13-0.00

HUR-13-7.06 BEGIN PROJECT HUR-13-0.00

LOCATION MAP

OTHER ROADS ______

LATITUDE: 41°02'42" N LONGITUDE: 82°29'12" W



DESIGN DESIGNATION

	HUR-13-0.00-2.55	HUR-13-2.55-3.17	HUR-13-3.17-7.06	
CURRENT ADT (2024)	3,300	2,500	2,500	
DESIGN YEAR ADT (2044)	3,400	2,600	2,500	
DESIGN HOURLY VOLUME (2044)	300	250	250	
DIRECTIONAL DISTRIBUTION	50.8%	55.7%	53.2%	
TRUCKS (24 HOUR B&C)	20%	13%	14%	
DESIGN SPEED	55 MPH	55 MPH	55 MPH	
LEGAL SPEED	55 MPH	55 MPH	55 MPH	
DESIGN FUNCTIONAL CLASSIFICATION:	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL	
NHS PROJECT	NO	NO	NO	

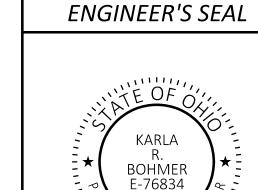
DESIGN EXCEPTIONS

SHOULDER WIDTH (APPROVAL DATE 11/20/23) SUPERELEVATION RATE (APPROVAL DATE 11/20/23)

ADA DESIGN WAIVERS

NONE





	BP
	BP
ER'S SEAL	BP
	СВ
	D٨
OF OA	D٨
	D٨
RLA \ _ =	D٨
IMER $\int_{-\infty}^{\infty}$	
700	HV
AL ENGILL	
RLA R. IMER 5834 TERED AL ENGLY	

		S	TANDARD	CONSTRU	JCTION I	DRAWIN	GS		EMENTAL CATIONS	SPECIAL PROVISIONS
BP-3.1	1/21/22	MGS-1.1	7/16/21	MT-97.10	4/19/19	TC-41.20	10/18/13	800-2023	10/20/23	WATERWAY PERMIT
BP-3.2	1/18/19	MGS-2.1	1/19/18	MT-97.12	1/20/17	TC-42.20	10/18/13	830	7/19/19	CONDITIONS
BP-4.1	7/19/13	MGS-2.3	1/20/23	MT-99.20	4/19/19	TC-52.10	10/18/13	832	7/21/23	DATED 12/21/23
BP-5.1	7/15/22	MGS-4.2	7/19/13	MT-101.90	7/17/20	TC-52.20	1/15/21	833	7/21/23	www
-		MGS-4.3	1/18/13	MT-105.10	1/17/20	TC-61.30	7/19/19	872	1/21/22	
CB-3A	7/16/21					TC-64.10	7/21/23	874	4/17/20	
DM-1.1	7/17/20	RM-1.1	1/20/23			TC-65.10	1/17/14	<i>875</i>	1/18/19	
DM-1.2	7/16/21					TC-65.11	7/15/22	899	1/20/23	
DM-4.3	1/15/16					TC-71.10	4/21/23	902	7/19/19	
DM-4.4	1/15/16									
HW-2.1	7/15/22									

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

HUR-13-0.00

FITCHVILLE TOWNSHIP

GREENWICH TOWNSHIP

HURON COUNTY

INDEX OF SHEETS:

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TITLE SHEET

SCHEMATIC PLAN

TYPICAL SECTIONS

GUARDRAIL NOTES

GENERAL SUMMARY

GUARDRAIL DETAILS

CULVERT DETAILS

HUR-13-0.98

HUR-13-1.68 HUR-13-4.38 HUR-13-5.21

HUR-13-5.52

STRUCTURE NOTES STRUCTURE DETAILS HUR-13-3.05 HUR-13-5.45

PIS: GR-1.1 PIS: GR-2.1 PIS: GR-3.4

CENTERLINE PLAT

PROFILE ELEVATION TABLES

GEOTECHNICAL PROFILE - ROADWAY

PAVEMENT MARKING/RPM SUB-SUMMARY

MAINTENANCE OF TRAFFIC NOTES

PAVEMENT & SHOULDER DATA

ROADWAY SUB-SUMMARY

DRAINAGE SUB-SUMMARY

GENERAL NOTES

DETOUR PLAN

FEDERAL PROJECT NUMBER

E161192

RAILROAD INVOLVEMENT

CSX TRANSPORTATION, INC.

PROJECT DESCRIPTION

THIS PROJECT SHALL CONSIST OF THE FULL DEPTH PAVEMENT REPLACEMENT OF SR 13 FROM THE RICHLAND COUNTY LINE (SLM 0.00) TO US 250 (SLM 7.06). THIS PROJECT WILL ALSO INCLUDE GUARDRAIL REPAIR, MINOR CULVERT REPAIR, STRUCTURE MAINTENANCE AND PAVEMENT MARKINGS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 50.1 ACRES 1.0 ACRES ESTIMATED CONTRACTOR EARTH DISTURBED AREA: NOTICE OF INTENT EARTH DISTURBED AREA: *51.1 ACRES*

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS 19-21.

Robert Weaver District 03 Deputy Director

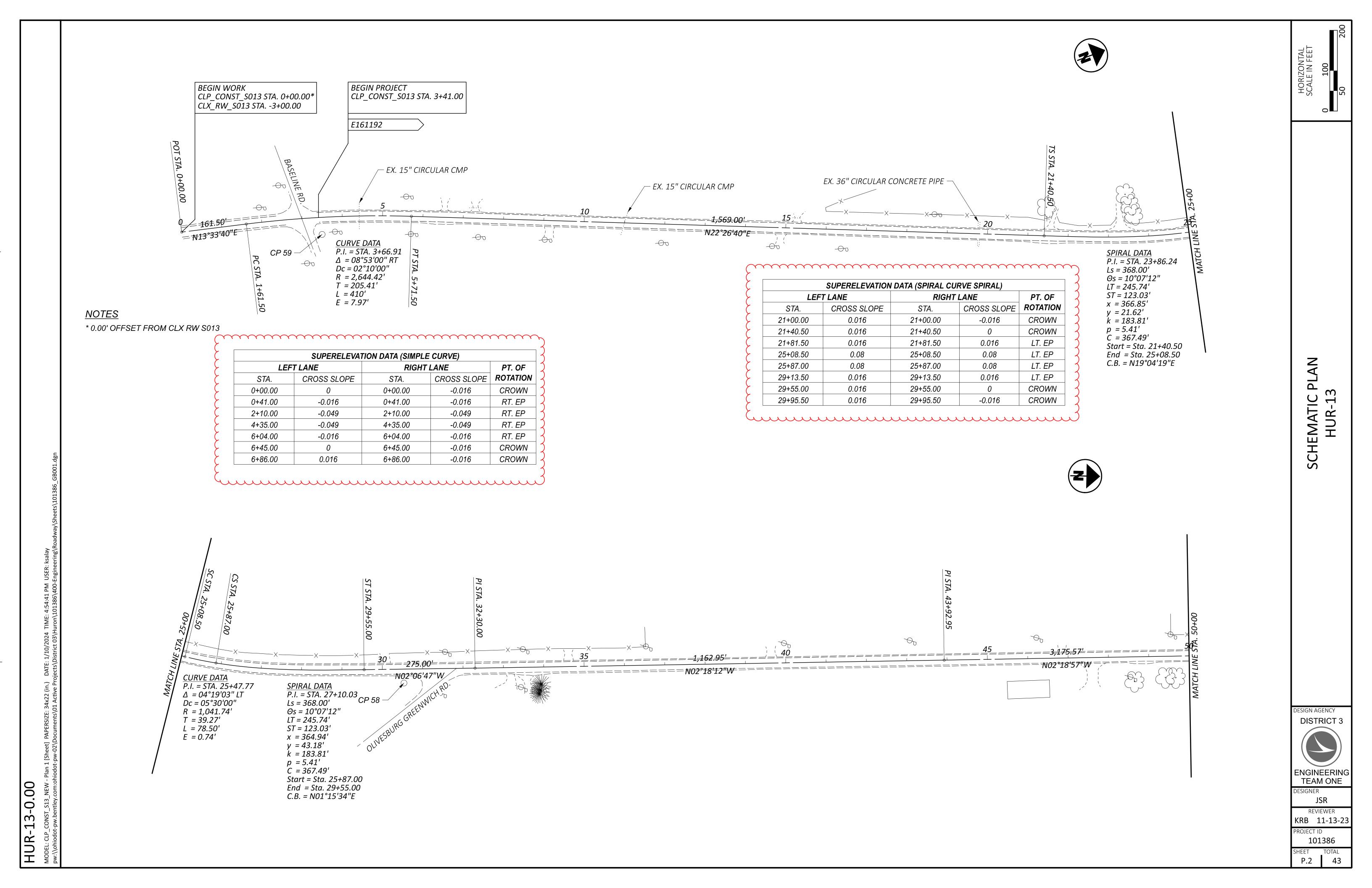
Director, Department of Transportation

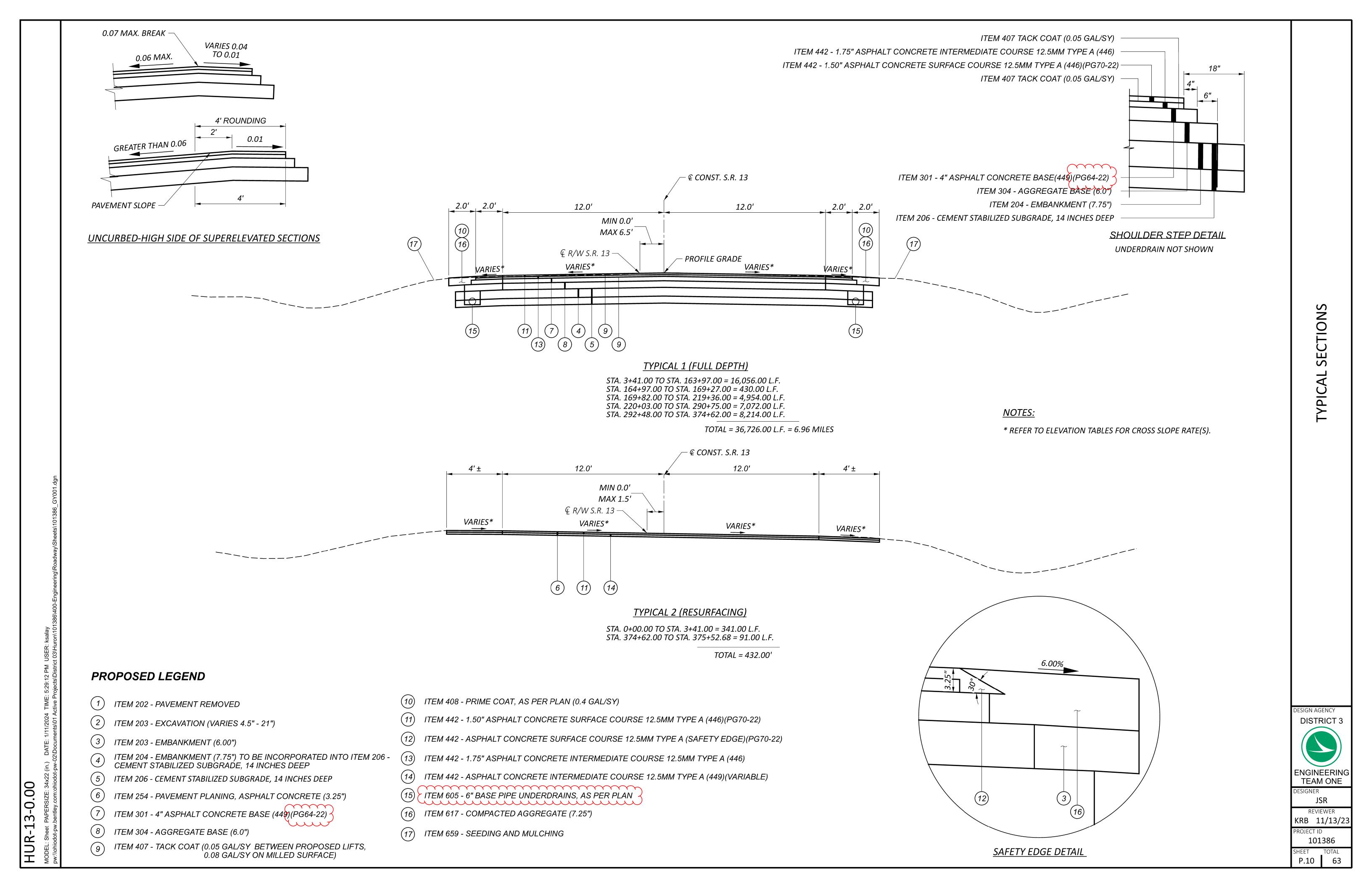
PLANS PREPARED BY:

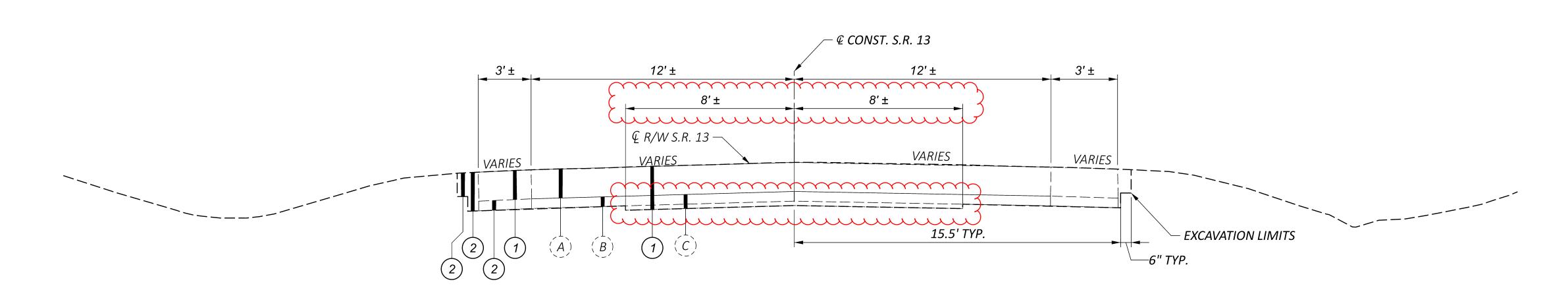




REVIEWER KRB 11/13/23 ROJECT ID 101386







TYPICAL 3 (EXISTING)

STA. 3+41.00 TO STA. 163+97.00 = 16,056.00 L.F. STA. 164+97.00 TO STA. 169+27.00 = 430.00 L.F. STA. 169+82.00 TO STA. 219+36.00 = 4,954.00 L.F. STA. 220+03.00 TO STA. 290+75.00 = 7,072.00 L.F. STA. 292+48.00 TO STA. 374+62.00 = 8,214.00 L.F.

TOTAL = 36,726.00 L.F. = 6.96 MILES

EXISTING LEGEND

- (A) EXISTING ASPHALT (16.5" ±)
- (B) EXISTING AGG. BASE $(4.5" \pm)$
- (C) EXISTING CONCRETE BASE (8.0" \pm)

PROPOSED LEGEND

- 1) ITEM 202 PAVEMENT REMOVED
- ITEM 203 EXCAVATION (VARIES 4.5" 21")
- ITEM 203 EMBANKMENT (6.00")
- ITEM 204 EMBANKMENT (7.75") TO BE INCORPORATED INTO ITEM 206 -CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
- ITEM 206 CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP
- ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE (3.25")
- ITEM 301 4" ASPHALT CONCRETE BASE (44<mark>9</mark>)(PG64-22)
- ITEM 304 AGGREGATE BASE (6.0")
- ITEM 407 TACK COAT (0.05 GAL/SY BETWEEN PROPOSED LIFTS, 0.08 GAL/SY ON MILLED SURFACE)

- ITEM 408 PRIME COAT, AS PER PLAN (0.4 GAL/SY)
- (11) ITEM 442 1.50" ASPHALT CONCRETE SURFACE COURSE 12.5MM TYPE A (446)(PG70-22)
- 12) ITEM 442 ASPHALT CONCRETE SURFACE COURSE 12.5MM TYPE A (SAFETY EDGE)(PG70-22)
- (13) ITEM 442 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE 12.5MM TYPE A (446)
- ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE 12.5MM TYPE A (449)(VARIABLE)
- ITEM 605 6" BASE PIPE UNDERDRAINS, AS PER PLAN
- ITEM 617 COMPACTED AGGREGATE (7.25")
- 17) ITEM 659 SEEDING AND MULCHING



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P.11 63

UNDERDRAINS SHALL BE INSTALLED AT THE DEPTHS SHOWN ON THE DRAINAGE SUB-SUMMARY PLAN SHEET.

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.

POST CONSTRUCTION STORM WATER TREATMENT (W100)

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

VEGETATED FILTER STRIP (W104)

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

MAILBOX APPROACHES

THE MAILBOX APPROACHES SHALL BE PAVED WITH [RESURFACING TREATMENT]. 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 THE 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

15 EACH (01/STR/04)

ITEM 617 – COMPACTED AGGREGATE

15 CU YD (01/STR/04)

ITEM SPECIAL – MAILBOX SUPPORT (R118)

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN. OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND AND CONFORM TO 710.14.

STEEL POSTS SHAL BE NOMINAL PIPE SIZE 2 INCHES I.D. AND CONFORM TO AASHTO M 181.

ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL

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

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE 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, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS, TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT SYSTEM, (SINGLE) (DOUBLE).

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

ITEM SPECIAL - MAILBOX SUPPORT SYSTEM, SINGLE

1 EACH (01/STR/04)

LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED

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

2472 S.R. 13, SLM 5.41

STOP BAR PLACEMENT

IN ORDER TO COMPLY WITH THE REQUIREMENTS OF THE TRAFFIC ENGINEERING MANUAL AND THE OMUTCD. AT NORMAL STOP CONTROLLED INTERSECTIONS WITHOUT CROSSWALK. PLACE THE LEADING EDGE OF THE STOP BAR (CLOSEST TO THE CENTER OF THE INTERSECTION) IN ACCORDANCE WITH THE BELOW TABLE UNLESS SPECIFIED OTHERWISE IN THESE PLANS:

SHOULDER WIDTH OF INTERSECTED ROADWAY	PLACE THE LEADING EDGE OF STOP BAR ON INTERSECTING/APPROACH ROADWAY
0 FEET < SHOULDER WIDTH ≤ 2 FEET	4 FEET BACK FROM EDGE OF PAVED SHOULDER OF INTERSECTED ROADWAY
2 FEET < SHOULDER WIDTH ≤ 4 FEET	2 FEET BACK FROM EDGE OF PAVED SHOULDER OF INTERSECTED ROADWAY
SHOULDER WIDTH > 4 FEET	IN LINE WITH EDGE OF PAVED SHOULDER OF INTERSECTED ROADWAY

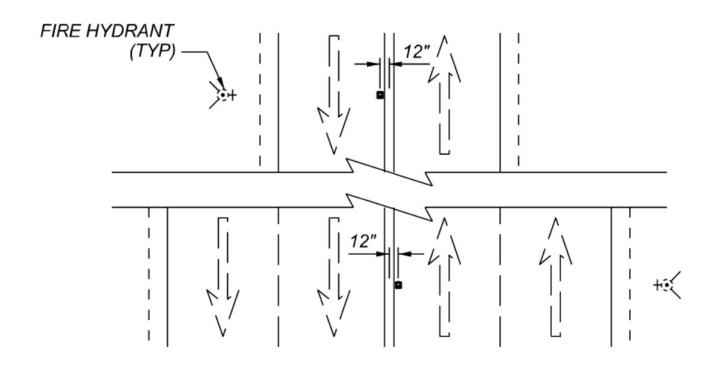
PAVEMENT MARKING LOG

PRIOR TO REMOVING, GRINDING, OR OTHERWISE DESTROYING ANY EXISTING PAVEMENT MARKINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CREATE AN EXISTING PAVEMENT MARKING LOG IN ORDER TO PLACE THE PROPOSED PAVEMENT MARKINGS IN THE SAME LOCATION AS THEIR EXISTING CONFIGURATION. SUBMIT THE EXISTING PAVEMENT MARKING LOG TO THE ENGINEER AND OBTAIN HIS OR HER APPROVAL PRIOR TO REMOVING. GRINDING, OR OTHERWISE DESTROYING THE EXISTING PAVEMENT MARKINGS.

ALL LABOR. MATERIAL. EQUIPMENT. AND INCIDENTALS NEEDED TO COMPLETE THIS WORK SHOULD BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 614 – MAINTAINING TRAFFIC.

RPMs FOR FIRE HYDRANTS (TWO- AND FOUR-LANE UNDIVIDED)

INSTALL ONE BLUE/BLUE RAISED PAVEMENT MARKER ALONG THE CENTERLINE OF THE ROADWAY IN FRONT OF ALL FIRE HYDRANTS WITHIN THE PROJECT LIMITS AS LISTED ON THE RPM SUBSUMMARY. OFFSET THESE RPMS A DISTANCE OF 12 INCHES, MEASURED FROM THE CENTER OF THE CENTERLINE TO THE CENTER OF THE RPM. LATERALLY FROM THE CENTERLINE OF THE ROADWAY, TOWARD THE MARKED FIRE HYDRANT. SEE THE DETAIL BELOW AS INFORMATION. THESE RPMS SHOULD BE ADDED IN ADDITION TO THE STANDARD LONG LINE MARKING PLAN: THEY SHOULD NOT REPLACE ANY YELLOW. RED. OR WHITE MARKINGS.



PAVEMENT CORING INFORMATION

COUNTY	ROUTE	SLM	ASPHALT (IN)	CONCRETE (IN)	BRICK (IN)	LOCATION	DIRECTION	YEAR CORED
HUR	13	0.06	17.0	8.5	0.0	LT. WHEEL PATH	NB	2020
HUR	13	0.06	13.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	0.06	7.0	0.0	0.0	SHOULDER	NB	2020
HUR	13	0.60	6.0	0.0	0.0	CENTER	NB	2020
HUR	13	0.60	9.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	0.60	7.0	0.0	0.0	SHOULDER	NB	2020
HUR	13	1.00	14.5	7.0	0.0	LT. WHEEL PATH	NB	2020
HUR	13	1.00	14.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	1.00	7.5	0.0	0.0	SHOULDER	NB	2020
HUR	13	2.00	12.0	8.0	0.0	LT. WHEEL PATH	NB	2020
HUR	13	2.00	13.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	2.00	6.5	0.0	0.0	SHOULDER	NB	2020
HUR	13	2.75	9.5	7.5	0.0	CENTER	NB	2020
HUR	13	2.75	14.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	2.75	7.5	0.0	0.0	SHOULDER	NB	2020
HUR	13	3.30	12.0	7.5	0.0	CENTER	NB	2020
HUR	13	3.30	13.5	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	3.30	10.0	0.0	0.0	SHOULDER	NB	2020
HUR	13	3.95	12.0	8.0	0.0	CENTER	NB	2020
HUR	13	3.95	10.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	3.95	7.5	0.0	0.0	SHOULDER	NB	2020
HUR	13	4.50	14.0	8.0	0.0	CENTER	NB	2020
HUR	13	4.50	15.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	4.50	10.0	0.0	0.0	SHOULDER	NB	2020
HUR	13	5.00	12.5	7.5	0.0	CENTER	NB	2020
HUR	13	5.00	15.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	5.00	6.5	0.0	0.0	SHOULDER	NB	2020
HUR	13	5.51	15.0	0.0	0.0	CENTER	NB	2020
HUR	13	5.51	15.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	5.51	9.0	0.0	0.0	SHOULDER	NB	2020
HUR	13	6.00	14.0	8.0	0.0	CENTER	NB	2020
HUR	13	6.00	15.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	6.00	9.0	0.0	0.0	SHOULDER	NB	2020
HUR	13	6.85	15.0	8.0	0.0	CENTER	NB	2020
HUR	13	6.85	12.0	0.0	0.0	RT. WHEEL PATH	NB	2020
HUR	13	6.85	9.0	0.0	0.0	SHOULDER	NB	2020

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DISTRICT 3

ESIGN AGENCY

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ENERAL

ENGINEERING

TEAM ONE KRB

REVIEWER XXX 11/13/23 ROJECT ID

P.15 63

101386

ITEM 614 – MAINTAINING TRAFFIC (GENERAL)

MAINTAIN ONE 10' LANE OF TRAFFIC AT ALL TIMES. UNLESS OTHERWISE SPECIFIED.

ROAD CLOSURE PERIODS AND ASSOCIATED DETOURS ARE PROVIDED IN THE PLANS. THE CONTRACTOR IS REQUIRED TO MAINTAIN ONE 10' MINIMUM LANE FOR LOCAL ACCESS DURING ALL CLOSURE PERIODS. THE CONTRACTOR SHALL PROVIDE FOR POSITIVE CONTROL AND DECONFLICTION OF LOCAL TRAFFIC USING FLAGGERS, SIGNALS, OR OTHER MEANS APPROVED BY THE ENGINEER. TRAFFIC SHALL BE DETOURED UNTIL INTERMEDIATE COURSE FOR A GIVEN SECTION HAS BEEN PLACED AND IS ABLE TO BEAR TRAFFIC.

SUBMIT, IN WRITING, A SCHEDULE OF OPERATIONS TO THE ENGINEER AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT. PRIOR TO BEGINNING WORK, COORDINATE THE MAINTENANCE OF TRAFFIC OPERATIONS WITH THE LOCAL STATE HIGHWAY PATROL.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2012, WITH THE LATEST REVISIONS. PAYMENT FOR ALL LABOR. EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 614 – MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. EXCEPT FOR A PERIOD NOT TO EXCEED THE CONSECUTIVE CALENDAR DAYS SHOWN ON THE TABLE BELOW. WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 19-21. AND LOCAL TRAFFIC MAINTAINED IN AT LEAST ONE DIRECTION. A DISINCENTIVE SHALL BE ASSESSED FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT, ACCORDING TO THE TABLE BELOW. THE CLOSURES FOR HUR-13-0.00 TO 2.55 AND HUR-13-2.55 TO 7.06 ARE PERMITTED TO OCCUR SIMULTANEOUSLY.

SEGMENT	MAXIMUM DURATION	DISINCENTIVE
SEGMENT	OF CLOSURE	AMOUNT
HUR-13-0.00 TO 2.55	120 DAYS	\$10,000 / DAY
HUR-13-2.55 TO 7.06	120 DAYS	\$10,000 / DAY

ITEM 614 – MAINTAINING TRAFFIC RESIDENTIAL AND AGRICULTURAL DRIVES

ACCESS TO ALL RESIDENTIAL AND AGRICULTURAL DRIVES SHALL BE MAINTAINED AT ALL TIMES WITH EITHER EXISTING / NEW PAVEMENT OR ITEM 410 – TRAFFIC COMPACTED SURFACE, TYPE A OR B EXCEPT FOR A MINIMAL PERIOD APPROVED BY THE ENGINEER FOR THE PLACEMENT OF ASPHALT CONCRETE PAVEMENT IN FRONT OF AND/OR ADJACENT TO THE DRIVE APRON. THE CONTRACTOR IS TO PROVIDE 7 CALENDAR DAY NOTICE TO THE AFFECTED PERSON(S) SO THEY CAN MAKE ALTERNATIVE PARKING ARRANGEMENTS. ASPHALT GRINDINGS THAT MEET THE REQUIREMENTS OF C&MS 703.18 MAY BE USED.

ITEM 614 – MAINTAINING TRAFFIC SIDE / CROSS ROADS

ACCESS TO ALL SIDE AND / OR INTERSECTING ROADS, INCLUDING ACCESS ACROSS S.R. 13, SHALL BE MAINTAINED AT ALL TIMES WITH EITHER EXISTING / NEW PAVEMENT OR ITEM 410 -TRAFFIC COMPACTED SURFACE, TYPE A OR B, EXCEPT FOR MINIMUM PERIODS AS APPROVED BY THE ENGINEER TO ALLOW CONSTRUCTION ACTIVITIES WITHIN THE INTERSECTION.

MAINTAINING TRAFFIC PHASES

DURING EACH PHASE, LOCAL TRAFFIC SHALL BE MAINTAINED IN AT LEAST ONE DIRECTION.

PH 1A: ROAD CLOSURE BETWEEN HUR-13-0.00 AND 2.55. MAINTAIN ONE 10' LANE FOR LOCAL TRAFFIC USING EXISTING WEST SIDE PAVEMENT. CONSTRUCT THE EAST SIDE.

ROAD CLOSURE BETWEEN HUR-13-0.00 AND 2.55. MAINTAIN ONE 10' LANE FOR LOCAL TRAFFIC USING NEW / EXISTING EAST SIDE PAVEMENT. CONSTRUCT THE WEST SIDE.

PH 2A: ROAD CLOSURE BETWEEN HUR-13-2.55 AND 7.06. MAINTAIN ONE 10' LANE FOR LOCAL TRAFFIC USING EXISTING WEST SIDE PAVEMENT. CONSTRUCT THE EAST SIDE.

ROAD CLOSURE BETWEEN HUR-13-2.55 AND 7.06. MAINTAIN ONE 10' LANE FOR LOCAL TRAFFIC USING NEW / EXISTING EAST SIDE PAVEMENT. CONSTRUCT THE WEST SIDE.

DETOUR SIGNING

THE FOLLOWING QUANTITY IS INCLUDED FOR THE CONTRACTOR TO PROVIDE THE DETOUR SIGNING AS SHOWN IN THESE PLANS AND AS PER C&MS 614.06:

ITEM 614 – DETOUR SIGNING 01/STR/04 - LUMP

ITEM 614 - MAINTAINING TRAFFIC (LANE CLOSURE/REDUCTION REQUIRED)

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

ITEM 614 – MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H14) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLAT SHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.] THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS. THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

	NOTICE OF CLOSURE SIGN TIME	TABLE
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
	≥ 2 WEEKS	14 CALENDAR DAYS*
RAMP AND ROAD CLOSURES	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS*
CLOSURES	< 12 HOURS	2 BUSINESS DAYS*

* DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H14 SIGN LISTS THE NAME OF THE DEPARTMENT, i.e. "THE OHIO DEPT. OF TRANS."

ITEM 614 – MAINTAINING TRAFFIC (ESTIMATED QUANTITIES)

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR MAINTENANCE OF TRAFFIC. INCLUDE THE COST FOR THE REMOVAL OF ALL MAINTENANCE OF TRAFFIC MATERIALS IN THE CONTRACT BID PRICE FOR EACH ITEM BELOW. REMOVE THE MATERIALS AT THE DIRECTION OF THE ENGINEER WHEN NO LONGER OPERATIONALLY NEEDED.

ITEM 410 – TRAFFIC COMPACTED SURFACE, TYPE A OR B

ITEM 410 – TRAFFIC COMPACTED SURFACE, TYPE C

ITEM 614 – ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

1,400 CU YD 208 CU YD

100 CU YD

TEMPORARY PAVEMENT WEDGES

PROVIDE TEMPORARY PAVEMENT WEDGES AT ALL TIMES WHERE TRAFFIC IS REQUIRED TO TRAVEL FROM OR ONTO A SURFACE OF A DIFFERENT ELEVATION IN THE DIRECTION OF TRAVEL (JOINTS, MANHOLES, CATCH BASINS, VALVE BOXES, MONUMENT BOXES, ETC.). THE TAPER RATE OF THE TEMPORARY PAVEMENT WEDGES SHALL BE AS PER THE REQUIREMENTS IN THE CHART BELOW. REMOVE THE TEMPORARY PAVEMENT WEDGES PRIOR TO PLACING EACH PROPOSED PAVEMENT COURSE. CONSIDER PAYMENT FOR THIS WORK, INCLUDING ALL MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK, AS INCIDENTAL TO ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

		DURA	ATION
		7 DAYS OR LESS	MORE THAN 7 DAYS
	LESS THAN 45 MPH	36H:1V	60H:1V
SPEED	45 MPH OR GREATER	60H:1V	120H:1V

DUST CONTROL

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

ITEM 616, WATER 01/STR/04 - 100 M. GAL.

ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

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

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT. OPERATION. MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL. AT THE DIRECTION OF THE ENGINEER. RELOCATE THE PCMS TO IMPROVE VISIBILITY OR

ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME. THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

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

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

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

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS. TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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

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

ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 01/STR/04 – 16 SIGN MONTH ASSUMING 2 PCMS SIGN(S) FOR 8 MONTH(S)

<u>ITEM 614 – BUSINESS ENTRANCE (M4-H15) SIGN, AS PER PLAN</u>

THE BUSINESS ENTRANCE (M4-H15) SIGN SHOULD BE PROVIDED AT EACH TEMPORARILY RELOCATED COMMERCIAL DRIVEWAY FOR WHICH THE RELOCATION IS NOT OBVIOUS TO THE MOTORIST. THE PROJECT ENGINEER SHALL DETERMINE WHETHER OR NOT THE DRIVEWAY RELOCATION IS. OR IS NOT. OBVIOUS AND WHETHER OR NOT A SIGN SHOULD BE PROVIDED. ONLY ONE SIGN PER BUSINESS SHALL BE PERMITTED. THE SIGN SHALL BE 36 INCH X 48 INCH IN SIZE WITH TYPE G OR TYPE H ORANGE RETROREFLECTIVE SHEETING. THE SIGN LEGEND SHALL BE PLACED ON BOTH SIDES OF THE SIGN (BACK TO BACK). THE SIGN SHALL HAVE THE STANDARD M4-H15 LEGEND WITH THE WORD "BUSINESS" ON THE TOP LINE, EXCEPT UNDER UNUSUAL CIRCUMSTANCES WHERE IT MAY NOT BE INTUITIVE THAT A DRIVEWAY SERVES A SPECIFIC BUSINESS. IN SUCH UNUSUAL CASES. THE ACTUAL BUSINESS NAME MAY BE SUBSTITUTED FOR THE WORD "BUSINESS".

THE SIGN SHALL BE MOUNTED ON TWO #3 POSTS OR ON TEMPORARY POSTS IN ACCORDANCE WITH SCD MT105.10 AND IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. LATEST EDITION. THE SIGN SHALL BE CLEARLY VISIBLE AND SHALL CLEARLY IDENTIFY THE LOCATION OF THE DRIVEWAY. THE SIGN SHOULD BE POSITIONED AT 900 TO THE DIRECTION(S) OF TRAFFIC. THE SIGN MAY NEED TO BE MOVED FOR EACH PHASE OF THE MAINTENANCE OF TRAFFIC OPERATIONS.

PAYMENT FOR ALL COSTS ASSOCIATED WITH MANUFACTURING, MOUNTING, RELOCATING, AND REMOVING THE SIGN. INCLUDING ALL LABOR. MATERIALS AND EQUIPMENT SHALL BE INCLUDED IN THE CONTRACT PRICE PER EACH FOR ITEM 614-BUSINESS ENTRANCE SIGN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS ITEM:

ITEM 614, BUSINESS ENTRANCE SIGN

01/STR/04 – 3 EACH

ONE WAY SIGNING

PROVIDE TEMPORARY ONE-WAY SIGNING IN FRONT OF EACH DRIVEWAY WITHIN ANY SEGMENT UNDER ONE-WAY LOCAL TRAFFIC. BELOW IS AN ESTIMATE OF REQUIRED SIGN INSTALLATIONS TO ACCOMPLISH THIS WORK. ALL LABOR. MATERIALS. AND EQUIPMENT REQUIRED TO ACCOMPLISH THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE PER EACH FOR ITEM 614 - WORK ZONE MARKING SIGN.

WORK ZONE MARKING SIGN: (R6-1L-36) ONE WAY WORK ZONE MARKING SIGN: (R6-1R-36) ONE WAY

01/STR/04 – 72 EACH 01/STR/04 – 72 EACH

TOTAL = 01/STR/04 - 144 EACH

JLL REVIEWER KRB 11/13/23 ROJECT ID 101386

ENGINEERING

TEAM ONE

ESIGN AGENCY

DISTRICT 3

P.17 63

					LEI	NGTH				202	203	203	20	04		206		254	301	304	4	.07		4	.42		6′	18	874	GED			209	408	617
PLAN SPLIT	COUNTY	ROUTE	1	POINT TO POINT	MILE	FEET	AVERAGE WIDTH	*TYPICAL-NUMBER (SEE SHEETS 10-11 FOR TYPICALS)	PAVEMENT AREA	PAVEMENT REMOVED	EXCAVATION	EMBANKMENT	EMBANKMENT	PROOF ROLLING	CEMENT	CURING COAT	CEMENT STABILIZED SUBGRADE, 14" DEEP	PAVEMENT PLANNING, ASPHALT CONCRETE (3.25") PATCHING PLANED SURFACE	ASPHALT CONCRETE BASE (4")	AGGREGATE BASE (6")	TACK COAT (0.05 GAL/SY)	TACK COAT (0.08 GAL/SY)	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) (1.5")	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) (SAFETY EDGE)	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) (1.75")	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449) (VARIABLE)	RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE)	RUMBLE STRIPES, CENTER LINE (ASPHALT CONCRETE)	LONGITUDINAL JOINT PREPARATION	AGGREGATE SI	SR	AGGREGATE SHOULDER AREA	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	PRIME COAT, AS PER PLAN (0.4 GAL/SY)	SHOW STATE COMPACTED AGGREGATE
			LINE MILE				FT		SY	SY	CY	CY	CY	HOUR	TON	SY	SY	SY SY		CY	GAL	GAL	CY	CY	CY	CY	MILE	MILE	MILE	FT	FT	SY	MILE	GAL	CY
01/STR/04	HUR	13	0.00	0.50	0.50	2640	28	1	8,213	8,800	1,027	98	2,414	}	275	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04	HUR	13	0.50	1.00	0.50	2640	28	1	8,213	8,800	1,027	98	2,414	5 _	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04	HUR	13	1.00	1.50	0.50	2640	28	1	8,213	8,800	1,027	98	2,414	5	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04	HUR	13	1.50	2.00	0.50	2640	28	1	8,213	8,800	1,027	98	2,414	5	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04	HUR	13	2.00	2.50	0.50	2640	28	1	8,213	8,800	1,027	98	2,414	5	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04	HUR	13	2.50	3.05 URE HUR-	0.55	2904	28	I	9,035	9,680	1,129	108	2,655	3	259	10,003	10,003		1,028	1,595	903		376	16	439		1.10	0.55	0.55	2	2	1,291	1.10	517	260
01/STR/04	HUR	13	3.05	3.50	0.45	2376	28	1	7,392	7,920	924	88	2,173	Δ	212	8,184	8,184		841	1,305	739		308	13	359		0.90	0.45	0.45	2	2	1,056	0.90	423	213
01/STR/04	HUR	13	3.50	4.00	0.50	2640	28	1	8,213	8,800	1,027		2,414)	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04	HUR	13	4.00	4.50	0.50	2640	28	1	8,213	8,800	1,027		2,414)	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04	HUR	13	4.50	5.00	0.50	2640	28	1	8,213	8,800	1,027		2,414)	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04		13	5.00	5.45	0.45	2376	28	1	7,392	7,920	924	88	2,173)	212	8,184	8,184		841	1,305	739		308	13	359		0.90	0.45	0.45	2	2	1,056	0.90	423	213
01/STR/04	HUR	13	STRUCT 5.45	URE HUR-	13-5.45 0.55	2904	28	1	9,035	9,680	1,129	108	2,655	5	259	10,003	10,003		1,028	1,595	903		376	16	439		1.10	0.55	0.55	2	2	1,291	1.10	517	260
01/STR/04	HUR	13	6.00	6.50	0.50	2640	28	1	8,213	8,800	(1,027		2,414	}	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04		13	6.50	7.00	0.50	2640	28	1	8,213	8,800	1,027	98	2,414	}	235	9,093	9,093		934	1,450	821		342	14	399		1.00	0.50	0.50	2	2	1,174	1.00	470	237
01/STR/04	HUR	13	7.00	7.04	0.04	225.98	28	1	703	753	88 2	8	207	0	20	778	778		80	124	70		29	1	34		0.09	0.04	0.04	2	2	101	0.09	41	21
01/STR/04		13	7.04	7.06	0.02	91	32	2	323		The state of the s		ti					323 2			32	26	13	0		16	0.03	0.02	0.02	2	2	41	0.03	17	9
eering/Koadwg																																			
01/STR/04	EXTRA	AREA - S	SR 13, SOU	TH OF BAS	SELINE RD	341	32	2	1,212									1,212 6			61	97	51	2		59	0.13	0.06	0.06	2	2	152	0.13	61	31
01/STR/04			EXTRA	AREA FOR	R INTERSE	CTIONS			2,196									2,196 11			110	176	92		107										
01/STR/04			EXTRA	A AREA FO	R PAVED [DRIVES			324									324 2			16	26	14		16										
01/STR/04			EXTRA AI	REA FOR A	GGREGAT	TE DRIVES	;		1,017									1,017 5			51	81	42		49										92
01/STR/04		EXTR	RA AREA F	OR EX & PI	R MAILBO	XES APPR	OACH		400									400 2			20	32	17		19										
ects/DI																																			
e Proje																																			
- Activ																																			D
L Docum																																			
70-wd																																			
TO	TALS TO	GENERA	L SUMMAI	RY						123,953	14,461	1,377	34,001	64	3,353	128,085	128,085	5,472 27	13,160	20,429	11,859	438	5,048	203	5,815	75	14.25	7.12	7.12			16,728	14.25	6,699	3,469
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DESIGN AGENCY DISTRICT 3

ENGINEERING TEAM ONE DESIGNER

KRB REVIEWER XXX 11/13/23

PROJECT ID 101386 SHEET TOTAL P.25 63

UNDERDRAIN QUANTITIES

					· ·			~~~~
OUTLET STA.	OFFSET [FT]		CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS [FT]	PRECAST REINFORCED CONCRETE OUTLET	6" BASE PIPE UNDERDRAINS.	3	UNDERDRAIN	
	LT	RT			LT	RT	\rightarrow LT	RT
10+33.00	27	27	26	2	692	692	12"	12"
20+48.00	27	28	27	2	1015	1015*	12"	12"
30+48.00	26	26	24	2	1000	1000*	12"	12"
40+48.00	26	25	23	2	1000	1000	2"	12"
50+48.00	26	24	22	2	1000	1000	12"	12"
55+67.00	27	27	26	2	519	519	2"	12"
65+67.00	25	25	22	2	1000	1000	12"	12"
75+67.00	24	27	23	2	1000	1000	2"	12"
83+25.00	25	28	25	2	758	758	12"	12"
92+40.00	27	29	28	2	915	915	12"	12"
102+40.00	24	26	22	2	1000	1000	2"	12"
108+75.00	24		10	1	635		12"	12"
112+40.00		26	12	1		1000	12"	12"
118+75.00	26		12	1	1000		12"	12"
122+40.00		25	11	1		1000	12"	12"
128+75.00	25		11	1	1000		12"	12"
131+75.00		26	12	1		935	12"	12"
133+75.00	27		13	1	500		2"	12"
141+62.00	27	26	25	2	787	987	12"	12"
151+62.00	27	27	26	2	1000	1000	12 "	12"
156+62.00	24	26	22	2	500	500	12"	12"
163+75.00	26	28	26	2	713	713	2"	12"
165+25.00	27	27	26	2	150	150	12"	12"
176+13.00	25	28	25	2	1088	1088	12"	12"
186+13.00	25	26	23	2	1000	1000	12"	12"
195+20.00	27	27	26	2	907	907	12"	12"
205+20.00	25	26	23	2	1000	1000	12 "	12" <
214+75.00	28	25	25	2	955	955	12"	12"
225+75.00	27	27	26	2	1100	1100	12"	12"
235+25.00	25	27	24	2	950	950	12"	12"
245+25.00	25	26	23	2	1000	1000	12"	12"
253+00.00	25		11	1	775		2"	12"
254+00.00		25	11	1		875	12"	12"
263+00.00	25		11	1	1000		2"	12"
264+00.00		24	10	1		1000	12"	12"
268+75.00	26		12	1	575		12"	12"
269+50.00		24	10	1	_	550	12"	12"
278+75.00	19	25	16	2	1000	925	12"	12"
292+50.00	28	30	30	2	1375	1375	12"	12"
302+00.00	20	19	11	2	950	950	12"	12"
312+00.00	LATERAL	24	45	1	1000	1000	12"	10"
321+50.00	LATERAL	27	48	1	950	950	12"	10"
331+50.00	20	21	13	2	1000	1000	12"	12"
340+00.00	21	20	13	2	850	850	12"	12"
347+75.00	LATERAL	24	45	1	775	775	12"	10"
352+75.00	LATERAL	22	43	1	500	500	12"	10"
359+26.00	31	27	30	2	651	651	12"	12"
368+40.00	23 TOTAL	24	19	2	914	914	12"	12"
	TOTAL		1047	79	/2	998		

ALL QUANTITIES CARRIED TO THE DRAINAGE SUB-SUMMARY

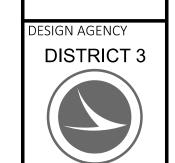
DRAINAGE SUB-SUMMARY

PLAN SPLIT	ITEM	EXTENSION	DESCRIPTION	UNIT	HUR-13-0.98 (01/STR/04)	HUR-13-1.68 (01/STR/04)	HUR-13-4.38 (01/STR/04)	HUR-13-5.21 OPTION A & B (01/STR/04)	HUR-13-5.52 (01/STR/04)	UNDERDRAINS	TOTALS
					SHEET 33	SHEET 34	SHEET 35	SHEETS 36 - 37	SHEET 38	SHEET 32	
01/STR/04	201	11000	CLEARING AND GRUBBING	LS	LS	LS	LS	LS			LS
01/STR/04	202	20010	HEADWALL REMOVED	EACH			2				2
01/STR/04	202	32000	CURB REMOVED	FT					43		43
01/STR/04	202	35100	PIPE REMOVED, 24" AND UNDER	FT					39		39
01/STR/04		58100	CATCH BASIN REMOVED	EACH					2		2
01/STR/04		11100	COFFERDAMS AND EXCAVATION BRACING	LS	LS	LS	LS	LS	LS		LS
01/STR/04	+	32100	ROCK CHANNEL PROTECTION, TYPE B W/ FILTER	CY	31	20	17				68
01/STR/04		20000	CONCRETE MASONRY	CY			5				5
01/STR/04		05100	4" SHALLOW PIPE UNDERDRAINS	FT					10		10
01/STR/04		14001	6" BASE PIPE UNDERDRAINS, AS PER PLAN	FT						72998	72998
01/STR/04		24510	CURB, TYPE 4-C	FT					43		43
01/STR/04		00510	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	FT						1047	1047
01/STR/04		04600	12" CONDUIT, TYPE C	FT					29		29
01/STR/04		96551	FIELD PAVING OF EXISTING PIPE, AS PER PLAN (103" SPAN X 71" RISE CMP ARCH)	FT	92						92
01/STR/04		96551	FIELD PAVING OF EXISTING PIPE, AS PER PLAN (87" SPAN X 63" RISE CMP ARCH)	FT		82			_		82
01/STR/04		98180	CATCH BASIN , NO. 3A	EACH					2		2
01/STR/04		99710	PRECAST REINFORCED CONCRETE OUTLET	EACH						79	79
01/STR/04		10000	CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ROUND CONDUIT (42" DIAMETER)	FT				51			51
01/STR/04		12000	CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ARCH (87" SPAN X 63" RISE)	FT			74				74
01/STR/04		10000	CURED-IN-PLACE PIPE LINER (42" DIAMETER)	FT				51			51
∐ ALL QUANT	ITIES CARRIE	D TO GENE	FRAL SUMMARY								

<u>NOTES:</u>

- 6" UNDERDRAINS SHALL BE CENTERED 14'-3" FROM THE $\mathop{\mathscr{Q}}$ CONST. UNLESS SPECIFIED ELSEWHERE.

- * UNDERDRAIN CENTERED 16'-3" FROM € CONST..
- OFFSETS MARKED "LATERAL" WILL REQUIRE LATERAL DRAINAGE AS PER DM-1.2.
- UNDERDRAIN DEPTH MEASURED FROM THE TOP OF PROPOSED SUBGRADE.



ENGINEERING TEAM ONE

REVIEWER KRB 11/13/23

ROJECT ID 101386

P.32 63

1.22%

EX. ½ = 995.18

HW-2.1

. CHANNEL PROFILE

990

985

975

-13-0.00

0.50%

∠ 0.93% ₋

HW-2.1

ROCK CHANNEL PROTECTION,

TYPE B W/ FILTER, 2.5'D -

EX. CHANNEL

PROFILE -

995

985

980

975

~~~

LEGEND

202 - TO BE REMOVED, DND - DO NOT DISTURB



- ROCK CHANNEL PROTECTION, TYPE B W/ FILTER



/ FILTER 2.) PROPOSE

NOTES

1.) EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO EARTHWORK DATA TABLES.

2.) PROPOSED PAVEMENT WORK NOT SHOWN ON PLAN VIEW FOR CLARITY. GUARDRAIL WORK NOT SHOWN ON PLAN AND PROFILE VIEW FOR CLARITY.

HYDRAULIC DATA

DRAINAGE AREA = 0.41 SQ. MILES

Q (25) = 186 CFS V (25) = 11.00 FT/S Q (100) = 280 CFS V (100) = 12.27 FT/S

EXISTING STRUCTURE

TYPE: CORRUGATED METAL PIPE ARCH
CULVERT FILE NUMBER: 1835334
DIMENSIONS: 87" SPAN X 63" RISE

LENGTH: 73'-9"± SKEW: 29° 35' 08" L.F.

ALIGNMENT: TANGENT

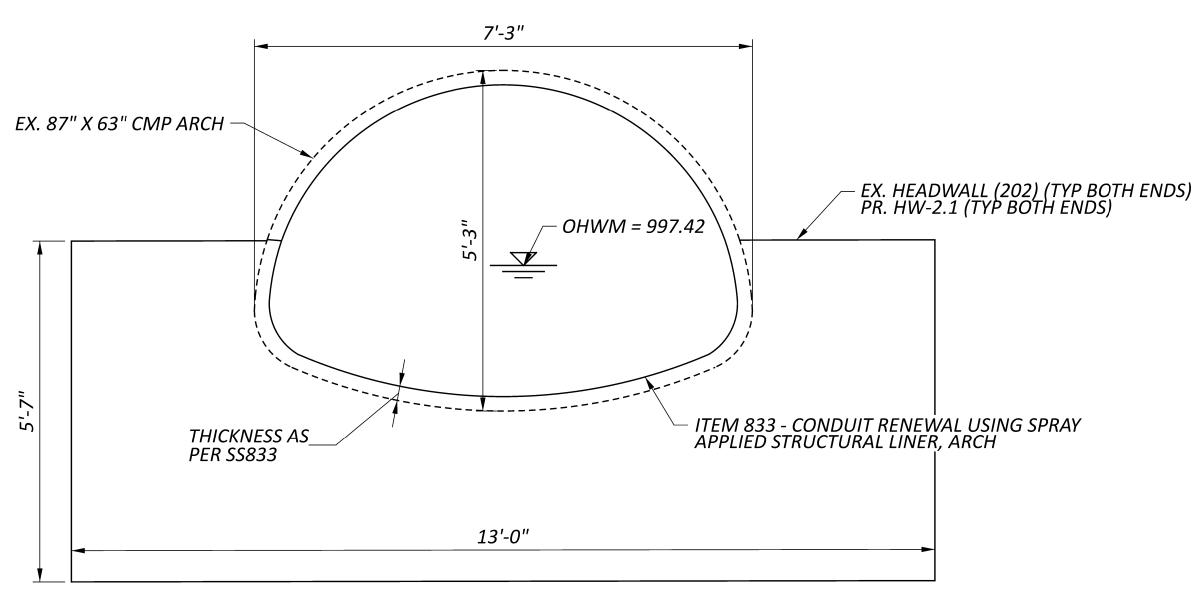
STREAM: ABRASION LEVEL = 2, pH = 8.5

DATE BUILT: 1958

COORDINATES: 41°03'22" N 82°29'11" W
DISPOSITION: POOR (TO BE REHABILITATED)

			HUR-13-4.38 ESTIMATED QUANTITIES (01/STR/01)
ITEM	QUANTITY	UNIT	DESCRIPTION
201	LS		CLEARING AND GRUBBING
202	2	EACH	HEADWALL REMOVED
503	LS		COFFERDAMS AND EXCAVATION BRACING
601	17	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER
602	5	CY	CONCRETE MASONRY
833	74	FT	CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, ARCH (87" SPAN X 63" RISE)

ALL QUANTITIES CARRIED TO DRAINAGE SUB-SUMMARY



<u>DETAIL A</u>
INLET SHOWN, OUTLET SIMILAR

DESIGN AGENCY
DISTRICT 3

ENGINEERING
TEAM ONE

DESIGNER
ACM

REVIEWER
KRB 11/13/23

PROJECT ID
101386

SHEET TOTAL

P.35 63

HORIZONTAL SCALE IN FEET

> DETAILS 3-4.38

HUR-13

CULVERT

MIDTH CKOSS **ELEVATION** GRADE **PROFILE NOITATS MIDTH** SLOPE CKOSS 0F **ELEVATION** SHEET P.43 63

HUR-13-0.00

ELEVATION TABLES PROFILE

ESIGN AGENCY ESIGNER JSR REVIEWER

DISTRICT 3 ENGINEERING TEAM ONE KRB 11/13/2 101386 SUBSET

MIDTH CKOSS NOITAVƏJƏ GRADE **PROFILE NOITAT2** [TT] **MIDTH** CKOSS NOITAVAJA

ELEVATION TABLES PROFILE

ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE ESIGNER

JSR REVIEWER KRB 11/13/2

101386 SUBSET 2 15 SHEET TOTAL **P.44 63**

MIDTH CKOSS NOITAVƏJƏ GRADE PROFILE **NOITAT2** [TT] **MIDTH** CKOSS NOITAVƏJƏ

ELEVATION TABLES PROFILE

ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE ESIGNER JSR

REVIEWER KRB 11/13/2

101386 SUBSET

3 TOTAL 15 SHEET TOTAL P.45 63

MIDTH CKOSS NOITAVƏJƏ GRADE **PROFILE NOITAT2** [TT]**MIDTH** CKOSS NOITAVAJA SUBSET 4

ELEVATION TABLES PROFILE

ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE DESIGNER

JSR REVIEWER KRB 11/13/2 101386

15 SHEET TOTAL P.46 63

MIDTH CKOSS NOITAVƏJƏ GRADE **PROFILE NOITAT2** [TT]**MIDTH** CKOSS NOITAVƏJƏ

ELEVATION TABLES PROFILE

ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE DESIGNER

JSR REVIEWER KRB 11/13/2

101386 SUBSET **5** 15 SHEET TOTAL P.47 63

HUR-13-0.00
MODEL: PGL SHEET 6 PAPERSIZE: § pw:\\ohiodot-pw.bentley.com:ohio

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	ROTATION L	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	
2FOPE CROSS	SH.	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%)	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	
	LANE	(-1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	(-1.60% -1.60%	7 -1.60%	-1.60%	C -1.60% -1.60%	-1.60%	-1.60%	C -1.60%	-1.60%	7 -1.60% -1.60%	(-1.60%	-1.60%	7 -1.60% 7 -1.60%	(-1.60%	-1.60%	-1.60%	(-1.60%	-1.60%	7 -1.60% -1.60%	-1.60%	-1.60%	2 -1.60% -1.60%	-1.60% -1.60%	(-1.60% (-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%	2 -1.60% -1.60%	-1.60%	-1.60% -1.60%	7 -1.60% -1.60%	-1.60%	-1.60%	-1.60% -1.60%	× -1.60% -1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%	2 -1.60% -1.60%	-1.60%-1.60%	-1.60% -1.60%	-1.60% -1.60%	-1.60%	-1.60% -1.60%	-1.60%	-1.60%	
	EPS.	1074.826 1074.348	1073.845	- -		1071.688	- 1 - 1			_ •	∞	1067.904	- (0)	(0) (0	1065.600	1064.750	1064.322	⊢ကျ	1063.432 1063.159		1062.337	√i ←	- -	1061.234	1060.932	1060.540	1060.108	1059.879	1059.490	1059.458	1059.530	1059.416	1058.184	1057.303	1056.976	1056.686	1056.514	1056.490 1056.473	1056.440	1056.307	1056.256	1056.282	1056.297	1056.313	1056.336	1056.346	1056.411	1056.471	1056.496	1056.559	1056.567 1056.613	1056.641	1056.708	1056.655	1056.635	1056.545	1056.082	
ELEVATION	EP.	1074.906	1073.925	1073.053	1072.617	1071.768	1071.010	1070.632	1069.984	_	∞	1067.984		(0) (0)	1065.680	1065.247	1064.402	1063.821	1063.512 1063.239	1063.008	1062.417	$\sqrt{ - }$	1061.540		1061.012	1060.620	1060.188	1059.959	1059.570	1059.538	1059.610	1059.496	1058.264	<u> </u>	1057.056	1056.766	1056.594	1056.570 1056.553	1056.520	1056.387	1056.336	1056.362 1056.390	1056.377	1056.393	1056.416	1056.426	1056.491	1056.551	1056.576	1056.639	1056.647	1056.721	1056.788	1056.735	1056.715	1056.510	1056.162	
PROFILE GRADE		1075.098	74.1	73.2	1072.809	1071.960	1071.202	1070.824	1070.176	1069.488	1069.143	1068.176	1067.199	1066.339	1065.872	1065.022		1064.013	1063.704	1063.200	1062.609	1061.996	1061.732	1061.340	1061.204	1060.812	1060.380	1060.151	1059.762 1059.750	1059.730	1059.802	1059.688	1058.456	1057.575	1057.248	1056.958		1056.745	1056.712	1056.579	1056.528	1056.554 1056.582	1056.569	1056.585 1056.615	1056.608	1056.618	1056.683		1056.768 1056.811	1056.831	1056.839 1056.885	1056.913 1056.970	1056.980	1056.927	1056.907	1056.702	1056.354	
NOITAT2		125+25.00 125+50.00	5+75	- +	+ + +	127+00.00	· +	127+75.00	128+25.00	128+75.00	129+00.00	129+50.00	130+00.00	130+25.00	130+75.00	131+00.00	131+50.00	132+00.00	132+25.00	132+75.00	133+25.00	133+50.00	134+00.00	134+50.00	134+75.00	135+25.00	135+50.00	136+00.00	136+50.00	137+00.00	137+50.00	138+00.00	138+50.00	<u> </u>	139+25.00	139+75.00	140+25.00	140+50.00	141+00.00	141+50.00	142+00.00	142+25.00 142+50.00	142+75.00	143+25.00	143+75.00	144+25.00	144+50.00	145+25.00	145+50.00 145+75.00	146+00.00	146+50.00	147+00.00	147+50.00	148+00.00	148+50.00 148+75.00	149+25.00	149+75.00	
[T 1]	SH.	2 2	2 0	2	2 2	2 2	2 0	2 2	2 0	7 2	2 2	2 0	2 2	2 2	2	7 2	2	2 0	2 2	2 0	2 2	7 2	2 0	7 2	2 2	2	7 2	2 2	2 2	2	2 2	1 2 0	2 2	7 2	2 2	2	2 0	7 2	2 2	2 2	7 2 0	2 2	2 2	2 2	2 0	1 2 0	7 0 0	7 2	2 2	2 2	2 2	2 2	5 2	2 2	5 5	7 2 0	7 2 0	7
MIDTH	LANE	12	12	12	12	12	12 5	12	12	12	12	12	12	12	12	12	12	12 7	12	12	7 2 :	12	12	12	12	12	12	12	12	12	12 1	1 2 5	12	12	12	12	12	12	12	12 1	7 7	12	12	12	12	1 2 5	7 2 5	12	12	12	12	12	12	12	12	12 5	7 2 5	7
	ROTATION	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	
SFOPE CROSS	SH	4.00% >	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00% \$	4.00% \$	4.00% \$	4.00%	4.00%	4.00%	DESIGN A
	LANE	7.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	7.60%	1.60%	1.60%	1.60%	1.60%	1.60%	7 1.60%	7 1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	(1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	7.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	DIST
	EPS.	1074.826 1074.348	1073.845	1072.973	1072.537 1072.096	1071.688	1070.930	1070.552	1069.904	1069.216	1068.871	1067.904	1066.927	1066.453	1065.600	1064.750	1064.322	1063.741	1063.432 1063.159	1062.928	1062.337	1062.028	1061.460	1061.234	1060.932	1060.540	1060.108	1059.879 1059.688	1059.490	1059.458	1059.530	1059.416	1058.184	1057.303	1056.976	1056.686	1056.514	1056.490 1056.473	1056.440	1056.307	1056.256	1056.282 1056.310	1056.297	1056.313	1056.336	1056.346	1056.411	1056.471	1056.496	1056.559	1056.567 1056.613	1056.641 1056.698	1056.708 1056.668	1056.655	1056.635	1056.545	1056.082	DESIGNER J
ELEVATION	EP.	1074.906 1074.428	1073.925	1073.053	1072.617	1071.768	1071.010	1070.632 1070.296	1069.984	1069.296	1068.951	1067.984	1067.007	1066.533	1065.680	1065.247	1064.402	1063.821	1063.512 1063.239	1063.008	1062.417	1061.804	1061.540	1061.314	1061.012	1060.620	1060.188	1059.959 1059.768	1059.570 1059.558	1059.538	1059.610	1059.496	1058.264	1057.751	1057.056 1056.850	1056.766	1056.594	1056.570 1056.553	1056.520 1056.453	1056.387	1056.336	1056.362 1056.390	1056.377	1056.393 1056.423	1056.416	1056.426	1056.491	1056.551	1056.576 1056.619	1056.639	1056.647 1056.693	1056.721 1056.778	1056.788 1056.748	1056.735	1056.715	1056.510	1056.162	REV KRB 1 PROJECT I 10: SUBSET

HUR-13-0.00
MODEL: PGL SHEET 7 PAPERSIZE:

	-	SH.	2 2	2 2 2	2 2	2 2 2	2 2 2	7 2 2	2	2 2 2	2 2 2	2 2 2	2 2	2 0	7 2 7	2 2	2	2 2	2 2	2 2	2 2	2 2 2	2 2 0	7 2 7	2	2 2	2	2 2	2 2	2 2 2	2 2	2	2 2	2 2	2 2 2	2 2 2	2 2	2 2	2	2 2	2 2	2 2	2 2	2 2	2 2	2 2 5	7
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ROSS		-4.00% -4.00%	-4.00%	-4.00% -4.00%	-4.00%	-4.00% -4.00%	-4.00%	-4.00% -4.00%	-4.00% >	-4.00%	-4.00% -4.00%	-4.00%	4.00%	4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00% \\ -4.00% \\	-4.00%	-4.00%	-4.00%	-4.00%	-4.00% }	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00% -4.00%	-4.00%	-4.00%	-4.00%	-4.00% >	-4.00%	-4.00%
	<u> </u>	-1.60% -1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60% -1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60%	2 -1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60%	-1.60%
Nous	(1055.491 1055.233 1055.010	1054.592	1054.142 1053.942 1053.707	1053.503	1053.111 1052.885 1052.626	1052.431	1051.369 1051.712 1051.446	1050.855	1050.656	1049.776	1049.143	1048.545	1047.945	1047.048	1046.701	1046.170	1045.528	1044.853	1044.196	1043.481	1042.839	1041.657	1041.055	1040.551	1040.273	1040.431	1040.729	1041.541	1042.350	1043.676	1044.533	1045.231	1045.728	1046.066	1046.888	1046.329	1046.138	1046.057	1045.809	1045.568	1045.187	1044.701	1044.310	1043.974	1043.726	1043.570
NOITAVE	± 1±	1055.571 1055.313 1055.090	• • •	1054.222 1054.022 1053.787		1053.191 1052.965 1052.706	1052.511	1052.049 1051.792 1051.526	1051.227 1050.935	1050.736	1049.856	1048.910	1048.625	1048.025	1047.414	1046.781	1046.250 1045.948	1045.608	- 1 - 1	1044.276		- -	1041.737	1041.135	1040.631	1040.353	1040.511	1040.809	1041.621	1042.874	1043.756	1044.613	1045.311	1045.808	1046.146	1046.968	1046.409	1046.218	1046.137	1045.889	1045.648	1045.267	1044.781	1044.390	1044.054	1043.806	1043.650
) FILE		1055.763 1055.505 1055.282	7 4 4	1054.414 1054.214 1053.979		1053.383 1053.157 1052.898		1052.241 1051.984 1051.718			1050.048	1049.415	1048.817	0 0 0	1047.320	ပြော ပြော						1043.111								1043.066	1043.948	1044.805	1045.503	1046.000	ကြေကြ	1047.160	_ ထ ထ	1046.503	1046.329	1046.081	1045.840	1045.217	1044.973	1044.582	1044.246	1043.998	1043.842
NOIT	ATS	150+25.00 150+50.00 150+75.00	25.	151+75.00 152+00.00 152+25.00	50	25 25	75 00	55 55	25.	50.	156+25.00	+75	157+25.00	+75.	+25.	158+75.00	+25.	159+75.00	160+25.00	160+75.00	161+25.00 161+50.00	161+75.00	162+50.00	163+25.00	163+50.00	164+00.00	164+50.00 164+75.00	165+00.00 165+25.00	165+50.00	166+25.00	166+75.00	167+25.00	167+75.00	168+25.00	168+75.00	169+50.00	170+00.00	170+50.00	171+00.00	171+50.00	172+00.00	172+50.00	173+00.00	173+50.00	174+00.00 174+25.00	174+50.00	175+00.00
[14]	-	S. 2 2 2.	2 2 2	2 2 2	2 2	2 2 2	2 2 0	2 2 2	2	2 2	2 2 2	2 2 2	2 2	2 2	2 2	2 2	2	5 2	2 2	2 2	2 2	2 2 2	2 2	2 2 2	2	2 2	2 2	2	2 2	2 2 2	2 2	2 2	2 2	2 2	2 2 2	2 2 2	2 2	2 2	2	2 2	2 2 0	2 2	2 2	2 2	2 2	2 2 2	7
HTQIV	Λ Γ	12 12 12 13	12 12	12 12	12 12	12 12	12	12 12 12	12	12	12 12	12 12	12 12	12 7	12 12	12	12	15	12	12	12	12 7	12 12	12 12	12	12	12	12	12	12 12 12	12 12	12	12	12	12 12	12 12	12 12	12 21	12	1 2 4	12 12	12 7	12	12	12	12	12
		CROWN CROWN	CROWN	CROWN CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN
POPE ROSS		4.00% 4.00% 4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00% \$	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00% >	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00% \$	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00% >	4.00%	4.00%	DESIGN A
	L	1.60% 1.60% 1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	7.60%	1.60%	1.60%	7.60%	7.60%	7.60%	1.60%	1.60%	1.60%	1.60%	1.60%	7 1.60% 7 1.60%	7.60% 1.60%	1.60%	1.60%	1.60%	1.60%	7.60%	1.60%	1.60%	1.60%	1.60%	1.60%	(1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	7.60%	1.60%	7.60%
	C L	1055.491 1055.233 1055.010	1054.592	1054.142 1053.942 1053.707	1053.503	1053.111 1052.885 1052.626	1052.431	1051.969 1051.712 1051.446	1051.147	1050.656		1049.143	1048.545	1047.945	1047.334	1046.701	1046.170	1045.528	1044.853	1044.196	1043.481	1042.839	1041.657	1041.055	1040.551	1040.273	1040.431	1040.729	1041.541	1042.794	1043.676	1044.533	1045.231	1045.728	1046.066	1046.888	1046.329	1046.138	1046.057	1045.809	1045.568	1045.187	1044.701	1044.310	1043.974	1043.726	1043.570 TEA DESIGNEI
NOITAVE	(1055.571 1055.313 1055.090	1054.672	1054.222 1054.022 1053.787	1053.583	1053.191 1052.965 1052.706	1052.511	1052.049 1051.792 1051.526	1051.227	1050.736	1050.134 1049.856 1049.498	1049.223	1048.625	1048.025	1047.414	1046.781	1046.250 1045.948	1045.608	1044.933	1044.276	1043.561	1042.919	1041.737	1041.135	1040.631	1040.353	1040.511	1040.809	1041.621	1042.430	1043.756	1044.613	1045.311 1045.581	1045.808	1046.146	1046.712	1046.409	1046.218	1046.137	7 00 7	1045.648	1045.267	1044.781	1044.390	1044.054	1043.806	KRB 1

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	LANE	12	12	12 12	12	12	2 2 5	12 7	12	12 2	12 17	12	12	12 12	1 2 5	12	12	12	12	2 2 2	1 2 5	2 2 2	7 2 5	7 7 7	7 2 5	12 7	12 12	12 12	7 7 7	12 7	7 2 5	2 2 2	7 2 2	2 2 5	12 2	12	12 2	1 2 2	12	12	12	12	12 2	12 2	12	12	7 7 7	7 2 5	2 2	12 2	12	7 2 5	12
	ROTATION	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN
SFOPE	SH.	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	4.00%	-4.00%	-4.00% >	-4.00%	-4.00%	-4.00%	-4.00% >	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00% -4.00%	4.00%	-4.00%	-4.00% >	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00% >	-4.00%	-4.00%	-4.00% >	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00%	-4.00% /
	LANE	-1.60%	-1.60%	-1.60%	7 -1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	7 -1.60%	-1.60%	-1.60%	-1.60% -1.60%	-1.60%	-1.60%	7 -1.60% -1.60%	-1.60% -1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60% -1.60%
	EPS.	1043.488	1043.383	1043.273	1043.337	1043.548	1043.484	1043.416	1043.293 1043.173	1043.069	1042.838	1042.401	1042.097	1041.477	1040.803	1040.528	1039.965 1039.675	1039.381	1038.828	1038.192	1037.438	1036.634	1035.832	1035.507	1034.664	1034.266	1034.139	1033.817	1033.508	1033.064	1032.180	1031.582	1031.261	1030.049	1029.103	1027.885	1026.428	1024.294	1023.758 1023.338	1022.992	1022.498	1022.148	1021.878	1021.900	1021.953	1022.197	1022.386	1023.210	1023.894	1024.658	1025.425	1025.986	1026.125
ELEVATION	م ا	1043.568	043	1043.353	043.	043.	~ 100	പ്പ	1043.373 1043.253	1043.149	1042.918	1042.481	1042.177	1041.557		1040.608	1040.045 1039.755	1039.461	1038.908	1038.272	1037.518	1036.714	35	1035.267	2 2 2	+ <+ -		1033.736	1033.588	32 33	1032.260	- •	- -	. l l _	1029.183			1025.043					1021.958		1022.033	1022.277	• - •	1023.290	1023.974	1024.738	1025.505	1026.066	1026.205
ROFILE ROFILE		1043.760		1043.545	1043.609	1043.820	1043.756	1043.688	1043.565 1043.445	1043.341	1043.110	1042.673	1042.369	1041.749	1041.075	1040.530	1040.237 1039.947	1039.653	1039.100	1038.464	1037.710	1036.906	1036.104	1035.459	1034.936	1034.538	1034.411	1033.928	1033.780	1033.336	1032.452	1031.854	1031.140	1030.321	1029.375	1028.157	1026.700	1025.235	1024.030 1023.610	(,) ()	1022.770	1022.420	1022.150	1022.172	1022.225	1022.469	1022.658	1023.187	1024.572	1024.930	1025.697	1026.258	1026.397
NOITAT	S	175+25.00 175+50.00	175+75.00 176+00.00	176+25.00	75.	177+25.00	177+75.00	8+25.	8+50. 8+75.	179+00.00	9+50.	0+00	25.	75	25 25	25	25	50.	00 4	183+50.00	2 0 4	3 5 5		1 22 12	186+00.00	50.	75.	187+55.00	75.	188+25.00		50.		190+50.00	191+00.00	191+50.00	00	+50.	00	193+50.00 193+75.00	25.	55	5 2	195+50.00	196+00.00	196+50.00	196+75.00	197+50.00	198+00.00	198+75.00	199+00.00	199+50.00	200+00.00
[T7]	SH.	2	2 2	2	2 2	2	2 2	2 2	2 2	2 2	2	2 2	2 2	2	1 2 0	2	2	2 2	2 0	2 2	2 2	2 2	7 2 0	7 2 0	7 2 0	2 2	2 2	2 2	2 2 2	2 2 2	7 0	2 2	2 2 2	2 2	2 2 2	2 2	2 0	2 2	2 2	2	2	2 2	2	2	2	2 2	2 2 2	7 0 0	2 2 2	2 2	2	2 2	5
HTGIW	LANE	12	12	12	12	12	12 12	7 7 7	12	12	12	12	12	12	12 5	12	12	12	12	12 12	12 5	2 2 0	7 7 7	12 7	7 7 7	12 7	12	12	12 7	12 12	7 7 7	7 7 7	12 12	12 12	12 12	12	12 12	12 12	12	12	12	12	12	12	12	12 2	12 12	7 7 7	1 2 2	12 12	12	12 12	12
	ROTATION	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN	CROWN
SFOPE CROSS	SH.	4.00% \$	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00% \$	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00% \$	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
	LANE	1.60%	7 1.60%	1.60%	1.60%	7 1.60% 1.60%	1.60%	1.60%	1.60%	7 1.60%	7 1.60%	1.60%	1.60%	7 1.60%	1.60%	1.60%	7 1.60% 1.60%	7 1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	7.60%	1.60%	1.60%	1.60%	1.60%	7.60%	1.60%	1.60%	1.60%	7 1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	7.60%	1.60%	DIST
	EPS.	1043.488	1043.383	1043.273	1043.337	1043.548	1043.484	1043.416	1043.293	1043.069	1042.838	1042.401	1042.097	1041.477	40.8	1040.528 1040.258	1039.965 1039.675	1039.381	1038.828	1038.192	1037.438	1036.634	1035.832	1035.507	1034.919	1034.266	1034.139	1033.656	1033.508	1033.064	1032.489	1031.582	1030.868	1030.049	1029.103	1027.885	1026.428	1024.963	1023.758	1022.992	1022.498	1022.148	1021.878	1021.900	1021.953	1022.197	1022.386	1023.210	1023.894	1024.658	1025.425 1025.762	$\alpha \mid \alpha \mid \alpha$	ENGINE TEA
NOITAVELE		1043.568 1043.522	1043.463 1043.396	1043.353	1043.417	1043.628	1043.564	1043.496	1043.373 1043.253	1043.149	1042.918	1042.481	1042.177	1041.557	1040.883	1040.338	1040.045 1039.755	1039.461	1038.908	1038.272	1037.518	1036.714	1035.912	1035.267	1034.744	1034.346	1034.219	1033.897	1033.588	1033.144	1032.260	1031.662	1030.948	1030.129	1029.183	1027.965 1027.225	1026.508	1025.043	1023.838	1023.072	1022.578	1022.228	1021.958	1021.980	1022.033	1022.277	1022.466	1023.290	1023.974	1024.738	1025.505 1025.842	1026.066	KRB PROJECT 10 SUBSET

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ELEVATION TABLES PROFILE

ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE

DESIGNER JSR REVIEWER KRB 11/13/2

101386 SUBSET **9** 15 SHEET TOTAL P.51 63

MIDTH CKOSS NOITAVƏJƏ GRADE **PROFILE NOITAT2** [TF] **MIDTH** CKOSS NOITAVAJA

ELEVATION TABLES PROFILE

ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE DESIGNER

JSR REVIEWER

KRB 11/13/23 101386 SUBSET TOTAL 10 15 SHEET TOTAL P.52 63

MIDTH CKOSS NOITAVƏJƏ GRADE **PROFILE NOITAT2** [TT]**MIDTH** CKOSS ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE ESIGNER REVIEWER NOITAVƏJƏ KRB 11/13/2 101386 SUBSET 11 SHEET TOTAL P.53 63

ELEVATION TABLES

PROFILE

JSR

15

MIDTH RIGHT SIDE CKOSS NOITAVƏJƏ GRADE **PROFILE NOITAT2** [TT]**MIDTH** SLOPE CKOSS NOITAVƏJƏ

ELEVATION TABLES PROFILE

ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE ESIGNER

JSR REVIEWER KRB 11/13/23 101386

SUBSET 12 15 SHEET TOTAL **P.54 63**

MIDTH CKOSS NOITAVƏJƏ GRADE PROFILE **NOITAT2** [TT]**MIDTH** CKOSS NOITAVƏJƏ

ELEVATION TABLES PROFILE

ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE ESIGNER

JSR REVIEWER

KRB 11/13/23 101386 SUBSET **13** 15 SHEET TOTAL P.55 63

MIDTH SLOPE CKOSS NOITAVƏJƏ GRADE **PROFILE NOITAT2** [TT]**MIDTH** CKOSS ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE ESIGNER REVIEWER NOITAVƏJƏ KRB 11/13/23 101386 SUBSET 14 SHEET TOTAL P.56 63

ELEVATION TABLES PROFILE

JSR

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MIDTH SLOPE CKOSS NOITAVƏJƏ GRADE **PROFILE NOITAT2** [FT]**MIDTH** CKOSS ESIGN AGENCY DISTRICT 3 ENGINEERING TEAM ONE ESIGNER JSR REVIEWER NOITAVƏJƏ KRB 11/13/23 101386 SUBSET 15 SHEET TOTAL P.57 63

ELEVATION TABLES PROFILE

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