UTILITIES

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

WIDE OPEN WEST 3765 CORPORATE DR COLUMBUS, OH 43231 CONTACT: STEVE CALLAHAN PHONE: (614) 948-4636

COLUMBIA GAS OF OHIO 3550 JOHNNY APPLESEED COURT COLUMBUS, OH 43231 CONTACT: ROB CALDWELL PHONE: (614)818-2108 EMAIL: rcaldwell@nisource.com

AEP - DISTRIBUTION UNDERGROUND 1 RIVERSIDE PLAZA, 12TH FLOOR COLUMBUS, OH 43215 CONTACT: PAT FEENEY PHONE: (614) 883-6901 EMAIL: pfeeney@aep.com

AEP - TRANSMISSION 700 MORRISON RD GAHANNA. OH 43230 CONTACT: JIM KING PHONE: (614) 460-0107 EMAIL: jrking@aep.com

AEP - AERIAL DISTRIBUTION 850 TECH CENTER DR GAHANNA, OH 43230-6605 CONTACT: PAUL PAXTON PHONE: (614) 883-6831 EMAIL: ptpaxton@aep.com

AT&T - OHIO 111 NORTH 4TH STREET ROOM 802 COLUMBUS, OH 43204 CONTACT: GARY VAN ALMSICK PHONE: (614) 223-7276 EMAIL: qv2758@att.com CONTACT: AL RIVERA PHONE: (614) 223-8903 EMAIL: ar8341@att.com CONTACT: MIKE LEE PHONE: (614) 223-6783 EMAIL: m/3453@att.com CONTACT: MIKE LEPLEY PHONE: (614) 223-5872 EMAIL: t/9569@att.com

ODOT ITS (NON-OUPS MEMBER) 1606 W BROAD ST COLUMBUS, OH 43223 PHONE: (614) 387-4113 FAX: (614) 887-4134 EMAIL: steven.callahan@wowinc.com EMAIL: cen.its.lab@dot.ohio.gov

> CITY OF COLUMBUS DPU - DIVISION OF SEWERAGE AND DRAINAGE SEWER MAINTENANCE MANAGER 1250 FAIRWOOD AVE COLUMBUS, OH 43206 PHONE: (614) 645-7102

CITY OF COLUMBUS DIVISION OF POWER 3500 INDIANOLA AVE COLUMBUS, OH 43214 PHONE: (614) 645-7627

CITY OF COLUMBUS DIVISION OF WATER 910 DUBLIN RD COLUMBUS, OH 43215 PHONE: (614) 645-7788

CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY 1355 McKINLEY AVE BUILDING C COLUMBUS, OH 43222 PHONE: (614) 645-7756

CITY OF COLUMBUS DEPARTMENT OF PUBLIC SERVICE TRAFFIC MANAGEMENT 1820 E 17TH AVE COLUMBUS, OH 43219 PHONE: (614) 645-7393

CITY OF COLUMBUS SUPPORT SERVICES DIVISION -**COMMUNICATIONS** 4211 GROVES RD COLUMBUS, OH 43232 PHONE: (614) 724-7047

CHARTER 3760 INTERCHANGE DR COLUMBUS, OH 43204 CONTACT: RAY MAURER PHONE: (614) 481-5262 EMAIL: ray.maurer@charter.com CONTACT: SAM LUTZ PHONE: (614) 481-5047 EMAIL: samuel.lutz@charter.com

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.

FXISTING PLANS

EXISTING PLANS ENTITLED FRA-315-5.18 MAY BE INSPECTED IN THE ODOT DISTRICT 6 OFFICE IN DELAWARE, OH.

NOTE TO CONTRACTOR REGARDING EXISTING FIRE HYDRANT ACCESS DURING CONSTRUCTION

ACCESS FOR EMERGENCY USAGE OF ALL FIRE HYDRANTS IS REQUIRED AT ALL TIMES DURING PLAN CONSTRUCTION. AT NO TIME SHALL THE ODOT CONTRACTOR BLOCK ACCESS TO ANY FIRE HYDRANT DURING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITION-ING ON ODOT PROJECTS.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: STATIC GNSS MONUMENT TYPE: (B)

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88 GEOID: GEOID12B

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83(2011)(EPOCH:2010.0000) FLL IPSOID: GRS80 MAP PROJECTION: LAMBERT CONFORMAL CONIC COORDINATE SYSTEM: OHIO STATE PLANE (SOUTH) ZONE COMBINED SCALE FACTOR: 1.00002761 ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY

PERMITS

WHEN OCCUPYING OR EXCAVATING WITHIN COLUMBUS PUBLIC RIGHT OF WAY LIMITS, THE CONTRACTOR SHALL OBTAIN AN EXCAVATION AND OCCUPANCY PERMIT FROM THE CITY OF COLUMBUS. DEPARTMENT OF PUBLIC SERVICE - PERMIT OFFICE BETWEEN THE HOURS OF 7:30 AM AND 4:00 PM MONDAY THROUGH FRIDAY. PHONE: (614) 645-7497; FAX: (614) 645-1876; EMAIL: colspermits@columbus.gov

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.

ITEM 524 - DRILLED SHAFTS

THIS ITEM PERTAINS TO WALLS 4 AND 5.

FOLLOW STANDARD DRAWING NBS-1-09 AND THE DETAILS OF THESE PLANS.

PAYMENT FOR THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 606 - SPECIAL -NOISE BARRIER UNLESS OTHERWISE NOTED, AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 606 - SPECIAL - NOISE BARRIER

THIS ITEM WILL BE USED TO INSTALL REFLECTIVE CONCRETE NOISE PANELS IN WALLS 4 AND 5. SEE SHEET 54 FOR COLOR, TEXTURE, AND LOCATION OF INSTALLATION.

FOLLOW STANDARD DRAWING NBS-1-09 AND THE DETAILS OF THESE PLANS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 606 - SPECIAL -NOISE BARRIER UNLESS OTHERWISE NOTED, AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

NOTE TO CONTRACTOR REGARDING EXTRA CARE NOT TO DAMAGE UTILITY LINES

THE CONTRACTOR IS TO USE EXTRA CARE NOT TO DAMAGE UTILITY LINES THAT ARE TO REMAIN AND NOTED ON THE PLANS AS DO NOT DISTURB (DND). IF DAMAGE OCCURS TO THESE LINES DUE TO THE CONTRACTOR'S NEGLIGENCE OR MISHANDLING, THE DAMAGED SECTIONS ARE TO BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED BY THE ENGINEER. REFER TO PAGES 31-38 FOR LOCATIONS AND COVER DEPTHS TO THE TOP OF THE NOTED UTILITY LINES.

STORM SEWER CONTINGENCY QUANTITIES

THE BELOW ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER, IN THE EVENT THAT THE PRE-CONSTRUCTION VIDEO (SEE ITEM 611 - CONDUIT, MISC.: STORM SEWER PROTECTION) FINDS DAMAGE TO THE EXISTING CONDUITS AT THE FOLLOWING LOCATIONS:

- o STA. 603+78 TO STA. 604+48
- o STA. 607+27
- o STA. 610+61 TO STA. 611+20

ITEM 611 - 24" CONDUIT, TYPE B, 706.02 15 LF ITEM 611 - 18" CONDUIT, TYPE B, 706.02 40 LF ITEM 611 - 12" CONDUIT, TYPE B, 706.02 30 LF

ITEM 611 - CONDUIT, MISC .: STORM SEWER PROTECTION

THE CONTRACTOR SHALL BE REQUIRED TO VIDEO INSPECT THE FOLLOWING STORM SEWER CONDUITS BOTH PRE AND POST CONSTRUCTION:

- o STA. 603+78 TO 604+48 (ESTIMATED 70 FEET OF EX 12")
- o STA. 607+27 (ESTIMATED 30 FEET OF EX. 15")
- o STA. 610+61 TO STA 611+20 (ESTIMATED 40 FEET OF EX. 18" AND 15 FEETOF EX. 24")

THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER AT LEAST 7 DAYS PRIOR TO ANY VIDEO WORK. THE PRE-CONSTRUCTION VIDEO SHALL BE PERFORMED PRIOR TO ORDERING ANY MATERIALS NECESSARY TO CONSTRUCT THE PROPOSED NOISE BARRIER. ONE (1) COPY OF THE VIDEO INSPECTION SHALL BE PROVIDED TO THE PROJECT ENGINEER FOR REVIEW. IF DAMAGE IS FOUND IN THE PRE-CONSTRUCTION VIDEO, THE CONTRACTOR SHALL DOCUMENT THE DAMAGE AND PROVIDE DOCUMENTATION TO THE PROJECT ENGINEER. IF DAMAGE IS FOUND IN THE POST-CONSTRUCTION VIDEO, THEN REPAIRS TO THE SATISFACTION OF THE DEPARTMENT SHALL BE PERFORMED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.

ALL LABOR, MATERIAL, AND INCIDENTALS FOR THE ABOVE WORK SHALL BE PAID FOR BY LUMP SUM, ITEM 611 - CONDUIT, MISC .: STORM SEWER PROTECTION

ITEM 638 WATER WORK, MISC.: CITY OF COLUMBUS DIVISION OF WATER 42" WATERLINE PROTECTION

THE CONTRACTOR SHALL BE REQUIRED TO PROTECT THE 42" WATERLINE FACILITY LOCATED WITHIN THE PROJECT LIMITS. FURTHERMORE, SPECIAL CARE MUST BE TAKEN TO ASSURE NO HARM TO THE 42" WATERLINE INCLUDING THE FOLLOWING PROVISIONS:

1.) PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL BE REQUIRED TO CONFIRM THE WATERLINE LOCATION BETWEEN THE FOLLOWING LIMITS:

- o WALL 4 STA. 403+00 TO 409+76
- o WALL 4 STA. 406+44.20 (NEXT TO PROP. DMS SIGN FOUNDATION)
- o WALL 5 STA. 504+56 TO STA 505+00
- o WALL 6 ENTIRE LIMITS

AIRVAC METHODS SHALL BE REQUIRED (SUE QUALITY LEVEL A) TO CONFIRM THE UTILITY LOCATION. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE OHIO DEPARTMENT OF TRANSPORTATION.

- 2.) PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PROVIDE THE SUE LOCATE CONFIRMATION DATA TO ODOT AND THE COC DIVISION OF WATER A MINUMUM OF 21 DAYS PRIOR TO COMMENCING WORK.
- 3.) ALL WORK ACTIVITIES WITHIN 20 FEET HORIZONTAL DISTANCE TO THE WATERLINE'S CLOSEST OUTSIDE DIAMETER SHALL BE COORDINATED WITH ODOT AND THE CITY OF COLUMBUS DIVISION OF WATER 21 DAYS PRIOR TO COMMENCING WORK.
- 4.) THE CONTRACTOR SHALL PROHIBIT CONSTRUCTION EQUIPMENT NECESSARY TO REMOVE THE DMS STRUCTURE AND FOUNDATION; CONSTRUCT THE NEW DMS STRUCTURE; BUILD NOISE WALLS 4, 5, 6; AND BUILD WALL 6 FROM OPERATING WITHIN 3 FEET HORIZONTAL DISTANCE TO THE WATERLINE'S CLOSEST OUTSIDE DIAMETER. IN ADDITION, CONTRACTOR ACCESS TO PERFORM THESE WORK TASKS SHALL BE LIMITED TO SR-315.

ALL LABOR, MATERIAL AND INCIDENTALS FOR THE ABOVE WORK SHALL BE PAID FOR BY LUMP SUM, ITEM 638, WATER WORK, MISC.: CITY OF COLUMBUS DIVISION OF WATER 42" WATERLINE PROTECTION.

ITEM 611 - CONDUIT, MISC.: EXISTING 36" SANITARY SEWER LINE LOCATES THE CONTRACTOR SHALL PERFORM HORIZONTAL AND VERTICAL LINE LOCATE OF THE EXISTING 36" SANITARY LINES LOCATED AT APPROXIMATE STATIONS 402+26 (SEE PAGE 31) AND 510+31 (SEE PAGE 37). THE LOCATES SHALL BE PERFORMED AT THE LOCATION THE EXISTING SANITARY LINE(S) CROSS THE PROPOSED NOISE WALL. AIRVAC METHODS SHALL BE REQUIRED (SUE QUALITY LEVEL A) TO CONFIRM THE UTILITY LOCATION. THE SUE COMPANY UTILIZED BY THE CONTRACTOR SHALL BE REQUIRED TO BE PRE-QUALIFIED WITH THE OHIO DEPARTMENT OF TRANSPORTATION. THIS WORK SHALL BE PERFORMED PRIOR TO ORDERING ANY MATERIALS NECESSARY TO CONSTRUCT THE PROPOSED NOISE BARRIER.

PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 611, CONDUIT, MISC.: EXISTING 36" SANITARY SEWER LINE LOCATES.

THE COMPLETION OF PHASE 1. PAYMENT FOR REMOVAL OF CONFLICTING EXISTING PAVEMENT MARKINGS SHALL BE PAID PER ITEM 614 MAINTAINING TRAFFIC. PAVEMENT MARKINGS SHALL BE RESTORED TO EXISTING CONDITIONS AFTER THE COMPLETION OF PHASE 2. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 644 - EDGE LINE, 6" (WHITE)	0.90 MILE
ITEM 644 - EDGE LINE, 6" (YELLOW)	0.94 MILE
ITEM 644 - LANE LINE, 6"	2.06 MILE
ITEM 644 - CHANNELIZING LINE, 12"	589 FT
ITEM 644 - DOTTED LINE, 12"	840 FT
ITEM 646 - EDGE LINE, 6" (WHITE)	0.03 MILE
ITEM 646 - EDGE LINE, 6" (YELLOW)	0.03 MILE
ITEM 646 - LANE LINE, 6"	0.06 MILE
ITEM 646 - DOTTED LINE, 12"	150 FT

ITEM 621, RPM REFLECTOR, AS PER PLAN ITEM 621, RAISED PAVEMENT MARKER REMOVED, AS PER PLAN

EXISTING RAISED PAVEMENT MARKER REFLECTORS ASSOCIATED EXISTING FAISED PAVEMENT MARKER REFLECTORS ASSOCIATED WITH CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED AFTER THE COMPLETION OF PHASE 1. EMBEDDED METAL HOUSINGS SHALL REMAIN IN PLACE DURING PHASE 2. NEW RAISED PAVEMENT MARKER REFLECTORS SHALL BE REPLACED IN THE EXISTING EMBEDDED METAL HOUSINGS FOLLOWING THE APPLICATION OF PERMANENT PAVEMENT MARKINGS AFTER THE COMPLETION OF PHASE 2. THE FOLLOWING QUANTITIES HAVE BEEN ADDIED TO THE CONFERN SHAWED. BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 621 - RPM REFLECTOR, AS PER PLAN 115 EACH ITEM 621 - RAISED PAVEMENT MARKER 115 EACH REMOVED, AS PER PLAN

ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO 614.

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON PERMANENT CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON. WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER ON PERMANENT CONCRETE SURFACES, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

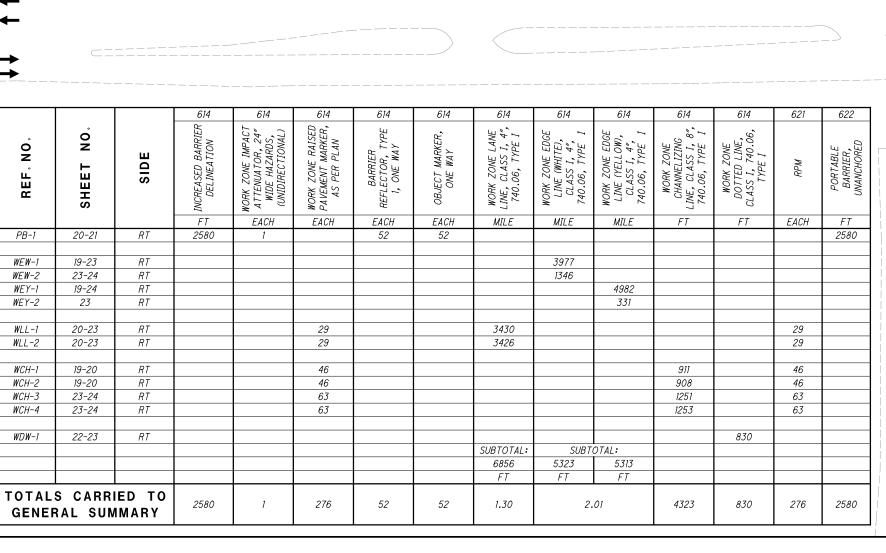
THE FOLLOWING BID ITEMS SHOULD BE INCLUDED IN THE PLANS:

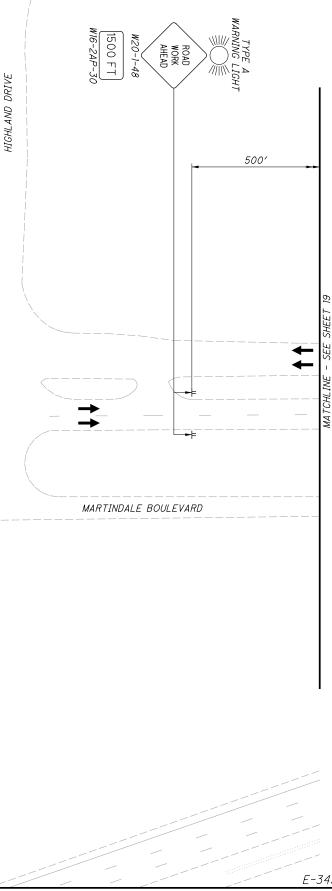
ITEM 614 - WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

276 EACH

ITEM 621 - RPM

276 EACH





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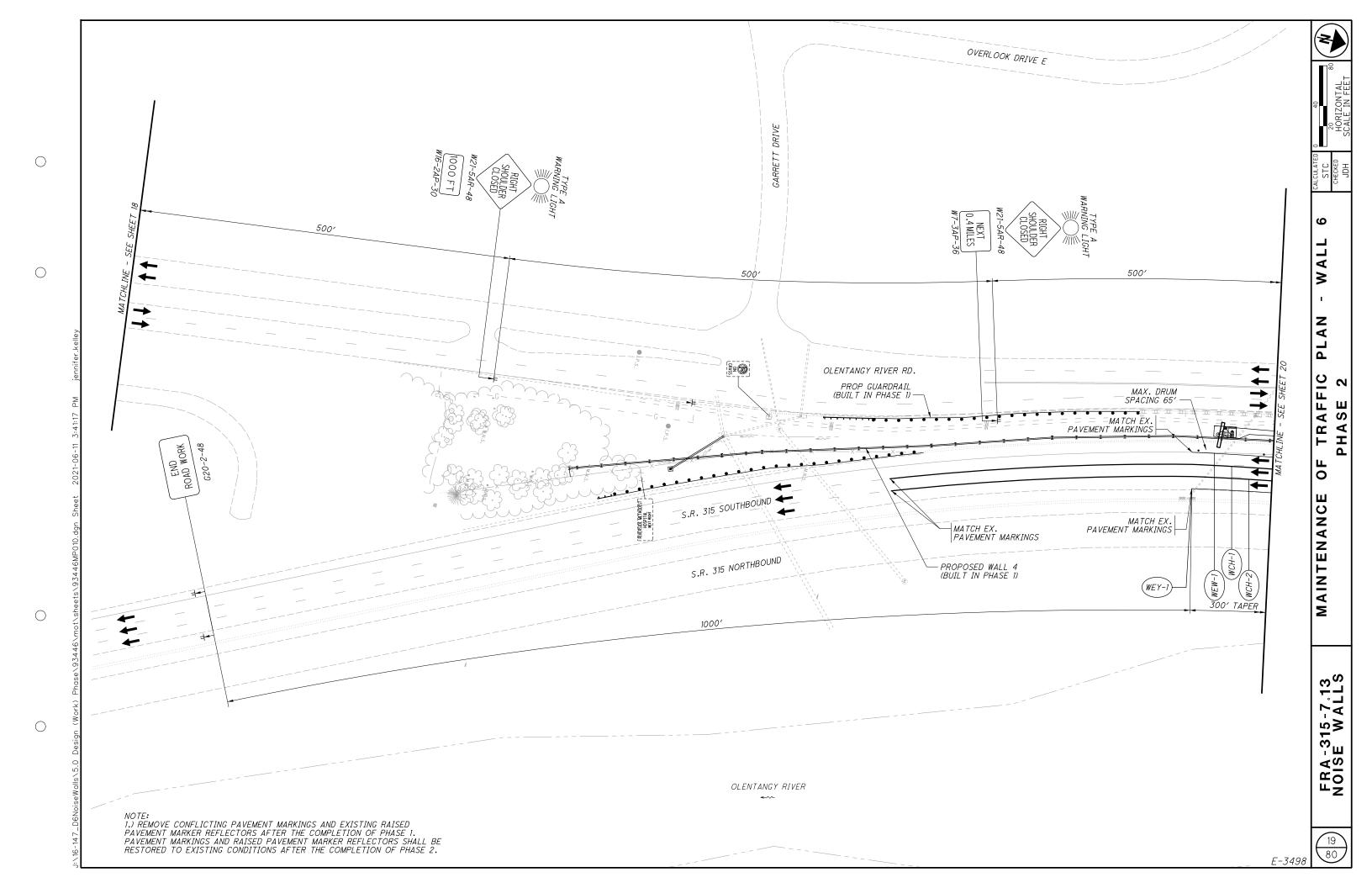
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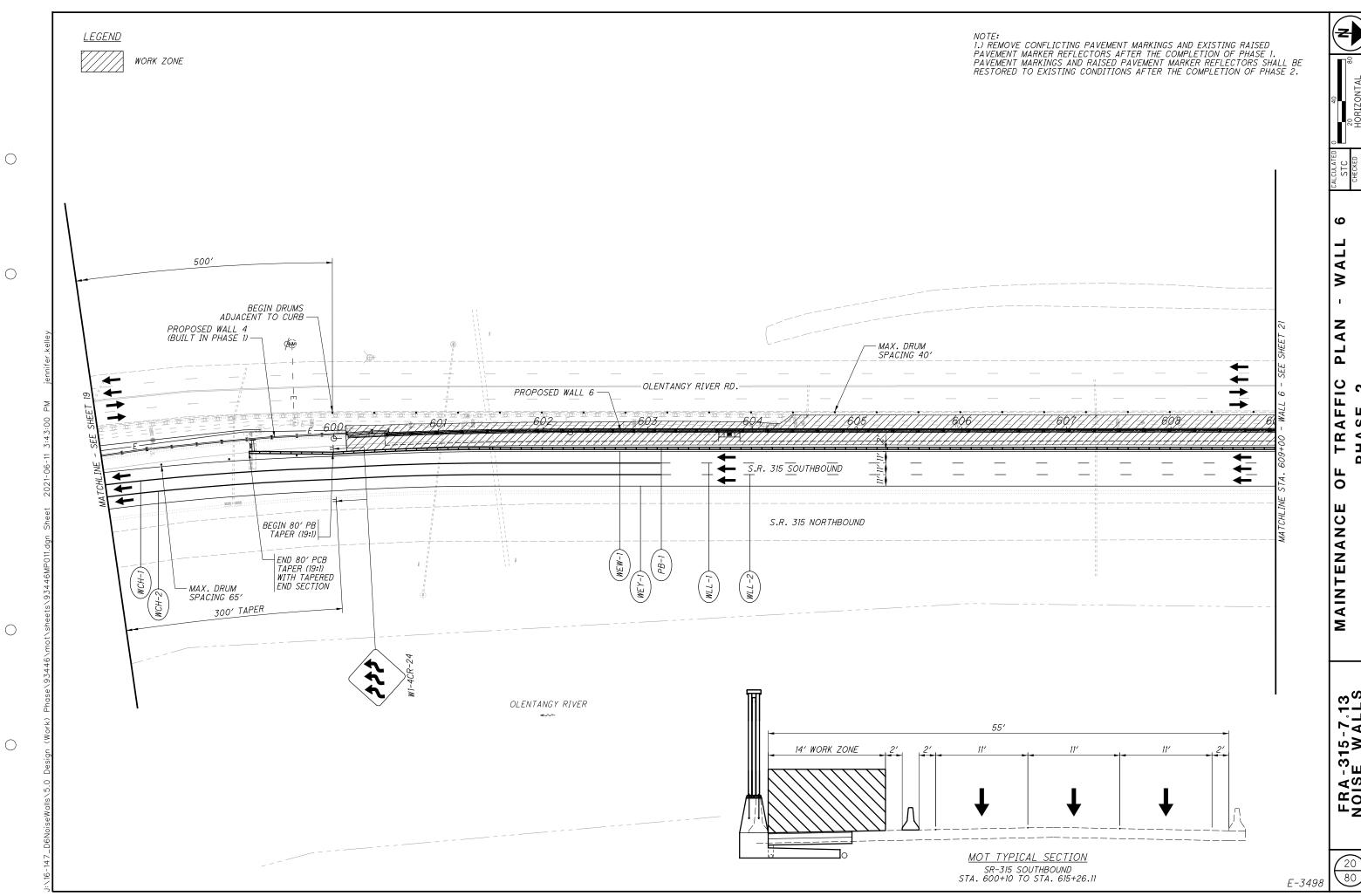
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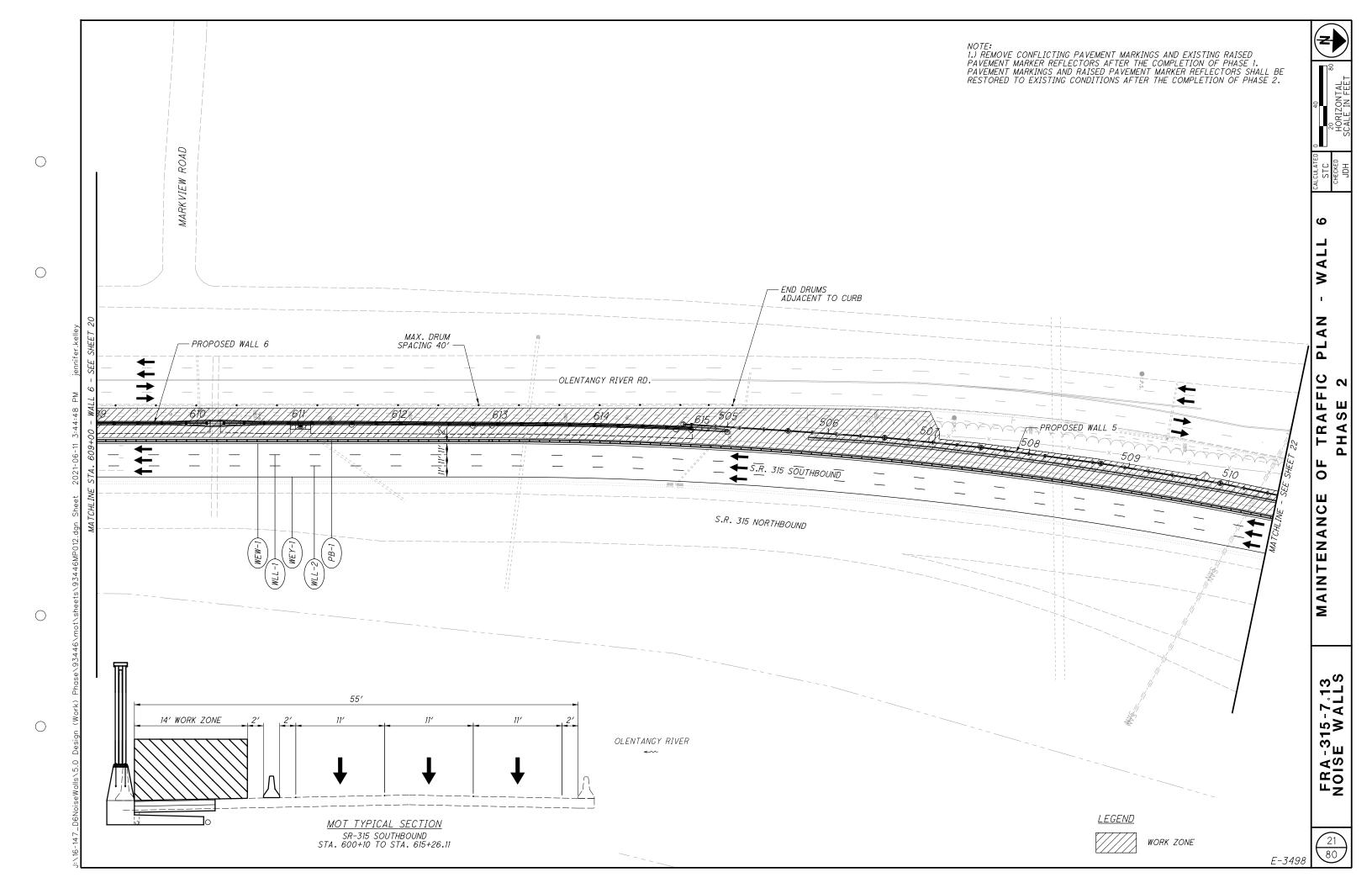


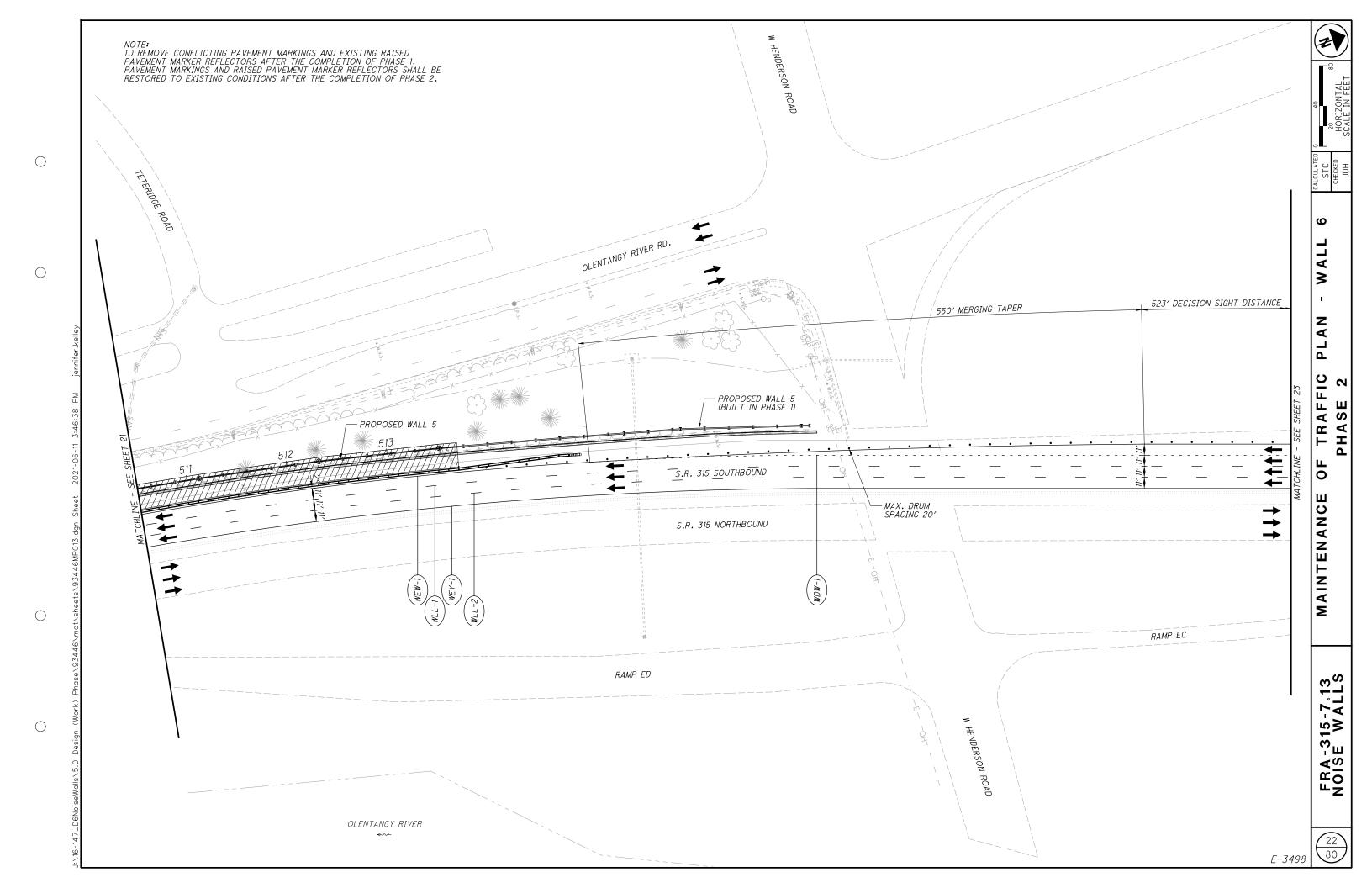


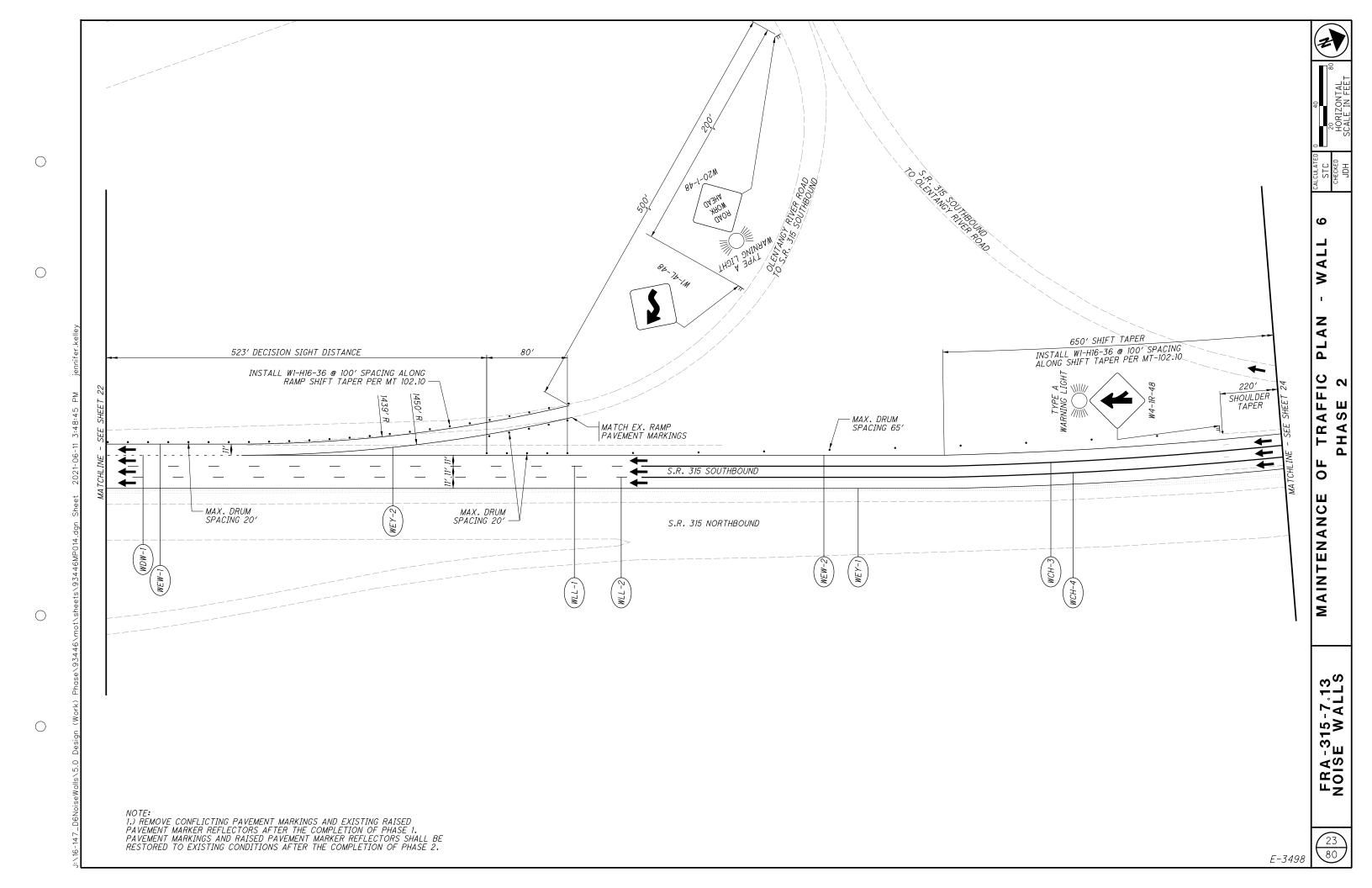
WALL

TRAFFIC PHASE 2

FRA-315-7,13 NOISE WALLS









FRA-315-7.13 NOISE WALLS

				SHI	EET NU	JM.		PA	RT.	ALT	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET	CULATED JMK HECKED RMH
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															ROADWAY		1
LS	2							LS			201 202	11000 58100	LS 2	EACH	CLEARING AND GRUBBING CATCH BASIN REMOVED		4
	479							479			202	75000	479	FT	FENCE REMOVED		-
	152							152			203	10000	152	CY	EXCAVATION		1
	104							104			203	20000	104	CY	EMBANKMENT		1
]
	1,858							1,858			204	10000	1,858	SY	SUBGRADE COMPACTION		4
	575							575			204 606	45000 15050	575	HOUR FT	PROOF ROLLING GUARDRAIL, TYPE MGS		4
	1							1			606	26150	3/3	EACH	ANCHOR ASSEMBLY, MGS TYPE E		4
	1							1			606	26550	1		ANCHOR ASSEMBLY, MGS TYPE T		1
]
	1							1			606	35102	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2		4
	1,138							1,138			606	98000	1,138	FT	GUARDRAIL, MISC.: GUARDRAIL PANELS REMOVED AND REATTACHED FENCE, TYPE CLT	5	4
	17							17			607	23000	17	FT	FENCE, TIPE CLT		-
															EROSION CONTROL		1
	9,063							9,063			659	10000	9,063	SY	SEEDING AND MULCHING		
	454							454			659	14000	454	SY	REPAIR SEEDING AND MULCHING		A B
<u> </u>	454							454			659	15000	454	SY	INTER-SEEDING		
<u> </u>	1.26 1.87							1.26 1.87			659 659	20000 31000	1.26 1.87	TON ACRE	COMMERCIAL FERTILIZER LIME		Σ
	1.01							1.01			000	31000	7.07	AUNL	LINL		
D C	51							51			659	35000	51	MGAL	WATER		∃ ເຣ
								LS			832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN]
								LS			832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		┨╶┇
≥								LS 51,000			832	15010 30000	LS 51,000	EACH	STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE EROSION CONTROL		
								31,000			832	30000	51,000	EACH	EROSION CONTROL		— Ж
<u>:</u>															DRAINAGE		
,	1,868							1,868			605	13300	1,868	FT	6" UNCLASSIFIED PIPE UNDERDRAINS		│
30								30			611	04400	30	FT	12" CONDUIT, TYPE B, 706.02		_
	62							62			611	06100	62	FT	15" CONDUIT, TYPE C		4
40								40 15			611 611	07400 10400	40 15	FT FT	18" CONDUIT, TYPE B, 706.02 24" CONDUIT, TYPE B, 706.02		-
								13			011	10400	13	FI	24 CONDUIT, TITE B, 100.02		-
LS								LS			611	97300	LS		CONDUIT, MISC.: STORM SEWER PROTECTION	4	1
LS								LS			611	97300	LS		CONDUIT, MISC.: EXISTING 36" SANITARY SEWER LINE LOCATES	4]
Ď	1							1			611	98510	1		CATCH BASIN, NO. 2-3		_
	2 228							2 228			611 899	99114 10000	2 228	EACH FT	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D CURED-IN-PLACE PIPE LINER (15" DIAMETER)		4
2	220							220			099	10000	220	F I	CORED-IN-FLACE FIFE LINER (IS DIAMETER)		4
1															PAVEMENT		1
5)	362							362			301	46000	362	CY	ASPHALT CONCRETE BASE, PG64-22		
20	465							465			304	20000	465	CY	AGGREGATE BASE		
<u></u>	112 78							112 78			407 441	10000 10000	112 78	GAL CY	TACK COAT ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22		4
<u> </u>	1,145							1,145			609	24510	1,145	FT	CURB, TYPE 4-C		-
8	,,,,,,							1,7773			000	27070	1,7,70				1
															WATER WORK]
LS								LS			638	98100	LS		WATER WORK, MISC.: CITY OF COLUMBUS DIVISION OF WATER 42" WATERLINE PROTECTION	4	_
<u> </u>									-						TRAFFIC SURVEILLANCE		4
		1,388							1,388		625	23000	1,388	FT	NO. 4 AWG 600 VOLT DISTRIBUTION CABLE		ქ გ თ
		302							302		625	25408	302	FT	CONDUIT, 2", 725.051		13 LS
		233							233		625	25750	233	FT	CONDUIT, 4", MULTICELL, 725.20 , EPC-40		⊱A
		525							525		625	29011	525	FT	TRENCH, 30" DEEP, AS PER PLAN	76	│ ≒
	 	1							1		625	30700	1	EACH	PULL BOX, 725.08, 18"		-315- E W
<u> </u>		1							1		625	30710	1	EACH	PULL BOX, 725.08, 32"		ქ ო
		2							2		625	32000	2	EACH	GROUND ROD		1 - 5
		1							1		625	32001	1	EACH	GROUND ROD, AS PER PLAN	76	FRA NOIS
		1							1		625	34001	1	EACH	POWER SERVICE, AS PER PLAN	76	╛╬╚
		525							525		625	36010	525	FT	UNDERGROUND WARNING/MARKING TAPE		_
		,							,		670	70044	,	EAC!!	OVERHEAD SION SURPORT, DUS DEDESTAL		4
<u> </u>		1 1							1		630 630	70044 70060	1 1	EACH EACH	OVERHEAD SIGN SUPPORT, DMS PEDESTAL CATWALK, DMS PEDESTAL		↓
		1 1							1		630	70082	1 1	EACH	OVERHEAD SIGN SUPPORT FOUNDATION, DMS PEDESTAL		1/26
		1							1		633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN	76	26
	I	1							1		633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN E-34	98 76	$\mathcal{L}^{\mathcal{C}}$

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7	18	28	58	77				01/NHS/OT	02/NHS/O T	(X)		EXT	TOTAL	01111	BESSIII TION	NO.
															TRAFFIC SURVEILLANCE (CONT.)	
				2,059					2,059		804	15010	2,059	FT	FIBER OPTIC CABLE, 24 FIBER	
				1					1		804	34022	1	EACH	FIBER TERMINATION PANEL, 24 FIBER	
				1					1		804	37000	1	EACH	SPLICE ENCLOSURE, BUTT STYLE	
				160					160		809	64550	160	FT	ETHERNET CABLE, OUTDOOR-RATED	
				1					1		809	65040	1	EACH	ITS CABINET - DMS	
				1					1		809	65990	1	EACH	ITS DEVICE, MISC.: REMOVAL OF DMS CABINET	76
				1					1		809	65990	1	EACH	ITS DEVICE, MISC.: REMOVAL OF DMS SIGN	76
												22721		5.00	TRAFFIC CONTROL	
	115							115			621	00301	115		RPM REFLECTOR, AS PER PLAN	18
	115							115			621	54001	115	EACH	RAISED PAVEMENT MARKER REMOVED, AS PER PLAN	18
		1						1			630	85400	1	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
	1.04	2						2			630	86102	2	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
	1.84							1.84			644	00104	1.84	MILE	EDGE LINE, 6"	
	0.00							0.00			244	00004		141.5	LANGUE OF	
	2.06							2.06			644	00204	2.06	MILE	LANE LINE, 6"	
	589							589			644	00404	589	FT	CHANNELIZING LINE, 12"	
	840							840			644	01520	840	FT	DOTTED LINE, 12"	
	0.06		1					0.06			646	10010	0.06	MILE	EDGE LINE, 6"	
	0.06							0.06			646	10110	0.06	MILE	LANE LINE, 6"	
	150							150			646	20510	150	FT	DOTTED LINE, 12"	
															WALL 6	
			2,073					2,073			202	23000	2,073	SY	PAVEMENT REMOVED	
			1,513					1,513			202	30700	1,513	FT	CONCRETE BARRIER REMOVED	
			LS					LS			503	21300	LS		UNCLASSIFIED EXCAVATION	
			181,011					181,011			509	10000	181,011	LB	EPOXY COATED REINFORCING STEEL	
			592					592			511	46012	592	CY	CLASS QCI CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING	
			1,162					1,162			511	46512	1,162	CY	CLASS QCI CONCRETE WITH QC/QA, FOOTING	
			1,737					1,737			512	10100	1,737	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
			26					26			516	13600	26	SF	1" PREFORMED EXPANSION JOINT FILLER	
		_	801					801			516	13900	801	SF	2" PREFORMED EXPANSION JOINT FILLER	
		_	13,462					13,462			SPECIAL	60610920	13,462	SF	NOISE BARRIER, MISC.: BARRIER MOUNTED NOISE WALL	58
		_									200			51011	DIRECT TO WOLFFOR ALL OF SERVICE	
			2					2			622	10201	2	EACH	BARRIER TRANSITION, AS PER PLAN	73
			2					2			622	90200	2	EACH	BARRIER, MISC.: END ANCHORAGE, REINFORCED	73
															NOICE DARRIERC	
		75.050						75 050			CDECTAL	00010010	75.050	SF	NOISE BARRIER (REFLECTIVE)	
		<i>35,256</i>						<i>35,256</i>			SPECIAL	60610210	<i>35,256</i>	3F	NOISE BARRIER (REFLECTIVE)	4
															MAINTENANCE OF TRAFFIC	
								040			C14	11110	640	HOUD	MAINTENANCE OF TRAFFIC	
640								640			614	11110	640	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	2,580	_						2,580			614	11630	2,580	FT	INCREASED BARRIER DELINEATION	
	1	-						1			614	12380	1	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
								LS			614	12420	LS	51011	DETOUR SIGNING	
								4			614	12484	4	EACH	WORK ZONE INCREASED PENALTIES SIGN	
	070	+						070			614	10001	276	EAC!!	WORK TONE DATCED DAVENENT MARKED AC DED DI AN	10
	276							276			614	12801	276	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	18
	52							52 52			614	13310	52 52	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	
	52							52			614	13350	52		OBJECT MARKER, ONE WAY	+ -
	,,,	+	-					8			614	18601 20200	8	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
	1.3	+	-				 	1.3			614	20200	1.3	MILE	WORK ZONE LANE LINE, CLASS I, 4", 740.06, TYPE I	_
								2.01	-		614	22200	2.01	₩	WORK JONE EDGE LINE CLASS I AN JAN OF TYPE I	
	2.01	1						2.01			614	22200	2.01		WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE I	-
	2.01		1					4,323			614	23400	4,323	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 740.06, TYPE I	
	4,323							830			614	24400	830	FT	WORK ZONE DOTTED LINE, CLASS I, 4", 740.06, TYPE I RPM	
	4,323 830					I		276 2,580			621	00100	276	EACH		
	4,323 830 276							. ∠.580	i		622	41100	2 , 580	FT	PORTABLE BARRIER, UNANCHORED	_
	4,323 830														INCIDENTALS	
	4,323 830 276												1			
	4,323 830 276								1.6		014	11000	1.6			
	4,323 830 276							LS	LS		614	11000	LS	INIT!!	MAINTAINING TRAFFIC	
	4,323 830 276							LS 6			619	16010	6	MNTH	MAINTAINING TRAFFIC FIELD OFFICE, TYPE B	
	4,323 830 276							LS 6 LS	LS		619 623	16010 10000	6 LS	MNTH	MAINTAINING TRAFFIC FIELD OFFICE, TYPE B CONSTRUCTION LAYOUT STAKES AND SURVEYING	
	4,323 830 276							LS 6			619	16010	6	MNTH	MAINTAINING TRAFFIC FIELD OFFICE, TYPE B	
	4,323 830 276							LS 6 LS	LS		619 623	16010 10000	6 LS	MNTH	MAINTAINING TRAFFIC FIELD OFFICE, TYPE B CONSTRUCTION LAYOUT STAKES AND SURVEYING MOBILIZATION	
	4,323 830 276			,				LS 6 LS	LS	X	619 623	16010 10000	6 LS		MAINTAINING TRAFFIC FIELD OFFICE, TYPE B CONSTRUCTION LAYOUT STAKES AND SURVEYING	

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I-2.3 REVISED 01-15-16 NBS-1-09 REVISED 01-19-18 RM-4.4 REVISED 07-19-19

DESIGN SPECIFICATIONS:

THESE STRUCTURES CONFORM TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), 8TH EDITION, AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THESE STRUCTURES IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

DESIGN DATA:

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CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.5 KSI (CAST-IN-PLACE WALL)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

FOUNDATION BEARING RESISTANCE:

WALL 6 FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 5.0 KIPS PER SQUARE FOOT AND MAXIMUM STRENGTH LOAD PRESSURE OF 6.2 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 7.2 KIPS PER SQUARE FOOT.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

NOISE WALL SHOP DRAWINGS:

THE CONTRACTOR'S NOISE WALL SHOP DRAWINGS SHALL INCLUDE THE ACOUSTICAL PROFILE ON ALL SHOP DRAWING SUBMITTALS.

NOISE WALL ANCHORS:

ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE NOISE WALL ANCHOR RODS TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF ANCHORS.

ITEM 606, SPECIAL - NOISE BARRIER: BARRIER MOUNTED NOISE WALL:

THE CONTRACTOR SHALL PERFORM THIS ITEM OF WORK AS STATED IN STANDARD CONSTRUCTION DRAWING NBS-1-09, EXCEPT AS MODIFIED ON SHEETS 55 - 75. ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 606, SPECIAL - NOISE BARRIER: BARRIER MOUNTED NOISE WALL FOR PAYMENT.

FOR COLOR AND TEXTURE, SEE SHEET 54 OF 80.

ABBREVIATIONS:

THE FOLLOWING ABBREVIATIONS ARE USED THROUGHOUT THESE PLANS:

₽ = BASELINE BOTT. = BOTTOM ₽ = CENTERLINE CIP = CAST IN PLACE C.J. = CONTRACTION JOINT BRG = BEARING CMS = CONSTRUCTION AND MATERIAL SPECIFICATIONS CONC = CONCRETE DND = DO NOT DISTURB EF = EACH FACE E.J. = EXPANSION JOINT FF = FAR FACE FTG. = FOOTING NF = NEAR FACE EL = ELEVATION EX = EXISTING NPCPP = NON-PERFORATED CORRUGATED PLASTIC PIPE PROP = PROPOSED TYP = TYPICAL PEJF = PREFORMED EXPANSION JOINT FILLER PCPP = PERFORATED CORRUGATED PLASTIC PIPE TBR = TO BE REMOVED

TBRBO = TO BE REMOVED BY OTHERS

			ESTIMATED C	QUANTITIES CHECKED BY: SS DATED: CHECKED BY: AIS DATED:	7-13-18 7-13-18
ITEM	ITEM EXTENSION	TOTAL	UNITS	DESCRIPTION	REF. SHEET
202	23000	2,073	SY	PAVEMENT REMOVED	
202	30700	1,513	FT	CONCRETE BARRIER REMOVED	
503	21300	LUMP		UNCLASSIFIED EXCAVATION	
509	10000	181,011	POUND	EPOXY COATED REINFORCING STEEL	
511	46012	592	CY	CLASS QCI CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING	
511	46512	1 , 162	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
512	10100	1,737	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
<i>516</i>	13600	26	SF	1" PREFORMED EXPANSION JOINT FILLER	
<i>516</i>	13900	801	SF	2" PREFORMED EXPANSION JOINT FILLER	
SPECIAL	60610920	13,462	SF	NOISE BARRIER: BARRIER MOUNTED NOISE WALL	4 OF 21
622	10201	2	EACH	BARRIER TRANSITION, AS PER PLAN	19 OF 21
622	90200	2	EACH	BARRIER, MISC.: END ANCHORAGE, REINFORCED	19 OF 21
			<u> </u> ITE	MS CARRIED TO THE GENERAL SUMMARY	

106877

PID No.

FRA-315-7.13

DESIGN IBI GROUP 8101 North H Columbus Of tel 614 818 41

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ESTIMATED QUANTITIES CONCRETE WALL

S GIP

NOTES WALL 6,

GENERAL