

STATE OF OHIO
DEPARTMENT OF
TRANSPORTATION

HUR-4-0.00

CITY OF BELLEVUE LYME TOWNSHIP SHERMAN TOWNSHIP

PROJECT DESCRIPTION
THIS PROJECT WILL INCLUDE PAVEMENT REPAIR,
RESURFACING 6.66 MILES WITH ASPHALT CONCRETE,
PLANING, ADJUSTMENT OF CASTINGS WHERE
NECESSARY, GUARDRAIL, PAVEMENT MARKINGS,
AND MINOR STRUCTURE REHABILITATION.

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

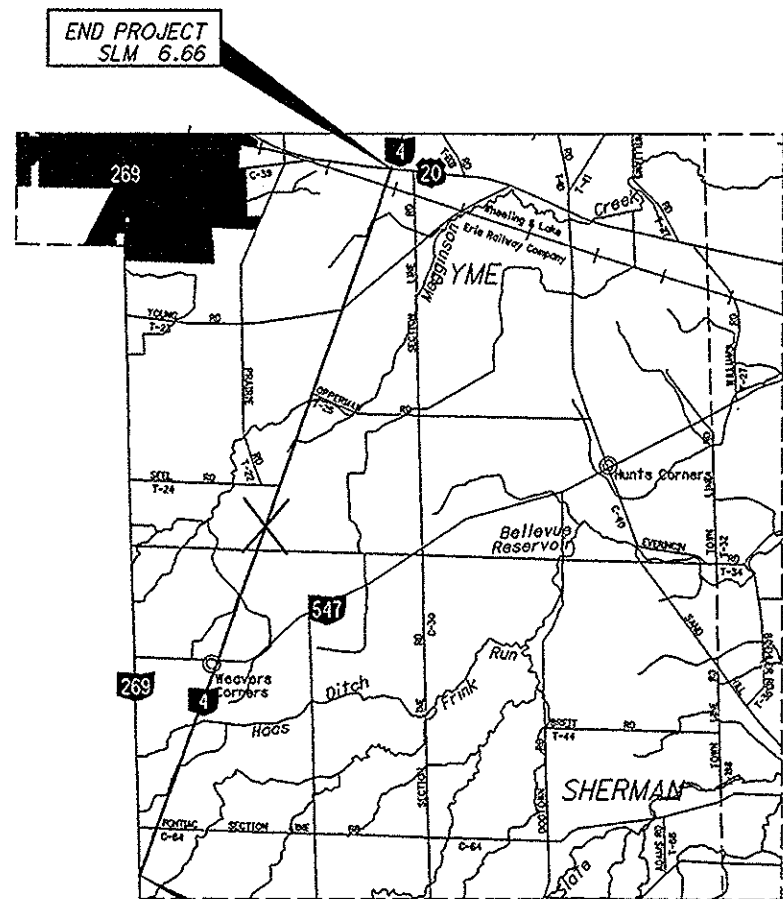
2010 SPECIFICATIONS
THE STANDARD SPECIFICATIONS OF THE STATE OF
OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING
CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED
IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT
THE MAKING OF THESE IMPROVEMENTS WILL
REQUIRE THE CLOSING OF THE HIGHWAY AND
PROVISIONS FOR THE MAINTENANCE AND SAFETY OF
TRAFFIC WILL BE AS INDICATED IN THE PLAN AND
PROPOSAL AND ON SHEET 7.

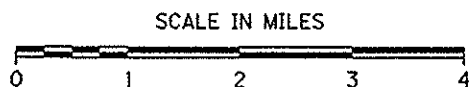
APPROVED: *John C. Deed*
DATE: 8-24-11 DISTRICT DEPUTY DIRECTOR

APPROVED: *Erny Wray*
DATE: 8-31-11 DIRECTOR, DEPARTMENT OF
TRANSPORTATION

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LOCATION MAP
X = LATITUDE: 41°13'06" LONGITUDE: 82°48'59"



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

DESIGN DESIGNATION: SEE SHEET 2
3R PROJECT

ROADWAY ENGINEERS SEAL:	STRUCTURE/CULVERT ENGINEERS SEAL:	STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS			
		BP-3.1	10/19/07	MT-97.10	10/15/10	TC-41.20	1/19/01	800	7/15/11
		BP-4.1	7/16/04	MT-97.12	10/15/10	TC-41.40	7/16/04	832	5/5/09
				MT-99.20	1/16/09	TC-52.10	1/19/07		
		DM-4.3	4/17/09	MT-101.60	4/17/09	TC-52.20	1/19/07		
		DM-4.4	4/17/09	MT-101.90	1/16/09	TC-65.10	1/21/05		
				MT-105.10	1/16/09	TC-65.11	1/21/05		
		GR-1.1	7/16/04			TC-71.10	1/21/11		
		GR-2.1	1/16/04			TC-73.10	1/19/01		
		GR-3.3	10/16/09			TC-82.10	1/21/11		
				RM-1.1	7/15/11				

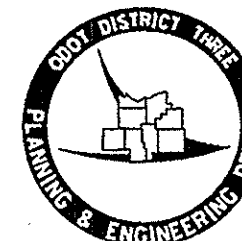
UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

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

PLAN PREPARED BY:



FEDERAL PROJECT NO. E071151
PID NO. 25682
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT
WHEELING AND LAKE ERIE
HUR-4-0.00
1/22

HUR - SR-4-0.00
110603 PID - 25682
Dist 3 12/1/2011
Contract Proposal Available
@www.contacts.dot.state.oh.us/home

BEGIN
PROJECT
SLM 0.00

E071151

DESIGN FUNCTIONAL CLASSIFICATION:
RURAL MINOR ARTERIAL
NHS PROJECT ----- NO

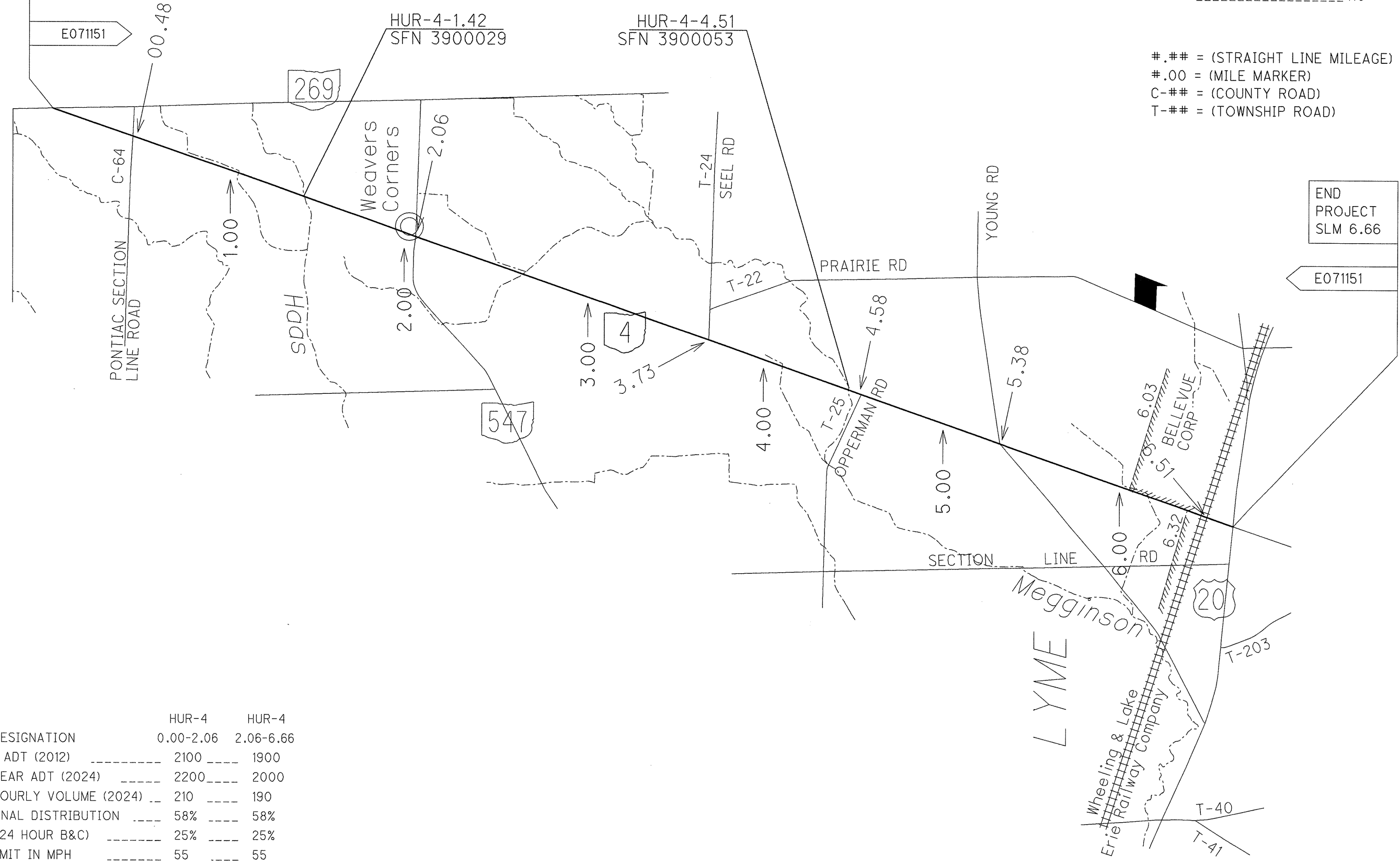


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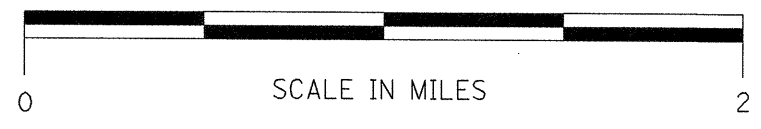
= (STRAIGHT LINE MILEAGE)
#.00 = (MILE MARKER)
C-### = (COUNTY ROAD)
T-### = (TOWNSHIP ROAD)

END
PROJECT
SLM 6.66

E071151



	HUR-4	HUR-4
DESIGN DESIGNATION	0.00-2.06	2.06-6.66
CURRENT ADT (2012)	2100	1900
DESIGN YEAR ADT (2024)	2200	2000
DESIGN HOURLY VOLUME (2024)	210	190
DIRECTIONAL DISTRIBUTION	58%	58%
TRUCKS (24 HOUR B&C)	25%	25%
SPEED LIMIT IN MPH	55	55

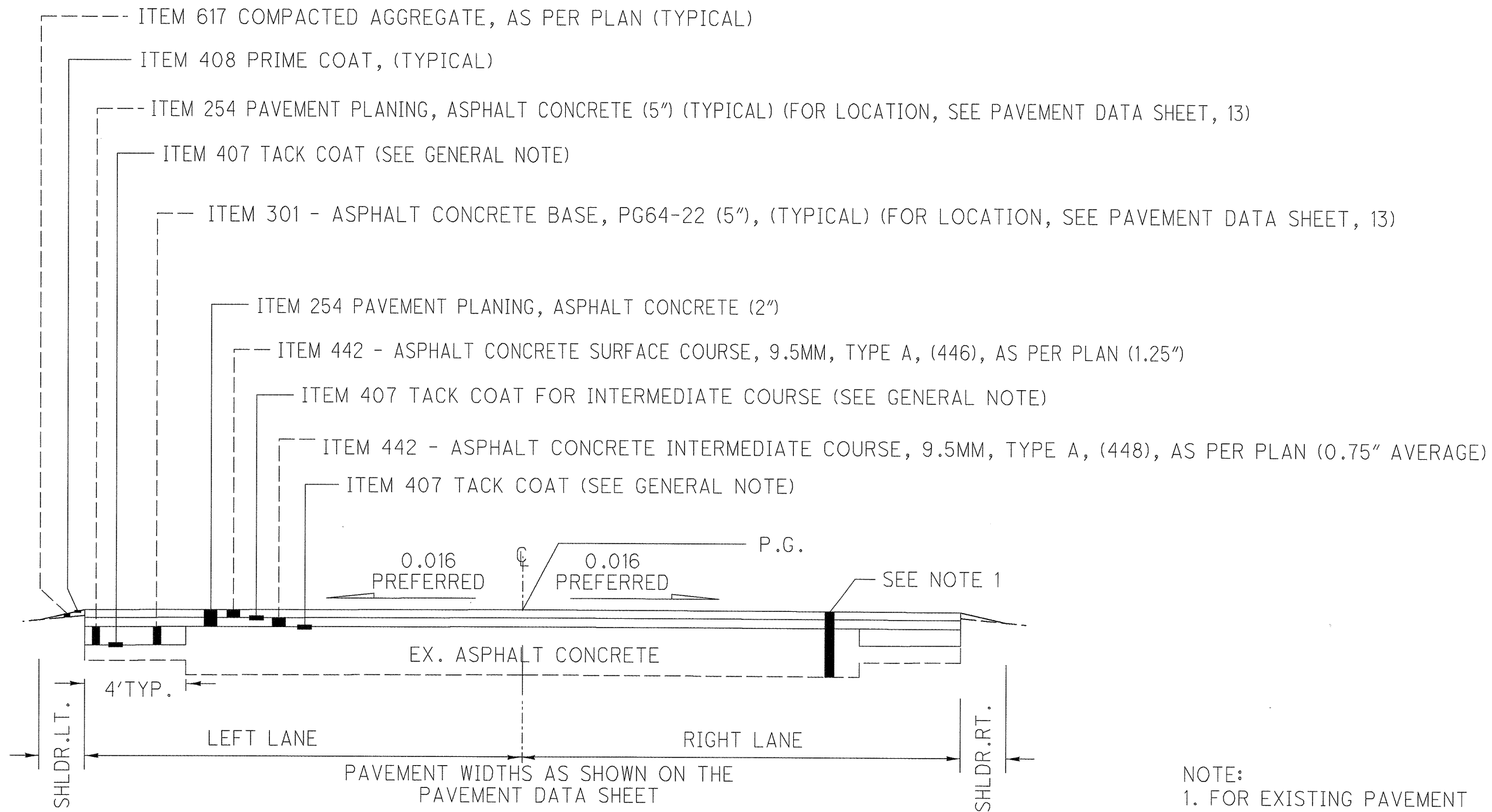


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PROJECT PLAN VIEW

HUR-4-0.00

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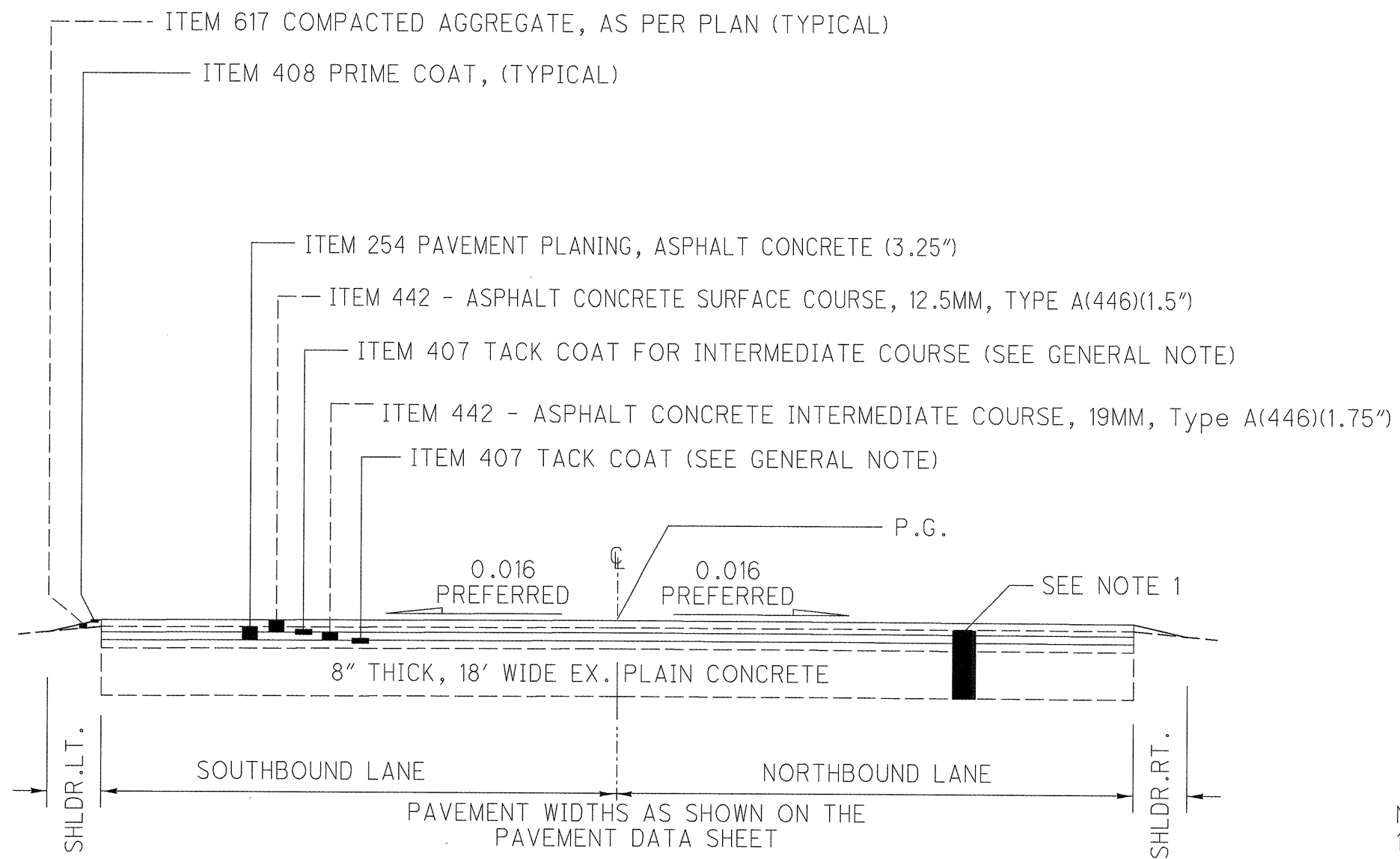
NOTE:
1. FOR EXISTING PAVEMENT BUILDUP, SEE THE PAVEMENT CORING ON SHEET 6.

CALCULATED
SCJ
CHECKED
ADB

TYPICAL SECTION

HUR-4-0.00

DESIGN FILE: \$\$\$\$DGNFILESPECIFICATIONS\$\$\$\$
WORKSTATION: \$TERMINAL\$ DATE: \$\$\$\$DATE\$\$\$\$



TYPICAL 2

NOTE:
1. FOR EXISTING PAVEMENT
BUILDUP, SEE THE PAVEMENT
CORING ON SHEET 6.

TYPICAL SECTION

HUR-4-0.00

4
22

CALCULATED
SCJ
CHECKED
ADB

GENERAL

UTILITIES

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

TELEPHONE
EMBARQ
175 ASHLAND ROAD
MANSFIELD, OHIO 44907
419-755-7956

TRAFFIC
OHIO DEPT OF TRANS, DIST 3
906 NORTH CLARK STREET
ASHLAND, OHIO 44805
419-207-7004

TELEPHONE
VERIZON
1534 SR-511 SOUTH
ASHLAND, OHIO 44805
419-282-6551

ELECTRIC
NORTH CENTRAL ELECTRIC CO-OP
13978 CR-56
ATTICA, OHIO 44807
419-426-3072

ELECTRIC
AMERICAN ELECTRIC POWER
2622 SOUTH S.R. 100
TIFFIN, OHIO 44883
419-443-4607

WATER AND SEWER
CRAWFORD COUNTY ENGINEER'S OFFICE
815 WHETSTONE STREET
BUCYRUS, OHIO 44820
419-562-7731

CABLE
TIME WARNER CABLE
1266 DUBLIN ROAD
COLUMBUS, OHIO 43215
(614) 255-6449

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

APPROPRIATE CAUTION SHOULD BE EXERCISED IN AREAS WITH UTILITIES. SECTIONS 105.07 AND 107.16 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

GENERAL

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.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ROADWAY

ITEM 209 - LINEAR GRADING

THE CONTRACTOR IS REQUIRED TO PERFORM LINEAR GRADING ON THE GRADED SHOULDER. IT IS ANTICIPATED THAT THERE ARE AREAS WHERE THE GRADED SHOULDER IS AT A HIGHER ELEVATION THAN THE ADJACENT PROPOSED PAVEMENT. A 10:1 SLOPE SHALL BE ESTABLISHED, OR AS DIRECTED BY THE ENGINEER, WHEN PERFORMING ITEM 209 LINEAR GRADING. THE INTENT IS TO PROVIDE AN UNOBSTRUCTED AND POSITIVE FLOW OF STORM WATER FROM THE PAVEMENT TO THE DITCH. THE LINEAR GRADING SHALL BE PERFORMED AFTER THE INTERMEDIATE COURSE HAS BEEN COMPLETED AND BEFORE THE SURFACE COURSE IS PLACED. ALL LABOR AND EQUIPMENT NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER MILE FOR ITEM 209 LINEAR GRADING.

DESIGN FILE: \$\$\$\$\$\$.DGNFILESPECIFICATIONS\$\$\$\$\$\$
WORKSTATION: \$TERMINAL\$ DATE: \$\$\$\$\$\$DATE\$\$\$\$\$\$

GENERAL NOTES

HUR-4-0.00

CALCULATED
SCJ
CHECKED
ADB

PAVEMENT

ITEM 253, PAVEMENT REPAIR, AS PER PLAN
ITEM 253, PAVEMENT REPAIR, MISC.: PARTIAL DEPTH

THESE ITEMS 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. CORING HAS BEEN PERFORMED TO HELP DETERMINE THE COMPONENTS THAT MAY BE ENCOUNTERED DURING THIS ITEM OF WORK. THE PAVEMENT CORING INFORMATION IS SHOWN ON THIS PLAN SHEET.

ALL REPAIRS ARE ESTIMATED TO BE MOSTLY LONGITUDINAL AND TO AVERAGE 4 FEET WIDE BY 30 FEET LONG.

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 DETERIORATED PAVEMENT WITH A MAXIMUM DEPTH OF 4", BASED ON THE PAVEMENT DESIGN AND AN AVERAGE DEPTH OF 4" 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 ASPHALT CONCRETE, PG64-22 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 1.5" AND 5" WITH A MAXIMUM PAVEMENT LIFT OF 3". THE CONTRACTOR HAS THE OPTION OF USING EITHER ITEM 301 OR ITEM 448 TYPE 2 MATERIAL WHEN THE PAVEMENT REPAIR IS BETWEEN 3" AND 5" DEEP. ITEM 448 TYPE 2 MATERIAL SHALL BE PG64-22 FOR MEDIUM MIX DESIGN PAVEMENTS AND PG64-28 FOR HEAVY MIX DESIGN PAVEMENTS. 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 A MAXIMUM OF 4" DEEP AND ITEM 253 PAVEMENT REPAIR, AS PER PLAN IS FOR DEPTHS GREATER THAN 4". PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, (BY TICKET WEIGHT CONVERSION), OF ITEM 253, PAVEMENT REPAIR, AS PER PLAN OR 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:

SR-4 ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH 250 CU. YD.
 SR-4 ITEM 253 PAVEMENT REPAIR, AS PER PLAN 10 CU. YD.

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.

PAVEMENT

PAVEMENT CORING INFORMATION

County	Route	SLM	Asphalt	Concrete	Brick	Location	Direction	Year Cored
HUR	4	1.07	15.0	4.00	0.0	Inside	SB	2010
HUR	4	1.07	19.0	0.0	0.0	Outside	SB	2010
HUR	4	1.07	9.0	0.0	0.0	Shoulder	SB	2010
HUR	4	1.24	12.0	4.5	3.5	Inside	SB	2005
HUR	4	1.95	11.5	0.0	3.5	Inside	SB	2005
HUR	4	2.52	12.0	0.0	3.5	Inside	SB	2010
HUR	4	2.52	19.0	0.0	0.0	Outside	SB	2010
HUR	4	2.52	9.5	0.0	0.0	Shoulder	SB	2010
HUR	4	3.00	12.0	6.0	0.0	Inside	SB	2005
HUR	4	3.00	2.5	5.0	0.0	Outside	SB	2005
HUR	4	3.00	19.0	0.0	0.0	Outside	SB	2005
HUR	4	3.55	12.0	0.0	3.5	Inside	SB	2010
HUR	4	3.55	13.0	0.0	3.5	Outside	SB	2010
HUR	4	3.55	9.0	0.0	0.0	Shoulder	SB	2010
HUR	4	4.34	10.5	0.0	3.5	Inside	SB	2010
HUR	4	4.34	11.5	0.0	3.5	Outside	SB	2010
HUR	4	4.34	9.5	0.0	0.0	Shoulder	SB	2010
HUR	4	5.01	10.3	0.0	3.5	Inside	SB	2005
HUR	4	6.00	10.3	0.0	3.5	Inside	SB	2005
HUR	4	6.00	11.0	0.0	3.5	Outside	SB	2005
HUR	4	6.60	7.8	0.0	3.5	Inside	SB	2010
HUR	4	6.60	8.2	3.0	0.0	Outside	SB	2010
HUR	4	6.55	8.5	0.0	3.5	Inside	SB	2010
HUR	4	6.55	8.8	?	0.0	Outside	SB	2010

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (2")
ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (3.25")

THE INTENT OF THE PLANING IS TO MILL 2 INCHES 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.

DRAINAGE SLOTS SHALL BE CUT INTO THE SHOULDER(S) AT THE LOW POINT OF EACH PLANED SECTION TO PREVENT TRAPPED WATER PUDDLES, AND REFILLED DURING RESURFACING. CUTTING AND FILLING DRAINAGE SLOTS SHALL BE INCLUDED IN PAYMENT WITH ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE.

THE AMOUNT OF GRINDINGS RESULTING FROM THIS WORK MAY PRODUCE UNEXPECTED VOLUMES OF GRINDINGS DUE TO THE EXISTING TRANSVERSE SLOPE OF THE PAVEMENT.

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. NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR UNEXPECTED VOLUMES OF ASPHALT GRINDINGS.

PAVEMENT

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 254, PAVEMENT PLANING, ASPHALT CONCRETE (DEEP PLANING)

THE INTENT OF THE PLANING IS TO MILL 5.00 INCHES (AFTER THE 2.00" PLANING OF THE ENTIRE WIDTH OF THE ROADWAY), MAXIMUM DEPTH, AT THE EDGE OF SHOULDER. THE PLANING OPERATION SHALL BE CONTINUOUS FROM THE EDGE OF SHOULDER, MEASURED TRANSVERSELY IN , A DISTANCE OF 4 FEET (SEE TYPICAL SECTIONS FOR FURTHER DETAILS). THE MILLING DEPTH SHALL BE CONTROLLED FROM THE EXISTING PAVEMENT IN CONFORMANCE WITH ABOVE GUIDELINES. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE OFF THE PAVEMENT SURFACE AND TO ALL CATCH BASINS, INLETS, AND DITCHES.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER IN WHICH THE ROADWAY SHALL BE RESTORED, AT A MINIMUM, TO ITS ORIGINAL PROFILE.

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.

DESIGN FILE: \$\$\$\$\$.DGNFILESPECIFICATIONS\$\$\$\$\$
 WORKSTATION: \$TERMINAL\$ DATE: \$\$\$\$\$\$DATE\$\$\$\$\$

GENERAL NOTES

HUR - 4 - 0.00

CALCULATED
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PAVEMENT

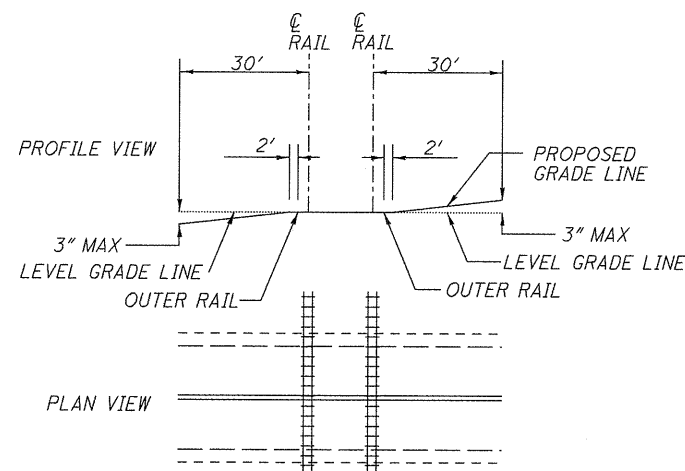
PAVING AT RAILROAD CROSSINGS

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.

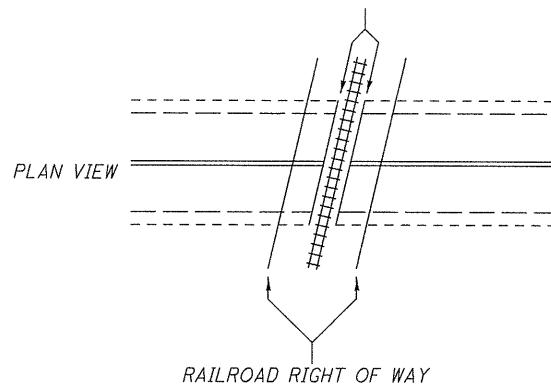
SUSPEND AND RESUME RESURFACING AT THE HEADER TIE, AS DIRECTED BY THE ENGINEER.

GENERAL RAILROAD CROSSING DETAIL



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.

MAINTENANCE OF TRAFFIC

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

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

THE DURATION OF THE CLOSURE OF HUR-4-0.00 TO 6.66 SHALL BE LIMITED TO 14 CONSECUTIVE CALENDAR DAYS. IT IS THE INTENT TO MINIMIZE THE IMPACT OF THE CLOSURE TO LOCAL TRAFFIC IN GAINING ACCESS TO DRIVEWAYS DURING THE PERIOD OF CLOSURE. DURING THIS PERIOD OF CLOSURE, ALL ROADWAY WORK AND STRUCTURE SHALL BE COMPLETED. THE PERIOD OF CLOSURE SHALL NOT INCLUDE JULY 4 AND SHALL NOT OCCUR DURING ANY OF THE SCHOOL SEASON.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVE FEE OF \$2500 PER DAY.

ITEM SPECIAL - AIR SPEED ZONE MARKING

EXCEPT AS NOTED, THIS ITEM IS TO MEET CMS 644. THE SPEED MEASUREMENT MARKINGS ARE TO BE WHITE AND 24 INCHES WIDE (MEASURED IN THE DIRECTION OF TRAVEL) AND FOUR (4) FEET IN LENGTH.

PLACE THE MARKINGS AT 0.25 MILE INTERVALS OVER A ONE (1) MILE LENGTH OF ROADWAY ENTIRELY ON THE PAVED SHOULDERS. THE ZONE IS TO START AT HUR-4-4.00 AND END AT HUR-4-5.00.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE MARKINGS LAID OUT BY A STATE OF OHIO REGISTERED SURVEYOR. A RECORD IS TO BE KEPT AND ONE ORIGINAL SIGNED AND SEALED DOCUMENT IS TO BE SENT TO THE DISTRICT 3 TRAFFIC ENGINEER AND ONE COPY FOR THE DISTRICT CONSTRUCTION ENGINEER.

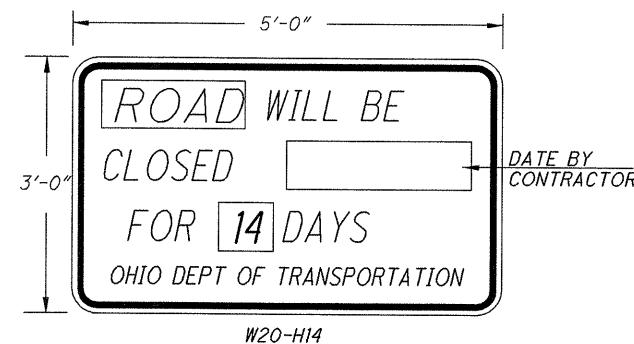
MEASUREMENT AND PAYMENT: THE FIVE (5) MARKINGS PLACED ON EACH OF THE TWO SHOULDERS IN EACH 1 MILE OF ROADWAY PER EACH DIRECTION OF TRAVEL EQUAL ONE ZONE. ONE ZONE WILL BE MEASURED AS 1 EACH. PAYMENT FOR ALL MATERIALS, LABOR, EQUIPMENT AND SURVEYING FOR ACCEPTED WORK IS TO BE INCLUDED PER EACH IN ITEM SPECIAL, AIR SPEED ZONE MARKING.

MAINTENANCE OF TRAFFIC

NOTICE OF CLOSURE SIGNS

THESE SIGNS SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE FOR SR-4. THE SIGNS SHALL BE ERECTED ON THE RIGHT HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE LOCATED IN THE FIELD SO AS NOT TO INTERFERE WITH ANY PERMANENT SIGNS. ON THIS PROJECT THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AND SHALL INCLUDE FURNISHING, ERECTING, MAINTAINING, AND REMOVING THE SIGNS INCLUDING SUPPORTS. THESE SIGNS SHALL BE PLACED ON THE SR-4 MAINLINE AT 0.00 SLM AND AT 6.66 SLM, ON THE MAINLINE OF SR-4 AT THE YOUNG ROAD INTERSECTION AND ON CR-64, TR-24, AND TR-25 WHERE THEY APPROACH SR-4.

THE CONTRACTOR SHALL NOTIFY THE DISTRICT ROADWAY SERVICES MANAGER IN WRITING A MINIMUM OF 14 DAYS IN ADVANCE OF THE DETOUR BEING PLACED. THE CONTRACTOR SHALL ALSO NOTIFY, IN WRITING, THE FOLLOWING AGENCIES AT LEAST 14 DAYS PRIOR TO THE TIME WHEN THE DETOUR WILL BE IMPLEMENTED:
 TOWNSHIP TRUSTEES (TWP. ROADS ONLY)
 LOCAL FIRE DEPARTMENT(S)
 LOCAL SCHOOL DISTRICT(S)
 COUNTY SHERIFF



DETOUR FOR SR-4

THE DEPARTMENT OF TRANSPORTATION SHALL BE RESPONSIBLE FOR THE DETOUR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR TYPE 3 BARRICADES PER STANDARD DRAWING MT-101.60 LOCATED AT THE LIMITS OF THE CLOSURE AND AT THE SIDE ROAD APPROACHES. TYPE 3 BARRICADES SHALL INCLUDE LOCAL TRAFFIC ONLY SIGNS.

COST OF MAINTAINING TRAFFIC SHALL BE LUMP SUM AND INCLUDED WITH ITEM 614 MAINTAINING TRAFFIC AS SHOWN IN THE GENERAL SUMMARY.

THE DETOUR FOR HUR-4 (SLM 0.00 TO SLM 6.66) SHALL BE: SR-269 NORTH TO US-20 EAST FOR NORTHBOUND TRAFFIC AND US-20 WEST TO SR-269 SOUTH FOR SOUTHBOUND TRAFFIC.

TRAFFIC CONTROL

ITEM 642 EDGE LINE, TYPE 1, AS PER PLAN

ITEM 642 EDGE LINE, TYPE 1 SHALL BE 6" WIDE INSTEAD OF 4" WIDE.

DESIGN FILE: \$\$\$\$\$.DGNFILESPECIFICATIONS\$\$\$\$\$
 WORKSTATION: \$TERMINAL\$ DATE: \$\$\$\$\$\$DATE\$\$\$\$\$

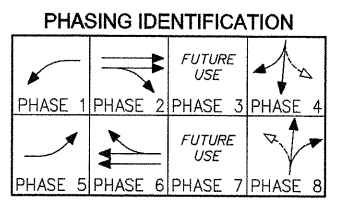
CALCULATED
 SCJ
 CHECKED
 ADB

GENERAL NOTES

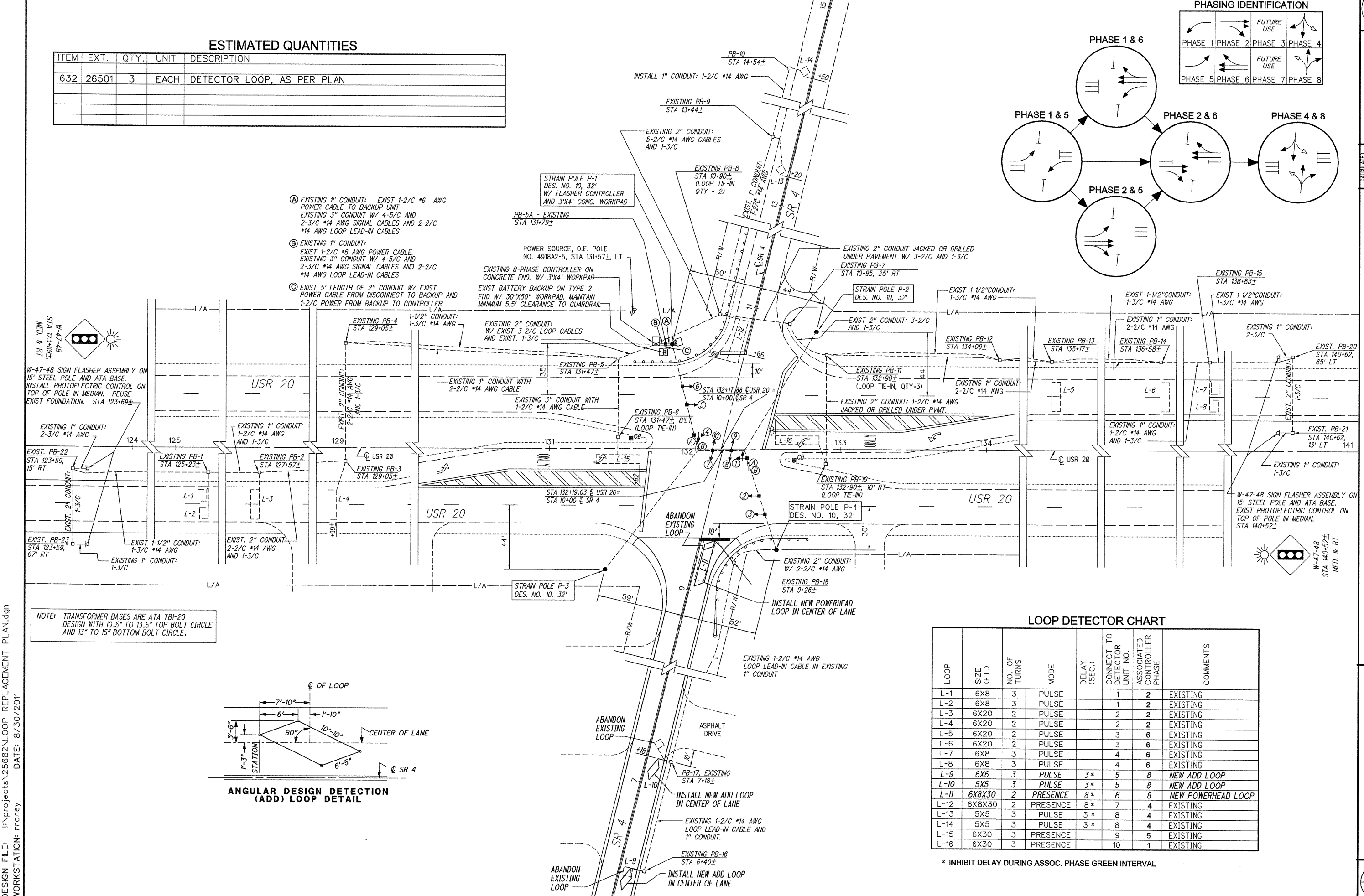
HUR-4-0.00

ESTIMATED QUANTITIES

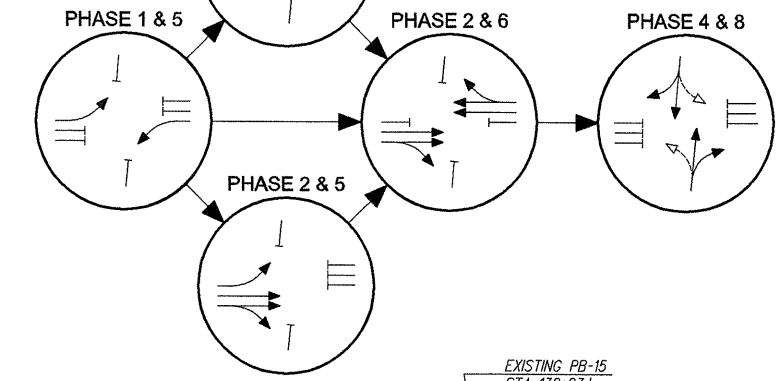
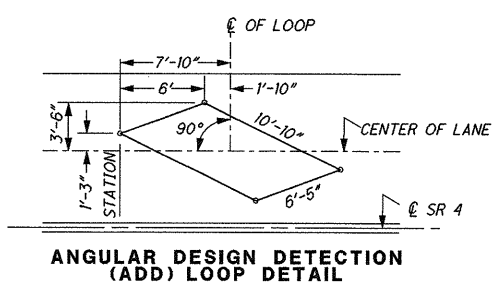
ITEM	EXT.	QTY.	UNIT	DESCRIPTION
632	26501	3	EACH	DETECTOR LOOP, AS PER PLAN



- (A) EXISTING 1" CONDUIT: EXIST 1-2/C *6 AWG POWER CABLE TO BACKUP UNIT
EXISTING 3" CONDUIT W/ 4-5/C AND 2-3/C *14 AWG SIGNAL CABLES AND 2-2/C *14 AWG LOOP LEAD-IN CABLES
- (B) EXISTING 1" CONDUIT: EXIST 1-2/C *6 AWG POWER CABLE, EXISTING 3" CONDUIT W/ 4-5/C AND 2-3/C *14 AWG SIGNAL CABLES AND 2-2/C *14 AWG LOOP LEAD-IN CABLES
- (C) EXIST 5' LENGTH OF 2" CONDUIT W/ EXIST POWER CABLE FROM DISCONNECT TO BACKUP AND 1-2/C POWER FROM BACKUP TO CONTROLLER



NOTE: TRANSFORMER BASES ARE ATA TBI-20 DESIGN WITH 10.5" TO 13.5" TOP BOLT CIRCLE AND 13" TO 15" BOTTOM BOLT CIRCLE.



LOOP DETECTOR CHART

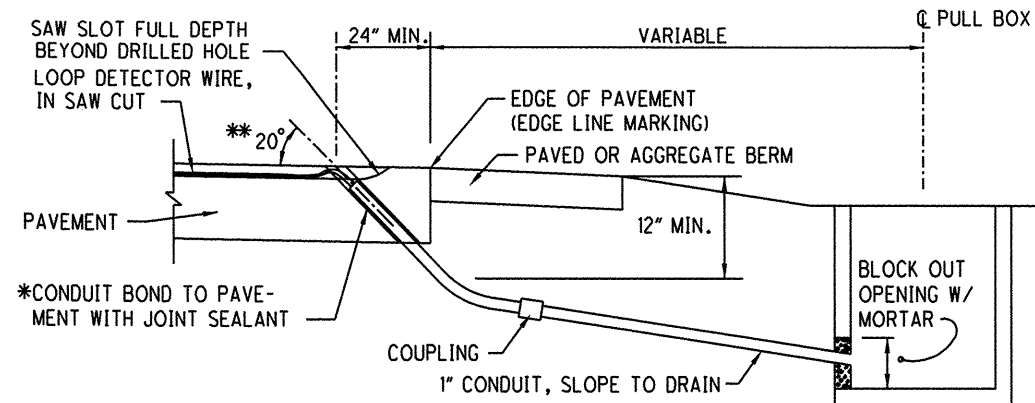
LOOP	SIZE (F.T.)	NO. OF TURNS	MODE	DELAY (SEC.)	CONNECT TO DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE	COMMENTS
L-1	6X8	3	PULSE		1	2	EXISTING
L-2	6X8	3	PULSE		1	2	EXISTING
L-3	6X20	2	PULSE		2	2	EXISTING
L-4	6X20	2	PULSE		2	2	EXISTING
L-5	6X20	2	PULSE		3	6	EXISTING
L-6	6X20	2	PULSE		3	6	EXISTING
L-7	6X8	3	PULSE		4	6	EXISTING
L-8	6X8	3	PULSE		4	6	EXISTING
L-9	6X6	3	PULSE	3*	5	8	NEW ADD LOOP
L-10	5X5	3	PULSE	3*	5	8	NEW ADD LOOP
L-11	6X8X30	2	PRESENCE	8*	6	8	NEW POWERHEAD LOOP
L-12	6X8X30	2	PRESENCE	8*	7	4	EXISTING
L-13	5X5	3	PULSE	3*	8	4	EXISTING
L-14	5X5	3	PULSE	3*	8	4	EXISTING
L-15	6X30	3	PRESENCE		9	5	EXISTING
L-16	6X30	3	PRESENCE		10	1	EXISTING

* INHIBIT DELAY DURING ASSOC. PHASE GREEN INTERVAL

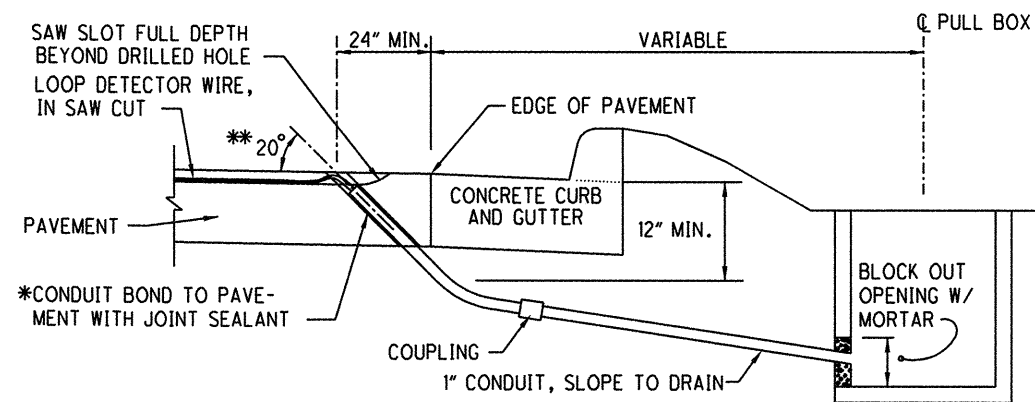
DETECTOR LOOP REPLACEMENTS SR 4 NB @ USR 20

HUR-4-0.00

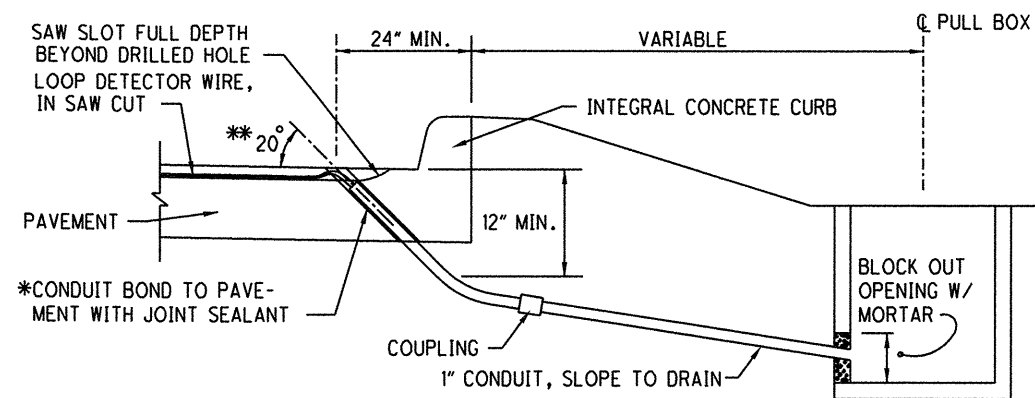
DESIGN FILE: I:\projects\25682\LOOP REPLACEMENT NOTES & DETAILS.dgn
 WORKSTATION: sjzwwk DATE: 2/7/2011



DRILLED HOLE LOCATION DETAIL WITH PAVED OR AGGREGATE BERM



DRILLED HOLE LOCATION DETAIL WITH CONCRETE CURB AND GUTTER



DRILLED HOLE LOCATION DETAIL WITH INTEGRAL CONCRETE CURB

* CONDUIT SHALL BE 1" DIAMETER 725.04.
 ** THE RANGE OF THIS ANGLE SHALL BE FROM 15 TO 30 DEGREES.

NOTE: SEE STANDARD DRAWING TC-82.10 FOR ADDITIONAL NOTES AND DETAILS

ITEM 632- DETECTOR LOOP, AS PER PLAN

AN ESTIMATED QUANTITY OF ITEM 632, DETECTOR LOOP, AS PER PLAN, HAS BEEN PROVIDED FOR THE PURPOSE OF REPLACING DAMAGED DETECTOR LOOPS AND/OR UPGRADING DETECTOR LOOPS TO IMPROVE MOTORCYCLE DETECTION. IT IS IMPERATIVE THAT REPLACEMENT OF DETECTOR LOOPS BE INSTALLED AND FULLY FUNCTIONAL IN THE SHORTEST POSSIBLE TIME. THE CONTRACTOR SHALL HAVE REPLACEMENT DETECTOR LOOPS INSTALLED AND FULLY FUNCTIONAL WITHIN 7 CALENDAR DAYS OF DESTRUCTION OF THE EXISTING DETECTOR LOOPS.

THE CONTRACTOR SHALL NOTIFY MATT BLANKENSHIP, ODOT DISTRICT 3 ROADWAY SERVICES MANAGER, (PHONE 419-207-7045) 5 WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK. THIS NOTIFICATION IS NEEDED FOR DISTRICT 3 TO SCHEDULE TEMPORARY SIGNAL TIMING MODIFICATIONS FOR THE TIME PERIOD WHEN THE DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RENOTIFY MR. BLANKENSHIP WITHIN 2 WORKING DAYS AFTER THE NEW DETECTOR LOOPS ARE REPLACED SO THAT HE CAN RESCHEDULE DISTRICT CREWS TO RESTORE SIGNAL TIMINGS TO THE ORIGINAL SETTINGS. IN ADDITION, THE CONTRACTOR SHALL ALSO NOTIFY RICHARD RONEY, ODOT DISTRICT 3 PRODUCTION DEPT. (PHONE 419-207-7064) WHEN THE NEW LOOPS ARE INSTALLED.

FAILURE TO COMPLY WITH THE ABOVE STATED REQUIREMENTS WILL RESULT IN THE ASSESSMENT OF LIQUIDATED DAMAGES ACCORDING TO SECTION 108.07 OF THE CMS FOR EACH CALENDAR DAY BEYOND THE SPECIFIED LIMIT.

THE NEW DETECTOR LOOPS SHALL BE PLACED PER THE PLAN DETAILS AFTER THE PLANING AND PAVEMENT REPAIR OPERATIONS ARE COMPLETED WITHIN THE AFFECTED AREAS. THE DETECTOR LOOPS SHALL NOT BE CUT INTO THE SURFACE COURSE.

IN ADDITION TO THE REQUIREMENTS OF CMS 632.11, THE CONTRACTOR SHALL PROVIDE A POSITIVE AND EFFECTIVE MEANS FOR REMOVAL OF SOLID RESIDUE RESULTING FROM THE DRY SAW BLADE CUTTING OF LOOP DETECTOR SLOTS IN THE PAVEMENT. THE RESIDUE SHALL BE REMOVED BY VACUUM OR OTHER EFFECTIVE MEANS, BEFORE IT IS BLOWN BY TRAFFIC ACTION OR WIND.

LOOP DETECTOR WIRE TO LEAD-IN CABLE SPLICES WITHIN EPOXY ENCAPSULATED SPLICE ENCLOSURES SHALL BE JOINED BY AN APPROVED CONNECTOR AND SOLDERED PER CMS 632.23 & 725.15. ALL COSTS ASSOCIATED WITH THE SOLDERED SPLICE CONNECTION AND EPOXY SPLICE KIT SHALL BE INCLUDED WITH THE DETECTOR LOOP.

IF THE PULL BOX IS NOT SPECIFIED IN THE PLANS, THE SPLICE SHALL BE MADE IN THE FIRST ENTERED POLE OR PEDESTAL, EXCEPT WHERE THE CONTROLLER CABINET IS MOUNTED ON THE POLE OR PEDESTAL, IN WHICH CASE THE LOOP WIRES SHALL BE ROUTED DIRECTLY INTO THE CABINET UNLESS SPECIFIED DIFFERENTLY IN THE PLANS. LOOP DETECTOR WIRE ROUTED THROUGH CONDUIT, PULL BOXES, POLES, AND PEDESTALS SHALL BE TWISTED PER CMS 632.23.

FURNISH ALL MATERIALS ACCORDING TO THE DEPARTMENT'S QUALIFIED PRODUCTS LIST (OPL).

SEE DETAILS ON THIS SHEET FOR ADDITIONAL REQUIREMENTS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 632, DETECTOR LOOP, AS PER PLAN.

DETECTOR LOOP INSTALLATION DETAILS
 AND TRAFFIC SIGNAL GENERAL NOTES

HUR-4-0.00

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.

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.

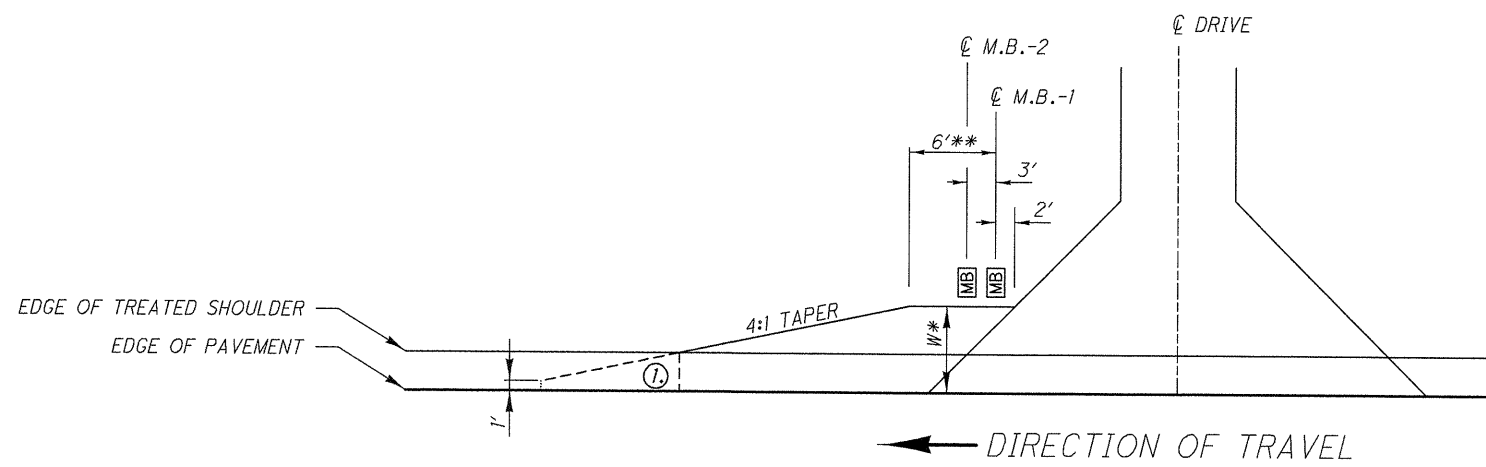
THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH THE LOCAL POST MASTER AND NOTIFYING THE PROPERTY OWNERS PRIOR TO WORK.

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.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DESCRIBED ABOVE.

ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, SINGLE
- S.R. 4 4 EACH

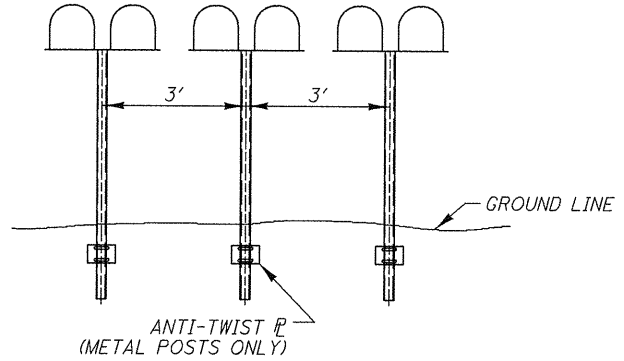


① END MAILBOX TURNOUT AT EDGE OF ASPHALT CONCRETE SHOULDER OR 1' FROM EDGE OF PAVEMENT IF TREATED SHOULDER IS AGGREGATE.

- 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 BE 6 FT MAXIMUM OR TO FACE OF EXISTING STANDARD MAILBOX IF IT IS LESS THAN 6 FT.
 - 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.

**** NOTE**

- 1) 6 FT FOR SINGLE MAILBOX SUPPORT, ADD 3 FT. FOR EACH ADDITIONAL MAILBOX.



GROUP MAILBOX INSTALLATION

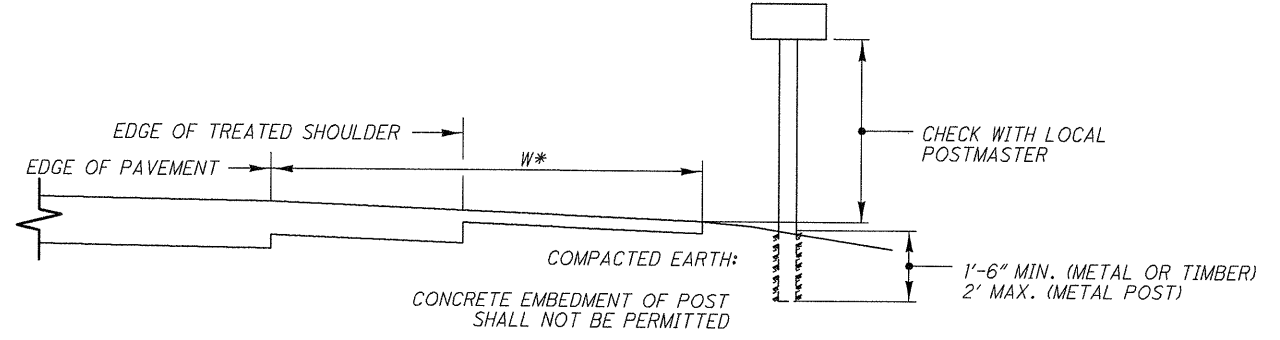
MAILBOX APPROACHES

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, AS PER PLAN 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:
- S.R. 4 10 EACH

ITEM 617 - COMPACTED AGGREGATE
- S.R. 4 20 CU YD

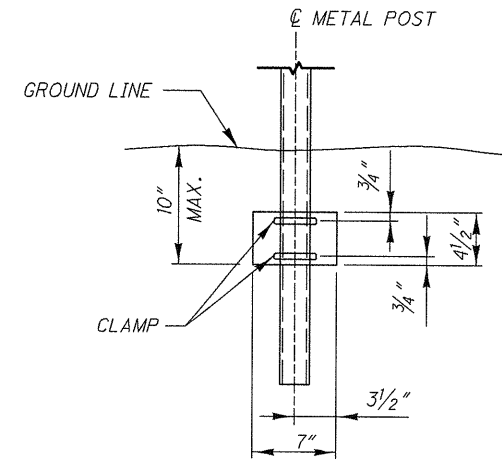


CROSS SECTION / ELEVATION VIEW

LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED

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

- #1640 SR-4 - SLM 1.095 NB SINGLE
- #???? SR-4 - SLM 1.215 NB SINGLE
- #2228 SR-4 - SLM 2.220 NB SINGLE
- #2605 SR-4 - SLM 3.020 NB SINGLE



ANTI-TWIST PLATE

FOR DETAILS NOT SHOWN SEE STANDARD DRAWING BP-4.1

DESIGN FILE: \$\$\$\$\$\$.DGNFILESPECIFICATIONS\$\$\$\$\$
 WORKSTATION: \$TERMINAL\$ DATE: \$\$\$\$\$\$DATE\$\$\$\$\$

Funding Participation FS = 80% FED/20% STATE FC = 80% FEDERAL/20% CITY C = 100% CITY	COUNTY	ROUTE	LOG POINT TO LOG POINT		LENGTH		DIRECTION	WIDTH FEET AVG.	TYPICAL	PAVE-MENT AREA SQ YD	254				407	407	442		442		442		442		301	AGGREGATE SHOULDER PROPOSED WIDTH		AGGREGATE SHOULDER AREA	209	408	617		617					
			SLM	LOG POINT	LOG POINT	TO					FROM	PAVEMENT PLANING, ASPHALT CONCRETE (2.00") (1.25"-2" **)	PAVEMENT PLANING, ASPHALT CONCRETE (3.25")	PAVEMENT PLANING, ASPHALT CONCRETE (5")	PATCHING PLANED SURFACE	TACK COAT @ 0.08 GAL/SY	TACK COAT FOR INTERM. COURSE @ 0.04 GAL/SY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN	ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5 MM, TYPE A (448), AS PER PLAN	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A(446)	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A(446)	ASPHALT CONCRETE BASE, PG64-22 (5")	SL	SR	SQ YD	MILE	GALLON	PRIME COAT @ 0.40 GAL/SY	COMPACTED AGGREGATE	SHOULDER PREPARATION								
FS	HUR	4	0.00	2.00	2.00	10555	BOTH	26.0	1	30,492	30492		9382	305	2439	1,220	1.25	1,059	0.75	635																		
FS	HUR	4	2.00	4.49	2.49	13147	BOTH	25.0	1	36,519	36519		11686	365	2922	1,461	1.25	1,268	0.75	761																		
FS	TAPER DOWN TO APPR SLAB					50	BOTH	25.0	1	139	139 **		44	1	11	6	1.25	5	0.75	3																		
FS	APPROACH SLAB					25	BOTH	44.0	1	122	122 *			1	10	5	1.25	4																				
FS	3900053	SFN		0.01	46.34	BOTH	44.0	1	227	227 *			2	18	9	1.25	8																					
FS	APPROACH SLAB					25	BOTH	44.0	1	122	122 *			1	10	5	1.25	4																				
FS	TAPER DOWN TO APPR SLAB					50	BOTH	25.0	1	139	139 **		44	1	11	6	1.25	5	0.75	3																		
SEE SHEET 21 FOR TAPER AND APPR SLAB DETAILS																																						
FS	HUR	4	4.53	6.03	1.50	7920	BOTH	25.0	1	22,000	22000		7040	220	1760	880	1.25	764	0.75	458																		
FS	HUR	4	6.03	6.32	0.29	1531	NB	4.0	1				680		54																							
FS	HUR	4	6.03	6.32	0.29	1531	NB	12.5	1	2,126	2126			21	170	85	1.25	74	0.75	44					2.0	340	0.29	136	9		340							
FC	HUR	4	6.03	6.32	0.29	1531	SB	12.5	1	2,126	2126			21	170	85	1.25	74	0.75	44				2.0	340	0.29	136	9		340								
FS	HUR	4	6.32	6.62	0.30	1584	BOTH	8.0	1				0		0																							
FC	HUR	4	6.32	6.62	0.30	1584	BOTH	25.0	1	4,400	4400		0	44	352	176	1.25	153	0.75	92				2.0	704	0.60	282	20		704								
FS	HUR	4	6.62	6.65	0.03	158	BOTH	8.0	2				0		0																							
FC	HUR	4	6.62	6.65	0.03	158	BOTH	25.0	2	439				4	35	18								2.0	70	0.06	28	2		70								
C	HUR	4	6.62	6.65	0.03	158	BOTH	25.0	2	439			439																									
FS																																						
FC	HUR	4	6.65	6.66	0.01	53	BOTH	50.0	2	294				3	24	12								2.0	24	0.02	10	1		24								
C	HUR	4	6.65	6.66	0.01	53	BOTH	50.0	2	294			294																									
FED / CITY											6,526		0	72	581	291		227		136		15	25	0				1,138	0.97	456	32		1,138					
CITY												733												20	5													
FED / STATE											91,886		28,876	917	7,405	3,677		3,191		1,904					4,011				14,438	12.31	5,775	401		14,438				

PAVEMENT & SHOULDER DATA

HUR-4-0.00

Funding Participation FS = 80% FED./20% STATE SC = 80% STATE; 20% CITY C = 100% CITY	COUNTY	ROUTE	LOG POINT TO LOG POINT	LENGTH		WIDTH FEET AVG.	PAVEMENT AREA SQ YD	254		407	407	442		442		AGGREGATE SHOULDER PROPOSED WIDTH		AGGREGATE SHOULDER AREA	209	408	617	617	
				MILE	FEET			PAVEMENT PLANING, ASPHALT CONCRETE (2.00")	PATCHING PLANED SURFACE	TACK COAT @ 0.08 GAL/SY	TACK COAT FOR INTERM. COURSE @ 0.04 GAL/SY	ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN	ASPHALT CONCRETE INTERMEDIATE COURSE, 9.5 MM, TYPE A (448), AS PER PLAN	SL	SR	PRIME COAT @ 0.40 GAL/SY	COMPACTED AGGREGATE	SHOULDER PREPARATION					
				STRAIGHT LINE MILEAGE				SQ.YD	SQ.YD	GALLON	GALLON	INCH	CU.YD.	INCH (AVG)	CU.YD.	FT	FT	SQ YD	MILE	GALLON	CU YD	SQ.YD	
FS			EXTRA AREA FOR INTERSECTIONS				2092	2092		21	167	84	1.25	73	0.75	44							
			EXTRA AREA FOR PAVED DRIVES										1.25		0.75								
			EXTRA AREA FOR AGGREGATE DRIVES				801			64	33	1.25	28	0.75	17		801		320		34	801	
			EXTRA AREA FOR EX. & PR. MAILBOX APPROACHES				100				4	1.25	4	0.75	3								
							2092		21	231	121		105		64					320		34	801
FED / STATE																							
CITY																							
FED / CITY																							

PAVEMENT & SHOULDER DATA

HUR-4-0.00

DESIGN FILE: \$\$\$\$\$\$.DGNFILESPECIFICATIONS\$\$\$\$\$\$
WORKSTATION: \$TERMINAL\$ DATE: \$\$\$\$\$\$DATE\$\$\$\$\$\$

GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE GUARDRAIL, INSTALL EMBANKMENT, GRADE AND REINSTALL GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF SAID COMPLIANCE.

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.

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.

PROGRESSION OF GUARDRAIL 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.

GUARDRAIL WORK IS TO BEGIN AFTER THE LINEAR GRADING IS COMPLETED AND THE 617 MATERIAL IS PLACED.

1. REMOVE THE GUARDRAIL FOR REUSE.
2. COMPLETE THE EMBANKMENT, AS PER PLAN.
3. REBUILD/CONSTRUCT THE GUARDRAIL RUN.
4. INSTALL BARRIER REFLECTORS.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

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 INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27 $\frac{1}{4}$ INCHES FROM THE EDGE OF THE SHOULDER.

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

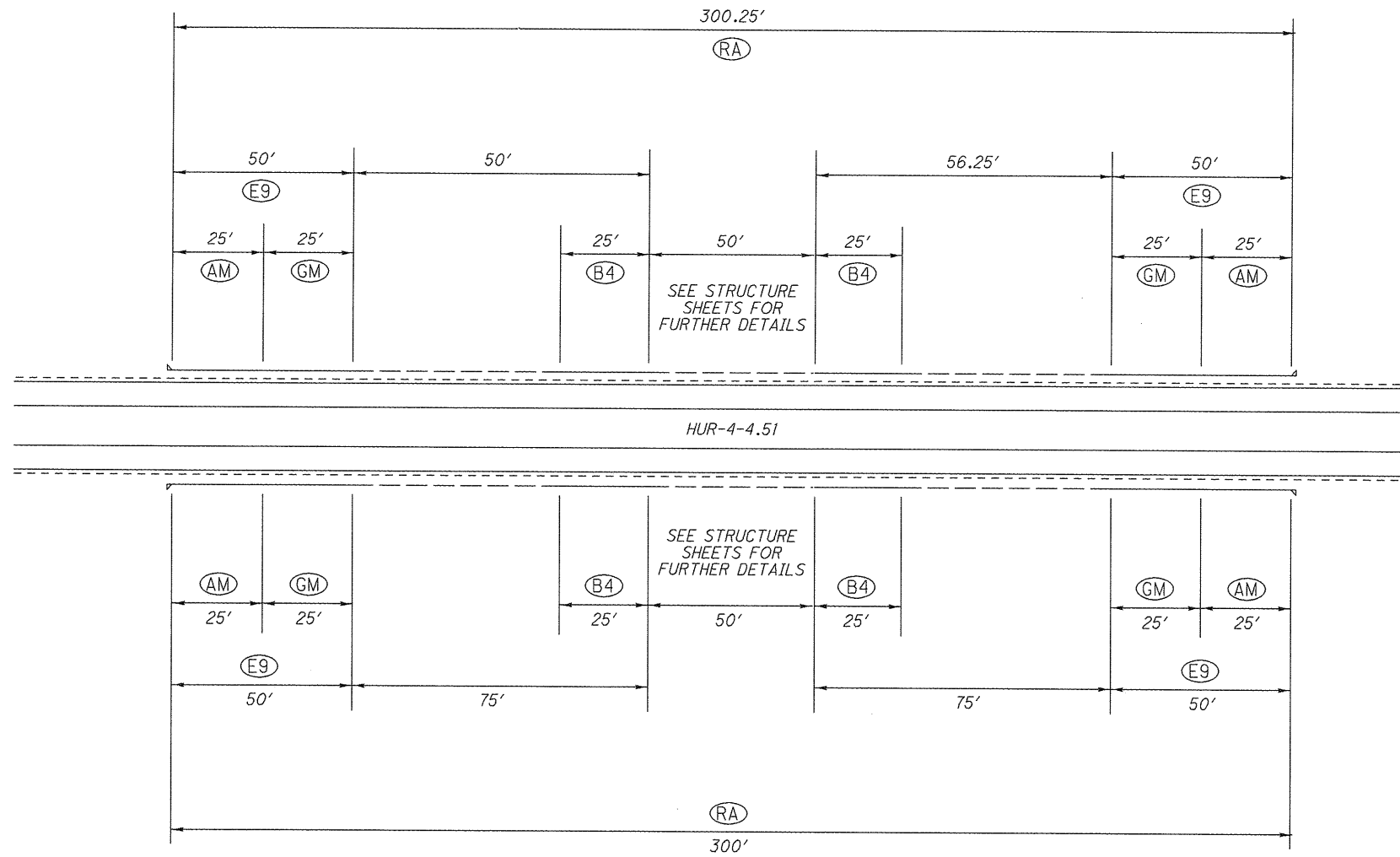
PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE,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

CALCULATED
SCJ
CHECKED
ADB

GUARDRAIL NOTES

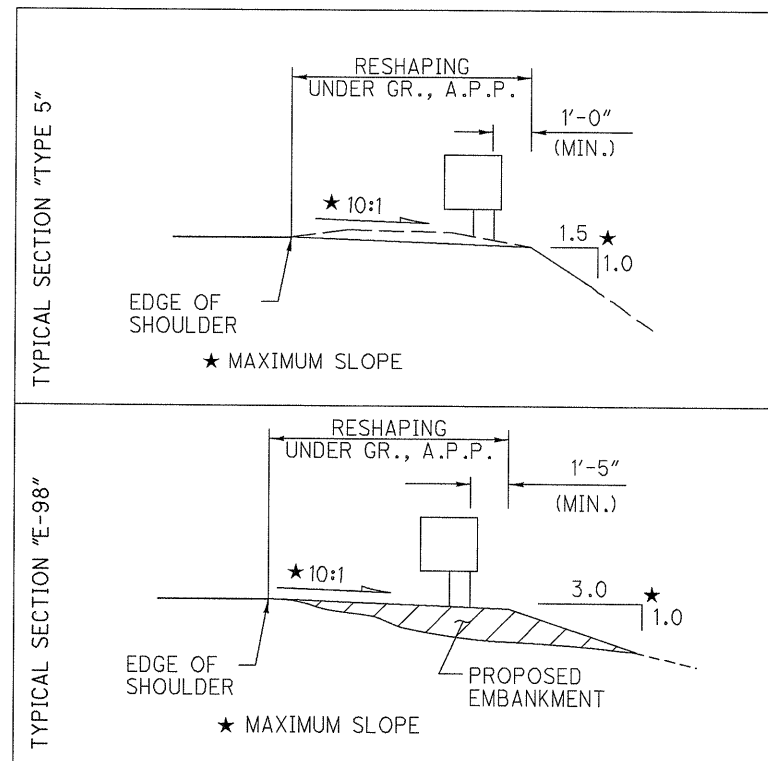
HUR - 4 - 0.00

DESIGN FILE: \$\$\$\$\$.DGNFILESPECIFICATIONS\$\$\$\$\$
 WORKSTATION: \$TERMINAL\$ DATE: \$\$\$\$\$\$DATE\$\$\$\$\$



LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				NB	SB	
(GM)	202	GUARDRAIL REMOVED	FT	50	50	100
(AM)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	2	2	4
(E9)	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	2	2	4
(B4)	606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	EACH	2	2	4
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	5	5	10

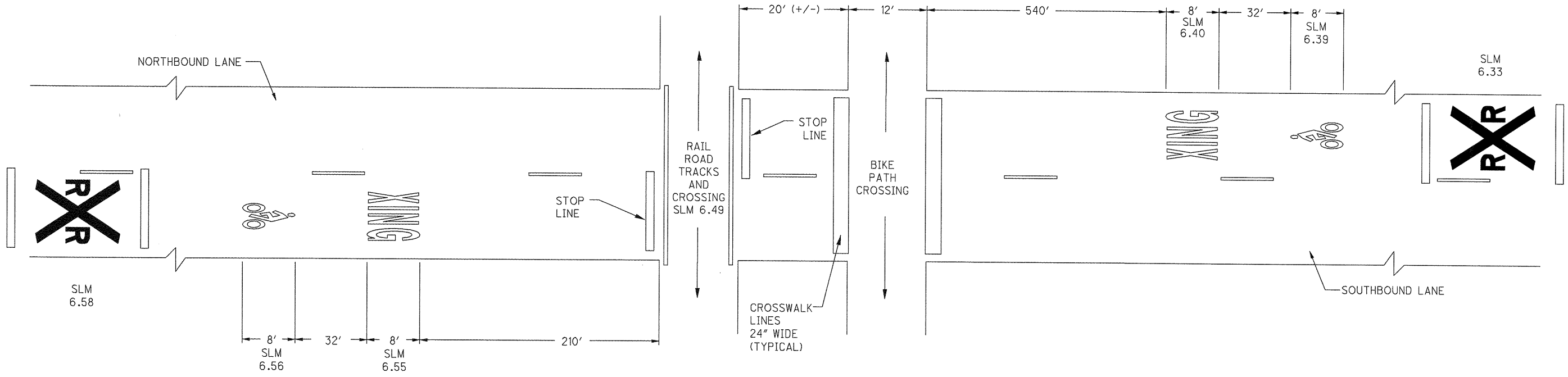
ALL QUANTITIES CARRIED TO GENERAL SUMMARY SHEET.



HORIZONTAL SCALE IN FEET
 CALCULATED SCJ
 CHECKED ADB

**GUARDRAIL LOCATION
 SLM 4.51**

HUR-4-0.00



BIKEWAY PAVEMENT MARKING DETAIL

HUR-4-0451 S.F.N. 3900053

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10100	52	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	

REFERENCES SHALL BE MADE TO STANDARD DRAWINGS:

BP-3.1 DATED 10/19/07

DESIGN SPECIFICATIONS:

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

EXISTING STRUCTURE VERIFICATION:

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

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

EXISTING PLANS:

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

STRUCTURE#	PLAN NAME	DATE
HUR-4-0451	HUR-4-4.47	1979

ITEM 614 - MAINTAINING TRAFFIC FOR STRUCTURE HUR-4-0451:

THE DURATION OF THE CLOSURE OF S.R. 4 BETWEEN SLM 0.00 AND 6.66 SHALL BE LIMITED TO 14 CONSECUTIVE CALENDAR DAYS. ALL ROADWAY WORK AND WORK ON STRUCTURE HUR-4-0451 SHALL BE COMPLETED DURING THIS CLOSURE. SEE SHEET 7 FOR DETOUR INFORMATION.

THE DEPARTMENT SHALL BE RESPONSIBLE FOR THE DETOUR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR TYPE 3 BARRICADES AS PER STANDARD CONSTRUCTION DRAWING MT-101.60 LOCATED AT THE LIMITS OF THE CLOSURE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

DESIGN FILE: i:\projects\25682\structures\25682GN001.dgn
WORKSTATION: salay DATE: 2/16/2011

STRUCTURE SUMMARY & NOTES

HUR-4-0.00

DESIGN AGENCY
DISTRICT THREE
OFFICE OF PRODUCTION

DATE
2-9-11

REVIEWED
RDN

DRAWN
KRB

DESIGNED
KRB

CHECKED
HYH

REVISED

STRUCTURE FILE NO.	BRIDGE NO.	LOCATION	BRIDGE TYPE	SKEW	BRIDGE LIMITS	DECK WIDTH	PROPOSED WORK
3900029	HUR-4-0142	OVER HAAS DITCH	TWIN CONCRETE PIPES				PAVEMENT PLANING AND PAVING (SEE PAVEMENT AND SHOULDER DATA SHEET FOR PAVING QUANTITIES)
3900053	HUR-4-0451	OVER MEGGINSON CREEK	SINGLE SPAN PRESTRESSED CONCRETE BOX BEAM	30°00'00"	46.34'±	44'-0"±	DECK EDGE & SUBSTRUCTURE SEALING, PAVEMENT PLANING AND PAVING (SEE PAVEMENT AND SHOULDER DATA SHEET FOR PAVING QUANTITIES)

STRUCTURE INFORMATION

HUR-4-0.00

DATE

2-9-11

REVIEWED

RDN

DRAWN

KRB

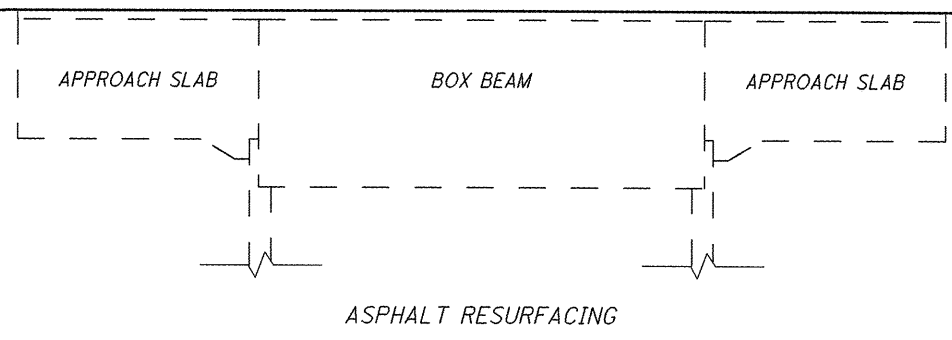
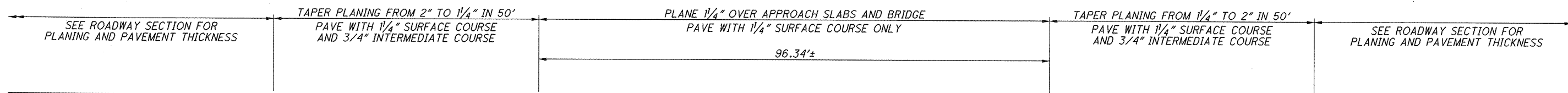
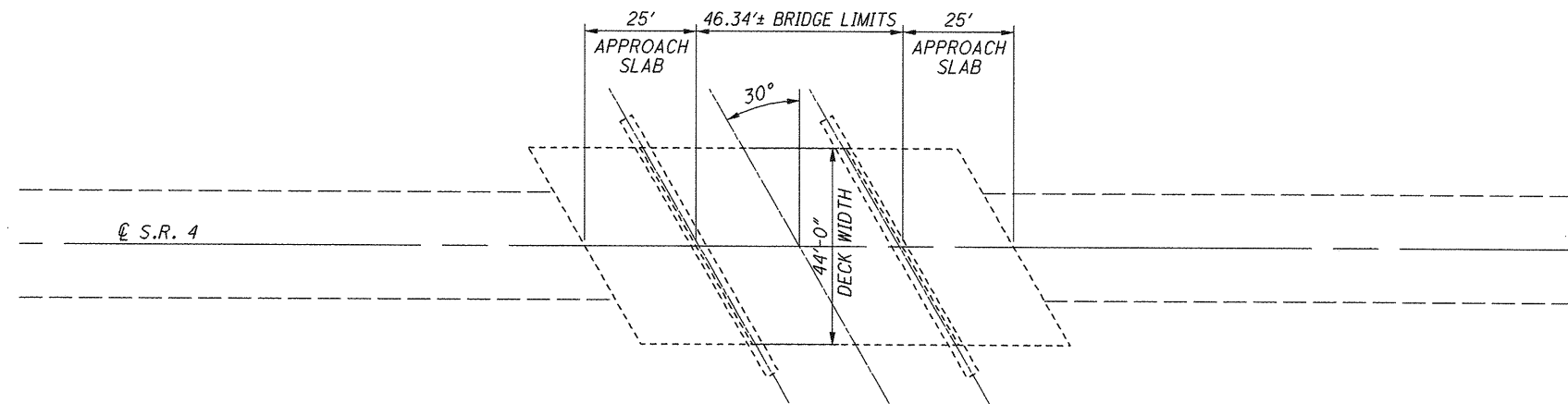
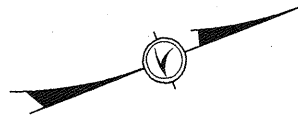
REVISD

DESIGNED

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CHECKED

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NOTES:

- 1) THE EXISTING GUARDRAIL IS NOT SHOWN.
- 2) SEE PAVEMENT AND SHOULDER DATA SHEET FOR PAVING QUANTITIES.

ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
512	52	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

ALL QUANTITIES CARRIED TO THE STRUCTURE SUMMARY.

DESIGN FILE: I:\projects\25682\structures\HUR004_045\ICGP001.dgn
 WORKSTATION: ksalay DATE: 2/16/2011

DESIGN AGENCY
 DISTRICT THREE
 OFFICE OF PRODUCTION

REVIEWED DATE
 RDN 2-9-11
 STRUCTURE FILE NUMBER
 3900053

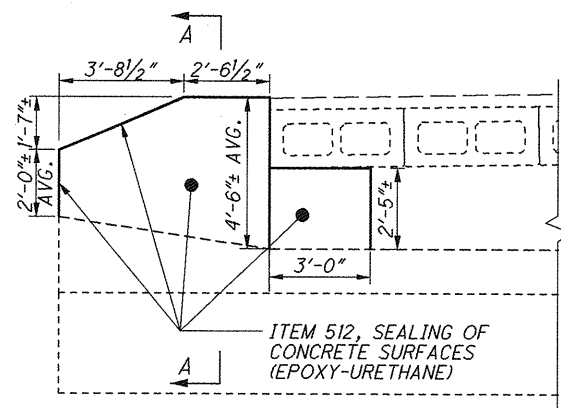
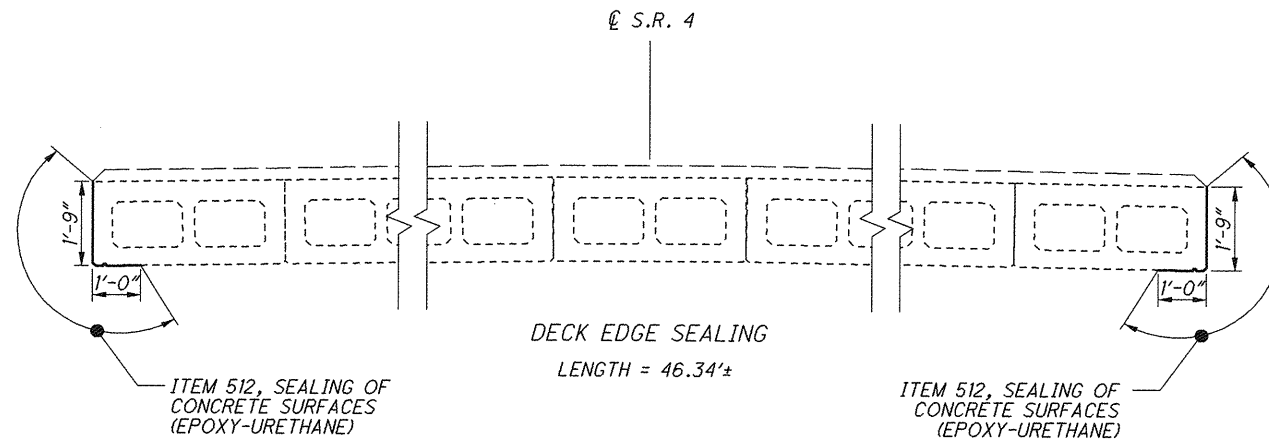
DRAWN
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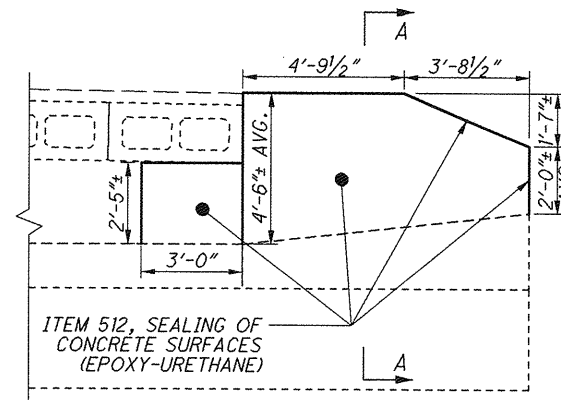
PLAN VIEW
 HUR-4-0451
 S.R. 4 OVER MEGGINSON CREEK

HUR-4-0-00

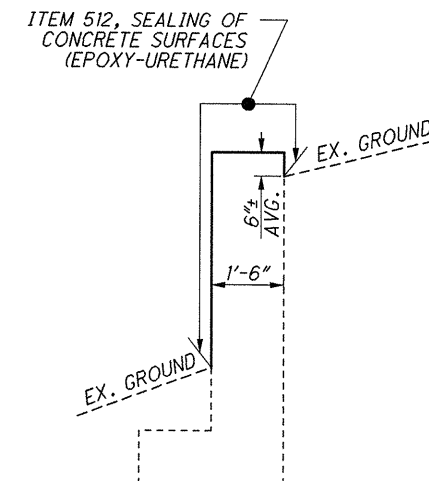
1 / 2
 21
 22



LEFT FORWARD & RIGHT REAR WINGWALL & ABUTMENT SEALING



RIGHT FORWARD & LEFT REAR WINGWALL & ABUTMENT SEALING



SECTION A-A WINGWALL SEALING

NOTES:

- 1) THE EXISTING GUARDRAIL IS NOT SHOWN.
- 2) SEAL FACE AND 1'-0" UNDERNEATH OF EXTERIOR BOX BEAM WITH ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).
- 3) SEAL ENTIRE WINGWALLS AND ABUTMENT FACE 3'-0" UNDERNEATH DECK WITH ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).

ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
512	52	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

ALL QUANTITIES CARRIED TO SHEET 1/2.