<u>GENERAL NOTES</u>

<u>UTILITIES</u>

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

CITY OF CONNEAUT PUBLIC WORKS (BRIDGE STREET LIGHTING) 285 16TH STREET CONNEAUT, OHIO 44030 (440) 593-7430 ATTN: JOE DIBELL

THE ILLUMINATING COMPANY 6896 MILLER RD., SUITE 101 BRECKSVILLE, OH 44141 (440) 546-8706 ATTN: JOHN ZASSICK

GREAT WAVE COMMUNICATIONS 224 STATE ST. CONNEAUT, OH 44030 (440) 593-7100 ATTN: DON ZAPPITELLI

DOMINION ENERGY OHIO 320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OH 44333 (330) 664-2409 ATTN: BILL SNYDER

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED BY THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C. 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.

ITEM 201, CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

STRUCTURE PAINTING/SEALING OPERATIONS

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EPOXY-URETHANE SEALER, PAINT OR OTHER MATERIALS USED TO REPAIR, CLEAN, PAINT, SEAL OR TREAT ANY STRUCTURE FROM ENTERING CONNEAUT CREEK AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

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.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7:00 PM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M

THE USE OF VIBRATORY COMPACTION EQUIPMENT IS PROHIBITED.

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

THE USE OF GRAVEL FOR COARSE VIRGIN AGGREGATE IS PROHIBITED.

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, TH CONTRACTOR SHALL SEAL THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO

MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INTLETS. - BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.

- BUTT JOINT BETWEEN PAVED SHOULDER AND DRIVEWAY ASPHALT AND TAPERED EDGE WHEN FEATHERING TO AN EXISTING ASPHALT DRIVEWAY.

- PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) AS PER PLAN, PG64-22

THE USE OF VIBRATORY COMPACTION EQUIPMENT IS PROHIBITED.

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.

<u>STREAM AVOIDANCE - CONNEAUT CREEK</u>

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR IMPACT CONNEAUT CREEK. NO EXCAVATION, GRADING OR FILLING OPERATIONS SHALL BE PREFORMED IN CONNEAUT CREEK. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE CONSTRUCTION EQUIPMENT AND/OR MATERIALS IN CONNEAUT CREEK.

 \bigcirc

 \bigcirc

Ę	<u>ITEM 606 - MGS BRIDGE TERMINAL</u> ASSEMBLY, TYPE 1, AS PER PLAN:	
	THIS ITEM SHALL CONSIST OF FURNISHING TERMINAL ASSEMBLIES WITH RADII SHOWN ON SHEET 11 OF 24.	
		NOTES
		ENERAL
		GE
		36
		-20-21.8 ROAD
		ATB-US CENTE

				S	HEET NU	м.					PART.		ITEM	GRAND		
	4	6		8	9		12				02/BRF/BR	ITEM	EXT	TOTAL	UNIT	
	LS										LS	201	11000	LS		CLEARING AND GRUBBING
				27							27	202	23000	27	SV	
				21	225						225	202	38000	225	FT	
					3						3	202	42000	3	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A
	 				11						11	202	10000	11		
												203	10000			
				48							48	204	10000	48	SY	SUBGRADE COMPACTION
					63						63	606	15050	63	FT	GUARDRAIL, TYPE MGS
	 				3	\sim	\sim	\sim	\sim		$\sqrt{3}$	606	26150	$\sim 3 \sim$	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH
	 			(2						2	606	35002	2	EACH FACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE
					K,											
											1,000	832	30000	1,000	EACH	EROSION CONTROL
ive	_			11							11	204	20000	11		
0 U U												304	20000			AGGREGATE BASE
Ň				5							5	407	10000	5	GAL	TACK COAT
Σ																
0	 			72							72	409	30000	72	FT	SAWING AND SEALING ASPHALT CONCRE
19:2				2							2	441	50101	2	СҮ	ASPHALT CONCRETE SURFACE COURSE,
613:				5							5	441	50301	5	CY	ASPHALT CONCRETE INTERMEDIATE COU
,202																
5/1/	 _						22				22	202	22001	22	ev	
+	 						405				405	202	23501	405	SY	WEARING COURSE REMOVED, AS PER PLAT
ee							325				325	202	38500	325	FT	BRIDGE RAILING REMOVED
gn St							52				52	407	10000	52	GAL	ТАСК СОАТ
ED.d							45				45		50404	45		
							15 27				15	441	50101	15		ASPHALT CONCRETE INTERMEDIATE COURSE,
							21				21	441	50501	21		
0001							50				50	509	20000	50	LB	REINFORCING STEEL, REPLACEMENT OF
102							104				104	512	10100	104	SY	SEALING OF CONCRETE SURFACES (EPO)
180							410				410	512	33010	410	SY	TYPE 3 WATERPROOFING
ets)							24				24	516	31000	24	FT	JOINT SEALER
She																
δ <u> </u>							325				325	517	72307	325	FT	RAILING (DEEP BEAM RAIL WITH STEEL TU
M p p o g							373				373	SPECIAL	51822300	373	FT	STEEL DRIP STRIP
ign \F							68				68	519	11100	68	SF	PATCHING CONCRETE STRUCTURE
De	 						23				23	526	25001	23	SY	REINFORCED CONCRETE APPROACH SLA
SRG \																
0-8							249				249	SPECIAL	53000600	249	SF	STRUCTURES: STONE MASONRY REPAIR
ш ш	 						2				2	SPECIAL	53001100	2	CY	STRUCTURES: STONE MASONRY REPLACE
03_CT							/12				/12	SPECIAL	53001300	/12	FI	STRUCTURES: MASONRY REPOINTING
689		F									E	410	12000	F		
		5									5	410	12000	5		TRAFFIC COMPACTED SURFACE, TYPE A
-Dd-		LS									LS	614	12420	LS		DETOUR SIGNING
ec		5									5	614	13000	5	CY	ASPHALT CONCRETE FOR MAINTAINING T
Iol		4									4	614	18601	4	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN,
DOTVP		10									10	616	10000	10	MGAL	WATER
		LS									LS	614	11000	LS		MAINTAINING TRAFFIC
180																
12018											LS	623	10000	LS		
			1	1	1	1		1	1	1	I LS	624	10000	I LS	1	IMUBILIZATION

	SEE	ATED T T
DESCRIPTION	SHEET	SA.
	NO.	CAI
ROADWAY		
	\frown	
1	V V Y	\frown
1, AS PER PLAN	4)
EROSION CONTROL	\sim	
DAVEMENT		\succ
FAVLMENT		Ľ
		A I
		Σ
		Σ
TE PAVEMENT JOINTS		
	4	S
RSE TYPE 2 (448) AS PER PLAN, PG70-22M RSE TYPE 2 (448) AS PER PLAN, PG64-22	4	
(OL, THE 2, (440), NOT EXTEND, TOOP 22		Ā
E OVER 20 FOOT SPAN (SFN 0461296)		Ř
	12	ш
AN	12	Z
		Ш
		Û
TYPE 1, (448), AS PER PLAN, PG70-22M	12	
RSE, TYPE 2, (448), AS PER PLAN, PG64-22	12	
EXISTING REINFORCING STEEL		
(Y-URETHANE)		
	10	
BULAR BACKUP AND TYPE 2 STEEL PUSTS), AS PER PLAN	12	
	22	
	- 10	
BS (I=15"), AS PER PLAN	12	
	13	Q
EMENT	13	Ω°Ω
	13	24
		0 "
JR B		Ω Ω
		SШ
RAFFIC		⊃⊢
AS PER PLAN	6	, Z
		. ∪ ∢
RVEYING		$\overline{7}$
		24
		\sim

									. /	$\sim \sim$	$\sim \sim$
					202	202	203	606	606 (606	606
REF NO.	SHEET NO.	STATION TO STATION			GUARDRAIL REMOVED	ANCHOR ASSEMBLY REMOVED, TYPE A	EXCAVATION	GUARDRAIL, TYPE MGS	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	MOS BRIDGE TERMINAL ASSEMBLY, TYPE I	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1,
		FROM	ТО		FT	EACH	СҮ	FT	EACH	EACH	EACI
R1	11	9+62	9+88	LT		1			(
R2	11	9+88	10+25.5	LT	37.5				\geq		
R3	11	11+88	12+50.5	LT	62.5				(
R4	11	12+50.5	12+77.5	LT		1			\geq		
R5	11	9+50.5	10+25.5	RT	75						
R6	11	11+88	12+38	RT	50						
R7	11	12+38	12+64	RT		1			5		
GR-1	11	9+48.5	10+00.5	LT					1 (
GR-2	11	10+00.5	10+25.5	LT					\rightarrow		1
GR-3	11	11+88	12+13	LT					(1
GR-4	11	12+13	12+25.50	LT				12.5	\rightarrow		
GR-5	11	12+25.50	12+78	LT					1 (
GR-6	11	9+50.5	10+00.5	RT				50	$\langle \rangle$		
GR-7	11	10+00.5	10+25.5	RT						1	
GR-8	11	11+88	12+13	RT						1	
GR-9	11	12+13	12+65	RT					1 >		-
EXC-1	11	11+79.29	11+87.29	LT/RT			4		(
EXC-2	11	11+87.29	11+97.29	LT/RT			7		$ \rightarrow $		
		TOTALS CARRIED TO GEN	ERAL SUMMARY		225	3	11	63	3	2	2

NOTE: STATIONS ON THIS TABLE ARE REFERENCED FROM THE FIRST AND LAST BRIDGE GUARDRAIL POSTS ON A BOX BEAM. THE ANCHOR BOLTS FOR THESE POSTS ARE BEING INCORPORATED IN THE NEW WORK. (SEE GENERAL PLAN SHEET 10 OF 24 FOR THESE STATIONS)

ITEM 203 - EXCAVATION

EXC-1: FROM STA. 11+79.29 TO STA. 11+87.29 = 8.0' AREA= 0.5 X (24.0' + 27.2') X 8.0' = 204.8 SF VOLUME= 204.8 SF X 0.5' = 102.4 CF ÷ 27 = 4 CY

EXC-2: FROM STA. 11+87.29 TO STA. 11+97.29 = 10.0' AREA= 10.0' X 24.0' = 240.0 SF VOLUME= 240.0 SF X 0.75' = 180.0 CF ÷ 27 = 7 CY

EXCAVATION TOTAL= 4 CY + 7 CY = 11 CY

 \bigcirc

			CALCULATED SAT CHECKED
E, MA5H 2010	WGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 99	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1, 99 4 AS PER PLAN	
	EACH	EACH	ROADWAY SUBSUMMARY
			ATB-US-20-21.86 CENTER ROAD



 \bigcirc

 \bigcirc

 \bigcirc