

STATE OF OHIO,
DEPARTMENT OF TRANSPORTATION

MED-42-7.12

HARRISVILLE TOWNSHIP
WESTFIELD TOWNSHIP
LAFAYETTE TOWNSHIP
MEDINA COUNTY

PROJECT DESCRIPTION

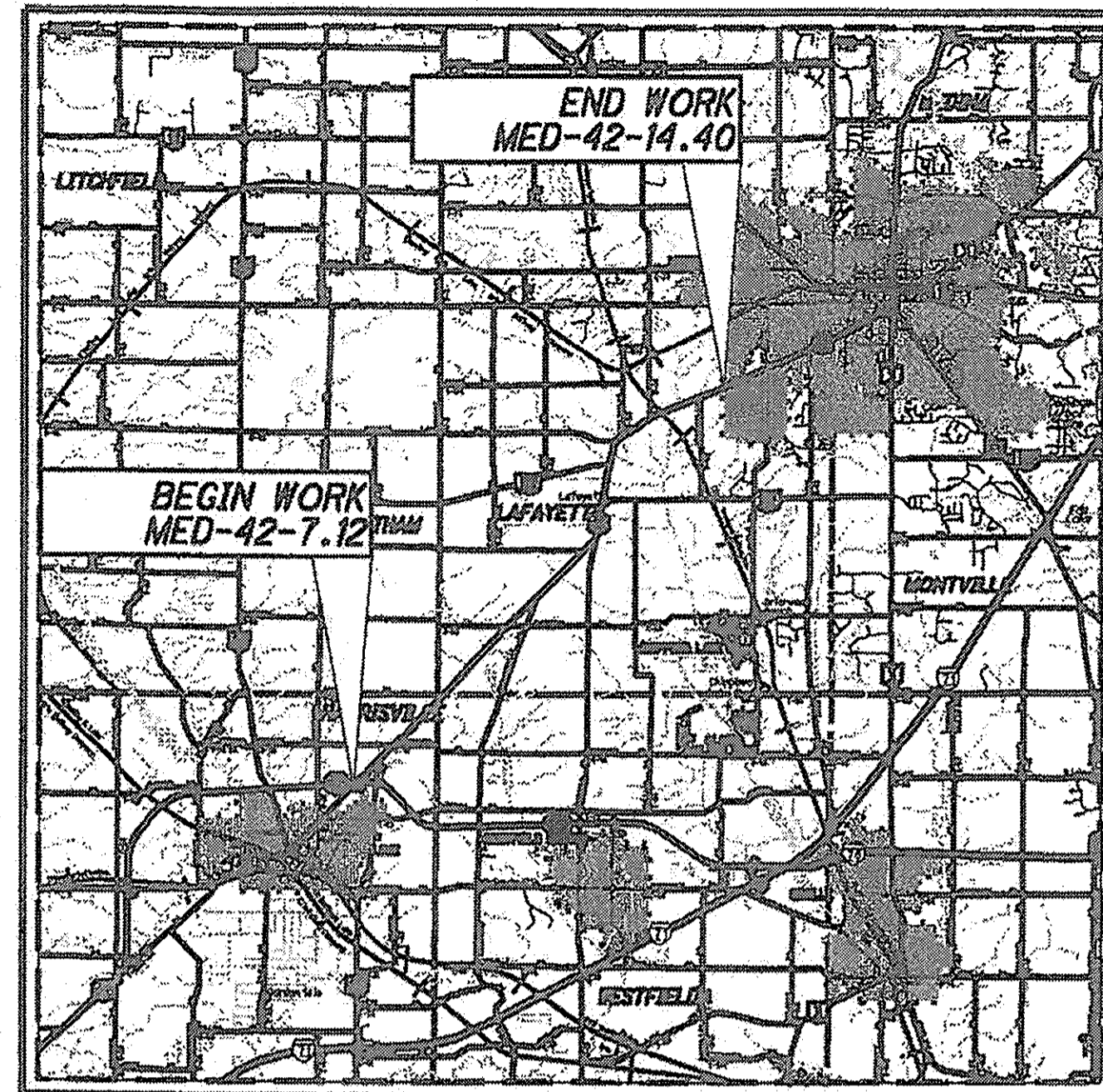
RESURFACING, INCLUDING PAVEMENT PLANING,
PAVEMENT REPAIRS, GUARDRAIL REPAIR, TRAFFIC CONTROL
ITEMS, AND STRUCTURE MAINTENANCE.

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

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 IN THE PLANS AND ESTIMATES.



LOCATION MAP

LATITUDE: 41°02'44" LONGITUDE: 81°59'49"

SCALE IN MILES



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

	MED-42 7.12-10.40	MED-42 10.40-12.05	MED-42 12.05-12.52	MED-42 12.52-14.40
CURRENT ADT (2012):	4,640	8,270	9,590	8,640
DESIGN YEAR ADT (2024):	5,060	9,360	11,720	9,050
DESIGN HOURLY VOLUME (2024):	560	936	1172	905
DIRECTIONAL DISTRIBUTION:	67%	66%	63%	63%
TRUCKS (24 HOUR B&C):	560	562	469	362

	MED-42 7.12-11.44	MED-42 11.44-12.67	MED-42 12.67-14.40
LEGAL SPEED:	55	45	55
DESIGN SPEED:	55	45	55

DESIGN FUNCTIONAL CLASSIFICATION: RURAL MAJOR COLLECTOR

NHS PROJECT ----- N/A

DESIGN EXCEPTIONS: NONE

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APPROVED *[Signature]* P.E.
DATE 12/17/10 DISTRICT DEPUTY DIRECTOR

APPROVED *[Signature]*
DATE 12-10-11 DIRECTOR, DEPARTMENT OF TRANSPORTATION

ENGINEERS SEAL:



SIGNED: *[Signature]*
DATE: 12/16/10

STANDARD CONSTRUCTION DRAWINGS

NO.	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
BP-3.1	10/19/07	RM-1.1	10/15/10	MT-96.11	1/16/09	MT-101.70	1/16/09		
BP-4.1	7/16/04			MT-96.20	10/15/10	MT-101.90	1/16/09		
				MT-96.26	1/16/09	MT-105.10	1/16/09		
DM-1.4	4/21/06			MT-97.10	10/15/10				
DM-4.4	4/17/09			MT-97.11	10/15/10				
				MT-98.10	7/17/09	TC-61.30	4/16/10		
GR-1.1	7/16/04	DS-1-92	7/18/03	MT-98.20	7/17/09	TC-65.10	1/21/05		
GR-2.1	1/16/04	PSBD-1-93	4/20/07	MT-98.22	7/17/09	TC-65.11	1/15/10		
GR-3.1	10/16/09	PCB-91	7/19/02	MT-98.28	7/17/09				
GR-3.4	10/16/09			MT-98.29	7/17/09	TC-72.20	10/16/09		
GR-4.2	1/19/07					TC-73.10	1/19/07		
GR-5.1	4/16/10			MT-99.20	1/16/09				
GR-6.1	4/16/10	MT-35.10	4/20/01	MT-101.60	4/17/09				

SUPPLEMENTAL SPECIFICATIONS

SS800	1/21/11
SS823	10/16/10
SS832	5/16/09
SS840	4/16/10
SS861	10/17/08
SPECIAL PROVISIONS	

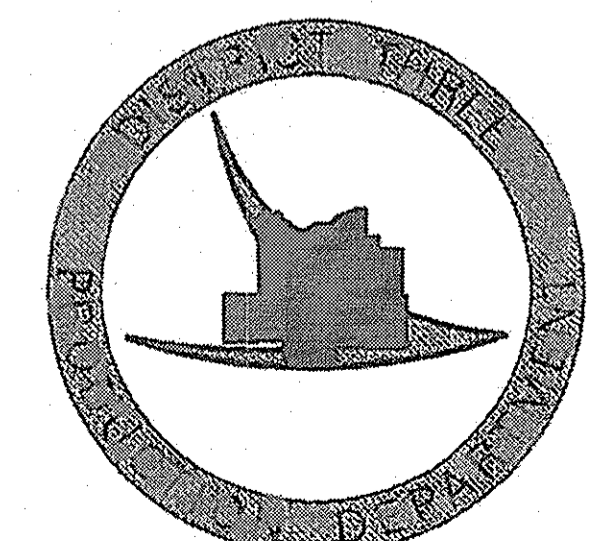
PLAN PREPARED BY:

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



FEDERAL PROJECT NO.
E080968

PID NO.
83420

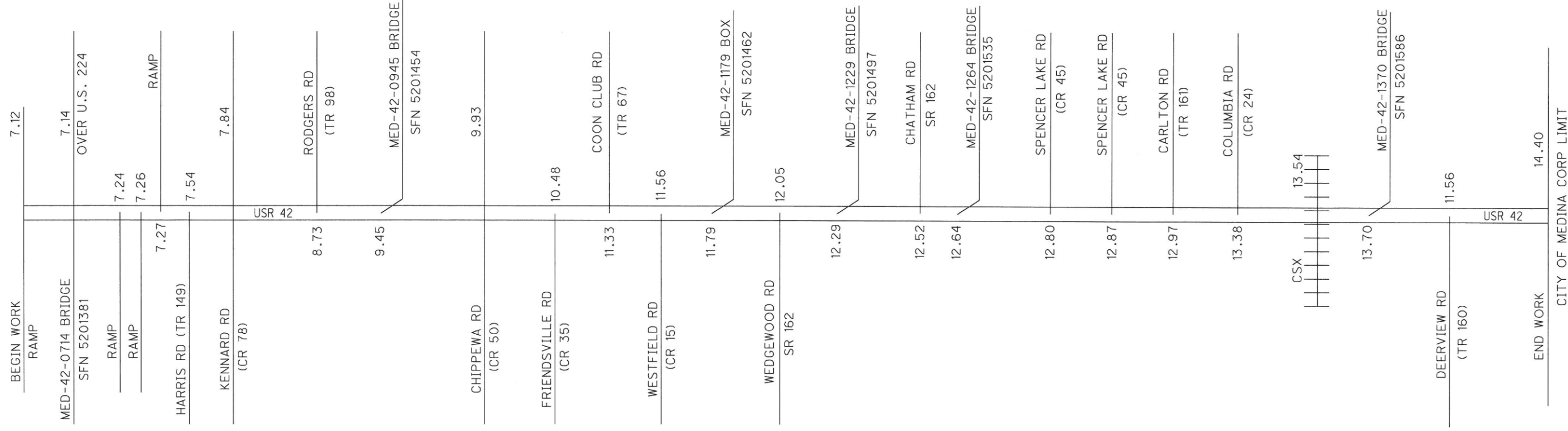
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
CSXT

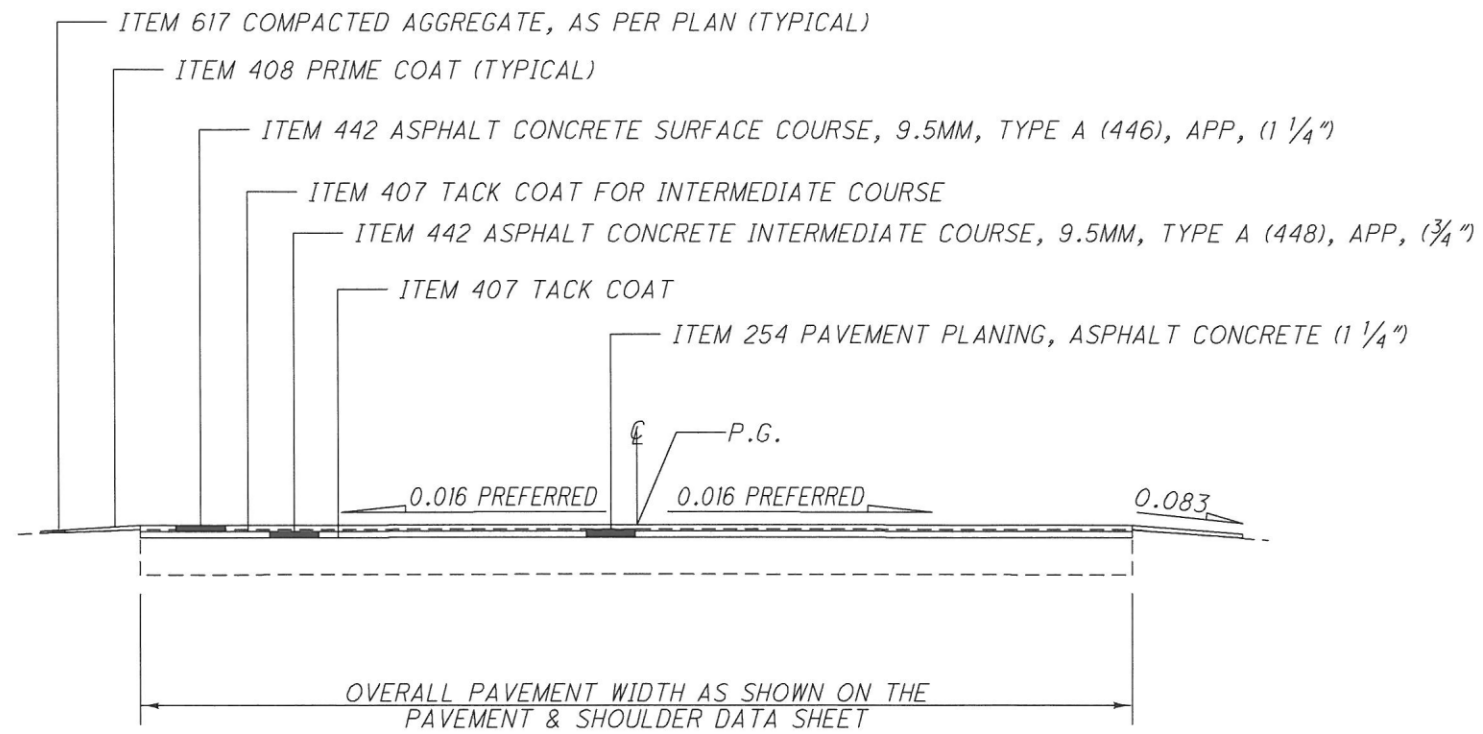
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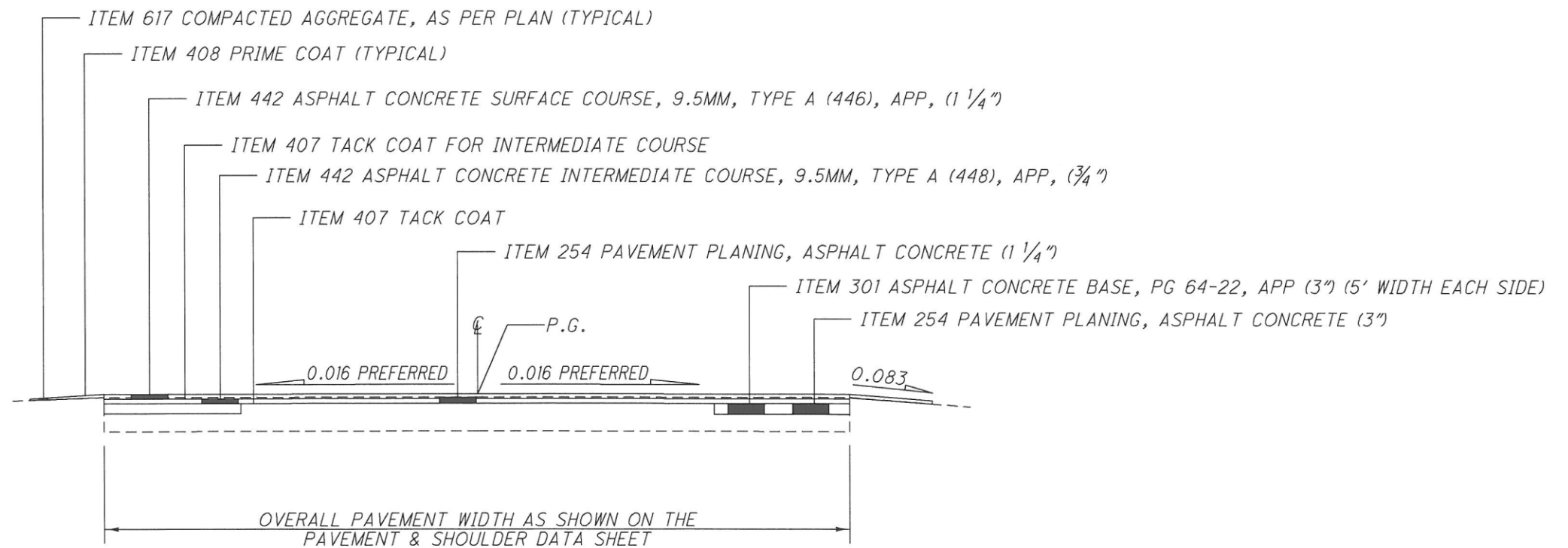
MED-US-42-7.12
110166 PID-83420
Dist 3 3/24/2011



CITY OF MEDINA CORP LIMIT



TYPICAL 1
NORMAL SECTION US 42
 MED-42-7.12 TO 7.40



TYPICAL 2
NORMAL SECTION US 42 (RUTTING REPAIR)
 MED-42-7.40 TO 14.40

DESIGN FILE: I:\projects\83420\roadway\sheets\83420GY001.dgn
 WORKSTATION: cheining
 DATE: 12/22/2010

UTILITIES

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

FONTIER
BRENT FIALA
6223 NORWALK ROAD
MEDINA, OHIO 44256
(330) 722-9453

MEDINA CO. SANITARY
ENGINEER (WATER)
AMY LYON-GALVIN
791 WEST SMITH ROAD
MEDINA, OHIO 44256
(330) 723-9579

TIME WARNER CABLE
DAVE ROUSH
1575 LEXINGTON AVE.
MANSFIELD, OHIO 44901
(419) 756-6091 x5136

OHIO EDISON
NATALIE CAMP
6326 LAKE AVE
ELYRIA, OHIO 44035
(440) 326-3319

COLUMBIA GAS OF OHIO
DAN SUREN
7080 FRY ROAD
MIDDLEBURG HEIGHTS, OHIO 44130
(440) 891-2428

ARMSTRONG UTILITIES
BRIAN KEITH
1141 LAFAYETTE ROAD
MEDINA, OHIO 44256
(330) 722-3141 x224

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

EXISTING PLANS

EXISTING PLANS ENTITLED MED-42 MAY BE INSPECTED IN THE ODOT DISTRICT 3 OFFICE IN ASHLAND, OHIO.

WORK LIMITS

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

PROGRESSION OF WORK

GUARDRAIL SHALL BE REMOVED PRIOR TO ANY EMBANKMENT WORK AT THE GUARDRAIL RUN. GUARDRAIL WORK SHALL BE DONE AFTER RESURFACING AND BERM WORK SO AS TO ESTABLISH PROPER GRADES FROM WHICH TO CONSTRUCT THE RAIL.

ITEM 301 ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN

ON THIS PROJECT ITEM 301 COARSE AGGREGATE SHALL HAVE A TWO FACE CRUSH COUNT OF 75% PER ASTM D 5821. MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT SHALL BE 30%. ENSURE THAT A MINIMUM OF 50% OF THE VIRGIN FINE AGGREGATE USED IN THE ITEM 301 IS SAND MANUFACTURED FROM STONE OR AIR COOLED SLAG. THE IN-PLACE BINDER SHALL BE PG64-22.

ALL COSTS TO BE INCLUDED IN ITEM 301 ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN.

ITEM 442. ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVES, INTERSECTIONS, ETC.

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.

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

THIS ITEM SHALL BE USED FOR CORRECTION OF CROWN, PROFILE AND ANY OTHER IRREGULARITIES.

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

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. QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

**ITEM 407. TACK COAT
ITEM 407. TACK COAT FOR INTERMEDIATE COURSE**

AS PER 407.06 THE APPLICATION RATES SHALL BE 0.08 GAL. PER SQ. YD. PRIOR TO THE INTERMEDIATE COURSE AND SHALL BE 0.04 GAL PER SQ. YD. PRIOR TO THE SURFACE COURSE FOR ESTIMATING PURPOSES ONLY. THE RATE OF APPLICATION SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. 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 AND ITEM 407 TACK COAT FOR INTERMEDIATE COURSE.

ROUTINE MAINTENANCE

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

INTERSECTIONS AND DRIVES

RURAL-INTERSECTIONS SHALL BE PLANED AND PAVED TO THE END OF THE RADII OR AS DIRECTED BY THE ENGINEER. (TO PROVIDE A SMOOTH TRANSITION BETWEEN THE TWO HIGHWAYS, AND TO ELIMINATE WATER POCKETS).

URBAN-INTERSECTIONS SHALL BE PLANED AND PAVED TO THE BACK OF CROSSWALKS OR AS DIRECTED BY THE ENGINEER. (TO PROVIDE A SMOOTH TRANSITION BETWEEN THE TWO HIGHWAYS, AND TO ELIMINATE WATER POCKETS).

INTERSECTING RAMPS SHALL BE PLANE AND PAVED TO THE END OF THE CHANNELIZING LINES AT THE GORE AREA. IF NO GORE MARKINGS ARE PRESENT, PLANE AND PAVE TO THE EXISTING PAVEMENT JOINT.

EXISTING PAVED DRIVES SHALL BE PAVED A MAXIMUM OF 4 FT.

EXISTING AGGREGATE DRIVES SHALL BE PAVED WITH ITEM 617 AN AVERAGE WIDTH OF 4 FT. THE SLOPE OF THIS APRON SHALL BE THE SAME AS THE ADJACENT PAVEMENT SLOPE OR AS DIRECTED BY THE ENGINEER. ANY GRADING NEEDED TO PAVE THE APRON SHALL BE INCLUDED IN THE RELATED ASPHALT ITEM FOR PAYMENT. ITEM 617 COMPACTED AGGREGATE SHALL BE PLACED ADJACENT TO THIS APRON TO PROVIDE A SMOOTH TRANSITION FROM THE APRON TO THE EXISTING DRIVE, (WIDTH OF THIS 617 APPLICATION MAY VARY) AS DIRECTED BY THE ENGINEER. AN ADDITIONAL QUANTITY OF ITEM 617 HAS BEEN ESTIMATED TO COMPLETE THIS WORK AND IS SHOWN AS AN EXTRA AREA ON THE PAVEMENT & SHOULDER DATA SHEET.

ANY HAZARD OR UNSAFE CONDITION RESULTING FROM THE ABOVE WORK MUST BE CORRECTED IMMEDIATELY, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS REMINDED OF SECTIONS 105.01, 107.07 & 614.02A OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

ITEM 253. PAVEMENT REPAIR, MISC.: PARTIAL DEPTH

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. PAVEMENT REPAIR SHALL BE PERFORMED AFTER PAVEMENT PLANING AND BEFORE PLACEMENT OF THE INTERMEDIATE AND/OR SURFACE COURSE. THE REPAIR AREAS SHALL BE SAW CUT AND EXCAVATED TO PROVIDE STRAIGHT AND VERTICAL SURFACES AROUND THE PERIMETER OF THE REPAIR AREA. PAVEMENT PLANING MAY BE USED AS AN ALTERNATIVE TO SAW CUTTING AND EXCAVATING. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETEIORATED PAVEMENT WITH A MAXIMUM DEPTH OF 6", AND AN AVERAGE DEPTH OF 5" AND AN AVERAGE WIDTH OF 3 FT FOR ESTIMATING PURPOSES. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17.

THE CONTRACTOR SHALL BE CAPABLE OF PERFORMING PAVEMENT REPAIRS 2 FEET WIDE.

REPLACEMENT MATERIAL SHALL BE ITEM 301 OR ITEM 448 TYPE 2 MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. ITEM 301 CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 3" AND 12" WITH A MAXIMUM PAVEMENT LIFT OF 6". ITEM 448 TYPE 2 CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 0" AND 5" WITH A MAXIMUM PAVEMENT LIFT OF 3". ALL EXISTING PAVEMENT AREAS WHICH WILL BE IN CONTACT WITH THE PAVEMENT REPAIR SHALL BE CLEANED AND COATED PER CMS 401.14, USING AN ASPHALT MATERIAL COMPLYING WITH 407.02. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. FOR PAYMENT PURPOSES ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH IS TO BE TO THE TOP OF CONCRETE BASE ESTIMATED AT 5" TO 6" DEEP. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, (BY TICKET WEIGHT CONVERSION), OF ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

US 42 ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH 250 CU. YD.

APPROXIMATELY 90% OF THE REPAIR QUANTITIES ARE TRANSVERSE REPAIRS.

ITEM 254. PAVEMENT PLANING, ASPHALT CONCRETE

THE INTENT OF THE PLANING IS TO MILL THE THICKNESS SHOWN ON THE PAVEMENT AND SHOULDER DATA SHEET AT THE CENTER OF PAVEMENT AT NON-CURBED AREAS. THE PAVEMENT SLOPE SHALL BE 0.016 PREFERRED AND 0.010 MINIMUM, CONTINUOUS BETWEEN THE CROWN AND THE PROPOSED EDGELINE/SHOULDER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN FOURTEEN (14) CALENDAR DAYS. THE 14 CALENDAR DAYS SHALL BE CONSIDERED AN INTERIM COMPLETION DATE (SECTION 108), AND FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER 108.07.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF PAVEMENT PLANING, ASPHALT CONCRETE.

ITEM 254 PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 254, PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN CMS 254.04. THE LIMIT OF THE PATCHING DEPTH IS 0 TO 2 IN.

ITEM 301 ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN

ON THIS PROJECT ITEM 301 COARSE AGGREGATE SHALL HAVE A TWO FACE CRUSH COUNT OF 75% PER ASTM D 5821. MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT SHALL BE 30%. ENSURE THAT A MINIMUM OF 50% OF THE VIRGIN FINE AGGREGATE USED IN THE ITEM 301 IS SAND MANUFACTURED FROM STONE OR AIR COOLED SLAG. THE IN-PLACE BINDER SHALL BE PG64-22.

ALL COSTS TO BE INCLUDED IN ITEM 301 ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN.

ITEM 604 - MONUMENT BOX ADJUSTED TO GRADE

THE MONUMENT BOX TO BE ADJUSTED MAY OR MAY NOT HAVE AN EXISTING ADJUSTABLE FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING MONUMENT BOX TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASTINGS WITHOUT ADJUSTABLE FRAMES.

TEMPORARY TRAFFIC SIGNAL ACTIVATION FOR PARTIAL ROADWAY CLOSURE

THE CONTRACTOR SHALL NOTIFY ODOT DISTRICT 3 PUBLIC INFORMATION OFFICER (PIO) A MINIMUM OF TEN (10) CALENDAR DAYS ADVANCE NOTICE BEFORE ACTIVATING A TEMPORARY TRAFFIC SIGNAL TO STOP-AND-GO OPERATION FOR PARTIAL ROADWAY CLOSURE.

THE PIO CONTACT INFORMATION IS AS FOLLOWS:

JOYCE MILLER
PUBLIC INFORMATION OFFICER
ODOT DISTRICT 3
906 CLARK AVENUE
ASHLAND, OH 44805
PHONE 419-207-7181

IN ADDITION, THE TEMPORARY TRAFFIC SIGNAL SHALL BE ACTIVATED PER THE REQUIREMENTS OF ODOT SCD MT-96.11, MT-96.20 MT-96.26. THE TEMPORARY TRAFFIC SIGNAL SHALL OPERATE IN FLASH MODE FIVE (5) TO SEVEN (7) DAYS PRIOR TO ACTIVATING TO STOP-AND-GO OPERATION. SIGNAL ACTIVATION SHALL NOT OCCUR ON WEEKENDS, MONDAYS, FRIDAYS, OR ANY DAY IMMEDIATELY BEFORE OR AFTER A STATE OBSERVED HOLIDAY.

ALL COSTS ASSOCIATED WITH THE ABOVE DESCRIBED WORK SHALL BE INCLUDED WITH ITEM 614, MAINTAINING TRAFFIC.

BUTT JOINTS

BUTT JOINTS SHALL NOT BE CUT AND LEFT OPEN TO TRAFFIC. THEY SHALL BE FILLED IN WITH A TEMPORARY ASPHALT CONCRETE WEDGE USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

CONSTRUCTION "BUMP" (W8-1-36) AND "ADVISORY SPEED" (W13-1-24) SIGNS SHALL BE ERECTED AND MAINTAINED DURING THE PERIOD THE BUTT JOINT IS LEFT OPEN. THESE SIGNS SHALL BE PAID FOR UNDER THE LUMP SUM ITEM FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 614. ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO CONSTRUCT A TEMPORARY ASPHALT WEDGE FROM THE EXISTING PAVEMENT TO THE PLANNED SURFACE AT BUTT JOINTS AND OTHER LOCATIONS THAT RESULT IN A DROP-OFF IN EXCESS OF 1.5 INCHES, AS DIRECTED BY THE ENGINEER. THIS QUANTITY SHALL ALSO BE USED AT PLANNED SURFACES WHERE A TEMPORARY ASPHALT WEDGE IS NEEDED AROUND CASTINGS, AS DIRECTED BY THE ENGINEER. BEFORE RESURFACING OF THE PAVEMENT, THE TEMPORARY WEDGE SHALL BE REMOVED AND THE COST SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 40 CU YD

PLACEMENT OF ASPHALT CONCRETE

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

ITEM 614. MAINTAINING TRAFFIC (ROAD CLOSED SIGN)

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

LOCATION: SLIP RAMP ON SOUTHEAST CORNER OF MED-42-0714 STRUCTURE. TRAFFIC TO BE DIRECTED TO STOP SIGN FOR RIGHT HAND TURN. TEMPORARY ASPHALT PAVEMENT QUANTITY HAS BEEN INCLUDED FOR MAINTAINING TRAFFIC FOR TRUCKS MAKING THE RIGHT TURN MOVEMENT.

ITEM 614. WORK ZONE MARKING SIGN

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR TEMPORARY WORK ZONE MARKING SIGNS PER THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS, 614.04.

WORK ZONE MARKING SIGN: (W8-H12A-36) NO EDGE LINE = 23 EACH
WORK ZONE MARKING SIGN: (R4-1-24) DO NOT PASS = 23 EACH
WORK ZONE MARKING SIGN: (R4-2-24) PASS WITH CARE = 22 EACH

TOTAL = 68 EACH

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

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ONE OF THE FOLLOWING IMPACT ATTENUATORS:

- 1. THE QUADGUARD CZ, (24 INCHES WIDE SIX-BAY) WORK ZONE IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: 312-467-6750).

THE LENGTH OF THE SIX-BAY QUADGUARD CZ IS 20'-9". INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: OSCZCVR-T4
DRAWING NAME: QUADGUARD CZ SYSTEM FOR CONSTRUCTION ZONES
REVISION DATE: 5/13/99 REV. J
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-10
DRAWING NAME: QUADGUARD SYSTEM CONCRETE PAD, CZ, OG
REVISION DATE: 11/19/97 REV. D
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-16
DRAWING NAME: QUADGUARD SYSTEM BACKUP ASSEMBLY, CZ, OG
REVISION DATE: 7/30/99 REV. F
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 354051Z
DRAWING NAME: QUADGUARD CZ SYSTEM NOSE ASSEMBLY, CZ, OG, 24, 30, 36
REVISION DATE: 5/17/99
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35-40-18
DRAWING NAME: TRANSITION ASSEMBLY, 4 OFFSET, OG
REVISION DATE: 6/25/99 REV. F
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: 35400260
DRAWING NAME: QUADGUARD SYSTEM PCMB ANCHOR ASSEMBLY
REVISION DATE: 11/19/97 REV. C
ODOT APPROVAL DATE: 8/27/99

- 2. THE TRACC (TRINITY ATTENUATING CRASH CUSHION) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE TRACC IS 21'-0" LONG AND 2'-7" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: SS450
DRAWING NAME: CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS
REVISION DATE: 3/12/99 REV. 1
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS455
DRAWING NAME: TRACC TRANSITION TO W-BEAM MEDIAN BARRIER PLAN, ELEVATION & SECTIONS
REVISION DATE: 2/18/99
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS461
DRAWING NAME: TRACC TRANSITION TO CONCRETE SAFETY SHAPE BARRIER PLAN, ELEVATION & SECTIONS
REVISION DATE: 6/30/99 REV. 1
ODOT APPROVAL DATE: 8/27/99

DRAWING NUMBER: SS462
DRAWING NAME: TRACC TRANSITION TO CONCRETE BARRIER SINGLE SLOPE PLAN, ELEVATION & SECTIONS
REVISION DATE: 6/30/99
ODOT APPROVAL DATE: 8/27/99

- 3. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OH 44515, (TELEPHONE 330-799-9291)

THE TAU-II FOR THIS NOTE IS A PARALLEL 8-BAY UNIT (24' LONG AND 35" WIDE). INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING NUMBER: A040416
DRAWING NAME: UNIVERSAL TAU-II PARTS LIST
REVISION DATE: 4/22/04
ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: A040420
DRAWING NAME: UNIVERSAL TAU-II FOUNDATION, FLUSH MOUNT BACKSTOP
REVISION DATE: 4/28/04
ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: A040105
DRAWING NAME: UNIVERSAL TAU-II FOUNDATION, PCB BACKSTOP (REFERENCED ON A04020)
REVISION DATE: 1/07/04
ODOT APPROVAL DATE: 10/16/04

DRAWING NUMBER: B040239
DRAWING NAME: APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)
REVISION DATE: 4/21/04
ODOT APPROVAL DATE: 10/16/04

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

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

DESIGN FILE: I:\projects\83420\roadway\sheets\83420MN001.dgn
WORKSTATION: aheiming DATE: 12/23/2010

CALCULATED
ACH
CHECKED
MJS

MAINTENANCE OF TRAFFIC

MED - 42 - 7.12

ITEM 614 - MAINTAINING TRAFFIC FOR STRUCTURE MED-42-0714:

TWO WAY TRAFFIC ON STRUCTURE MED-42-0714 SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT THROUGH TRAFFIC ON THIS STRUCTURE SHALL HAVE A SIGNALIZED CLOSURE AS SHOWN ON (SHEETS 31 & 32) FOR A MAXIMUM OF FORTY TWO (42) CONSECUTIVE CALENDAR DAYS (TOTAL BOTH PHASES). THE FORTY TWO (42) CONSECUTIVE DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE FORTY TWO (42) CALENDAR DAYS THAT THE HIGHWAY REMAINS IN A SIGNALIZED CLOSURE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE IN ACCORDANCE WITH CMS 108.07-1.

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

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 614 - MAINTAINING TRAFFIC FOR STRUCTURE MED-42-0945:

TWO WAY TRAFFIC ON STRUCTURE MED-42-0945 SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT THROUGH TRAFFIC ON THIS STRUCTURE SHALL HAVE A SIGNALIZED CLOSURE AS SHOWN ON (SHEETS 31 & 32) FOR A MAXIMUM OF THIRTY (30) CONSECUTIVE CALENDAR DAYS (TOTAL BOTH PHASES). THE THIRTY (30) CONSECUTIVE DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE THIRTY (30) CALENDAR DAYS THAT THE HIGHWAY REMAINS IN A SIGNALIZED CLOSURE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE IN ACCORDANCE WITH CMS 108.07-1.

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

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.

PAVING AT RAILROAD CROSSINGS

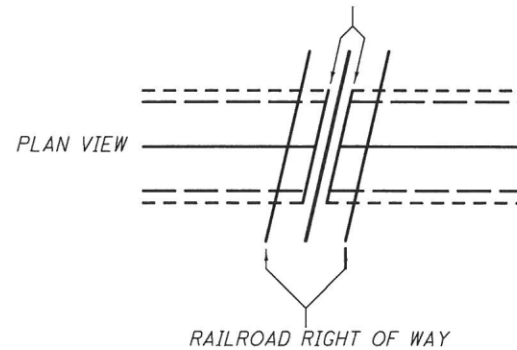
PRIOR TO ANY WORK AT RAILROAD CROSSINGS THE CONTRACTOR SHALL CONTACT THE AFFECTED RAILROAD AUTHORITY SO AS TO MAKE THEM AWARE OF THE PROGRESS AND SCHEDULE OF WORK. THE CONTRACTOR SHALL COOPERATE WITH THE RAILROAD SO AS TO ELIMINATE ANY SAFETY CONCERNS. FLAGGING WILL BE REQUIRED BY THE RAILROAD. ODOT WILL BE RESPONSIBLE FOR PAYING THE RAILROAD FOR ALL FLAGGING COSTS. REFER TO THE RAILROAD SPECIAL CLAUSES IN THE PROPOSAL.

THE CROWN SHALL BE WORKED OUT OF THE RESURFACED PAVEMENT ON EACH SIDE OF THE RAILROAD CROSSING, BEGINNING 50 FEET FROM THE NEAREST RAIL, BY RAISING THE EDGES OF THE RESURFACED PAVEMENT TO MEET THE PLATFORM ELEVATION.

SUSPEND AND RESUME RESURFACING AT THE HEADER TIE, AS DIRECTED BY THE ENGINEER.

DETAIL - PAVING AT RAILROAD CROSSING

BUTT JOINT/BEGIN AND END RESURFACING AS DIRECTED BY THE ENGINEER



- NOTE:
 1.) DO NOT DISTURB RAILROAD GATES
 2.) RE-INSTALL PAVEMENT MARKINGS
 3.) RAILROAD MAY DIRECT ENGINEER ON THE LOCATION OF BUTT JOINTS. OTHERWISE OMIT AND RESUME RESURFACING AT HEADER TIE.

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

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

- | | |
|--|----------------|
| CHRISTMAS | FOURTH OF JULY |
| NEW YEARS | LABOR DAY |
| MEMORIAL DAY | THANKSGIVING |
| MEDINA COUNTY FAIR - BEGINNING THE WEDNESDAY PRECEDING THE MEDINA COUNTY FAIR OPENING TO THE MONDAY FOLLOWING THE CLOSE OF FAIR WEEK | |

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN ACCORDANCE WITH CMS 108.07-1.

ITEM SPECIAL, MAILBOX SUPPORT SYSTEM

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF EXISTING NON-STANDARD MAILBOX SUPPORTS AND FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED HARDWARE IN ACCORDANCE WITH THE DETAILS SHOWN, AND ATTACHING AN OWNER SUPPLIED MAILBOX, AT LOCATIONS DETERMINED BY THE ENGINEER. DISPOSE OF THE EXISTING SUPPORTS AND HARDWARE ACCORDING TO 202.02.

IN ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE BOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION. SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO MAILBOXES MAY BE MOUNTED ON A SINGLE POST. HARDWARE SHALL BE COMMERCIAL GRADE GALVANIZED STEEL.]

WOOD POSTS SHALL BE NOMINAL 4 IN. x 4 IN. (S4S) OR 4 1/2 IN. DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 IN. I.D., AND CONFORM TO AASHTO M 181.

POSTS SHALL BE SET AS PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH THE LOCAL POST MASTER AND NOTIFYING THE PROPERTY OWNERS PRIOR TO WORK.

GROUP MAILBOX SUPPORTS SHALL BE PLACED ON 3 FT. CENTERS AND THE TURNOUT LENGTHENED TO ACCOMMODATE THE GROUPING.

WHERE GUARDRAIL EXISTS, MAILBOXES AND THEIR SUPPORTS SHALL BE PLACED BEHIND THE GUARDRAIL. SUPPORTS MUST STILL MEET THE BREAKAWAY REQUIREMENTS LISTED ABOVE.

PAYMENT FOR THE MAILBOX SUPPORTS COMPLETE IN PLACE, INCLUDING REMOVAL AND DISPOSAL OF THE EXISTING MAILBOX SUPPORT, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DESCRIBED ABOVE.

ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, SINGLE	18 EACH
ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, DOUBLE	3 EACH

MAILBOX APPROACHES

THE MAILBOX APPROACHES SHALL BE PAVED WITH 0.75" ITEM 442 INTERMEDIATE COURSE AND 1.25" ITEM 442 SURFACE COURSE. THEY SHALL CONFORM AS MUCH AS PRACTICAL TO STANDARD DRAWING BP-4.1 OR AS DIRECTED BY THE ENGINEER.

GRADING SHALL BE PERFORMED IN THESE AREAS TO OBTAIN A BASE WHICH WILL ALLOW THE FINISHED GRADE TO BE FLUSH WITH ADJACENT PAVEMENT. A QUANTITY OF ITEM 617 COMPACTED AGGREGATE HAS BEEN PROVIDED FOR AREAS WHERE THE SHOULDER IS LOW PRIOR TO GRADING AND/OR LOW AREAS CAUSED BY THE REMOVAL OF UNSUITABLE MATERIAL. QUANTITIES TO PERFORM THIS WORK HAVE BEEN INCLUDED IN THE GENERAL SUMMARY AND ARE ESTIMATED AS FOLLOWS.

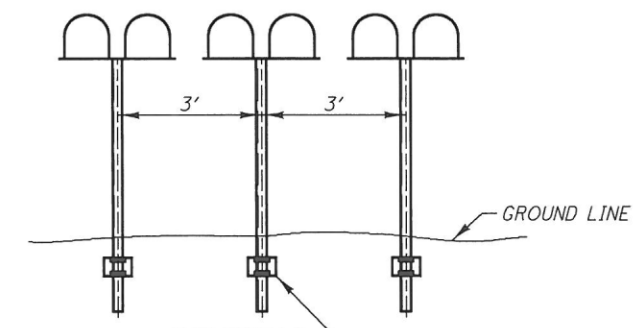
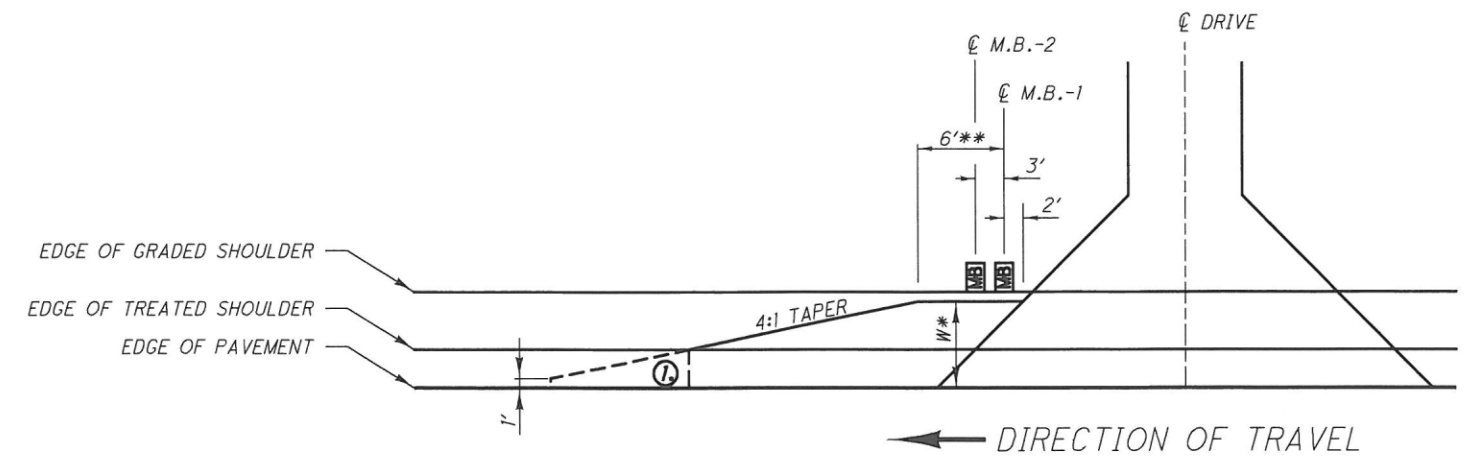
ITEM 209 - GRADING MAILBOX APPROACHES	29 EACH
ITEM 617 - COMPACTED AGGREGATE	62 CU YD

LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED

ADDRESSES AND/OR LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED:

NORTHBOUND - US 42	SOUTHBOUND - US 42
5651	5720
5665	6020 (BESIDE)
5745	6280 (DOUBLE)
5919	6472 (DOUBLE)
6235	6620
6698	7300
6984	7510
7317	7556
7381	7654 (NO MAILBOX ON TOP)
	7741
	7845 (DOUBLE)
	7895
	7938 (ALSO REMOVE STEEL POST W/ NO MAILBOX)
	7959

FOR DETAILS NOT SHOWN SEE STANDARD DRAWING BP-4.1

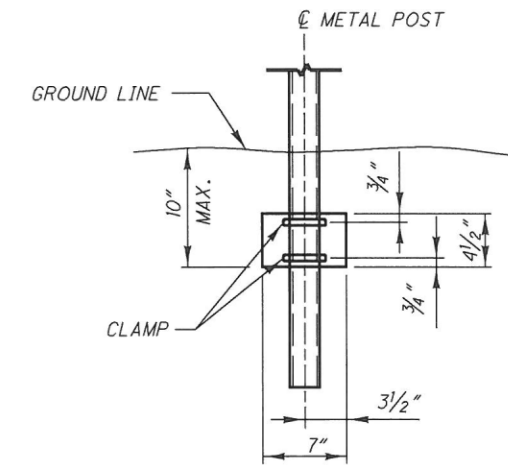


GROUP MAILBOX INSTALLATION

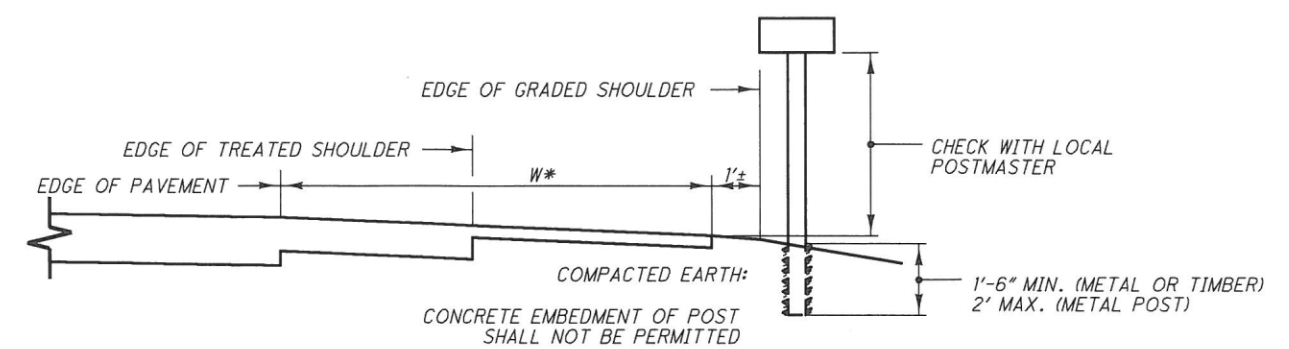
① END MAILBOX TURNOUT AT EDGE OF TREATED SHOULDER OR 1' WHICH EVER IS GREATER.

- W* NOTES
- 1) WHERE EXISTING STANDARD MAILBOX POSTS ARE BEHIND GUARDRAIL AND ARE TO REMAIN IN PLACE, TURNOUT WIDTH SHALL EXTEND TO FACE OF GUARDRAIL.
 - 2) WHERE NO GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL EXTEND TO FACE OF EXISTING STANDARD MAILBOX WITH MAILBOX REMAINING IN PLACE.
 - 3) IF THE MAILBOX SUPPORT IS SPECIFIED TO BE REMOVED AND REERECTED OR REPLACED, WHERE GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL EXTEND TO FACE OF GUARDRAIL AND MAILBOX SHALL BE INSTALLED BEHIND THE GUARDRAIL.
 - 4) IF THE MAILBOX SUPPORT IS SPECIFIED TO BE REMOVED AND REERECTED OR REPLACED, WHERE NO GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL BE 6 FT. MAXIMUM, EXCEPT WHERE FIELD CONDITIONS WILL NOT PERMIT.

** NOTE
1) 6' FOR SINGLE MAILBOX SUPPORT, ADD 3 FT. FOR EACH ADDITIONAL MAILBOX.



ANTI-TWIST PLATE



CROSS SECTION / ELEVATION VIEW

DESIGN FILE: I:\projects\83420\roadway\sheets\83420gm001.dgn
WORKSTATION: aheining DATE: 12/22/2010

DESIGN FILE: I:\projects\83420\roadway\sheets\83420GG001.dgn
 WORKSTATION: cheiming DATE: 1/13/2011
 MODELNAME: Design

SHEET NUMBER										RURAL TOTAL	URBANIZED	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	REF. SHEET
8		11				13											
ROADWAY																	
						725.00				725.00		202	38000	725	FT	GUARDRAIL REMOVED	
						1,065.63				1,065.63		202	38200	1,065.63	FT	GUARDRAIL REMOVED FOR REUSE	
						16				16		202	42000	16	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	
						4				4		202	42041	4	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	16
						12				12		202	42810	12	EACH	ANCHOR ASSEMBLY REMOVED FOR REUSE, TYPE E	
						20				20		202	47000	20	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
						211.00				211		203	20001	211	CU YD	EMBANKMENT, AS PER PLAN	4
						21.41				21.41		209	15001	21.41	STA	RESHAPING UNDER GUARDRAIL, AS PER PLAN	11
		14.16								14.16	0.28	209	60500	14.44	MILE	LINEAR GRADING	
		29								29		209	80000	29	EACH	GRADING MAILBOX APPROACHES	
		10								10		604	39500	10	EACH	MONUMENT BOX ADJUSTED TO GRADE	
						400.00				400.00		606	13000	400.00	FT	GUARDRAIL, TYPE 5	
						50				50.00		606	13050	50.00	FT	GUARDRAIL, TYPE 5A	
						1,065.63				1,065.63		606	16500	1,065.63	FT	GUARDRAIL REBUILT, TYPE 5	
						2,015.63				2,015.63		606	17000	2,015.63	FT	RAISING TYPE 5 GAURDRAIL	
						3				3		606	26000	3	EACH	ANCHOR ASSEMBLY, TYPE B	
						13				13		606	26100	13	EACH	ANCHOR ASSEMBLY, TYPE E	
						4				4		606	26500	4	EACH	ANCHOR ASSEMBLY, TYPE T	
						12				12		606	27850	12	EACH	ANCHOR ASSEMBLY REBUILT, TYPE E	
						4				4		606	35000	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1	
						16				16		606	35140	16	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4	
						80				80		626	00100	80	EACH	BARRIER REFLECTOR	
18										18		SPECIAL	69050100	18	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	7
3										3		SPECIAL	69050200	3	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE	7
DRAINAGE																	
						30.0				30.0		603	06100	30	FT	15" CONDUIT, TYPE C	
PAVEMENT																	
		250								250		253	90000	250	CU YD	PAVEMENT REPAIR, MISC.: PARTIAL DEPTH	5
		122,080								122,080	2,268	254	01000	124,348	SO YD	PAVEMENT PLANING, ASPHALT CONCRETE (1.25" DEEP)	
		40,244								40,244	821	254	01000	41,065	SO YD	PAVEMENT PLANING, ASPHALT CONCRETE (3.00" DEEP)	
		1,193								1,193	22	254	01600	1,215	SO YD	PATCHING PLANED SURFACE	
		3,349								3,349	68	301	46001	3,417	CU YD	ASPHALT CONCRETE BASE, PG-64-22, AS PER PLAN	5
		9,779								9,779	182	407	10000	9,961	GALLON	TACK COAT	4
		4,889								4,889	91	407	14000	4,980	GALLON	TACK COAT FOR INTERMEDIATE COURSE	4
		7,407								7,407	145	408	10000	7,552	GALLON	PRIME COAT	
		4,265								4,265	80	442	00201	4,345	CU YD	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN	4
		2,560								2,560	49	442	20101	2,609	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5 MM, TYPE A (448), AS PER PLAN	4
		774								774	16	617	10100	790	CU YD	COMPACTED AGGREGATE	
62		18520								18,582	364	617	20000	18,946	SO YD	SHOULDER PREPARATION	
		14.16								14.16	0.28	618	41000	14.44	MILE	EDGE LINE, RUMBLE STRIPE, (ASPHALT CONCRETE)	24A

GENERAL SUMMARY

MED-42-7.12

DESIGN FILE: I:\projects\83420\roadway\sheets\83420GG001.dgn
 WORKSTATION: cheining
 DATE: 1/13/2011
 MODELNAME: Design

SHEET NUMBER								RURAL TOTAL	URBANIZED	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	REF. SHEET
6	24	31	34												
TRAFFIC CONTROL															
	506.00						506.00	10.00	621	00100	516	EACH	RPM		
	506.00						506.00	10.00	621	54000	516	EACH	RAISED PAVEMENT MARKER REMOVED		
	14.28						14.28	0.28	642	00100	14.56	MILE	EDGE LINE, TYPE 1 (WHITE)		
	0.01						0.01		642	00100	0.01	MILE	EDGE LINE, TYPE 1 (YELLOW)		
	7.29						7.29	0.14	642	00300	7.43	MILE	CENTER LINE, TYPE 1		
	420.00						420.00		644	00400	420	FT	CHANNELIZING LINE		
	480.00						480.00		644	00500	480	FT	STOP LINE		
	157.00						157.00		644	00700	157	FT	TRANSVERSE/DIAGONAL LINE (WHITE)		
	9.00						9.00		644	00900	9	SQ FT	ISLAND MARKING		
	2.00						2.00		644	01000	2	EACH	RAILROAD SYMBOL MARKING		
MAINTENANCE OF TRAFFIC															
			4				4		614	12338	4	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)		
68							68		614	12460	68	EACH	WORK ZONE MARKING SIGN		
40							40		614	13000	40	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC		
			13		12		25		614	13202	25	EACH	BARRIER REFLECTOR, TYPE A2		
			42				42		614	13302	42	EACH	BARRIER REFLECTOR, TYPE B2		
			0.06		0.06		0.12		614	21200	0.12	MILE	WORK ZONE CENTERLINE, CLASS I, 740.06, TYPE I		
	21.42						21.42	0.42	614	21500	21.84	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT		
			0.47		0.22		0.69		614	22200	0.69	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I		
	1260						1260		614	23200	1260	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT		
	408						408		614	26200	408	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT		
			23		23		46		614	26400	46	MILE	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I		
			370				370		622	40020	370	FT	PORTABLE CONCRETE BARRIER, 32"		
			740				740		622	40040	740	FT	PORTABLE CONCRETE BARRIER, 32" BRIDGE MOUNTED (UNANCHORED)		
STRUCTURES															
ALL STRUCTURE QUANTITIES ARE RURAL FUNDING															
													MED-42-0714	SFN 5201381	SEE SHEET 25
													MED-42-0945	SFN 5201454	SEE SHEET 25
													MED-42-1179	SFN 5201462	SEE SHEET 25
													MED-42-1229	SFN 5201497	SEE SHEET 25
													MED-42-1370	SFN 5201586	SEE SHEET 25
									614	11000	LUMP				MAINTAINING TRAFFIC
									619	16010	3	MONTH			FIELD OFFICE, TYPE B
									624	10000	LUMP				MOBILIZATION

GENERAL SUMMARY

MED-42-7.12

CONNECTING GUARDRAIL TO EXISTING RAIL

IN LOCATIONS WHERE TYPE 5 GUARDRAIL, TERMINAL ASSEMBLIES, ETC. ARE TO BE CONNECTED TO EXISTING RAIL SOME MODIFICATIONS MAY BE REQUIRED, INCLUDING EXTRA POSTS, DRILLING HOLES AND POSSIBLY PARTIAL SECTIONS OF ADDITIONAL RAIL ELEMENTS. THE COST OF THIS ADDITIONAL WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR TYPE 5 GUARDRAIL. IF ADDITIONAL PORTIONS OF RAIL ELEMENT ARE USED THE LINEAL MEASUREMENT OF THIS ADDITIONAL PORTION SHALL BE ADDED FOR PAYMENT.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1.1. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

LOCATIONS OF GUARDRAIL

THE GUARDRAIL PROTECTION PROVIDED IN THIS PLAN SHALL BE LOCATED IN THE FIELD TO ASSURE THAT THE INSTALLATION WILL AFFORD THE MAXIMUM PROTECTION FOR TRAFFIC. THIS LOCATION SHALL BE POSITIONED AS FAR AS POSSIBLE FROM THE EDGE OF PAVEMENT WHILE MAINTAINING PROPER GRADE IN FRONT OF GUARDRAIL AS PER STANDARD DRAWINGS AND PLAN DETAILS.

SUGGESTED SEQUENCE OF GUARDRAIL WORK

1. GUARDRAIL WORK IS TO BEGIN AFTER THE LINEAR GRADING IS COMPLETED AND THE 617 MATERIAL IS PLACED.
2. REMOVE THE GUARDRAIL.
3. PERFORM THE RESHAPING UNDER GUARDRAIL INCLUDING COMPLETING THE EMBANKMENT, AS PER PLAN.
4. REBUILD/CONSTRUCT THE GUARDRAIL RUN.
5. INSTALL BARRIER REFLECTORS.

ITEM 203 - EMBANKMENT, AS PER PLAN

AT SPECIFIED LOCATIONS AND LOCATIONS AS DIRECTED BY THE ENGINEER, EMBANKMENT SHALL BE PLACED AS TO PROVIDE A SUITABLE AREA TO CONSTRUCT GUARDRAIL AND TO PROVIDE STRUCTURAL INTEGRITY OF THE ROADWAY SHOULDER.

EMBANKMENT MATERIAL SHALL BE LIMITED TO CMS ITEM 304 LIMESTONE.

AREAS WHERE EMBANKMENT MATERIAL IS TO BE PLACED SHALL BE SCALPED. THE REQUIREMENTS FOR BENCHING SHALL BE WAIVED. THE DEPTH OF LAYERS IN WHICH THE EMBANKMENT IS PLACED SHALL BE LIMITED TO EIGHT (8) INCHES IN THICKNESS. THE METHOD OF COMPACTION AND EQUIPMENT USED SHALL BE SUFFICIENT TO COMPACT 95% OF STANDARD PROCTOR TO THE SATISFACTION OF THE ENGINEER.

THE METHOD OF MEASUREMENT FOR EMBANKMENT MATERIAL SHALL BE BY THE NUMBER OF CUBIC YARDS CONVERTED BY TICKET WEIGHT IN THE CARRIER AT THE WORK SITE, IN LIEU OF THE REQUIREMENTS OF 203.09. PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT BID PRICE PER CUBIC YARD FOR ITEM 203 - EMBANKMENT, AS PER PLAN AND SHALL INCLUDE ALL WORK DESCRIBED ABOVE.

ITEM 202 - ANCHOR ASSEMBLY REMOVED FOR REUSE, TYPE E

THIS ITEM CONSISTS OF REMOVING AN EXISTING ANCHOR ASSEMBLY, AND SALVAGING FOR REUSE AT A LOCATION SHOWN ON THE PLANS. THE RESULTING HOLES SHALL BE BACKFILLED AND COMPACTED. ELEMENTS THAT ARE NOT SALVAGEABLE SHALL BE DISPOSED OF PER 202.02.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING TYPE A, ANCHOR ASSEMBLY INCLUDING ALL POSTS, HARDWARE, RAIL ELEMENTS, AND CONCRETE ANCHORS. ALL ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF.

THE EXISTING CONCRETE ANCHOR AND CONCRETE AT POSTS SHALL BE REMOVED ENTIRELY. ALL HOLES REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL OR EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION. ALL FILL MATERIAL SHALL BE THOROUGHLY COMPACTED AND LEVELED, AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE

FOR ITEM 202, ANCHOR ASSEMBLY REMOVED, TYPE A.

ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN

THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLANS.

THIS WORK SHALL BE COMPLETED AT LOCATIONS SPECIFIED FOR WORK AS WELL AS PER CMS 209.05 AND AS DESCRIBED HEREIN, AND SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER.

THE AREA IN FRONT OF, UNDER, AND BEHIND THE GUARDRAIL SHALL BE GRADED AND RESHAPED TO PROVIDE AN AREA THAT HAS A SLOPE OF 10:1 MAXIMUM (SEE DETAIL BELOW AS WELL AS THE GUARDRAIL DETAIL SHEETS FOR FURTHER DETAILS AND INFORMATION OF THE LIMITS OF THIS WORK).

EXCESS MATERIAL RESULTING SHALL BE USED ELSEWHERE FOR THIS ITEM IF SO DIRECTED OR DISPOSED OF PROPERLY. IF EXTRA MATERIAL IS REQUIRED IT SHALL BE PAID FOR WITH ITEM 203 - EMBANKMENT, AS PER PLAN. THIS WORK SHALL NOT BE STARTED UNTIL AFTER THE RESURFACING AND BERM WORK HAS BEEN COMPLETED.

THE ABOVE WORK SHALL BE PAID FOR PER STATION WITH ITEM 209, RESHAPING UNDER GUARDRAIL, AS PER PLAN WITH THE EXCEPTION OF ANY EXTRA MATERIAL REQUIRED TO MEET THE SLOPE REQUIREMENTS WHICH SHALL BE PAID BY ITEM 203 - EMBANKMENT, AS PER PLAN.

ITEM 606 - GUARDRAIL REBUILT, TYPE 5

THIS ITEM SHALL BE USED WHEN GUARDRAIL REQUIRES REPAIRS IN WHICH THE RAIL ELEMENT IS REUSABLE. ALSO, THIS ITEM WILL BE USED TO RE-ALIGN GUARDRAIL RUNS, AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT, AS DESCRIBED IN 606.05 AND TO INCLUDE REMOVAL AND REPLACEMENT OF ANY AND ALL DAMAGED MATERIAL, (REUSING THE RAIL ELEMENT), INCLUDING REPLACEMENT OF ANY MATERIALS DAMAGED DURING DISMANTLING OR ANY MATERIALS WHICH MAY HAVE DETERIORATED TO THE POINT THEY CANNOT BE REUSED.

ITEM 606 - RAISING TYPE 5 GUARDRAIL

WHERE DESIGNATED ON THE PLAN, THE EXISTING TYPE 5 GUARDRAIL SHALL BE RAISED ON THE EXISTING WOOD POSTS AS PER STANDARD DRAWING GR-2.1 SO AS TO OBTAIN THE STANDARD 27.75 IN. HEIGHT. THE RAIL SHALL BE RE-ATTACHED TO THE POSTS USING NEW POST BOLTS.

THE RAIL SHALL BE DISMANTLED ONLY TO THE EXTENT NECESSARY TO FIELD BORE NEW BOLT HOLES IN THE WOOD POSTS, AND TO RECONNECT THE RAIL AND BLOCK TO THE EXISTING POSTS.

THE EXISTING TYPE "A" ANCHOR ASSEMBLIES THAT ARE TO REMAIN SHALL NOT BE ADJUSTED. THE LAST RAIL ELEMENT SHALL BE TRANSITIONED TO MEET THESE ASSEMBLIES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT OF ITEM 606 - RAISING TYPE 5 GUARDRAIL, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 606 - ANCHOR ASSEMBLY, TYPE B

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

1) THE SRT-350, GUARDRAIL END TERMINAL AS MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330.545.4373).

THE LENGTH OF THE SRT-350 SYSTEM IS CONSIDERED TO BE 37'-6" (11.43 m), INCLUSIVE OF THREE 12'-6" (3.81 m) LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SS444 SS444M	SLOTTED RAIL TERMINAL POST LAYOUT AND ERECTION DETAILS SRT-350 (12.5, 8 POST)	7/12/99 Rev. 1 7/12/99	08/27/99
SS425M	SLOTTED RAIL TERMINAL SRT-350 POST LAYOUT AND ERECTION DETAILS (12.5, 9 POST)	6/21/97 Rev. 1	03/6/98

2) THE FLEAT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 2516 MALLORY LANE, STOW, OHIO, 44224 (TELEPHONE: 330.346.0721).

THE LENGTH OF THE FLEAT-350 IS CONSIDERED TO BE 37'-6" (11.43 m), INCLUSIVE OF THREE 12'-6" (3.81 m) LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
FLT-M	FLARED ENERGY ABSORBING TERMINAL (FLEAT-350) ASSEMBLY	04/16/98	07/31/98
FLT HINGED CRT	FLARED ENERGY ABSORBING TERMINAL (POSTS 1 AND 2 ARE STEEL HINGED)	5/4/06	05/23/06
FLT-SP	FLARED ENERGY ABSORBING TERMINAL (A SEVEN POST OPTION USING STANDARD STEEL POSTS)	03/30/09	03/4/09

REFER TO THE MANUFACTURER'S INSTRUCTION REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES (100mm) ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27 3/4 INCHES (706mm) FROM THE EDGE OF THE SHOULDER.

ON SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES NOT PROJECT MORE THAN 4 INCHES (100mm) ABOVE THE GROUND LINE.

THE FACE OF THE TYPE B IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19: APPROXIMATELY 36 IN. WIDE x 12 IN. HIGH (915 mm W x 305 mm H) FOR THE SRT-350 AND 14 IN. WIDE x 20 IN. HIGH (350 mm W x 500 mm H) FOR THE FLEAT.

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

ITEM 606 - ANCHOR ASSEMBLY REBUILT, TYPE E

THIS ITEM SHALL CONSIST OF REUSING SALVAGED ELEMENTS FROM AN EXISTING ANCHOR ASSEMBLY, AND CONSTRUCTING A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY AT A LOCATION SHOWN IN THE PLANS.

THE ANCHOR ASSEMBLY SHALL BE RECONSTRUCTED AS PER THE FOLLOWING GUARDRAIL END TERMINALS, OR AN APPROVED EQUAL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE AT WWW.DOT.STATE.OH.US/DRRC/ UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS.

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

THE LENGTH OF THE ET-2000 (1997) SYSTEM IS CONSIDERED TO BE 50 FEET (15.24 m), INCLUSIVE OF TWO 25 FOOT (7.62 m) LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SS142	ET2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/PL POSTS 1-4	4/12/00	7/31/00
SS141	ET-2000 PLUS PLAN, ELEVATION & SECTION 25'-0" RAIL, HBA POSTS 1-4	2/29/00	7/31/00
SS158	ET-2000 PLUS 50'-0" WITH 12'-6" PANELS & HBA POSTS 1-4 PLAN, ELEVATION & SECTION	5/22/00	7/31/00
SS330	ET-2000 PLUS 50'-0" WITH FOUR FOUNDATION TUBES AND FOUR CRT POSTS	3/28/06	3/29/06
SS373	ET-2000 PLUS 50'-0" WITH 7 SYT POSTS AND ONE HBA POST	6/20/09	1/20/09

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

THE LENGTH OF THE SKT-350 SYSTEM IS CONSIDERED TO BE 50'-0" (15.24 m), INCLUSIVE OF FOUR 12'-6" (3.81m) LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SKT-4M	SEQUENTIAL KINKING TERMINAL (SKT-350) ASSEMBLY WITH 4 FOUNDATION TUBES	12/11/97	3/6/98
SKT HINGED CRT	SEQUENTIAL KINKING TERMINAL (SKT-350) FOUR POSTS ARE STEEL HINGED AND FIVE POSTS ARE CRT	4/30/06	5/23/06
SKT-SP	SEQUENTIAL KINKING TERMINAL (SKT-350) A SEVEN POST OPTION USING STANDARD STEEL POST	3/30/09	3/4/09

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

THE CONTRACTOR MAY USE A SALVAGED EXTRUDER WHEN ASSEMBLING THE ITEM 606 ANCHOR ASSEMBLY, TYPE E. ALL WELDS ON THE EXTERIOR OF THE SALVAGED EXTRUDER SHALL NOT BE DAMAGED AND THE FEEDER SHUTE SHALL NOT BE BENT.

REFER TO THE MANUFACTURER'S INSTRUCTION REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES (100mm) ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27 3/4 INCHES (706mm) FROM THE EDGE OF THE SHOULDER.

ON SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES NOT PROJECT MORE THAN 4 INCHES (100mm) ABOVE THE GROUND LINE.

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

ITEM 606 - ANCHOR ASSEMBLY, TYPE E

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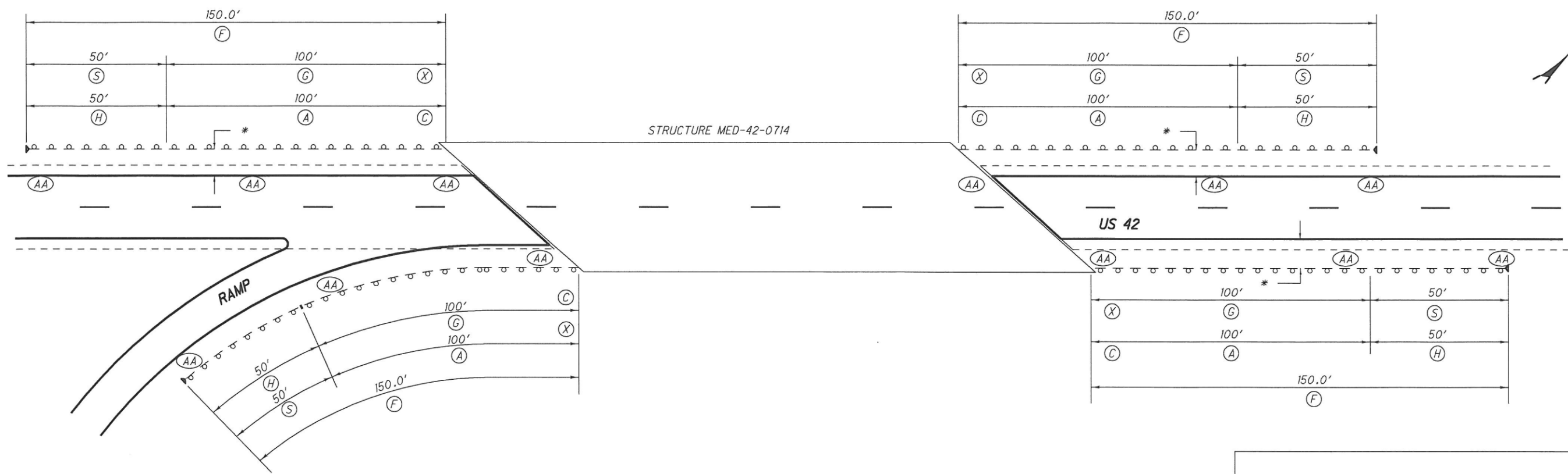
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SHEET	LOCATION	202	202	202	202	202	202	203	209	606	606	606	606	606	606	606	606	606	626	
		GUARDRAIL REMOVED FT	GUARDRAIL REMOVED FOR REUSE FT	ANCHOR ASSEMBLY REMOVED, TYPE A EACH	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN EACH	ANCHOR ASSEMBLY REMOVED FOR REUSE, TYPE E EACH	BRIDGE TERMINAL ASSEMBLY REMOVED EACH	EMBANKMENT, AS PER PLAN CU YD	RESHAPING UNDER GUARDRAIL, AS PER PLAN STATION	RAISING TYPE 5 GUARDRAIL FT	GUARDRAIL, TYPE 5 FT	GUARDRAIL REBUILD, TYPE 5 FT	GUARDRAIL, TYPE 5A FT	ANCHOR ASSEMBLY, TYPE T EACH	ANCHOR ASSEMBLY, TYPE B EACH	ANCHOR ASSEMBLY, TYPE E EACH	ANCHOR ASSEMBLY REBUILD, TYPE E EACH	BRIDGE TERMINAL ASSEMBLY, TYPE I EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4 EACH	BARRIER REFLECTOR EACH
14	MED-42-7.12	400				4	4		6.00		400				4	4			12	
15	MED-42-7.34		237.5	2				34	2.375			237.5		2					4	
16	MED-42-9.45	137.5	250	3	1		4		4.625			250	50	1	3			4	11	
17	MED-42-10.90	50		3				34		425					3				6	
18	MED-42-12.29					4	4	58		500						4		4	10	
19	MED-42-12.64	25		2				51		137.5					2				4	
20	MED-42-12.90	37.5	140.63	2	2		4		2.031	162.5		140.63		2	2			4	10	
21	MED-42-13.25	25		1				17		250					1				4	
22	MED-42-13.45	50		3	1			17		540.63				1	3				9	
23	MED-42-13.70		437.5			4	4		6.375			437.5				4		4	10	
TOTALS CARRIED TO GENERAL SUMMARY		725	1065.63	16	4	12	20	211	21.406	2015.63	400	1065.63	50	4	3	13	12	4	16	80

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ROADWAY SUB-SUMMARY

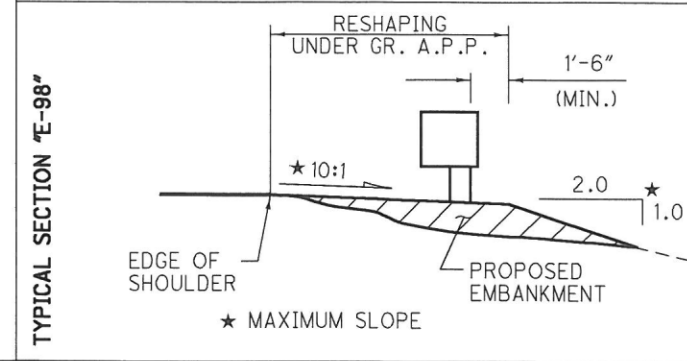
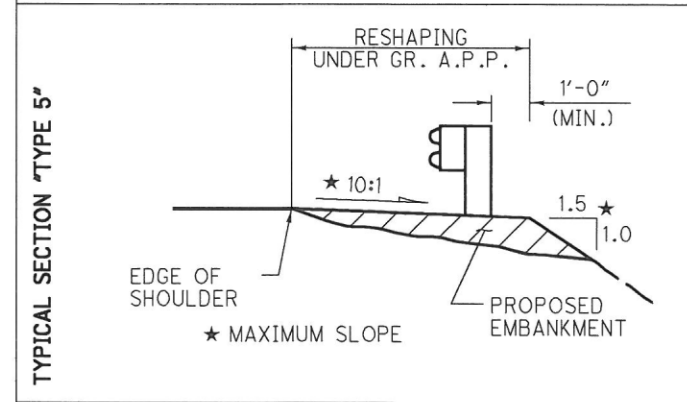
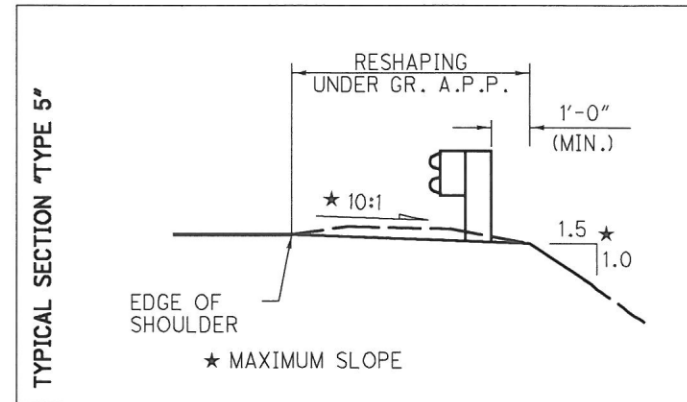
MED-42-7.12



NOTE:
1.) * USE GUARDRAIL OFFSET SAME AS EXISTING
2.) REPLACE BRIDGE TERMINAL ASSEMBLY AND ATTACH TO EXISTING CONCRETE PARAPET

LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(A)	202	GUARDRAIL REMOVED	FT	200	200	400
(C)	202	BRIDGE TERMINAL ASSEMBLY REMOVED	EACH	2	2	4
(F)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION	3.000	3.000	6.000
(G)	606	GUARDRAIL, TYPE 5	FT	200	200	400
(H)	202	ANCHOR ASSEMBLY REMOVED FOR REUSE, TYPE E	EACH	2	2	4
(S)	606	ANCHOR ASSEMBLY REBUILT, TYPE E	EACH	2	2	4
(X)	606	BRIDGE TERMINAL ASSEMBLY, TYPE 1	EACH	2	2	4
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	6	6	12

ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.

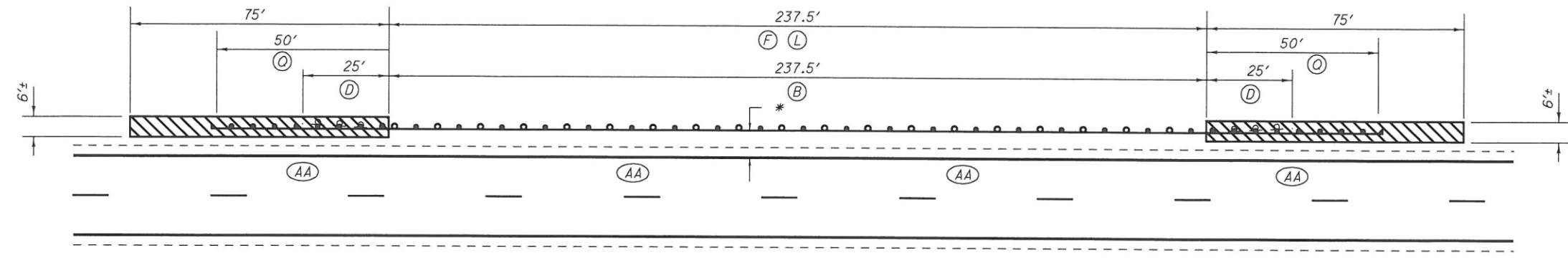


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WORKSTATION:cheining
DATE:12/21/2010

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GUARDRAIL DETAIL
MED-42-7.34

MED-42-7.12

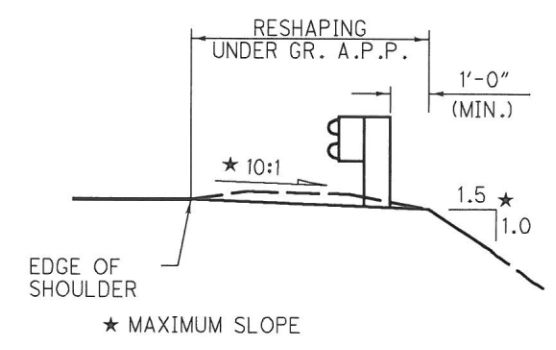


NOTE:
1.) * USE GUARDRAIL OFFSET MATCH EXISTING

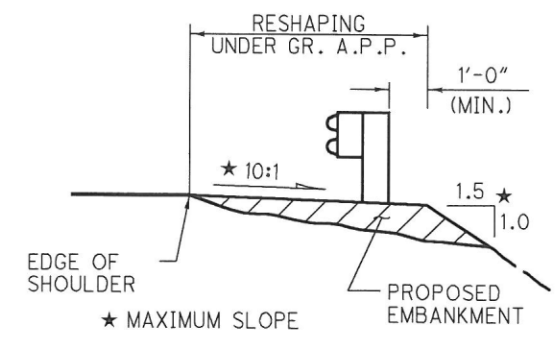
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(B)	202	GUARDRAIL REMOVED FOR REUSE	FT	237.5		237.5
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	2		2
(F)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION	2.375		2.375
(L)	606	GUARDRAIL REBUILT, TYPE 5	FT	237.5		237.5
(Q)	606	ANCHOR ASSEMBLY, TYPE E	EACH	2		2
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	4		4
	203	EMBANKMENT, AS PER PLAN	CY	34		34

ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.

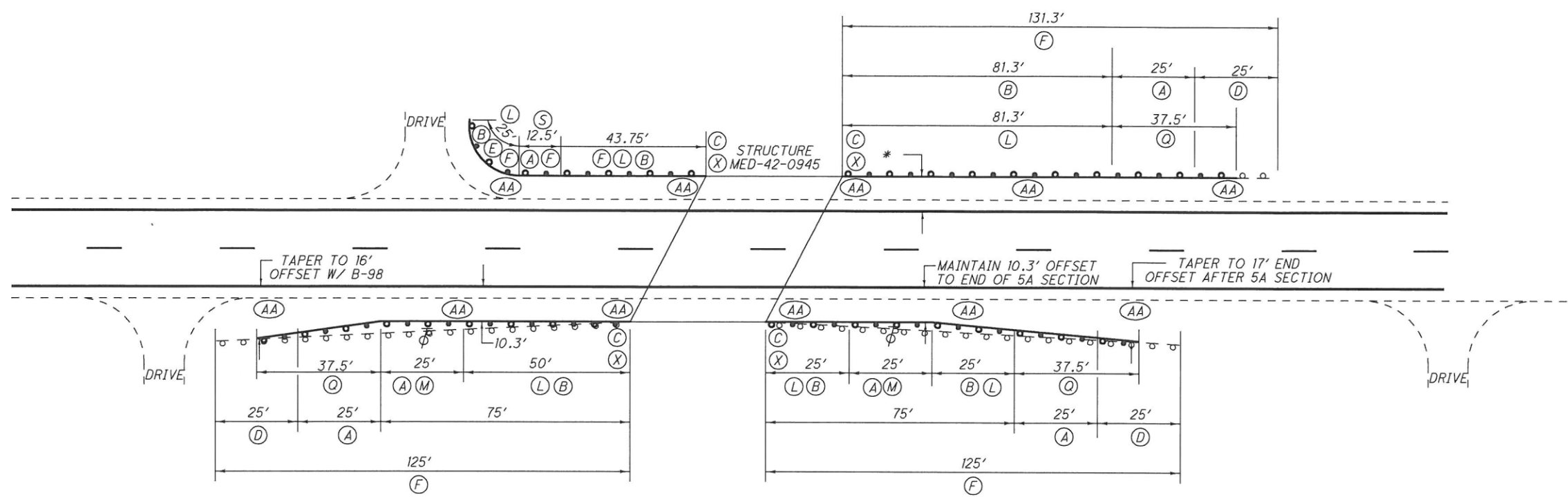
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



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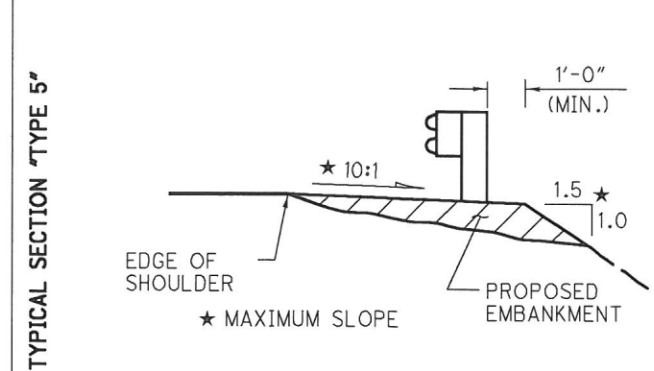
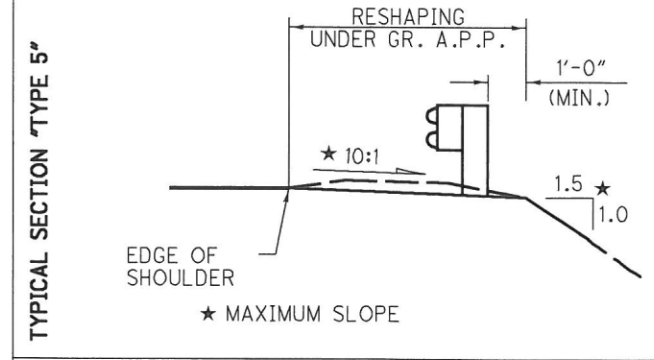


ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN:
REMOVE TYPE T ANCHOR, REMOVE AND REUSE THE ASSOCIATED
RADIUS GUARDRAIL PANEL AT THE SAME LOCATION WITH NEW POSTS.

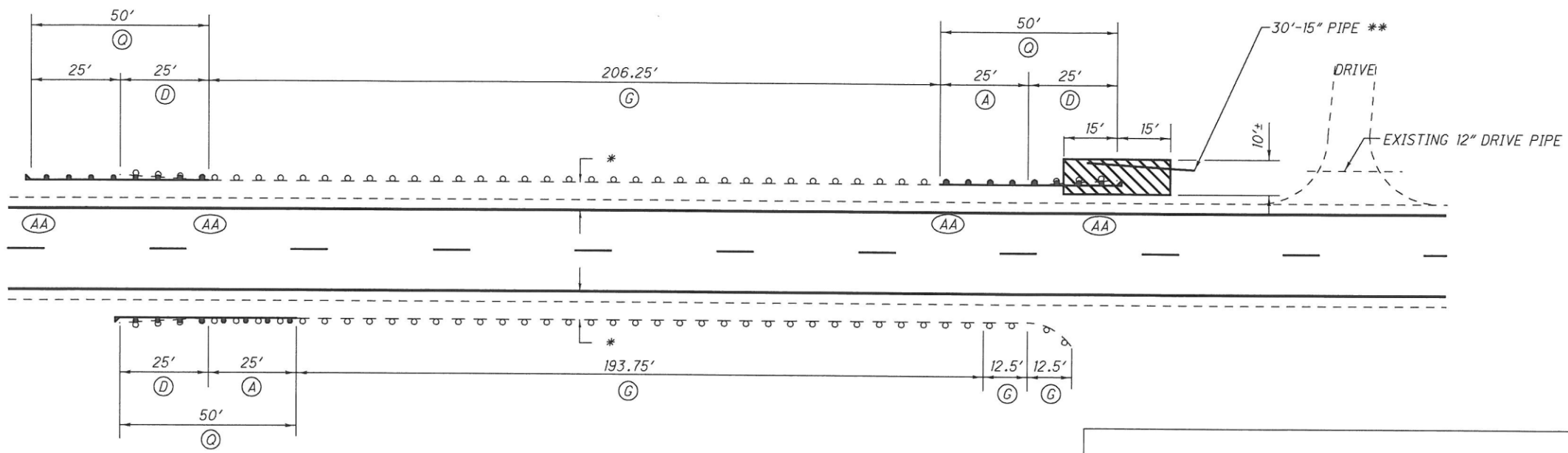
NOTE:
1.) * GUARDRAIL OFFSET SAME AS EXISTING

LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(A)	202	GUARDRAIL REMOVED	FT	37.5	100	137.5
(B)	202	GUARDRAIL REMOVED FOR REUSE	FT	150	100	250
(C)	202	BRIDGE TERMINAL ASSEMBLY REMOVED	EACH	2	2	4
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	2	3
(E)	202	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	EACH	1		1
(F)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION	2.125	2.500	4.625
(L)	606	GUARDRAIL REBUILT, TYPE 5	FT	150	100	250
(M)	606	GUARDRAIL, TYPE 5A	FT		50	50
(Q)	606	ANCHOR ASSEMBLY, TYPE B	EACH	1	2	3
(S)	606	ANCHOR ASSEMBLY, TYPE T	EACH	1		1
(X)	606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	EACH	2	2	4
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	6	6	11

ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.



DESIGN FILE: i:\projects\83420\roadway\sheet\83420GR001.dgn
WORKSTATION:cheiming DATE:12/21/2010

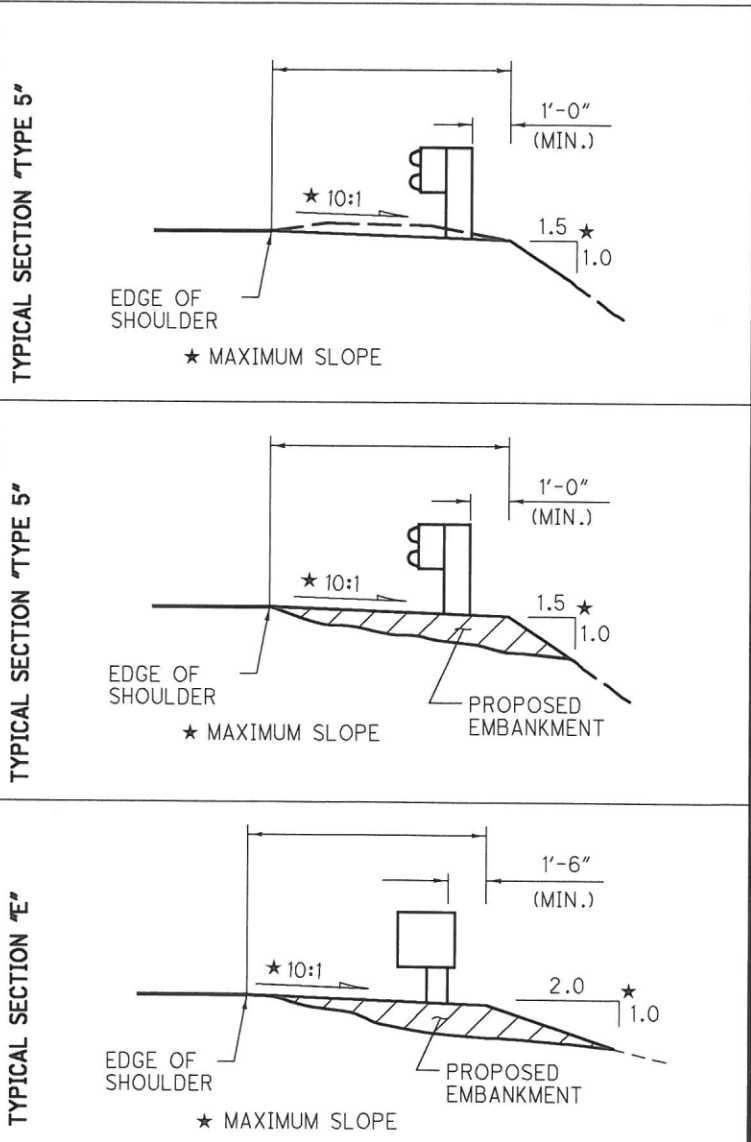


NOTE:
1.) * USE GUARDRAIL OFFSET MATCH EXISTING

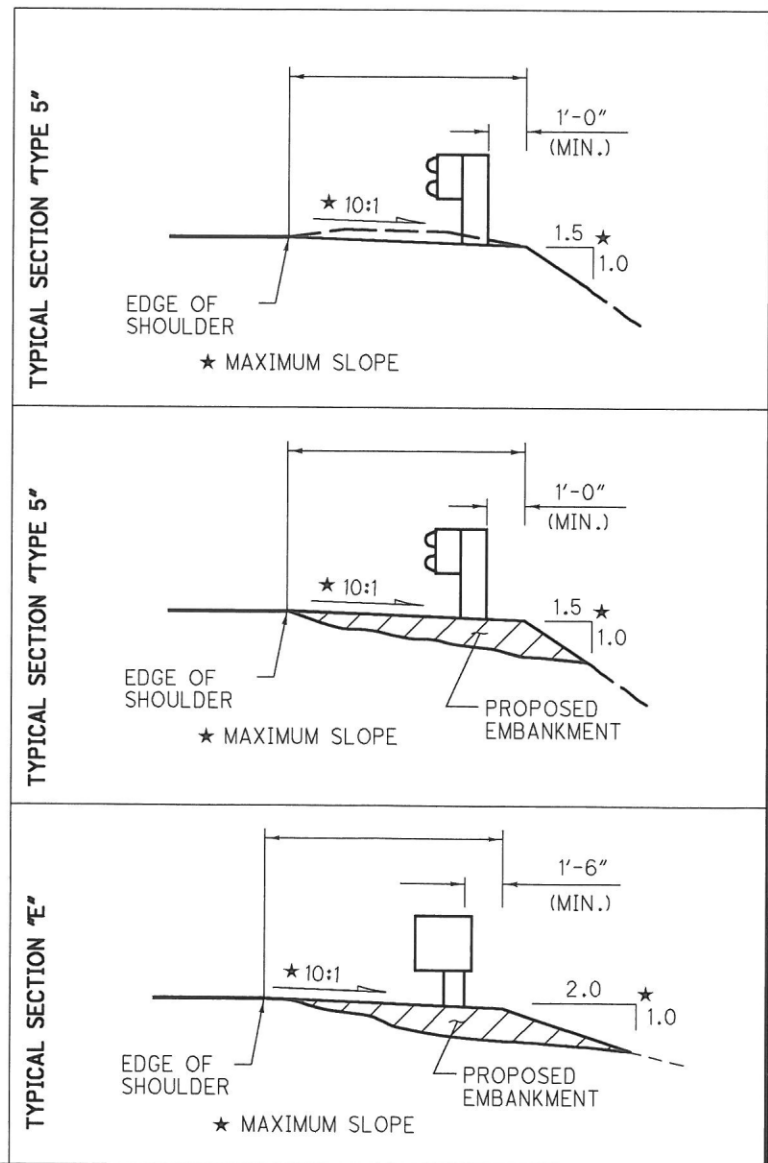
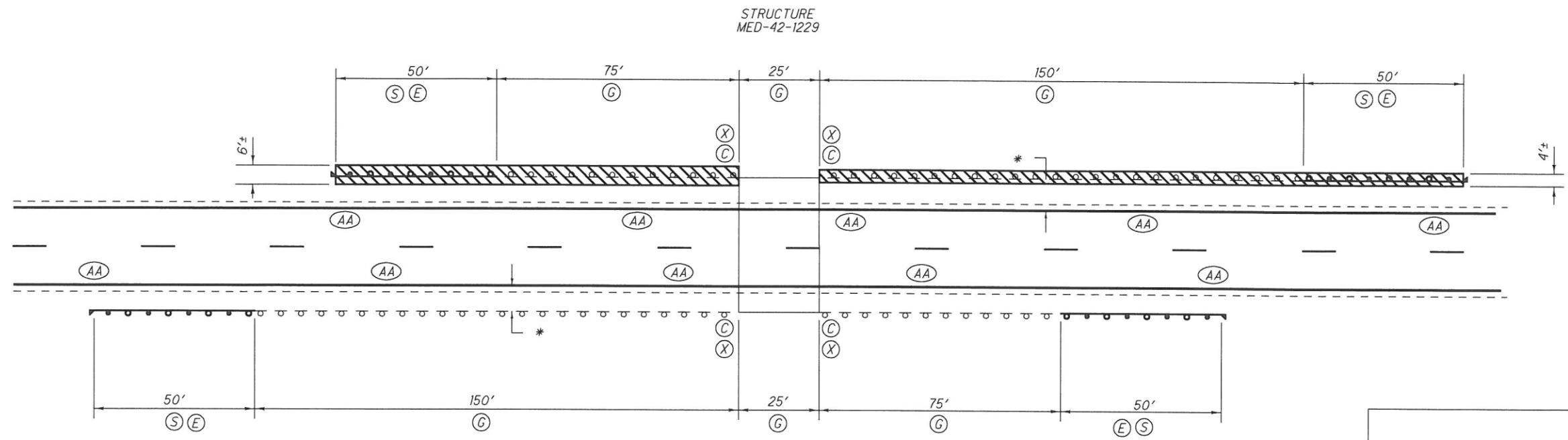
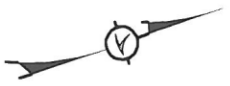
** PLACE 15" PIPE IN EXISTING DITCH AND PLACE INVERT OF 15" PIPE 4" BELOW EXISTING DITCH BOTTOM OR AS DIRECTED BY THE ENGINEER.

LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
Ⓐ	202	GUARDRAIL REMOVED	FT	25	25	50
Ⓓ	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	2	1	3
Ⓒ	606	RAISING TYPE 5 GUARDRAIL	FT	206.25	218.75	425
Ⓚ	606	ANCHOR ASSEMBLY, TYPE E	EACH	2	1	3
AA	626	BARRIER REFLECTOR, TYPE A	EACH	4	2	6
	203	EMBANKMENT, AS PER PLAN	CY	34		34

ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.



DESIGN FILE: i:\projects\83420\roadway\sheets\83420GR001.dgn
WORKSTATION:cheining DATE:12/21/2010

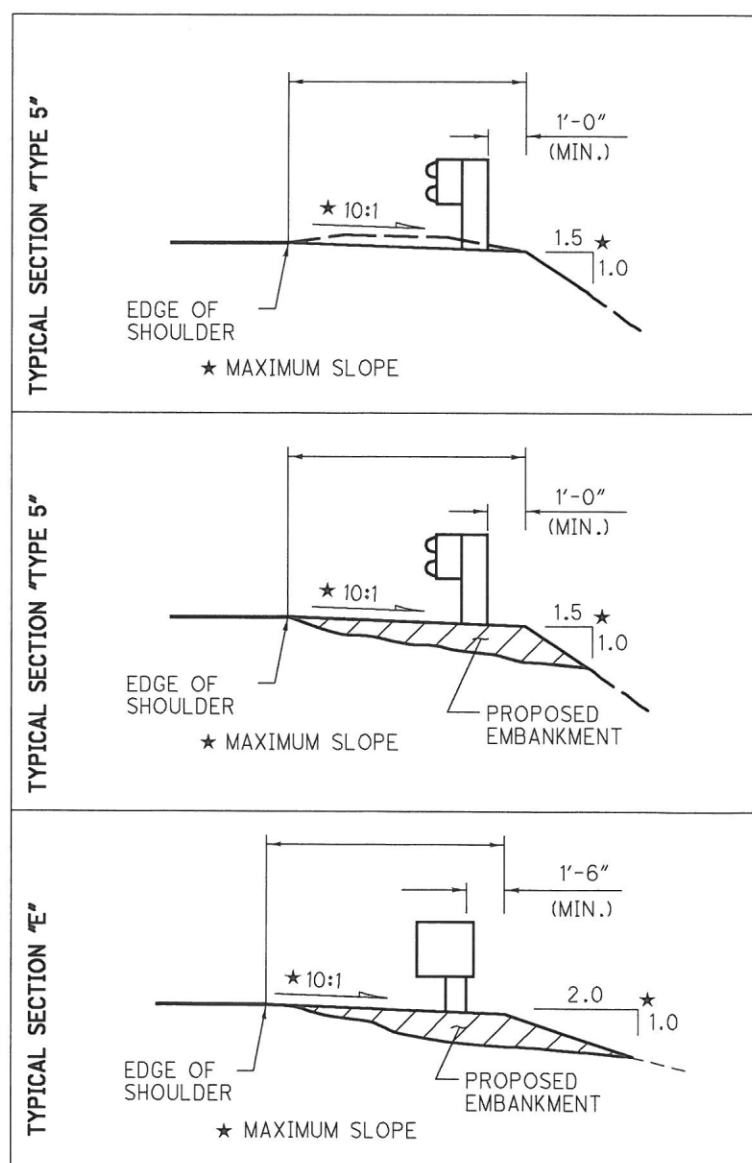
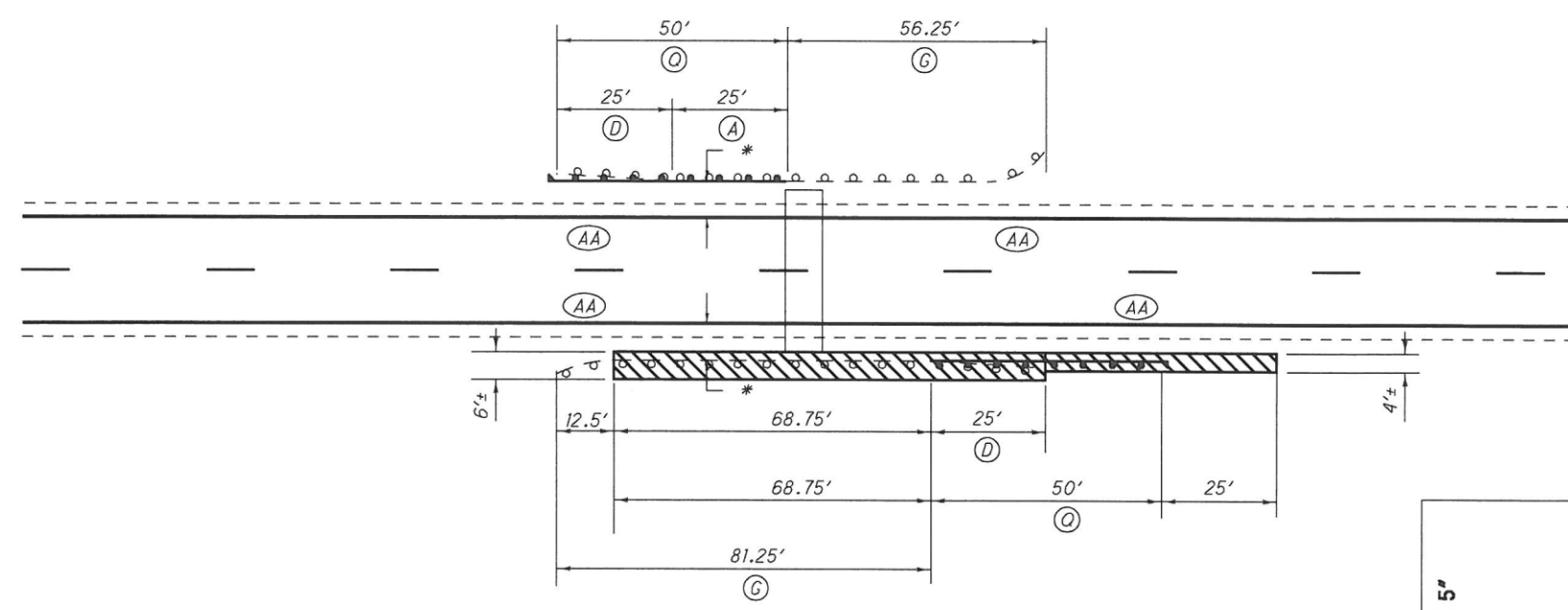


NOTE:
1.) * GUARDRAIL OFFSET SAME AS EXISTING

LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(C)	202	BRIDGE TERMINAL ASSEMBLY REMOVED	EACH	2	2	4
(E)	202	ANCHOR ASSEMBLY REMOVED FOR REUSE, TYPE E	EACH	2	2	4
(G)	606	RAISING TYPE 5 GUARDRAIL	FT	250	250	500
(S)	606	ANCHOR ASSEMBLY REBUILT, TYPE E	EACH	2	2	4
(X)	606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	EACH	2	2	4
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	5	5	10
	203	EMBANKMENT, AS PER PLAN	CY	58		58

ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.

DESIGN FILE: I:\projects\83420\roadway\sheets\83420GR001.dgn
WORKSTATION: ohnein DATE: 12/21/2010



NOTE:
1.) * USE GUARDRAIL OFFSET MATCH EXISTING

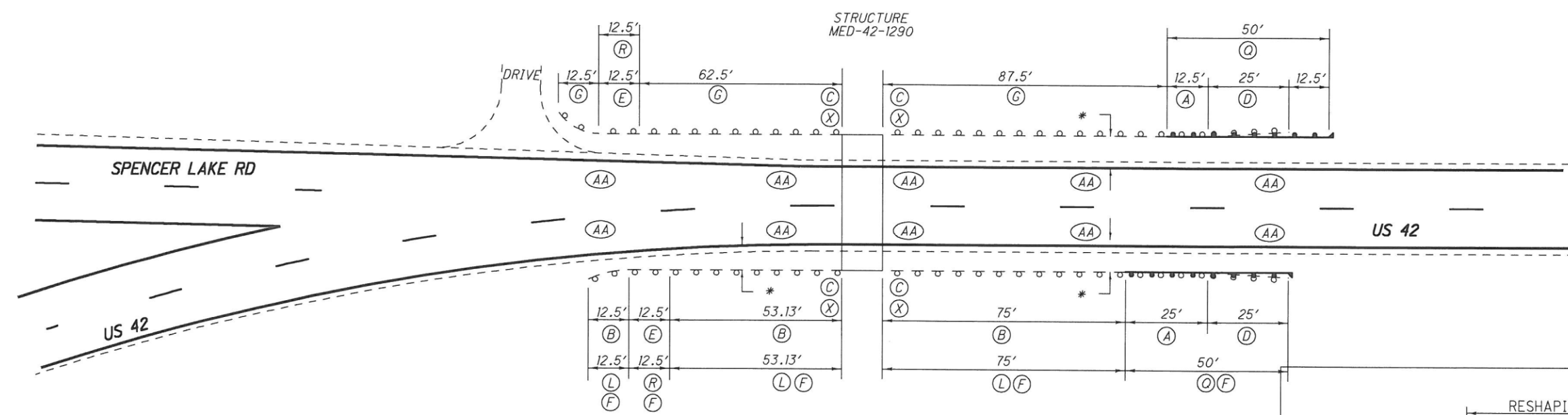
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(A)	202	GUARDRAIL REMOVED	FT	25		25
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	1	2
(G)	606	RAISING TYPE 5 GUARDRAIL	FT	81.25'	56.25'	137.5'
(Q)	606	ANCHOR ASSEMBLY, TYPE E	EACH	1	1	2
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	2	2	4
(Hatched)	203	EMBANKMENT, AS PER PLAN	CY		51	51

ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.

GUARDRAIL DETAIL
MED - 42 - 12.64

MED - 42 - 7.12

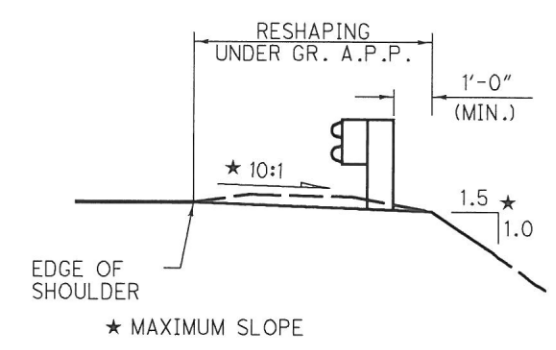
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WORKSTATION:cheining DATE:12/21/2010



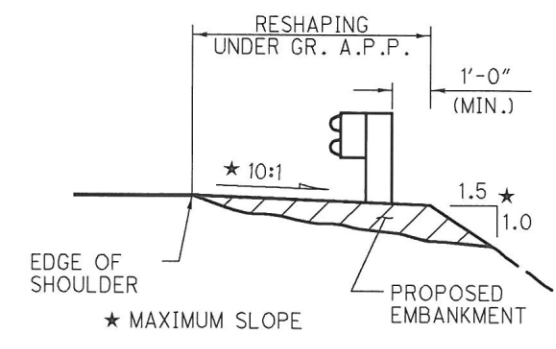
NOTE:
1.) * GUARDRAIL OFFSET SAME AS EXISTING

LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(A)	202	GUARDRAIL REMOVED	FT	12.5	25	37.5
(B)	202	GUARDRAIL REMOVED FOR REUSE	FT	140.63		140.63
(C)	202	BRIDGE TERMINAL ASSEMBLY REMOVED	EACH	2	2	4
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	1	2
(E)	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH	1	1	2
(F)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION		2.031	2.031
(G)	606	RAISING TYPE 5 GUARDRAIL	FT	162.5		162.5
(L)	606	GUARDRAIL REBUILT, TYPE 5	FT		140.63	140.63
(R)	606	ANCHOR ASSEMBLY, TYPE T	EACH	1	1	2
(Q)	606	ANCHOR ASSEMBLY, TYPE E	EACH	1	1	2
(X)	606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	EACH	2	2	4
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	5	5	10

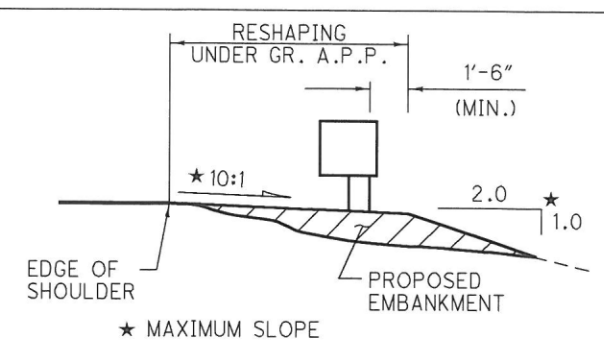
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"

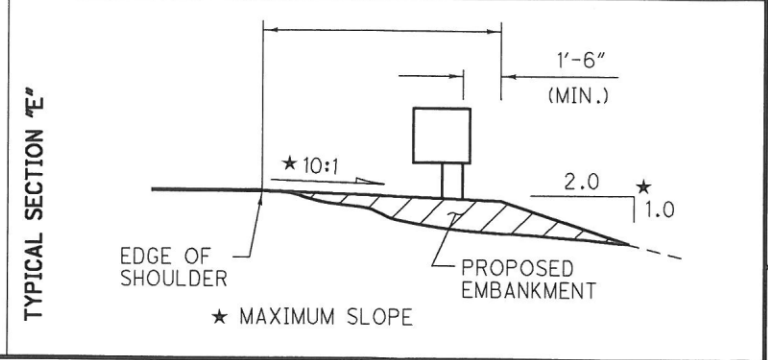
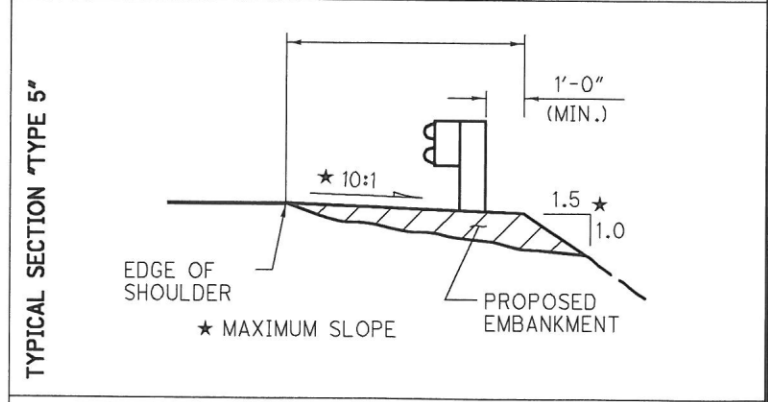
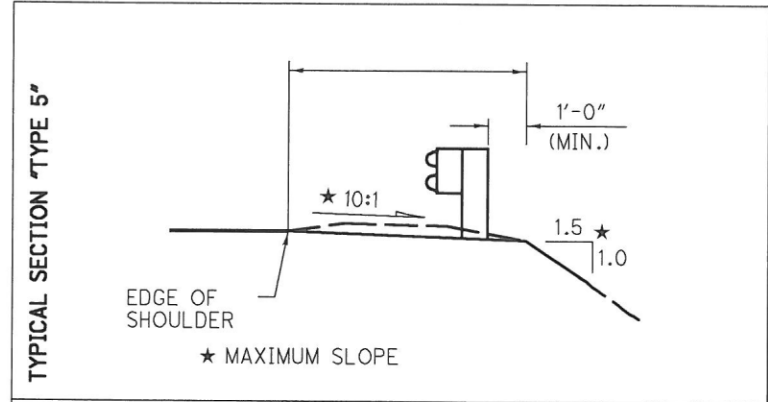
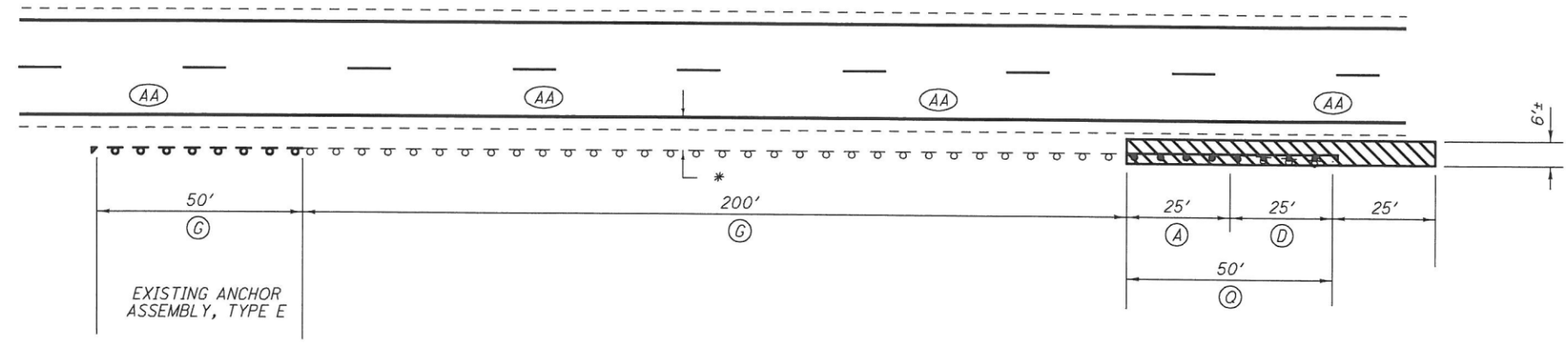
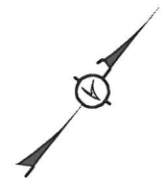


TYPICAL SECTION "E"



DESIGN FILE: I:\projects\83420\roadway\sheets\83420GR001.dgn
WORKSTATION:cbn:ning DATE:12/21/2010

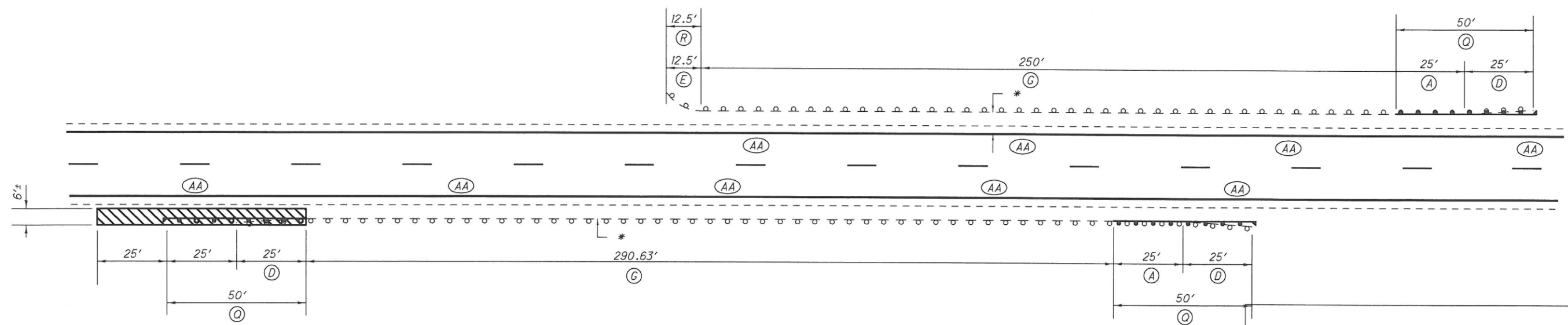
ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.



NOTE:
1.) ★ USE GUARDRAIL OFFSET MATCH EXISTING

LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(A)	202	GUARDRAIL REMOVED	FT		25	25
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH		1	1
(G)	606	RAISING TYPE 5 GUARDRAIL	FT		250	250
(C)	606	ANCHOR ASSEMBLY, TYPE E	EACH		1	1
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH		4	4
	203	EMBANKMENT, AS PER PLAN	CY		17	17

ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.

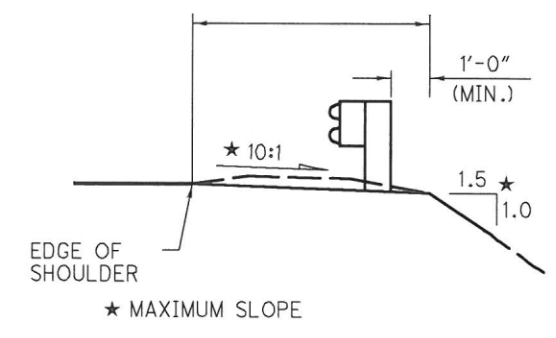


NOTE:
1.) * USE GUARDRAIL OFFSET MATCH EXISTING

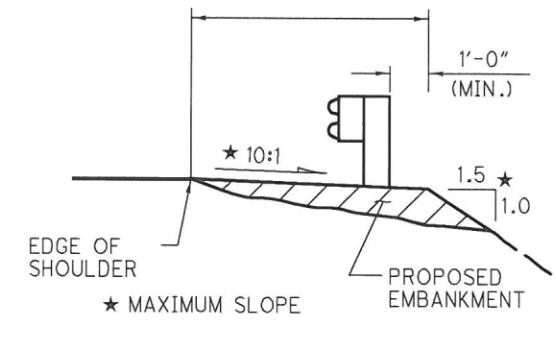
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(A)	202	GUARDRAIL REMOVED	FT	25	25	50
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	2	3
(E)	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH	1		1
(G)	606	RAISING TYPE 5 GUARDRAIL	FT	250	290.63	540.63
(Q)	606	ANCHOR ASSEMBLY, TYPE E	EACH	1	2	3
(R)	606	ANCHOR ASSEMBLY, TYPE T	EACH	1		1
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	4	5	9
	203	EMBANKMENT, AS PER PLAN	CY		17	17

ALL QUANTITIES CARRIED TO ROADWAY SUB-SUMMARY SHEET, SHEET 13.

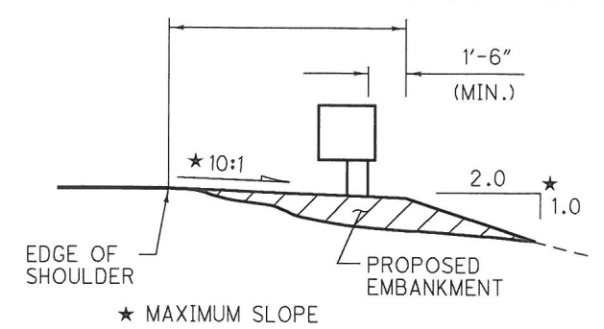
TYPICAL SECTION "TYPE 5"



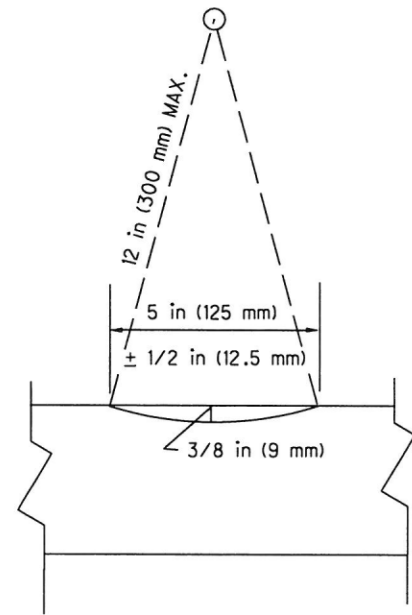
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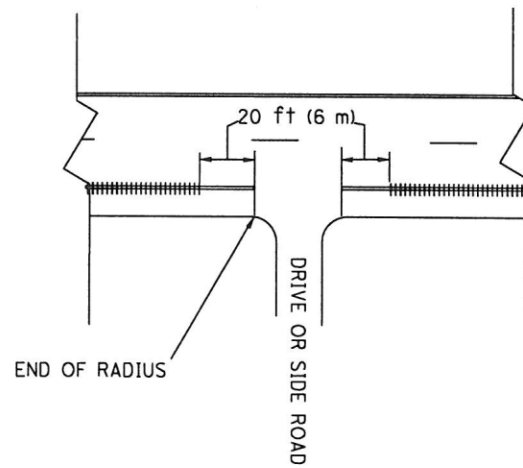
TYPICAL SECTION "E"



DESIGN FILE: I:\projects\83420\roadway\sheets\83420GR001.dgn
WORKSTATION: chnein DATE: 12/21/2010



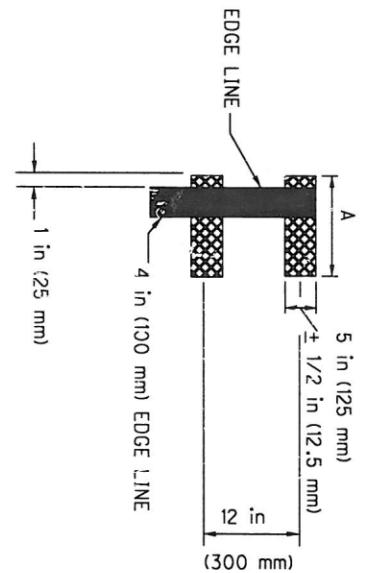
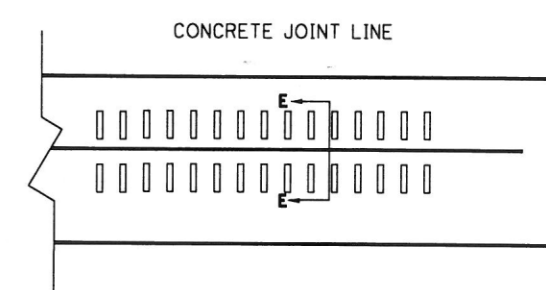
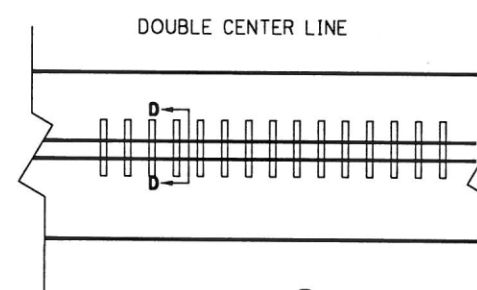
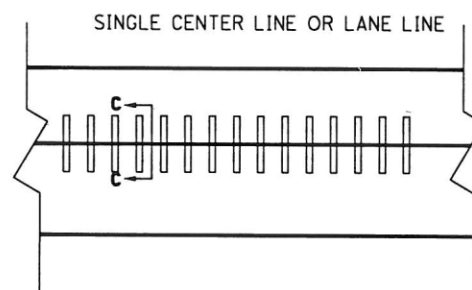
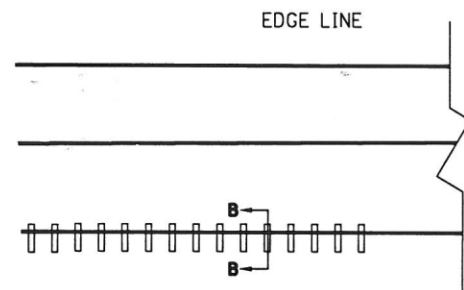
PROFILE



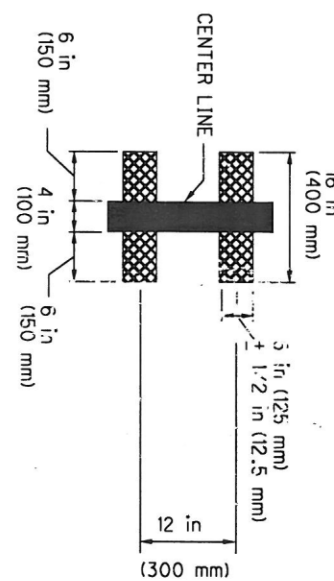
SIDE ROAD AND DRIVE RUMBLE STRIPE INSTALLATION DETAILS

NOTES

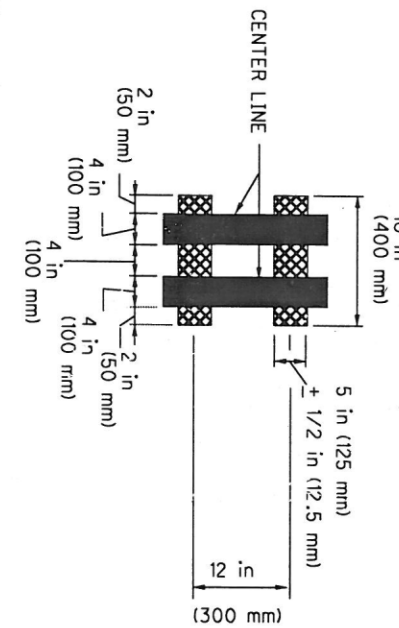
1. Rumble stripes shall be interrupted for driveways and intersections.
2. Rumble stripes shall be paid for in accordance with Item 618.
3. Rumble stripes shall be installed on a 62 foot (18.6 meter) cycle, i.e. 50 feet (15 meters) of rumble stripes followed by a 12 foot (3.6 meter) gap.



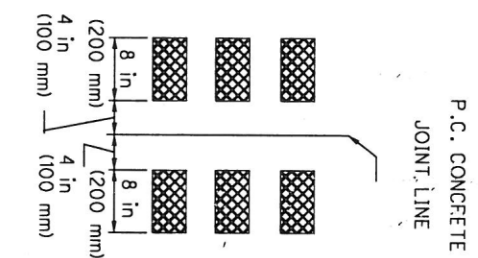
SECTION B-B
EDGE LINE RUMBLE STRIPE



SECTION C-C
CENTER LINE OR LANE LINE
RUMBLE STRIPE



SECTION D-D
CENTER LINE RUMBLE STRIPE



SECTION E-E
PORTLAND CEMENT CONCRETE
JOINT CENTER LINE RUMBLE STRIPE

SHOULDER WIDTH	A
2-5 ft (0.6-1.5 m)	6 in (150 mm)
5 ft-1 in - 8 ft (1.5 m-25mm - 2.4 m)	10 in (250 mm)
≥ 8 ft- 1 in (≥ 2.4 m-25mm)	16 in (400 mm)

MED-42-0714 SFN 5201381

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	11301	7	CU YD	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	26
511	34450	5	CU YD	CLASS S CONCRETE, MISC: APPROACH SLAB REPAIR	26
511	45701	3	CU YD	CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)	26
SPECIAL	511E60000	1275	SQ YD	BRIDGE DECK GROOVING	26
512	10100	728	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
516	31000	102	FT	JOINT SEALER	
848	10201	1275	SQ YD	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2½" THICK)	26
848	20000	1275	SQ YD	SURFACE PREPARATION USING HYDRO DEMOLITION	
848	30201	4	CU YD	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	26
848	50000	10	SQ YD	HAND CHIPPING	
848	50100	LUMP		TEST SLAB	
848	50320	1275	SQ YD	EXISTING CONCRETE OVERLAY REMOVED (2" NOMINAL THICKNESS)	
848	50340	10	SQ YD	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	

MED-42-0945 SFN 5201454

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	98200	103.33	FT	REMOVAL MISC.: STEEL DRIP STRIP	26
512	33010	225	SQ YD	TYPE 3 WATERPROOFING	
SPECIAL	518E22300	103.33	FT	STEEL DRIP STRIP	26
SPECIAL	530E01300	412	FT	STRUCTURE, MISC.: SHEAR KEY REPAIR	26

MED-42-1179 SFN 5201462

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10100	58	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	

MED-42-1229 SFN 5201497

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10100	68	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	

MED-42-1370 SFN 5201586

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10100	88	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	

NOTE: SEE ROADWAY SHEETS FOR PAVING DATA

DESIGN FILE: I:\projects\83420\structures\83420strsum.dgn
 WORKSTATION: cheining DATE: 12/22/2010

ODOT DISTRICT THREE
OFFICE OF PRODUCTION

DATE 12/10
RDN

ACH
DUV

STRUCTURE SUMMARY

MED-42-7.12

1 / 1
25
37

EXISTING PLANS

EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 3 OFFICE IN ASHLAND, OHIO.

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 PREBID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING:

DS-1-92 DATED 7-18-03
PSBD-1-93 DATED 4/20/07

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION:

848 DATED 4/16/10

DESIGN SPECIFICATIONS

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 2003-2007 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN DATA

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI

DECK PROTECTION METHOD

SUPERPLASTICIZED DENSE OVERLAY
WATERPROOF AND ASPHALT OVERLAY

ITEM 202. PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. 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.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

ITEM SPECIAL - STRUCTURE, MISC.: SHEAR KEY REPAIR

THE MORTAR IN THE EXISTING PRESTRESSED CONCRETE BEAM SHEAR KEY AT THE LOCATION INDICATED IN THE PLAN ON STRUCTURE MED-42-0945 SHALL BE REMOVED AND REPLACED AS PER DETAILS IN THE PLAN. ALL LOOSE AND DETERIORATED SHEAR KEY MORTAR SHALL BE REMOVED, AS MUCH AS IS PRACTICAL, WITH HAND TOOLS AND AN AIR BLAST.

WITHIN TWENTY-FOUR (24) HOURS BEFORE PLACING THE MORTAR, THE EXISTING SHEAR KEY SURFACES AGAINST WHICH THE MORTAR SHALL BE PLACED, SHALL BE GIVEN A MEDIUM SANDBLAST FOLLOWED BY AN AIR BLAST. A NONSHRINK, NONMETALLIC GROUT PER STANDARD PSBD-1-93 SHALL BE USED.

THE MORTAR SHALL BE STORED, APPLIED AND CURED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. NO VEHICLE SHALL BE PERMITTED ON THE BEAMS ADJACENT TO THE NEW SHEAR KEY UNTIL THE MORTAR HAS REACHED ITS FINAL CURE TIME.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR ITEM SPECIAL, STRUCTURE, MISC.: SHEAR KEY REPAIR IRRESPECTIVE OF DEPTH OR THICKNESS, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

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

ITEM 511. CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)

ITEM 848. SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN

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

EACH ITEM SHALL BE USED AT THE LOCATIONS INDICATED IN THE PLANS.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

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

ITEM SPECIAL - STEEL DRIP STRIP:

SEE STANDARD DRAWING DS-1-92 FOR DETAILS AND NOTES.

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.

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.

ITEM SPECIAL - BRIDGE DECK GROOVING:

THE BRIDGE DECK GROOVING SHALL MEET CMS 511.20.

THE BRIDGE DECK GROOVING SHALL BE DONE PRIOR TO OPENING TO TRAFFIC.

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 202 - REMOVAL MISC: STEEL DRIP STRIP:

THIS ITEM SHALL BE USED TO REMOVE THE DRIP STRIP ALONG BOTH SIDES OF THE STRUCTURE. THE COST TO REMOVE THE UPPER SHORT PIECES OF DRIP STRIP IS INCIDENTAL TO THIS ITEM.

CARE SHALL BE TAKEN TO NOT DAMAGE THE EXISTING PRESTRESSED BEAMS. IF THE BEAMS ARE DAMAGED, THE CONTRACTOR SHALL REPAIR THE BEAMS TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE STATE.

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

DESIGN FILE: I:\projects\83420\structures\83420GN001.dgn
MODELNAME: Design
DATE: 12/23/2010
WORKSTATION: cheiming

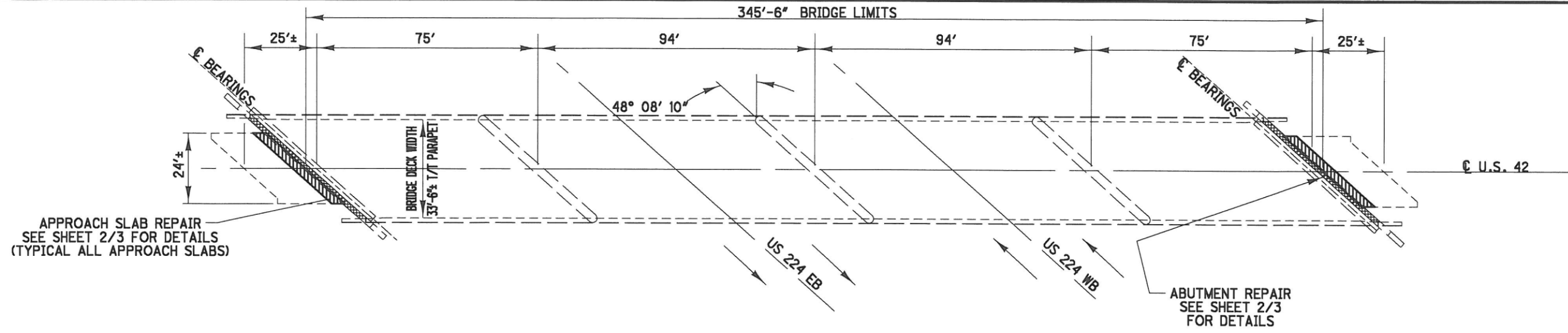
CALCULATED
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STRUCTURE NOTES


MED - 42 - 7.12

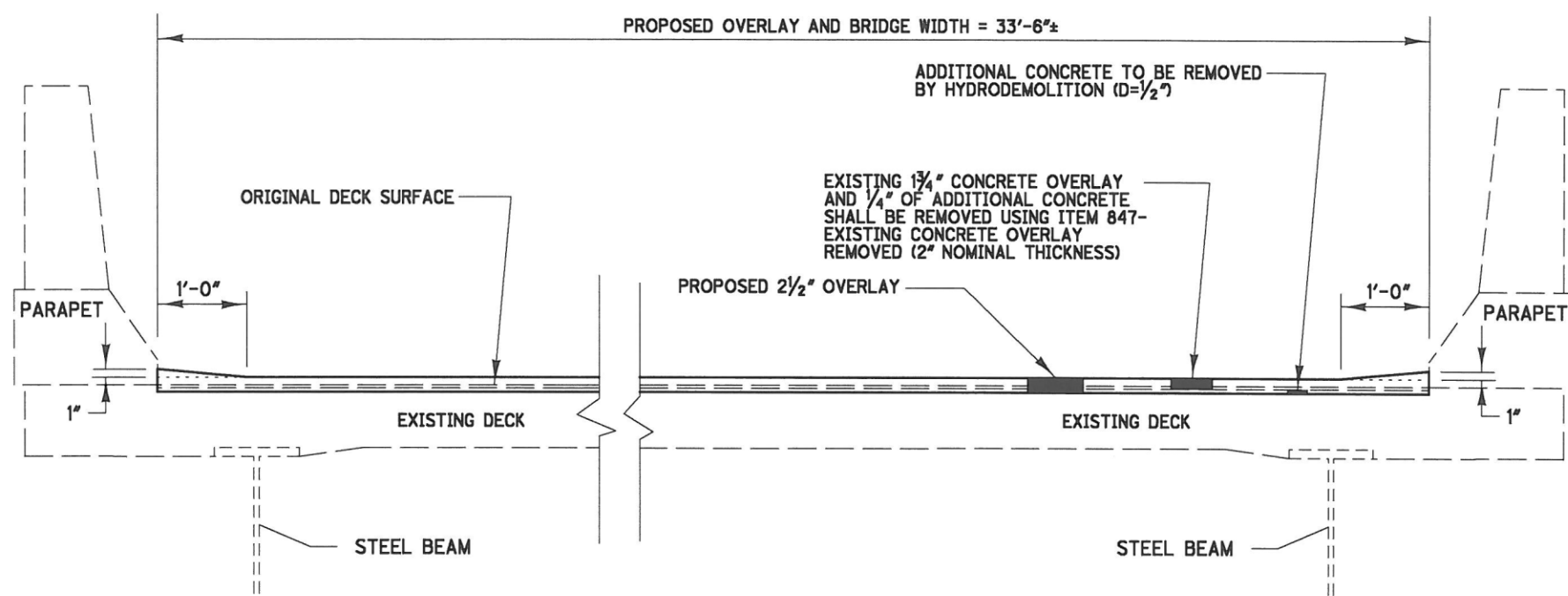
STRUCTURE FILE NO.	BRIDGE NO.	LOCATION	BRIDGE TYPE	SKEW	BRIDGE LIMITS	DECK WIDTH	PROPOSED WORK
5201381	MED-42-0714	OVER U.S. 224 OVER U.S. 42	4-SPAN STEEL BEAM	48° 8' 10" LF	345'-6"±	33'-6"± T/T PARAPETS	OVERLAY, ABUTMENT, BACKWALL & APPROACH SLAB REPAIR
5201454	MED-42-0945	OVER JIM'S RUN	1-SPAN CONC. BOX BEAM	30° 00' LF	41'-4"±	44'-0"± DECK EDGE	REGROUT SHEAR KEYWAY, WATERPROOF DECK, PLANE AND PAVE QUANTITIES WITH ROADWAY
5201462	MED-42-1179	OVER SMALL CREEK	1-SPAN CONC. BOX	17° 00' RF	14' X 4' BOX		SEAL CONCRETE HEADWALLS & WINGWALLS PLANE AND PAVE WITH ROADWAY
5201497	MED-42-1229	OVER SMALL CREEK	1-SPAN CONC. BOX	00°	18' THREE SIDED BOX	40'-0"± DECK EDGE	SEAL CONCRETE HEADWALLS & WINGWALLS PLANE AND PAVE SURFACE COURSE ONLY WITH ROADWAY DO NOT PLANE EXISTING INTERMEDIATE COURSE TO AVOID DECK
5201535	MED-42-1264	INLET TO CHIPPEWA CREEK	1-SPAN CMP ELLIPTICAL	9° 00' RF	16' X 10' ELLIPTICAL		NO WORK - PLANE AND PAVE WITH ROADWAY
5201586	MED-42-1370	OVER SMALL CREEK	1-SPAN CONC. BOX	00°	20' THREE SIDED BOX	40'-0"± DECK EDGE	SEAL CONCRETE HEADWALLS & WINGWALLS PLANE AND PAVE WITH ROADWAY

DESIGN FILE: I:\projects\83420\structures\83420_MED-42-0714.dgn
 WORKSTATION: oheining DATE: 12/22/2010 MODELNAME: Design



 REPAIR APPROACH SLAB WITH ITEM 202-PORCTIONS OF STRUCTURE REMOVED, AS PER PLAN AND ITEM 511-CLASS S CONCRETE, MISC.; APPROACH SLAB REPAIR

 REPAIR TOP OF BACKWALL WITH ITEM 202-PORCTIONS OF STRUCTURE REMOVED, AS PER PLAN AND ITEM 511-CLASS C CONCRETE, ABUTMENT, AS PER PLAN



OVERLAY DETAIL

ITEM	QUANTITY	UNIT	DESCRIPTION
202	7	CU YD	PORCTIONS OF STRUCTURE REMOVED, AS PER PLAN
511	5	CU YD	CLASS S CONCRETE, MISC.; APPROACH SLAB REPAIR
511	3	CU YD	CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)
512	728	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
516	102	FT	JOINT SEALER
SPECIAL	1275	SQ YD	BRIDGE DECK GROOVING
848	1275	SQ YD	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2 1/2" THICK)
848	1275	SQ YD	SURFACE PREPARATION USING HYDRODEMOLITION
848	4	CU YD	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
848	10	SQ YD	HAND CHIPPING
848	LUMP		TEST SLAB
848	1275	SQ YD	EXISTING CONCRETE OVERLAY REMOVED (2" NOMINAL THICKNESS)
848	10	SQ YD	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY

NOTES:
 1) SEE SHEETS 4 OF 5 AND 5 OF 5 FOR MAINTENANCE OF TRAFFIC DETAILS

DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PRODUCTION

DATE
 12/10
 REVIEWED
 RON
 STRUCTURE FILE NUMBER
 5201381

DRAWN
 ACH
 REVISED

DESIGNED
 ACH
 CHECKED
 DJV

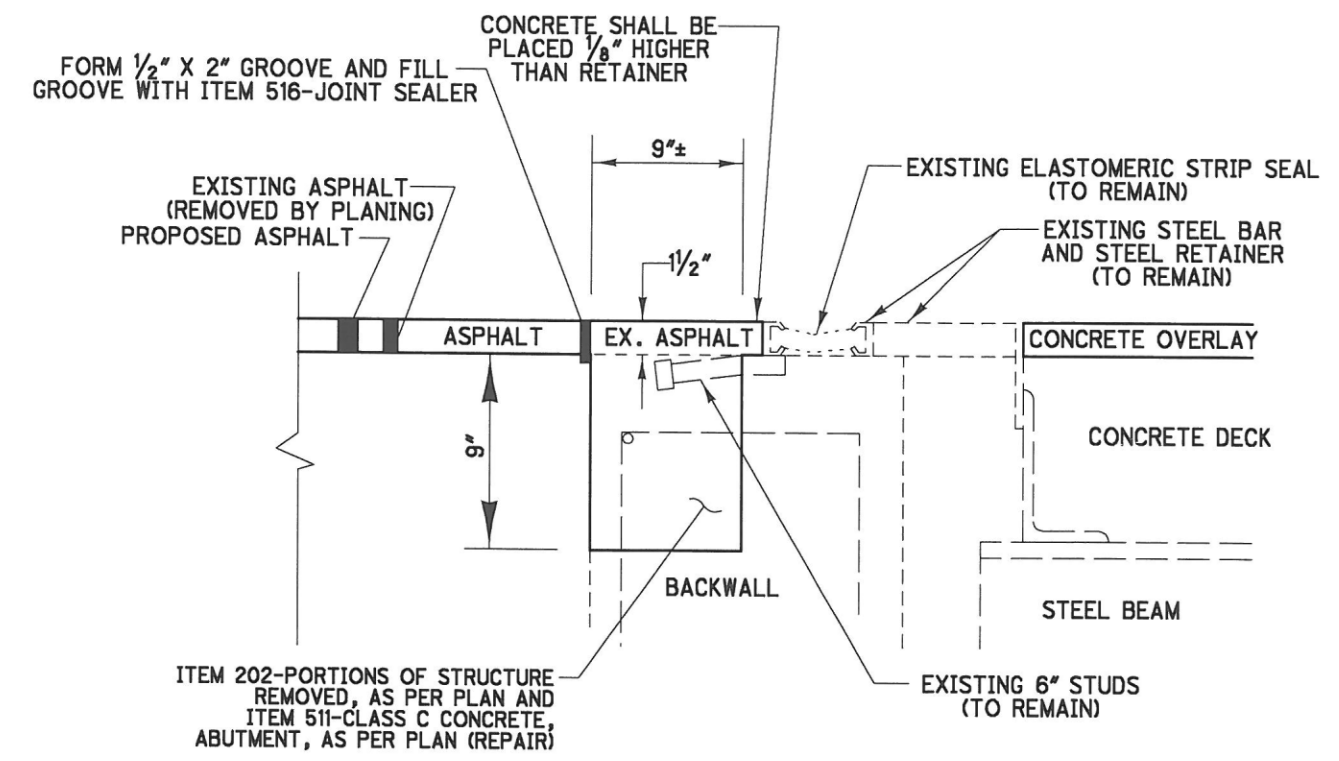
PLAN VIEW / OVERLAY DETAILS
 MED-42-0714 OVER U.S. 224

MED-42-7.12

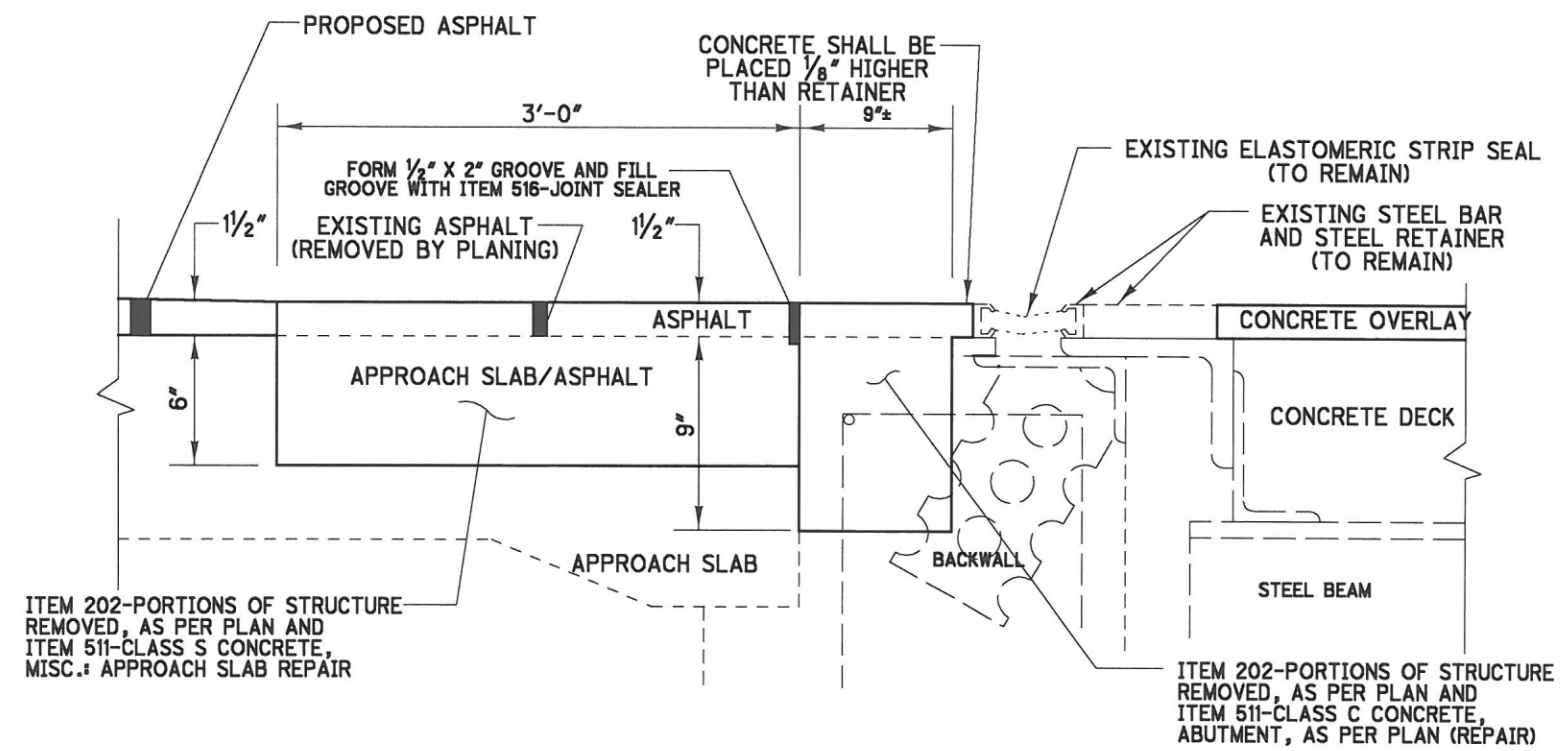
1 / 5

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DESIGN FILE: I:\projects\83420\structures\83420_MED-42-0714.dgn
 WORKSTATION: ahneing DATE: 12/22/2010 MODELNAME: Design



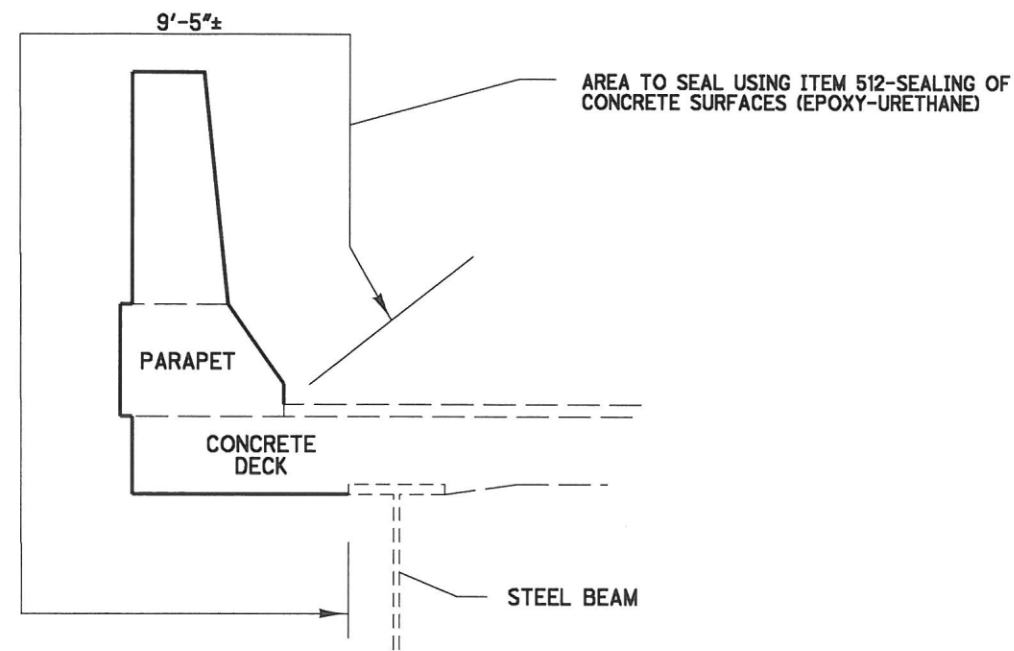
PROPOSED TYPICAL SECTION THROUGH REPAIR WITH NO APPROACH SLAB



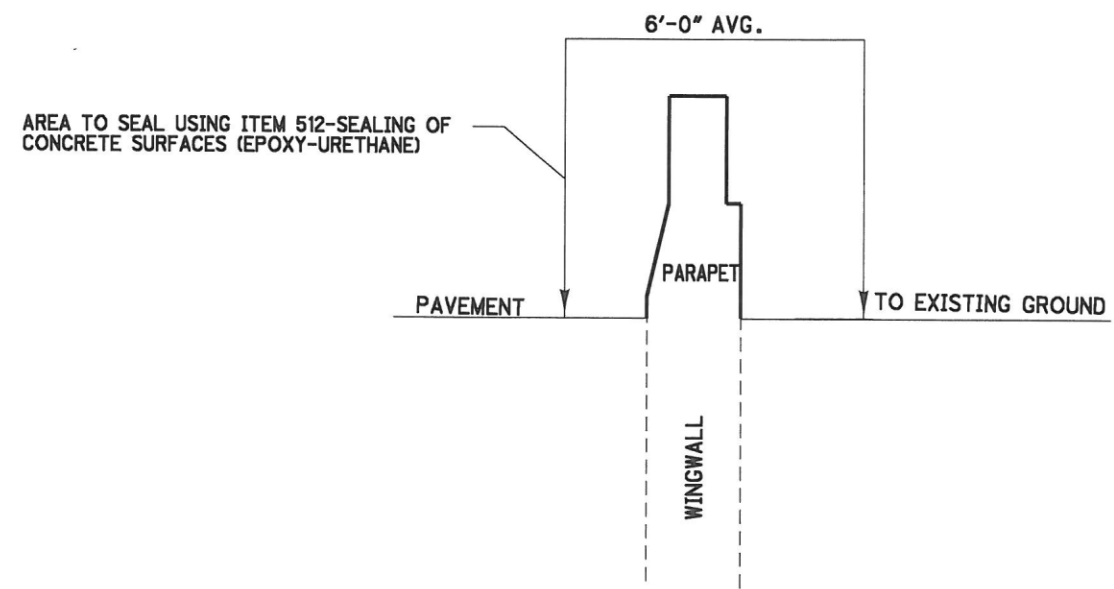
EXISTING TYPICAL SECTION THROUGH REPAIR THROUGH APPROACH SLAB

- NOTES:
1. REPAIR APPROACH SLABS AS SHOWN IN PLAN WITH ITEM 202, PORTIONS OF STRUCTURE REMOVED, APP, ITEM 511, CLASS S CONCRETE, MISC.: APPROACH SLAB REPAIR, AND ITEM 516, JOINT SEALER.
 2. REPAIR BACKWALLS AS SHOWN IN PLAN WITH ITEM 202, PORTIONS OF STRUCTURE REMOVED, APP, AND ITEM 511, CLASS C CONCRETE, ABUTMENT, AS PER PLAN.
 3. ALL EXISTING REINFORCING STEEL SHALL BE PRESERVED.
 4. THE PROPOSED OVERLAY ELEVATIONS SHALL MATCH THE EXISTING OVERLAY ELEVATION.

DESIGN FILE: I:\projects\83420\structures\83420 MED-42-0714.dgn
 WORKSTATION: chneining DATE: 12/22/2010 MODELNAME: Design



PARAPET SEALING DETAIL
 (PARAPET SEALING LENGTH ON DECK = 342'-6"±)



PARAPET SEALING OFF BRIDGE DETAIL
 (PARAPET SEALING LENGTH = 4'-0"±)

ITEM	QUANTITY	UNIT	DESCRIPTION
512	728	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

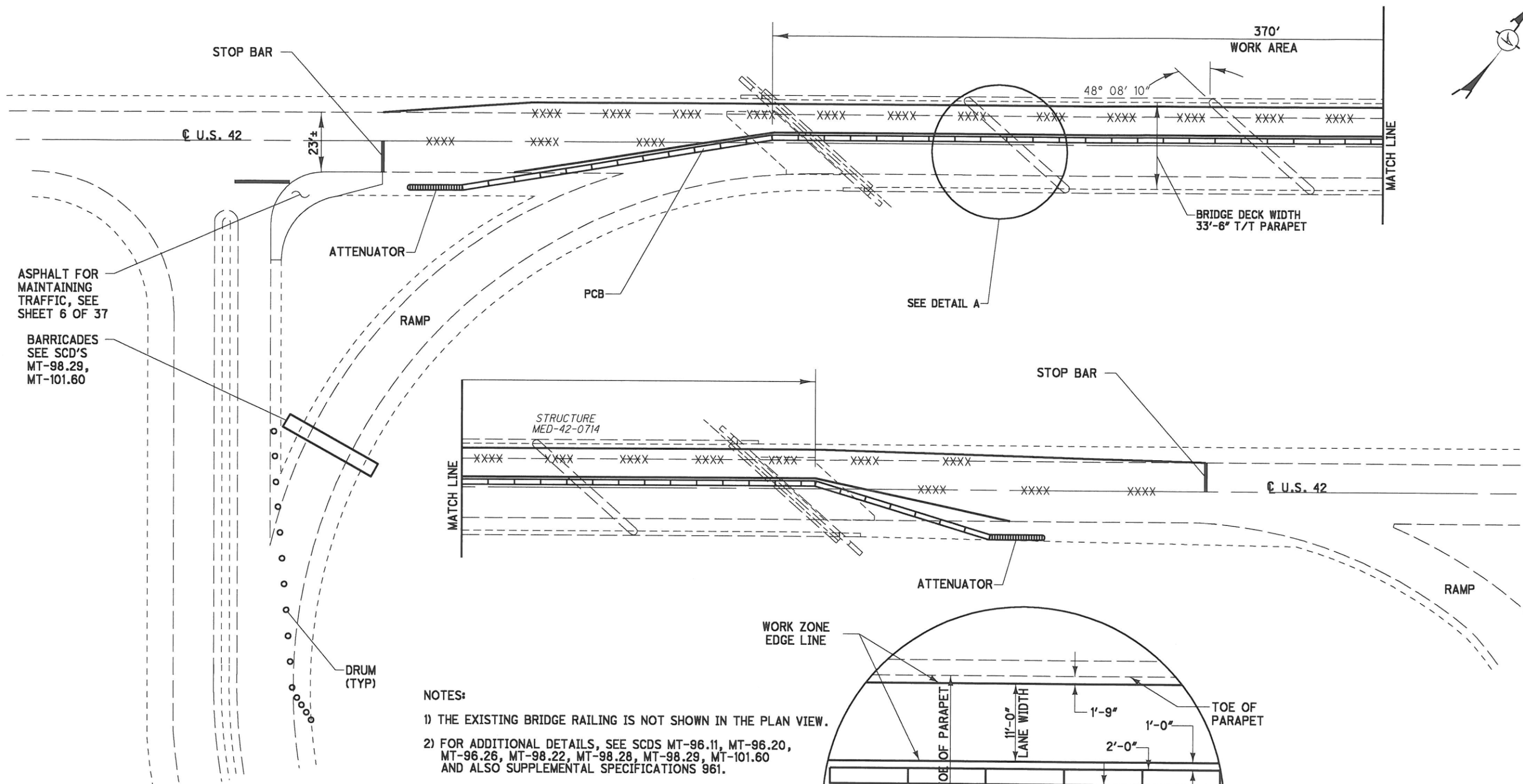
ALL QUANTITIES CARRIED TO SHEET 1/5.

NOTES:

- 1) SEAL PARAPETS WITH ITEM 512
- 2) SEE SHEETS 4 OF 5 AND 5 OF 5 FOR MAINTENANCE OF TRAFFIC DETAILS

DESIGN FILE: I:\projects\83420\structures\MOT.dgn
 WORKSTATION: chneing DATE: 12/21/2010

MODELNAME: Design



ASPHALT FOR MAINTAINING TRAFFIC, SEE SHEET 6 OF 37

BARRICADES SEE SCD'S MT-98.29, MT-101.60

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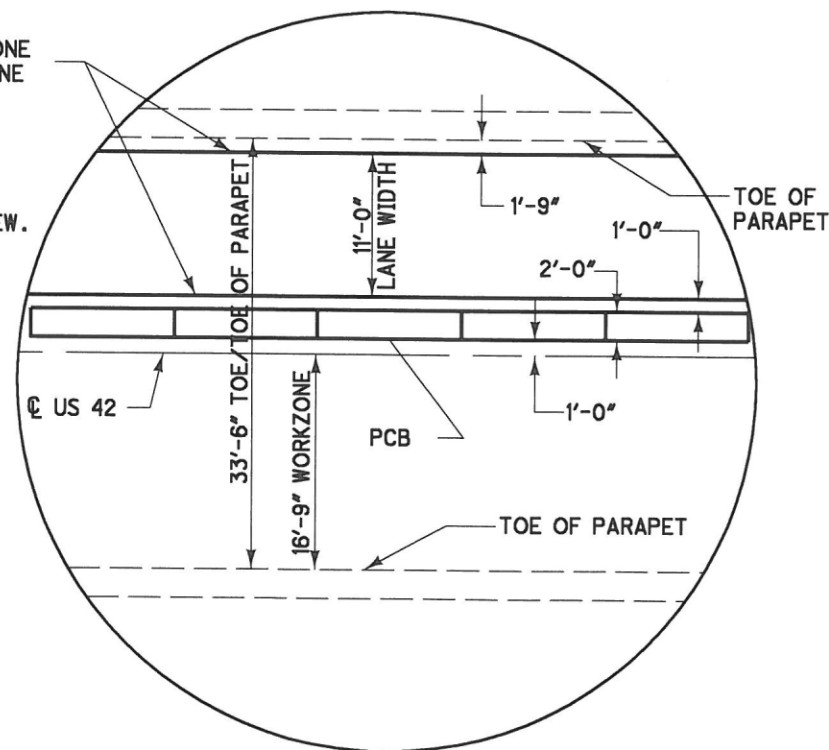
NOTES:

- 1) THE EXISTING BRIDGE RAILING IS NOT SHOWN IN THE PLAN VIEW.
- 2) FOR ADDITIONAL DETAILS, SEE SCD'S MT-96.11, MT-96.20, MT-96.26, MT-98.22, MT-98.28, MT-98.29, MT-101.60 AND ALSO SUPPLEMENTAL SPECIFICATIONS 961.
- 3) SEE SHEET 5 OF 5 FOR PHASE B.

ITEM	QUANTITY	UNIT	DESCRIPTION
614	13	EACH	BARRIER REFLECTOR, TYPE A2
614	42	EACH	BARRIER REFLECTOR, TYPE B2
614	4	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)
614	0.06	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I
614	0.47	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I
614	23	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I
622	370	FT	PORTABLE CONCRETE BARRIER, 32"
622	740	FT	PORTABLE CONCRETE BARRIER, 32" BRIDGE MOUNTED (UNANCHORED)

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET

WORK ZONE EDGE LINE



PHASE A

DETAIL A

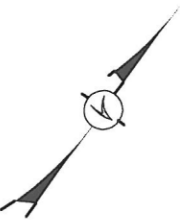
SIGNAL TIMING

A TWO PHASE CONTROLLER WITH CABINET CAPABLE OF BEING SET WITH THE FOLLOWING SPLITS SHALL BE FURNISHED

CYCLE LENGTH: 90 SECONDS

	GREEN	AMBER	RED
PHASE A	25	5	15
PHASE B	25	5	15

THE ABOVE TIMING MAYBE CHANGED WITH THE APPROVAL OF THE ENGINEER



DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PRODUCTION

REVIEWED DATE
 RDN 12/10
 STRUCTURE FILE NUMBER
 5201381

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 REVISED

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MAINTENANCE OF TRAFFIC PLAN-PHASE A
 MED-42-0714
 OVER SR 224/ US 42

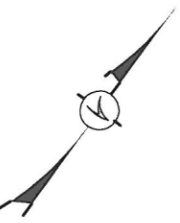
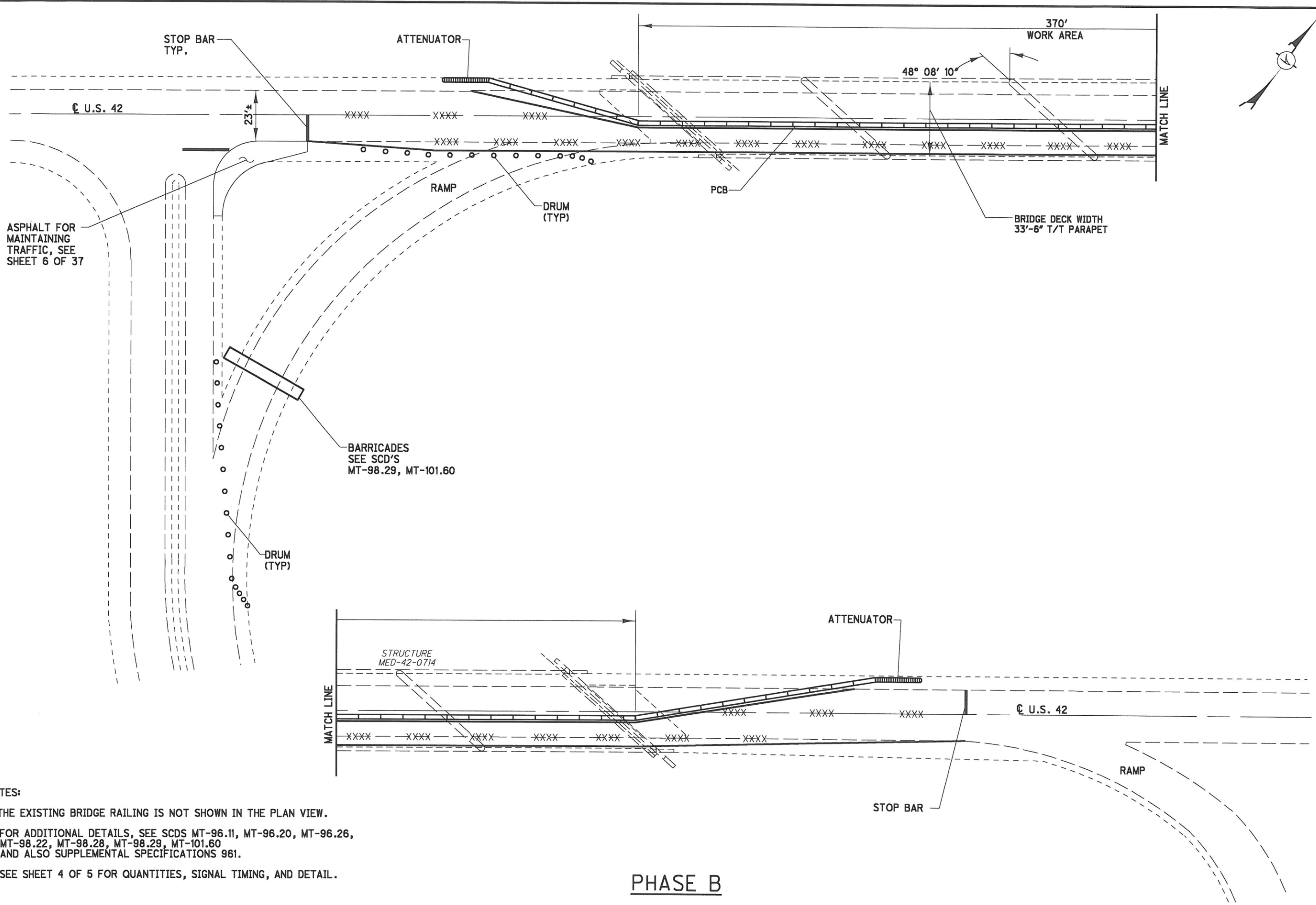
MED-42-7.12

4 / 5

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DESIGN FILE: I:\projects\83420\structures\MOT.dgn
 WORKSTATION: ahelning DATE: 12/21/2010

MODELNAME: Design

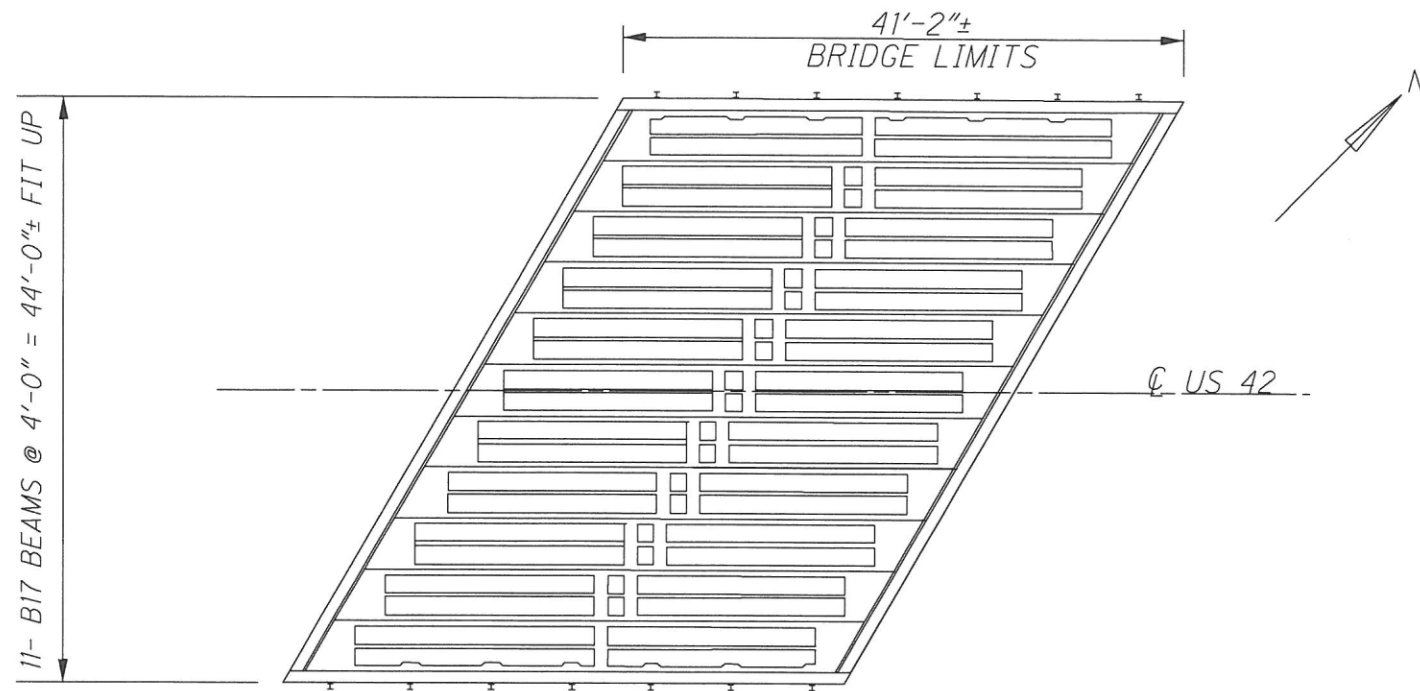


- NOTES:
- 1) THE EXISTING BRIDGE RAILING IS NOT SHOWN IN THE PLAN VIEW.
 - 2) FOR ADDITIONAL DETAILS, SEE SCDS MT-96.11, MT-96.20, MT-96.26, MT-98.22, MT-98.28, MT-98.29, MT-101.60 AND ALSO SUPPLEMENTAL SPECIFICATIONS 961.
 - 3) SEE SHEET 4 OF 5 FOR QUANTITIES, SIGNAL TIMING, AND DETAIL.

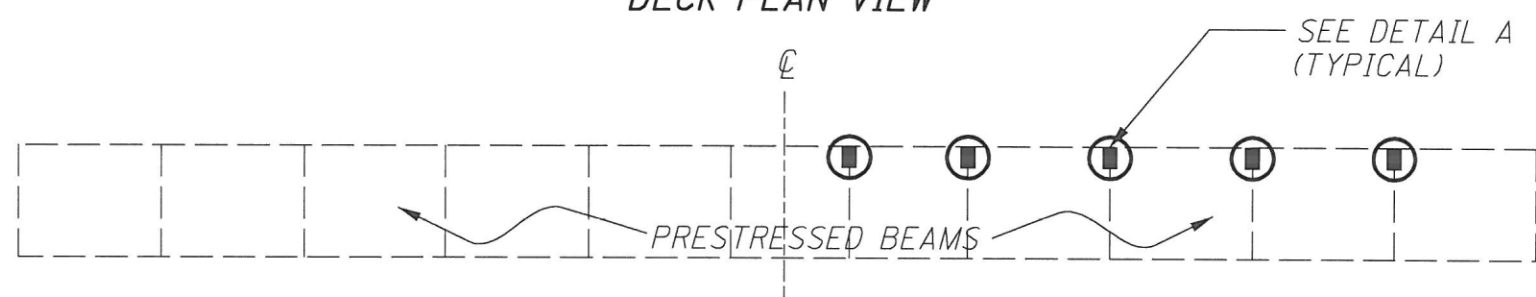
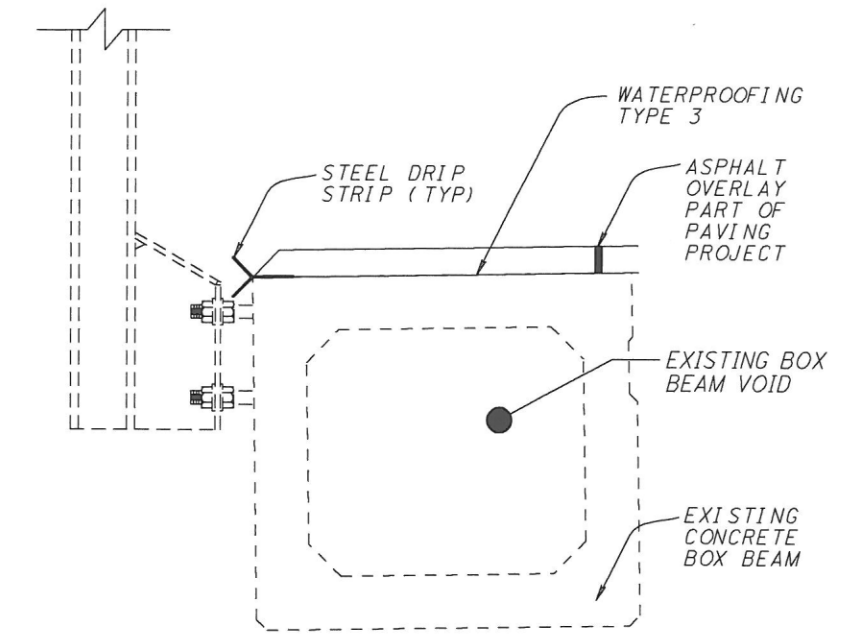
ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET

PHASE B

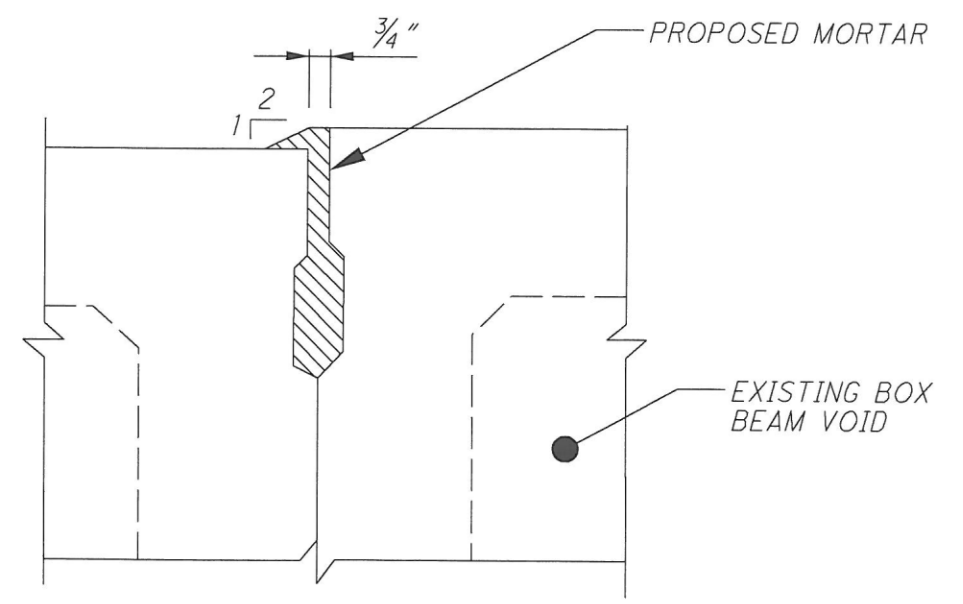
DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PRODUCTION	
DATE 12/10	REVIEWED RDN
STRUCTURE FILE NUMBER 5201361	REVISOR
DRAWN ACH	CHECKED DCM
DESIGNED ACH	
MAINTENANCE OF TRAFFIC PLAN-PHASE B MED-42-0714 OVER SR 224/ US 42	
MED-42-7.12	
5 / 5	
32 / 37	



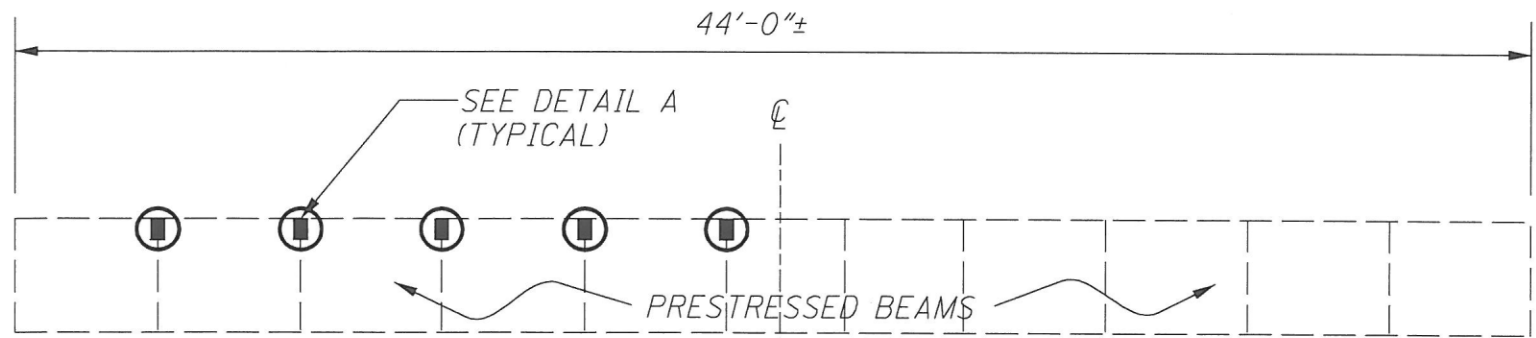
DECK PLAN VIEW



TYPICAL SECTION PHASE A



DETAIL A SHEAR KEY REPAIR



TYPICAL SECTION PHASE B

■ SHEAR KEY REPAIR LOCATIONS
SHEAR KEY LENGTH = 41'-2"±

ITEM	QUANTITY	UNIT	DESCRIPTION
202	103.33	FT	REMOVAL MISC.: STEEL DRIP STRIP
SPECIAL	103.33	FT	STEEL DRIP STRIP
512	225	SQ YD	TYPE 3 WATERPROOFING
SPECIAL	412	FT	STRUCTURE, MISC.: SHEAR KEY REPAIR

NOTE: FOR MOT DETAILS SEE SHEET 2 OF 2.
NOTE: FOR DETAILS ON THE SHEAR KEY REPAIR, SEE STRUCTURE GENERAL NOTES SHEET.

DESIGN FILE: I:\projects\83420\structures\945.dgn
WORKSTATION: chahning DATE: 12/22/2010
MODELNAME: Design

DESIGN AGENCY
ODOT DISTRICT 3
OFFICE OF PRODUCTION

DATE
12/10
REVIEWED
RDN
STRUCTURE FILE NUMBER
5201454

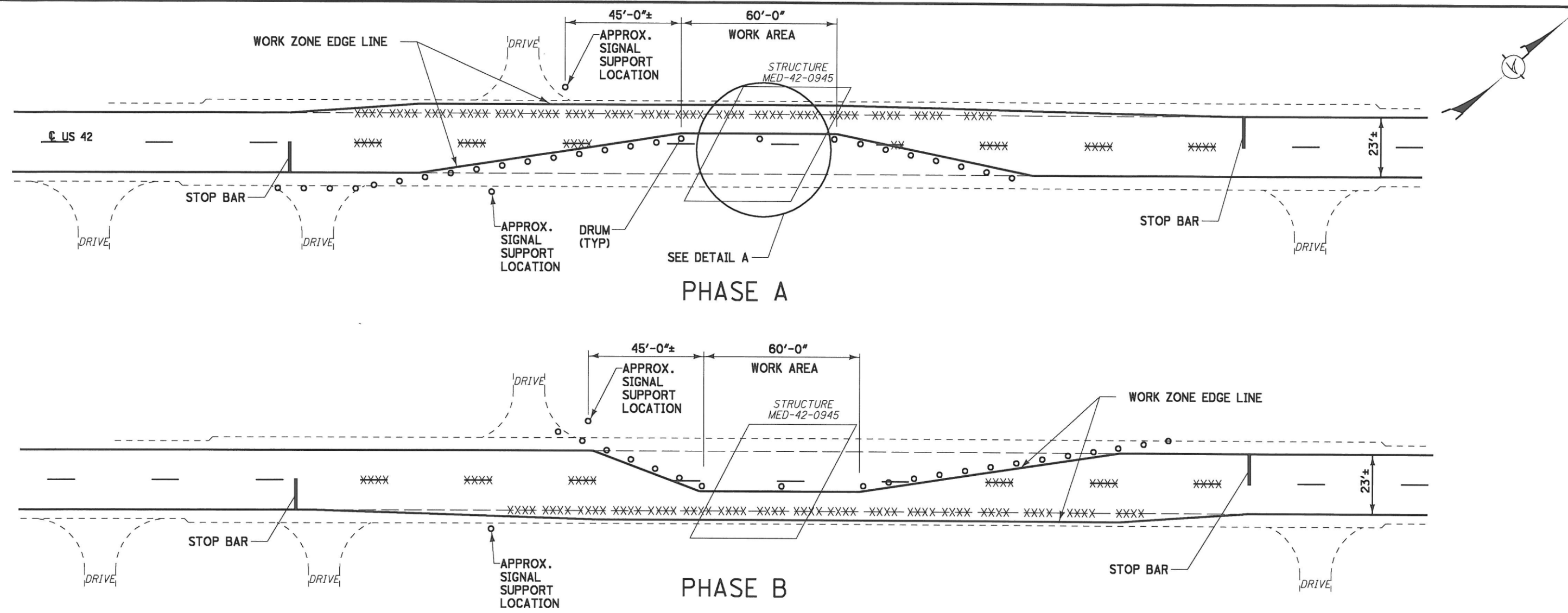
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SHEAR KEY REPAIR DETAIL
MED-42-0945 OVER JIM'S RUN

MED-42-7.12

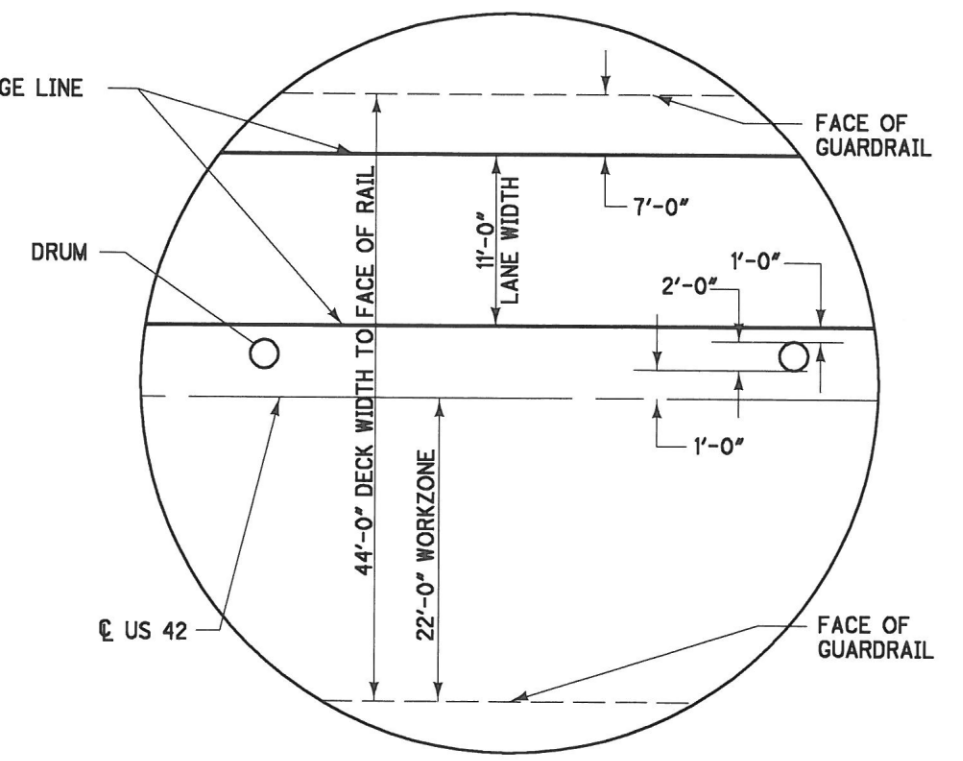
1 / 33
37

DESIGN FILE: I:\projects\83420\structures\MOT.dgn
 WORKSTATION: oheining
 MODELNAME: Design
 DATE: 12/21/2010



PHASE A

PHASE B



DETAIL A

NOTES:

- 1) THE EXISTING BRIDGE RAILING IS NOT SHOWN IN THE PLAN VIEW.
- 2) FOR ADDITIONAL DETAILS, SEE SCDS MT-96.11, MT-96.20, MT-96.26 AND ALSO SUPPLEMENTAL SPECIFICATIONS 961.

ITEM	QUANTITY	UNIT	DESCRIPTION
614	12	EACH	BARRIER REFLECTOR, TYPE A2
614	0.06	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I
614	0.22	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I
614	23	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I

ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET

SIGNAL TIMING

A TWO PHASE CONTROLLER WITH CABINET CAPABLE OF BEING SET WITH THE FOLLOWING SPLITS SHALL BE FURNISHED

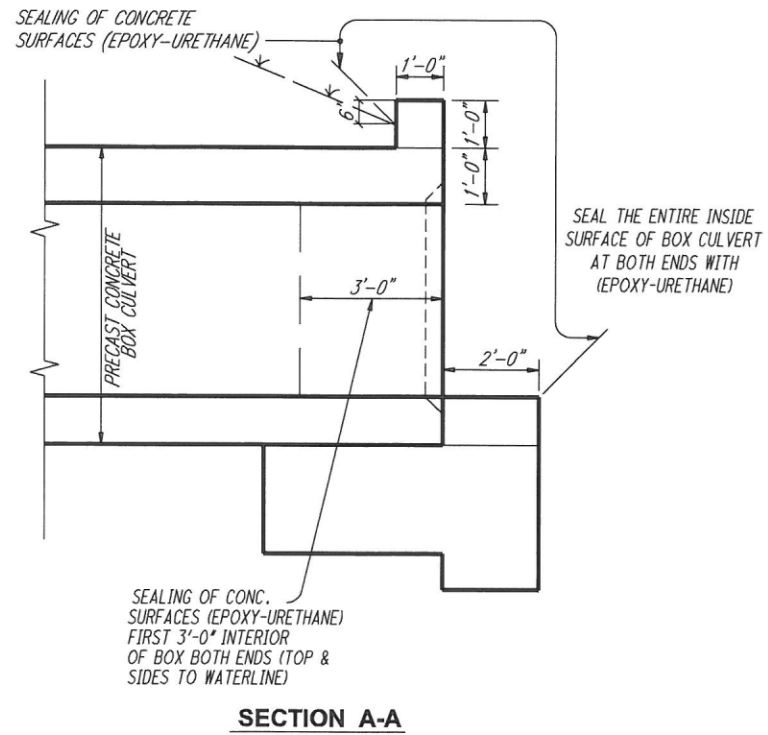
CYCLE LENGTH: 60 SECONDS

	GREEN	AMBER	RED
PHASE A	15	5	10
PHASE B	15	5	10

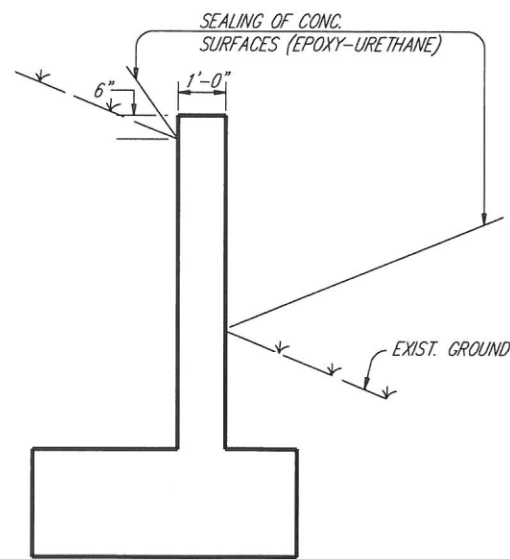
THE ABOVE TIMING MAYBE CHANGED WITH THE APPROVAL OF THE ENGINEER

DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PRODUCTION
DATE 12/10
REVIEWED RDN
STRUCTURE FILE NUMBER 5201454
DRAWN ACH
REVISOR
DESIGNED ACH
CHECKED DCM
MAINTENANCE OF TRAFFIC PLAN MED-42-0945
MED-42-7.12
2 / 2
34 37

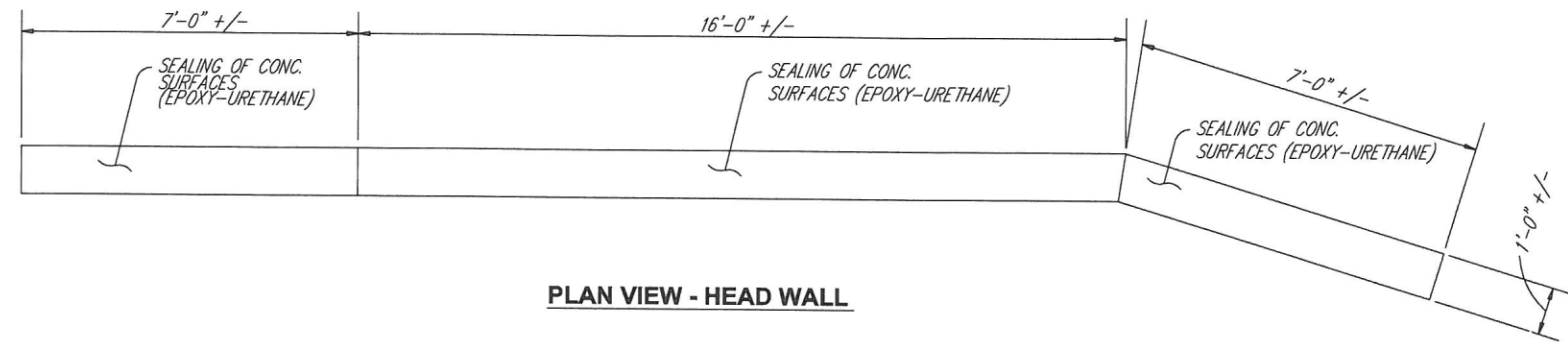
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 WORKSTATION: ahaining DATE: 12/22/2010 MODELNAME: Model



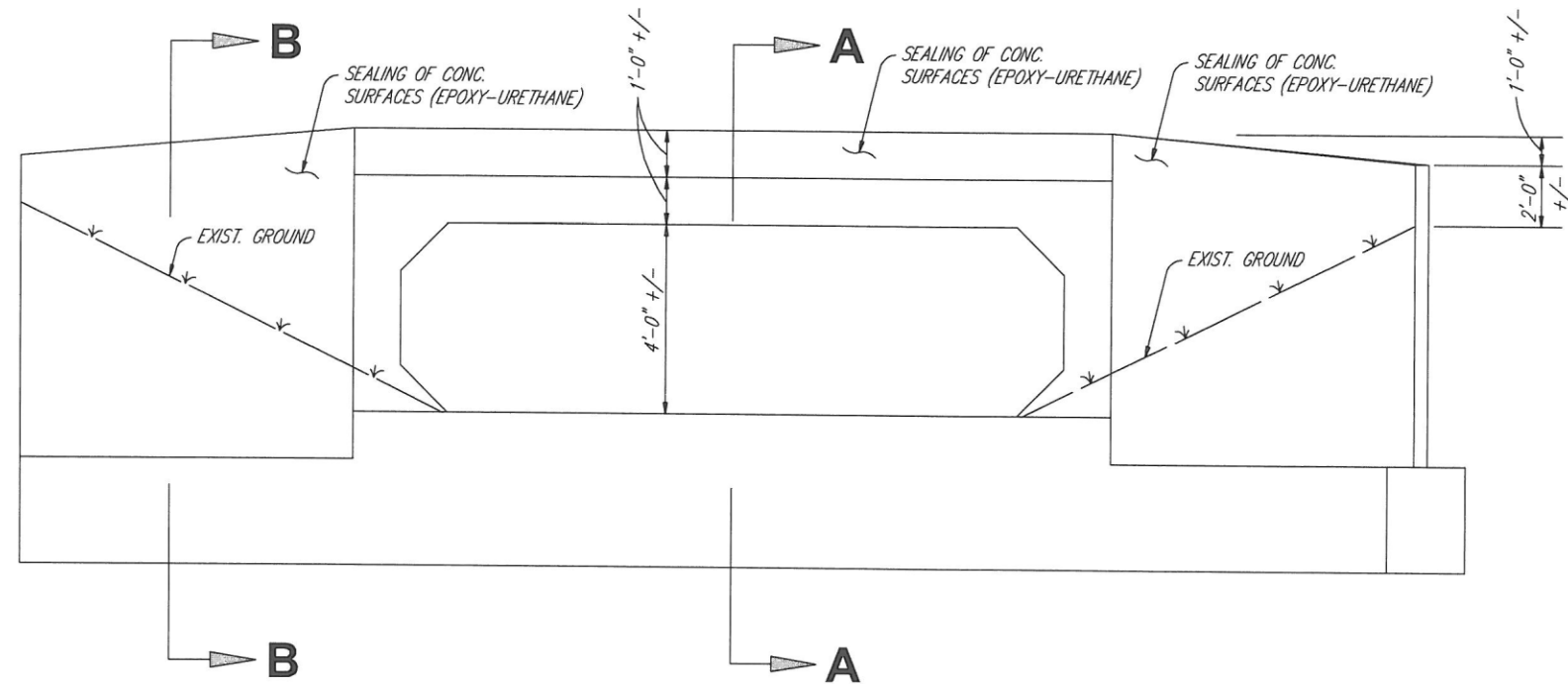
SECTION A-A



SECTION B-B



PLAN VIEW - HEAD WALL



ELEVATION VIEW - HEADWALL/WINGWALL
 INLET / OUTLET HEADWALL & WINGWALLS SIMILAR

ESTIMATED QUANTITIES			
ITEM	QUANT.	UNIT	DESCRIPTION
512	58	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)

NOTE: ALL QUANTITIES CARRIED TO SHEET 25 OF 37

STRUCTURAL SEALING DETAILS
 MED-42-1179 BRIDGE OVER SMALL CREEK

MED-42-7.12

1 / 1

35
37

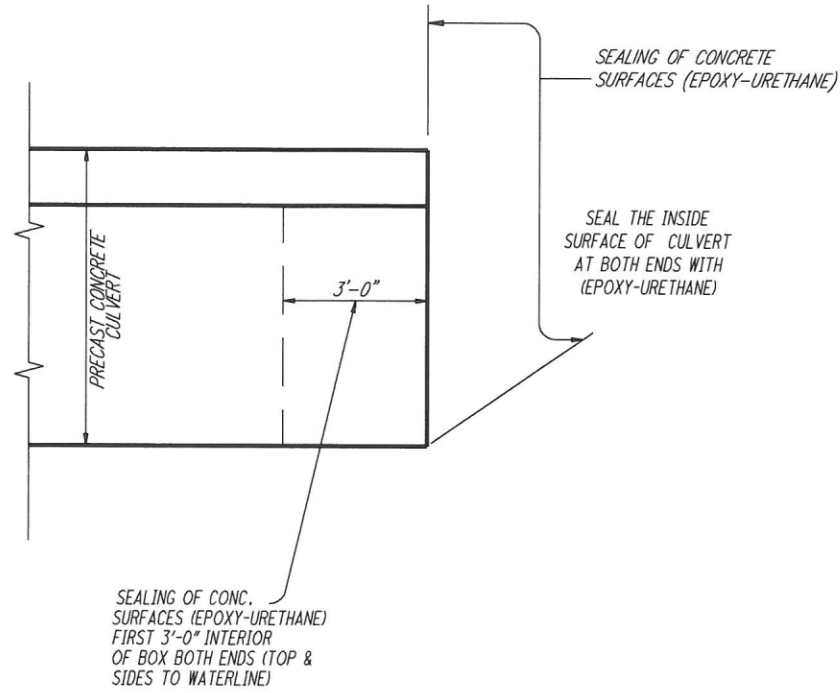
DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF PRODUCTION

REVIEWED
 RDN
 DATE
 12/10
 STRUCTURE FILE NUMBER
 5201462

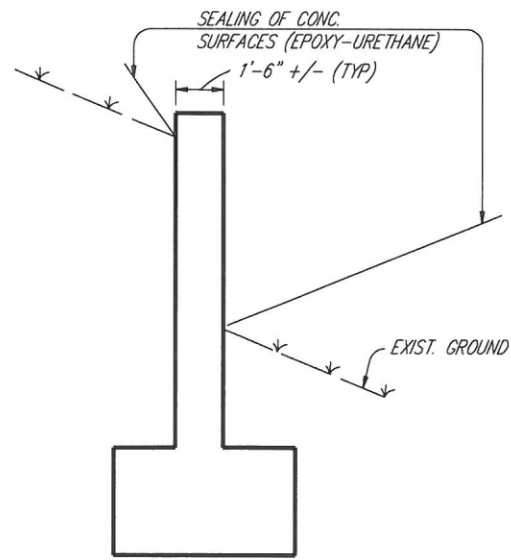
DESIGNED
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 REVISED

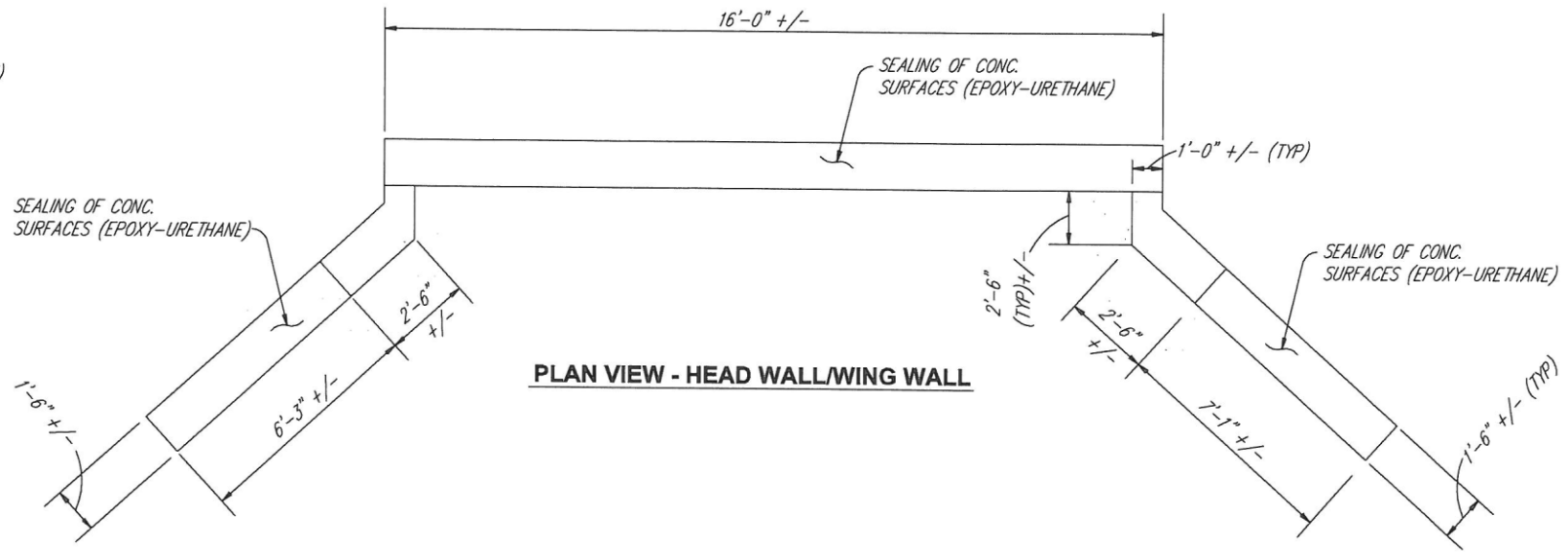
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 WORKSTATION: aheining DATE: 12/22/2010 MODELNAME: Model



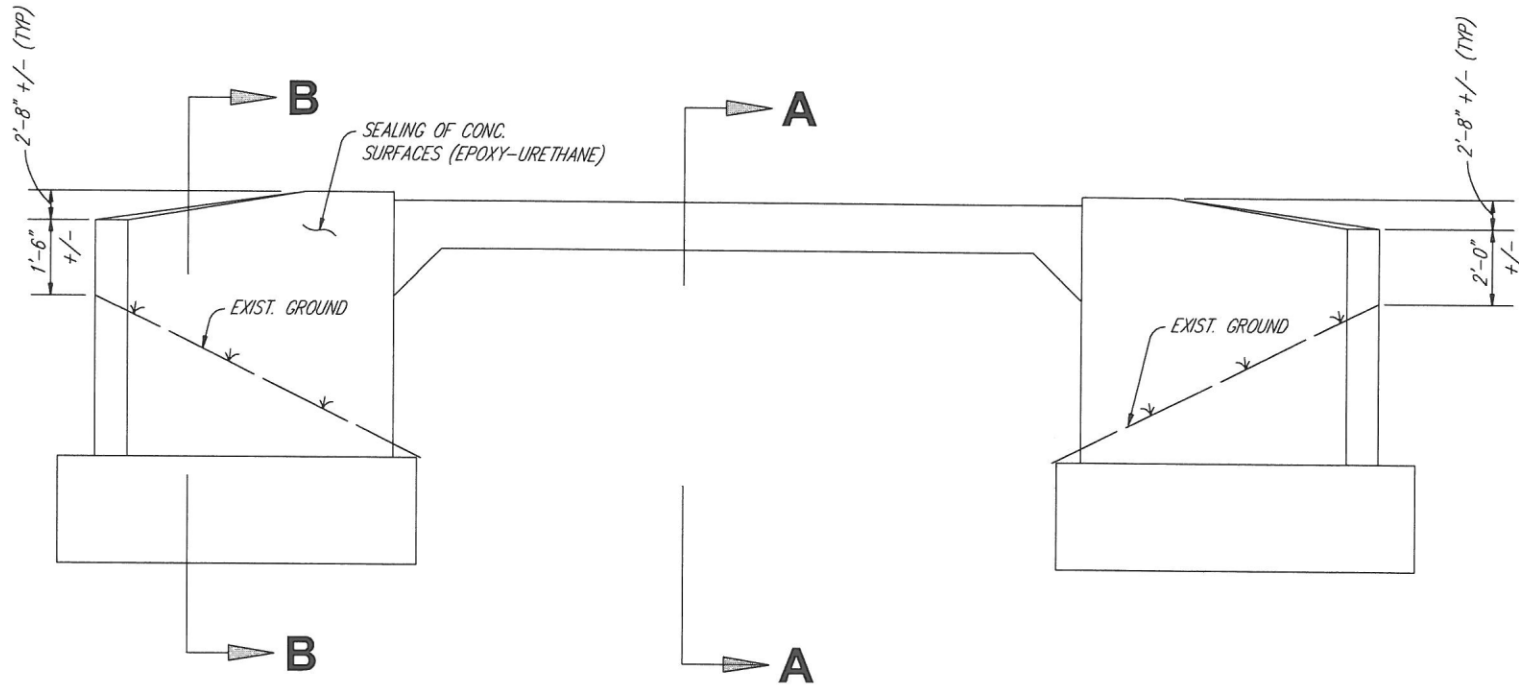
SECTION A-A



SECTION B-B



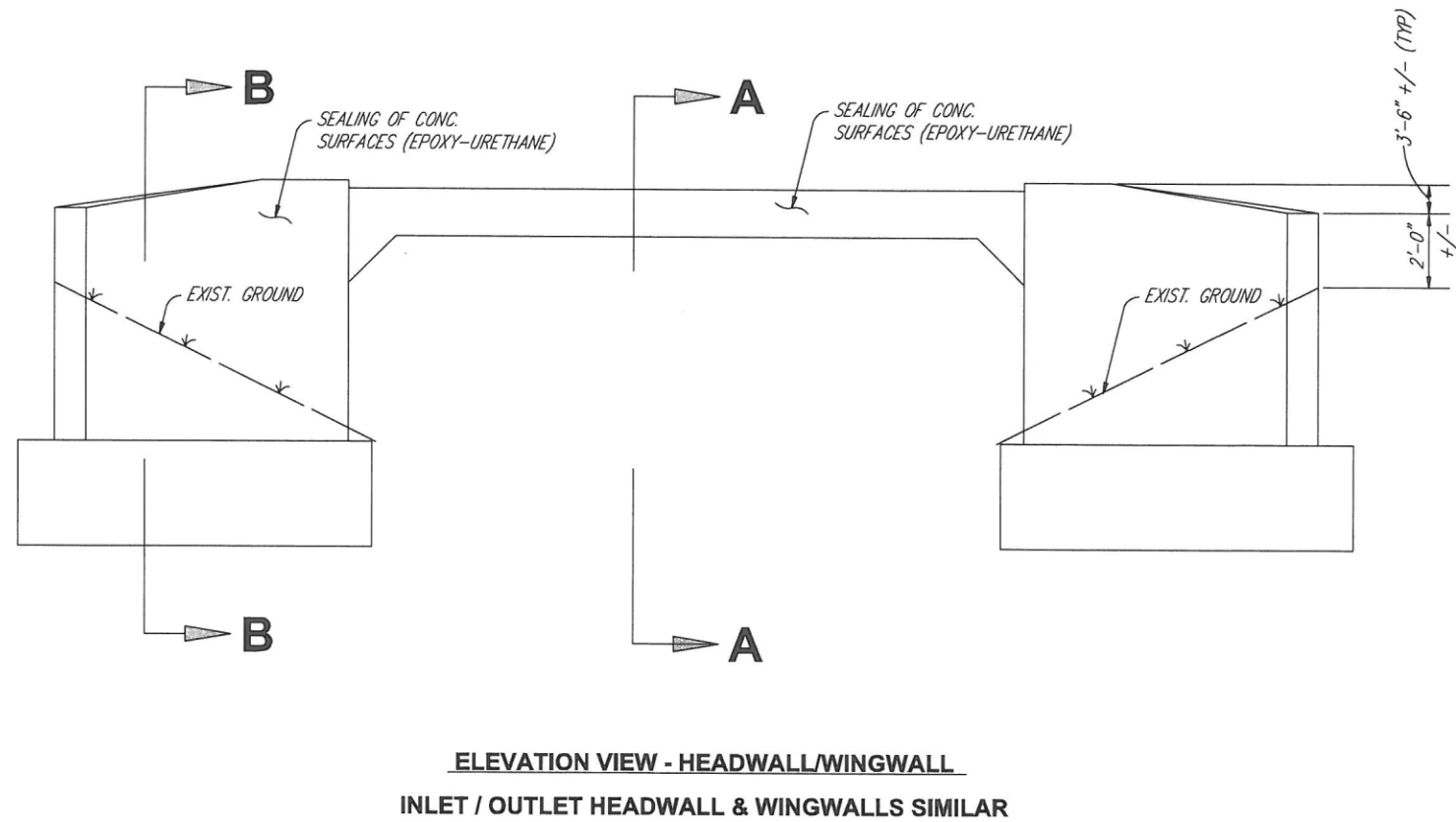
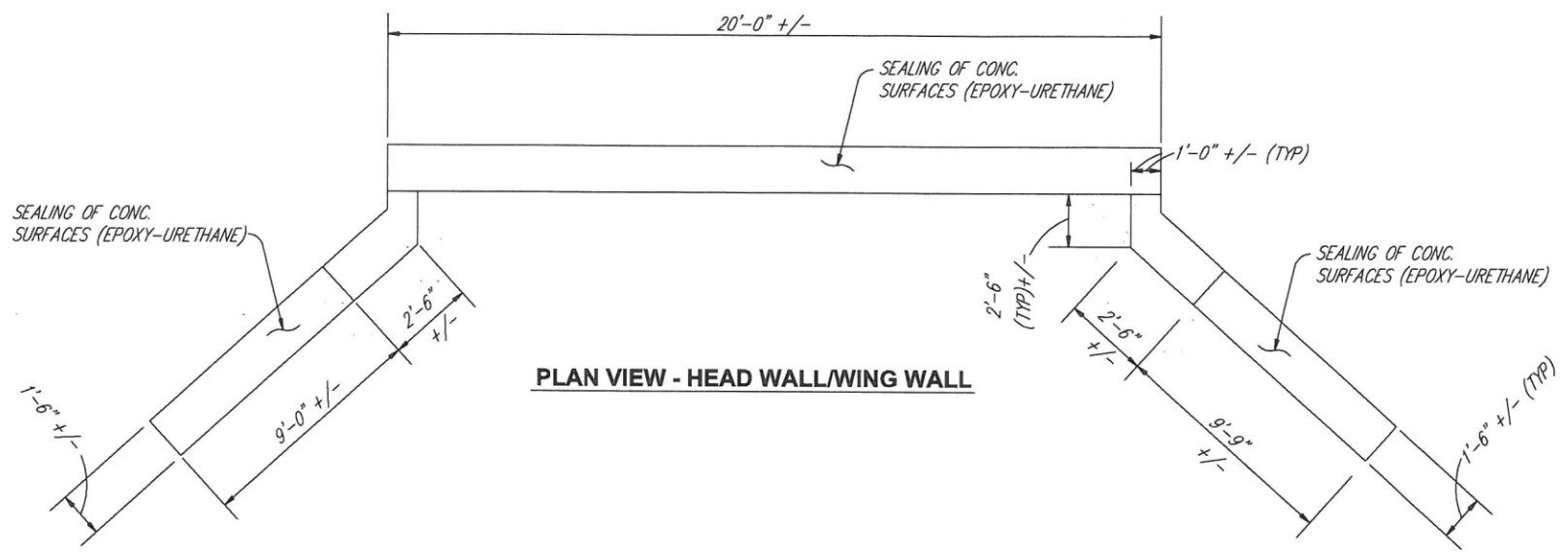
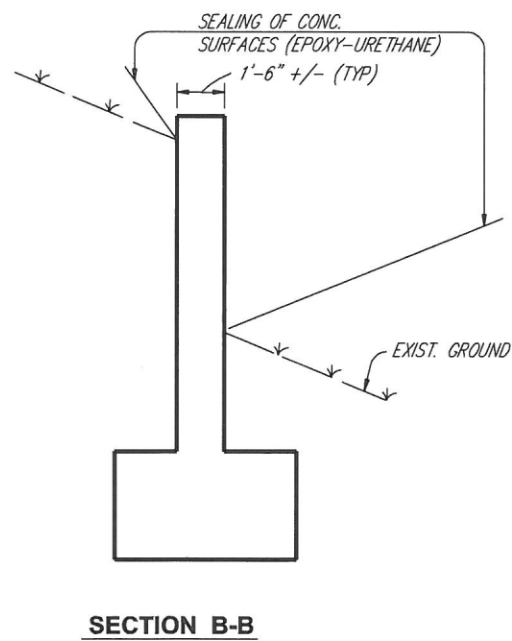
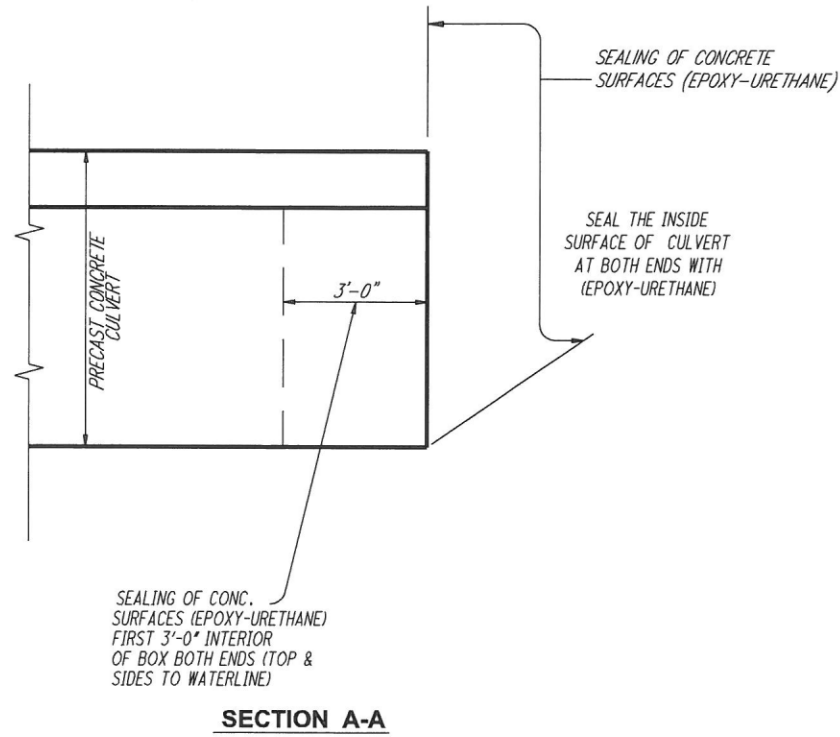
PLAN VIEW - HEAD WALL/WING WALL



ELEVATION VIEW - HEADWALL/WINGWALL
 INLET / OUTLET HEADWALL & WINGWALLS SIMILAR

ESTIMATED QUANTITIES			
ITEM	QUANT.	UNIT	DESCRIPTION
512	68	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)

NOTE: ALL QUANTITIES CARRIED TO SHEET 25 OF 37



ESTIMATED QUANTITIES			
ITEM	QUANT.	UNIT	DESCRIPTION
512	88	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)

NOTE: ALL QUANTITIES CARRIED TO SHEET 25 OF 37