

**GENERAL:**

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER (SEE 108.02) AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

**CONTRACTORS EQUIPMENT - OPERATION AND STORAGE:**

THE CONTRACTORS EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTORS STORAGE AREA.

**CONTINGENCY QUANTITIES:**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK 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 FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT,

**REMOVAL ITEMS:**

UNLESS OTHERWISE INSTRUCTED, ASPHALT AND ANY OTHER MISCELLANEOUS ITEMS (SUCH AS CONDUIT) DESIGNATED FOR REMOVAL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE REMOVED ITEM.

**WORK LIMITS:**

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

**ALIGNMENT AND PROFILE:**

THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED. THE PROFILE OF THE PROPOSED SURFACE WILL BE THE SAME AS EXISTING PAVEMENT.

**OVERHEAD STRUCTURES - VERTICAL CLEARANCE:**

IT IS THE INTENT OF THIS PROJECT THAT THE EXISTING VERTICAL CLEARANCES AT OVERHEAD STRUCTURES IS NOT TO BE REDUCED FROM EXISTING. THE CONTRACTOR SHALL USE GREAT CARE AT THESE LOCATIONS NOT TO ALTER THE CURRENT VERTICAL CLEARANCE.

**PART-WIDTH CONSTRUCTION:**

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

**UTILITIES:**

NO UTILITY IMPACT IS ANTICIPATED DUE TO THE SCOPE OF WORK. THE ODOT CONTRACTOR IS REQUIRED TO CONTACT OHIO811 A MINIMUM OF 48 HOURS EXCLUDING WEEKENDS AND HOLIDAYS TO PERMIT ALL UNDERGROUND UTILITIES AN OPPORTUNITY TO MARK THEIR LINES. IT IS ALSO THE ODOT CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL NON-MEMBERS OF OHIO811 DIRECTLY A MINIMUM OF 48 HOURS NOTICE EXCLUDING WEEKENDS AND HOLIDAYS TO PROVIDE THEM WITH THE SAME OPPORTUNITY.

IF THERE IS A UTILITY MARKING WITHIN THE TOLERANCE ZONE OF A UTILITY LOCATE FROM THE PROPOSED GUARDRAIL PLACEMENT IT IS THE ODOT CONTRACTORS RESPONSIBILITY TO DIRECTLY CONTACT THE IMPACTED UTILITY AND WORK WITH THEM TO FIND A SOLUTION THAT DOES NOT CHANGE THE GUARDRAIL PLACEMENT OR DAMAGE THE EXISTING UTILITY. NO UTILITY RELOCATION WILL BE REIMBURSED NOR WILL DELAY CLAIMS BE PERMISSIBLE BASED ON LACK OF COORDINATION BETWEEN THE ODOT CONTRACTOR AND THE IMPACTED UTILITY.

BELOW IS A LIST OF UTILITIES LOCATED WITHIN THE PROJECT AREA TOGETHER WITH THEIR RESPECTIVE OWNERS.

**ITEM 202 - PAVEMENT REMOVED, AS PER PLAN:**

THIS ITEM SHALL CONSIST OF REMOVING EXISTING MEDIAN CROSSOVERS DOWN TO THE TOP OF SUBGRADE, AND BACKFILLING AS PER CMS 202.02. THE EXISTING MEDIAN CROSSOVERS ARE EITHER HEAVILY RAVELLED ASPHALT OR GRAVEL, AND THE DEPTH TO SUBGRADE IS UNKNOWN.

**ITEM 202 - GUARDRAIL REMOVED, AS PER PLAN:**

**ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE E, AS PER PLAN:**  
**ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN:**  
**ITEM 202 - BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN:**  
IN ADDITION TO THE REQUIREMENTS OF ITEM 202, REMOVAL OF SPECIFIED GUARDRAIL ITEMS SHALL INCLUDE BUT NOT BE LIMITED TO ANY ATTACHED POSTS, SIGNS AND DELINEATORS (NOT OTHERWISE SPECIFIED). THIS REMOVAL WILL INCLUDE ALL POSTS, ANCHORS AND HARDWARE UNDER GROUND.

THE CONTRACTOR SHALL EXPECT TO REMOVE ALL CONCRETE FOUNDATIONS COMPLETELY AT ALL LOCATIONS UNLESS OTHERWISE INSTRUCTED OR APPROVED BY THE ENGINEER. REMOVING EXISTING CONCRETE FOUNDATION TO A MINIMUM OF 1 FOOT BELOW THE GRADE OF THE SURROUNDING AREA MAY ONLY BE PERMITTED IF THE EXISTING CONCRETE DOES NOT FALL WITHIN 6 FEET OF THE PROPOSED AS TO NOT COMPROMISE THE PERFORMANCE OF THE PROPOSED GUARDRAIL SYSTEM(S).

ALL HOLES AND VOIDS REMAINING AFTER REMOVAL OF GUARDRAIL POSTS AND FOUNDATIONS SHALL BE FILLED WITH GRANULAR MATERIAL CONFORMING TO CMS 203.02R. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPLICABLE GUARDRAIL REMOVAL ITEM.

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL NEW GUARDRAIL IN A CONTINUOUS OPERATION.

**ITEM 203 - EMBANKMENT, AS PER PLAN:**

QUANTITIES FOR ITEM 203 - EMBANKMENT HAVE BEEN PROVIDED THROUGHOUT THIS PLAN TO BUILD UP FORE-SLOPES AND ENSURE PROPER GRADING FOR THE PROPOSED GUARDRAIL AND ANCHOR ASSEMBLIES. THIS ITEM OF WORK INCLUDES ANY CLEARING AND GRUBBING NECESSARY TO PLACE THE EMBANKMENT AT THE LOCATIONS SPECIFIED OR DIRECTED. THE CONTRACTOR SHALL BE PREPARED TO USE EMBANKMENT AT ALL PROPOSED GUARDRAIL LOCATIONS AND ANY OTHER AREAS "AS DIRECTED BY THE ENGINEER". SEE GUARDRAIL DETAILS ON SHEET P.5 FOR MORE DETAILS.

**ITEM 606 - GUARDRAIL, MISC.: ALTERNATE GUARDRAIL PLACEMENT:**

THIS ITEM SHALL BE USED WHEN THE CONTRACTOR IS REQUIRED TO USE AN ALTERNATE METHOD TO SET POSTS TO PREVENT DAMAGE TO AN UNDERGROUND OBSTACLE, SUCH AS A UTILITY. THE USE OF THIS ITEM WILL BE AS DEEMED NECESSARY BY THE ENGINEER. THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIAL NEEDED TO SET AND BACKFILL POSTS WHILE MEETING THE REQUIREMENTS OF THE APPLICABLE GUARDRAIL ITEM BEING PERFORMED. APPLICABLE GUARDRAIL ITEMS INCLUDE BUT ARE NOT LIMITED TO SETTING POSTS (AND SLEEVES) FOR TYPE 5, TYPE MGS, ANCHOR ASSEMBLIES, AND BRIDGE TERMINAL ASSEMBLIES. PAYMENT SHALL BE AT THE UNIT BID PRICE OF EACH AND SHALL BE PAID FOR IN ADDITION TO THE APPLICABLE GUARDRAIL PLACEMENT ITEM LISTED ABOVE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 606 - GUARDRAIL, MISC.: ALTERNATIVE GUARDRAIL PLACEMENT = 75.0 FT

**ITEM SPECIAL, PAVER MOUNTED THERMAL PROFILING (PMTP):**

THIS ITEM CONSISTS OF PROVIDING A PAVER MOUNTED THERMAL PROFILING (PMTP) SYSTEM TO IDENTIFY THE PRESENCE OF ANY THERMAL SEGREGATION OF AN UNCOMPACTED MAT OF HOT MIX ASPHALT. METHODS AND PROCEDURES FOR DETERMINING THE THERMAL PROFILE USING A PAVER-MOUNTED THERMAL IMAGING SYSTEM SHALL CONFORM TO THE SPECIFICATIONS FOUND IN THE SPECIAL PROVISIONS.

ODOT OFFICE OF PAVEMENT ENGINEERING SHALL BE NOTIFIED AT LEAST TWO WEEKS PRIOR TO THE START OF PMTP DATA COLLECTION.

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ALL, LABOR, EQUIPMENT, SOFTWARE, AND INCIDENTALS NECESSARY TO INSTALL THE EQUIPMENT AND ANALYZING THE DATA SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM SPECIAL, PAVER MOUNTED THERMAL PROFILING (PMTP).

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY:  
ITEM SPECIAL - PAVER MOUNTED THERMAL PROFILING = LS

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (MASH 2016):**

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.

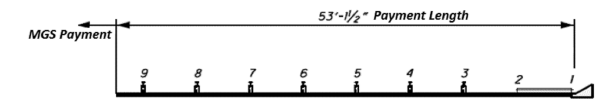
WHEN THE FACE OF THE ADJACENT (ATTACHED) GUARDRAIL IS LESS THAN 4' OFFSET FROM THE PROPOSED EDGE LINE, THE PROPOSED TYPE E ANCHOR ASSEMBLY SHALL BE INSTALLED USING A 25:1 FLARE RATE (24" OFFSET DESIGN) AS DETAILED IN THE SHOP DRAWINGS AND AS DIRECTED BY THE ENGINEER.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH TYPE J, ASTM D4956 TYPE XI REFLECTIVE SHEETING, PER CMS 730.193.

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.

THE PAYMENT LIMIT (LENGTH) FOR THE PROPOSED ANCHOR ASSEMBLY, (MGS) TYPE E, AS PER PLAN SHALL BE 53'-1 1/2" (TO THE STANDARD MGS CONNECTION) AS DETAILED BELOW



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.

**CURVED RAIL ELEMENTS:**

ALL RADII OF CURVED RAIL ARE ESTIMATED AND ACTUAL RADII OF PROPOSED RAIL SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING. LENGTH OF CURVED RAIL ELEMENTS, WHERE CALLED FOR IN A RUN, SHALL BE INCLUDED IN THE TOTAL LENGTH OF RUN SHOWN IN THE GUARDRAIL COLUMN AND THE CURVED RAIL ELEMENT TOTAL ARE INCLUDED WITH THE GUARDRAIL TOTALS ON THE GENERAL SUMMARY SHEET. LOCATIONS OF ANY CURVED RAIL ARE IDENTIFIED IN THE PLAN SHEETS.

DESIGN AGENCY



DESIGNER

AMH

REVIEWER

DKR 01/11/22

PROJECT ID

112823

SHEET TOTAL

P.6 31