

**ITEM 606, SPECIAL RESHAPING BERM**

BERMS AT LOCATIONS WHERE EXISTING GUARDRAIL IS REMOVED OR WHERE NEW GUARDRAIL IS TO BE ERECTED SHALL BE RESHAPED AS DIRECTED BY THE ENGINEER TO INSURE A SMOOTH SURFACE FREE OF ALL IRREGULARITIES. RESHAPING SHALL INCLUDE REMOVAL OF FALSE DITCHES TO INSURE PROPER DRAINAGE. EXCESS EXCAVATION SHALL BE DISPOSED OF AS DIRECTED BY THE ENGINEER. PAYMENT FOR RESHAPING BERMS SHALL BE INCLUDED IN THE CONTRACT PRICE BID PER FOOD FOR ITEM 606, SPECIAL RESHAPING BERM.

**ANCHOR ASSEMBLY LOCATIONS**

IN CASES WHERE A DIFFERENT ANCHOR ASSEMBLY IS PROPOSED, HOLD THE LOCATION OF THE EXISTING JOINT BETWEEN THE GUARDRAIL AND THE ANCHOR ASSEMBLY. IF THE NEW ANCHOR ASSEMBLY IS LONGER THAN THE EXISTING, THE OVERALL LENGTH OF THE GUARDRAIL SEGMENT WILL BE EXTENDED.

**RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS), AS PER PLAN**

THE LOCATIONS SPECIFIED BELOW HAVE BEEN DESIGNATED TO RECEIVE NEW DEEP BEAM RAILING. ONLY TUBING, RAIL FACING, AND ALL HARDWARE REQUIRED TO MOUNT THESE COMPONENTS SHALL BE REPLACED. EXISTING POSTS AND ANCHORS ARE TO REMAIN IN PLACE UNLESS OTHERWISE DEEMED UNSALVAGEABLE BY THE ENGINEER.

BRIDGE TREATMENTS					
SPLIT	SEE SHEET NO.	LOCATION	SLM (TO THE NEAREST HUNDRETH OF A MILE)	SFN	PROPOSED TREATMENT
1	7	MOE-7	23.10	5600723	REFACE DBR

**ITEM 202, GUARDRAIL REMOVED FOR STORAGE, AS PER PLAN**

1000 SECTIONS OF SALVAGEABLE W-BEAM RAIL SHALL BE REMOVED FOR STORAGE. SALVAGEABLE SECTIONS SHALL BE DETERMINED BY THE ENGINEER. GUARDRAIL ITEMS REMOVED FOR STORAGE SHALL BE DELIVERED AS FOLLOWS:

600 SECTIONS DELIVERED TO:  
 BELLE VALLEY OUTPOST  
 TOWNSHIP HIGHWAY 108  
 BELLE VALLEY, OH 43717

400 SECTIONS DELIVERED TO:  
 MONROE COUNTY GARAGE  
 47028 STATE ROUTE 26  
 WOODSFIELD, OH 43793

300 REUSABLE GUARDRAIL BLOCKOUTS SHALL BE SALVAGED AND MAY BE DELIVERED TO EITHER OF THE ABOVE LOCATIONS.

DESIGN AGENCY



DESIGNER

WBC

REVIEWER

MRF MM-DD-YY

PROJECT ID

105043

SHEET TOTAL

4 10

SHEET NUM.				PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
6	7	8	01/NHS/OT	02/IMS/OT								
29,912.5	25,219	7,512.5			32,731.5	29,912.5	202	38000	62,644	FT	ROADWAY	
7,500	5,000				5,000	7,500	202	38101	12,500	FT	GUARDRAIL REMOVED FOR STORAGE, AS PER PLAN	4
2,012.5					2,012.5	2,012.5	202	38300	2,012.5	FT	GUARDRAIL REMOVED BARRIER DESIGN	
	287.5				287.5		202	38500	287.5	FT	BRIDGE RAILING REMOVED	
8						8	202	47800	8	EACH	IMPACT ATTENUATOR REMOVED	
35,312.5	27,325	6,687.5			34,012.5	35,312.5	606	15050	69,325	FT	GUARDRAIL, TYPE MGS	
87.5						87.5	606	15400	87.5	FT	MGS GUARDRAIL, TYPE 8	
2,012.5						2,012.5	606	15550	2,012.5	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS	
1						1	606	17500	1	EACH	POST END ANCHOR (OR CONCRETE BLOCK END ANCHOR)	
	1					1	606	25550	1	EACH	ANCHOR ASSEMBLY, MGS TYPE A	
16	29	8			37	16	606	26050	53	EACH	ANCHOR ASSEMBLY, MGS TYPE B	
14	29	9			38	14	606	26150	52	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	
31	17	5			22	31	606	26550	53	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
17	1	2			3	17	606	35002	20	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
9	1				1	9	606	35102	10	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
	5				5		606	35140	5	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4	
39,677	30,219	7,512.5			37,731.5	39,677	SPECIAL	60650000	77,408.5	FT	RESHAPING BERM	4
8						8	606	60012	8	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	
											TRAFFIC CONTROL	
845	653	163			816	845	626	00110	1,661	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	
	287.5				287.5		517	72307	287.5	FT	STRUCTURE OVER 20 FOOT SPAN (SFN 5600723) RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS), AS PER PLAN	4
											INCIDENTALS	
					LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
					LS	LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

WBC

REVIEWER

MRF MM-DD-YY

PROJECT ID

105043

SHEET


5

TOTAL

10

SPLIT	STRAIGHT LINE MILES (SLM IS ROUNDED TO THE NEAREST 0.01 MILES)		SIDE	TOTAL BARRIER LENGTH FT	202	202	202	606	606	606	606	606	606	606	606	SPECIAL	626	606	606	202	NOTES	
	BEGIN	END			FT	FT	FT	EACH	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH	FT	EACH	FT	EACH		FT
	NOB-77 NORTHBOUND																					
2	11.22	RAMP B	RT	725	725					712.5			1		1	725	16				NORTHBOUND EXIT RAMP	
2	11.74		RT	512.5	512.5					462.5	1		1		512.5	11						
2	11.94		RT	287.5	287.5					237.5	1		1		287.5	7						
2	12.27		RT	1800	1800					1750	1		1		1800	37						
2	12.72		RT	1912.5	1912.5					1862.5	1		1		1912.5	39						
2	13.66		RT	600	600			87.5		500			1		600	13			1			
2	13.91		RT	212.5	212.5					137.5		1		1	212.5	5						
2	14.15		RT	1675	1675					1625	1		1		1675	35						
2	14.59		RT	1662.5	1662.5					1600			1	1	1662.5	34						
2	15.06		RT	700	700					637.5			1	1	700	15						
2	15.76		RT	237.5	237.5					162.5			1		237.5	6						
2	15.94		RT	1962.5	1962.5					1912.5	1		1		1962.5	40						
2	16.55		RT	612.5	612.5					537.5			1		612.5	13						
2	16.69		RT	550	550					525				1	550	12						
2	16.82		RT	200	200					187.5				1	200	5						
2	17.56		RT	750	750					687.5	1			1	750	16						
2	17.72		RT	2525	2525					2512.5				1	2525	52						
2	18.38		RT	1675	1675					1612.5			1		1675	35						
2	18.77		RT	662.5	662.5					612.5	1		1		662.5	14						
<b>NOB-77 SOUTHBOUND</b>																						
2	11.24		LT	1725	1725					1650				1	1	1725	36					
2	12.27		LT	2162.5	2162.5					2100				1	1	2162.5	44					
2	12.81		LT	1487.5	1487.5					1437.5	1			1	1487.5	31						
2	13.22		LT	462.5	462.5					412.5	1			1	462.5	10						
2	13.58		LT	262.5	262.5					212.5	1			1	262.5	6						
2	13.68		LT	837.5	837.5					787.5	1			1	837.5	18						
2	13.96		LT	225	225					150				1	225	6						
2	14.19		LT	3312.5	3312.5					3263	1			1	3312.5	67						
2	15.16		LT	325	325					275	1			1	325	8						
2	15.71		LT	437.5	437.5					425				1	437.5	10						
2	15.81		LT	187.5	187.5					112.5				1	187.5	5						
2	16.03		LT	1312.5	1312.5					1262.5	1			1	1312.5	27						
2	16.62		LT	187.5	187.5					175				1	187.5	5						
2	16.68		LT	562.5	562.5					537.5				1	562.5	12						
2	16.82		LT	700	700					725				1	700	15						
2	17.49		LT	1062.5	1062.5					1050				1	1062.5	22						
2	17.72		LT	412.5	412.5					337.5				1	412.5	9						
2	18.12		LT	512.5	512.5					450				1	512.5	11						
2	18.34		LT	1025.0	1025.0					962.5				1	1025	22						
<b>NOB-77 MEDIAN</b>																						
2	11.24		MED	275	275					237.5	1				275	7						
2	13.91		MED	244	75.0	137.5	1	1		62.5				1	244	6	137.5					
2	13.95		MED	244	75.0	137.5	1	1		62.5				1	244	6	137.5					
2	15.76		MED	244	75.0	137.5	1	1		62.5				1	244	6	137.5					
2	15.79		MED	244	75.0	137.5	1	1		62.5				1	244	6	137.5					
2	16.60		MED	344	62.5	250	1	1		37.5				1	344	8	250					
2	16.68		MED	587.5	125	462.5				75				2	587.5	13	462.5					
2	16.82		MED	344	62.5	250	1	1		37.5				1	344	8	250					
2	17.64		MED	344	62.5	250	1	1		37.5				1	344	8	250					
2	17.72		MED	344	62.5	250	1	1		37.5				1	344	8	250					
2	GUARDRAIL REMOVED FOR STORAGE, A.P.P.				-7500.0															7500		
SPLIT 1 TOTAL					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SPLIT 2 TOTAL					29912.5	2012.5	8	8	87.5	35312.5	16	14	31	17	9	39677	845	2012.5	1	7500		
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>					29912.5	2012.5	8	8	87.5	35312.5	16	14	31	17	9	39677	845	2012.5	1	7500		

GUARDRIAL SUBSUMMARY

DESIGN AGENCY  
  
 DESIGNER  
**WBC**  
 REVIEWER  
**MRF MM-DD-YY**  
 PROJECT ID  
**105043**  
 SHEET TOTAL  
**6 | 10**



ROUTE	202	202	202	202	606	606	606	606	606	606	606	606	606	606	SPECIAL	606	517	626	606	202
	GUARDRAIL REMOVED	GUARDRAIL REMOVED, BARRIER DESIGN	IMPACT ATTENUATOR REMOVED	BRIDGE RAILING REMOVED	GUARDRAIL, TYPE MGS	MGS GUARDRAIL, TYPE 8	GUARDRAIL BARRIER DESIGN, TYPE MGS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE B	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	ANCHOR ASSEMBLY, MGS TYPE T	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	BRIDGE TERMINAL ASSEMBLY, TYPE 4	RESHAPING BERM	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS), AS PER PLAN	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	POST END ANCHOR (OR CONCRETE BLOCK END ANCHOR)	GUARDRAIL REMOVED FOR STORAGE, AS PER PLAN
	FT	FT	EACH	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	EACH	FT	EACH	EACH	FT
<b>NOB-77</b>																				
SPLIT 1																				
SPLIT 2	29912.5	2012.5	8		35312.5	87.5	2012.5		16	14	31	17	9		39677	8		845	1	7500
TOTAL	29912.5	2012.5	8		35312.5	87.5	2012.5		16	14	31	17	9		39677	8		845	1	7500
<b>MOE-7</b>																				
SPLIT 1	27818.75			287.5	29275			1	37	36	17	1	1	5	32818.75		287.5	714		5000
SPLIT 2																				
TOTAL	27818.75			287.5	29275			1	37	36	17	1	1	5	32818.75		287.5	714		5000
<b>MOE-536</b>																				
SPLIT 1	4912.5				4737.5					2	5	2			4912.5			102		
SPLIT 2																				
TOTAL	4912.5				4737.5					2	5	2			4912.5			102		
<b>ROUTE SUBTOTALS</b>																				