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CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING

WHERE NEW CONCRETE IS PLACED ADJACENT TO AND TIED TO EXISTING CONCRETE, THE CONTRACTION JOINT SPACING REQUIRED IN STANDARD CONSTRUCTION DRAWING BP-2.2 WILL BE WAIVED. CONSTRUCT CONTRACTION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL CONTRACTION JOINTS IN THE EXISTING CONCRETE PAVEMENT. INSTALL EXPANSION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL EXPANSION JOINTS IN THE EXISTING CONCRETE PAVEMENT.

EXISTING PLANS

EXISTING PLANS ENTITLED RIC/ASD-30-13.18/0.00 / RIC-42-13.74 MAY BE INSPECTED IN THE ODOT DISTRICT 3 OFFICE IN ASHLAND.

MONUMENT ASSEMBLIES

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET 153.

<u>ITEM 204 - PROOF ROLLING</u>

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING

6 HOUR

CONNECTION BETWEEN EXISTING AND PROPOSED **GUARDRAIL**

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

POST CONSTRUCTION STORM WATER TREATMENT

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

VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTER(S) FOR POST CONSTRUCTION STORM WATER TREATMENT, PLACE FITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL, AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 AS SPECIFIED IN THE PLANS.

ITEM 202, REMOVAL MISC .: BOLLARD REMOVED

THIS ITEM SHALL REMOVE THE EXISTING BOLLARDS ON THE WEST SIDE OF S.R. 603 (SOUTH) FROM STA. 245+33.42 TO 245+51.09. THE CONTRACTOR SHALL DISPOSE OF REMOVED ITEMS OFF THE PROJECT SITE.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL 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 7.30.19.

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 31 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 DOES 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, MGS 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.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

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

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

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

ITEM 601, TIED CONCRETE BLOCK MAT WITH TYPE I UNDERLAYMENT 4 SY ITEM 611. 6" CONDUIT. TYPE F 50 FT ITEM 611, PRECAST REINFORCED CONCRETE OUTLET 2 FACH ITEM 605. 6" UNCLASSIFIED PIPE UNDERDRAINS 100 FT

CLEARING AND GRUBBING

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

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	35	0	35
30"	2	0	2

ITEM 630, GROUND MOUNTED SUPPORT, NO. 4 POST, AS PER PLAN

THIS ITEM SHALL BE AS PER C&MS 630. EXCEPT THE GROUND MOUNTED POST SUPPORT SHALL BE A SQUARE POST (TYPE S) AS DETAILED IN SCD TC-41.20.

CONCRETE PAVEMENT REPAIR

AFTER THE MILLING OPERATIONS HAVE BEEN COMPLETED THE CONTRACTOR AND ENGINEER SHALL VISUALLY INSPECT THE CONCRETE PAVEMENT, AND DETERMINE IF REPAIRS ARE NECESSARY. ANY AREAS REQUIRING REPAIR SHALL BE FIELD MARKED AND REPAIRED PER ITEM 255 IN THE 2019 ODOT CM&S. THE FOLLOWING QUANTITY IS CARRIED TO THE GENERAL SUMMARY TO COMPLETE ANY REPAIRS AND SHALL ONLY BE USED WHEN APPROVED BY THE ENGINEER:

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1 500 SY

ITEM 601. PAVED GUTTER. TYPE 1-4. AS PER PLAN

IN ADDITION TO THE INSTALLATION OF THE PROPOSED PAVED GUTTER AS PER C&MS 601, THIS ITEM SHALL ALSO INCLUDE REMOVAL OF THE EXISTING PAVED GUTTER WHERE IT CONFLICTS WITH THE INSTALLATION OF THE PROPOSED PAVED GUTTER.

REMOVAL SHALL INCLUDE REMOVING ALL EXISTING MATERIAL AND DISPOSING OF SAID MATERIAL OFF THE PROJECT SITE.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442)

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO COMPLETE ANY PARTIAL PAVEMENT REPAIRS AND SHALL ONLY BE USED WHEN APPROVED BY THE ENGINEER:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442) 25 CY

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INTERIM COMPLETION DATE

THE CONTRACTOR SHALL HAVE PHASE 1 AND 2 COMPLETE BY NOVEMBER 15. 2021. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$2500 PER DAY FOR EACH CALENDAR DAY THAT PHASE I OR 2 EXTENDS PAST THIS DATE.

SEQUENCE OF CONSTRUCTION

THIS PROJECT WILL BE COMPLETED IN FOUR CONSTRUCTION PHASES. A MINIMUM OF ONE LANE IN EACH DIRECTION WILL BE MAINTAINED ON U.S. 30 AT ALL TIMES.

PHASE 1 (45 DAYS) - SHEETS 23-27

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THIS PHASE SHALL CONSTRUCT THE LEFT TURN LANES/U-TURN LANES ON U.S. 30.

THE EASTBOUND AND WESTBOUND LEFT LANES U.S. 30 SHALL BE CLOSED WITHIN THE PROJECT LIMITS. PORTABLE BARRIER SHALL BE PLACED ALONG THE WORK AREAS AT EACH LEFT TURN LANE/U-TURN LOCATION. DRUMS SHALL BE UTILIZED TO KEEP THE LEFT LANES CLOSED BETWEEN WORK AREAS. THE CONTRACTOR SHALL KEEP THE DRUMS PULL BACK IN THE S.R. 603 INTERSECTION TO AVOID SIGHT DISTANCE OBSTRUCTIONS FOR S.R. 603 TRAFFIC.

PHASE 2 (45 DAYS) - SHEETS 28-32

THIS PHASE SHALL CONSTRUCT THE EASTBOUND LOON AND PARTIALLY CONSTRUCTION THE WESTBOUND LOON/RIGHT TURN LANE.

THE EASTBOUND AND WESTBOUND RIGHT LANES ON U.S. 30 SHALL BE CLOSED WITHIN THE PROJECT LIMITS. PORTABLE BARRIER SHALL BE PLACED ALONG THE WORK AREAS AT EACH LOON LOCATION.

DRUMS SHALL BE PLACED ADJACENT TO THE EXISTING EDGE LINE AT EACH LEFT TURN LANE AND U-TURN LANE. THESE AREAS SHALL REMAIN CLOSED TO TRAFFIC UNTIL PHASE 4.

WORK MAY BEGIN ON THE RELOCATED SOUTH LEG OF THE S.R. 603 WHILE MAINTAINING ALL EXISTING MOVEMENTS AND TURN LANES TO AND FROM THE SOUTH LEG OF THIS INTERSECTION. ONE-LANE, TWO-WAY OPERATION WITH FLAGGERS ON S.R. 603 IS PERMITTED DURING ACTIVE WORKING HOURS. FLAGGING OPERATIONS SHALL BE AS PER TA-10 OF THE OMUTCD. THE CONTRACTOR SHALL NOT ALLOW SOUTHBOUND TRAFFIC TO QUEUE ONTO U.S. 30 WHEN STOPPED FOR NORTHBOUND TRAFFIC. ROADWAY SHALL BE RESTORED TO TWO LANES DURING NON-WORKING HOURS.

OVER-WINTER (NO PLAN SHEETS PROVIDED)

ALL ROADS SHALL BE OPEN TO TRAFFIC AND NO WORK PERFORMED BETWEEN NOVEMBER 1, 2021 AND MARCH 15, 2022. THE OVER-WINTER SET UP SHALL BE AS FOLLOWS:

- ALL LANES ON U.S. 30 SHALL BE OPEN TO TRAFFIC
- WORK ZONE PAVEMENT MARKINGS SHALL BE PLACED TO RESTORE U.S. 30 LANES TO THEIR EXISTING CONFIGURATION AFTER PHASE 2.
- S.R. 603 SHALL BE FULLY OPEN TO TRAFFIC WITH ALL TURNING MOVEMENTS MAINTAINED AT THE INTERSECTION

OVER-WINTER CONT'D (NO PLAN SHEETS PROVIDED)

- BEFORE OPENING U.S. 30 TO TRAFFIC FOR THE OVER-WINTER PHASE, ALL PAVEMENT JOINTS AT LOCATIONS WHERE NEW PAVEMENT INSTALLED IN PHASES 1 AND 2 MEETS EXISTING PAVEMENT SHALL BE WEDGED WITH HOT MIX ASPHALT CONCRETE OF THE MIX TYPE USED IN THE TOP-MOST LIFT OF NEW ASPHALT PAVEMENT ADJACENT TO THE JOINT. THE WIDTH OF THIS WEDGE SHALL BE I FOOT. ALTHOUGH THE TAPER RATE WILL VARY BASED ON THE DIFFERENCE IN ELEVATION BETWEEN EXISTING AND NEW PAVEMENT. PHASES 1 AND 2 WILL NOT BE CONSIDERED COMPLETE UNTIL THIS PAVEMENT WEDGE IS INSTALLED AND ACCEPTED BY THE ENGINEER.

PAYMENT FOR THIS WORK WILL BE AT THE CONTRACT UNIT PRICE FOR ASPHALT CONCRETE FOR MAINTAINING TRAFFIC -10 CU YD.

PHASE 3A (45 DAYS) - SHEETS 33-37

THIS PHASE SHALL NOT OCCUR BETWEEN MEMORIAL DAY AND LAROR DAY.

THIS PHASE SHALL CONSTRUCT THE SOUTH S.R. 603 APPROACH.

CLOSE THE RIGHT LANE OF U.S. 30 EASTBOUND EAST OF CHARLES MILL RESERVOIR AND CLOSE THE SOUTH LEG OF S.R. 603 TO COMPLETE THE REALIGNMENT OF THIS APPROACH. PORTABLE BARRIER SHALL BE UTILIZED FOR THE LANE CLOSURE. THE DETOUR FOR THIS APPROACH OF S.R. 603 SHALL BE AS SHOWN ON SHEETS 19-20.

PHASE 3B (45 DAYS) - SHEETS 38-42

THIS PHASE SHALL CONSTRUCT THE REMAINING SECTION OF THE WESTBOUND RIGHT TURN LANE AND THE NORTH APPROACH TO S.R. 603

CLOSE THE WESTBOUND RIGHT LANE OF U.S. 30 AS REQUIRED TO CONSTRUCT THE LOON, RIGHT TURN LANE AND EXCAVATION. PORTABLE BARRIER SHALL BE REQUIRED FOR THIS LANE CLOSURE. THE WORK ON THE NORTH APPROACH TO S.R. 603 SHALL BE COMPLETED IN THIS PHASE. THE NORTH LEG OF S.R. 603 SHALL BE CLOSED DURING THIS PHASE. SEE SHEETS 21-22 FOR DETOUR. ALL MOVEMENTS TO AND FROM THE SOUTH LEG SHALL BE MAINTAINED.

OPEN THE SOUTH LEG OF S.R. 603. THIS LEG OF THE INTERSECTION WILL NOW OPERATE AS A RIGHT-IN/RIGHT-OUT. TRAFFIC SHALL BE DETOURED AS SHOWN SHEET 21-22.

PHASE 4 (30 DAYS) - SHEETS 43-47

THIS PHASE SHALL REMOVE THE EXISTING PAVEMENT FROM THE MEDIAN AREA.

BOTH S.R. 603 APPROACHES SHALL BE OPENED AND THE PROPOSED RCUT SHALL BE COME OPERATIONAL. ALL PERMANENT SIGNING AND PAVEMENT MARKINGS NECESSARY FOR THE RCUT OPERATION SHALL BE INSTALLED PRIOR TO THIS PHASE.

ONCE THE MEDIAN WORK IS COMPLETE, THE BARRIER SHALL BE REMOVED. ALL REMAINING ASPHALT WORK SHALL BE COMPLETED. THIS WORK SHALL BE COMPLETED ONE LANE AT A TIME WHILE MAINTAINING A MINIMUM ONE LANE OF TRAFFIC IN EACH DIRECTION. LANE CLOSURES SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. FINAL PAVEMENT MARKINGS SHALL BE INSTALLED AFTER THE FINAL SURFACE COURSE IS PLACED.

WORK ZONE MARKINGS

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

- ITEM 614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT --- 1.63 MI
- ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT --- 0.13 MI
- ITEM 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT --- 2.16 MI
- ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT --- 2864 FT
- ITEM 614, WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT --- 1341 FT
- ITEM 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT --- 38 FT
- ITEM 614, WORK ZONE ARROW, CLASS III, 642 PAINT --- 14 EACH
- ITEM 614, WORK ZONE PAVEMENT MARKING, MISC .: U-TURN ARROW, CLASS III --- 9 EACH
- ITEM 614, WORK ZONE PAVEMENT MARKING, MISC.: YIELD LINE, CLASS III --- 37 FT

WORK ZONE MARKINGS - REMOVABLE TAPE

THE ADJACENT ASD-30-0.27 (PID 87729) PAVING PROJECT WILL BE CONSTRUCTED CONCURRENTLY WITH THIS PROJECT. IF THE FINAL COURSE FOR THIS PAVING PROJECT HAS BEEN PLACED, THE CONTRACTOR SHALL UTILIZE REMOVABLE TAPE (740.06, TYPE I) WORK ZONE MARKINGS IN LIEU 642 PAINT ON PAVEMENT EAST OF STA. 15+77.00 (S.L.M. 0.30).

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED AND CARRIED TO GENERAL SUMMARY FOR USE AS DIRECTED BY THE FNGINFFR:

- ITEM 614, WORK ZONE LANE LINE, CLASS I, 6", 740.06. TYPE 1 --- 0.43 MI
- ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I --- 1.23 MI
- ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS I, 12", 74Ó.06. TYPE I --- 135 FT
- ITEM 614, WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I --- 1,440 FT
- ITEM 614, WORK ZONE ARROW, CLASS I, 740.06, TYPE I --- 2 EACH

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

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

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

THE RII-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

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

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

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

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN 4 EACH

WORK ZONE INCREASED PENALTIES SIGNS WILL BE PLACED AT THE LOCATIONS AS SHOWN IN THE PLANS

	SH	EET NU	JM.	1			ı	PART	· ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEE	
		9	10	53	108	153	OFFICE CALCS	01/NHS/ OT		EXT	TOTAL	0		NO.	
			1.6					1.6	201	11000	1.6		ROADWAY		\Box
			LS 35					LS 35	201 201	11000 21800	1 LS 35	EACH	CLEARING AND GRUBBING TREE REMOVED, 18"		-
			2					2	201	23000	2	EACH	TREE REMOVED, 30"		-
				1				1	202	20010	1	EACH	HEADWALL REMOVED		
							9,673	9,673	202	23000	9,673	SY	PAVEMENT REMOVED		
				1,167				1,167	202	35100	1,167	FT	PIPE REMOVED, 24" AND UNDER		_
				1,021				1,021	202	38000	1,021	FT	GUARDRAIL REMOVED		_
				5				5 119	202	58100	5	EACH	CATCH BASIN REMOVED FENCE REMOVED		_
				119 3				3	202 202	75000 98100	119 3	FT EACH	REMOVAL MISC.: BOLLARD REMOVED	10	_
				J					202	30100	1	EAUT	THEMOVAL MISC. BOLLAND REMOVED	10	-
					46,811			46,811	203	10000	46,811	CY	EXCAVATION		_
					8,335			8,335	203	20000	8,335	CY	EMBANKMENT		
					-,		11,780	11,780	204	10000	11,780	SY	SUBGRADE COMPACTION		
					514		,	514	204	13000	514	CY	EXCAVATION OF SUBGRADE		
					514			514	204	30010	514	CY	GRANULAR MATERIAL, TYPE B		
			6					6	204	45000	6	HOUR	PROOF ROLLING		
				1,975				1,975	606	15050	1,975	FT	GUARDRAIL, TYPE MGS		
				1				1	606	26150	1		ANCHOR ASSEMBLY, MGS TYPE E, NCHRP 350/MASH 2016		
931				2 6				6	606 607	26550	6	EACH FT	ANCHOR ASSEMBLY, MGS TYPE T FENCE, TYPE 47RA		_
Σ				0				0	007	15100	1 0	FI	FENCE, TIFE 4TRA		_
						3		.3	623	38500	3	EACH	MONUMENT ASSEMBLY		
5						4		4	623	40500	4	EACH	REFERENCE MONUMENT		_
									7-7	1					
5.													EROSION CONTROL		
20.			4					4	601	21050	4	SY	TIED CONCRETE BLOCK MAT WITH TYPE I UNDERLAYMENT		
				650				650	601	38001	650	FT	PAVED GUTTER, TYPE 1-4, AS PER PLAN	10	
a l		2						2	659	00100	2	EACH	SOIL ANALYSIS TEST		
		3,585		217				3,802	659	00300	3,802	CY	TOPSOIL		
9					32,296			32,296	659	10000	32,296	SY	SEEDING AND MULCHING		
<u>.</u>		1.015						1.015	650	14000	1.615	CV	DEDATO CEEDING AND HUI CUING		
0		1,615 1,615						1,615 1,615	659 659	14000 15000	1,615 1,615	SY SY	REPAIR SEEDING AND MULCHING INTER-SEEDING		_
$\overline{\Omega}$		4.5						4.5	659	20000	4.5	TON	COMMERCIAL FERTILIZER		_
5		6.67						6.67	659	31000	6.67	ACRE	LIME		-
1.		179						179	659	35000	179	MGAL	WATER		
398															
188				827				827	670	00700	827	SY	DITCH EROSION PROTECTION		
216							LS	LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN		
110							LS	LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		
t t							LS	LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
ع ا							40,624	40,624	832	30000	40,624	EACH	EROSION CONTROL		
ν. - Ι				1 170				1 170	0.76	10000	1 170	CV	CEEDING AND EDGEON CONTROL WITH THRE REINFORCING MAT. TYPE I		
0				1,132				1,132	836	10000	1,132	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE I		
													DRAINAGE		
				0.33				0.33	602	20000	0.33	CY	CONCRETE MASONRY		
5				2,507				2,507	605	11100	2,507	FT	6" SHALLOW PIPE UNDERDRAINS		_
			100					100	605	13300	100	FΤ	6" UNCLASSIFIED PIPE UNDERDRAINS		_
				3,585				3,585	605	14000	3,585	FT	6" BASE PIPE UNDERDRAINS		
		125						125	605	31100	125	FΤ	AGGREGATE DRAINS		
				98				98	611	00510	98		6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS		
			50					50	611	01500	50	FT	6" CONDUIT, TYPE F		
				282				282	611	04400	282	FT	12" CONDUIT, TYPE B		
				370				370	611	05900	370	FT	15" CONDUIT, TYPE B		
				349				349	611	06100	349	FT	15" CONDUIT, TYPE C		_
				675				675	611	07600	675	FT	18" CONDUIT, TYPE C		_
<u> </u>				4				4	611	98410	4	EACH	CATCH BASIN, NO. 8		
				1				1	611	98470	1	EACH	CATCH BASIN, NO. 2-2B		
				2				2	611	99654	2	EACH	MANHOLE ADJUSTED TO GRADE		_
			2	2				4	611	99710	4	EACH	PRECAST REINFORCED CONCRETE OUTLET		_
															_
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 	 	SH	EET N	UM.	_	ı		l	PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEE
		10	53	122	124	146	147	OFFICE CALCS	01/NHS/ 0T	=	EXT	TOTAL			NO.
														PAVEMENT	
		25							25	251	01030	25		PARTIAL DEPTH PAVEMENT REPAIR (442)	
								5,608	5,608	252	01500	5,608	FT	FULL DEPTH PAVEMENT SAWING	
								8,560	8,560	254	01000	8,560		PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH	
		500							500	255	10010	500		FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS OCI	
								314	314	301	46000	314	CY	ASPHALT CONCRETE BASE, PG64-22	
								2,820	2,820	304	20000	2,820	CY	AGGREGATE BASE	
								9,631	9,631	305	13010	9,631	SY	9" CONCRETE BASE, CLASS OC IP	
								3,107	3,107	407	10000	3,107	GAL	TACK COAT	
								1,118	1,118	442	10000	1,118		ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	
								1,209	1,209	442	10100	1,209	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)	
			277						277	609	26000	277	FT	CURB, TYPE 6	
+ +			184						184	609	54000	184		6" CONCRETE TRAFFIC ISLAND	
			104					21	21	617	10100	21	CY	COMPACTED AGGREGATE	
+								1.53	1.53	618	40600	1.53		RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
								7.00	7.00	0,0	70000	7.00	WILL	NOMBLE STATES, SHOOLDEN ASPTALL CONCRETES	
														LIGHTING	
							18		18	625	00450	18	EACH	CONNECTION, FUSED PULL APART	
							6		6	625	00451	6		CONNECTION, FUSED PULL APART, AS PER PLAN	145
							15		15	625	00480	15		CONNECTION, UNFUSED PERMANENT	
							4		4	625	10490	4		LIGHT POLE, CONVENTIONAL, DESIGN AT15B40	
+							5		5	625	10490	5	EACH	LIGHT POLE, CONVENTIONAL, DESIGN AT18B40	
+ +							.3		.3	625	14001	3	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP, AS PER PLAN	145
							9		9	625	14100	9		LIGHT POLE FOUNDATION, 24" X 8' DEEP	173
1							8,379		8,379	625	23302	8,379		NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE	
1							1,020		1,020	625	23400	1,020		NO. 10 AWG POLE AND BRACKET CABLE	
							2,142		2,142	625	25300	2,142		CONDUIT, 1-1/2", 725.04	
							171		171	625	25500	171		CONDUIT, 3", 725.04	
							280		280	625	25902	280		CONDUIT, JACKED OR DRILLED, 725.04, 3"	
							14		14	625	26253	14		LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN, IES-III-M, LED, 13,000-15,500 LUMENS	145
							2,313		2,313	625	29000	2,313	FT	TRENCH	
							2		2	625	30700	2	EACH	PULL BOX, 725.08, 18"	
							6		6	625	30706	6	EACH	PULL BOX, 725.08, 24"	
							4		4	625	31510	4		PULL BOX REMOVED	
							14		14	625	32000	14		GROUND ROD	
							1		1	625	34001	1		POWER SERVICE, AS PER PLAN	145
							3		3	625	35011	3	EACH	REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN	145
							2,313		2,313	625	36010	2,313	FT	UNDERGROUND WARNING/MARKING TAPE	
							1		1	625	39520	1	EACH	PULL BOX CLEANED	
						LS			LS	SPECIAL	62540000	LS	5100	MAINTAIN EXISTING LIGHTING	146
						2	1		2	SPECIAL	62540010	2		REPLACEMENT OF EXISTING LIGHTING UNIT	146
+ +							'			625	75401	- '	EACH	LIGHT POLE REMOVED, AS PER PLAN	146
							4		4	625	75500	4	EACH	LIGHT POLE FOUNDATION REMOVED	
							6		6	625	75507	6		LUMINAIRE REMOVED, AS PER PLAN	146
							2		2	625	75801	2		DISCONNECT CIRCUIT, AS PER PLAN	146
						2			2	625	76000	2		ARC FLASH CALCULATIONS AND LABEL(RIC-30-18.93)(ASD-30-0.05)	
							1		1	625	98000	1	EACH	LIGHTING, MISC.: CONTROL CENTER WORK PAD	145
							1	ļ	1	625	98000	1		LIGHTING, MISC.: EXISTING POWER SERVICE MODIFICATION	146
							/		/	625	98000	/ /	EACH	LIGHTING, MISC.:CONTROL CENTER WORK PAD, SLOPED AREA	145
														TRAFFIC CONTROL	
				180					180	621	00100	180	EACH	RPM	
				112					112	621	54000	112		RAISED PAVEMENT MARKER REMOVED	
			18						18	626	00110	18		BARRIER REFLECTOR, TYPE 2, IWAY	
			28						28	626	00110	28		BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	
					563.5				563.5	630	02100	563.5		GROUND MOUNTED SUPPORT, NO. 2 POST	
1 l					728				728	630	03100	728		GROUND MOUNTED SUPPORT, NO. 3 POST	
+ +			I		285.5		1		285.5 133.8	630 630	04101	285.5 133.8		GROUND MOUNTED SUPPORT, NO. 4 POST, AS PER PLAN GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W8X18	10
					1220	ı						ı 1.2.2.ŏ	· / /	INTO AND THE WAR AND A LINE OF A DECEMBER AND A DEC	
					133.8 182.5				182.5	630	07500	182.5		GROUND MOUNTED STRUCTURAL BEAM SUPPORT, WIOX22	_

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0.24 0.24 607 2010 0.24 MILE WET REFLECTIVE FOOLY PAILWRINT MARKING, LOSE LINE, 6"		
0.24 0.24 807 2010 0.24 MILE RET REPLECTIFE FOOVE PAIRWING MARKING, LANE LINE, 6"		
0.12 0.12 0.12 807 200 0.12 MILE NET REFLECTIVE EFROY PAYEMENT MARKING, LANE LINE, 6"		
1.65		
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2,864 2,864 807 M310 2,864 FT WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING, CHAINELIZING LINE, 12"		
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50 10 60 614 13000 60 CY ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 208 614 13310 208 EACH BARRIER REFLECTOR, TYPE 1, (IWAY)		
208 208 614 13310 208 EACH BARRIER REFLECTOR, TYPE 1, (IWAY) 208 208 614 13350 208 EACH OBJECT MARKER, ONE WAY 60 60 614 18601 60 SNMT PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 2.99 614 20056 2.99 MILE WORK ZONE LANE LINE, CLASS 1, 6", 807 PAINT 0.43 614 20210 0.43 MILE WORK ZONE LANE LINE, CLASS 11, 6", 642 PAINT 0.12 0.12 614 21050 0.12 MILE WORK ZONE CENTER LINE, CLASS 1, 807 PAINT		
208 208 614 13350 208 EACH OBJECT MARKER, ONE WAY 60 60 614 18601 60 SNMT PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 2.99 614 20056 2.99 MILE WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT 0.43 614 20210 0.43 MILE WORK ZONE LANE LINE, CLASS I, 6", 740.06, TYPE I 1.63 614 20560 1.63 MILE WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT 0.12 614 21050 0.12 MILE WORK ZONE CENTER LINE, CLASS I, 807 PAINT		
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6.55 6.55 614 22056 6.55 MILE WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT		
1.23 1.23 614 22210 1.23 MILE WORK ZONE EDGE LINE, CLASS 1, 6", 740.06, TYPE 1		
2.16 2.16 614 22360 2.16 MILE WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT		 -
		 -
4,206 4,206 614 23110 4,206 FT WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT		 $-\!$
135 135 614 23410 135 FT WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE I		 $-\!$
2,864 2,864 614 23690 2,864 FT WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT		 \longrightarrow
4,941 4,941 614 24102 4,941 FT WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT		 -
1,440 1,440 614 24402 1,440 FT WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I		 -+
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REF. NO.	SHEET NO.	LOCATION		STA	TION	SIDE	HEADWALL REMOVED	PIPE REMOVED, 24" AND UNDER	GUARDRAIL REMOVED	CATCH BASIN REMOVED	FENCE REMOVED	REMOVAL MISC.: BOLLARD REMOVED	PAVED GUTTER, TYPE 1-4, AS PER PLAN	CONCRETE MASONRY	6" SHALLOW PIPE UNDERDRAINS	6" BASE PIPE UNDERDRAINS	GUARDRAIL, TYPE MGS	ANCHOR ASSEMBLY, MGS TYPE E, NCHRP 350/MASH 2016	ANCHOR ASSEMBLY, MGS TYPE T	FENCE, TYPE 47RA	CURB, TYPE 6	6" CONCRETE TRAFFIC ISLAND	CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	12" CONDUIT, TYPE B	IS" CONDUIT, TYPE B	IS" CONDUIT, TYPE C	I8" CONDUIT, YPE C	CATCH BASIN, NO. 8	CATCH BASIN, NO. 2-2B	MANHOLE ADJUSTED TO GRADE	PRECAST REINFORCED CONCRETE OUTLET	BARRIER REFLECTOR, TYPE 2, IWAY	BARRIER REFLECTOR, TYPE 2, BI-DIRECTIONAL	108201	DITCH EROSION PROTECTION	EDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE I		CALCULAT DTS DTS
			-	FROM	ТО	-	EACH	FT	FT	EACH	FT	EACH		CY	FT	FT	FT	FACH	EACH	FT	FT	SY) *9 FT	FT	FT	FT	FT	FACH	FACH	FACH		FACH	EACH	CY	SY	SY		
R-1	54,56			689+80.00	695+00.00	RT			520		, ,	LACIT			' '		, ,	LACIT	LACIT	- '	, ,	31						LACII	LACII	LACIT	LACIT	LACIT	LACIT	07	31	<u> </u>		
R-2 R-3	56 56	U.S	30	693+51.27 693+98.11	695+71.30 695+31.12	LT RT	1	220	135	2																												> 0
R-4 R-5	58 58	U.S		1+04.43 1+04.59	2+64.30 3+08.89	L T RT			161 205																													
R-6	60,62	2 U.S.	30	5+06.21	9+58.87	RT		453		,																												2
R-7 R-8	60 60	U.S		5+06.44 6+78.60	6+29.27 7+94.95	RT RT		124		1	119																											V M M
R-9 R-10	62 66	U.S S.R. 6		9+58.87 245+33.42	13+07.92 245+51.09	RT/LT LT		370		2		3																										ď
GR-I	54,56			689+83.79	695+00.00	RT											525.0															12						3
GR-2	56	U.S.	30	692+27.99	695+31.12	RT											250.0	1														12	6					Ū
GR-3 GR-4	58,60 58,60			1+04.43	4+94.55 3+51.00	LT RT											<i>337.5 237.5</i>		1													6	8					>
GR-5	58,60			1+04.59	7+38.66	RT											625.0		1														14					}
<i>I-1</i>	67	S.R. 6		249+33.80	249+96.47	RT/LT															181	135																
<i>1-2</i>	68	S.R. 6	503	256+43.26	256+79.42	LT		-													96	49																0
E-1	58 58-64	U.S		1+17.52 3+25.19	1+50.00 15+75.87	RT/LT																												3 116		27 1047		٥
E-2 E-3	62,64			9+06.41	15+75.87	L T L T							650																					110		1047		
E-4 E-5	62 66-67	U.S 7 S.R. 6		9+61.00 245+06.37	10+31.00 249+68.43	L T L T																												6 43	384	58		
E-6	66-67			245+06.37	249+61.32	RT																												49	443			
UD-1	54	U.S.	30	689+80.00	690+60.97	LT		_							86																						_	
UD-2 UD-3	54,56 54,56			689+80.00 689+80.00	695+31.12 695+31.20	RT RT									556	551							17 7								1							
UD-4	54	U.S.	30	689+88.92	690+53.49	LT										67																						
UD-5 UD-6	54 54,56	U.S		689+88.42 690+53.49	690+68.45 695+25.27	RT/LT LT									90 473								17															
UD-7 UD-8	58,60 58-64) U.S.	30	1+04.59 2+97.51	6+43.67 15+77.00	RT LT									1302	550							14 19								1							
UD-9	58-64	4 U.S.	30	3+04.22	15+77.00	LT									1302	1289							7															
UD-10 UD-11	60,62 60,62			7+64.10 7+83.11	13+05.90 10+03.65	RT RT		-								544 223							10	1									1				\dashv	
UD-12	62,64	4 U.S.	30	13+07.89	15+06.37	RT										199							7															
UD-13 UD-14	64 64	U.S		14+88.72 15+06.37	15+70.90 15+70.75	RT/LT RT/LT										93 69																						_
D-3	62	U.S.	30	13+07.92	9+59.06	LT																		1		349				,								Ť
D-4	60,62	2 U.S.	30	9+59.06	5+06.21	LT																				3 70	453	1		,								
D-6 D-8	60 60	U.S		7+85.00	5+06.44	RT RT																		282					1	1								6
D-9	54,56	5 U.S.	30	689+80.45	693+50.00	RT																			370		170	1										_
D-10 D-11	56 56	U.S		693+50.00 695+25.38	695+25.38 695+71.30	RT LT								0.33													176 46	1										U
F-1	60	U.S.	30	7+89.47	7+94.95	RT														6																	\Box	<
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TOT	ALS	CARR	IED	TO GENE	ERAL SUMI	MARY	1	1167	1021	5	119	3	650	0.33	2507	3585	1975.0	1	2	6	277	184	98	282	370	349	675	4	1	2	2	18	28	217	827	1132	- 1	16

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