

UTILITIES

THIS PROJECT REQUIRES THE INSTALLATION OF NEW GUARDRAIL POSTS. SURVEY WORK HAS NOT BEEN PERFORMED ON THIS PROJECT, NOR HAVE THE UTILITY LOCATIONS BEEN CONFIRMED IN THE FIELD. IN ADDITION TO CMS 105.07, IF, DURING THE COURSE OF INSTALLING ANY NEW GUARDRAIL COMPONENT, IT IS DETERMINED THAT A UTILITY CONFLICT MAY RESULT, THE CONTRACTOR IS TO NOTIFY THE PROJECT ENGINEER IMMEDIATELY. UTILITIES ARE NOT TO BE RELOCATED AS A RESULT OF THIS OPERATION. ADJUSTMENTS TO THE PROPOSED GUARDRAIL WILL ACCOMMODATE THE EXISTING UTILITY. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE GUARDRAIL VIA MEANS THAT WOULD BE COMPLIANT WITH THE IMPACTED UTILITY'S SAFETY GUIDELINES AS WELL AS STILL MEETING ODOT'S DESIGN CRITERIA. ANY MINOR ADJUSTMENTS MADE TO THE PROPOSED GUARDRAIL INSTALLATIONS SHALL BE INCIDENTAL TO PAY ITEM 606.

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

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER UNLESS AUTHORIZED BY THE ENGINEER". THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DIRECTION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THE PROJECT.

PERMANENT PAVEMENT MARKINGS

THE CONTRACTOR SHALL REFERENCE ALL PAVEMENT MARKINGS INCLUDING AUXILIARY PAVEMENT MARKINGS BEFORE THE START OF THE RESURFACING OPERATION. THIS WILL BE NECESSARY TO ASSURE THE CORRECT PLACEMENT OF MARKINGS IN ORIGINAL LOCATIONS. FOR CENTER LINE MARKINGS, THE CONTRACTOR SHALL INSTALL THE PASSING/NO PASSING ZONE MARKINGS ACCORDING TO THE CURRENT CENTER LINE LOGS AVAILABLE AT <http://www.dot.state.oh.us/Divisions/Operations/Traffic/miscellaneous/Pages/CenterlinePassingandNoPassingZoneLogs.aspx> PAYMENT FOR THIS OPERATION SHALL BE INCLUDED WITH EACH RESPECTIVE PAVEMENT MARKING ITEM.

ITEM 623- CONSTRUCTION LAYOUT STAKES, AS PER PLAN

PRIOR TO THE START OF ROADWAY OPERATION, THE CONTRACTOR SHALL REFERENCE THE LENGTH OF THE PROJECT ON BOTH SIDES OF THE ROADWAY, IN A MANNER SATISFACTORY TO THE ENGINEER. THE PAVEMENT SHALL BE REFERENCED IN 1000' FEET INCREMENTS, OR IN INCREMENTS ACCEPTABLE TO THE ENGINEER, IN A SEMIPERMANENT CONDITION.

ITEM 254- PAVEMENT PLANING, ASPHALT CONCRETE

THE PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE INTERMEDIATE COURSE PRIOR TO REOPENING THE LANE TO TRAFFIC. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE ITEM. A DISINCENTIVE IN THE AMOUNT OF \$2,100 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC.

ITEM 621- RPM REMOVED/REPLACED

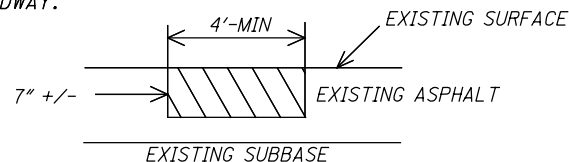
ITEM 621- RPM, Y/Y.....368 EA
ITEM 621- RPM, 1-WAY (WHITE)32 EA

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 621- RPM400 EA
ITEM 621- RPM REMOVED.....400 EA

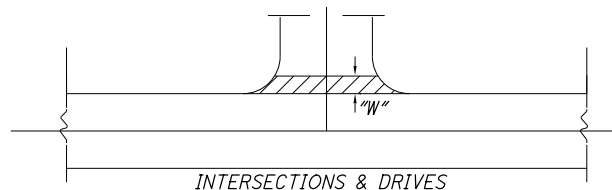
ITEM 253- PAVEMENT REPAIR

AN ESTIMATED QUANTITY OF 500 CU YDS OF ITEM 253- PAVEMENT REPAIR HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THIS OPERATION SHALL BE PERFORMED BEFORE PAVEMENT PLANING OF ROADWAY.



EXISTING DETERIORATED ASPHALT SHALL BE REMOVED TO A MAXIMUM DEPTH OF 7" INCHES OR AS DIRECTED BY THE ENGINEER AND REPLACED WITH ITEM 301, ASPHALT CONCRETE BASE. THE 301 SHALL BE COMPACTED AS PER 401.15 AND IN APPROXIMATELY EQUAL LAYERS. THE LOCATIONS AND SIZE OF THE REPAIRS SHALL BE DETERMINED BY THE ENGINEER.

INTERSECTIONS AND DRIVES



INTERSECTION AND DRIVES QUANTITIES ARE INCLUDED IN THE ASPHALT CONCRETE QUANTITIES. INTERSECTION QUANTITIES HAVE BEEN ESTIMATED AT 15' MEASURED FROM EDGE OF PAVED SHOULDER, DRIVE QUANTITIES HAVE BEEN ESTIMATED AT 3' MEASURED FROM EDGE OF PAVED SHOULDER.

PERFORM WORK PER SPECIFIED OFFSET LIMITS UNLESS THERE IS A JOINT PRESENT CLOSER TO THE EDGE OF PAVED SHOULDER, IN WHICH CASE END WORK AT SAID JOINT.

ITEM 611 - MANHOLE ADJUSTED TO GRADE

THIS WORK SHALL CONSIST OF ADJUSTING MANHOLES TO GRADE PRIOR TO APPLICATION OF THE SURFACE COURSE, AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 611 - MANHOLE ADJUSTED TO GRADE..... 1 EA.

ITEM 638 - VALVE BOX ADJUSTED TO GRADE

THIS WORK SHALL CONSIST OF ADJUSTING VALVE BOXES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 638 - VALVE BOX ADJUSTED TO GRADE..... 3 EA.

PROJECTS LOCATED OVER A SOLE SOURCE AQUIFER:

THE PROJECT AREA IS LOCATED OVER THE GREATER MIAMI SOLE SOURCE AQUIFER SYSTEM, A DESIGNATED SOLE SOURCE AQUIFER. IN ORDER TO MINIMIZE THE POTENTIAL FOR A RELEASE IN THIS SENSITIVE AREA, ALL PROJECT RELATED REFUELING AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN AN ENVIRONMENTALLY RESPONSIBLE MANNER.

SPILLS OF FUELS, OILS, CHEMICALS OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. IF THE SPILL IS A REPORTABLE AMOUNT, THE CONTRACTOR SHOULD CONTACT THE FIRE CHIEF OF THE COORDINATING TOWNSHIP OR THE OHIO EPA'S SPILLS HOTLINE 1-800-282-9378 FOR CLEAN-UP OF THE SPILL FOR CLEAN-UP OF THE SPILL.

COUNTY	ROUTE	FIRE DEPARTMENT	PHONE
BUTLER	SR-748 SLM 0.00 TO 2.01	MORGAN TOWNSHIP FIRE CHIEF JEFF GALLOWAY	513-738-4513
BUTLER	SR-748 SLM 5.75 TO 5.80	ROSS TOWNSHIP FIRE CHIEF STEVE MILLER, OFE	513-863-3410

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 730.19.

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.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, APP

WHERE DESIGNATED, EXISTING ANCHOR ASSEMBLIES INCLUDING ALL POST AND HARDWARE SHALL BE REMOVED. THIS ITEM SHALL ALSO INCLUDE THE REMOVAL OF THE ENTIRE CONCRETE ANCHOR AND CONCRETE ENCASEMENT. ALL HOLES LEFT AFTER REMOVAL OF ASSEMBLIES AND POSTS SHALL BE FILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER. PAYMENT SHALL INCLUDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO PERFORM THE INDICATED ABOVE.

GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL THE NEW GUARDRAIL/BARRIER IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL/BARRIER SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL/BARRIER 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 UNTIL SUCH TIME ENGINEER IS ASSURED OF COMPLIANCE.

ITEM 618 - RUMBLE STRIPES (ASPHALT CONCRETE), SLM 1.71-2.04

INSTALL ITEM 618 EDGE LINE RUMBLE STRIPES PER SCD TC-64.10 ON SR-748 AT SLM 1.71-2.04. QUANTITIES BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 618 - RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE) 0.66 MILE

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GENERAL NOTES

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SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	5	6	7							01/STR/PV	EXT	TOTAL				
ROADWAY																	
				300							300	202	38000	300	FT	GUARDRAIL REMOVED	
				4							4	202	42001	4	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	4
				76							76	517	75600	76	FT	DEEP BEAM BRIDGE RETROFIT RAILING	
				200							200	606	15100	200	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
				4							4	606	26150	4	EACH	ANCHOR ASSEMBLY, MGS TYPE E, NCHRP 350 or MASH 2016	
PAVEMENT																	
76,933	500										500	253	02000	500	CY	PAVEMENT REPAIR	
771											76,933	254	01000	76,933	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3"	
11,540											771	254	01600	771	SY	PATCHING PLANED SURFACE	
2,672											11,540	407	20000	11,540	GAL	NON-TRACKING TACK COAT	
3,740											2,672	441	50000	2,672	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
											3,740	441	50300	3,740	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
	1										1	611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE	
	0.66										0.66	618	41000	0.66	MILE	RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE)	
	3										3	638	10800	3	EACH	VALVE BOX ADJUSTED TO GRADE	
TRAFFIC CONTROL																	
	400										400	621	00100	400	EACH	RPM	
	400										400	621	54000	400	EACH	RAISED PAVEMENT MARKER REMOVED	
						8					8	626	00110	8	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	
						32					32	644	00500	32	FT	STOP LINE	
						0.04					0.04	646	10010	0.04	MILE	EDGE LINE, 6"	
						0.02					0.02	646	10200	0.02	MILE	CENTER LINE	
						11.16					11.16	648	00104	11.16	MILE	EDGE LINE, 6"	
						5.58					5.58	648	00300	5.58	MILE	CENTER LINE	
MAINTENANCE OF TRAFFIC																	
						5.58					5.58	614	21100	5.58	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
						5.58					5.58	614	21550	5.58	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
						11.16					11.16	614	22110	11.16	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
						11.16					11.16	614	22360	11.16	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
						32					32	614	26200	32	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
						32					32	614	26610	32	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
INCIDENTALS																	
											LS	614	11000	LS		MAINTAINING TRAFFIC	
											LS	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	4
											LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

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