

STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION
ERI-6-17.70
 CITY OF HURON
 ERIE COUNTY

PROJECT DESCRIPTION

PLACE NEW OVERLAY OVER ENTIRE STRUCTURE, EXCEPT FOR MIDDLE SPAN OVER THE HURON RIVER. ADD CATHODIC PROTECTION IN THE VARIABLE DEPTH REPAIR AREAS IN THE DECK. REPAIR APPROACH SLABS, TOP OF BACKWALL AND RAISED MEDIAN. REPAIR EDGE OF DECK. SEAL PARAPETS, RAISED MEDIAN, SIDEWALKS, EDGE OF DECK. REPAIR EROSION UNDER STRUCTURE AND REPAVE APPROACH PAVEMENT.

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

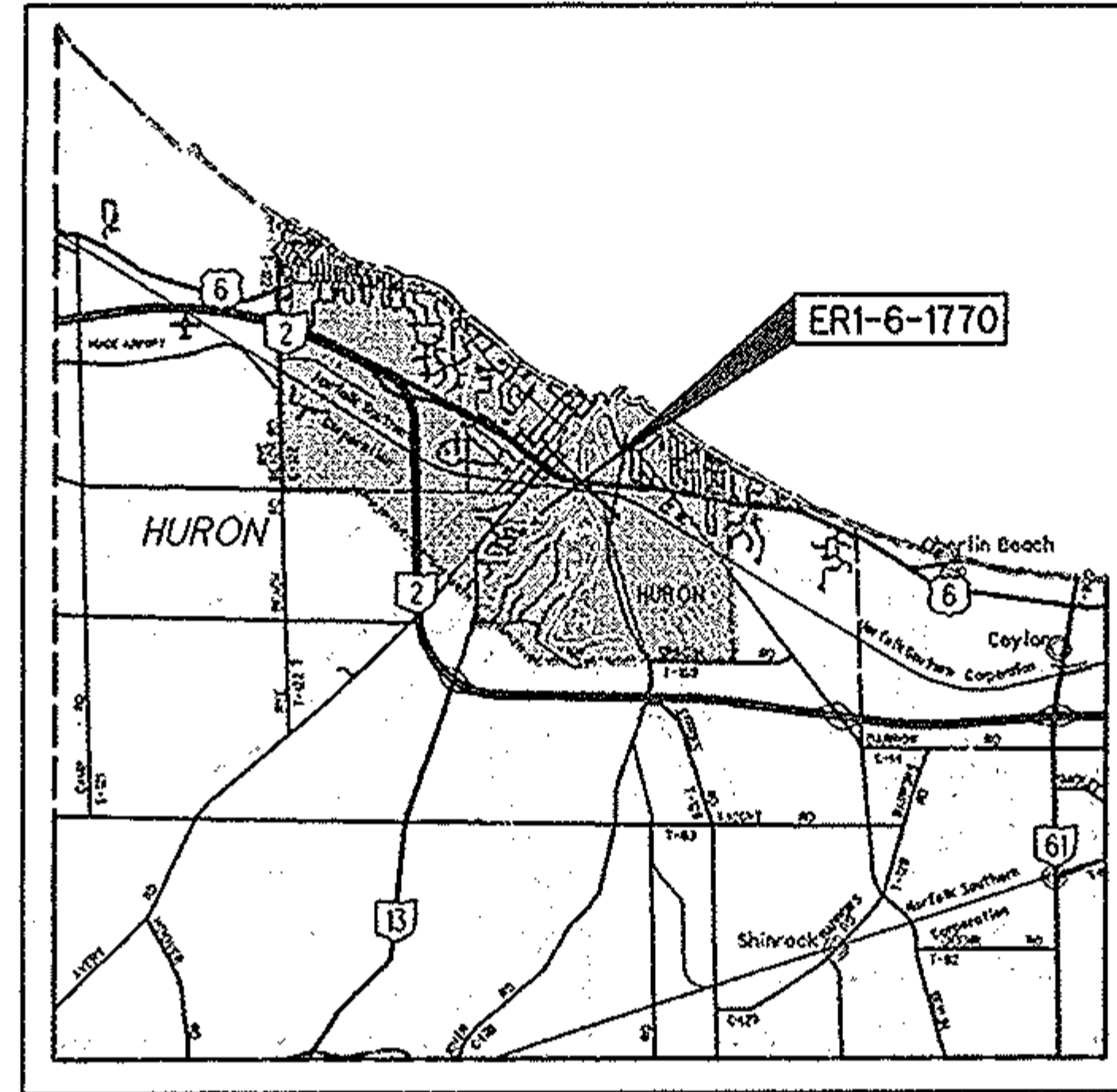
2010 SPECIFICATIONS

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

I HEREBY 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.

APPROVED *Allen C. Bell*
 DATE 7-25-11 DISTRICT DEPUTY DIRECTOR

APPROVED *Gregory W. Hays*
 DATE 8-19-11 DIRECTOR, DEPARTMENT OF TRANSPORTATION



LOCATION MAP

LATITUDE: N41°23'24" LONGITUDE: W82°33'19"



PORTION TO BE IMPROVED ----- X -----
 INTERSTATE & DIVIDED HIGHWAY -----
 UNDIVIDED STATE & FEDERAL ROUTES -----
 OTHER ROADS -----

DESIGN DESIGNATION

CURRENT ADT (2011) 12,300
 DESIGN YEAR ADT (2023) 13,800
 DESIGN HOURLY VOLUME (2023) 1380
 DIRECTIONAL DISTRIBUTION .55
 TRUCKS (24 HOUR B&C) 4%
 DESIGN SPEED 35 M.P.H.
 LEGAL SPEED 35 M.P.H.

DESIGN FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL

DESIGN EXCEPTIONS

NONE REQUIRED

UNDERGROUND UTILITIES
 CONTACT BOTH SERVICES
 CALL TWO WORKING DAYS
 BEFORE YOU DIG

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

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

PLAN PREPARED BY:
 ODOT DISTRICT THREE
 OFFICE OF PLANNING
 AND ENGINEERING

INDEX OF SHEETS:

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ENGINEERS SEAL:		STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS		
		BP-3.1	10/19/07	TC-41.10	10/19/07	MT-35.10	4/20/01	
		BP-5.1	7/28/00	TC-41.20	1/19/01	MT-95.30	7/17/09	800-2010 7/15/11
		BP-7.1	10/15/10	TC-42.10	1/19/07	MT-95.31	7/17/09	832 5/05/09
				TC-42.20	1/21/11	MT-95.32	7/17/09	848 4/15/11
		RM-3.1	10/15/10	TC-52.10	1/19/07	MT-105.10	1/16/09	
				TC-52.20	1/19/07			Special Provisions
				TC-71.10	1/21/11			Right-of-Entry & Temporary Easement
				TC-73.10	1/19/01			7/7/2011
				TC-83.20	1/21/11			404 WATERWAY PERMIT #3
								DATED 2/16/11

SIGNED: *David C. Mollehsott*
 DATE: 7/25/11

ERI - US-6-17.70
 110550 PID - 77463
 Dist 3 10/20/2011

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

FEDERAL PROJECT NO. NON-FEDERAL
 PID NO. 77463
 CONSTRUCTION PROJECT NO.
 RAILROAD INVOLVEMENT NONE
 ERI-6-17.70
 1/62

DESIGN FILE: \\projects\77463\Struct\GENNOTES.dgn
 WORKSTATION: dmollens
 MODELNAME: Design
 DATE: 7/22/2011

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, INCLUDING THE 2003, 2004, 2005 AND 2006 SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN DATA:

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4,000 PSI
 CONCRETE CLASS S - COMPRESSIVE STRENGTH 4,500 PSI
 REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI
 STRUCTURAL STEEL - ASTM A709 GRADE 50W OR GRADE 50 - YIELD STRENGTH 50,000 PSI
 A709 GRADE 36 - YIELD STRENGTH 36,000 PSI

DECK PROTECTION METHOD:

SUPERPLASTICIZED DENSE CONCRETE OVERLAY
 SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN

EXISTING PLANS:

THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OH.

STRUCTURE #	PLAN NAME	DATE
ERI-6-1770	RECONSTRUCTION & REALIGNMENT OF BRIDGE NO. ER-6-179 OVER HURON RIVER	1946
	ERI-6-17.41	1983
	ERI-6-28.839	1999

PLACING ASPHALT CONCRETE FEATHERING ON APPROACHES TO BRIDGES:

SPECIAL CARE SHALL BE TAKEN, WHEN PLACING THE ASPHALT CONCRETE BUTT JOINT TO EFFECT A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK THE CONTRACTOR'S ATTENTION IS CALLED TO STANDARD DRAWING BP-3.1 FOR REQUIRED TOLERANCES.

EXISTING STRUCTURE VERIFICATION:

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

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

UTILITIES:

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

SANITARY:
 ERIE COUNTY DEPT. OF ENVIRONMENTAL SERVICES
 ERIE COUNTY SANITARY ENGINEER
 554 RIVER ROAD
 P.O. BOX 469
 HURON, OHIO 44839
 (419) 433-7303

GAS:
 COLUMBIA GAS OF OHIO
 1800 BROAD AVE.
 FINDLAY, OHIO 45840
 (419) 427-3227

TELEPHONE:
 FRONTIER COMMUNICATIONS
 83 TOWNSEND AVE.
 NORWALK, OHIO 44857
 (419) 744-3617

WATER:
 CITY OF HURON WATER DIVISION
 DIRECTOR OF SERVICE
 500 CLEVELAND ROAD WEST
 HURON, OHIO 44839
 (419) 433-9502

ELECTRIC:
 OHIO EDISON CO.
 6326 LAKE AVE.
 ELYRIA, OHIO 44035
 (440) 326-3268

CABLE:
 TIME WARNER CABLE
 576 TERNES AVE.
 ELYRIA, OHIO 44035
 (440) 366-0417 EXT. 624

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.

ALL UTILITIES WILL REMAIN IN PLACE AND IN SERVICE AT ALL STRUCTURES.

WORK IN AND OVER THE HURON RIVER

ALL CONSTRUCTION OPERATIONS IN AND OVER THE RIVER SHALL CONFORM TO THE REQUIREMENT OF THE UNITED STATES COAST GUARD. THE CONTRACTOR SHALL SUBMIT A NOTICE TO NAVIGATION TO THE UNITED STATES COAST GUARD, 30 DAYS PRIOR TO CONSTRUCTION TO THE FOLLOWING:

LEE D. SOULE
 BRIDGE MANAGEMENT SPECIALIST
 9TH COAST GUARD DISTRICT (DPB)
 1240 EAST NINTH STREET
 CLEVELAND, OHIO 44199-2060

A COURTESY COPY SHALL ALSO BE SENT 30 DAYS PRIOR TO CONSTRUCTION TO THE FOLLOWING:

CPT. JAMES BJORKMAN CHIEF, OHIO AREA OFFICE 1035 EAST 9TH STREET CLEVELAND, OHIO 44114	MR. ROBERT REMMERS CHIEF, OPERATIONS AND TECHNICAL SUPPORT 1776 NIAGARA STREET BUFFALO, NEW YORK 14207	HURON-JOINT PORT AUTHORITY P.O. BOX 468 HURON, OHIO 44839
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THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION OF THE STARTING DATE OF THIS PROJECT TO EACH OF THE UPSTREAM BOATING FACILITIES WHOSE CUSTOMERS MAY TRAVEL UNDER THE STRUCTURE.

A COPY OF THE USCG APPROVED DOCUMENTS AND THE COPIES OF CORRESPONDENCE WITH BOATING FACILITIES SHALL BE PROVIDED TO THE ENGINEER BEFORE WORK STARTS.

ALL COSTS NECESSARY TO MEET THE ABOVE REQUIREMENTS, INCLUDING PERMITS SHALL BE INCLUDED FOR PAYMENT PER LUMP SUM ITEM 614-MAINTAINING TRAFFIC, MISC: BOAT TRAFFIC.

DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING	DATE 7/11	REVIEWED CLB	DRAWN DCM	DESIGNED DCM
GENERAL NOTES				
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2 62				

COORDINATION OF WORK BETWEEN CONTRACTORS

THE CONTRACTOR SHOULD BE AWARE THAT THERE MAY BE OTHER WORK BEING PERFORMED BY A SEPARATE CONTRACT. ERI-13-6.92 IS AN URBAN PAVING PROJECT WHICH IS SCHEDULED TO BEGIN WORK IN THE 2012 CONSTRUCTION SEASON. COORDINATION OF WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.

ENVIRONMENTAL COMMITMENTS :

IN STREAM WORK RESTRICTION:

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID CONSTRUCTION IN AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING STREAMS OR WETLANDS. ANY MATERIAL THAT DOES FALL INTO STREAMS OR WETLANDS SHALL BE REMOVED AS SOON AS POSSIBLE.

ALL PROJECTS INVOLVING JURISDICTIONAL WATERS OF THE UNITED STATES (STREAMS, RIVERS, NON-ISOLATED WETLANDS) AND/OR ISOLATED WETLANDS ARE SUBJECT TO REGULATION UNDER SECTIONS 404 AND 401 OF THE CLEAN WATER ACT, AND POSSIBLY OHIO EPA ISOLATED WETLAND LAW. IT IS ANTICIPATED THAT NO IN-STREAM WORK, OR WORK UNDER THE STREAM'S ORDINARY HIGH WATER MARK (OHWM) WILL BE NEEDED. THEREFORE NO WATERWAY PERMITS HAVE BEEN GRANTED FOR THIS PROJECT AND NO IN-STREAM WORK IS ALLOWED. IN THE PROJECT AREA, THE HURON RIVER IS CONSIDERED JURISDICTIONAL WATERS.

SHOULD WORK (EITHER TEMPORARY OR PERMANENT) IN THE STREAM IS NEEDED; IT WILL REQUIRE A PERMIT AND AUTHORIZATION BY THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE). THE CONTRACTOR SHALL NOT UTILIZE FILLS BELOW OHWM UNTIL SUCH ACTIVITY IS AUTHORIZED BY THE USACE. DETAILS OF THIS REQUIREMENT ARE DESCRIBED IN ODOT'S SUPPLEMENTAL SPECIFICATION 832.09.

USACE DEFINITION OF OHWM - THE ORDINARY HIGH WATER MARK IS THE LINE ON THE SHORES ESTABLISHED BY THE FLUCTUATIONS OF WATER AND INDICATED BY PHYSICAL CHARACTERISTICS SUCH AS A CLEAR, NATURAL LINE IMPRESSED ON THE BANK; SHELING; CHANGES IN THE CHARACTER OF THE SOIL; DESTRUCTION OF TERRESTRIAL VEGETATION; THE PRESENCE OF LITTER AND DEBRIS; OR THE APPROPRIATE MEANS THAT CONSIDER THE CHARACTERISTICS OF THE SURROUNDING AREAS.

ACCESS FOR WORK UNDER STRUCTURE:

FOR WORK UNDER THE EAST END OF THE STRUCTURE, THE CONTRACTOR CAN GAIN ACCESS THROUGH THE BOAT LAUNCH PARKING LOT ON THE NORTH SIDE OF U.S. 6 PER RIGHT OF ENTRY AGREEMENT DATED 7-7-11 BETWEEN O.D.O.T. AND OHIO DEPARTMENT OF NATURAL RESOURCES. CONTACT THE CITY OF HURON SERVICE DIRECTOR @ 419-433-9502.

FOR WORK UNDER THE WEST END OF THE STRUCTURE, THE CONTRACTOR MAY NEED TO CONSTRUCT AN ACCESS ROAD ON THE SOUTH WEST CORNER OF THE STRUCTURE. THE EMBANKMENT SHALL BE RESTORED TO A CONDITION AS GOOD OR BETTER THAN THE EXISTING. COST INCLUDED IN ITEM 624-MOBILIZATION.

FOR EASEMENT AND RIGHT-OF-WAY INFORMATION, SEE SHEET 62A.

CUT LINE CONSTRUCTION JOINT PREPARATION:

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

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS ITEM SHALL BE USED AT LOCATIONS IN THE PLAN.

THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED.

THE EXISTING REINFORCING STEEL SHALL BE PRESERVED AS INDICATED IN THE PLANS. EXISTING CONCRETE SHALL BE REMOVED IN A MANNER THAT WILL NOT CUT, ELONGATE, OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS NO HEAVIER THAN THE 90 POUND CLASS.

REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE ITEM, WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (FDGE BEAM):

THIS ITEM SHALL BE USED AT LOCATIONS IN THE PLAN.

THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED.

THE EXISTING REINFORCING STEEL SHALL BE PRESERVED AS INDICATED IN THE PLANS. EXISTING CONCRETE SHALL BE REMOVED IN A MANNER THAT WILL NOT CUT, ELONGATE, OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS NO HEAVIER THAN THE 35 POUND CLASS.

REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ABOVE ITEM, WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - WALK REMOVED, AS PER PLAN:

WHEN AN EXISTING SIDEWALK IS REMOVED AND NO NEW SIDEWALK IS BEING PLACED IN THE SAME LOCATION, THE AREA SHALL BE BACKFILLED WITH TOP SOIL, THEN SEEDED AND MULCHED, WHICH IS ALL INCLUDED IN THIS ITEM.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR THE ABOVE ITEM, WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

DESIGN FILE: \\projects\77463\Struct\GENNOTES.dgn
WORKSTATION: dmollens
MODELNAME: Design
DATE: 7/22/2011

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF PLANNING
AND ENGINEERING

DATE
7/11

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GENERAL NOTES

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WORKSTATION: dmollens DATE: 10/11/2011
MODELNAME: Design

ITEM 407 - TACK COAT:

THE APPLICATION RATES SHALL BE 0.08 GAL. PER SQ. YD. FOR ESTIMATING PURPOSES ONLY. THE RATE OF APPLICATION SHALL BE AS PER 407.06. A COMPLETE PAVEMENT SURFACE COVERAGE SHALL BE REQUIRED. AREAS OF TACK STRIPPED BY CONSTRUCTION EQUIPMENT OR TRAFFIC SHALL BE RE-COATED PRIOR TO PLACING ASPHALT CONCRETE. ALL COSTS AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER GALLON FOR ITEM 407, TACK COAT.

ITEM SPECIAL - BRIDGE DECK GROOVING:

THE BRIDGE DECK GROOVING SHALL MEET CMS 511.20.

THE GROOVING SHALL BE DONE PRIOR TO ALLOWING TRAFFIC ON NEW OVERLAY.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (RAISED MEDIAN RECONSTRUCTION):

ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (EDGE BEAM REPAIR):

ITEM 511 - CLASS S CONCRETE, MISC.: APPROACH SLAB REPAIR:

ITEM 511 - CLASS C CONCRETE, ABUTMENT, AS PER PLAN: (RECONSTRUCTION):

THESE ITEMS SHALL BE USED AT LOCATIONS INDICATED IN THE PLAN.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

THE COST OF THE TYPE A WATERPROOFING IS INCLUDED IN THIS ITEM.

ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, AND OTHER CONTAMINANTS DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR EACH OF THE ABOVE WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINT, AS PER PLAN:

PAYMENT FOR THE ABOVE ITEM SHALL INCLUDE THE QUANTITY FOR THE HOLES MADE TO WELD THE STEEL MEMBERS TO THE EXISTING EXPANSION JOINT AND AS PER DETAILS ON SHEET 57/62.

ITEM SPECIAL- STRUCTURE MISC.: EMBEDDED GALVANIC ANODE INSTALLATION:

GENERAL

THIS ITEM INCLUDES FURNISHING ALL LABOR, TOOLS, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO PROPERLY INSTALL EMBEDDED GALVANIC ANODES WHICH ARE PROVIDED BY THE OHIO DEPARTMENT OF TRANSPORTATION.

GALVANIC ANODE INSTALLATION

- A. GALVANIC ANODES SHALL BE INSTALLED AS SHOWN ON SHEET 52 AND AS DIRECTED BY THE ENGINEER AFTER THE HYDRODEMOLITION AND ALL HAND CHIPPING IS COMPLETE. IN NO CASE SHALL THE DISTANCE BETWEEN ANODES EXCEED 30 INCHES.
- B. PROVIDE SUFFICIENT CLEARANCE BETWEEN ANODES AND SUBSTRATE TO ALLOW REPAIR MATERIAL TO ENCASE ANODE.
- C. SECURE THE GALVANIC ANODES AS CLOSE AS POSSIBLE TO THE PATCH EDGE USING THE ANODE TIE WIRES. THE TIE WIRES SHOULD BE TIGHTENED TO ALLOW LITTLE OR NO FREE MOVEMENT.
 - 1. IF THE ANODE IS TO BE TIED ONTO A SINGLE BAR, OR IF LESS THAN 1 INCH OF CONCRETE COVER IS EXPECTED, PLACE ANODE BENEATH THE BAR AND SECURE TO CLEAN REINFORCING STEEL.
 - 2. IF SUFFICIENT CONCRETE COVER EXISTS, THE ANODE MAY BE PLACED AT THE INTERSECTION BETWEEN TWO BARS AND SECURED TO CLEAN BAR.

ELECTRICAL CONTINUITY

CONFIRM ELECTRICAL CONNECTION BETWEEN ANODE TIE WIRE AND REINFORCING STEEL WITH A MULTI-METER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR EACH INSTALLATION OF THE GALVANIC ANODE PROVIDED BY THE STATE OF OHIO WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING	
DATE 7/11	REVIEWED CLB
DRAWN DCM	REVISED DCM
DESIGNED DCM	CHECKED CAL
GENERAL NOTES	
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DESIGN FILE: I:\projects\77463\Struct\GENNOTES.dgn
WORKSTATION: mollens DATE: 9/20/2011
MODELNAME: Design

ITEM 202 - REMOVAL MISC.: RAISED CONCRETE APPROACH MEDIAN:

THIS ITEM SHALL BE USED AT THE LOCATIONS SHOWN IN THE PLAN.

THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR THE ABOVE ITEM WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 608 - CURB RAMP, TYPE A1, A2, C2 & D, AS PER PLAN:

THE COST FOR ADDITIONAL EXCAVATION, GRADING, SEEDING AND ADDITIONAL MATERIAL AROUND THE CURB RAMPS AND SIDEWALKS ARE INCLUDED IN THIS ITEM.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR EACH OF THE ABOVE WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2 3/4" THICK):

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY, (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN:

THE COARSE AGGREGATE SHALL BE LIMESTONE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR EACH OF THE ABOVE WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - ELASTOMERIC COMPRESSION SEAL, AS PER PLAN :

COMPRESSION SEAL:

FURNISH MATERIAL CONFORMING TO 705.11.

THE SEAL SHALL BE A WATSON BOWMAN ACME WG-400 OR AN APPROVED EQUIVALENT. INSTALL THE SEAL ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND UNDER THE SUPERVISION OF THE MANUFACTURER'S DESIGNATED REPRESENTATIVE.

THE SEAL SHALL BE INSTALLED IN ONE CONTINUOUS PIECE FROM EXPANSION JOINT TO EXPANSION JOINT.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (448), AS PER PLAN

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS. MINIMUM TOTAL PG BINDER CONTENT IS 6.0 PERCENT.
USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 20 PERCENT.
WHEN AN AGGREGATE SOURCE IS SPECIALLY DESIGNATED WITH AN SR ON THE AGGREGATE GRAVITY LIST DO NOT USE THE AGGREGATE EXCEPT AS ALLOWED FOR MEDIUM TRAFFIC IN THE GUIDELINES FOR MAINTAINING ADEQUATE PAVEMENT FRICTION IN SURFACE PAVEMENT.
QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

614 - MAINTAINING TRAFFIC:

TWO LANES OF TRAFFIC EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT THROUGH TRAFFIC SHALL HAVE LANE CLOSURES AND CROSS OVERS AS SHOWN ON SHEETS 7-41 FOR A MAXIMUM OF 110 CONSECUTIVE CALENDAR DAYS (TOTAL ALL 4 PHASES). THE 110 CONSECUTIVE DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE 110 CALENDAR DAYS THAT THE HIGHWAY REMAINS IN A LANE CLOSURE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE OF \$1,000 A DAY.

NO EQUIPMENT OR MATERIAL SHALL BE LOCATED OTHER THAN BEHIND THE DRUMS.

ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES AS PER 614.02 (a).

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 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 630 - SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN INSTALLATION AND REMOVAL FOR STORAGE:

1.0 DESCRIPTION

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING A SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY AND WHEN NO LONGER NEEDED REMOVING THE RRFB SIGN ASSEMBLY FOR STORAGE. THE FLASHING UNIT SHALL BE 2 SIDED LED, SOLAR POWERED AND PEDESTRIAN ACTIVATED. MULTIPLE UNITS SHALL BE WIRELESSLY CONTROLLED AND SYNCHRONIZED. THE UNIT SHALL BE COMPLIANT WITH THE MOST CURRENT FEDERAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

2.0 GENERAL REQUIREMENTS

- 2.1. EACH RRFB SHALL CONSIST OF TWO RAPIDLY AND ALTERNATELY FLASHING RECTANGULAR YELLOW INDICATIONS HAVING LED ARRAY BASED PULSING LIGHT SOURCES.
- 2.2. EACH RRFB SHALL BE A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.).
- 2.3. THE DURATION OF A PREDETERMINED PERIOD OF OPERATION OF THE RRFB'S FOLLOWING EACH ACTUATION SHOULD BE BASED ON THE MUTCD PROCEDURES FOR TIMING OF PEDESTRIAN CLEARANCE TIMES FOR PEDESTRIAN SIGNALS.

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF PLANNING
AND ENGINEERING

DATE
7/11
REVIEWED
CLB

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DCM
REVISED
DCM 9/11

DESIGNED
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GENERAL NOTES

ERI-6-17.70

ITEM 630 - SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN INSTALLATION AND REMOVAL FOR STORAGE: (CONTINUED)

3.0 FUNCTIONAL REQUIREMENTS

- 3.1. EACH RRFB SHALL UTILIZE SOLAR POWER.
- 3.2. EACH RRFB SHALL BE ACTIVATED BY ADA COMPLIANT PUSHBUTTONS.
- 3.3. THE RRFB SHALL BE NORMALLY DARK, SHALL INITIATE OPERATION ONLY UPON PEDESTRIAN ACTUATION, AND SHALL CEASE OPERATION AFTER A PREDETERMINED TIME LIMIT (BASED ON MUTCD PROCEDURES).
- 3.4. EACH REMOTE RRFB SHALL BE WIRELESSLY ACTIVATED.
- 3.5. WHEN ACTIVATED, THE RRFB UNIT INDICATIONS SHALL FLASH IN A RAPIDLY ALTERNATING "WIG-WAG" FLASHING SEQUENCE (LEFT LIGHT ON, THEN RIGHT LIGHT ON).
- 3.6. ALL RRFB LIGHT INDICATIONS SHALL BE WIRELESSLY SYNCHRONIZED (ALL LIGHTS WILL TURN ON WITHIN 120 MSEC AND REMAIN SYNCHRONIZED THROUGHOUT THE DURATION OF THE FLASHING CYCLE).
- 3.7. EACH OF THE RRFB'S INDICATIONS SHALL FLASH AT 70 TO 80 FLASHES PER MINUTE.
- 3.8. UNIT SHALL BE LOW CURRENT/HIGH OUTPUT INCLUDING AUTOMATIC DIMMING CAPABILITIES FOR DAY AND NIGHT VISIBILITY.
- 3.9. UNIT SHALL BE CAPABLE OF RUNNING UP TO 30 DAYS WITHOUT SUNLIGHT.

4.0 MATERIALS

FURNISH A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS, AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.). THE RRFB ASSEMBLY INCLUDES THE FOLLOWING ITEMS:

4.1 RRFB INDICATIONS

- A. EACH RRFB INDICATION LENS SHALL BE A MINIMUM SIZE OF APPROXIMATELY 5" WIDE X 2" HIGH.
- B. THE RRFB INDICATIONS SHALL BE ALIGNED HORIZONTALLY, WITH THE LONGER DIMENSION OF THE INDICATION HORIZONTAL. THERE SHALL BE TWO INDICATIONS ON THE FRONT AND TWO INDICATIONS ON THE BACK.
- C. EACH RRFB SHALL BE SUPPLIED WITH ALL REQUIRED HARDWARE TO INSTALL ASSEMBLY. ALL EXPOSED HARDWARE SHALL BE ANTI-VANDAL.
- D. EACH RRFB SHALL BE LOCATED BETWEEN THE BOTTOM OF THE CROSSING WARNING SIGN AND THE TOP OF THE SUPPLEMENTAL DOWNWARD DIAGONAL ARROW PLAQUE.
- E. THE LIGHT INTENSITY OF THE YELLOW INDICATIONS SHALL MEET THE MINIMUM SPECIFICATIONS OF SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) STANDARD J595 (DIRECTIONAL FLASHING OPTICAL WARNING DEVICES FOR AUTHORIZED EMERGENCY, MAINTENANCE, AND SERVICE VEHICLES) DATED JANUARY, 2005.
- F. A SMALL CONFIRMATION LIGHT DIRECTED AT AND VISIBLE TO PEDESTRIANS IN THE CROSSWALK SHALL BE INSTALLED INTEGRAL TO THE RRFB OR PUSH BUTTON TO GIVE CONFIRMATION THAT THE RRFB IS IN OPERATION.

4.2 SIGNS

- A. ALL SIGNS SHALL CONFORM TO MUTCD STANDARDS.
- B. ALL SIGN BLANKS SHALL BE MINIMUM .080 GAUGE ALUMINUM, MINIMUM.
- C. REFLECTIVE SHEETING TYPE G, H OR J SHALL BE USED ON THE SIGN. SIGN SHEETING SHALL BE LISTED ON ODOT QUALIFIED PRODUCTS LIST (QPL).
- D. ALL SIGN ASSEMBLIES SHALL USE ANTI-VANDAL FASTENERS TO MOUNT COMPONENTS TO SIGN AND SIGN TO FIXTURE.
- E. ALL SIGN ASSEMBLIES SHALL BE W11-2 (36" X 36"), W16-7P (30"X18) OR AS SHOWN & SPECIFIED IN THE PLANS.
- F. PEDESTRIAN PUSH BUTTONS SIGNS SHALL BE PROVIDED AND INCLUDE THE LEGEND "PUSH BUTTON TO TURN ON WARNING LIGHTS". SIGNS SHOULD BE MOUNTED ADJACENT TO OR INTEGRAL WITH EACH PEDESTRIAN PUSHBUTTON.
- G. TWO SETS OF SIGNS SHALL BE REQUIRED PER UNIT FOR VIEW FROM EACH APPROACH.
- H. SIGN MOUNTING HEIGHTS SHALL BE IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWINGS.

4.3 CONTROL CIRCUIT

- A. WHEN ACTIVATED, THE TWO YELLOW INDICATIONS IN EACH RRFB SHALL FLASH IN A RAPIDLY ALTERNATING "WIG-WAG" FLASHING SEQUENCE (LEFT LIGHT ON, THEN RIGHT LIGHT ON).
- B. THE CONTROL CIRCUIT SHALL HAVE THE CAPABILITY OF INDEPENDENTLY FLASHING UP TO TWO INDEPENDENT OUTPUTS. THE LED LIGHT OUTPUTS AND FLASH PATTERN SHALL BE COMPLETELY PROGRAMMABLE.
- C. AS A SPECIFIC EXCEPTION TO 2003 MUTCD SECTION 4K.01 REQUIREMENTS FOR THE FLASH RATE OF BEACONS, RRFBs SHALL USE A MUCH FASTER FLASH RATE. EACH OF THE TWO YELLOW INDICATIONS OF AN RRFB SHALL HAVE 70 TO 80 PERIODS OF FLASHING PER MINUTE AND SHALL HAVE ALTERNATING BUT APPROXIMATELY EQUAL PERIODS OF RAPID PULSING LIGHT EMISSIONS AND DARK OPERATION. DURING EACH OF ITS 70 TO 80 FLASHING PERIODS PER MINUTE, ONE OF THE YELLOW INDICATIONS SHALL EMIT TWO RAPID PULSES OF LIGHT AND THE OTHER YELLOW INDICATION SHALL EMIT THREE RAPID PULSES OF LIGHT.
- D. THE FLASH RATE OF EACH INDIVIDUAL YELLOW INDICATION, AS APPLIED OVER THE FULL ON-OFF SEQUENCE OF A FLASHING PERIOD OF THE INDICATION, SHALL NOT BE BETWEEN 5 AND 30 FLASHES PER SECOND, TO AVOID FREQUENCIES THAT MIGHT CAUSE SEIZURES.
- E. THE CONTROL CIRCUIT SHALL BE SEALED WATERTIGHT TO ELIMINATE DIRT CONTAMINATION AND ALLOW FOR SAFE HANDLING IN ALL WEATHER CONDITIONS.
- F. THE L.E.D.S SHALL BE SEALED AGAINST DUST AND MOISTURE INTRUSION AS PER THE REQUIREMENTS OF NEMA STANDARD 250-1991 FOR TYPE 4 ENCLOSURE AND TO PROTECT ALL INTERNAL L.E.D. AND ELECTRICAL COMPONENT.

DESIGN FILE: \\projects\77463\Struct\GENNOTES.dgn
 WORKSTATION: dmollens DATE: 7/22/2011
 MODELNAME: Design

DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PLANNING
 AND ENGINEERING

DATE

7/11

REVIEWED

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GENERAL NOTES

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ITEM 630 - SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN INSTALLATION AND REMOVAL FOR STORAGE: (CONTINUED)

4.4 BATTERY & SOLAR PANELS

- A. BATTERY UNIT SHALL BE A 12VDC, 40 AHR MINIMUM, SEALED GEL OR AGM LEAD ACID BATTERY. BATTERIES SHALL HAVE A WRITTEN TWO YEAR FULL REPLACEMENT WARRANTY.
- B. THE SOLAR PANEL SHALL PROVIDE MINIMUM OF 55 WATTS PEAK TOTAL OUTPUT.
- C. THE SOLAR PANEL SHALL BE MOUNTED TO AN ALUMINUM PLATE AND BRACKET AT AN ANGLE OF 45 DEGREES- 60 DEGREES TO PROVIDE MAXIMUM OUTPUT.
- D. ALL FASTENERS USED SHALL BE ANTI-VANDAL.

4.5 WIRELESS RADIO

- A. RADIO CONTROL SHALL OPERATE ON 900 MHZ FREQUENCY HOPPING SPREAD SPECTRUM NETWORK, WI-FI OR APPROVED EQUAL.
- B. RADIO SHALL INTEGRATE COMMUNICATION OF RRFB CONTROL CIRCUIT TO ACTIVATE SIGN FROM PUSHBUTTON INPUT.
- C. THE RADIO SHALL BE SYNCHRONIZED SO ALL OF THE REMOTE RRFB LIGHT INDICATIONS WILL TURN ON WITHIN 120 MSEC OF EACH OTHER AND REMAIN SYNCHRONIZED THROUGH-OUT THE DURATION OF THE FLASHING CYCLE.
- D. RADIO SYSTEMS SHALL OPERATE FROM: 3VDC TO 15VDC.

4.6 PUSHBUTTON

- A. THE PUSHBUTTON SHALL BE CAPABLE OF CONTINUOUS OPERATION OVER A TEMPERATURE RANGE OF -30 DEGREES F TO 165 DEGREES F (-34 DEGREES C TO 74 DEGREES C).
- B. PUSHBUTTON SHALL BE ADA COMPLIANT.

4.7 PEDESTAL SHAFT & BASE

- A. MUST MOUNT ON STANDARD 4.5" OD ALUMINUM PEDESTAL POLE WITH BREAKAWAY BASE. A 14FT POLE SHALL BE PROVIDED AND FIELD ADJUSTED TO MAINTAIN THE PROPER SIGN MOUNTING HEIGHTS, UNLESS SPECIFIED OTHERWISE IN THE PLANS. POLE & BASE MANUFACTURER SHALL BE LISTED ON ODOT APPROVED LIST.

4.8 SCREW-IN FOUNDATION

- A. INSTALL HELICAL AUGER FOUNDATION WITH 6-INCH (MIN) PIPE DIAMETER AND 11-INCH (MIN) AUGER DIAMETER USING A HYDRAULIC AUGER DRIVE AND SPECIAL DRIVE ADAPTER TOOL.
- B. USE PELCO MODEL PB-5372, ECP UTILITY MODEL LPS-663-60, OR AN APPROVED EQUAL SCREW-IN AUGER TYPE FOUNDATION.

5.0 CONSTRUCTION

THE RRFB WILL BE ASSEMBLED AND CONSTRUCTED BY THE CONTRACTOR AS SHOWN AND SPECIFIED ON THE PLANS.

6.0 REMOVAL FOR STORAGE

WHEN THE RRFB SIGNS ARE NO LONGER NEEDED AT THESE CROSSINGS, THE CONTRACTOR SHALL OBTAIN THE PROJECT ENGINEER'S APPROVAL TO REMOVE THE RRFB SIGNS AND THEN NOTIFY THE DISTRICT 3 TRAFFIC MANAGER DOUG HICKEY AT 419-207-7184 THAT THE RRFB SIGN ASSEMBLIES WITH AUGER FOUNDATIONS WILL BE AVAILABLE FOR ODOT CREWS TO PICK UP AT THE SITE.

- A. CAREFULLY DISASSEMBLE AND REMOVE THE RRFB SIGN ASSEMBLY AND AUGER TYPE FOUNDATION AND PROTECT THEM FROM DAMAGE..

7.0 WARRANTY

WARRANTY SHALL BE 2 YEARS FROM THE DATE OF FINAL ACCEPTANCE.

8.0 MEASUREMENT

THE DEPARTMENT WILL MEASURE THE ITEM COMPLETE IN PLACE, INCLUDING ALL MATERIALS, TESTING, LABOR AND SOFTWARE , AS DESCRIBED ABOVE, FOR A FULLY FUNCTIONAL UNIT.

9.0 PAYMENT

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

ITEM - 630E97700

UNIT - EACH

DESCRIPTION - SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN INSTALLATION AND REMOVAL FOR STORAGE.

DESIGN FILE: \\projects\77463\struct\GENNOTES.dgn
WORKSTATION: dmollens
MODELNAME: Design
DATE: 7/22/2011

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF PLANNING
AND ENGINEERING

DATE
7/11

REVIEWED
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GENERAL NOTES

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DESIGN FILE: \\projects\77463\Struct\GENNOTES.dgn
 WORKSTATION: dmollens DATE: 7/22/2011
 MODELNAME: Design

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN:

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE WHEN NO LONGER NEEDED, 2 PORTABLE CHANGEABLE MESSAGE SIGN, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN CLICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FT. AND 475 FT., 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. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PCMS LOCATIONS SHALL BE LOCATED IN ADVANCE OF THE BEGINNING AND END OF THE PROJECT TO NOTIFY THE TRAVELLING PUBLIC OF CONSTRUCTION WORK BEING DONE. 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, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE 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 6 HOURS 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 PREPROGRAMMED 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 PREPROGRAMMED 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.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (CONTINUED):

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 WORK ZONE 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 CMS 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.

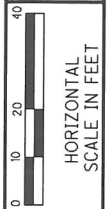
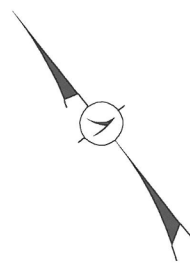
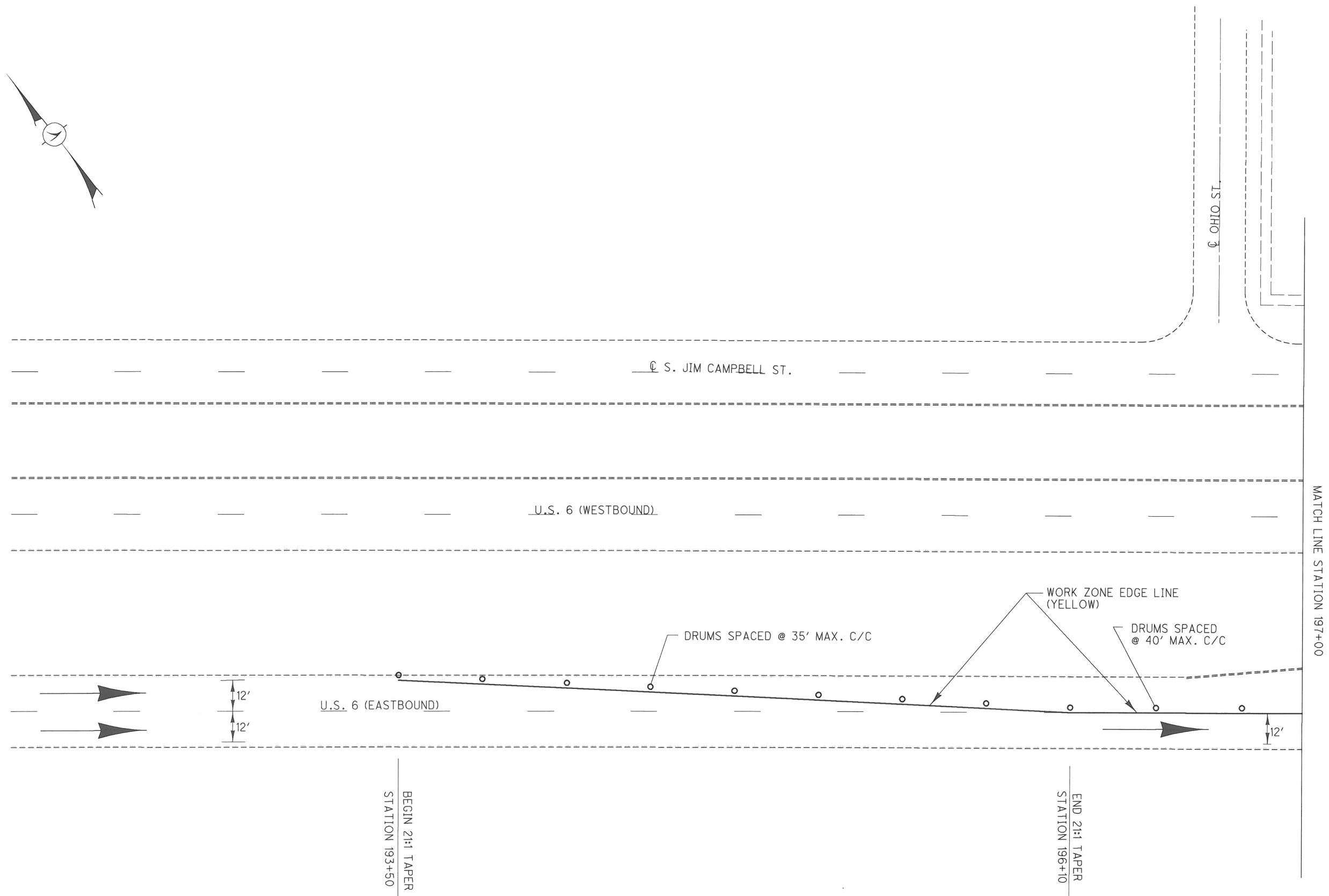
PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

240 DAYS CARRIED TO GENERAL SUMMARY

SEQUENCE OF WORK:

- 1) CURB RAMPS SHALL BE BUILT PRIOR TO PHASE 1-4.
- 2) PHASE 1 SHALL BE USED TO REMOVE APPROACH RAISED MEDIANS AND RECONSTRUCT THE PAVEMENT ON THE MEDIANS FOR M.O.T. RECONSTRUCT RAISED MEDIAN ON STRUCTURE, PATCH RAISED MEDIAN ON STRUCTURE.
- 3) PHASE 2 SHALL BE USED TO REPAIR APPROACH SLABS AND BACKWALLS, REPAIR EDGE BEAM, REMOVE AND REPLACE OVERLAY, GROOVE NEW OVERLAY AND SEAL IN THE WEST BOUND DIRECTION.
- 4) PHASE 3 SHALL BE USED TO REPAIR APPROACH SLABS AND BACKWALLS, REPAIR EDGE BEAM, REPAIR JOINT, REMOVE AND REPLACE OVERLAY, GROOVE NEW OVERLAY AND SEAL IN THE EAST BOUND DIRECTION.
- 5) PHASE 4 SHALL BE USED TO REPLACE APPROACH RAISED MEDIANS, INSTALL TYPE 6 CURBS AND PLACE TOP SOIL.
- 6) RESURFACING AND REMOVAL OF TEMPORARY CURB RAMPS SHALL BE DONE AFTER PHASE 1-4.

GENERAL NOTES	ERI-6-17.70
DESIGNED DCM CHECKED CAL	DRAWN DCM REVISED
REVIEWED CLB	DATE 7/11
DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING	



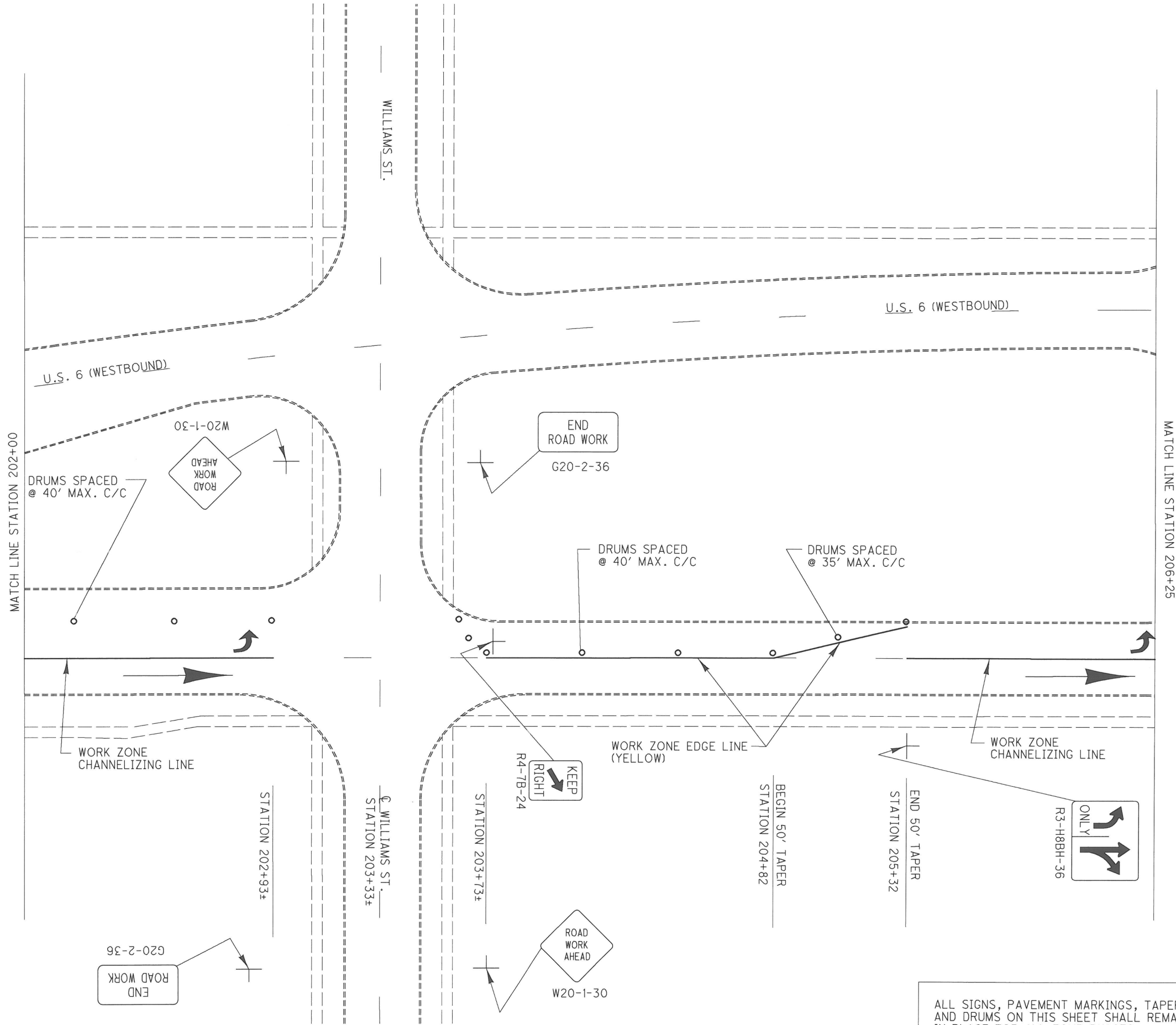
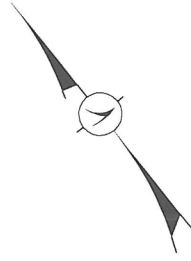
HORIZONTAL
SCALE IN FEET

M.O.T. PHASE 1 - PHASE 4
STATION 192+00 TO 197+00

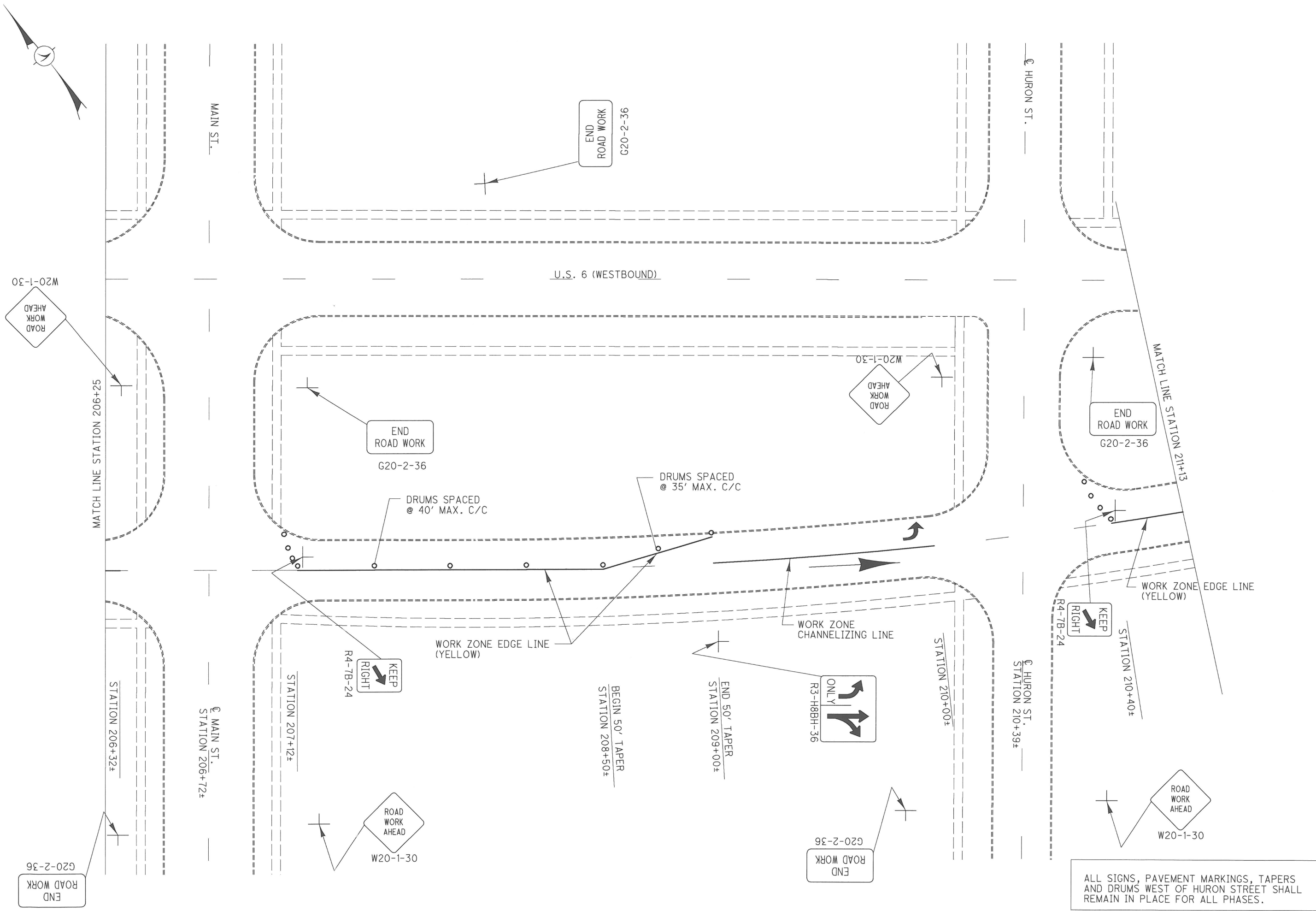
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FOR ADDITIONAL DETAILS, SEE STANDARD
CONSTRUCTION DRAWING MT-95.30

ALL SIGNS, PAVEMENT MARKINGS, TAPERS
AND DRUMS ON THIS SHEET SHALL REMAIN
IN PLACE FOR ALL FOUR PHASES.



ALL SIGNS, PAVEMENT MARKINGS, TAPERS AND DRUMS ON THIS SHEET SHALL REMAIN IN PLACE FOR ALL FOUR PHASES.

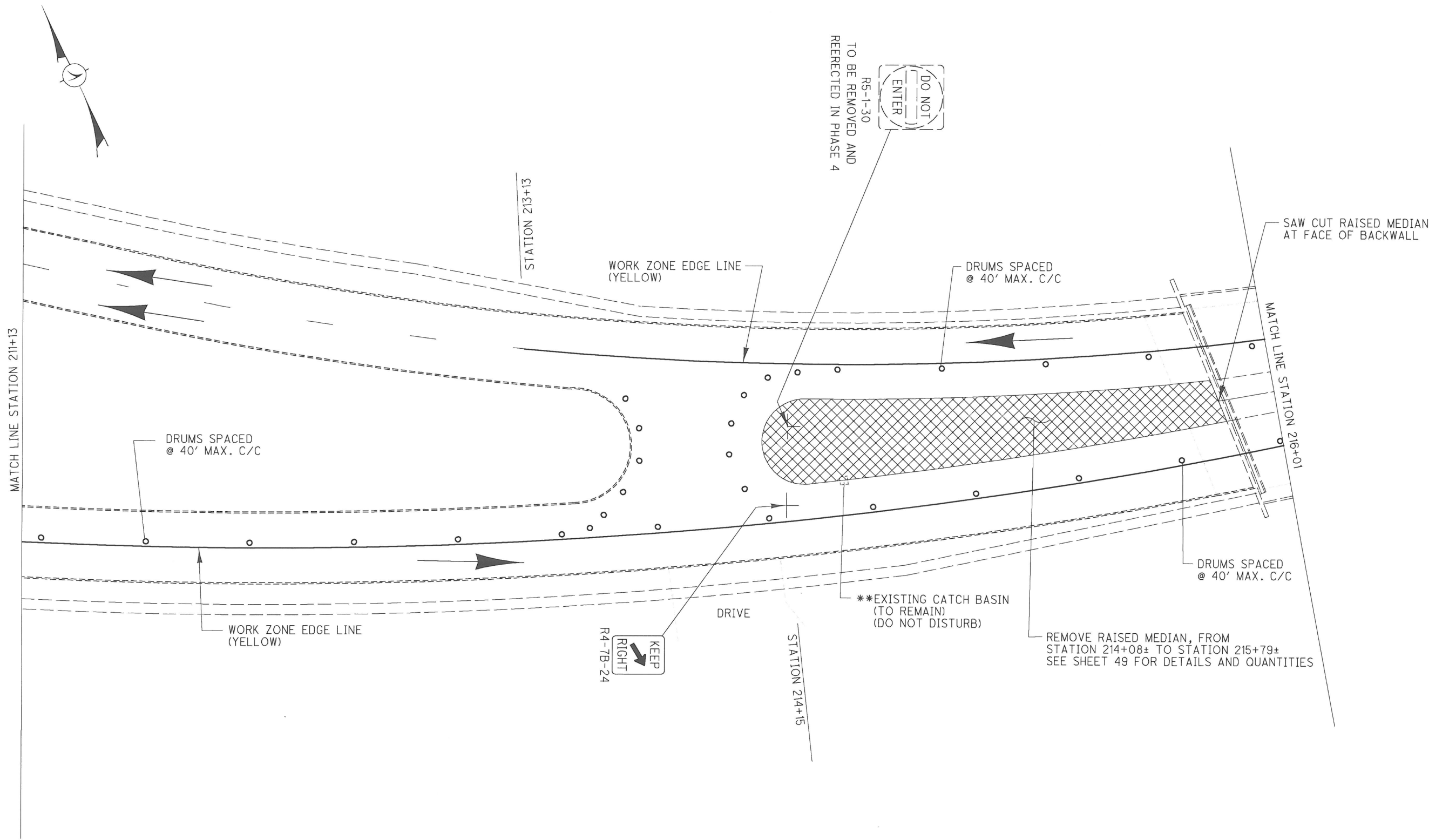


ALL SIGNS, PAVEMENT MARKINGS, TAPERS AND DRUMS WEST OF HURON STREET SHALL REMAIN IN PLACE FOR ALL PHASES.

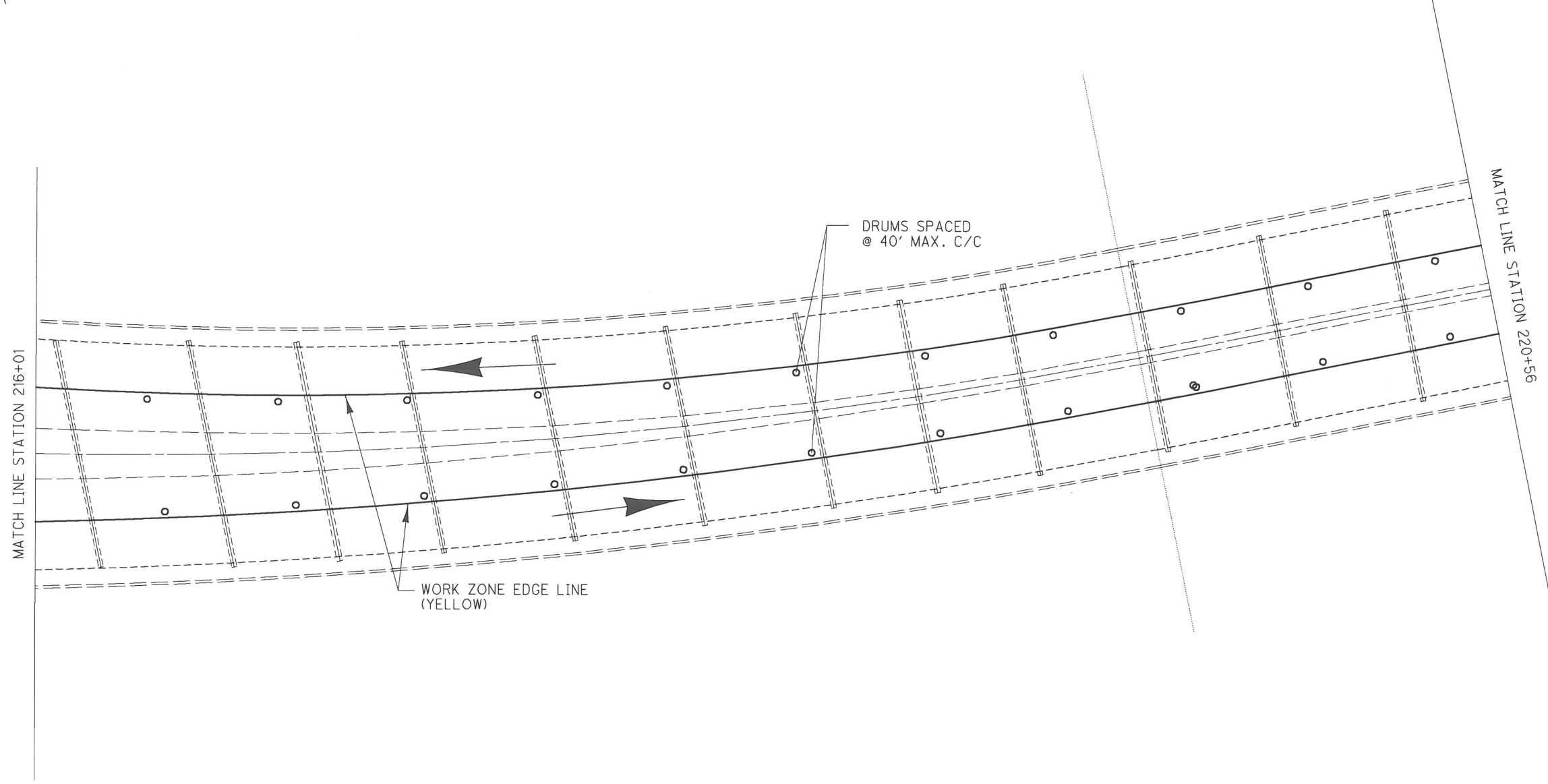


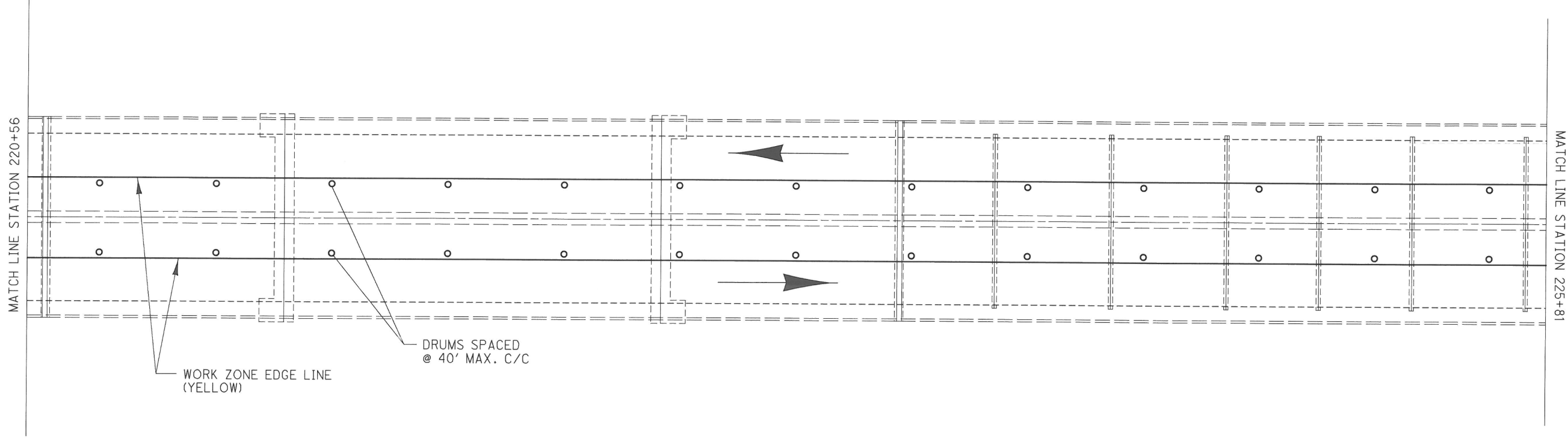
M.O.T. PHASE 1
STATION 206+25 TO 211+13

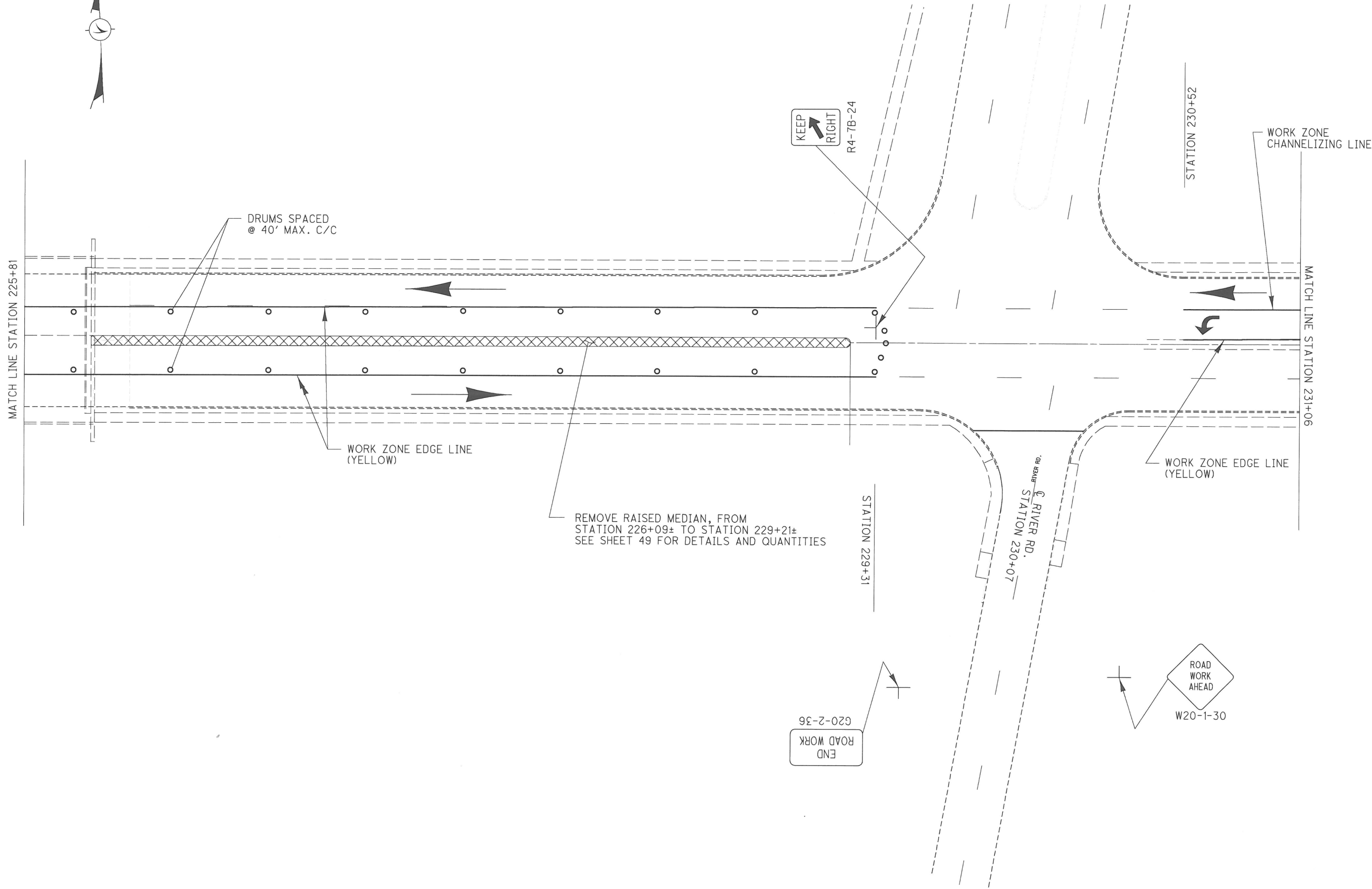
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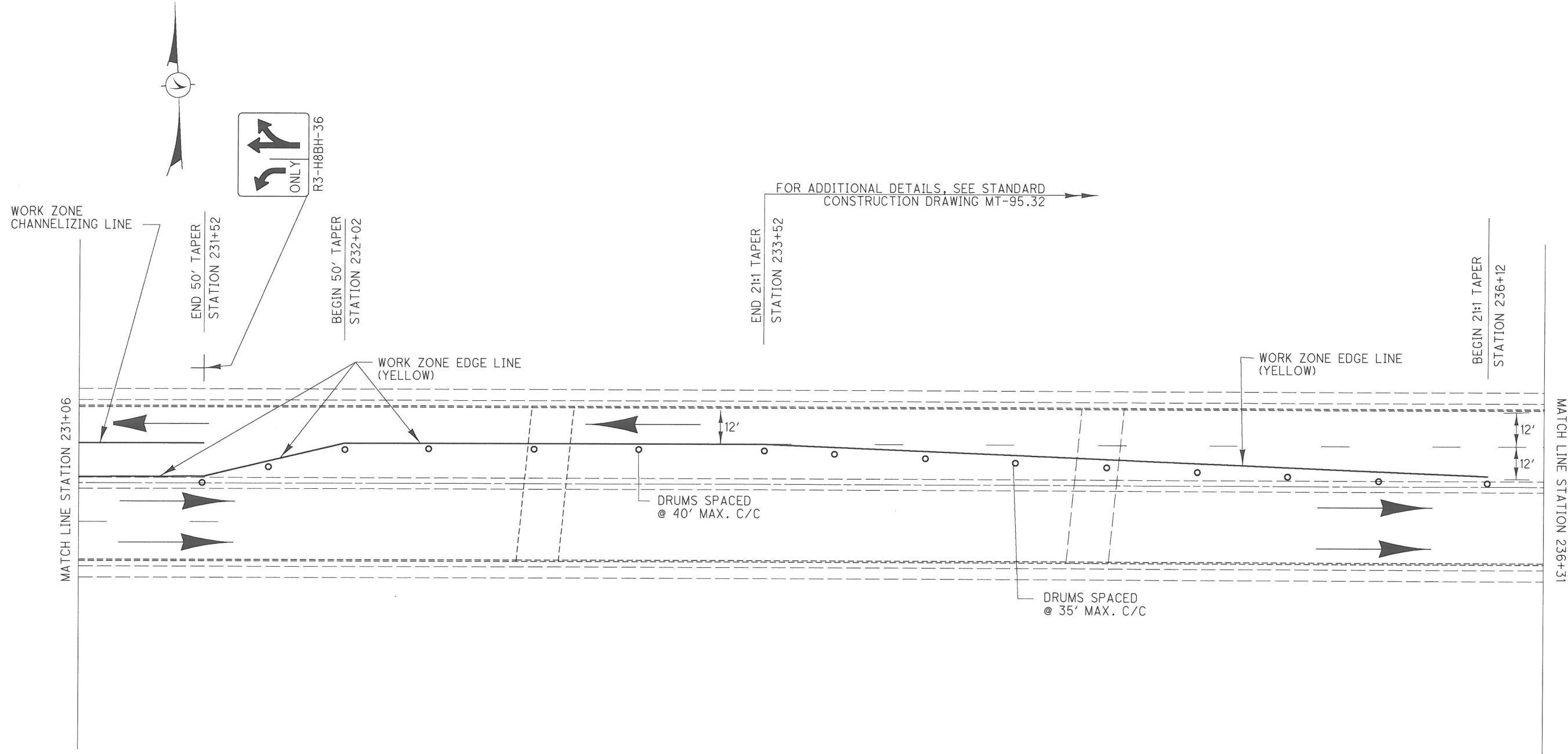


** IF THE EXISTING CATCH BASIN IS DISTURB, THEN THE CONTRACTOR SHALL REPLACE THE CATCH BASIN AT THERE OWN EXPENSE



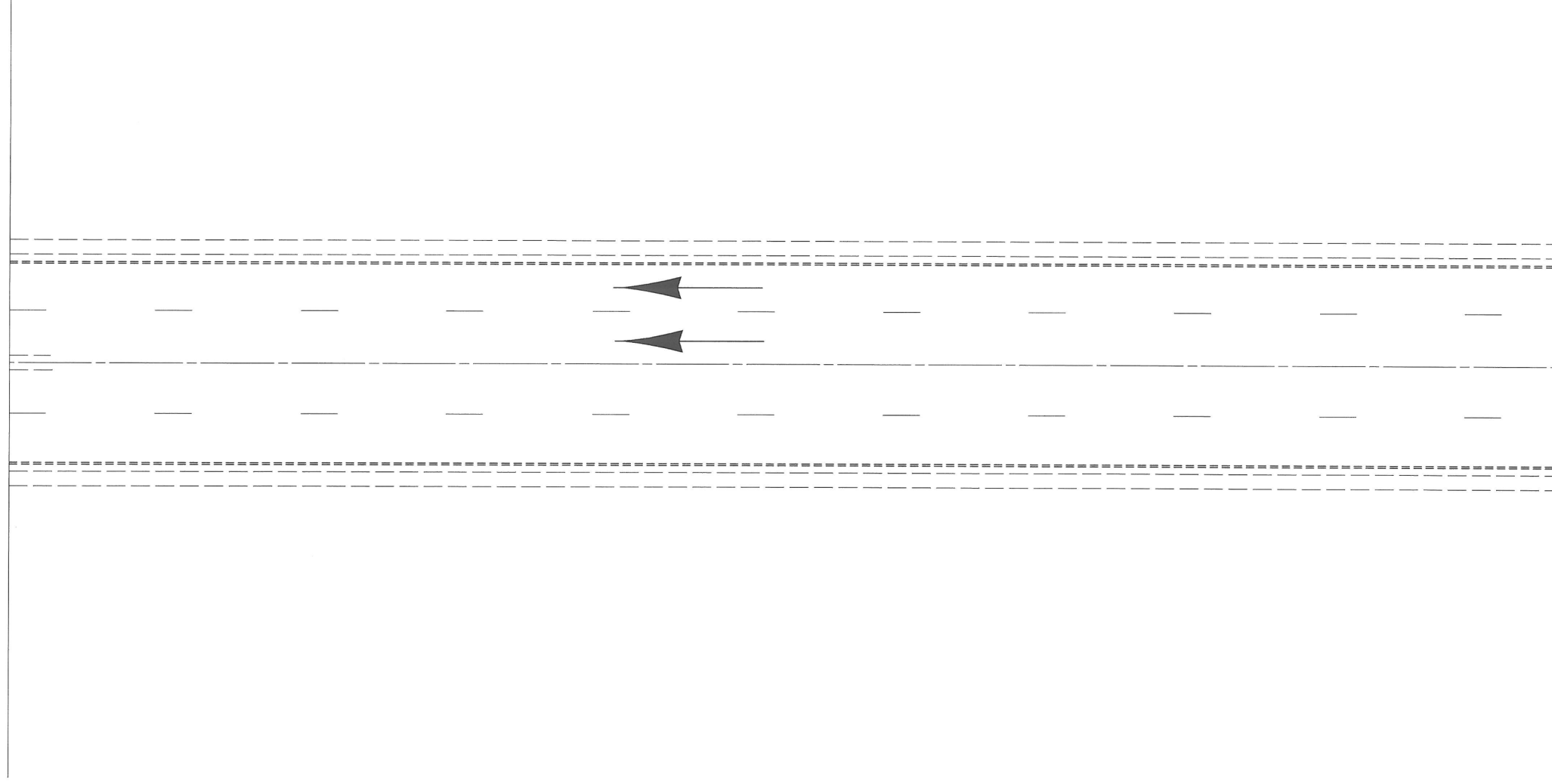






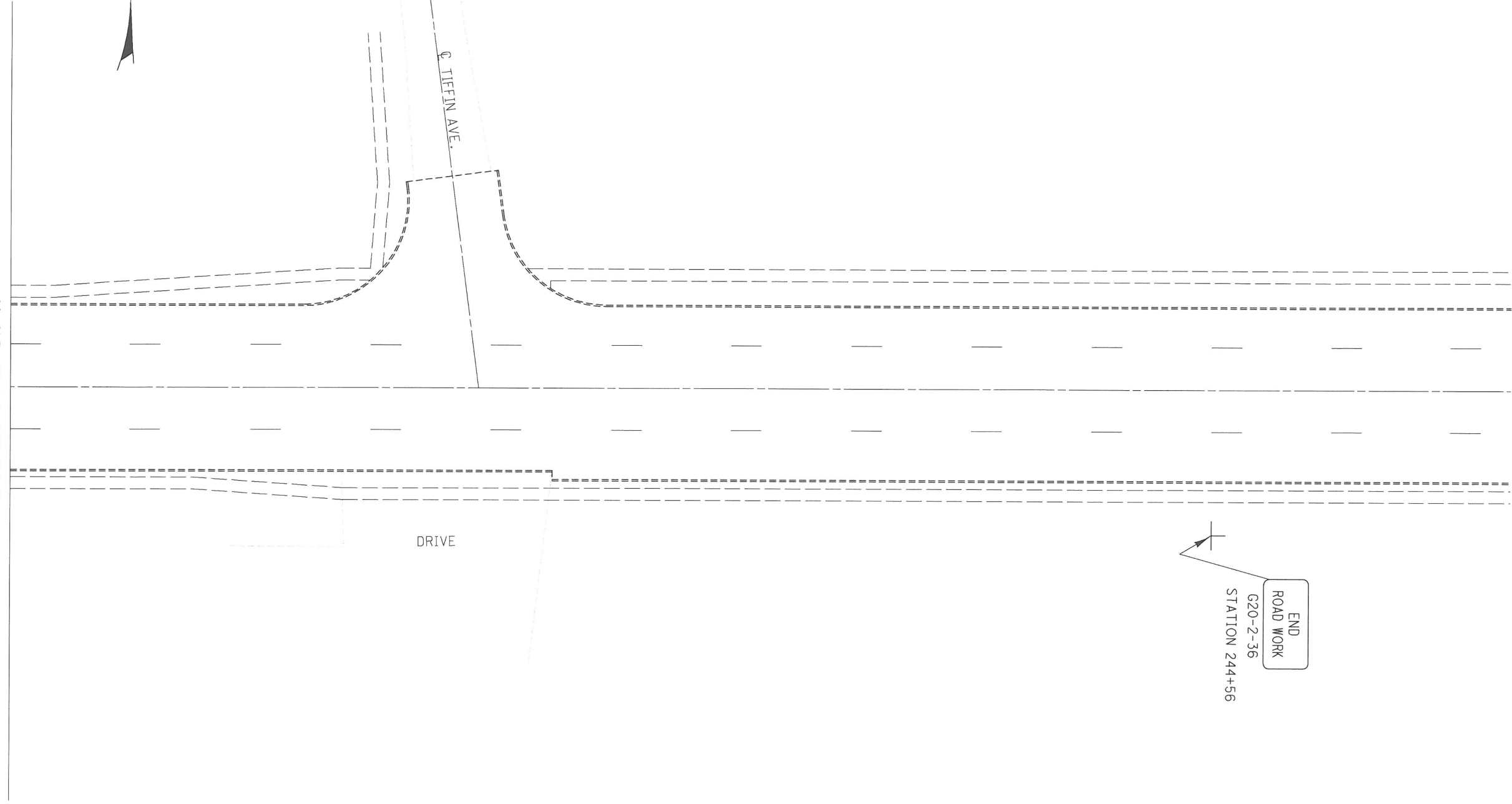


MATCH LINE STATION 236+31



MATCH LINE STATION 240+56

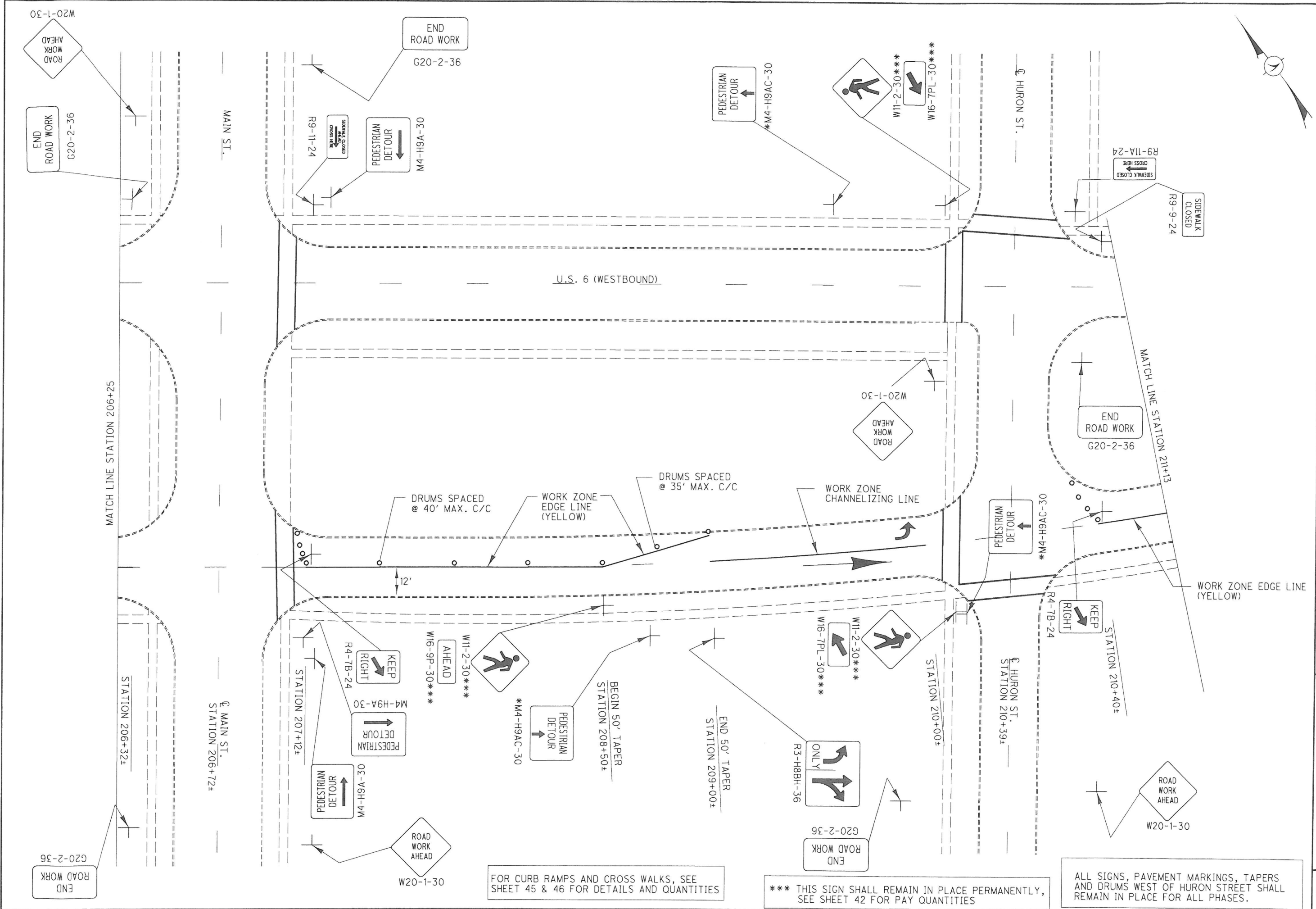
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DRIVE

C. TIFFIN AVE.

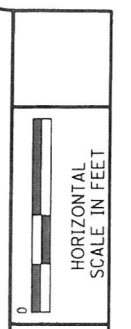
END
ROAD WORK
G20-2-36
STATION 244+56



FOR CURB RAMPS AND CROSS WALKS, SEE SHEET 45 & 46 FOR DETAILS AND QUANTITIES

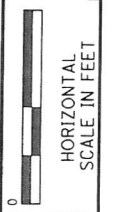
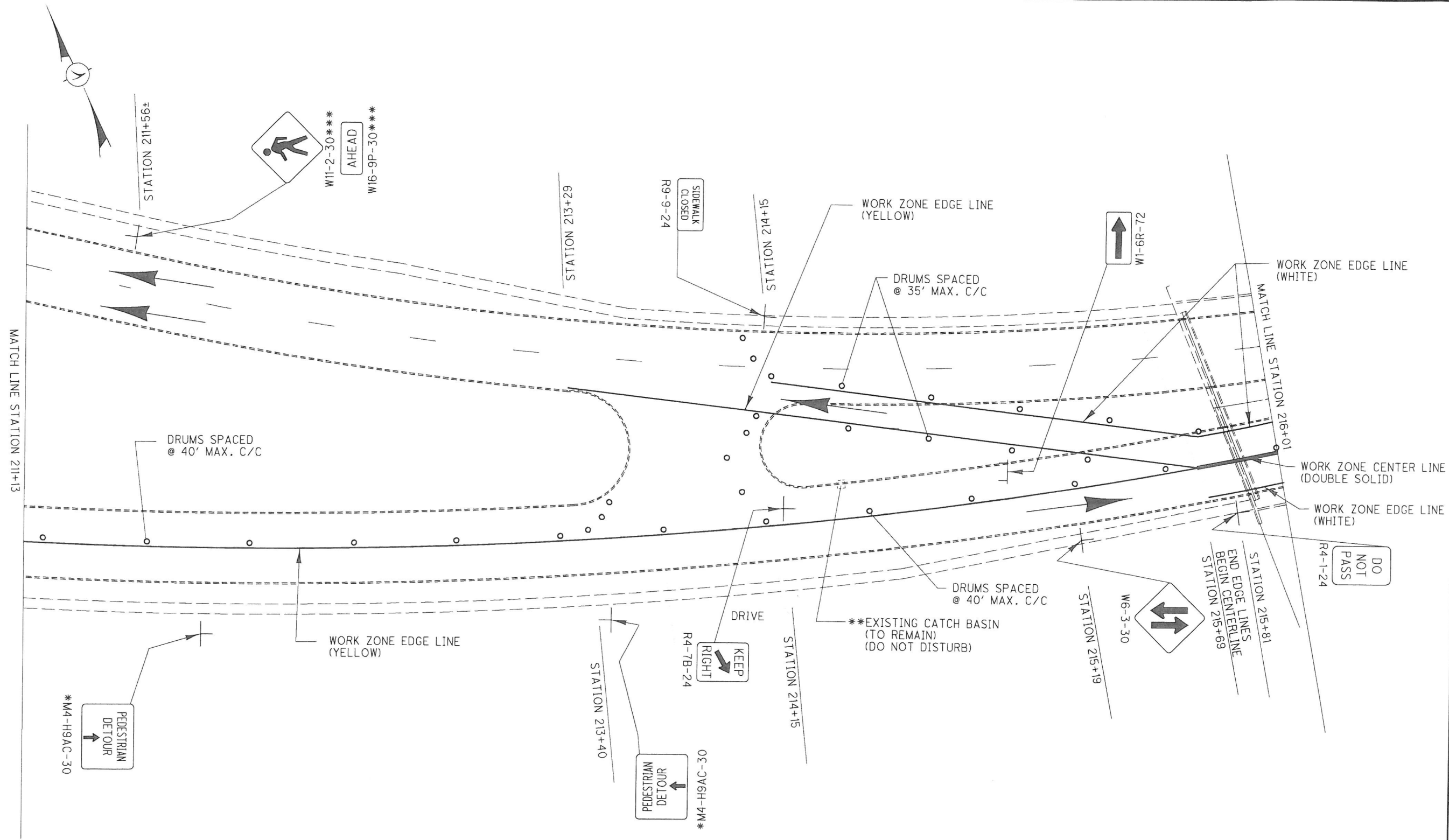
*** THIS SIGN SHALL REMAIN IN PLACE PERMANENTLY, SEE SHEET 42 FOR PAY QUANTITIES

ALL SIGNS, PAVEMENT MARKINGS, TAPERS AND DRUMS WEST OF HURON STREET SHALL REMAIN IN PLACE FOR ALL PHASES.



**M.O.T. PHASE 2
 STATION 206+25 TO 211+13**

ERI-6-17.70



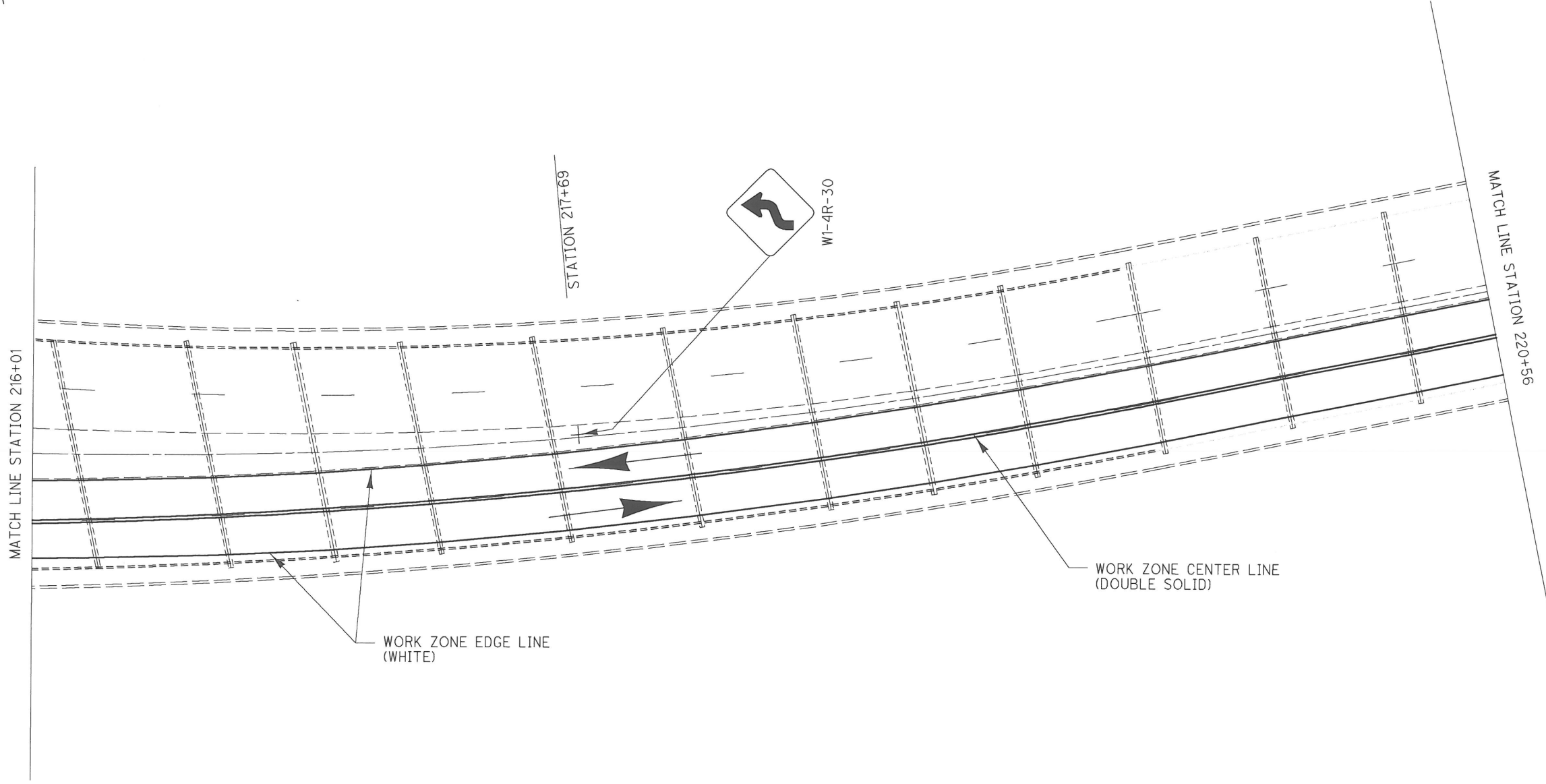
M.O.T. PHASE 2
 STATION 211+13 TO 216+01

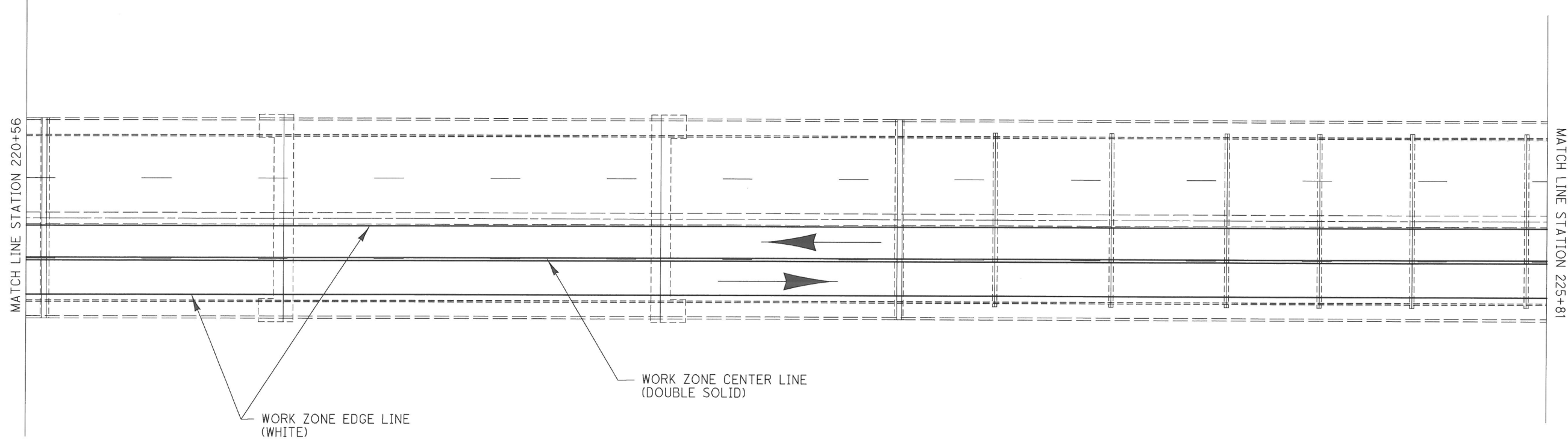
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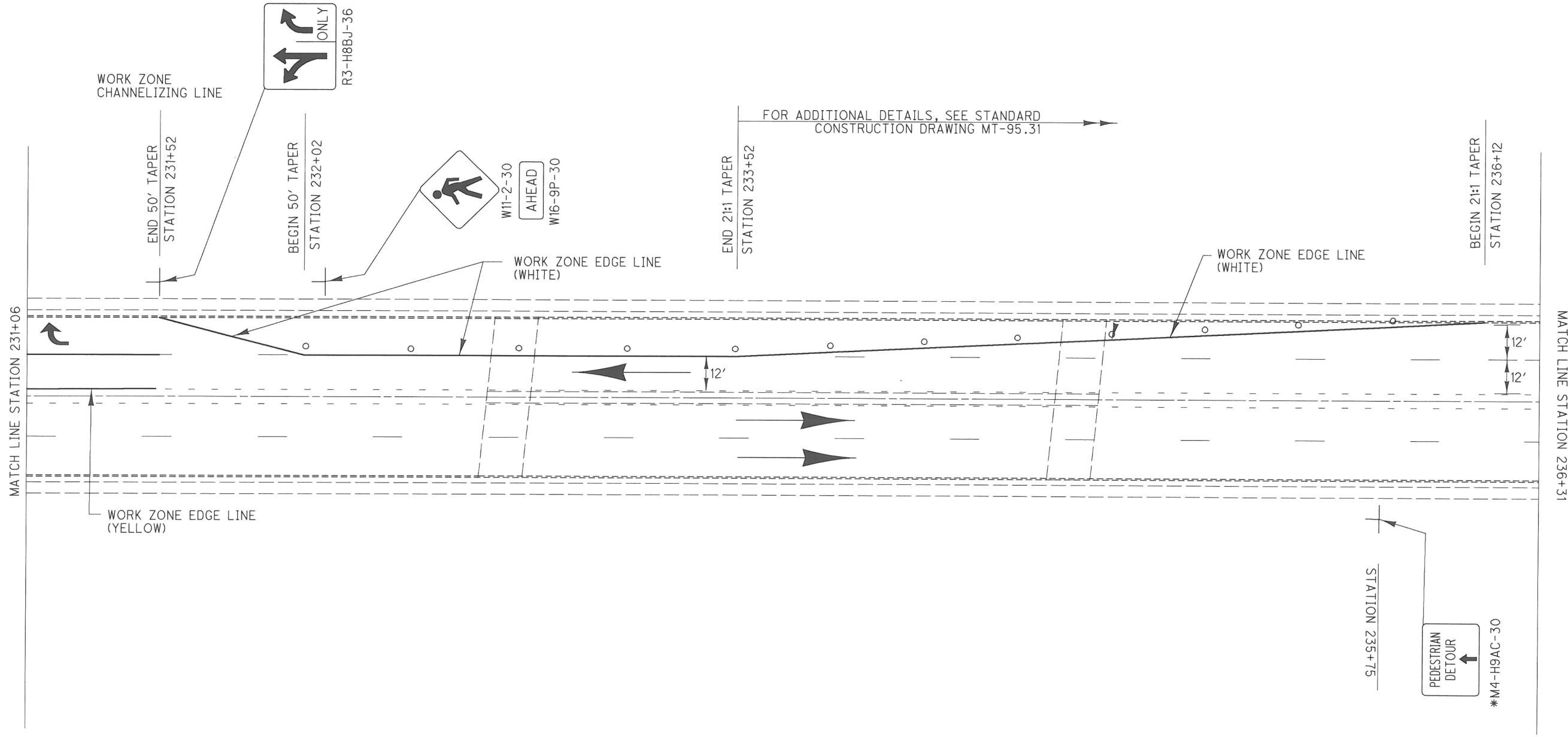
*** THIS SIGN SHALL REMAIN IN PLACE PERMANENTLY, SEE SHEET 42 FOR PAY QUANTITIES

*M4-H9AC-30 - SEE SHEET 25 FOR SIGN DETAILS

** IF THE EXISTING CATCH BASIN IS DISTURB, THEN THE CONTRACTOR SHALL REPLACE THE CATCH BASIN AT THERE OWN EXPENSE







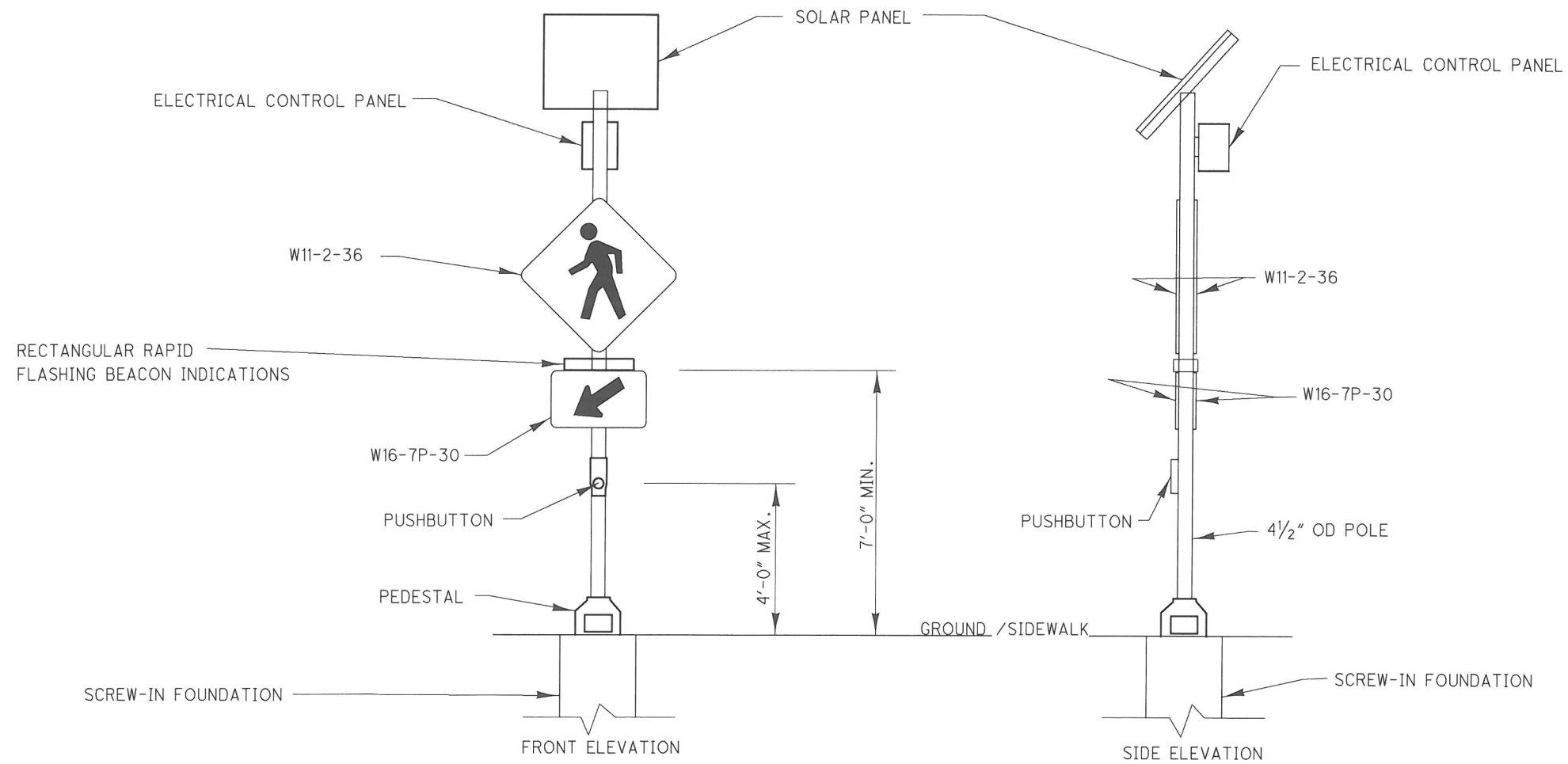
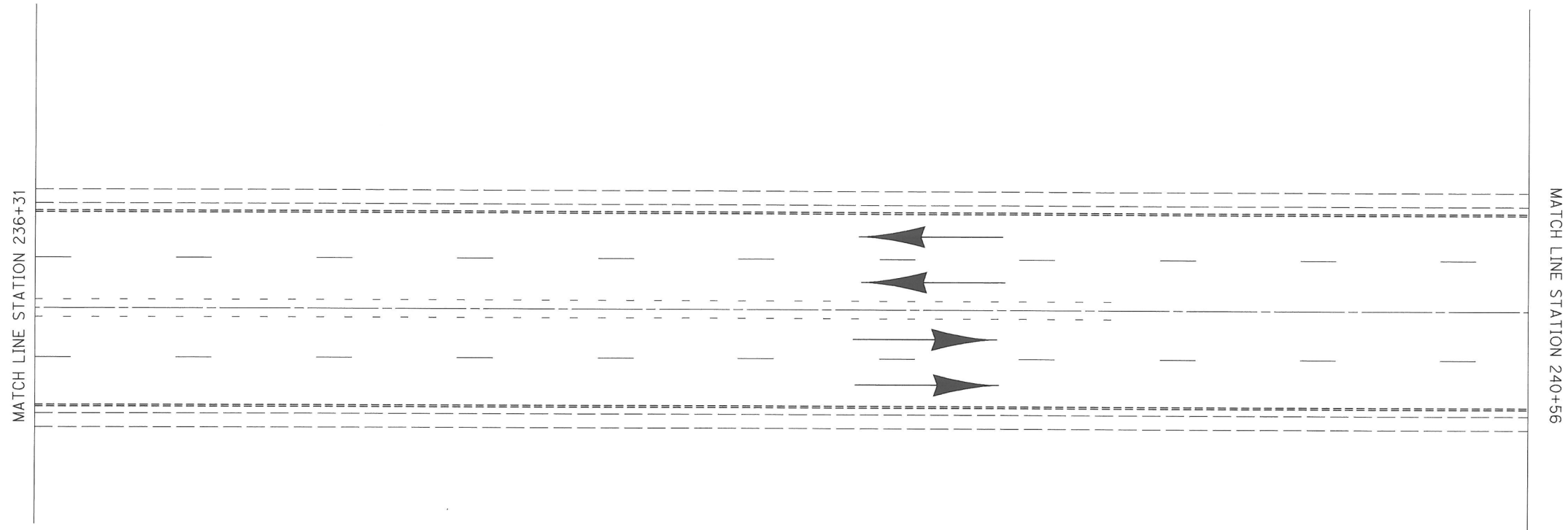
*M4-H9AC-30 - SEE SHEET 25 FOR SIGN DETAILS



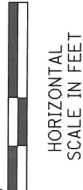
HORIZONTAL
SCALE IN FEET

**M.O.T. PHASE 2
STATION 231+06 TO 236+31**

ERI-6-17.70



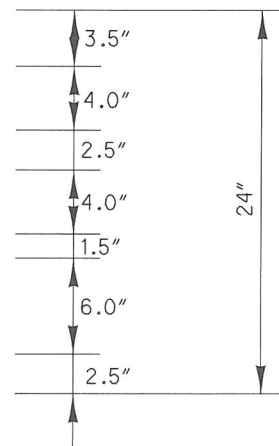
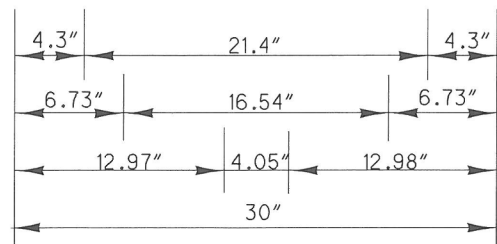
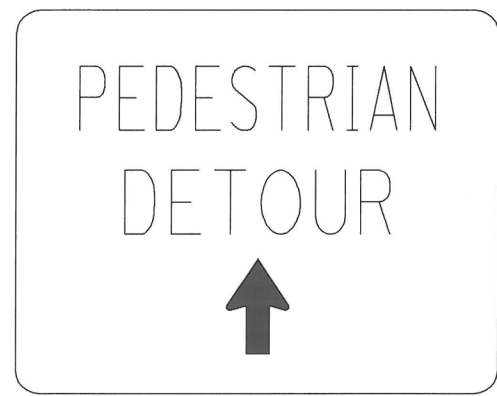
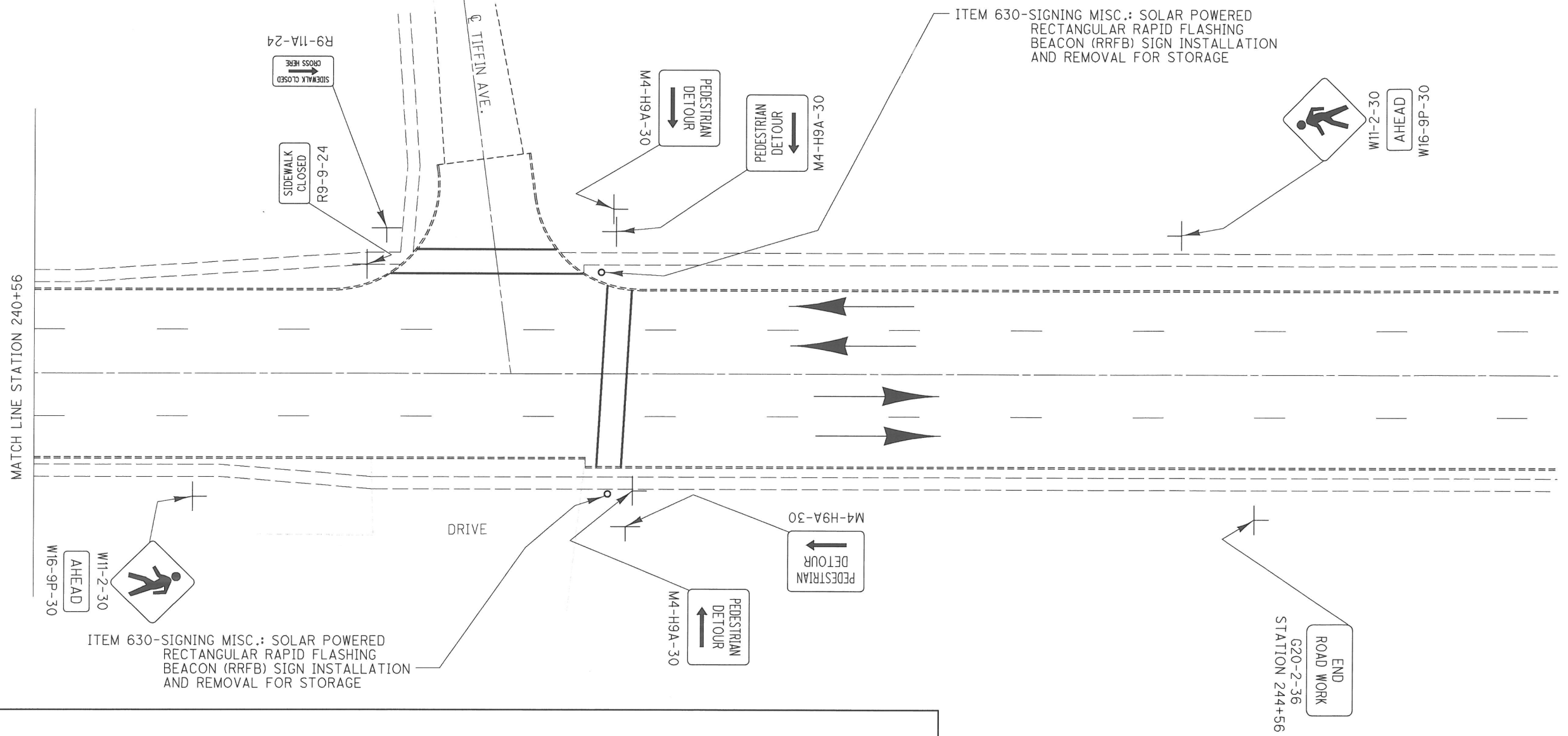
RECTANGULAR RAPID FLASHING BEACON SIGN INSTALLATION AND REMOVAL FOR STORAGE



HORIZONTAL
SCALE IN FEET

M.O.T. PHASE 2
STATION 236+31 TO 240+56

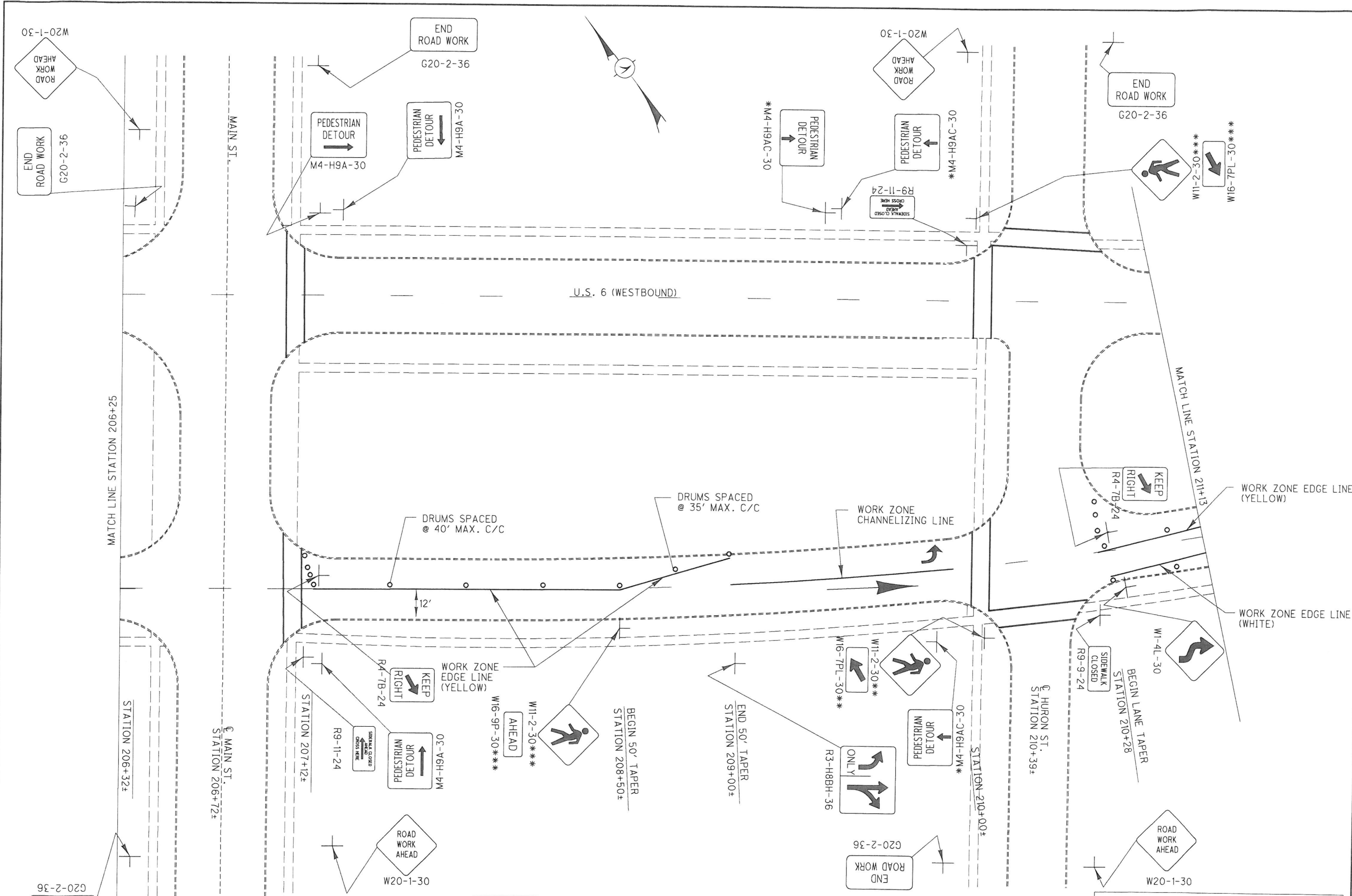
ERI-6-17.70



1.50" RADIUS, 0.63" BORDER, 0.38" INDENT, BLACK ON ORANGE
 "PEDESTRIAN" B; "DETOUR" C;
 STANDARD ARROW CUSTOM 6.00" X 4.05" 90°

DETAILS FOR M4-H9AC-30 SIGN

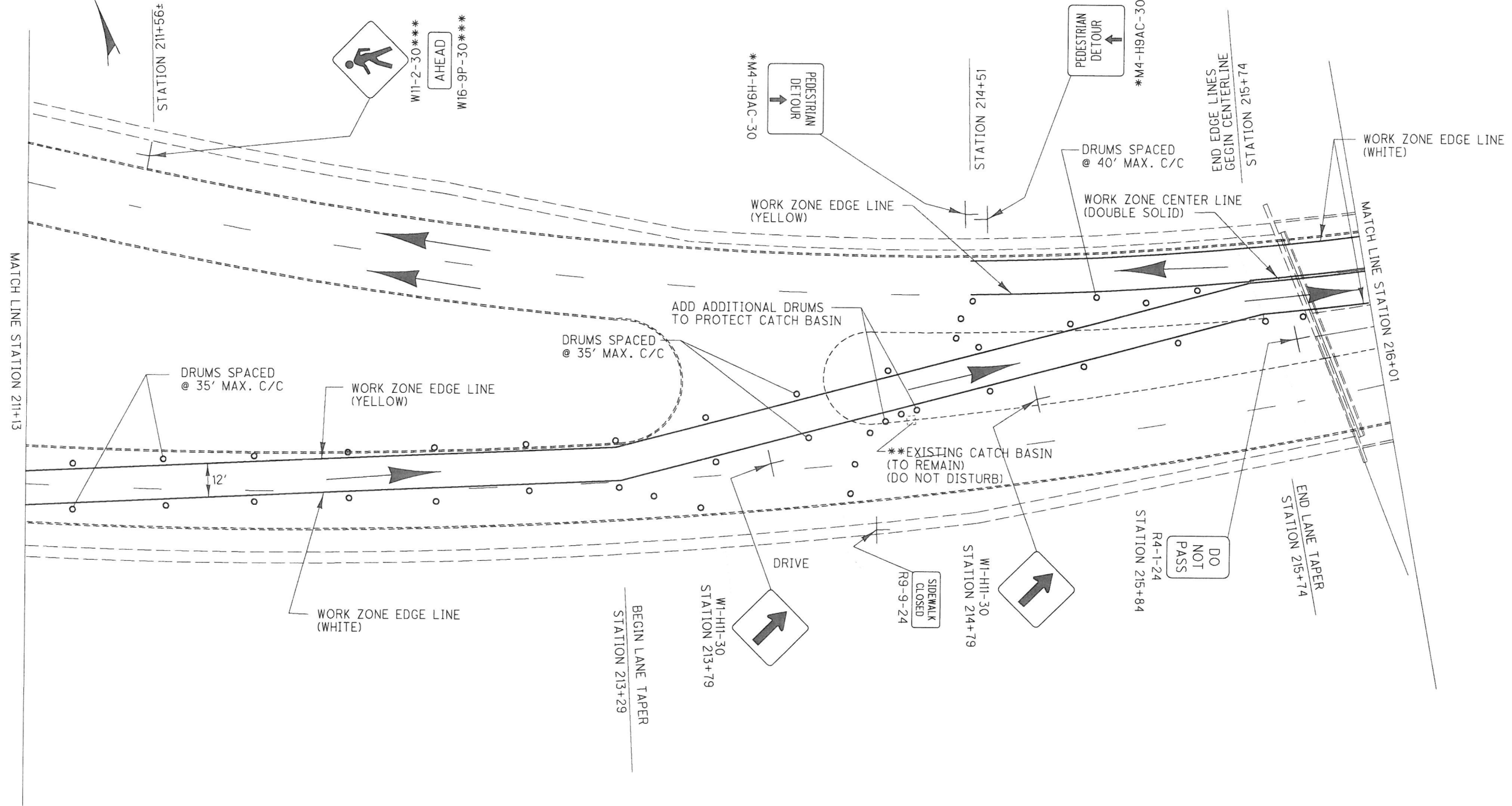
FOR RECTANGULAR RAPID FLASHING BEACON,
 SEE SHEETS 24 AND 48 FOR ADDITIONAL DETAILS
 FOR CURB RAMPS AND CROSS WALKS,
 SEE SHEET 48 FOR DETAILS AND QUANTITIES



FOR CURB RAMPS AND CROSS WALKS,
 SEE SHEET 45 & 46 FOR DETAILS AND QUANTITIES

*** THIS SIGN SHALL REMAIN IN PLACE PERMANENTLY,
 SEE SHEET 42 FOR PAY QUANTITIES

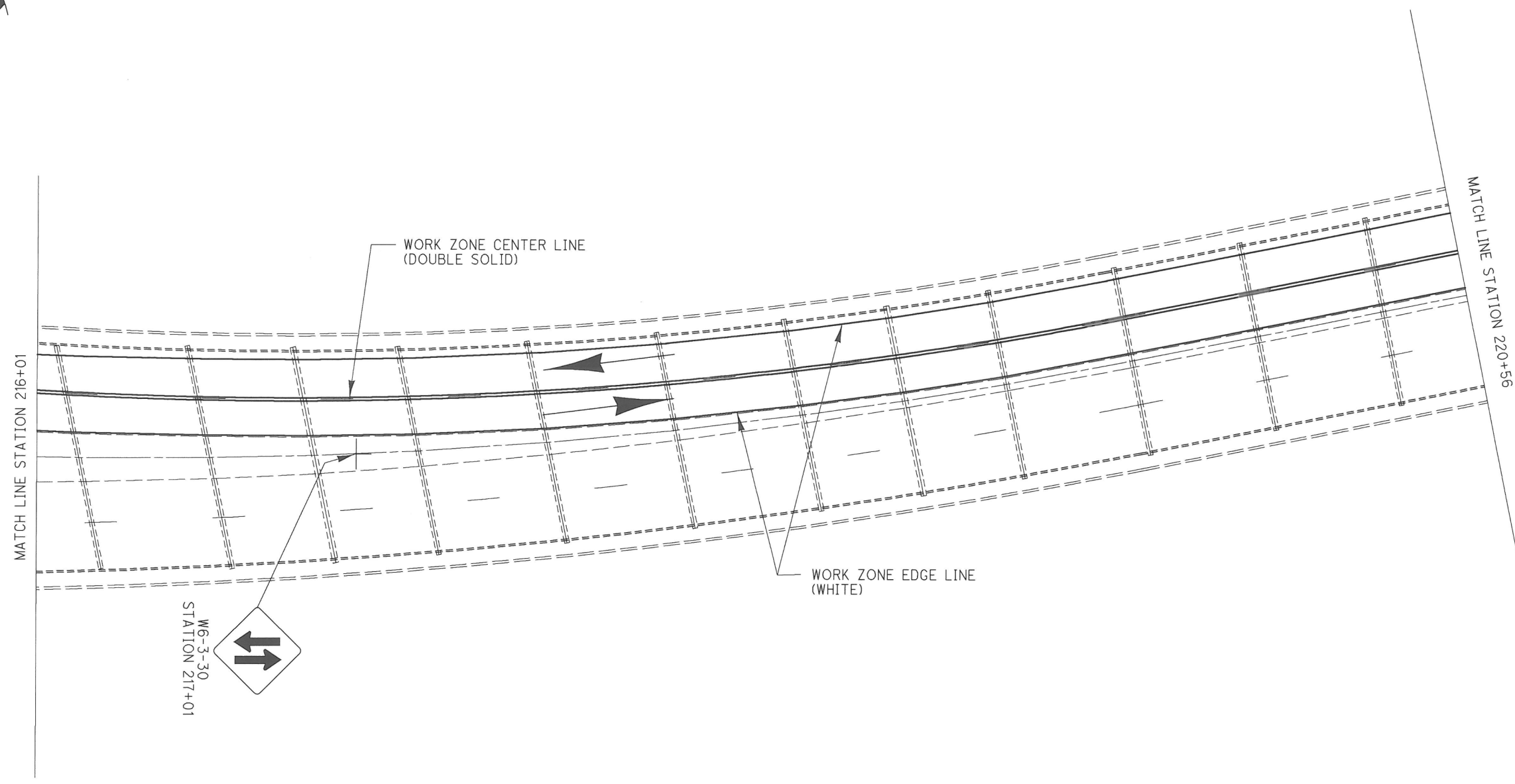
ALL SIGNS, PAVEMENT MARKINGS, TAPERS
 AND DRUMS WEST OF HURON STREET SHALL
 REMAIN IN PLACE FOR ALL PHASES.

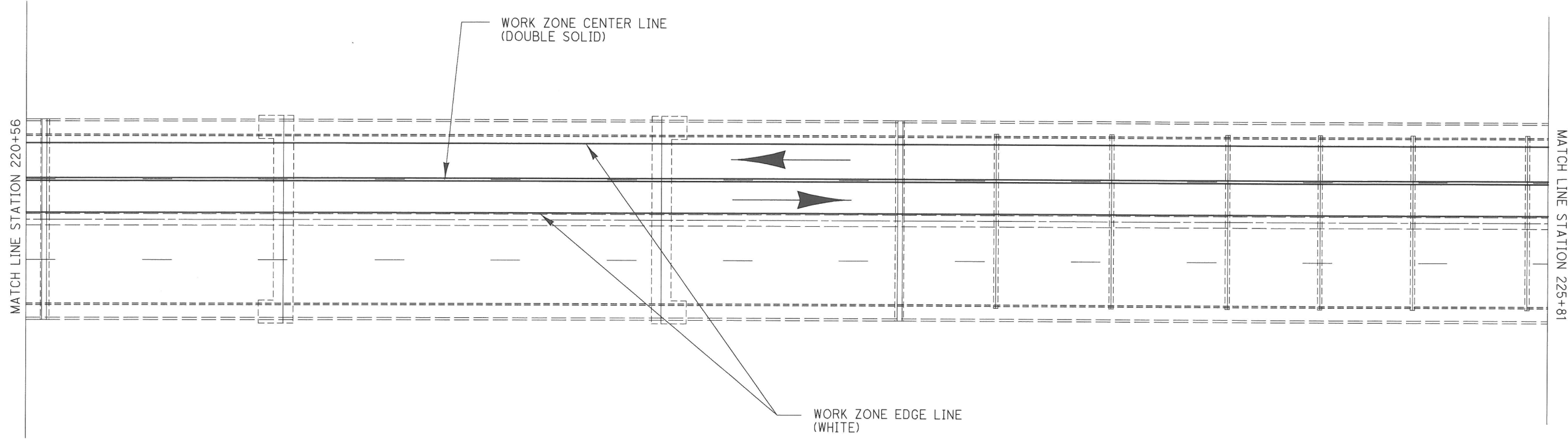


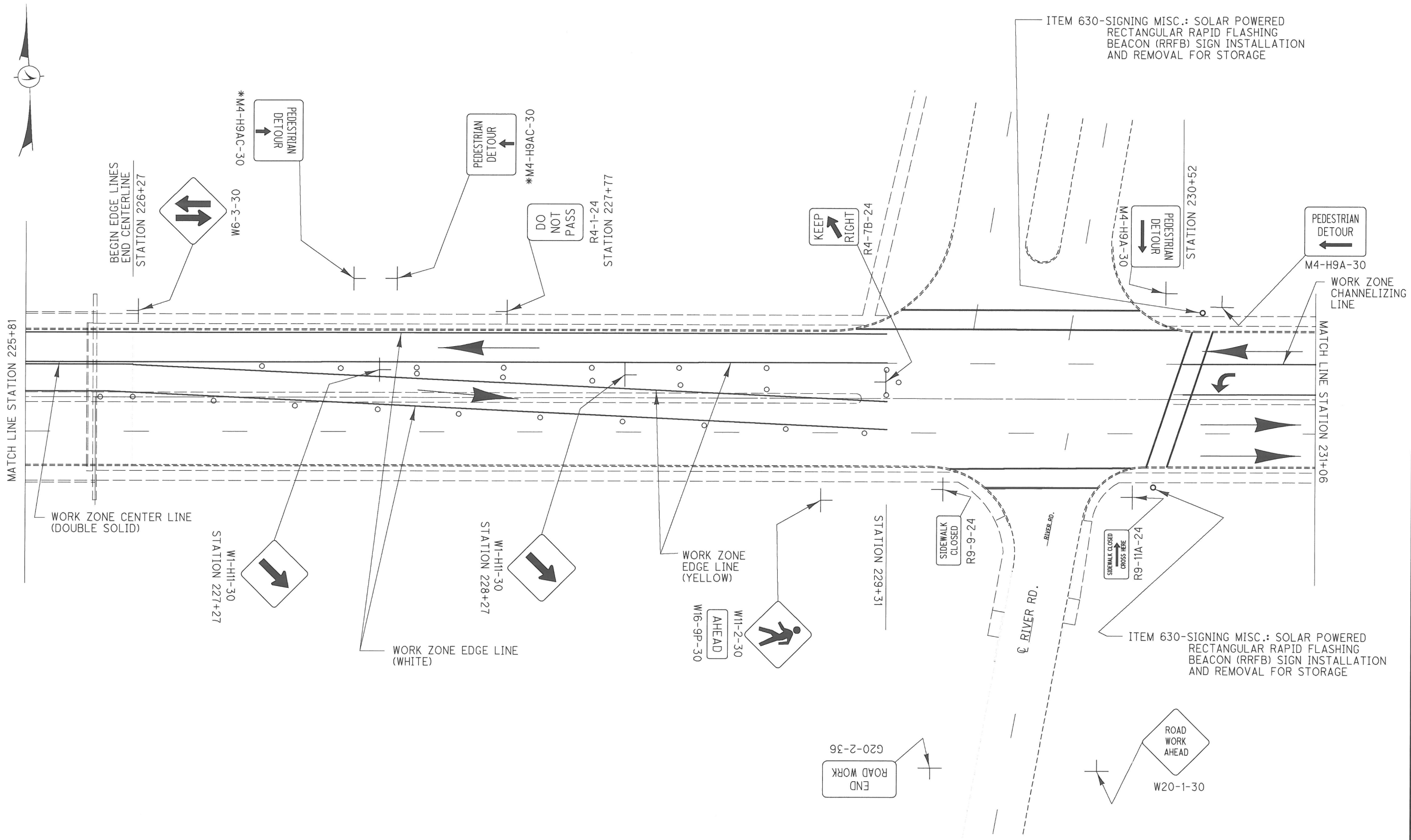
*** THIS SIGN SHALL REMAIN IN PLACE PERMANENTLY, SEE SHEET 42 FOR PAY QUANTITIES

*M4-H9AC-30 - SEE SHEET 25 FOR SIGN DETAILS

** IF THE EXISTING CATCH BASIN IS DISTURB, THEN THE CONTRACTOR SHALL REPLACE THE CATCH BASIN AT THERE OWN EXPENSE

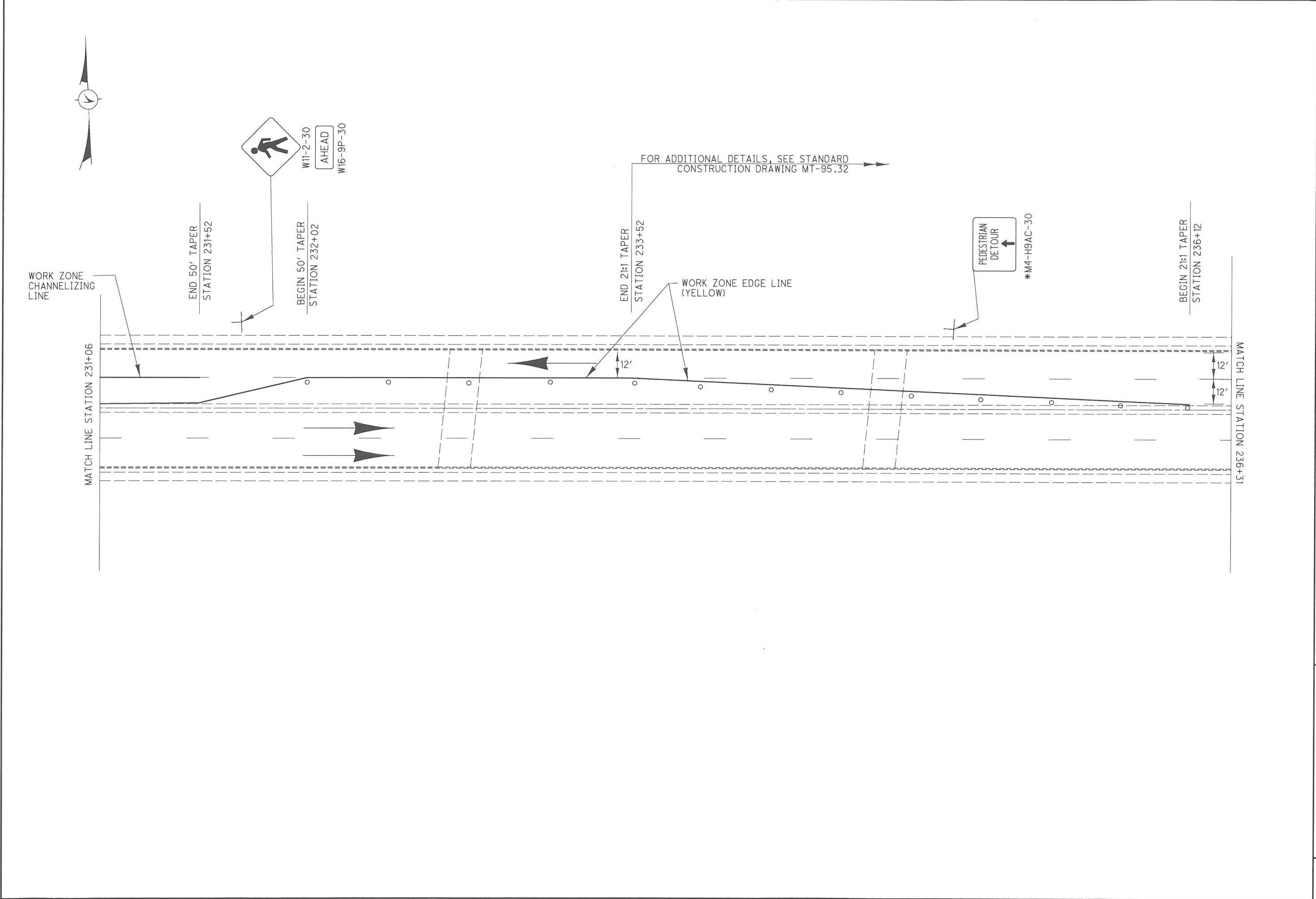


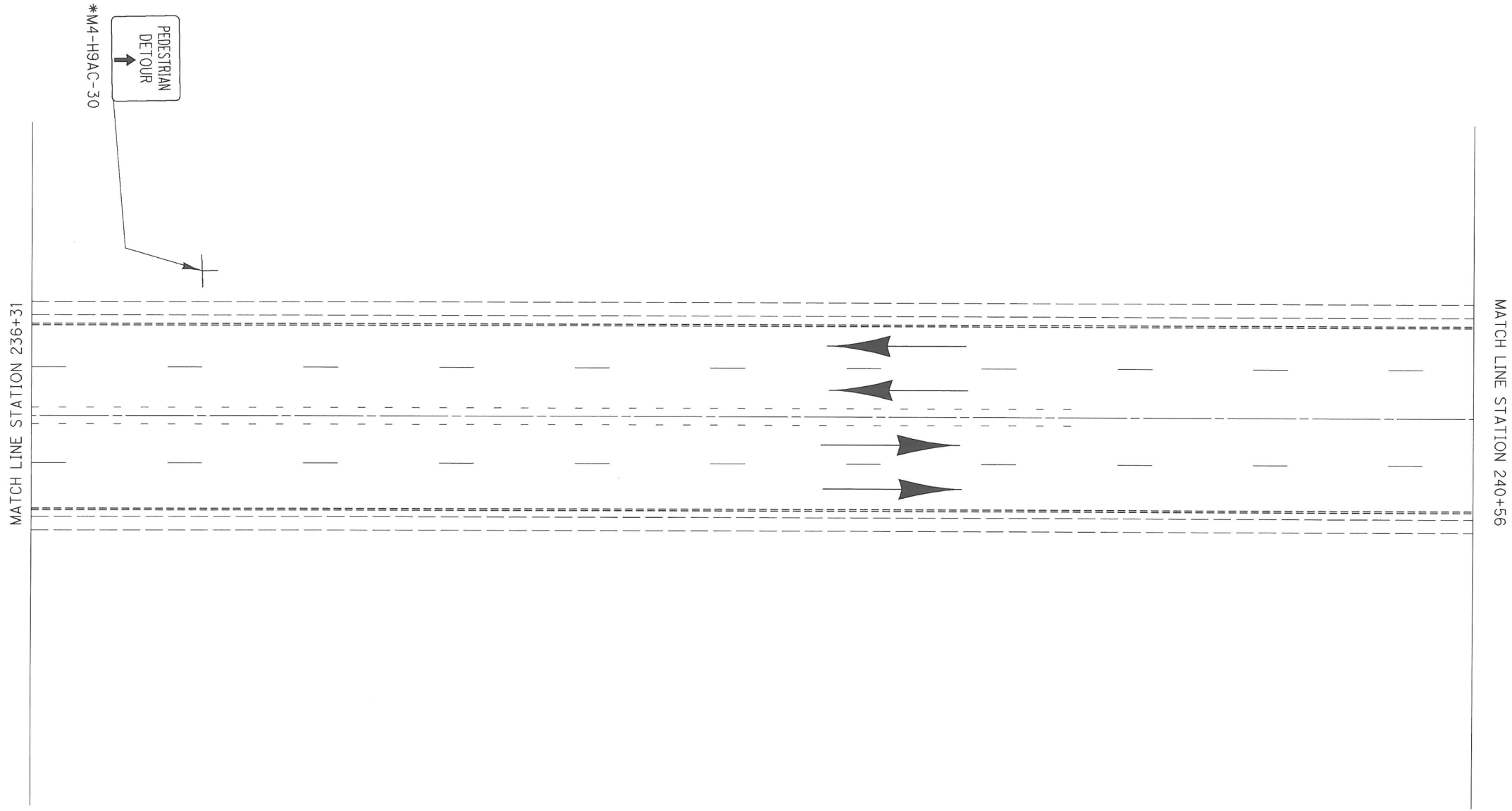


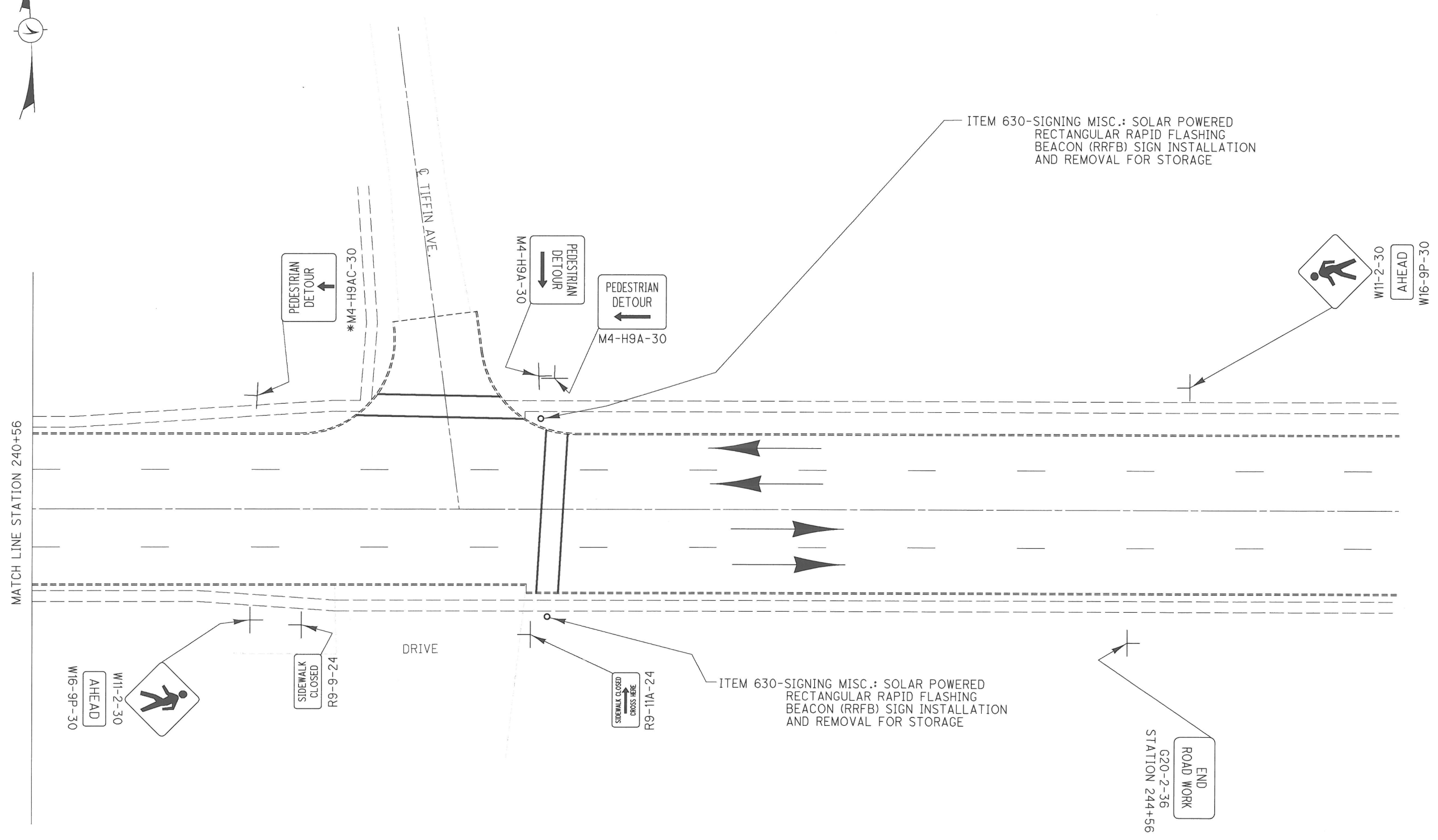


FOR RECTANGULAR RAPID FLASHING BEACON,
 SEE SHEETS 24 AND 47 FOR ADDITIONAL DETAILS
 FOR CURB RAMPS AND CROSS WALKS,
 SEE SHEET 48 FOR DETAILS AND QUANTITIES

*M4-H9AC-30 - SEE SHEET 25 FOR SIGN DETAILS





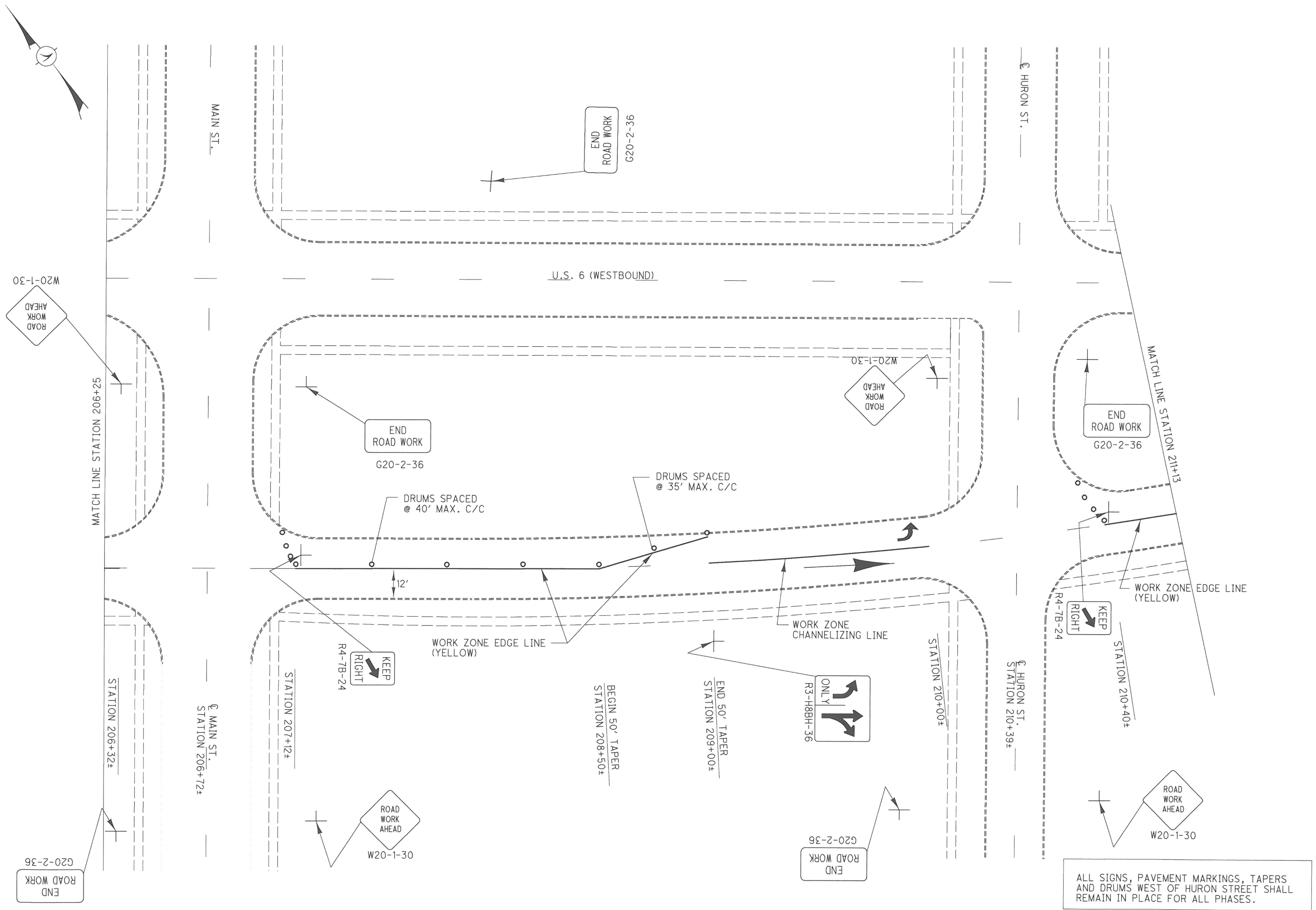


FOR RECTANGULAR RAPID FLASHING BEACON,
 SEE SHEETS 24 AND 48 FOR ADDITIONAL DETAILS
 FOR CURB RAMP AND CROSS WALKS,
 SEE SHEET 48 FOR DETAILS AND QUANTITIES



M.O.T. PHASE 3
 STATION 240+56 TO 245+56

ERI-6-17.70

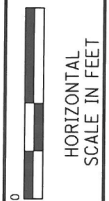
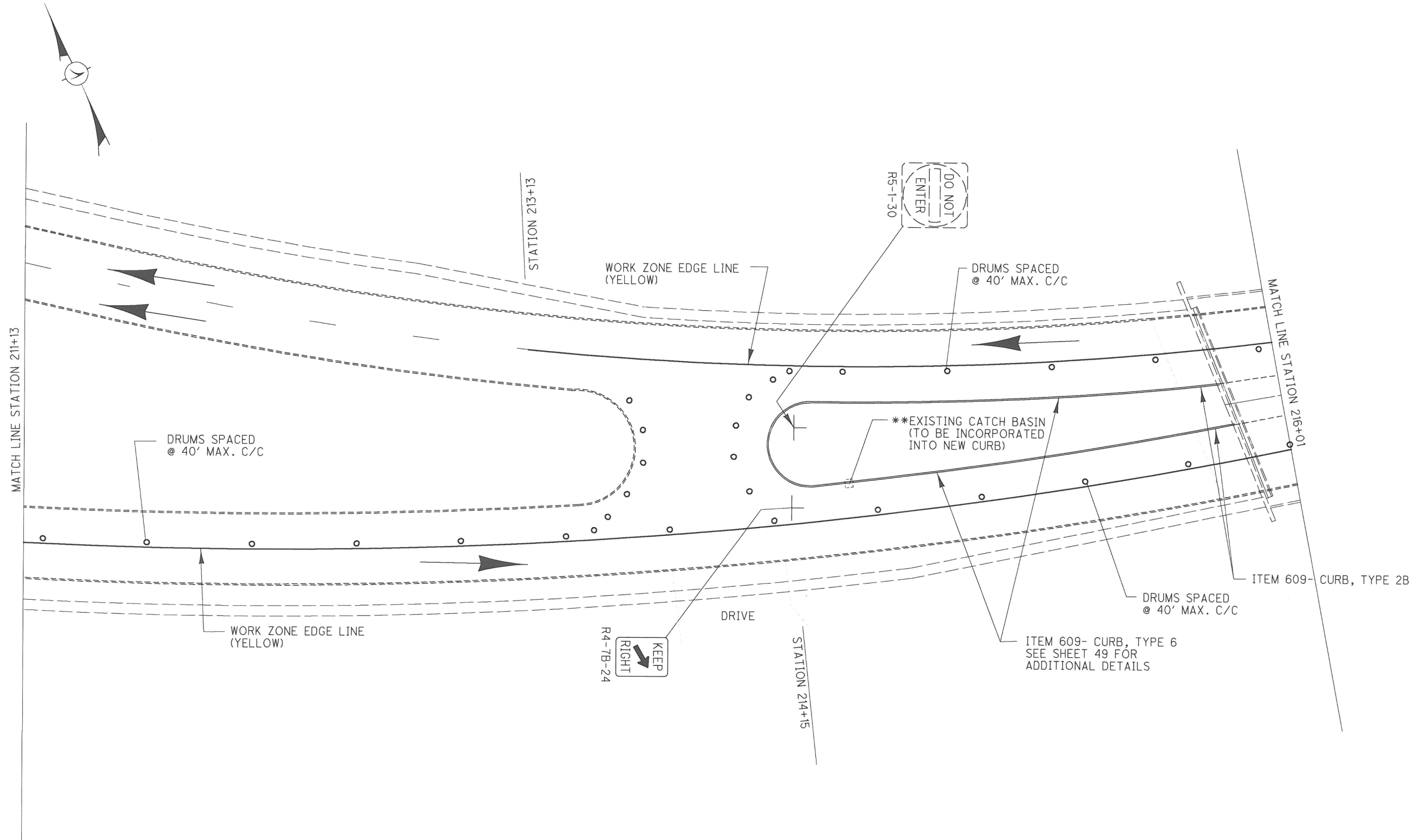


ALL SIGNS, PAVEMENT MARKINGS, TAPERS AND DRUMS WEST OF HURON STREET SHALL REMAIN IN PLACE FOR ALL PHASES.



M.O.T. PHASE 4
 STATION 206+25 TO 211+13

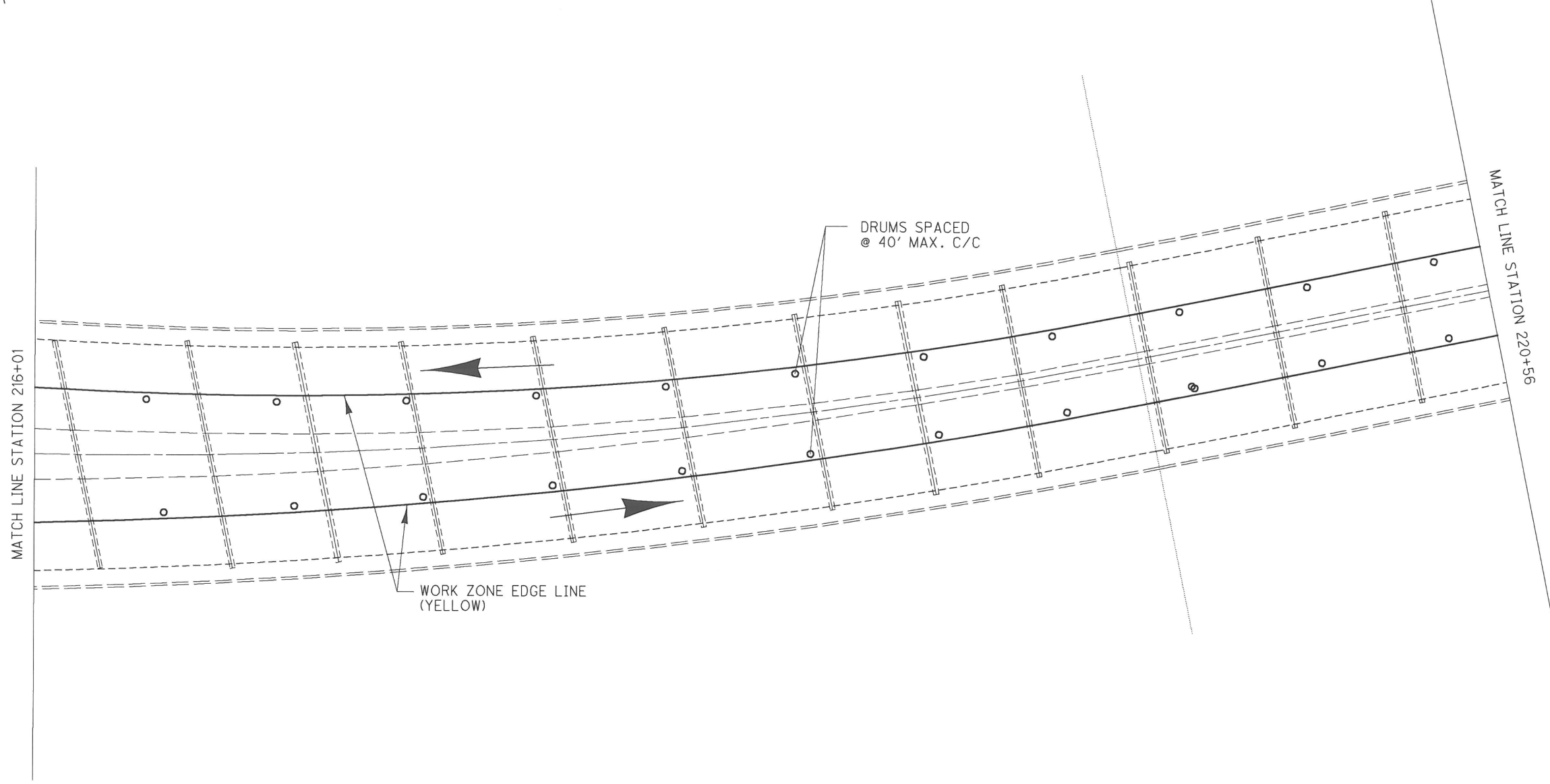
ERI-6-17.70



M.O.T. PHASE 4
STATION 211+13 TO 216+01

ERI-6-17.70

** IF THE EXISTING CATCH BASIN IS DISTURB, THEN THE CONTRACTOR SHALL REPLACE THE CATCH BASIN AT THERE OWN EXPENSE

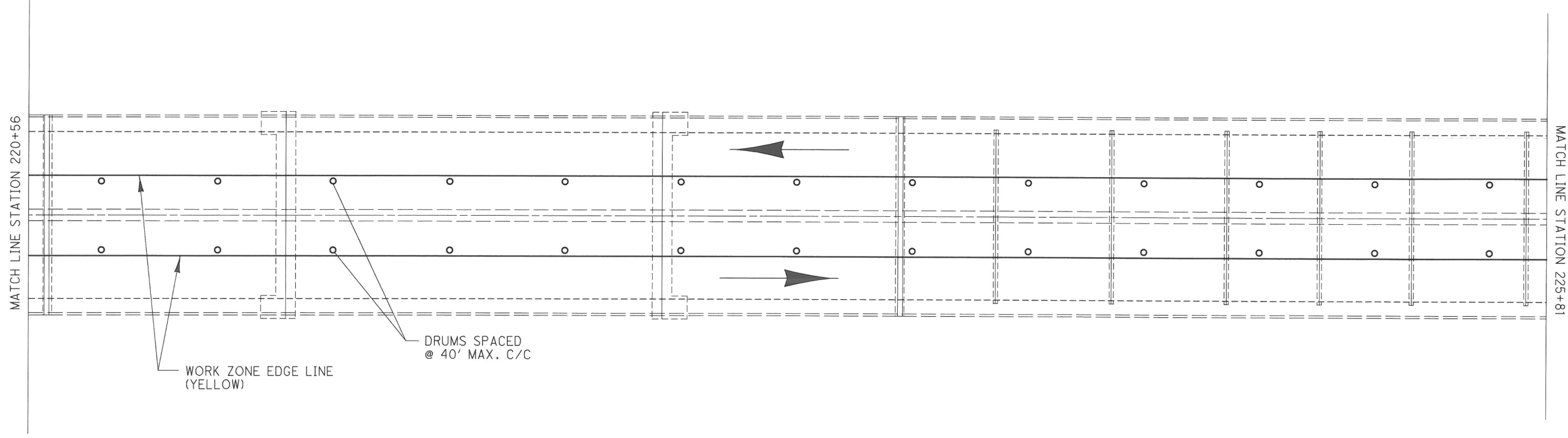


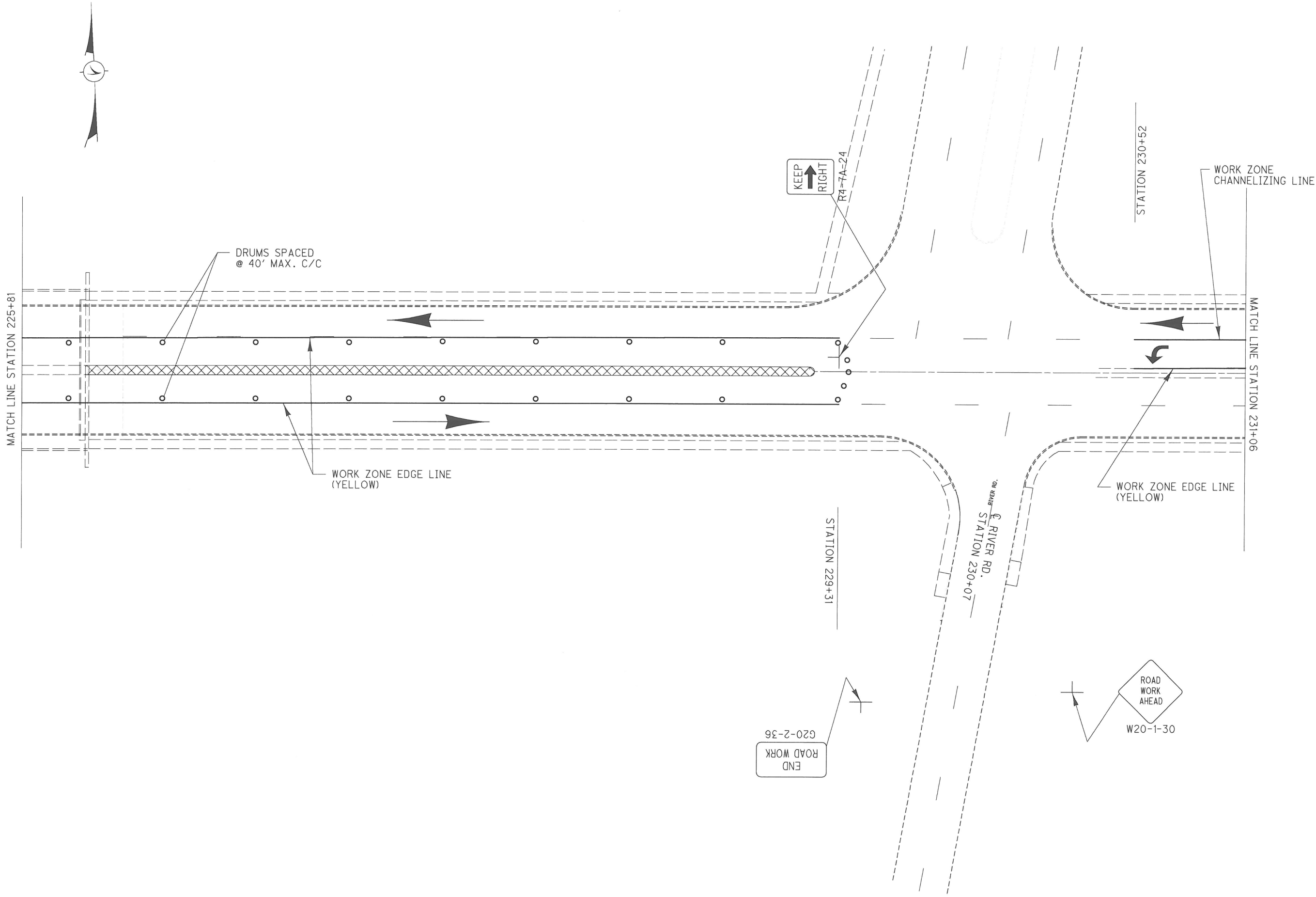
MATCH LINE STATION 216+01

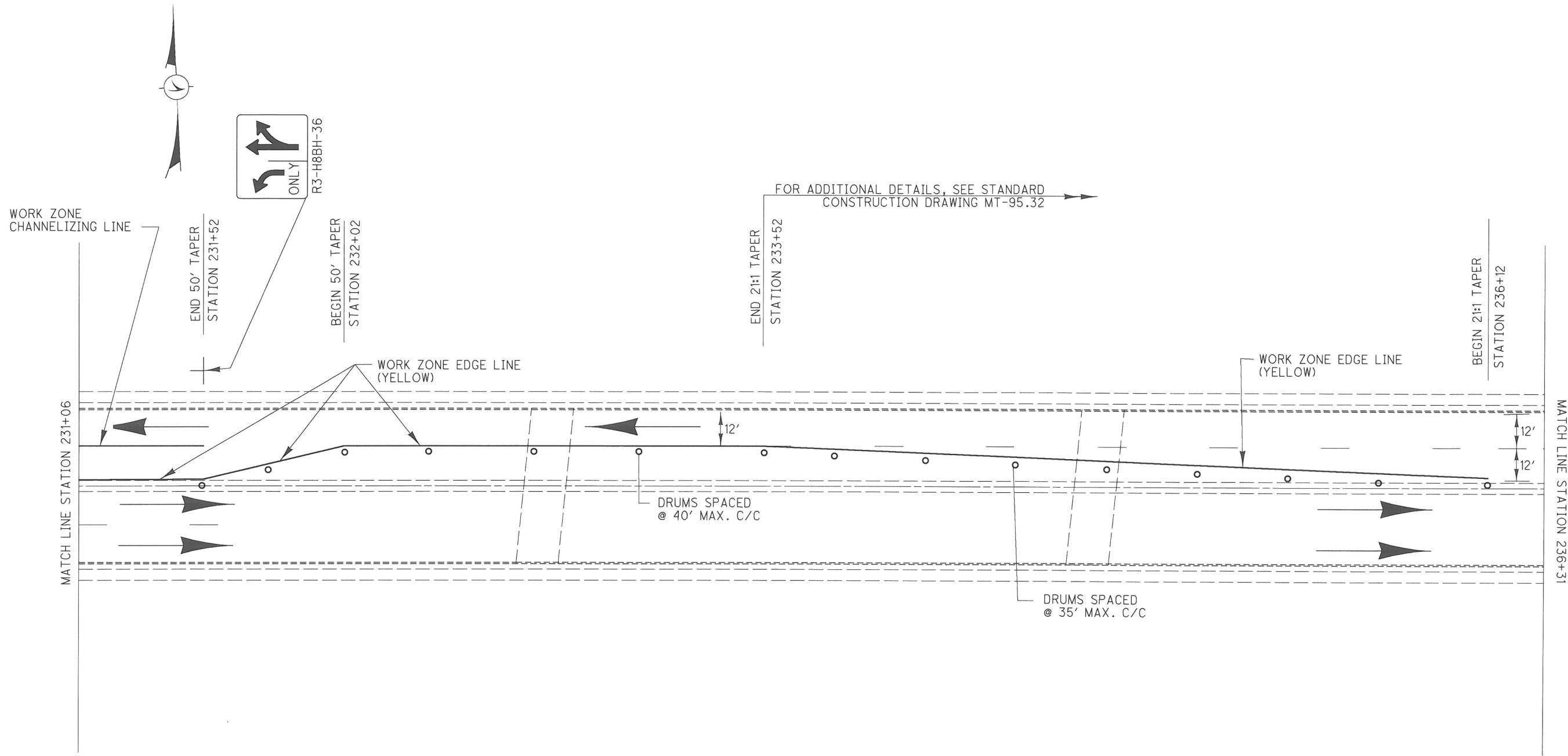
MATCH LINE STATION 220+56

WORK ZONE EDGE LINE
(YELLOW)

DRUMS SPACED
@ 40' MAX. C/C

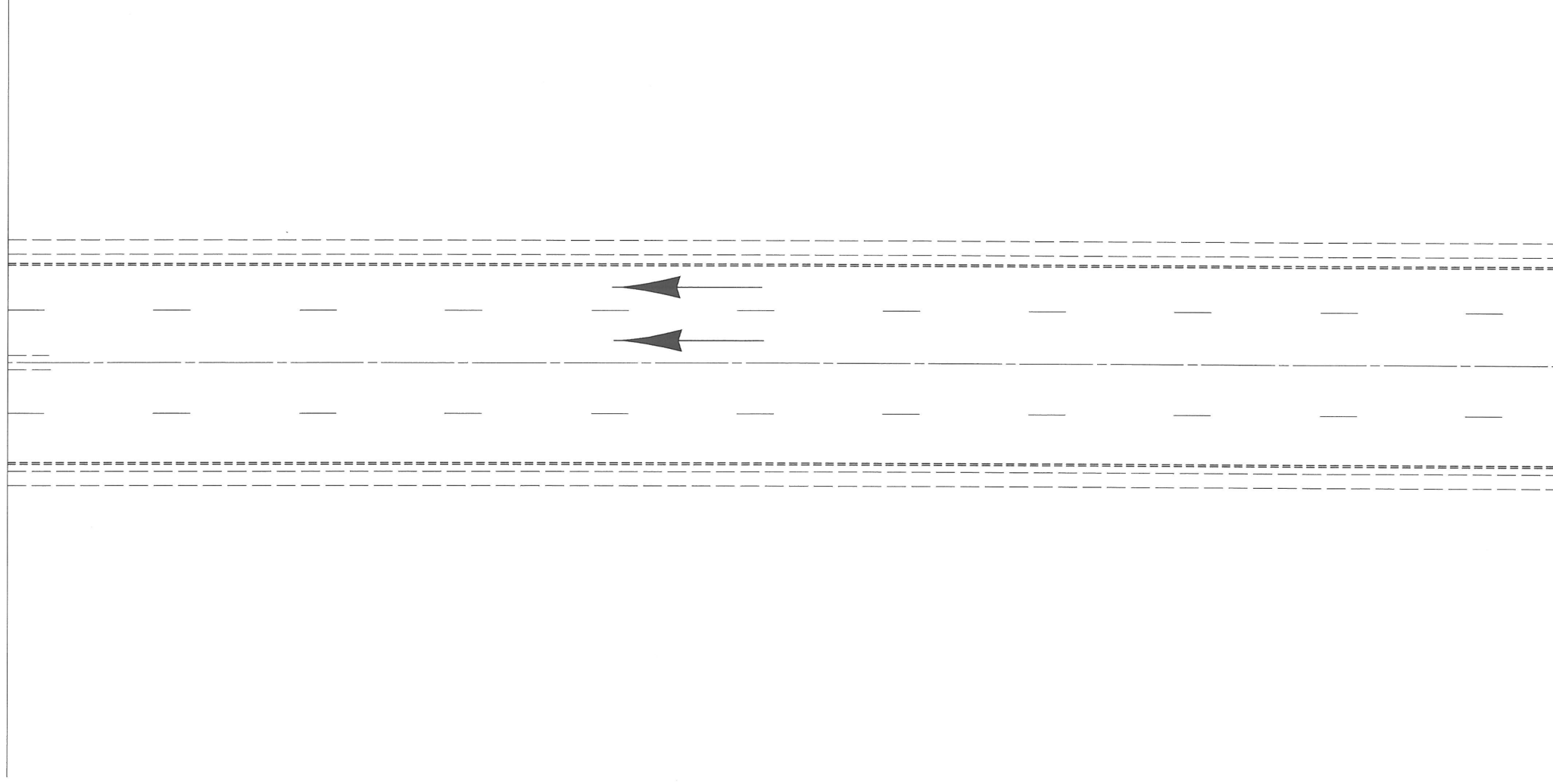








MATCH LINE STATION 236+31



MATCH LINE STATION 240+56

MATCH LINE STATION 240+56



DRIVE

C. TIEFFIN AVE.

END
ROAD WORK
G20-2-36
STATION 244+56

WORK ZONE PAVEMENT MARKINGS AND SIGNS

CONSTRUCTION PHASE	STATION		LOCATION	614			630				
				WORK ZONE CENTER LINE CLASS 1, 740.06, TYPE 1	WORK ZONE EDGE LINE CLASS 1, 740.06, TYPE 1		WORK ZONE CHANNELIZING LINE CLASS 1, 740.06, TYPE 1	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN, FLAT SHEET
PHASE	FROM	TO	DIRECTION	MILE	MILE		FT	EACH	EACH	FT	SQ FT
1, 2, 3, 4	193+50	197+60	EAST BOUND		.08						
1, 2, 3, 4	197+60	199+60	EAST BOUND				200				
1, 2, 3, 4	200+40	201+43	EAST BOUND		.02						
1, 2, 3, 4	201+43	202+93	EAST BOUND				150				
1, 2, 3, 4	203+73	205+32	EAST BOUND		.03						
1, 2, 3, 4	205+32	206+32	EAST BOUND				100				
1, 2	207+12	209+00	EAST BOUND		.04						
1, 2	209+00	210+00	EAST BOUND				100				
1, 2	210+40	215+69	EAST BOUND		.10						
1	215+69	229+31	EAST BOUND		.26						
1	213+13	229+31	WEST BOUND		.31						
1, 2, 3, 4	230+52	231+52	WEST BOUND				100				
1, 2, 3, 4	230+52	231+52	WEST BOUND		.02						
1	231+52	236+12	WEST BOUND		.09						
2	213+29	215+69	WEST BOUND		.05						
2	214+15	229+31	WEST BOUND		.29						
2	215+69	227+08	BOTH	.22							
2	215+69	229+31	EAST BOUND		.26						
2	227+08	229+31	EAST BOUND		.04						
2	227+08	229+31	WEST BOUND		.04						
2	231+52	236+12	WEST BOUND		.09						
3	210+28	215+74	EAST BOUND		.10						
3	210+28	229+31	EAST BOUND		.36						
3	214+51	229+31	WEST BOUND		.28						
3	214+51	215+74	WEST BOUND		.02						
3	215+74	226+27	BOTH	.20							
3	226+27	229+31	EAST BOUND		.06						
3	226+27	229+31	WEST BOUND		.06						
3, 4	231+52	236+12	WEST BOUND		.09						
4	210+40	229+31	EAST BOUND		.36						
4	213+13	229+31	WEST BOUND		.31						
4	231+52	236+12	WEST BOUND		.09						
2, 3, PERMANENTLY	208+50		EAST BOUND							14	10
2, 3, PERMANENTLY	210+10		EAST BOUND							14	10
2, 3, PERMANENTLY	210+06		WEST BOUND							14	10
2, 3, PERMANENTLY	211+56		WEST BOUND							14	10
1, 4, PERMANENTLY	214+18		CENTER					1	1	13	
			TOTAL	.42	3.45		650	1	1	69	40

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PLANNING
 AND ENGINEERING

WORK ZONE PAVEMENT MARKINGS AND SIGNS
 SUBSUMMARY

ERI-6-17.70

CALCULATED
 DCM
 CHECKED
 CAL

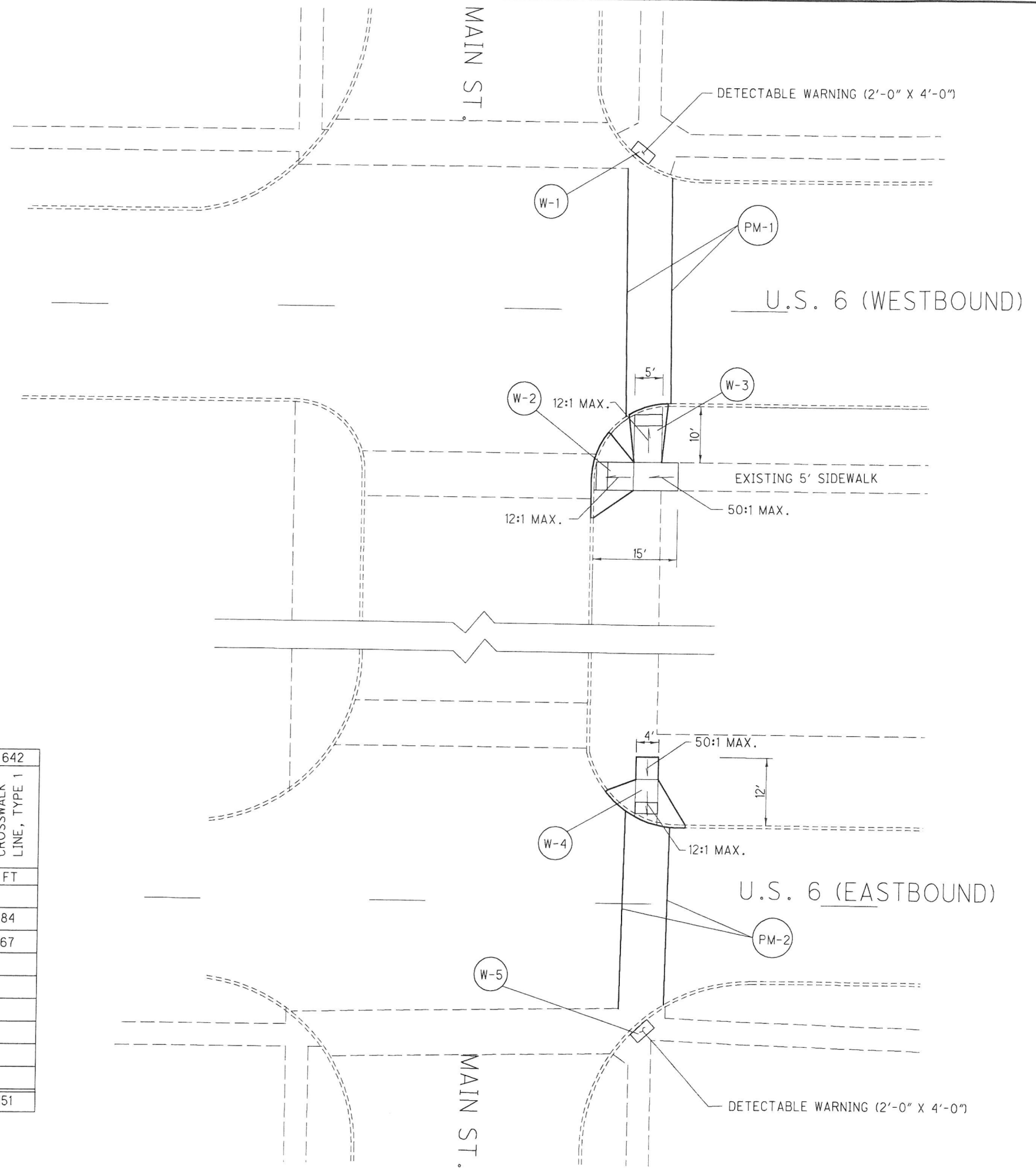
SHEET NUMBER																	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED DCM CHECKED CAL
42	45	46	47	48	49	50	51	52	53	56	57	58	59	60	61	62							
																					ROADWAY		
																	202	23000	466	SQ YD	PAVEMENT REMOVED		
																	202	30000	189	SQ FT	WALK REMOVED		
																	202	30001	1556	SQ FT	WALK REMOVED, AS PER PLAN	3	
																	202	32000	229	FT	CURB REMOVED		
																	202	98500	109	CU YD	REMOVAL MISC.: RAISED CONCRETE APPROACH MEDIAN	5	
																	608	10000	214	SQ FT	4" CONCRETE WALK		
																	608	53020	26	SQ FT	DETECTABLE WARNING		
																	608	52011	205	SQ FT	CURB RAMP, TYPE A1, AS PER PLAN		
																	608	52021	520	SQ FT	CURB RAMP, TYPE A2, AS PER PLAN	5	
																	608	52061	301	SQ FT	CURB RAMP, TYPE C2, AS PER PLAN	5	
																	608	52071	60	SQ FT	CURB RAMP, TYPE D, AS PER PLAN	5	
																	653	10000	251	CU YD	TOPSOIL FINISHED AND PLACED		
																					EROSION CONTROL		
																	601	28000	66	CU YD	DUMPED ROCK FILL, TYPE D		
																	659	10000	448	SQ YD	SEEDING AND MULCHING		
																	659	35000	10	M GAL	WATER		
																	832	30000	1000	EACH	EROSION CONTROL		
																					PAVEMENT		
																	3156	254	01000	3760	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
																		254	01600	4	SQ YD	PATCHING PLANED SURFACE	
																	239	407	10000	287	GALLON	TACK COAT	4
																	14	407	13900	14	GALLON	TACK COAT, 702.13	
																	176	442	10501	210	CU YD	ASPHALT CONCRETE SURFACE COURSE, 9.5MM, TYPE A (448), AS PER PLAN	5
																	609	14000	38	FT	CURB, TYPE 2-A		
																	609	16000	30	FT	CURB, TYPE 2-B		
																	609	24000	9	FT	CURB, TYPE 4-A		
																	609	26000	372	FT	CURB, TYPE 6		
																	609	72100	32	CU YD	CONCRETE MEDIAN		
																					TRAFFIC CONTROL		
																	630	03100	69	FT	GROUND MOUNTED SUPPORT, NO. 3 POST		
																	630	80100	40	SQ FT	SIGN, FLAT SHEET		
																	630	85100	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION		
																	630	86002	1	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
																	630	97700	4	EACH	SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN INSTALLATION AND REMOVAL FOR STORAGE	5, 5A,5B	
																	.39	642	00100	.39	MILE	EDGE LINE, TYPE 1	
																	.20	642	00200	.20	MILE	LANE LINE, TYPE 1	
																	642	00600	933	FT	CROSSWALK LINE, TYPE 1		
																	1	642	01124	1	EACH	SCHOOL SYMBOL MARKING, 120 INCH, TYPE 1	
																	.79	646	10000	.79	MILE	EDGE LINE	
																	.39	646	10100	.39	MILE	LANE LINE	

GENERAL SUMMARY

ERI-6-17.70

REFERENCE NUMBER	202	202	202		608	608	608			642
	WALK REMOVED SQ FT	WALK REMOVED, AS PER PLAN SQ FT	CURB REMOVED FT		CURB RAMP, TYPE A1, AS PER PLAN SQ FT	CURB RAMP, TYPE A2, AS PER PLAN SQ FT	DETECTABLE WARNING SQ FT			CROSSWALK LINE, TYPE 1 FT
PM-1										84
PM-2										67
W-1							8			
W-2	110		16		118					
W-3		71	8			60				
W-4	79		17		87					
W-5							8			
TOTAL	189	71	41		205	60	16			151

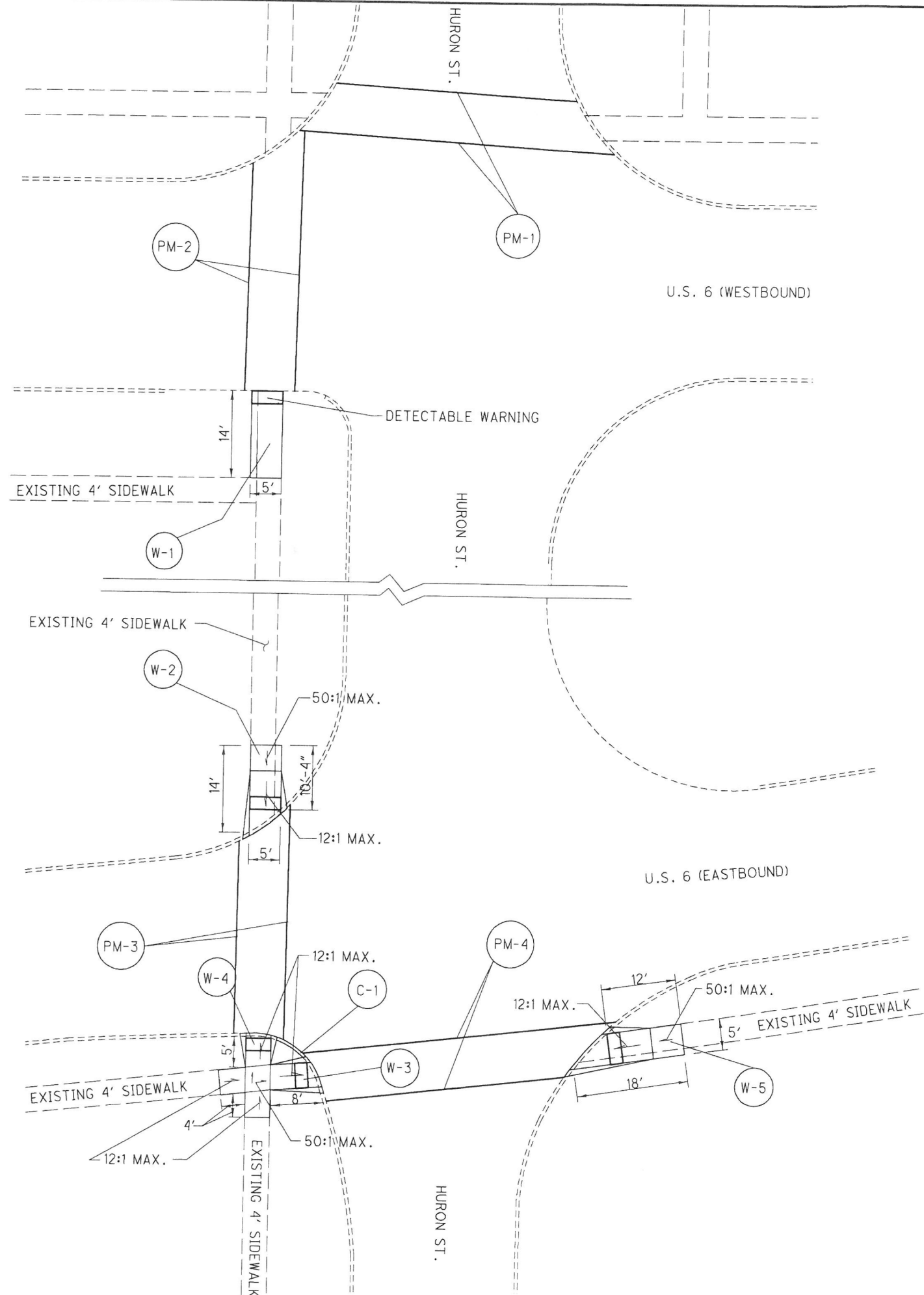
ALL QUANTITIES CARRIED TO GENERAL SUMMARY



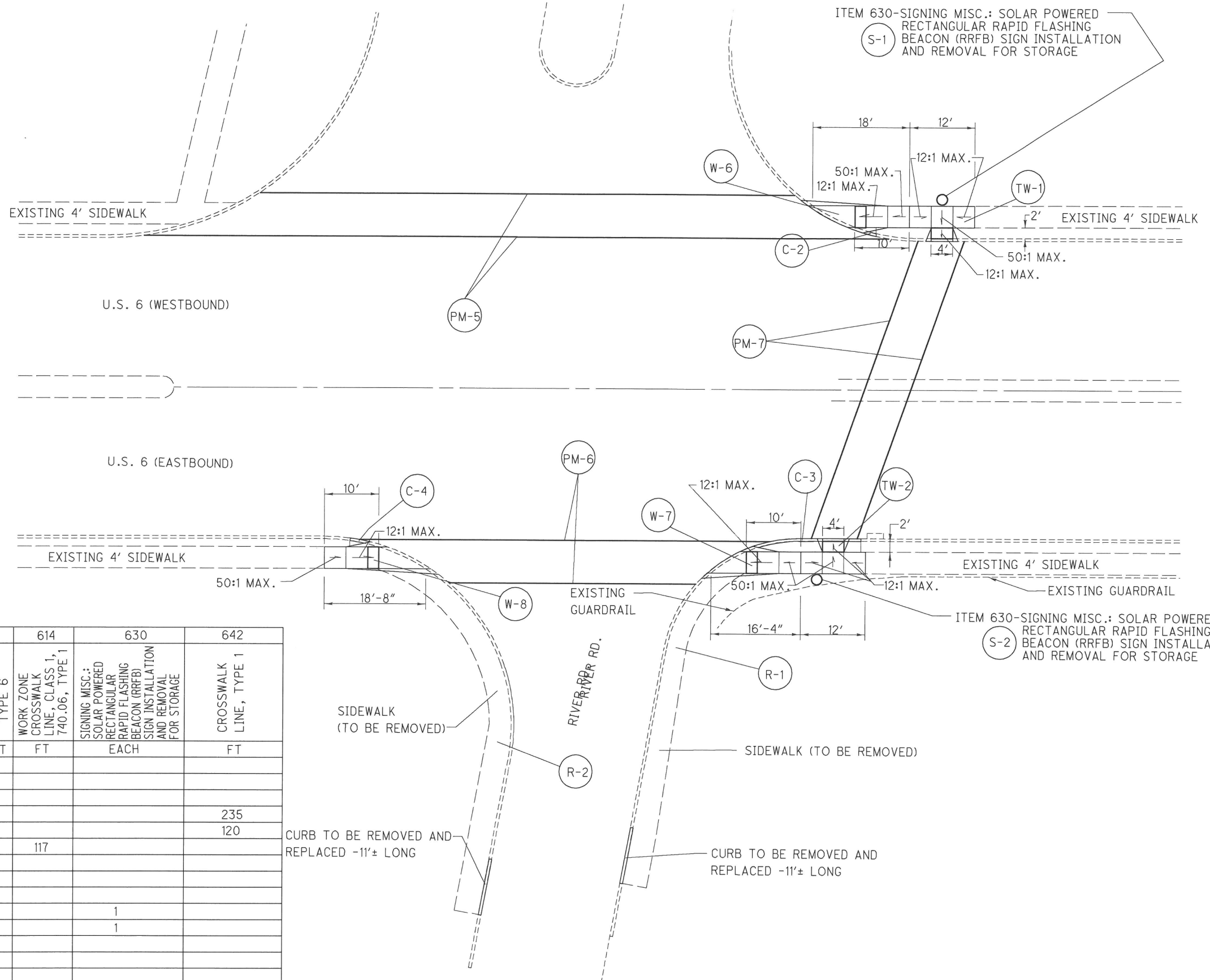


REFERENCE NUMBER	202	202	608	608	608	608		609		642
	WALK REMOVED, AS PER PLAN SQ FT	CURB REMOVED FT	4" CONCRETE WALK SQ YD	DETECTABLE WARNING SQ FT	CURB RAMP, TYPE A2, AS PER PLAN SQ FT	CURB RAMP, TYPE C2, AS PER PLAN SQ FT		CURB, TYPE 2A FT		CROSSWALK LINE, TYPE 1 FT
C-1								6		
PM-1										89
PM-2										78
PM-3										69
PM-4										87
W-1	56		70	10						
W-2	51	9			73					
W-3	56	9				62				
W-4	56	9				51				
W-5	58	11			89					
TOTAL	277	38	70	10	162	113		6		323

ALL QUANTITIES CARRIED TO GENERAL SUMMARY



DESIGN FILE: \\projects\77463\Struct\curbramps.dgn
 WORKSTATION: molens DATE: 7/22/2011
 MODELNAME: Design



REFERENCE NUMBER	202		608		609		614	630		642
	WALK REMOVED, AS PER PLAN SQ FT	CURB REMOVED FT	4" CONCRETE WALK SQ YD	CURB RAMP, TYPE A2, AS PER PLAN SQ FT	CURB RAMP, TYPE C2, AS PER PLAN SQ FT	CURB, TYPE 2A FT	CURB, TYPE 6 FT	WORK ZONE CROSSWALK LINE, CLASS 1, 740.06, TYPE 1 FT	SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN INSTALLATION AND REMOVAL FOR STORAGE EACH	CROSSWALK LINE, TYPE 1 FT
C-2						2				
C-3						14				
C-4						4				
PM-5										235
PM-6								117		120
PM-7										
R-1	234	11					11			
R-2	296	11					11			
S-1									1	
S-2									1	
TW-1	106	12	48		61	6				
TW-2	106	6	48		61	6				
W-6	60	16		73						
W-7	94	31		68						
W-8	69	18		74						
TOTAL	965	105	96	215	122	32	22	117	2	355

CURB TO BE REMOVED AND REPLACED -11'± LONG

CURB TO BE REMOVED AND REPLACED -11'± LONG

- NOTES:
- 1) NEW CURB ELEVATIONS SHALL MATCH ELEVATIONS OF ADJACENT CURBS.
 - 2) FOR (RRFB) DETAILS, SEE SHEET 24

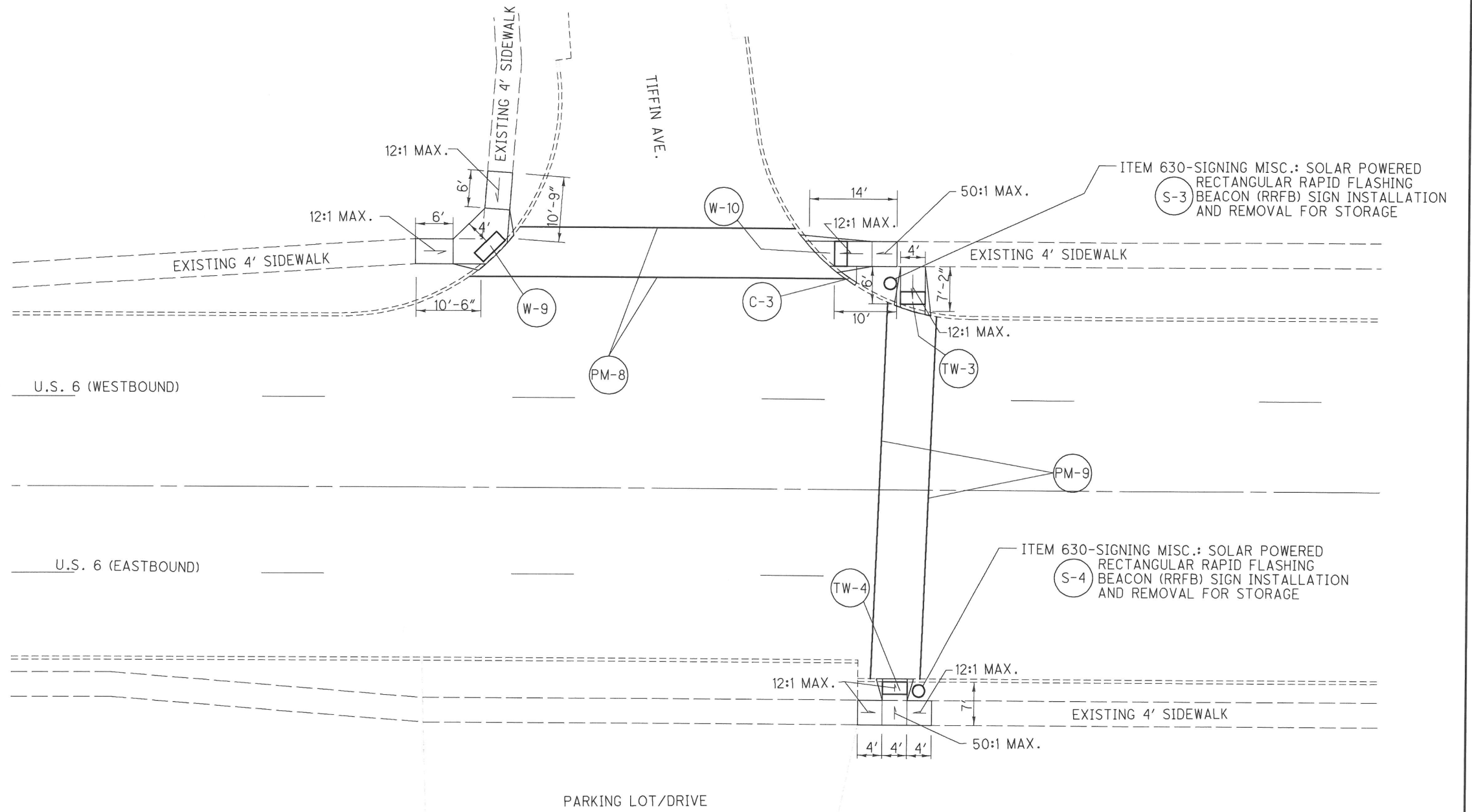
(TW-1) THESE ITEMS UNDER THIS REFERENCE ARE FOR A TEMPORARY CURB RAMP AND WHEN NO LONGER NEEDED SHALL BE RESTORED TO ORIGINAL CONDITION.

(TW-2)

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

US 6 AT RIVER ROAD CURB RAMPS

ERI-6-17.70



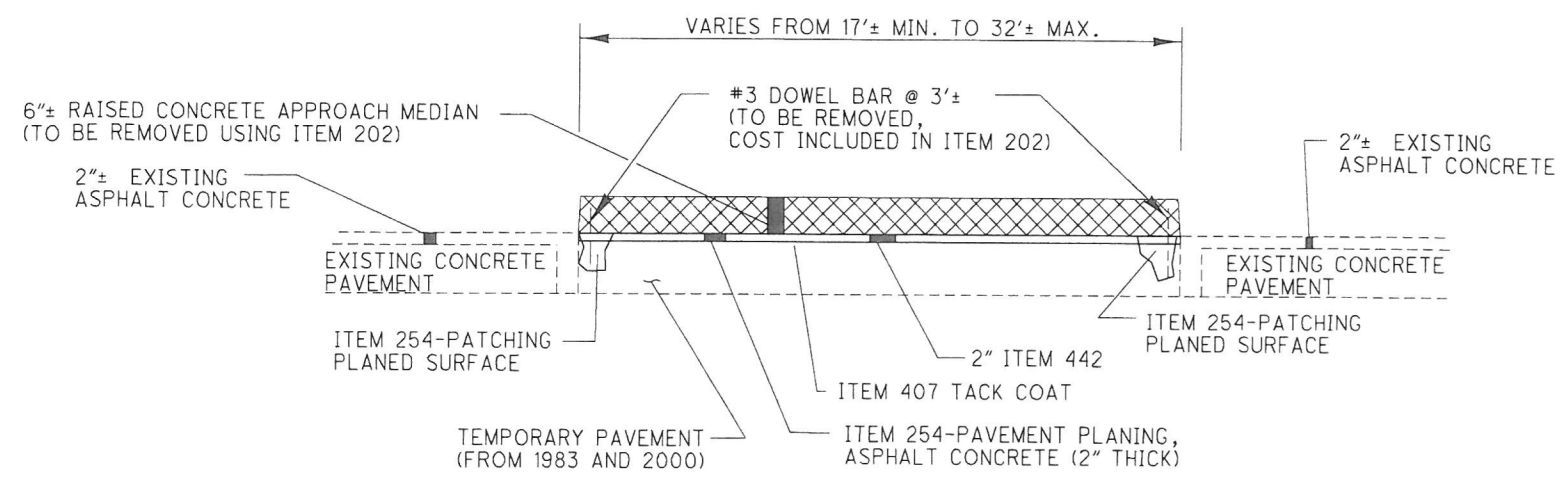
ALL QUANTITIES CARRIED TO GENERAL SUMMARY

TW-3 THESE ITEMS UNDER THESE REFERENCES ARE FOR A TEMPORARY CURB RAMP AND WHEN NO LONGER NEEDED SHALL BE RESTORED TO ORIGINAL CONDITION.
TW-4

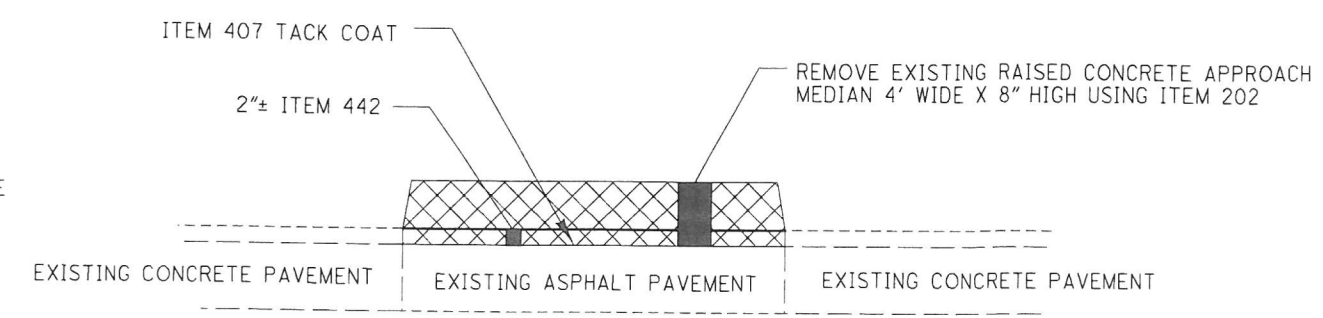
CALCULATED
DCM
CHECKED
REVISIONS
ODOT DISTRICT THREE
OFFICE OF PLANNING
AND ENGINEERING

RAISED MEDIAN DETAILS

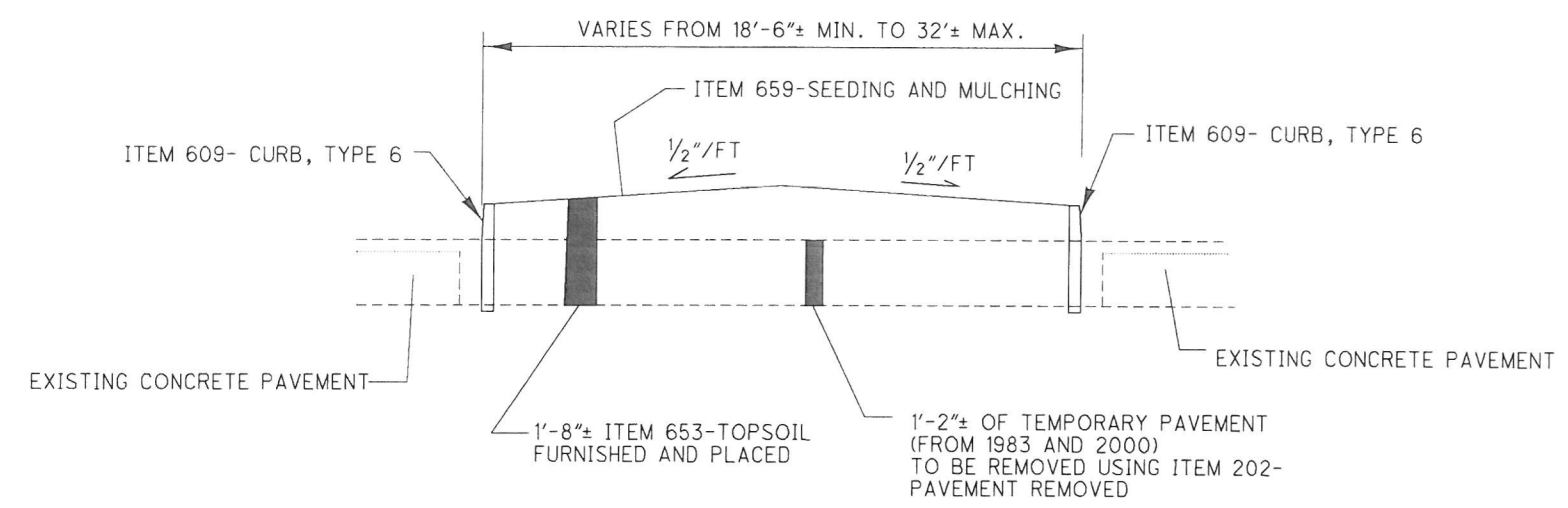
ERI-6-17.70



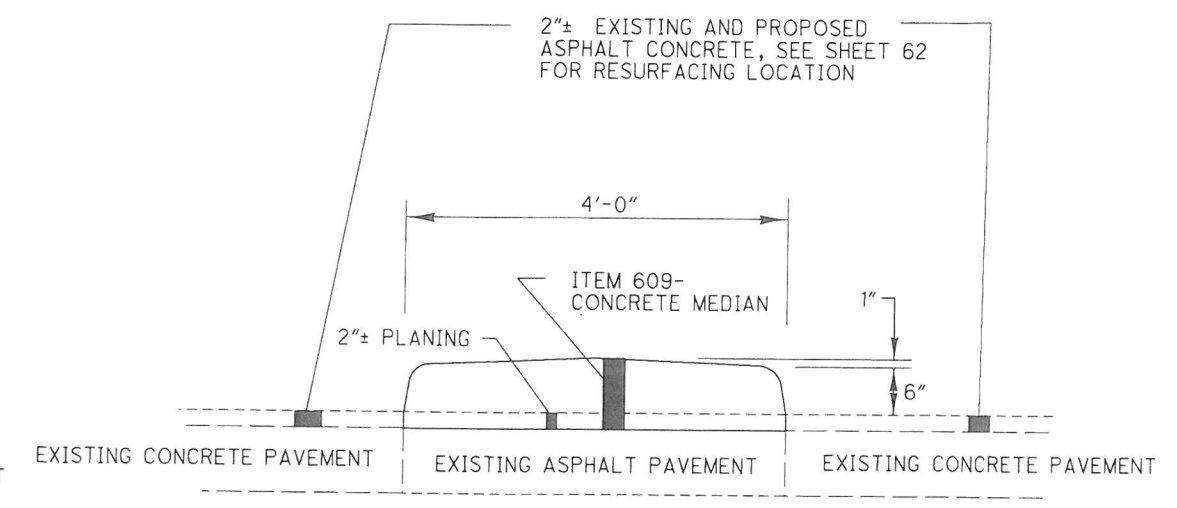
REMOVAL OF RAISED CONCRETE MEDIAN & RECONSTRUCT PAVEMENT FOR M.O.T. DETAIL
STATION 214+08± TO STATION 215+79±



REMOVAL OF RAISED CONCRETE MEDIAN & RECONSTRUCT PAVEMENT FOR M.O.T. DETAIL
STATION 226+09± TO STATION 229+21±



RAISED CONCRETE MEDIAN REPLACEMENT DETAIL
STATION 214+08± TO STATION 215+64±



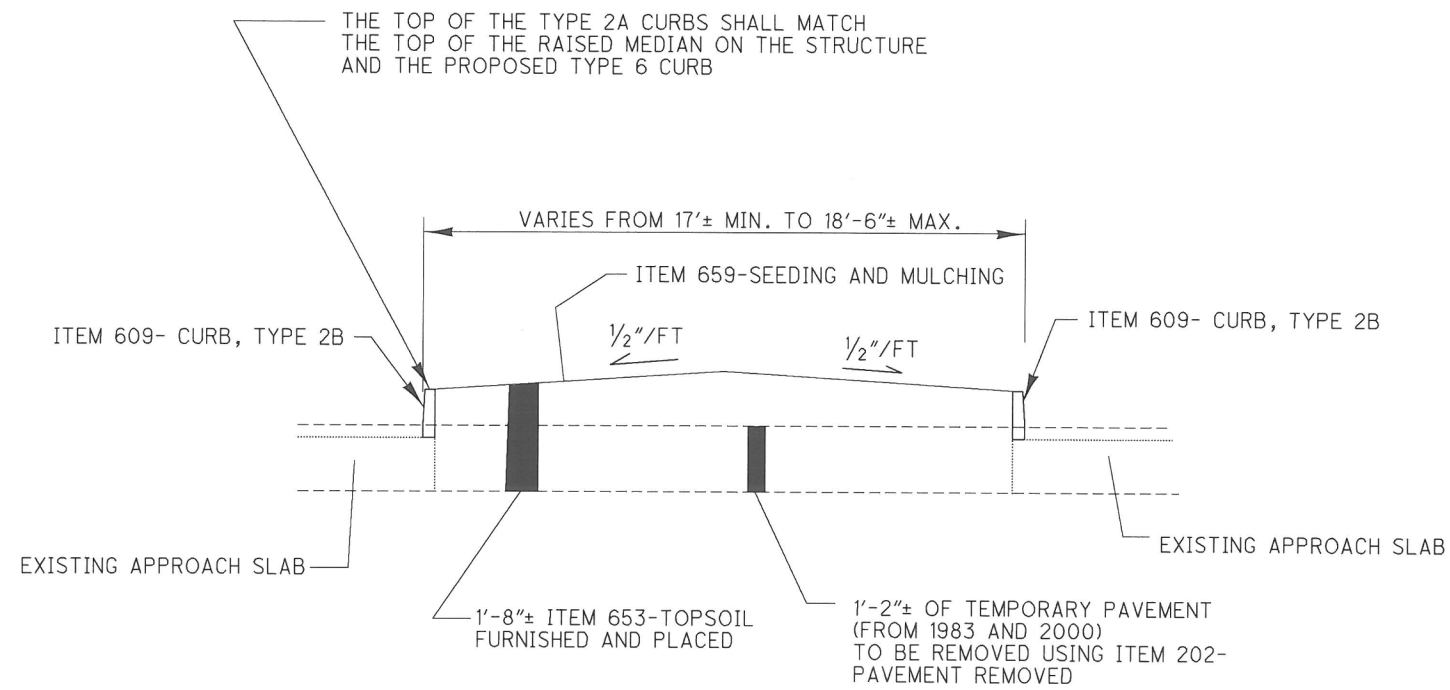
RAISED CONCRETE MEDIAN REPLACEMENT DETAIL
STATION 226+09± TO STATION 229+21±

ITEM	QUANTITY	UNIT	DESCRIPTION
202	438	SQ YD	PAVEMENT REMOVED
202	109	CU YD	REMOVAL MISC.: RAISED CONCRETE APPROACH MEDIAN
254	604	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
254	4	SQ YD	PATCHING PLANED SURFACE
407	48	GALLON	TACK COAT
442	34	CU YD	ASPHALT CONCRETE SURFACE COURSE, 9.5MM, TYPE A (448), AS PER PLAN
609	32	CU YD	CONCRETE MEDIAN
609	344	FT	CURB, TYPE 6
653	234	CU YD	TOPSOIL FURNISHED AND PLACED
659	420	SQ YD	SEEDING AND MULCHING

- NOTES:
- FOR RAISED MEDIAN DETAILS NOT SHOWN, SEE STD. DRW. RM-3.1.
 - FOR TYPE 6 CURB, SEE STD. DRW. BP-5.1.

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

DESIGN FILE: \\projects\77463\Struct\MOT.dgn
WORKSTATION: mollens DATE: 9/20/2011
MODELNAME: Design



RAISED CONCRETE MEDIAN REPLACEMENT DETAIL @ APPROACH SLAB
 STATION 215+64± TO STATION 215+79±

ITEM	QUANTITY	UNIT	DESCRIPTION
202	28	SQ YD	PAVEMENT REMOVED
609	30	FT	CURB, TYPE 2B
653	17	CU YD	TOPSOIL FURNISHED AND PLACED
659	28	SQ YD	SEEDING AND MULCHING
659	10	M GAL	WATER

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

NOTES:

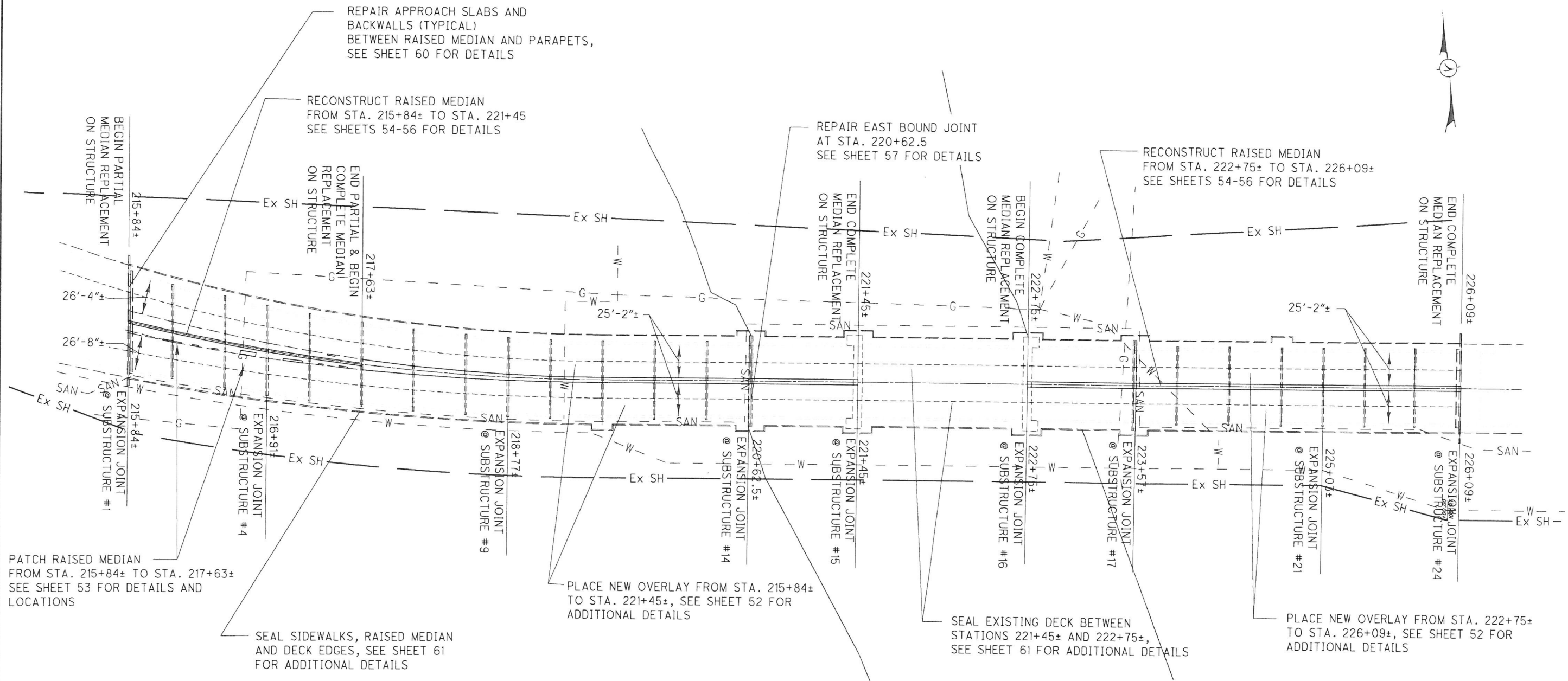
- 1) FOR TYPE 2B CURB, SEE STD. DRW. BP-5.1.

CALCULATED
DCM

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF PLANNING
AND ENGINEERING

RAISED MEDIAN DETAILS

ERI-6-17.70



PLAN VIEW

ITEM	QUANTITY	UNIT	DESCRIPTION
SPECIAL	5054	SQ YD	BRIDGE DECK GROOVING
848	5054	SQ YD	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2 3/4" THICK)
848	5054	SQ YD	SURFACE PREPARATION USING HYDRODEMOLITION
848	78	CU YD	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
848	650	SQ YD	HAND CHIPPING
848	LUMP		TEST SLAB
848	3	CU YD	FULL DEPTH REPAIR
848	5054	SQ YD	EXISTING CONCRETE OVERLAY REMOVED (2 1/4" NOMINAL THICKNESS)
848	252	SQ YD	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

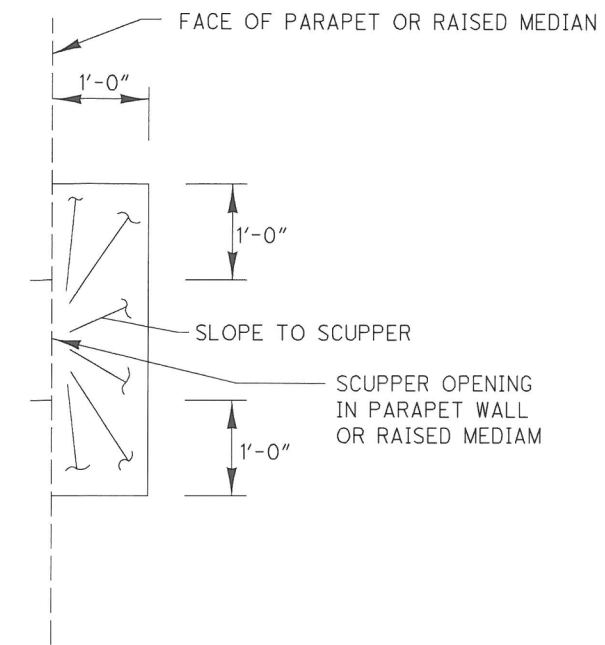
- NOTES:
- 1) FOR RESURFACING DETAILS, SEE SHEET 62.
 - 2) FOR EROSION REPAIR DETAILS, SEE SHEET 58.
 - 3) FOR EDGE BEAM REPAIR DETAILS, SEE SHEET 59.
 - 4) THE SANITARY FORCED MAIN LINE IS ATTACHED TO THE STRUCTURE, ALL OTHER UTILITIES SHOWN ARE BURIED.

ERI-6-1770 PLAN VIEW OVER HURON RIVER

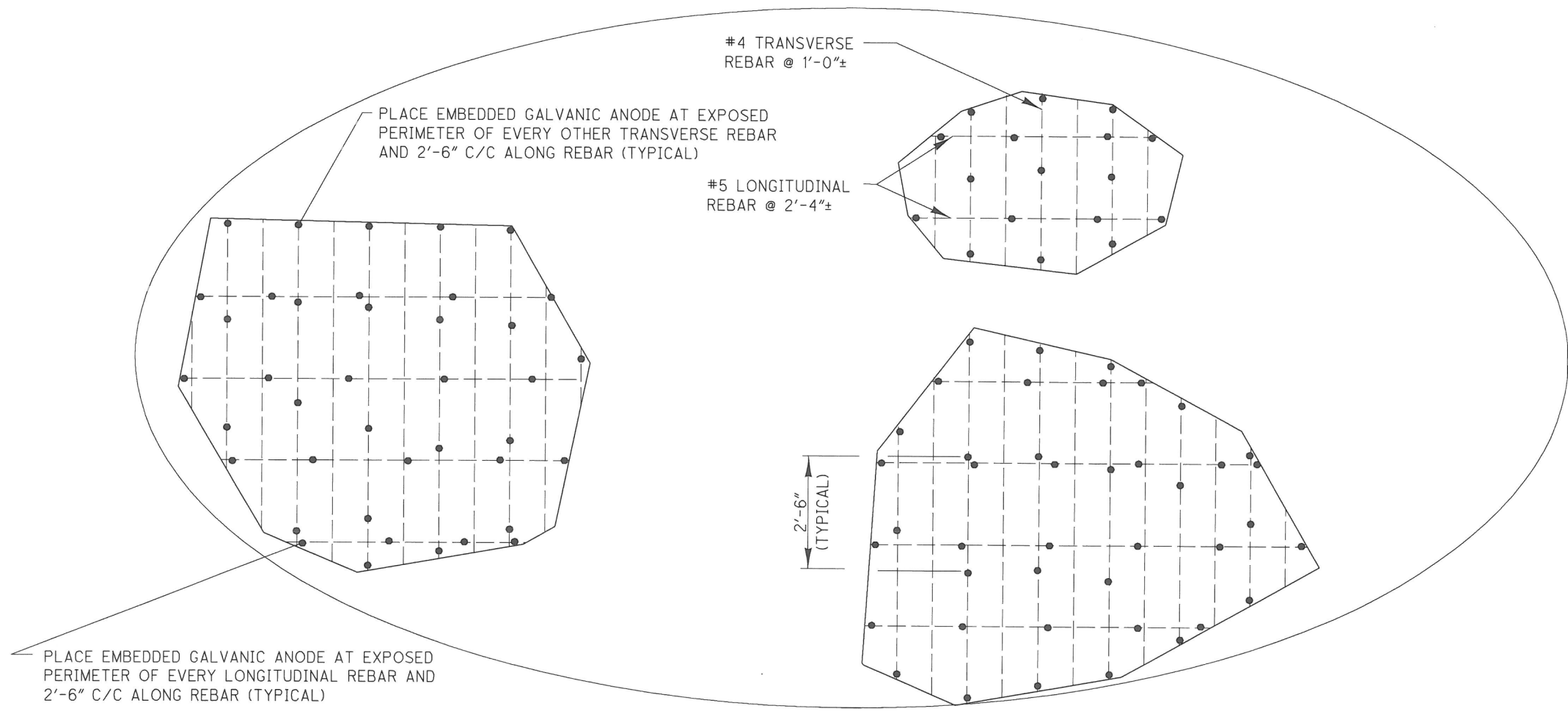
ERI-6-1770

DESIGNED	DCM	CHECKED	CAL
DRAWN	DCM	REVISED	DCM
REVIEWED	CLB	DATE	7/11
STRUCTURE FILE NUMBER	2201984	DESIGN AGENCY	ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING

DESIGN FILE: i:\projects\77463\Struct\overlaycathprot.dgn
 WORKSTATION: dmollens
 DATE: 7/22/2011
 MODELNAME: Design



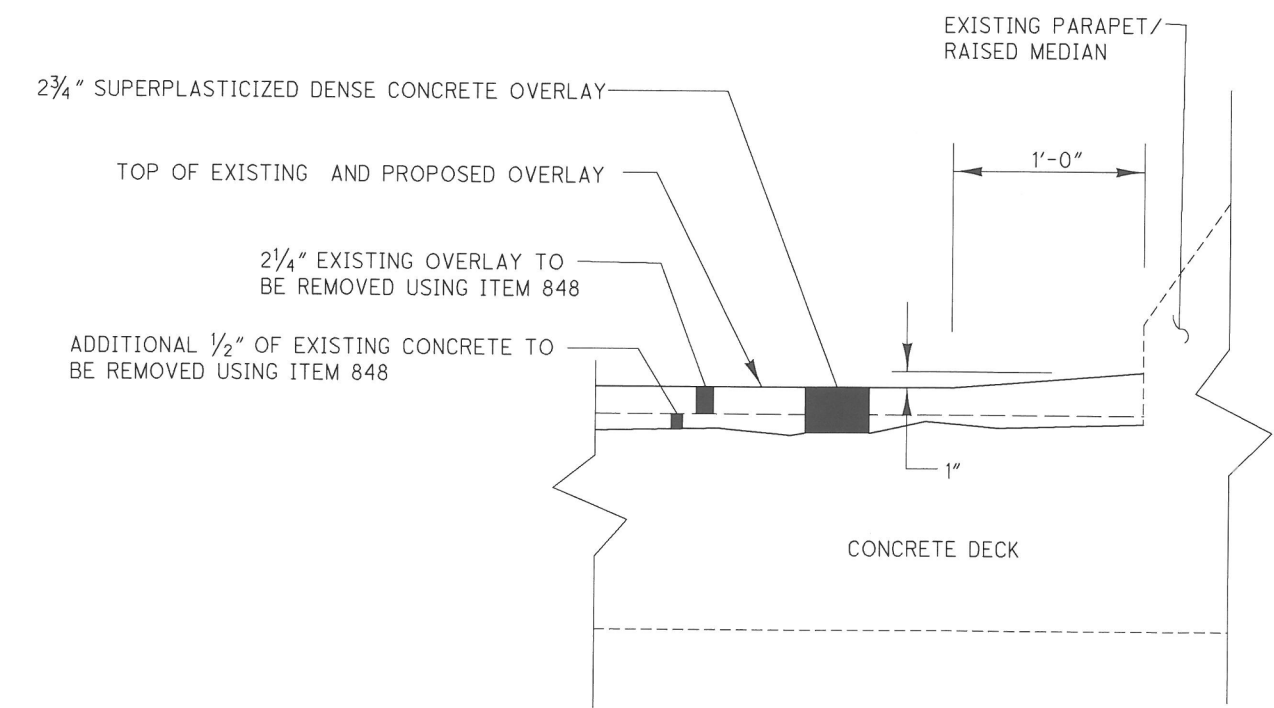
TYPICAL PLAN VIEW FOR OVERLAY AT SCUPPERS



TYPICAL AREA OF DECK AFTER HYDRODEMOLITION

ITEM	QUANTITY	UNIT	DESCRIPTION
SPECIAL	475	EACH	STRUCTURE MISC.: EMBEDDED GALVANIC ANODE INSTALLATION

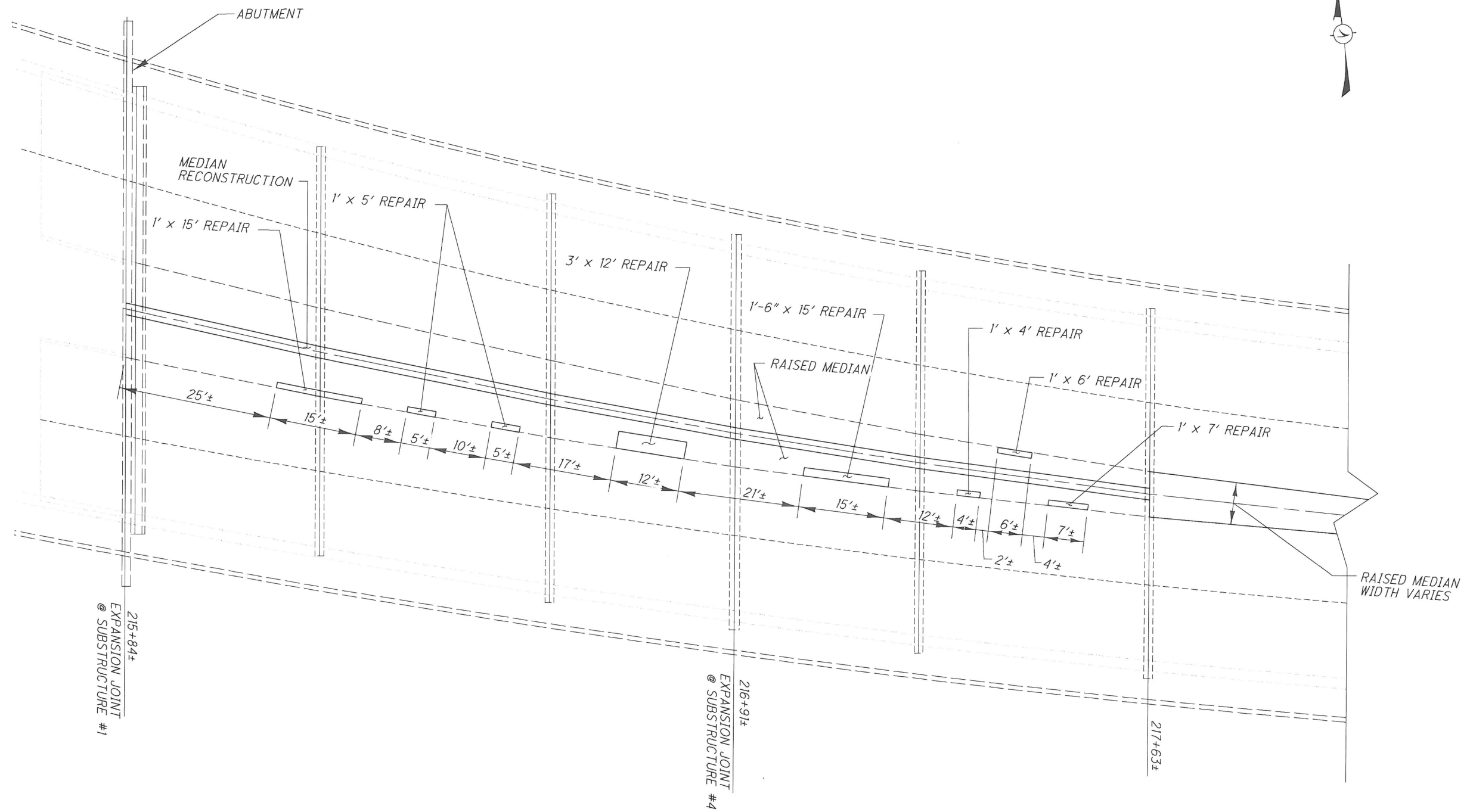
ALL QUANTITIES CARRIED TO GENERAL SUMMARY



TYPICAL SECTION VIEW AT PARAPET

DESIGNED DCM CHECKED CAL	DRAWN DCM REVISED	REVIEWED CLB STRUCTURE FILE NUMBER 2201984	DATE 7/11	DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING
OVERLAY WITH CATHODIC PROTECTION DETAILS ERI-6-1770 OVER HURON RIVER				
ERI-6-1770				
52 62				

DESIGN FILE: i:\projects\77463\struct\medianrepair.dgn
 WORKSTATION: dmollens
 MODELNAME: Design
 DATE: 7/22/2011



PLAN VIEW

ITEM	QUANTITY	UNIT	DESCRIPTION
202	2	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
511	2	CU YD	CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (RAISED MEDIAN RECONSTRUCTION)

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

NOTES:
 1) FOR TYPICAL REPAIR DETAIL, SEE SHEET 54.



DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PLANNING
 AND ENGINEERING

REVIEWED
 CLB
 DATE
 7/11
 STRUCTURE FILE NUMBER
 2201984

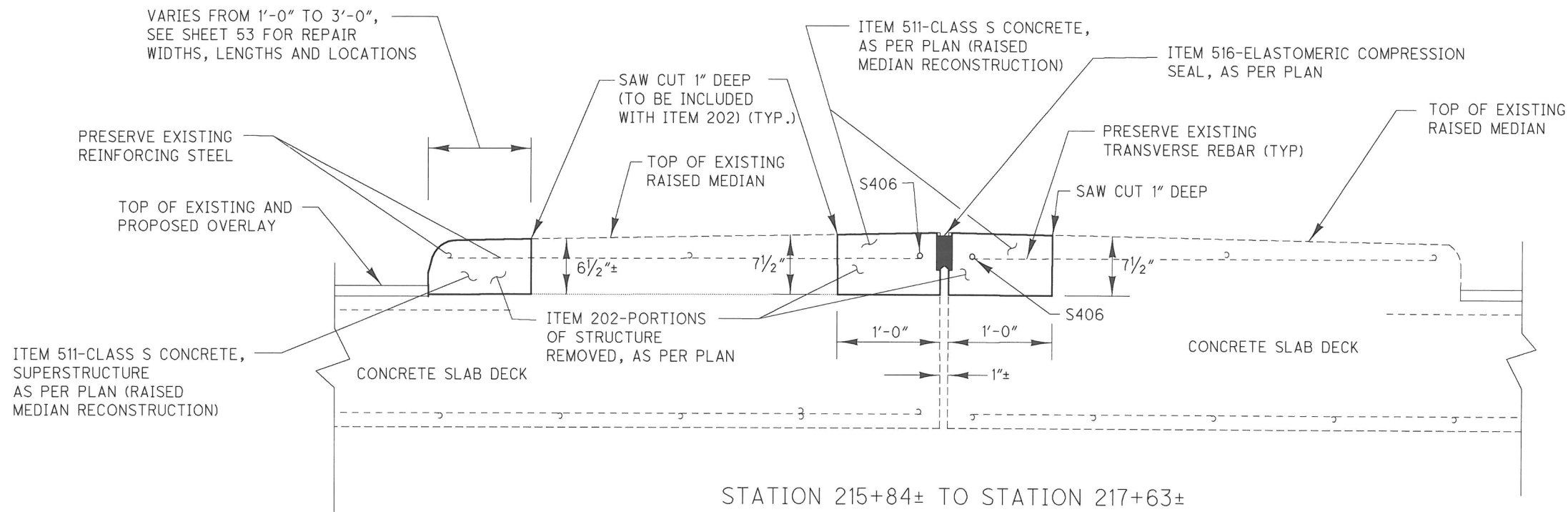
DRAWN
 DCM
 CHECKED
 CAL
 DESIGNED
 DCM

**RAISED MEDIAN PATCHING
 ERI-6-1770 OVER HURON RIVER**

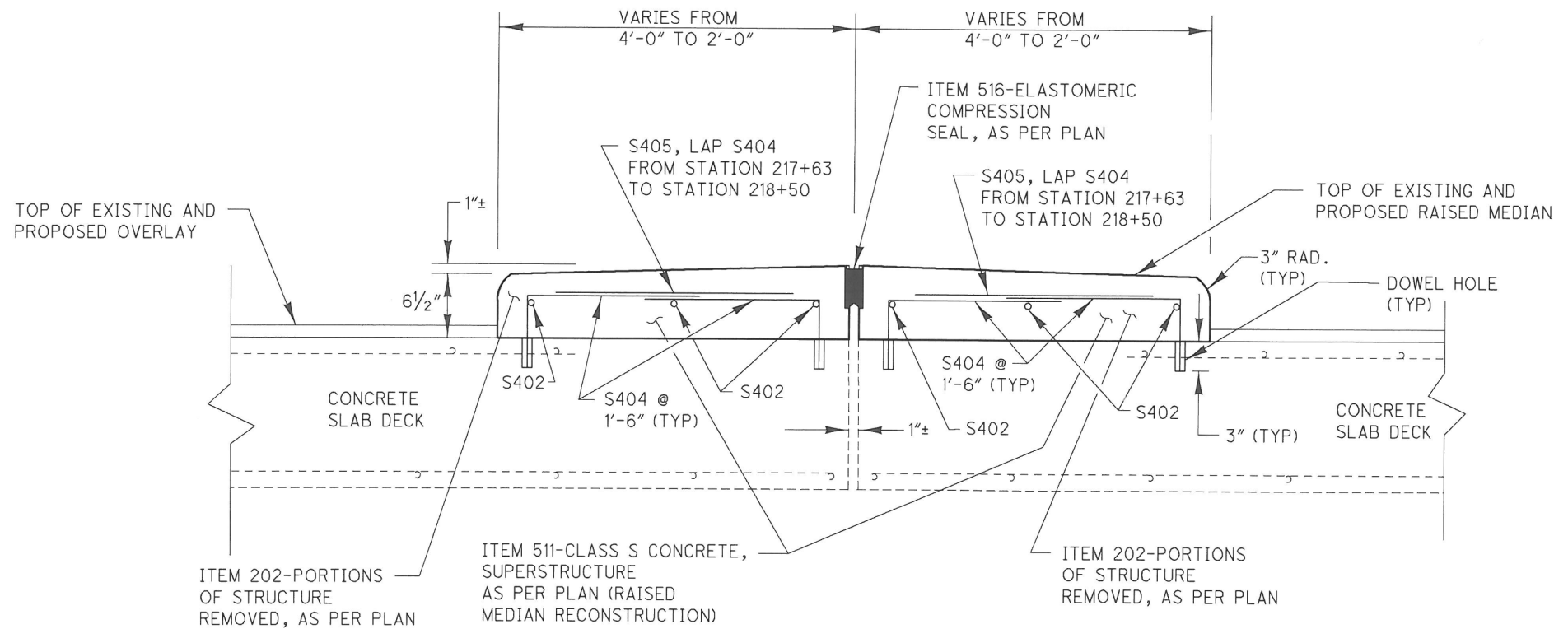
ERI-6-1770

DESIGN FILE: \\projects\77463\Struct\medianrepair.dgn
 WQRKSTATION\mollens DATE: 7/22/2011

MODELNAME: Design



STATION 215+84± TO STATION 217+63±



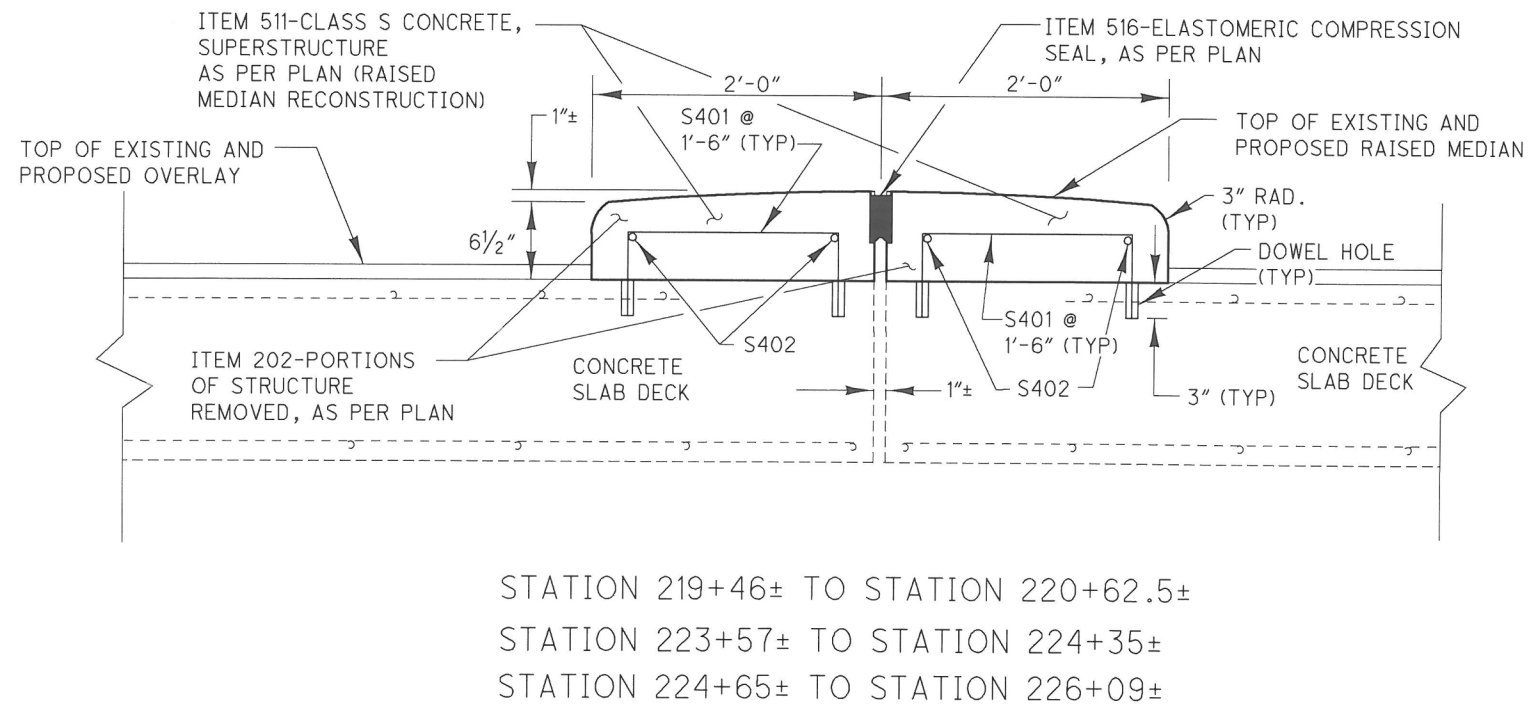
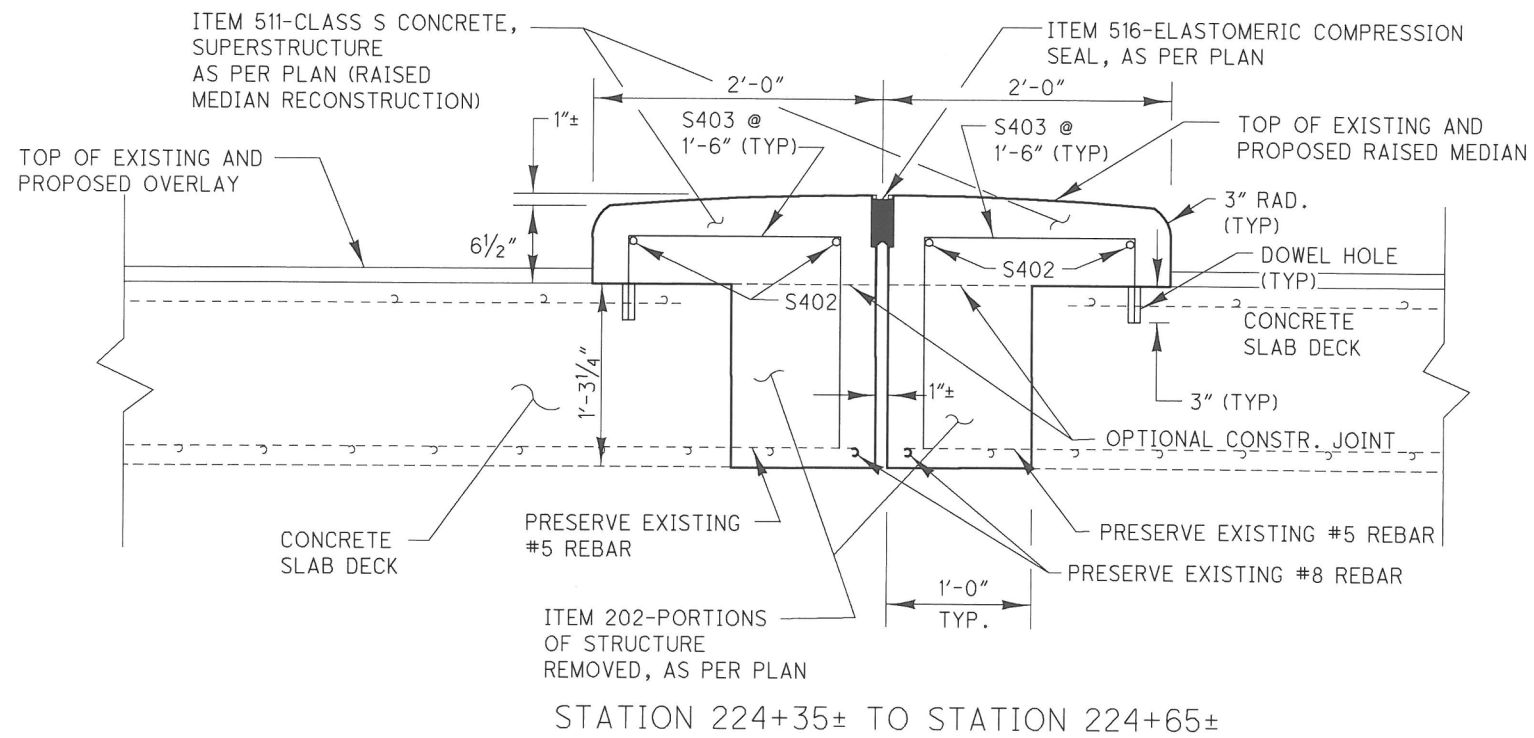
STATION 217+63± TO STATION 219+46±

NOTES:

- 1) DO NOT DISTURB MEDIAN CURB FROM STATION 221+45 TO STATION 222+75.
- 2) DO NOT DAMAGE EXISTING EXPANSION JOINTS.
- 3) SEE SHEET 56 FOR REINFORCING TABLE AND QUANTITIES.
- 4) #4 BARS SHALL LAP 1'-6" MIN.
- 5) MATCH EXISTING MEDIAN SLOPE AND RADIUS AT FACE OF CURB.
- 6) SEE SHEET 53 FOR RAISED MEDIAN PATCHING QUANTITIES.
- 7) SEE SHEET 56 FOR RAISED MEDIAN RECONSTRUCTION QUANTITIES.

DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING	
DATE 7/11	STRUCTURE FILE NUMBER 2201984
REVIEWED CLB	REVISIONS 2201984
DRAWN DCM	CHECKED CAL
RAISED MEDIAN REPAIR DETAIL ERI-6-1770 OVER HURON RIVER	
ERI-6-1770	
54	62

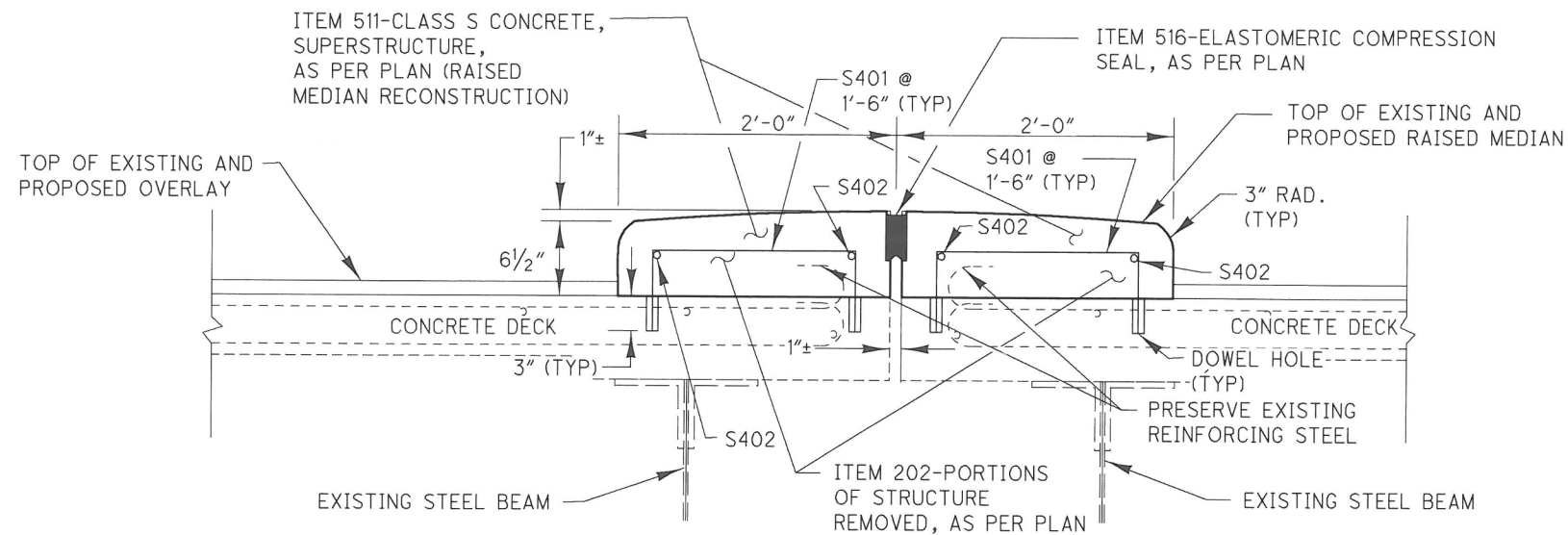
DESIGN FILE: \\projects\77463\Struct\medianrepair .dgn
 WORKSTATION: dmollens DATE: 7/22/2011
 MODELNAME: Design



NOTES:

- 1) DO NOT DISTURB MEDIAN CURB FROM STATION 221+45 TO STATION 222+75.
- 2) DO NOT DAMAGE EXISTING EXPANSION JOINTS.
- 3) SEE SHEET 56 FOR REINFORCING TABLE AND QUANTITIES.
- 4) #4 BARS SHALL LAP 1'-6" MIN.

DESIGN FILE: \\projects\77463\Struct\medianrepair.dgn
 WORKSTATION: molens DATE: 7/22/2011
 MODELNAME: Design



STATION 220+62.5± TO STATION 221+45±
 STATION 222+75± TO STATION 223+57±

NOTES:

- 1) DO NOT DISTURB MEDIAN CURB FROM STATION 221+45 TO STATION 222+75.
- 2) DO NOT DAMAGE EXISTING EXPANSION JOINTS.
- 3) SEE THIS SHEET FOR REINFORCING TABLE AND QUANTITIES.
- 4) #4 BARS SHALL LAP 1'-6" MIN.

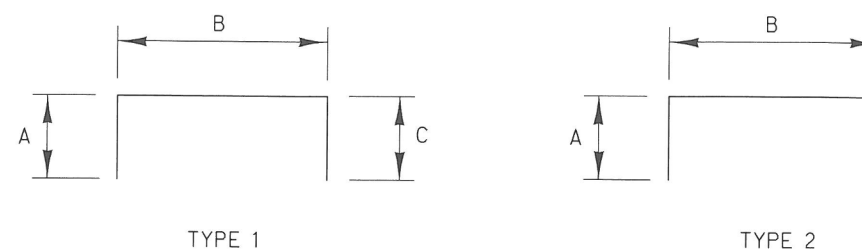
ITEM	QUANTITY	UNIT	DESCRIPTION
202	81	CU YD	PORCTIONS OF STRUCTURE REMOVED, AS PER PLAN
509	4632	POUND	EPOXY COATED REINFORCING STEEL
510	1902	EACH	DOWEL HOLE WITH NONSHRINK, NONMETALLIC GROUT
511	81	CU YD	CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (RAISED MEDIAN RECONSTRUCTION)
516	895	FT	ELASTOMERIC COMPRESSION SEAL, AS PER PLAN

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

EPOXY COATED REINFORCING STEEL

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIM A	DIM B	DIM C
S401	686	2'-5"	1107	1	7"	1'-5"	7"
S402	118	30'-6"	2404	STRAIGHT			
S403	42	3'-3"	91	1	7"	1'-5"	1'-5"
S404	488	1'-11"	625	2	7"	1'-5"	
S405	118	2'-0"	158	STRAIGHT			
S406	10	37'-0"	247	STRAIGHT			
TOTAL			4632				

BENDING DIAGRAM



RAISED MEDIAN REPAIR DETAIL
 ERI-6-1770 OVER HURON RIVER

ERI-6-1770

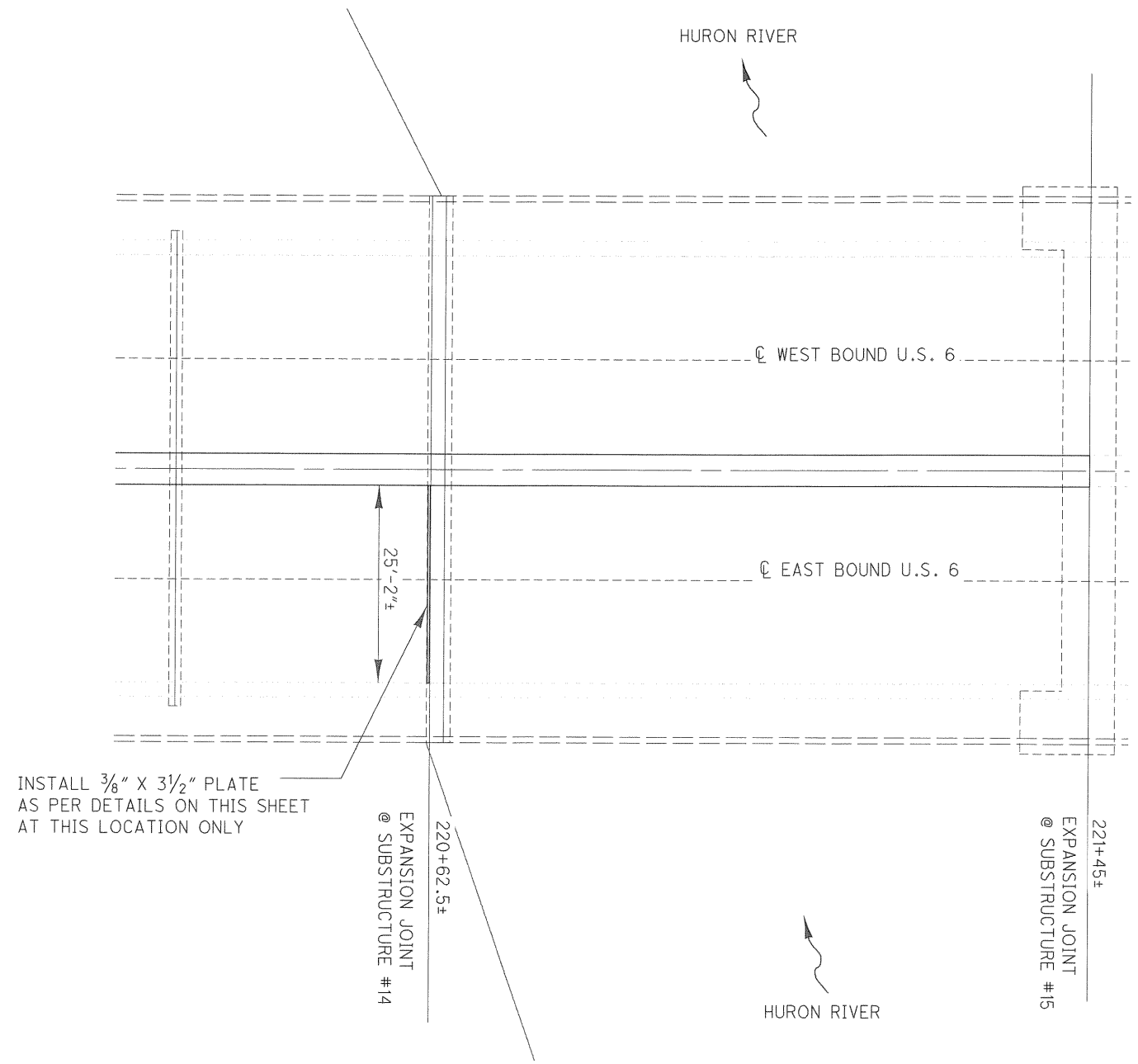
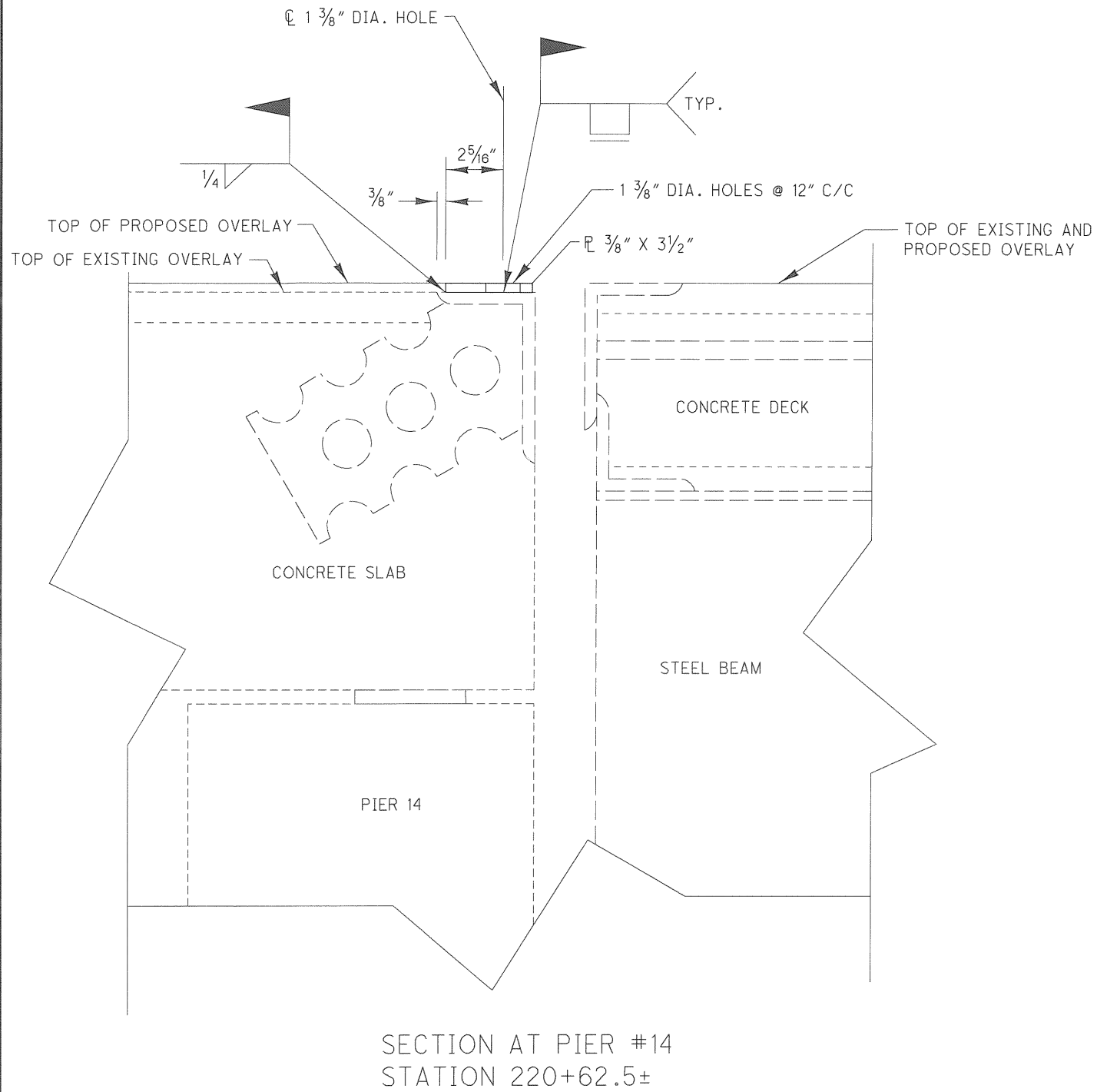
DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PLANNING
 AND ENGINEERING

REVIEWED
 DATE 7/11
 CLB
 STRUCTURE FILE NUMBER
 2201984

DRAWN
 DCM
 REVISION

DESIGNED
 DCM
 CHECKED
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DESIGN FILE: i:\projects\77463\Struct\jointrepair.dgn
 WORKSTATION: molens DATE: 10/11/2011
 MODELNAME: Design

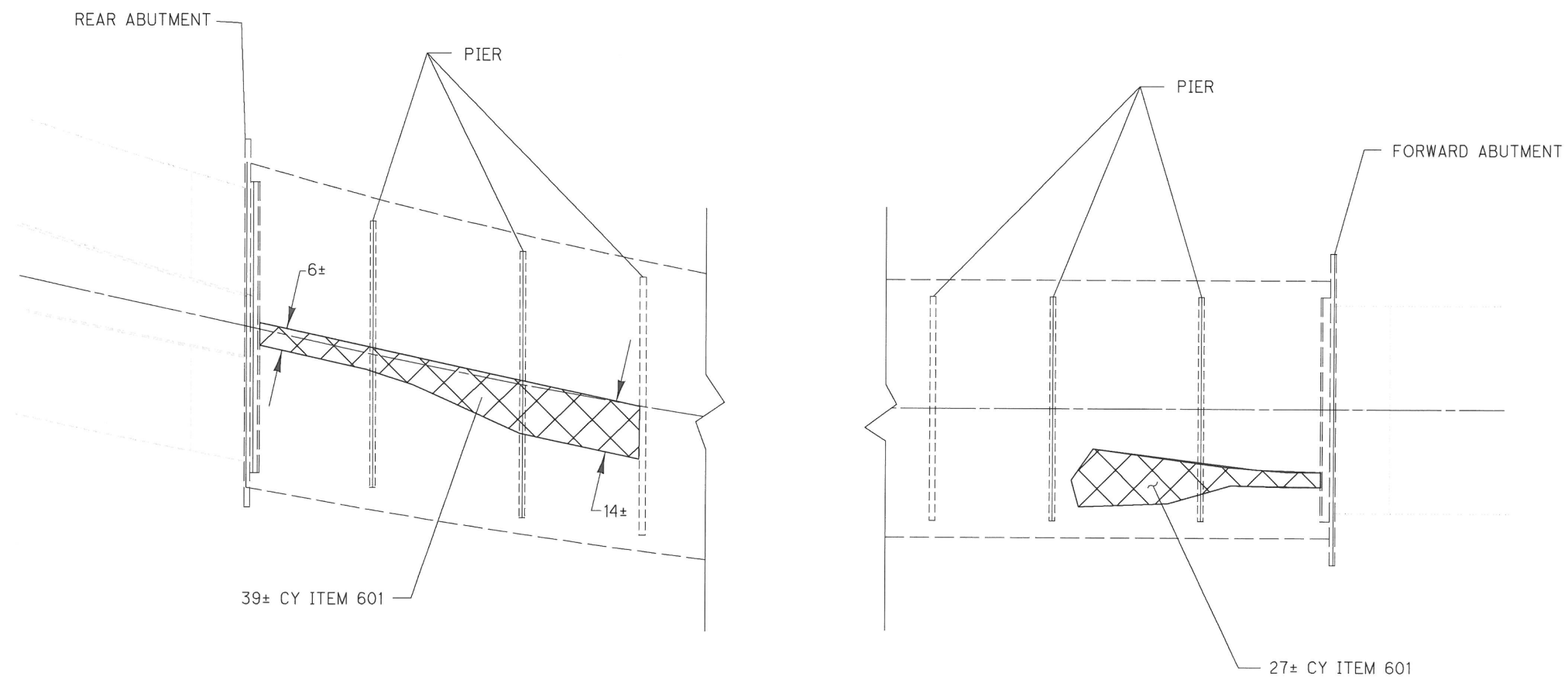


ITEM	QUANTITY	UNIT	DESCRIPTION
516	25.17	FT	VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINT, AS PER PLAN

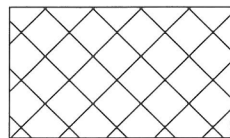
ALL QUANTITIES CARRIED TO GENERAL SUMMARY

DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING	
DESIGNED DCM CHECKED CAL	DRAWN DCM REVISED
REVIEWED CLB	DATE 7/11
STRUCTURE FILE NUMBER 2201984	
JOINT DETAIL (EAST BOUND ONLY) ERI-6-1770 OVER HURON RIVER	
ERI-6-1770	
57 62	

DESIGN FILE: \\projects\77463\Struct\erosionrepair.dgn
 WORKSTATION: mollens
 DATE: 7/22/2011
 MODELNAME: Design



PARTIAL PLAN VIEW
 UNDER STRUCTURE



ITEM 601-DUMPED ROCK FILL, TYPE D

ITEM	QUANTITY	UNIT	DESCRIPTION
601	66	CU YD	DUMPED ROCK FILL, TYPE D

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

NOTES:

- 1) LEAVE EXISTING ASPHALT GUTTERS IN PLACE.
- 2) ADD ITEM 601 IN WASHED OUT AREAS AS SHOWN ABOVE TO FILL IN THE AREAS TO MATCH THE SURROUNDING GROUND ELEVATIONS.

DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PLANNING
 AND ENGINEERING

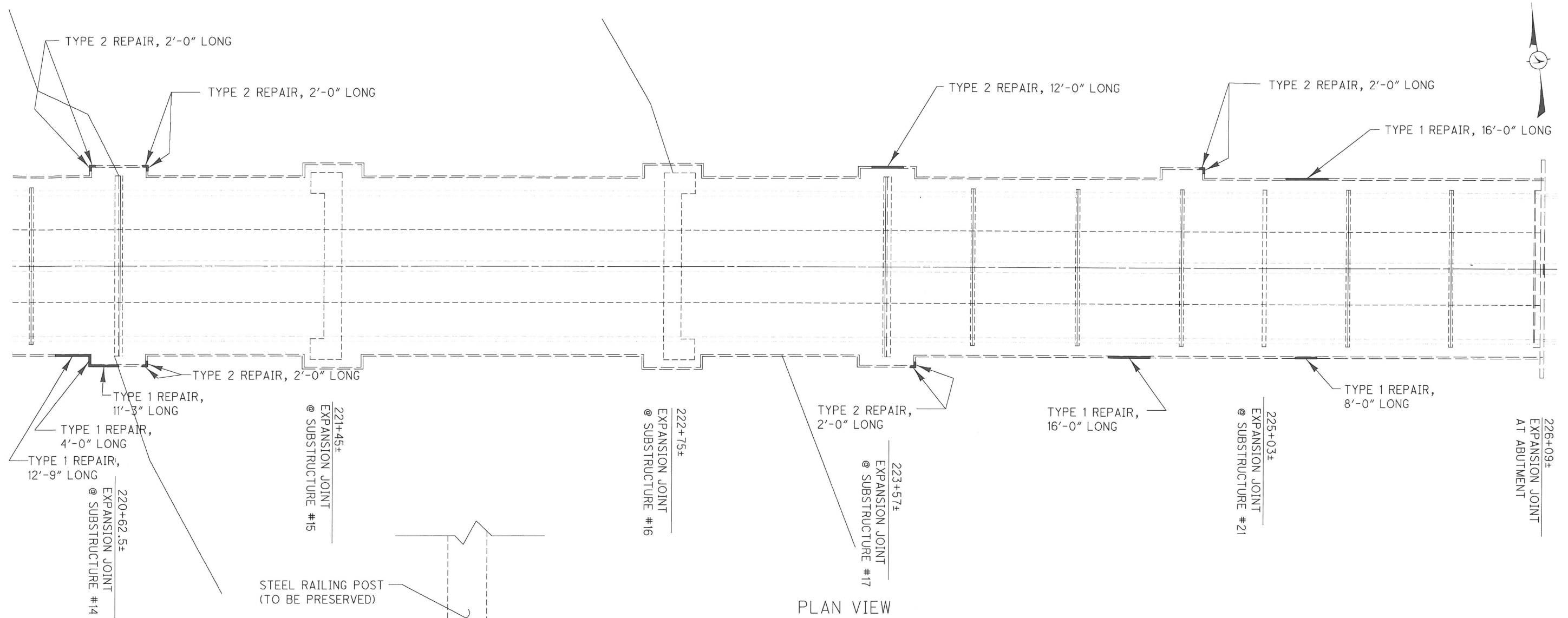
REVIEWED
 CLB
 DATE
 7/11
 STRUCTURE FILE NUMBER
 2201984

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 DCM
 CHECKED
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 DESIGNED
 DCM

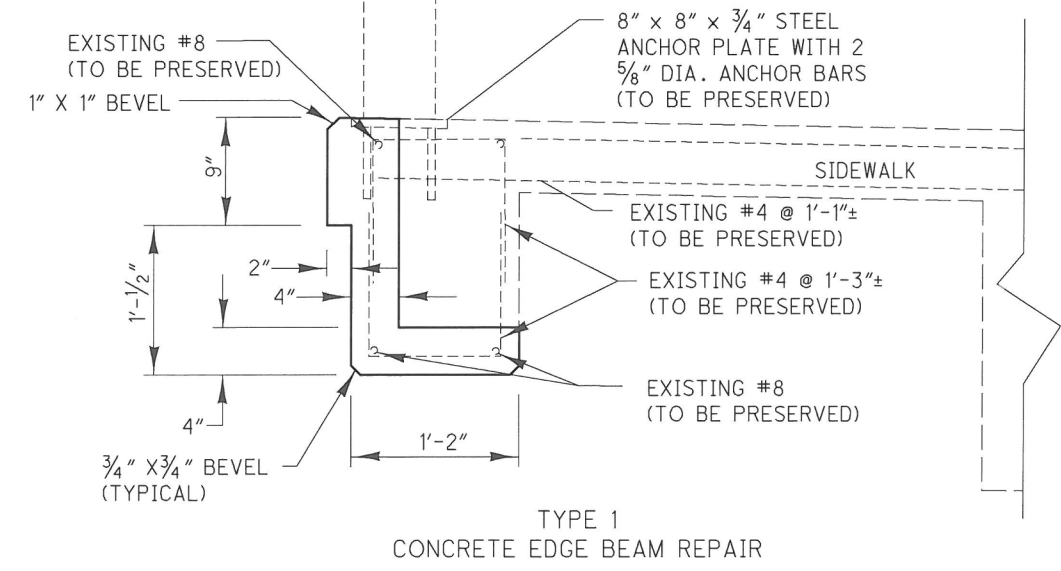
**EROSION REPAIR DETAIL
 ERI-6-1770 OVER HURON RIVER**

ERI-6-1770

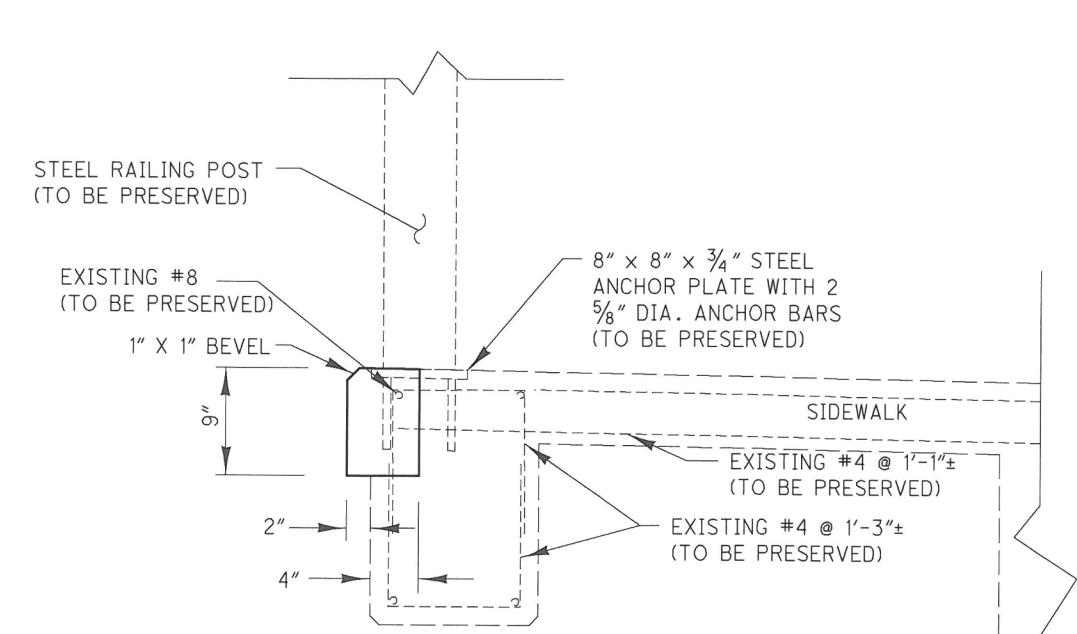
DESIGN FILE: \\projects\77463\Struct\edgebeamrepair.dgn
 WORKSTATION:mollens DATE: 7/22/2011
 MODELNAME: Design



PLAN VIEW



TYPE 1
CONCRETE EDGE BEAM REPAIR



TYPE 2
CONCRETE EDGE BEAM REPAIR

ITEM	QUANTITY	UNIT	DESCRIPTION
202	3	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (EDGE BEAM)
511	3	CU YD	CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (EDGE BEAM REPAIR)

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

**PARTIAL PLAN VIEW OF
EDGE BEAM REPAIR LOCATIONS
ERI-6-1770 OVER HURON RIVER**

ERI-6-1770

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF PLANNING
AND ENGINEERING

DATE
7/11

DESIGNED
DCM

CHECKED
CAL

DRAWN
DCM

REVIEWED
CLB

STRUCTURE FILE NUMBER
2201984

DESIGN FILE: \\projects\77463\Struct\approachslabrepair.dgn
 WORKSTATION:mollens DATE: 8/1/2011
 MODELNAME: Design

FORM A 1/2" WIDE X 2" DEEP SLOT AND
 FILL WITH ITEM 516- JOINT SEALER

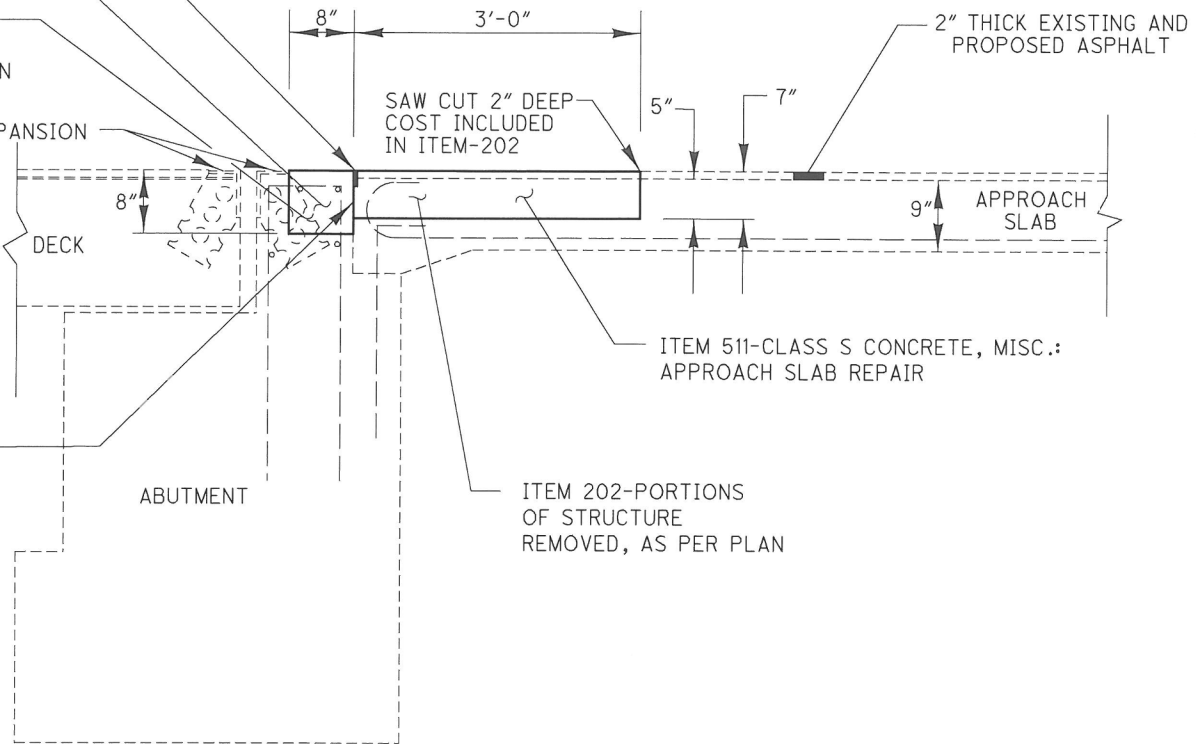
ITEM 511-CLASS C CONCRETE, ABUTMENT,
 AS PER PLAN (RECONSTRUCTION)

ITEM 202-PORCTIONS
 OF STRUCTURE
 REMOVED, AS PER PLAN

EXISTING STEEL EXPANSION
 JOINT AND ANGLES
 TO BE PRESERVED

TYPE A WATERPROOFING,
 COST INCLUDED IN ITEM 511

ABUTMENT



TYPICAL APPROACH SLAB
 AND BACKWALL REPAIR

(106± OF TOTAL REPAIR LENGTH)

ITEM	QUANTITY	UNIT	DESCRIPTION
202	8	CU YD	PORCTIONS OF STRUCTURE REMOVED, AS PER PLAN
511	7	CU YD	CLASS S CONCRETE, MISC.: APPROACH SLAB REPAIR
511	2	CU YD	CLASS C CONCRETE, ABUTMENT, AS PER PLAN (RECONSTRUCTION)
516	106	FT	JOINT SEALER

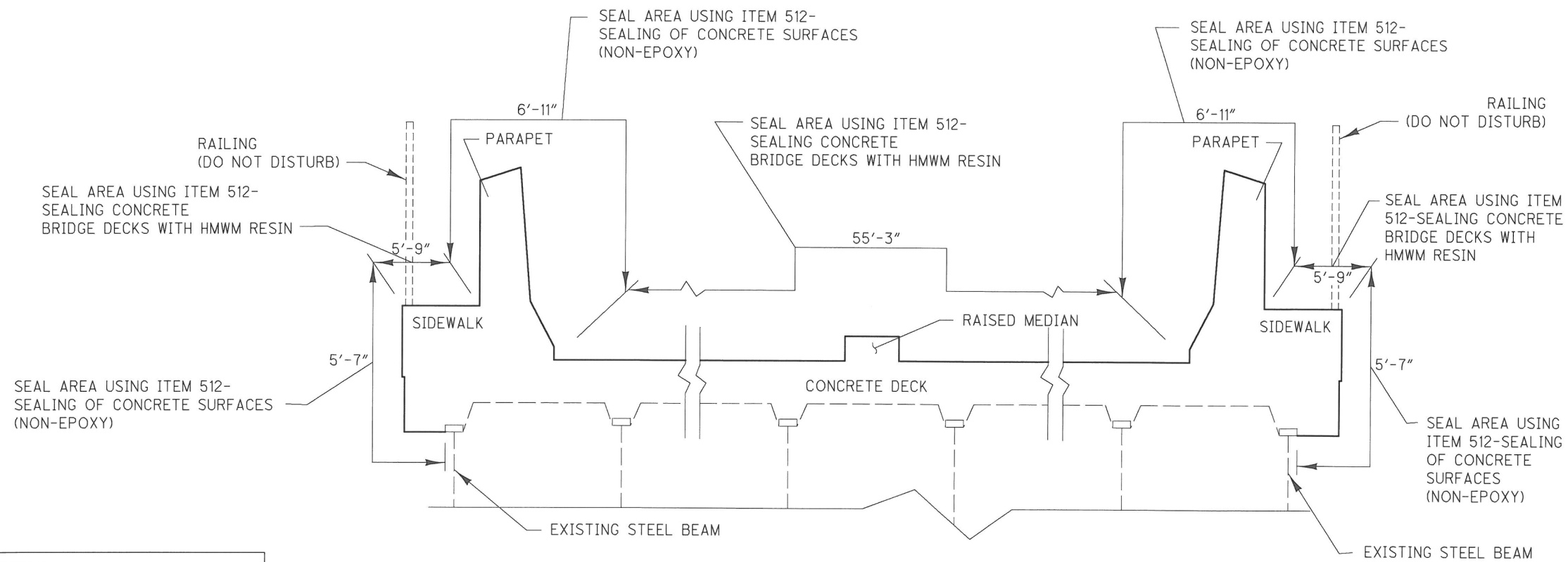
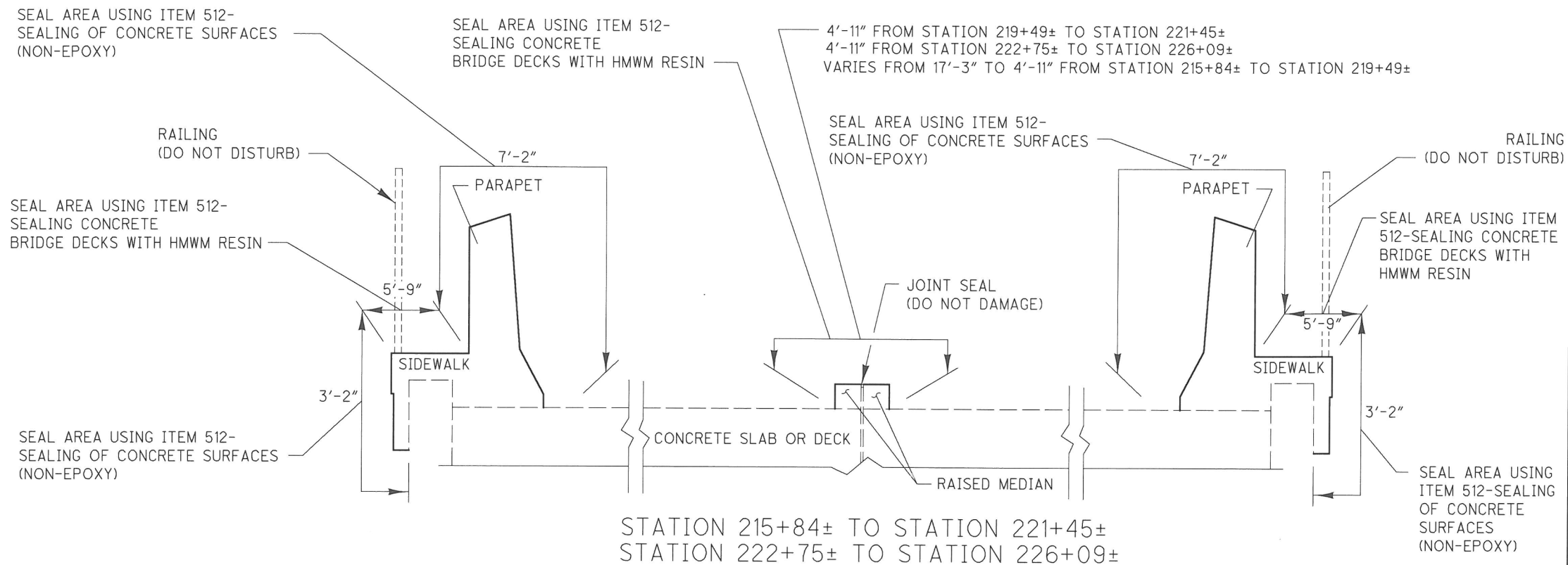
NOTES:

- 1) PRESERVE ALL EXISTING REINFORCING STEEL.
- 2) PROPOSED TOP OF APPROACH SLAB AND BACKWALL REPAIR CONCRETE SHALL BE 1/8" ABOVE TOP OF EXISTING STEEL EXPANSION JOINT ANGLES.
- 3) PRESERVE EXISTING EXPANSION JOINT AND ANGLES.

ERI-6-1770	APPROACH SLAB AND BACKWALL REPAIR DETAIL ERI-6-1770 OVER HURON RIVER	DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING
60 62	DRAWN DCM	REVIEWED CLB
DESIGNED DCM	DATE 7/11	STRUCTURE FILE NUMBER 2201984
CHECKED CAL	REVISOR	FILE NUMBER

DESIGN FILE: \\projects\77463\Struct\sealing.dgn
 WORKSTATION: dmilens DATE: 7/22/2011

MODELNAME: Design



ITEM	QUANTITY	UNIT	DESCRIPTION
512	2417	SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY)
512	2848	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

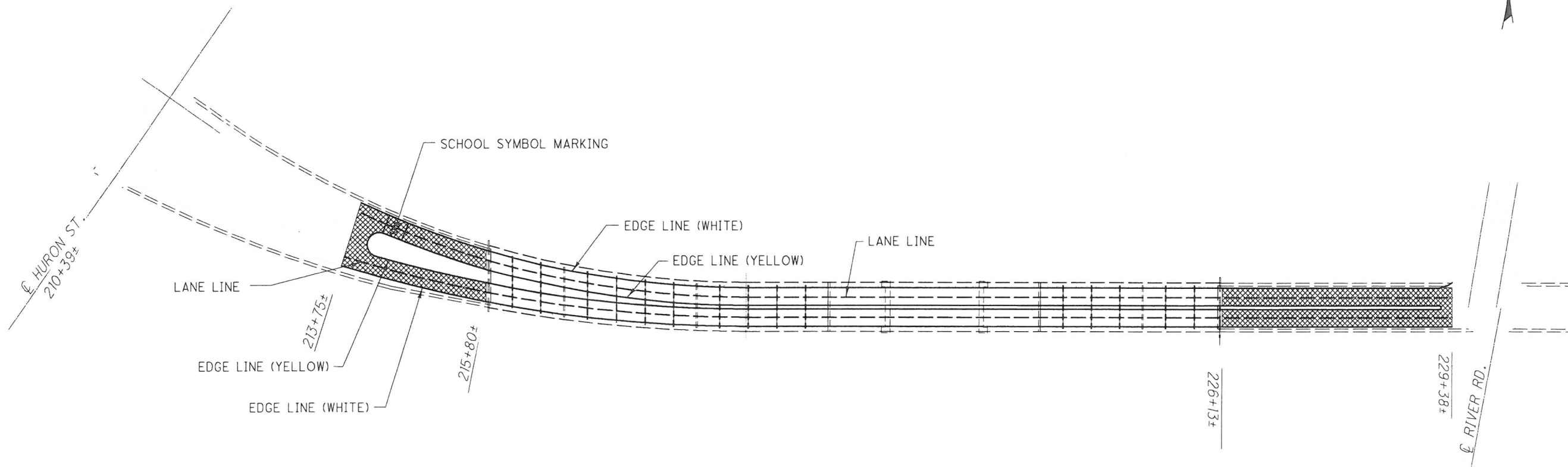
DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PLANNING
 AND ENGINEERING

DATE
 7/11
 REVISED
 CLB
 STRUCTURE FILE NUMBER
 2201984

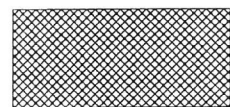
DRAWN
 DCM
 REVISED
 DCM
 CHECKED
 CAL

SEALING DETAILS
 HURON RIVER
 ERI-6-1770

ERI-6-1770



PLAN VIEW



AREA TO PLANE 2" DEEP AND PAVE WITH 2" OF ITEM 442 AND TACK COAT

ITEM	QUANTITY	UNIT	DESCRIPTION
254	3156	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
407	239	GALLON	TACK COAT
407	14	GALLON	TACK COAT, 702.13
442	176	CU YD	ASPHALT CONCRETE SURFACE COURSE, 9.5MM, TYPE A (448), AS PER PLAN
642	.39	MILE	EDGE LINE, TYPE 1
642	.20	MILE	LANE LINE, TYPE 1
642	1	EACH	SCHOOL SYMBOL MARKING, 120 INCH
646	.79	MILE	EDGE LINE
646	.39	MILE	LANE LINE

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

NOTES:

- 1) PLANING AND RESURFACING SHALL BE DONE AFTER ALL RAISED MEDIAN CURB, TYPE 2B CURB AND TYPE 6 CURB HAS BEEN REPLACED.
- 2) ITEM 642 SHALL BE PLACED ON ASPHALT PAVEMENT.
- 3) ITEM 646 SHALL BE PLACED ON CONCRETE.
- 4) ITEM 407 TACK COAT, 702.13 SHALL BE PLACED ON THE PLANED APPROACH SLABS.

CURVE-1
 $\Delta = 83^\circ 10' 39''$ (LT)
 $Dc = 30^\circ 01' 03''$
 $R = 190.88'$
 $T = 169.40'$
 $L = 277.10'$
 $E = 64.33'$
 $C = 253.40'$
 C.B. = N 15° 43' 57" W

CURVE-2
 $\Delta = 91^\circ 38' 53''$ (LT)
 $Dc = 229^\circ 10' 59''$
 $R = 25.00'$
 $T = 25.73'$
 $L = 39.99'$
 $E = 10.87'$
 $C = 35.86'$
 C.B. = S 16° 45' 45" E

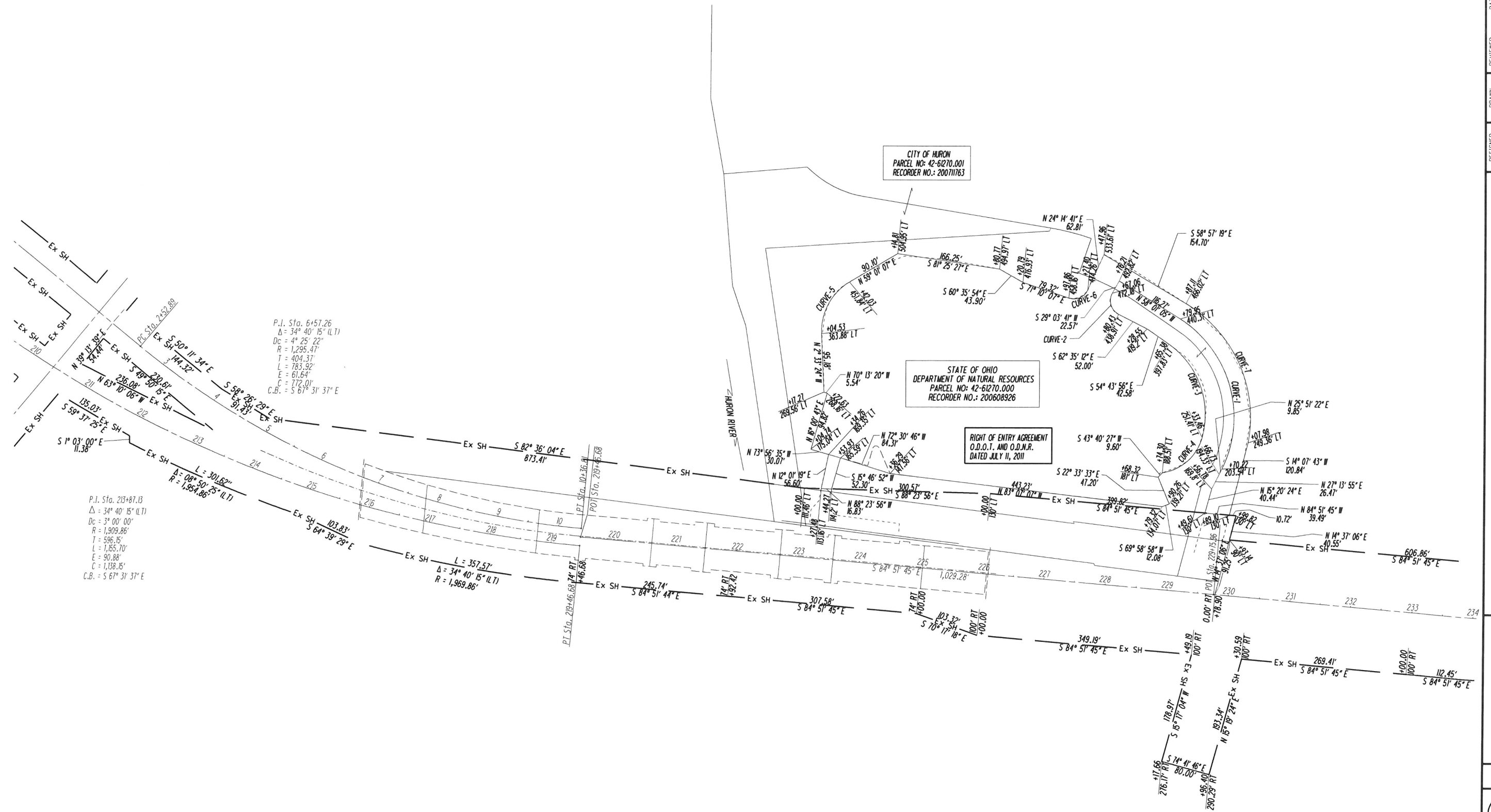
CURVE-3
 $\Delta = 69^\circ 51' 43''$ (RT)
 $Dc = 40^\circ 38' 07''$
 $R = 141.00'$
 $T = 98.48'$
 $L = 171.92'$
 $E = 30.98'$
 $C = 161.47'$
 C.B. = S 19° 48' 04" E

CURVE-4
 $\Delta = 66^\circ 30' 10''$ (RT)
 $Dc = 72^\circ 45' 42''$
 $R = 78.74'$
 $T = 51.63'$
 $L = 91.40'$
 $E = 15.42'$
 $C = 86.35'$
 C.B. = S 48° 22' 52" W

CURVE-5
 $\Delta = 61^\circ 34' 31''$ (RT)
 $Dc = 61^\circ 20' 36''$
 $R = 93.40'$
 $T = 55.65'$
 $L = 100.38'$
 $E = 15.32'$
 $C = 95.62'$
 C.B. = N 28° 13' 52" E

CURVE-6
 $\Delta = 84^\circ 35' 12''$ (LT)
 $Dc = 229^\circ 10' 59''$
 $R = 25.00'$
 $T = 22.74'$
 $L = 36.91'$
 $E = 8.80'$
 $C = 33.65'$
 C.B. = N 66° 32' 17" E

CURVE-7
 $\Delta = 69^\circ 52' 23''$ (RT)
 $Dc = 26^\circ 27' 00''$
 $R = 216.62'$
 $T = 151.32'$
 $L = 264.17'$
 $E = 47.62'$
 $C = 248.10'$
 C.B. = S 24° 01' 08" E



**EXISTING R/W LIMITS AND EASEMENTS
 ERI-6-1770 OVER HURON RIVER**

DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PLANNING
 AND ENGINEERING

DESIGNED	DCM
DRAWN	DCM
REVIEWED	CLB
DATE	7/11

ERI-6-1770

SPECIAL PROVISIONS

WATERWAY PERMITS CONDITIONS

C-R-S: ERI-6-17.92

PID: 77463

Date: 02-16-11

1. Deviations from Permitted Construction Activities

No deviation from the requirements for work in streams and wetlands depicted in the plans, Special Provisions, and/or working drawings may be made unless a modification has been submitted to ODOT and approved by the appropriate agencies (i.e., USACE, Ohio EPA, USCG, ODNR, and USFWS).

For emergency situations resulting in unanticipated impacts to streams or wetlands, 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- Office of Environmental Services- Waterway Permits Unit must be made within 24 hours.

For non-emergency situations, notify the Engineer in writing for submission to the ODOT- Office of Environmental Services- Waterway Permits Unit (614-466-7100) for consideration and coordination with the appropriate agencies. Notification must be made at least two months 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.

2. Cultural Resources

If archeological sites or human remains are discovered, cease all work in the immediate area and notify the Engineer who will immediately contact the Office of Environmental Services – Cultural Resource Section (614-466-7100) and the Ohio Historic Preservation Office.

In the event of human remains are discovered the Engineer shall also contact the Erie County Sherriff's Office (419-625-7951).

3. Water Resource Demarcation:

All streams, wetlands, lakes, and ponds indicated on the plans 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.

4. Spill containment:

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.

<p><u>5. Blasting:</u></p> <p>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).</p> <p>Notify Engineer, in writing, for submission to ODOT Office of Environmental Services – Waterway Permits Unit (614-466-7100) for coordination with the Ohio Department of Natural Resources.</p>
<p><u>6. Waterway Permits:</u></p> <p>A copy of the waterway permits: USACE NWP #3 (authorizing work over a Section 10 water) shall be kept at the work site at all times and made available to all contractors and subcontractors. The Permit is effective starting: <u>02-16-11</u> . The Permit expires: <u>03-19-2012</u> .</p>
<p><u>7. Bridge Inspection:</u></p> <p>Prior to the removal of bridge structures, the underside must be carefully examined for the presence of birds and bats. Should any birds or bats be found roosting on the underside of the bridge, the Contractor is required to notify the Engineer for coordination with ODOT- Office of Environmental Services (614-466-7100).</p>
<p><u>8. Project Inspection:</u></p> <p>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 Office of Environmental Services. Waterway Permits Unit (614-466-7100).</p>
<p><u>9. Temporary Access Fills (Stream and River Crossings and Fills)</u></p> <p>Special Provisions Notes: Regional General Permit (RGP) for the State of Ohio Department of Transportation</p> <p>Definitions:</p> <p>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)*.</p> <p>Standard Temporary Discharge The hydraulic opening providing a capacity for a discharge equal to twice the <i>highest monthly flow</i> without producing a rise in the backwater above the OHWM shall be known as the Standard Temporary Discharge. 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, (http://water.usgs.gov/osw/streamstat/ohi.html).</p> <p>Average Monthly Flow The average monthly flow represents the estimated "normal" flow.</p>

<p>Temporary Access Fills (TAFs)</p> <p>In Streams and Rivers may include, but are not limited to, causeways, cofferdams (as described by other items of work), access pads, temporary bridges, etc. The Contractor will make every attempt minimize disturbance to water bodies, stream banks, stream beds, and approach sections during the construction, maintenance, and removal of the TAFs. Fording of streams and rivers is prohibited. Construct TAFs in such a manner that will maintain flows, minimize upstream flooding, and avoid overtopping the TAF on a regular basis. <i>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 Ordinary High Water Mark (OHWM)*.</i></p> <p>Do not exceed an overall length of 250 feet measured linearly upstream to downstream.</p> <p>Requirements</p> <p>21 calendar days prior to the initiation of any in-stream work, provide the Engineer with working drawings that include:</p> <ul style="list-style-type: none"> • Plan view drawing (200 scale or less) showing the location of all jurisdictional temporary fill proposed for use on the project • Scaled Cross section and profile drawing showing the OHWM and the proposed compliant hydraulic opening. • A description of the installation and staging of all temporary jurisdictional fill over the life of the contract. • A description of the removal of all jurisdictional temporary fill and restoration of the channel and all areas impacted by the jurisdictional temporary fill. • A schedule outlining the timing of the placement and removal of all TAF. <ul style="list-style-type: none"> • Have an Ohio Registered Engineer prepare, sign, seal and date the working drawings. Have a second Ohio Registered Engineer check, sign, seal and date the working drawings. The preparer and checker are two different Engineers. Include the following statement on the working drawings: " These working drawings were prepared in compliance with the terms of the Regional General Permit and all contract documents." • Include supporting hydraulic calculations developed by the engineer(s) who sealed the working drawings. • Do not begin instream work until the Engineer has accepted the working drawings. <p>If the OHWM is not shown on the plans, the Department will establish the OHWM based on the definition of OHWM (as defined in SS 832) or the peak discharge from the 2 year event, using the method described in the most current version of the Department's Location and Design Manual Volume II.</p> <p>If the Contractor proposes a TAF which does not provide for the Standard Temporary Discharge (discharge equal to twice the highest monthly flow without producing a rise in the backwater), the Contractor is required to coordinate the request for the contractor's proposed TAF with the Engineer and the ODOT Office of Environmental Services (OES). The Department makes no guarantee to grant the request. The contractor's proposed TAF request will be coordinated by OES with the U.S. Army Corps of Engineers and the Ohio Environmental Protection Agency, as appropriate.</p> <p>In addition to the requirements described in SS 832, supply the Engineer/OES with the following:</p> <ol style="list-style-type: none"> 1. A plan and Profile showing the temporary access fill(s) with the OHWM. 2. Cross section showing the hydraulic opening and the anticipated discharge flow. 3. A restoration plan for the area affected by the temporary access fill(s). 4. A schedule outlining the timing of the placement and removal of the temporary access fill(s) <p>The time frame allowed for the coordination of the contractor's proposed TAF will be a minimum of 60 days.</p>
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Installation of any jurisdictional fill without a 404 Permit authorized by the USACE is strictly prohibited. All direct coordination with the USACE and/or OEPA will be performed through OES.

Temporary Access Fills Construction and Payment

Begin planning and installing causeways and access fills as early in construction as possible to avoid conflicts with 404/401 permits or other environmental commitments that have been included in the construction plans.

Temporary Access Fills (TAFs) in Streams and Rivers may include, but are not limited to, causeways, cofferdams, access pads, temporary bridges, etc. Make every attempt minimize disturbance to water bodies, stream banks, stream beds, and approach sections during the construction, maintenance, and removal of the TAFs. Make every attempt to minimize disturbance to water bodies during construction, maintenance and removal of the causeway and access fills. Construct the causeway and access fills as narrow as practical. Install instream conduits parallel to the stream banks. Make the causeway and access fills in shallow areas rather than deep pools where possible. Minimize clearing, grubbing, and excavation of stream banks, bed, and approach sections. Construct the causeway and access fills as to not erode stream banks or allow sediment deposits in the channel.

Prior to the initiation of any in-stream work, establish a monument upstream of proposed temporary crossing or temporary construction access fill 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. If the OHWM is not shown on the plans, the Department will establish the OHWM based on the definition of OHWM (SS 832.02) or the peak discharge from the 2 year event, using the method described in the most current version of the Department's Location and Design Manual Volume II.

Ensure that the monument can be read from the bank of the waterway. Have this elevation set and certified by an Ohio Registered Surveyor.

Temporary access fills placed by the contractor above the OHWM are not subject to the 404/401 permit constraints.

Should the water elevation of the waterway, exceed the elevation 1 foot above OHWM, the Department will compensate the Contractor for repair of any resulting damage to the permitted temporary access fill up to the elevation of 1 foot above the OHWM. The Department will not pay for repair and maintenance of temporary access structures that are related to the construction access fill.

Should the water elevation of the waterway exceed the elevation shown on the monument, the Department will recognize this event as an excusable, non-compensable delay in accordance with Section 108.06 of the Construction & Materials Specifications.

All costs associated with furnishing and maintaining the above referenced monument is incidental to the work.

Construct the causeway and access fills to a water elevation at least 1 foot (0.3 m) above the OHWM. If the causeway fills more than one-third the width of the stream, then use culvert pipes to allow the movement of aquatic life. Ensure that any ponding of water behind the causeway and access fills will not damage property 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.
- C. Furnish a sufficient number of culverts in addition to stream openings to providing 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)...

For all fill and surface material placed in the channel, around the culverts, or on the surface of the causeway and access fills furnish clean, non-erodible, nontoxic dumped rock fill, Type 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 the TAFs is complete all portions of the TAF (including all rock and culverts) will be removed in its entirety. The material will not be disposed in other waters of the US or isolated wetland. The stream bottom affected by the causeway and access fills will be restored to its pre-construction elevations. The TAF will not be paid as a separate item but will be included by the Contractor as part of the total project cost.

All environmental protection and control associated with the 404/401 permit activities are incidental to the work within the boundaries of the 404/401 permit or as otherwise identified in the 404/401 permit application.

10. Navigational Requirements:

ODOT District 3 has notified the USCG that this work (such as use of snooper/cherry picker/cable rigging and movable pick board) temporarily alters the navigational clearance of the bridge and mariners have been notified. Should any equipment within the waterway be needed, the Contractor is required to notify the Engineer for coordination with ODOT- Office of Environmental Services (614-466-7100). No navigational closures of the river are permitted at any time.

11. Instream Work:

No work or fill is permitted below the Ordinary High Water Mark of the Huron River/Harbor. Examples of "fill materials" include (but are not limited to) bridge piers, abutments, bridge demolition debris, culverts, rock channel protection, scour protection, temporary work pads, and temporary access fills. No instream work is permitted.

SPECIAL PROVISIONS

**RIGHT-OF-ENTRY &
TEMPORARY EASEMENT**

C-R-S: ERI-6-17.92

PID: 77463

DATE: 07-07-2011

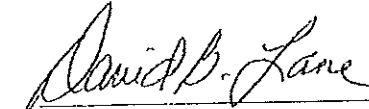
RIGHT-OF-ENTRY

A Right-of-Entry is hereby granted by the State of Ohio, Department of Natural Resources, acting by and through its Director, David Mustine or his designee, to Ohio Department of Transportation, and/or its duly appointed representatives, agents, employees, contractors and subcontractors, to enter upon property located at Huron Fishing Access as shown on the attached map, with necessary personnel and machinery for the purpose of bridge repair.

The consideration for this Agreement shall be \$1.00. It is understood and agreed that the work described above shall be carried out under the following terms, conditions and limitations:

1. Prior to construction or entry, Fish Supervisor Mike Wilkerson, shall be given two business day's notice at (419) 424-5000.
2. Said right-of-entry shall be effective on the date that is signed by the Director or his designee for the Department of Natural Resources, and shall expire March 31, 2012 or upon completion of project.
3. The removal of any brush must first be approved by Wildlife Area Supervisor.
4. All brush removed shall be disposed of in an area designated by the Wildlife Area Supervisor.
5. The area is to be restored to the satisfaction of the Division of Wildlife.
6. ODOT's contractors shall fully indemnify and hold harmless the State of Ohio, from all liability, loss and expenses and cost of defense in any matter arising from the above-described work.
7. Obligations of the State are subject to the provisions of Section 126.07 of the Ohio Revised Code.

STATE OF OHIO

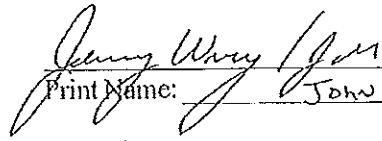


David B. Lane, Chief
Division of Wildlife

Designee For:
David Mustine, Director

7/7/11
Date

ODOT


 Print Name: John Maynard
5-24-11
 Date

\\res2\rcalm\Real Estate\ROENTRY\RIGHT OF ENTRY-

ODOT RE 214-D
Rev. 09/2009

Donated TE
State

TEMPORARY EASEMENT

KNOW ALL MEN BY THESE PRESENTS THAT: *State of Ohio, Department of Natural Resources, the Grantor(s) herein, as a GIFT/DONATION PURSUANT TO R.C. 5501.33, *does* hereby grant, convey, release and forever Quit Claim to the State of Ohio and its successors and assigns for the use and benefit of the Department of Transportation, the Grantee herein, a temporary easement to exclusively occupy and use for the purposes mentioned in Exhibit A the following described real estate:

PARCEL(S): *Nos. of all easement parcels being transferred*
 ERI-06-17.92

SEE EXHIBIT "A" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF
 Prior Instrument Reference: *Recorder Number: 200608926*, *Erie* County Recorder's Office.

To have and to hold said temporary easement, for the aforesaid purposes and for the anticipated period of time described below, unto the Grantee, its successors and assigns.

The duration of the temporary easement herein granted to the Grantee is *No. of months* months immediately following the date on which the work described above is first commenced by the Grantee, or its duly authorized employees, agents, and contractors.

The property conveyed herein to Grantee is being acquired for one of the statutory purposes for which the Director of Transportation may acquire property under Title LV of the Revised Code, such as, but not limited to, those purposes enumerated in Sections 5501.31 and 5519.01 of the Revised Code.

- SEE ACKNOWLEDGEMENT FORMS RE 244-I THROUGH RE 249-I FOR THE CORRECT FORM OF THE SIGNATURE BLOCK FOR EACH OWNER, AND INSERT AS NEEDED
- DELETE THESE INSTRUCTIONS UPON FORMATTING EACH OWNER'S SIGNATURE BLOCK

Exhibit A

Being an Access Easement located across a parcel of land deeded to the State of Ohio, Department of Natural Resources, as described in recorder number 200608926, Erie County Deed Records, situated in the State of Ohio, County of Erie, City of Huron, and being part of Original Lot 31, Section 1 and being more particularly described as follows:

Commencing at a point on the centerline of right of way of United States Route 6, where the east line of said State of Ohio, Department of Natural resources parcel intersects said centerline, said point being at station 229+78.90;

Thence along the east line of said Department of Natural Resources parcel **North 14 degrees 37 minutes 06 seconds East** a distance of **131.80 feet** to a point on the north right-of-way line of United States Route 6 at station 229+99.82, 130.00 feet left;

Thence along the north right of way of said United States Route 6 **North 84 degrees 51 minutes 45 seconds West** a distance of **10.72 feet** to a point at 130.00 feet left of station 229+89.10 of the centerline of United States Route 6, said point marks the **Principle Point of Beginning** for the parcel herein described;

- 1.) Thence continuing along the north right of way of said United States Route 6 **North 84 degrees 51 minutes 45 seconds West** a distance of **39.49 feet** to a point at 130.00 feet left of station 229+49.61 of the centerline of United States Route 6;
- 2.) Thence **North 15 degrees 20 minutes 24 seconds East** a distance of **40.44 feet** to a point at 169.80 feet left of station 229+56.78 of the centerline of United States Route 6;
- 3.) Thence **North 27 degrees 13 minutes 55 seconds East** a distance of **26.47 feet** to a point at 194.33 feet left of station 229+66.73 of the centerline of United States Route 6;
- 4.) Thence **North 25 degrees 51 minutes 22 seconds East** a distance of **9.85 feet** to a point at 203.54 feet left of station 229+70.22 of the centerline of United States Route 6, said point is on a concave curve to the left having a radius of 190.88 feet;
- 5.) Thence along said curve a distance of **277.10 feet** through a central angle of **83 degrees 10 minutes 39 seconds** (chord bearing = North 15 degrees 43 minutes 57

seconds West, chord distance = 253.40 feet) to a point at 440.31 feet left of station 228+79.95 of the centerline of United States Route 6;

- 6.) Thence **North 58 degrees 01 minute 05 seconds West** a distance of **116.27 feet** to a point at 492.82 feet left of station 227+76.21 of the centerline of United States Route 6;
- 7.) Thence **South 29 degrees 03 minutes 41 seconds West** a distance of **22.57 feet** to a point at 472.18 feet left of station 227+67.06 of the centerline of United States Route 6, said point is on a concave curve to the left having a radius of 25.00 feet;
- 8.) Thence along said curve a distance of **39.99 feet** through a central angle of **91 degrees 38 minutes 53 seconds** (chord bearing = South 16 degrees 45 minutes 45 seconds East, chord distance = 35.86 feet) to a point at 438.91 feet left of station 227+80.43 of the centerline of United States Route 6;
- 9.) Thence **South 62 degrees 35 minutes 12 seconds East** a distance of **52.00 feet** to a point at 419.20 feet left of station 228+28.55 of the centerline of United States Route 6;
- 10.) Thence **South 54 degrees 43 minutes 56 seconds East** a distance of **42.58 feet** to a point at 397.83 feet left of station 228+65.38 of the centerline of United States Route 6, said point is on a concave curve to the right having a radius of 141.00 feet;
- 11.) Thence following said curve a distance of **171.92 feet** through a central angle of **69 degrees 51 minutes 43 seconds** (chord bearing = South 19 degrees 48 minutes 04 seconds East, chord distance = 161.47 feet) to a point at 251.41 feet left of station 229+33.46, said point is on a concave curve to the right having a radius of 78.74 feet;
- 12.) Thence following said curve a distance of **91.40 feet** through a central angle of **66 degrees 30 minutes 10 seconds** (chord bearing = South 48 degrees 22 minutes 52 seconds West, chord distance = 86.35 feet) to a point at 188.51 feet left of station 228+74.30 of the centerline of United States Route 6;

- 13.) Thence **South 43 degrees 40 minutes 27 seconds West** a distance of **9.60 feet** to a point at 181.00 feet left of station 228+68.32 of the centerline of United States Route 6;
- 14.) Thence **South 22 degrees 33 minutes 33 seconds East** a distance of **47.20 feet** to a point at 139.21 feet left of station 228+90.26 of the centerline of United States Route 6;
- 15.) Thence **South 69 degrees 58 minutes 58 seconds West** a distance of **12.08 feet** to a point at 134.07 feet left of station 228+79.32 feet of the centerline of United States Route 6;
- 16.) Thence **North 83 degrees 07 minutes 07 seconds West** a distance of **443.23 feet** to a point at 147.56 feet left of station 224+36.29 of the centerline of United States Route 6;
- 17.) Thence **North 72 degrees 30 minutes 46 seconds West** a distance of **84.31 feet** to a point at 165.59 feet left of station 223+53.93 of the centerline of United States Route 6;
- 18.) Thence **South 15 degrees 46 minutes 52 seconds West** a distance of **52.30 feet** to a point on the north right of way line of said United States Route 6 at 114.20 feet left of station 223+44.27 of the centerline of United States Route 6;
- 19.) Thence along the east right of way line of said United States Route 6 **South 88 degrees 23 minutes 56 seconds West** a distance of **16.83 feet** to a point at 113.16 feet left of station 223+27.48 of the centerline of United States Route 6;
- 20.) Thence **North 12 degrees 01 minute 19 seconds East** a distance of **56.60 feet** to a point at 169.35 feet left of station 223+34.26 of the centerline of United States Route 6;
- 21.) Thence **North 73 degrees 56 minutes 35 seconds West** a distance of **30.07 feet** to a point at 175.04 feet left of station 223+04.74 of the centerline of United States Route 6;

- 22.) Thence **North 16 degrees 00 minutes 43 seconds East** a distance of **94.82 feet** to a point at 268.16 feet left of station 223+22.63 of the centerline of United States Route 6;
- 23.) Thence **North 70 degrees 13 minutes 20 seconds West** a distance of **5.54 feet** to a point at 269.56 feet left of station 223+17.27 of the centerline of United States Route 6;
- 24.) Thence **North 02 degrees 33 minutes 24 seconds West** a distance of **95.18 feet** to a point at 363.88 feet left of station 223+04.53 of the centerline of United States Route 6, said point is on a concave curve to the right having a radius of 93.40 feet;
- 25.) Thence following said curve a distance of **100.38 feet** through a central angle of **61 degrees 34 minutes 31 seconds** (chord bearing = North 28 degrees 13 minutes 52 seconds East, chord distance = 95.62 feet) to a point 451.84 feet left of station 223+42.03 of the centerline of United States Route 6;
- 26.) Thence **North 59 degrees 01 minute 07 seconds East** a distance of **90.10 feet** to a point at 504.95 feet left of station 224+14.81 of the centerline of United States Route 6;
- 27.) Thence **South 81 degrees 25 minutes 27 seconds East** a distance of **166.25 feet** to a point at 494.97 feet left of station 225+80.77 of the centerline of United States Route 6;
- 28.) Thence **South 60 degrees 35 minutes 54 seconds East** a distance of **43.90 feet** to a point at 476.93 feet left of station 226+20.79 of the centerline of United States Route 6;
- 29.) Thence **South 71 degrees 10 minutes 07 seconds East** a distance of **79.32 feet** to a point at 458.16 feet left of station 226+97.86 of the centerline of United States Route 6 said point is on a concave curve to the left having a radius of 25.00 feet;
- 30.) Thence following said curve a distance of **36.91 feet** through a central angle of **84 degrees 35 minutes 12 seconds** (chord bearing = North 66 degrees 32

minutes 17 seconds East, chord distance = 33.65 feet) to a point 474.26 feet left of station 227+27.40 feet of the centerline of United States Route 6;

- 31.) Thence **North 24 degrees 14 minutes 41 seconds East** a distance of **62.81 feet** to a point 533.61 feet left of station 224+47.96 of the centerline of United States Route 6;
- 32.) Thence **South 58 degrees 57 minutes 19 seconds East** a distance of **154.70 feet** to a point at 466.02 feet left of station 228+87.11 of the centerline of United States Route 6, said point is on a concave curve to the right having a radius of 216.62 feet;
- 33.) Thence following said curve a distance of **264.17 feet** through a central angle of **69 degrees 52 minutes 23 seconds** (chord bearing = South 24 degrees 01 minute 08 seconds East, chord distance = 248.10 feet) to a point at 249.36 feet left of station 230+07.98 of the centerline of United States Route 6;
- 34.) Thence **South 14 degrees 07 minutes 43 seconds West** a distance **120.84 feet** to the **Principle Point of Beginning**.

The above described tract contains an area of 4.783 Acres, more or less, and is based on a plat by the Ohio Department of Transportation, District 3, by Raymond W. Foos P.S., Professional Surveyor Number 7812, dated April 21, 2011.

The bearings shown hereon are relative to Grid North of the Ohio State Plane Coordinate System, North Zone, NAD 83 (CORS) Datum as determined by GPS observations and are for the purposes of defining directional variations.

Stationing referred to hereon is based on the centerline of right of way of United States Route 6, as found on ODOT Right of Way Plan Erie S.H. 3 Sec-Huron-Pt.

May 23, 2011
Date:

Raymond W. Foos
Raymond W. Foos, P.S. 7812

