

STATE OF OHIO DEPARTMENT OF TRANSPORTATION **D06-GR-FY21**

VARIOUS GUARDRAIL REPAIR AT VARIOUS LOCATIONS WITHIN DELAWARE, FAYETTE, MADISON, MARION, MORROW, PICKAWAY, AND UNION COUNTIES.

2019 SPECIFICATIONS

CONSTRUCTION PROJECT NO:

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES

AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE

PROPOSAL SHALL GOVERN THIS PROJECT.

FEDERAL PROJECT NO: N/A

PID NO: 111511

INDEX OF SHEETS

TITLE	1
GENERAL NOTES	2 - 10
MAINTENANCE OF TRAFFIC	11 - 12
PERMITTED LANE CLOSURES	13 - 14

ESTIMATED GENERAL SUMMARY 15 - 16

EARTH DISTURBED AREA

LIMITED ACCESS

REVISED CODE.

PROJECT EARTH DISTURBED AREA:N/A*EST. CONTRACTOR EARTH DISTURBED AREA:N/A*NOTICE OF INTENT DISTURBED AREA:N/A*RAILROAD INVOLVEMENT:NONE

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR

LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION

THROUGH TRAFFIC AND HAS BEEN DECLARED A

OF THE DIRECTOR IN ACCORDANCE WITH THE

PROVISIONS OF SECTION 5511.02 OF THE OHIO

*MAINTENANCE PROJECT

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE OF TRAFFIC AND SAFETY WILL BE AS SET FORTH ON PLANS AND ESTIMATES.

APPROVED DISTRICT DEPUTY DIRECTOR 12020 DATE 4115

APPROVED

DATE _____

DIRECTOR, DEPARTMENT OF TRANSPORTATION

UNDERGROUND UTILITIES	
Contact Two Working Days Before You Dig	
Before You Dig	
Before You Dig OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)	
OHI0811, 8-1-1, or 1-800-362-2764	

ou Dig			STANDARD CONSTRUCTION DRAWINGS						
044	ENGINEERS SEAL:	MGS-1.1	01/19/18	MT-95 . 30	07/19/19	TC-41 . 20	10/18/13		LEMENTAL FICATIONS
811 .org		MGS-2.1 MGS-3.1		MT-95.31 MT-97.10	07/19/19	TC-41.40 TC-42.20	10/18/13 10/18/13	800	04/17/20 04/20/12
ore You Dig	Muniter And	MGS-3.2	01/18/13	MT-98.11	01/17/20	TC-52.10	10/18/13		10/19/18
1-800-362-2764 be called directly)	KEVIN R.	MGS-4.1 MGS-4.2		MT-98.20 MT-98.22	04/19/19 01/17/20	TC-52.20 TC-61.10	07/20/18 01/17/20		
	E-64877	MGS-4.3 MGS-5.2		MT-98.28 MT-101.90	01/17/20 07/21/17				
PARED BY:	ACENTER ALE ALE ALE	MGS-5.2 MGS-5.3		MT-105.10	01/17/20				PECIAL
	Kerni R. Frant	RM-4.3	01/17/20	DBR-2-73	07/19/02			IDIQ	0 VISIONS 04/20/20
	,	RM-4.4 RM-4.5	07/19/19 07/21/17	DBR-3-11	07/15/11				
IN HOUSE DESIGN	4/15/2020	RM-4.6	07/19/13						

drankin

ЫΜ

1:20:21

6/22/2020

PURPOSE OF PROJECT AND BUDGETED FUNDS:

THIS PROJECT IS INTENDED TO SOLICIT BIDS FROM QUALIFIED CONTRACTORS TO PROVIDE MAINTENANCE SERVICES FOR GUARDRAIL, CABLE RAIL AND OTHER ASSOCIATED ITEMS WITHIN FRANKLIN COUNTY OHIO.

THIS CONTRACT IS INTENDED TO BE AN "ON-CALL" CONTRACT WITH PRE-DETERMINED BID ITEMS TO BE USED AS DIRECTED BY THE DEPARTMENT. THE CONTRACT WILL CONTAIN A SUMMARY OF EQUIPMENT AND SERVICES WITH ESTIMATED ITEM QUANTITIES. ALL WORK WILL BE SUB-DIVIDED INTO CATEGORIES OR TASKS ENTITLED, "WORK ORDERS". EACH WORK ORDER MAY HAVE SEVERAL "SUB-WORK ORDERS" OF SIMILAR TYPE AND IN THE SAME RELATIVE LOCATION.

THE MAXIMUM CONTRACT VALUE IS \$400,000. THE CONTRACT COMPLETION DATE IS 8/30/2021. THE CONTRACT WILL TERMINATE UPON REACHING EITHER THE CONTRACT COMPLETION DATE OR THE OVERALL MAXIMUM CONTRACT VALUE, WHICHEVER IS ACHIEVED FIRST.

THE CONTRACT PERIOD INITIALLY BEGINS AT THE NOTICE TO PROCEED AND ENDS AS DESCRIBED ABOVE. REFER TO THE IDIQ (INDEFINITE DELIVERY, INDEFINITE QUANTITY) SPECIAL PROVISIONS FOR FURTHER CONTRACT PROVISIONS. THE IDIQ SPECIAL PROVISION REVISES AND SUPERSEDES SECTION 100 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE EDITED VERSION OF THE 100 SPECIFICATION SHOWING THE CHANGES MADE HAS BEEN PROVIDED AS A NON-CONTRACTUAL REFERENCE DOCUMENT TO ASSIST IN IDENTIFYING THE CHANGES MADE.

CONTRACTORS ARE HEREBY ADVISED THAT THEY MAY BE WORKING WITH OTHER CONSULTANTS, ROADWAY CONSTRUCTION CONTRACTORS, ETC. IN PERFORMING WORK UNDER THIS CONTRACT.

GENERAL:

.ProjectData

N

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. 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.

GENERAL DESCRIPTION:

THIS IS A DISTRICT WIDE GUARDRAIL REPAIR PROJECT. THE INTENT OF THIS PLAN IS TO REPAIR DAMAGED GUARDRAIL AND ANCHOR ASSEMBLIES THROUGHOUT DISTRICT 6 ON ODOT MAINTAINED ROUTES. WHEN GUARDRAIL IS TO BE REPAIRED, THE HIGHWAY MANAGEMENT DEPARTMENT SHALL NOTIFY THE CONTRACTOR OF THE LOCATION BY PHONE AND SHALL FAX THE WORK ORDER. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DEPARTMENT (740-833-8095) 24 HOURS BEFORE BEGINNING THE REPAIR WORK.

ITEM 624 - MOBILIZATION, AS PER PLAN:

THE INTENT OF THIS ITEM IS TO COMPENSATE THE CONTRACTOR FOR HIS COST TO QUICKLY RESPOND TO AN "EMERGENCY" REPAIR WORK ORDER REQUEST.

THE WORK ORDERS RECEIVED BY THE CONTRACTOR WILL ALL BE LABELED "EMERGENCY" OR "NON-EMERGENCY". IF THE WORK ORDER IS LABELED "EMERGENCY", THE CONTRACTOR WILL BE EXPECTED TO COMPLETE THE WORK ORDER WITHIN 72 HOURS (INCLUDING WEEKENDS) OF NOTIFICATION.

THIS MOBILIZATION WILL APPLY TO EACH LOCATION OF "EMERGENCY" WORK. A LOCATION WILL BE DEFINED AS ANY SET OF "EMERGENCY" WORK ORDERS THAT ARE GIVEN TO THE CONTRACTOR AT A SPECIFIC TIME THAT ARE WITHIN A ONE MILE RADIUS.

IN THE EVENT THAT THE CONTRACTOR HAS NOT COMPLETED THE "EMERGENCY" WORK ORDER WITHIN THE 72 HOURS (INCLUDING WEEKEND, DAYS, EXCLUDING HOLIDAYS) HE SHALL BE ASSESSED A DISINCENTIVE OF \$1,000 PER CALENDAR DAY THAT THE WORK ORDER IS NOT COMPLETED. EXCEPTIONS WILL BE GIVEN IF THERE IS WEATHER PROHIBITING WORK ON ANY OF THESE WORK ORDERS.

PAYMENT FOR THIS ITEM SHALL BE FOR EACH "EMERGENCY" REPAIR COMPLETED WITHIN THE 72 HOURS ALLOTTED. ALL MATERIAL, LABOR, EQUIPMENT, ETC. REQUIRED FOR THE REPAIR WILL BE PAID BY ITS RESPECTIVE PAY ITEM LISTED IN THIS PLAN. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM	DESCRIPTION	TOTAL	UNIT
624	MOBILIZATION, AS PER PLAN	4	EACH

CONTINUOUS WORK PROVISION:

IF THE WORK ORDER IS LABELED "NON-EMERGENCY", THE CONTRACTOR WILL BE EXPECTED TO COMPLETE THE WORK ORDER WITHIN 14 DAYS (INCLUDING WEEKEND DAYS BUT EXCLUDING HOLIDAYS AS NOTED ON SHEET 11/16) OF NOTIFICATION. IN THE EVENT THE CONTRACTOR HAS NOT COMPLETED THE "NON-EMERGENCY" WORK ORDER WITHIN THIS TIME FRAME, CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE OF \$1,000 (PER CMS 108.07) PER CALENDAR DAY THAT THE WORK ORDER IS NOT COMPLETED. THESE PROVISIONS WILL BE STRICTLY FOLLWED IN THIS CONTRACT. EXCEPTIONS WILL BE GIVEN IF THERE IS WEATHER PROHIBITING WORK ON ANY OF THESE WORK ORDERS.

 $\left| \begin{array}{c} 2 \\ 16 \end{array} \right|$

UNDERGROUND UTILITIES:

2020

ŵ

THE ODOT CONTRACTOR IS REQUIRED TO CONTACT OUPS 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 OUPS DIRECTLY A MINIMUM OF 48 HOURS NOTICE EXCLUDING WEEKENDS AND HOLIDAYS TO PROVIDE THEM WITH THE SAME OPPORTUNITY.

IT IS ODOT'S EXPECTATION THAT ALL GUARD RAIL POSTS WILL BE INSTALLED IN THE SAME LOCATIONS AND THERE WILL BE NO DISRUPTION TO UNDERGROUND UTILITIES. IF THERE IS A UTILITY MARKING WITHIN THE TOLERANCE ZONE OF A UTILITY LOCATE FROM THE PROPOSED GUARDRAIL PLACEMENT IT IS THE 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.

OHIO UTILITY PROTECTION SERVICE 1-800-362-2764 NON-MEMBERS MUST BE CALLED DIRECTLY

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE:

THE CONTRACTOR'S 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 CONTRACTOR'S STORAGE AREA.

TERM AND TERMINATION OF THE CONTRACTOR:

IN ADDITION TO THE GENERAL PROVISIONS AS SPECIFIED IN SECTION 100 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, IT IS STIPULATED THAT THE CONTRACT SHALL LAST NO LONGER THAN THE SPECIFIED COMPLETION DATE. UPON WRITTEN NOTICE FROM THE DIRECTOR OF TRANSPORTATION TO THE CONTRACTOR, OF NOT LESS THAN 15 CALENDAR DAYS, THE DIRECTOR MAY TERMINATE THE CONTRACT AT ANYTIME.

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.

GUARDRAIL POST HOLES:

ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS SHALL BE FILLED WITH GRANULAR MATERIAL, EXCESS MATERIAL RESULTING FROM GUARDRAIL RECONSTRUCTION, OR EXCESS MATERIAL FROM BERM RESHAPING. 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 ITEM.

GUARDRAIL REPLACEMENT:

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. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED UNTIL SUCH TIME AS THE ENGINEER IS ASSURED OF COMPLIANCE.

REMOVAL ITEMS:

GUARDRAIL, POSTS AND MISCELLANEOUS HARDWARE 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. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED FOR USE ONLY WHEN THE ENGINEER DESIGNATES THAT THE REMOVED GUARDRAIL IS TO BE STORED, OR THAT NEW RAIL NOT TO BE PUT BACK AT THE SAME LOCATION:

ITEM	DESCRIPTION	TOTAL	UNIT
202	GUARDRAIL REMOVED	25	FT

ITEM 202 - BRIDGE RAILING REMOVED:

THE CONTRACTOR SHALL REMOVE RAIL, AS DESIGNATED, IN GOOD ORDER. ANY DAMAGE TO BRIDGE FASCIA RESULTING FROM THE REMOVAL OPERATION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE, TO THE SATISFACTION OF THE ENGINEER.

ITEM	DESCRIPTION	TOTAL	UNIT
202	BRIDGE RAILING REMOVED	12.5	FT

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN:

ALL EXISTING CONCRETE SHALL BE REMOVED IN ADDITION TO ALL GUARDRAIL PARTS. CONCRETE BECOMES PROPERTY OF THE CONTRACTOR. ALL HOLES REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL OR EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION.

ITEM	DESCRIPTION	TOTAL	UNIT
202	ANCHOR ASSEMBLY REMOVED, TYPE A, APP	1	EACH

ITEM 202 - REMOVAL MISC.:IMPACT ATTENUATOR:

ALL GUARDRAIL PARTS FROM REMOVAL BECOMES PROPERTY OF THE CONTRACTOR. ALL HOLES REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL OR EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION.

ITEM	DESCRIPTION	TOTAL	UNIT
202	REMOVAL MISC.:IMPACT ATTENUATOR	1	EACH

S

ITEM 517 - RAILING, AS PER PLAN:

F

THIS ITEM INCLUDES ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY TO REMOVE AND REPLACE ANY AND ALL EXISTING DAMAGED COMPONENTS OF THE DEEP BEAM RAIL AND STEEL TUBULAR BACK UP IN ACCORDANCE WITH APPLICABLE STANDARD DRAWINGS. SHOP DRAWINGS AND FABRICATING APPROVAL IS NOT REQUIRED FOR REPLACING MATERIAL. POST LENGTH AND ANCHOR BOLT SPACING SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING TO INSURE A 2.25 FT. CLEARANCE FROM THE TOP OF RAIL TO SURFACE OF BRIDGE DECK. ADDITIONAL QUANTITIES HAVE BEEN PROVIDED TO BE USED WHERE DIRECTED. PAYMENT SHALL BE AT THE UNIT PRICE BID FOR:

ITEM	DESCRIPTION	TOTAL	UNIT
517	RAILING (DEEP BEAM W/ STEEL TUBE B/UP & TYPE 2 POST)	12.5	FT
517	RAILING (DEEP BEAM W/ STEEL TUBE B/UP & TYPE 2 POST), AS PER PLAN	12.5	FT
517	DEEP BEAM BRIDGE RETROFIT RAILING, APP	25	FT

GUARDRAIL TYPE 5 PLAN INSERT SHEETS/ARCHIVED STANDARD DRAWINGS:

A PORTION OF THIS PROJECT INVOLVES REPAIRING TYPE 5 GUARDRAIL. ARCHIVED STANDARD DRAWINGS OF TYPE 5 GUARDRAIL ARE PROVIDED AS PLAN INSERT SHEETS ON ROADWAY ENGINEERING'S PLAN INSERT SHEETS WEB PAGE.

P.I.S.	ARCH. DATE	<i>P.I.S.</i>	ARCH. DATE
GR-1.1	7/20/12	GR-3.6	7/20/12
GR-2.1	7/20/12	GR-4.1	7/20/12
GR-2.2	7/20/12	GR-4.2	7/20/12
GR-2.3	7/20/12	GR-4.5	1/20/12
GR-2.4	7/20/12	GR-5.1	4/16/10
GR-3.1	7/20/12	GR-5.2	4/16/10
GR-3.2	7/20/12	GR-5.3	4/16/10
GR-3.3	7/20/12	GR-6.1	4/16/10
GR-3.4	7/20/12	GR-6.2	4/16/10
GR-3.5	7/20/12		

ITEM 606 - GUARDRAIL, (VARIOUS TYPE), AS PER PLAN:

THESE ITEMS SHALL INCLUDE THE REMOVAL AND ALL WORK NECESSARY TO REPLACE SECTIONS OF DAMAGED GUARDRAIL WITH THE TYPE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THESE ITEMS SHALL INCLUDE REPLACING GUARDRAIL, POST AND/OR ASSOCIATED HARDWARE WITHIN THE LENGTH DESIGNATED FOR REPAIR AND ALL WORK NECESSARY TO RESET AND ALIGN POST AND GUARDRAIL FOR RE-USE AS DIRECTED BY THE ENGINEER.

ADJUSTMENT OF ADJACENT RAIL OUTSIDE THE LIMITS DESIGNATED FOR REPLACEMENT, IF NECESSARY, IN ORDER TO REESTABLISH SPACING, WILL BE CONSIDERED INCIDENTAL TO THIS ITEM. SECTIONS TO BE REPLACED WILL BE DESIGNATED BY THE ENGINEER FROM CENTER OF POST TO CENTER OF POST. MATERIALS SHALL BE NEW ITEMS UNDER THIS CONTRACT. POST AND BLOCKS SHALL BE OF THE SAME TYPE AS THE EXISTING RUN. ADDITIONAL QUANTITIES HAVE BEEN PROVIDED TO BE USED WHERE DIRECTED. PAYMENT SHALL BE AT THE UNIT PRICE BID FOR:

ITEM	DESCRIPTION	TOTAL	UNIT
606	GUARDRAIL,TYPE 5, AS PER PLAN	1,250	FT
606	GUARDRAIL,TYPE 5 WITH TUBULAR BACKUP	12.5	FT
606	GUARDRAIL,TYPE 5 WITH TUBULAR BACKUP, AS PER PLAN	12.5	FT
606	GUARDRAIL,TYPE 5A	38	FT
606	GUARDRAIL,TYPE 5A, AS PER PLAN	50	FŤ
606	GUARDRAIL, TYPE MGS	500	FT
606	GUARDRAIL, TYPE MGS, AS PER PLAN	2,500	FŤ
606	GUARDRAIL, TYPE MGS W/ LONG POSTS	1,300	FT
606	GUARDRAIL,BARRIER DESIGN, TYPE 5	100	FŤ
606	GUARDRAIL,BARRIER DESIGN, TYPE 5, APP	125	FT
606	GUARDRAIL, TYPE MGS, 25' LONG-SPAN	25	FT

ITEM 606 - GUARDRAIL REBUILT, (VARIOUS TYPE), APP:

THIS ITEM INCLUDES ALL LABOR EQUIPMENT AND MATERIAL NECESSARY TO REMOVE AND REPLACE ANY AND ALL EXISTING DAMAGED COMPONENTS INCLUDING POSTS, BLOCKS, AND HARDWARE IN ACCORDANCE WITH PLAN INSERT SHEET:

GR-2.1

SECTIONS TO BE REBUILT SHALL BE DESIGNATED BY THE ENGINEER FROM CENTER OF POSTS. PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM	DESCRIPTION	TOTAL	UNIT
606	GUARDRAIL REBUILT, TYPE MGS, APP	250	FT
606	GUARDRAIL REBUILT,TYPE 5, APP	225	FT

ITEM 606 - GUARDRAIL POST, 9 FT., AS PER PLAN:

AN ESTIMATED NUMBER OF 9 FT. LONG GUARDRAIL POSTS HAVE BEEN LISTED TO BE USED AS DIRECTED BY THE ENGINEER TO OBTAIN A REASONABLE LINE AND ELEVATION OF GUARDRAIL ELEMENTS. EXCEPT FOR LENGTH, THE POST SHALL MEET THE APPLICABLE REQUIREMENTS NOTED IN ITEM 710. THE UNIT BID PRICE FOR THIS ITEM SHALL BE THE DIFFERENCE FOR SUPPLYING THE 9 FT. LONG POST IN LIEU OF THE STANDARD LENGTH GUARDRAIL POSTS INCLUDED IN THE 606 GUARDRAIL BID ITEMS, AND SHALL BE PAID AS EACH. STANDARD LENGTH POSTS REQUIRED TO COMPLETE THE VARIOUS RUNS SHALL BE INCLUDED IN THE 606 GUARDRAIL BID ITEMS. PAYMENT SHALL BE AT THE UNIT BID PRICE

010 111			
ITEM	DESCRIPTION	TOTAL	UNIT
606	GUARDRAIL POST	5	EACH
606	GUARDRAIL POST, 9 FT., AS PER PLAN	10	EACH

ITEM 606 - 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 NOT BE INCLUDED IN THE TOTAL LENGTH OF RUN SHOWN IN THE GUARDRAIL COLUMN, HOWEVER, THE CURVED RAIL ELEMENT TOTAL SHALL BE INCLUDED WITH THE GUARDRAIL TOTALS ON THE GENERAL SUMMARY SHEET.

GENERAL NOTES

0

ieets\GENERAL

ArojectData \111511_D06 - GR - F Y 21 \Design \Roadway \S

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS: www.dot.state.oh.us/Divisions/ProdMgt/Roadway/roadwaystandards

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27.75 (31 INCH FOR MGS) 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 FACE OF THE TYPE B IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

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

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM	DESCRIPTION	TOTAL	UNIT
606	ANCHOR ASSEMBLY, TYPE B	2	EACH
606	ANCHOR ASSEMBLY, MGS TYPE B	4	EACH

ITEM 606 - ANCHOR ASSEMBLY, (MGS)(TYPE 5), TYPE E: THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS:

www.dot.state.oh.us/Divisions/ProdMat/Roadwav/roadwavstandards

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27.75 (31 INCH FOR MGS) 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.

LOCATED ON THE LEFT SIDE OF THE THROUGH ROADWAY. THESE DELINEATORS ARE ITEMIZED SEPARATELY AND SHALL COMPLY WITH STANDARD CONSTRUCTION DRAWING: TC-61.10

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

ITEM	DESCRIPTION	TOTAL	UNIT
606	ANCHOR ASSEMBLY, TYPE E	4	EACH
606	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	12	EACH

ITEM 606 - ANCHOR ASSEMBLY, TYPE A:

THIS ITEM SHALL INCLUDE ALL WORK, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT TYPE A ANCHOR ASSEMBLY IN ACCORDANCE WITH PLAN INSERT SHEETS:

GR-4.1

THE FOLLOWING QUANTITIES HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ІТЕМ	DESCRIPTION	TOTAL	UNIT
606	ANCHOR ASSEMBLY, TYPE A	2	EACH

ITEM 606 - ANCHOR ASSEMBLY, TYPE T, AS PER PLAN:

THIS ITEM INCLUDES THE REMOVAL AND ALL WORK AND EQUIPMENT NECESSARY TO REPLACE THE EXISTING ANCHOR ASSEMBLY. THIS ITEM SHALL INCLUDE ALL WORK, EQUIPMENT AND MATERIALS NECESSARY TO REPLACE THE EXISTING ASSEMBLY IN ACCORDANCE WITH PLAN INSERT SHEETS:

GR-4.2 ADDITIONAL QUANTITIES HAVE BEEN PROVIDED TO BE USED

WHERE DIRECTED. PAYMENT SHALL BE AT THE UNIT PRICE BID FOR:

l	ITEM	DESCRIPTION	TOTAL	UNIT
I				
	606	ANCHOR ASSEMBLY, TYPE T	2	EACH
	606	ANCHOR ASSEMBLY, TYPE T, AS PER PLAN	1	EACH
I	606	ANCHOR ASSEMBLY, MGS TYPE T	4	EACH

ITEM 606 - ANCHOR ASSEMBLY REBUILT, TYPE A, AS PER PLAN:

THIS ITEM INCLUDES ALL WORK, MATERIALS, AND EQUIPMENT NECESSARY TO REPLACE A SINGLE 25 FT. LONG RAIL ELEMENT AND REMOVE EXISTING POST, IF NECESSARY, (36" CONCRETE ANCHOR NOT INCLUDED). THIS ITEM SHALL INCLUDE ALL WORK, EQUIPMENT, AND MATERIALS NECESSARY TO REPLACE THE DAMAGED COMPONENTS OF THE EXISTING ASSEMBLY IN ACCORDANCE WITH PLAN INSERT SHEETS:

GR-4.1

PAYMENT SHALL BE AT THE UNIT BID PRICE.

anki

Ъ

ITEM	DESCRIPTION	TOTAL	UNIT	
606	ANCHOR ASSEMBLY REBUILT, TYPE A, APP	4	EACH	
-				

ITEM 606 - ANCHOR ASSEMBLY REBUILT, TYPE T,AS PER PLAN:

THIS ITEM INCLUDES THE REMOVAL AND ALL WORK AND EQUIPMENT NECESSARY TO REPLACE ANY AND ALL DAMAGED COMPONENTS OF THE EXISTING ANCHOR ASSEMBLY. THIS ITEM SHALL INCLUDE ALL WORK, EQUIPMENT AND MATERIALS NECESSARY TO REPLACE DAMAGED COMPONENTS OF THE EXISTING <u>ASSEMBLY</u> IN ACCORDANCE WITH PLAN INSERT SHEETS:

PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM	DESCRIPTION	TOTAL	UNIT
606	ANCHOR ASSEMBLY REBUILT, TYPE T, APP	1	EACH

ITEM 606 - BRIDGE TERMINAL ASSEMBLY, AS PER PLAN:

THIS ITEM INCLUDES THE REMOVAL AND ALL WORK AND EQUIPMENT NECESSARY TO REPLACE ANY AND ALL DAMAGED COMPONENTS OF THE EXISTING BRIDGE TERMINAL ASSEMBLY. WHEN REMOVAL OF ANCHOR BOLTS OF DAMAGED BRIDGE TERMINAL ASSEMBLIES IS NECESSARY, THE ANCHORS SHALL BE REPLACED WITH BOLTS EXTENDING THROUGH THE BRIDGE PARAPET, AS DIRECTED BY THE ENGINEER. THIS IS INCLUDED IN THE RESPECTIVE ITEM OF WORK.

511_D06-	ITEM	DESCRIPTION	TOTAL	UNIT
<1115 	606	MGS BRIDGE TERMINAL ASSEMBLY,TYPE 1,APP	2	EACH
ata'	606	MGS BRIDGE TERMINAL ASSEMBLY,TYPE 2,APP	1	EACH
ProjectDo				

THIS ITEM SHALL INCLUDE ALL WORK, EQUIPMENT AND MATERIALS NECESSARY TO REPLACE DAMAGED COMPONENTS OF THE EXISTING ASSEMBLY PER IN ACCORDANCE WITH PLAN INSERT SHEETS:

	GR-3.1	GR-3.2	GR-3.3	GR-3.4	GR-3.5
ADDITIC	ONAL QUANT	ITIES HAVE	BEEN PROVI	DED TO BE USED	

WHERE DIRECTED. PAYMENT SHALL BE AT THE UNIT PRICE BID FOR:

ITEM	DESCRIPTION	TOTAL	UNIT
606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	1	EACH

MANUFACTURER'S REQUIREMENTS FOR IMPACT ATTENUATOR, TYPE 1 (UNIDIRECTIONAL AND BIDIRECTIONAL):

THE CONTRACTOR SHALL REFERENCE THE FOLLOWING INFORMATION FOR PROPER REPAIR OF IMPACT ATTENUATORS, TYPE 1.

THE FOLLOWING APPROVED SHOP DRAWINGS CAN BE ACCESSED AT: www.dot.state.oh.us/Divisions/ProdMgt/Roadway/roadwaystandards

ITEM	DESCRIPTION	TOTAL	UNIT
606	IMPACT ATTENUATOR, TYPE 1 (BI)	1	EACH

1) THE C-A-T MANUFACTURED BY TRINITY INDUSTRY 1170 N. STATE ST., GIRARD, OHIO 44420 (TEL. 330-545-4373). THE LENGTH OF THE C-A-T SYSTEM IS CONSIDERED TO BE 31.25 FT. LONG. REPLACEMENT PARTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

1022011,10 1	RE-AFFROVED SHOF DRAWINGS:		0007
DWG#	DRAWING NAME	DWG/RFV	ODOT APPROVAL
DWG#	DRAWING NAME		
		DATE	DATE
	CRASH-CUSHION-ATTEN.		
	TERMINAL PLAN, ELEVATION		
SS245	& SECTION FOR USE AS A	4/10/97	3/6/98
М	LONGITUDINAL MEDIAN	REV. 4	
	BARRIER TERMINAL OR		
	CRASH CUSHION ATTENUATOR		
	C-A-T TRANSITION TO		
SS224	MEDIAN BARRIER GUARDRAIL	4/26/96	3/6/98
М	PLAN ELEVATION & SECTIONS		
	C-A-T TRANSITION TO		
<i>SS226</i>	VERTICAL WALL OR PIER	4/26/96	3/6/98
М	PLAN, ELEVATION SECTIONS		

(5

2) THE BRAKEMASTER MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., ONE EAST WACKER DRIVE, CHICAGO, IL 60601 (TEL. 312-467-6750). THE LENGTH OF THE BRAKEMASTER SYSTEM IS CONSIDERED TO BE 32'-8" FT. LONG. REPLACEMENT PARTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

			ODOT
DWG#	DRAWING NAME	DWG/REV	APPROVAL
		DATE	DATE
92-00	BRAKEMASTER GENERAL	3/6/97	3/6/98
-1	ASSEMBLY(UNIDIRECTIONAL)	REV.K	
92-00	BRAKEMASTER(UNIDIRECT)	2/9/98	3/6/98
-81	₩/ FOUNDATION TUBES		
92-00	BRAKEMASTER GENERAL	3/10/97	3/6/98
-2	ASSEMBLY (BIDIRECTIONAL)	REV.K	
92-00	BRAKEMASTER (BIDIRECT)	2/9/98	3/6/98
-82	₩/ FOUNDATION TUBES		
####	ANCHOR ASSEMBLY	6/12/97	3/6/98
-24	FOUNDATION TUBE, 6.5 FT,	REV. D	
0000	BRS		

3) THE FLEAT-MT MANUFACTURED BY ROAD SYSTEMS, INC. (RSI),3616 OLD HOWARD COUNTY AIRPORT ROAD, BIG SPRINGS, TX, 79720 (TELEPHONE 915-263-2435) AND AVAILABLE FROM RSI'S LIST OF APPROVED DISTRIBUTORS. THE LENGTH OF THE FLEAT-MT SYSTEM IS CONSIDERED TO BE 37'-6" [11430 mm]

LONG. REPLACEMENT PARTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE

FOLLOW	VING	PRE-APPI	ROVED	SHOP	DRAWINGS:	

drankin

Ъ

1:20:45

6/22/2020

GN106

NOTES.

:\ProjectData\111511_D06-GR-FY21\Design\Roadway\Sheets\GENERAL

			ODOT
DWG#	DRAWING NAME	DWG/REV	APPROVAL
		DATE	DATE
	FLARED ENERGY ABSORBING		
MEDFLT	TERMINAL – FLEAT-MT	4/10/02	1/6/03
-WUS	ASSEMBLY FOR WOOD	Rev. 5	
	BREAKAWAY POST SYSTEM		
	FLARED ENERGY ABSORBING		
MEDFLT	TERMINAL – FLEAT-MT	4/10/02	1/6/03
-S-US	ASSEMBLY FOR STEEL	Rev. 6	
	BREAKAWAY POST SYSTEM		
	FLARED ENERGY ABSORBING		
MEDFLT	TERMINAL-FLEAT-MT(Metric)	4/10/02	1/6/03
-W-M	ASSEMBLY FOR WOOD	Rev. 5	
	BREAKAWAY POST SYSTEM		
	FLARED ENERGY ABSORBING		
MEDFL T	TERMINAL-FLEAT-MT(Metric)	4/10/02	1/6/03
-S-M	ASSEMBLY FOR STEEL	Rev. 6	
	BREAKAWAY POST SYSTEM		

IMPACT ATTENUATOR, TYPE 1 REPAIR:

ALL INDIVIDUAL ITEMS OF THE IMPACT ATTENUATOR, TYPE 1 ASSEMBLY SHALL BE BID TO INCLUDE LABOR, TOOLS, EQUIPMENT AND HARDWARE NECESSARY FOR REMOVAL OF DAMAGED ITEMS AND INSTALLATION OF THE INDIVIDUAL ITEMS NEEDED TO PROVIDE A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR. THE FOLLOWING ITEMS HAVE BEEN PROVIDED TO REPAIR DAMAGED IMPACT ATTENUATOR, TYPE 1 (BREAKMASTER):

ITEM	DESCRIPTION	TOTAL	UNIT
606	IMPACT ATTENUATOR,MISC.:PANEL/STRAP ASSEMBLY	1	EACH
606	IMPACT ATTENUATOR,MISC.:NOSE PLATE,10 GAUGE ROLLED (CAT)	1	EACH
606	IMPACT ATTENUATOR,MISC.:WOOD BLOCKS (#1 CAT)	1	EACH
606	IMPACT ATTENUATOR,MISC.:WOOD BLOCKS (#2 - #6 CAT)	4	EACH
606	IMPACT ATTENUATOR,MISC.:WOOD POST, #1 (3.50') (CAT)	3	EACH
606	IMPACT ATTENUATOR,MISC.:WOOD POST, #2-#6 (3.50') (CAT)	4	EACH

(5

CHECKED

 $\begin{pmatrix} 7\\ 16 \end{pmatrix}$

MANUFACTURER'S REQUIREMENTS FOR IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL AND BIDIRECTIONAL):

THE CONTRACTOR SHALL REFERENCE THE FOLLOWING INFORMATION FOR PROPER REPAIR OF IMPACT ATTENUATORS, TYPE 2.

THE FOLLOWING APPROVED SHOP DRAWINGS CAN BE ACCESSED AT: www.dot.state.oh.us/Divisions/ProdMgt/Roadway/roadwaystandards

IQUADGUARD IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., 35 EAST WACKER DRIVE, CHICAGO, IL 60601(TEL: 312-467-6750).BALDWIN & SOURS 614-851-8800 REPLACEMENTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

drankin

МЧ

6/22/2020 1:20:45

:\ProjectData\111511_D06-GR-FY21\Design\Roadway\Sheets\GENERAL_NOTES.dgn_SHEET_GN107

	RE-APPROVED SHOP DRAWINGS:		ODOT
DWG#	DRAWING NAME	DWG/REV	APPROVAL
		DATE	DATE
QSTS	QUADGUARD SYSTEM WITH	7/10/96	3/6/98
CVR-U	TENSION STRUT BACKUP	REV. A	
QSCB	QUADGUARD SYSTEM WITH	4/28/97	3/6/98
CVR-U	CONCRETE BACKUP	REV. E	
QFTS	QUADGUARD SYSTEM W/ 69"	9/5/97	
CVR-U	& 90" TENSION STRUT BACKUPS	REV. C	3/6/98
QFCB	QUADGUARD SYSTEM 69" &	9/4/97	3/6/98
CVR-U	90″ CONCRETE BACKUPS	REV. D	
35-	DEFLECTOR ASSEMBLY,	11/14/97	
40-	CONCRETE BACKUP	REV. B	7/31/98
20			
35-	QUADGUARD SYSTEM	3/19/99	
40-	BACKUP ASSEMBLY	REV. F	8/27/99
03	TS, QG		
35-	QUADGUARD SYSTEM	10/14/97	8/27/99
40-08	CONCRETE BACKUP, QG ON	REV. F	
(2-	GRADE & ON EXISTING	10/14/97	8/27/99
SHEETS)	CONCRETE STRUCTURE	REV.F	
35-		11/6/97	8/27/99
40-21	TRANSITION ASSEMBLY	REV. B	
(2-	QUAD-BEAM TO W-BEAM	7/17/97	8/27/99
SHEETS)		REV. A	
35-		7/15/97	8/27/99
40-22	TRANSITION ASSEMBLY	REV. A	
(2-	QUAD-BEAM/THRIE-BEAM	7/11/97	8/27/99
SHEETS)		REV. A	
35-	QUADGUARD SYSTEM END	9/11/98	8/27/99
40-15	SHOE ASSEMBLY, QG	REV.F	
3540-	QG TRANSITION ASSEMBLY	REV. A	
211	QUAD-BEAM/W-BEAM-WIDE	8/29/97	8/27/99
3540-	QG TRANSITION ASSEMBLY	8/29/97	8/27/99
221	QUAD-BEAM TO	REV. A	
(2-	THREE-BEAM-	8/29/97	8/27/99
SHEETS)	WIDE	REV. A	

3540-	QG SYSTEM NOSE		
498	ASSEMBLY, QG, 24, 30,	12/30/98	8/27/99
	36, WITH BELTING		
3540-	QUADGUARD TRANSITION	9/1/96	8/27/99
150	TO VERTICAL CONCRETE BARRIER	9/1/96	8/27/99

2)THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR DISTRIBUTED BY ROAD SYSTEMS, INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OH 44515 TELEPHONE: (330)799-9291. REPLACEMENTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG#	DRAWING NAME	DWG/REV DATE	ODOT APPROVA DATE
SYS. CAPA-	UNIVERSAL TAU-II CRASH CUSHION SYSTEM	10/6/04	10/16/04
CITY	CONFIGURATION CHART	V5	
A040	UNIVERSAL TAU-II		
416	PARTS LIST	4/22/04	10/16/04
A040	UNIVERSAL TAU-II		
420	FOUNDATION FLUSH MOUNT	4/28/04	10/16/04
	BACKSTOP – PCC PAD		
A040	UNIVERSAL TAU-II		
105	FOUNDATION, PCB BACKSTOP (REFERENCED ON A040420)	1/7/04	10/16/04
A040	UNIVERSAL TAU-II		
108	FOUNDATION WIDE FLANGE	1/7/04	10/16/04
	BACKSTOP		
A040	FOUNDATION SPECIFICATIONS	1/9/04	
113	(REFERENCED ON A040420 AND A040108)	Rev. A	10/16/0
B010			
537	COMPACT BACKSTOP, TAU-II	3/25/02	10/16/0
B040	FLUSH MOUNT BACKSTOP		
219	ASSEMBLY	4/19/04	10/16/0
B040	FLUSH MOUNT BACKSTOP (FOR		
239	PARALLEL SYSYEM,60&70 MPH UP TO 36″ HAZARD WIDTH CONNECTED TO SCD RM-4.6)	4/21/04	10/16/0
B033	WIDE TAU-II 60 MPH, 60"		
004	BACKSTOP (TYPICAL FOR 60 MPH COMBINATION SYSTEM)	12/21/03	10/16/0
B033	WIDE TAU-II 70 MPH, 66"		
101	BACKSTOP (TYPICAL FOR 70	2/13/04	10/16/0
101	MPH COMBINATION SYSTEM)	27 107 0 1	107 107 0
B033	WIDE TAU-II 60 MPH. 90"		
009	BACKSTOP (TYPICAL FOR 60	11/26/03	10/16/0
	MPH FLARED SYSTEM)	11/20/03	107 107 0.
B033	WIDE TAU-II 70 MPH, 90"		
105	WIDE TAU-11 TO MPH, 90" BACKSTOP (TYPICAL FOR 70 MPH FLARED SYSTEM)	2/17/04	10/16/04

S

CHECKED

06-GR-FY21

Δ



3)THE TRINITY INDUSTRIES, INC. TRINITY ATTENUATING CRASH CUSHION DISTRIBUTED BY TRINITY INDUSTRIES, INC 1170 N. STATE ST., GIRARD, OHIO 44420, TELEPHONE:(330)-545-4373. REPAIR SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING SHOP DRAWINGS:

눕

Ъ

1:20:46

6/22/2020

GN108

NOTES.dan

:\ProjectData\111511_D06-GR-FY21\Design\Roadway\Sheets\GENERAL

			ODOT
DWG#	DRAWING NAME	DWG/REV	APPROVAL
		DATE	DATE
SS455	TRACC TRANS TO W-BEAM	11/2/99	
	MEDIAN BARRIER		
SS456	TRACC TRANSITION TO	9/7/00	
	VERTICAL CONCRETE WALL		
SS497	WIDE TRACC-DOUBLE FLARE	11/22/02	
	WING EXTENSIONS		
SS699	WIDE TRACC-ASSEMBLED	4/2/03	
	MODULAR BASE		
SS1000	CRASH CUSHION ATTENUATING	3/30/05	
	TERMINAL PLAN		
SS1001	CRASH CUSHION ATTENUATING	4/22/05	
	TERMINAL BASE UNIT		
SS1002	CRASH CUSHION ATTENUATING	5/11/05	
	TERMINAL ASSEMBLY DETAILS		
SS1003	CRASH CUSHION ATTENUATING	4/25/05	
	TERMINAL ATTACHMENTS		
SS1004	SHOR-TRACC CRASH CUSHION	5/16/05	
	ATTENUATING TERMINAL BASE		
SS1005	SHOR-TRACC CRASH CUSHION	5/24/05	
	ATT TERMINAL ASSMBLY		
SS1006	SHOR-TRACC CRASH CUSHION	5/24/05	
	ATTENUATING ATTACHMENTS		
SS1007	FAS-TRACC CRASH CUSHION	6/8/05	
	ATTENUATING TERMINAL BASE		
SS1008	FAS-TRACC CRASH CUSHION	6/9/05	
	ATT TERMINAL ASSMBLY		
SS1009	FAS-TRACC CRASH CUSHION	6/10/05	
	ATTENUATING ATTACHMENTS		
SS1010	TRACC CRASH CUSHION ATTEN	4/4/05	
	TERMINAL 22" FOUNDATION		
SS1013	SHOR-TRACC CRASH CUSHION	4/4/05	
	TERMINAL 15" FOUNDATION		
SS1018	58" WIDE TRAC DOUBLE	8/8/05	
	FLAIR ASSEMBLY DETAILS		
SS1019	58" WIDE TRAC DOUBLE	8/12/05	
	FLAIR ATTACHMENT		

IMPACT ATTENUATOR, TYPE 2 DEBRIS CLEANOUT:

THIS ITEM SHALL BE BID TO INCLUDE LABOR, TOOLS, EQUIPMENT AND HARDWARE NECESSARY TO COMPLETELY CLEAN OUT ANY DEBRIS COLLECTED WITHIN AND UNDERNEATH AN EXISTING TYPE 2 ATTENUATOR. THE METHOD SHALL BE TO THE SATISFACTION OF THE ENGINEER AND MAY INCLUDE POWER WASHING IN ORDER TO PROVIDE A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR.

ITEM	DESCRIPTION	TOTAL	UNIT
606	IMPACT ATTENUATOR,MISC.:DEBRIS CLEANOUT	1	EACH

IMPACT ATTENUATOR, TYPE 2 REPAIR:

ALL INDIVIDUAL ITEMS OF THE IMPACT ATTENUATOR ASSEMBLY SHALL BE BID TO INCLUDE LABOR, TOOLS, EQUIPMENT AND HARDWARE NECESSARY FOR REMOVAL OF DAMAGED ITEMS AND INSTALLATION OF THE INDIVIDUAL ITEMS NEEDED TO PROVIDE A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR. ALL ITEMS UNDER THIS HEADING SHALL BE ACCOMPLISHED WITHIN 72 HOURS AND WILL NOT BE PAID UNDER THE EMERGENCY CLAUSE OF THIS CONTRACT. THIS 72 HOURS WILL BE CONSIDERED AN INTERIM COMPLETION DATE SUBJECT TO LIQUIDATED DAMAGES AS PER 108.07. THE FOLLOWING ITEMS HAVE BEEN PROVIDED TO REPAIR DAMAGED IMPACT ATTENUATOR, TYPE 2 (QUADGUARD):

ITEM	DESCRIPTION	TOTAL	UNIT
606	IMPACT ATTENUATOR,MISC.:DIAPHRAGM	1	EACH
606	IMPACT ATTENUATOR, MISC.: FENDER PANEL	4	EACH
606	IMPACT ATTENUATOR,MISC.:NOSE ASSEMBLY	1	EACH
606	IMPACT ATTENUATOR,MISC.:	Λ	FACH
000	TYPE 1 CARTRIDGE	4	EAUN
606	IMPACT ATTENUATOR,MISC.:	1	FACH
000	TYPE 2 CARTRIDGE	4	EAUN

TENSIONED CABLE BARRIER REPAIR:

ALL INDIVIDUAL ITEMS OF THE TENSIONED CABLE BARRIER (INCLUDING END TERMINALS) SHALL BE BID TO INCLUDE LABOR, TOOLS, EQUIPMENT AND HARDWARE NECESSARY FOR REMOVAL OF DAMAGED ITEMS AND INSTALLATION OF THE INDIVIDUAL ITEMS NEEDED TO PROVIDE A PROPERLY TENSIONED COMPLETE AND FUNCTIONAL CABLE BARRIER RUN. THE FOLLOWING ITEMS HAVE BEEN PROVIDED TO REPAIR DAMAGED CABLE BARRIER:

ANYTIME THE CONTRACTOR PERFORMS THE FOLLOWING WORK ITEMS BELOW, TENSIONING THE SYSTEM WILL BE CONSIDERED INCIDENTAL TO THE BID ITEM. ON THE WORK ORDER, PROVIDE THE FINAL TENSION OF EACH CABLE AND THE AMBIENT TEMPERATURE TO THE ENGINEER.

ITEM	DESCRIPTION	TOTAL	UNIT
606	GUARDRAIL, MISC.:ANCHOR POST	8	EACH
606	GUARDRAIL, MISC.:ANCHOR POST RESET	80	EACH
606	GUARDRAIL, MISC.:CABLE SPLICE	4	EACH
606	GUARDRAIL, MISC.:CABLE TURNBUCKLE	4	EACH
606	GUARDRAIL, MISC.:CONCRETE ANCHOR FOUNDATION WITH SLEEVE	4	EACH
606	GUARDRAIL, MISC.:CONCRETE LINE POST FOUNDATION WITH SLEEVE	4	EACH

ITEM	DESCRIPTION	TOTAL	UNIT
606	GUARDRAIL, MISC.:LINE POST	900	EACH
606	GUARDRAIL, MISC.:POST REFLECTOR	10	EACH

ITEM 606 - GUARDRAIL MISC.: CABLE BARRIER TENSIONING

THIS ITEM SHALL CONSIST OF TENSIONING AN EXISTING CABLE GUARDRAIL SYSTEM TO MEET NCHRP REPORT 350 TEST LEVEL-3 REQUIREMENTS FOR EACH CONTINUOUS CABLE GUARDRAIL RUNS WITHIN THIS PROJECT.

THE BID ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO CERTIFY A PROPER TENSION AT INTERVALS AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATE HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

ITEM	DESCRIPTION	TOTAL	UNIT
606	GUARDRAIL, MISC.CABLE BARRIER TENSIONING	70	EACH

ANCHOR ASSEMBLY REPAIR:

누

Ъ

1:20:46

2020

60

Z

NOTES.dgn

I: \ProjectData\111511_D06-GR-FY21\Design\Roadway\Sheets\GENERAL

ALL INDIVIDUAL ITEMS OF THE TYPE B & E ASSEMBLIES SHALL BE BID TO INCLUDE LABOR, TOOLS, EQUIPMENT AND HARDWARE NECESSARY FOR REMOVAL OF DAMAGED ITEMS AND INSTALLATION OF THE INDIVIDUAL ITEMS NEEDED TO PROVIDE A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY. SOME OF THE MISC. ITEMS BELOW ARE INTERCHANGEABLE WITH CERTAIN TYPE I IMPACT ATTENUATORS. SUCH ITEMS SHALL BE UTILIZED "AS DIRECTED". THE FOLLOWING ITEMS HAVE BEEN PROVIDED TO REPAIR DAMAGED TYPE E AND TYPE B ANCHOR ASSEMBLIES:

ITEM	DESCRIPTION	TOTAL	UNIT
606	ANCHOR ASSEMBLY, MISC.:#1 AND #2 HBA BOTTOM POST	5	EACH
606	ANCHOR ASSEMBLY, MISC.:#1 AND #2 HBA TOP POST	10	EACH
606	ANCHOR ASSEMBLY, MISC.:#2 THRU #8 SYT POST	10	EACH
606	ANCHOR ASSEMBLY, MISC.:12 GAUGE, BUFFERED,ROLLED END TERMINAL	1	EACH
606	ANCHOR ASSEMBLY, MISC.: 2"X5-1/2" PIPE SLEEVE	1	EACH
606	ANCHOR ASSEMBLY, MISC.:BEARING PLATE	1	EACH
606	ANCHOR ASSEMBLY, MISC.:CABLE ANCHOR BRACKET	3	EACH
606	ANCHOR ASSEMBLY, MISC.:CABLE ASSEMBLY	4	EACH
606	ANCHOR ASSEMBLY, MISC.:DEEP BEAM GUARDRAIL, 12 GAUGE - SLOT 1	4	EACH
606	ANCHOR ASSEMBLY, MISC.:DEEP BEAM GUARDRAIL, 12 GAUGE - SLOT 2	1	EACH
606	ANCHOR ASSEMBLY, MISC.: DEEP BEAM GUARDRAIL 12 GAUGE, 12.5' PANEL #2-#4	3	EACH
606	ANCHOR ASSEMBLY, MISC.:DEEP BEAM GUARDRAIL, 12 GAUGE, 25' PANEL #2	10	EACH
606	ANCHOR ASSEMBLY, MISC. DEEP BEAM GUARDRAIL 12 GAUGE, END ANC, 12.5' PANEL #1	4	EACH

606	ANCHOR ASSEMBLY, MISC.:DEEP BEAM GUARDRAIL, 12 GAUGE, END ANC, 25' PANEL #1	10	EACH
606	ANCHOR ASSEMBLY, MISC.:GUARDRAIL EXTRUDER, 2000	4	EACH
606	ANCHOR ASSEMBLY, MISC.:GUARDRAIL EXTRUDER, MSKT	1	EACH
606	ANCHOR ASSEMBLY, MISC.:GUARDRAIL EXTRUDER, PLUS	1	EACH
606	ANCHOR ASSEMBLY, MISC.:GUARDRAIL EXTRUDER, RSI	1	EACH
606	ANCHOR ASSEMBLY, MISC.:GROUND STRUT	1	EACH
606	ANCHOR ASSEMBLY, MISC.:SOIL PLATE	1	EACH
606	ANCHOR ASSEMBLY, MISC.:STEEL FOUNDATION TUBE, 4'-6"	1	EACH
606	ANCHOR ASSEMBLY, MISC.: WOOD BLOCKS (ANCHOR ASSEMBLY)	20	EACH
606	ANCHOR ASSEMBLY, MISC.:WOOD POST (3.75′ LONG)	30	EACH
606	ANCHOR ASSEMBLY, MISC.:WOOD POST (6.0' LONG)	15	EACH

ITEM 626 - BARRIER REFLECTOR:

AN ESTIMATED QUANTITY OF BARRIER REFLECTORS HAVE BEEN PROVIDED FOR LOCATIONS THAT ARE RECEIVING NEW GUARDRAIL. AN ESTIMATED QUANTITY OF GROUND MOUNTED DELINEATORS HAVE BEEN PROVIDED TO BE INSTALLED AT THE HEAD OF REPAIRED TYPE E UNITS, AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM	DESCRIPTION	TOTAL	UNIT
620	DELINEATOR, POST GROUND MOUNTED	4	EACH
626	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	20	EACH

(5

GENERAL MAINTENANCE OF TRAFFIC:

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(CURRENT EDITION). COPIES ARE AVAILABLE FROM:

THE OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC, 1980 WEST BROAD STREET COLUMBUS, OHIO 43223.

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.

NOTIFICATION OF TRAFFIC RESTRICTIONS:

2

NOTE

neets\GENERAL

21\Design\

Projec

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

ITEM	DURATION OF	NOTIFICATION DUE			
	CLOSURE	TO DISTRICT 6			
		COMMUNICATIONS OFFICE			
	>= 2 WEEKS	21 CALENDAR DAYS PRIOR			
RAMP	7- Z WEEKS	TO CLOSURE			
AND	> 12 HOURS	14 CALENDAR DAYS PRIOR			
ROAD	AND < 2 WEEKS	TO CLOSURE			
CLOSURES	< 2 WEEKS	4 BUSINESS DAYS PRIOR			
	N Z WEEKS	TO CLOSURE			
	>= 2 WEEKS	14 CALENDAR DAYS PRIOR			
LANE*	2 VEEKS	TO CLOSURE			
CLOSURES/	< 2 WEEKS	2 BUSINESS DAYS PRIOR			
RESTRICTIONS	1 Z WEENS	TO CLOSURE			

24 HOURS AND/OR APPROVAL

FROM THE ENGINEER

*ALSO INCLUDES WORK ON SHOULDERS

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

EMERGENCY

WORK ORDER

NOTIFICATION OF CONSTRUCTION INITIATION:

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT d06.pio@dot.ohio.gov, THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT d06.mot@dot.ohio.gov AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614)728-4099 OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

ITEM 614 - MAINTAINING TRAFFIC:

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC AT ALL LOCATIONS DURING THE FOLLOWING DESIGNATED HOLIDAYS:

MEMORIAL DAY	CHRISTMAS
FOURTH OF JULY	NEW YEARS
LABOR DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THE PERIOD:

DAY OF THE WEEK TIME ALL LANES MUST BE OPEN TRAFFIC

SUNDA Y	12 NOON FRIDAY THRU 6:00 AM MONDAY
MONDA Y	12 NOON FRIDAY THRU 6:00 AM TUESDAY
TUESDAY	12 NOON MONDAY THRU 6:00 AM WEDNESDAY
WEDNESDAY	12 NOON TUESDAY THRU 6:00 AM THURSDAY
THURSDAY	12 NOON WEDNESDAY THRU 6:00 AM FRIDAY
THANKSGIVING	12 NOON TUESDAY THRU 6:00 AM MONDAY
FRIDAY	12 NOON THURSDAY THRU 6:00 AM MONDAY
SA TURDA Y	12 NOON FRIDAY THRU 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$50 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

LENGTH AND DURATION OF SHOULDER WORK 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.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, AS SPECIFIED BELOW:

11

C

ITEM	DESCRIPTION	TOTAL	UNIT
614	MAINTENANCE OF TRAFFIC - ONE LANE CLOSURE ON A TWO LANE HIGHWAY	50	EACH
614	MAINTENANCE OF TRAFFIC, ONE LANE CLOSE ON A FOUR LANE UNDIVIDED HIGHWAY	5	EACH
614	MAINTENANCE OF TRAFFIC, ONE LANE CLOSE ON A 4 LANE OR GREATER DIVIDED HIGHWAY	15	EACH
614	MAINTENANCE OF TRAFFIC FOR SHOULDER CLOSURE	125	EACH

EACH ITEM SHALL INCLUDE SET UP OF TRAFFIC CONTROL, MAINTENANCE OF TRAFFIC CONTROL AND THE REMOVAL OF THE TRAFFIC CONTROL. PAYMENT SHALL BE MADE FOR THE UNIT BID PRICE, FOR EACH ITEM.

ALL OTHER MAINTENANCE OF TRAFFIC NOT COVERED BY THE EACH ITEMS LISTED SHALL BE COVERED UNDER THE LUMP SUM QUANTITY OF ITEM 614 - MAINTAINING TRAFFIC.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE:

USE OF LEOS BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL GENERALLY NOT BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE PROJECT ENGINEER. LAW ENFORCEMENT OFFICERS (LEOS) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

1. FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES. LAW ENFORCEMENT OFFICERS SHOULD NOT FORSAKE THEIR TRAFFIC

LAW ENFORCEMENT OFFICERS SHOULD NOT FORSAKE THEIR TRAFFIC CONTROL RESPONSIBILITIES TO CHASE MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF THE MOTORISTS ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST MAY BE ACCEPTABLE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEO'S AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEO. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THEIR RESPECTIVE DUTIES, PLACEMENT AND WILL RESOLVE ANY ISSUES BETWEEN THE TWO PARTIES THAT MAY ARISE.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE SERVICES WITH: OHIO HIGHWAY PATROL

> 650 EAST MAIN STREET COLUMBUS, OHIO 43215 614-466-2660

THE LEO SHOULD REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING THE SHIFT. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF THE SHIFT.

LAW ENFORCEMENT OFFICERS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR). THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM	DESCRIPTION	TOTAL	UNIT
614	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	5	HOUR

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A L.E.O. ARE INCLUDED WITHIN THE BID UNIT PRICE FOR ITEM-614 LAW ENFORCEMENT OFFICER WITH PATROL CAR. THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED. 2

>

ш

Å

0-0 9-0

ŏ

12

PERMITTED WORK HOURS (INCLUDING RIGHT-OF-WAY AND SHOULDER WORK:

PERMITTED WORK TIMES ARE LIMITED TO THE TIMES OULINED IN THE FOLLOWING CHARTS.

NO STAGING OF EQUIPMENT OR OCCUPYING SHOULDERS SHALL OCCUR PRIOR TO THE PERMITTED HOURS. THIS INCLUDES WARNING SIGNS AND OTHER TRAFFIC CONTROL DEVICES.

WORK SHALL NOT BE PERMITTED OUTSIDE THE NORMAL WORKING HOURS GIVEN. THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE AS DESIGNATED IN THE UNAUTHORIZED LANE USE TABLE IN THIS PLAN FOR EACH UNIT OF TIME A LANE/RAMP/SHOULDER IS BEING OCCUPIED BY THE CONTRACTOR WHILE NOT OTHERWISE PERMITTED BY THE CONTRACT.

SEASON	PERIOD
CONSTRUCTION	APRIL 1 - NOV 30
NON-CONSTRUCTION	DEC 1 - MARCH 31

DEL-71 (SR-750 (POLARIS) TO US 36)

ikin'

누

Ъ

1:20:48

2020

22

-LC101

SHEET

dan

CLOSURES.

ЧN

7

Road

FY21\Design\

.ProjectData/111511.

DEL 11 (31 100 (1 0EARIS) 10 03 30)					
	CONST	CONST	NON-CONST	NON-CONST	
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND	
HOURS	MON-FRI	SAT-SUN	MON-FRI	SAT-SUN	
0-7AM					
6АМ-9АМ	NO WORK		NO WORK		
9АМ-ЗРМ					
ЗРМ-6РМ	NO WORK		NO WORK		
6PM-12AM					

*NO LANE CLOSURES ALLOWED 2 HOURS PRIOR THROUGH THE START TIME OF EVENTS AT GERMAIN AMPHITHEATER.

DEL-71 (US 36 TO DEL/MRW CO LINE)

	CONST	CONST	NON-CONST	NON-CONST		
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND		
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN		
0-6AM						
6AM-7AM		NO WORK				
7AM-10AM	NO WORK	NO WORK		NO WORK		
10AM-7PM	NO WORK	NO WORK	NO WORK	NO WORK		
7-8PM	NO WORK	NO WORK				
8-9PM		NO WORK				
9-12AM						

DFI -23	(FRA/DEL	COUNTY	I TNF	το	SR-750)
	U MAY DEL	0000011		10	511 1007

DEL 23 UNA			5/ 1507	
	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-FRI	SAT-SUN	MON-FRI	SAT-SUN
0-6AM				
6AM-9AM	NO WORK		NO WORK	
9АМ-2РМ				
2РМ-ЗРМ	NO WORK			
3PM-4PM	NO WORK		NO WORK	
4PM-5PM	NO WORK	NO WORK	NO WORK	
5РМ-6РМ	NO WORK		NO WORK	
6PM-7PM	NO WORK			
7PM-12AM				

*NO LANE CLOSURES ALLOWED ON HOME OSU FOOTBALL SATURDAYS.

DEL-23 (SR-750 TO US 36)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-FRI	SAT-SUN	MON-FRI	SAT-SUN
0-7AM				
7 <i>AM-8AM</i>	NO WORK			
8AM-3PM				
ЗРМ-6РМ	NO WORK		NO WORK	
6PM-12AM				

*NO LANE CLOSURES ALLOWED ON HOME OSU FOOTBALL SATURDAYS.

DEL-23 (US 36 TO DEL/MAR CO LINE)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-2PM				
2PM-4PM		NO WORK		
4PM-5PM	NO WORK	NO WORK		
5РМ-6РМ		NO WORK		
6PM-12AM				

*NO LANE CLOSURES ALLOWED ON HOME OSU FOOTBALL SATURDAYS.

FAY-71 (SR 41 TO FAY/PIC CO LINE)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-10AM				
10AM-2PM		NO WORK		
2РМ-ЗРМ	NO WORK	NO WORK		
ЗРМ-6РМ	NO WORK	NO WORK		NO WORK
6PM-7PM		NO WORK		
7PM-12AM				

MAD-70 (CLA/MAD CO LINE TO US 42)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-7AM				
7AM-7PM	NO WORK	NO WORK	NO WORK	NO WORK
7PM-8PM	NO WORK	NO WORK		NO WORK
8РМ-9РМ		NO WORK		
9PM-12AM				

MAD-71 (GRE/FAY CO LINE TO US 62)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-10AM				
10AM-2PM		NO WORK		
2-3PM	NO WORK	NO WORK		
ЗРМ-6РМ	NO WORK	NO WORK		NO WORK
6PM-7PM		NO WORK		
7PM-12AM				

MRW-71 (DEL/MRW CO LINE TO RIC CO LINE)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-6AM				
6AM-9AM	NO WORK		NO WORK	
9AM-8PM	NO WORK	NO WORK	NO WORK	NO WORK
8PM-10PM		NO WORK		NO WORK
10P-12AM				

*NO LANE CLOSURES ALLOWED ON HOME OSU FOOTBALL SATURDAYS.

ш £ S 0 \mathbf{O} ш Ζ ◄ Δ ш F F Σ £

PERN

06 - GR - FY 2

13 16

S

PIC-71 (FAY/PIC CO LINE TO PIC/FRA CO LINE)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-10AM				
10AM-2PM		NO WORK		
2РМ-ЗРМ	NO WORK	NO WORK		
ЗРМ-6РМ	NO WORK	NO WORK		NO WORK
6PM-7PM		NO WORK		
7PM-12AM				

PIC-23 (PIC/ROS CO LINE TO SR 316)

drankin

МЧ

1:20:48

6/22/2020

CLOSURES.dgn SHEET_LC102

ANE

:\ProjectData\111511_D06-GR-FY21\Design\Roadway\Sheets\L

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-4PM				
4PM-5PM		NO WORK		
5PM-12AM				

PIC-23 (SR 316 TO PIC/FRA CO LINE)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-FRI	SAT-SUN	MON-FRI	SAT-SUN
0-6AM				
6АМ-9АМ	NO WORK		NO WORK	
9AM-3PM				
ЗРМ-6РМ	NO WORK		NO WORK	
6PM-12AM				

*NO LANE CLOSURES ALLOWED ON HOME OSU FOOTBALL SATURDAYS.

UNI-33 (LOG/UNI CO LINE TO SCOTTSLAWN RD.)

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-10AM				
10AM-2PM		NO WORK		
2РМ-ЗРМ	NO WORK	NO WORK		
ЗРМ-6РМ	NO WORK	NO WORK		NO WORK
6PM-7PM		NO WORK		
7PM-12AM				

UNI-33 (SCOTTSLAWN RD TO US 42 (EAST))

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-2PM				
2PM-3PM		NO WORK		
ЗРМ-6РМ	NO WORK	NO WORK	NO WORK	NO WORK
6PM-12AM				

UNI-33 (SCOTTSLAWN RD TO US 42 (WEST))

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-THU	FRI-SUN	MON-THU	FRI-SUN
0-6AM				
6AM-9AM	NO WORK	NO WORK	NO WORK	NO WORK
9AM-12AM				

UNI-33 (US 42 TO SR 161 (EAST))

	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-FRI	SAT-SUN	MON-FRI	SAT-SUN
0-6AM				
6АМ-9АМ	NO WORK		NO WORK	
9AM-12AM				
12PM-1PM	NO WORK	NO WORK		
1PM-2PM	NO WORK			
2РМ-ЗРМ	NO WORK	NO WORK	NO WORK	
3PM-7PM	NO WORK		NO WORK	
7PM-12AM				

UNI-33 (US 42 TO SR 161 (WEST))

		==		
	CONST	CONST	NON-CONST	NON-CONST
SEASON	WEEKDAY	WEEKEND	WEEKDAY	WEEKEND
HOURS	MON-FRI	SAT-SUN	MON-FRI	SAT-SUN
0-6AM				
6AM-10AM	NO WORK		NO WORK	
10AM-12PM				
12РМ-ЗРМ	NO WORK			
ЗРМ-5РМ	NO WORK		NO WORK	
5PM-6PM	NO WORK		NO WORK	NO WORK
6PM-12AM				

UNAUTHORIZED LANE USE TABLE

DESC	TIME	DISINCENTIVE
OF	UNIT	\$ PER TIME
WORK		UNIT
WEEK	EACH	
DAY	MINUTE	\$ 50
WORK		
WEEK	EACH	
END	MINUTE	\$ 50
WORK		

OSURES -

CHECKED

CULA

Δ

SHEET	NUMBER	ITEM	ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET	AL CULATED CHECKED
2 - 10	11 - 12		EXT.	01/NFP/OT/			NO.	õ
						ROADWAY		
25		202	38000	25	FT	GUARDRAIL REMOVED	3	
12.5		202	38500	12.5	FT	BRIDGE RAILING REMOVED	3	 ≻
1		202	42001	1	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	3	
1		202	98100	1	EACH	REMOVAL MISC. IMPACT ATTENUATOR	3	Ā
12.5		517	72306	12.5	FT	RAILING(DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS)	4	
12.5		517	72307	12.5	FT	RAILING(DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS), AS PER PLAN	4	Σ
25		517	75601	25	FT	DEEP BEAM BRIDGE RETROFIT RAILING, AS PER PLAN	4	Σ
1250		606	13001	1250	FT	GUARDRAIL, TYPE 5, AS PER PLAN	4	
12.5		606	13010	12.5	FT	GUARDRAIL, TYPE 5 WITH TUBULAR BACKUP	4	S S
12.5		606	13011	12.5	FT	GUARDRAIL, TYPE 5 WITH TUBULAR BACKUP, AS PER PLAN	4	
37.5		606	13050	37.5	FT	GUARDRAIL, TYPE 5A	4	
50 500		606	13051	50 500	FT	GUARDRAIL, TYPE 5A, AS PER PLAN GUARDRAIL, TYPE MGS	4	₹
2500		606 606	15050 15051	2500	FT FT	GUARDRAIL, TYPE MGS GUARDRAIL, TYPE MGS, AS PER PLAN	4	l œ
1300		606	15051	1300	FT FT	GUARDRAIL, TYPE MGS, AS PER PLAN GUARDRAIL, TYPE MGS WITH LONG POSTS	4	∣Щ
100		606	15500	100	FT FT	GUARDRAIL, THE MGS WITH LONG POSTS	4	Z
100		606	15500	125	FT	GUARDRAIL, BARRIER DESIGN, TYPE 5, AS PER PLAN	4	Ш
250		606	16051	250	FT	GUARDRAIL, BARRIER DESIGN, TTPE 5, AS PER PLAN GUARDRAIL REBUILT, TYPE MGS, AS PER PLAN	4	J
230		606	16501	225	FT	GUARDRAIL REBUILT, TYPE 5, AS PER PLAN	4	
223		606	17350	223	FT	GUARDRAIL REDOILT, TIPE 3, AS FER FLAN	4	
5		606	17900	5	EACH	GUARDRAIL POST	4	ш
10		606	18501	10	EACH	GUARDRAIL POST, 9 FEET, AS PER PLAN	4	
2		606	25000	2	EACH	ANCHOR ASSEMBLY, TYPE A	5	▲
2		606	26000	2	EACH	ANCHOR ASSEMBLY, TYPE B	5	Σ
4		606	26050	4	EACH	ANCHOR ASSEMBLY, MGS TYPE B	5	
4		606	26100	4	EACH	ANCHOR ASSEMBLY, TYPE E	5	
12		606	26150	12	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	5	S
2		606	26500	2	EACH	ANCHOR ASSEMBLY, TYPE T	6	ш
1		606	26501	1	EACH	ANCHOR ASSEMBLY, TYPE T, AS PER PLAN	6	
4		606	26550	4	EACH	ANCHOR ASSEMBLY, MGS TYPE T	6	
4		606	27801	4	EACH	ANCHOR ASSEMBLY REBUILT, TYPE A, AS PER PLAN	6	
1		606	27901	1	EACH	ANCHOR ASSEMBLY REBUILT, TYPE T, AS PER PLAN	6	
2		606	35003	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1, AS PER PLAN	6	
1		606	35103	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2, AS PER PLAN	6	1
1		606	35140	1	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4	6	
1		606	60012	1	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	6	N
1		606	61000	1	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 1)(BREAKMASTER) PANEL/STRAP ASSEMBLY	7] ≻
1		606	61000	1	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 1)(CAT) NOSE PLATE, 10 GAUGE, ROLLED	7	<u> </u>
1		606	61000	1	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 1)(CAT) WOOD BLOCKS #1	7	
4		606	61000	4	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 1)(CAT) WOOD BLOCKS #2 - #6	7	l ü
3		606	61000	3	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 1)(CAT) WOOD POST, #1 (3.50')	7	U U
4		606	61000	4	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 1)(CAT) WOOD POST, #2-6 (3.50')	7	b b
1		606	61000	1	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 2) DEBRIS CLEANOUT	9	Ö
1		606	61000	1	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 2) DIAPHRAGM	9	ă
4		606	61000	4	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 2) FENDER PANEL	9	
1		606	61000	1	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 2) NOSE ASSEMBLY	9	1
4		606	61000	4	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 2) TYPE 1 CARTRIDGE	9	4
4		606	61000	4	EACH	IMPACT ATTENUATOR, MISC.: (TYPE 2) TYPE 2 CARTRIDGE	9	
8		606	98100	8	EACH	GUARDRAIL, MISC.: CABLE BARRIER: ANCHOR POST	9	(15)
80		606	98100	80	EACH	GUARDRAIL, MISC.: CABLE BARRIER: ANCHOR POST RESET	9	

SHEET	NUMBER	ITEM		GRAND	UNIT	DESCRIPTION	SEE SHEET	ALCULATED
0 10			ITEM	TOTAL	UNIT	DESCRIPTION	NO.	CALC
2 - 10	11 - 12		EXT.	01/NFP/OT/				Ē
4		606	98100	4	EACH	GUARDRAIL, MISC.: CABLE BARRIER: CABLE SPLICE	9	-
4		606	98100	4	EACH	GUARDRAIL, MISC.: CABLE BARRIER: CABLE SPLICE	9	-
4		606	98100	4	EACH	GUARDRAIL, MISC.: CABLE BARRIER: CABLE TURNBUCKLE	9	-
4		606	98100	4	EACH	GUARDRAIL, MISC.: CABLE BARRIER: CONCRETE LINE POST FOUNDATION WITH SLEEVE	9	>
900		606	98100	900	EACH	GUARDRAIL, MISC.: CABLE BARRIER: LINE POST	10	<u>۵</u>
10		606	98100	10	EACH	GUARDRAIL, MISC.: CABLE BARRIER: POST REFLECTOR	10	<
70		606	98100	70	EACH	GUARDRAIL, MISC.: CABLE BARRIER: TENSIONING	10	
5		606	99200	5	EACH	ANCHOR ASSEMBLY, MISC.: #1 AND #2 HBA BOTTOM POST	10	
10		606	99200	10	EACH	ANCHOR ASSEMBLY, MISC.: #1 AND #2 HBA TOP POST	10	
10		606	99200	10	EACH	ANCHOR ASSEMBLY, MISC.: #2 THRU #8 SYT POST	10	1 2
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC. 12 GAUGE, BUFFERED, ROLLED END TERMINAL	10	-
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC.: 2"X5-1/2"PIPE SLEEVE	10	-
1		606	99200	1 1	EACH	ANCHOR ASSEMBLY, MISC.: BEARING PLATE	10	
3		606	99200	3	EACH	ANCHOR ASSEMBLY, MISC. CABLE ANCHOR BRACKET	10	
4		606	99200	4	EACH	ANCHOR ASSEMBLY, MISC.: CABLE ANCHOR DIRACKET	10	11
4		606	99200	4	EACH	ANCHOR ASSEMBLY, MISC.: DEEP BEAM GUARDRAIL, 12 GAUGE - SLOT 1	10	
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC.: DEEP BEAM GUARDRAIL, 12 GAUGE - SLOT 1	10	1 i
3		606	99200	3	EACH	ANCHOR ASSEMBLY, MISC. DEEP BEAM GUARDRAIL, 12 GAUGE, 12.5' PANEL #2-#4	10	
10		606	99200	10	EACH	ANCHOR ASSEMBLY, MISC.: DEEP BEAM GUARDRAIL, 12 GAUGE, 25' PANEL #2	10	1 1
4		606	99200	4	EACH	ANCHOR ASSEMBLY, MISC.: DEEP BEAM GUARDRAIL, 12 GAUGE, END ANC, 12.5' PANEL #1	10	-
10		606	99200	10	EACH	ANCHOR ASSEMBLY, MISC.: DEEP BEAM GUARDRAIL, 12 GAUGE, END ANC, 25' PANEL #1	10	-
4		606	99200	4	EACH	ANCHOR ASSEMBLY, MISC. EXTRUDER, 2000	10	-
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC.: EXTRUDER, MSKT	10	-
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC.: EXTRUDER, PLUS	10	-
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC.: EXTRUDER, RSI	10	
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC.: GROUND STRUT	10	
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC.: SOIL PLATE	10	
1		606	99200	1	EACH	ANCHOR ASSEMBLY, MISC. SOLE FLATE	10	-
20		606	99200	20	EACH	ANCHOR ASSEMBLY, MISC.: WOOD BLOCKS	10	-
30		606	99200	30	EACH	ANCHOR ASSEMBLY, MISC.: WOOD BLOCKS ANCHOR ASSEMBLY, MISC.: WOOD POST(3.75' LONG)	10	-
 15		606	99200	15	EACH	ANCHOR ASSEMBLY, MISC.: WOOD POST(5.15 LONG)	10	-
15		000	99200	15	EACH	ANCHOR ASSEMBLT, MISC.: WOOD FOSTIO.U LONG	10	-
						EROSION CONTROL		
		832	30000	1000	EACH	EROSION CONTROL		-
		0.52	30000	1000	EAUN			-
					-	TRAFFIC CONTROL		-
4		620	00500	4	EACH	DELINEATOR, POST GROUND MOUNTED	10	
20		626	00300	20	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	10	
20		020		20		DAMMEN NEI LEUTON, THE Z, DIDINEUTIONAL	10	-
						MAINTENANCE OF TRAFFIC		-
	5	614	11110	5	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	12	-
	50	614	13600	50	EACH	MAINTENANCE OF TRAFFIC - ONE LANE CLOSURE ON A TWO LANE HIGHWAY	12	
	5	614	13700	5	EACH	MAINTENANCE OF TRAFFIC - ONE LANE CLOSURE ON A TWO LANE HIGHWAT	12	-
	15	614	13800	15	EACH	MAINTENANCE OF TRAFFIC, ONE LANE CLOSURE ON A FOUR LANE ONDIVIDED HIGHWAT	12	
	125	614	13900	125	EACH	MAINTENANCE OF TRAFFIC, ONE LANE CLOSURE ON A 4 LANE OR GREATER DIVIDED HIGHWAT	12	
	120	014	12300	120			12	-
	-					INCIDENTALS		1
		624	10000	LS		MOBILIZATION		1
4		624	15001	4	EACH	MOBILIZATION MOBILIZATION, AS PER PLAN	2	
Т		024	10001	1 1			<u> </u>	17
	1							14
	1	1	1	1	1		1	17