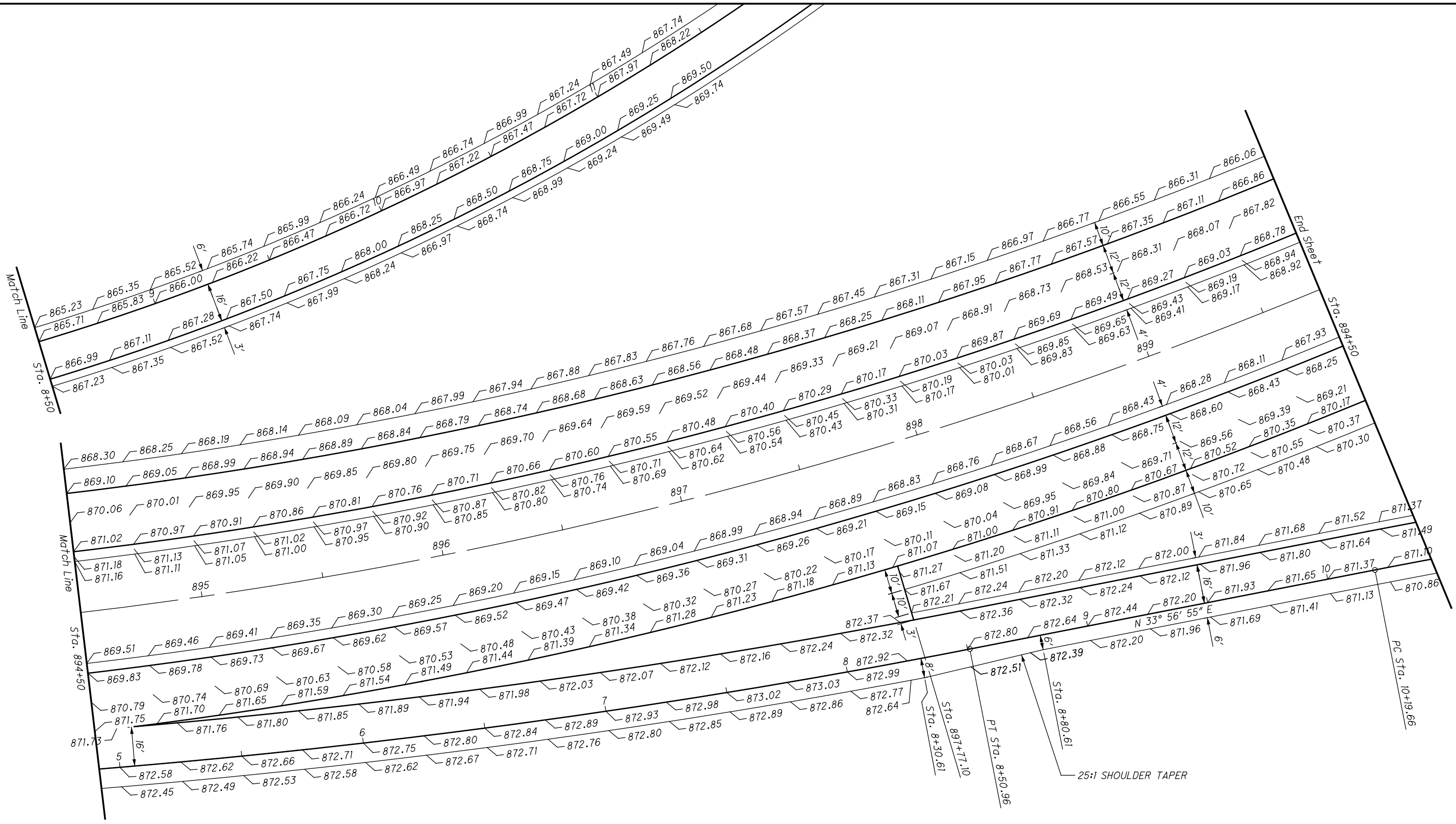
ALL -75 -15.80

SUPERELEVATION TABLE (RAMP G)													
P.I. STA. 11+41.54						Dc = 2° 00'00"							
LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE						REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION		
872.12	233	-0.76	-0.0630	12	3+04.29	872.88						PC	
872.08	233	-0.67	-0.0556	12.04	3+25	872.75							
872.08		-0.65	-0.0540	12.06	3+29.45	872.73						FS	
872.03		-0.66	-0.0540	12.21	3+50	872.69							
871.99		-0.67	-0.0540	12.49	3+75	872.66							
871.93		-0.70	-0.0540	12.90	4+00	872.63							
871.88		-0.73	-0.0540	13.43	4+25	872.61							
871.83		-0.76	-0.0540	14.09	4+50	872.59							
871.78		-0.80	-0.0540	14.86	4+75	872.58							
871.73		-0.85	-0.0540	15.76	5+00	872.58							
871.72		-0.86	-0.0540	16	5+06.09	872.58							
871.76		-0.86	-0.0540	16	5+25	872.62							
871.80		-0.86	-0.0540	16	5+50	872.66							
871.85		-0.86	-0.0540	16	5+75	872.71							
871.89		-0.86	-0.0540	16	6+00	872.75							
871.94		-0.86	-0.0540	16	6+25	872.80							
871.98		-0.86	-0.0540	16	6+50	872.84							
872.03		-0.86	-0.0540	16	6+75	872.89							
872.07		-0.86	-0.0540	16	7+00	872.93							
872.12		-0.86	-0.0540	16	7+25	872.98							
872.16		-0.86	-0.0540	16	7+50	873.02							
872.17	213	-0.86	-0.0540	16	7+58.94	873.03						FS	
872.24	213	-0.79	-0.0493	16	7+75	873.03							
872.32	213	-0.67	-0.0420	16	8+00	872.99							
872.37	213	-0.55	-0.0346	16	8+25	872.92							
872.36	213	-0.44	-0.0273	16	8+50	872.80							
872.37	213	-0.43	-0.0270	16	8+50.96	872.80						PT	
872.32	213	-0.32	-0.0199	16	8+75	872.64							
872.24	213	-0.20	-0.0126	16	9+00	872.44							
872.12	213	-0.08	-0.0053	16	9+25	872.20							
872.01	213	0.00	0.0000	16	9+42.98	872.01						FLAT	
871.96	213	0.03	0.0021	16	9+50	871.93							
871.80	213	0.15	0.0094	16	9+75	871.65							
871.64	213	0.27	0.0167	16	10+00	871.37							
871.52	213	0.36	0.0225	16	10+19.66	871.16						PC	
871.49	213	0.39	0.0241	16	10+25	871.10							
871.32	213	0.50	0.0314	16	10+50	870.82							
871.16	213	0.62	0.0387	16	10+75	870.54							
871.02		0.72	0.0450	16	10+96.34	870.30						FS	
870.98		0.72	0.0450	16	11+00	870.26							
870.70		0.72	0.0450	16	11+25	869.98							
870.43		0.72	0.0450	16	11+50	869.71							
870.17		0.72	0.0450	16	11+75	869.45							
869.98		0.72	0.0450	16	12+00	869.26							
869.83		0.72	0.0450	16	12+25	869.11							
869.74		0.72	0.0450	16	12+50	869.02							
869.71		0.72	0.0450	16	12+75	868.99							
869.73		0.72	0.0450	16	13+00	869.01							
869.77	213	0.72	0.0450	16	13+15.46	869.05						FS	
869.76	213	0.68	0.0422	16	13+25	869.08							
869.77	213	0.56	0.0349	16	13+50	869.21							
869.80	213	0.48	0.0300	16	13+66.58	869.32						PT	
869.83	213	0.44	0.0275	16	13+75	869.39							
869.95	213	0.32	0.0202	16	14+00	869.63							
870.03		0.26	0.0160	16	14+14.29	869.77							
870.13		0.26	0.0160	16	14+25	869.87							
870.17		0.26	0.0160	16	14+28.57	869.91						POT	

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0102040

HORIZONTAL SCALE IN FEET

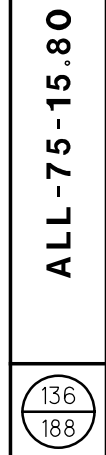
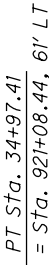
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MJM

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JLG

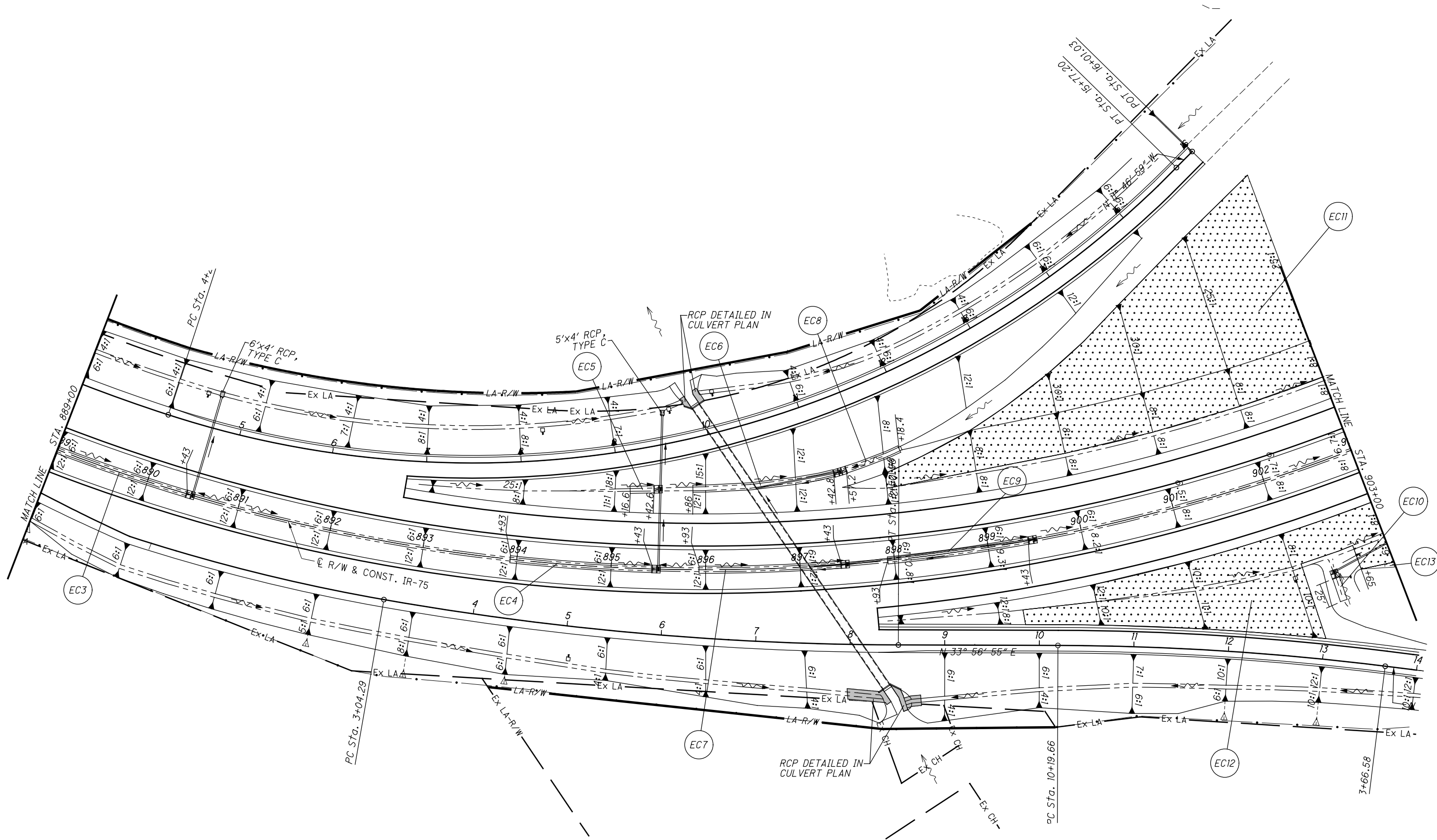
INTERCHANGE DETAILS
STA. 894+50 TO STA. 899+75







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- +++++ ITEM 653 TOPSOIL FURNISHED AND PLACED, AS PER PLAN (4")
- ITEM 670 SLOPE EROSION PROTECTION
- ITEM 659 SEEDING AND MULCHING
- ITEM 659 TOPSOIL (4")
- ITEM 670 SLOPE EROSION PROTECTION
- SEEDING AND MULCHING INCLUDED IN CROSS SECTIONS

139
188

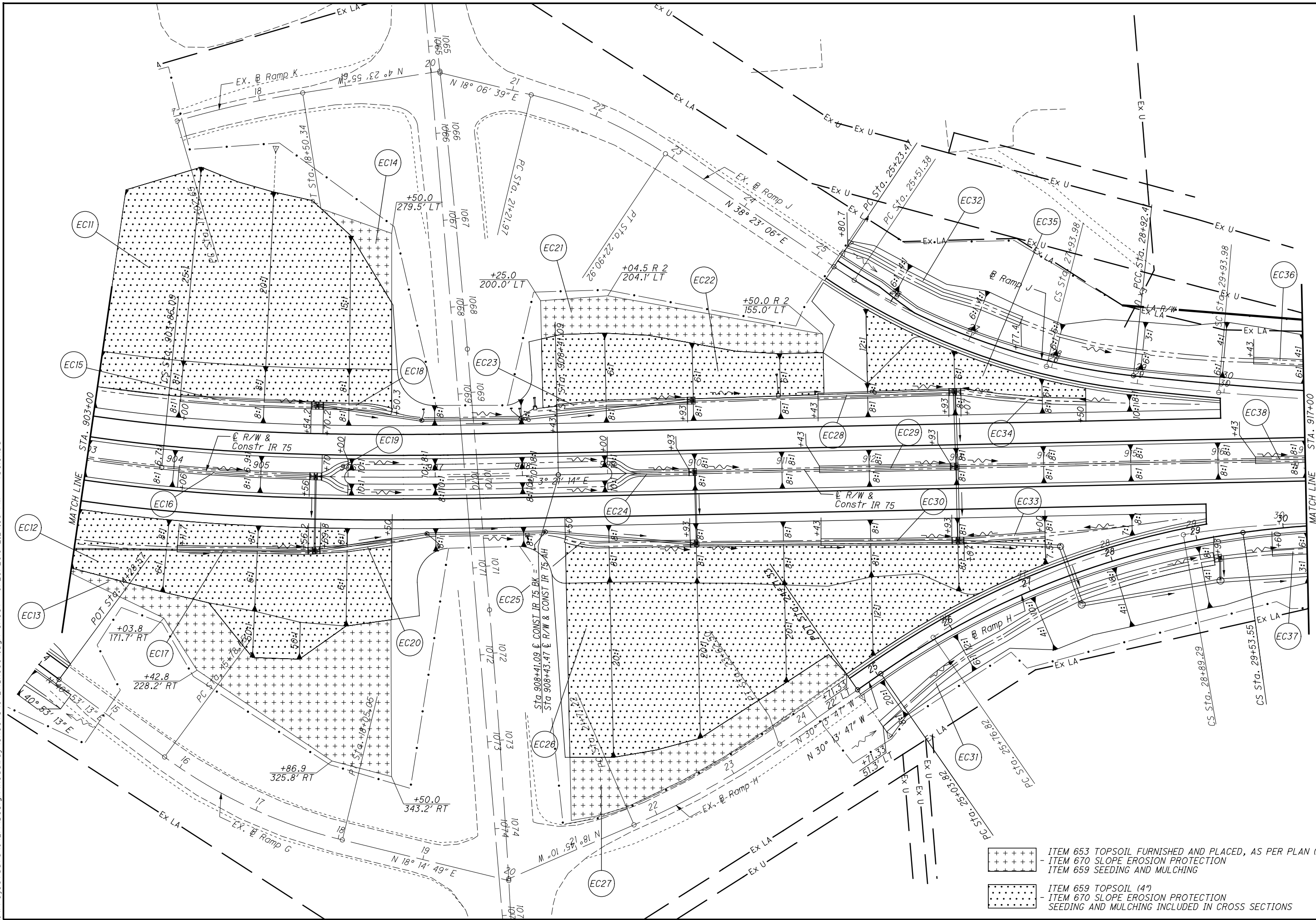
ALL -75-15.80

GRADING AND EROSION CONTROL DETAILS
STA.889+00 TO STA. 903+00

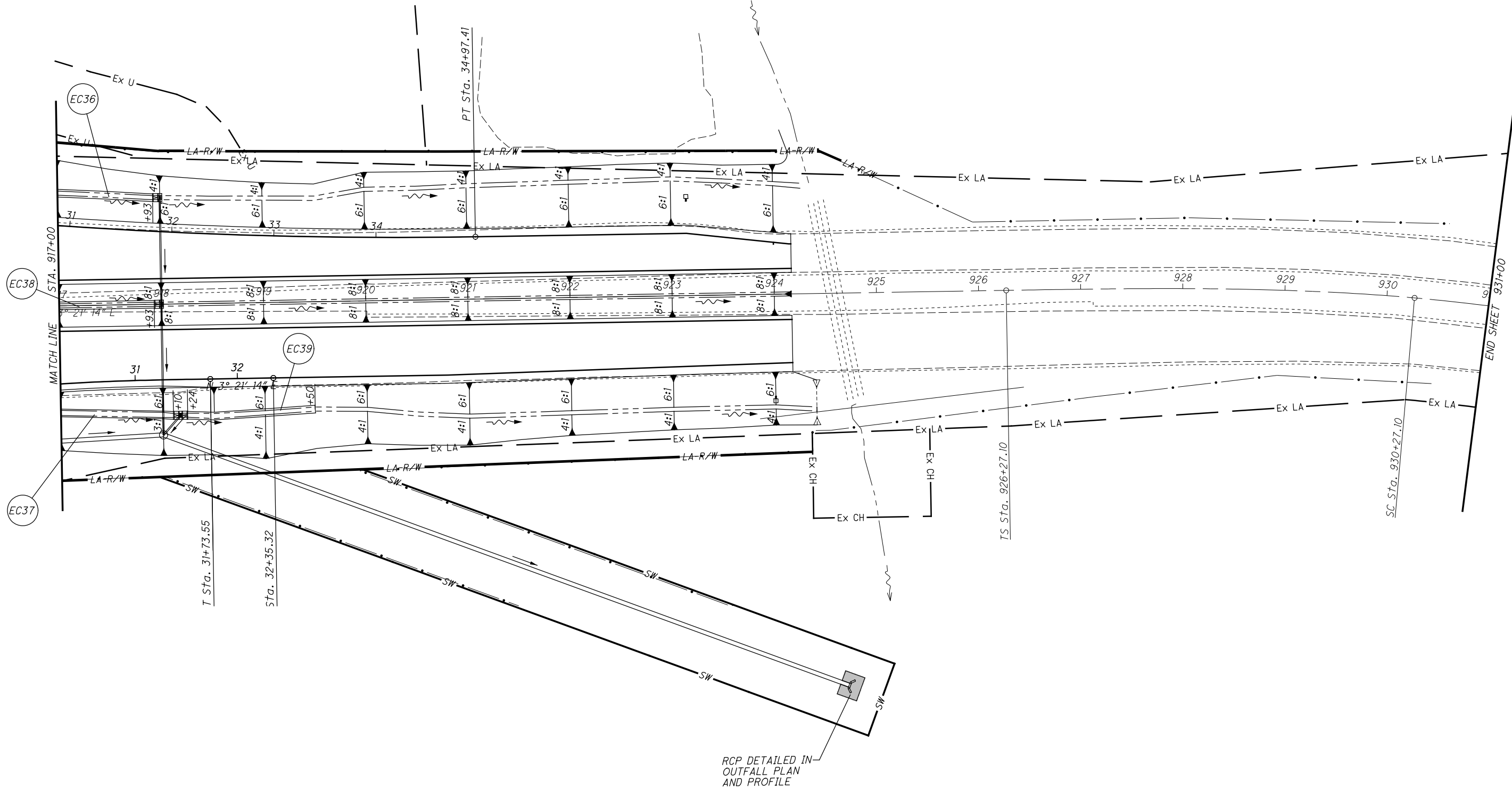
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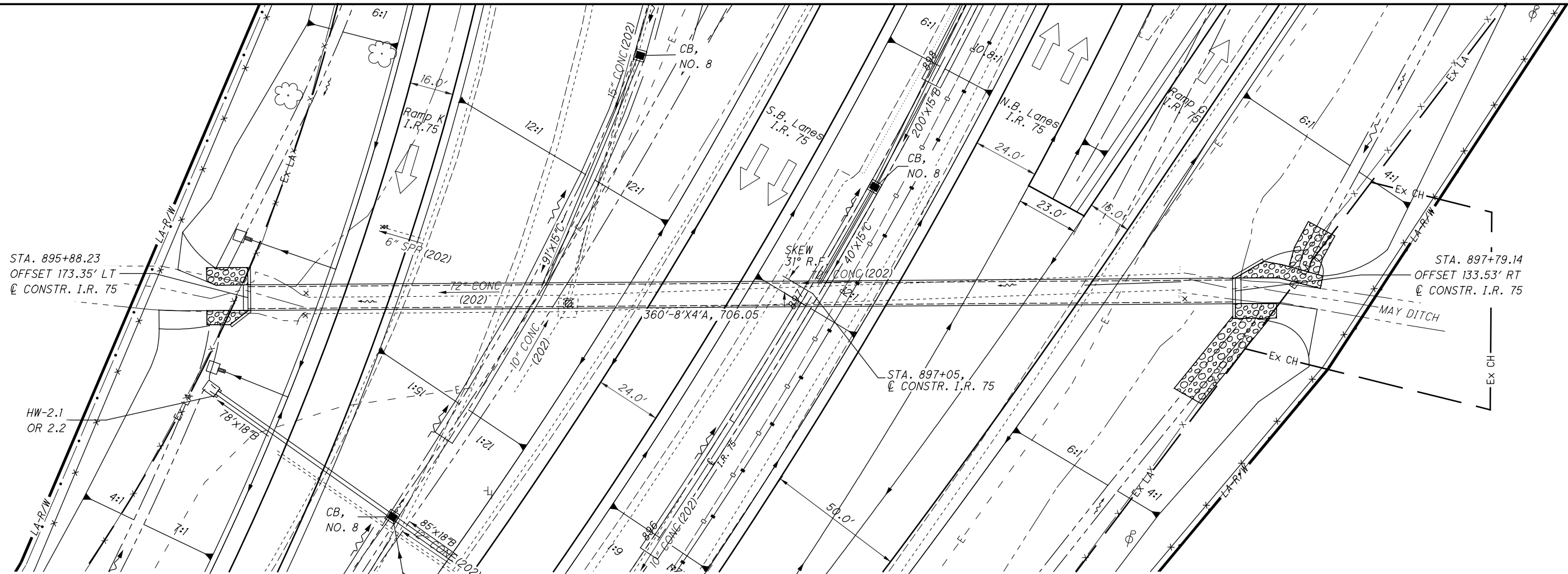
CHECKED
IMK

0 50 100
HORIZONTAL
SCALE IN FEET



- +++++ ITEM 653 TOPSOIL FURNISHED AND PLACED, AS PER PLAN (4")
- - - - - ITEM 670 SLOPE EROSION PROTECTION
- ITEM 659 SEEDING AND MULCHING
- ITEM 659 TOPSOIL (4")
- - - - - ITEM 670 SLOPE EROSION PROTECTION
- SEEDING AND MULCHING INCLUDED IN CROSS SECTIONS



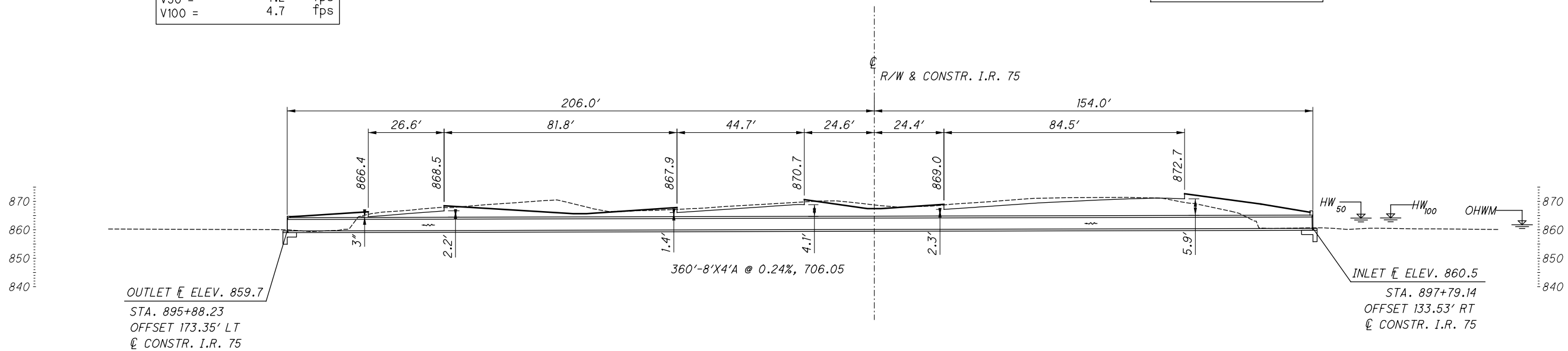


HYDRAULIC DATA	
DRAINAGE AREA =	326 AC.
Q50 =	129.0 cfs
Q100 =	145.0 cfs
HW50 =	864.1 FT.
HW100 =	864.2 FT.
V50 =	4.2 fps
V100 =	4.7 fps

 - ROCK CHANNEL PROTECTION, TYPE C
18" THICK

EXISTING CULVERT
TYPE = 72" CONC
LENGTH = 315'
DATE BUILT = 1965

PROPOSED CULVERT
DESIGN SERVICE LIFE - 75 YEARS
STREAM pH - 7.5
NON-ABRASIVE
ORDINARY HIGH WATER MARK - 861.8
CULVERT FILE NO. - 1979569
ESTIMATED QUANTITIES ON SHEET 143



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DESIGN SPECIFICATIONS: THIS STANDARD DRAWING CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2014, INCLUDING THE 2015 & 2016 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

DESIGN DATA: THE FOLLOWING DESIGN DATA IS ASSUMED:

INTERNAL ANGLE OF FRICTION OF BACKFILL SOIL, $\phi_{br} = 30^\circ$
TOTAL UNIT WEIGHT OF BACKFILL SOIL = 120 PCF
INTERNAL ANGLE OF FRICTION (DRAINED), FOUNDATION SOIL, $\phi_p = 28^\circ$
UNDRAINED SHEAR STRENGTH (COHESIVE), FOUNDATION SOIL, $S_{ur} = 1500$ PSF
UNIT WEIGHT OF CONCRETE = 150 PCF
SLOPE OF BACKFILL = 2:1 (TYPE A & B HEADWALLS)
HEIGHT OF LIVE LOAD SURCHARGE = 2 FT (TYPE C HEADWALLS)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4000 PSI
(FOOTING, WINGWALL AND FORESLOPE WALL)

REINFORCING STEEL - ASTM A615, A616, OR A617
GRADE 60 MINIMUM YIELD STRENGTH
60,000 PSI (ALL REINFORCING SHALL BE EPOXY COATED)

WINGWALL AND FORESLOPE WALL DESIGN IS BASED ON ODOT DESIGN DATA SHEET HWDD-1, DATED 7/20/18, TYPE B & C HEADWALLS WITH DESIGN HEIGHT "H" = 7'-6" (INLET) AND 6'-6" (OUTLET).

FORESLOPE WALL ANCHOR DOWELS: ANCHOR PER CMS 510 WITH NONSHRINK, NONMETALLIC GROUT CONFORMING TO CMS 705.20 AND TO A DEPTH SPECIFIED ON SHEETS 145-146. PAYMENT FOR DOWEL HOLES, GROUT AND INSTALLATION SHALL BE INCLUDED WITH ITEM 511.

THREADED INSERTS OR NON-PROTRUDING MECHANICAL CONNECTORS CAPABLE OF DEVELOPING AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE REINFORCEMENT SHOWN ARE AN ACCEPTABLE ALTERNATIVE TO RESIN BONDING. MAINTAIN A MINIMUM COVER OF 3 INCHES AT THE BOTTOM OF THE CULVERT SLAB. MECHANICAL CONNECTORS SHALL HAVE AN "L-SHAPED" BAR INSIDE THE CULVERT WITH A MINIMUM HORIZONTAL LENGTH OF 12 INCHES. THE DEPARTMENT WILL CONSIDER PAYMENT FOR INSERTS OR MECHANICAL CONNECTORS AS INCIDENTAL TO ITEM 611.

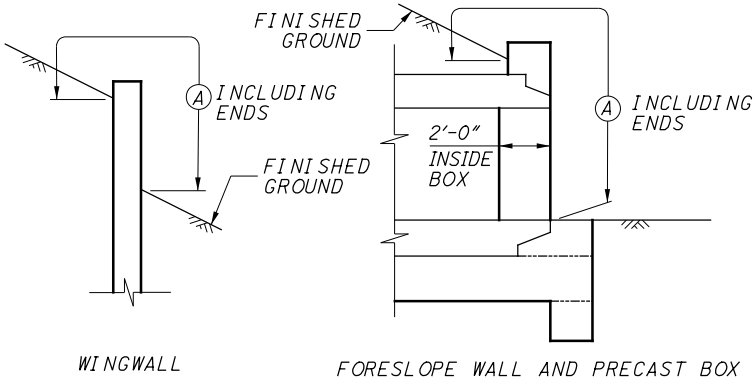
POROUS BACKFILL WITH FILTER FABRIC 1'-6" THICK SHALL BE PLACED BEHIND THE WINGWALLS ONLY AND SHALL EXTEND TO 12" BELOW THE EMBANKMENT SURFACE. GEOTEXTILE FABRIC TYPE A SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND REPLACED EXCAVATION ADJACENT TO THE STRUCTURE. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL AND RETURN 6" ABOVE THE TOP ELEVATION OF THE WEEPHOLE.

WEEPHOLES SHALL BE PLACED 6" TO 12" ABOVE THE NORMAL WATER ELEVATION OR GROUND LINE AND SHALL HAVE A MAXIMUM SPACING OF 10'-0". A MINIMUM OF ONE WEEPHOLE SHALL BE PROVIDED PER WINGWALL.

PREFORMED EXPANSION JOINT FILLER: PREFORMED EXPANSION JOINT FILLER (PEJF) CONFORMING TO CMS 705.03, 1 INCH THICK, SHALL BE PLACED ABOVE THE FOOTING BETWEEN THE SIDES OF THE BOX CULVERT AND THE ENDS OF THE WINGWALLS. PAYMENT FOR MATERIALS AND INSTALLATION SHALL BE INCLUDED WITH ITEM 516 - 1" PREFORMED EXPANSION JOINT FILLER.

CULVERT NOTES

SEALING OF FORESLOPE WALL AND WINGWALLS: ALL EXPOSED FORESLOPE WALL AND WINGWALL CONCRETE SHALL BE SEALED WITH EPOXY-URETHANE SEALER. THE LIMITS SHALL BE AS SHOWN IN THE DIAGRAMS BELOW. PAYMENT FOR THE EPOXY-URETHANE SEALER SHALL BE PER ITEM 512 - SEALING OF CONCRETE SURFACES.



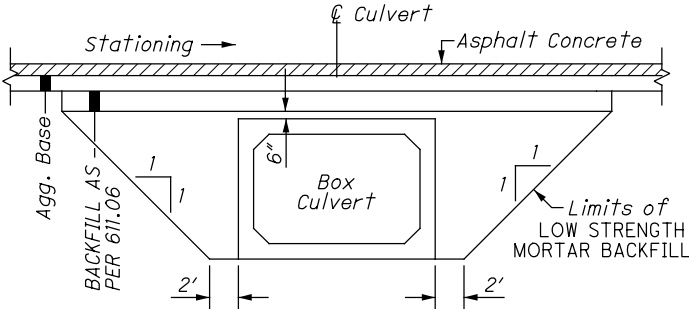
LIMITS OF ITEM 512-SEALING CONCRETE SURFACES
Ⓐ - SEAL ENTIRE CONCRETE SURFACE AREA

ITEM 613, LOW STRENGTH MORTAR BACKFILL

LOW STRENGTH MORTAR BACKFILL SHALL BE PLACED AS SHOWN AND Laterally to one foot beyond the edge of pavement on each side . Payment for low strength mortar back-fill shall be made only for backfill placed to the limits shown.

THE FOLLOWING ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED FOR THE WORK NOTED ABOVE.

ITEM 613 - LOW STRENGTH MORTAR BACKFILL = 279 CY



EXISTING STRUCTURE VERIFICATION

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

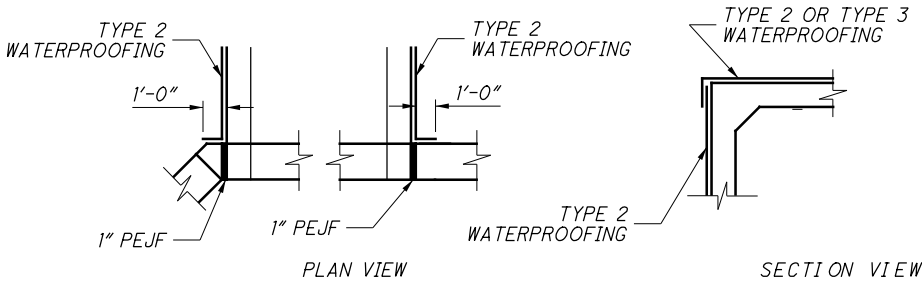
CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED ON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

CONDUIT FABRICATION AND APPROVAL

PRIOR TO CLOSING THE ROADWAY TO TRAFFIC, THE CONTRACTOR SHALL HAVE THE ITEM 611 TYPE A CONDUIT SPECIFIED IN THESE PLANS FABRICATED AND APPROVED. ALL COSTS ASSOCIATED WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PERTINENT CONDUIT.

WATERPROOFING: TYPE 2 WATERPROOFING, PER CMS 512 AND 711.25, SHALL EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF THE PRECAST CULVERT SECTIONS FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.

PAVEMENT SHALL NOT BE PLACED DIRECTLY ON TOP OF THE CULVERT, TYPE 2 WATERPROOFING, PER CMS 512 AND 711.25 SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE PRECAST CULVERT SECTIONS AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.



WATERPROOFING DETAILS

ITEM 511, CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN

IN ADDITION TO THE SPECIFICATIONS FOR ITEM 511 IN THE CMS, THIS ITEM SHALL INCLUDE ANY AND ALL EXCAVATION AND EMBANKMENT NEEDED TO CONSTRUCT THE WINGWALLS. THE EXCAVATION AND EMBANKMENT SHALL FOLLOW THE SPECIFICATIONS OUTLINED IN THE CMS FOR ITEM 203 EXCAVATION AND ITEM 203 EMBANKMENT.

PAYMENT WILL BE AT THE CONTRACT BID PRICE PER CUBIC YARD FOR ITEM 511, CLASS QC1 CONCRETE. THE FOLLOWING ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED IN THE CULVERT SUBSUMMARY FOR THE WORK NOTED ABOVE.

ITEM 511 - CLASS QC1 CONCRETE, RETAINING/WINGWALL, NOT INCLUDING FOOTING, AS PER PLAN = 9 CY

ITEM 511, CLASS QC1 CONCRETE, FOOTING, AS PER PLAN

IN ADDITION TO THE SPECIFICATIONS FOR ITEM 511 IN THE CMS, THIS ITEM SHALL INCLUDE ANY AND ALL EXCAVATION AND EMBANKMENT NEEDED TO CONSTRUCT THE FOOTINGS. THE EXCAVATION AND EMBANKMENT SHALL FOLLOW THE SPECIFICATIONS OUTLINED IN THE CMS FOR ITEM 203 EXCAVATION AND ITEM 203 EMBANKMENT.

PAYMENT WILL BE AT THE CONTRACT BID PRICE PER CUBIC YARD FOR ITEM 511, CLASS QC1 CONCRETE. THE FOLLOWING ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED IN THE CULVERT SUBSUMMARY FOR THE WORK NOTED ABOVE.

ITEM 511 - CLASS QC1 CONCRETE, FOOTING, AS PER PLAN = 24 CY

ESTIMATED QUANTITIES (CARRIED TO THE GENERAL SUMMARY)					
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	SEE SHEET
202	11000	LS		STRUCTURE REMOVED	
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
509	10000	2706	LB	EPOXY COATED REINFORCING STEEL	
511	46011	9	CY	CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING, AS PER PLAN	143
511	46511	24	CY	CLASS QC1 CONCRETE, FOOTING, AS PER PLAN	143
512	10100	46	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	33000	878	SY	TYPE 2 WATERPROOFING	
516	13600	28	SF	1" PREFORMED EXPANSION JOINT FILLER	
601	32200	54	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
611	94800	360	FT	8' X 4' CONDUIT, TYPE A, 706.05	
613	41200	279	CY	LOW STRENGTH MORTAR BACKFILL	

CALCULATED
KCO
CHECKED
JLG

CULVERT NOTES AND ESTIMATED QUANTITIES

ALL -75-15.80

143
188



NOTES

1. FOR CULVERT LOCATION PLAN, SEE SHEET 142.
2. FOR REINFORCING STEEL SCHEDULE, SEE SHEET 147.
3. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, WW501 IS A NO.5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
4. THE LAP SPLICE LENGTHS USED IN THESE DETAILS ARE AS FOLLOWS: 2'-5" FOR #5 BARS; 2'-11" FOR #6 BARS.
5. THE INTERFACE BETWEEN THE TOP OF FOOTING AND BASE OF WINGWALL STEM IS INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY 1/4" BY MEANS OF A SERRATED TROWEL.

LEGEND:

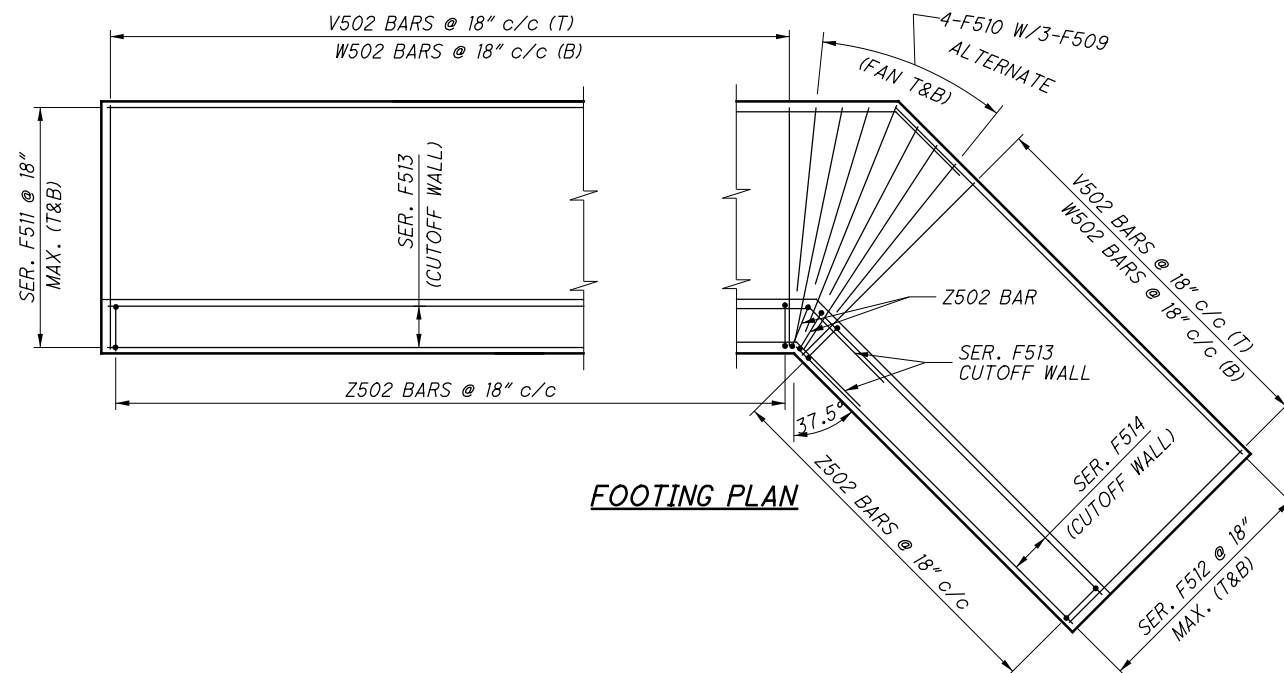
C.J.	CONSTRUCTION JOINT	N.F.	NEAR FACE
CLR.	CLEAR	SER.	SERIES
DIA.	DIAMETER	STR.	STRAIGHT
E.F.	EACH FACE	(T)	TOP
F.F.	FAR FACE	(B)	BOTTOM
MAX.	MAXIMUM	T&B	TOP AND BOTTOM
MIN.	MINIMUM	TYP.	TYPICAL
PEJF	PERFORMED EXPANSION JOINT FILLER	INC.	INCREMENT

 θ = $\angle$ CULVERT SKEW FROM LINE NORMAL TO ROADWAY
(ROUNDED TO NEAREST 15° INCREMENT FROM 0° TO 45°)

(POROUS BACKFILL NOT SHOWN FOR CLARITY)

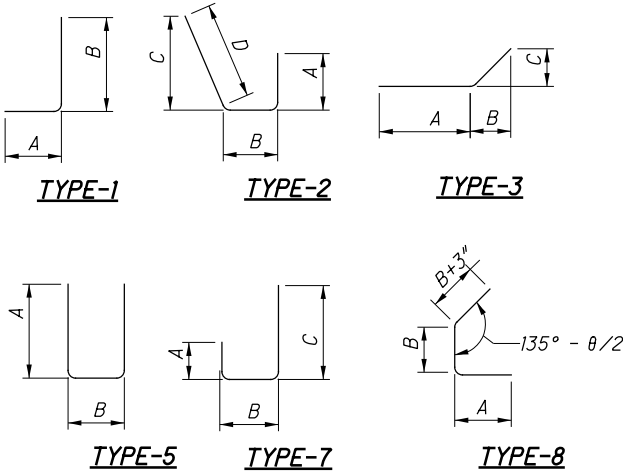


(CULVERT INLET BEVEL SHOWN)



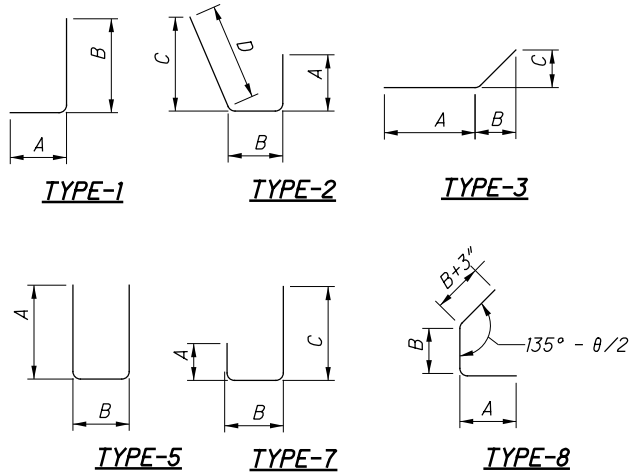
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TYPE B HEADWALL REINFORCING SCHEDULE (INLET)									
BAR MARK	NUMBER	LENGTH	WEIGHT (LBS.)	TYPE	BAR TYPE DIMENSIONS				INC.
					A	B	C	D	
WINGWALLS #1 & #2									
	1	4'- 4''							
X501	SERIES	TO	67	STR.				0'- 3 5/8''	
	of 11	7'- 4''							
X502	2	7'- 4''	16	STR.					
	1	4'- 1''							
X503	SERIES	TO	30	STR.				0'- 9 3/4''	
	of 5	7'- 4''							
Y501	18	4'- 1''	76	1	0'- 6''	3'- 8''			
	1	4'- 4''							
WW501	SERIES	TO	55	STR.				0'- 4 1/2''	
	of 9	7'- 4''							
WW502	6	11'- 8''	74	STR.					
	2	5'- 10''							
WW503	SERIES	TO	37	STR.				5'- 10 ''	
	of 2	11'- 8''							
WW504	5	3'- 10''	20	2	0'- 7''	0'- 4 ''	2'- 7 1/4''	3'- 0 ''	
WW505	2	14'- 5''	31	3	2'- 5''	2'- 10''	11'- 8''		
WW506	1	1'- 5''	2	8	0'- 7''	0'- 4 ''			
	1	4'- 1''							
WW507	SERIES	TO	30	STR.				0'- 9 3/4''	
	of 5	7'- 4''							
WW508	6	4'- 12''	32	STR.					
	2	1'- 8''							
WW509	SERIES	TO	21	STR.				1'- 8 ''	
	of 3	4'- 12''							
WW510	2	8'- 4''	18	3	2'- 5''	3'- 1''	4'- 12''		
FOOTING & CUTOFF WALL									
V501	19	5'- 2''	103	STR.					
W501	19	5'- 2''	103	STR.					
Z501	21	8'- 2''	179	5	3'- 7''	1'- 2''			
F501	6	4'- 8''	30	STR.					
F502	8	3'- 8''	31	STR.					
	2	15'- 10''			13'- 4 3/4''				
F503	SERIES	TO	181	3	TO	1'- 2 1/2''	2'- 1 1/4''	0'- 9 ''	
	of 5	18'- 10''			16'- 4 1/2''				
	2	10'- 8''							
F504	SERIES	TO	127	STR.				0'- 9 ''	
	of 5	13'- 8''							
	1	15'- 10''			13'- 4 3/4''				
F505	SERIES	TO	34	3	TO	1'- 2 1/2''	2'- 1 1/4''	0'- 8 ''	
	2	16'- 6''			14'- 1 ''				
	1	10'- 8''							
F506	SERIES	TO	23	STR.				0'- 8 1/8''	
	2	11'- 4''							
F507	7	3'- 10''	28	1	2'- 1''	1'- 10''			
F508	2	9'- 0''	19	STR.					
FORESLOPE WALL									
FS501	6	9'- 0''	57	STR.					
FS502	10	4'- 2''	44	5	1'- 10''	0'- 8''			
FS503	10	4'- 8''	49	7	1'- 10''	0'- 8''	2'- 5''		
		TOTAL	1,517						



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TYPE B HEADWALL REINFORCING SCHEDULE (OUTLET)									
BAR MARK	NUMBER	LENGTH	WEIGHT (LBS.)	TYPE	BAR TYPE DIMENSIONS				INC.
					A	B	C	D	
WINGWALLS #3 & #4									
	1	3'- 10''							
X504	SERIES	TO	38	STR.					0'- 5 ''
	of 7	6'- 4''							
X505	2	6'- 4''	14	STR.					
	1	4'- 7''							
X506	SERIES	TO	29	STR.					0'- 5 1/4''
	of 5	6'- 4''							
Y502	14	4'- 1''	60	1	0'- 6''	3'- 8''			
	1	3'- 10''							
WW511	SERIES	TO	38	STR.					0'- 5 ''
	of 7	6'- 4''							
WW512	6	7'- 11''	50	STR.					
	2	4'- 0''							
WW513	SERIES	TO	25	STR.					3'- 11 ''
	of 2	7'- 11''							
WW514	5	3'- 11''	21	2	0'- 7''	0'- 4 1/2''	2'- 8 3/4''	3'- 1/2''	
WW515	2	10'- 8''	23	3	2'- 5''	2'- 4''	7'- 11''		
WW516	1	1'- 6''	2	8	0'- 7''	0'- 4 1/2''			
	1	4'- 7''							
WW517	SERIES	TO	29	STR.					0'- 5 1/4''
	of 5	6'- 4''							
WW518	6	5'- 12''	38	STR.					
	2	3'- 0''							
WW519	SERIES	TO	19	STR.					3'- 0 ''
	of 2	5'- 12''							
WW520	2	8'- 8''	19	3	2'- 5''	1'- 7''	5'- 12''		
FOOTING & CUTOFF WALL									
V502	17	4'- 5''	79	STR.					
W502	17	4'- 5''	79	STR.					
Z502	19	8'- 2''	162	5	3'- 7''	1'- 2''			
F509	6	4'- 0''	26	STR.					
F510	8	3'- 2''	27	STR.					
	2	17'- 0''			14'- 7 ''				
F511	SERIES	TO	154	3	TO	1'- 1 ''	2'- 2 1/4''		0'- 11 ''
	of 4	19'- 9''			17'- 3 3/4''				
	2	7'- 1''							
F512	SERIES	TO	71	STR.					0'- 11 ''
	of 4	9'- 10''							
	1	17'- 0''			14'- 7 ''				
F513	SERIES	TO	37	3	TO	1'- 1 ''	2'- 2 1/4''		0'- 9 ''
	2	17'- 9''			15'- 3 1/2''				
	1	7'- 1''							
F514	SERIES	TO	16	STR.					0'- 9 ''
	2	7'- 10''							
F515	7	3'- 6''	26	1	1'- 9''	1'- 10''			
F516	2	9'- 0''	19	STR.					
FORESLOPE WALL									
FS504	4	9'- 0''	38	STR.					
FS505	10	2'- 1''	22	5	0'- 10''	0'- 8''			
FS506	10	2'- 8''	28	7	0'- 10''	0'- 8''	1'- 5''		
		TOTAL	1,189						

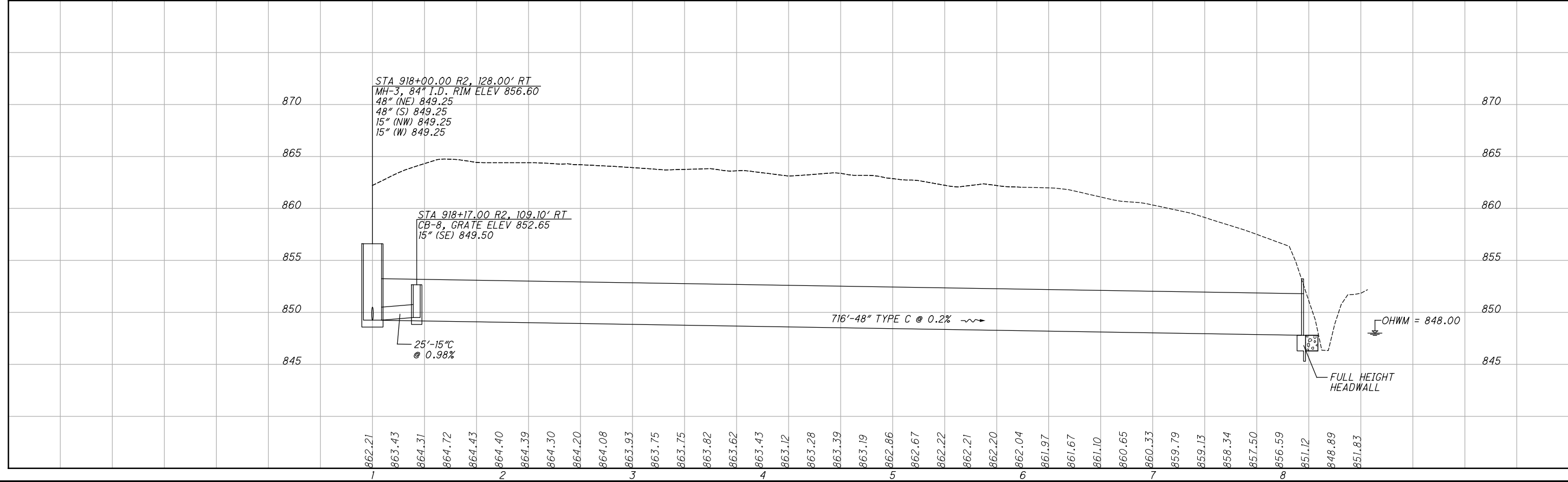
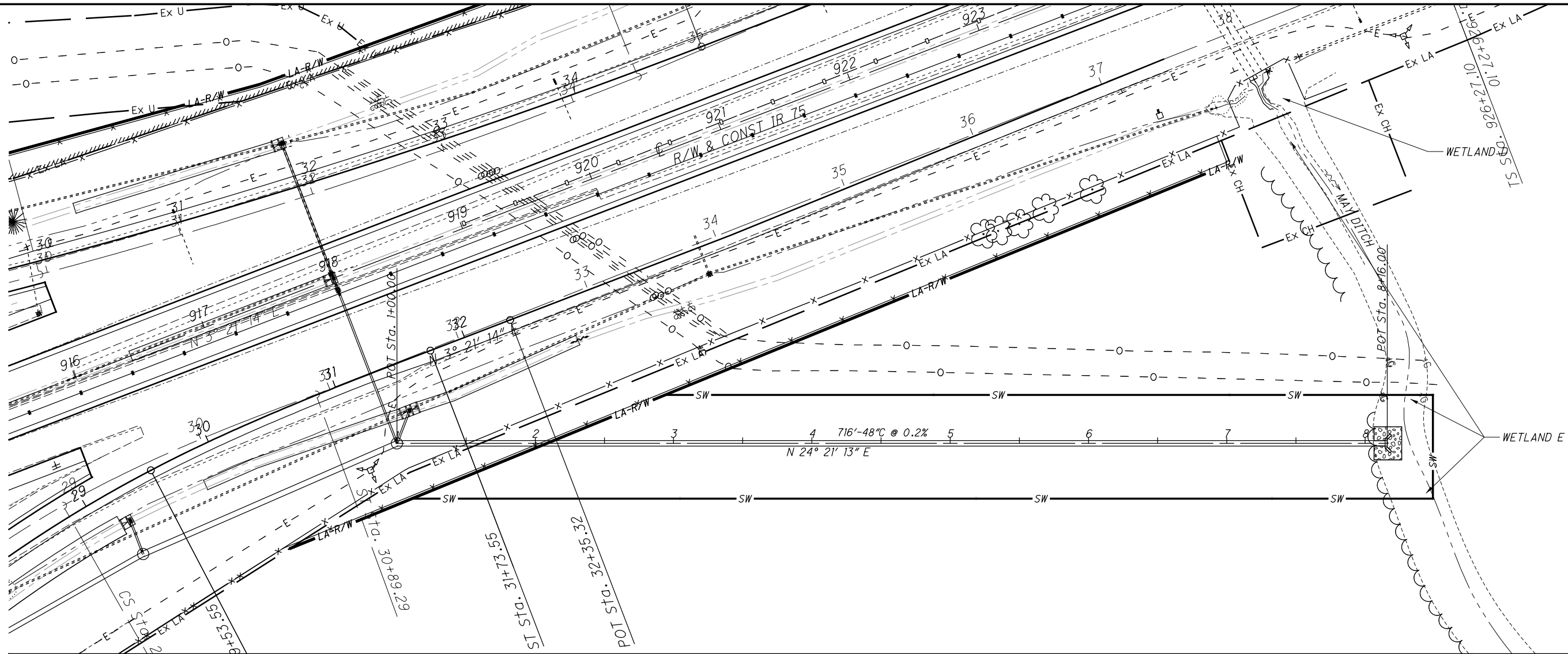


REINFORCING STEEL QUANTITIES
CULVERT FILE NO. 1979569

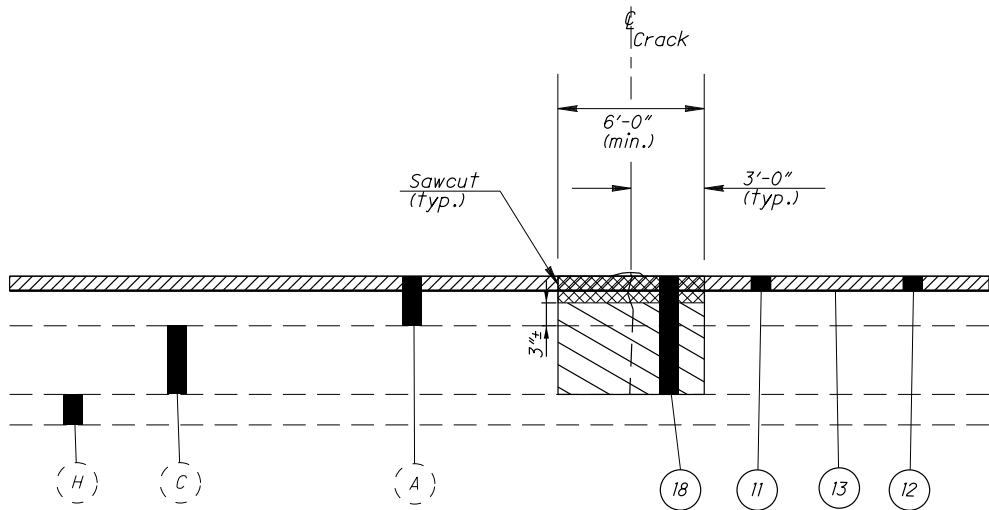
ALL -75 -15.80

CALCULATED
KCO
CHECKED
JLG

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**ITEM 255 FULL DEPTH PAVEMENT
REMOVAL AND RIGID REPLACEMENT,
CLASS RRCM, AS PER PLAN**

*ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID
REPLACEMENT, CLASS RRCM, AS PER PLAN*

ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, AS PER PLAN SHALL FOLLOW THE SPECIFICATION FOR THE 255 ITEM EXCEPT FOR CMS 255.01 DESCRIPTION. ALL CONCRETE REPAIRS MUST HAVE AT LEAST 3" OF ASPHALT ON TOP OF THE CONCRETE WHEN THE PROJECT IS COMPLETED. PLACE, CONSOLIDATE, FINISH AND CURE NEW CONCRETE CLASS RRCM TO A LEVEL 3" BELOW THE EXISTING ROADWAY. FILL THE REMAINING VOID WITH ITEM 301 ASPHALT CONCRETE BASE, PG64-22.

IF THE REPAIRS ARE COMPLETED DURING THE FOUR PERMITTED MULTI-DAY CLOSURES, THE CONTRACTOR HAS THE OPTION OF USING QC MS CONCRETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE ROADWAY WILL OPEN AT THE TIMES SPECIFIED IN THE CONTRACT.

PAVEMENT REPAIRS ARE TO BE MADE PRIOR TO PLANING AT THE LOCATIONS DESIGNATED BY THE ENGINEER. PERFORM AN ITEM 255 FULL DEPTH SAW CUT AND COMPLETE THE REPAIR AS PER ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, AS PER PLAN, AS DETAILED IN THESE PLANS.

ITEM 255 FULL DEPTH PAVEMENT REMOVAL DIMENSIONS AND QUANTITIES

	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
I.R. 75	6'	12'	8 SY	90	720 SY
I.R. 75 RAMPS	6'	16'	10.67 SY	70	747 SY
CULVERT @ STA. 873+00	6'	28'	18.67 SY	1	19 SY

ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, AS PER PLAN = 1486 SY

ITEM 255 PAVEMENT SAWING DIMENSIONS AND QUANTITIES

	LENGTH	WIDTH	PERIMETER	QUANTITY	TOTAL AREA
I.R. 75	6'	12'	36 FT	90	3240 FT
I.R. 75 RAMPS	6'	16'	44 FT	70	3080 FT
CULVERT @ STA. 873+00	6'	28'	68 FT	1	68 FT

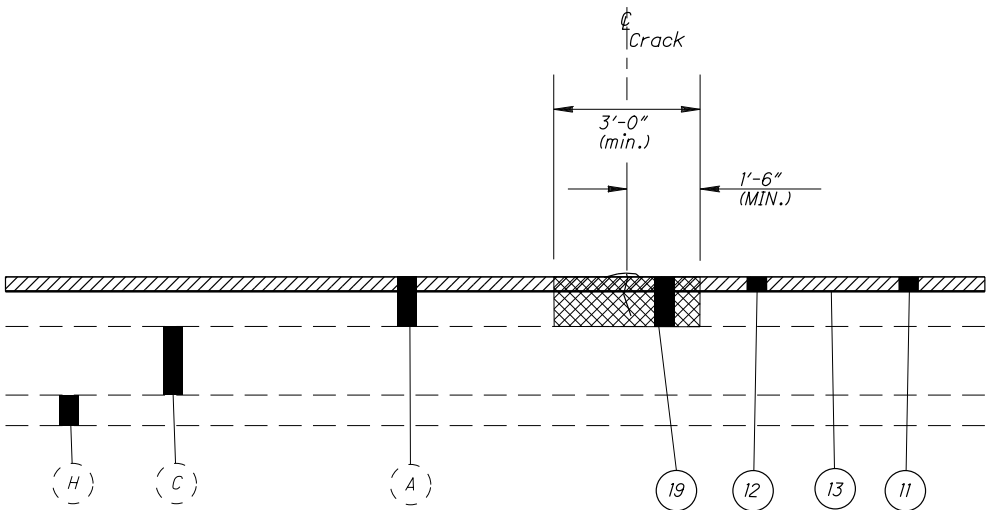
ITEM 255 FULL DEPTH PAVEMENT SAWING = 6388 FT

QUANTITIES CARRIED TO GENERAL SUMMARY

- EXISTING LEGEND
- (A) 6 1/4"± ASPHALT CONCRETE
 - (C) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
 - (H) 4"± SUBBASE

- PROPOSED LEGEND
- (11) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2" THICKNESS
 - (12) ITEM 442 1-1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447)
 - (13) ITEM 407 TRACKLESS TACK COAT
 - (18) ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, AS PER PLAN
 - (19) ITEM 255 PAVEMENT REPAIR, AS PER PLAN

- CLASS RRCM CONCRETE
- ASPHALT CONCRETE BASE, PG64-22
- PAVEMENT PLANING



**ITEM 253 PAVEMENT REPAIR,
AS PER PLAN**

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING MAINLINE ASPHALT PAVEMENT AREAS AT EXISTING PAVEMENT FAILURES.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIRS SHALL BE COMPLETED PRIOR TO THE PLANING OF THE ROADWAY. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE AND SHALL BE REPAIRED FOLLOWING THE REQUIREMENTS OF ITEM 253 EXCEPT AS MODIFIED BY THIS NOTE. TRIM THE LIMITS OF THE REPAIR AREA TO FORM A VERTICAL FACE 1.5 INCHES (38 MM) DEEP FROM THE SURFACE, REGARDLESS OF THE TIME UNTIL THE REPAIR IS COVERED WITH AN OVERLAY. THE CONTRACTOR SHALL PROVIDE THE MEANS AND METHODS TO PERFORM THIS WORK. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED ASPHALT PAVEMENT EXPOSING THE UNDERLYING CONCRETE PAVEMENT. THE MATERIALS SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.01.

ITEM 301 MATERIAL SHALL BE PLACED AND COMPACTED WITH A PNEUMATIC ROLLER AS PER CMS 253.03 ENSURING COMPLIANCE WITH THE ALLOWABLE LIFT THICKNESSES TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLANING AND PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER. REPAIRED JOINTS SHALL BE MILLED IF REQUESTED BY THE ENGINEER TO ENSURE AN ACCEPTABLE RIDE IF THE ROADWAY WILL BE OPENED TO THE TRAVELING PUBLIC.

PAVEMENT REPAIR OPERATIONS MUST BE COMPLETED AND ASPHALT ALLOWED TO COOL PRIOR TO THE OPENING TO THRU TRAFFIC TO ENSURE NO DAMAGE TO THE SURFACE OF THE REPAIRS.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR INCLUDING MEANS AND METHODS TO PROVIDE THE 1.5 INCH VERTICAL FACE. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD OF ITEM 253 PAVEMENT REPAIR, AS PER PLAN.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN

	LENGTH	WIDTH	AVG. DEPTH	VOLUME	QUANTITY	TOTAL VOLUME
I.R. 75	4'	12'	6.25"	0.92 CY	95	88 CY
I.R. 75 RAMPS	4'	16'	6.25"	1.25 CY	10	12.5 CY
						100.5 CY

ITEM 253 PAVEMENT REPAIR, AS PER PLAN = 101 CY

QUANTITIES CARRIED TO GENERAL SUMMARY

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SIGN LEGEND	
	NEW
	EXISTING, TO REMAIN
	EXISTING, TO BE REMOVED AND REERECTED
	EXISTING, TO BE REMOVED

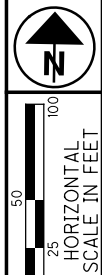
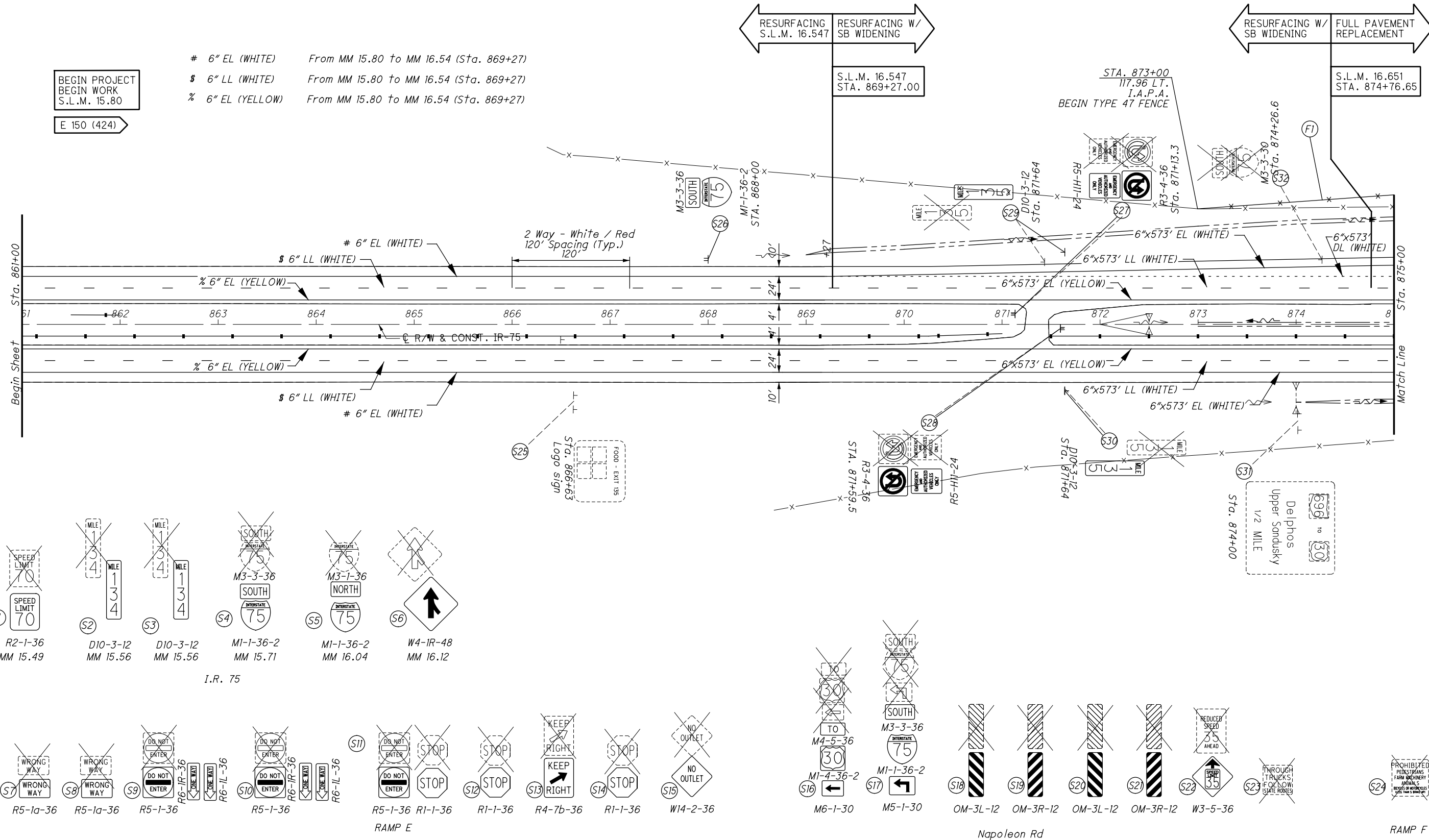
LEGEND:	
E.A.P.A.	END ANCHOR POST ASSEMBLY
I.A.P.A.	INTERMEDIATE ANCHOR POST ASSEMBLY
C.A.P.A.	CORNER ANCHOR POST ASSEMBLY
L.P.	STEEL LINE POST SET IN CONCRETE OR WOOD POST
A.C.	ABUTMENT CONNECTION

FENCING QUANTITIES INCLUDE ALL HARDWARE, POSTS, ETC., COMPLETE IN PLACE AND ARE CARRIED TO THE FENCING SUB-SUMMARY TABLE ON SHEET 158

BEGIN PROJECT
BEGIN WORK
S.L.M. 15.80

E 150 (424)

# 6" EL (WHITE)	From MM 15.80 to MM 16.54 (Sta. 869+27)
\$ 6" LL (WHITE)	From MM 15.80 to MM 16.54 (Sta. 869+27)
% 6" EL (YELLOW)	From MM 15.80 to MM 16.54 (Sta. 869+27)



CALCULATED	TAB	CHECKED	XXX
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TRAFFIC CONTROL
STA. 861+00 TO STA. 875+00

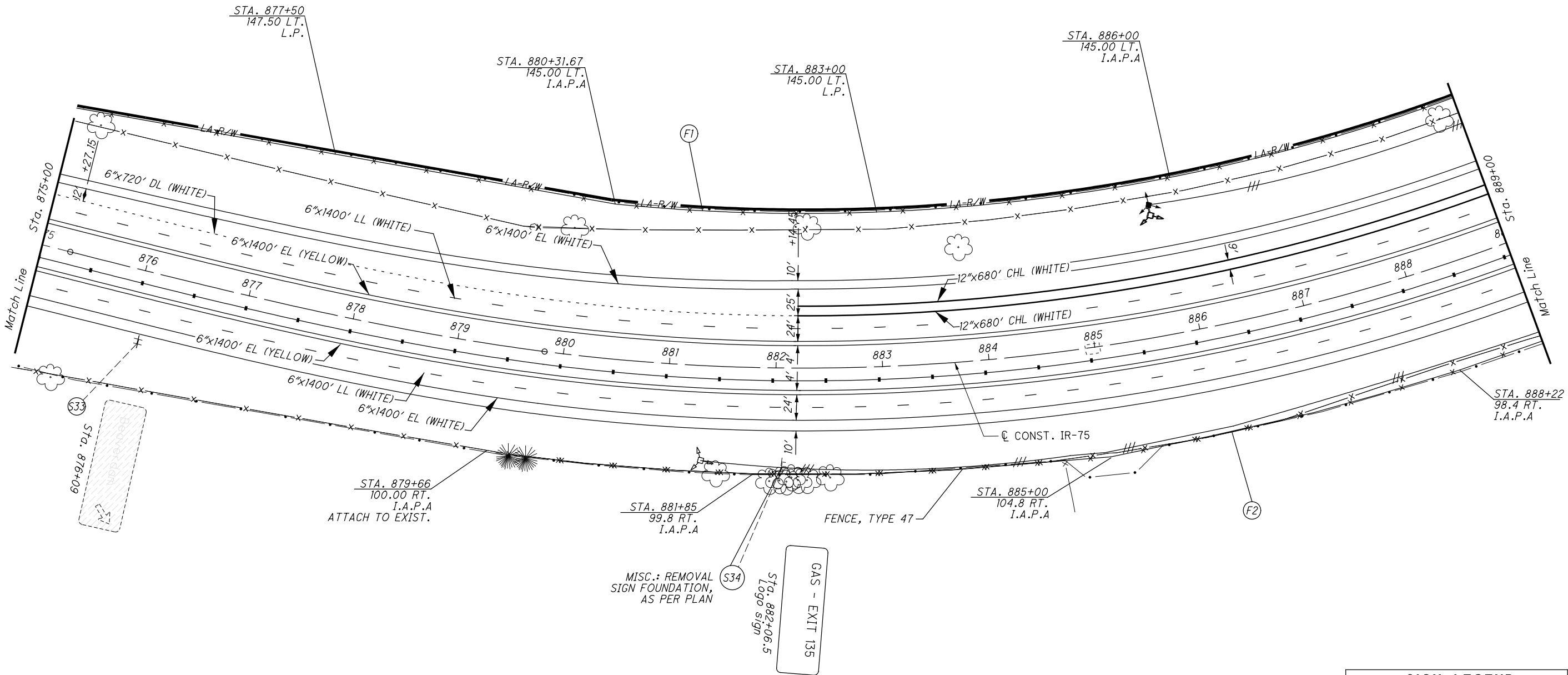
ALL - 75 - 15.80

151
188

I:\Project\data\94214\Design\Roadway\Sheets\94214_IP002.dgn sheet 9/20/2019 2:25:04 PM tboleba

- LEGEND:
- E.A.P.A. - END ANCHOR POST ASSEMBLY
 - I.A.P.A. - INTERMEDIATE ANCHOR POST ASSEMBLY
 - C.A.P.A. - CORNER ANCHOR POST ASSEMBLY
 - L.P. - STEEL LINE POST SET IN CONCRETE OR WOOD POST
 - A.C. - ABUTMENT CONNECTION

FENCING QUANTITIES INCLUDE ALL HARDWARE, POSTS, ETC., COMPLETE IN PLACE AND ARE CARRIED TO THE FENCING SUB-SUMMARY TABLE ON SHEET 158



SIGN LEGEND	
	NEW
	EXISTING, TO REMAIN
	EXISTING, TO BE REMOVED AND REERECTED
	EXISTING, TO BE REMOVED

0 50 100
HORIZONTAL SCALE IN FEET

CALCULATED
TAB
CHECKED
XXX

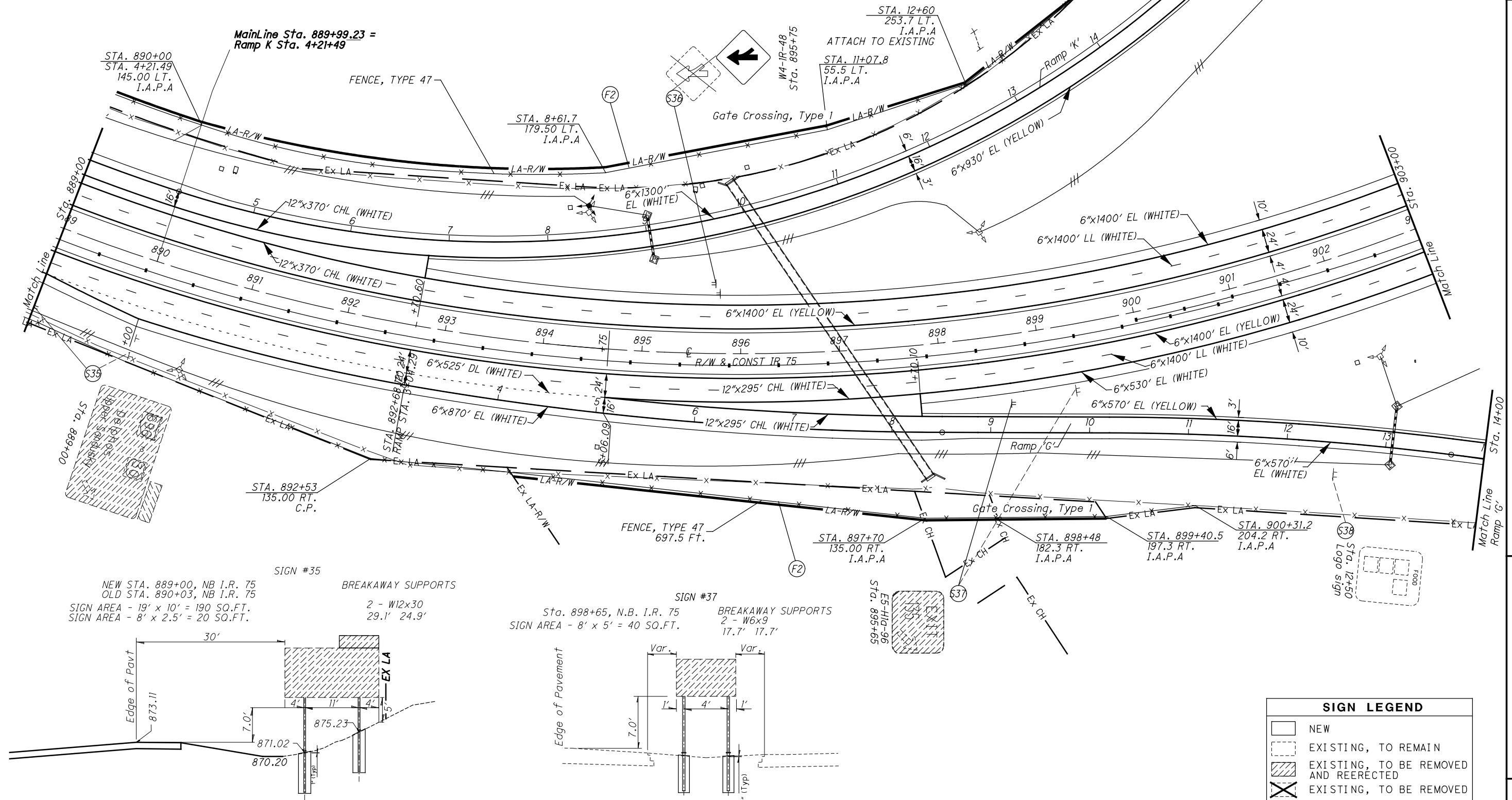
TRAFFIC CONTROL
STA. 875+00 TO STA. 889+00

ALL-75-15.80

152
188

E.A.P.A. - END ANCHOR POST ASSEMBLY
I.A.P.A - INTERMEDIATE ANCHOR POST ASSEMBLY
C.A.P.A. - CORNER ANCHOR POST ASSEMBLY
L.P. - STEEL LINE POST SET IN CONCRETE OR WOOD POST
A.C. - ABUTMENT CONNECTION

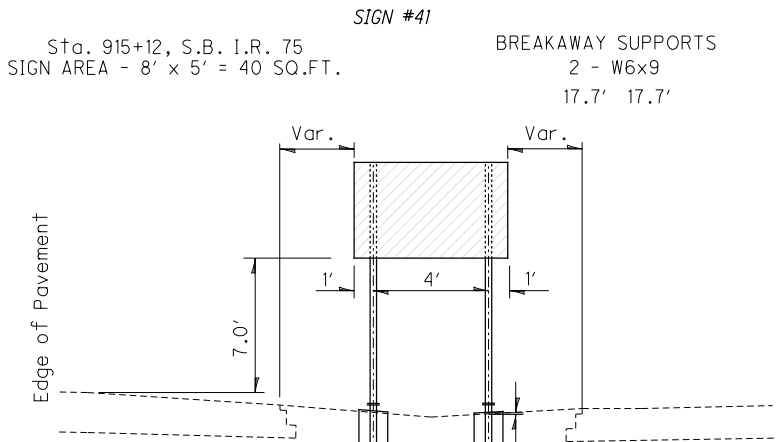
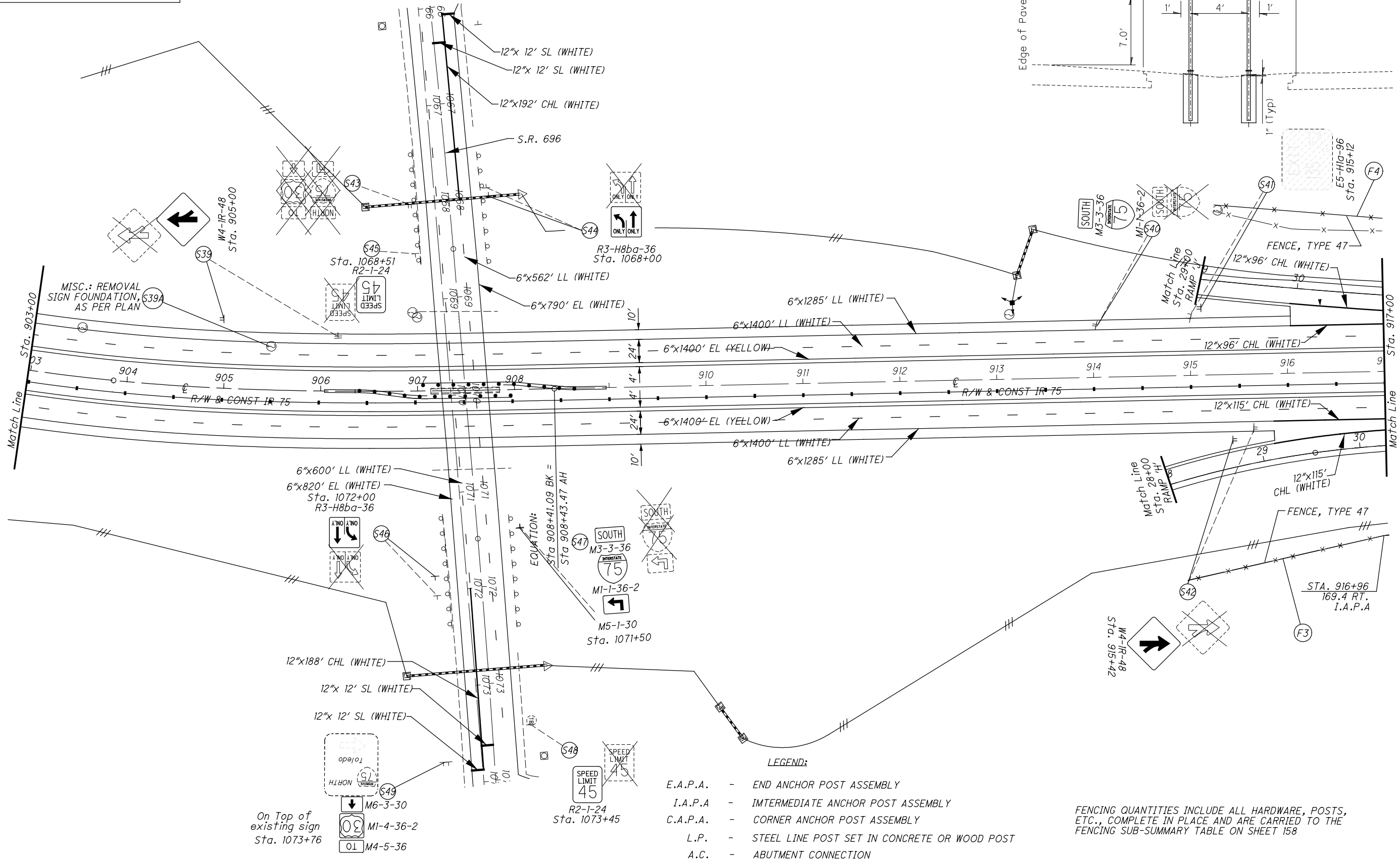
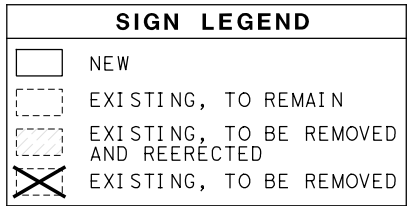
STA. 12+60
253.7 LT.
I.A.P.A
ATTACH TO EXISTING



TRAFFIC CONTROL
STA. 889+00 TO STA. 903+00

ALL-75-15.80

$$\frac{53}{88}$$



TRAFFIC CONTROL
STA. 903+00 TO STA. 917+00

ALL-75-15.80

$$\frac{154}{188}$$

EXISTING, TO BE REMOVED

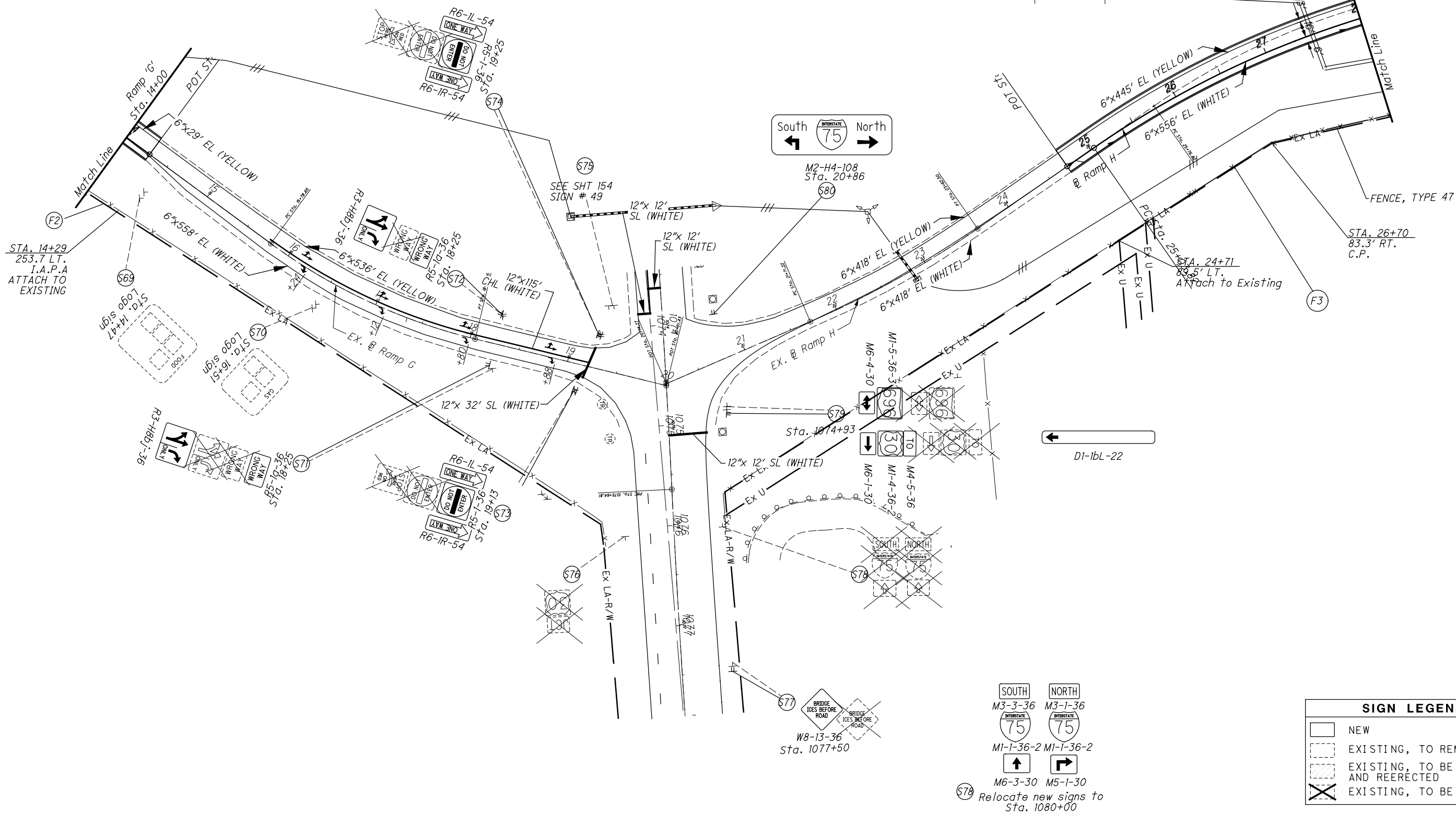
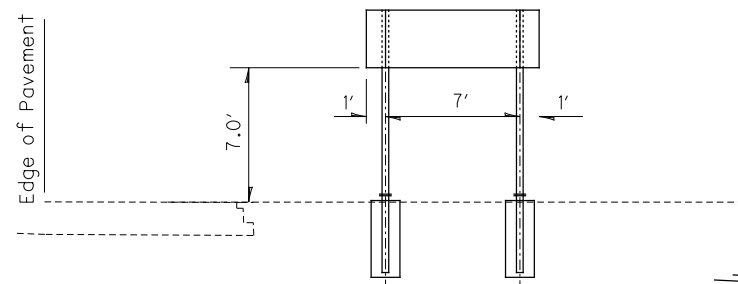
$$\frac{155}{188}$$

E.A.P.A. - END ANCHOR POST ASSEMBLY
I.A.P.A - INTERMEDIATE ANCHOR POST ASSEMBLY
C.A.P.A. - CORNER ANCHOR POST ASSEMBLY
L.P. - STEEL LINE POST SET IN CONCRETE OR WOOD POST
A.C. - ABUTMENT CONNECTION

Sta. 20+86, Ramp H
SIGN AREA - 9' x 3' = 27 SQ.FT.

SIGN #80

BREAKAWAY SUPPORTS
2 - S4x7.79



TRAFFIC CONTROL PLAN

STA. 14+00 RAMP "G" TO STA. 28+00 RAMP "H"

ALL-75-15.80

$$\frac{156}{188}$$

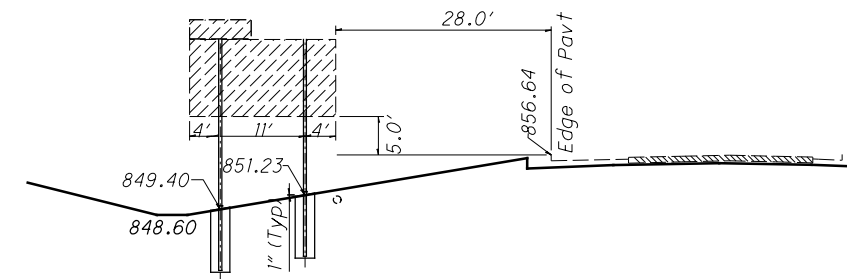
LEGEND:

- E.A.P.A. - END ANCHOR POST ASSEMBLY
I.A.P.A. - INTERMEDIATE ANCHOR POST ASSEMBLY
C.A.P.A. - CORNER ANCHOR POST ASSEMBLY
L.P. - STEEL LINE POST SET IN CONCRETE OR WOOD POST
A.C. - ABUTMENT CONNECTION

FENCING QUANTITIES INCLUDE ALL HARDWARE, POSTS, ETC., COMPLETE IN PLACE AND ARE CARRIED TO THE FENCING SUB-SUMMARY TABLE ON SHEET 158

PROPOSED Sta. 924+00, SB I.R. 75
EXISTING SIGN AREA - 19' x 10' = 190 SQ.FT.
EXISTING SIGN AREA - 8' x 2.5' = 20 SQ.FT.

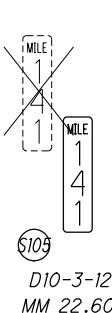
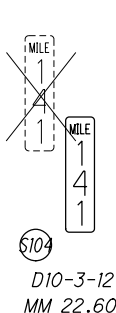
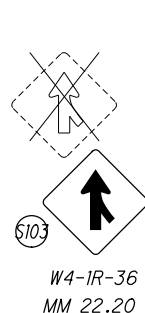
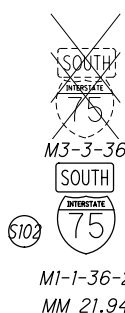
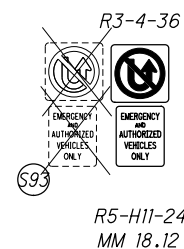
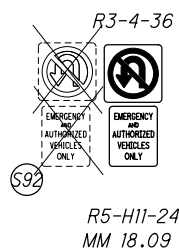
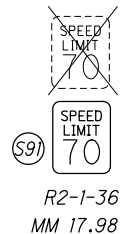
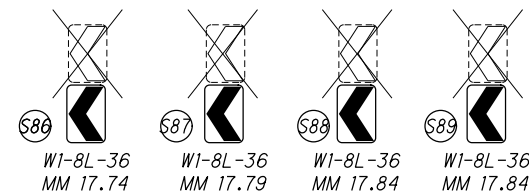
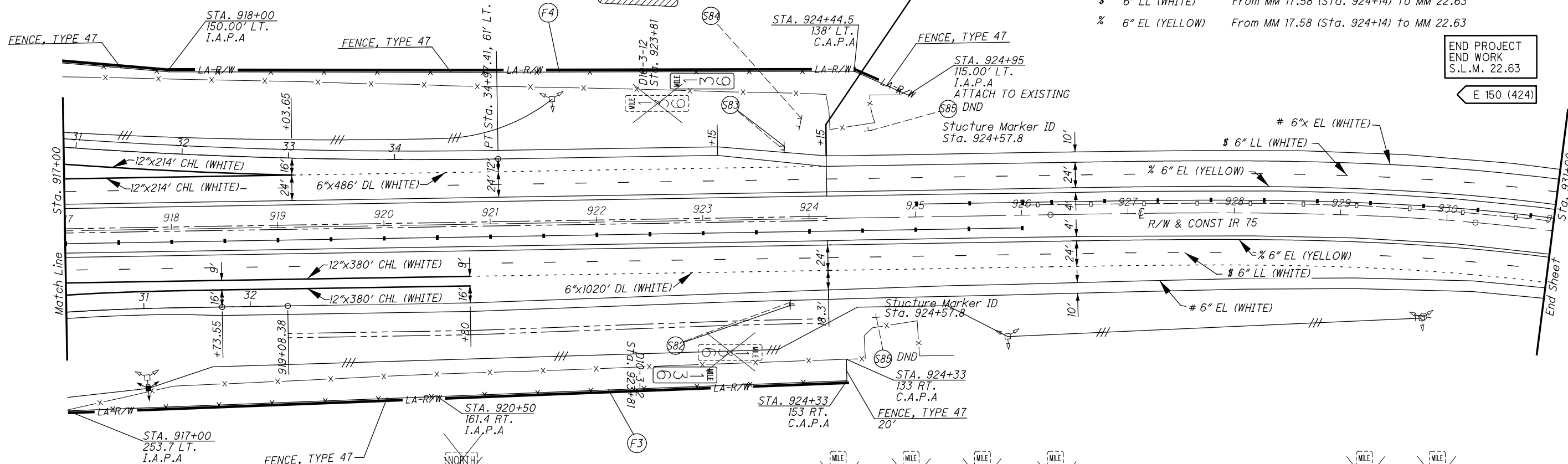
BREAKAWAY SUPPORTS
2 - W12x30
30.0' 28.2'



- # 6" EL (WHITE) From MM 17.58 (Sta. 924+14) to MM 22.63
\$ 6" LL (WHITE) From MM 17.58 (Sta. 924+14) to MM 22.63
% 6" EL (YELLOW) From MM 17.58 (Sta. 924+14) to MM 22.63

END PROJECT
END WORK
S.L.M. 22.63

E 150 (424)



SIGN LEGEND	
	NEW
	EXISTING, TO REMAIN
	EXISTING, TO BE REMOVED AND REERECTED
	EXISTING, TO BE REMOVED

TRAFFIC CONTROL PLAN
STA. 917+00 TO STA. 931+00

ALL-75-15.80

157
188

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STATION		LENGTH	RAISED PAVEMENT MARKER REMOVED	621			642			644					
				RPM			EDGE LINE, 6"		LANE LINE, 6"	CENTER LINE	CHANNELIZING LINE, 12"	STOP LINE	TRANSVERSE/ DIAGONAL LINE	LANE ARROW	DOTTED LINE, 6"
FROM	TO	FT	EACH	EACH			MI		MI	MI	FT	FT	FT	EACH	FT
				W	W/R	Y/R	White	Yellow							
01/SAF/PV															
S.R. 696/Lincoln Hwy															
K	Entrance														
869+27	874+76.65	549.65	9	9			0.10	0.10							550
874+76.65	889+99.23	1522.58	25	25			0.29	0.29			1056				752
4+21.49	20+00	1578.51	44	26		18	0.30	0.30			540	46			
				61	0	18	0.69	0.69							
Total Split 1		3650.74	79	79			1.38		0.00	0.00	1596	46	0	0	1302
02/IMS/PV															
874+76.65	924+17	4940.35	82	82			1.87	1.87	1.87						
S.R. 696/Lincoln Hwy													320		
G	Exit		19		5	14	0.20	0.20			809	30		6	520
H	Entrance		19		3	16	0.27	0.24			350				1050
J	Exit		26		14	12	0.23	0.18			780	50		8	520
				82	22	42	2.58	2.50							
Total Split 2			146	146			5.07		1.87	0.00	1939	80	320	14	2090
03/IMS/PV															
15.800	16.547	3944.16	66	66			1.49	1.49	1.49						
869+27	874+76.65	549.65	9	9			0.21	0.21	0.21						
17.586	22.630	26632.32	444	444			10.09	10.09	10.09						
Napoleon Rd															
E	Exit		28		8	20	0.32	0.29		0.08	1300	40			540
F	Entrance		34		12	22	0.37	0.33			550				1020
Bentley Rd.															
A	Entrance		37		10	27	0.32	0.28			440				856
B	Exit		28		18	10	0.24	0.16	0.03		716	60			472
C	Entrance		58		38	20	0.31	0.29			1500				590
D	Exit		29		18	11	0.16	0.16	0.03		712	34			314
				519	104	110	13.50	13.30							
Total Split 3		31126.13	733	733			26.91		11.85	0.08	5218	134	0	0	3792
TOTALS															
TOTALS to GEN SUMMARY			958	958			33.37		13.73	0.08	8753	260	320	14	7184

FENCE												
REFERENCE #	SHEET #	STATION			202		607					
					FENCE REMOVED	GATE REMOVED		FENCE, TYPE 47		GATE, TYPE 47		FENCELINE SEEDING AND MULCHING
		FROM	TO		FT	EACH		FT		EACH		FT
		01/SAF/PV										
		S.R. 696/Lincoln Hwy										
		K	Entrance									
F1	151-153	873+00	890+00	Lt.	1700			1700				1700
	152,153	4+21.49	16+00	Lt.	1179	1		1179		1		1179
		Total Split 1			2879	1		2879		1		2879
02/IMS/PV												
F2	152	879+66	897+70	Rt.	1804			1804				1804
	152,156	8+30	14+29	Rt.	599	1		599		1		599
F3	156-157	24+70	29+14.7	Rt.	445			445				445
	156, 154, 157	915+85.1	924+33	Rt.	869			869				869
F4	155, 154, 157	25+00	29+94	Lt.	494			494				494
	154, 157	916+04	924+95	Lt.	891	1		891		1		891
		Total Split 2			5102	2		5102		2		5102
03/IMS/PV												
		Total Split 3			0	0		0		0		0
	TOTALS CARRIED TO GENERAL SUMMARY				7981	3		7981		3		7981

SIGNS																												
SHEET NO.	REF NO.	LOGPOINT or Sta.	SPECIAL	CODE	SIZE	LEVEL	630																					
							SIGNS		SIGN ATTACHMENT ASSEMBLY	SIGN BACKING ASSEMBLY	GROUNDED MOUNTED SIGN SUPPORTS										REMOVAL							
							FLAT SHEET	EXTRU SHEET			NO. 3 POST	S4x7.7	W6x9	W10x12	W12x30	ONE WAY SUPPORT, NO. 3 POST	SIGN POST REFLECTORS	GROUND MOUNTED BEAM SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	GROUND MOUNTED								
																				SIGN AND DISPOSAL	SIGN AND REERECTION	POST SUPORT AND DISPOSAL	STRUCTURAL BEAM SUPPORT AND DISPOSAL	MISC.: REMOVAL SIGN FOUNDATION, APP				
					GM																				INCHES	SQ FT	SQ FT	EACH
SPLIT 01/SAF/PV																												
151	S 26	868+00		M1-1-36-2	36x36		9.0				17.5	18.0									2		2					
	S 29	871+64		M3-3-36	36x18		4.5														1		1					
	S 32	874+26.6		D10-3-12	12x48		4.0					11.0									2		2					
153	S 36	895+75		W4-1R-48	48x48		16.0				15.0	15.0						2			1		2					
155	S 55	1064+15		DND																								
	S 56	1064+35.5																			6		2					
	S 57	18+82																			1		2					
	S 58	17+22																			2		2					
											32.5	44.0	0.0	0.0	0.0	0.0	0.0	0.0			2		2					
SPLIT 01/SAF/PV TOTALS											33.5	0.0	0	0	76.5	0.0	0.0	0.0	0.0	0	2	0	0	15	0	13	0	0

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SIGNS																													
SHEET NO.	REF NO.	LOGPOINT or Sta.	SPECIAL	CODE	SIZE	LEVEL	SIGNS		SIGN ATTACHMENT ASSEMBLY	SIGN BACKING ASSEMBLY	630										REMOVAL								
							FLAT SHEET	EXTRU SHEET			GROUNDED MOUNTED SIGN SUPPORTS					ONE WAY SUPPORT, NO. 3 POST	SIGN POST REFLECTORS	GROUND MOUNTED BEAM SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	GROUND MOUNTED									
								GM			NO. 3 POST	S4x7.7	W6x9	W10x12	W12x30					SIGN AND DISPOSAL	SIGN AND REERECTION	POST SUPORT AND DISPOSAL	STRUCTURAL BEAM SUPPORT AND DISPOSAL	MISC.: REMOVAL SIGN FOUNDATION, APP					
					SQ FT		SQ FT	EACH	EACH	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH					
SPLIT 02/IMS/PV																													
152	S 33	876+09									15.0	14.5									1								
	S 34	882+06.5		LOGO																					2				
153	S 35	889+00							1						29.1	24.9			2	2		2		2					
	S 37	898+65		E5-H1a-96	96x60		40.0						17.7	17.7				2	2		1		2						
	S 38	12+50		LOGO																									
154	S 39	905+00		W4-1R-48	48x48		16.0				15.0	15.0					2				1		2						
	S 39A	905+47																							1				
	S 40	914+00		M3-3-36	36x18		4.5				17.5	18.0									2		2						
				M1-1-36-2	36x36		9.0																						
	S 41	915+12		E5-H1a-96	96x60		40.0						17.7	17.7				2	2		1			2					
	S 42	915+42		W4-1R-48	48x48		12.0				15.0	15.0					2				1		2						
	S 43	1068+00																			6		2						
	S 44	1068+00		R3-H8ba-30	30x30		6.3					14.0									1		1						
	S 45	1068+51		R2-1-24	24x30		4.5					13.5									1		1						
	S 46	1072+00		R3-H8ba-30	30x30		6.3					14.0									1		1						
	S 47	1071+50		M3-3-36	36x18		4.5				17.5	18.0									3		1						
				M1-1-36-2	36x36		9.0																						
				M5-11	30x21		4.4																						
	S 48	1073+45		R2-1-24	24x30		4.5					13.5									1		1						
	S 49	1073+76		M4-5-36	36x18		4.5		1																				
		Ex.Sign		M1-4-36-2	36x36		9.0																						
				M6-3-30	30x21		4.4																						
155	S 50	SR 696		R3-9b-36	36x48		12.0				16.0	16.0									2		2						
				R3-9cp-36	36x12		3.0																						
	S 51	1061+10		W8-13-36	36x36		9.0				14.5	15.0					2				1		2						
	S 52	1062+55		M1-5-30-3	30x24		4.5				16.5	16.5									5		2						
				M3-1-36	24x12		2.0																						
				D10-1-12	10x18		1.3																						
				D10-1-12	10x18		1.3																						
				ex																									
	S 53	1062+91		R3-H8cb-48	48x30		10.0				14.0	14.5									2		2						
	S 54	1064+07		DND																									
	S 59	1065+72.6		M2-H4-108	108x36			27.0		1			14.0	14.0					2	2									
				M6-3-30	30x21		4.4																						
				M1-4-36-2	36x36		9.0																						
				M4-5-36	36x18		4.5																						
	S 60	1065+93.5		M4-5-36	36x18		4.5				15.6	15.6									5		2						
				M1-4-36-2	36x36		9.0																						
				M6-1-30	30x21		4.4																						
				M1-5-36-3	36x36		9.0																						
				M6-4-30	30x21		4.4																						
	S 61	21+91		R5-1-36	36x36		9.0				16.0	16.5					2	2			2		2						
				R6-1L-54	36x12		6.8																						
				R6-1R-54	36x12		6.8																						
	S 62	21+14		R5-1-36	36x36		9.0				16.0	16.5					2	2			2		2						
				R6-1L-54	54x18		6.8																						
				R6-1R-54	54x18		6.8																						
	S 63	1066+23		DND																									
	S 64	22+61		R5-1a-36	36x24		6.0				15.0	15.5					2				1		2						
	S 65	22+70.5		R5-1a-36	36x24		6.0				15.0	15.5					2				1		2						
	S 66	25+00		D3-H6-72	132x24		22.0							15.6	15.6				2	2	1			2					
				D3-H6-72	132x24		22.0																						
				M6-3-30	30x21		4.4			1																			
				M1-4-36-2	36x36		9.0																						
				M4-5-36	36x18		4.5																						
				M1-5-36-3	36x36		9.0			1																			
				M6-4-36	30x21		4.4																						
SubTotal Split 02/IMS/PV							403.3	27	0	5	218.6	277.1	14.0	14.0	35.4	35.4	15.6	15.6	29.1	24.9	4	14	10	10	39	5	31	8	3

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SIGNS																													
SHEET NO.	REF NO.	LOGPOINT or Sta.	SPECIAL	CODE	SIZE	LEVEL	630																						
							SIGNS		SIGN ATTACHMENT ASSEMBLY	SIGN BACKING ASSEMBLY	GROUNDED MOUNTED SIGN SUPPORTS										ONE WAY SUPPORT, NO. 3 POST	SIGN POST REFLECTORS	GROUND MOUNTED BEAM SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	REMOVAL				
							FLAT SHEET	EXTRU SHEET			NO. 3 POST	S4x7.7	W6x9	W10x12	W12x30	GROUND MOUNTED													
					GM			SIGN AND DISPOSAL								SIGN AND REERECTION	POST SUPORT AND DISPOSAL	STRUCTURAL BEAM SUPPORT AND DISPOSAL	MISC.: REMOVAL SIGN FOUNDATION, APP										
					INCHES		SQ FT	SQ FT	EACH	EACH	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH					
SPLIT 02/IMS/PV																													
155	S 67	25+96		LOGO																									
	S 68	26+92		LOGO																									
156	S 69	14+47		LOGO																									
	S 70	16+51		LOGO																									
	S 71	18+25		R5-1a-36	36x24		6.0				13.0	13.0					2			2									
				R3-H8bj-36	36x30		7.5																						
	S 72	18+25		R5-1a-36	36x24		6.0				13.0	13.0					2			2									
				R3-H8bj-36	36x30		7.5																						
	S 73	19+13		R5-1-36	36x36		9.0									2	2			2									
				R6-1L-54	54x12		4.5																						
				R6-1R-54	54x12		4.5																						
	S 74	19+25		R5-1-36	36x36		9.0									2	2			2									
				R6-1L-54	54x12		4.5																						
				R6-1R-54	54x12		4.5																						
	S 75			Did Not Use																									
	S 76	1076+07																		2			1						
	S 77	1077+50		W8-13-36	36x36		9.0				14.5	15.0					2			1			2						
	S 78	1080+00		M3-3-36	36x18		4.5				17.0	17.5								6			2						
				M1-1-36-2	36x36		9.0																						
				M6-3-30	30x21		4.4																						
				M3-1-36	36x18		4.5																						
				M1-1-36-2	36x36		9.0																						
				M5-1-30	30x21		4.4																						
	S 79	1074+93		M4-5-36	36x18		4.5			1	15.5	14.0								5			2						
				M1-4-36-2	36x36		9.0																						
				M6-1-36	30x21		4.4																						
				M1-5-36-3	36x36		9.0																						
				M6-4-36	30x21		4.4																						
	S 80	20+86		M2-H4-108	108x36			27.0				14.0	14.0						2	2									
157	S 81			Did Not Use																									
	S 82	923+81		D10-3-12	12x48		4.0					11.0								1			1						
	S 83	923+81		D10-3-12	12x48		4.0					11.0								1			1						
	S 84	923+93.7												30.0	28.2				2	2		1		2					
																				1									
SubTotal Split 02/IMS/PV							147.1	27	0	1	167.5	28.0	0.0	58.2	0.0	4	10	4	4	24	2	17	2	0					
SubTotal Split 02/IMS/PV Pev Page							403.3	27	0	5	495.7	28.0	70.8	31.2	54.0	4	14	10	10	39	5	31	8	3					
SPLIT 02/IMS/PV - TOTALS																													
SPLIT 03/IMS/PV																													
151	S 1	15.49		R2-1-36	36X48		12.0				16.5	17.0								1		2							
	S 2	15.56		D10-3-12	12x48		4.0					11.0								1		1							
	S 3	15.56		D10-3-12	12x48		4.0					11.0								1		1							
	S 4	15.71		M1-1-36-2	36x36		9.0				17.5	18.0								2		2	2						
				M3-3-36	36x18		4.5																						
	S 5	16.04		M1-1-36-2	36x36		9.0				17.5	18.0								2		2							
				M3-1-36	36x18		4.5																						
	S 6	16.12		W4-1R-36	48x48		12.0				15.0	15.0						2		1		2							
	S 7	Ramp E		R5-1a-36	36x24		6.0				13.0	13.0						2		1		2							
	S 8	Ramp E		R5-1a-36	36x24		6.0				13.0	13.0						2		1		2	2						
	S 9	Ramp E		R5-1-36	36x36		9.0				14.0	14.0					2	2		2		2							
				R6-1L-36	36x12		3.0																						
				R6-1R-36	36x12		3.0											2											
SubTotal Split 03/IMS/PV							86.0	0	0	0	236.5	0.0	0.0	0.0	0.0	2	10	0	0	12	0	16	4	0					

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SHEET+1+AE65 NO.	REF NO.	LOGPOINT or Sta.	SPECIAL	CODE	SIZE	LEVEL	630																						
							SIGNS		SIGN ATTACHMENT ASSEMBLY	SIGN BACKING ASSEMBLY	GROUNDED MOUNTED SIGN SUPPORTS										ONE WAY SUPPORT, NO. 3 POST	SIGN POST REFLECTORS	GROUND MOUNTED BEAM SUPPORT FOUNDATION	BREAKAWAY BEAM CONNECTION	REMOVAL				
							FLAT SHEET	EXTRU SHEET			NO. 3 POST	S4x7.7	W6x9	W10x12	W12x30	GROUND MOUNTED									SIGN AND DISPOSAL	SIGN AND REERECTION	POST SUPORT AND DISPOSAL	STRUCTURAL BEAM SUPPORT AND DISPOSAL	MISC.: REMOVAL SIGN FOUNDATION, APP
					GM		SQ FT	SQ FT	EACH	EACH						FT	FT	FT	FT	FT	FT	EACH	EACH	EACH					
					SQ FT		SQ FT	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH				
SPLIT 03/IMS/PV (cont)																													
151	S 10	Ramp E		R5-I-36	36x36		9.0				14.0	14.0							2					2		2			
				R6-IL-36	36x12		3.0													2									
				R6-IR-36	36x12		3.0																						
	S 11	Ramp E		R5-I-36	36x36		9.0				14.0	14.0								2				2		2			
				R1-I-36	36x36		9.0																						
	S 12	Ramp E		R1-I-36	36x36		9.0				14.0	14.0								2				2		2			
	S 13	Ramp E		R4-7b-36	36x48		12.0				15.0	15.0												2		2			
	S 14	Ramp E		R1-I-36	36x36		9.0				14.0	14.0								2				2		2			
	S 15	Ramp E		W14-2-36	36x36		9.0				15.0	15.0								2				2		2			
	S 16	Napoleon		M4-5-36	36x18		4.5				19.5	19.5												3		2			
				M1-4-36-2	36x36		9.0																						
				M6-I-30	30x21		4.4																						
	S 17	Napoleon		M3-3-36	36x18		4.5				19.5	19.5												3		2			
				M1-I-36-2	36x36		9.0																						
				M5-I-30	30x21		4.4																						
	S 18	Napoleon		OM-3L-12	12x36		3.0					13.0									1			1		1			
	S 19	Napoleon		OM-3R-12	12x36		3.0					13.0									1			1		1			
	S 20	Napoleon		OM-3L-12	12x36		3.0					13.0									1			1		1			
	S 21	Napoleon		OM-3R-12	12x36		3.0					13.0									1			1		1			
	S 22	Napoleon		W3-5-36	36x36		9.0				16.0	16.0									2				1		2		
	S 23	Napoleon																						1		2			
	S 24	Ramp F																						1		2			
	S 25	866+63		LOGO																									
	S 27	871+13.3		R3-4-36	36x36		9.0				14.0	14.0												2		2			
				R5-H11-24																									
	S 28	871+59.5		R3-4-36	36x36		9.0				14.0	14.0												2		2			
				R5-H11-24																									
	S 30	871+64		D10-3-12	12x48		4.0					11.0												1		1			
	S 31	874+00		DND																									
	S 32																							1		2			
157	S 85	924+57.8		DND																									
	S 86	17.7		W1-8I-36	36X48		12.0				16.0	16.0									1								
	S 87	17.74		W1-8I-36	36X48		12.0				16.0	16.0									1								
	S 88	17.79		W1-8I-36	36X48		12.0				16.0	16.0									1								
	S 89	17.9		W1-8I-36	36X48		12.0				16.0	16.0									1								
	S 90	17.85		M3-I-36	36x18		4.5																						
				M1-I-36-2	36x36		9.0				17.0	17.5												2		2			
	S 91	17.98		R2-I-36	36x48		12.0				16.0	16.5												1		2			
	S 92	18.09		R3-4-36	36x36		9.0				14.0	14.0												2		2			
				R5-H11-24	36x12		3.0																						
	S 93	18.12		R3-4-36	36x36		9.0				14.0	14.0												2		2			
				R5-H11-24	36x12		3.0																						
	S 94	19.57		D10-3-12	12x48		4.0					11.0												1		1			
	S 95	19.57		D10-3-12	12x48		4.0					11.0												1		1			
	S 96	20.58		D10-3-12	12x48		4.0					11.0												1		1			
	S 97	20.58		D10-3-12	12x48		4.0					11.0												1		1			
	S 98	21.42		R3-4-36	36x36		9.0				14.0	14.0												2		2			
				R5-H11-24	36x12		3.0																						
	S 99	21.42		R3-4-36	36x36		9.0				14.0	14.0												2		2			
				R5-H11-24	36x12		3.0																						
	S 100	21.6		D10-3-12	12x48		4.0					11.0												1		1			
	S 101	21.6		D10-3-12	12x48		4.0					11.0												1		1			
	S 102	21.94		M3-3-36-2	36x18		4.5				17.0	17.5												2		2			
				M1-I-36	36x36		9.0																						
				M3-3-36	36x18		4.5																						
	S 103	22.2		W4-IR-48	48X48		12.0				17.5	18.0								2				1		2			
	S 104	22.6		D10-3-12	12x48		4.0					11.0												1		1			
	S 105	22.6		D10-3-12	12x48		4.0					11.0												1		1			
											356.5	509.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									
SPLIT 03/IMS/PV - SUBTOTALS							334.3	0.0	0	0	866.0	0.0	0.0	0.0															

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625, LUMINAIRE, INSTALLATION ONLY, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING AN EXISTING LUMINAIRE REMOVED FROM A PREVIOUS LOCATION ON THE PROJECT OR SUPPLIED TO THE PROJECT SITE BY OTHERS.

THE LUMINAIRE SHALL BE CLEANED, REPAIRS TO ENSURE THAT IT IS IN GOOD SERVICEABLE CONDITION MADE, ADJUSTMENTS TO THE OPTICAL COMPONENTS TO ENSURE THAT THE SPECIFIED DISTRIBUTION IS BEING PRODUCED MADE, AND A NEW LAMP INSTALLED IF THE LIGHT SOURCE IS A LAMP.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER ITEM 625, "LUMINAIRE, INSTALLATION ONLY, AS PER PLAN" FOR EACH LUMINAIRE INSTALLED AND SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM IN A WORKMANLIKE MANNER.

SPECIAL, MAINTAIN EXISTING LIGHTING

EXISTING RAMPS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "B" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

LUMINAIRE, HIGH MAST, SOLID STATE (LED), AS PER PLAN

THE LUMINAIRE ARRAYS AND ASSOCIATED ILLUMINATION TEST AREAS SPECIFIED IN C&MS 725.11 ARE HEREBY WAIVED. INSTEAD, THE LUMINAIRES FOR HIGH-MAST LIGHTING SHALL MEET THE FOLLOWING REQUIREMENTS: LUMINAIRES FOR HIGH-MAST LED LIGHTING UNITS WITH SYMMETRIC DISTRIBUTION SHALL BE FOUND ON ODOT'S OFFICE OF MATERIALS MANAGEMENT APPROVED LIST SS813 - LUMINAIRES, SOLID-STATE (LED).

THE APPROVED LIST IS BASED ON THE FOLLOWING: SUPPLEMENTAL SPECIFICATION 813 LUMINAIRE, SOLID-STATE (LED); SUPPLEMENTAL SPECIFICATION 913 LUMINAIRE, SOLID-STATE (LED); SUPPLEMENT 1114 LUMINAIRES, SOLID-STATE (LED) APPROVED LIST QUALIFICATION PROCEDURE.

SOLID STATE (LED) LUMINAIRES FOR HIGH-MAST LIGHTING UNITS WITH TYPE V, SYMMETRIC DISTRIBUTION SHOULD BE IN THE 55,000 - 65,000 LUMEN RANGE WITH 55,000 LUMENS BEING MINIMUM ACCEPTABLE. SHALL BE 3000K COLOR TEMPERATURE. AND BE EITHER HOLOPHANE "HMLD-2, HMLD-3, GE "EVOLVE HM", CONDOR LED, CELESTEON , NAVIGATOR, AN UPDATED VERSION OR EQUAL AS APPROVED BY THE ENGINEER.

625, PULL BOX CLEANED

THIS ITEM OF WORK SHALL CONSIST OF CLEANING AN EXISTING PULL BOX BY REMOVING ANY EXISTING CABLES NOT BEING RECONNECTED, AND DEBRIS SO THAT NEW CABLES CAN BE INSTALLED. ANY UNUSED OPENINGS SHALL BE CLOSED. DISTURBED AREAS NEAR THE PULL BOX SHALL BE CLEARED OF WEEDS OR DEBRIS AND SHALL BE FULLY RESTORED. MATERIAL REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF OF THE PROJECT SITE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER C&MS ITEM 625, "PULL BOX CLEANED" FOR EACH PULL BOX CLEANED WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

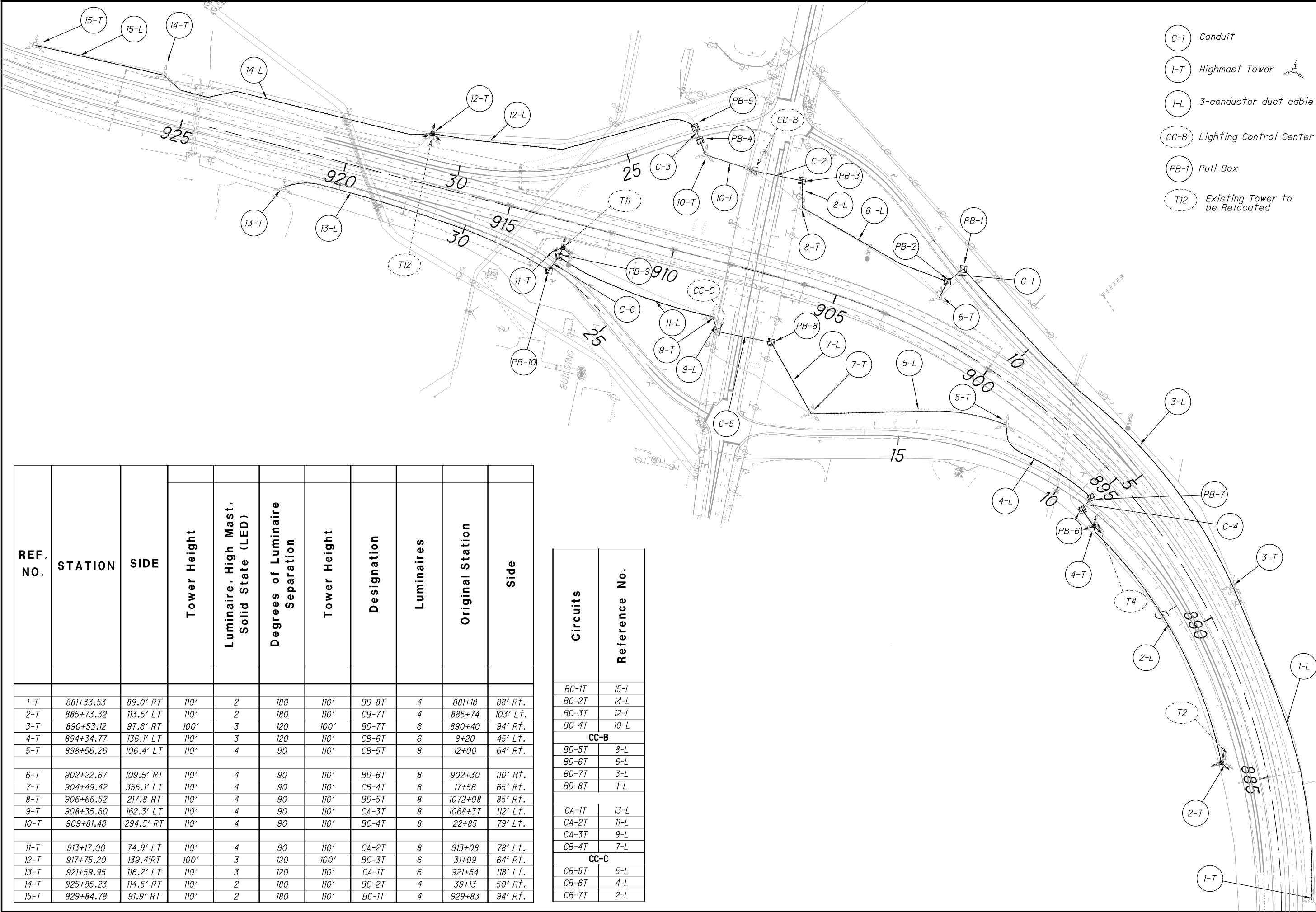
CALCULATED	XXX	LIGHTING NOTES	
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REF. NO.	STATION	SIDE	Tower Height	Luminaire, High Mast, Solid State (LED)	Degrees of Luminaire Separation	Tower Height	Designation	Luminaires	Original Station	Side
1-T	881+33.53	89.0' RT	110'	2	180	110'	BD-8T	4	881+18	88' Rt.
2-T	885+73.32	113.5' LT	110'	2	180	110'	CB-7T	4	885+74	103' Lt.
3-T	890+53.12	97.6' RT	100'	3	120	100'	BD-7T	6	890+40	94' Rt.
4-T	894+34.77	136.1' LT	110'	3	120	110'	CB-6T	6	8+20	45' Lt.
5-T	898+56.26	106.4' LT	110'	4	90	110'	CB-5T	8	12+00	64' Rt.
6-T	902+22.67	109.5' RT	110'	4	90	110'	BD-6T	8	902+30	110' Rt.
7-T	904+49.42	355.1' LT	110'	4	90	110'	CB-4T	8	17+56	65' Rt.
8-T	906+66.52	217.8 RT	110'	4	90	110'	BD-5T	8	1072+08	85' Rt.
9-T	908+35.60	162.3' LT	110'	4	90	110'	CA-3T	8	1068+37	112' Lt.
10-T	909+81.48	294.5' RT	110'	4	90	110'	BC-4T	8	22+85	79' Lt.
11-T	913+17.00	74.9' LT	110'	4	90	110'	CA-2T	8	913+08	78' Lt.
12-T	917+75.20	139.4' RT	100'	3	120	100'	BC-3T	6	31+09	64' Rt.
13-T	921+59.95	116.2' LT	110'	3	120	110'	CA-1T	6	921+64	118' Lt.
14-T	925+85.23	114.5' RT	110'	2	180	110'	BC-2T	4	39+13	50' Rt.
15-T	929+84.78	91.9' RT	110'	2	180	110'	BC-1T	4	929+83	94' Rt.

Circuits	Reference No.
BC-1T	15-L
BC-2T	14-L
BC-3T	12-L
BC-4T	10-L
CC-B	
BD-5T	8-L
BD-6T	6-L
BD-7T	3-L
BD-8T	1-L
CA-1T	13-L
CA-2T	11-L
CA-3T	9-L
CB-4T	7-L
CC-C	
CB-5T	5-L
CB-6T	4-L
CB-7T	2-L



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632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION FOR STORAGE, AS PER PLAN

TRAFFIC SIGNAL INSTALLATIONS, INCLUDING SIGNAL HEADS, CABLE, MESSENGER WIRE, STRAIN POLES, CABINET, CONTROLLER, ETC., SHALL BE REMOVED IN ACCORDANCE WITH C&MS 632.26 AND AS INDICATED ON THE PLANS. REMOVED ITEMS SHALL BE STORED ON THE PROJECT FOR SALVAGE BY ODOT, DISTRICT 01 ROADWAY SERVICES IN ACCORDANCE WITH THE LISTING GIVEN HEREIN.

THE FOLLOWING ITEMS WILL BE REUSED:
UBIQUITI NANOSTATION M5, 5GHZ INDOOR/OUTDOOR AIRMAX 16DBI CPE AND BANDING
CONTROL ROCKETLINX ES8105 UNMANAGED SWITCHES
72" ASTRO-BRACKETS - TYPE POLE
SURGE PROTECTION (TRIPP-LITE ISOBAR 4 ULTRA)
POWER OVER ETHERNET (POE) INJECTORS

THE FOLLOWING ITEMS WILL BE RETURNED TO THE DISTRICT:
METER BASE, DISCONNECT AND ATTACHED CONDUIT,
NORTHBOUND BATTERY BACKUP SYSTEM (MEYER) INCL. CABINET AND INVERTER. RADAR DETECTION UNITS, CLICK 112 CARDS CLICK 222 CARDS, PIGTAIL JUNCTION BOXES, POWER SUPPLY AND RACK.

REMOVED ITEMS SHALL BE DELIVERED TO THE ODOT FACILITY WHOSE ADDRESS IS LISTED BELOW:

ODOT DISTRICT 01, ATTN: Curt Sybert 1885 N. McCullough St. Lima, Ohio 45801 (419) 999-6926

IN THE EVENT THE ITEMS STORED ON THE PROJECT FOR SALVAGE BY THE LOCAL AGENCY ARE NOT REMOVED, THE CONTRACTOR SHALL, WHEN DIRECTED BY THE ENGINEER IN WRITING, REMOVE AND DISPOSE OF THE ITEMS AT NO ADDITIONAL COST TO THE PROJECT.

POWER SERVICE, AS PER PLAN

ELECTRIC POWER SHALL BE OBTAINED FROM THE AMERICAN ELECTRIC POWER COMPANY AT THE LOCATION INDICATED ON THE PLANS. POWER SUPPLIED SHALL BE 120 VOLTS.

632 SIGNAL SUPPORT FOUNDATION

PRIOR TO ORDERING THE SIGNAL SUPPORTS, THE CONTRACTOR SHALL CONTACT OUPS TO HAVE ALL THE UTILITIES LOCATED IN THE FIELD THEN MEET WITH THE PROJECT ENGINEER TO LOCATE THE PROPOSED SUPPORT LOCATIONS TO ENSURE THERE ARE NO CONFLICTS WITH UTILITIES. IF THERE ARE ISSUES, THE PROJECT ENGINEER SHALL PROVIDE GUIDANCE AS TO THE RELOCATION OF THE SUPPORT POLES.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SUPPORT FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

WORK INSPECTION

THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER AND THE DISTRICT TRAFFIC ENGINEER WITH 72 HOUR NOTICE OF ANY SIGNAL WORK TO BE PERFORMED AT THE INTERSECTION SITE(S) SO THAT INSPECTION SERVICES CAN BE SUPPLIED.

GUARANTEE

THE CONTRACTOR SHALL GUARANTEE THAT THE TRAFFIC CONTROL SYSTEM INSTALLED AS PART OF THIS CONTRACT SHALL OPERATE SATISFACTORILY FOR A PERIOD OF 90 DAYS FOLLOWING COMPLETION OF THE 10-DAY PERFORMANCE TEST. IN THE EVENT OF UNSATISFACTORY OPERATION THE CONTRACTOR SHALL CORRECT FAULTY INSTALLATIONS, MAKE REPAIRS AND REPLACE DEFECTIVE PARTS WITH NEW PARTS OF EQUAL OR BETTER QUALITY.

EQUIPMENT, MATERIAL AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM: CONTROLLER, CABINET, UNINTERRUPTIBLE POWER SUPPLY, VEHICLE DETECTION EQUIPMENT, LED LAMP UNITS, NETWORK AND COMMUNICATION/INTERCONNECT EQUIPMENT.

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE STATE OR THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

632 VEHICULAR SIGNAL HEAD, (LED), (BY TYPE), AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS 632 AND 732, THE FOLLOWING REQUIREMENTS SHALL APPLY:

1. SIGNAL HEADS AND VISORS SHALL BE CONSTRUCTED OF BLACK POLYCARBONATE PLASTIC WITH VISORS AS SPECIFIED AND MEET ITE SPECIFICATIONS.

2. PROPER EXTERIOR COLORS SHALL BE OBTAINED BY USE OF COLORED PLASTIC MATERIAL RATHER THAN PAINTING.

3. THE ENTRANCE FITTING SHALL BE OF THE TRI-STUD DESIGN WITH SERRATED RINGS IN ORDER TO ACHIEVE POSITIVE LOCKING.

4. ALL SIGNAL HEADS SHALL BE RIGIDLY MOUNTED TO THE MAST ARM WITH THE YELLOW MODULE LOCATED IN FRONT OF THE MAST ARM.

5. ALUMINUM BACKPLATES SHALL BE IN ACCORDANCE WITH THE C&MS AND INCLUDE A FLUORESCENT YELLOW REFLECTIVE BORDER.

6. THE LIGHT EMITTING DIODE (LED) MODULES SHALL MEET THE REQUIREMENTS OF C&MS 732.04-C. THE CONTRACTOR SHALL PROVIDE ODOT, IN WRITING, WITH THE LED MANUFACTURER NAME, SERIAL NUMBER, PART NUMBER, DESCRIPTION OF LAMP, AND DATE OF MANUFACTURE FOR ALL LED UNITS THAT ARE TO BE USED IN THE SIGNAL HEAD PRIOR TO INSTALLATION, FOR ACCEPTANCE AND WARRANTY PURPOSES.

7. SIGNAL HEADS SHALL HAVE A MINIMUM WALL THICKNESS OF 0.117 INCHES.

8. SIGNAL HEADS SHALL INCLUDE FEDUDE CUTAWAY TYPE VISORS UNLESS OTHERWISE SPECIFIED IN THE PLANS.

9. APPLY A BEAD OF SILICONE TO THE SIGNAL HEAD, WASHER, AND ENTRANCE ADAPTER SERRATIONS TO PREVENT WATER INTRUSION. ALSO, FILL THE SPACE BETWEEN CONCENTRIC SERRATION RINGS ON THE TOP OF THE SIGNAL HEAD TO COMPLETELY EXCLUDE WATER FROM THE SPACE BETWEEN THE

CONCENTRIC RINGS.

10. BALANCE ADJUSTERS SHALL NOT BE USED ON ONE-WAY HEADS OR TETHERED HEADS.

PAYMENT FOR ITEM 632 VEHICULAR SIGNAL HEAD, LED, (BY TYPE), AS PER PLAN SHALL BE MADE FOR COMPLETE SIGNAL HEAD FURNISHED AND INSTALLED, INCLUDING ALL LABOR, EQUIPMENT, MATERIALS, AND NEW ATTACHMENT HARDWARE.

633 UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS 633 AND 733, POLE ATTACHMENT HARDWARE WILL BE INCLUDED FOR POLE-MOUNTED CABINETS, AND A CABINET RISER (8 INCH MINIMUM) AND ANCHOR BOLTS WILL BE PROVIDED FOR BASE-MOUNTED CABINETS. BEFORE PERFORMING THE WORK, THE CONTRACTOR, THE DISTRICT TRAFFIC ENGINEER AND THE PROJECT ENGINEER WILL PERFORM A SITE INSPECTION TO ESTABLISH THE LOCATION OF THE UPS CABINET AND FOUNDATION.

THE UPS CABINET SHALL INCLUDE A GENERATOR POWER PANEL WITH A HEAVY DUTY POWER RELAY VERSUS THE LINE VOLTAGE GENERATOR SWITCH. THE GENERATOR INLET SHALL BE A RECESSED PANEL WITH A DOOR THAT IS FLUSH WITH THE EXTERNAL SIDE OF THE UPS CABINET. IT SHALL INCLUDE A RECESSED PLUG, AUTOMATIC TRANSFER SWITCH AND A DOOR THAT SECURELY CLOSSES OVER THE POWER CORD.

THE UPS OUTPUT NOTIFICATIONS FOR ON BATTERY, BATTERY 2-HOUR TIMER, AND LOW BATTERY SHALL BE WIRED INTO THE TRAFFIC SIGNAL CABINET BACK PANEL TO PROVIDE SPECIAL STATUS ALARMS FOR EACH OUTPUT INTO THE SIGNAL CONTROLLER.

THIS ITEM SHALL INCLUDE A RED LED STATUS INDICATOR LAMP TO ALLOW MAINTENANCE PERSONNEL AND LAW ENFORCEMENT TO QUICKLY ASSESS WHETHER A TRAFFIC SIGNAL CABINET IS BEING POWERED BY A UPS. THE LED HOUSING SHALL BE NEMA 4X, IP65 OR IP66, RATED FOR OUTDOOR USE AND BE TAMPER/SHATTER RESISTANT. IT SHALL BE A DOMED ENCLOSURE CONTAINING A RED LENS WITH LED THAT IS VISIBLE FROM 100 FOOT MINIMUM. THE ENCLOSURE AND LED MODULE SHOULD BE PLACED AND CENTERED ON THE TOP SURFACE OF THE UPS CABINET AND SEALED FROM WATER INTRUSION. IT SHOULD BE WIRED USING MINIMUM 20GA STRANDED, INSULATED HOOKUP WIRE TO THE STATUS RELAY OUTPUTS OF THE UPS. THE WIRES SHALL BE TERMINATED BY LUGS AT THE DISPLAY END AND PERMANENTLY LABELED "BACKUP POWER STATUS DISPLAY," WITH WIRE POLARITY INDICATED. THE RED LED SHALL ONLY ILLUMINATE TO INDICATE THE CABINET IS OPERATING UNDER UPS BACKUP POWER (THE "BACKUP" OPERATING CONDITION). THIS ITEM INCLUDES PROGRAMMING THE UPS STATUS RELAY OUTPUTS TO PRODUCE THE LAMP STATUS DISPLAYS. THESE STATUS DISPLAYS WILL BE SOLID 100% DUTY CYCLE (NOT FLASHING) DISPLAYS. THE OPERATING VOLTAGE OF THE LED LAMP SHALL BE 120V AC UNLESS OTHERWISE INDICATED.

632 SIGNAL SUPPORT TYPE TC-81.21, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS 632 AND 732, THE SIGNAL POLES AND MAST ARM SHALL HAVE A BLACK COATING (Black (FEDSTD-595b 17038)) AS PER THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 916

632 SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 10 POLE, WITH MAST ARMS TC-81.21 DESIGN 14 AND DESIGN 11, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF C&MS 632 AND 732, THE SIGNAL POLES AND MAST ARM SHALL HAVE A BLACK COATING (Black (FEDSTD-595b 17038)) AS PER THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 916

ARC-FLASH HAZARD CALCULATIONS AND EQUIPMENT LABEL

DELIVER TO THE ENGINEER, AS REQUIRED BY SUPPLEMENTAL SPECIFICATIONS 825, THREE (3) COPIES OF THE COMPLETED CALCULATIONS, PRINTED AND STAMPED BY AN ENGINEER LICENSED TO PRACTICE IN THE STATE OF OHIO. PROVIDE THE SAME AS PDF FILES ON A STANDARD DIGITAL MEDIUM.

BASIS OF PAYMENT:
625 EACH ARC FLASH CALCULATIONS AND LABEL, STA.1064+93.00, 59.00' LT.
625 EACH ARC FLASH CALCULATIONS AND LABEL,STA.1074+93.50, 68.50' RT.

SEE SUPPLEMENTAL SPECIFICATIONS 825 FOR THE COMPLETE REQUIREMENTS.

GROUNDING AND BONDING

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE TC SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

- ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH.
 - PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.
 - WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.
 - METALLIC CONDUIT CARRYING THE LOOP WIRES FROM IN THE PAVEMENT TO THE PULL BOX SPLICE LOCATION WILL ONLY BE BONDED AT THE PULL BOX END, AND WILL NOT CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR.
 - IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.
 - IF AN EQUIPMENT GROUNDING CONDUCTOR IS NEEDED IN CONDUIT BETWEEN SIGNALIZED INTERSECTIONS FOR UNDERGROUND INTERCONNECT CABLE, THE GROUNDING SYSTEM FOR EACH SIGNALIZED INTERSECTION WILL BE SEPARATED ABOUT MIDWAY BETWEEN THE INTERSECTIONS.

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GROUNDING AND BONDING cont.

F. THE MESSENGER WIRE AT SIGNALIZED INTERSECTIONS WILL BE USED AS THE CONDUCTIVE PATH FROM CORNER TO CORNER IF CONDUIT IS NOT PROVIDED UNDER THE ROADWAY. WHEN CONDUIT CONNECTS THE CORNERS OF AN INTERSECTION, AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE USED IN THE CONDUIT.

2. CONDUITS.

- A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.
- B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.
- C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
- D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

3. WIRE FOR GROUNDING AND BONDING.

- A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:
- I. USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.
- II. USE A MINIMUM 8 AWG BETWEEN LOOP DETECTOR PULL BOXES AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.
- III. USE A MINIMUM 8 AWG BETWEEN THE "PREPARE TO STOP WHEN FLASHING" INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.

- IV. THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.
- B. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.
4. GROUND ROD.
- A. A 3/4 INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
- B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.
5. THE GREEN CONDUCTOR IN SIGNAL CABLES (CONDUCTOR #4) SHALL NOT BE USED TO SUPPLY POWER TO A SIGNAL INDICATION. IT WILL BE CONNECTED TO THE SIGNAL BODY AS AN EQUIPMENT GROUND IN ALUMINUM HEADS AND IT WILL BE UNUSED IN PLASTIC HEADS. UNUSED CONDUCTORS SHALL BE GROUNDED IN THE CABINET. TYPICAL USE OF CONDUCTORS IS AS FOLLOWS:

COND. NO.	COLOR	VEHICLE SIGNAL PEDESTRIAN SIGNAL
1	BLACK	GREEN BALL #1 WALK
2	WHITE	AC NEUTRAL AC NEUTRAL
3	RED	RED BALL #1 DW/FDW
4	GREEN	EQUIPMENT GROUND EQUIPMENT GROUND
5	ORANGE	YELLOW BALL #2 DW/FDW
6	BLUE	GREEN ARROW #2 WALK
7	WHITE	YELLOW ARROW BLACK STRIPE NOT USED
6.	POWER SERVICE AND DISCONNECT SWITCH.	
A.	AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL	

- (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.
- B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.
- I. NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.
- II. IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.
7. PAYMENT - ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.
- 809 ADVANCE RADAR DETECTION**
- THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR ADVANCE DETECTION UNIT (MODEL SS-200E). THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:
1. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
2. ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CAL TRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
3. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
4. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
5. THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE

6. A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).
7. THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.

PAYMENT FOR ITEM 809 ADVANCE RADAR DETECTION SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT, CONNECTIONS TESTED AND ACCEPTED, AND ANY OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM.

809 STOP-LINE RADAR DETECTION

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT. THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

1. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
2. ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CAL- TRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
3. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
4. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
5. THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.
6. A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).
7. THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.

PAYMENT FOR ITEM 809 STOP-LINE RADAR DETECTION SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED.

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ITEM 633 – CONTROLLER ITEM, MISC.: ETHERNET RADIO (UBIQUITI), INSTALL ONLY

THIS ITEM CONSISTS OF INSTALLING THE SPECIFIED ETHERNET RADIOS, ETHERNET CABLES (CAT 5E OR GREATER- GEL FILLED, ARMORED, DIRECT BURY RATED, UV RATED, & DUAL JACKET; PER SS 809.13.B), SURGE PROTECTION (TRIPP-LITE ISOBAR 4 ULTRA) WIRED TO BACK PANEL POWER OR NON-GFI RECEPTACLE, CABINET WIRING, AND ATTACHMENTS REQUIRED FOR INSTALLATION BACK TO THE ORIGINAL LOCATIONS WHERE THE EQUIPMENT CAME FROM AND WILL BE REUSED.

FOR NETWORK CONSISTENCY, ETHERNET RADIOS SUPPLIED SHALL BE UBIQUITI NANOSTATION M5, 5GHZ INDOOR/OUTDOOR AIRMAX 16DBI CPE. THE RADIOS SHALL BE INSTALLED ON SIGNAL SUPPORTS AND ITS CAMERA POLES ON THE CABINET CORNER.

RADIOS SHALL BE INSTALLED SO THAT THEY POINT TOWARD ADJACENT RADIOS IN THE SIGNALIZED CORRIDOR. NOTE THAT IN SOME CASES, THE CORRIDOR MAY INCLUDE AN INTERSECTION PERPENDICULAR TO THE CORRIDOR, OR THE RADIO SHALL BE POINTED TO AN ITS CAMERA POLE WHERE THE FIBER DROP EXISTS. RADIOS SHALL BE INSTALLED ON TOP OF A 72" ASTRO-BRACKET TYPE POLE ATTACHED TO THE TOP OF THE STRAIN POLE OR 30' HEIGHT ON THE ITS CAMERA POLE OR AS APPROVED BY THE ENGINEER.

INCIDENTAL WORK TO THIS ITEM INCLUDES RUNNING TWO ETHERNET CABLES (CAT 5E OR GREATER- GEL FILLED, ARMORED, DIRECT BURY RATED, UV RATED, & DUAL JACKET; PER SS 809.13.B) WITH RJ-45 TERMINATIONS TO THE RADIO FROM THE CABINET WHERE ONE CABLE WILL BE POWER OVER ETHERNET AND THE OTHER WILL BE PLUGGED INTO THE MANAGED SWITCH.

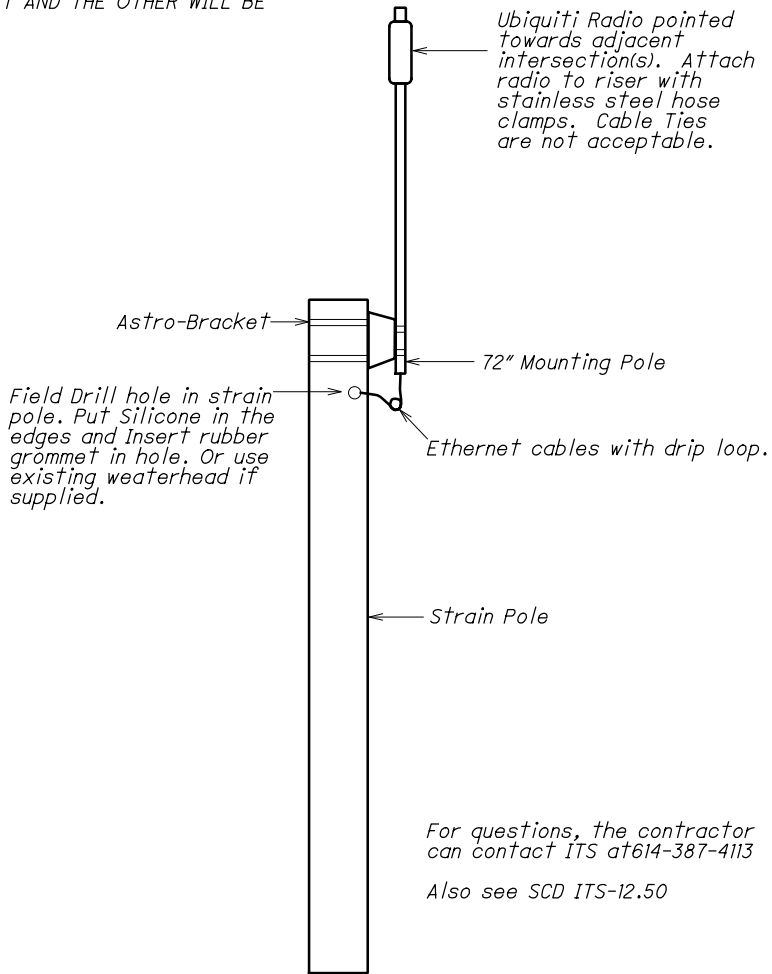
ITEM 633 – CONTROLLER ITEM, MISC.: UNMANAGED SWITCH (CONTROL), INSTALL ONLY

THIS ITEM CONSISTS OF INSTALLING AN UNMANAGED SWITCH. FOUR(4) 10' CAT 5 FOR NETWORK CONSISTENCY, UNMANAGED SWITCHES SUPPLIED SHALL BE CONTROL ROCKETLINX ES8105. SWITCHES SPECIFIED SHALL BE FURNISHED WITH COMPATIBLE POWER SUPPLIES AND ALL ACCESSORIES TO BE FULLY FUNCTIONAL INCLUDING POWER PLUG AND CABLE.

TRAFFIC SIGNAL COMMUNICATIONS (EXISTING)

ONE OF THE TWO RADIOS LOCATED AT THE IR-75 NB RAMP COMMUNICATES WITH THE RADIO LOCATED AT IR-75 SB RAMP. THE SECOND RADIO LOCATED AT THE IR-75 NB RAMP COMMUNICATES WITH THE IR-75/US-30 CCTV SITE RADIO.

THE INTENTION OF THE REUSE SECTION OF '632 REMOVAL OF TRAFFIC SIGNALS INSTALLATION FOR STORAGE, AS PER PLAN' IS TO STORE FOR REUSE THE HARDWARE NEEDED TO RE-ESTABLISH THESE EXISTING COMMUNICATION PAIRS. THE FOLLOWING: 'ITEM 633 – CONTROLLER ITEM, MISC.: ETHERNET RADIO (UBIQUITO), INSTALL ONLY' AND 'ITEM 633 – CONTROLLER ITEM, MISC.: UNMANAGED SWITCH (CONTROL), INSTALL ONLY' NOTES/PAY ITEMS ARE PROVIDED AS A MEANS TO DO THIS WORK AND SHALL INCLUDE ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.



ITEM 633 – CONTROLLER ITEM, MISC.: ETHERNET RADIO (UBIQUITI) TYPICAL INSTALLATION.

632 SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.21 MAST ARM (GREATER THAN 59' IN LENGTH), AS PER PLAN (ALTERNATE 1)

THIS ITEM SHALL CONSIST OF THE CONTRACTOR INSTALLING A TUNED MECHANICAL STOCKBRIDGE OR MASS-SPRING TYPE DAMPER ON A TC-81.21 MAST ARM SIGNAL SUPPORT TO REDUCE THE POSSIBILITY OF HARMONIC VIBRATIONS CAUSED BY WIND LOADS. A MECHANICAL DAMPER SHALL BE APPLIED TO ALL MAST ARMS OVER 59 FEET IN LENGTH. THE INSTALLED DAMPER SHALL BE CAPABLE OF REDUCING THE LOADED MAXIMUM VERTICAL MOVEMENT AT THE TIP OF THE ARM TO 8 INCHES MEASURED FROM THE HIGHEST TO THE LOWEST POINT OF DEFLECTION AT WIND SPEEDS OF 5-20 MPH.

ALL ATTACHMENT HARDWARE CONNECTIONS SHALL BE STAINLESS STEEL. STOCKBRIDGE-TYPE DAMPERS SHALL HAVE A STAINLESS STEEL SAFETY CHAIN ANCHORED TO THE MAST ARM TO PREVENT WEIGHTS FROM FALLING SHOULD THEY BECOME SEPARATED FROM THE REST OF THE ASSEMBLY. THE DAMPER SHALL BE ATTACHED TO THE ARM WITHIN 8 FEET OF MAST ARM TIP. INSTALLATION SHALL BE PER THE MANUFACTURER'S GUIDELINES. STATIC DAMPERS SUCH AS HORIZONTAL FLAT SIGN MOUNTINGS SHALL NOT BE USED. ACCEPTABLE DEVICES INCLUDE THE FOLLOWING OR APPROVED EQUAL:

1. UNION METAL ALCOA DAMPER DEVICE
- DWG. NO. 2G-1817-C1
2. VALMONT STRUCTURES ALCOA DEVICE
- DWG. NO. OH104242P1
3. VALMONT STRUCTURES MITIGATOR
- MODEL TRI
4. FLORIDA DOT SPRING-MASS DAMPER
- DRAWING INDEX NO. 17749
5. PATHMASTER DAMPER ASSEMBLY
- DWG. U2G-1817-C
6. HUBBELL 607 SERIES DAMPER
- MILLERBERND DWG. NO. HUBBELL-6072014

PAYMENT FOR ITEM 632 "SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.21 MAST ARM (GREATER THAN 59 FEET IN LENGTH), AS PER PLAN ALTERNATE 1" SHALL BE MADE AT THE CONTRACT UNIT PRICE PER EACH COMPLETE AND IN PLACE, AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK.

632 SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.21 MAST ARM (GREATER THAN 59' IN LENGTH), AS PER PLAN (ALTERNATE 2)

THIS ITEM SHALL CONSIST OF THE CONTRACTOR INSTALLING A TUNED MECHANICAL STOCKBRIDGE OR MASS-SPRING TYPE DAMPER ON A TC-81.21 MAST ARM SIGNAL SUPPORT TO REDUCE THE POSSIBILITY OF HARMONIC VIBRATIONS CAUSED BY WIND LOADS. A MECHANICAL DAMPER SHALL BE APPLIED TO ALL MAST ARMS OVER 59 FEET IN LENGTH. THE INSTALLED DAMPER SHALL BE CAPABLE OF REDUCING THE LOADED MAXIMUM VERTICAL MOVEMENT AT THE TIP OF THE ARM TO 8 INCHES MEASURED FROM THE HIGHEST TO THE LOWEST POINT OF DEFLECTION AT WIND SPEEDS OF 5-20 MPH.

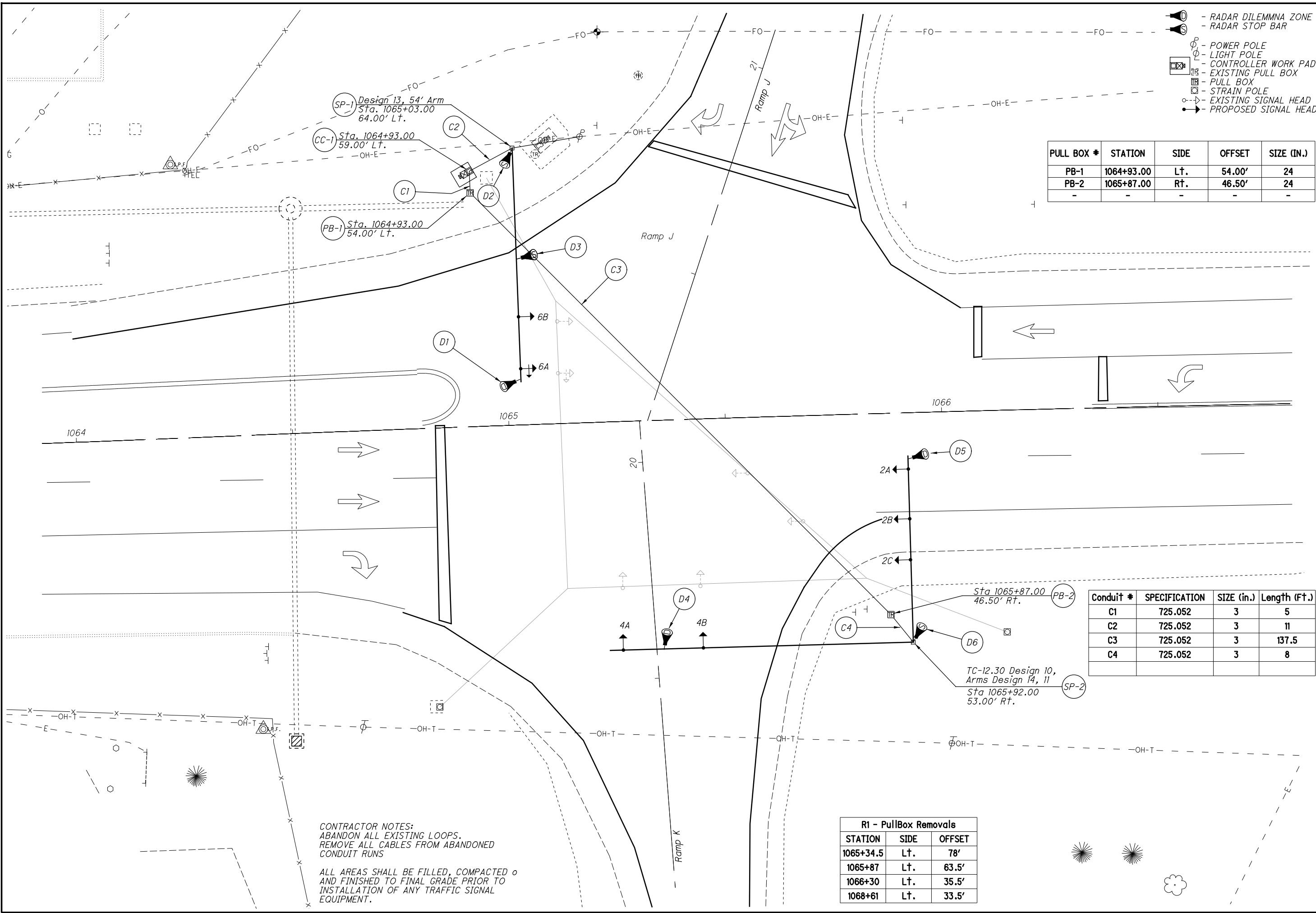
ALL ATTACHMENT HARDWARE CONNECTIONS SHALL BE STAINLESS STEEL. STOCKBRIDGE-TYPE DAMPERS SHALL HAVE A STAINLESS STEEL SAFETY CHAIN ANCHORED TO THE MAST ARM TO PREVENT WEIGHTS FROM FALLING SHOULD THEY BECOME SEPARATED FROM THE REST OF THE ASSEMBLY. THE DAMPER SHALL BE ATTACHED TO THE ARM WITHIN 8 FEET OF MAST ARM TIP. INSTALLATION SHALL BE PER THE MANUFACTURER'S GUIDELINES. STATIC DAMPERS SUCH AS HORIZONTAL FLAT SIGN MOUNTINGS SHALL NOT BE USED. ACCEPTABLE DEVICE SHALL BE A VALMONT STRUCTURES MITIGATOR - MODEL TRI.

PAYMENT FOR ITEM 632 "SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.21 MAST ARM (GREATER THAN 59 FEET IN LENGTH), AS PER PLAN ALTERNATE 2" SHALL BE MADE AT THE CONTRACT UNIT PRICE PER EACH COMPLETE AND IN PLACE, AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK.

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REF NO.	SHEET NO.	STATION TO STATION			625	625	625	625	625	625	632	632	632	632	632	632	632	632	632	632	632	632	632	632	
					CONDUIT, JACKED OR DRILLED, 725.052, 3"	CONDUIT, 3", 725.052	TRENCH, 24" DEEP	PULL BOX, 725.08, 24"	PULL BOX REMOVED	GROUND ROD	ARC FLASH CALCULATIONS AND LABEL	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	COVERING OF VEHICULAR SIGNAL HEAD	SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 10 POLE, WITH MAST ARMS TC-81.21 DESIGN 14 AND DESIGN 11, AS PER PLAN	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 11, AS PER PLAN, 40' ARM	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13, AS PER PLAN, 50' ARM	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13, AS PER PLAN, 54' ARM	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 14, AS PER PLAN, 61' ARM	SIGNAL SUPPORT FOUNDATION	SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.21 MAST ARM (GREATER THAN 59' IN LENGTH)
					FT	FT	FT	EACH	EACH	EACH	EACH	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
R1	167								4																
R2	171								4																
PB-1	167							1																	
PB-2	167							1																	
PB-3	171							1																	
PB-4	171							1																	
PB-5	171							1																	
C1-C4	167				137.5	24	24																		
C5-C10	171				242.5	16.5	16.5																		
SP-1	167									1		108.5				1	1	2							
SP-2	167									1	526					4		4	1						
CC-1	167									1	1			48	21										
SP-3	171									1		360.5				2		2		1					
SP-4	171									1		231.5				2		2			1				
SP-5	171									1			104.5			1	1	2							
CC-2	171									1	1			38.5	109										
TOTALS CARRIED TO GENERAL SUMMARY					380	41	41	5	8	7	2	1118	213	87	130	10	2	12	1	1	1	1	1	5	6
REF NO.	SHEET NO.	STATION TO STATION			633	633				632	632		633	633	633	633									
					CONTROLLER ITEM, MISC.:ETHERNET RADIO (UBIQUITI), INSTALL ONLY	CONTROLLER ITEM, MISC.:UNMANAGED SWITCH (COMTROL), INSTALL ONLY				REMOVAL OF TRAFFIC SIGNAL INSTALLATION FOR STORAGE, AS PER PLAN	POWER SERVICE, AS PER PLAN		CABINET, TYPE 332	CABINET FOUNDATION	CONTROLLER WORK PAD	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN								ATC V6.24 CONTROLLER	ADVANCE RADAR DETECTION
					EACH	EACH				EACH	EACH		EACH	EACH	EACH	EACH							EACH	EACH	EACH
CC-1	167			TO						1	1		1	1	1	1							1		
CC-2	171									1	1		1	1	1	1							1		
	165A	TRAFFIC	SIGNAL																						
D1	167																							1	
D2	167																								1
D3	167																								1
D4	167																								1
D5	167																								1
D6	167																								1
D7	171																								1
D8	171																								1
D9	171																								1
D10	171																								1
D11	171																								1
D12	171																								1
TOTALS CARRIED TO GENERAL SUMMARY					1	1				2	2		2	2	2	2							2	6	6

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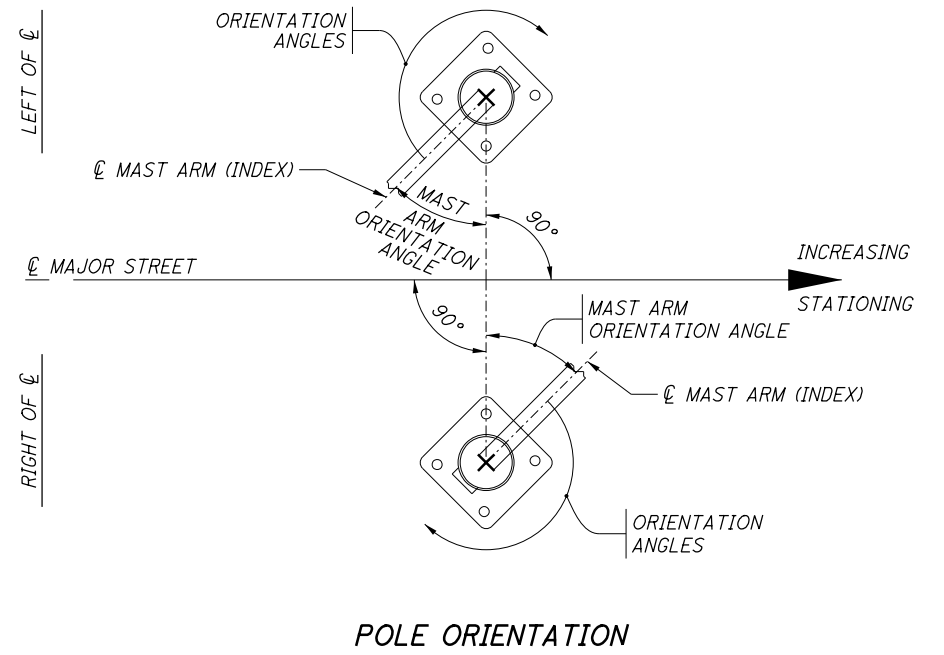
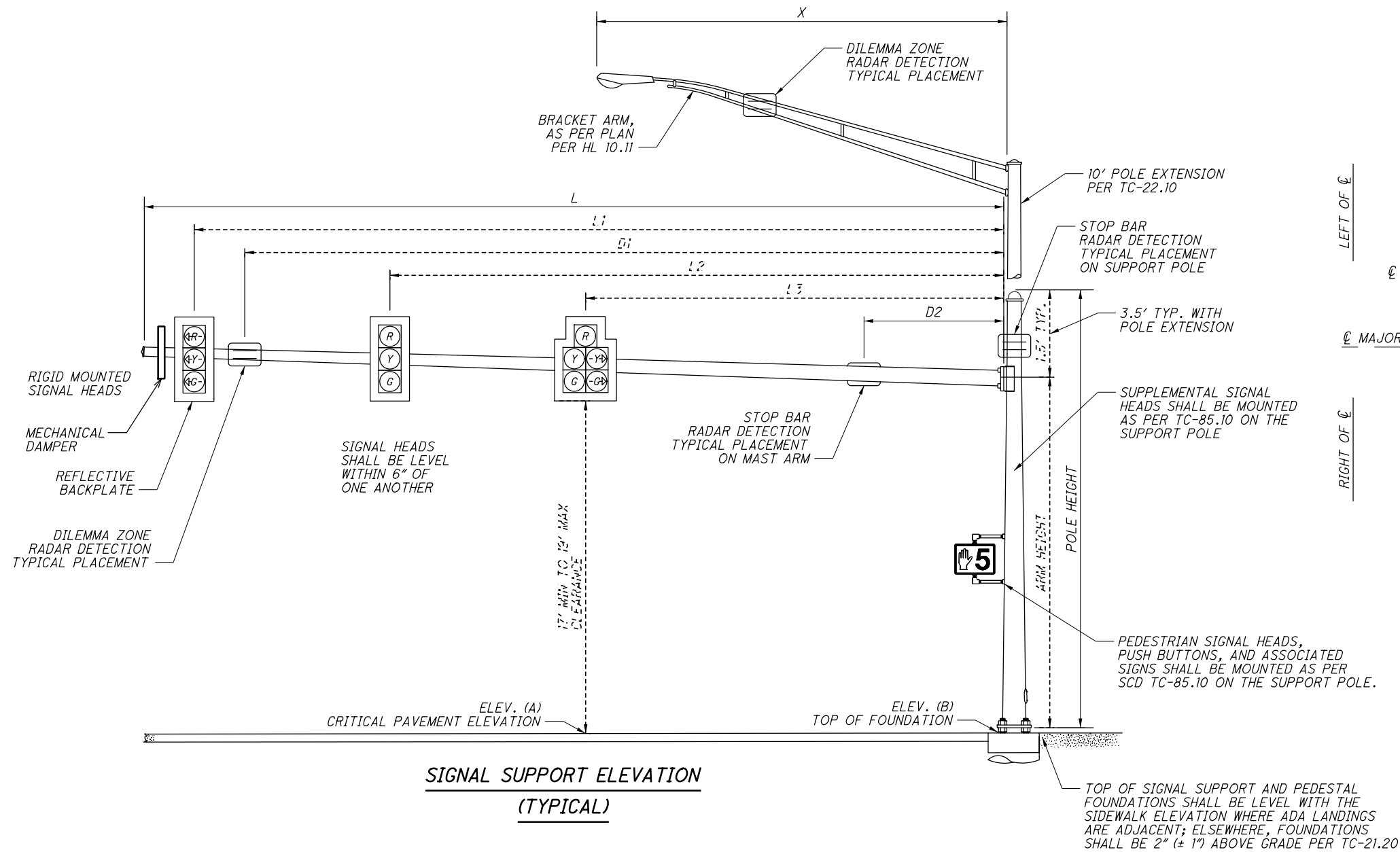
- RADAR DILEMMA ZONE
- RADAR STOP BAR
- POWER POLE
- LIGHT POLE
- CONTROLLER WORK PAD
- EXISTING PULL BOX
- PULL BOX
- STRAIN POLE
- EXISTING SIGNAL HEAD
- PROPOSED SIGNAL HEAD

PULL BOX #	STATION	SIDE	OFFSET	SIZE (IN.)
PB-1	1064+93.00	Lt.	54.00'	24
PB-2	1065+87.00	Rt.	46.50'	24
-	-	-	-	-

Conduit #	SPECIFICATION	SIZE (in.)	Length (Ft.)
C1	725.052	3	5
C2	725.052	3	11
C3	725.052	3	137.5
C4	725.052	3	8

R1 - PullBox Removals		
STATION	SIDE	OFFSET
1065+34.5	Lt.	78'
1065+87	Lt.	63.5'
1066+30	Lt.	35.5'
1068+61	Lt.	33.5'

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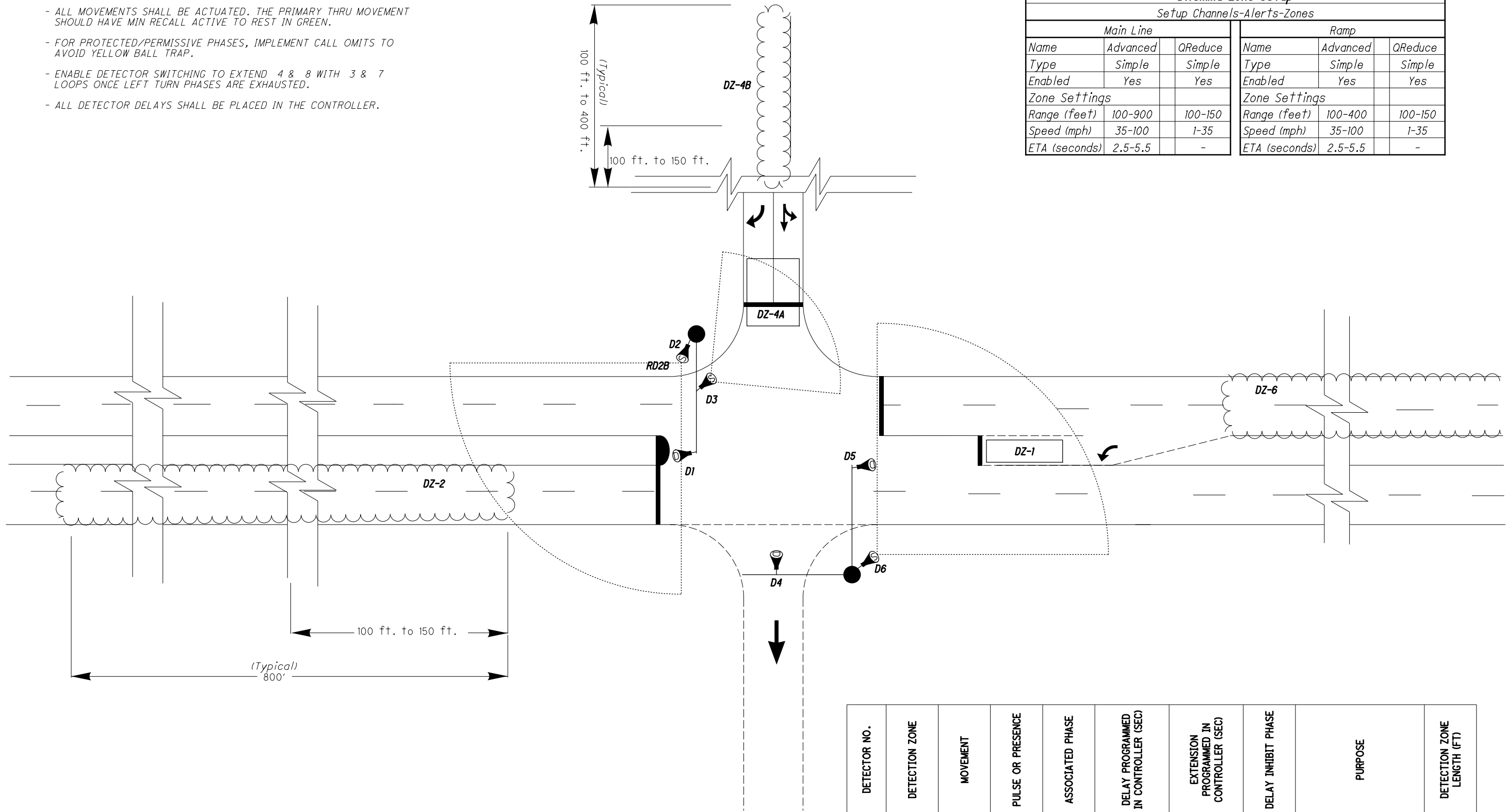
MAST ARM TABLE (TEM FIGURE 498-37 & 38)

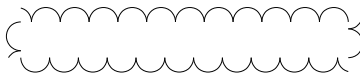
SUPPORT NO.	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS												ORIENTATION ANGLES FROM MAST ARM						SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.21 MAST ARM
			A	B	DESIGN TYPE	DESIGN NO.	ARM DESIGN NO. TC-81.21	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	D1	D2	D3	MAST ARM A ANGLE	MAST ARM B ANGLE	POWER SERVICE	CONTROLLER	HANDHOLE	CABLE ENTRANCE 12" FROM TOP	
			FT	FT				FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG	
SP-1	1065+03	64.0' Lt.	871.76	871.04	TC-81.21	13		22	20.5	54'	51	39					0		269	64	180	269	Yes
SP-2A	1065+92	53.0' Rt.	872.42	870.61	TC-12.30	10	14	24.5	21	70'	67	48.5					270						Yes
SP-2B			873.99				11		23	43'	40	28.5	19					0			180		Yes

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- ALL MOVEMENTS SHALL BE ACTUATED. THE PRIMARY THRU MOVEMENT SHOULD HAVE MIN RECALL ACTIVE TO REST IN GREEN.
- FOR PROTECTED/PERMISSIVE PHASES, IMPLEMENT CALL OMITS TO AVOID YELLOW BALL TRAP.
- ENABLE DETECTOR SWITCHING TO EXTEND 4 & 8 WITH 3 & 7 LOOPS ONCE LEFT TURN PHASES ARE EXHAUSTED.
- ALL DETECTOR DELAYS SHALL BE PLACED IN THE CONTROLLER.

TYPICAL RAMP DRAWING



 Radar Dilemma Detection Zone
(Typical 100'-900' mainline and 100'-400' Ramp)

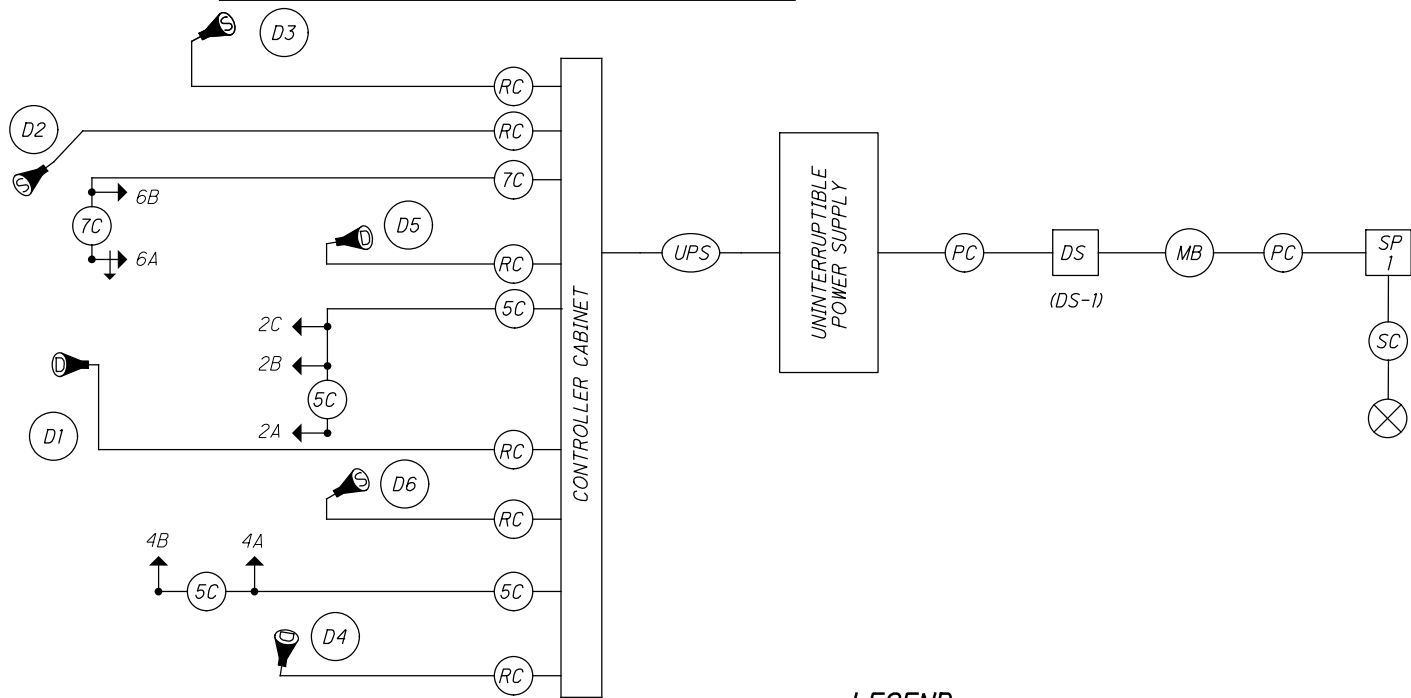
Dilemma Zone Setup					
Setup Channels-Alerts-Zones					
Main Line			Ramp		
Name	Advanced	QReduce	Name	Advanced	QReduce
Type	Simple	Simple	Type	Simple	Simple
Enabled	Yes	Yes	Enabled	Yes	Yes
Zone Settings			Zone Settings		
Range (feet)	100-900	100-150	Range (feet)	100-400	100-150
Speed (mph)	35-100	1-35	Speed (mph)	35-100	1-35
ETA (seconds)	2.5-5.5	-	ETA (seconds)	2.5-5.5	-

DETECTOR NO.	DETECTION ZONE	MOVEMENT	PULSE OR PRESENCE	ASSOCIATED PHASE	DELAY PROGRAMMED IN CONTROLLER (SEC)	EXTENSION PROGRAMMED IN CONTROLLER (SEC)	DELAY INHIBIT PHASE	PURPOSE	DETECTION ZONE LENGTH (FT)
D1	DZ-2	EB THRU	PULSE	2	-	-	-	DILEMMA ZONE	900
D2	DZ-2	SB THRU	PRESENCE	2	-	-	-	CALL/EXTEND PHASE 4	140
D3	DZ-4A	SB THRU	PRESENCE	4	10	-	-	CALL/EXTEND PHASE 4	140
D4	DZ-4B	SB THRU	PULSE	4	-	-	-	DILEMMA ZONE	400
D5	DZ-6	WB THRU	PULSE	6	-	-	-	DILEMMA ZONE	900
D6	DZ-1	WB LT	PRESENCE	1	-	-	-	CALL/EXTEND PHASE 1	140
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

NOTE: DILEMMA ZONE SPEED THRESHOLD >30 MPH

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WIRING DIAGRAM (TYPICAL)
SIGNAL TIMING CHART (TEM FORM 496-3)

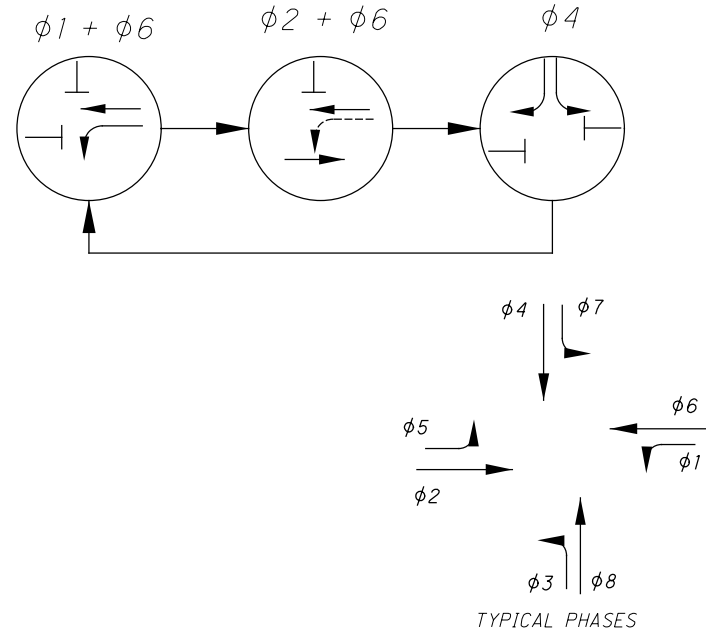


LEGEND

	5 SECTION VEHICULAR SIGNAL HEAD, 1-WAY		SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG		METER BASE
	3 SECTION VEHICULAR SIGNAL HEAD, 1-WAY		SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG		SIGNAL DISCONNECT SWITCH
	DILEMMA ZONE RADAR DETECTION UNIT		SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG		UNINTERRUPTIBLE POWER SUPPLY CABLE
	STOP BAR RADAR DETECTION UNIT		RADAR DETECTION CABLE		
	PULLBOX		SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG		
	SIGNAL SUPPORT POLE NO. --		POWER CABLE, 3 CONDUCTOR, NO. 6 AWG		

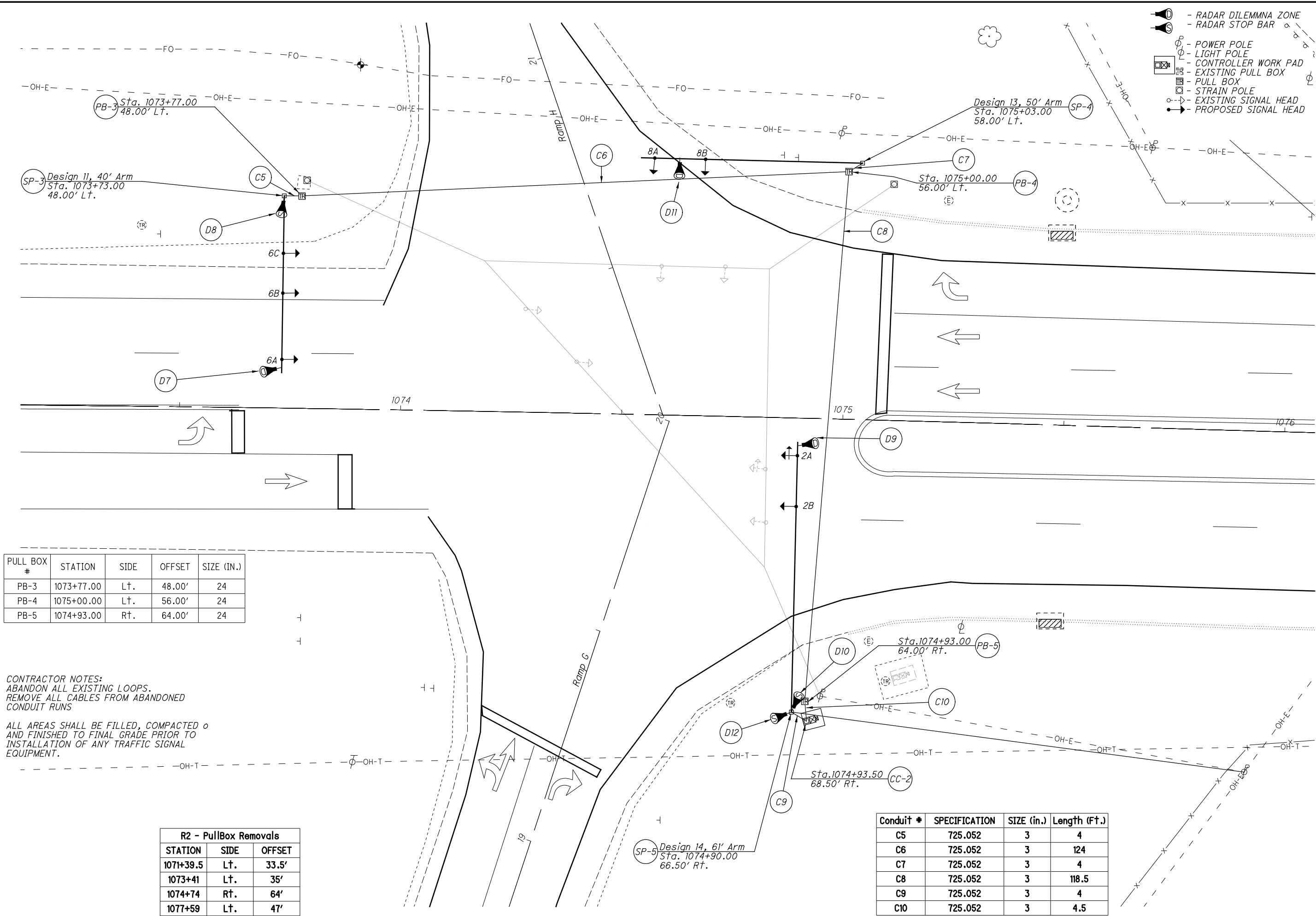
NOTES:

- ALL MOVEMENTS SHALL BE ACTUATED. THE PRIMARY THRU MOVEMENT SHOULD HAVE MIN RECALL ACTIVE TO REST IN GREEN.
- FOR PROTECTED/PERMISSIVE PHASES, IMPLEMENT CALL OMTS TO AVOID YELLOW BALL TRAP.
- ENABLE $\phi 3$ & $\phi 7$ DETECTOR SWITCHING TO ALLOW $\phi 3$ & $\phi 7$ TO EXTEND $\phi 4$ & $\phi 8$ WHEN ALLOCATED GREEN TIME FOR LEFT TURN PHASES ARE EXHAUSTED.
- ENABLE DETECTOR SWITCHING TO EXTEND $\phi 4$ & $\phi 8$ WITH $\phi 3$ & $\phi 7$ LOOPS ONCE LEFT TURN PHASES ARE EXHAUSTED.
- COUNTDOWN PEDESTRIAN SIGNALS SHALL GO TO ZERO ON YELLOW PER OMTCD FIGURE 4E-2.
- RADAR DETECTION UNITS FOR DILEMMA ZONE DETECTION SHALL PLACE A CONSTANT CALL TO THE CONTROLLER WHEN VEHICLES TRAVEL TIMES TO THE STOP BAR ARE BETWEEN 2.5 AND 6 SECONDS. SPEED TRIGGER SHALL BE SET FOR VEHICLES TRAVELING 35 MPH AND GREATER.
- RADAR SHALL HAVE QUEUE DETECTION CONFIGURED AND A ZONE PLACED AT 100-200 FEET FROM STOP BAR FOR SLOW MOVING VEHICLE EXTENSIONS. SPEED TRIGGER SHALL BE SET AT 1-35 MPH.
- ALL DETECTOR DELAYS SHALL BE PLACED IN THE CONTROLLER.



INTERSECTION: SR-696 & IR 75 SB Ramp									
MAINTAINING AGENCY: ODOT									
START UP		DUAL ENTRY:	YES	PHASES:					
START IN:		REST IN RED:		RING 1		RING 2			
TIME FOR FLASH OR ALL RED:		OVERLAP		A	B	C	D		
FIRST PHASE(S):		PHASES		-	-	-	-		
COLOR DISPLAYED:									
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)		1	2	3	4	5	6	7	8
DIRECTION		WB LT	EB	-	SB	-	WB	-	-
MINIMUM GREEN (INITIAL) (SEC.)		7	20	-	12	-	20	-	-
ADDED INITIAL *(SEC./ACTUATION)		-	-	-	-	-	-	-	-
MAXIMUM INITIAL (SEC.)		-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP) (SEC.)		1.5	2	-	1.5	-	2	-	-
TIME BEFORE REDUCTION *(SEC.)		-	-	-	-	-	-	-	-
MINIMUM GAP *(SEC.)		-	-	-	-	-	-	-	-
TIME TO REDUCE *(SEC.)		-	-	-	-	-	-	-	-
MAXIMUM GREEN I (SEC.)		15	60	-	25	-	60	-	-
MAXIMUM GREEN II (SEC.)		15	60	-	25	-	60	-	-
YELLOW CHANGE (SEC.)		4	4.8	-	4.8	-	4.8	-	-
ALL RED CLEARANCE (SEC.)		2.5	2	-	2	-	2	-	-
WALK (SEC.)		-	-	-	-	-	-	-	-
PEDESTRIAN CLEARANCE (SEC.)		-	-	-	-	-	-	-	-
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	ON	-	-	-	ON	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-
MEMORY (ON/OFF)		-	-	-	-	-	-	-	-
*VOLUME DENSITY CONTROLS									

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PULL BOX #	STATION	SIDE	OFFSET	SIZE (IN.)
PB-3	1073+77.00	Lt.	48.00'	24
PB-4	1075+00.00	Lt.	56.00'	24
PB-5	1074+93.00	Rt.	64.00'	24

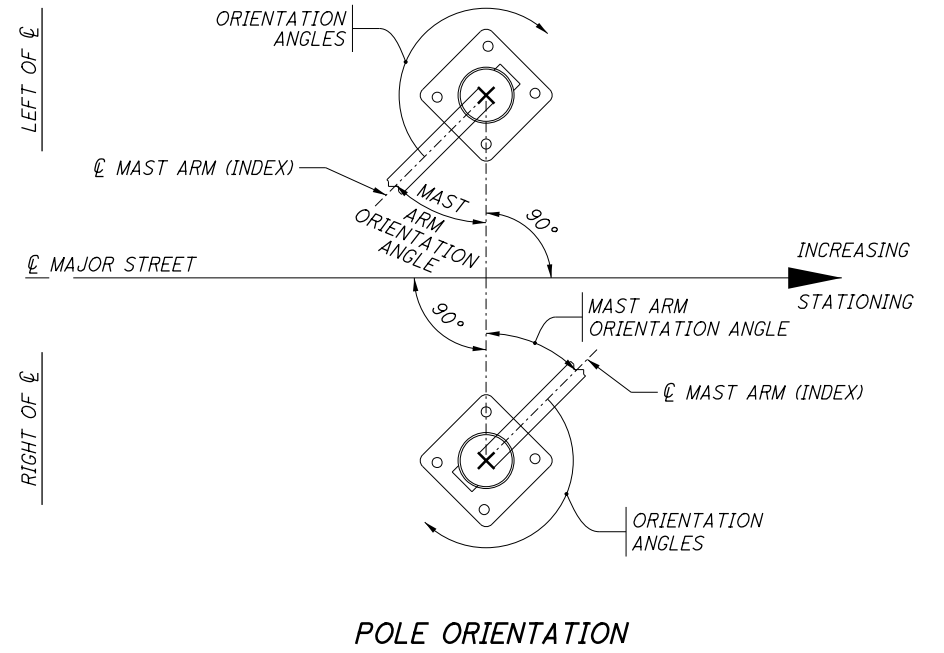
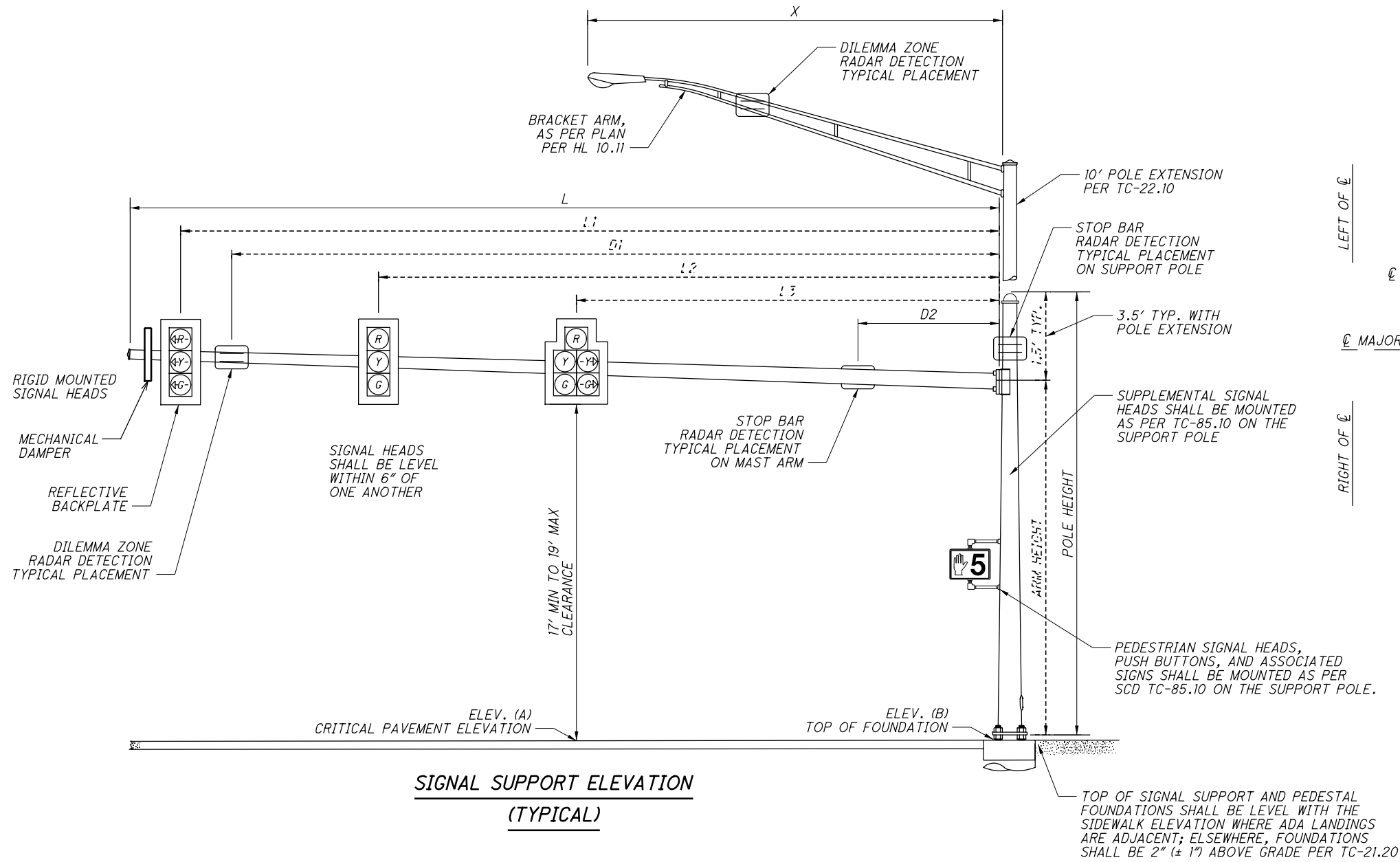
CONTRACTOR NOTES:
ABANDON ALL EXISTING LOOPS.
REMOVE ALL CABLES FROM ABANDONED
CONDUIT RUNS

ALL AREAS SHALL BE FILLED, COMPACTED o
AND FINISHED TO FINAL GRADE PRIOR TO
INSTALLATION OF ANY TRAFFIC SIGNAL
EQUIPMENT.

R2 - PullBox Removals		
STATION	SIDE	OFFSET
1071+39.5	Lt.	33.5'
1073+41	Lt.	35'
1074+74	Rt.	64'
1077+59	Lt.	47'

Conduit #	SPECIFICATION	SIZE (in.)	Length (Ft.)
C5	725.052	3	4
C6	725.052	3	124
C7	725.052	3	4
C8	725.052	3	118.5
C9	725.052	3	4
C10	725.052	3	4.5

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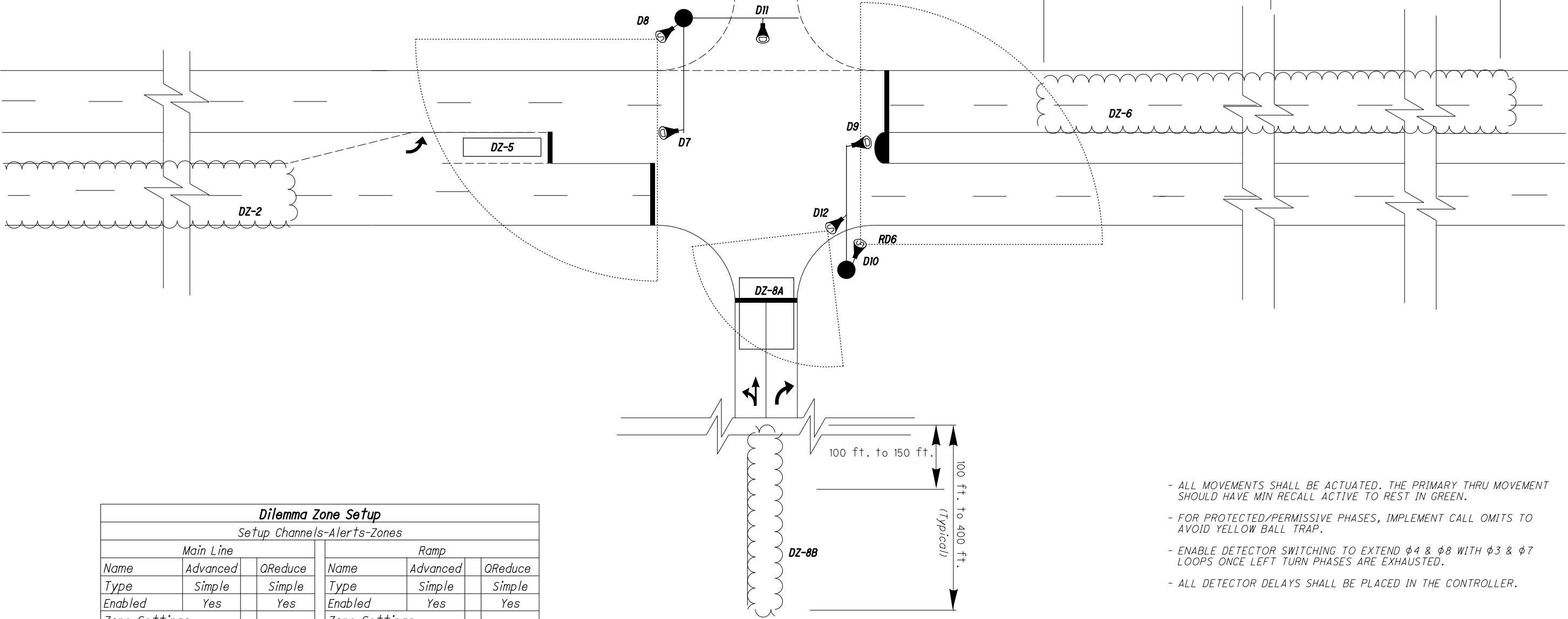
MAST ARM TABLE (TEM FIGURE 498-37 & 38)

SUPPORT NO.	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS												ORIENTATION ANGLES FROM MAST ARM						SIGNAL SUPPORT, MECHANICAL DAMPER FOR TC-81.21 MAST ARM
			A	B	DESIGN TYPE	DESIGN NO.	ARM DESIGN NO. TC-81.21	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	D1	D2	D3	MAST ARM A ANGLE	MAST ARM B ANGLE	POWER SERVICE	CONTROLLER	HANDHOLE	CABLE ENTRANCE 12" FROM TOP	
SP-3	1073+73	48.0' Lt.	877.54	876.99	TC-81.21	11		22	20.5	40	37	22	13				0				180		Yes
SP-4	1075+03	58.0' Lt.	876.35	875.32	TC-81.21	13		22	20.5	50	47	35.5					90				270		Yes
SP-5	1074+90	66.5' Rt.	876.21	875.93	TC-81.21	14		19.5	18	61	58	46.5					0	96	120	180	96		Yes

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DETECTOR NO.	DETECTION ZONE	MOVEMENT	PULSE OR PRESENCE	ASSOCIATED PHASE	DELAY PROGRAMMED IN CONTROLLER (SEC)	EXTENSION PROGRAMMED IN CONTROLLER (SEC)	DELAY INHIBIT PHASE	PURPOSE	DETECTION ZONE LENGTH (FT)
D7	DZ-2	EB THRU	PULSE	2	-	-	-	DILEMMA ZONE	900
D8	DZ-5	EB LT	PRESENCE	5	-	-	-	CALL/EXTEND PHASE 5	140
D9	DZ-6	WB THRU	PULSE	6	-	-	-	DILEMMA ZONE	900
D10	DZ-6	WB THRU	PRESENCE	6	-	-	-	CALL/EXTEND PHASE 6	140
D11	DZ-8B	NB THRU	PULSE	8	-	-	-	DILEMMA ZONE	140
D12	DZ-8A	NB THRU	PRESENCE	8	10	-	-	CALL/EXTEND PHASE 8	140
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

NOTE: DILEMMA ZONE SPEED THRESHOLD >30 MPH



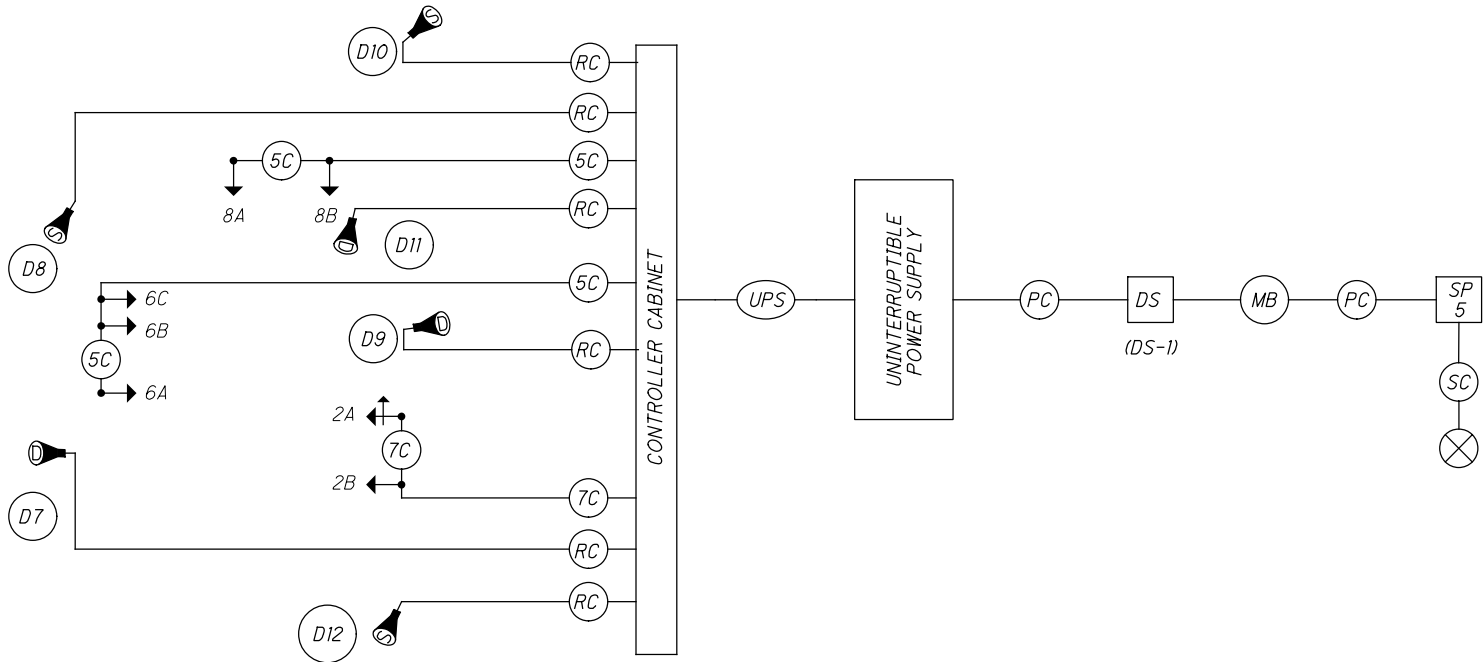
Dilemma Zone Setup					
Setup Channels-Alerts-Zones					
Main Line			Ramp		
Name	Advanced	QReduce	Name	Advanced	QReduce
Type	Simple	Simple	Type	Simple	Simple
Enabled	Yes	Yes	Enabled	Yes	Yes
Zone Settings			Zone Settings		
Range (feet)	100-900	100-150	Range (feet)	100-400	100-150
Speed (mph)	35-100	1-35	Speed (mph)	35-100	1-35
ETA (seconds)	2.5-5.5	-	ETA (seconds)	2.5-5.5	-

TYPICAL RAMP DRAWING

- ALL MOVEMENTS SHALL BE ACTUATED. THE PRIMARY THRU MOVEMENT SHOULD HAVE MIN RECALL ACTIVE TO REST IN GREEN.
- FOR PROTECTED/PERMISSIVE PHASES, IMPLEMENT CALL OMITTS TO AVOID YELLOW BALL TRAP.
- ENABLE DETECTOR SWITCHING TO EXTEND $\phi 4$ & $\phi 8$ WITH $\phi 3$ & $\phi 7$ LOOPS ONCE LEFT TURN PHASES ARE EXHAUSTED.
- ALL DETECTOR DELAYS SHALL BE PLACED IN THE CONTROLLER.

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WIRING DIAGRAM (TYPICAL)

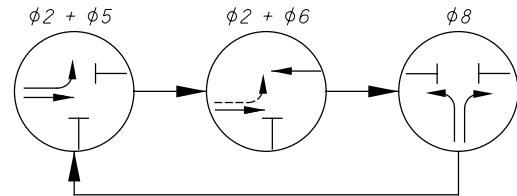


LEGEND

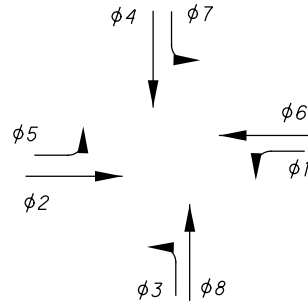
	5 SECTION VEHICULAR SIGNAL HEAD, 1-WAY		SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG		METER BASE
	3 SECTION VEHICULAR SIGNAL HEAD, 1-WAY		SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG		SIGNAL DISCONNECT SWITCH
	DILEMMA ZONE RADAR DETECTION UNIT		SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG		UNINTERRUPTIBLE POWER SUPPLY CABLE
	STOP BAR RADAR DETECTION UNIT		RADAR DETECTION CABLE		
	PULLBOX		SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG		
	SIGNAL SUPPORT POLE NO. 1		POWER CABLE, 3 CONDUCTOR, NO. 6 AWG		

NOTES:

- ALL MOVEMENTS SHALL BE ACTUATED. THE PRIMARY THRU MOVEMENT SHOULD HAVE MIN RECALL ACTIVE TO REST IN GREEN.
- FOR PROTECTED/PERMISSIVE PHASES, IMPLEMENT CALL OMITS TO AVOID YELLOW BALL TRAP.
- ENABLE $\phi 3$ & $\phi 7$ DETECTOR SWITCHING TO ALLOW $\phi 3$ & $\phi 7$ TO EXTEND $\phi 4$ & $\phi 8$ WHEN ALLOCATED GREEN TIME FOR LEFT TURN PHASES ARE EXHAUSTED.
- ENABLE DETECTOR SWITCHING TO EXTEND $\phi 4$ & $\phi 8$ WITH $\phi 3$ & $\phi 7$ LOOPS ONCE LEFT TURN PHASES ARE EXHAUSTED.
- COUNTDOWN PEDESTRIAN SIGNALS SHALL GO TO ZERO ON YELLOW PER OMUTCD FIGURE 4E-2.
- RADAR DETECTION UNITS FOR DILEMMA ZONE DETECTION SHALL PLACE A CONSTANT CALL TO THE CONTROLLER WHEN VEHICLES TRAVEL TIMES TO THE STOP BAR ARE BETWEEN 2.5 AND 6 SECONDS. SPEED TRIGGER SHALL BE SET FOR VEHICLES TRAVELING 35 MPH AND GREATER.
- RADAR SHALL HAVE QUEUE DETECTION CONFIGURED AND A ZONE PLACED AT 100-200 FEET FROM STOP BAR FOR SLOW MOVING VEHICLE EXTENSIONS. SPEED TRIGGER SHALL BE SET AT 1-35 MPH.
- ALL DETECTOR DELAYS SHALL BE PLACED IN THE CONTROLLER.



PHASE Diagram



TYPICAL PHASES

SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: SR-696 & IR 75 NB Ramp										
MAINTAINING AGENCY: ODOT										
START UP START IN: YELLOW/RED FLASH TIME FOR FLASH OR ALL RED: 9FL & 6AR FIRST PHASE(S): 2 & 6 COLOR DISPLAYED: GREEN			DUAL ENTRY: -		PHASES: 2 & 6, 8					
			REST IN RED:		RING 1 -		RING 2 -			
			OVERLAP			A	B	C	D	
			PHASES			-	-	-	-	
INTERVAL OR FEATURE			CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)			1	2	3	4	5	6	7	8
DIRECTION			-	EB	-	-	EB LT	WB	-	NB
MINIMUM GREEN (INITIAL) (SEC.)			-	20	-	-	7	20	-	12
ADDED INITIAL *(SEC./ACTUATION)			-	-	-	-	-	-	-	-
MAXIMUM INITIAL (SEC.)			-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP) (SEC.)			-	2	-	-	1.5	2	-	1.5
TIME BEFORE REDUCTION *(SEC.)			-	-	-	-	-	-	-	-
MINIMUM GAP *(SEC.)			-	-	-	-	-	-	-	-
TIME TO REDUCE *(SEC.)			-	-	-	-	-	-	-	-
MAXIMUM GREEN I (SEC.)			-	60	-	-	15	60	-	25
MAXIMUM GREEN II (SEC.)			-	60	-	-	15	60	-	25
YELLOW CHANGE (SEC.)			-	4.8	-	-	4	4.8	-	4.8
ALL RED CLEARANCE (SEC.)			-	2	-	-	2.7	2	-	2
WALK (SEC.)			-	-	-	-	-	-	-	-
PEDESTRIAN CLEARANCE (SEC.)			-	-	-	-	-	-	-	-
RECALL	MAXIMUM (ON/OFF)	-	-	-	-	-	-	-	-	-
	MINIMUM (ON/OFF)	-	ON	-	-	-	ON	-	-	-
	PEDESTRIAN (ON/OFF)	-	-	-	-	-	-	-	-	-
MEMORY (ON/OFF)			-	-	-	-	-	-	-	-

*VOLUME DENSITY CONTROLS

CALCULATED
MLF
CHECKED
ERP

IR-75 NB & SR-696 - PHASING, TIMING AND DETECTION

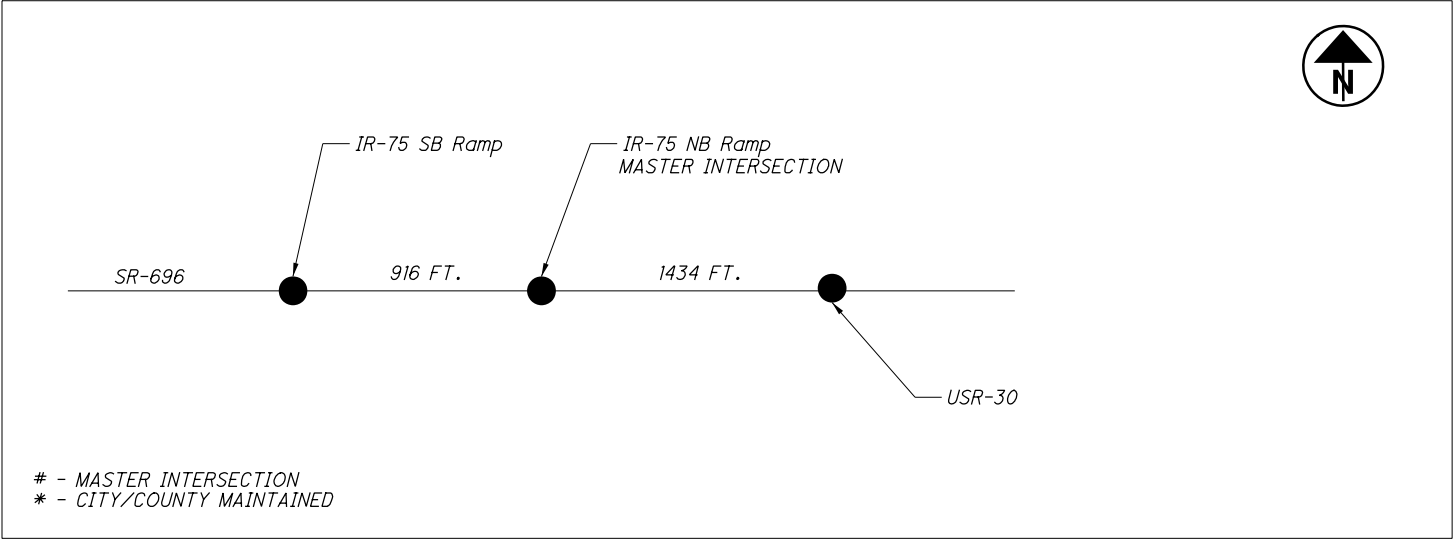
ALL-75-15.80

174
188

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ECONOLITE COORD SETTINGS	
MANUAL PATTERN	-
SYSTEM SOURCE	-
SPLITS IN	-
TRANSITION	-
DWELL/ADD TIME	-
OFFSET REFERENCE	-
PED RECALL	-
CAL ZERO OVERRIDE	-
RE-SYNC COUNT	-
ECPI COORD	-
SYSTEM FORMAT	-
OFFSET IN	-
MAX SELECT	-
FORCE OFF	-
USE PED TIME	-
PED RESERVICE	-
FO ADD INI GRN	-
MULTISYNC	-

CORRIDOR LAYOUT



COORDINATION TIMING PLANS

DAY(S) OF WEEK	PLAN NAME	HOURS	CYCLE/SPLIT/OFFSET	CYCLE LENGTH (SEC)
Weekday	Weekday Free	0:00 - 7:00	-	-
Weekday	AM Plan	7:00 - 9:30	1/1/1	105
Weekday	Midday Plan	9:30 - 15:00	2/1/1	75
Weekday	PM Plan	15:00 - 19:00	2/1/2	75
Weekday	Free	19:00 - 23:59	-	-
Sat/Sun	Sat/Sun Plan	-	2/1/3	75
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

NOTES:

- OFFSETS ARE MEASURED FROM REFERENCE PHASE(S) NUMBERED "END OF GREEN/BEGINNING OF YELLOW."
- MASTER INTERSECTION OFFSET REFERENCE IS ALWAYS EQUAL TO ZERO.
- $\Sigma \phi 1 + \phi 2 = \Sigma \phi 5 + \phi 6$ AND $\Sigma \phi 3 + \phi 4 = \Sigma \phi 7 + \phi 8$

COORDINATION TIMING CHART (TEM FORM 496-5)

	Splits (s)								Cycle Length (s)	Offset 1 (s)	Offset 2 (s)
Phase	1	2	3	4	5	6	7	8			
				Intersection 1 (SB - IR 75)							
Weekday Free (0:00 - 7:00)											
AM Plan (7:00 - 9:30)	36	37		32		73			105	28	
Midday Plan (9:30 - 15:00)	21	29		25	50				75	37	
PM Plan (15:00 - 19:00)	18	31		26		49			75	37	
Free (19:00 - 23:59)											
Sat/Sun Plan	21	29		25	50				75	37	
				Intersection 2 (NB - IR 75)							
Weekday Free (0:00 - 7:00)											
AM Plan (7:00 - 9:30)		70			31	39		35	105	0	
Midday Plan (9:30 - 15:00)		51			25	26		24	75	0	
PM Plan (15:00 - 19:00)		51			25	26		24	75	0	
Free (19:00 - 23:59)											
Sat/Sun Plan		51			25	26		24	75	0	
				Intersection 3 (USR 30 & SR 696)							
Weekday Free (0:00 - 7:00)											
AM Plan (7:00 - 9:30)		23				23		22	45		
Midday Plan (9:30 - 15:00)		43				43		32	75	48	
PM Plan (15:00 - 19:00)		46				46		29	75	50	
Free (19:00 - 23:59)											
Sat/Sun Plan		43				43		32	75	48	

CALCULATED
MLF
CHECKED
ERP

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SEPAC AND ASC/3 INPUT FILE INFORMATION FOR THE 332 CABINET

UPPER INPUT FILE (FILE=I)

C U P P E R L	PHASE	1	2	2	2	3	4	4	4	1		MANUAL CONTROL ADV.	2	6	FLASH
	DEFAULT FUNCTION	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	SPARE		PED	PED	SENSE
	SEPAC DETECTOR NO.	VEH 1	VEH 3	VEH 5	VEH 7	VEH 9	VEH 11	VEH 13	VEH 15	VEH 17			PED 2	PED 6	
	ASC/3 DETECTOR NO.	VEH 1	VEH 2	VEH 3	VEH 4	VEH 5	VEH 6	VEH 7	VEH 8	VEH 9			PED 2	PED 6	
	C1 PIN NUMBER	56	39	63	47	58	41	65	49	60		80	67	68	81
	FIELD TERMINALS	1-D,E	2-D,E	3-D,E	4-D,E	5-D,E	6-D,E	7-D,E	8-D,E	9-D,E	10-D,E	11-D,E	12-D,E	13-D,E	14-D,E
SLOT NUMBER		1	2	3	4	5	6	7	8	9	10	11	12	13	14
C L O W E R L	PHASE	1	2	2	2	3	4	4	4	3		ADV.	4	8	STOP
	DEFAULT FUNCTION	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	SPARE	ENABLE	PED	PED	TIME
	SEPAC DETECTOR NO.	VEH 1	VEH 4	VEH 6	VEH 7	VEH 9	VEH 12	VEH 14	VEH 15	VEH 18			PED 4	PED 8	
	ASC/3 DETECTOR NO.	VEH 1	VEH 10	VEH 11	VEH 4	VEH 5	VEH 14	VEH 15	VEH 8	VEH 13			PED 4	PED 8	
	C1 PIN NUMBER	56	43	76	47	58	45	78	49	62		53	69	70	82
	FIELD TERMINALS	1-J,K	2-J,K	3-J,K	4-J,K	5-J,K	6-J,K	7-J,K	8-J,K	9-J,K	10-J,K	11-J,K	12-J,K	13-J,K	14-J,K

LOWER INPUT FILE (FILE=J)

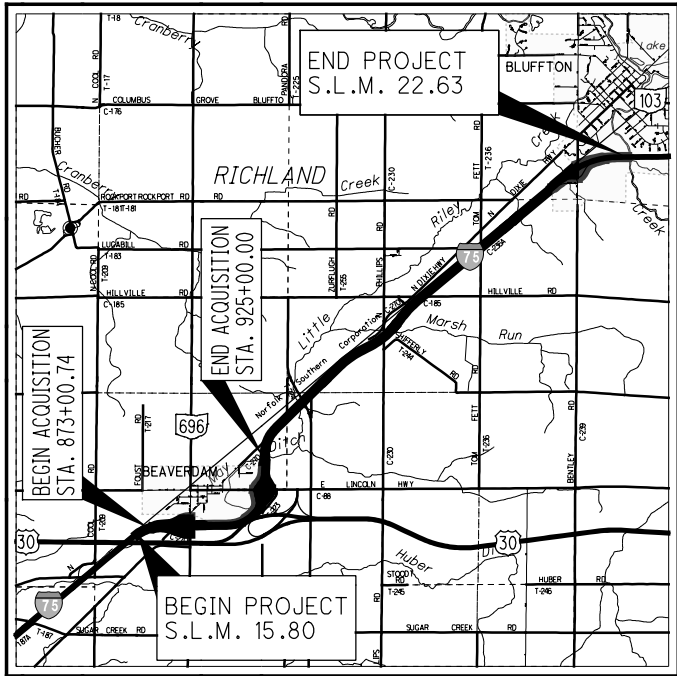
C U P P E R L	PHASE	5	6	6	6	7	8	8	8	5					
	DEFAULT FUNCTION	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	SPARE	SPARE	EV - A	EV - B	RR - 1
	SEPAC DETECTOR NO.	VEH 19	VEH 21	VEH 23	VEH 25	VEH 29	VEH 31	VEH 33	VEH 35	VEH 37					
	ASC/3 DETECTOR NO.	VEH 17	VEH 18	VEH 19	VEH 20	VEH 21	VEH 22	VEH 23	VEH 24	VEH 25					
	C1 PIN NUMBER	55	40	64	48	57	42	66	50	59		54	71	72	51
	FIELD TERMINALS	1-D,E	2-D,E	3-D,E	4-D,E	5-D,E	6-D,E	7-D,E	8-D,E	9-D,E	10-D,E	11-D,E	12-D,E	13-D,E	14-D,E
SLOT NUMBER		1	2	3	4	5	6	7	8	9	10	11	12	13	14
C L O W E R L	PHASE	5	6	6	6	7	8	8	8	7					
	DEFAULT FUNCTION	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	SPARE	SPARE	EV - C	EV - D	RR - 2
	SEPAC DETECTOR NO.	VEH 19	VEH 22	VEH 24	VEH 25	VEH 29	VEH 32	VEH 34	VEH 35	VEH 38					
	ASC/3 DETECTOR NO.	VEH 17	VEH 26	VEH 27	VEH 20	VEH 21	VEH 30	VEH 31	VEH 24	VEH 29					
	C1 PIN NUMBER	55	44	77	48	57	46	79	50	61		75	73	74	52
	FIELD TERMINALS	1-J,K	2-J,K	3-J,K	4-J,K	5-J,K	6-J,K	7-J,K	8-J,K	9-J,K	10-J,K	11-J,K	12-J,K	13-J,K	14-J,K

SEPAC AND ASC/3 INPUT FILE INFORMATION FOR THE 336 CABINET

C U P P E R L	PHASE	1	2	3	4	5	6	7	8				2	6	FLASH
	DEFAULT FUNCTION	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	RR - 1	EV - A	EV - B	PED	PED	SENSE
	SEPAC DETECTOR NO.	VEH 1	VEH 3	VEH 9	VEH 11	VEH 19	VEH 21	VEH 29	VEH 31				PED 2	PED 6	
	ASC/3 DETECTOR NO.	VEH 1	VEH 2	VEH 5	VEH 6	VEH 17	VEH 18	VEH 21	VEH 22				PED 2	PED 6	
	C1 PIN NUMBER	56	39	58	41	55	40	57	42	51	71	72	67	68	81
	FIELD TERMINALS	1-D,E	2-D,E	3-D,E	4-D,E	5-D,E	6-D,E	7-D,E	8-D,E	9-D,E	10-D,E	11-D,E	12-D,E	13-D,E	14-D,E
SLOT NUMBER		1	2	3	4	5	6	7	8	9	10	11	12	13	14
C L O W E R L	PHASE	2	2	4	4	6	6	8	8				4	8	STOP
	DEFAULT FUNCTION	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	EXT-CALL	RR - 2	EV - C	EV - D	PED	PED	TIME
	SEPAC DETECTOR NO.	VEH 7	VEH 4	VEH 15	VEH 12	VEH 25	VEH 22	VEH 35	VEH 32				PED 4	PED 8	
	ASC/3 DETECTOR NO.	VEH 4	VEH 10	VEH 8	VEH 14	VEH 20	VEH 26	VEH 24	VEH 30				PED 4	PED 8	
	C1 PIN NUMBER	47	43	49	45	48	44	50	46	52	73	74	69	70	82
	FIELD TERMINALS	1-J,K	2-J,K	3-J,K	4-J,K	5-J,K	6-J,K	7-J,K	8-J,K	9-J,K	10-J,K	11-J,K	12-J,K	13-J,K	14-J,K

THIS DRAWING REPLACES PIS 203324 DATED 10-18-2013.

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LOCATION MAP

LATITUDE: 40°51'18" LONGITUDE: 83°56'27"



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

STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL
- OUT-BUILDING

- TYPES OF TITLE LEGEND:
- WL = FEE SIMPLE WITH LIMITATION OF ACCESS
 - WD = WARRANTY DEED
 - PRW = PROPERTY RIGHT FEE SIMPLE
 - SH = STANDARD HIGHWAY EASEMENT
 - LA = LIMITED ACCESS EASEMENT
 - T = TEMPORARY EASEMENT
 - CH = CHANNEL EASEMENT
 - A = AERIAL EASEMENT
 - SL = SLOPE EASEMENT
 - PRE = PROPERTY RIGHT EASEMENT

CONVENTIONAL SYMBOLS

County Line	-----	Edge of Shoulder (Ex)	-----
Township Line	-----	Edge of Shoulder (Pr)	-----
Section Line	-----	Ditch / Creek (Ex)	-----
Corporation Line	----- or -----	Ditch / Creek (Pr)	-----
Fence Line (Ex)	----- (Pr) -----	Tree Line (Ex)	-----
Center Line	-----	Ownership Hook Symbol	Example
Right of Way (Ex)	----- Ex R/W -----	Property Line Symbol	Example
Right of Way (Pr)	----- R/W -----	Break Line Symbol	Example
Standard Highway Ease.(Ex)	----- Ex SH -----	Tree (Pr)	Tree (Ex) Shrub (Ex)
Standard Highway Ease.(Pr)	----- SH -----	Tree (Remove)	Shrub (Remove)
Temporary Right of Way	----- TMP -----	Evergreen (Ex)	Stump
Channel Ease. (Pr)	----- CH -----	Evergreen (Remove)	Stump (Remove)
Utility Ease. (Ex)	----- Ex U -----	Wetland (Pr)	Grass (Pr)
Railroad	----- or -----	Post (Ex)	Mailbox (Ex) Mailbox (Pr)
Guardrail (Ex)	----- (Pr) -----	Light (Ex)	Telephone Marker (Ex)+TEL
Construction Limits	-----	Fire Hydrant (Ex)	Water Meter (Ex)
Edge of Pavement (Ex)	-----	Water Valve (Ex)	Utility Valve Unknown (Ex.)
Edge of Pavement (Pr)	-----	Telephone Pole (Ex)	Power Pole (Ex)
		Light Pole (Ex)	Light Tower

RIGHT OF WAY LEGEND SHEET ALL-75-15.80

ALLEN COUNTY
RICHLAND TOWNSHIP
& VILLAGE OF BEAVERDAM
S.E. 1/4 SEC 29 & N. 1/2 SEC 32
T-2-S , R-8-E

INDEX OF SHEETS:

LEGEND SHEET	1
CENTERLINE PLAT	2-4
PROPERTY MAP	5
SUMMARY OF ADDITIONAL R/W	6
DETAIL SHEETS	7-12

UTILITY OWNERSHIP	
TYPE	NAME & ADDRESS
ELECTRIC	American Electric Power 369 E. O'Conner Lima, OH 45801 Dan Wilson 419-998-5103
PIPELINE	Buckeye Partners, LP 1020 Buckeye Rd. Lima, OH 45804 Martin White 419-993-8008
FIBER	Com Net / Independent Fiber 13888 C.R. 25A Wapakoneta, OH 45895 Randy Plaiser 419-739-3120
VILLAGE	Village of Beaverdam 101 W. Main St. Beaverdam, OH 45808 Mike Lewis 419-643-4321
GAS	Dominion East Ohio Gas 150 S. Jackson St. Lima, OH 45801 Dan Stechschulte 419-860-2148

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



I, Sara S. Morrisey, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation between Dec. 7, 2016 and Jan. 17, 2018. The results of that survey are contained herein. See the Survey Parameters note for horizontal and vertical survey parameters. As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way as necessary for the property takes contained herein. As a part of this project I have established the proposed property lines, calculated the Gross Take, present roadway occupied (PRO), Net Take and Net Residue herein. As a part of this work, right of way monuments have been or will be set within 6 months of the completion of aquisition at the points as shown herein. All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys, unless so noted. The words "I" and "my" as used herein are to mean that either myself or someone working under my direct supervision.

Sara S. Morrisey,
Professional Land Surveyor #8335

Date:

PROJECT DESCRIPTION

PLANING AND RESURFACING OF 0.74 MILES FROM S.L.M. 15.80 TO S.L.M. 16.54 AND 5.07 MILES FROM S.L.M. 17.59 TO S.L.M. 22.66 OF I.R. 75, INCLUDING JOINT REPAIR.
TOTAL RECONSTRUCTION OF 1.05 MILES OF I.R. 75 FROM S.L.M. 16.54 TO S.L.M. 17.59, INCLUDING PARTIAL REPLACEMENT OF RAMPS AT S.R. 696

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 REVISED CODE OF OHIO.

PLANS PREPARED BY:

FIRM NAME : OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT ONE

R/W DESIGNER: Dean Siebeneck

R/W REVIEWER: Sara S. Morrisey

FIELD REVIEWER: Scott Recker

PRELIMINARY FIELD REVIEW DATE: 4-23-18

OWNERSHIP UPDATED BY: MaryLou Richards

DATE COMPLETED: 5-24-18

PLAN COMPLETION DATE: 5-31-18

HORIZONTAL DISTANCE NOTE:

THIS PROJECT IS AT 1983 U.S. STATE PLANE, OHIO NORTH - GRID. ALL PROPERTY & BOUNDARY SURVEY RELATED DISTANCES SHOWN HEREON ARE AT GRID. TO CONVERT THE HORIZONTAL PROPERTY & BOUNDARY SURVEY RELATED DISTANCES, TO GROUND DISTANCES, THE DISTANCES SHOULD BE MULTIPLIED BY 1.0000882629.

I, Sara S. Morrissey, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation between Dec. 7, 2016 and Jan. 17, 2018. The results of that survey are contained herein. See the Survey Parameters note for horizontal and vertical survey parameters. As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way as necessary for the property takes contained herein. As a part of this project I have established the proposed property lines, calculated the Gross Take, present roadway occupied (PRO), Net Take and Net Residue herein. As a part of this work, right of way monuments have been or will be set within 6 months of the completion of aquisition at the points as shown herein. All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys, unless so noted. The words "I" and "my" as used herein are to mean that either myself or someone working under my direct supervision.

Sara S. Morrissey,
Professional Land Surveyor #8335

Date:



BEARING & DISTANCE		
LINE	Bearing	Distance
1	N4°23'55"W	159.24'
2	N18°06'39"E	107.52'
3	N38°23'06"E	260.46'
4	N55°02'48"E	106.63'
5	N40°53'13"E	243.61'
6	N18°14'49"E	196.38'
7	N18°45'10"W	156.45'
8	N30°13'47"W	214.32'
9	N89°42'10"E	300.00'
10	N30°13'47"W	32.49'
11	N3°21'14"E	61.77'
12	N33°56'55"E	168.69'
13	N40°53'13"E	61.99'

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- RAILROAD SPIKE SET
- IRON PIN FOUND
- IRON PIN FOUND W/ ID CAP
- IRON PIN SET W/ ID CAP
- IRON PIPE FOUND
- IRON PIPE SET
- P.K. NAIL FOUND
- P.K. NAIL SET
- MAG NAIL Found

NOTE: For Intersection Station Equations, see sheet 4 of 12.

N.W. 1/4
SEC. 32

NOTE: For Curve Data, see sheet 3 of 12.

ALLEN COUNTY RICHLAND TOWNSHIP & VILLAGE OF BEAVERDAM S.E. 1/4 SEC. 29 & N. 1/2 SEC. 32 T-2-S, R-8-E

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. THESE CENTERLINE PLATS CONTAIN THE TABLE WITH PROJECT CONTROL INFORMATION. USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL -
POSITIONING METHOD: ODOT VRS NETWORK (2011)
MONUMENT TYPE: VARIOUS MONUMENTS

VERTICAL POSITIONING -
ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 12A

HORIZONTAL POSITIONING & BASIS OF BEARINGS -
REFERENCE FRAME: NAD83 (2011 ADJ)
ELLIPSOID: GRS 80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: 1983 U.S. STATE PLANE, OHIO NORTH
COMBINED SCALE FACTOR: 1.000000 (AT GRID)
ORIGIN OF COORDINATE SYSTEM: N/A (AT GRID)

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.28083333 U.S. SURVEY FEET.

BASIS OF R/W:

CENTERLINE AND RIGHT OF WAY LIMITS OF MAINLINE I-75 WERE ESTABLISHED USING OHIO DEPARTMENT OF HIGHWAYS PLANS "ALL-25-17.40 / HAN-25-0.00" DATED 1963; & "ALL-25-15.84 / ALL-30N-20.08" DATED 1953. CENTERLINE AND RIGHT OF WAY LIMITS OF S.R. 696 AND ALIGNMENTS OF THE ENTRANCE & EXIT RAMP ON I-75 WERE ESTABLISHED FROM PLANS "ALL-696-0.86" DATED 2005. ALL PLANS ON FILE AT THE DISTRICT 1 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION AT LIMA, OHIO.

THE CENTERLINE STATIONING WAS ESTABLISHED BY ACCEPTING THE INTERSECTION OF THE CENTERLINE OF I-75 WITH THE CENTERLINE OF R/W FOR S.R. 696 AS BEING STA. 907+36.58 PER PLANS "ALL-25-15.84" DATED 1953.

HORIZONTAL DISTANCE NOTE:

THIS PROJECT IS AT 1983 U.S. STATE PLANE, OHIO NORTH - GRID. ALL PROPERTY & BOUNDARY SURVEY RELATED DISTANCES SHOWN HEREON ARE AT GRID. TO CONVERT THE HORIZONTAL PROPERTY & BOUNDARY SURVEY RELATED DISTANCES TO GROUND DISTANCES, THE DISTANCES SHOULD BE MULTIPLIED BY 1.0000882629.



HORIZONTAL
SCALE IN FEET

PID NO.
94214

R/W DESIGNER
DJS
R/W REVIEWER
SSM

CENTERLINE PLAT

ALL-75-15.80

2 / 12

178
188

Ex. C 175 - C1
$PI = Sta. 895+32.44$ $\Delta = 85^{\circ}-49'-39" L \dagger$ $Dc = 3^{\circ}-00'-11"$ $R = 1,907.93'$ $Ls = 400.00'$ $\theta s = 6^{\circ}-00'-22"$ $LT = 266.82'$ $ST = 133.47'$ $X = 399.56'$ $Y = 13.97'$ $K = 199.93'$ $P = 3.49'$ $\Delta c = 73^{\circ}-48'-56" L \dagger$ $Lc = 2,458.03'$ $E = 701.19''$ $C = 2,458.03'$ $Ts = 399.80'$ $C.B.1 = N 87^{\circ}-06'-50" E$ $C.B. = N 46^{\circ}-13'-32" E$ $C.B.2 = S 5^{\circ}-21'-21" W$

Ex. C 175 - C2
$PI = Sta. 935+65.44$ $\Delta = 42^{\circ}-12'-21" R \dagger$ $Dc = 3^{\circ}-00'-00"$ $R = 1,909.86'$ $Ls = 400.00'$ $\theta s = 6^{\circ}-00'-00"$ $LT = 266.82'$ $ST = 133.47'$ $X = 399.56'$ $Y = 13.95'$ $K = 199.93'$ $P = 3.49'$ $\Delta c = 30^{\circ}-12'-21" R \dagger$ $Lc = 1,006.86'$ $E = 141.03'$ $C = 995.24'$ $Ts = 399.81'$ $C.B.1 = N 5^{\circ}-21'-13" E$ $C.B. = N 24^{\circ}-27'-24" E$ $C.B.2 = S 43^{\circ}-33'-36" W$

Ex. B Ramp "K" - K1
$PI = Sta. 5+73.45$ $\Delta = 9^{\circ}-46'-20" L \dagger$ $Dc = 9^{\circ}-46'-27"$ $R = 1,758.91'$ $T = 150.36'$ $L = 300.00'$ $E = 6.42'$ $C = 299.64'$ $C.B.= N 43^{\circ}-50'-27" E$

Ex. B Ramp "K" - K2
$PI = Sta. 8+37.47$ $fs = 11^{\circ}-15'-07"$ $Ls = 200.00'$ $LT = 114.38''$ $ST = 86.24'$ $X = 198.96'$ $Y = 16.83'$ $K = 99.87'$ $P = 1.38'$

Ex. B Ramp "K" - K3
$PI = Sta. 11+80.81$ $\Delta = 39^{\circ}-34'-53" L \dagger$ $Dc = 8^{\circ}-00'-00"$ $R = 716.20'$ $T = 257.72'$ $L = 494.77'$ $E = 44.96'$ $C = 484.99'$ $C.B.= N 8^{\circ}-00'-28" E$

Ex. B Ramp "K" - K4
$PI = Sta. 17+76.60$ $\Delta = 7^{\circ}-23'-04" R \dagger$ $Dc = 5^{\circ}-00'-00"$ $R = 1,145.92'$ $T = 73.95'$ $L = 147.69'$ $E = 2.38'$ $C = 147.59'$ $C.B.= N 8^{\circ}-05'-27" W$

Ex. B Ramp "J" - J1
$PI = Sta. 22+07.34$ $\Delta = 20^{\circ}-16'-27" R \dagger$ $Dc = 12^{\circ}-00'-00"$ $R = 477.46'$ $T = 85.37'$ $L = 168.95'$ $E = 7.57'$ $C = 168.07'$ $C.B.= N 28^{\circ}-14'-53" E$

Ex. B Ramp "J" - J2
$PI = Sta. 28+71.37$ $fs = 9^{\circ}-30'-00"$ $Ls = 200.00'$ $LT = 123.02''$ $ST = 77.39'$ $X = 199.36'$ $Y = 12.77'$ $K = 99.90'$ $P = 1.89'$

Ex. B Ramp "J" - J3
$PI = Sta. 32+22.25$ $\Delta = 6^{\circ}-50'-24" L \dagger$ $Dc = 1^{\circ}-30'-00"$ $R = 3,819.72'$ $T = 228.27'$ $L = 456.00'$ $E = 6.81'$ $C = 455.73'$ $C.B.= N 6^{\circ}-03'-26" E$

Ex. B Ramp "G" - G1
$PI = Sta. 3+32.58$ $\Delta = 8^{\circ}-22'-13" L \dagger$ $Dc = 2^{\circ}-54'-26"$ $R = 1,970.86'$ $T = 144.22'$ $L = 287.92'$ $E = 5.27'$ $C = 287.66'$ $C.B.= N 42^{\circ}-51'-27" E$

Ex. B Ramp "G" - G2
$PI = Sta. 6+54.19$ $\Delta = 5^{\circ}-20'-00" L \dagger$ $Dc = 1^{\circ}-30'-00"$ $R = 3,819.72'$ $T = 177.91'$ $L = 355.56'$ $E = 4.14'$ $C = 355.43'$ $C.B.= N 36^{\circ}-00'-21" E$

Ex. B Ramp "G" - G3
$PI = Sta. 10+83.80$ $\Delta = 7^{\circ}-32'-53" R \dagger$ $Dc = 1^{\circ}-30'-00"$ $R = 3,819.72'$ $T = 251.96'$ $L = 503.20'$ $E = 8.30'$ $C = 502.84'$ $C.B.= N 37^{\circ}-06'-47" E$

Ex. B Ramp "G" - G4
$PI = Sta. 16+93.35$ $\Delta = 22^{\circ}-38'-25" L \dagger$ $Dc = 10^{\circ}-00'-00"$ $R = 572.96'$ $T = 114.70'$ $L = 226.40'$ $E = 11.37'$ $C = 224.93'$ $C.B.= N 29^{\circ}-34'-01" E$

Ex. B Ramp "H" - H1
$PI = Sta. 22+67.18$ $\Delta = 11^{\circ}-28'-37" L \dagger$ $Dc = 6^{\circ}-00'-00"$ $R = 954.93'$ $T = 95.96'$ $L = 191.28'$ $E = 4.81'$ $C = 190.96'$ $C.B.= N 24^{\circ}-29'-29" W$

Ex. B Ramp "H" - H2
$PI = Sta. 27+35.58$ $\Delta = 24^{\circ}-59'-51" R \dagger$ $Dc = 8^{\circ}-00'-00"$ $R = 716.20'$ $T = 158.76'$ $L = 312.47'$ $E = 17.39'$ $C = 310.00'$ $C.B.= N 17^{\circ}-43'-52" W$

Ex. B Ramp "H" - H3
$PI = Sta. 29+66.69$ $fs = 9^{\circ}-30'-00"$ $Ls = 200.00'$ $LT = 123.02''$ $ST = 77.39'$ $X = 199.36'$ $Y = 12.77'$ $K = 99.91'$ $P = 1.89'$

Ex. B Ramp "H" - H4
$PI = Sta. 44+06.81$ $\Delta = 10^{\circ}-40'-02" R \dagger$ $Dc = 3^{\circ}-00'-00"$ $R = 1,909.86'$ $T = 178.30'$ $L = 355.57'$ $E = 8.30'$ $C = 355.06'$ $C.B.= N 8^{\circ}-06'-04" E$

C Const. 175 - C3
$PI = Sta. 878+30.71$ $fs = 6^{\circ}-49'-28"$ $Ls = 455.00'$ $LT = 303.56''$ $ST = 151.87'$ $X = 454.35'$ $Y = 18.05'$ $K = 227.39'$ $P = 4.51'$

C Const. 175 - C4
$PI = Sta. 895+32.44$ $\Delta = 85^{\circ}-45'-43" L \dagger$ $Dc = 2^{\circ}-59'-59"$ $R = 1,910.00'$ $Ls = 455.00'$ $\theta s = 6^{\circ}-49'-28"$ $LT = 303.56'$ $ST = 151.87'$ $X = 454.35'$ $Y = 18.05'$ $K = 227.39'$ $P = 4.51'$ $\Delta c = 72^{\circ}-06'-47" L \dagger$ $Lc = 2,403.94'$ $Es = 702.71'$ $C = 2,248.38'$ $Ts = 2,005.28'$ $C = 2,248.38'$ $C1 = C2 = 454.71'$ $C.B.1 = N 85^{\circ}-50'-29" E$ $C.B. = N 46^{\circ}-14'-05" E$ $C.B.2 = S 5^{\circ}-37'-42" W$

C Const. 175 - C5
$PI = Sta. 905+37.96$ $fs = 6^{\circ}-49'-28"$ $Ls = 455.00'$ $LT = 303.56''$ $ST = 151.87'$ $X = 454.35'$ $Y = 18.05'$ $K = 227.39'$ $P = 4.51'$

B Const. Ramp "K" - K5
$PI = Sta. 10+66.95$ $\Delta = 63^{\circ}-33'-51" L \dagger$ $Dc = 5^{\circ}-30'-00"$ $R = 1,041.74'$ $T = 645.46'$ $L = 1,155.71'$ $E = 183.75'$ $C = 1,097.35'$ $C.B.= N 19^{\circ}-59'-57" E$

B Const. Ramp "J" - J4
$PI = Sta. 27+11.61$ $\Delta = 27^{\circ}-40'-13" L \dagger$ $Dc = 7^{\circ}-30'-00"$ $R = 763.94'$ $T = 188.14'$ $L = 368.94'$ $E = 22.83'$ $C = 365.36'$ $C.B.= N 24^{\circ}-32'-59" E$

B Const. Ramp "J" - J5
$PI = Sta. 31+95.32$ $\Delta = 7^{\circ}-21'-39" L \dagger$ $Dc = 1^{\circ}-13'-00"$ $R = 4,709.24'$ $T = 302.92'$ $L = 605.00'$ $E = 9.73'$ $C = 604.58'$ $C.B.= N 7^{\circ}-02'-04" E$

B Const. Ramp "G" - G5
$PI = Sta. 5+78.29$ $\Delta = 9^{\circ}-44'-57" L \dagger$ $Dc = 1^{\circ}-47'-00"$ $R = 3,212.80'$ $T = 274.00'$ $L = 546.67'$ $E = 11.66'$ $C = 546.01'$ $C.B.= N 38^{\circ}-49'-24" E$

B Const. Ramp "G" - G6
$PI = Sta. 11+93.33$ $\Delta = 6^{\circ}-56'-18" R \dagger$ $Dc = 2^{\circ}-00'-00"$ $R = 2,864.79'$ $T = 173.67'$ $L = 346.92'$ $E = 5.26'$ $C = 346.71'$ $C.B.= N 37^{\circ}-25'-04" E$

B Const. Ramp "H" - H5
$PI = Sta. 27+32.94$ $\Delta = 26^{\circ}-59'-01" R \dagger$ $Dc = 6^{\circ}-00'-00"$ $R = 954.93'$ $T = 229.11'$ $L = 449.73'$ $E = 27.10'$ $C = 455.58'$ $C.B.= N 16^{\circ}-44'-17" W$

B Const. Ramp "H" - H6
$PI = Sta. 30+26.98$ $fs = 6^{\circ}-36'-00"$ $Ls = 220.00'$ $LT = 146.77''$ $ST = 73.43'$ $X = 219.71'$ $Y = 8.44'$ $K = 109.95'$ $P = 2.11'$

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MONUMENTS & R/W I-75 TABLE							
OF RIGHT OF WAY	EXISTING MONUMENTS AS FOUND				COORDINATES OF MONUMENTS TO BE SET		MONUMENT ASSEMBLY
STATION	NORTHING (GRID)	EASTING (GRID)	DESCRIPTION OF MONUMENT AS FOUND	STATION & OFFSET FROM R/W	NORTHING (GRID)	EASTING (GRID)	623E38500
POT 844+03.46	426412.4379	1558880.6234		844+03.46, 0.00'			
865+00.00	426444.7949	1560977.2017	Conc. Mon. 9" Deep	865+00.00, 0.00'			
TS 875+56.57	426461.0948	1562033.3580	Conc. Mon. w/ "+", 2" Deep	875+56.57, 0.00'	426461.0936	1562033.3580	MON. BOX SET
SC 879+56.57	426481.1819	1562432.5685	Conc. Mon. 5" Deep	879+56.48, 0.03'RT	426481.2234	1562432.6556	MON. BOX SET
890+00.00	426876.4719	1563384.6550	Conc. Mon. w/ "+", 1" Deep	890+00.36, 0.14'LT	426876.1349	1563384.4560	MON. BOX SET
895+00.00	427233.1813	1563732.7567	Conc. Mon. 5" Deep	895+00.22, 0.02'RT	427233.0124	1563732.6097	MON. BOX SET
CS 904+14.60				904+14.60, 0.00'	428066.5548	1564087.2968	MON. BOX SET
ST 908+14.60				908+14.60, 0.00'	428464.6141	1564124.6142	MON. BOX SET
TS 926+21.10				926+21.10, 0.00'	430274.0111	1564230.6509	MON. BOX SET
SC 930+27.10				930+27.10, 0.00'	430672.0721	1564267.9542	MON. BOX SET
CS 940+33.96	431578.0318	1564679.9908	Conc. Mon. w/ "+", 6" Deep	940+33.98, 0.15'LT			
ST 944+33.96	431867.7351	1564955.5020	Conc. Mon. w/ "+", 3" Deep	944+33.96, 0.00'			
950+37.00	432290.2087	1565386.3080	Conc. Mon. w/ "+", 4" Deep	950+37.35, 0.00'			
POT 970+24.72	433681.6937	1566805.2500	Conc. Mon. w/ "+"	970+24.72, 0.00'			
TOTAL CARRIED TO GENERAL SUMMARY SHEET							8

COORDINATES - EXISTING RAMP "K"		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
PC 4+23.09	426949.6722	1563358.0849
CS 7+23.09	427165.7905	1563565.6298
SC 9+23.09	427330.9058	1563677.9108
PT 14+17.86	427811.1668	1563745.4733
PC 17+02.65	428089.9558	1563687.3178
PT 18+50.34	428236.0740	1563666.5461
POT 20+09.58	428394.8450	1563654.3335

COORDINATES - CONST. RAMP "K"		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
PC 4+21.49	426935.9726	1563337.6346
PT 15+77.20	427967.1501	1563712.9351
POT 16+01.03	427990.4783	1563708.0688

COORDINATES - EXISTING RAMP "J"		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
POT 20+14.45	428394.9067	1563656.2024
PC 21+21.97	428497.0999	1563689.6257
PT 22+90.92	428645.1540	1563769.1711
PC 25+51.38	428849.3169	1563930.9016
CS 27+93.98	429061.1351	1564046.7775
SC 29+93.98	429255.6661	1564092.2011
PT 34+49.98	429708.8511	1564140.2894
PT 36+92.49	429951.2953	1564146.0126
POT 37+93.21	430050.4252	1564163.8389

COORDINATES - CONST. RAMP "J"		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
PC 25+23.47	428827.4381	1563913.5700
PT 28+92.41	429159.7716	1564065.3725
PT 34+97.41	429759.8049	1564139.4120

COORDINATES - EXISTING RAMP "H"		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
POT 20+14.77	428399.9654	1564583.3703
PC 21+71.22	428548.1101	1564533.0737
PT 23+62.50	428721.8908	1564453.9089
PC 25+76.82	428907.0661	1564346.0053
CS 28+89.29	429202.3377	1564251.5956
ST 30+89.29	429402.0906	1564253.6927
PC 42+28.51	430539.9819	1564308.6979
PT 45+84.08	430891.4955	1564358.7323

COORDINATES - CONST. RAMP "H"		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
POT 24+71.33	428815.9160	1564399.1194
PC 25+03.82	428843.9903	1564382.7602
CS 29+53.55	429270.6959	1564254.4341
ST 31+73.55	429490.5216	1564258.8628
POT 32+35.32	429552.1865	1564262.4765

STATION EQUATIONS FOR ALL CENTERLINE AND BASELINE INTERSECTIONS			
MAINLINE R/W I-75 AND CONST. I-75			
869+27.00 R/W I-75 = 869+27.00 CONST. I-75			
908+43.47 R/W I-75 & 908+43.47 CONST. I-75 (AHD) = 908+41.09 (BK) CONST. I-75			
924+17.00 R/W I-75 = 924+17.00 CONST. I-75			
INTERSECTIONS OF RAMP "G"			
14+28.57 RAMP "G" = POT 14+28.57 CONST. RAMP "G"			
INTERSECTIONS OF RAMP "H"			
24+71.33 RAMP "H" = POT 24+71.33 CONST. RAMP "H"			
INTERSECTIONS OF RAMP "J"			
25+23.47 RAMP "J" = PC 25+23.47 CONST. RAMP "J"			
INTERSECTIONS OF RAMP "K"			
16+01.03 RAMP "K" = POT 16+01.03 CONST. RAMP "K"			
INTERSECTIONS OF R/W S.R. 696			
1060+20.40 R/W 696 = 1060+20.95 CONST. 696			
1065+30.24 R/W 696 = 19+99.20 RAMP "K"			
1069+94.91 R/W 696 = 907+34.19 CONST. I-75			
1069+95.05 R/W 696 = 907+36.58 R/W I-75			
1074+56.81 R/W 696 = 19+90.06 RAMP "G"			
1079+78.52 R/W 696 = PT 1079+79.43 CONST. 696			
INTERSECTIONS OF CONST. S.R. 696			
1060+20.95 CONST. 696 = 1060+20.40 R/W 696			
1065+30.17 CONST. 696 = 20+09.58 RAMP "K"			
1065+32.04 CONST 696 = 20+14.45 RAMP "J"			
1069+96.69 CONST 696 = 907+49.23 CONST. I-75			
1069+96.78 CONST. 696 = 907+51.61 R/W I-75			
1074+59.30 CONST 696 = 20+14.77 RAMP "H"			
1074+61.19 CONST. 696 = 20+01.43 RAMP "G"			
PT 1079+79.43 CONST. 696 = PT 1079+78.52 R/W 696			

COORDINATES - CONST. S.R. I-75		
OF PROP. CONST. ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
POT 869+27.00	426451.3787	1561403.8630
TS 875+27.15	426460.6396	1562003.9425
SC 879+82.15	426485.6954	1562457.9649
CS 903+86.09	428040.9118	1564081.7061
908+43.47	428493.4337	1564126.3031
924+17.00	430064.2697	1564218.3594

COORDINATES - R/W S.R. 696		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
1056+71.77, M.N.F.	428379.8620	1562796.6890
1083+18.32	428393.5956	1565443.1994

COORDINATES - CONST. S.R. 696		
OF EX. CONST. ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
PC 1060+20.95	428381.6713	1563145.3143
PRC 1064+35.57	428391.3225	1563559.7993
PT 1068+50.19	428400.9736	1563974.2844
PC 1071+50.19	428402.5304	1564274.2803
PRC 1075+64.81	428397.1814	1564688.8432
PT 1079+79.43	428391.8323	1565103.4061
POT 1083+18.32	428393.5956	1565443.1994

COORDINATES - EXISTING RAMP "G"		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
POT 0+81.73	426873.1321	1563457.9083
PC 1+88.36	426934.2214	1563545.3043
PCC 4+76.28	427145.0926	1563740.9672
PRC 8+31.84	427432.6218	1563949.9136
PT 13+35.04	427833.6067	1564253.3198
PC 15+78.65	428017.7762	1564412.7796
PT 18+05.05	428213.4188	1564523.7710
POT 20+01.43	428399.9241	1564585.2599

COORDINATES - CONST. RAMP "G"		
OF R/W ALIGNMENT	STATE PLANE GRID COORDINATES	
STATION	NORTHING (GRID)	EASTING (GRID)
PC 3+04.29	427016.7606	1563626.7862
PT 8+50.96	427442.1514	1563969.0928
PC 10+19.66	427582.0902	1564063.3003
PT 13+66.58	427857.4559	1564273.9692
POT 14+28.57	427904.3173	1564314.5433

PID NO.

94214

R/W DESIGNER

DJS

R/W REVIEWER

SSM

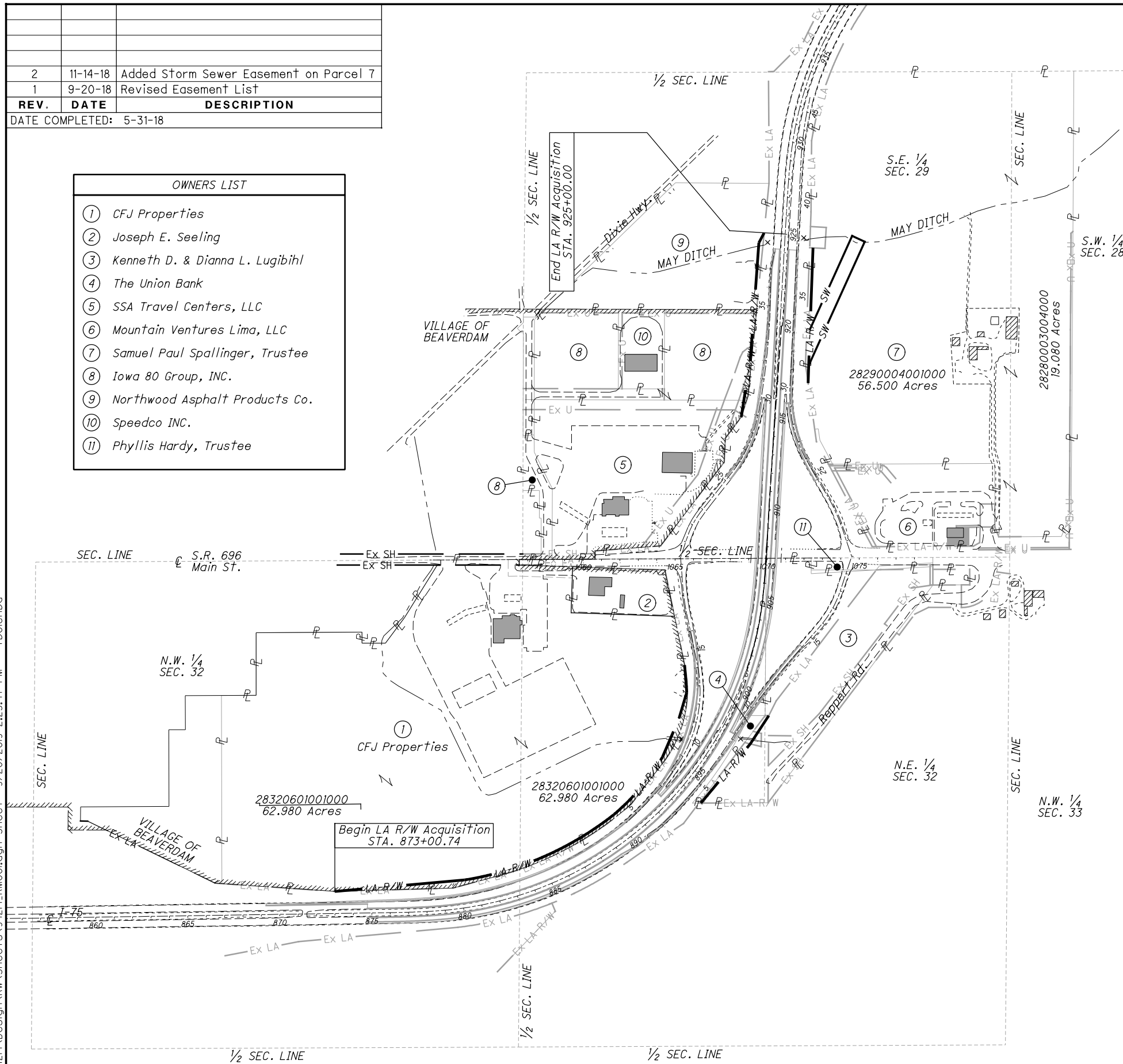
CENTERLINE COORDINATE TABLES

ALL-75-15.80

2	11-14-18	Added Storm Sewer Easement on Parcel 7
1	9-20-18	Revised Easement List
REV.	DATE	DESCRIPTION
DATE COMPLETED: 5-31-18		

OWNERS LIST

- ① *CFJ Properties*
- ② *Joseph E. Seeling*
- ③ *Kenneth D. & Dianna L. Lugibihl*
- ④ *The Union Bank*
- ⑤ *SSA Travel Centers, LLC*
- ⑥ *Mountain Ventures Lima, LLC*
- ⑦ *Samuel Paul Spallinger, Trustee*
- ⑧ *Iowa 80 Group, INC.*
- ⑨ *Northwood Asphalt Products Co.*
- ⑩ *Speedco INC.*
- ⑪ *Phyllis Hardy, Trustee*

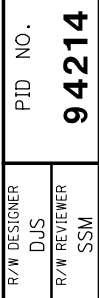


ALLEN COUNTY
RICHLAND TOWNSHIP &
--VILLAGE OF BEAVERDAM
S.E. 1/4 SEC. 29 &
N. 1/2 SEC 32
T-2-S , R-8-E

[illegible]

HORIZONTAL
SCALE IN FEET

CURVE DATA - R1
$PI = Sta. 885+14.28$ $\Delta = 29^{\circ}-07'-46'' L$ $Dc = 3^{\circ}-15'-33''$ $R = 1757.93'$ $T = 456.75'$ $L = 893.74'$ $E = 58.37'$ $PC = Sta. 880+30.00$ $PCC = Sta. 890+00.00$ $C.B. = N 66^{\circ}-21'-48'' E$ $LC = 884.15'$



ALL-75-15.80

THIS PROJECT IS AT 1983 U.S. STATE PLANE, OHIO
NORTH - GRID. ALL PROPERTY & BOUNDARY SURVEY
RELATED DISTANCES SHOWN HEREON ARE AT GRID. TO
CONVERT THE HORIZONTAL PROPERTY & BOUNDARY
SURVEY RELATED DISTANCES TO GROUND DISTANCES,
THE DISTANCES SHOULD BE MULTIPLIED BY 1.0000882629.

REV.	DATE	DESCRIPTION
DATE COMPLETED: 5-31-18		

N.E. 1/4
SEC. 32

N.W. $\frac{1}{4}$
SEC. 32

N.E. $\frac{1}{4}$
SEC. 32

CFJ Properties

Agricultural

CURVE DATA - R1

$PI = Sta. 885+14.28$
 $\Delta = 29^{\circ}-07'-46''$ Lt
 $Dc = 3'-15'-33''$
 $R = 1757.93'$
 $T = 456.75'$
 $L = 893.74'$
 $E = 58.37'$
 $PC = Sta. 880+30.00$
 $PCC = Sta. 890+00.00$
 $C.B. = N 66^{\circ}-21'-48'' E$
 $LC = 884.15'$

CURVE DATA - R3

$PI = Sta. 886+72.33$
 $\Delta = 26^{\circ}-41'-16''$ Rt
 $Dc = 3^{\circ}-13'-41''$
 $R = 1774.90'$
 $T = 421.00'$
 $L = 826.73'$
 $E = 49.25'$
 $PCC = Sta. 890+00.00$
 $PT = Sta. 891+20.13$
 $C.B. = S\ 61^{\circ}-34'-02''\ W$
 $LC = 819.28$

CURVE DATA - R2

$PI = Sta. 892+23.93$
 $\Delta = 18^{\circ}-55'-32'' \text{ L}$
 $DC = 4^{\circ}-35'-01''$
 $R = 1250.00'$
 $T = 208.34'$
 $L = 412.89'$
 $E = 17.24'$
 $PCC = Sta. 890+00.00$
 $PT = Sta. 894+45.15$
 $CB = N 40^{\circ}-11'-27'' E$
 $LC = 411.02$

N.W. $\frac{1}{4}$
SEC. 32

N.E. $\frac{1}{4}$
SEC. 32

U.S.R. 30 R/W

HORIZONTAL DISTANCE NOTE:

THIS PROJECT IS AT 1983 U.S. STATE PLANE, OHIO
NORTH - GRID. ALL PROPERTY & BOUNDARY SURVEY
RELATED DISTANCES SHOWN HEREON ARE AT GRID. TO
CONVERT THE HORIZONTAL PROPERTY & BOUNDARY
SURVEY RELATED DISTANCES TO GROUND DISTANCES,
THE DISTANCES SHOULD BE MULTIPLIED BY 1.0000882629.

REV.	DATE	DESCRIPTION
DATE COMPLETED: 5-31-18		

For $\mathcal{C}$ & $\mathcal{B}$ Curve Data, See Sheet 3/12.

25 100
HORIZONTAL
SCALE IN FEET

94214

DJS
 R/W REVIEW
 SSM

RIGHT OF WAY PLAN
STA. 880+50 TO STA. 893+00

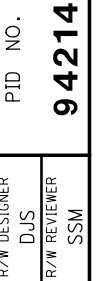
ALL-75-15.80

3	/	12
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184
188

REV.	DATE	DESCRIPTION
DATE COMPLETED: 5-31-18		

CURVE DATA - R4
PI = Sta. 897+37.37
$\Delta = 49^{\circ}04'12''$ Rt
Dc = 8°-52'-02"
R = 646.15'
T = 294.94'
L = 553.38'
E = 64.13'
PC = Sta. 894+18.00
PT = Sta. 900+08.06
C.B. = S 13°-10'-05" W
LC = 536.62'



ALL-75-15.80

9 / 12
185 188

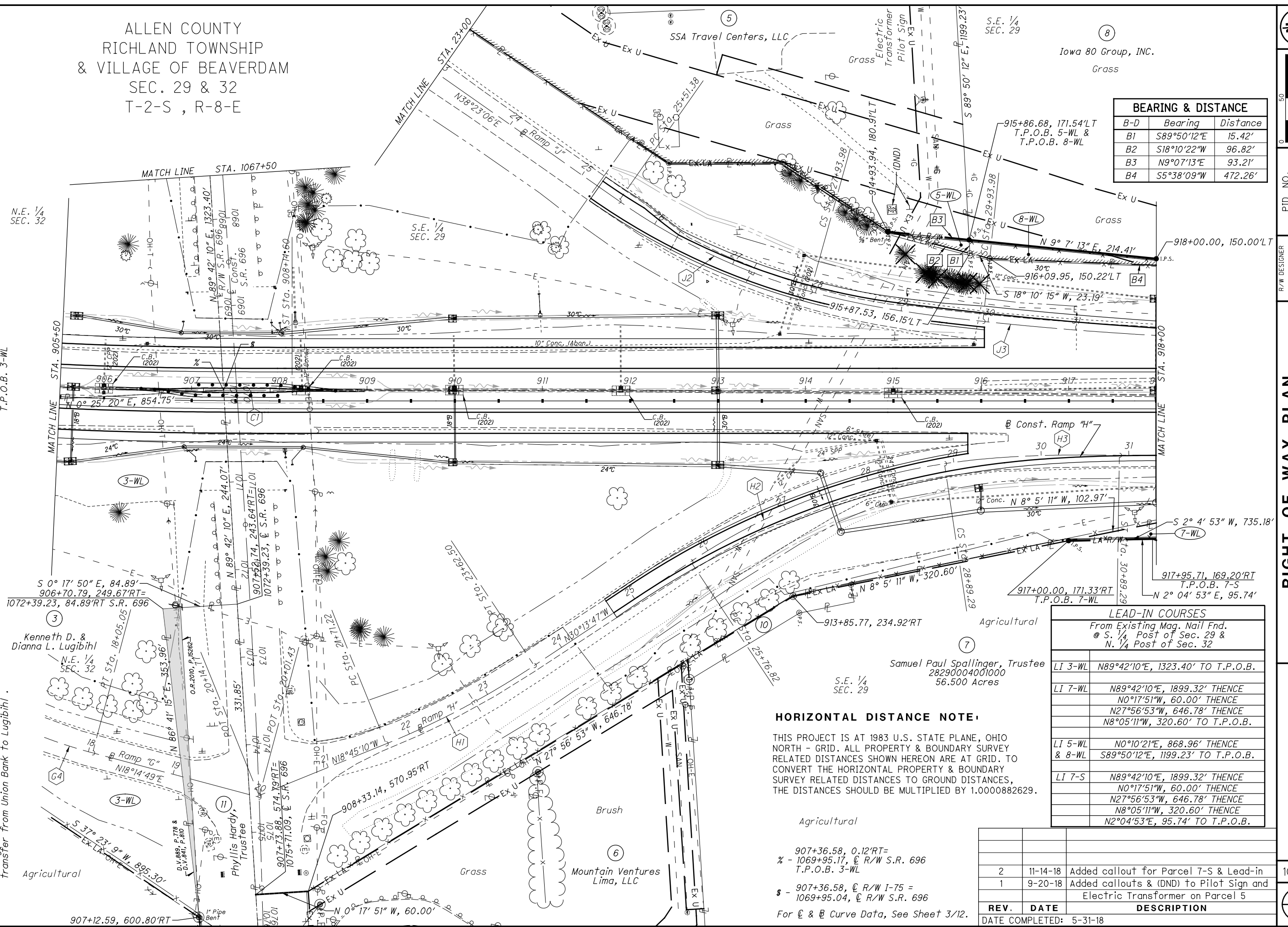
For C & B Curve Data, See Sheet 3/12.

I:\Project\data\94214\Design\RW\Sheets\94214_R0004.dgn Sheet 9/20/2019 2:25:56 PM tboleba

ALLEN COUNTY
RICHLAND TOWNSHIP
& VILLAGE OF BEAVERDAM
SEC. 29 & 32
T-2-S , R-8-E

N.E. 1/4
SEC. 32

907+36.58, 0.12'RT=
% - 1069+95.17, C R/W S.R. 696
T.P.O.B. 3-WL



BEARING & DISTANCE		
B-D	Bearing	Distance
B1	S89°50'12"E	15.42'
B2	S18°10'22"W	96.82'
B3	N9°07'13"E	93.21'
B4	S5°38'09"W	472.26'

LEAD-IN COURSES	
From Existing Mag. Nail Fnd. @ S. 1/4 Post of Sec. 29 & N. 1/4 Post of Sec. 32	
LI 3-WL	N89°42'10"E, 1323.40' TO T.P.O.B.
LI 7-WL	N89°42'10"E, 1899.32' THENCE N0°17'51"W, 60.00' THENCE N27°56'53"W, 646.78' THENCE N8°05'11"W, 320.60' TO T.P.O.B.
LI 5-WL & 8-WL	N0°10'21"E, 868.96' THENCE S89°50'12"E, 1199.23' TO T.P.O.B.
LI 7-S	N89°42'10"E, 1899.32' THENCE N0°17'51"W, 60.00' THENCE N27°56'53"W, 646.78' THENCE N8°05'11"W, 320.60' THENCE N2°04'53"E, 95.74' TO T.P.O.B.

HORIZONTAL DISTANCE NOTE:

THIS PROJECT IS AT 1983 U.S. STATE PLANE, OHIO NORTH - GRID. ALL PROPERTY & BOUNDARY SURVEY RELATED DISTANCES SHOWN HEREON ARE AT GRID. TO CONVERT THE HORIZONTAL PROPERTY & BOUNDARY SURVEY RELATED DISTANCES TO GROUND DISTANCES, THE DISTANCES SHOULD BE MULTIPLIED BY 1.0000882629.

907+36.58, 0.12'RT=
% - 1069+95.17, C R/W S.R. 696
T.P.O.B. 3-WL

% - 907+36.58, C R/W I-75 =
1069+95.04, C R/W S.R. 696

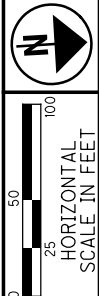
For C & B Curve Data, See Sheet 3/12.

REV.	DATE	DESCRIPTION
2	11-14-18	Added callout for Parcel 7-S & Lead-in
1	9-20-18	Added callouts & (DND) to Pilot Sign and Electric Transformer on Parcel 5
DATE COMPLETED: 5-31-18		

ALLEN COUNTY
RICHLAND TOWNSHIP
& VILLAGE OF BEAVERDAM
SEC. 29
T-2-S , R-8-E

BEARING & DISTANCE		
B-D	Bearing	Distance
B5	S89°50'42"E	13.61'
B6	N28°00'49"E	60.52'

LEAD-IN COURSES	
From Existing Mag. Nail End. @ S. 1/4 Post of Sec. 29 & N. 1/4 Post of Sec. 32	
LI 9-WL	N0°10'21"E, 868.96' THENCE
	S89°50'12"E, 1199.23' THENCE
	N9°07'13"E, 214.41' THENCE
	N4°22'23"E, 281.11' TO T.P.O.B.



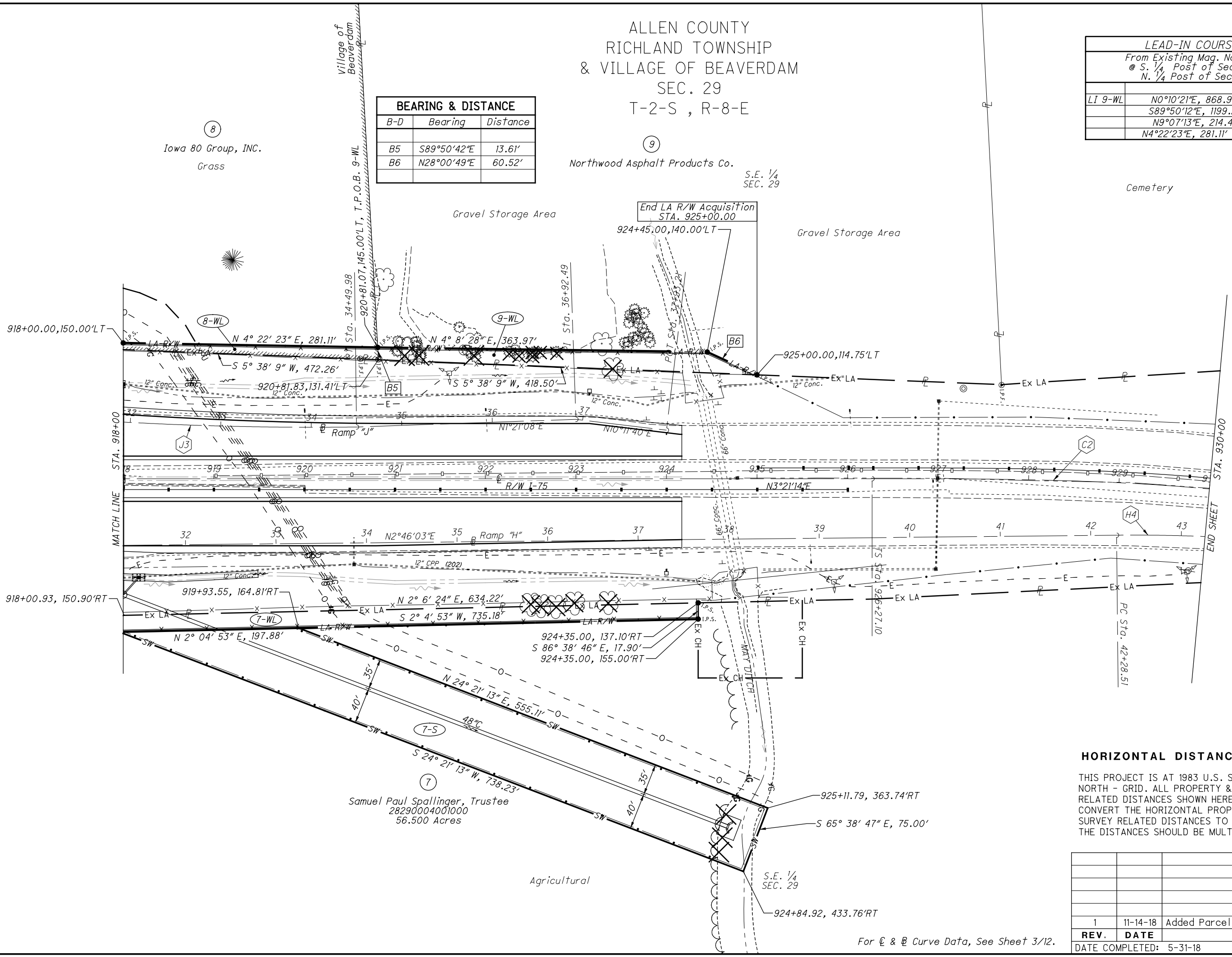
PID NO. 94214
R/W DESIGNER DJJ
R/W REVIEWER SSM

RIGHT OF WAY PLAN
STA. 918+00 TO STA. 930+50

ALL-75-15.80

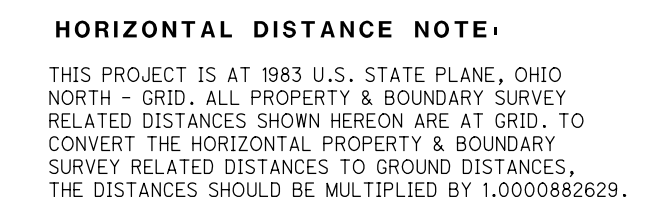
HORIZONTAL DISTANCE NOTE:
THIS PROJECT IS AT 1983 U.S. STATE PLANE, OHIO NORTH - GRID. ALL PROPERTY & BOUNDARY SURVEY RELATED DISTANCES SHOWN HEREON ARE AT GRID. TO CONVERT THE HORIZONTAL PROPERTY & BOUNDARY SURVEY RELATED DISTANCES TO GROUND DISTANCES, THE DISTANCES SHOULD BE MULTIPLIED BY 1.0000882629.

REV.	DATE	DESCRIPTION
1	11-14-18	Added Parcel 7-S
DATE COMPLETED: 5-31-18		



For C & B Curve Data, See Sheet 3/12.

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REV.	DATE	DESCRIPTION
DATE COMPLETED: 5-31-18		

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PROJECT DESCRIPTION

PLANING AND RESURFACING OF 0.74 MILES FROM S.L.M. 15.80 TO S.L.M. 16.54 AND 5.07 MILES FROM S.L.M. 17.59 TO S.L.M. 22.66 OF I.R. 75, INCLUDING JOINT REPAIR. TOTAL RECONSTRUCTION OF 1.05 MILES OF I.R. 75 FROM S.L.M. 16.54 TO S.L.M. 17.59, INCLUDING PARTIAL REPLACEMENT OF RAMPS AT S.R. 696.

HISTORIC RECORDS

HISTORICAL BORINGS WERE OBTAINED FROM ODOT OFFICE OF GEOTECHNICAL ENGINEERING FOR ALL-696-0.86, PID 22991. TWO OF THE BORINGS WERE USED IN THE CURRENT PROJECT DESIGN AND ARE SHOWN WITHIN THIS EXPLORATION.

ADDITIONAL HISTORICAL BORINGS WERE OBTAINED FROM THE ODOT OFFICE OF GEOTECHNICAL ENGINEERING FOR ALL-75-22.17, PART OF ALL-75-8.18, PID 22248. FOUR OF THE BORINGS WERE USED IN THE CURRENT PROJECT DESIGN AND ARE SHOWN WITHIN THIS EXPLORATION.

HISTORICAL BORINGS OBTAINED FROM THE ODOT OFFICE OF GEOTECHNICAL ENGINEERING FOR ALL/HAN-25-9.07/0.00 FROM 1951 ARE NOT PRESENTED FOR PURPOSES OF CLARITY. MOST OF THE ENCOUNTERED SOILS WERE COHESIVE (A-6a, A-6b, AND A-7-6), CONSISTENT WITH THE CURRENT PROJECT.

GEOLOGY

THE PROJECT IS LOCATED WITHIN THE CENTRAL OHIO CLAYEY TILL PLAIN WHICH IS CHARACTERIZED BY WELL DEFINED MORAINES WITH INTERVENING FLAT-LYING GROUND MORaine AND INTERMORAINAL LAKE BASINS. THE SURFACE OF CLAYEY, HIGH LIME WISCONSINAN-AGE TILL AND LACUSTRINE MATERIALS IS UNDERLAIN BY LOWER PALEOZOIC-AGE CARBONATE ROCKS.

RECONNAISSANCE

FIELD RECONNAISSANCE WAS COMPLETED IN NOVEMBER 2017 (ALL-75-15.80) AND ON APRIL 9, 2019 (ALL-75-22.11) BY PERSONNEL FROM THE OFFICE OF GEOTECHNICAL ENGINEERING.

AT ALL-75-15.80, THE ASPHALT SURFACE AND CONCRETE BASE WAS NOTED AS BEING IN MODERATE CONDITION WITH AREAS OF PATCHING AND SURFACE GRINDING NOTED. THE ADJACENT LAND USAGE WAS RURAL AGRICULTURAL WITH NUMEROUS COMMERCIAL PROPERTIES AT THE SR 696 INTERCHANGE.

AT ALL-75-22.11, THE PAVEMENT HAS BEEN EXPERIENCING LOCALIZED DISTRESS. THE ADJACENT LAND IS USED FOR A QUARRY INCLUDING A TUNNEL BELOW I-75.

SUBSURFACE EXPLORATION

FOURTEEN (14) BORINGS, B-001-0-17 THROUGH B-012-0-17 ALONG WITH B-006-1-17 AND B-006-2-17 WERE PERFORMED AS PART OF THE SUBSURFACE EXPLORATION AT ALL-75-15.80 BETWEEN NOVEMBER 20 AND 22, 2017. THE BORINGS WERE DRILLED WITH A TRUCK MOUNTED CME 55 ROTARY DRILL RIG, USING 3-1/4 INCH I.D. HOLLOW STEM AUGERS TO ADVANCE THE BORINGS THROUGH THE SOIL. DISTURBED SAMPLES WERE COLLECTED IN ACCORDANCE WITH THE STANDARD PENETRATION TEST (AASHTO T206) AT CONTINUOUS AND 2.5-FOOT INTERVALS. THE HAMMER SYSTEM WAS CALIBRATED ON JUNE 1, 2017, AND THE AVERAGE DRILL ROD ENERGY RATIO (ER) WAS 77%.

IN 2019, DUE TO THE AFOREMENTIONED PAVEMENT DISTRESS AT ALL-75-22.11, A SECOND PHASE OF EXPLORATION WAS PERFORMED VIA A SERIES OF 3 TEST PITS AND 2 ELECTRICAL RESISTIVITY LINES AT THIS LOCATION.

EXPLORATION FINDINGS

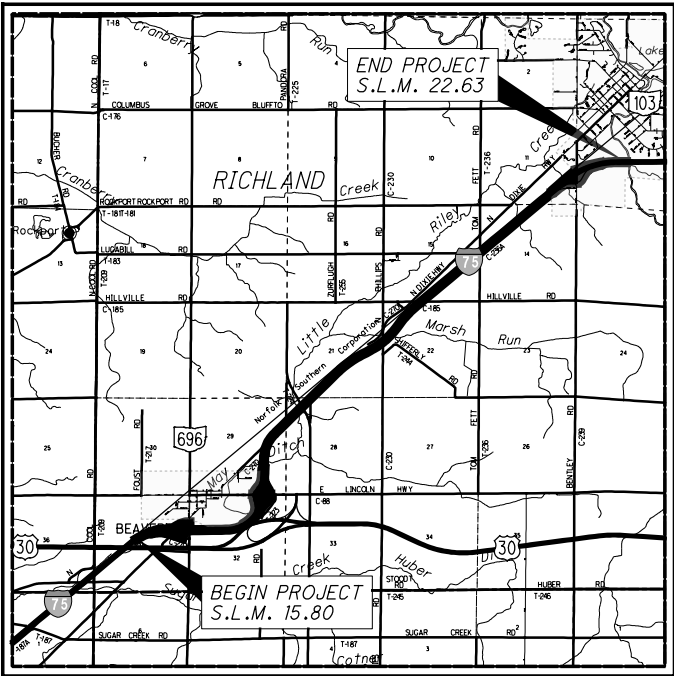
FOR THE EXPLORATION AT ALL-75-15.80, BORINGS B-001-0-17 THROUGH B-012-0-17 WERE ALL DRILLED THROUGH THE EXISTING PAVEMENT AND INITIALLY ENCOUNTERED 3 TO 7 INCHES OF ASPHALT UNDERLAIN BY 9 TO 10 INCHES OF CONCRETE AND 2 INCHES OF AGGREGATE BASE. THE SUBGRADE SOILS WERE STIFF TO HARD COHESIVE SOILS (A-4a, A-6a, A-6b, AND A-7-6). BORINGS B-006-1-17 AND B-006-2-17 WERE DRILLED FOR THE CULVERT THAT CROSSES I-75 AT STA. 897+05 AT THE OUTLET AND INLET, RESPECTIVELY, AND INITIALLY ENCOUNTERED 6 INCHES OF TOPSOIL. BENEATH THE TOPSOIL, B-006-1-17 THEN ENCOUNTERED 8 FEET OF VERY LOOSE STONE FRAGMENTS WITH SAND, SILT, AND CLAY (A-2-6) UNDERLAIN BY 2.5 FEET OF MEDIUM DENSE COARSE AND FINE SAND (A-3a). BENEATH THIS LAYER, 12.5 FEET OF STIFF SILTY CLAY (A-6b) WAS FOUND WITH THE BORING TERMINATED IN 4 FEET OF LOOSE GRAVEL WITH SAND AT ELEVATION 838.6 FEET. BENEATH THE TOPSOIL IN B-006-2-17, ALTERNATING LAYERS OF NON-COHESIVE AND COHESIVE SOILS WERE FOUND CONSISTING OF 2.5 TO 5.5 FEET OF MEDIUM DENSE STONE FRAGMENTS WITH SAND (A-1-b), 2.5 FEET OF LOOSE COARSE AND FINE SAND (A-3a), 2.5 FEET OF MEDIUM STIFF SANDY SILT (A-4a), AND 5 TO 7.5 FEET OF STIFF TO VERY STIFF SILTY CLAY (A-6b). THE BORING WAS TERMINATED IN MEDIUM DENSE GRAVEL WITH SAND (A-1-b) AT ELEVATION 836.3 FEET.

THE TEST PITS FOR THE SITE AT ALL-75-22.11 WERE ALL DUG IN THE MEDIAN AND ENCOUNTERED PREDOMINATELY STIFF TO VERY STIFF COHESIVE SOIL (A-4a, A-6a, A-6b) WITH LIMITED NON-COHESIVE SOIL (A-2-4, A-2-6, AND A-3a).

FREE WATER WAS ENCOUNTERED IN B-006-1-17 AND B-006-2-17 AT ELEVATION 860.1 AND 860.3 FT., RESPECTIVELY AND WATER AT COMPLETION WAS RECORDED AT ELEVATION 849.4 AND 842.9, RESPECTIVELY.

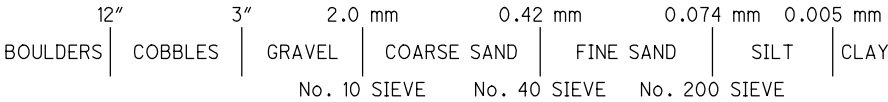
LEGEND

DESCRIPTIONS		ODOT CLASS	CLASSIFIED MECH./VISUAL	
	GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1-b	3	4
	COARSE AND FINE SAND	A-3a	4	1
	GRAVEL AND/OR STONE FRAGS. WITH SAND & SILT	A-2-4	1	-
	GR. AND/OR ST. FRAGS. WITH SAND, SILT & CLAY	A-2-6	3	1
	SANDY SILT	A-4a	4	1
	SILT AND CLAY	A-6a	18	9
	SILTY CLAY	A-6b	20	15
	CLAY	A-7-6	3	4
		TOTAL	56	35
	BOULDERY ZONE	VISUAL		
	PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL		
	SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL		
	BORING LOCATION - PLAN VIEW.			
	HISTORICAL BORING LOCATION - PLAN VIEW.			
	TEST PIT LOCATION - PLAN VIEW.			
	DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.			
WC	INDICATES WATER CONTENT IN PERCENT.			
N ₆₀	INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.			
N	INDICATES STANDARD PENETRATION RESISTANCE.			
X/Y/Z	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X= NUMBER OF BLOWS FOR FIRST 6 INCHES. Y= NUMBER OF BLOWS FOR SECOND 6 INCHES. Z= NUMBER OF BLOWS FOR THIRD 6 INCHES.			
W—	INDICATES FREE WATER ELEVATION.			
▼—	INDICATES STATIC WATER ELEVATION.			
⊕	INDICATES A NON-PLASTIC MATERIAL WITH A MOISTURE CONTENT GREATER THAN 25 % OR GREATER THAN 19 % WITH A WET APPEARANCE.			
LOI	INDICATES ORGANIC CONTENT BY LOSS ON IGNITION, AASHTO T267.			
NP	INDICATES A NON-PLASTIC SAMPLE.			
SO ₄	INDICATES SULFATE CONTENT IN PARTS PER MILLION.			
SS	INDICATES A SPLIT SPOON SAMPLE.			
HISTORICAL BORING DESCRIPTIONS		ODOT CLASS	CLASSIFIED MECH./VISUAL	
	COARSE AND FINE SAND	A-3a	4	2
	SANDY SILT	A-4a	3	2
	SILT AND CLAY	A-6a	5	2
	SILTY CLAY	A-6b	1	-
		TOTAL	13	6
	LIMESTONE	VISUAL		
	SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL		



LOCATION MAP
SCALE IN MILES

PARTICLE SIZE DEFINITIONS



INDEX OF SHEETS					
GENERAL INFORMATION (CONT.), SHEET 2					
SUMMARY OF SOIL TEST DATA, SHEETS 3 & 4					
LOCATION FROM STA. TO STA.	PLAN VIEW SHEET	PROFILE SHEET	CUT MAX.	FILL EMB. MAX.	
I.R. 75					
869+00 883+00	5	6	-	3.1	FT
883+00 897+00	7	8	-	4.2	FT
897+00 911+00	9	10	2.9	1.8	FT
911+00 925+00	11	12	1.8	2.5	FT
CULVERT NO. 1979569 DETAILS, SHEET 13					
I.R. 75 S.L.M. 22.11 TO S.L.M. 22.22 - PLAN VIEW, SHEET 14					
BORING LOGS, SHEET 15					
SULFATE CONTENT, SHEET 16					

RECON. -	PPP	11/09/17
	PPP	04/09/19
DRILLING -	DML	11/20-21/17
	PPP	05/15/19
GEOPHYSICS -	AMJ	05/23/19
DRAWN -	ARR	07/19
REVIEWED -	SAT	07/19

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SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2017.

AVAILABLE INFORMATION

ALL AVAILABLE SOIL AND BEDROCK INFORMATION THAT CAN BE CONVENIENTLY SHOWN ON THE GEOTECHNICAL EXPLORATION SHEETS HAS BEEN SO REPORTED. ADDITIONAL EXPLORATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE OR THE OFFICE OF GEOTECHNICAL ENGINEERING AT 1980 WEST BROAD STREET.

ORGANIC CONTENT BY LOSS ON IGNITION		
BORING ID	ELEVATION	LOI (%)
B-011-0-17	853.3	3.3%
B-012-0-17	850.6	3.8%
T-001-0-19	826.6	3.8%
	824.4	4.3%
T-002-0-19	825.6	4.4%
	825.1	5.2%
T-003-0-19	825.4	5.0%



SUMMARY OF SOIL TEST DATA																
I.R. 75 (S.L.M. 16.54 TO S.L.M. 17.59)																
EXPLOR. ID	FROM - TO	SAMPLE ID	N60	% REC	% tsf	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (G1)	ppm SO4
B-001-0-17 STA. 877+70, 28' RT. LATITUDE = 40.827777 LONGITUDE = -83.968081	1.50 - 3.00	SS-1A	15	56	4.00	27	5	10	26	32	33	17	16	15	A-6b (7)	200
	3.00 - 4.50	SS-2A	23	67	4.50	5	6	12	33	44	31	17	14	16	A-6a (10)	180
	4.50 - 6.00	SS-3A	28	78	4.50				SAME AS SS-2A				16	16	A-6a (VISUAL)	-
	6.00 - 7.50	SS-4A	32	78	4.50				SAME AS SS-2A				15	15	A-6a (VISUAL)	-
B-002-0-17 STA. 878+92, 26' LT. LATITUDE = 40.827954 LONGITUDE = -83.967656	1.50 - 3.00	SS-1A	14	33	3.50	7	5	12	29	47	35	17	18	18	A-6b (11)	190
	3.00 - 4.50	SS-2A	31	78	4.50	17	5	11	30	37	31	18	13	15	A-6a (8)	190
	4.50 - 6.00	SS-3A	31	78	4.50				SAME AS SS-2A				16	16	A-6a (VISUAL)	-
	6.00 - 7.50	SS-4A	37	78	4.50				SAME AS SS-2A				16	16	A-6a (VISUAL)	-
B-003-0-17 STA. 883+21, 31' RT. LATITUDE = 40.828054 LONGITUDE = -83.966100	1.50 - 3.00	SS-1A	9	39	3.00	0	5	14	34	47	36	17	19	19	A-6b (12)	440
	3.00 - 4.50	SS-2A	10	44	2.00	0	2	9	38	51	44	21	23	26	A-7-6 (14)	250
	4.50 - 6.00	SS-3A	9	67	2.00				SAME AS SS-2A				26	26	A-7-6 (VISUAL)	-
	6.00 - 7.50	SS-4A	10	67	2.00				SAME AS SS-2A				28	28	A-7-6 (VISUAL)	-
B-004-0-17 STA. 886+81, 29' LT. LATITUDE = 40.828605 LONGITUDE = -83.965004	1.50 - 3.00	SS-1A	9	28	1.50	24	8	11	25	32	38	16	22	18	A-6b (9)	160
	3.00 - 4.50	SS-2A	12	67	2.00	8	4	10	29	49	40	18	22	21	A-6b (13)	270
	4.50 - 6.00	SS-3A	26	78	3.50				SAME AS SS-2A				20	20	A-6b (VISUAL)	-
	6.00 - 7.50	SS-4A	45	78	4.50				SAME AS SS-2A				14	14	A-6b (VISUAL)	-
B-005-0-17 STA. 891+15, 30' RT. LATITUDE = 40.829177 LONGITUDE = -83.963614	1.50 - 3.00	SS-1A	9	44	2.00	3	3	10	35	49	41	18	23	21	A-7-6 (13)	120
	3.00 - 4.50	SS-2A	15	67	2.50	6	3	11	33	47	42	19	23	23	A-7-6 (14)	310
	4.50 - 6.00	SS-3A	17	78	3.00				SAME AS SS-2A				22	22	A-7-6 (VISUAL)	-
	6.00 - 7.50	SS-4A	27	78	4.00				SAME AS SS-2A				17	17	A-7-6 (VISUAL)	-
B-006-0-17 STA. 895+72, 26' RT. LATITUDE = 40.830149 LONGITUDE = -83.962539	1.50 - 3.00	SS-1A	13	56	3.00	8	4	12	37	39	31	18	13	18	A-6a (9)	210
	3.00 - 4.50	SS-2A	8	67	2.00	0	8	23	34	35	32	17	15	23	A-6a (9)	130
	4.50 - 6.00	SS-3A	12	78	2.50	13	14	25	20	28	35	17	18	23	A-6b (5)	-
	6.00 - 7.50	SS-4A	9	56	1.50				SAME AS SS-3A				22	22	A-6b (VISUAL)	-
FOR BORINGS B-006-1-17 & B-006-2-17, SEE THE BORING LOGS ON SHEET 14.																
B-007-0-17 STA. 900+02, 19' LT. LATITUDE = 40.831254 LONGITUDE = -83.961971	1.50 - 3.00	SS-1A	18	67	4.00	7	7	13	35	38	30	17	13	16	A-6a (9)	230
	3.00 - 4.50	SS-2A	32	67	4.50	8	5	12	33	42	33	17	16	16	A-6b (10)	910
	4.50 - 6.00	SS-3A	45	78	4.50				SAME AS SS-2A				17	17	A-6b (VISUAL)	-
	6.00 - 7.50	SS-4A	60	78	4.50				SAME AS SS-2A				17	17	A-6b (VISUAL)	-
B-008-0-17 STA. 905+01, 13' RT. LATITUDE = 40.832563 LONGITUDE = -83.961446	1.50 - 3.00	SS-1A	12	44	3.00	6	5	10	32	47	32	17	15	17	A-6a (10)	620
	3.00 - 4.50	SS-2A	17	78	3.00	11	4	9	30	46	33	17	16	19	A-6b (10)	420
	4.50 - 6.00	SS-3A	21	78	3.50				SAME AS SS-2A				19	19	A-6b (VISUAL)	-
	6.00 - 7.50	SS-4A	22	78	3.50				SAME AS SS-2A				19	19	A-6b (VISUAL)	-
B-009-0-17 STA. 908+78, 10' LT. LATITUDE = 40.833599 LONGITUDE = -83.961450	1.50 - 3.00	SS-1A	15	56	3.00	9	6	11	34	40	33	19	14	18	A-6a (9)	1200
	3.00 - 4.50	SS-2A	22	44	3.50	11	4	9	28	48	32	17	15	19	A-6a (10)	840
	4.50 - 6.00	SS-3A	15	67	3.00				SAME AS SS-2A				20	20	A-6a (VISUAL)	-
	6.00 - 7.50	SS-4A	12	78	2.00				SAME AS SS-2A				21	21	A-6a (VISUAL)	-
B-010-0-17 STA. 913+01, 14' RT. LATITUDE = 40.834757 LONGITUDE = -83.961300	1.50 - 3.00	SS-1A	18	56	4.50	26	8	9	25	32	32	17	15	18	A-6a (6)	320
	3.00 - 4.50	SS-2A	31	83	4.50	13	6	12	34	35	29	16	13	15	A-6a (8)	300
	4.50 - 6.00	SS-3A	23	89	4.50				SAME AS SS-2A				15	15	A-6a (VISUAL)	-
	6.00 - 7.50	SS-4A	14	78	4.00				SAME AS SS-2A				12	12	A-6a (VISUAL)	-
B-011-0-17 STA. 920+13, 22' LT. LATITUDE = 40.836715 LONGITUDE = -83.961322	1.50 - 3.00	SS-1A	14	28	3.00	16	5	10	30	39	35	18	17	15	A-6b (10)	180
	3.00 - 4.50	SS-2A	17	33	4.00	18	5	10	27	40	35	18	17	19	A-6b (9)	320
	4.50 - 6.00	SS-3A	15	67	3.00	0	6	44	20	30	29	14	15	19	A-6a (5)	-
	6.00 - 7.50	SS-4A	8	56	2.00				SAME AS SS-3A				22	22	A-6a (VISUAL)	-
B-012-0-17 STA. 924+01, 26' RT. LATITUDE = 40.837773 LONGITUDE = -83.961088	1.50 - 3.00	SS-1A	15	44	4.00	37	14	9	20	20	24	14	10	13	A-4a (1)	200
	3.00 - 4.50	SS-2A	12	44	2.50	26	7	10	24	33	34	17	17	19	A-6b (7)	210
	4.50 - 6.00	SS-3A	9	56	3.00				SAME AS SS-2A				20	20	A-6b (VISUAL)	-
	6.00 - 7.50	SS-4A	12	67	3.00	27	3	18	22	30	39	16	23	22	A-6b (8)	-

SUMMARY OF SOIL TEST DATA I.R. 75 (S.L.M. 22.11 TO S.L.M. 22.22)																
EXPLOR. ID	FROM - TO	SAMPLE ID	N60	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (g1)	ppm SO4
T-001-0-19 STA. 10+01, 6' RT. LATITUDE = 40.884181 LONGITUDE = -83.893365	0.20 - 1.50	1	-	100	3.00	3	6	12	33	46	30	18	12	18	A-6a (9)	-
	1.50 - 2.10	2	-	100	2.50	24	9	24	19	24	29	18	11	15	A-6a (2)	-
	2.10 - 2.50	3	-	100	-	5	5	17	29	44	35	17	18	18	A-6b (11)	-
	2.50 - 3.30	4	-	100	-	3	10	33	20	34	32	18	14	19	A-6a (5)	-
T-002-0-19 STA. 10+38, 5' RT. LATITUDE = 40.884193 LONGITUDE = -83.893232	3.30 - 4.30	5	-	100	2.50	2	5	22	33	38	19	16	3	21	A-4a (7)	-
	4.30 - 5.80	6	-	100	-	0	7	79	8	6	NP	NP	NP	13	A-3a (10)	-
	5.80 - 6.20	7	-	100	-	4	15	56	13	12	NP	NP	NP	18	A-3a (10)	-
	6.20 - 7.00	8	-	100	-	3	6	13	33	45	30	18	12	19	A-6a (9)	-
T-003-0-19 STA. 10+62, 7' RT. LATITUDE = 40.884196 LONGITUDE = -83.893146	1.80 - 2.60	2	-	100	-	11	10	20	32	27	39	23	16	24	A-6b (7)	-
	2.60 - 3.10	3	-	100	2.50	2	5	15	31	47	38	18	20	20	A-6b (12)	-
	3.10 - 4.20	4	-	100	2.00	10	11	27	25	27	33	19	14	18	A-6a (5)	-
	4.20 - 5.50	5	-	100	2.50	7	6	19	38	30	25	15	10	22	A-4a (7)	-
T-004-0-19 STA. 10+90, 8' RT. LATITUDE = 40.884197 LONGITUDE = -83.893097	5.50 - 6.10	6	-	100	-	7	14	37	19	23	25	15	10	17	A-4a (1)	-
	6.10 - 7.00	7	-	100	3.00	14	7	16	18	45	32	17	15	19	A-6a (8)	-
	7.00 - 7.50	8	-	100	1.50	45	9	15	15	16	31	18	13	20	A-2-6 (10)	-
	7.50 - 8.00	9	-	100	3.00	14	5	16	26	39	33	15	18	19	A-6b (9)	-
T-005-0-19 STA. 10+120, 9' RT. LATITUDE = 40.884198 LONGITUDE = -83.893098	3.20 - 4.60	4	-	100	2.50	10	11	28	26	25	32	18	14	17	A-6a (5)	-
	4.60 - 5.50	5	-	100	1.50	14	9	23	23	31	34	16	18	20	A-6b (7)	-
	5.50 - 7.00	6	-	100	1.00	30	17	23	14	16	25	15	10	16	A-2-4 (10)	-
	7.00 - 7.50	7	-	100	1.00	30	17	23	14	16	25	15	10	16	A-2-4 (10)	-

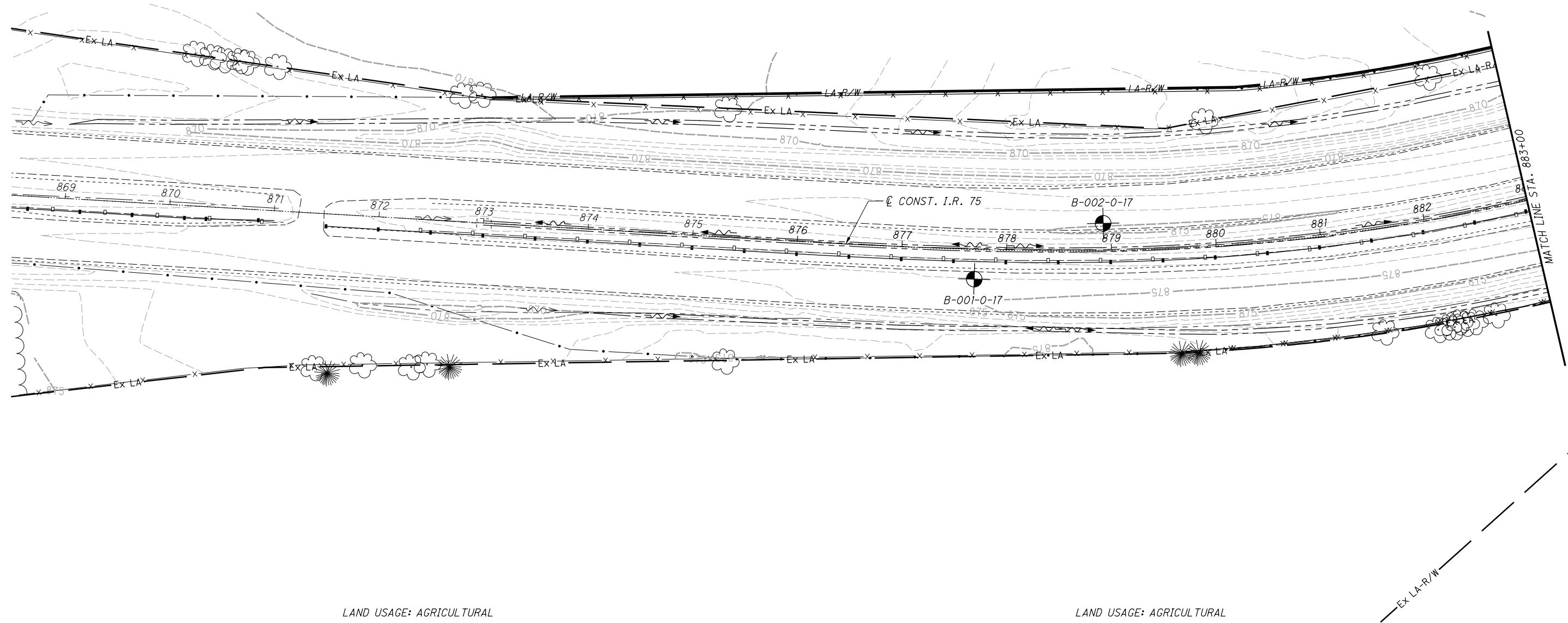
SUMMARY OF SOIL TEST DATA
I.R. 75 (S.L.M. 16.54 TO S.L.M. 17.59) HISTORIC BORINGS

EXPLOR. ID	SAMPLE ID	FROM - TO	N	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO4
R-017-0-03	SS-1	1.00 - 3.00	10	94	2.00	17	5	11	25	42	36	17	19	18	A-6b (10)	-
STA. 893+52, 50' LT.	SS-2A	3.00 - 4.50	8	88	3.25				SAME AS SS-1						A-6b (VISUAL)	-
LATITUDE = 40.829803	SS-2B	4.50 - 5.00	-	88	-				SAME AS SS-3						A-6a (VISUAL)	-
LONGITUDE = -83.963233	SS-3	5.00 - 7.00	18	94	4.50	4	6	10	34	46	35	21	14	15	A-6a (10)	-
R-018-0-03	SS-1	1.00 3.00	12	67	2.50	4	5	14	33	44	35	23	12	24	A-6a (9)	-
STA. 897+69, 47' LT.	SS-2	3.00 5.00	6	78	2.50	21	5	13	24	37	42	20	22	20	A-7-6 (10)	-
LATITUDE = 40.830721	SS-3	5.00 7.00	7	83	3.50				SAME AS SS-2					22	A-7-6 (VISUAL)	-
LONGITUDE = -83.962407																

SUMMARY OF SOIL TEST DATA
I.R. 75 (S.L.M. 22.11 TO S.L.M. 22.22) HISTORIC BORINGS

EXPLOR. ID	SAMPLE ID	FROM - TO	N60	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO4
B-002-0-09	SS-1	1.50 - 3.00	8	89	2.75	17	14	25	25	19	29	17	12	22	A-6a (2)	-
STA. 10+70, CL	SS-2	3.00 - 4.50	22	100	3.00				SAME AS SS-1					17	A-6a (VISUAL)	-
LATITUDE = 40.884215	SS-3A	4.50 - 5.70	11	100	1.75	15	17	32	20	16	25	13	12	15	A-6a (1)	-
LONGITUDE = -83.893111	SS-3B	5.70 - 6.00			-				SAME AS SS-4					9	A-3a (VISUAL)	-
	SS-4	6.00 - 7.50	7	94	-	7	22	47	19	5	NP	NP	NP	11	A-3a (0)	-
B-003-0-09	SS-1	1.50 - 3.00	8	89	2.75	14	7	20	31	28	27	17	10	22	A-4a (5)	-
STA. 10+83, 17' LT.	SS-2	3.00 - 4.50	15	100	4.00				SAME AS SS-1					21	A-4a (VISUAL)	-
LATITUDE = 40.884264	SS-3	4.50 - 6.00	14	89	4.00				SAME AS SS-1					16	A-4a (VISUAL)	-
LONGITUDE = -83.893071	SS-4	6.00 - 7.50	9	100	2.25	10	16	38	21	15	25	15	10	14	A-4a (0)	-
B-005-0-09	SS-1	1.50 - 3.00	12	100	2.50	20	8	24	22	26	28	16	12	17	A-6a (3)	-
STA. 10+95, 69' RT.	SS-2	3.00 - 4.50	8	94	2.50	3	16	43	17	21	23	14	9	13	A-4a (1)	-
LATITUDE = 40.884032	SS-3	4.50 - 6.00	11	72	2.50	21	12	25	19	23	33	17	16	20	A-6b (3)	-
LONGITUDE = -83.892999	SS-4A	6.00 - 7.00	83	100	1.75	18	11	18	27	26	30	17	13	33	A-6a (5)	-
B-006-0-09	SS-1	1.50 - 3.00	14	89	2.50	29	7	13	26	25	29	16	13	16	A-6a (4)	-
STA. 11+08, 66' RT.	SS-2	3.00 - 4.50	18	100	2.50				SAME AS SS-1					16	A-6a (VISUAL)	-
LATITUDE = 40.884043	SS-3	4.50 - 6.00	19	100	1.00	10	10	56	12	12	NP	NP	NP	16	A-3a (0)	-
LONGITUDE = -83.892952	SS-4	6.00 - 7.50	19	100	1.00	14	17	38	18	13	21	15	6	19	A-3a (0)	-

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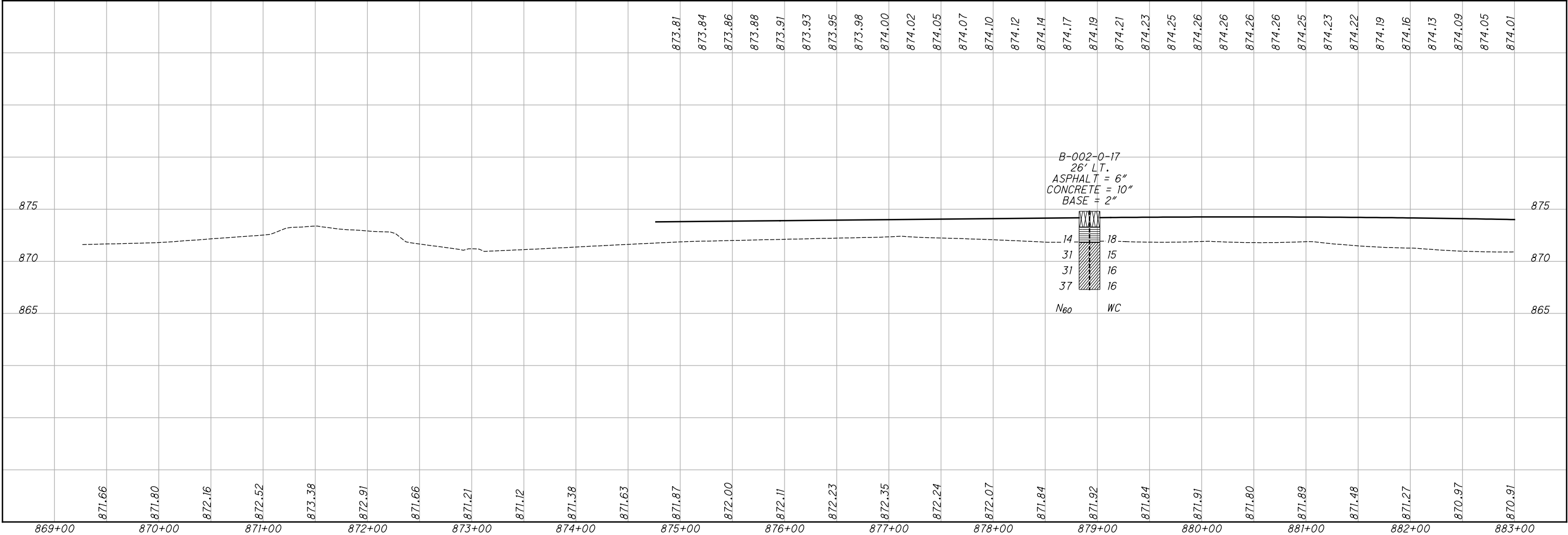
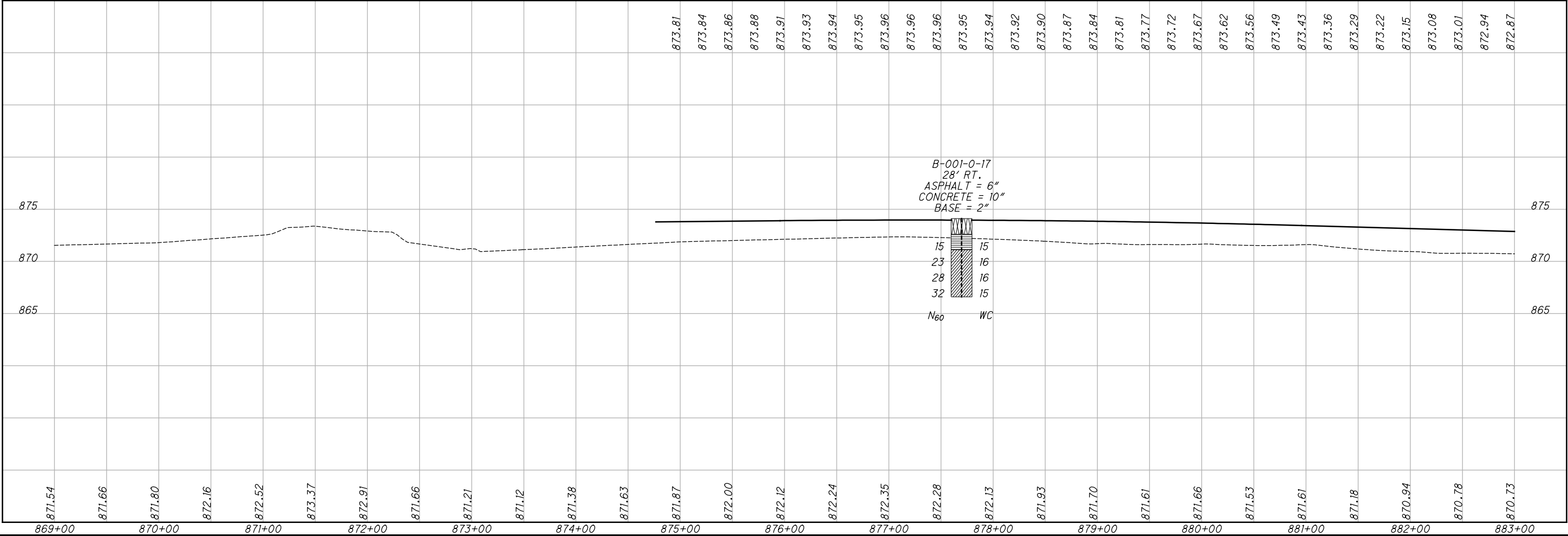
SOIL PROFILE
STA. 869+00 TO STA. 883+00 I.R. 75

ALL-75-15.80

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6 / 16

ALL-75-15.80

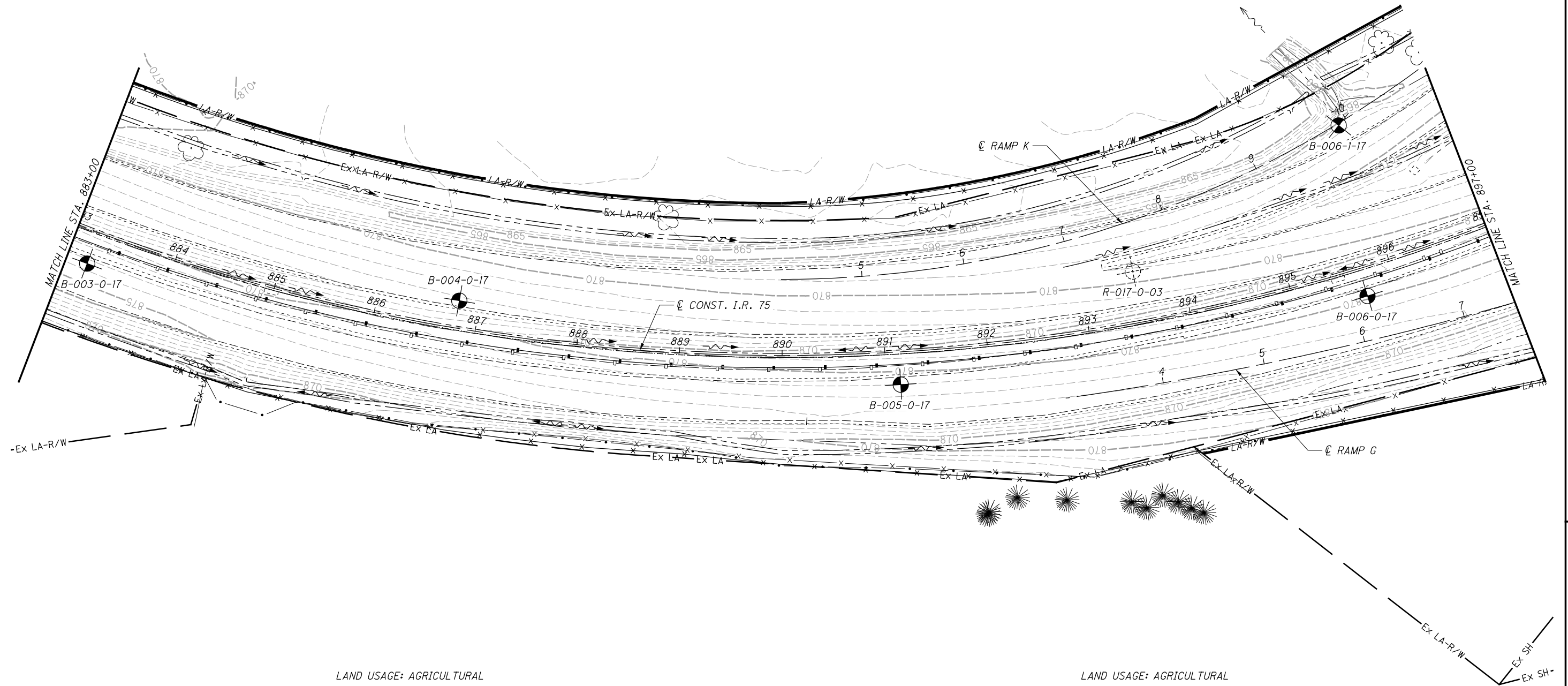
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SOIL PROFILE

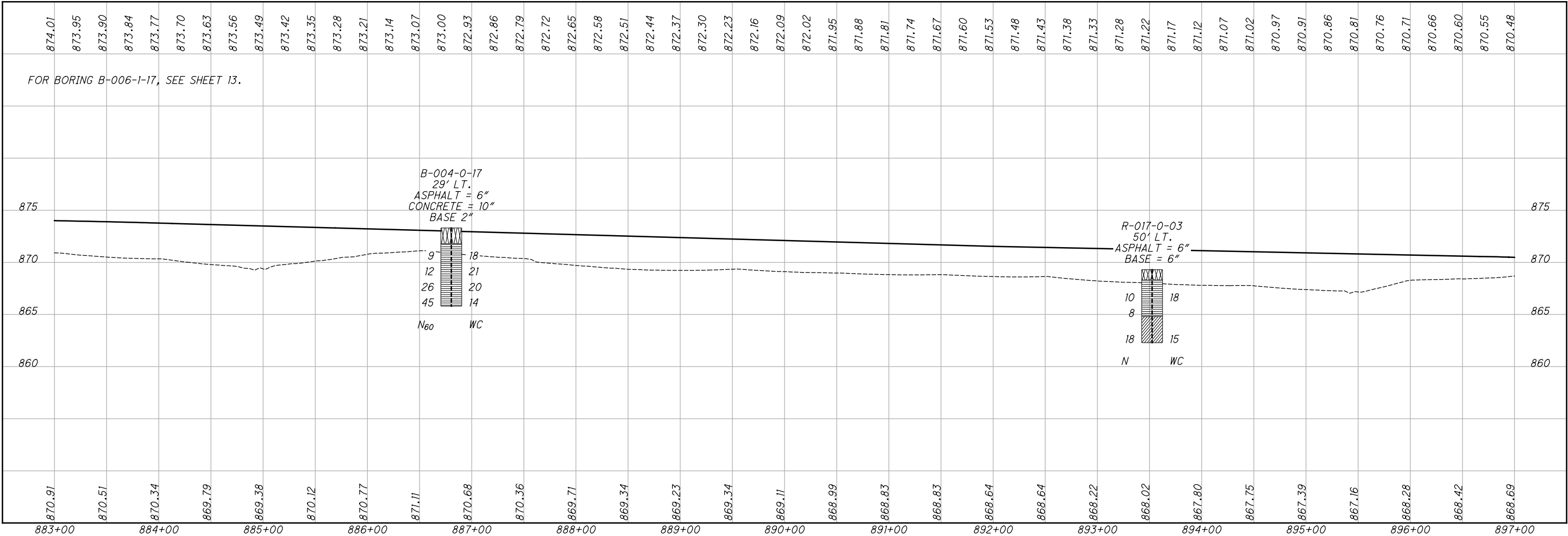
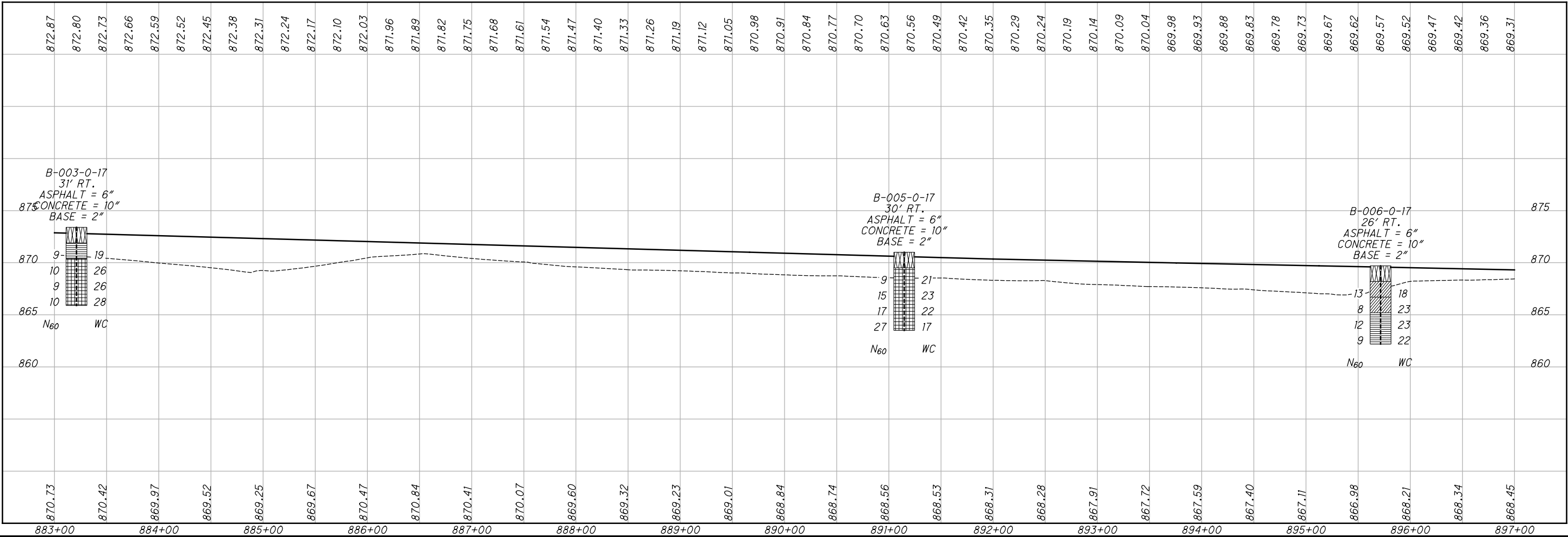
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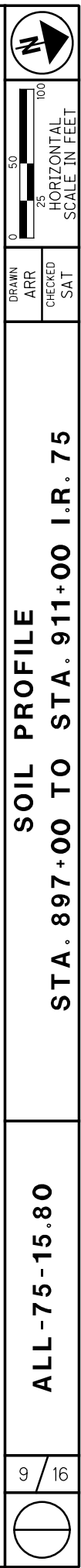
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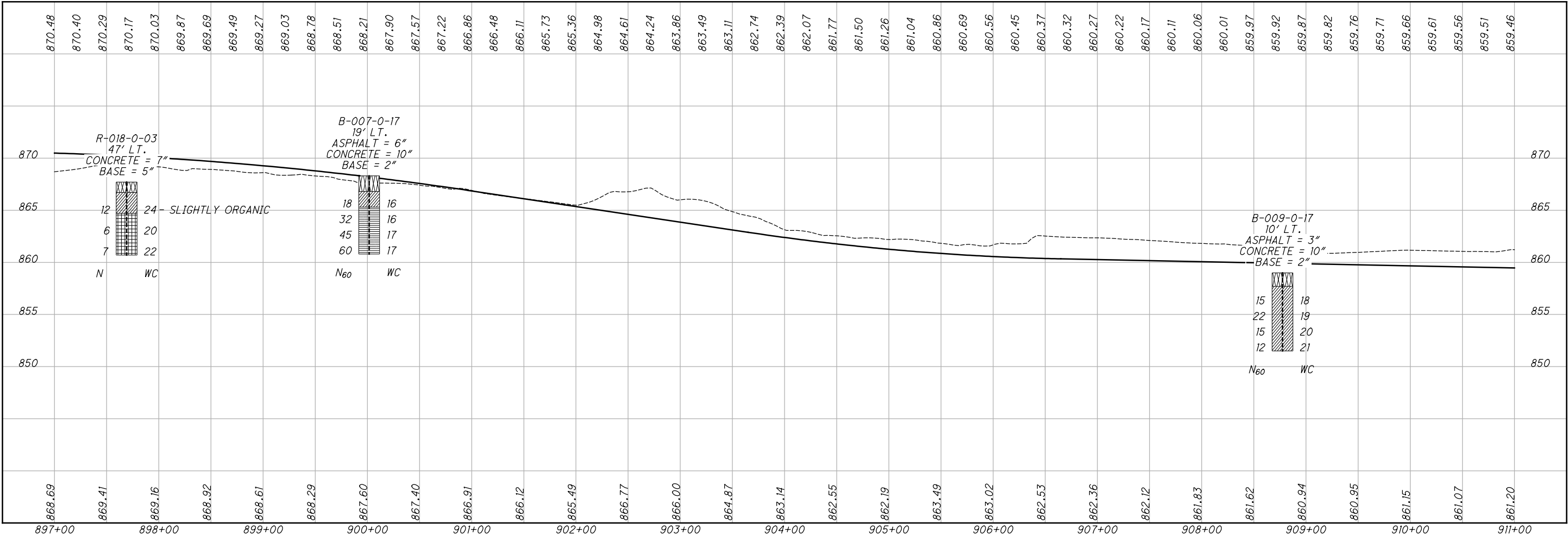
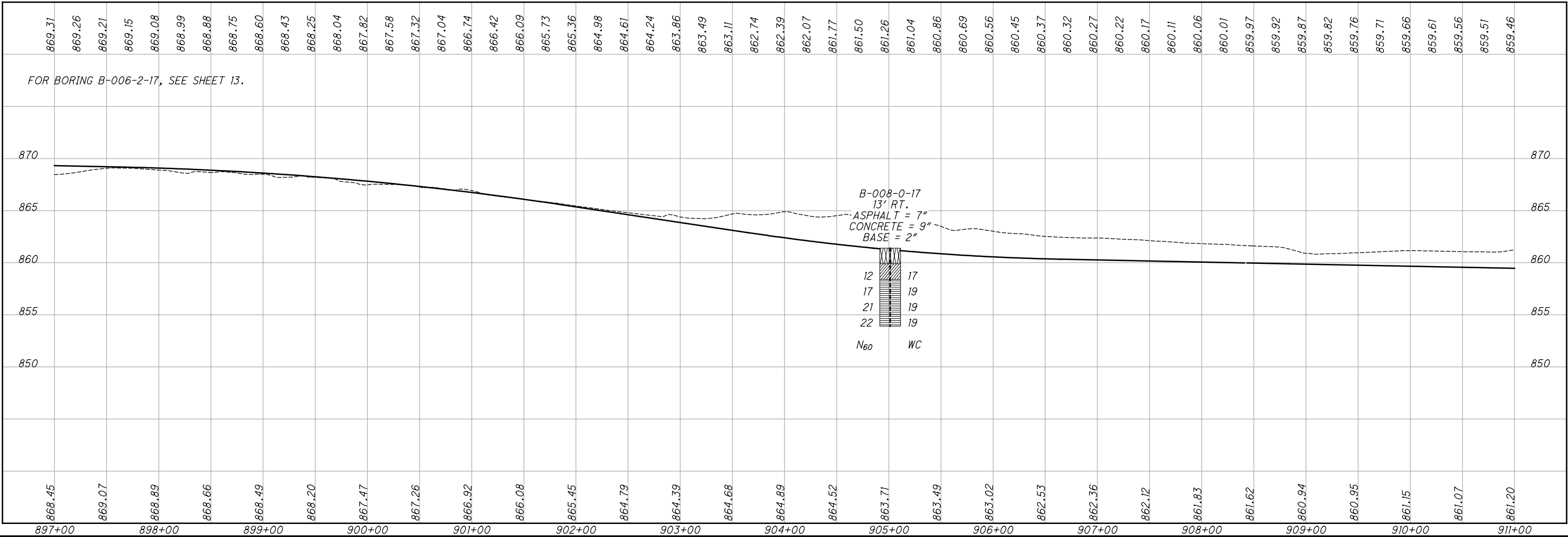
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			ALL-75-15.80		
	9 / 16				

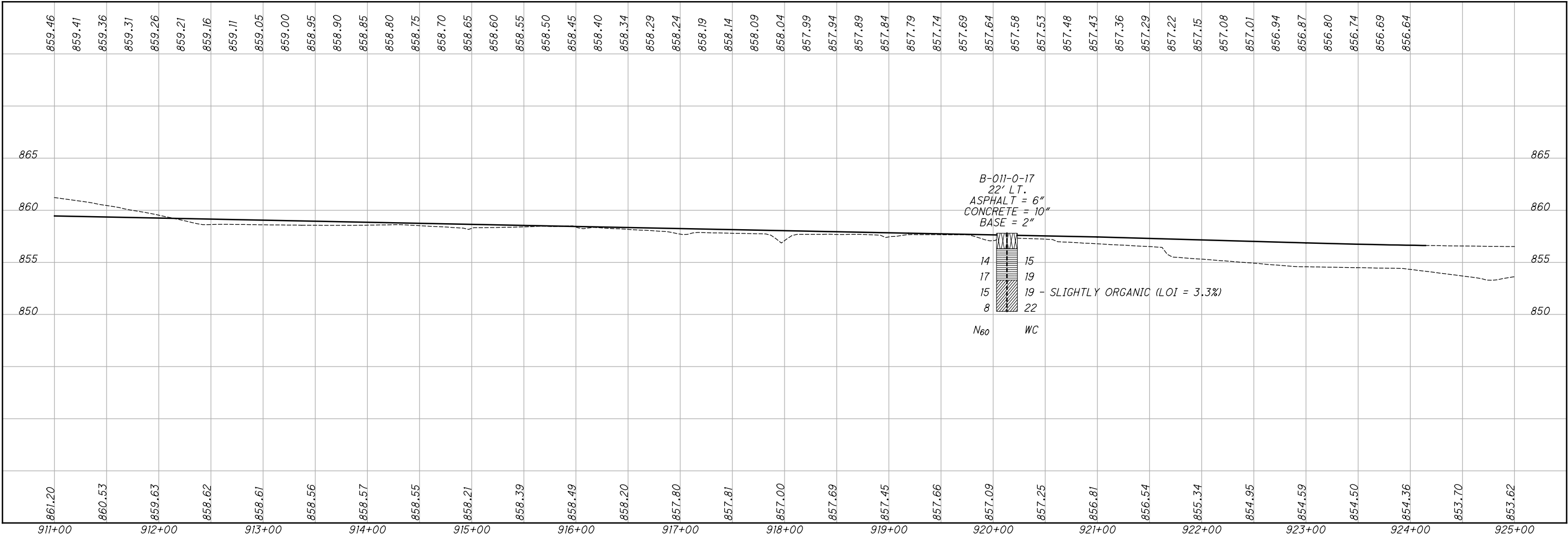
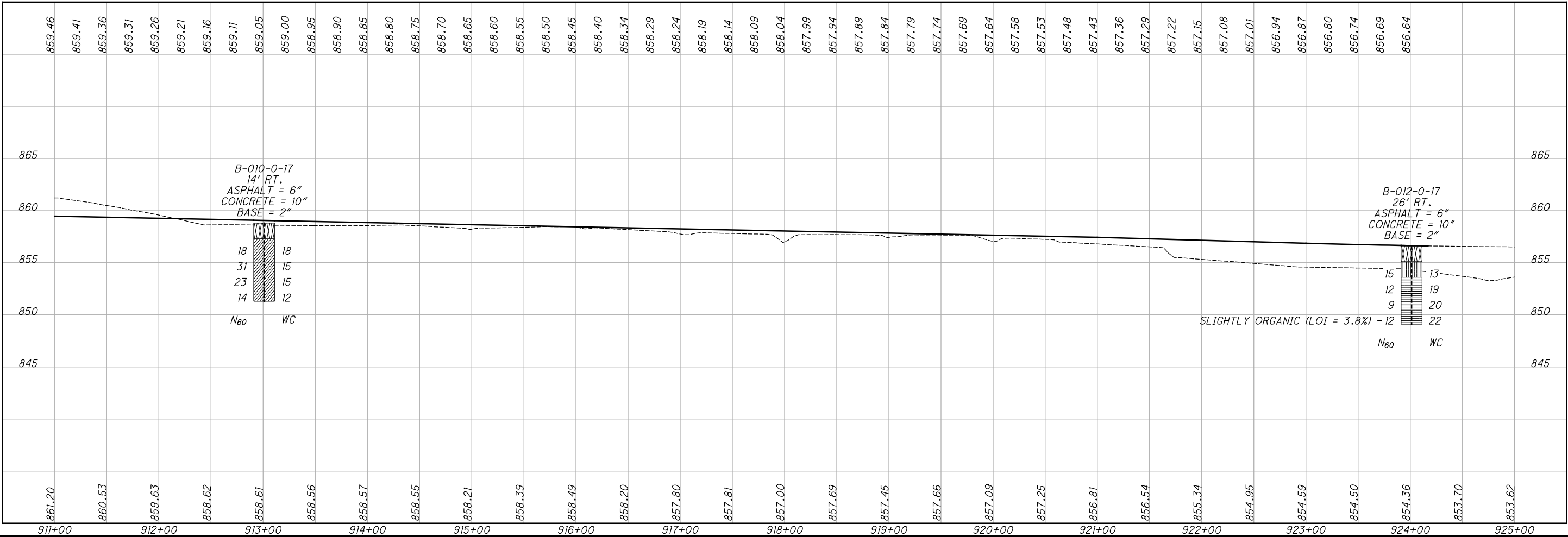




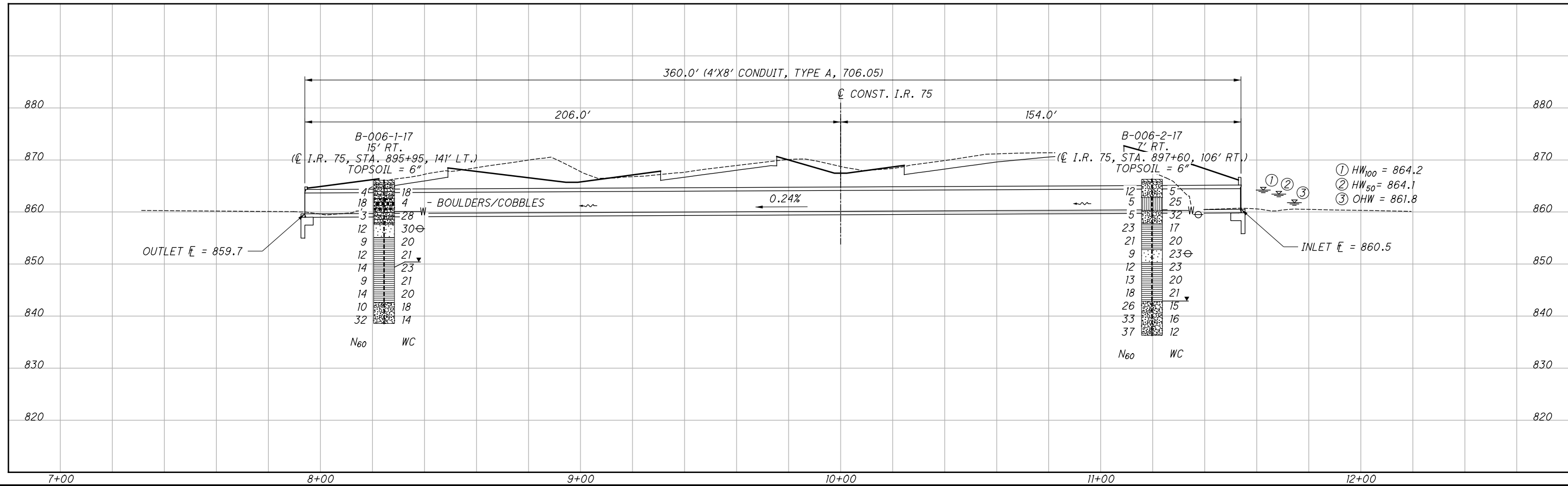
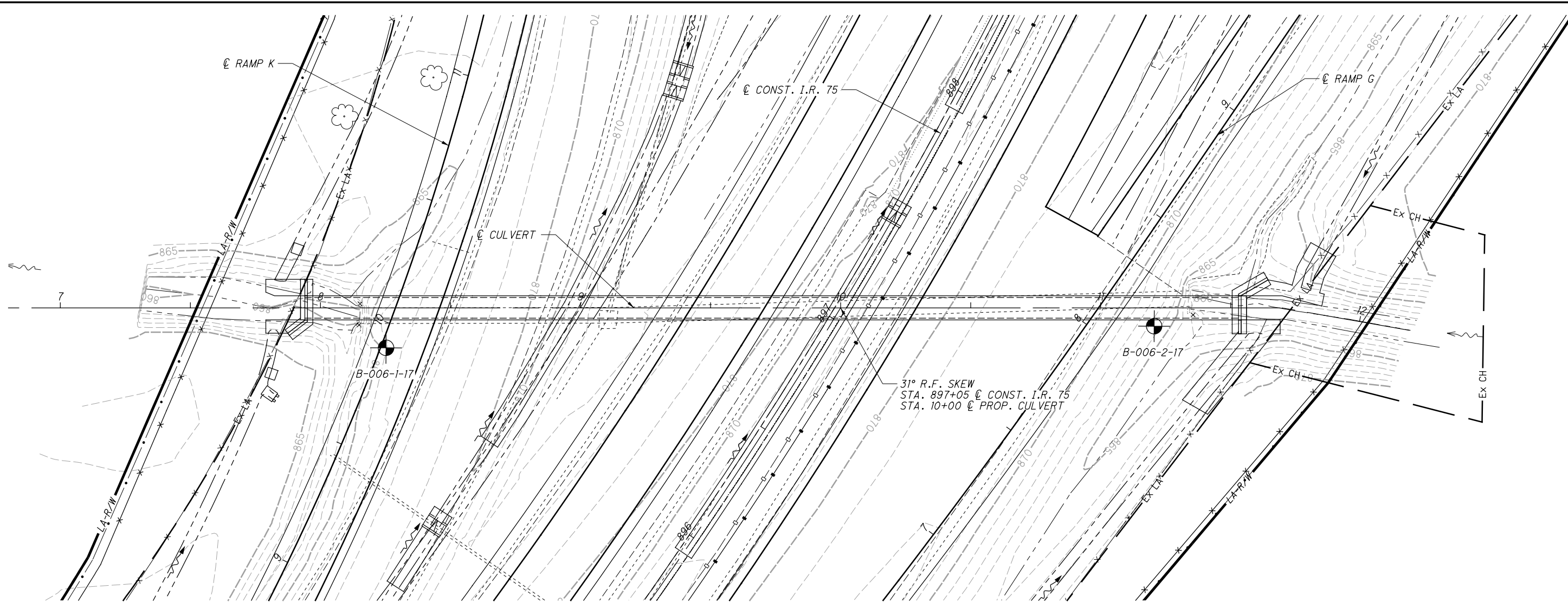
SOIL PROFILE

STA. 911+00 TO STA. 925+00 I.R. 75

ALL-75-15.80



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PROJECT: ALL-75-15.80		DRILLING FIRM / OPERATOR: ODOT / MCINTOSH		DRILL RIG: CME 55 TRUCK		STATION / OFFSET: 895+95, 141' L.T.				EXPLORATION ID B-006-1-17								
TYPE: CULVERT		SAMPLING FIRM / LOGGER: ODOT / LEWIS		HAMMER: CME AUTOMATIC		ALIGNMENT: CL IR 70				PAGE								
PID: 94214 SFN: 1979569 (P)		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 6/1/17		ELEVATION: 866.1 (ft) EOB: 27.5 ft.				1 OF 1								
START: 11/21/17 END: 11/21/17		SAMPLING METHOD: SPT		ENERGY RATIO (%): 77		LAT / LONG: 40.830453, -83.962997												
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)				ODOT CLASS (G1)	BACK FILL				
									GR	CS	FS	SI			CL	LL	PL	PI
TOPSOIL (6") VERY LOOSE, BROWN, STONE FRAGMENTS WITH SAND, SILT, AND CLAY, DAMP @3.5' - 6.0"; ENCOUNTERED BOULDERS/COBBLES		866.1	1															
			2	1	4	56	-	16	40	13	16	15	33	20	13	18	A-2-6 (0)	
			3		2													
			4	2	18	17	SS-2A	-	-	-	-	-	-	-	-	4	A-2-6 (V)	
			5		2													
			6															
			7		1	3	33	SS-3A	-	45	16	9	16	14	37	21	16	A-2-6 (1)
			8		1													
			9		3	12	33	SS-4A	-	0	72	12	10	6	NP	NP	30	A-3a (V)
			10		5													
MEDIUM DENSE, GRAY AND BLACK, COARSE AND FINE SAND, TRACE SILT, TRACE CLAY, WET		867.6	11	2	9	33	SS-5A	2.00	-	-	-	-	-	-	20	A-6b (V)		
			12	3	4													
			13															
			14	3	12	67	SS-6A	1.50	10	6	10	29	45	33	17	16	21	A-6b (10)
			15		5													
			16	4	14	78	SS-7A	2.00	-	-	-	-	-	-	-	23	A-6b (V)	
			17	5	6													
			18															
			19	2	9	89	SS-8A	2.00	-	-	-	-	-	-	-	21	A-6b (V)	
			20		4													
STIFF, GRAY, SILTY CLAY, LITTLE SAND, TRACE STONE FRAGMENTS, MOIST		868.6	21	4	14	89	SS-9A	2.00	-	-	-	-	-	-	20	A-6b (V)		
			22		5													
			23															
			24	2	10	33	SS-10A	-	41	50	5	3	1	NP	NP	18	A-1-b (0)	
			25		5													
			26															
			27	8	32	67	SS-11A	-	-	-	-	-	-	-	-	14	A-1-b (V)	
			28		14													
			29															
			30															
LOOSE, GRAY AND BLACK, GRAVEL WITH SAND, TRACE SILT, TRACE CLAY, WET		869.6	31															
			32															
			33															
			34															
			35															
			36															
			37															
			38															
			39															
			40															



OHIO DEPARTMENT OF TRANSPORTATION
DETERMINING SULFATE CONTENT IN SOILS SUPPLEMENT
1122

Project C-R-S: ALL-75-15.80

PID No: 94214

Report Date: 12/15/17

Consultant:

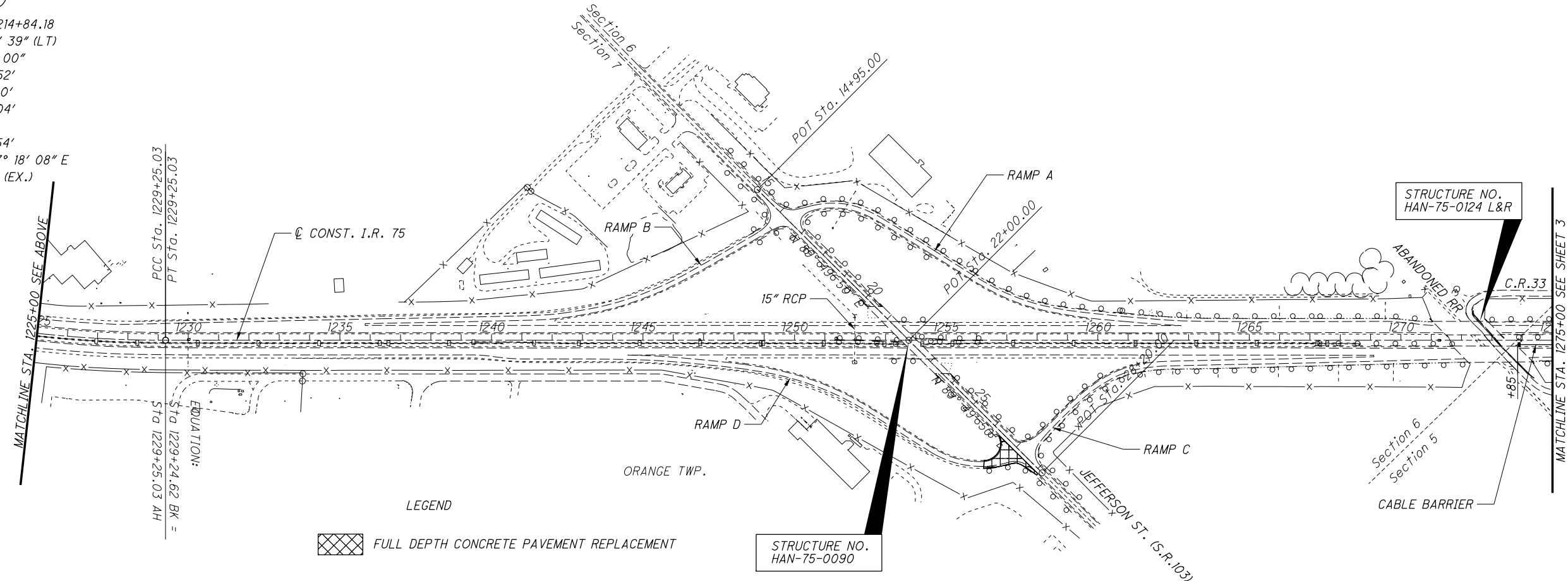
Technician: A. Willis

Sample or Boring ID	Station	Offset	Latitude & Longitude or State Plane Coordinates	Elevation	Soaking Time (hr)	Dilution Ratio	Replicate Sample Readings			Average Reading	Sulfate Content (ppm)
							1	2	3		
B-001, 2017-015-063	875+00	Right	40.82777702 -83.9680791	874.072	19.4	1:20	8.993	14.49	5.818	9.77	195
B-001, 2017-015-064	875+00	Right	40.82777702 -83.9680791	874.072	20.6	1:20	8.923			8.92	178
B-002, 2017-015-067	879+00	Left	40.82795277 -83.96767892	874.804	21.3	1:20	9.678			9.68	194
B-002, 2017-015-068	879+00	Left	40.82795277 -83.96767892	874.804	21.7	1:20	9.236			9.24	185
B-003, 2017-015-071	883+00	Right	40.82805306 -83.96609903	873.373	22	1:20	22.05			22.05	441
B-003, 2017-015-072	883+00	Right	40.82805306 -83.96609903	873.373	22.1	1:20	12.3			12.30	246
B-004, 2017-015-075	887+00	Left	40.8286204 -83.96499777	873.257	22.3	1:20	8.141			8.14	163
B-004, 2017-015-076	887+00	Left	40.8286204 -83.96499777	873.257	22.4	1:20	13.5			13.50	270
B-005, 2017-015-079	891+00	Right	40.82920105 -83.96360147	870.977	22.6	1:20	5.927			5.93	119
B-005, 2017-015-080	891+00	Right	40.82920105 -83.96360147	870.977	16.1	1:20	15.42			15.42	308
B-006, 2017-015-083	895+50	Right	40.83014987 -83.96253891	869.680	16.5	1:20	8.145	15.12	8.437	10.57	211
B-006, 2017-015-084	895+50	Right	40.83014987 -83.96253891	869.680	17	1:20	6.677			6.68	134
B-007, 2017-015-110	900+00	Left	40.83126002 -83.96197556	868.307	17.3	1:20	11.42			11.42	228
B-007, 2017-015-111	900+00	Left	40.83126002 -83.96197556	868.307	17.5	1:20	45.57			45.57	911
B-008, 2017-015-114	905+00	Right	40.83256375 -83.96144598	861.378	17.8	1:20	30.92			30.92	618
B-008, 2017-015-115	905+00	Right	40.83256375 -83.96144598	861.378	18.2	1:20	20.78			20.78	416
B-009, 2017-015-118	909+00	Left	40.83359743 -83.96145057	858.990	18.4	1:20	62.43			62.43	1249
B-009, 2017-015-119	909+00	Left	40.83359743 -83.96145057	858.990	18.6	1:20	41.73			41.73	835
B-010, 2017-015-122	913+00	Right	40.83475968 -83.96129904	858.795	18.8	1:20	15.8			15.80	316
B-010, 2017-015-123	913+00	Right	40.83475968 -83.96129904	858.795	18.9	1:20	15.01			15.01	300
B-011, 2017-015-126	920+50	Left	40.83671415 -83.96132226	857.761	19.1	1:20	8.783			8.78	176
B-011, 2017-015-127	920+50	Left	40.83671415 -83.96132226	857.761	19.4	1:20	21.97	8.656	16.91	15.85	317
B-012, 2017-015-130	924+00	Right	40.83777321 -83.96108833	856.633	19.9	1:20	9.851			9.85	197
B-012, 2017-015-131	924+00	Right	40.83777321 -83.96108833	856.633	20.2	1:20	10.48			10.48	210

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1

P.I. Sta. 1214+84.18
 $\Delta = 44^\circ 39' 39''$ (LT)
 $Dc = 1^\circ 28' 00''$
 $R = 3,906.52'$
 $T = 1,604.60'$
 $L = 3,045.04'$
 $E = 316.71'$
 $C = 2,968.54'$
C.B. = N $67^\circ 18' 08''$ E
SE = 0.048 (EX.)



LEGEND
FULL DEPTH CONCRETE PAVEMENT REPLACEMENT

STRUCTURE NO.
HAN-75-0090

STRUCTURE NO.
HAN-75-0124 L&R

MATCHLINE STA. 1225+00 SEE ABOVE
PCC Sta. 1229+25.03
PT Sta. 1229+25.03
EQUATION:
Sta 1229+24.62 BK =
Sta 1229+25.03 AH

CONST. I.R. 75

ORANGE TWP.

RAMP C

RAMP A

RAMP B

RAMP D

15" RCP

POT Sta. 14+95.00

POT Sta. 22+00.00

POT Sta. 28+00.00

POT Sta. 34+00.00

POT Sta. 40+00.00

POT Sta. 46+00.00

POT Sta. 52+00.00

POT Sta. 58+00.00

POT Sta. 64+00.00

POT Sta. 70+00.00

POT Sta. 76+00.00

POT Sta. 82+00.00

POT Sta. 88+00.00

POT Sta. 94+00.00

POT Sta. 100+00.00

CONST. I.R. 75

VILLAGE OF
BLUFFTON

STRUCTURE NO.
ALL-75-2268 L&R

REQUIRES BRIDGE SURFACE SMOOTHNESS, FOR
ADDITIONAL INFORMATION SEE GENERAL NOTE FOR
ITEM - SPECIAL, BRIDGE SURFACE SMOOTHNESS
ON SHEET 5.

CONST. I.R. 75

STRUCTURE NO.
HAN-75-0001

SLM 23.15
ALLEN COUNTY
HANCOCK COUNTY
SLM 0.00

COUNTY LINE RD. (C.R.15)

PC Sta. 1198+79.58

E150(424)

BEGIN PROJECT
STA. 1182+00.00
SLM 22.66

BEGIN WORK
STA. 1179+88.00

P.I. Sta. 1214+84.18
 $\Delta = 44^\circ 39' 39''$ (LT)
 $Dc = 1^\circ 28' 00''$
 $R = 3,906.52'$
 $T = 1,604.60'$
 $L = 3,045.04'$
 $E = 316.71'$
 $C = 2,968.54'$
C.B. = N $67^\circ 18' 08''$ E
SE = 0.048 (EX)

MATCHLINE STA. 1225+00 SEE BELOW
30" RCP

ORANGE TWP.

NOTE: THERE ARE NO LANDSCAPED AREAS WITHIN THE PROJECT LIMITS.



SCHEMATIC PLAN
I.R. 75 BEGIN WORK TO STA. 1275+00

ALL / HAN-75 -
22.66 / 0.00

2
53



E150(424)

2

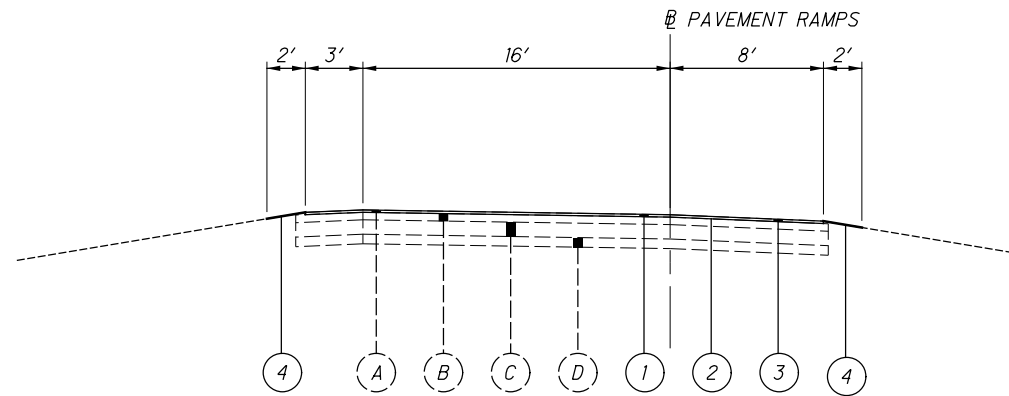


**ALL / HAN-75 -
22.66 / 0.00**

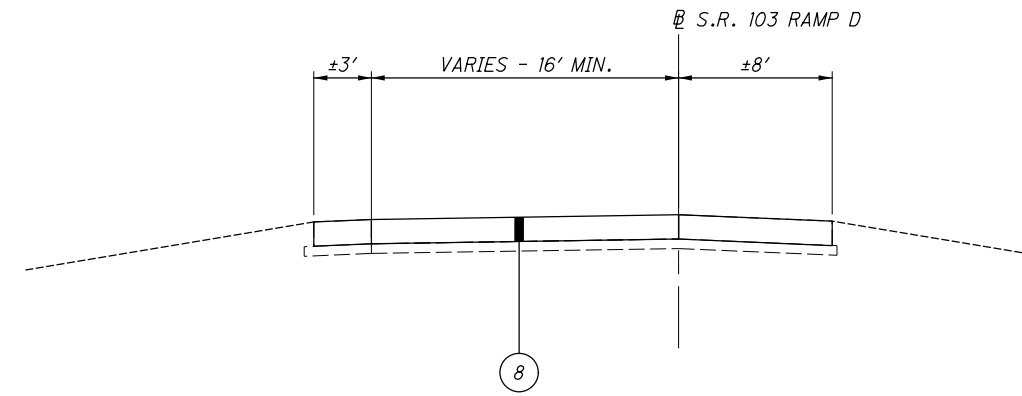
$$\frac{3}{53}$$



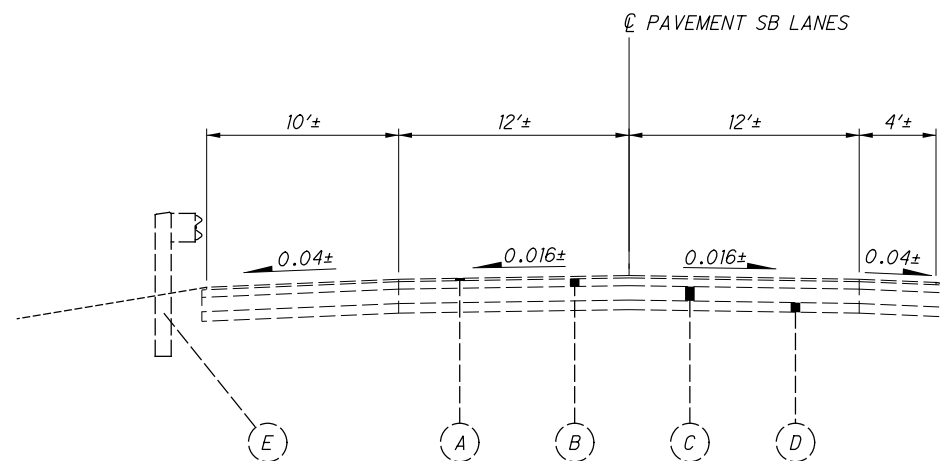
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NORMAL RAMP SECTION



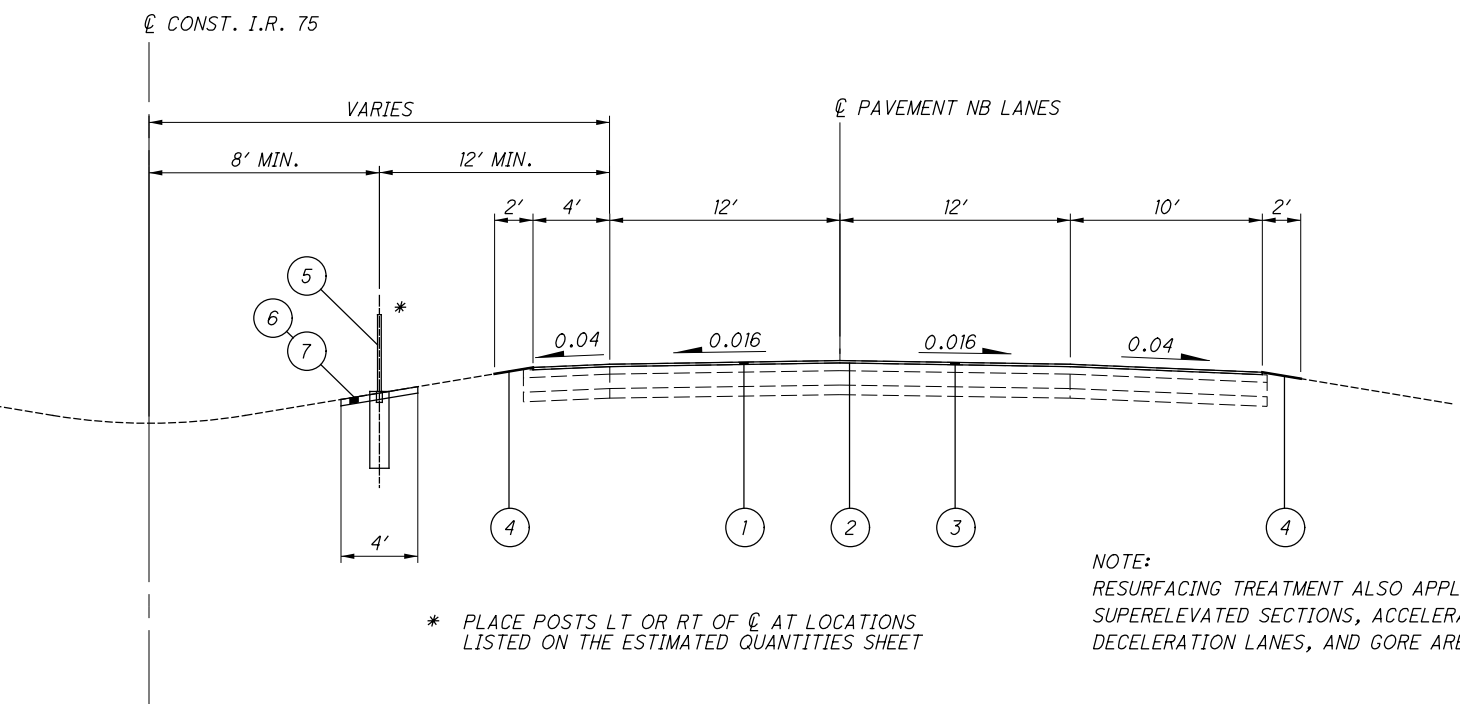
PROPOSED RAMP SECTION
CONCRETE PAVEMENT REPLACEMENT



EXISTING SECTION

EXISTING LEGEND

- (A) 1 1/2" ASPHALT CONCRETE SURFACE COURSE
- (B) 4 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE
- (C) 9" REINFORCED CONCRETE PAVEMENT
- (D) 6" SUBBASE
- (E) GUARDRAIL



NORMAL SECTION

PROPOSED SECTION
APPLIES TO BOTH SIDES

PROPOSED LEGEND

- (1) ITEM 442 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447)
- (2) ITEM 407 - NON-TRACKING TACK COAT
- (3) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2" THICKNESS
- (4) ITEM 617 - COMPACTED AGGREGATE
- (5) ITEM 606 - SPECIAL: CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION
- (6) ITEM 203 - EXCAVATION
- (7) ITEM SPECIAL - MISC.: NO MOW STRIP
- (8) ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC IP, AS PER PLAN

TYPICAL SECTIONS

ALL / HAN-75-
22.66 / 0.00

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UTILITIES

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

CENTURYLINK
175 ASHLAND ROAD
MANSFIELD, OH 44902
(419)-755-7183

CHARTER TELECOMMUNICATIONS/SPECTRUM
3760 INTERCHANGE DRIVE
COLUMBUS, OH 43204
(614)-255-6340

SUNOCO PIPE LINE L.P.
525 FRITZTOWN ROAD
SINKING SPRINGS, PA 19608
(610)-670-3291

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.

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.

SURVEYING PARAMETERS

USE THE FOLLOWING VERTICAL POSITIONING AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83(2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE NORTH ZONE
COMBINED SCALE FACTOR: 1.000090882 (DIFFERENT FROM PART 1)

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

ALIGNMENT AND PROFILE

THE WORK PROPOSED BY THIS PROJECT IS FOR THE RESURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT.

ITEM - SPECIAL, BRIDGE SURFACE SMOOTHNESS

CONTRACTOR IS REQUIRED TO PROVIDE BRIDGE SURFACE SMOOTHNESS PER PROPOSAL NOTE 555 ON THE ALL-75-2268 L&R STRUCTURES.

RE-GROOVING OF DIAMOND GROUND SURFACES WILL BE REQUIRED ACCORDING TO 511.17 IF THE EXISTING GROOVES ARE LESS THAN 0.8 INCHES DEEP.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM - SPECIAL, BRIDGE SURFACE SMOOTHNESS.

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 253 - PAVEMENT REPAIR

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF EXISTING MAINLINE ASPHALT AREAS OR PAVED SHOULDER AREAS OF EXISTING PAVEMENT FAILURES.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS, DEPTHS, AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIRS SHALL BE COMPLETED PRIOR TO THE PLANING OF THE ROADWAY. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.01.

ITEM 301 MATERIAL SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLANING AND PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD OF ITEM 253 PAVEMENT REPAIR.

ITEM 253 - PAVEMENT REPAIR 300 CY

ENVIRONMENTAL ASBESTOS SURVEY

AN ASBESTOS SURVEY OF THE HAN-IR 75-1.24L AND HAN-IR 75-1.24R BRIDGES (SPANNING COUNTY ROAD 33), SCHEDULED FOR RENOVATION, WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DID NOT DETECT REGULATED ASBESTOS-CONTAINING MATERIALS ON THE STRUCTURES.

ITEM 690 SPECIAL - MISC.: NO MOW STRIP

THE CONTRACTOR SHALL INSTALL A 4 FOOT WIDE BY 4 INCH DEPTH NO MOW STRIP WITH MATERIALS CONFORMING TO ITEM 608 - CONCRETE WALK.

THE NO MOW STRIP SHALL BE PLACED ON COMPACTED EARTH AND CONSTRUCTED USING CLASS C CONCRETE WITH A CURING COMPOUND MEETING THE SPECIFICATIONS OF 705.07 OF THE CMS. THE NO MOW STRIP SHALL BE INTEGRAL TO THE SOCKETED CONCRETE FOUNDATION.

THE NO MOW STRIP SHALL HAVE A TRANSVERSE JOINT EVERY EIGHT FEET AND AN EXPANSION JOINT EVERY 100 FEET. THE JOINTS AND MATERIALS TO CONSTRUCT THE JOINTS SHALL CONFORM TO 608.03 (C) OF THE CMS.

IF MATERIAL FROM THE EXCAVATION OF THE NO MOW STRIP AND THE SOCKETED CONCRETE FOUNDATION IS WASTED ADJACENT TO THE NO MOW STRIP THE AREA SHALL BE SEEDED AND MULCHED TO THE SPECIFICATIONS OF ITEM 659 IN THE CMS. PAYMENT FOR THIS WORK IS INCLUDED WITH THE UNIT BID PRICE UNDER ITEM 690 SPECIAL - MISC.: NO MOW STRIP.

ALL MATERIAL, LABOR AND EQUIPMENT TO CONSTRUCT THE CONCRETE NO MOW STRIP SHALL BE PAID FOR UNDER ITEM 690 SPECIAL - MISC.: NO MOW STRIP.

ITEM 253 - PAVEMENT REPAIR MISC.: SHOULDER REPAIR FOR MOT

THIS ITEM OF WORK SHALL CONSIST OF THE PAVEMENT REPAIR OF THE EXISTING MAINLINE PAVED SHOULDER AREAS FOR MAINTENANCE OF TRAFFIC OPERATIONS.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIRS SHALL BE COMPLETED PRIOR TO SHIFTING TRAFFIC ONTO THE SHOULDERS. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE ESTIMATED QUANTITY FOR THESE REPAIRS IS BASED ON DIMENSIONS OF 4' WIDE BY 4" THICK REPAIRS. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.01.

ITEM 301 MATERIAL SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLANNING AND PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD OF ITEM 253 PAVEMENT REPAIR, MISC.: SHOULDER REPAIR FOR MOT

ITEM 253 - PAVEMENT REPAIR, MISC.: SHOULDER REPAIR FOR MOT 350 CY

ITEM 606, SPECIAL CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION
ITEM 606, SPECIAL CABLE BARRIER, ANCHOR ASSEMBLY

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A GIBRALTAR HIGH TENSION FOUR CABLE GUARDRAIL SYSTEM AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, SPECIAL CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION, AND ITEM 606, SPECIAL CABLE BARRIER, ANCHOR ASSEMBLY AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL HIGH TENSION CABLE GUARDRAIL SYSTEM NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

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

SYSTEMS SHALL HAVE A MAXIMUM DEFLECTION OF 8 FEET AND THE MAXIMUM LONGITUDINAL DISTANCE BETWEEN POSTS SHALL BE 15 FEET.

INSTALLATION WILL BE A FOUR CABLE HIGH TENSION SYSTEM INSTALLED IN SOCKETED POSTS FOUNDATION WITH A FOUR FOOT WIDE "NO MOW STRIP".

CONTRACTOR SHALL PROVIDE DELINEATORS ON THE POSTS AT A MINIMUM INTERVAL OF 100 FEET AND ON ALL ANCHOR TERMINALS.

TRANSITIONS TO W-BEAM GUARDRAIL ARE NOT ALLOWED.

REFER TO MANUFACTURER FOR MAXIMUM OFFSET FROM BREAK POINT.

TORPEDO OR BULLET SPLICES ARE NOT ALLOWED. ALL CABLE SPLICES SHALL BE A SWAGED OR OPEN BODY DESIGN THAT ALLOWS FOR ANNUAL INSPECTION BETWEEN THE WEDGE AND STRANDS OF CABLE.

POSTS ARE SET IN SOCKETED CONCRETE FOUNDATIONS AND SHALL NOT BE PERMANENTLY INSTALLED UNTIL THEIR RESPECTIVE RUNS OF TENSIONED CABLE GUARDRAIL ARE READY FOR FINAL CONNECTION TO THE END TERMINAL ASSEMBLY. THE CONTRACTOR SHALL REPLACE ANY POSTS DAMAGED DURING INSTALLATION AS DETERMINED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

CALCULATED	MJT	CHECKED	MJC
GENERAL NOTES			
ALL / HAN-75-22.66 / 0.00			
5 / 53			

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PERSONAL PROTECTION EQUIPMENT (PPE)

THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF SEC-TIONS XXIV AND XXXIV OF THE OHIO DEPARTMENT OF TRANSPORTA-TION SAFETY & HEALTH STANDARD OPERATING PROCEDURE 220-006(SP) EFFECTIVE: NOVEMBER 1, 2018 (EXCEPT AS AMENDED BELOW) AND ALL SUBSEQUENT UPDATES POSTED AT THE FOLLOWING WEBSITE:

http://www.dot.state.oh.us/policy/policiesandsops/policies/22-006(sp).pdf

AMENDMENTS TO THE REQUIREMENTS OF THIS DOCUMENT ARE:

XXIV. HEAD PROTECTION (HARD HATS)
ALL PERSONS WITHIN THE RIGHT-OF-WAY OF ANY HIGHWAY OR ANY OTHER TYPE OF ROADWAY OR CONSTRUCTION SITE WHO ARE EXPOSED TO EITHER TRAFFIC (VEHICLES USING THE HIGH-WAY FOR PURPOSES OF TRAVEL) OR CONSTRUCTION EQUIPMENT WITHIN THE WORK AREA, REGARDLESS OF JOB TYPE, SHALL WEAR APPROPRIATE HEAD PROTECTION. ALL HARD HATS MUST MEET OR EXCEED ANSI Z89.1-2009 TYPE 1, CLASS E-G REQUIRE-MENTS.

XXXIV. SAFETY APPAREL AND VEST (HIGH VISIBILITY)
ALL PERSONS WITHIN THE RIGHT-OF-WAY OF ANY HIGHWAY OR ANY OTHER TYPE OF ROADWAY OR CONSTRUCTION SITE WHO ARE EXPOSED TO EITHER TRAFFIC (VEHICLES USING THE HIGH-WAY FOR PURPOSES OF TRAVEL) OR CONSTRUCTION EQUIPMENT WITHIN THE WORK AREA, REGARDLESS OF JOB TYPE, SHALL WEAR A HIGH-VISIBILITY SAFETY VEST THAT MEETS THE PER-FORMANCE CLASS II OR CLASS III REQUIREMENTS OF THE ANSI/ISEA 107-2015 PUBLICATION ENTITLED "AMERICAN NATIONAL STANDARD FOR HIGH-VISIBILITY SAFETY APPAREL AND ACCESSORIES."

WORKERS MAY WEAR AN ANSI CLASS II OR ANSI CLASS III AP-PROVED RAIN SUIT, JACKET OR OTHER APPAREL WITHOUT A SAFETY VEST OVER IT.

ITEM 621 - RAISED PAVEMENT MARKERS

IN ADDITION TO THE SPECIFICATIONS LISTED UNDER ITEM 621, THE LOCATIONS SHALL BE THE SAME AS EXISTING. THE APPROX-IMATE STATIONS LISTED IN THE PLANS ARE FOR GUIDANCE. THE CONTRACTOR IS RESPONSIBLE TO NOTE THE LOCATIONS AND COLORS BEFORE THEY ARE REMOVED DUE TO THE PAVEMENT PLANING AND RESURFACING. IN ADDITION, THE CONTRACTOR SHALL FOLLOW THE CURRENT ODOT STANDARD CONSTRUCTION DRAWINGS TC-65.10 AND TC-65.11 AND REPORT ANY DISCREPANCIES TO THE ENGINEER.

SAWCUTTING OF JOINTS

SAWCUTTING OF JOINTS SHALL ONLY BE DONE WHEN THE LANE ADJACENT TO THE JOINT BEING CUT IS CLOSED. THIS IS TO ALLOW ROOM FOR SAWCUTTING EQUIPMENT, SO THERE IS NO ENCROACHMENT ON LANES OPEN TO TRAFFIC.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 25 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO FILE A NEW FAA FORM 7460-1, ADVISING THE FAA THAT AERONAUTICAL STUDY NUMBERS:

2019-AGL-13284-OE
2019-AGL-13285-OE
2019-AGL-13286-OE
2019-AGL-13287-OE
2019-AGL-13288-OE
2019-AGL-13289-OE
2019-AGL-13290-OE
2019-AGL-13291-OE
2019-AGL-13292-OE
2019-AGL-13293-OE
2019-AGL-13294-OE
2019-AGL-13295-OE
2019-AGL-13296-OE
2019-AGL-13297-OE
2019-AGL-13298-OE
2019-AGL-13299-OE
2019-AGL-13300-OE
2019-AGL-13301-OE

ARE BEING RESUBMITTED AND THAT AN ALTERATION TO THE ORIGINAL SUBMISSION IS REQUESTED.

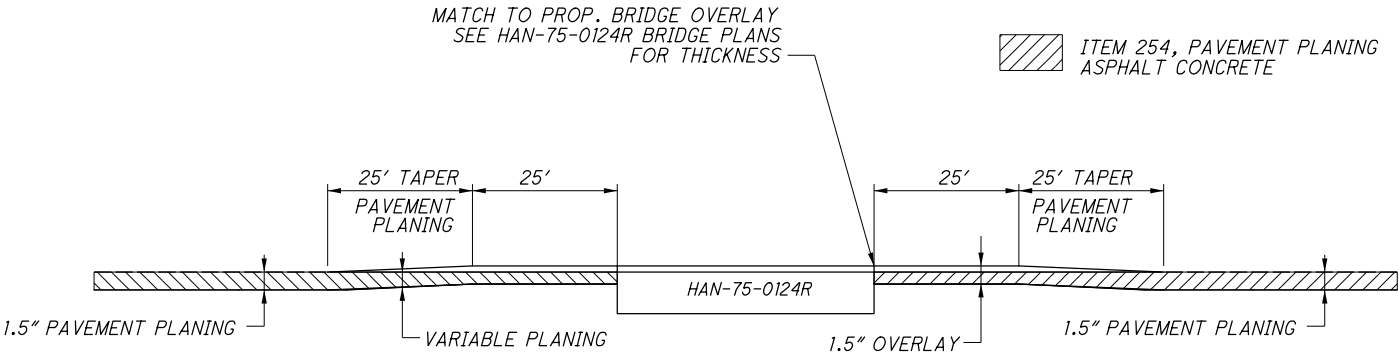
NOTIFY THE ODOT OFFICE OF AVIATION WHEN RESUBMITTING FAA FORM 7460-1. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FAA APPROVAL MAY TAKE UP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

EXPRESS PROCESSING CENTER
THE FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
AIR TRAFFIC AIRSPACE BRANCH ASW-520
2601 MEACHAN BLVD.
FORT WORTH, TX 76137-4298

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
614-387-2346

PAVEMENT ELEVATION TRANSITION DETAILS



BLUFFTON AIRPORT COORDINATION

IN ADDITION TO THE FAA AND ODOT OFFICE OF AVIATION COORDINATION REQUIREMENTS, THE CONTRACTOR SHALL CONTACT NICK VANCE (419-358-7045) AT THE BLUFFTON AIRPORT AT LEAST 5 DAYS PRIOR TO THE START OF CONSTRUCTION.

AN ASBESTOS SURVEY OF THE HAN-IR 75-1.24 L AND HAN-IR 75-1.24 R BRIDGES (SPANNING COUNTY ROAD 33), SCHEDULED FOR RENOVATION, WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DID NOT DETECT REGULATED ASBESTOS-CONTAINING MATERIALS ON THE STRUCTURES.

ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN

THIS ITEM IS TO BE USED FOR THE FULL REPLACEMENT OF ALL EXISTING CONCRETE SLABS EXPOSED AT THE TOP OF THE NORTHBOUND INTERSTATE 75 EXIT RAMP TO SR 103/JEFFERSON STREET, OTHERWISE REFERED TO AS RAMP D. THIS SECTION OF REPLACED CONCRETE PAVEMENT SHALL BE COMPLETED DURING THE SAME 5 DAY CLOSURE USED TO COMPLETE JOINT REPAIRS ON RAMP D. SEE SHEET 12 FOR ADDITIONAL INFORMATION REGARDING SR 103 RAMP CLOSURES. REFER TO CMS SECTION 451.17 FOR ALTERNATE MIXES.

THE CONTRACTOR SHALL REPLACE THE EXISTING CONCRETE SLABS TO MATCH THE EXISTING PAVEMENT ELEVATIONS AND THE EXISTING LAYOUT OF THE JOINTS. PRIOR TO THE REMOVAL OF THE EXISTING CONCRETE SLABS AND TO THE SATISFACTION OF THE ENGINEER, THE CONTRACTOR SHALL RECORD EXISTING PAVEMENT ELEVATIONS AND EXISTING LAYOUT OF JOINTS. THIS RECORDED INFORMATION SHALL BE USED TO RE-ESTABLISH THE CONCRETE PAVEMENT.

AFTER REMOVING THE PAVEMENT FULL DEPTH AND BEFORE INSTALLING DOWELS OR TIE BARS, SHAPE AND RE-COMPACT THE SUBGRADE TO THE SATISFACTION OF THE ENGINEER. THE SUBGRADE SHALL BE SHAPED TO PROVIDE FOR A MINIMUM THICKNESS OF 9" OF CONCRETE PAVEMENT. USE CONCRETE TO REPLACE ANY SUBGRADE MATERIAL REMOVED AS PART OF THE RIGID PAVEMENT REPLACEMENT.

PLACEMENT OF ANY DOWELS OR TIE BARS INTO EXISTING CONCRETE PAVEMENT SHALL BE PER CMS 255.05 AND ALL APPLICABLE STANDARD CONSTRUCTION DRAWINGS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO REPLACE THE EXISTING CONCRETE SLABS IN ACCORDANCE WITH THESE REQUIREMENTS AND AS DEEMED NECESSARY BY THE ENGINEER SHALL BE INCLUDED IN THE UNIT BID CONTRACT PRICE FOR ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLANS.

CALCULATED	GENERAL NOTES	
	MJT	MJC
CHECKED		
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ITEM 614 – MAINTAINING TRAFFIC

THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC AT ALL TIMES ON MAINLINE I.R. 75 IN ACCORDANCE WITH THE REQUIREMENTS OF SPEC. 614, THESE MAINTENANCE OF TRAFFIC NOTES AND DETAILS, AND THE TRAFFIC CONTROL DETAILS DESCRIBED IN THESE PLANS.

THE MINIMUM LANE WIDTH FOR TRAFFIC CONTROL SHALL BE 11 FT AT ALL TIMES ON I.R. 75. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORGANIZE HIS/HER WORK IN SUCH A MANNER TO PROVIDE THE MOST SAFETY WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.

PERMITTED LANE CLOSURES

LANE CLOSURES WILL ONLY BE PERMITTED BETWEEN 7:00 P.M. AND 7:00 A.M. THE ONLY EXCEPTION TO THIS TIME FRAME WILL BE FOR FOUR CLOSURE PERIODS (ONE FOR EACH LANE OF TRAVEL) IN WHICH THE CONTRACTOR CAN CLOSE A LANE BEGINNING AT 7:00 P.M. ON SUNDAY AND MUST HAVE BOTH LANES OPEN BY 7:00 A.M. ON FRIDAY. THE FOUR LANE CLOSURE PERIODS MUST TAKE PLACE PRIOR TO MEMORIAL DAY.

THE INTENT OF THE FOUR LANE CLOSURE PERIODS IS TO ALLOW FOR PERFORMING AND COMPLETING THE BRIDGE WORK ON HAN-75-0124 L&R. THE CONTRACTOR SHALL HAVE THE OPTION TO WORK BOTH THE NORTHBOUND AND SOUTHBOUND (L&R) STRUCTURES SIMULTANEOUSLY OR SEPARATELY FROM EACH OTHER AS LONG AS LANE CLOSURE RESTRICTIONS ARE MET.

ALTHOUGH THE INTENT OF THE FOUR LANE CLOSURE PERIODS IS FOR COMPLETING THE BRIDGE WORK ON HAN-75-0124L&R, THE CONTRACTOR WILL BE PERMITTED TO EXTEND THE WORK ZONE/LANE CLOSURE DURING THESE PERIODS IN ORDER TO PERFORM JOINT REPAIRS ALONG IR-75. NO EXTENSIONS TO THE LANE CLOSURE PERIOD WILL BE PERMITTED TO ACCOMMODATE JOINT REPAIRS.

NO WORK WITHIN ACTIVE TRAVEL LANES OR WHICH WILL SLOW TRAFFIC IS PERMITTED AT ANY OTHER TIMES.

RAMP TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR CLOSURE PERIODS SPECIFIED IN THE SEQUENCE OF CONSTRUCTION.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING AND MAINTAINING SAFE AND EFFECTIVE TRAFFIC CONTROL 24 HOURS A DAY FOR THE DURATION OF THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR. THIS CONSISTS OF NOTIFYING THE OHIO STATE PATROL AFTER ENCOUNTERING ANY ACCIDENTS OR DISABLED VEHICLES OR OBJECTS HINDERING THE FLOW OF TRAFFIC.

UNLESS PHYSICALLY IMPOSSIBLE, ALL CONSTRUCTION EQUIPMENT SHALL EXIT ALL WORK ZONES FROM THE DOWNSTREAM END OF THE WORK ZONE OR BY INTERCHANGE RAMPS.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO DIRECTLY TRANSPORT OR OPERATE EQUIPMENT ACROSS THE OPEN LANES OF I.R. 75. THE CONTRACTOR WILL NOT BE PERMITTED TO UTILIZE THE EMERGENCY TURN-AROUNDS AS PART OF THE HAUL ROUTE.

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

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
EASTER	(OTHER HOLIDAY OR EVENT)

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 7:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY	(THANKSGIVING ONLY)
	6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY

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

ITEM 614 – 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 OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, 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.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN A 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 IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

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 CONTRACTOR. 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.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING THE 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. 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 120 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 A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

NOTIFICATION OF TRAFFIC RESTRICTIONS

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

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

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

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

PN 127 – LANE VALUE CONTRACT

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

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

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

LANE VALUE CONTRACT TABLE			
DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
2 LANES OF ALL/HAN IR 75	SEE NOTES	EACH HOUR	\$9,500
RAMPS FROM S.R. 103 TO IR 75	SEE NOTES	EACH DAY	\$1,000
RAMPS TO S.R. 103 FROM IR 75	SEE NOTES	EACH DAY	\$1,000

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ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

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

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND 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. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

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

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 1 HOUR FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

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

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

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT. THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. 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. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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

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

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 4 SIGN MONTH

ASSUMING 2 PCMS SIGNS FOR 2 MONTHS

ALTERNATE METHODS

IF THE CONTRACTOR SO ELECTS, THEY MAY SUBMIT ALTERNATE METHODS FOR MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DISTRICT CONSTRUCTION ENGINEER. ALLOW 2 WEEKS FOR REVIEW WITH NO DELAY TO THE PROJECT. NO ADDITIONAL MONEY WILL BE PAID FOR ALTERNATE METHODS.

MAINTAINING TRAFFIC AT PLANED AND PAVED AREAS

THE CONTRACTOR SHALL ARRANGE OPERATIONS SO THAT TRAFFIC IS RETURNED TO AN AREA WHEN PAVING IS COMPLETE. NO I.R. 75 TRAFFIC SHALL BE ALLOWED TO OPERATE ON A PLANED SURFACE. ALL REQUIRED WORK ZONE PAVEMENT MARKINGS SHALL BE PLACED PRIOR TO OPENING THE AREA TO TRAFFIC.

REMOVAL OF PAVEMENT MARKINGS

THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS ALONG THE WORK ZONE. THE CONTRACTOR SHALL ORGANIZE HIS WORK TO REQUIRE ONLY THE REMOVAL OF CONFLICTING PAVEMENT MARKINGS ALONG ONE LANE IN EACH DIRECTION OF THE ROADWAY. THE LINE TYPE MAY VARY THROUGHOUT THE ZONE. PAYMENT TO REMOVE THESE MARKINGS AND ANY OTHER CONFLICTING MARKINGS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

MAINTAINING TRAFFIC NEAR RUMBLE STRIPS

TRAFFIC IS NOT PERMITTED TO RUN ON OR CROSS OVER ANY RUMBLE STRIPS AT ANY TIME. RUMBLE STRIPS MUST BE FILLED WHEN THEY CONFLICT WITH THE MAINTENANCE OF TRAFFIC LANE CONFIGURATION. THIS INCLUDES LOCATIONS OF LANE SHIFTS ENTERING AND EXITING A WORK ZONE, AS WELL AS CONFLICTING RUMBLE STRIPS AT THE EXIT AND ENTRANCE RAMPS. THE RUMBLE STRIPS SHALL BE FILLED OR ELIMINATED BY PLANING AND PAVING TO PROVIDE A SMOOTH RIDE TO THE SATISFACTION OF THE PROJECT ENGINEER. ONCE TRAFFIC IS RETURNED TO ITS FINAL LANE CONFIGURATION, THE RUMBLE STRIPS THAT WERE REMOVED IN ANY EXISTING PAVEMENT SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION TO THE SATISFACTION OF THE PROJECT ENGINEER.

IT WILL BE NECESSARY TO TEMPORARILY CLOSE THE NORTHBOUND ENTRANCE RAMP TO I.R. 75 FROM S.R. 103 DURING PHASE 1 & 2 OF CONSTRUCTION IN ORDER TO COMPLETE WORK ON THE HAN-75-0124R STRUCTURE. SEE SHEETS 13-18 FOR MAINTENANCE OF TRAFFIC DETAILS.

PAYMENT FOR ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

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WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

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

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

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

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

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

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN
14 EACH

WORK ZONE INCREASED PENALTIES SIGNS WILL BE PLACED AT THE FOLLOWING LOCATIONS:

PHASE 1 AND 2 SIGNS SHALL BE PLACED AS SHOWN IN THE PLANS.

SIGNS FOR THE RESURFACING WORK SHALL BE PLACED PER APPLICABLE STANDARD CONSTRUCTION DRAWINGS.

WORK ZONE SPEED ZONES (WZSZS)

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

WZSZ REVISION NUMBER	COUNTY-ROUTE-SECTION	DIRECTION
WZ-10133	ALL/HAN-75-22.66/0.00	NB & SB

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

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

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

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

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

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

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

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

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

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
14 SIGN MNTH

ASSUMING 6 DSL SIGN ASSEMBLIES FOR 2 MONTHS
AND 2 SIGNS FOR 1 MONTH

ITEM 614, REPLACEMENT SIGN

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

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

AN ESTIMATED QUANTITY OF 20 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

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

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE REQUIRED FOR EXIT RAMP CLOSURES. W20-H13 SIGNS ARE ACCEPTABLE FOR ENTRANCE RAMP CLOSURES.

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

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTIFICATION DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE PCMS OR W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THE PHONE NUMBER TO BE INCLUDED ON THE NOTICE OF CLOSURE SIGN IS 419-999-6803.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 50 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 ONE-WAY	70 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	70 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL AND ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.J

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 2 ONE-WAY	10 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	10 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT

OHIO TIM IS OHIO’S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

1.

SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.
2.

SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.
3.

PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND AT WWW.OHIOTIM.COM.
4.

SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:

A.

COLLABORATE WITH ODOT AND SAFETY FORCES;

B.

SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND

C.

RECOMMEND WAYS TO INCORPORATE EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.
5.

CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

6.

CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:

A.

IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:

I.

LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL

II.

NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN

III.

ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN

IV.

ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN

V.

ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN

VI.

THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE

B.

FOLLOWING AN INCIDENT/CRASH:

I.

INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

II.

RECOMMEND ROADWAY REPAIR NEEDS.

III.

PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

IV.

ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).
- ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.
- WORK ZONE MARKINGS AND SIGNS
- THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.
- | | |
|---|-----------|
| ITEM 614 - WORK ZONE MARKING SIGN | = 14 EACH |
| ITEM 614 - WORK ZONE LANE LINE, CLASS I, 6" | = 7 MILE |
| ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6" | = 16 MILE |
| ITEM 614 - WORK ZONE STOP LINE, CLASS I | = 155 FT |
- FLOODLIGHTING
- FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.
- PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.
- WORK ZONE QUEUE DETECTION WARNING SYSTEM
- THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN AN APPROVED WORK ZONE QUEUE DETECTION WARNING SYSTEM (WZQDWS) AS PER SUPPLEMENTAL SPECIFICATION 896.
- FOR A LANE CLOSURE APPLICATION IT IS RECOMMENDED TO PLACE A SENSOR AT 0.5 MILES FROM THE TAPER, A SENSOR AT 1 MILE FROM THE TAPER, A SENSOR 2 MILES FROM THE TAPER, A SENSOR 3 MILES FROM THE TAPER, AND ONE PCMS 3.5 MILES FROM THE TAPER.
- IT IS EXPECTED THAT THESE LOCATIONS WILL VARY BASED ON PLANNED OR UNPLANNED PHASE AND TRAFFIC PATTERN CHANGES. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE DEVICES BY THE CONTRACTOR SHALL BE DIRECTED BY THE ENGINEER.
- THE FOLLOWING TRAFFIC SENSOR THRESHOLDS AND PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) MESSAGES SHALL BE USED:
- GREATER THAN OR EQUAL TO 50 MPH - USE FOUR CORNER FLASHING CAUTION MODE BETWEEN 50 MPH TO 25 MPH - TRAFFIC AHEAD XX MPH / SLOW DOWN BELOW OR EQUAL TO 25 MPH - TRAFFIC AHEAD XX MPH / PREPARE TO STOP
- FOUR CORNER FLASHING CAUTION MODE SHALL CONSIST OF THE USE OF ONE ASTERISK IN EACH CORNER OF THE PCMS DISPLAY (4 TOTAL ASTERISKS).
- XX SHALL BE ROUNDED UP TO THE NEAREST MULTIPLE OF 5 MPH MINUS 1. OCCUPANCY MAY BE DIRECTED TO BE USED BASED ON CERTAIN TRAFFIC CONDITIONS AND SCENARIOS. ODOT WILL DIRECT THE CONTRACTOR OF THE THRESHOLDS TO BE USED FOR THOSE AREAS WHERE OCCUPANCY IS DIRECTED TO BE USED.
- THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
- | |
|--|
| ITEM 896, PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS II, 16 SIGN MONTH ASSUMING 8 SENSORS FOR 2 MONTHS |
| ITEM 896, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 4 SIGN MONTH ASSUMING 2 PCMS SIGNS FOR 2 MONTHS |
- | | | | |
|------------------------------|-----|---------|-----|
| CALCULATED | SMB | CHECKED | MJC |
| | | | |
| MAINTENANCE OF TRAFFIC NOTES | | | |
| ALL / HAN-75 - 22.66 / 0.00 | | | |
| 10 / 53 | | | |

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WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A PREQUALIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE TRAINED IN ACCORDANCE WITH CMS 614.03, SHALL HAVE SUCCESSFULLY COMPLETED ODOT ADMINISTERED WTS TESTING (AND RE-TESTING WHEN APPLICABLE) AND BE LISTED ON THE ODOT PREQUALIFIED WTS ROSTER. PREQUALIFICATION EXPIRES EVERY 5 YEARS. RE-TESTING SHALL BE SUCCESSFULLY REPEATED EVERY 5 YEARS TO REMAIN PREQUALIFIED.

THE NAME OF THE PREQUALIFIED WTS AND RELATED 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE (SECONDARY) WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY; HOWEVER THE PRIMARY WTS SHALL REMAIN THE POINT OF CONTACT AT ALL TIMES. ANY ALTERNATE (SECONDARY) WTS IS SUBJECT TO THE SAME TRAINING, PREQUALIFICATION AND OTHER REQUIREMENTS OUTLINED WITHIN THIS PLAN NOTE. AT ALL TIMES THE ENGINEER, OR ENGINEER'S REPRESENTATIVES, MUST BE INFORMED OF WHO THE PRIMARY WTS (AND SECONDARY WTS, IF APPLICABLE) IS AT THE CURRENT TIME.

THE WTS POSITION HAS THE PRIMARY RESPONSIBILITY OF IMPLEMENTING THE TRAFFIC MANAGEMENT PLAN (TMP), MONITORING THE SAFETY AND MOBILITY OF THE ENTIRE WORK ZONE, AND CORRECTING TEMPORARY TRAFFIC CONTROL (TTC) DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE WTS, AND ALTERNATE WTS WHEN ON DUTY, SHALL HAVE SUFFICIENT AUTHORITY TO EFFECTIVELY CARRY OUT THE IDENTIFIED WTS RESPONSIBILITIES AND DUTIES. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS.
2. BE ON SITE FOR ALL EMERGENCY TTC NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF AND EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TTC DEVICES.
3. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TTC MANAGEMENT IS DISCUSSED.
4. BE AVAILABLE ON SITE FOR OTHER MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST.
5. BE AWARE OF ALL EXISTING AND PROPOSED TTC OPERATIONS OF THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS, AND ENSURE COORDINATION OCCURS BETWEEN THEM TO ELIMINATE CONFLICTING TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL.
6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). THE WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE LEOS ARE ON THE PROJECT.

7. COORDINATE AND FACILITATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS THE WORK ZONE TCC FOR IMPLEMENTING THE PHASE SWITCH. SUBMIT A WRITTEN DETAIL OF MOT OPERATIONS AND SCHEDULE OF EVENTS TO IMPLEMENT THE SWITCH BETWEEN PHASE PLANS TO THE ENGINEER 5 CALENDAR DAYS PRIOR TO THIS MEETING.
8. BE PRESENT, ON SITE FOR, AND INVOLVED WITH, EACH TTC SET UP/TAKE DOWN AND EACH PHASE CHANGE IN ACCORDANCE WITH CMS 614.03.
9. ON CONTINUAL BASIS ENSURE THAT THE TTC ZONE AND ALL RELATED DEVICES ARE INSTALLED, MAINTAINED, AND REMOVED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
10. ON A CONTINUAL BASIS FACILITATE CORRECTIVE ACTION(S) NECESSARY TO BRING DEFICIENT TCC ZONES AND ALL RELATED DEVICES INTO COMPLIANCE WITH CONTRACT DOCUMENTS IN THE TIMEFRAME DETERMINED BY THE ENGINEER.
11. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TTC DEVICES AND TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, PERFORM ONE WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:
 - A. INITIAL TTC SETUP (DAY AND NIGHT REVIEW).
 - B. DAILY TTC SETUP AND REMOVAL.
 - C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TTC SETUP.
 - D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA AND WITHIN THE INFLUENCE AREA(S) APPROACHING THE WORK ZONE.
 - E. REMOVAL OF TTC DEVICES AT THE END OF A PHASE OR PROJECT.
 - F. ALL OTHER EMERGENCY TTC NEEDS.
12. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN # 11 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORK DAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED OR COMPLETED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THE CURRENT CA-D-8 DOCUMENT CAN BE FOUND ON THE OFFICE OF CONSTRUCTION ADMINISTRATION'S INSPECTION FORMS WEBSITE.

13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL DEDUCT:

- A. THE PRORATED DAILY AMOUNT OF ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY IN WHICH THE WTS FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. THE PRORATED DAILY AMOUNT WILL BE EQUAL TO THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC DIVIDED BY THE DIFFERENCE BETWEEN THE ORIGINAL COMPLETION DATE AND THE FIRST DAY OF WORK, IN CALENDAR DAYS.
- B. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A TTC ISSUE IS IDENTIFIED IN THE FIELD AND IS NOT CORRECTED IN THE GIVEN TIMEFRAME PER THE ENGINEER. DEDUCTION B SHALL NOT APPLY TO SITUATIONS COVERED BY DEDUCTION C.
- C. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A LANE OR RAMP IS BLOCKED (FULLY OR PARTIALLY) WITHOUT TTC, AS DETERMINED BY THE ENGINEER. THIS DEDUCTION SHALL BE IN ADDITION TO ANY OTHER DISINCENTIVES ESTABLISHED FOR UNAUTHORIZED LANE USE.

FOR DAYS IN WHICH MORE THAN ONE DEDUCTION LISTED ABOVE OCCUR, THE HIGHEST DEDUCTION AMOUNT WILL APPLY.

IF THREE OR MORE TOTAL DAYS RESULT IN TTC ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05. UPON REMOVAL THE ENGINEER SHALL NOTIFY ODOT CENTRAL OFFICE (WTSPREQUALIFICATION@DOT.OHIO.GOV) TO REGISTER A REMOVAL AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS. THREE REMOVALS SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY PREVIOUSLY PREQUALIFIED WTS.

PAYMENT FOR THE ABOVE REQUIREMENTS, RESPONSIBILITIES AND DUTIES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

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

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

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

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

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

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

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

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

SEQUENCE OF CONSTRUCTION

DUE TO WIDTH CONSTRAINTS ON THE HAN-75-0124 STRUCTURES, TWO PHASE PART WIDTH CONSTRUCTION WILL BE REQUIRED TO COMPLETE ALL WORK ON THE STRUCTURES.

THE CONTRACTOR MAY COMPLETE WORK ON THE HAN-75-0124 STRUCTURES AT THE SAME TIME AS OTHER I.R. 75 MAINLINE AND RAMP RESURFACING WORK. IF WORK IS DONE CONCURRENTLY, SIGNAGE AND PAVEMENT MARKING WILL NEED TO BE COORDINATED AND ADJUSTED APPROPRIATELY IN ORDER TO SAFELY MAINTAIN TRAFFIC AT ALL TIMES.

STRUCTURE PHASING

PHASE 1:
MAINTAINING A REQUIRED DECISION SIGHT DISTANCE FOR THE NORTHBOUND I.R. 75 ENTRANCE RAMP FROM S.R. 103 IS NOT POSSIBLE DURING PHASE 1. THIS RAMP SHALL BE CLOSED FOR THE DURATION OF PHASE 1. SEE SHEET 12 FOR DETOUR PLANS.

REDUCE TRAFFIC TO ONE LANE BY DROPPING THE OUTSIDE LANE IN BOTH NORTHBOUND AND SOUTHBOUND DIRECTIONS OF I.R. 75. WORK ON THE OUTSIDE LANE AND SHOULDER OF BOTH HAN-75-0124 STRUCTURES WILL BE COMPLETED WHILE MAINTAINING ONE 11 FT LANE IN BOTH DIRECTIONS.

PHASE 2:
FOLLOWING PHASE 1, OPEN THE NORTHBOUND I.R. 75 ENTRANCE RAMP FROM S.R. 103. IF THE CONTRACTOR INTENDS TO PERFORM PHASE 1 & 2 IN BACK TO BACK WEEKS THEN THE RAMP SHALL REMAIN CLOSED.

SHOULDER REPAIRS, AS DIRECTED BY THE ENGINEER, MUST BE COMPLETED BEFORE SHIFTING TRAFFIC ONTO THE SHOULDER.

REDUCE TRAFFIC TO ONE LANE BY DROPPING THE INSIDE LANE IN BOTH NORTHBOUND AND SOUTHBOUND DIRECTIONS OF I.R. 75. MAINTAIN ONE 11 FT LANE IN EACH DIRECTION. SHIFT TRAFFIC FAR ENOUGH TO THE OUTSIDE TO COMPLETE REMAINING INSIDE WORK ON BOTH HAN-75-0124 STRUCTURES.

RESURFACING PHASING

MAINTAIN A SINGLE LANE IN EACH DIRECTION ACCORDING TO APPLICABLE STANDARD CONSTRUCTION DRAWINGS AND THE NOTES AND DETAILS HEREIN. LANE CLOSURES MUST ADHERE TO THE PERMITTED LANE CLOSURES NOTE PROVIDED ON SHEET 7. SHOULDER REPAIRS, AS DIRECTED BY THE ENGINEER, MUST BE COMPLETED BEFORE SHIFTING TRAFFIC ONTO THE SHOULDER.

S.R. 103 RAMP CLOSURES

THE ENTRANCE AND EXIT RAMPs FOR S.R. 103 ARE EACH PERMITTED TO BE CLOSED FOR A SINGLE DURATION NOT TO EXCEED FIVE (5) CALENDAR DAYS, WITH THE EXCEPTION OF RAMP C, IN ORDER TO COMPLETE PAVEMENT WORK. RAMP C IS PERMITTED TO BE CLOSED DURING PHASE 1 AND PHASE 2 OF THE BRIDGE WORK. IF THE CONTRACTOR INTENDS TO PERFORM PHASE 1 AND PHASE 2 IN BACK TO BACK WEEKS, RAMP C SHOULD REMAIN CLOSED THROUGH THE WEEKEND BETWEEN THE TWO WEEKS. ALL REQUIRED PAVEMENT WORK ON RAMP C MUST BE COMPLETED DURING THE SAME CLOSURE USED TO COMPLETE BRIDGE WORK. WHEN CLOSING A RAMP, THE CONTRACTOR MUST ENSURE THE RAMPs AT THAT INTERCHANGE AND RAMPs AT THE ADJACENT INTERCHANGE, THAT ARE NECESSARY FOR THE POSTED DETOUR, REMAIN OPEN. A DISINCENTIVE SHALL BE ASSESSED PER THE LANE VAULE CONTRACT FOR EACH TIME UNIT THAT THE RAMP REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE EXIT AND ENTRANCE RAMP CLOSURES SHALL BE ESTABLISHED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR AS PER STANDARD CONSTRUCTION DRAWINGS MT-98.29 AND MT-98.30. THE DETOURS SHALL BE ESTABLISHED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE STATE OF OHIO. THE CONTRACTOR SHALL NOTIFY ODOT PRIOR TO EACH CLOSURE/DETOUR ACCORDING TO THE NOTES HEREIN.

THE FIRST DAY THE DETOUR IS IN EFFECT SHALL BE THE STARTING DATE OF THE 5 DAY DETOUR/CLOSURE LIMITATION. ON OR BEFORE THE 5TH DAY, THE RAMP SHALL BE OPENED TO THE SAFE AND CONVENIENT USE OF THE TRAVELING PUBLIC. IF THE ROADWAY IS NOT OPENED ON THE 5TH DAY, DISINCENTIVES SHALL BE ASSESSED AS PER THE ABOVE SPECIFICATIONS.

PORTABLE CHANGEABLE MESSAGE SIGNS, LOCATED ON THE EXIT RAMP TO BE CLOSED, SHALL BE PROVIDED BY THE CONTRACTOR AT LEAST 7 CALENDAR DAYS IN ADVANCE OF THE SCHEDULED EXIT RAMP CLOSURES AT S.R. 103. THE PCMS'S WILL PROVIDE MOTORISTS ADVANCED NOTICE OF THE EXIT RAMP CLOSURES. THE CONTRACTOR SHALL COVER EXISTING EXIT GUIDE SIGNS WITH A CLOSED OVERLAY SIGN AND PROVIDE THE APPROPRIATE TRAFFIC CONTROL TO CLOSE THE S.R. 103 EXIT RAMPs.

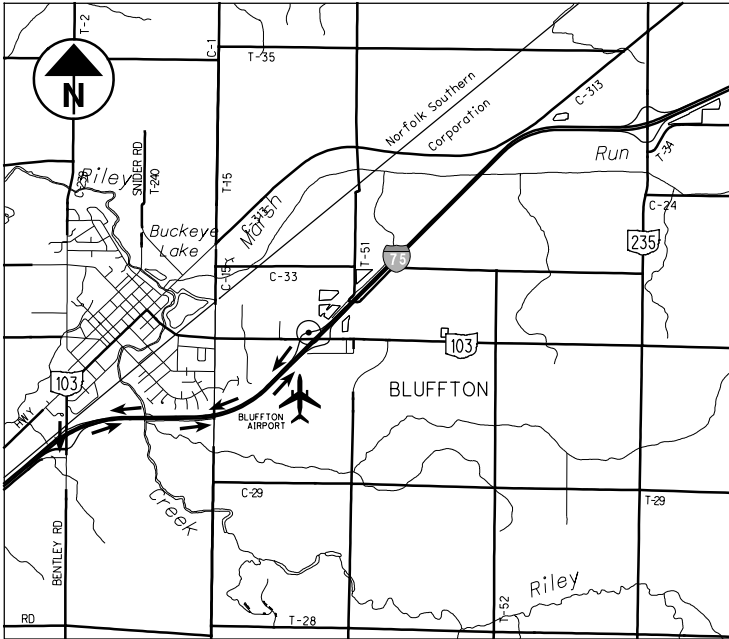
NOTICE OF CLOSURE SIGNS (W20-H13), AS DETAILED IN THESE PLANS, ARE TO BE USED FOR THE ENTRANCE RAMP CLOSURES AND SHALL BE ERECTED BY THE CONTRACTOR AT LEAST 7 DAYS IN ADVANCE OF THE SCHEDULED ENTRANCE RAMP CLOSURES.

----- WILL BE
CLOSED -----
FOR X DAYS
INFO: 419-999-6803

W20-H13-60

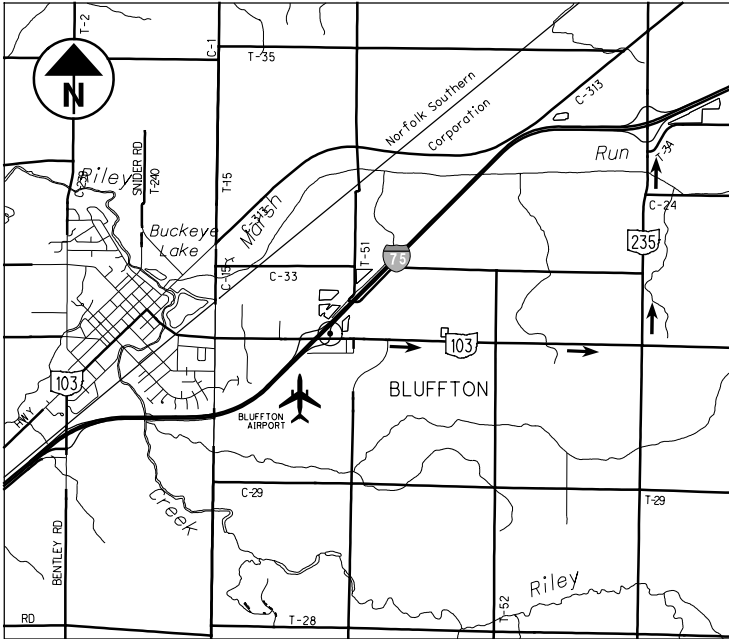
NOTE: THE CONTRACTOR IS
TO SUPPLY DATE.

X = 5 DAYS WITH THE
EXCEPTION OF RAMP C



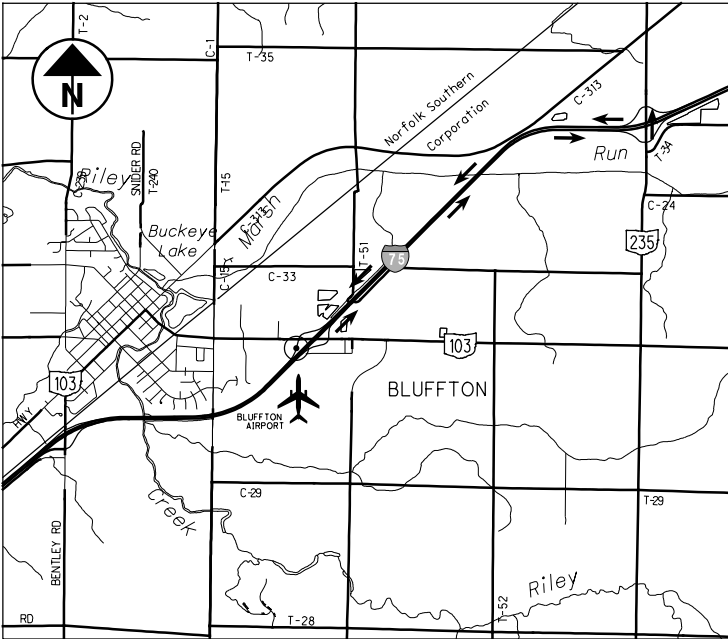
OFFICIAL DETOUR MAP
RAMP A: I.R. 75 SB EXIT RAMP

- | LEGEND | DETOUR |
|----------------------------|-------------------------------------|
| ● - PROJECT LOCATION | - SOUTH ON I.R. 75 TO BENTLEY RD |
| → - OFFICIAL SIGNED DETOUR | - SOUTH ON BENTLEY RD TO NB I.R. 75 |
| | - NORTH ON I.R. 75 TO S.R. 103 |



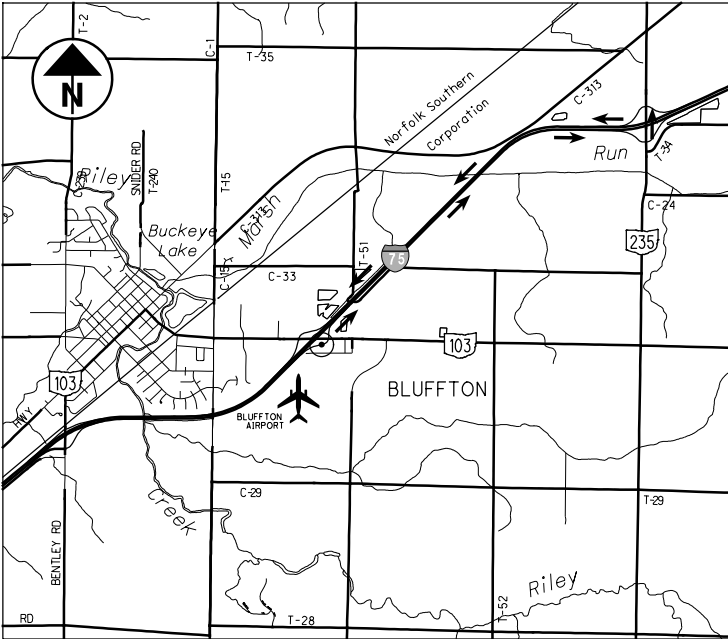
OFFICIAL DETOUR MAP
RAMP C: I.R. 75 NB ENTRANCE RAMP

- | LEGEND | DETOUR |
|----------------------------|-----------------------------------|
| ● - PROJECT LOCATION | - EAST ON BENTLEY RD TO S.R. 235 |
| → - OFFICIAL SIGNED DETOUR | - NORTH ON S.R. 235 TO NB I.R. 75 |



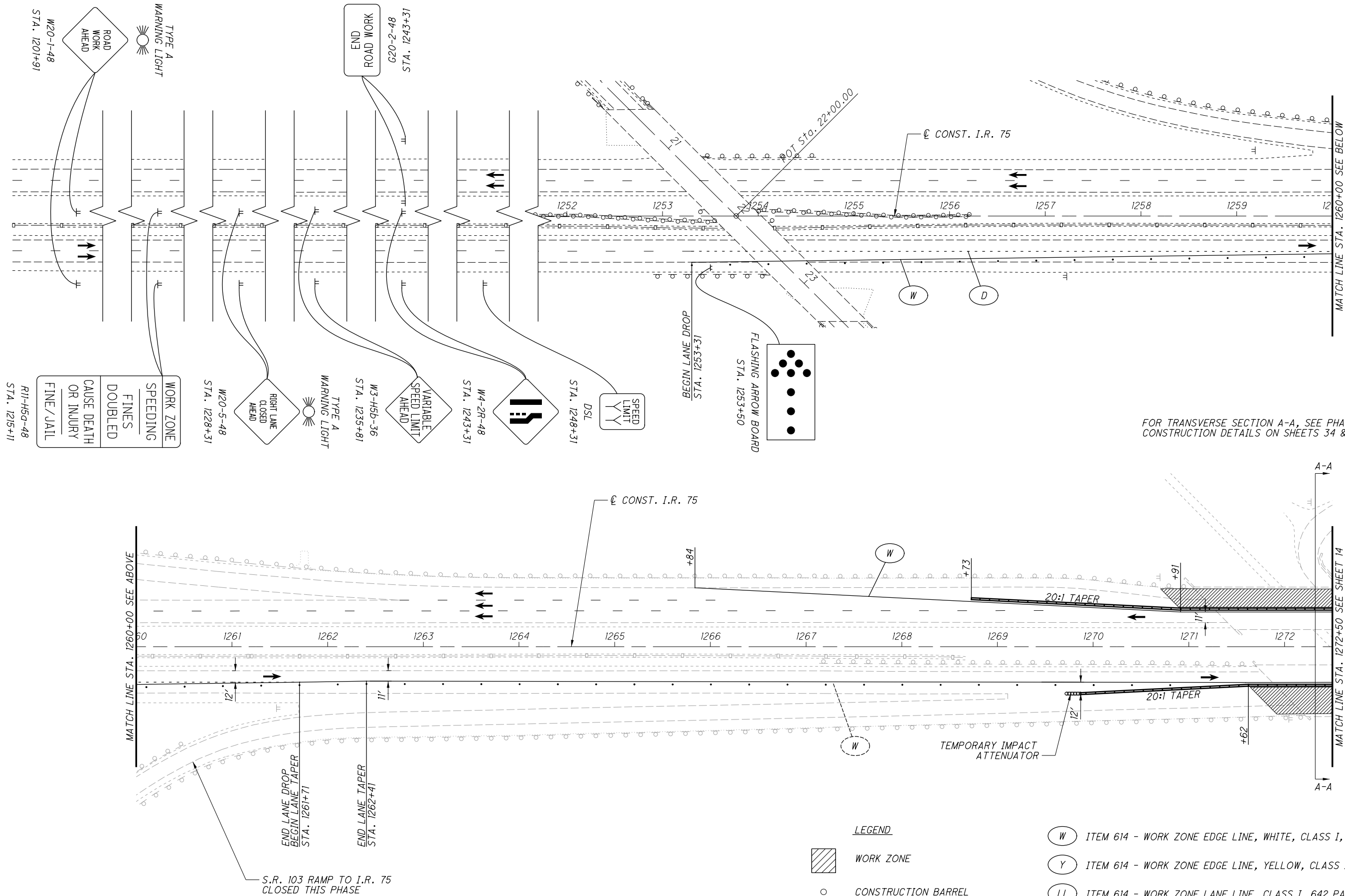
OFFICIAL DETOUR MAP
RAMP B: I.R. 75 SB ENTRANCE RAMP

- | LEGEND | DETOUR |
|----------------------------|-----------------------------------|
| ● - PROJECT LOCATION | - NORTH ON I.R. 75 TO S.R. 235 |
| → - OFFICIAL SIGNED DETOUR | - NORTH ON S.R. 235 TO SB I.R. 75 |
| | - SOUTH ON I.R. 75 TO S.R. 103 |



OFFICIAL DETOUR MAP
RAMP D: I.R. 75 NB EXIT RAMP

- | LEGEND | DETOUR |
|----------------------------|-----------------------------------|
| ● - PROJECT LOCATION | - NORTH ON I.R. 75 TO S.R. 235 |
| → - OFFICIAL SIGNED DETOUR | - NORTH ON S.R. 235 TO SB I.R. 75 |
| | - SOUTH ON I.R. 75 TO S.R. 103 |

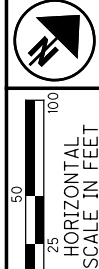


LEGEND

- WORK ZONE
- CONSTRUCTION BARREL
- DIRECTION OF TRAVEL
- TYPE 3 BARRICADE
- PORTABLE BARRIER

- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT

FOR TRANSVERSE SECTION A-A, SEE PHASE CONSTRUCTION DETAILS ON SHEETS 34 & 46.



CALCULATED
SMB
CHECKED
MJC

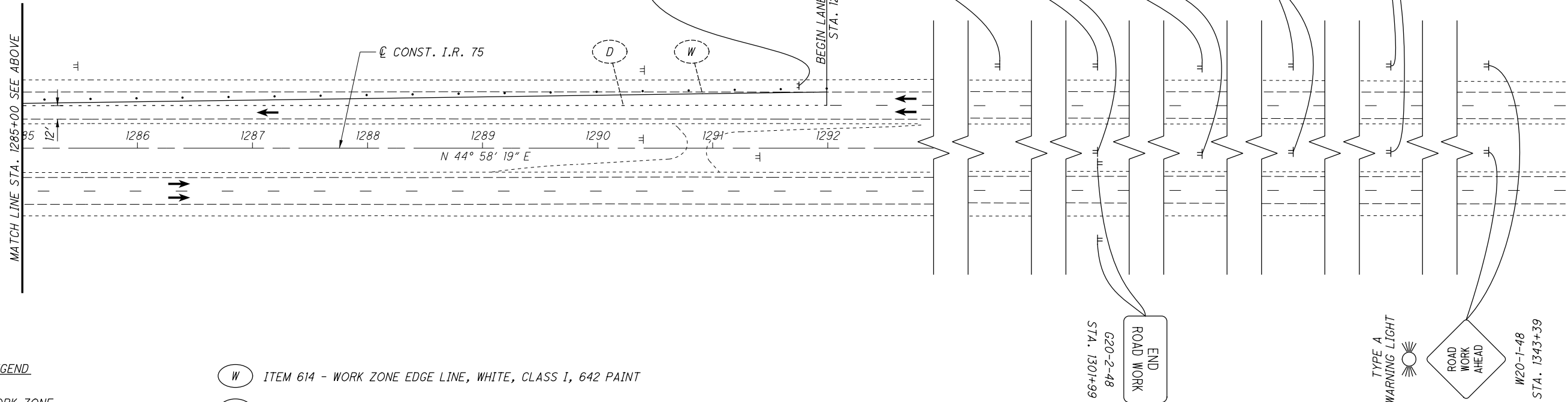
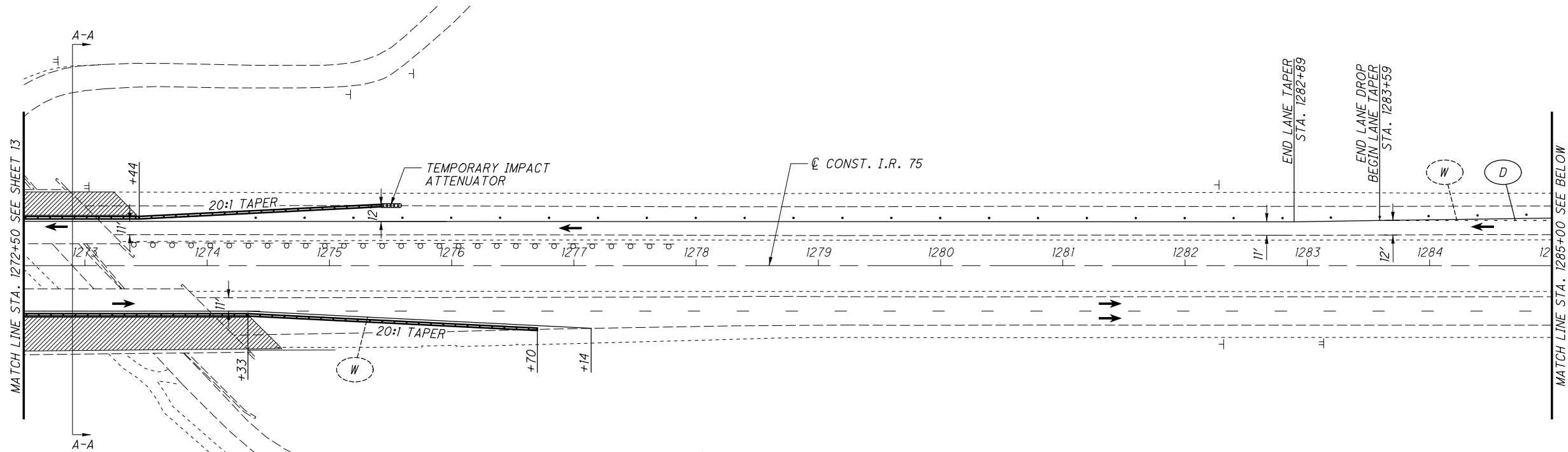
MAINTENANCE OF TRAFFIC PHASE 1
I.R. 75 BEGIN WORK TO STA. 1272+50

ALL / HAN-75-
22.66 / 0.00

- LEGEND**
-  WORK ZONE
-  CONSTRUCTION BARREL
-  DIRECTION OF TRAVEL
-  TYPE 3 BARRICADE
-  PORTABLE BARRIER

- (W) ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
- (Y) ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
- (LL) ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
- (D) ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT

FOR TRANSVERSE SECTION A-A, SEE PHASE
CONSTRUCTION DETAILS ON SHEETS 34 & 46.



FLASHING ARROW BOARD
STA. 1291+75

SPEED LIMIT
YY
STA. 1296+99

W4-2R-48
STA. 1301+99

VARIABLE
SPEED LIMIT
AHEAD
STA. 1309+49

W3-H5b-36
STA. 1309+49

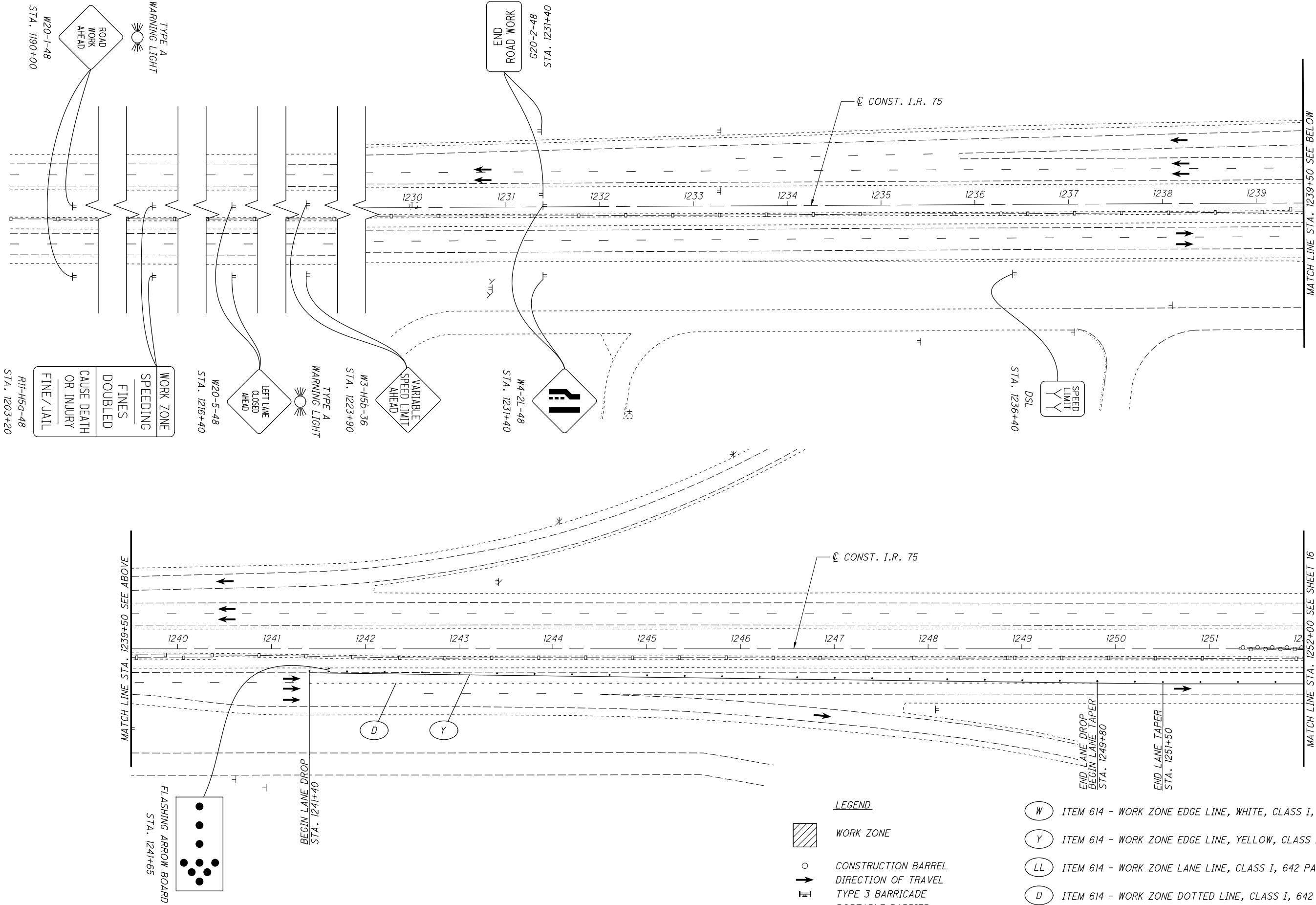
TYPE A
WARNING LIGHT
STA. 1316+99

W20-5-48
STA. 1316+99

WORK ZONE
SPEEDING
FINES
DOUBLED
CAUSE DEATH
OR INJURY
FINE / JAIL
STA. 1330+19

MAINTENANCE OF TRAFFIC PHASE 1
I.R. 75 STA. 1272+50 TO END WORK

ALL / HAN-75 -
22.66 / 0.00



W20-1-48
STA. 1190+00

TYPE A
WARNING LIGHT

WORK ZONE
SPEEDING
FINES
DOUBLED
CAUSE DEATH
OR INJURY
FINE/JAIL

R11-H5G-48
STA. 1203+20

W20-5-48
STA. 1216+40

LEFT LANE
CLOSED
AHEAD

TYPE A
WARNING LIGHT

W3-H5B-36
STA. 1223+90

VARIABLE
SPEED LIMIT
AHEAD

W4-2L-48
STA. 1231+40

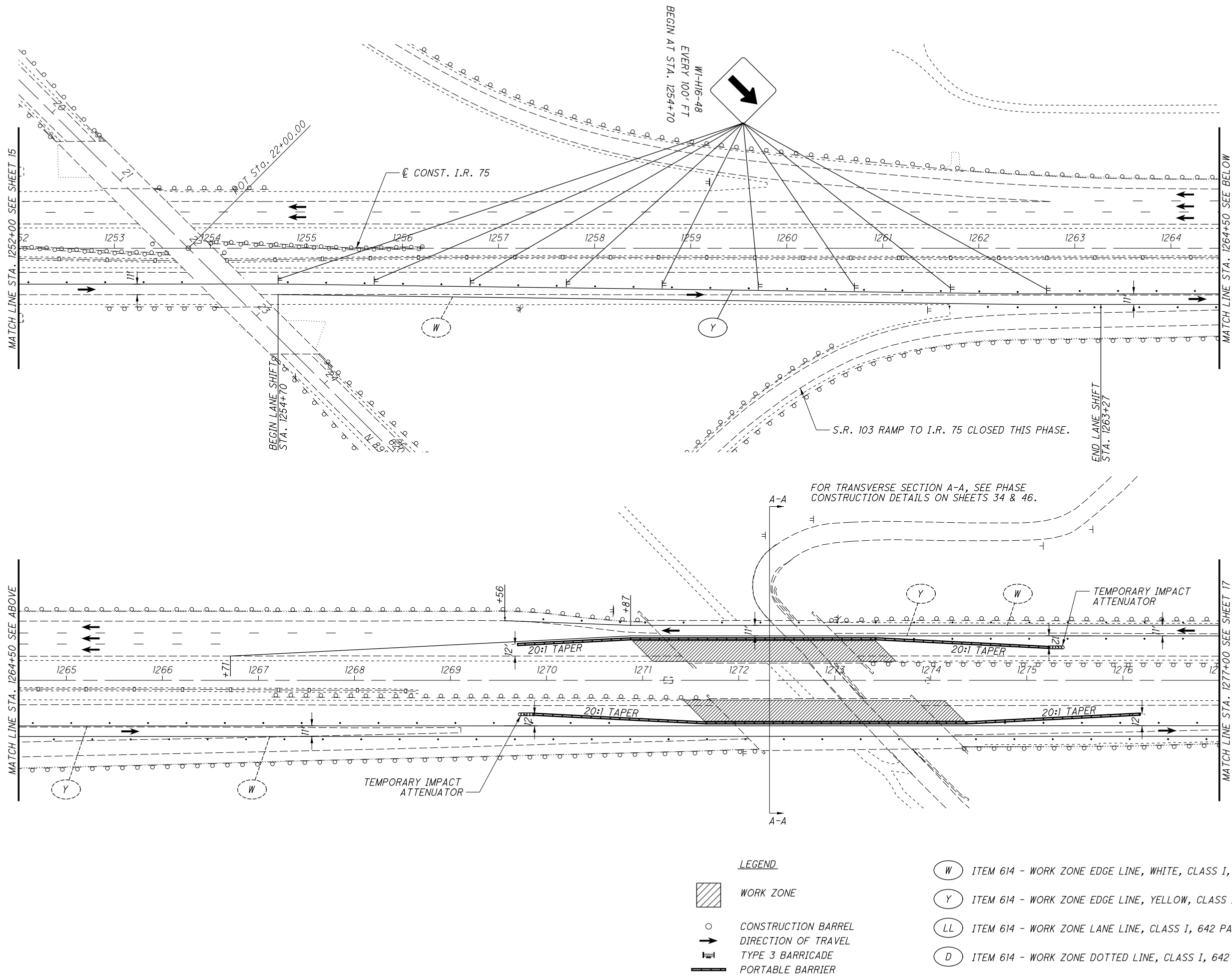
END
ROAD WORK

G20-2-48
STA. 1231+40

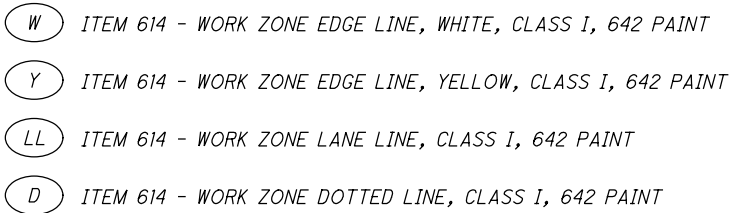
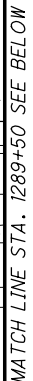
SPEED
LIMIT
75

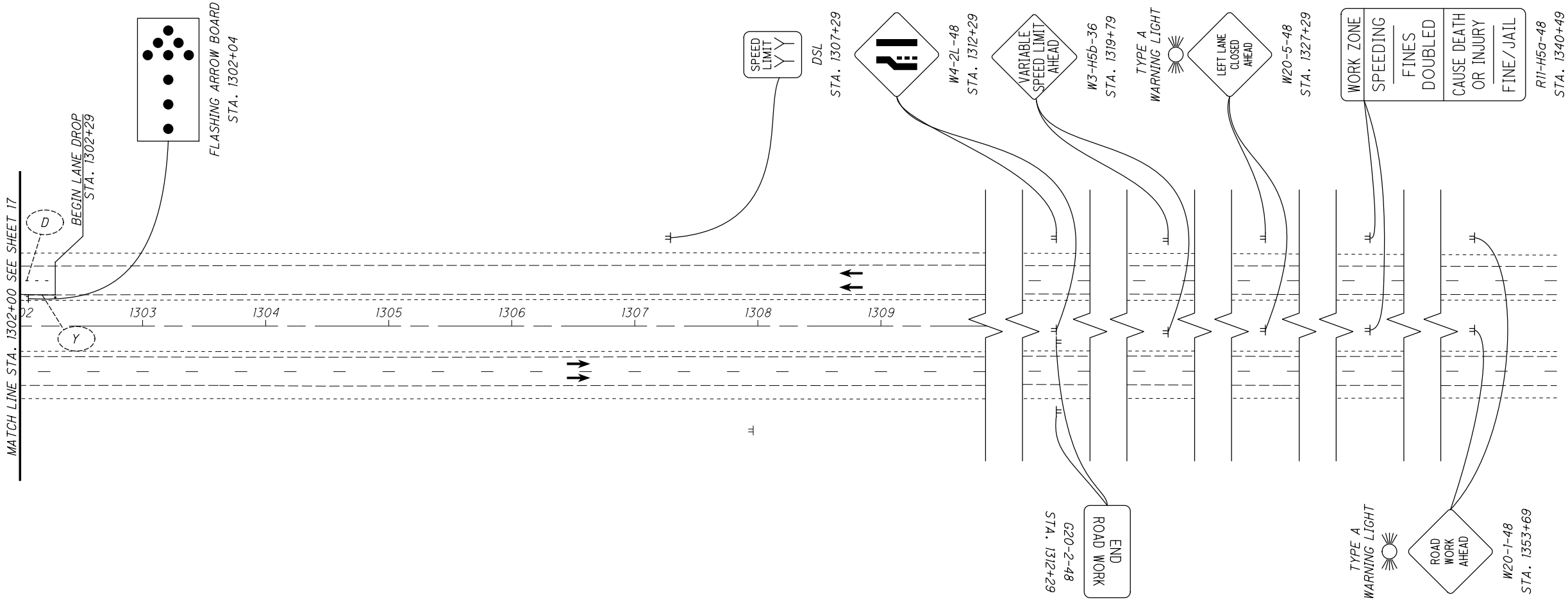
DSL
STA. 1236+40

- LEGEND**
- WORK ZONE
 - CONSTRUCTION BARREL
 - DIRECTION OF TRAVEL
 - TYPE 3 BARRICADE
 - PORTABLE BARRIER
 - ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
 - ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
 - ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
 - ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT



- LEGEND**
- WORK ZONE
 - CONSTRUCTION BARREL
 - DIRECTION OF TRAVEL
 - TYPE 3 BARRICADE
 - PORTABLE BARRIER
 - ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS I, 642 PAINT
 - ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS I, 642 PAINT
 - ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT
 - ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT





LEGEND

- WORK ZONE
- CONSTRUCTION BARREL
- DIRECTION OF TRAVEL
- TYPE 3 BARRICADE
- PORTABLE BARRIER

- ITEM 614 - WORK ZONE EDGE LINE, WHITE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE EDGE LINE, YELLOW, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE LANE LINE, CLASS 1, 642 PAINT
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT

19
53

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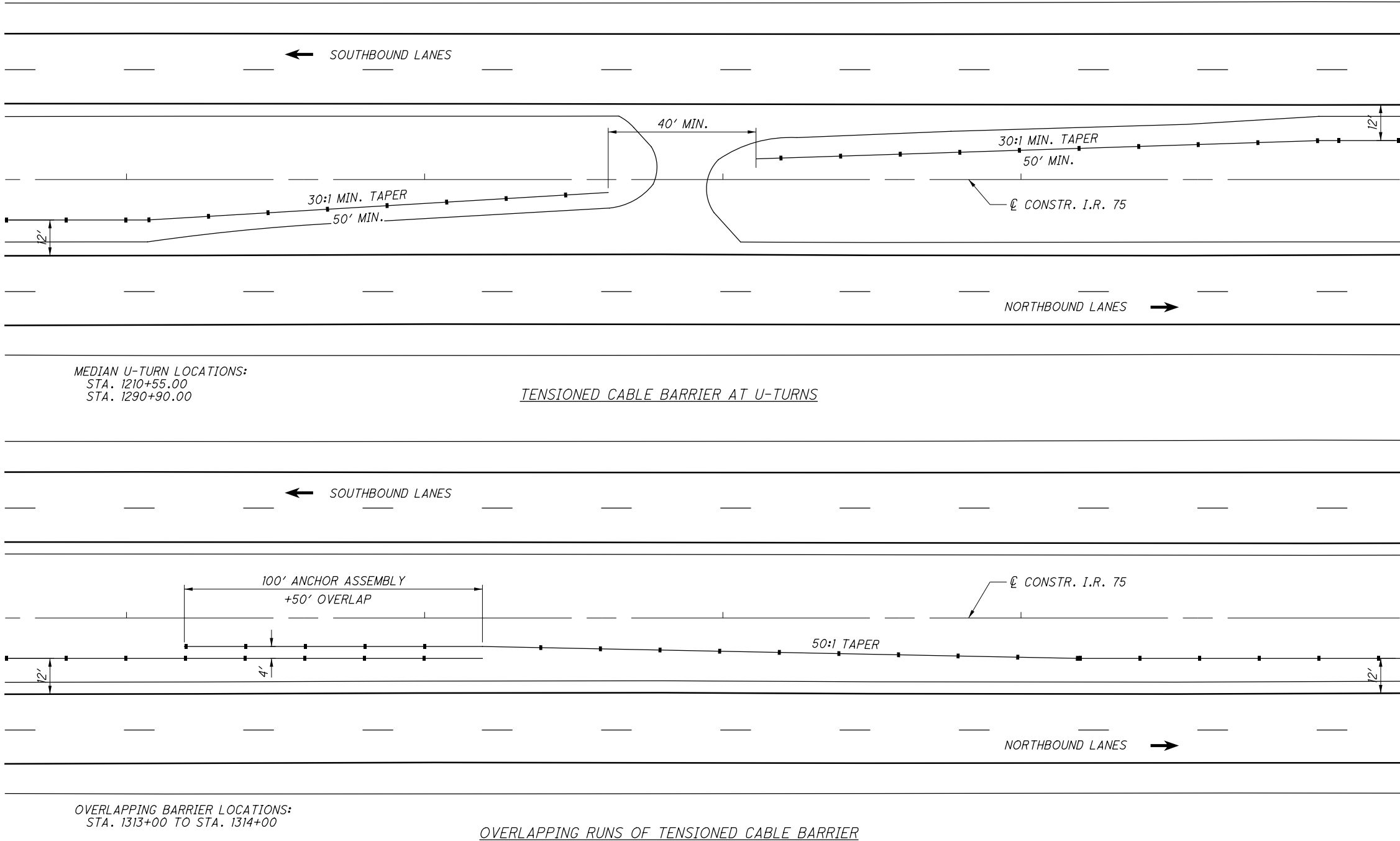
SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED KRF	CHECKED MJC
5	22	23	27	28	33						06/BRO/BR	07/IMS/PV	08/SAF/OT								
LS													LS	201	11000	LS		ROADWAY		GENERAL SUMMARY	
													LS	201	11000	LS		CLEARING AND GRUBBING			
		511											511	203	10000	511	CY	EXCAVATION			
		10,350											10,350	SPECIAL	60655010	10,350	FT	CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION	5		
		10											10	SPECIAL	60655150	10	EACH	CABLE BARRIER, ANCHOR ASSEMBLY	5		
																		EROSION CONTROL			
													LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN			
													LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS			
													LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE			
													30,000	832	30000	30,000	EACH	EROSION CONTROL			
																		PAVEMENT			
300												300		253	02000	300	CY	PAVEMENT REPAIR			
			194									194		253	02001	194	CY	PAVEMENT REPAIR, AS PER PLAN	27		
350												350		253	90000	350	CY	PAVEMENT REPAIR, MISC.:SHOULDER REPAIR FOR MOT	5		
	182,672											182,672		254	01000	182,672	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"			
	784											784		254	01000	784	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH			
			1,013									1,013		255	10501	1,013	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, AS PER PLAN	27		
			4,580									4,580		255	20000	4,580	FT	FULL DEPTH PAVEMENT SAWING			
	16,511											16,511		407	20000	16,511	GAL	NON-TRACKING TACK COAT			
	7,644											7,644		442	10300	7,644	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)			
	4,939											4,939		442	00100	4,939	CY	ANTI-SEGREGATION EQUIPMENT			
	736											736		452	13011	736	SY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	6		
	798											798		617	10100	798	CY	COMPACTED AGGREGATE			
	14.59											14.59		618	40600	14.59	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)			
		4,600											4,600	SPECIAL	69098300	4,600	SY	MISC.: NO MOW STIRP	5		
																		TRAFFIC CONTROL			
				454								454		621	00100	454	EACH	RPM			
				454								454		621	54000	454	EACH	RAISED PAVEMENT MARKER REMOVED			
				16.18								16.18		642	00104	16.18	MILE	EDGE LINE, 6", TYPE 1			
				7.36								7.36		642	00204	7.36	MILE	LANE LINE, 6", TYPE 1			
				3,270								3,270		644	00404	3,270	FT	CHANNELIZING LINE, 12"			
				155								155		644	00500	155	FT	STOP LINE			
				3,405								3,405		644	01510	3,405	FT	DOTTED LINE, 6"			
LS												LS		SPECIAL	69098400	LS		STRUCTURE OVER 20 FOOT SPAN (ALL-75-2268L&R)	5	ALL / HAN-75 - 22.66 - 0.00	
																		BRIDGE SURFACE SMOOTHNESS			
				LS								LS		202	11203	LS		STRUCTURE OVER 20 FOOT SPAN (HAN-75-01240L)	32		
				100								100		509	20001	100	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	32		
				575								575		512	10100	575	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)			
				48								48		512	10600	48	FT	CONCRETE REPAIR BY EPOXY INJECTION			
				45								45		512	74000	45	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES			
				118								118		516	10000	118	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL			
				126								126		516	10501	126	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRESSION SEAL, AS PER PLAN	32		
				6								6		516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12" x 12" x 1.625")			
				6								6		516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (10" x 12" x 1.879")			
				LS								LS		516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	32		

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	7	8	9	10	11	19	33	45			06/BRO/BR	07/IMS/PV	08/SAF/OT						
																	STRUCTURE OVER 20 FOOT SPAN (HAN-75-01240L) CONT.		
							8				8			518	12901	8	EACH	SCUPPER, LENGTHENING, AS PER PLAN	32 & 42
							833				833			519	11101	833	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	31 & 35
							1,050				1,050			848	10001	1,050	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T=1.75")	32
							1,050				1,050			848	20001	1,050	SY	SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN	31 & 36
							19				19			848	30000	19	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	
							32				32			848	50001	32	SY	HAND CHIPPING, AS PER PLAN	32
							LS				LS			848	50101	LS		TEST SLAB, AS PER PLAN	32
							1,112				1,112			848	50321	1,112	SY	EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN	32
							48				48			848	50340	48	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	
							2				2			848	50201	2	CY	FULL DEPTH REPAIR, AS PER PLAN	32
																		STRUCTURE OVER 20 FOOT SPAN (HAN-75-01240R)	
								583			583			512	10100	583	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
								30			30			512	10600	30	FT	CONCRETE REPAIR BY EPOXY INJECTION	
								40			40			512	74000	40	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
								141			141			516	31000	141	FT	JOINT SEALER	
								4			4			516	45305	4	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	44
								LS			LS			516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	44
								217			217			SPECIAL	51900100	217	SF	COMPOSITE FIBER WRAP SYSTEM	44
								427			427			519	11101	427	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	44 & 48
								5			5			601	21061	5	SY	TIED CONCRETE BLOCK MAT, TYPE 2, AS PER PLAN	47
								1,456			1,456			848	10001	1,456	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T=1.75")	44
								1,456			1,456			848	20001	1,456	SY	SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN	44
								34			34			848	30000	34	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	
								60			60			848	50001	60	SY	HAND CHIPPING, AS PER PLAN	44
								LS			LS			848	50101	LS		TEST SLAB, AS PER PLAN	44
								7			7			848	50201	7	CY	FULL DEPTH REPAIR, AS PER PLAN	45
																		MAINTENANCE OF TRAFFIC	
	120										40	80		614	11110	120	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
						4					4			614	12348	4	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL) FOR 24" WIDE HAZARDS	
				14								14		614	12460	14	EACH	WORK ZONE MARKING SIGN	
			14								4	10		614	12484	14	EACH	WORK ZONE INCREASED PENALTIES SIGN	
			20									20		614	12500	20	EACH	REPLACEMENT SIGN	
			50									50		614	12600	50	EACH	REPLACEMENT DRUM	
						70						70		614	13310	70	EACH	BARRIER REFLECTOR, TYPE 1 (ONE WAY)	
						10						10		614	13312	10	EACH	BARRIER REFLECTOR, TYPE 2 (ONE WAY)	
						80						80		614	13350	80	EACH	OBJECT MARKER, ONE WAY	
		4									1	3		614	18601	4	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	8
				7								7		614	20110	7	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
				16		3.36					3.36	16		614	22110	19.36	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
						3,360					3,360			614	24200	3,360	FT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT	
				155								155		614	26200	155	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
						2,538					2,538			622	41000	2,538	FT	PORTABLE BARRIER, 32"	
			14								2	12		808	18700	14	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
				16							16			896	00012	16	SNMT	PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS II	10
				4							4			896	00020	4	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN	10
																		INCIDENTALS	
											LS			614	11000	LS		MAINTAINING TRAFFIC	
											2			619	16020	2	MNTH	FIELD OFFICE, TYPE C	
											LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS			624	10000	LS		MOBILIZATION	



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STATION		SIDE	203	606	606	SPECIAL
			EXCAVATION	SPECIAL - CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION	SPECIAL - CABLE BARRIER, ANCHOR ASSEMBLY	MISC.: NO MOW STIRP
FROM	TO		CY	FT	EA	SY
1273+85.00	1290+65.00	R	83	1680	2	747
1291+05.00	1314+00.00	L	113	2295	2	1020
1313+00.00	1337+50.00	L	121	2450	2	1089
1338+75.00	1357+00.00	R	90	1825	2	811
1356+00.00	1377+00.00	L	104	2100	2	933
TOTALS CARRIED TO GENERAL SUMMARY			511.0	10350	10	4600



TOTAL AREA:	40.41 AC.
PROJECT EARTH DISTURBED	0.95 AC.
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE:	0.00 AC.
IMPERVIOUS (PAVED) AREA FOR POST-CONSTRUCTION SITE:	0.95 AC.
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE:	0.50
RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE:	0.53
USDA SOIL & WATER CONSERVATION MAP:	ALLEN COUNTY , OHIO HANCOCK COUNTY, OHIO
IMMEDIATE RECEIVING WATERS:	MARSH RUN
SUBSEQUENT RECEIVING WATERS:	RILEY CREEK
EARTH DISTURBED AREA SUMMARY	
PROJECT EDA:	0.95 AC.
CONTRACTOR EDA:	0.25 AC.
NOTICE OF INTENT EDA:	4.90 AC.

CONTOUR INTERVAL: 2 FEET

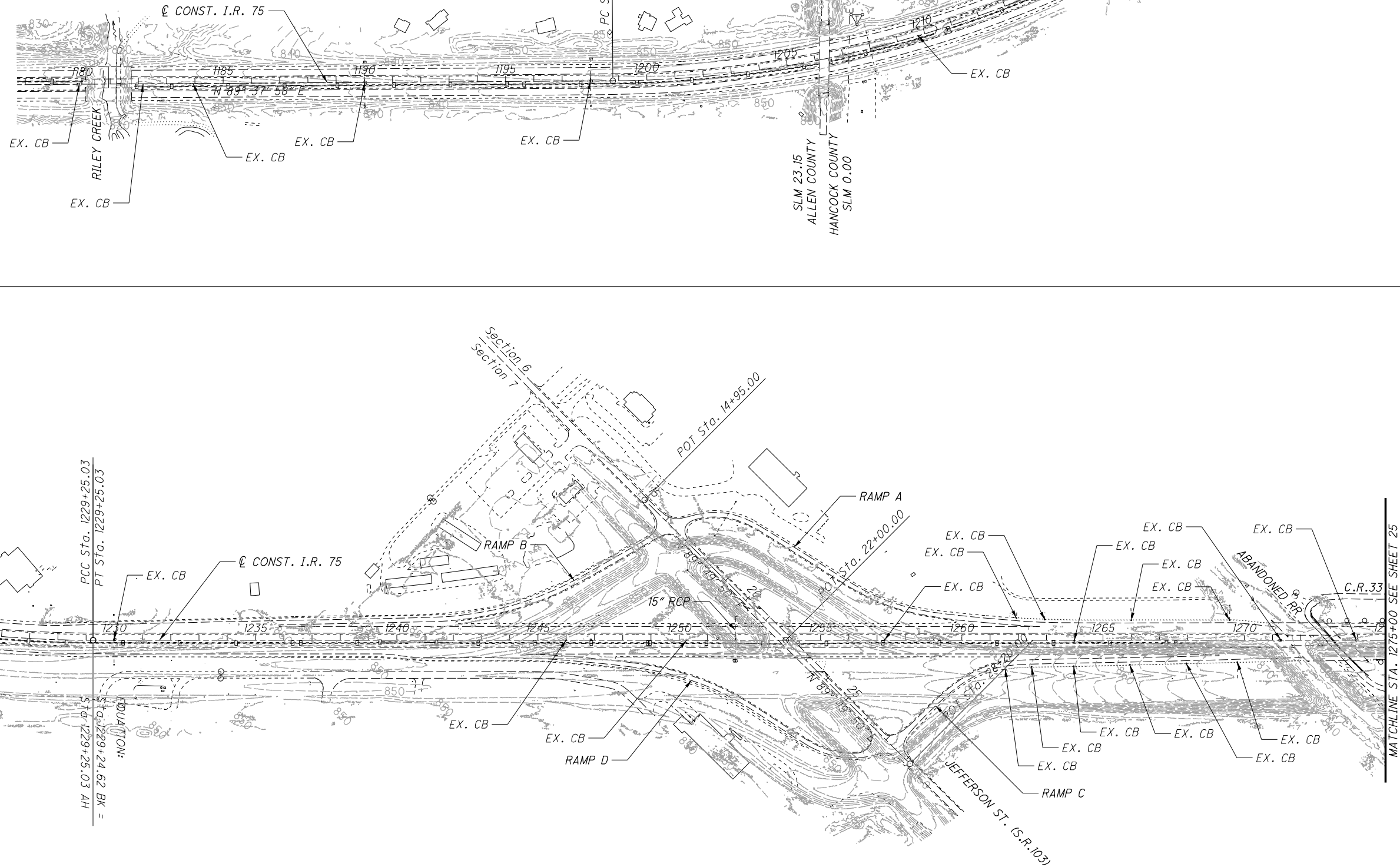
PROJECT DESCRIPTION

RESURFACE WITH ASPHALT CONCRETE AND PREFORM JOINT REPAIR ON I.R. 75 FROM THE BRIDGE OVER RILEY CREEK APPROXIMATELY 3.7 MILES TO JUST SOUTH OF SR 235. ALSO RESURFACE THE RAMP AT SR 103. PROJECT WILL ALSO INCLUDE REHABILITATING THE BRIDGES OVER CR 33 AND THE ABANDONED RR APPROXIMATELY 0.3 MILES NORTH OF THE SR 103 OVERPASS. (HAN-75-0124 L&R) BY OVERLAYING THE BRIDGE DECKS AND APPROACHING SLABS AND PATCHING AND SEALING CONCRETE SURFACES.

USGS QUADRANT: BLUFFTON, OHIO AND RAWSON, OHIO

LONGITUDE*: 83°51'28"
LATITUDE*: 40°53'59"

*LONGITUDE AND LATITUDE TO APPROX. CENTER OF PROJECT



PROJECT SITE PLAN
I.R. 75 BEGIN WORK TO STA. 1275+00

ALL / HAN-75-
22.66 / 0.00



E171(393)

2

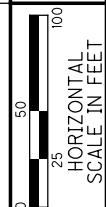
- EX. CB
- 24" CONC.



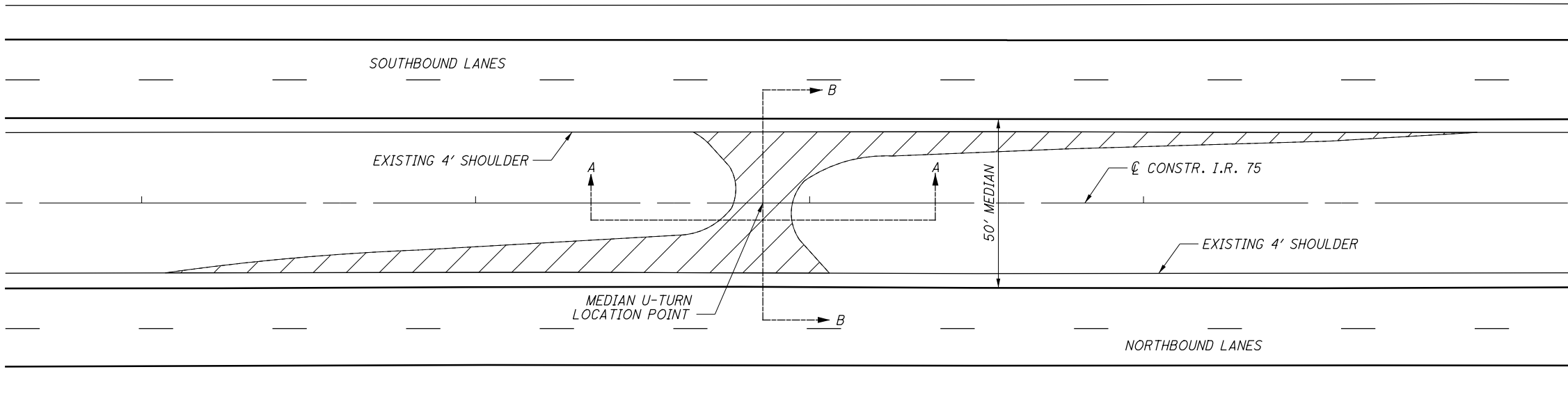
**ALL / HAN-75 -
22.66 / 0.00**

$$\frac{25}{53}$$

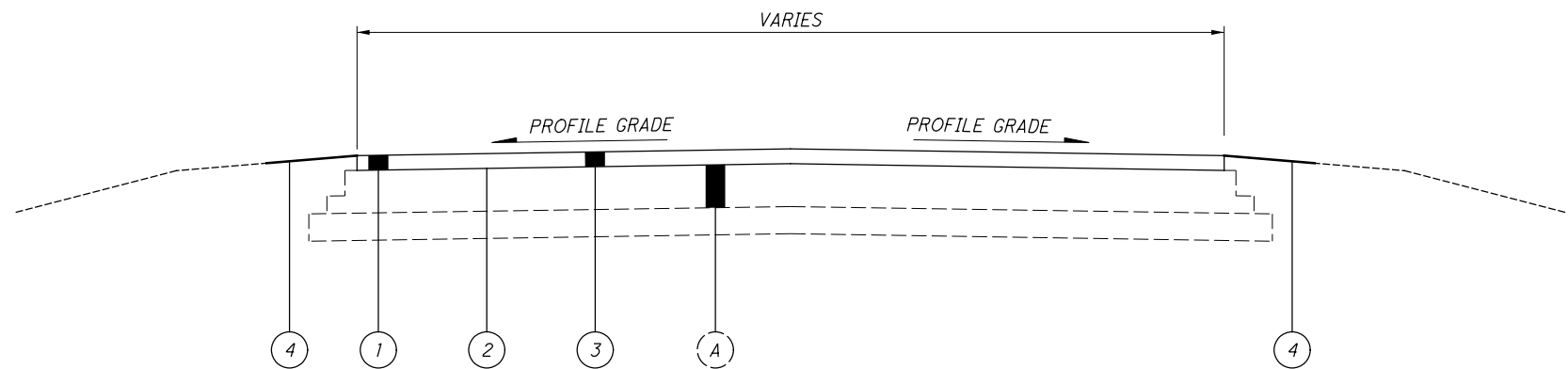
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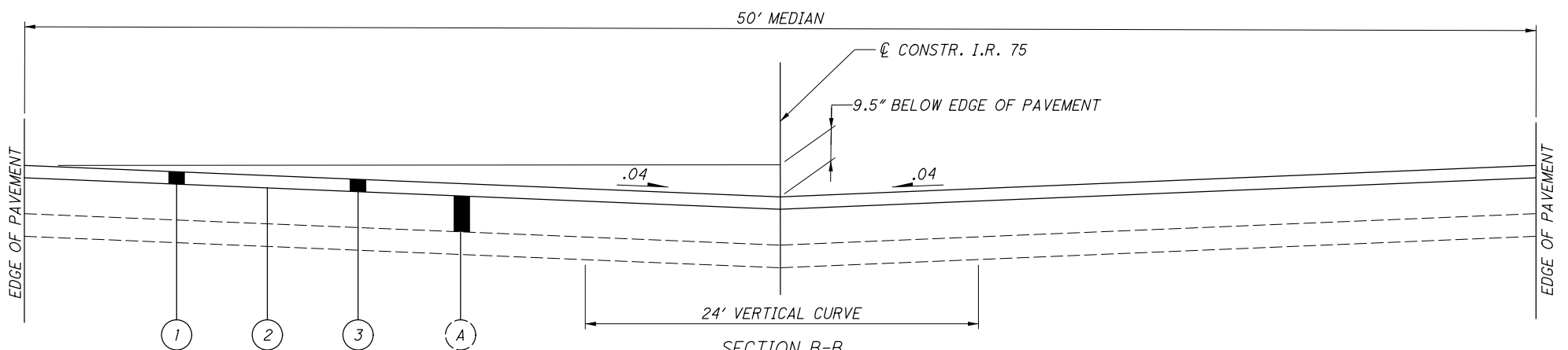
MEDIAN U-TURN LOCATIONS:
STA. 1210+55.00
STA. 1290+90.00



SECTION A-A

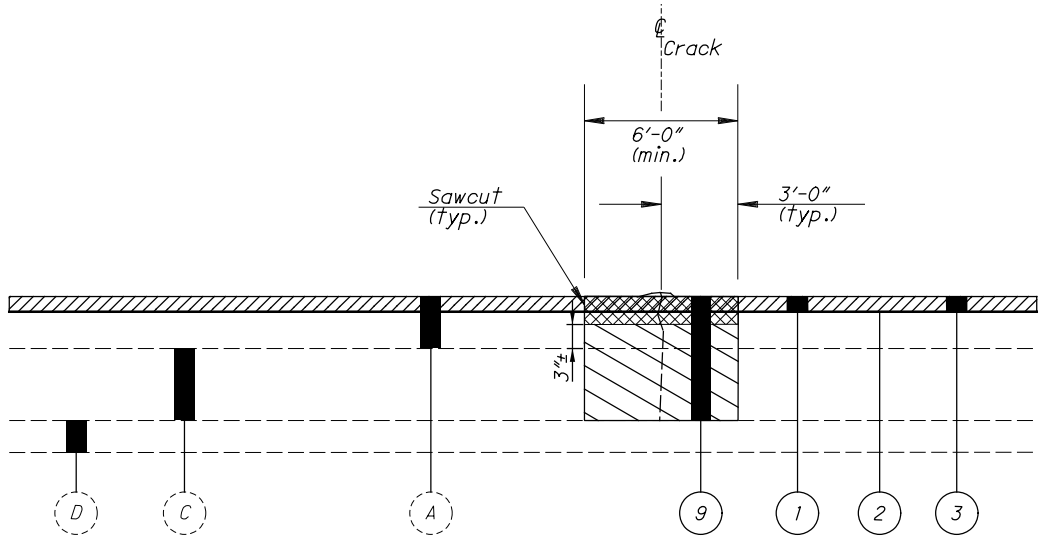
LEGEND

- 1 ITEM 442 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447)
- 2 ITEM 407 - NON-TRACKING TACK COAT
- 3 ITEM 254 - PAVEMENT PLANING, 1 1/2" THICKNESS
- 4 ITEM 617 - COMPACTED AGGREGATE
- (A) EXISTING ASPHALT PAVEMENT



SECTION B-B

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ITEM 255 FULL DEPTH PAVEMENT
REMOVAL AND RIGID REPLACEMENT,
CLASS RRCM, AS PER PLAN

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID
REPLACEMENT, CLASS RRCM, AS PER PLAN

ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, AS PER PLAN SHALL FOLLOW THE SPECIFICATION FOR THE 255 ITEM EXCEPT FOR CMS 255.01 DESCRIPTION. ALL CONCRETE REPAIRS MUST HAVE AT LEAST 3" OF ASPHALT ON TOP OF THE CONCRETE WHEN THE PROJECT IS COMPLETED. PLACE, CONSOLIDATE, FINISH AND CURE NEW CONCRETE CLASS RRCM TO A LEVEL 3" BELOW THE EXISTING ROADWAY. FILL THE REMAINING VOID WITH ITEM 301 ASPHALT CONCRETE BASE, PG64-22.

IF THE REPAIRS ARE COMPLETED DURING THE FOUR PERMITTED MULTI-DAY CLOSURES, THE CONTRACTOR HAS THE OPTION OF USING QC MS CONCRETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE ROADWAY WILL OPEN AT THE TIMES SPECIFIED IN THE CONTRACT.

PAVEMENT REPAIRS ARE TO BE MADE PRIOR TO PLANING AT THE LOCATIONS DESIGNATED BY THE ENGINEER. PERFORM AN ITEM 255 FULL DEPTH SAW CUT AND COMPLETE THE REPAIR AS PER ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, AS PER PLAN, AS DETAILED IN THESE PLANS.

ITEM 255 FULL DEPTH PAVEMENT REMOVAL DIMENSIONS AND QUANTITIES

	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
I.R. 75	6'	12'	8 SY	60	480 SY
I.R. 75 RAMPS	6'	16'	10.67 SY	50	533 SY

ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT,
CLASS RRCM, AS PER PLAN = 1013 SY

ITEM 255 PAVEMENT SAWING DIMENSIONS AND QUANTITIES

	LENGTH	WIDTH	PERIMETER	QUANTITY	TOTAL AREA
I.R. 75	6'	12'	36 FT	60	2160 FT
I.R. 75 RAMPS	6'	16'	44 FT	50	2420 FT

ITEM 255 FULL DEPTH PAVEMENT SAWING = 4580 FT

QUANTITIES CARRIED TO GENERAL SUMMARY

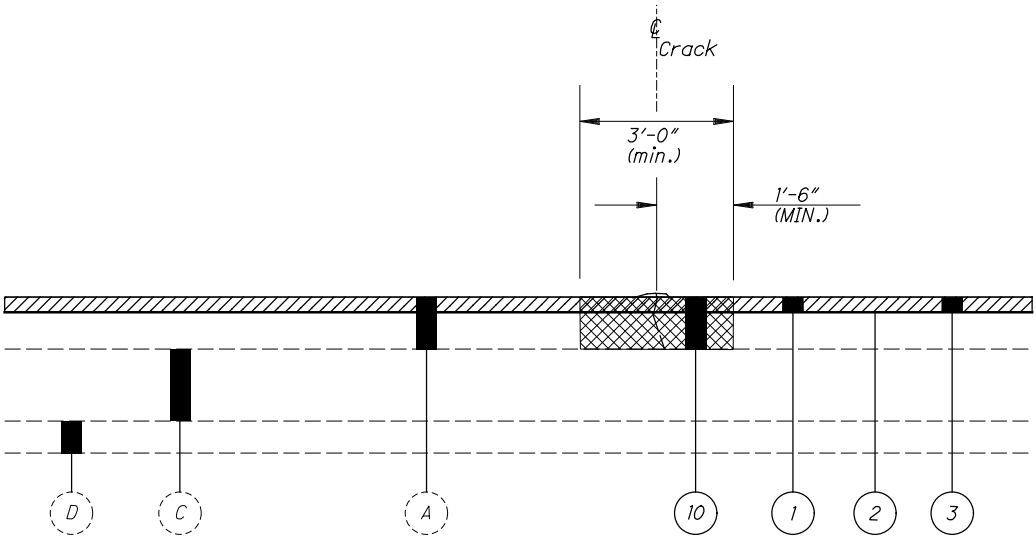
EXISTING LEGEND

- (A) 6 1/4" ASPHALT CONCRETE
- (C) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (D) 6" SUBBASE

PROPOSED LEGEND

- (1) ITEM 442 1-1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447)
- (2) ITEM 407 TRACKLESS TACK COAT
- (3) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2" THICKNESS
- (9) ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, AS PER PLAN
- (10) ITEM 255 PAVEMENT REPAIR, AS PER PLAN

- CLASS QC MS CONCRETE
- ASPHALT CONCRETE BASE, PG64-22
- PAVEMENT PLANING



ITEM 253 PAVEMENT REPAIR,
AS PER PLAN

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING MAINLINE ASPHALT PAVEMENT AREAS AT EXISTING PAVEMENT FAILURES.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS, AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIRS SHALL BE COMPLETED PRIOR TO THE PLANING OF THE ROADWAY. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE AND SHALL BE REPAIRED FOLLOWING THE REQUIREMENTS OF ITEM 253 EXCEPT AS MODIFIED BY THIS NOTE. TRIM THE LIMITS OF THE REPAIR AREA TO FORM A VERTICAL FACE 1.5 INCHES (38 MM) DEEP FROM THE SURFACE, REGARDLESS OF THE TIME UNTIL THE REPAIR IS COVERED WITH AN OVERLAY. THE CONTRACTOR SHALL PROVIDE THE MEANS AND METHODS TO PERFORM THIS WORK. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED ASPHALT PAVEMENT EXPOSING THE UNDERLYING CONCRETE PAVEMENT. THE MATERIALS SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.01.

ITEM 301 MATERIAL SHALL BE PLACED AND COMPACTED ENSURING COMPLIANCE WITH THE ALLOWABLE LIFT THICKNESSES TO FINISH FLUSH WITH THE ADJACENT EXISTING PAVEMENT SURFACE PRIOR TO PLANING AND PLACING THE PROPOSED ASPHALT CONCRETE OVERLAY. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER. REPAIRED JOINTS SHALL BE MILLED IF REQUESTED BY THE ENGINEER TO ENSURE AN ACCEPTABLE RIDE IF THE ROADWAY WILL BE OPENED TO THE TRAVELING PUBLIC.

PAVEMENT REPAIR OPERATIONS MUST BE COMPLETE AT LEAST 12 HOURS PRIOR TO THE OPENING OF THE ROADWAY TO THRU TRAFFIC TO ALLOW TIME FOR THE ASPHALT TO COOL.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR INCLUDING MEANS AND METHODS TO PROVIDE THE 1.5 INCH VERTICAL FACE. AN ESTIMATED QUANTITY IS PROVIDED IN THE SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD OF ITEM 253 PAVEMENT REPAIR, AS PER PLAN.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN

	LENGTH	WIDTH	AVG. DEPTH	VOLUME	QUANTITY	TOTAL VOLUME
I.R. 75	4'	12'	6.25"	0.92 CY	210	194 CY
I.R. 75 RAMPS	4'	16'	6.25"	1.25 CY	0	0 CY
						194 CY

ITEM 253 PAVEMENT REPAIR, AS PER PLAN = 194 CY

QUANTITIES CARRIED TO GENERAL SUMMARY

PAVEMENT REPAIR DETAILS

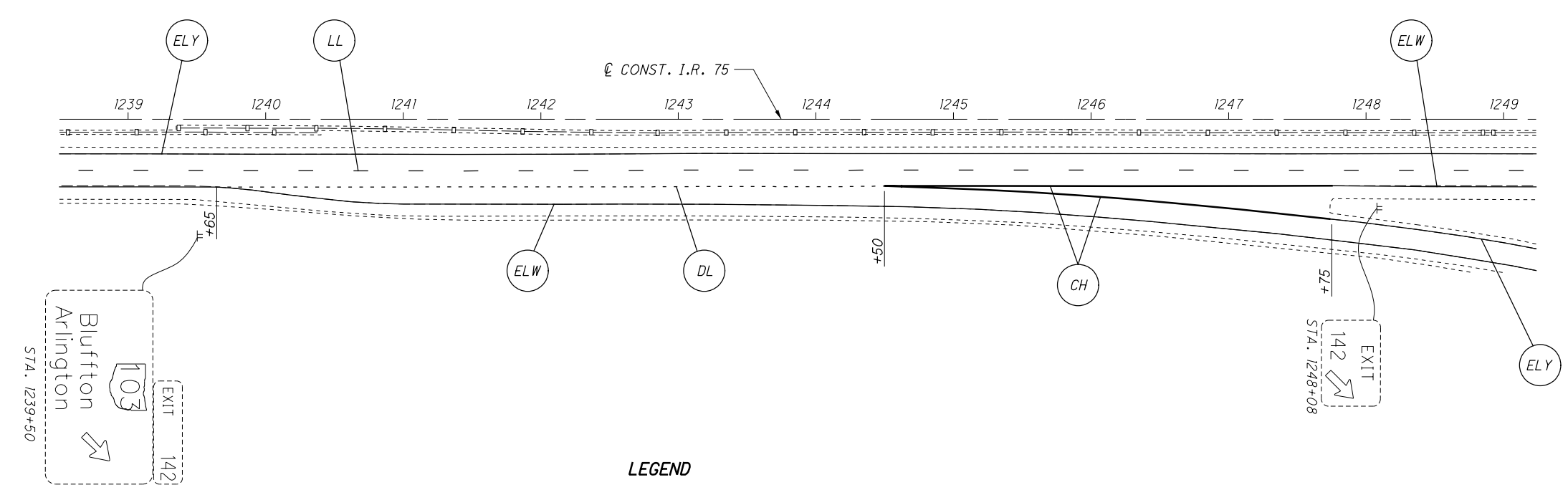
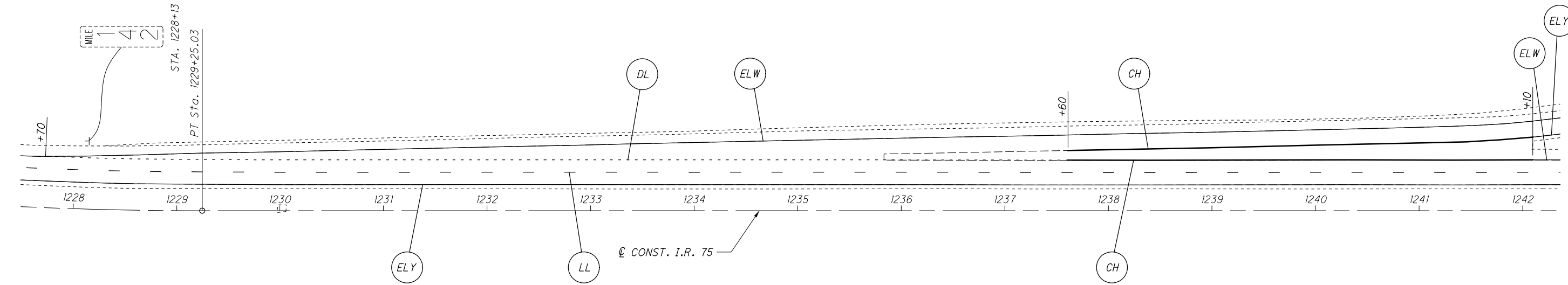
ALL-75-15.80-
22.66 / 0.00

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CALCULATED
KRF
CHECKED
MJC

PAVEMENT MARKING SUBSUMMARY

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- LEGEND**
- | | | | |
|-----|-------------------------------------|----|----------------------------|
| CH | ITEM 644 - CHANNELIZING LINE, (12") | LL | ITEM 642 - LANE LINE, 6" |
| ELW | ITEM 642 - EDGE LINE, 6", WHITE | SL | ITEM 644 - STOP LINE, 24" |
| ELY | ITEM 642 - EDGE LINE, 6", YELLOW | DL | ITEM 644 - DOTTED LINE, 6" |

NOTE
1. THE EXISTING SIGNS SHALL NOT BE REPLACED ON THIS PROJECT.

ALL HAN-75-22.66 / 0.00

TRAFFIC CONTROL PLAN
RAMP B AND RAMP D

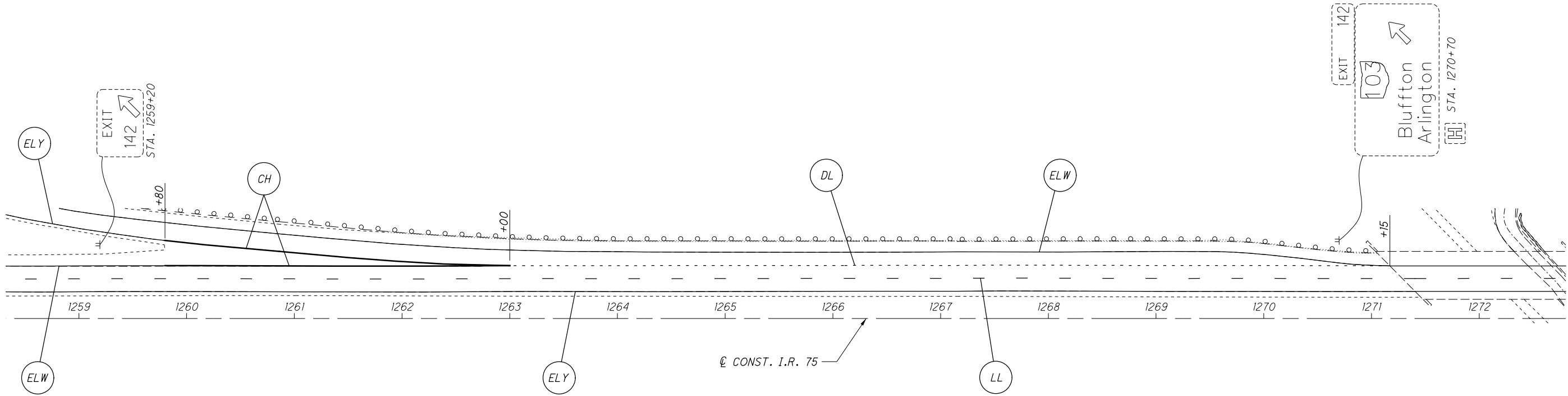
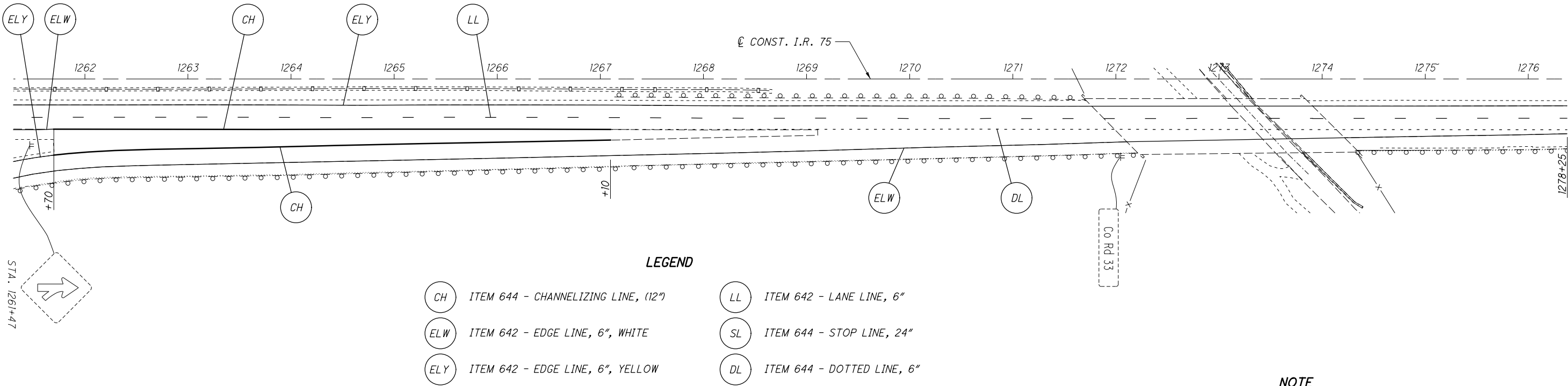
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0 50 100
HORIZONTAL
SCALE IN FEET

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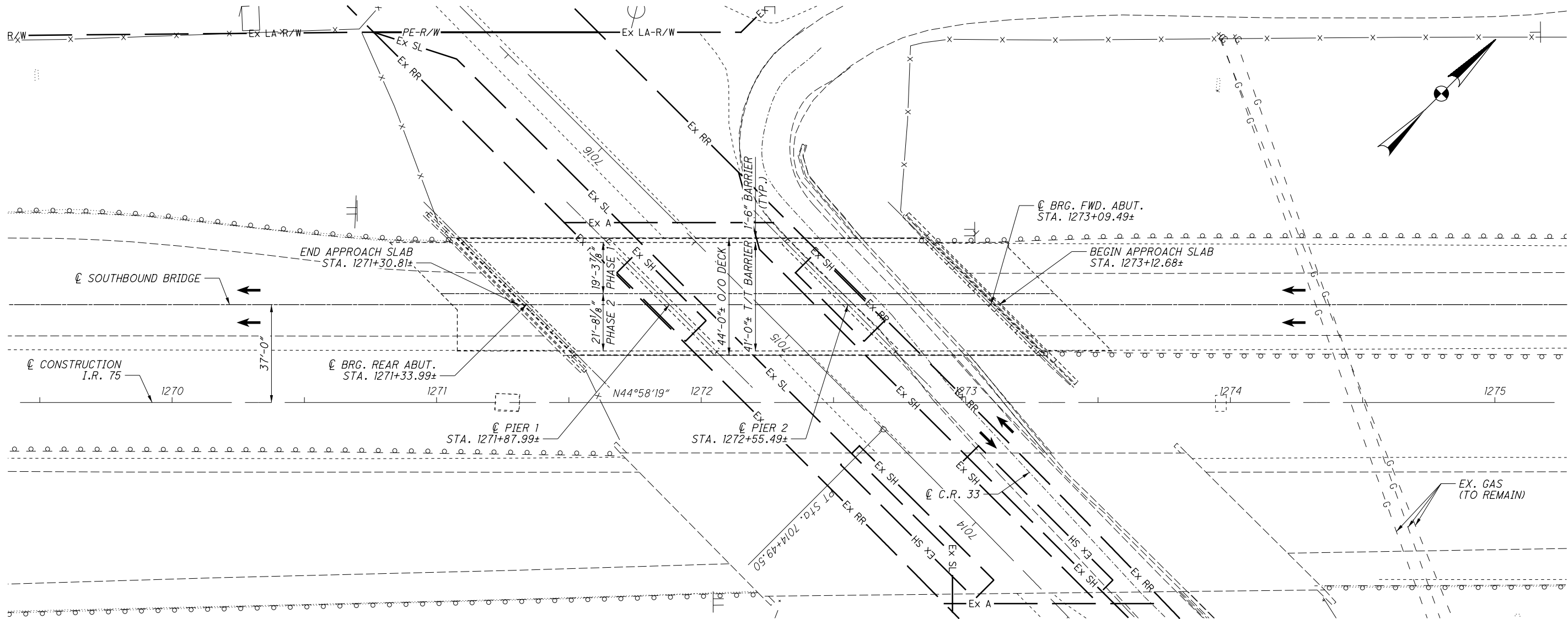
TRAFFIC CONTROL PLAN
RAMP A AND RAMP C

ALL / HAN-75-
22.66 / 0.00

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GENERAL PLAN

PROPOSED WORK

1. TEMPORARILY SUPPORT THE BRIDGE AT THE REAR AND FORWARD ABUTMENTS.
2. REMOVE EXISTING 1 1/4" MICRO-SILICA OVERLAY ON THE DECK AND APPROACH SLAB BEFORE BEGINNING HYDRO-DEMOLITION.
3. REMOVE ABUTMENT PLATE BEARINGS.
4. REPLACE ABUTMENT PLATE BEARINGS WITH ELASTOMERIC BEARING ASSEMBLY.
5. REMOVE TEMPORARY SUPPORTS.
6. REMOVE EXISTING JOINT ASSEMBLY.
7. ATTACH PROPOSED JOINT ASSEMBLY.
8. OVERLAY THE DECK AND APPROACH SLABS WITH 1 3/4" MICRO-SILICA OVERLAY.
9. REPAIR UNSOUND CONCRETE ON ABUTMENTS, PIERS, EDGE OF DECK, AND BARRIERS BY PATCHING OR BY EPOXY INJECTION.
10. SEAL THE FOLLOWING WITH EPOXY-URETHANE SEALER: BARRIERS, DECK EDGES, ABUTMENTS, WINGWALLS, ENDS OF PIER CAPS AND ANY PATCHED AREAS.
11. LENGTHEN EXISTING SCUPPERS.
12. WORK LISTED IS NOT INCLUSIVE. CONTRACTOR WILL SEQUENCE WORK AS NEEDED.

EXISTING STRUCTURE

TYPE: 3-SPAN CONTINUOUS ROLLED STEEL BEAM WITH NONCOMPOSITE REINFORCED CONCRETE DECK ON HAMMER HEAD PIERS AND STUB ABUTMENTS

SPANS: 54'-0"±, 67'-6"±, AND 54'-0"±

ROADWAY: 41'-0" T/T BARRIER

LOADING: HS20-44 & ALTERNATE MILITARY LOADING

SKEW: 45°01'30" R.F.

APPROACH SLABS: 25'-0"±

ALIGNMENT: TANGENT

CROWN: 3/16"±/FT

STRUCTURAL FILE NUMBER: 3202259

DATE BUILT: 1964

DISPOSITION: TO BE REHABILITATED

COORDINATES: LATITUDE: N 40° 53' 46.10" LONGITUDE: W 83° 51' 45.70"

MADE BY: MGB		DATE: 3/25/2019		ESTIMATED QUANTITIES						STRUCTURAL FILE NUMBER: 3202259	
CHECKED BY: TAS		DATE: 3/27/2019									
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	REFERENCE SHEET NO.		
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	2, 6, 10, AND 11 OF 12		
509	20001	100	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	100				2 OF 12		
512	10100	575	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	179	39	357				
512	10600	48	FT	CONCRETE REPAIR BY EPOXY INJECTION	48						
512	74000	45	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	45						
516	10000	118	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL	118						
516	10501	126	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRESSION SEAL, AS PER PLAN				126	2 OF 12		
516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12" x 12" x 1.625")	6						
516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (10" x 12" x 1.875")	6						
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		2 OF 12		
518	12901	8	EACH	SCUPPER, LENGTHENING, AS PER PLAN			8		2 AND 12 OF 12		
519	11101	833	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	131		702		2 AND 5 OF 12		
848	10001	1,050	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T=1.75")			809	241	2 OF 12		
848	20001	1,050	SY	SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN			809	241	2 AND 6 OF 12		
848	30000	19	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			17	2			
848	50001	32	SY	HAND CHIPPING, AS PER PLAN			29	3	2 OF 12		
848	50101	LUMP		TEST SLAB, AS PER PLAN			LUMP	LUMP	2 OF 12		
848	50201	2	CY	FULL DEPTH REPAIR, AS PER PLAN			2		2 OF 12		
848	50321	1,112	SY	EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN			869	243	2 OF 12		
848	50340	48	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY			44	4			

33
53

3 / 12

ALL / HAN-75 - 22.66 / 0.00

PID No. 104095

ESTIMATED QUANTITIES

BRIDGE NO. HAN-75-0124OL

I.R. 75 OVER COUNTY ROAD 33

DESIGNED
MGB

CHECKED
TAS

DRAWN
MGB

REVIEWED
DFT

DATE
3/28/2019

STRUCTURE FILE NUMBER
3202259

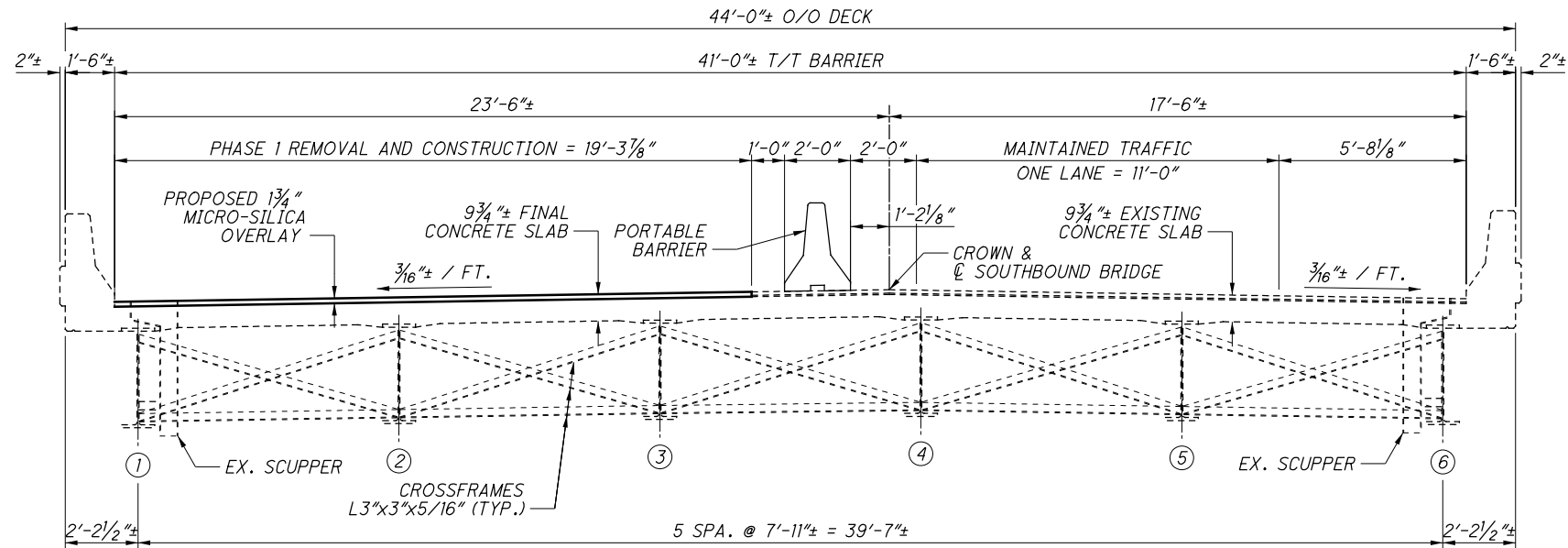
E.L. ROBINSON

ENGINEERING

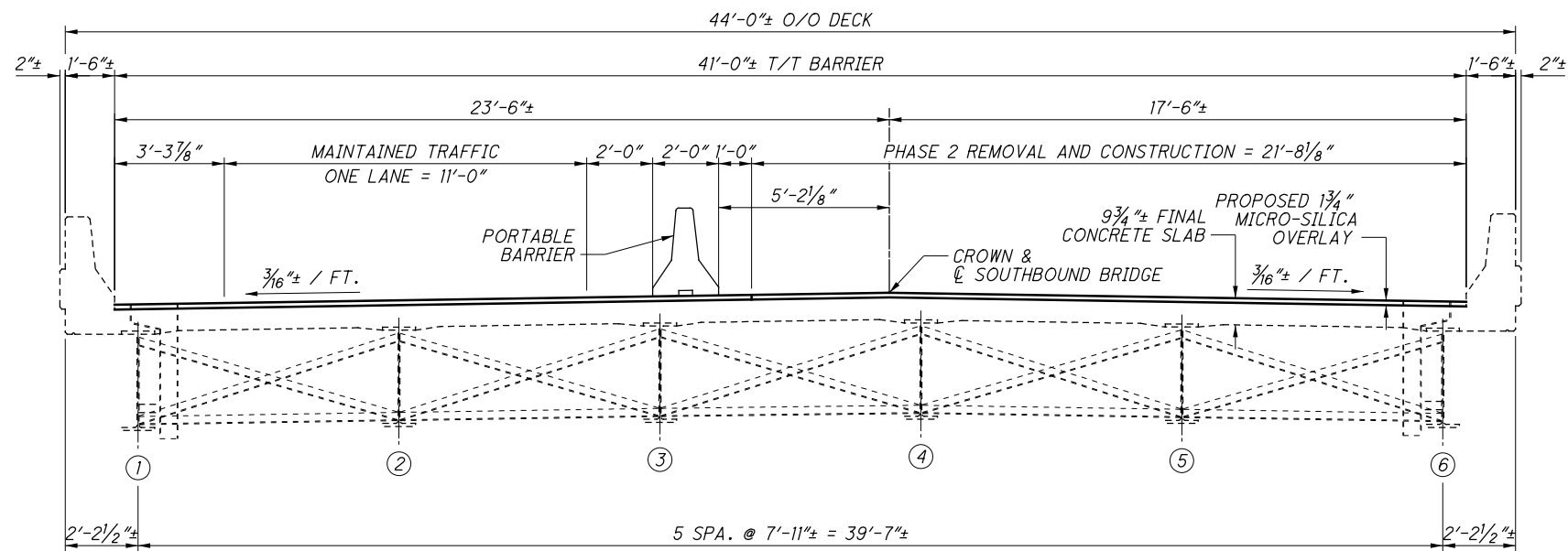
1801 Watermark Drive, Suite 310 • Columbus, Ohio 43215

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PHASE 1 - REMOVAL AND CONSTRUCTION



PHASE 2 - REMOVAL & CONSTRUCTION

LEGEND:

(#) - BEAM NUMBER

PHASED CONSTRUCTION DETAILS

BRIDGE NO. HAN-75-0124OL
I.R. 75 OVER COUNTY ROAD 33

ALL / HAN-75 - 22.66 / 0.00

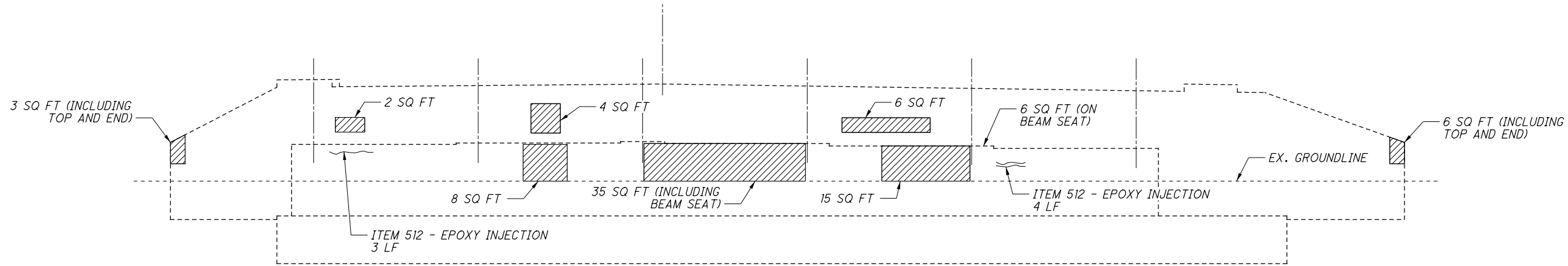
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4 / 12

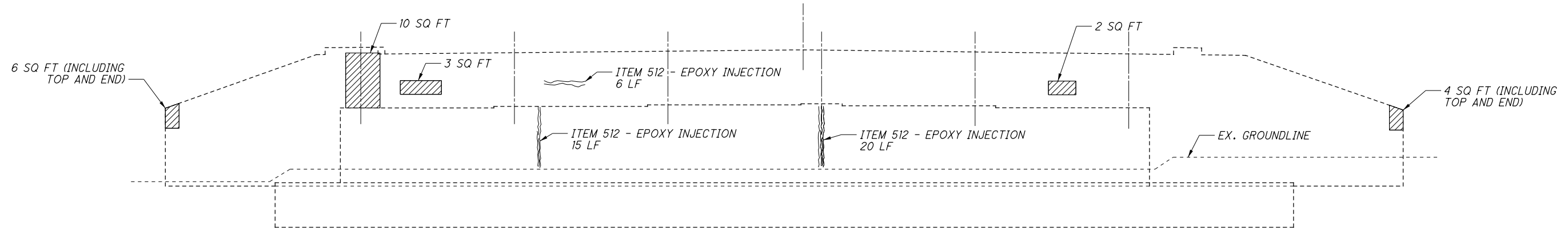
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DESIGNED	DRAWN	REVIEWED	DATE
MGB	MGB	DFT	3/28/2019
CHECKED	REVIS	STRUCTURE FILE NUMBER	
TAS	-	3202259	

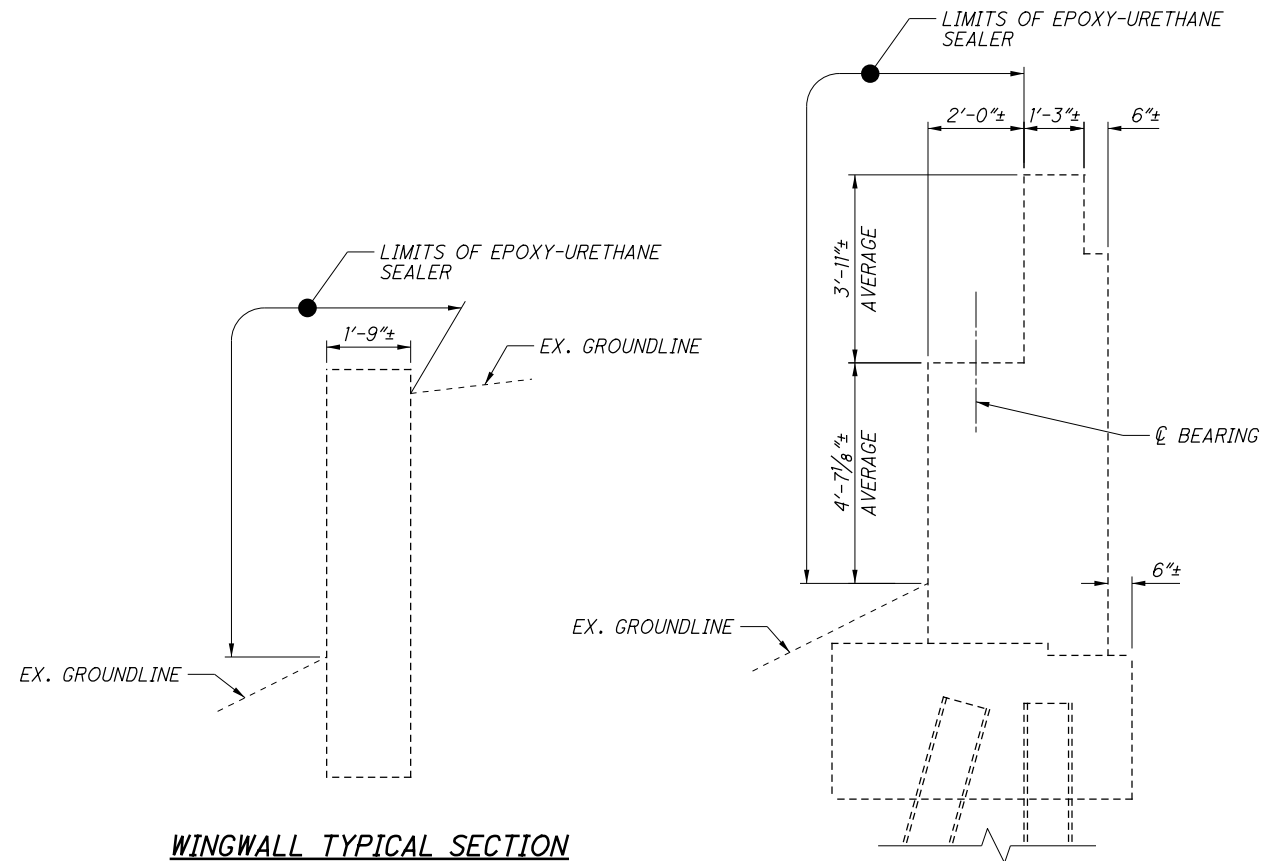
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REAR ABUTMENT - ELEVATION



FORWARD ABUTMENT - ELEVATION



WINGWALL TYPICAL SECTION

ABUTMENT TYPICAL SECTION

LEGEND:

 - ITEM 519 - PATCHING CONCRETE STRUCTURE

ABUTMENT DETAILS
BRIDGE NO. HAN-75-0124OL
I.R. 75 OVER COUNTY ROAD 33

ALL / HAN-75 - 22.66 / 0.00
PID No. 104095

5 / 12

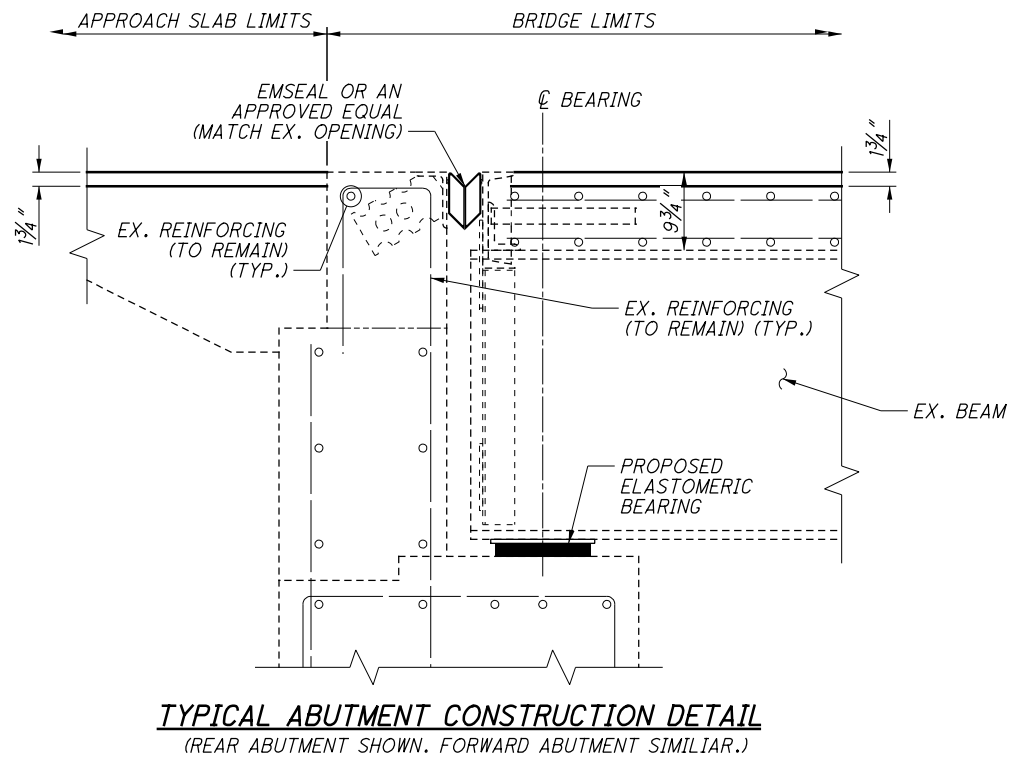
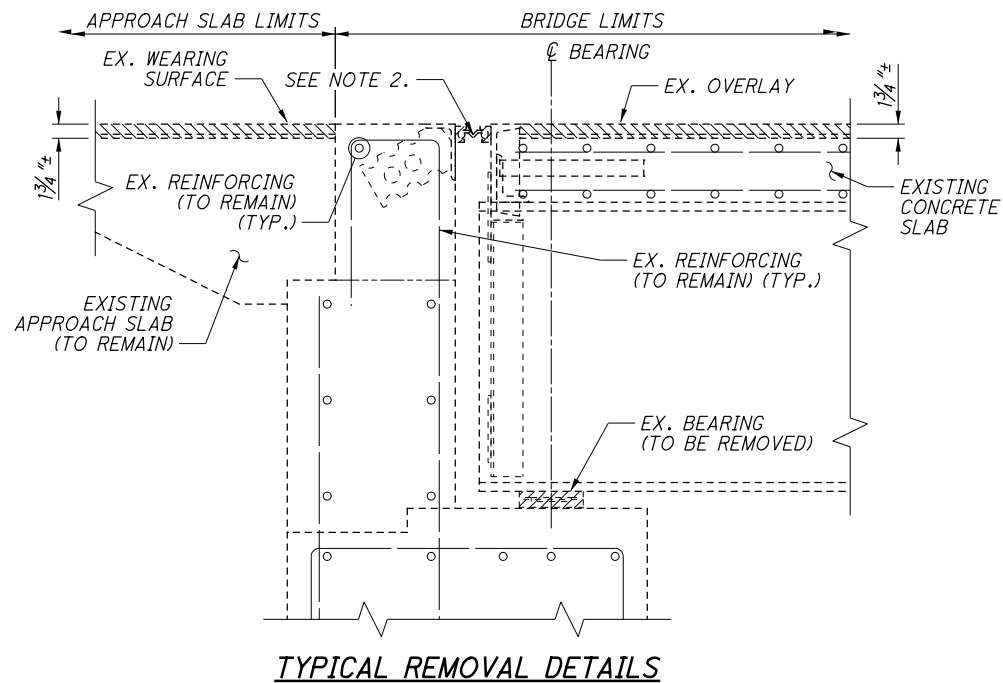
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53

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REVIEWED DATE 3/28/2019
DFT 3/28/2019
STRUCTURE FILE NUMBER 3202259

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TAS

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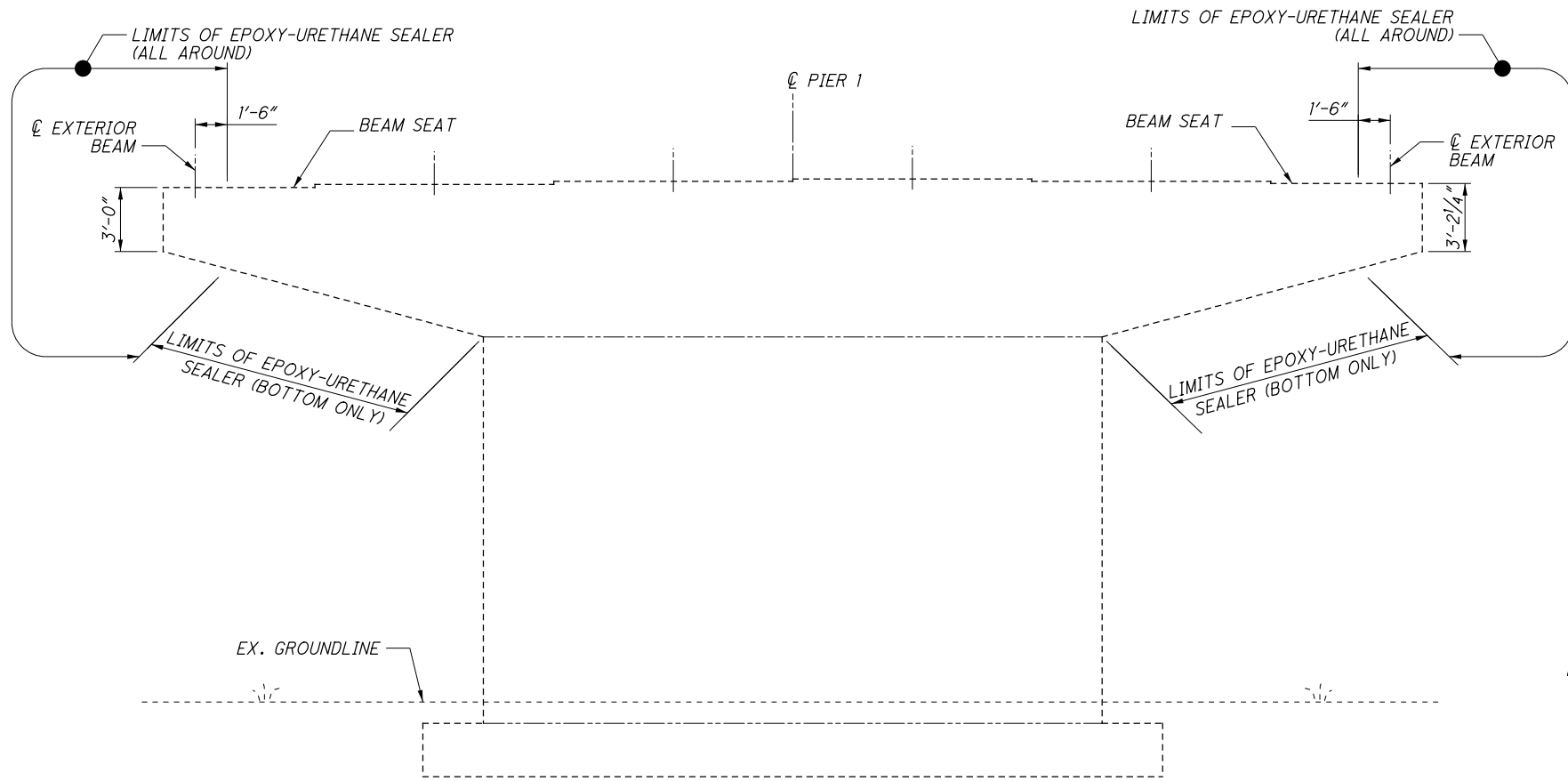
LEGEND:

-  - INDICATES AREAS TO BE REMOVED AS PER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.
-  - INDICATES AREAS TO BE REMOVED AS PER ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED (T=1 3/4\"/>

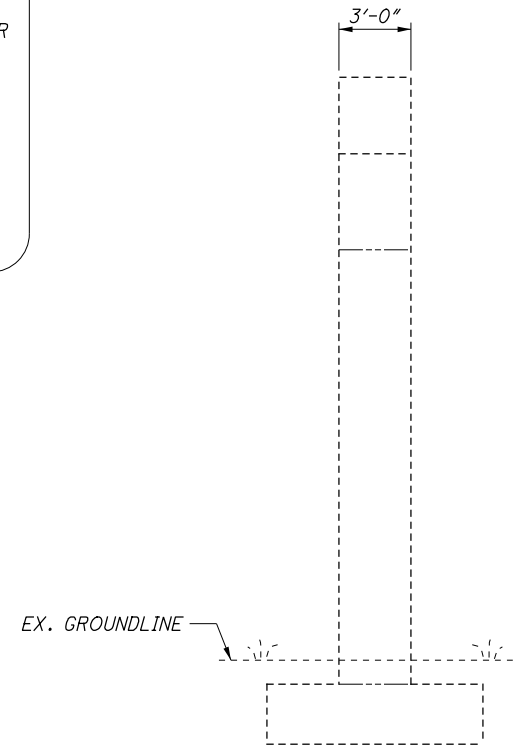
NOTES:

- SEE ODOT STD. DWG. EXJ-4-87 FOR ADDITIONAL EXPANSION JOINT DETAILS.
- THE EXISTING STEEL RETAINERS SHALL BE TORCH CUT FOR REMOVAL. PAYMENT INCLUDED WITH ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

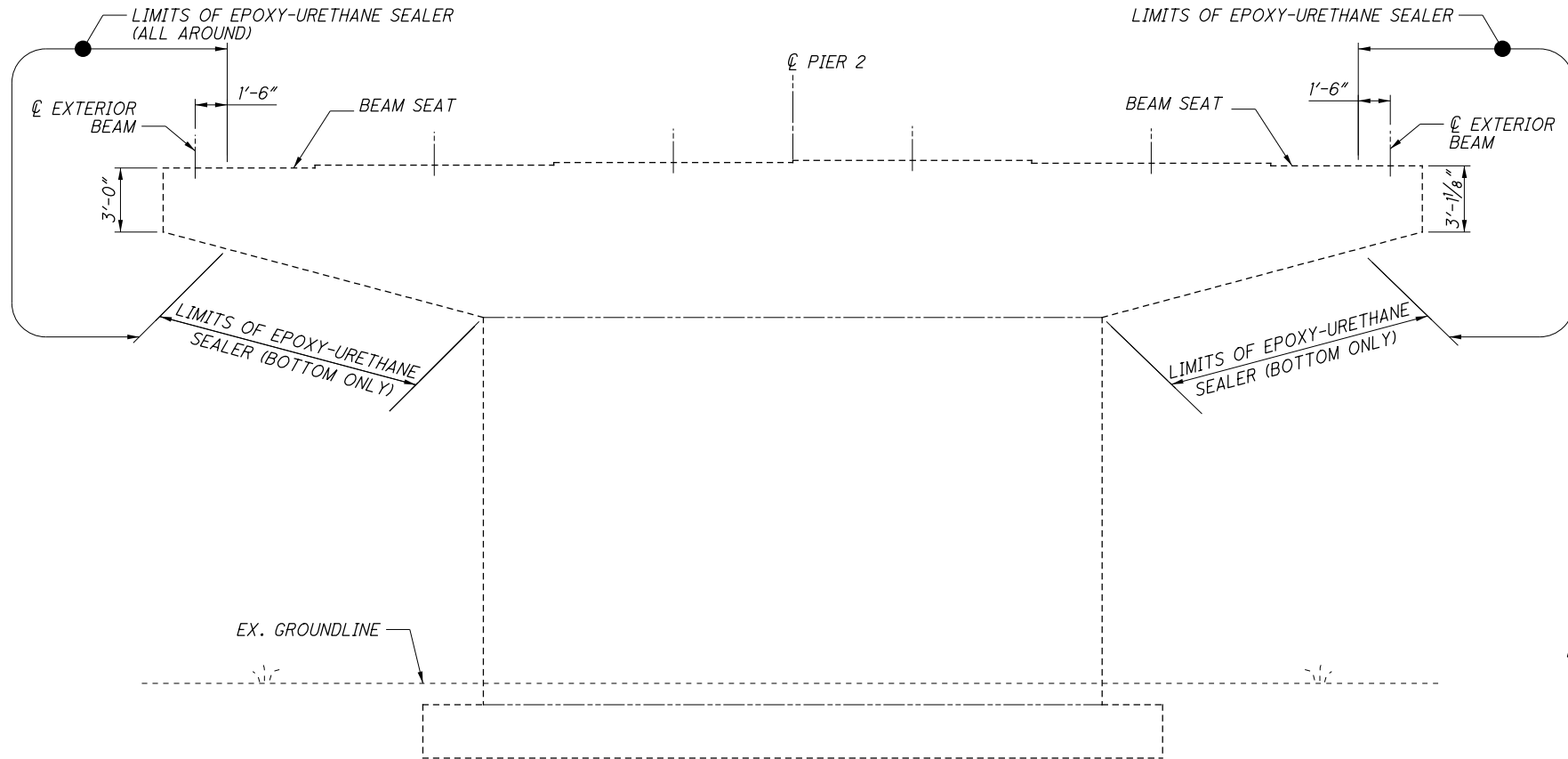
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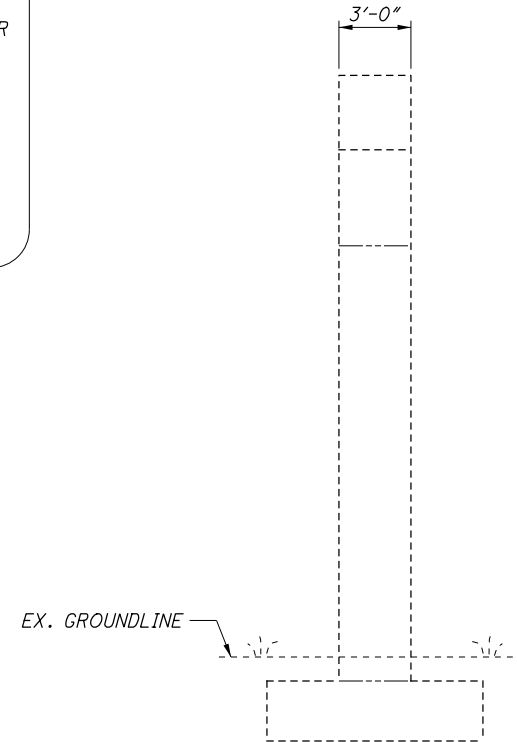
PIER 1 ELEVATION
(LOOKING NORTH)



PIER 1 TYPICAL SECTION



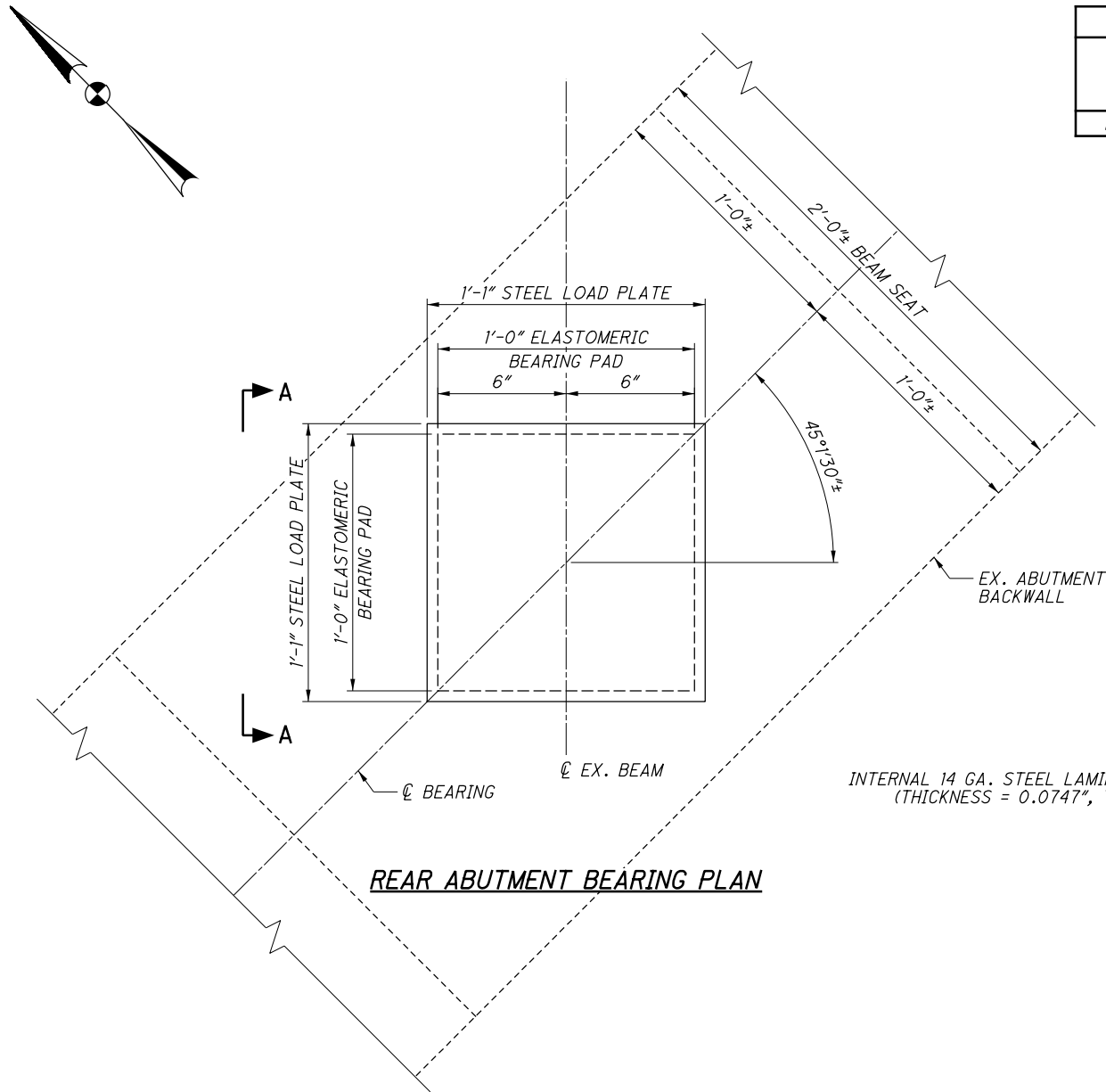
PIER 2 ELEVATION
(LOOKING NORTH)



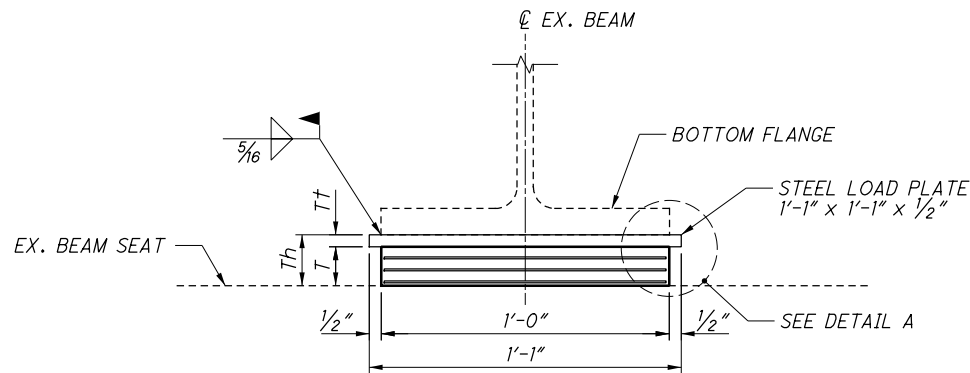
PIER 2 TYPICAL SECTION

NOTES:
1. FOR ADDITIONAL DIMENSIONS, SEE ORIGINAL CONSTRUCTION PLANS.

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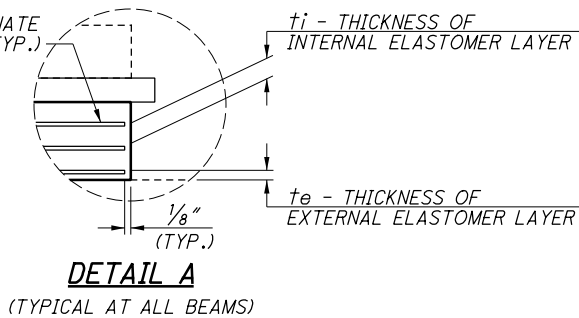
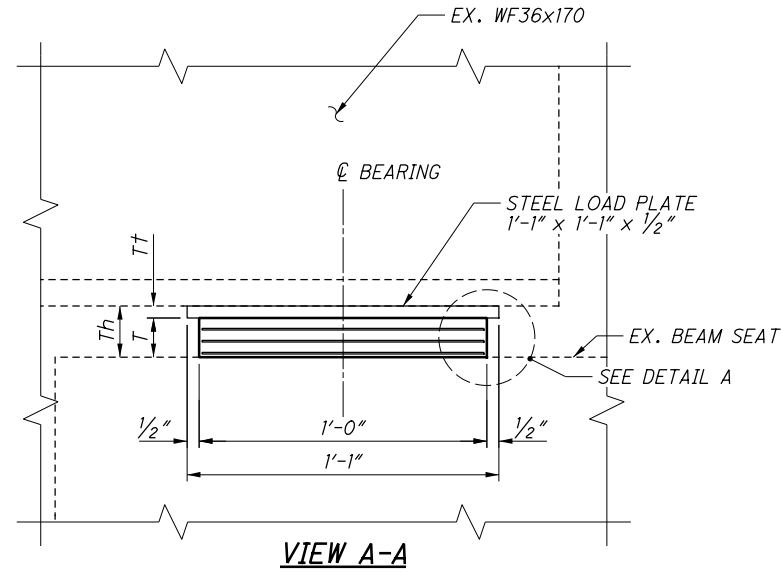


REAR ABUTMENT BEARING PLAN



REAR ABUTMENT BEARING ELEVATION

ELASTOMERIC BEARING DATA																
LOCATION	TYPE	NO. REQ'D.	DL (KIP)	LL W/O IMPACT (KIP)	MAX DESIGN LOAD (DL+LL)	L (IN.)	W (IN.)	ti (IN.)	te (IN.)	NO. OF ti's	NO. OF INTERNAL LAMINATES	T (IN.)	STEEL LOAD PLATE			Th (in.)
													X (IN.)	Y (IN.)	Tt (IN.)	
REAR ABUT.	EXP.	6	34	59	93	12.0	12.0	0.425	0.126	3	3	1.625	13	13	0.5	2.125



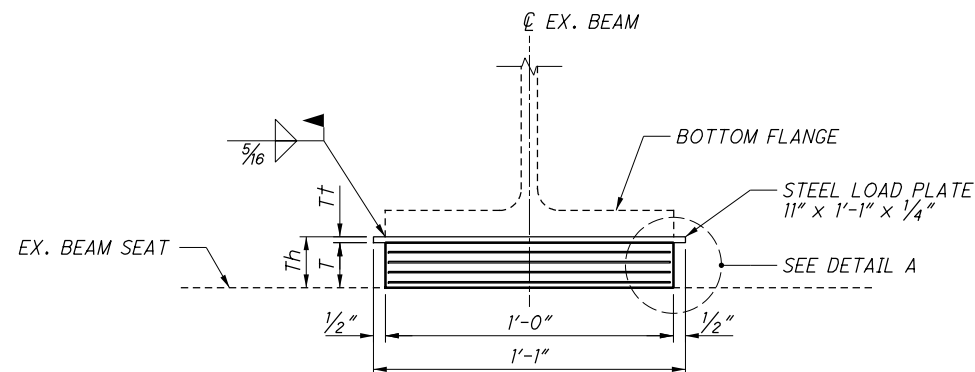
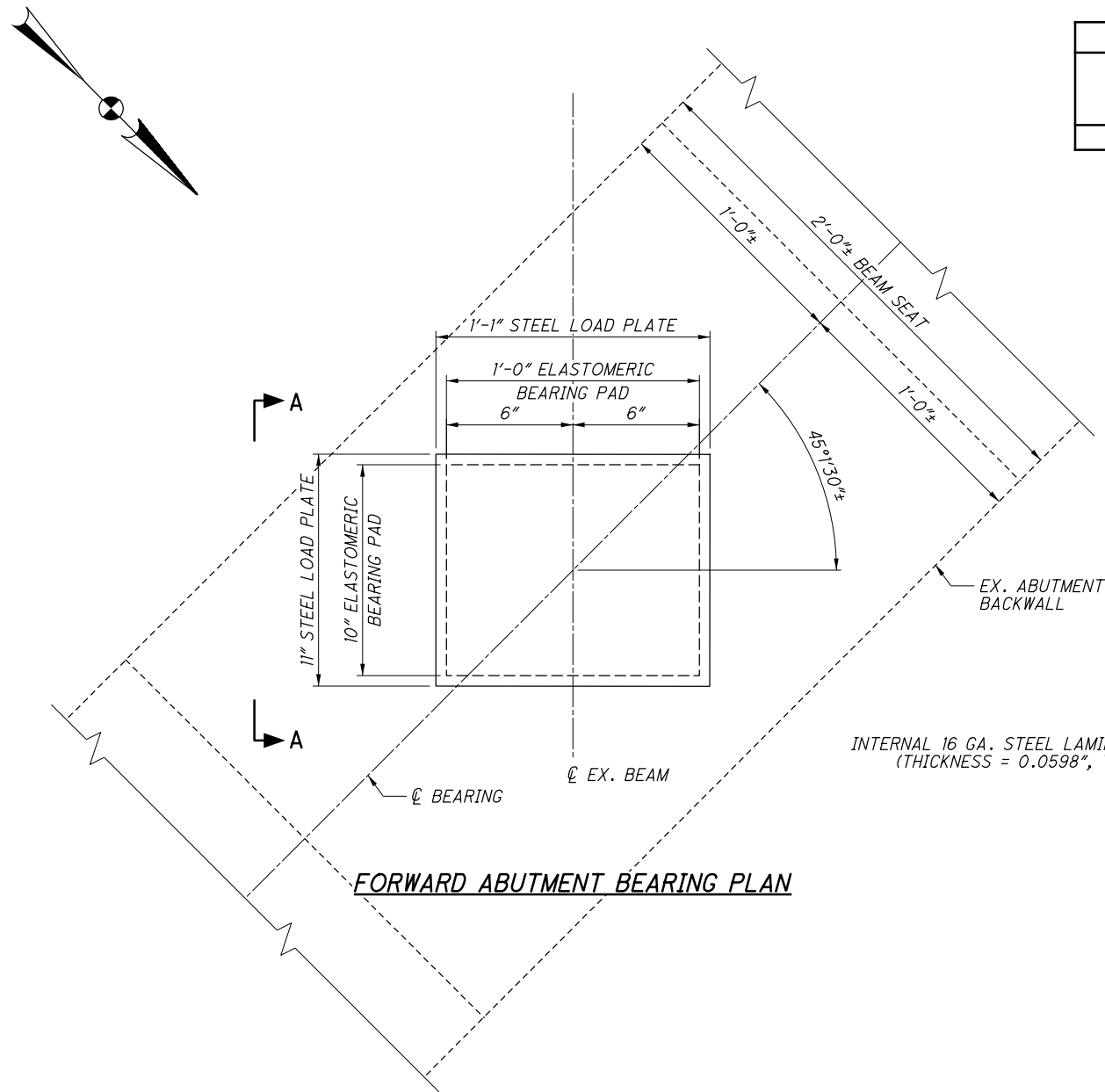
DETAIL A

(TYPICAL AT ALL BEAMS)

NOTES:

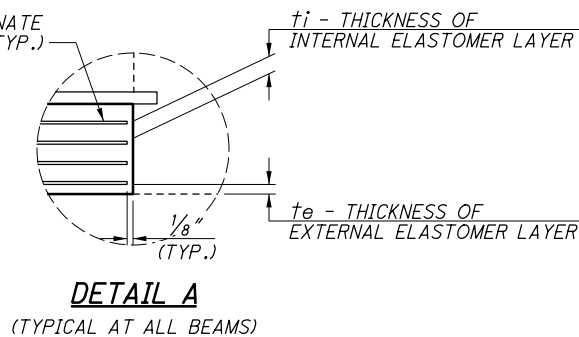
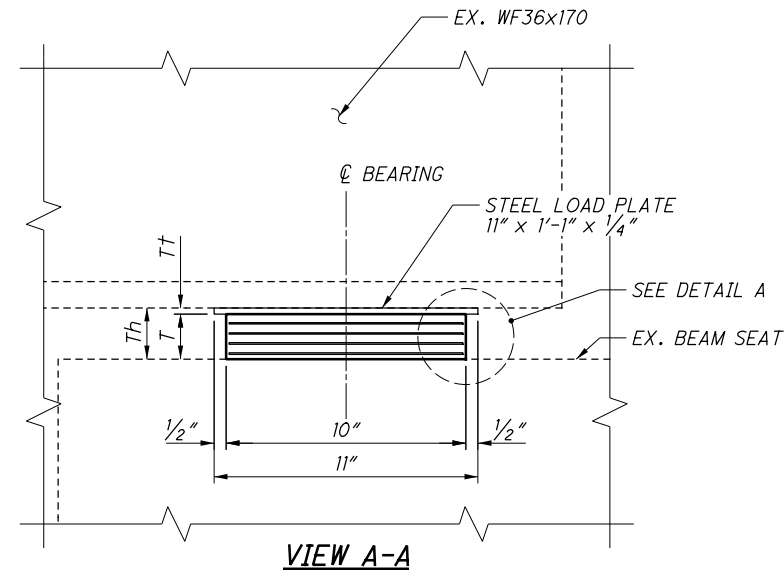
1. THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
2. THE STEEL LOAD PLATES SHALL BE ASTM A709 GRADE 50 STEEL AND PRIME PAINTED IN ACCORDANCE WITH ITEM 513.
3. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCEESS. CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
4. BEARING REPOSITIONING: IF THE BEARING IS INSTALLED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40°F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60°F ± 10°F, RAISE THE BEAMS TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F ± 10°F.
5. TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE. IMPACT IS NOT INCLUDED.
6. BASIS OF PAYMENT: THE UNIT BID PRICE FOR ALL ABUTMENT BEARINGS SHALL INCLUDE THE TOP LOAD PLATE AND ALL MATERIALS, LABOR, TESTING, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12" x 12" x 1.625").
7. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY THE HEIGHT OF THE BEARINGS LOCATED AT THE CENTERLINE OF ABUTMENT BEARING. THE CONTRACTOR SHALL USE THESE DIMENSIONS TO DETERMINE THE PROPOSED HEIGHT OF THE STEEL LOAD PLATE (Tt). THE CONTRACTOR SHALL SUBMIT DIMENSIONS TO THE ENGINEER.

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FORWARD ABUTMENT BEARING ELEVATION

ELASTOMERIC BEARING DATA																
LOCATION	TYPE	NO. REQ'D.	DL (KIP)	LL W/O IMPACT (KIP)	MAX DESIGN LOAD (DL+LL)	L (IN.)	W (IN.)	ti (IN.)	te (IN.)	NO. OF ti's	NO. OF INTERNAL LAMINATES	T (IN.)	STEEL LOAD PLATE			Th (in.)
													X (IN.)	Y (IN.)	Tt (IN.)	
FWD. ABUT.	EXP.	6	34	59	93	10.0	12.0	0.360	0.2	4	4	1.879	11	13	0.25	2.129



NOTES:

1. THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
2. THE STEEL LOAD PLATES SHALL BE ASTM A709 GRADE 50 STEEL AND PRIME PAINTED IN ACCORDANCE WITH ITEM 513.
3. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCEESS. CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
4. BEARING REPOSITIONING: IF THE BEARING IS INSTALLED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40°F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60°F ± 10°F, RAISE THE BEAMS TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F ± 10°F.
5. TOTAL DESIGN LOAD FOR BEARINGS EQUALS THE SUM OF THE DEAD LOADS AND LIVE LOADS TABULATED IN THE BEARING TABLE. IMPACT IS NOT INCLUDED.
6. BASIS OF PAYMENT: THE UNIT BID PRICE FOR ALL ABUTMENT BEARINGS SHALL INCLUDE THE TOP LOAD PLATE AND ALL MATERIALS, LABOR, TESTING, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (10" x 12" x 1.879").
7. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY THE HEIGHT OF THE BEARINGS LOCATED AT THE CENTERLINE OF ABUTMENT BEARING. THE CONTRACTOR SHALL USE THESE DIMENSIONS TO DETERMINE THE PROPOSED HEIGHT OF THE STEEL LOAD PLATE (Tt). THE CONTRACTOR SHALL SUBMIT DIMENSIONS TO THE ENGINEER.

FORWARD ABUTMENT BEARING DETAILS

BRIDGE NO. HAN-75-0124OL
I.R. 75 OVER COUNTY ROAD 33

ALL / HAN-75-22.66 / 0.00

PID No. 104095

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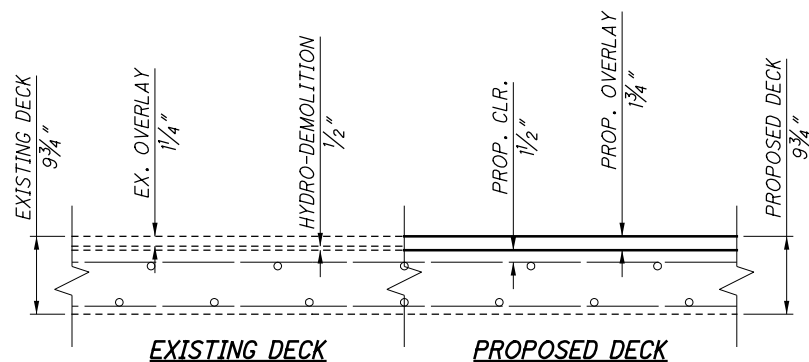
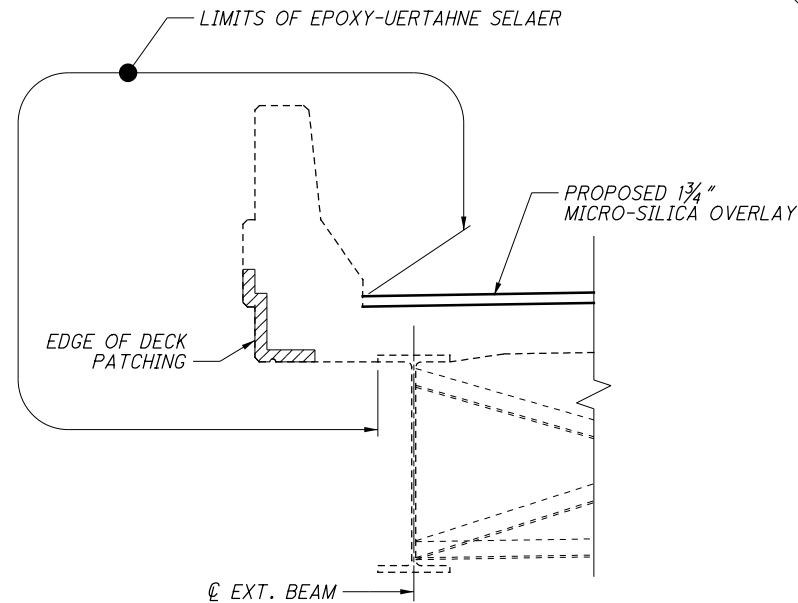
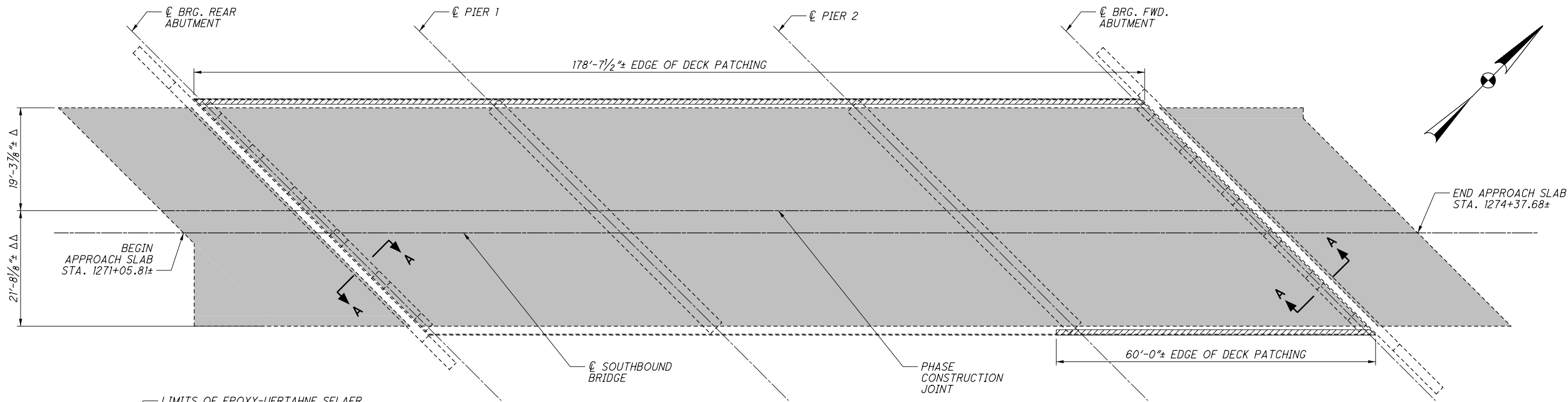
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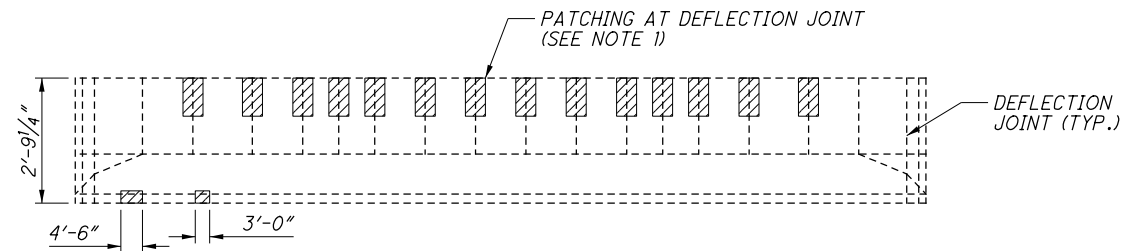
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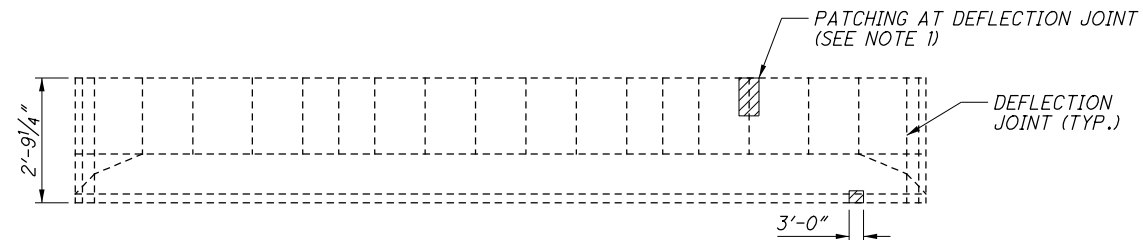
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SUPERSTRUCTURE REPAIR PLAN



LEFT BARRIER ELEVATION
(ROADWAY SIDE SHOWN)
(DRAWING NOT TO SCALE)



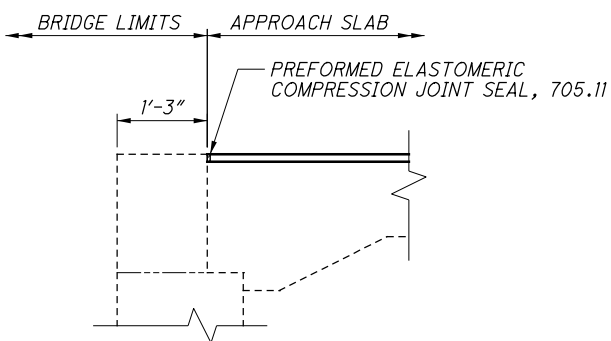
RIGHT BARRIER ELEVATION
(ROADWAY SIDE SHOWN)
(DRAWING NOT TO SCALE)

LEGEND:

- ITEM 519 - PATCHING CONCRETE STRUCTURE
- ITEM 848 - MICRO-SILICA OVERLAY
- PHASE 1 CONSTRUCTION
- PHASE 2 CONSTRUCTION

NOTES:

- EACH BARRIER DEFLECTION JOINT IS ESTIMATED TO REQUIRE 2 SF OF PATCHING.
- FOR ADDITIONAL APPROACH SLAB DETAILS, SEE ODOT STANDARD DRAWINGS AS-1-15.



SECTION A-A

SUPERSTRUCTURE REPAIR DETAILS

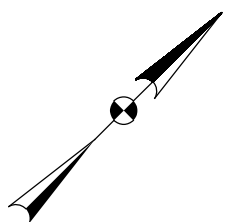
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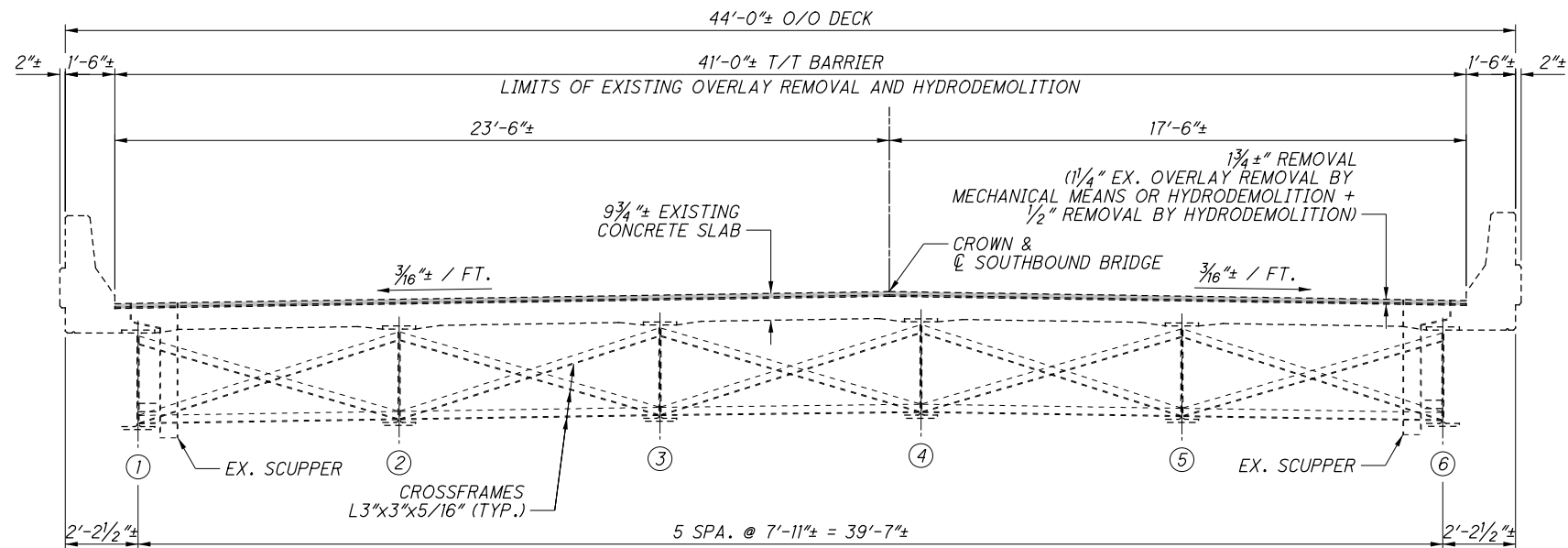
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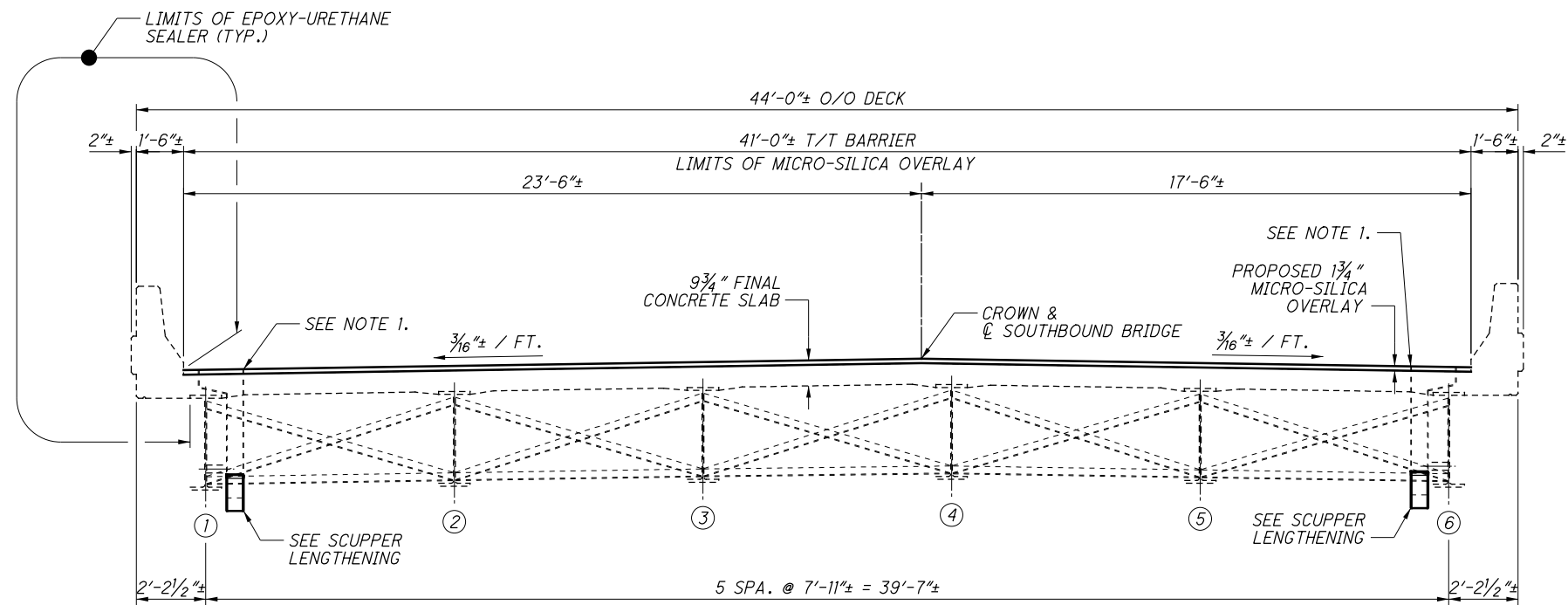
LEGEND:

- ① - BEAM NUMBER
- - BEARING TO BE REMOVED. WELDS SHALL BE REMOVED AND GROUND FLUSH DURING REMOVAL. PAYMENT INCLUDED WITH ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

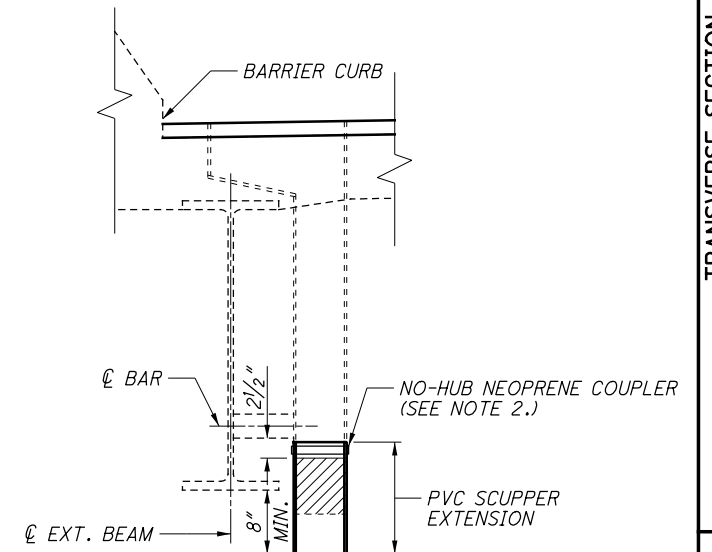
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TRANSVERSE SECTION - REMOVAL



TRANSVERSE SECTION - PROPOSED



SCUPPER LENGTHENING
(8 LOCATIONS)

LEGEND:

- BEAM NUMBER

▨ - INDICATES AREAS TO BE REMOVED AS PER ITEM 518 - SCUPPER LENGTHENING, AS PER PLAN

NOTES:

1. MICRO-SILICA OVERLAY IS TO BE DEPRESSED AROUND THE EXISTING SCUPPERS PER STD. DRW. GSD-I-19.
2. NO-HUB NEOPRENE COUPLER IS TO HAVE BOTH A STAINLESS STEEL SHIELD AND STAINLESS STEEL CLAMP BANDS.

TRANSVERSE SECTION
BRIDGE NO. HAN-75-0124OL
I.R. 75 OVER COUNTY ROAD 33

ALL / HAN-75-22.66 / 0.00
PID No. 104095

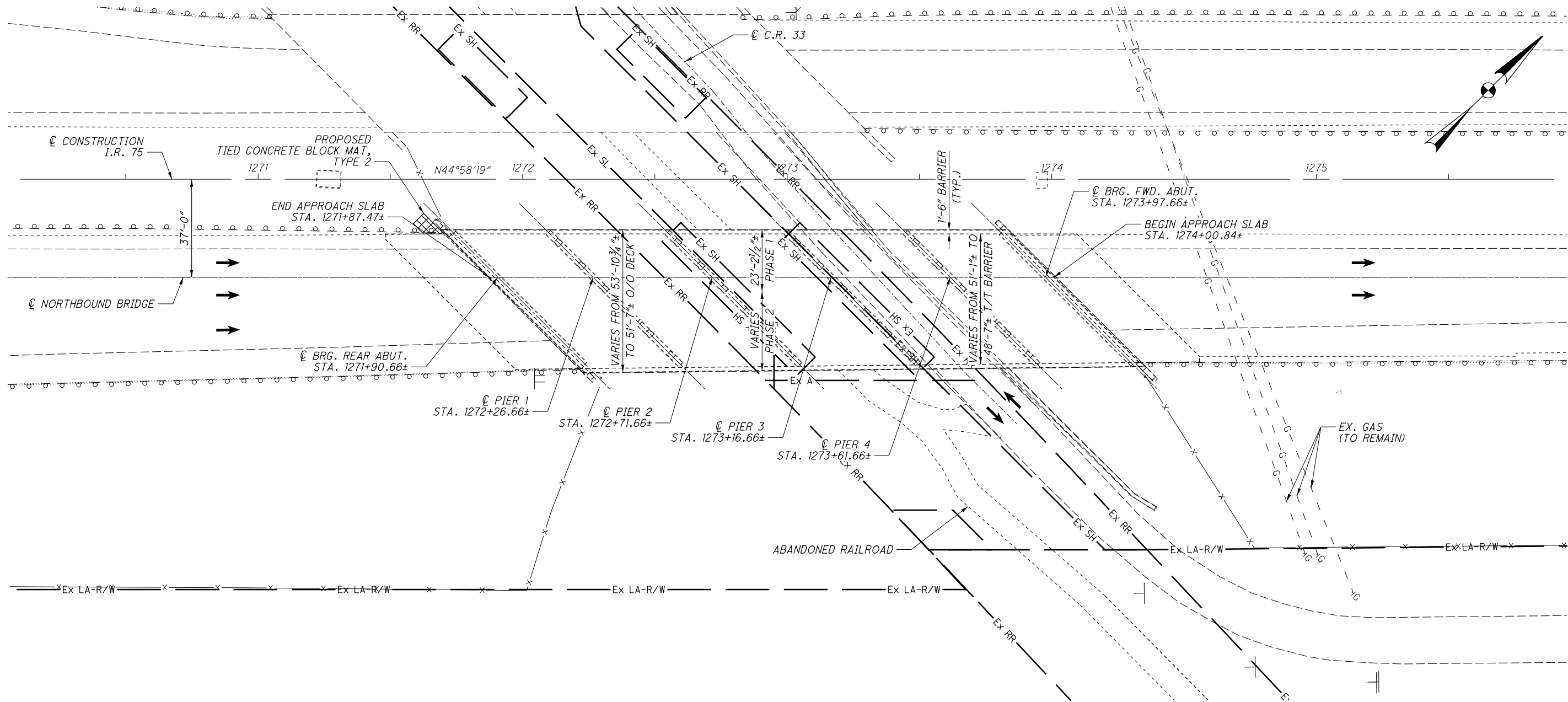
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GENERAL PLAN

PROPOSED WORK

1. REMOVE EXISTING 1" MONOLITHIC WEARING SURFACE USING HYDRO-DEMOLITION ON THE DECK AND APPROACH SLAB.
2. OVERLAY THE DECK AND APPROACH SLABS WITH 1 3/4" MICRO-SILICA OVERLAY.
3. REHABILITATE THE EXTERIOR BEARINGS AT EACH ABUTMENT.
4. REPAIR UNSOUND CONCRETE ON ABUTMENTS, PIERS, EDGE OF DECK, AND BARRIERS BY PATCHING OR BY EPOXY INJECTION.
5. REHABILITATE ONE PIER COLUMN BY WRAPPING WITH CARBON FIBER.
6. SEAL THE FOLLOWING WITH EPOXY-URETHANE SEALER: BARRIERS, DECK EDGES, ABUTMENTS, WINGWALLS, PIERS AS SHOWN IN PLANS AND ANY PATCHED AREAS.
7. INSTALL CONCRETE TIED BLOCK MAT AT REAR ABUTMENT.
8. WORK LISTED IS NOT INCLUSIVE. CONTRACTOR WILL SEQUENCE WORK AS NEEDED.

EXISTING STRUCTURE

TYPE: 5-SPAN CONTINUOUS ROLLED STEEL BEAM WITH NONCOMPOSITE REINFORCED CONCRETE DECK ON CAP AND COLUMN PIERS AND STUB ABUTMENTS

SPANS: 36'-0"±, 45'-0"±, 45'-0"±, 45'-0"±, AND 36'-0"±

ROADWAY: VARIES FROM 51'-1"± TO 48'-7"± T/T BARRIER

LOADING: HS20-44 & ALTERNATE MILITARY LOADING

SKEW: 45°01'30"±

APPROACH SLABS: 25'-0"±

ALIGNMENT: TANGENT

CROWN: 3/16"±/FT

STRUCTURAL FILE NUMBER: 3202283

DATE BUILT: 1954

DISPOSITION: TO BE REHABILITATED

COORDINATES: LATITUDE 40° 53' 45.59" N
LONGITUDE 83° 51' 44.41" W

 E.L. ROBINSON ENGINEERING 1801 Watermark Drive, Suite 310 • Columbus, Ohio 43215 www.elrobinsonengineering.com	DATE 3/28/2019	DESIGNED TAS	HANCOCK COUNTY STA. 1271+87.47± STA. 1274+00.84±	GENERAL PLAN BRIDGE NO. HAN-75-01240R I.R. 75 OVER COUNTY ROAD 33	ALL / HAN-75-22.66 / 0.00	PID No. 104095
	REVIEWED DFT	DRAWN TAS	CHECKED CJW			
STRUCTURE FILE NUMBER 3202283			1 / 11			
			43 / 53			

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD DRAWINGS:

DM-4.1 REVISED 07-20-18

AND REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

848 DATED 01-20-17

AND REFER TO THE FOLLOWING PROPOSAL NOTES:

519 DATED 07-21-17

555 DATED 10-20-17

DECK PROTECTION METHOD

MICRO-SILICA MODIFIED CONCRETE OVERLAY

EXISTING BRIDGE PLANS

EXISTING STRUCTURE PLANS MAY BE VIEWED BY PROSPECTIVE BIDDERS AT THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 1 OFFICE, 1885 NORTH MCCULLOUGH ST., LIMA, OHIO 45801. PHONE: (419) 222-9055

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 AND 105.02.

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 THAT HAVE BEEN VERIFIED IN THE FIELD.

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

ALL EXPOSED SURFACES OF ABUTMENTS, WINGWALLS, BARRIERS, DECK EDGES, PIERS AS SHOWN IN PLANS, ANY PATCHED AREAS, AND ANY AREAS WRAPPED WITH A COMPOSITE FIBER WRAP SYSTEM SHALL BE SEALED AS SHOWN IN THE PLANS.

ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES

WORK SHALL CONSIST OF REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES IN AREAS TO BE SEALED. COATINGS MAY INCLUDE EXISTING GRAFFITI.

THE SURFACE AREA PAY QUANTITY SHALL BE BASED ON 25% OF THE TOTAL AREA TO BE SEALED WITH EPOXY-URETHANE SEALER ON THE ABUTMENTS AND PIERS.

ITEM 516 - REFURBISHING BEARING DEVICES. AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (C&MS 711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60° F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

ITEM 519 - COMPOSITE FIBER WRAP SYSTEM

REFER TO ODOT PROPOSAL NOTE 519 FOR ITEM SPECIFICATIONS NOT GIVEN HEREIN.

THE COMPOSITE FIBER WRAP SYSTEM SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

COMPOSITE LAMINATE PROPERTIES		
PROPERTY	DESIGN VALUE	ASTM TEST METHOD
ULTIMATE TENSILE STRENGTH IN PRIMARY FIBER DIRECTION	60,000 PSI, MINIMUM	D3039
TENSILE MODULUS	5,000,000 PSI, MINIMUM	D3039
LAMINATE THICKNESS	0.04 IN., MINIMUM	

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE. AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURE. AS PER PLAN

PATCHING HAS BEEN ESTIMATED FOR THE PIERS, ABUTMENTS, PARAPETS, AND EDGE OF DECK. AN ADDITIONAL 25% CONTINGENCY HAS BEEN ADDED TO THE FIELD MEASURED PATCHING AREAS TO ALLOW FOR ADDITIONAL AREAS OF DETERIORATION. EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED AND MARKED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 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.

ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION. AS PER PLAN

ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION. AS PER PLAN

ITEM 848 - HAND CHIPPING. AS PER PLAN

ITEM 848 - TEST SLAB. AS PER PLAN

ITEM 848 - FULL DEPTH REPAIR. AS PER PLAN

THESE ITEMS SHALL BE PERFORMED PER SUPPLEMENTAL SPECIFICATION 848, "BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRODEMOLITION," ON HAN-75-01240R AND THE APPROACH SLABS WITH THE FOLLOWING REVISIONS:

A) THE THICKNESS OF THE CONCRETE OVERLAY REMOVED, PROPOSED OVERLAY, AND DEPTH OF HYDORDEMOLITION SHALL BE AS SPECIFIED IN THE PLANS.

B) CONSTRUCTION JOINTS WILL NOT BE PERMITTED IN THE WHEEL LINE.

C) ADDITIONAL TEST SLABS WILL BE REQUIRED INACCORDANCE WITH SS848 IF A PERIOD OF 30 DAYS OR MORE HAS ELAPSED SINCE THE POURING OF THE TEST SLAB OR IF THERE IS A 30+ DAY LAG IN THE STAGED OVERLAYS OF HAN-75-01240R. AN ADDITIONAL TEST SLAB SHALL BE REQUIRED FOR EACH 30 DAY TIME PERIOD THAT ELAPSES.

D) THE MAXIMUM AMOUNT OF OVERLAY MATERIAL TO BE CARRIED BY ANY ONE VEHICLE DURING THE OVERLAY PROCESS IS 6 CY.

E) THE REMOVAL OPERATIONS SHALL NOT BEGIN IF SUSTAINED RAINS (5 HOURS OR MORE WITH BREAKS BETWEEN SHOWERS LESS THAN 1½ HOURS) ARE PREDICTED WITHIN 48 HOURS OF COMMENCEMENT.

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

G) HAND CHIPPING IS FOR THE PURPOSE OF CHIPPING AREAS WHERE THE HYRDODEMOLITION MACHINE DOES NOT HAVE ACCESS. HAND CHIPPING SHALL ALSO BE USED TO REMOVE AREAS IDENTIFIED AS UNSOUND DURING THE FINAL SOUNDING.

H) 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 THE CURING MATERIAL 705.07, TYPE 1 OR 1D, AS PER CMS 511.14, METHOD B MEMBRANE CURING. THE DECK SURFACE MUST BE DRY PRIOR TO THE PLACEMENT OF THE CURING MATERIAL.

I) 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 PSI.

J) 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 9:30 AM.

K) FOR EACH POUR, 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 BEAMUNTIL THE MODULUS OF RUPTURE OF TWO TEST IS NOT LESS THAN 600 PSI.

L) IT IS REQUIRED THAT THE DECK GROOVING AND PERMANENT STRIPING BE PREFORMED IN THE SAME WORK PERIOD AS THE OVERLAY, PRIOR TO THE RE-OPENING OF THE BRIDGE TO TRAFFIC.

M) SEALING OF JOINTS MAY BE DONE UNDER A SEPARATE CLOSURE, AS LONG AS THE DURATIONS AND TERMS ARE MET AS OUTLINED IN THE MAINTENANCE OF TRAFFIC NOTES.

BASED UPON THE GROUND PENETRATING RADAR DECK IMAGE, IT IS ANTICIPATED THAT SOME FULL DEPTH REPAIRS WILL BE REQUIRED. IN ACCORDANCE WITH SS848, THE CONTRACTOR SHALL PROVIDE FALSE WORK, WITH THE APPROPRIATE PROTECTIONS, BELOW THE BRIDGE DECK TO CONTAIN ANY DEBRIS AND WASTE WATER. THE FALSE WORK SHALL BE SLOPED TO CHANNEL WASTE WATER FROM ANY FULL DEPTH REMOVALS TO AN APPROPRIATE CONTAINER THAT WILL PREVENT DISCHARGE OF EFFLUENT.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL EQUIPMENT, TOOLS, MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO PERFORM THE WORK AS AS STATED ABOVE. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR THE ITEMS OF WORK ESTABLISHED IN SS848.

ABBREVIATIONS:

ABUT. - ABUTMENT ADT - AVERAGE DAILY TRAFFIC ADTT - AVERAGE DAILY TRUCK TRAFFIC APPR. - APPROACH B - BOTTOM B - BASELINE B.F. - BACK FACE BM - BENCHMARK BOT. OR BTM. - BOTTOM BRG. - BEARING C - CENTERLINE C/C - CENTER TO CENTER C.I.P. - CAST-IN-PLACE C.J. - CONSTRUCTION JOINT CLR. - CLEAR CMS - CONSTRUCTION AND MATERIAL SPECIFICATIONS CONC. - CONCRETE CONSTR. - CONSTRUCTION CVN - CHARPY V-NOTCH DIA. - DIAMETER DIM. - DIMENSION DWG. - DRAWING E - EAST EB - EASTBOUND E.F. - EACH FACE EL. OR ELEV. - ELEVATION EOP - EDGE OF PAVEMENT EQ. - EQUAL EST. - ESTIMATED EX. - EXISTING EXP. - EXPANSION F.A. - FORWARD ABUTMENT F/F - FACE TO FACE F.F. - FRONT FACE F.S. - FIELD SPLICE FT. - FOOT OR FEET FWD. - FORWARD HMWM - HIGH MOLECULAR WEIGHT METHACRYLATE HW - HIGH WATER IN. - INCH JT. - JOINT L.F. - LEFT FORWARD LF - LINEAR FEET LT. - LEFT MAX. - MAXIMUM MIN. - MINIMUM	MISC. - MISCELLANEOUS MSE - MECHANICALLY STABILIZED EARTH N - NORTH NB - NORTHBOUND NO. - NUMBER N.P.C.P.P. - NON-PERFORATED CORRUGATED PLASTIC PIPE OHWM - ORDINARY HIGH WATER MARK O/O - OUT TO OUT P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE P.E.J.F. - PREFORMED EXPANSION JOINT FILLER PROP. - PROPOSED PSF - POUNDS PER SQUARE FOOT P.V.I. - POINT OF VERTICAL INTERSECTION Q - FLOW RATE R - RADIUS R.A. - REAR ABUTMENT RCP - ROCK CHANNEL PROTECTION REQD. - REQUIRED R.F. - RIGHT FORWARD R.R. - RAILROAD RT. - RIGHT R/W - RIGHT OF WAY S - SOUTH SB - SOUTHBOUND SDC - SUPERPLASTICIZED DENSE CONCRETE SER. - SERIES SHLDR - SHOULDER SPA. - SPACE OR SPACES SQ FT - SQUARE FEET STA. - STATION STD. - STANDARD STR - STRAIGHT T - TOP T&B - TOP & BOTTOM TBR - TO BE REMOVED TEMP. - TEMPORARY T.O.S. OR T/S - TOP OF SLOPE T/T - TOE TO TOE TYP. - TYPICAL U.N.O. - UNLESS NOTED OTHERWISE VAR. - VARIES V - VELOCITY W - WEST WB - WESTBOUND WWR - WELDED WIRE REINFORCEMENT
--	---

E.L. ROBINSON

ENGINEERING

1801 Watermark Drive, Suite 310 • Columbus, Ohio 43215

www.elrobinsonengineering.com

REVIEWED

DATE

DFT

3/28/2019

DRAWN

TAS

REVIEWED

-

DESIGNED

TAS

CHECKED

CJW

GENERAL NOTES

BRIDGE NO. HAN-75-01240R

I.R. 75 OVER COUNTY ROAD 33

ALL / HAN-75 - 22.66 / 0.00

PID No. 104095

2 / 11

44

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MADE BY: TAS		DATE: 3/26/2019		ESTIMATED QUANTITIES						STRUCTURAL FILE NUMBER: 3202283			
CHECKED BY: MGB		DATE: 3/28/2019											
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	REFERENCE SHEET NO.				
512	10100	583	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	99	59	425						
512	10600	30	FT	CONCRETE REPAIR BY EPOXY INJECTION	6	24							
512	74000	40	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	25	15							
516	31000	141	FT	JOINT SEALER (0.5" x 1.75" HOT APPLIED)				141					
516	45305	4	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	4				2 OF 11				
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		2 OF 11				
SPECIAL	51900100	217	SF	COMPOSITE FIBER WRAP SYSTEM		217							
519	11101	427	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	157	100	170		2 AND 6 OF 11				
601	21061	5	SY	TIED CONCRETE BLOCK MAT, TYPE 2, AS PER PLAN	5				5 OF 11				
848	10001	1,456	SY	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (T=1.75")			1,180	276	2 OF 11				
848	20001	1,456	SY	SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN			1,180	276	2 OF 11				
848	30000	34	CY	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			33	1					
848	50001	60	SY	HAND CHIPPING, AS PER PLAN			59	1	2 OF 11				
848	50101	LUMP		TEST SLAB, AS PER PLAN			LUMP	LUMP	2 OF 11				
848	50201	7	CY	FULL DEPTH REPAIR, AS PER PLAN			7		2 OF 11				

3

11

ALL / HAN-75-22.66 / 0.00

PID No. 104095

ESTIMATED QUANTITIES

BRIDGE NO. HAN-75-0124OR

I.R. 75 OVER COUNTY ROAD 33

DESIGNED

TAS

CHECKED

CJW

DRAWN

TAS

REVISED

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REVIEWED

DFT

STRUCTURE FILE NUMBER

3202283

DATE

3/28/2019

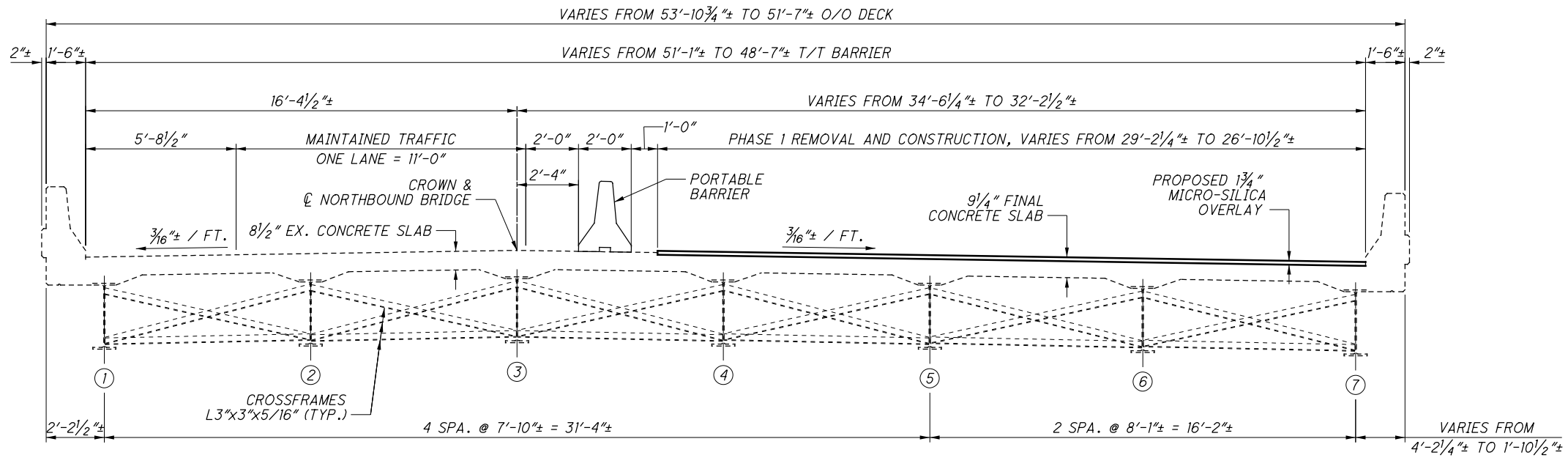
E.L. ROBINSON

ENGINEERING

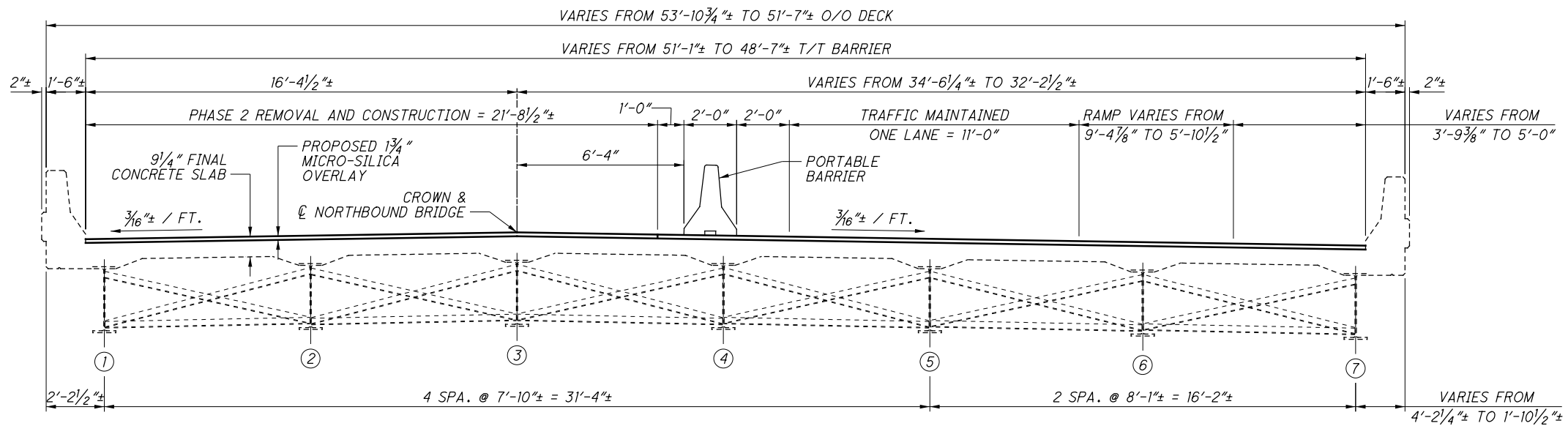
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PHASE 1 - REMOVAL & CONSTRUCTION



PHASE 2 - REMOVAL & CONSTRUCTION

LEGEND:

- BEAM NUMBER

PHASED CONSTRUCTION DETAILS

BRIDGE NO. HAN-75-01240R
I.R. 75 OVER COUNTY ROAD 33

ALL / HAN-75-22.66 / 0.00

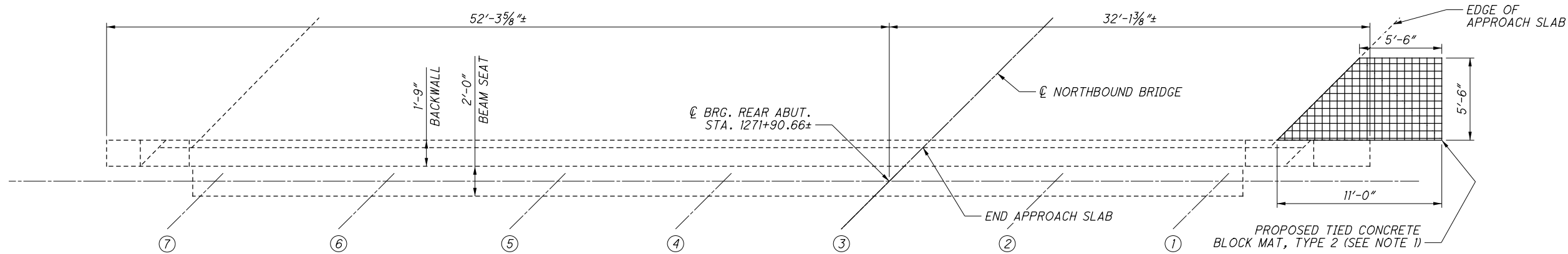
PID No. 104095

4 / 11

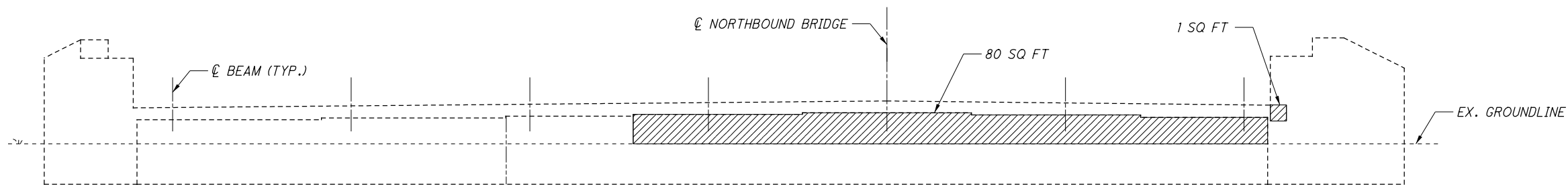
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DESIGNED	TAS	CHECKED	CJW
DRAWN	TAS	REVISED	-
REVIEWED	DFT	STRUCTURE FILE NUMBER	3202283
DATE	3/28/2019		

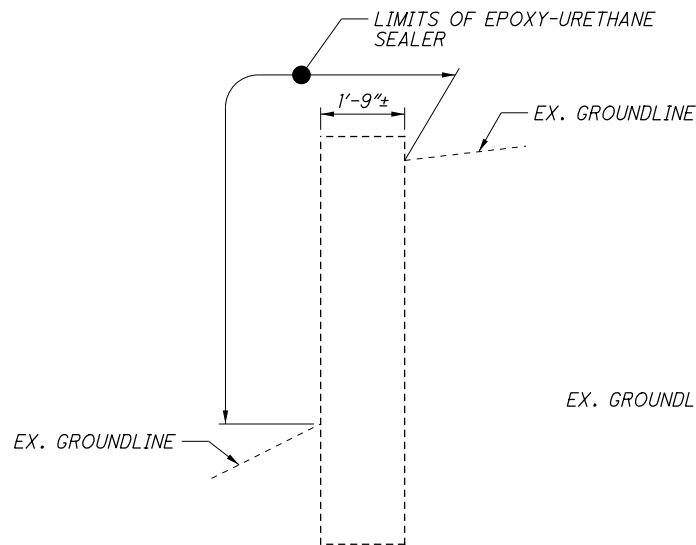
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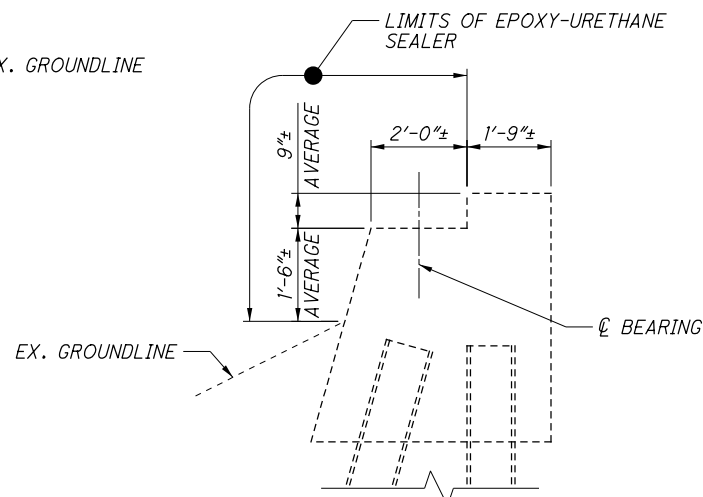
REAR ABUTMENT PLAN



REAR ABUTMENT ELEVATION



WINGWALL TYPICAL SECTION



ABUTMENT TYPICAL SECTION

LEGEND:

- ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN
- BEAM NUMBER

NOTES:

- ITEM 601, TIED CONCRETE BLOCK MAT, TYPE 2, AS PER PLAN SHALL INCLUDE REPAIR OF THE SLOPE AROUND THE SOUTHWEST ABUTMENT CORNER TO MAKE THE SLOPE FLUSH WITH THE ROADWAY SURFACE AND TO DIVERT DRAINAGE AWAY FROM THE ABUTMENT BACKWALL. SEE ODOT STANDARD DRAWING DM-4.1 FOR ADDITIONAL DETAILS.

REAR ABUTMENT DETAILS
BRIDGE NO. HAN-75-0124OR
I.R. 75 OVER COUNTY ROAD 33

ALL / HAN-75-22.66 / 0.00
PID No. 104095

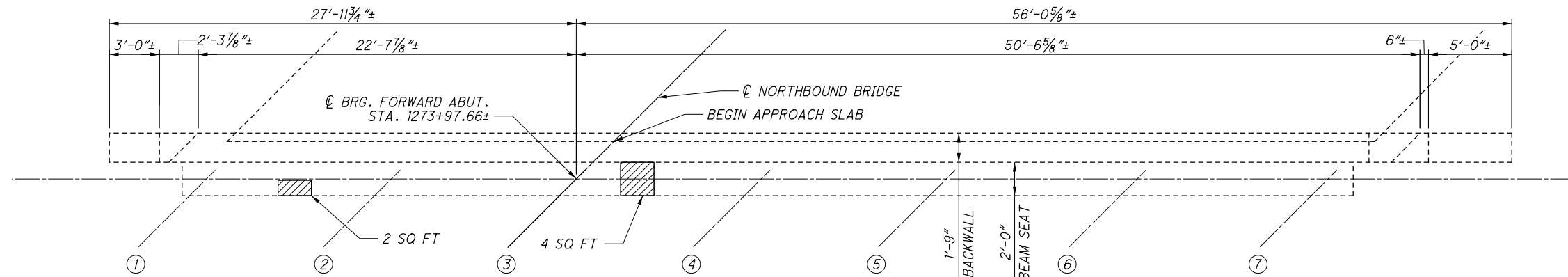
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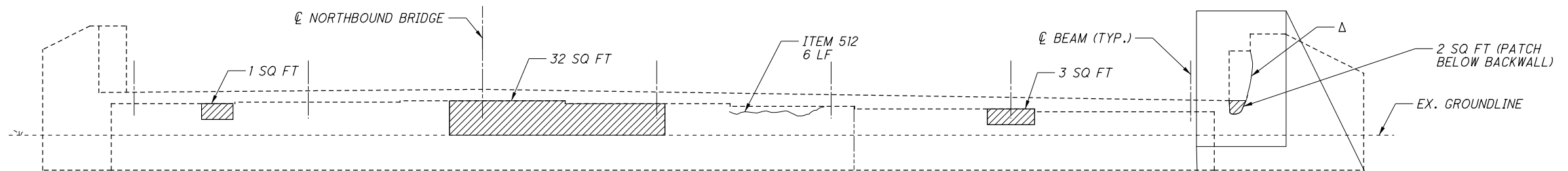
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DESIGNED	TAS	CHECKED	CJW
DRAWN	FIB/TAS	REVIEWED	DFT
DATE	3/28/2019	STRUCTURE FILE NUMBER	3202283

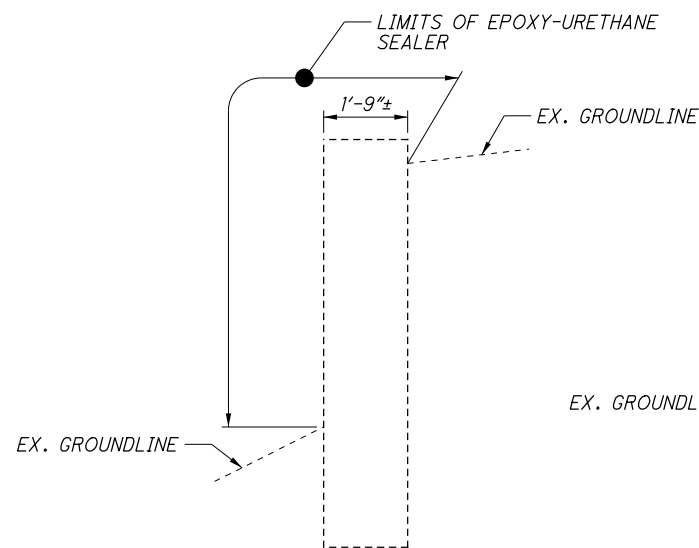
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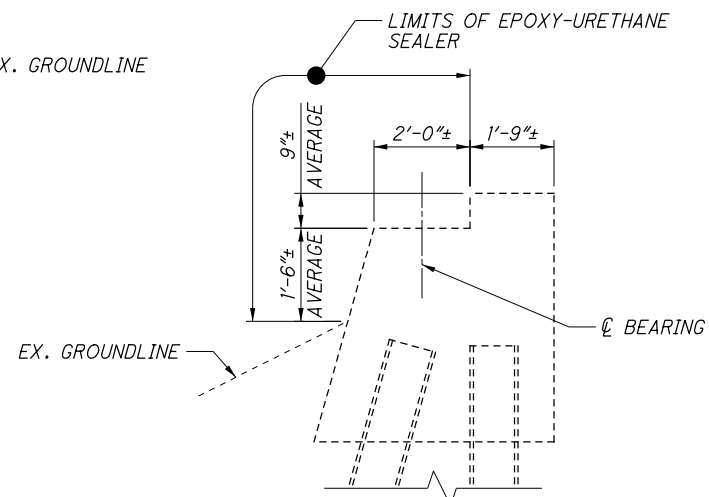
FORWARD ABUTMENT PLAN



FORWARD ABUTMENT ELEVATION



WINGWALL TYPICAL SECTION



ABUTMENT TYPICAL SECTION

LEGEND:

- ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN
- BEAM NUMBER
- REMOVE SPALLED CONCRETE ABOVE BACKWALL TO THE SATISFACTION OF THE ENGINEER. EXPOSED REBAR SHALL BE BLAST CLEANED TO REMOVE ANY RUST AND THEN PAINTED WITH A ZINC RICH PAINT. REMAINING EXPOSED CONCRETE SHALL BE SEALED WITH EPOXY-URETHANE SEALER. CONCRETE REMOVAL AND REBAR CLEANING AND PAINTING SHALL BE PAID FOR UNDER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.



FORWARD ABUTMENT DETAILS

BRIDGE NO. HAN-75-01240R
I.R. 75 OVER COUNTY ROAD 33

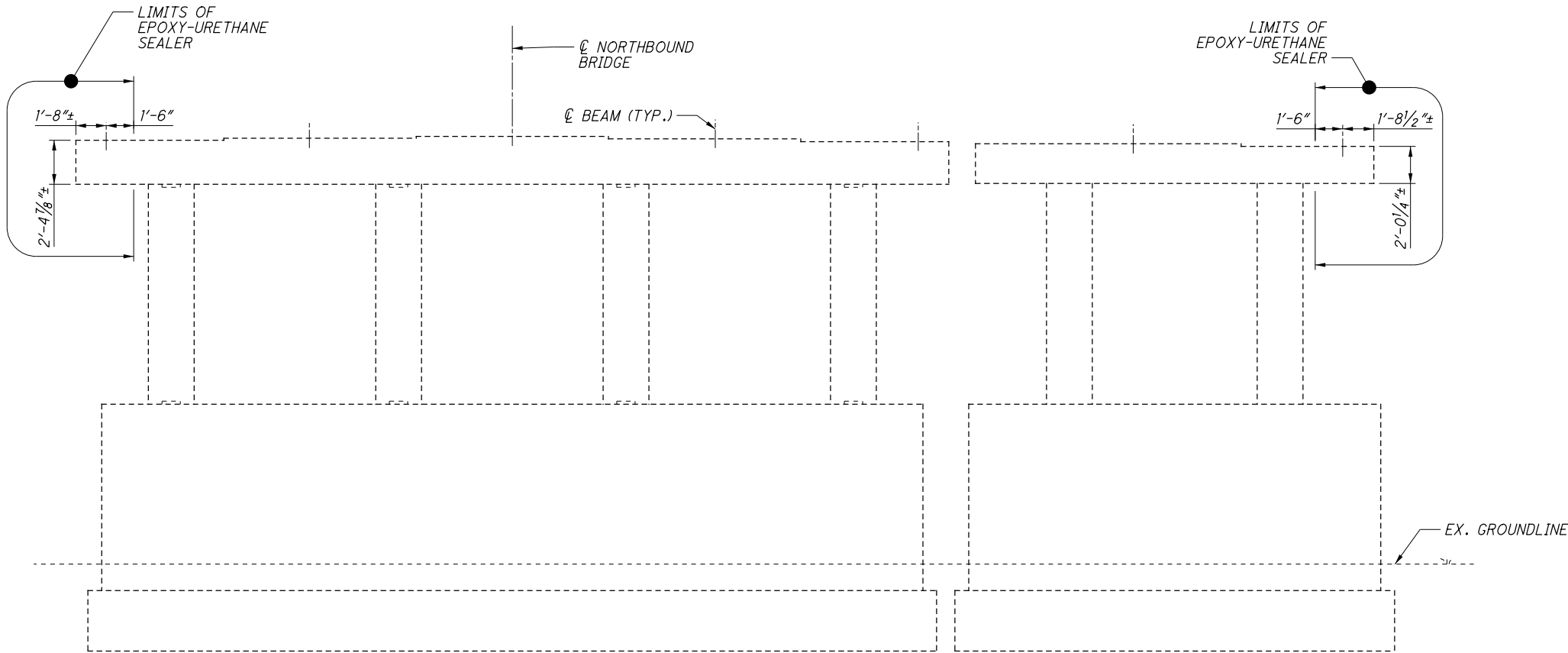
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PID No. 104095

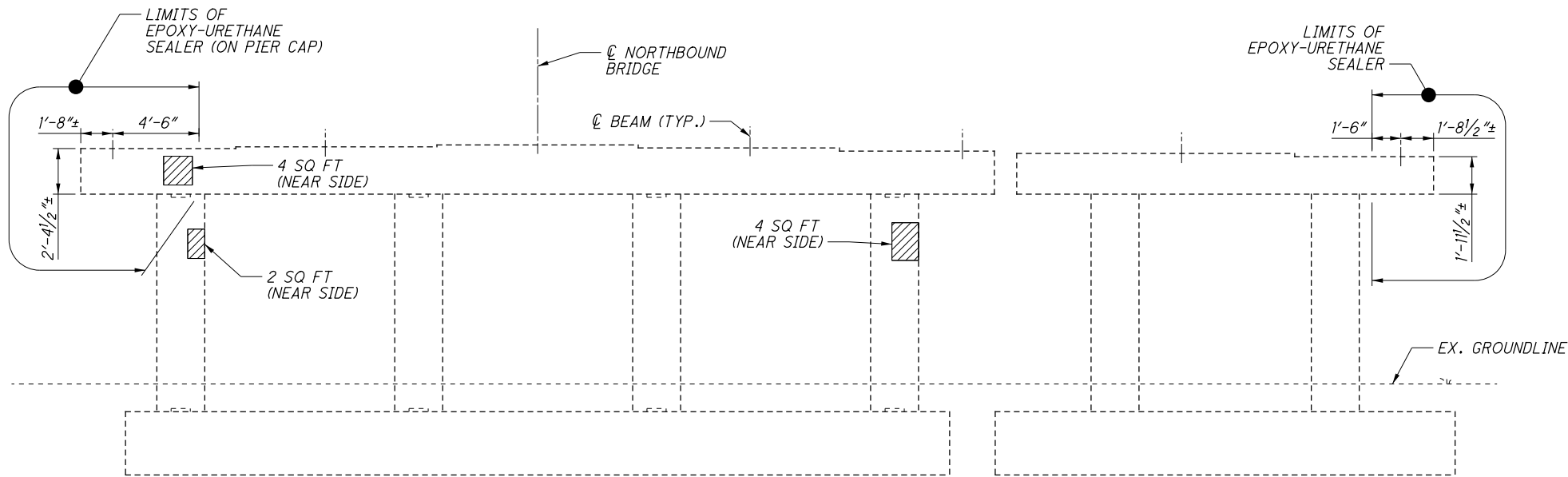
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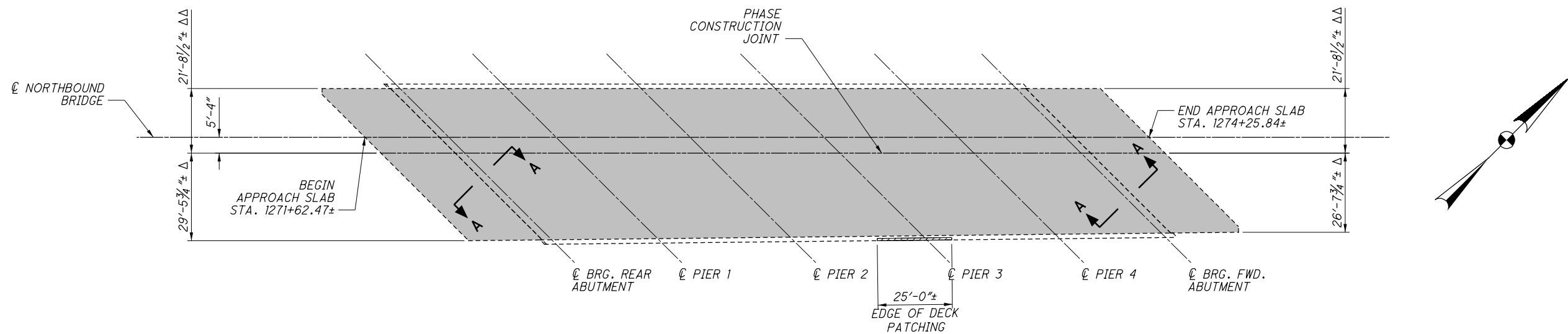
PIER 3 ELEVATION
(LOOKING NORTH)



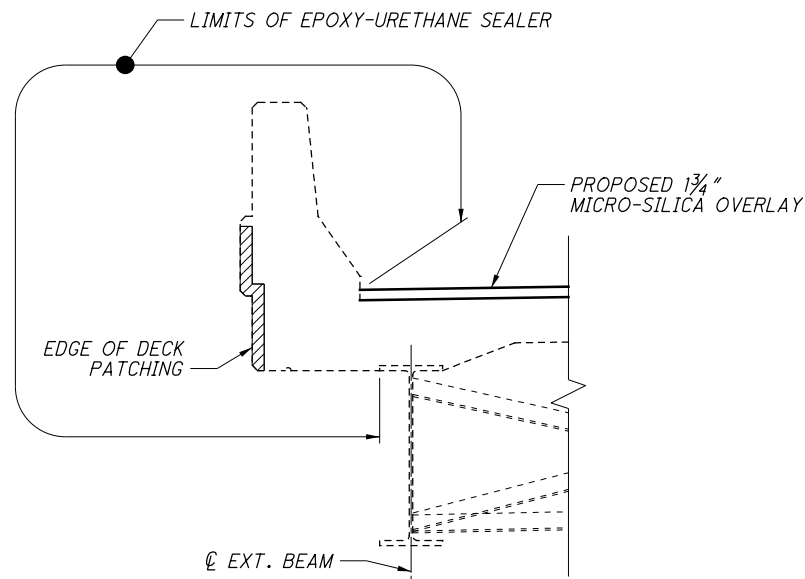
PIER 4 ELEVATION
(LOOKING NORTH)

LEGEND:
- ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

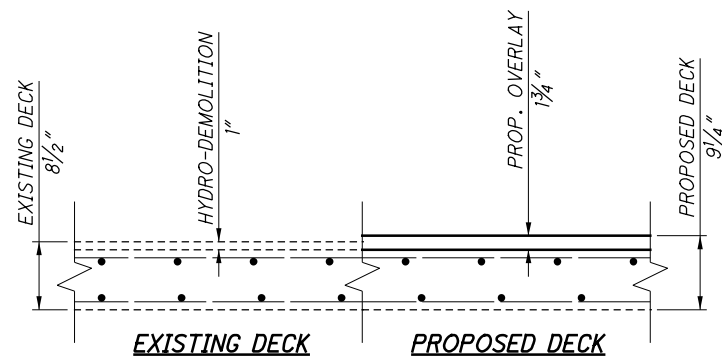
 E.L. ROBINSON ENGINEERING 1801 Watermark Drive, Suite 310 • Columbus, Ohio 43215 www.elrobinsonengineering.com	DESIGNED TAS	DRAWN FIB/TAS	REVIEWED DFT	DATE 3/28/2019
	CHECKED CJW	REVISED -	STRUCTURE FILE NUMBER 3202283	
PIER DETAILS (2 OF 2)				
BRIDGE NO. HAN-75-01240R				
I.R. 75 OVER COUNTY ROAD 33				
ALL / HAN-75 - 22.66 / 0.00				
PID No. 104095				
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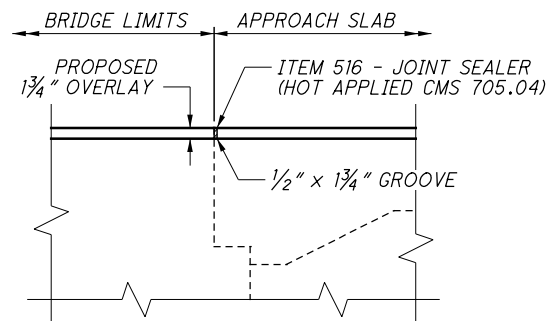
DECK PLAN



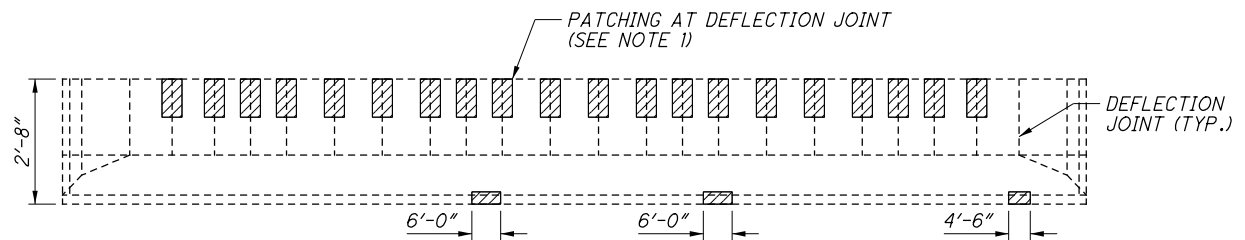
EDGE OF DECK REPAIR DETAIL



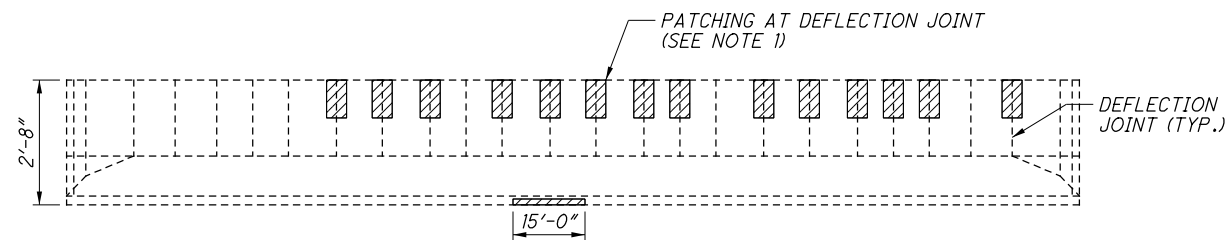
MICRO-SILICA OVERLAY DETAIL



SECTION A-A



LEFT BARRIER ELEVATION
(ROADWAY SIDE SHOWN)



LEFT BARRIER ELEVATION
(ROADWAY SIDE SHOWN)

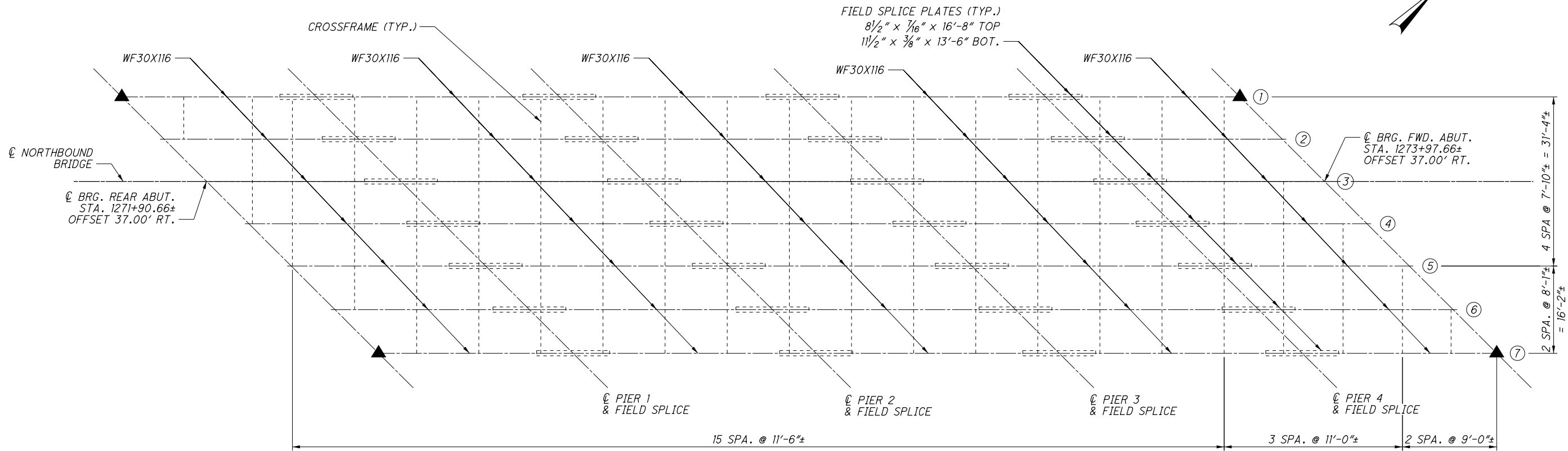
LEGEND:

- ITEM 519 - PATCHING CONCRETE STRUCTURE
- ITEM 848 - MICRO-SILICA OVERLAY
- Δ - PHASE 1 CONSTRUCTION
- ΔΔ - PHASE 2 CONSTRUCTION

NOTES:

- EACH BARRIER DEFLECTION JOINT DESIGNATED IS ESTIMATED TO REQUIRE 2 SF OF PATCHING.

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FRAMING PLAN

LEGEND:

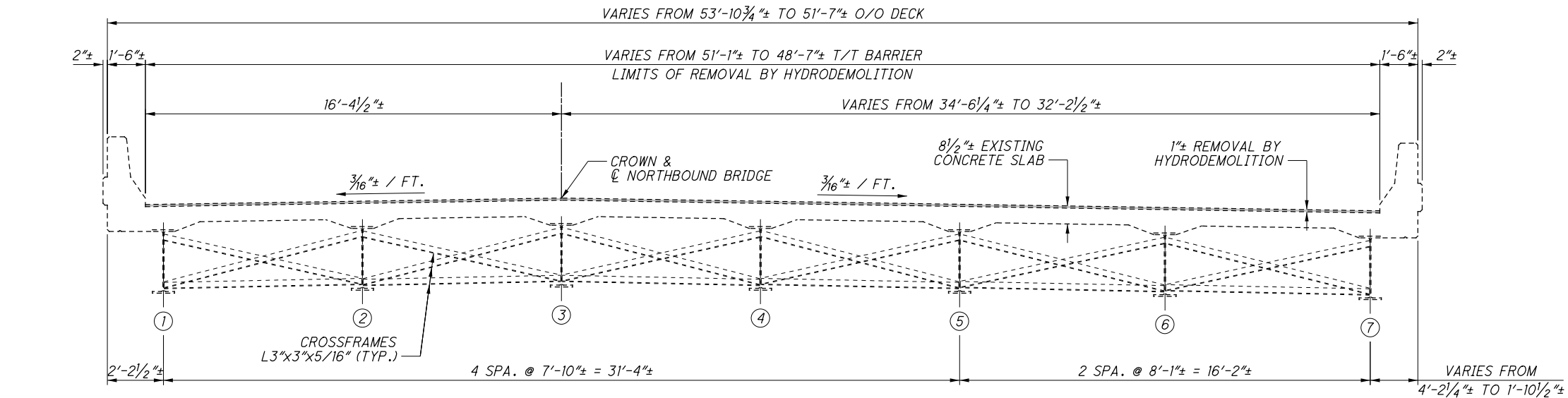
- # - BEAM NUMBER
- ▲ - BEARING TO BE REFURBISHED

ALL / HAN-75-22.66 / 0.00
PID No. 104095

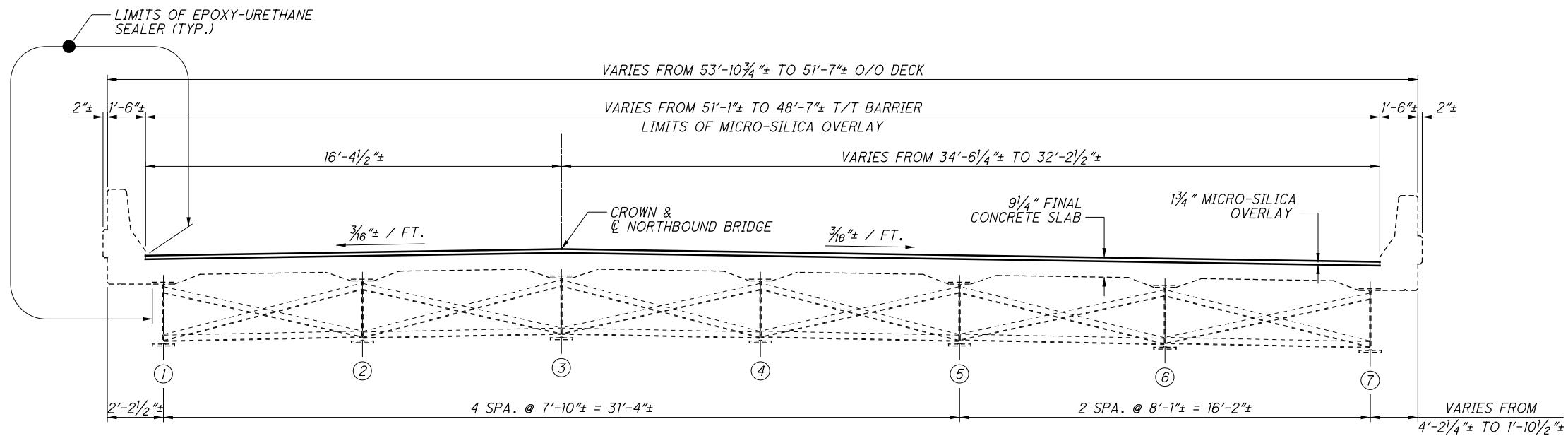
FRAMING PLAN
BRIDGE NO. HAN-75-01240R
I.R. 75 OVER COUNTY ROAD 33

DESIGNED	TAS	CHECKED	CJW
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REVIEWED	DFT	DATE	3/28/2019
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TRANSVERSE SECTION - REMOVAL



TRANSVERSE SECTION - PROPOSED

LEGEND:

Ⓢ - BEAM NUMBER

NOTES:

1. THE CONTRACTOR SHALL TAKE EXTRA PRECAUTION WHEN REMOVING DECK CONCRETE SO AS TO NOT DAMAGE THE EXISTING REINFORCING STEEL.

TRANSVERSE SECTION
BRIDGE NO. HAN-75-0124OR
I.R. 75 OVER COUNTY ROAD 33

ALL / HAN-75 - 22.66 / 0.00
PID No. 104095

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SPECIAL PROVISIONS

WATERWAY PERMITS CONDITIONS

C-R-S: ALL-75-15.80

PID: 94214

Date: 09/16/2019

1. Waterway Permits Time Restrictions:

A USACE Section 404 Nationwide Permit (NWP) #14 (Linear Transportation Projects) is authorized for ALL-75-15.80, PID 94214. A copy of the NWP and authorization letter (LRH-2019-00375-MAU) shall be kept at the work site at all times and made available to all contractors and subcontractors. The permit is effective starting: September 16, 2019. The permit expires: March 18, 2022.

For authorized work in aquatic resources (including streams, wetlands, jurisdictional ditches, captured streams, lakes, ponds), the Department will consider the Contractor’s submission of a reauthorization to the waterway permit expiration date based on project constraints. If more than one permit is authorized for the project, then all permits become invalid once the first permit expires. In order for the request to be considered, the Contractor must submit a justification to the Engineer at least 90 days prior to the waterway permit expiration date. The Engineer will submit the request for a time extension to the Ohio Department of Transportation, Office of Environmental Services, Waterway Permits Unit (ODOT-OES-WPU) for consideration and coordination with the U.S. Army Corps of Engineers (USACE), Ohio Environmental Protection Agency (OEPA), U.S. Coast Guard (USCG), U.S. Fish and Wildlife Service (USFWS), and Ohio Department of Natural Resources (ODNR) as appropriate.

2. Deviations From Permitted Construction Activities:

No deviation from the requirements for work in aquatic resources depicted in the plans, Special Provisions, and/or Working Drawings may be made unless a modification has been submitted to ODOT-OES-WPU and approved by the appropriate agencies (i.e., USACE, OEPA, USCG, ODNR, and USFWS).

For emergency situations resulting in unanticipated impacts to aquatic resources, provide notification (verbal or written) to the Engineer as soon as possible following discovery of the situation. Written notification to the Engineer and notification to the ODOT-OES-WPU (614-466-7100) must be made within 24 hours.

For non-emergency situations, notify the Engineer in writing for submission to the ODOT-OES-WPU (614-466-7100) for consideration and coordination with the appropriate agencies. Notification must be made at least 90 days prior to planned, non-permitted activities. Consideration of the requested deviation is at the discretion of the Director and must be coordinated with the appropriate regulatory agencies.

3. In-Stream Work Restrictions:

Work in the following aquatic resources is further restricted as follows:

Stream Name/Description	Location	Work restriction dates (No in-stream work permitted)
Stream 1 (May Ditch)	STA 897+00 and STA 924+50	None

In-stream work has been defined as the placement and/or removal of fill materials (temporary or permanent) below ordinary high water of a stream. Examples of “fill” include, but are not limited to: bridge piers, abutments, culverts, rock channel protection, scour protection, and temporary access fills.

Fills placed within a stream identified in the above table (outside of the work restriction dates) can continue to be worked from during the work restriction dates, but cannot be expanded, removed, or otherwise modified (below ordinary high water) until once again outside of the work restriction dates.

<u>4. Materials:</u> Materials utilized in or adjacent to aquatic resources for temporary or permanent fill or bank protection shall consist of suitable material free from toxic contaminants in other than trace quantities. Broken asphalt is specifically excluded. Chromated Copper Arsenate (CCA), creosote, and other pressure treated lumber shall not be used in structures that are placed in aquatic resources.
<u>5. Cultural Resources:</u> Per CMS 107.10, if archeological sites, historical sites, or human remains are discovered, cease all work in the immediate area and notify the Engineer who will immediately contact the ODOT-District Environmental Coordinator and ODOT-OES-Cultural Resource Section at 614-466-7100. In the event of human remains are identified by OES-Cultural Resources Section, the Engineer shall also contact the Allen County Sheriff’s Office at 419-227-3535.
<u>6. Aquatic Resource Demarcation:</u> The table attached includes detailed fill quantities authorized within the aquatic resources. Aquatic resources not authorized for impact by these Special Provisions shall be demarcated in the field as per SS 832 prior to site disturbance. The fence shall remain in place and be maintained throughout the construction process. Following the completion of the project, the fence and posts shall be removed. Table C is attached and includes detailed fill quantities that are authorized within the aquatic resources.
<u>7. Spill containment:</u> Provide and Maintain an Oil Spill Kit with a minimum capacity of 65 gallons. The Spill Kit shall contain: - 6 - 3 in. X 8 ft. Oil only socks - 4 - 18 in. X18 in. Oil only pillows - 2 - 5 in. X 10ft. Booms - 50 - 16in. X 20 in. Oil only pads - 10- Disposable Bags - 1 - 65 Gallon drum with lid - 25 pounds of Granular Oil Absorbent The Oil Spill Kit shall be located within 150 feet of any equipment working in a stream or wetland. The oil Spill Kit shall be maintained for the life of the contract. Any materials utilized during the project will be replaced within 48 hours. All costs associated with furnishing and maintaining the above referenced spill containment kit is incidental to work.
<u>8. Blasting:</u> State law requires notification to the Ohio Department of Natural Resources should blasting be required within or near stream channels (See ORC 1533.58 & CMS 107.09). Notify the Engineer, in writing, a minimum of 30 days in advance of blasting, for submission to ODOT-OES-WPU (614-466-7100) for coordination with ODNR.

<u>9. Project Inspection:</u> Inspection of Work may include inspection by representatives of other government agencies or railroad corporations that pay a portion of the cost of the Work or regulate the Work through State and Federal law. Comments from the representatives of these agencies shall be directed to the Engineer. Please forward a copy to ODOT-OES-WPU (614-466-7100).
<u>10. Temporary Access Fills:</u> Definitions: Hydraulic Opening The cross-sectional area allowing an unimpeded discharge equal to twice the highest monthly flow without producing a rise in the backwater above the Ordinary High Water Mark (OHWM). Standard Temporary Discharge Discharge equal to twice the <i>highest monthly flow</i> without producing a rise in the backwater above the OHWM. The U.S. Geologic Service publication “Techniques for estimating Selected Streamflow Characteristics of Rural Unregulated Streams in Ohio” provides equations that estimate monthly flow for Ohio Waterways These flows are also available in a web application by USGS StreamStats, (https://water.usgs.gov/osw/streamstats/ohio.html). Average Monthly Flow The average monthly flow represents the estimated “normal” flow. Temporary Access Fills (TAFs) Include, but are not limited to, dewatering fills, causeways, cofferdams, access pads, temporary bridges, etc. below the OHWM. Requirements 21 calendar days prior to the initiation of any in-stream work, provide the Engineer with Working Drawings that include: • Plan view drawing (50 scale or less) showing the location of all TAFs proposed for use on the project • Scaled cross section and profile drawing showing the OHWM and the proposed hydraulic opening. • Calculations analyzing the hydraulic impacts of the TAF on the waterway. Include in the calculations an analysis of the hydraulic opening sized adequately to pass the Standard Temporary Discharge without producing a rise in backwater above the OHWM. Include, in the analysis, calculated channel velocities adjacent to the TAF, culvert exit velocities, calculated headwater and tailwater elevations, and any additional appropriate calculations to assess potential impacts to the waterway during normal and anticipated high flow (twice the highest monthly flow) events. • A description of all temporary material to be placed below the OHWM elevation. • A description of the installation and staging of all temporary fill over the life of the contract. • Volume of temporary fill below the OHWM elevation. • A description of the diversion ditches, equipment, conduits or means for maintaining normal flows in the waterway. • A description of the removal of all temporary fill and restoration of the channel and all areas impacted by the TAFs.

- A schedule outlining the timing of the placement and removal of all temporary fill.
- Have competent individuals prepare and check the Working Drawings and hydraulic calculations. Provide a cover sheet containing the preparer(s) and checker(s): First Name, Last Name and Initials. The preparer(s) and checker(s) shall not be the same individual. Have an Ohio Registered Engineer review, approve, sign, seal and date the Working Drawings and hydraulic calculations according to ORC 4733 and OAC 4733-35. Include the following statement on the Working Drawings:

“These Working Drawings were prepared in compliance with the terms of these Special Provisions and all contract documents.”

Do not begin in-stream work until the Engineer has accepted the Working Drawings and hydraulic calculations.

The design of the Contractor’s TAF must minimize impacts to water bodies, stream banks, stream beds, and riparian zones to the maximum extent practicable.

Fording of waterways and other aquatic resources is prohibited.

Construct TAFs in such a manner that will maintain flows, minimize upstream flooding, and avoid overtopping the TAF on a regular basis. *TAFs shall be designed and constructed so that the hydraulic opening provides capacity for a discharge equal to twice the highest monthly flow without producing a rise in the backwater above the (OHWM).*

If the Contractor proposes a TAF which does not meet all the requirements of these Special Provisions, the Contractor must submit a request in writing for a modified TAF to the Engineer. The request must include all Working Drawings and hydraulic calculations required by these Special Provisions. The Department makes no guarantee to grant the request. The Contractor’s proposed TAF request will be coordinated by OES with the USACE and the OEPA, as appropriate. The time frame allowed for the coordination of the contractor’s proposed TAF will be a minimum of 60 days.

Installation of any temporary fill without appropriate authorization is strictly prohibited. All direct coordination with the USACE and/or OEPA will be performed through OES.

TAFs Construction and Payment

Begin planning and installing causeways and access fills as early in construction as possible to avoid conflicts with these Special Provisions or other environmental commitments that have been included in the construction plans.

TAFs in Streams and Rivers may include, but are not limited to, causeways, cofferdams, access pads, sheet piling, temporary bridges, etc. The Contractor must make every attempt to minimize disturbance to waterbodies, stream banks, stream beds and riparian zones during the construction, maintenance, and removal of the TAF. Construct the TAFs as narrow as practical. Install in-stream conduits parallel to the stream banks. Make the TAFs in shallow areas rather than deep pools where possible. Minimize clearing, grubbing, and excavation of stream banks, and approach sections. Construct the TAFs as to not cause erosion or allow sediment deposits in the waterway.

Prior to the initiation of any in-stream work, establish a monument upstream of the proposed TAF to visually monitor the water elevation in the waterway where the fill is permitted. Maintain the monument throughout the project. Provide a visual mark on the monument that identifies the elevation 1 foot above the OHWM. Ensure that the monument can be read from the bank of the waterway. Have this elevation set and certified by an Ohio Registered Surveyor. All costs associated with furnishing and maintaining the above referenced monument is incidental to the work.

Should the surface water elevation exceed the elevation 1 foot above OHWM, the Department will compensate the Contractor for repair of any resulting damage to the TAF up to the elevation of 1 foot above the OHWM, except as noted. The Department will recognize this event as an excusable, non-compensable delay in accordance with Section 108.06 B. of the Construction & Materials Specifications.

Follow the requirements in Item 502 for Structures for Maintaining Traffic and in Item 503 for Cofferdams and Excavation Bracing and any modifications to these items as shown in the plans. The Department will not pay for repair and maintenance of TAFs associated with Items 502 and 503 as a result of surface water elevation exceeding 1 foot above the OHWM. Compensation for damages associated with waterway flows will be provided as described in Items 502 and 503.

Construct the TAFs, not including Items 502 and 503, to a water elevation at least 1 foot (0.3 m) above the OHWM. If more than one-third the width of the stream is filled, then use culvert pipes to allow the movement of aquatic life. Ensure that any ponding of water behind the TAF will not damage property, flood roadways, or threaten human health and safety.

The following minimum requirements apply to TAFs where culverts are used.

- A. Furnish culverts on the existing stream bottom.
- B. Avoid a drop in water elevation at the downstream end of the culvert that would result in an adverse impact to the waterway.
- C. Furnish a sufficient number of culverts in addition to stream openings to provide a discharge equal to twice the highest monthly flow without producing a rise in the backwater above the OHWM.
- D. Furnish culverts with a minimum diameter of 18 inches (0.5 m).

All TAFs must be constructed of suitable materials. Causeways and access fills must be encapsulated with clean, non-erodible, nontoxic Dumped Rock Fill, Type A, B, C, or D, as specified in C&MS 703.19.B. Extend rock fill up the slope from original stream bank for 50 feet (10 m) to catch and remove erodible material from equipment.

When the work requiring TAF is complete, all portions of the TAF (including all rock and culverts) will be removed in its entirety. Do not dispose of TAF material in other aquatic resources or where erosion into another aquatic resource is possible. The stream bottom affected by the TAFs will be restored to its pre-construction elevations. The TAFs will not be paid as a separate item but will be included by the Contractor as part of the total project cost.

Unless specific TAF compensation is included in the plans, all environmental protection and control associated with the authorized activities, are incidental to the work within the boundaries of the aquatic resources.

11. Excavation Activities:

Excavated material will be placed at an upland site and disposed of in such a manner that sediment and runoff to streams and other aquatic resources is controlled and minimized. Additionally, no more than incidental fallback into jurisdictional waters of the U.S. is permitted during the excavation process. If any changes to the proposed work are deemed necessary, you must notify and coordinate with the ODOT-OES-WPU (614-466-7100).

12. Demolition Debris:

The temporary discharge of demolition debris into Stream 1 (May Ditch) (including but not limited to bridges, culverts, abutments, wing walls, piers) is conditionally authorized for this project. Perform demolition activities in a manner to prevent the discharge of fine (erodible) debris into aquatic resources. Utilize TAF or other catchment methods accepted by the Engineer and authorized by these Special Provisions to prevent erodible demolition debris from entering aquatic resources. Demolition debris may not remain in the waterway for more than 72 hours and must be removed in its entirety. If removal of debris material cannot be achieved within 72 hours, notify the Engineer in writing and contact ODOT-OES-WPU at 614-466-7100.

13. Construction Completion Certification:

Upon completion of the work, notify the Engineer. The USACE Construction Completion Certification must be completed and signed by the Engineer then provided via US mail or email to:

Waterway Permits Program Manager
ODOT - Office of Environmental Services
1980 West Broad Street, Mail Stop 4170
Columbus, Ohio 43223
Adrienne.Earley@dot.ohio.gov

A copy of the certification has been attached to these Special Provisions.

Version: 2019

USACE Pre-Construction Notification
ALL-IR 75-15.80; PID 94214
31-May-19

TABLE C. DISCHARGE AND FILL QUANTITIES
Preferred Alternative

STREAMS						Existing Culvert	Existing Culvert Replaced (overlap)	Permanent Fill Within/Below OHWM									Total Permanent Fill Within OHWM			Total Temporary Fill Within OHWM			TOTAL IMPACT (Upstream to Downstream)	TOTAL NEW IMPACT (Total Impact Minus Pre-Existing Impacts)
Aquatic Resource ID	Station	Description of Impacts/Activities Within OHWM	Total Length Within Project Area	Stream Width (LF)	Stream Depth (LF)			Proposed Concrete (Includes Culvert, Piers, Walls, Abutments, etc.)			Proposed RCP			Proposed Earthen, Granular, or Embankment Fill										
								Length (LF)	Length (LF)	Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	Length (LF)		
Stream 1 (May Ditch) (South)	897+00	Culvert and headwall replacement; grading/earthen fill; RCP for scour protection; temporary construction access and dewatering	670 LF	11	1.5	315	315	365	0.049*	110*	45	0.005	13	45*	0.011*	27	410	0.054	150	40	0.014	4	450	135
Stream 1 (May Ditch)	924+50	Grading/earthen fill and RCP for scour protection (for ditch relocation); temporary construction access and dewatering	719 LF	13	2.0	190	0	0	0.000	0	20	0.005	17	25	0.003	10	45	0.008	27	30	0.009	5	75	75
	(North)	~ 350 feet east of 924+50		13	2.0	0	0	0	0.000	0	25	0.002	7	0	0.000	0	25	0.002	7	50	0.015	19	75	75

* Overlapping fill (length/area not added to total).
^ Includes approximately 0.037 acre and 83 CY fill below OHWM within length of the existing 315' x 72" culvert.

WETLANDS, JURISDICTIONAL DITCHES, PONDS						Permanent Fill Within Wetland Boundary											TOTAL IMPACT	TOTAL NEW IMPACT (Total - Existing)
Aquatic Resource ID	Station	Description of Impacts/Activities within Wetland Boundary	Total Acreage Within Project Area	Width (LF)	Depth (LF)	Existing Culvert	Existing Culvert Replaced (overlap)	Proposed Earthen, Granular, or Embankment Fill			Proposed Other (Steel, Etc.)			Total Permanent Fill Within Wetland Boundary				
								Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)	Length (LF)	Area (AC)	Volume (CY)		
Wetland A	855+00	Grading/earthen fill for ditch relocation and storm pipe replacement	0.050	N/A	1	170	170	N/A	0.028	46	N/A	0.000	0	N/A	0.028	46	0.028	0.028
Wetland B	908+40	Grading/earthen fill and manhole for ditch relocation and new storm pipe installation	0.014	N/A	1	0	0	N/A	0.013	21	N/A	0.001	2	N/A	0.014	23	0.014	0.014
Wetland C	914+00	Grading/earthen fill for ditch relocation	0.002	N/A	1	0	0	N/A	0.002	4	N/A	0.000	0	N/A	0.002	4	0.002	0.002
Wetland D	924+50	Grading/earthen fill for ditch relocation	0.015	N/A	1	0	0	N/A	0.015	25	N/A	0.000	0	N/A	0.015	25	0.015	0.015
Wetland E	~ 350 feet east of 924+50	Grading/earthen fill for new storm pipe outfall	0.001	N/A	1	0	0	N/A	0.001	2	N/A	0.000	0	N/A	0.001	2	0.001	0.001



US Army Corps of Engineers
Huntington District

Permit Number: 2019-00375-MAU

Name of Permittee: Ohio Department of Transportation

Date of Issuance: September 11, 2019

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers - Huntington District
Building 10/ Section 10
PO Box 3990
Columbus, OH 43218-3990

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date