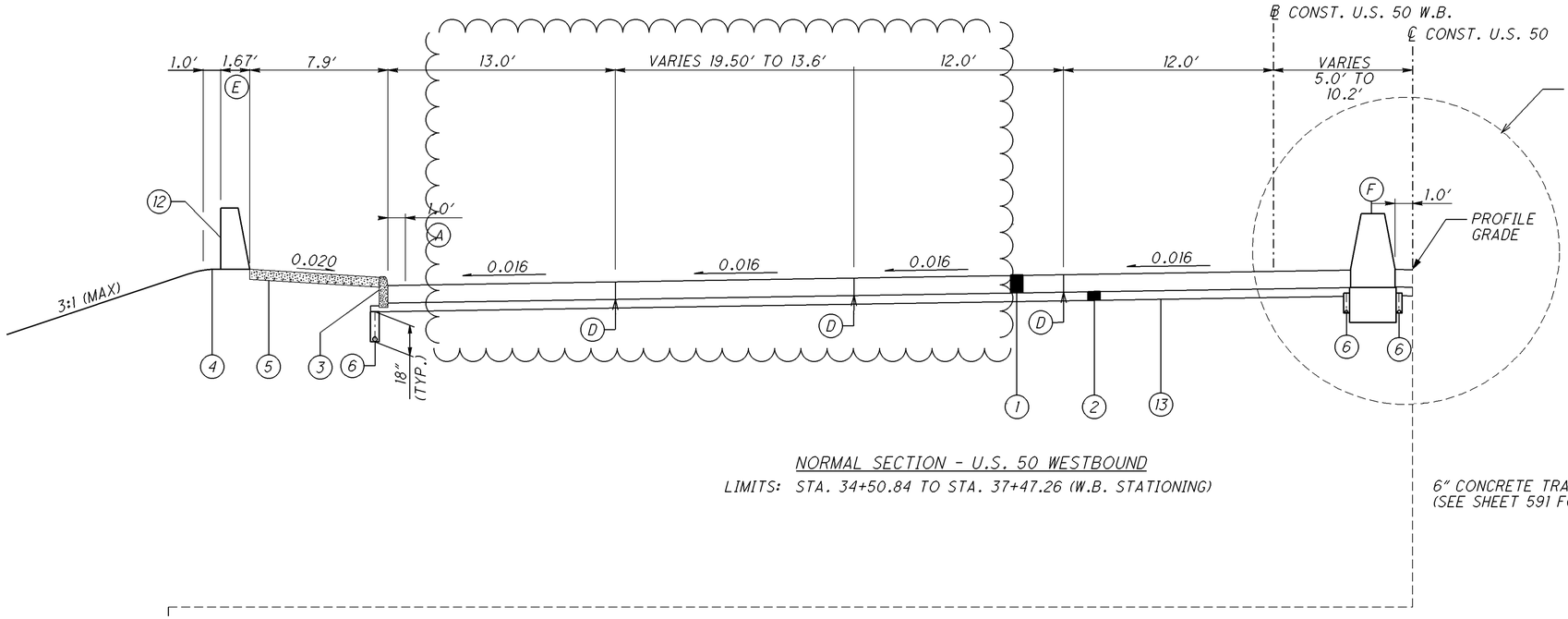


NOTES:

(A) VARIES 1.0′ TO 1.9′ STA. 35+98.40 TO STA. 37+47.26

(B) VARIES 4.0′ TO 0.0′ STA. 34+88.52 TO STA. 36+94.68

(C) END ℄ FOR E.B. WARSAW RAMP @ STA. 34+94.68 U.S. 50

(D) LONGITUDINAL JOINT PER BP-2.1

(E) BEGIN BARRIER AT STA. 35+73.38.

(F) MEDIAN BARRIER AND FOUNDATION STA. 37+63.19 TO STA. 38+77.00 (SEE SHEET 591 FOR TYPICAL SECTIONS)

(1) ITEM 305 - 12″ CONCRETE PAVEMENT

(2) ITEM 304 - 6″ AGGREGATE BASE

(3) ITEM 609 - CURB, TYPE 6

(4) ITEM 659 - SEEDING AND MULCHING

(5) ITEM 608 - 5″ CONCRETE WALK

(6) ITEM 605 - 6″ BASE PIPE UNDERDRAINS

(7) ITEM 840 - MECHANICALLY STABILIZED EARTH WALL

(8) ITEM 622 - CONCRETE BARRIER, TYPE D (MOUNTED ON MOMENT SLAB)

(9) ITEM 622 - CONCRETE BARRIER, TYPE C1

(10) ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=17″)

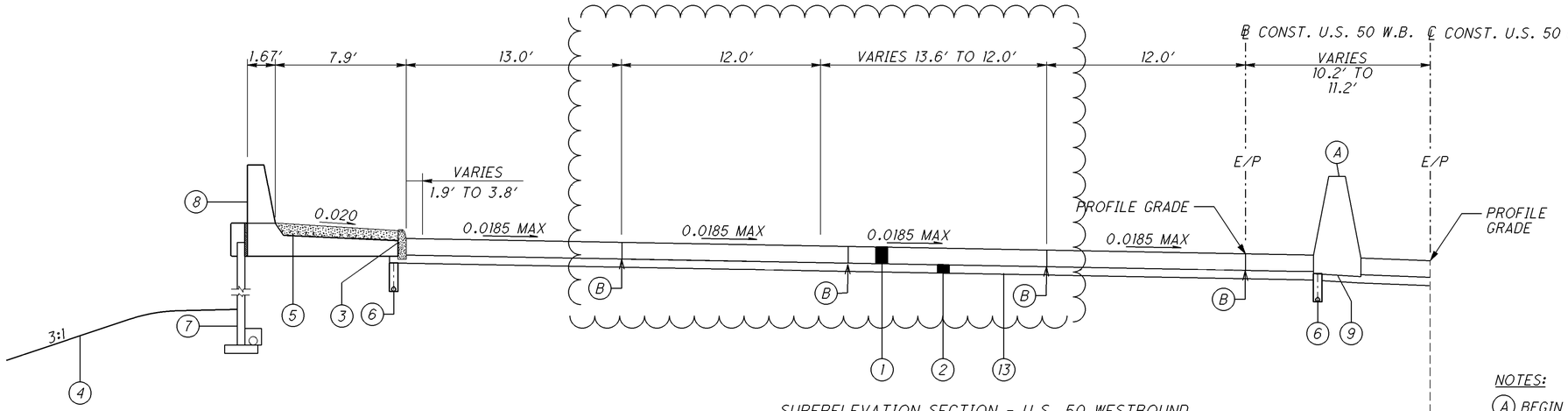
(11) ITEM 606 - GUARDRAIL, TYPE 5

(12) ITEM 622 - CONCRETE BARRIER, TYPE D

(13) ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

TYPICAL SECTIONS (U.S. 50)

HAM-50-18.79

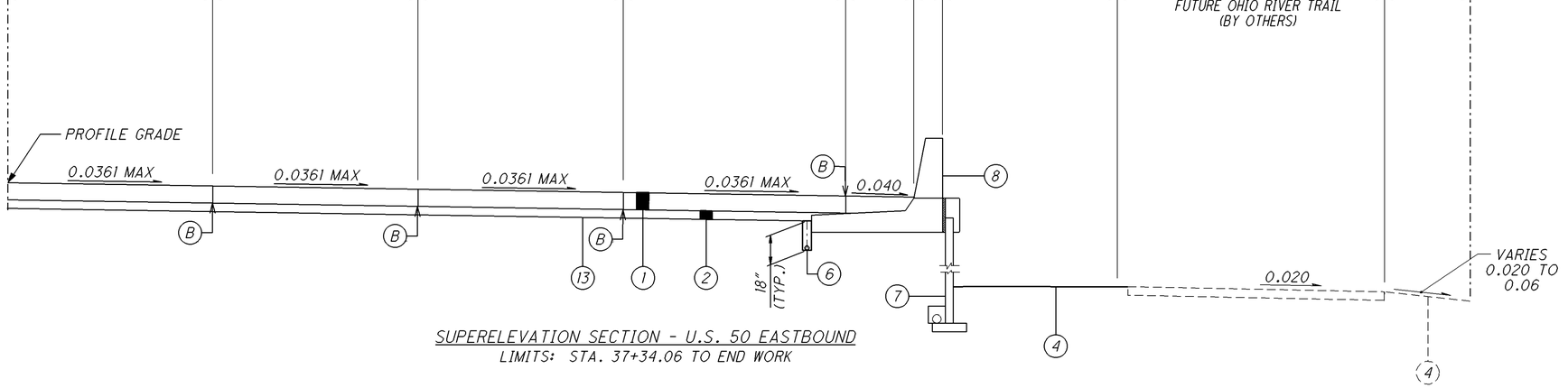


SUPERELEVATION SECTION - U.S. 50 WESTBOUND
LIMITS: STA. 37+47.26 TO END WORK (W.B. STATIONING)

NOTES:

(A) BEGIN TYPE C1 MEDIAN BARRIER STA 38+77.00 (SEE SHEETS 9 AND 591 FOR TYPICAL SECTIONS)

(B) LONGITUDINAL JOINT PER BP-2.1



SUPERELEVATION SECTION - U.S. 50 EASTBOUND
LIMITS: STA. 37+34.06 TO END WORK

(1) ITEM 305 - 12" CONCRETE PAVEMENT
(2) ITEM 304 - 6" AGGREGATE BASE
(3) ITEM 609 - CURB, TYPE 6
(4) ITEM 659 - SEEDING AND MULCHING
(5) ITEM 608 - 5" CONCRETE WALK
(6) ITEM 605 - 6" BASE PIPE UNDERDRAINS
(7) ITEM 840 - MECHANICALLY STABILIZED EARTH WALL
(8) ITEM 622 - CONCRETE BARRIER, TYPE D (MOUNTED ON MOMENT SLAB)
(9) ITEM 622 - CONCRETE BARRIER, TYPE C1
(10) ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=17")
(11) ITEM 606 - GUARDRAIL, TYPE 5
(12) ITEM 622 - CONCRETE BARRIER, TYPE D
(13) ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

TYPICAL SECTIONS (U.S. 50)

HAM-50-18.79

SHEET NUMBER														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
21	22	23	87	88	89	90	91	92	93	94	191	192	194						
																		ROADWAY	
								LUMP						201	11000	LUMP		CLEARING AND GRUBBING	
			15256		6476		6685		10617					202	23000	39034	SQ YD	PAVEMENT REMOVED	
			23003		8385		11023		12747					202	30000	55158	SQ FT	WALK REMOVED	
			22				47							202	30200	69	FT	STEPS REMOVED	
									LUMP					202	30204	LUMP		STEPS REMOVED	
			6986		2791		3046		2443					202	32000	15266	FT	CURB REMOVED	
													3553	202	35100	3553	FT	PIPE REMOVED, 24" AND UNDER	
													373	202	35200	373	FT	PIPE REMOVED, OVER 24"	
													28	202	58000	28	EACH	MANHOLE REMOVED	
													100	202	58100	100	EACH	CATCH BASIN REMOVED	
													23	202	58700	23	EACH	MANHOLE ABANDONED	
		5												202	66500	5	EACH	UNDERGROUND STORAGE TANK REMOVED	
			443		132				143					202	75000	718	FT	FENCE REMOVED	
														202	98000	LUMP		REMOVAL MISC.: STORMWATER DIVERSION CHAMBER	195
									210					202	98200	210	FT	REMOVAL MISC.: WALL REMOVED	
								10972						203	10000	10972	CU YD	EXCAVATION	
								65442						203	20000	65442	CU YD	EMBANKMENT	
			25371		5025		8989		4170					204	10000	43555	SQ YD	SUBGRADE COMPACTION	
								4246		1108				204	13000	5354	CU YD	EXCAVATION OF SUBGRADE	
								4246		1108				204	30020	5354	CU YD	GRANULAR MATERIAL, TYPE C	
40														204	45000	40	HOUR	PROOF ROLLING	
										3325				204	50000	3325	SQ YD	GEOTEXTILE FABRIC	
			146					229						606	13000	375	FT	GUARDRAIL, TYPE 5	
			2											606	22000	2	EACH	ANCHOR ASSEMBLY, TYPE B-98	
								1						606	22010	1	EACH	ANCHOR ASSEMBLY, TYPE E-98	
				4		4								606	26500	8	EACH	ANCHOR ASSEMBLY, TYPE T	
								1						606	35100	1	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	
			2					2						606	35140	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4	
				20540		7156		9680	9545					608	12000	46921	SQ FT	5" CONCRETE WALK	
						45			40					608	40000	85	FT	CONCRETE STEPS, TYPE A	
				804		300		215	687					608	52000	2006	SF	CURB RAMP	
								25						622	10060	25	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B	
				34				29						622	10140	63	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1	
				149										622	10160	149	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
						2		1						622	25000	3	EACH	CONCRETE BARRIER, END SECTION, TYPE D	
						2		1						622	25052	3	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
	315													653	10000	315	CU YD	TOPSOIL FURNISHED AND PLACED	
LUMP														690	98400	LUMP		SPECIAL - MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION	21
	LUMP													690	98400	LUMP		SPECIAL - MISC.: CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST (CAHES) INSPECTION SERVICES	22
														878	25000	LUMP		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	1
																		EROSION CONTROL	
											93			601	32204	93	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER	
	2													659	00100	2	EACH	SOIL ANALYSIS TEST	
								26396						659	10000	26396	SQ YD	SEEDING AND MULCHING	
	1400													659	14000	1400	SQ YD	REPAIR SEEDING AND MULCHING	
	1000													659	15000	1000	SQ YD	INTER-SEEDING	
	4													659	20000	4	TON	COMMERCIAL FERTILIZER	
	6													659	31000	6	ACRE	LIME	
	0.2													659	35000	0.2	M GAL	WATER	
	0.3													659	40000	0.3	M SQ FT	MOWING	
											453			670	00700	453	SQ YD	DITCH EROSION PROTECTION	
																		DRAINAGE	
											0.21			602	20000	0.21	CU YD	CONCRETE MASONRY	
												62		603	00900	62	FT	6" CONDUIT, TYPE B	
											300			603	00901	300	FT	6" CONDUIT, TYPE B, AS PER PLAN	21
											33			603	01801	33	FT	8" CONDUIT, TYPE B, AS PER PLAN	195
											2656			603	04400	2656	FT	12" CONDUIT, TYPE B	
											786			603	04401	786	FT	12" CONDUIT, TYPE B, 706.02, AS PER PLAN	195
											20			603	04401	20	FT	12" CONDUIT, TYPE B, 707.01, AS PER PLAN	195
											392			603	04408	392	FT	12" CONDUIT, TYPE B, 748.01, AS PER PLAN	195

CALCULATED AWS
CHECKED MAH

GENERAL SUMMARY

HAM-50-18.79

SHEET NUMBER										ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	191	192			599										
														DRAINAGE (CONT.)	
	828									603	04600	828	FT	12" CONDUIT, TYPE C	
	389									603	05900	389	FT	15" CONDUIT, TYPE B	
	102									603	05901	102	FT	15" CONDUIT, TYPE B, AS PER PLAN	195
	15									603	06100	15	FT	15" CONDUIT, TYPE C	
	346									603	07400	346	FT	18" CONDUIT, TYPE B	
	789									603	07401	789	FT	18" CONDUIT, TYPE B, 706.02, AS PER PLAN	195
	133									603	07600	133	FT	18" CONDUIT, TYPE C	
	1074									603	10400	1074	FT	24" CONDUIT, TYPE B	
	384									603	10401	384	FT	24" CONDUIT, TYPE B, 706.02, AS PER PLAN	195
	355									603	10600	355	FT	24" CONDUIT, TYPE C	
	243									603	13400	243	FT	30" CONDUIT, TYPE B	
	404									603	13401	404	FT	30" CONDUIT, TYPE B, 706.02, AS PER PLAN	195
	110									603	97011	110	FT	12" SLOTTED DRAIN, TYPE 2, AS PER PLAN	369
	47									604	00400	47	EACH	CATCH BASIN NO. 3	
	20									604	00800	20	EACH	CATCH BASIN NO. 3A	
	4									604	02000	4	EACH	CATCH BASIN NO. 6	
	7									604	04100	7	EACH	CATCH BASIN NO. 2-2A	
	6									604	04500	6	EACH	CATCH BASIN NO. 2-2B	
	2									604	04900	2	EACH	CATCH BASIN NO. 2-3	
	2									604	09500	2	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
	1									604	15151	1	EACH	INLET, NO. 3D, AS PER PLAN	21
	1									604	11700	1	EACH	INLET, NO. 2-10	
	48									604	31500	48	EACH	MANHOLE NO. 3	
	1									604	32100	1	EACH	MANHOLE NO. 5	
	1									604	32500	1	EACH	MANHOLE, MISC: RECONSTRUCT REGULATION CHAMBER TO GRADE	21
	2									604	32500	2	EACH	MANHOLE, MISC: EXTEND SLUICE GATE CONTROL STEM	21
	13									604	34500	13	EACH	MANHOLE ADJUSTED TO GRADE	
	40									604	35500	40	EACH	MANHOLE RECONSTRUCTED TO GRADE	
		8887								605	14000	8887	FT	6" BASE PIPE UNDERDRAINS	
		38								605	13300	38	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	192
														WATER WORK	
					600					202	98200	600	FT	REMOVAL MISC.: STREET CAR RAILS REMOVED	
					7874					509	25000	7874	POUND	REINFORCING STEEL	
					1					602	98200	1	CU YD	MASONRY, MISC.: BRICK MASONRY	
					9					604	34501	9	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	
					1					638	11500	1	MBF	SHEETING AND BRACING ORDERED LEFT IN PLACE	
					20					638	80500	20	FT	SPECIAL - FURNISHING AND LAYING 4" DUCTILE IRON PIPE AND FITTINGS (CIN. 1101)	599
					232					638	80600	232	FT	SPECIAL - FURNISHING AND LAYING 6" DUCTILE IRON PIPE AND FITTINGS (CIN. 1101)	599
					459					638	80700	459	FT	SPECIAL - FURNISHING AND LAYING 8" DUCTILE IRON PIPE AND FITTINGS (CIN. 1101)	599
					31					638	80800	31	FT	SPECIAL - FURNISHING AND LAYING 10" DUCTILE IRON PIPE AND FITTINGS (CIN. 1101)	599
					158					638	80900	158	FT	SPECIAL - FURNISHING AND LAYING 12" DUCTILE IRON PIPE AND FITTINGS (CIN. 1101)	599
					2079					638	81000	2079	FT	SPECIAL - FURNISHING AND LAYING 16" DUCTILE IRON PIPE AND FITTINGS (CIN. 1101)	599
					16					638	81200	16	FT	SPECIAL - FURNISHING AND LAYING 24" DUCTILE IRON PIPE AND FITTINGS (CIN. 1101)	599
					750					638	81600	750	FT	SPECIAL - FURNISHING AND LAYING 24" PRESTRESSED CONCRETE WATER PIPE AND FITTINGS (CIN 1101)	599
					232					638	81800	232	FT	SPECIAL - FURNISHING AND LAYING 36" PRESTRESSED CONCRETE WATER PIPE AND FITTINGS (CIN 1101)	599
					6					638	82000	6	TON	SPECIAL - HAULING WATER WORK MATERIAL (CIN. 1102)	599
					66					638	84500	66	CU YD	SPECIAL - CONCRETE, CLASS C (CIN. 1110)	599
					11					638	85800	11	EACH	SPECIAL - FURNISHING AND INSTALLING FIRE HYDRANT (CIN. 1112)	599
					5					638	86000	5	EACH	SPECIAL - REMOVING FIRE HYDRANT (CIN. 1114)	599
					11					638	86100	11	EACH	SPECIAL - FURNISHING AND INSTALLING FIRE HYDRANT EXTENSION (CIN. 1115)	599
					31					638	86300	31	EACH	SPECIAL - FURNISHING AND INSTALLING VALVE BOX, COMPLETE (CIN. 1116)	599
					6					638	86302	6	EACH	SPECIAL - FIELD WELDING TIE JOINT (CIN. 1117)	599
					100					638	86400	100	CU YD	SPECIAL - ADDITIONAL EXCAVATION (CIN. 1119)	599
					100					638	86404	100	CU YD	SPECIAL - EXPLORATORY EXCAVATION (CIN. 1120)	599
					6					638	86600	6	EACH	SPECIAL - REMOVING EXISTING MANHOLE CURB AND COVER (CIN. 1122)	599
					13					638	86700	13	EACH	SPECIAL - REMOVING EXISTING VALVE BOX (CIN. 1122)	599
					100					638	86800	100	FT	SPECIAL - CHANGING 8" AND UNDER PIPE SEWER (CIN. 1123)	599
					100					638	86900	100	FT	SPECIAL - CHANGING 10" THRU 24" PIPE SEWER (CIN. 1123)	599

CALCULATED AWS
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GENERAL SUMMARY

HAM-50-18.79

SHEET NUMBER														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	23	24	25	26	27	81	87	88	89	90	91	92	93						
																		MAINTENANCE OF TRAFFIC	
			500											254	01000	500	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
				300										614	11110	300	HOURS	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
						2								614	11300	2	EACH	SPECIAL - WORK ZONE TRAFFIC SIGNAL	25
					24									614	11500	24	MONTH	WORKSITE TRAFFIC SUPERVISOR	
						3								614	12336	3	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
						13								614	12338	13	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	
				20										614	12410	20	EACH	SPEED ZONE AHEAD SYMBOL SIGN	
		LUMP												614	12420	LUMP		DETOUR SIGNING	
				20										614	12470	20	EACH	WORK ZONE SPEED LIMIT SIGN	
				20										614	12484	20	EACH	WORK ZONE INCREASED PENALTIES SIGN	
			50											614	12500	50	EACH	REPLACEMENT SIGN	
			200											614	12600	200	EACH	REPLACEMENT DRUM	
		24	50											614	13000	74	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
					13650									614	11621	13650	FT	LINEAR DELINEATION, AS PER PLAN	27
					173									614	13350	173	EACH	OBJECT MARKER, ONE-WAY (CONCRETE BARRIER)	
					24									614	18511	24	MONTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	27
						2.3								614	20200	2.3	MILE	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	
			2											614	20550	2	MILE	WORK ZONE LANE LINE, CLASS III, 642 PAINT	
						3.45								614	21200	3.45	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	
			1											614	21550	1	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
			2			8.91								614	22200	10.9	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I	
			3											614	22350	3	MILE	WORK ZONE EDGE LINE, CLASS III, 642 PAINT	
			1000			3441								614	23400	4441	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I	
						373								614	24400	373	FT	WORK ZONE DOTTED LINE, CLASS I, 740.06, TYPE I	
			150											614	24610	150	FT	WORK ZONE DOTTED LINE, CLASS III, 642 PAINT	
						755								614	25400	755	FT	WORK ZONE TRANSVERSE/DIAGONAL CLASS I, 740.06, TYPE I	
						345								614	26400	345	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	
						1170								614	27400	1170	FT	WORK ZONE CROSSWALK LINE, CLASS I, 740.06, TYPE I	
						14								614	30400	14	EACH	WORK ZONE ARROW CLASS I, 740.06, TYPE I	
		LUMP												615	10000	LUMP		ROADS FOR MAINTAINING TRAFFIC	
						7620								615	25000	7620	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	
			2											616	10000	2	M GAL	WATER	
						11725								622	40020	11725	FT	PORTABLE CONCRETE BARRIER, 32"	
						400								622	40030	400	400	PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED	
																		PAVEMENT	
							5165		838		1498		1390	304	20000	8891	CU YD	6" AGGREGATE BASE	
							24097		4234		8023			305	16000	36354	SQ YD	12" CONCRETE BASE	
							18				724			452	12000	742	SQ YD	8" NON-REINFORCED CONCRETE PAVEMENT (DRIVEWAY)	
													3850	452	15000	3850	SQ YD	12" NON-REINFORCED CONCRETE PAVEMENT (DRIVEWAY)	
								6190		865		2501	1461	609	26000	11017	FT	CURB, TYPE 6	
	LUMP													690	12160	LUMP		SPECIAL - TESTING (MATERIAL SAMPLING)	23
	250													690	65000	250	TON	SPECIAL - WORK INVOLVING NON-REGULATED MATERIALS	23
	7500													690	65010	7500	TON	SPECIAL - WORK INVOLVING SOLID WASTE	23
	125													690	65014	125	TON	SPECIAL - WORK INVOLVING HAZARDOUS WASTE	23
	2000													690	65016	2000	TON	SPECIAL - WORK INVOLVING PETROLEUM-CONTAMINATED SOIL	23
	100000													690	65020	100000	GAL	SPECIAL - WORK INVOLVING WATER	23
	50000													690	65024	50000	GAL	SPECIAL - WORK INVOLVING REGULATED WATER	23
	5													690	65300	5	EACH	SPECIAL - GROUND WATER MONITORING WELL ABANDONMENT	23
	5													690	65310	5	EACH	SPECIAL - ACTIVE GROUND WATER MONITORING WELL RECONSTRUCTION	23
	5													690	65310	5	EACH	SPECIAL - ACTIVE GROUND WATER MONITORING WELL GRADE ADJUSTMENT	23
	2000													690	98800	2000	TON	SPECIAL - TEMPORARY STORAGE OF CONTAMINATED MATERIAL	23
														108	10000	LUMP		SPECIAL - CPM PROGRESS SCHEDULE	
														619	16020	24	MONTH	FIELD OFFICE, TYPE C	
		LUMP												614	11000	LUMP		MAINTAINING TRAFFIC	
														623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
														623	11000	1	EACH	PROVIDING ELECTRONIC INSTRUMENTATION	
														623	11100	16	HOURS	TECHNICAL ASSISTANCE	
														624	10000	LUMP		MOBILIZATION	

CALCULATED NG CHECKED MAH

GENERAL SUMMARY

HAM-50-18.79

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 Pavement Removed	202 Curb Removed	202 Walk Removed	202 Fence Removed	202 Building Demolished	202 Steps Removed	204 Subgrade Compaction	304 6" Aggregate Base	305 12" Concrete Base	452 8" Non-Reinforced Concrete Pavement	606 Guardrail, Type 5	606 Bridge Terminal Assembly, Type 4	606 Anchor Assembly, Type B-98					
						LF	LF	SF	LF	LUMP	SF	SY	CY	SY	SY	LF	EA	EA					
95		River Road	11+54.26	13+00.00	LT & RT	971						858	143	826									
95	R1	River Road	11+54.26	13+00.00	LT		145																
95	R2	River Road	11+54.26	13+00.00	RT		146																
95	R3	River Road	11+54.26	13+00.00	LT			1260															
95	R4	River Road	11+54.26	13+00.00	RT			986															
95	R5	River Road	11+54.26	13+00.00	LT				147														
96		River Road	13+00.00	17+00.00	LT & RT	1999						2773	462	2635									
96	R1	River Road	13+00.00	17+00.00	LT		400																
96	R2	River Road	13+00.00	17+00.00	RT		401																
96	R3	River Road	13+00.00	17+00.00	LT			2529															
96	R4	River Road	13+00.00	17+00.00	RT			233															
97		River Road	17+00.00	22+00.00	LT & RT	3312						4059	677	3731									
97	R1	River Road	17+00.00	18+50.00	LT		260	1627															
97	R2	River Road	18+50.00	20+00.00	LT		322	2110															
97	R3	River Road	19+50.00	22+00.00	LT		379	2682															
97	R4	River Road	18+33.00	22+00.00	RT		367																
98		River Road	22+00.00	27+00.00	LT & RT	1973						3254	542	3143									
98	R1	River Road	22+00.00	24+50.00	LT		250	1396															
98	R2	River Road	22+00.00	27+00.00	LT & RT		500																
98	R3	River Road	24+40.00	24+90.00	LT		105																
98	R4	River Road	25+50.00	25+65.00	LT		157																
98	R5	River Road	26+50.00	27+00.00	LT		30	1888															
98	R6	River Road	26+16.00		LT					1													
99		River Road	27+00.00	32+00.00	LT & RT	2280						4166	694	4054									
99	R1	River Road	27+00.00	32+00.00	LT		500																
99	R2	River Road	27+00.00	32+00.00	RT		498																
99	R3	River Road	27+00.00	32+00.00	LT			3701															
100		River Road	32+00.00	37+00.00	LT & RT	3329						6554	1092	6226									
100	R1	River Road	32+00.00	34+90.00	LT		328	2430															
100	R2	River Road	32+00.00	37+00.00	LT & RT		500																
100	R3	River Road	35+15.00	37+00.00	LT		587	905															
102		River Road	37+00.00	41+03.52	LT & RT	964						2804	1402	2755									
102	R1	River Road	37+00.00	41+03.52	LT		885																
102	R2	River Road	37+00.00	41+03.52	LT						22												
102	R3	River Road	37+00.00	41+03.52	LT				296														
102	R4	River Road	39+00		LT					1													
126		EB Elberon Ramp	50+00.00	53+00.00	LT & RT	428						871	147	727									
126	R1	EB Elberon Ramp	50+00.00	52+00.00	LT		226																
126	R2	EB Elberon Ramp	50+00.00	52+00.00	LT			1256															
126	D1	EB Elberon Ramp	50+40.00		RT							32	5		18								
126	GR-3	EB Elberon Ramp	52+37.61	53+00.00	LT											73	1	1					
126	GR-3	EB Elberon Ramp	52+04.23	53+00.00	RT											73	1	1					
TOTALS CARRIED TO GENERAL SUMMARY						15256	6986	23003	443	2	22	25371	5165	24097	18	146	2	2					

CALCULATED AWS
CHECKED MAH

ROADWAY SUB-SUMMARY

HAM-50-18.79

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 Pavement Removed	202 Curb Removed	202 Walk Removed	202 Fence Removed	202 Building Demolished	204 Subgrade Compaction	304 6" Aggregate Base	305 12" Concrete Base
						FT	FT	SF	FT	LUMP	SY	CY	SY
128		EB Elberon Ramp	53+00.00	53+96.20	LT & RT						465	78	325
130		EB Elberon Ramp	58+00.00	62+77.25	LT & RT						518	86	380
134		WB Elberon Ramp	90+00.00	94+00.00	LT & RT	306					583	97	448
134	R1	WB Elberon Ramp	90+00	91+24.28	LT		124	641					
134	R2	WB Elberon Ramp	90+00	91+24.67	RT		125						
136		WB Elberon Ramp	94+00.00	99+00.00	LT & RT						364	61	239
136	R1	WB Elberon Ramp	97+79.20	99+00	LT & RT			632					
136	R2	WB Elberon Ramp	97+79.20	99+00	RT				132				
136	R3	WB Elberon Ramp	98+00		RT					1			
138		WB Elberon Ramp	99+00.00	103+70.06	LT & RT	2706					2080	347	2001
138	R1	WB Elberon Ramp	99+00	101+55	LT		303						
138	R2	WB Elberon Ramp	99+00	101+55	LT & RT		303						
138	R3	WB Elberon Ramp	99+00	101+55	LT		304						
138	R4	WB Elberon Ramp	99+00	101+55	LT		244						
138	R5	WB Elberon Ramp	101+90	102+45	LT		107	314					
138	R6	WB Elberon Ramp	99+00	101+55	LT			1805					
138	R7	WB Elberon Ramp	101+90	103+70.06	LT		170	1323					
138	R8	WB Elberon Ramp	99+00	101+55	LT & RT			2245					
142		EB Warsaw Ramp	70+00.00	73+00.00	LT & RT	1170					621	104	582
142	R1	EB Warsaw Ramp	72+00	73+00	RT			272					
142	R2	EB Warsaw Ramp	72+00	73+00	RT		256						
142	R3	EB Warsaw Ramp	70+00	73+00	RT		268						
143		EB Warsaw Ramp	73+00.00	74+14.74	LT & RT						375	63	259
143		EB Warsaw Ramp	73+00.00	75+14.08	LT & RT	1132							
143	R1	EB Warsaw Ramp	73+00	74+20.81	RT	530	271						
143	R2	EB Warsaw Ramp	73+00	74+84.74	RT	632	221	1153					
143	R3	EB Warsaw Ramp	74+54.31	74+69.65	RT		41						
143	R4	EB Warsaw Ramp	74+01.44	74+52.54	LT & RT		54						
143	R5	EB Warsaw Ramp	77+00		LT & RT					1			
145		EB Warsaw Ramp	78+00.00	83+00.00	LT & RT						19	3	
TOTALS CARRIED TO GENERAL SUMMARY						6476	2791	8385	132	2	5025	838	4234

CALCULATED AWS
CHECKED MAH

ROADWAY SUB-SUMMARY

HAM-50-18.79

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	606 Anchor Assembly, Type T	608 Curb Ramp	608 5" Concrete Walk	608 Concrete Steps, Type A	609 Curb Type 6	622 Concrete Barrier, End Section, Type D	622 Concrete Barrier, End Anchor, Reinf, Type D
						EA	SF	SF	FT	FT	EA	EA
128	B1	EB Elberon Ramp	53+45	53+96.20	LT						1	1
128	B2	EB Elberon Ramp	53+35	53+70	RT						1	1
128	C1	EB Elberon Ramp	53+00	53.68	LT					20		
128	C2	EB Elberon Ramp	53+00	53+35	RT					35		
134	C1	WB Elberon Ramp	90+00	91+24.28	LT					124		
134	C2	WB Elberon Ramp	90+00	91+24.67	RT					124		
138	C1	WB Elberon Ramp	99+50	101+25	RT					225		
138	GR-4	WB Elberon Ramp	101+50	102+00	LT	4	300					
138	SW1	WB Elberon Ramp	99+00	103+70	LT			4302				
142	C1	EB Warsaw Ramp	70+00	73+00	RT					305		
142	SW1	EB Warsaw Ramp	70+00	73+00	RT			1693				
143	SW1	EB Warsaw Ramp	73+00.00	78+00.00	LT & RT			1161				
143	B1	EB Warsaw Ramp	73+71	73+84	LT							
143	B2	EB Warsaw Ramp	73+30	73+71	RT							
143	C1	EB Warsaw Ramp	73+00	73+30	RT					32		
143	S1	EB Warsaw Ramp	73+88	74+20	RT				45			
TOTALS CARRIED TO GENERAL SUMMARY						4	300	7156	45	865	2	2

CALCULATED AWS
CHECKED MAH

ROADWAY SUB-SUMMARY

HAM-50-18.79

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 Pavement Removed LF	202 Curb Removed LF	202 Walk Removed SF	202 Steps Removed FT	204 Subgrade Compaction SY	304 6" Aggregate Base CY	305 12" Concrete Base SY	452 8" Non-Reinforced Concrete Pavement SY
147		EB Warsaw Ramp	83+00.00	88+00.00	LT & RT					2336	389	2141	
149		EB Warsaw Ramp	88+00.00	93+22068	LT & RT	1068				2005	334	1927	
160		WB Warsaw Ramp	100+25.00	104+00.00	LT & RT	1273				1075	179	925	
160	R1	WB Warsaw Ramp	100+25.00	102+83.00	LT		246	1440					
160	R2	WB Warsaw Ramp	102+04.00	103+88	LT & RT		257	1005					
162		WB Warsaw Ramp	104+00.00	109+34.06	LT & RT	716				697	116	382	
162	R1	WB Warsaw Ramp	104+70	107+60	LT & RT		285	800					
162	R2	WB Warsaw Ramp	105+30	107+60	LT & RT		222						
162	R3	WB Warsaw Ramp	107+66	109+34.06	LT		160	1250					
162	R4	WB Warsaw Ramp	107+66	109+34.06	LT		200						
162	R5	WB Warsaw Ramp	107+66	109+34.06	LT		150						
162	R6	WB Warsaw Ramp	107+66	109+06	RT		130	718					
164		Elberon Ave	43+87.89	46+00.00	LT & RT	868				833	139	808	
164	R1	Elberon Ave	43+87.89	46+00.00	LT		211						
165	R3	Elberon Ave	46+00.00	49+50.99	LT & RT	2084				1288	215	1210	
165	R1	Elberon Ave	47+18.68	48+75.62	LT		276	934					
165	R2	Elberon Ave	47+48	49+29	LT & RT		250	1707					
165	R3	Elberon Ave	46+27	46+77	LT		84	398					
165	R4	Elberon Ave	46+00	47+59	RT		168	1082					
165	R5	Elberon Ave	46+60		LT				22				
172		SEE SHEET 93											
173		SEE SHEET 93											
179		Maryland Ave	45+36.00	46+95.76	LT & RT	280				297	50	272	
179	R1	Maryland Ave	45+36	46+95.76	LT		110						
179	R2	Maryland Ave	45+36	46+95.76	RT		118						
179	R3	Maryland Ave	45+60		LT				25				
179	R4	Maryland Ave	45+36.00	46+95.76	LT			420					
179	R5	Maryland Ave	45+36.00	46+95.76	RT			517					
183		Evans St	20+05.23	22+06.23	LT & RT	396				458	76	358	
183	R1	Evans St	21+17	22+06.23	LT & RT		89	380					
183	R2	Evans St	21+17	22+06.23	RT		90						
183	R3	Evans St	21+17	21+67.76	RT			372					
183	DR1	Evans St	21+58.31		LT								724
TOTALS CARRIED TO GENERAL SUMMARY						6685	3046	11023	47	8989	1498	8023	724

CALCULATED AWS
CHECKED MAH

ROADWAY SUB-SUMMARY

HAM-50-18.79

REF NO.	SHEET NO.	STATION TO STATION	SIDE		603			605	605	BENDS AND BRANCHES		
					6" CONDUIT, TYPE B			6" BASE PIPE UNDERDRAINS	6" UNCLASSIFIED PIPE UNDERDRAINS	6"x6"x6" TEE	6" 90° BEND	6" CAP
					FT			FT	FT	EACH		
		US 50										
U1	196	11+54 TO 13+15	LT					160				1
U2	196	11+54 TO 13+35	RT					182				1
U3	196	13+19 TO 14+85	LT					166				1
U4	196	13+39 TO 14+85	RT					146				1
U5	196	14+89 TO 15+37	LT					48				1
U6	196	14+89 TO 15+36	RT					47				1
U7	196	15+37 TO 15+84	LT					47				1
U8	196	15+36 TO 15+84	RT					48				1
U9	196-197	15+88 TO 17+76	LT					191				1
U10	196-197	15+88 TO 21+70	RT					572				
U11	197	17+80 TO 49+40 STATE AVE.	LT					79				1
U12	197	49+14 STATE AVE. TO 19+51	LT					84				1
U13	197	19+55 TO 21+18	LT					170				1
U14	197-198	21+18 TO 24+31	LT					323				
U15	197-198	21+74 TO 24+28	RT					249				1
U16	198	24+31 TO 24+41	LT						10			1
U17	198	101+60 TO 101+75 WB ELBERON	RT						14			1
U18	198	24+32 TO 27+00	RT					265				1
U19	198	27+03 TO 28+24	RT					123				1
U20	198-199	28+26 TO 29+12	RT					87				1
U21		NOT USED										
U22	198	27+30 TO 28+10	LT					80				1
U23	198-199	28+14 TO 28+96	LT					82				1
U24		NOT USED										
U25		NOT USED										
U26		NOT USED										
U27		NOT USED										
U28		NOT USED										
U29		NOT USED										
U30		NOT USED										
U31	199	29+14 TO 29+81	RT					67				1
U32	199	29+81 TO 30+50	RT					70				1
U33	199	30+53 TO 31+58	RT					106				1
U34	199	29+00 TO 29+81	LT					79				1
U35	199	29+81 TO 30+50	LT					70				1
U36	199	30+53 TO 30+97	LT					45				1
U37		NOT USED										
U38		NOT USED										
U39	199-200	34+53 TO 20+80 EVANS STREET	LT					50				1
U40	199-200	33+90 TO 34+95	RT					105				1
U41	200	35+00 TO 37+92	LT		17			293			1	1
U42	200	37+94 TO 38+77	LT					80				1
U43	200	38+76 TO 39+17	LT					40				1
TOTALS CARRIED TO NEXT COLUMN					17			4154	24	0	1	31

REF NO.	SHEET NO.	STATION TO STATION	SIDE		603			605	605	BENDS AND BRANCHES		
					6" CONDUIT, TYPE B			6" BASE PIPE UNDERDRAINS	6" UNCLASSIFIED PIPE UNDERDRAINS	6"x6"x6" TEE	6" 90° BEND	6" CAP
					FT			FT	FT	EACH		
		EVANS STREET										
U44	200	35+82 US 50 TO 20+97	LT & RT					68				1
U45	200	20+97 TO 21+25	RT					29				1
U46	200	21+28 TO 22+06	RT					79				1
U47	200	20+81 TO 20+98	LT					18				1
U48	200	21+01 TO 22+06	LT					106				1
		ELBERON AVE. EASTBOUND RAMP										
U49	201	50+04 TO 53+25	RT					319				1
U50	201	52+04 TO 53+35	LT					136				1
		ELBERON AVE. WESTBOUND RAMP										
U51	201	90+00 TO 91+12	RT					112			1	1
U52	201	90+00 TO 91+12	LT					112			1	1
U53	202	99+40 TO 99+63	RT					25				1
U54	197-198	99+67 TO 101+60	RT					193				1
		ELBERON AVE.										
U55	201	43+88 TO 46+25	LT					237				1
U56	201	46+29 TO 46+63	LT					37				1
U57	201	45+95 TO 48+11	RT					224				1
U58	201-202	47+37 TO 46+36 STATE AVE.	LT					185				1
		MARYLAND AVE.										
U59	201	45+37 TO 46+12	RT					77				1
U60	201	46+16 TO 46+76	RT					66				1
U61	201	45+37 TO 46+20	LT					83				1
U62	201	46+24 TO 47+34 ELBERON AVE.	LT					66				1
		STATE STREET										
U63	202-203	43+56 TO 46+50	RT		22			304			1	
U64	202-203	43+56 TO 48+00	LT					433				
U65	201-202	48+13 ELBERON AVE. TO 47+54	RT					105				1
U66	202	47+56 TO 48+00	RT					46				1
U67	197,202	48+03 TO 49+36	RT					138				1
U68	197,202	48+04 TO 49+10	LT					102				1
		WARSAW AVE. EASTBOUND RAMP										
U69	203	70+00 TO 73+25	RT					333				1
U70	198-199	84+77 TO 88+12	LT					334				1
U71	199	89+01 TO 89+92	RT					90				1
U72	199	88+14 TO 89+75	LT					162				1
U73	199	89+75 TO 89+89	LT						14			1
U74	199	89+94 TO 90+47	RT					53				1
U75	199	90+47 TO 91+11	RT					62				1
U76	199	91+13 TO 92+16	RT					103				1
		WARSAW AVE. WESTBOUND RAMP										
U77	203	100+25 TO 102+25	LT					198				1
U78	203	102+29 TO 103+30	LT					98				1
TOTALS CARRIED FROM PREVIOUS COLUMN					17			4154	24		1	31
TOTALS CARRIED TO GENERAL SUMMARY					62			8887	38	1	3	64

CALCULATED BMB
CHECKED BAA

UNDERDRAIN SUBSUMMARY

HAM-50-18.79

192
657

REF NO.	SHEET NO.	STATION TO STATION	SIDE	202 PIPE REMOVED, 24" AND UNDER FOOT	202 PIPE REMOVED, OVER 24" FOOT	202 MANHOLE REMOVED EACH	202 CATCH BASIN REMOVED EACH	202 MANHOLE ABANDONED EACH			
RD1	196	14+80.8	RT					1			
RD2	196	15+98.4	RT					1			
RD3	196	16+08.1	RT	28			1				
RD4	197	17+27.6	RT					1			
RD8	197	17+82.0 TO 18+18.2	RT	40			1				
RD9	197	18+22.0 TO 18+54.1	LT & RT	46			1				
RD10	197	18+58.5 TO 18+54.1	RT	19			1				
RD11	197	18+81.7	RT					1			
RD12	197	18+88.1 TO 18+81.7	RT	15			1				
RD13	197	19+02.4 TO 19+10.5	RT	8			1				
RD14	197	19+57.4 TO 19+10.5	LT & RT	50			1				
RD15	197	20+37.6	RT					1			
RD16	197	21+62.1 TO 21+71.7	LT & RT	32			1				
RD17	197	21+68.1 TO 21+71.7	RT	13			1				
RD18	197	21+71.7	RT					1			
RD19	197	23+02.4	RT					1			
RD20	198	24+29.2 TO 24+30.3	LT & RT	29			1				
RD21	198	24+10.1 TO 24+21.1	LT	20			1				
RD22	198	24+21.1 TO 24+30.3	LT	15			1				
RD23	198	24+23.8 TO 24+30.3	LT	30			1				
RD24	198	24+30.3	LT			1					
RD25	202	98+89.7 TO 99+60.8 (WB ELBERON)	LT	72		1					
RD26	202	99+58.3 TO 99+60.8 (WB ELBERON)	LT	42			1				
RD27	202	99+70.8 TO 99+66.6 (WB ELBERON)	LT	26			1				
RD28	202	99+66.6 TO 99+60.8 (WB ELBERON)	LT	10			1				
RD29	202	99+60.8 TO 100+24.8 (WB ELBERON)	LT	65		1					
RD30	198	100+24.8 TO 101+71.1 (WB ELBERON)	LT	148		1					
RD31	198	101+49.1 TO 101+57.3 (WB ELBERON)	LT	26			1				
RD32	198	101+57.3 TO 101+71.1 (WB ELBERON)	LT	21			1				
RD35	198	26+20.7 TO 26+19.4	LT	27			1				
RD37	198	26+39.0 TO 26+67.2	LT	29			1				
RD38	198	26+55.1 TO 26+67.2	LT	17			1				
RD39	198	26+79.9 TO 26+67.2	LT	17			1				
RD41	198	26+84.9 TO 26+84.5	LT	13			1				
RD42	198	26+84.5 TO 27+72.1	LT	88				1			
RD43	198	27+43.3 TO 27+87.3	LT	44			1				
RD44	198	27+87.3 TO 27+93.1	LT	20			1				
RD45	198	27+43.3 TO 27+85.4	LT	42			1				
RD42A	198	27+72.1 TO 28+95.0	LT	123		1					
RD42B	199	28+95.0 TO 30+15.9	LT	120		1					
RD42C	199	30+15.9 TO 31+11.8	LT	96		1					
RD42D	199	31+11.8 TO 32+33.0	LT	121		1					
RD42E	199	32+33.0 TO 33+55.9	LT	123		1					
RD42F	199	33+55.9 TO 34+75.2	LT	121		1					
RD42G	200	34+75.2 TO 34+92.3	LT	19		1					
TOTALS CARRIED TO NEXT COLUMN				1775	0	11	26	8			

REF NO.	SHEET NO.	STATION TO STATION	SIDE	202 PIPE REMOVED, 24" AND UNDER FOOT	202 PIPE REMOVED, OVER 24" FOOT	202 MANHOLE REMOVED EACH	202 CATCH BASIN REMOVED EACH	202 MANHOLE ABANDONED EACH			
RD46	198	27+85.4 TO 27+93.1	LT	27			1				
RD47	199	29+39.9 TO 28+64.8	LT	44			1				
RD48	199	28+64.8 TO 28+97.0	LT	4			1				
RD49	199	28+97.0 TO 28+95.0	LT	19		1					
RD50	199	29+36.8 TO 28+94.4	LT	42			1				
RD51	199	28+94.4 TO 28+95.6	LT	5			1				
RD52	199	28+95.6 TO 28+95.0	LT	20			1				
RD53	199	30+16.3 TO 30+15.9	LT	31							
RD54	199	30+55.5 TO 30+99.0	LT	44			1				
RD55	199	30+99.0 TO 33+11.8	LT	27			1				
RD56	199	30+56.2 TO 30+97.2	LT	41			1				
RD57	199	30+97.2 TO 31+11.8	LT	26			1				
RD58	199	32+56.6 TO 33+15.2	LT	60			1				
RD59	199	33+15.2 TO 33+09.6	LT	17			1				
RD60	199	33+56.6 TO 33+15.7	LT	59			1				
RD61	199	33+15.7 TO 33+09.6	LT	30			1				
RD62		NOT USED									
RD63	199	34+54.0	RT			1					
RD64	200	35+07.9	RT	25			1				
RD65	200	35+16.7	RT					1			
RD66	200	35+07.3	RT					1			
RD67	199	34+40.2 TO 34+78.1	LT & RT	42			1				
RD68	200	34+78.1 TO 34+84.9	LT	6			1				
RD69	200	34+84.9	LT	37			1				
RD70	199-200	34+61.2	LT				1				
RD71	200	34+56.9 TO 34+72.9	LT	41			1				
RD72	200	20+70.3 (EVANS)	LT	20			1				
RD73	200	20+78.4 (EVANS)	RT	30			1				
RD74	200	35+31.4 TO 35+21.2	LT	11			1				
RD75	200	35+21.2	LT					1			
RD76	200	35+48.5	LT				1				
RD77	200	35+48.2	LT					1			
RD78	200	35+45.0	LT					1			
RD79	200	35+46.6	LT				1				
RD80	200	36+22.4	LT					1			
RD81	200	37+33.5	LT					1			
RD82	200	38+63.0	LT				1				
RD83	200	38+62.4	LT					1			
RD84	200	38+64.8	LT				1				
RD85	200	39+51.0 TO 39+76.5	LT	28			1				
RD86	200	39+92.2 TO 39+76.5	LT	19			1				
RD87	200	39+94.5 TO 39+76.5	LT	23			1				
RD88	200	39+50.0 TO 39+76.5	LT	26		1					
RD89	200	39+73.2	RT				1				
RD90	200	39+95.0	RT				1				
TOTALS CARRIED FROM PREVIOUS COLUMN				1775	0	11	26	8			
TOTALS CARRIED TO NEXT SHEET				2579	0	14	58	16			

CALCULATED BMB CHECKED BAA

DRAINAGE REMOVAL SUBSUMMARY

HAM-50-18.79

REF NO.	SHEET NO.	STATION TO STATION	SIDE	202 PIPE REMOVED, 24" AND UNDER (FOOT)	202 PIPE REMOVED, OVER 24" (FOOT)	202 MANHOLE REMOVED (EACH)	202 CATCH BASIN REMOVED (EACH)	202 MANHOLE ABANDONED (EACH)			
RD91	201	43+90.4 TO 43+97.1 (EB ELBERON)	RT	8			1				
RD92	201	45+08.1 TO 46+30.1 (EB ELBERON)	RT	126		1					
RD93	201	45+88.5 TO 46+18.1 (EB ELBERON)	RT	30			1				
RD94	201	47+53.3 TO 47+51.1 (EB ELBERON)	RT	16			1				
RD95	201	47+48.5 TO 47+51.1 (EB ELBERON)	RT	5			1				
RD96	201	47+51.1 (EB ELBERON)	RT					1			
RD97	201	47+76.4 (EB ELBERON)	RT				1				
RD98	201	47+74.4 (EB ELBERON)	RT					1			
RD99	201	47+72.1 (EB ELBERON)	RT				1				
RD100	202	47+99.7 (EB ELBERON)	RT					1			
RD101	201	91+34.6 TO 91+41.6 (WB ELBERON)	LT	21			1				
RD102	201	91+34.6 TO 91+41.6 (WB ELBERON)	RT & LT	11			1				
RD103	201	91+41.6 (WB ELBERON)	LT			1					
RD104	201	92+02.4 TO 92+03.5 (WB ELBERON)	LT	6			1				
RD105	201	92+03.5 TO 92+04.4 (WB ELBERON)	LT & RT	24			1				
RD106	201	91+97.4 TO 92+04.4 (WB ELBERON)	RT	14			1				
RD107	201	92+04.4 TO 92+43.4 (WB ELBERON)	RT	40		1					
RD108	201	92+43.4 TO 92+51.3 (WB ELBERON)	RT	34		1					
RD109	201	46+18.5 TO 46+32.4 (MARYLAND)	LT	26			1				
RD110	202	44+96.9 TO 45+13.3 (STATE)	RT	21			1				
RD111	202	45+13.3 TO 45+61.2 (STATE)	RT	23	34	1					
RD112	202	45+18.9 TO 45+72.7 (STATE)	LT	54		1					
RD113	202	45+63.2 TO 45+72.7 (STATE)	LT	26			1				
RD114	202	45+88.6 TO 45+72.7 (STATE)	LT	21			1				
RD115	202	45+60.0 (STATE)	RT					1			
RD116	202	46+04.2 TO 45+60.0 (STATE)	RT	49		1					
RD117	202	46+18.8 TO 46+04.2 (STATE)	RT	21			1				
RD118	202	45+68.1 (STATE)	RT				1				
RD119	201	46+44.0 (STATE)	RT				1				
RD120	201	46+66.5 (STATE)	RT			1					
RD121	201	47+14.7 (STATE)	RT				1				
RD122	203	70+68.1 (EB WARSAW)	RT				1				
RD123	203	70+83.2 (EB WARSAW)	RT				1				
RD124	203-202	72+06.0 TO 74+56.2 (EB WARSAW)	RT	1	254						
RD125	202	19+95.8	LT				1				
RD126	202	19+65.8	LT				1				
RD127	202	20+19.9	LT					1			
RD128	202	20+24.9	LT				1				
RD129	202	20+40.9	LT				1				
RD130	202	20+51.3	LT				1				
RD131	202	20+63.5	LT				1				
RD132	202	20+85.4	LT				1				
RD133	202	21+24.4 TO 21+33.6	LT	14			1				
RD134	202	21+37.9 TO 21+33.6	LT	13			1				
RD135	202	21+33.6 TO 20+97.0	LT	45		1					
TOTALS CARRIED TO NEXT COLUMN				648	288	10	30	5			

REF NO.	SHEET NO.	STATION TO STATION	SIDE	202 PIPE REMOVED, 24" AND UNDER (FOOT)	202 PIPE REMOVED, OVER 24" (FOOT)	202 MANHOLE REMOVED (EACH)	202 CATCH BASIN REMOVED (EACH)	202 MANHOLE ABANDONED (EACH)			
RD136	202	21+10.4 TO 21+18.5	LT	26			1				
RD137	202	21+40.2 TO 21+36.2	LT	10			1				
RD138	202	21+36.2 TO 21+18.5	LT	21		1					
RD139	196	13+43.4 TO 13+64.8	RT	23			1				
RD140	196	13+64.8 TO 13+72.7	RT	16		1					
RD141	196	13+72.7	RT					1			
RD142	196	13+14.0 TO 12+97.7	LT	19			1				
RD143	198	23+64.5	LT	65			1				
RD144	198	24+52.2	LT	13			1				
RD145	198	24+76.8	LT	19			1				
RD146	199	32+35.3 TO 32+33.0	LT	20			1				
RD147	199	32+32.4 TO 32+33.0	LT	18			1				
RD148	199	34+41.6	RT					1			
RD149	202	74+08.0 (EB WARSAW)	RT	8			1				
RD150	203	102+59.3 TO 102+68.4 (WB WARSAW)	LT	9			1				
RD151	203	102+96.5 TO 103+01.2 (WB WARSAW)	LT	7			1				
RD152	203	103+01.2 TO 103+19.2	LT	32		1					
RD153	201	46+32.4 (MARY.) TO 46+42.5 (ELB.)	LT		85	1					
TOTALS				306	85	4	12	2			
TOTALS CARRIED FROM PREVIOUS COLUMN				648	288	10	30	5			
TOTALS CARRIED FROM PREVIOUS SHEET				2579	0	14	58	16			
TOTALS CARRIED TO GENERAL SUMMARY				3533	373	28	100	23			

CALCULATED BMB
CHECKED BAA

DRAINAGE REMOVAL SUBSUMMARY

HAM-50-18.79

CALCULATED BMB | CHECKED BAA

DRAINAGE DETAILS
NEAVE, CHURCH AND BURNS STREETS

MANHOLE NO. 3 (48" BASE)(MH-1.2)
STA. 19+97.1, 91.4' LT.
RIM EL. 494.16
INV. 12" W 488.81
INV. 12" E 488.81
INV. EX. 36" N 487.31±
INV. EX. 36" S 487.31±

D82 D81 D80

CATCH BASIN NO. 3A (CB-2.2)
STA. 20+13.0, 76.6' LT.
GRATE EL. 493.67
INV. 12" W 489.67

CATCH BASIN NO. 3A (CB-2.2)
STA. 19+91.9, 96.3' LT.
GRATE EL. 493.88
INV. 12" E 488.88

EX. 12" GAS
EX. 6" WATER
1.00%
3.91%
7' OF 12" TYPE B
22' OF 12" TYPE B

D89 D88 D91

CATCH BASIN NO. 3 (CB-2.1)
STA. 24+71.3, 101.1' LT.
GRATE EL. 492.45
INV. 12" E 486.23

CATCH BASIN NO. 3 (CB-2.1)
STA. 24+55.5, 107.4' LT.
GRATE EL. 492.52
INV. 12" SE 486.65

EX. 6" WATER
2.30%
EX. 12" SANITARY
18' OF 12" TYPE C
16' OF 12" TYPE C

D93 D92 D93A

CATCH BASIN NO. 3 (CB-2.1)
STA. 26+75.6, 78.0' LT.
GRATE EL. 491.42
INV. 12" SW 484.20

CATCH BASIN NO. 3 (CB-2.1)
STA. 26+61.6, 81.5' LT.
GRATE EL. 491.58
INV. 12" SE 484.70

EX. 12" WATER
3.33%
EX. 15" SANITARY
15' OF 12" TYPE C
12' OF 12" TYPE C

MANHOLE NO. 3
(48" BASE)(MH-1.2)
STA. 24+74.3, 86.2' LT.
RIM EL. 493.00
INV. 12" N 485.88
INV. 18" W 485.43
INV. 18" E 484.88

MANHOLE NO. 3
(48" BASE)(MH-1.2)
STA. 26+75.9, 66.7' LT.
RIM EL. 491.50
INV. 12" N 483.91
INV. 18" W 481.76
INV 18" E 481.70

MANHOLE NO. 3
(48" BASE)(MH-1.2)
STA. 27+32.0, 63.0' LT.
RIM EL. 493.23
INV. 18" W 480.85
INV. 18" SE 480.85

D91 D93A D168 D170

D87

CATCH BASIN NO. 2-2B (CB-1.1)
STA. 23+86.5, 108.3' LT.
GRATE EL. 492.65
INV. 12" E 486.40

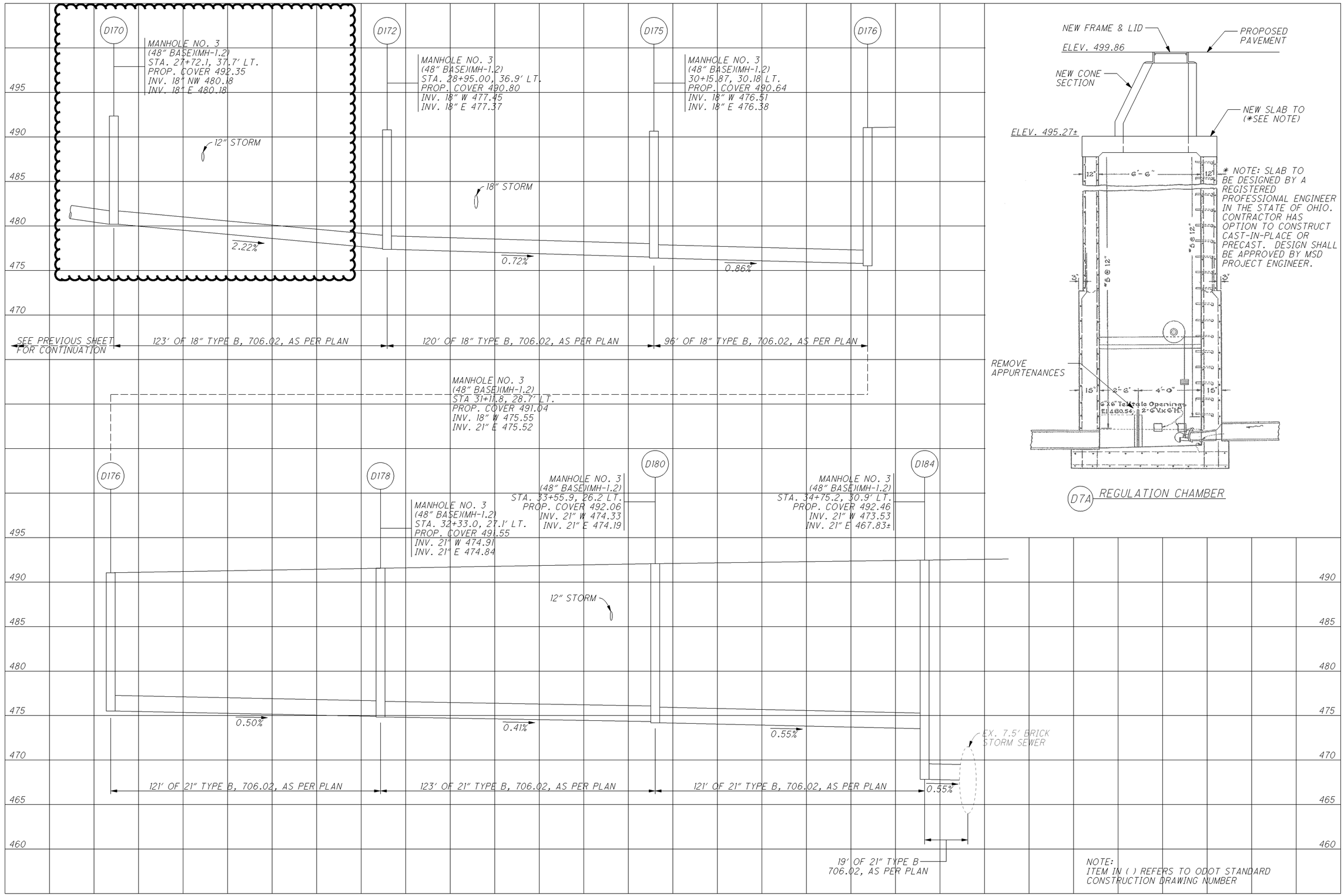
MANHOLE NO. 3
(48" BASE)(MH-1.2)
STA. 27+72.1, 37.7' LT.
PROP. COVER 492.35
INV. 18" NW 480.18
INV. 18" E 480.18

EX. 6" WATER
EX. 6" WATER
1.00%
1.47%
EX. 12" WATER
EX. 3" GAS
1.52%
1.43%
EX. 24" SANITARY

97' OF 12" TYPE C
212' OF 18" TYPE B, 706.02, AS PER PLAN
56' OF 18" TYPE B, 706.02, AS PER PLAN
47' OF 18" TYPE B, 706.02, AS PER PLAN
SEE NEXT SHEET FOR CONTINUATION

NOTE:
ITEM IN ( ) REFERS TO ODOT STANDARD CONSTRUCTION DRAWING NUMBER

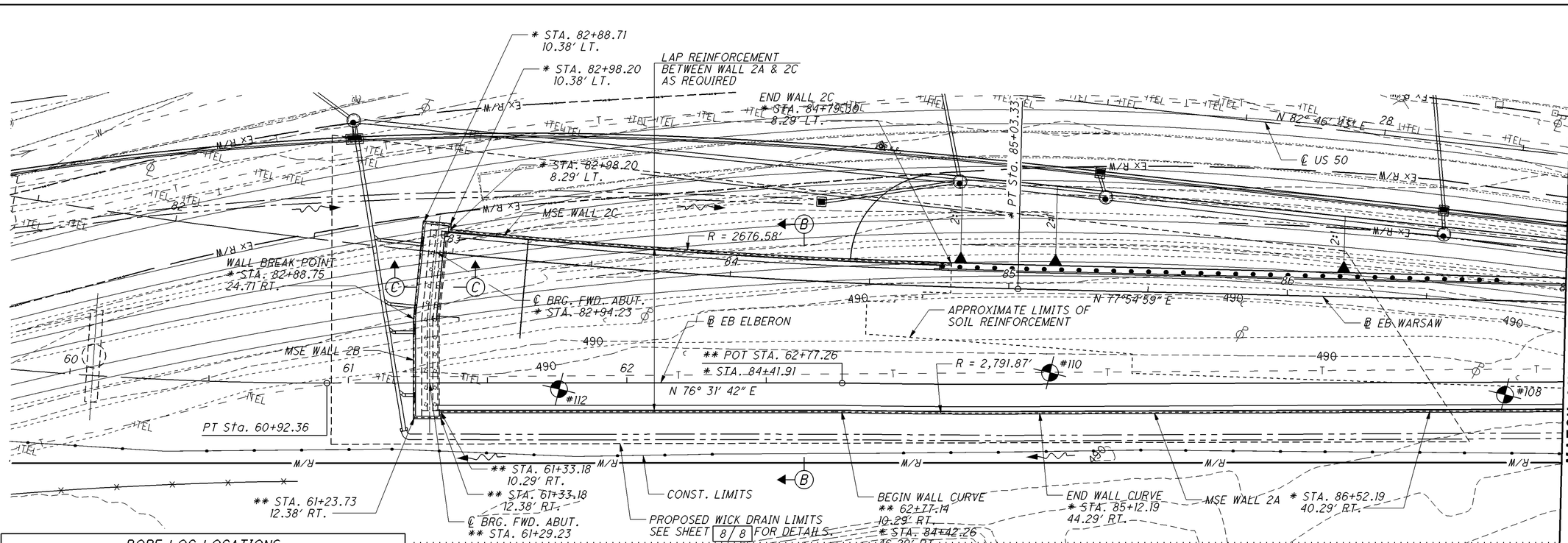
HAM-50-18.79



CALCULATED BMB
CHECKED BAA

DRAINAGE DETAILS
US 50, BURNS TO EVANS STREETS

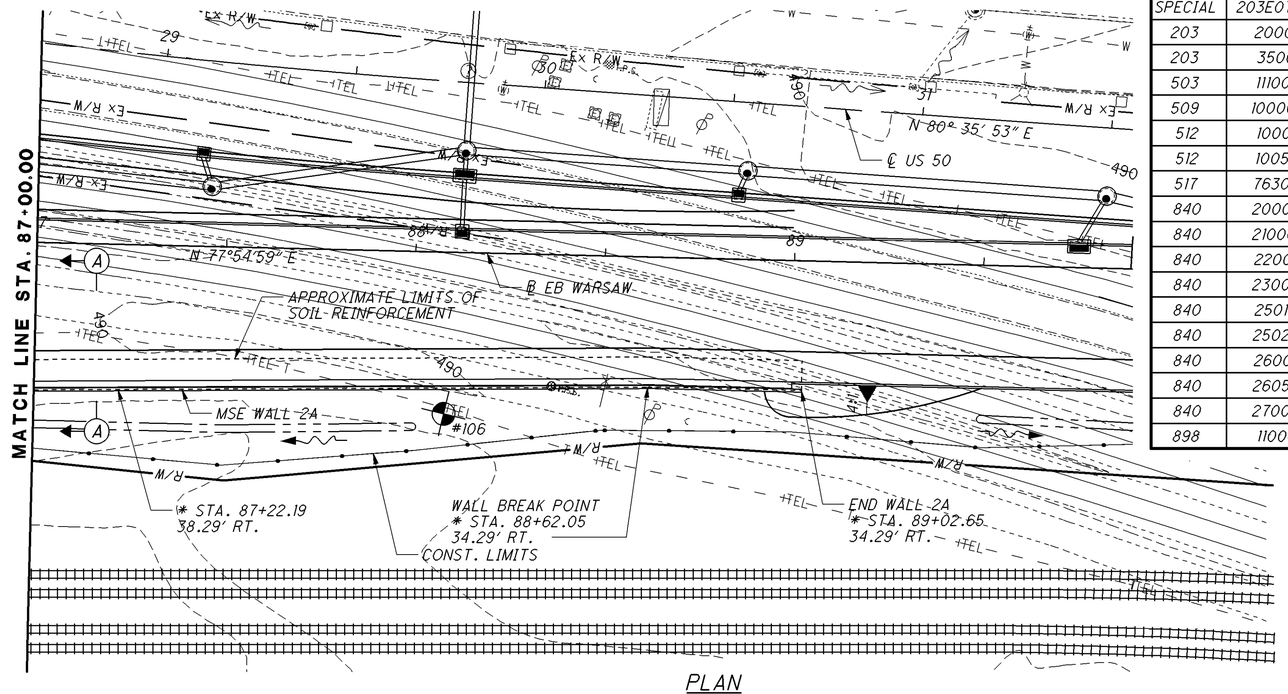
HAM-50-18.79



PLAN

BORE LOG LOCATIONS		
BORE LOG	STA., OFFSET	TOP OF ROCK EL.
#106	* 88+08.30, 42.7' RT.	** 428.7
#108	* 86+78.98, 33.7' RT.	** 468.8
#110	* 85+15.53, 29.8' RT.	** 428.7
#112	** 61+75.65, 2.16' RT.	** 428.7

** INDICATES BOTTOM OF BORING EL. NO ROCK ENCOUNTERED



PLAN

		STRUCTURE TOTAL		ESTIMATED QUANTITIES		SEE SHEET NO.
ITEM	EXTENSION	ODOT	CITY	UNIT	DESCRIPTION	
SPECIAL	203E07504	37,944		FT	WICK DRAIN	
203	20000	3,823		CU YD	EMBANKMENT	
203	35001	3,528		CU YD	GRANULAR EMBANKMENT, AS PER PLAN	6/8
503	11100	1		LUMP	COFFERDAMS AND EXCAVATION BRACING	
509	10000	62,855		POUND	EPOXY COATED REINFORCING STEEL	
512	10001	977		SQ YD	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION	
512	10050	2,311		SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY), CLEAR	
517	76300		730	FT	RAILING, MISC.: RAILING ALTERNATE, TEXAS RAILING	
840	20000	17,374		SQ FT	MECHANICALLY STABILIZED EARTH WALL	
840	21000	9,880		CU YD	WALL EXCAVATION	
840	22001	4,255		SQ YD	FOUNDATION PREPARATION, AS PER PLAN	1/8
840	23000	13,265		CU YD	SELECT GRANULAR BACKFILL	
840	25010	1,619		FT	6" DRAINAGE PIPE, PERFORATED	
840	25020	72		FT	6" DRAINAGE PIPE, NON-PERFORATED	
840	26001	879		FT	CONCRETE COPING, AS PER PLAN	
840	26050	17,374		SQ FT	AESTHETIC SURFACE TREATMENT	
840	27000	5		DAYS	ON-SITE ASSISTANCE	
898	11000	426		CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)	

NOTES:

1. ALL WALL STATIONS AND OFFSETS, MEASURED TO ℄ OF WALL.
2. FOR EXCAVATION PLAN, SEE SHEET 2/8.
3. FOR DRAINAGE PLAN, SEE SHEET 3/8.
4. FOR WALL ELEVATIONS, SEE SHEET 4/8.
5. FOR SECTION A-A, SEE SHEET 5/8.
6. FOR SECTION B-B, SEE SHEET 6/8.
7. FOR SECTION C-C, SEE SHEET 7/8.
8. FOR MINIMUM SOIL REINFORCEMENT LENGTHS ALONG WALL, SEE SHEET 4/8.
9. FOR SETTLEMENT PLATFORM LOCATIONS AND WICK DRAIN DETAILS, SEE SHEET 8/8.
10. FOUNDATION PREPARATION AS PER PLAN SHALL CONFORM TO SS840 WITH THE EXCEPTION THAT NO GRANULAR MATERIAL, TYPE C IS INCLUDED IN THE QUANTITY.

DESIGN AGENCY
PB AMERICAS, INC.
312 ELM STREET
SUITE 2500
CINCINNATI, OHIO 45202

DESIGNED BMG | DRAWN NAL | REVIEWED EBS | DATE 11/16/10
CHECKED PJL | REVISED | STRUCTURE FILE NUMBER

WALL 2 SITE PLAN

HAM-50-18.79
PID No. 20082

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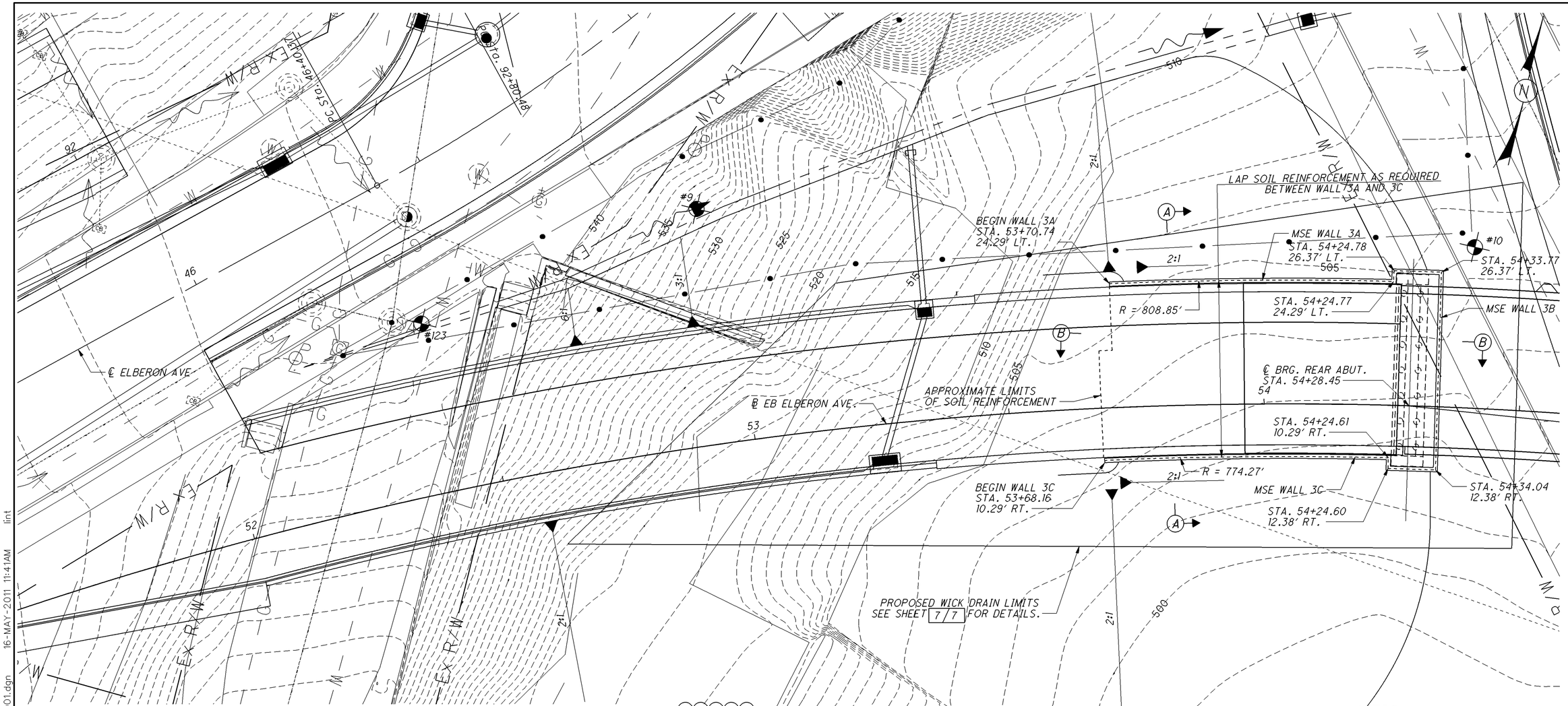

STRUCTURE TOTAL				ESTIMATED QUANTITIES		SEE SHEET NO.
ITEM	EXTENSION	ODOT	CITY	UNIT	DESCRIPTION	
SPECIAL	203E07504	9,324		FT	WICK DRAIN	
203	20000	1,874		CU YD	EMBANKMENT	
203	35001	937		CU YD	GRANULAR EMBANKMENT, AS PER PLAN	4/7
503	11100	1		LUMP	COFFERDAMS AND EXCAVATION BRACING	
509	10000	4,736		SQ YD	EPOXY COATED REINFORCING STEEL	
512	10001	188		SQ YD	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)	
512	10050	338		SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY), CLEAR	
517	76300		54	FT	RAILING, MISC.: RAILING ALTERNATIVE, TEXAS RAILING	
840	20000	3,813		SQ FT	MECHANICALLY STABILIZED EARTH WALL	
840	21000	1,124		CU YD	WALL EXCAVATION	
840	22001	1,125		SQ YD	FOUNDATION PREPARATION, AS PER PLAN	1/7
840	23000	1,701		CU YD	SELECT GRANULAR BACKFILL	
840	25010	280		FT	6" DRAINAGE PIPE, PERFORATED	
840	25020	100		FT	6" DRAINAGE PIPE, NON-PERFORATED	
840	26001	169		FT	CONCRETE COPING, AS PER PLAN	
840	26050	3,813		SQ FT	AESTHETIC SURFACE TREATMENT	
840	27000	5		DAYS	ON-SITE ASSISTANCE	
898	11000	32		CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)	

BORE LOG LOCATIONS		
BORE LOG	STA., OFFSET FROM BASELINE EB ELBERON AVE.	TOP OF ROCK EL.
#9	52+94.93, 46.3' LT.	462.8
#122	53+07.33, 91.1' RT.	445.3
#10	54+39.87, 31.6' LT.	434.8
#123	52+40.71, 33.5' LT.	461.9

INDICATES BOTTOM OF BORING EL. NO ROCK ENCOUNTERED

NOTES:

1. ALL WALL STATIONS AND OFFSETS, MEASURED TO ℄ OF WALL.
2. FOR DRAINAGE AND EXCAVATION PLAN, AND WALL EMBANKMENT LIMITS, SEE SHEET 2/7.
3. FOR WALL ELEVATIONS, SEE SHEET 3/7.
4. FOR SECTION A-A, SEE SHEET 4/7.
5. FOR SECTION B-B, SEE SHEET 5/7.
6. FOR MINIMUM SOIL REINFORCEMENT LENGTHS ALONG WALL, SEE SHEET 3/7.
7. FOR SETTLEMENT PLATFORM LOCATIONS AND WICK DRAIN DETAILS, SEE SHEET 7/7.
8. FOUNDATION PREPARATION AS PER PLAN SHALL CONFORM TO SS840 WITH THE EXCEPTION THAT NO GRANULAR MATERIAL, TYPE C IS INCLUDED IN THE QUANTITY.

DESIGN AGENCY
PB AMERICAS, INC.
312 ELM STREET
SUITE 2500
CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
BMG	NAL	EBS	11/16/10
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PJL			

WALL 3 SITE PLAN

HAM-50-18.79
PID No. 20082

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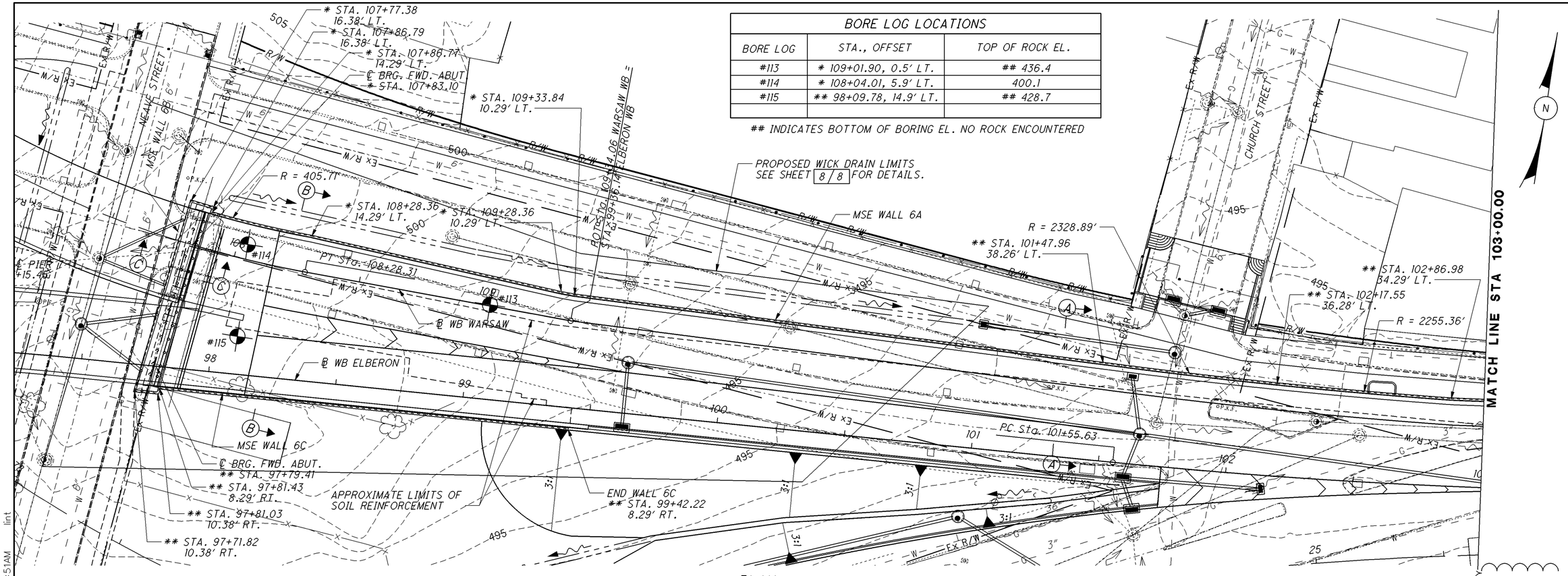
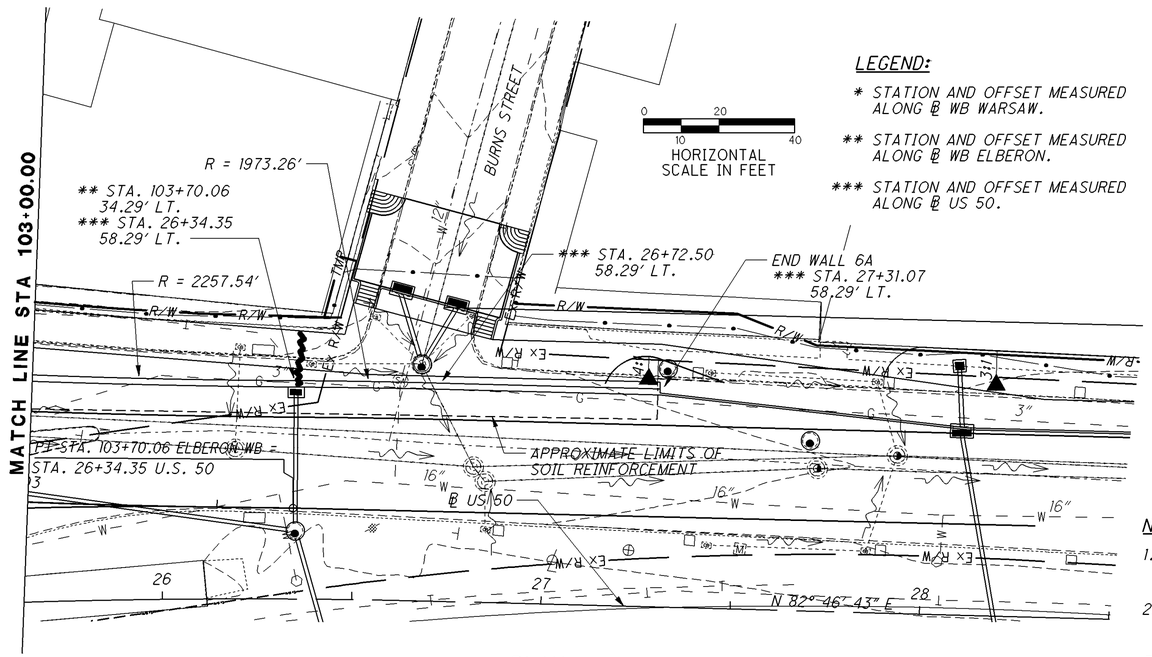
BORE LOG LOCATIONS		
BORE LOG	STA., OFFSET	TOP OF ROCK EL.
#113	* 109+01.90, 0.5' LT.	## 436.4
#114	* 108+04.01, 5.9' LT.	400.1
#115	** 98+09.78, 14.9' LT.	## 428.7

INDICATES BOTTOM OF BORING EL. NO ROCK ENCOUNTERED



PLAN



PLAN

LEGEND:

* STATION AND OFFSET MEASURED ALONG ℄ WB WARSAW.

** STATION AND OFFSET MEASURED ALONG ℄ WB ELBERON.

*** STATION AND OFFSET MEASURED ALONG ℄ US 50.

		STRUCTURE TOTAL		ESTIMATED QUANTITIES		SEE
ITEM	EXTENSION	ODOT	CITY	UNIT	DESCRIPTION	SHEET NO.
SPECIAL	203E07504	27,714		FT	WICK DRAIN	
203	20000	1,809		CU YD	EMBANKMENT	
203	35001	3,014		CU YD	GRANULAR EMBANKMENT, AS PER PLAN	6/8
503	11100	1		LUMP	COFFERDAMS AND EXCAVATION BRACING	
509	10000	66,707		POUND	EPOXY COATED REINFORCING STEEL	
512	10001	1031		SQ YD	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)	
512	10050	1,441		SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY), CLEAR	
517	76300		771	FT	RAILING, MISC.: RAILING ALTERNATIVE, TEXAS RAILING	
840	20000	12,708		SQ FT	MECHANICALLY STABILIZED EARTH WALL	
840	21000	9,944		CU YD	WALL EXCAVATION	
840	22001	4,262		SQ YD	FOUNDATION PREPARATION, AS PER PLAN	1/8
840	23000	7,590		CU YD	SELECT GRANULAR BACKFILL	
840	25010	1,797		FT	6" DRAINAGE PIPE, PERFORATED	
840	25020	219		FT	6" DRAINAGE PIPE, NON-PERFORATED	
840	26001	928		FT	CONCRETE COPING, AS PER PLAN	
840	26050	12,708		SQ FT	AESTHETIC SURFACE TREATMENT	
840	27000	5		DAYS	ON-SITE ASSISTANCE	
898	11000	450		CU YD	OC/OA CONCRETE, CLASS OSC2, SUPERSTRUCTURE (PARAPET)	

NOTES:

1. ALL WALL STATIONS AND OFFSETS MEASURED TO ℄ OF WALL.
2. FOR EXCAVATION PLAN, AND WALL EMBANKMENT LIMITS, SEE SHEET 2/8.
3. FOR DRAINAGE PLAN, SEE SHEET 3/8.
4. FOR WALL ELEVATIONS, SEE SHEET 4/8.
5. FOR SECTION A-A, SEE SHEET 5/8.
6. FOR SECTION B-B, SEE SHEET 6/8.
7. FOR SECTION C-C, SEE SHEET 7/8.
8. FOR MINIMUM SOIL REINFORCEMENT LENGTHS ALONG WALL, SEE SHEET 4/8.
9. FOR SETTLEMENT PLATFORM LOCATIONS AND, WICK DRAIN DEATILS SEE SHEET 8/8.
10. FOUNDATION PREPARATION AS PER PLAN SHALL CONFORM TO SS840 WITH THE EXCEPTION THAT NO GRANULAR MATERIAL, TYPE C IS INCLUDED IN THE QUANTITY.

DESIGN AGENCY
PB AMERICAS, INC.
312 ELM STREET
SUITE 2500
CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
BMG	NAL	EBS	11/16/10
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PJL			

WALL 6 SITE PLAN

HAM-50-18.79
PID No. 20082

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BORE LOG LOCATIONS		
BORE LOG	STA., OFFSET	TOP OF ROCK EL.
#102	** 38+80.28, 52.3' LT.	## 466.7
#203	* 39+26.93, 45.0' RT.	## 309.5
#303	* 37+75.17, 46.4' RT.	## 479.2

INDICATES BOTTOM OF BORING EL. NO ROCK ENCOUNTERED

BEGIN WALL 8C
** STA. 36+49.09
63.83' LT.

MSE WALL 8C

** STA. 39+21.84
62.04' LT.

** STA. 39+54.57
61.84' LT.

#102

R = 2260.36'

APPROXIMATE LIMITS OF SOIL REINFORCEMENT

****

℄ US 50 WB

℄ US 50

PCC Sta. 39+22.10

MSE WALL 8B

APPROXIMATE LIMITS OF SOIL REINFORCEMENT

#303

#203

MSE WALL 8A

R = 2157.87'

R = 2160.30'

* STA. 36+94.75
54.29 RT.

* STA. 39+60.40
54.29' RT.

BEGIN WALL 8A
* STA. 34+98.96
58.21' RT.

PT Sta. 93+22.68

N 2°53'25" E

Ex R/W

R/W

I.P.F.

SAN

TEL

W

PLAN

NOTES:

1. ALL WALL STATIONS AND OFFSETS MEASURED TO ℄ OF WALL.
2. FOR EXCAVATION PLAN AND WALL PAY LIMITS, SEE SHEET 2/7.
3. FOR DRAINAGE PLAN, SEE SHEET 3/7.
4. FOR WALL ELEVATIONS, SEE SHEET 4/7.
5. FOR SECTION A-A, SEE SHEET 5/7.
6. FOR SECTION B-B, SEE SHEET 6/7.
7. FOR SECTION C-C, SEE SHEET 7/7.

LEGEND:

* STATION AND OFFSET MEASURED ALONG ℄ US 50.

** STATION AND OFFSET MEASURED ALONG ℄ US 50 WB.

**** TEMPORARY MSE WALL (SEE DETAILS ON SHEET 13/25 OF BRIDGE HAM-050-1903 L & R

STRUCTURE TOTAL ESTIMATED QUANTITIES					
ITEM	EXTENSION	ODOT	CITY	UNIT	DESCRIPTION
203	20000	175		CU YD	EMBANKMENT
203	35110	445		CU YD	GRANULAR MATERIAL, TYPE B
503	11100	1		LUMP	COFFERDAMS AND EXCAVATION BRACING
509	10000	59,292		SQ YD	EPOXY COATED REINFORCING STEEL
512	10001	946		SQ YD	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)
512	10050	1,263		SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY), CLEAR
517	76300		692	FT	RAILING, MISC.: RAILING ALTERNATE, TEXAS RAILING
840	20000	10,083		SQ FT	MECHANICALLY STABILIZED EARTH WALL
840	21000	2,538		CU YD	WALL EXCAVATION
840	22000	1,603		SQ YD	FOUNDATION PREPARATION
840	23000	5,129		CU YD	SELECT GRANULAR BACKFILL
840	25010	1,745		FT	6" DRAINAGE PIPE, PERFORATED
840	25020	50		FT	6" DRAINAGE PIPE, NON-PERFORATED
840	26001	893		FT	CONCRETE COPING, AS PER PLAN
840	26050	10,083		SQ FT	AESTHETIC SURFACE TREATMENT
840	27000	5		DAYS	ON-SITE ASSISTANCE
898	11000	404		CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)

DESIGN AGENCY
PB AMERICAS, INC.
312 ELM STREET
SUITE 2500
CINCINNATI, OHIO 45202

DESIGNED BMG | DRAWN NAL | REVIEWED EBS | DATE 11/16/10
CHECKED PJL | REVISED | STRUCTURE FILE NUMBER

WALL 8 SITE PLAN

HAM-50-18.79
PID No. 20082

1 / 7

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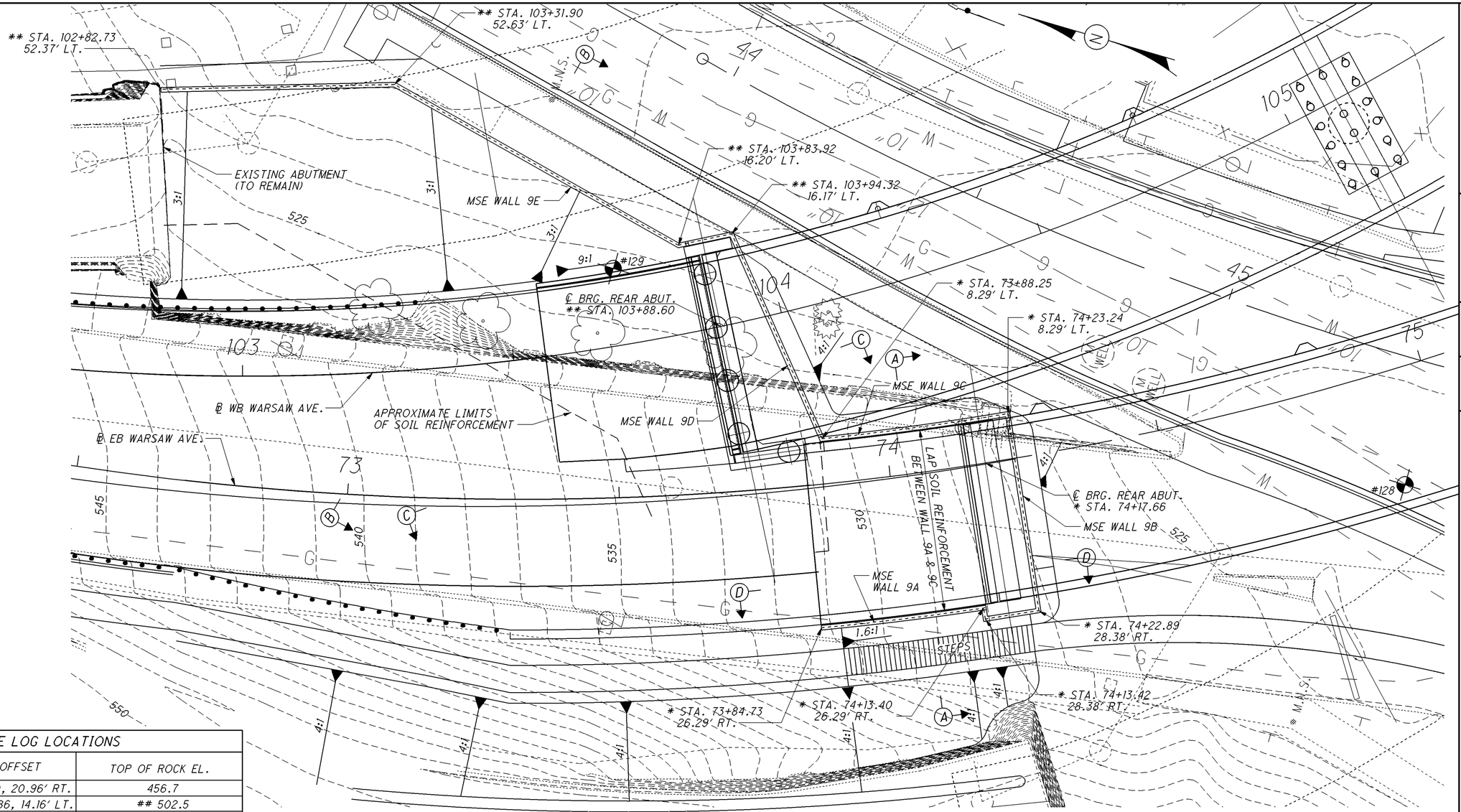

PLAN

BORE LOG LOCATIONS		
BORE LOG	STA., OFFSET	TOP OF ROCK EL.
#128	* 74+90.70, 20.96' RT.	456.7
#129	** 103+70.86, 14.16' LT.	## 502.5

INDICATES BOTTOM OF BORING EL. NO ROCK ENCOUNTERED

ITEM	EXTENSION	STRUCTURE TOTAL	ESTIMATED QUANTITIES UNIT	DESCRIPTION	SEE SHEET NO.
203	20000	140	CU YD	EMBANKMENT	
503	11101	1	LUMP	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	1/8
512	10001	289	SQ YD	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)	
512	10050	560	SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY), CLEAR	
840	20900	6,138	SQ FT	MECHANICALLY STABILIZED EARTH WALL	
840	21000	2,521	CU YD	WALL EXCAVATION	
840	22001	922	SQ YD	FOUNDATION PREPARATION, AS PER PLAN	1/8
840	23000	5,236	CU YD	SELECT GRANULAR BACKFILL	
840	23050	208	CU YD	NATURAL SOIL	
840	25010	431	FT	6" DRAINAGE PIPE, PERFORATED	
840	25020	8	FT	6" DRAINAGE PIPE, NON-PERFORATED	
840	26001	260	FT	CONCRETE COPING, AS PER PLAN	
840	26050	6,138	SQ FT	AESTHETIC SURFACE TREATMENT	
840	27000	5	DAYS	ON-SITE ASSISTANCE	

LEGEND:

* STATION AND OFFSET MEASURED ALONG ℄ EB WARSAW.

** STATION AND OFFSET MEASURED ALONG ℄ WB WARSAW.

ITEM 503, COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN:

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROVIDING AN ALTERNATE DESIGN.

NOTES:

1. ALL WALL STATIONS AND OFFSETS MEASURED TO ℄ OF WALL.
2. FOR EXCAVATION PLAN AND WALL EMBANKMENT LIMITS, SEE SHEET 2/8.
3. FOR DRAINAGE PLAN, SEE SHEET 3/8.
4. FOR WALL ELEVATIONS, SEE SHEET 4/8.
5. FOR SECTION A-A, SEE SHEET 5/8.
6. FOR SECTION B-B, SEE SHEET 6/8.
7. FOR SECTION C-C AND D-D, SEE SHEET 7/8.
8. FOR MINIMUM SOIL REINFORCEMENT LENGTHS ALONG WALL, SEE SHEET 4/8.
9. FOUNDATION PREPARATION AS PER PLAN SHALL CONFORM TO SS840 WITH THE EXCEPTION THAT THE WORK SHALL INCLUDE UNDERCUT OF UNSUITABLE SOIL AND BACKFILL W/ ITEM 203 GRANULAR MATERIAL TYPE C. THE AVERAGE ANTICIPATED DEPTH OF ITEM 203 IS 2.5 FEET.

DESIGN AGENCY
PB AMERICAS, INC.
312 ELM STREET
SUITE 2500
CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
BMG	NAL	EBS	11/16/10
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PJL			

WALL 9 SITE PLAN

HAM-50-18.79
PID No. 20082

1 / 8

348
657

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ESTIMATED QUANTITIES

CALC.	DATE	CHK'D	DATE
JHL	1/8/2009	ADZ	1/21/2009

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIERS	SUPER.	APPROACH SLAB	GENERAL	SHT. REF.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN						4 / 34
202	22900	134	SY	APPROACH SLAB REMOVED				134		
SPECIAL	20307502	1	EACH	INCLINOMETER	1					5 / 34
SPECIAL	20365000	6	EACH	SETTLEMENT PLATFORM	6					5 / 34
503	21300	LUMP		UNCLASSIFIED EXCAVATION						
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION						
507	00501	1560	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN	1560					5 / 34
507	00550	1690	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1690					
507	00700	2000	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		2000				
507	00750	2160	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		2160				
509	10000	217865	LB	EPOXY COATED REINFORCING STEEL	26978	35581	155306			
512	10001	84	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION)		84				4 / 34
512	10050	1208	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	319		889			
512	10100	192	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		192				
513	10300	634780	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5			634780			
513	20000	4107	EACH	WELDED STUD SHEAR CONNECTORS			4107			
513	95030	2	EACH	STRUCTURAL STEEL MISC. : SURVEY PRISM MOUNT	2					5 / 34
514	00060	30640	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			30640			
514	00066	30640	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			30640			
514	10000	23	EACH	FINAL INSPECTION REPAIR			23			
516	11211	37	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN (5")			37			9 / 34
516	11211	71	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN (4")			71			9 / 34
516	13600	11	SF	1" PREFORMED EXPANSION JOINT FILLER	11					
516	13900	18	SF	2" PREFORMED EXPANSION JOINT FILLER	18					
516	44400	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (1'-8" DIA. x 5 3/16") (SPECIAL)	4					
516	44400	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2'-1 1/4" DIA. x 5 1/2") (FIXED)		4				
516	44400	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2'-2 1/2" DIA. x 6 3/8") (EXPANSION)		4				
516	44400	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (1'-8" DIA. x 5 3/16") (EXPANSION)	4					
517	76300	802	FT	RAILING, MISC: RAILING ALTERNATE, MINNESOTA RAILING *			802			6 & 25 / 34
518	12300	3	EACH	SCUPPERS, INCLUDING SUPPORTS			3			
518	51100	35	FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS					35	
518	60030	24	FT	PIPE HORIZONTAL CONDUCTOR					24	
523	20000	3	EACH	DYNAMIC LOAD TESTING	1	2				
524	94903	230	FT	DRILLED SHAFTS, 48" DIAMETER, ABOVE BEDROCK, AS PER PLAN	230					4 / 34
898	10201	444	CY	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN			444			4 / 34
898	10709	352	SY	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN				352		4 / 34
898	11000	92	CY	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			92			
898	20100	125	CY	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		125				
898	20160	213	CY	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT INCLUDING FOOTING) **	213					
898	20300	93	CY	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)		93				

* RAILING, MISC: RAILING ALTERNATE, MINNESOTA RAILING IS A REQUIRED BID ITEM. IF SELECTED BY THE OWNER IT WILL REPLACE BID ITEM 898: QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET). CONCRETE IN ALTERNATE RAILING SHALL BE QC/QA CONCRETE,CLASS QSC2. ALTERNATE RAILING SHALL BE DETAILED PER MINNESOTA STANDARD DRAWING FIGURE 5-397.157 AND SUBMITTED FOR SHOP DRAWING REVIEW PRIOR TO FABRICATION. REINFORCING WILL BE PAID UNDER ITEM 509, EPOXY COATED REINFORCING STEEL. THE ALTERNATE RAILING OPTION WILL REPLACE 20,479 POUNDS OF REINFORCEMENT AND 695 SQ. YD. OF SEALING.

DESIGN DETAILS ARE INCLUDED FOR BARRIER TRANSITIONS FOR STANDARD ODOT RAILING. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR TRANSITIONS OF THE ALTERNATE BID ITEM RAILING SELECTED. DESIGN DETAILS OF SIMILAR AESTHETIC RAILING TRANSITIONS ARE ON FILE WITH THE CITY FROM PREVIOUS PROJECTS SUCH AS THE FORMER COLUMBIA PARKWAY PROJECT. THE CONTRACTOR SHOULD CONTACT RICHARD SZEKERESH, P.E., PRINCIPAL STRUCTURAL ENGINEER FOR THE CITY OF CINCINNATI AT (513) 352-3419 OR richard.szekeresh@cincinnati-oh.gov FOR THESE DRAWINGS PRIOR TO DEVELOPING OR SUBMITTING SHOP DRAWINGS.

** CONCRETE FOR REAR ABUTMENT COLUMNS IS INCLUDED WITH THIS ITEM FOR PAYMENT.

DESIGN AGENCY
BURGESS & NIPLE

DESIGNED XAC | DRAWN SJA | REVIEWED RMK | DATE 02-20-08
CHECKED SJA | REVISED | STRUCTURE FILE NUMBER 3111636

ESTIMATED QUANTITIES
BRIDGE NO. HAM-264-1448
W.B. WARSAW AVE. RAMP OVER S.R. 264

HAM-50-18.79
PID No. 20082

6 / 34

375
657

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ESTIMATED QUANTITIES

CALC.	DATE	CHK'D	DATE
JHL	1/8/2009	ADZ	1/21/2009

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIERS	SUPER.	APPROACH SLAB	GENERAL	SHT. REF.
202	11002	LUMP		STRUCTURE REMOVED, OVER 20 FOOT SPAN					LUMP	
202	22900	134	SY	APPROACH SLAB REMOVED				134		
SPECIAL	20307502	3	EACH	INCLINOMETER	1	2				5 / 34
503	21300	LUMP		UNCLASSIFIED EXCAVATION						
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION						
507	00700	1680	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		1680				
507	00750	1825	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		1825				
509	10000	280847	LB	EPOXY COATED REINFORCING STEEL	9753	71197	199897			
512	10001	118	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION)		118				4 / 34
512	10050	1339	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	102		1237			
512	10100	381	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		381				
513	10300	642378	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5			642378			
513	20000	6336	EACH	WELDED STUD SHEAR CONNECTORS			6336			
513	95030	4	EACH	STRUCTURAL STEEL MISC. : SURVEY PRISM MOUNT	2	2				5 / 34
514	00060	33787	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			33787			
514	00066	33787	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			33787			
514	10000	25	EACH	FINAL INSPECTION REPAIR			25			
516	11211	37	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN			37			10 / 34
516	13600	7	SF	1" PREFORMED EXPANSION JOINT FILLER	7					
516	13900	15	SF	2" PREFORMED EXPANSION JOINT FILLER	15					
516	44200	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (1'-6" DIA. x $3\frac{9}{16}$") (EXPANSION)	4					
516	44300	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2'-0" DIA. x $4\frac{3}{8}$") (EXPANSION)		4				
516	44400	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (1'-6" DIA. x $8\frac{1}{2}$") (SPECIAL)	4					
516	44400	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2'-2" DIA. x 6") (FIXED)		4				
516	44400	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2'-2" DIA. x 6") (EXPANSION)		4				
516	44400	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (2'-2" DIA. x $6\frac{7}{8}$") (EXPANSION)		4				
517	76300	1159	FT	RAILING, MISC: RAILING ALTERNATE, MINNESOTA RAILING *			1159			6 & 24 / 34
518	12300	3	EACH	SCUPPERS, INCLUDING SUPPORTS			3			
518	51100	27	FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS					34	
518	60030	103	FT	PIPE HORIZONTAL CONDUCTOR					103	
523	20000	2	EACH	DYNAMIC LOAD TESTING		2				
524	94903	156	FT	DRILLED SHAFTS, 48" DIAMETER, ABOVE BEDROCK, AS PER PLAN	156					4 / 34
524	94907	756	FT	DRILLED SHAFTS, 54" DIAMETER, ABOVE BEDROCK, AS PER PLAN		756				4 / 34
898	10201	555	CY	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN			555			4 / 34
898	10709	108	SY	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN				108		4 / 34
898	11000	135	CY	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			135			
898	20100	256	CY	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		256				
898	20160	54	CY	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT INCLUDING FOOTING)	54					
898	20300	311	CY	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)		311				

* RAILING, MISC: RAILING ALTERNATE, MINNESOTA RAILING IS A REQUIRED BID ITEM. IF SELECTED BY THE OWNER IT WILL REPLACE BID ITEM 898: QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET). CONCRETE IN ALTERNATE RAILING SHALL BE QC/QA CONCRETE,CLASS QSC2. ALTERNATE RAILING SHALL BE DETAILED PER MINNESOTA STANDARD DRAWING FIGURE 5-397.157 AND SUBMITTED FOR SHOP DRAWING REVIEW PRIOR TO FABRICATION. REINFORCING WILL BE PAID UNDER ITEM 509, EPOXY COATED REINFORCING STEEL. THE ALTERNATE RAILING OPTION WILL REPLACE 27,596 POUNDS OF REINFORCEMENT AND 948 SQ. YD. OF SEALING.

DESIGN DETAILS ARE INCLUDED FOR BARRIER TRANSITIONS FOR STANDARD ODOT RAILING. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR TRANSITIONS OF THE ALTERNATE BID ITEM RAILING SELECTED. DESIGN DETAILS OF SIMILAR AESTHETIC RAILING TRANSITIONS ARE ON FILE WITH THE CITY FROM PREVIOUS PROJECTS SUCH AS THE FORMER COLUMBIA PARKWAY PROJECT. THE CONTRACTOR SHOULD CONTACT RICHARD SZEKERESH, P.E., PRINCIPAL STRUCTURAL ENGINEER FOR THE CITY OF CINCINNATI AT (513) 352-3419 OR richard.szekeresh@cincinnati-oh.gov FOR THESE DRAWINGS PRIOR TO DEVELOPING OR SUBMITTING SHOP DRAWINGS.

DESIGN AGENCY: BURGESS & NIPLE

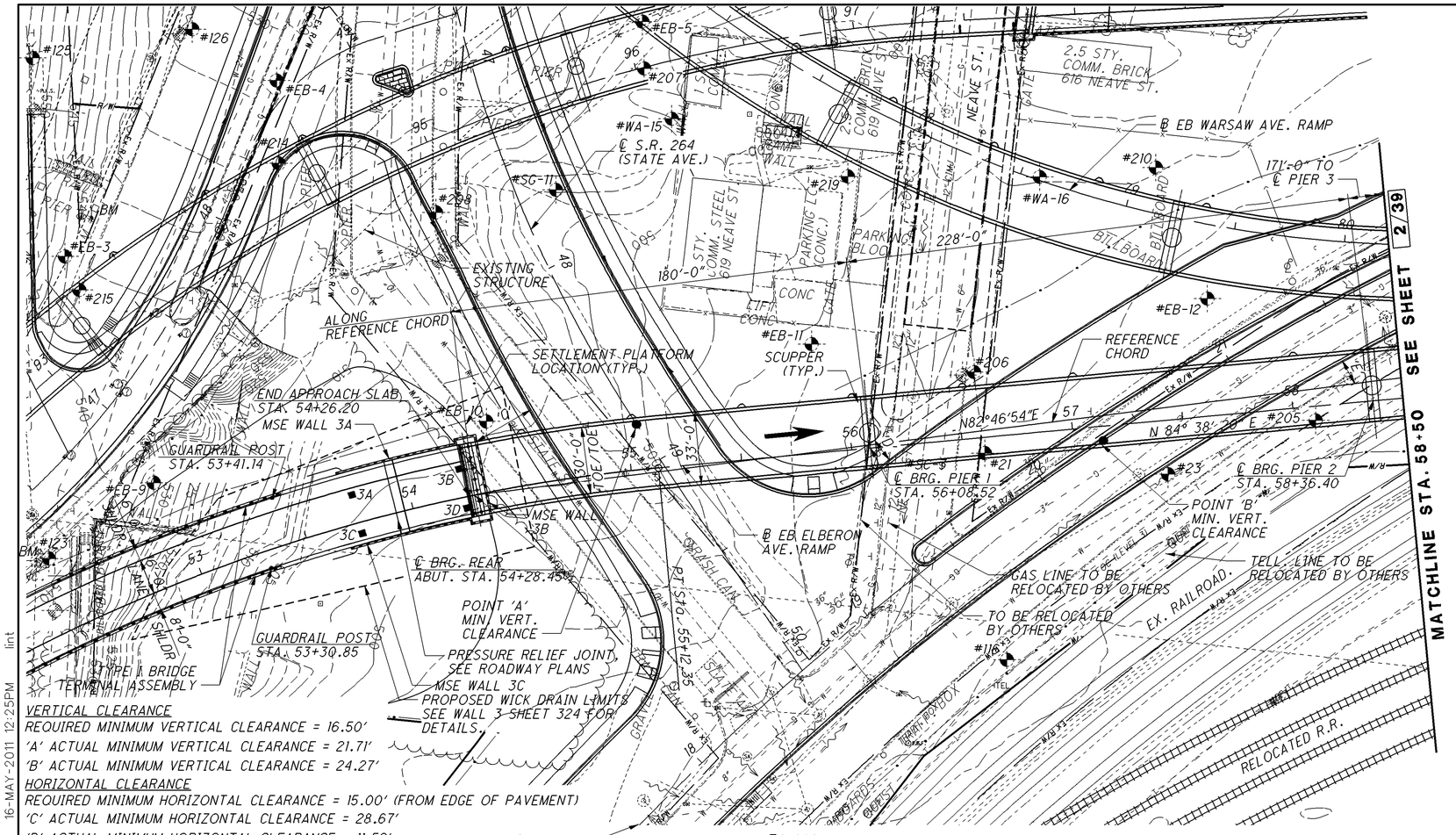
REVIEWED RMK | DATE 03-05-08 | STRUCTURE FILE NUMBER 3111652

DRAWN SJA | REVISED

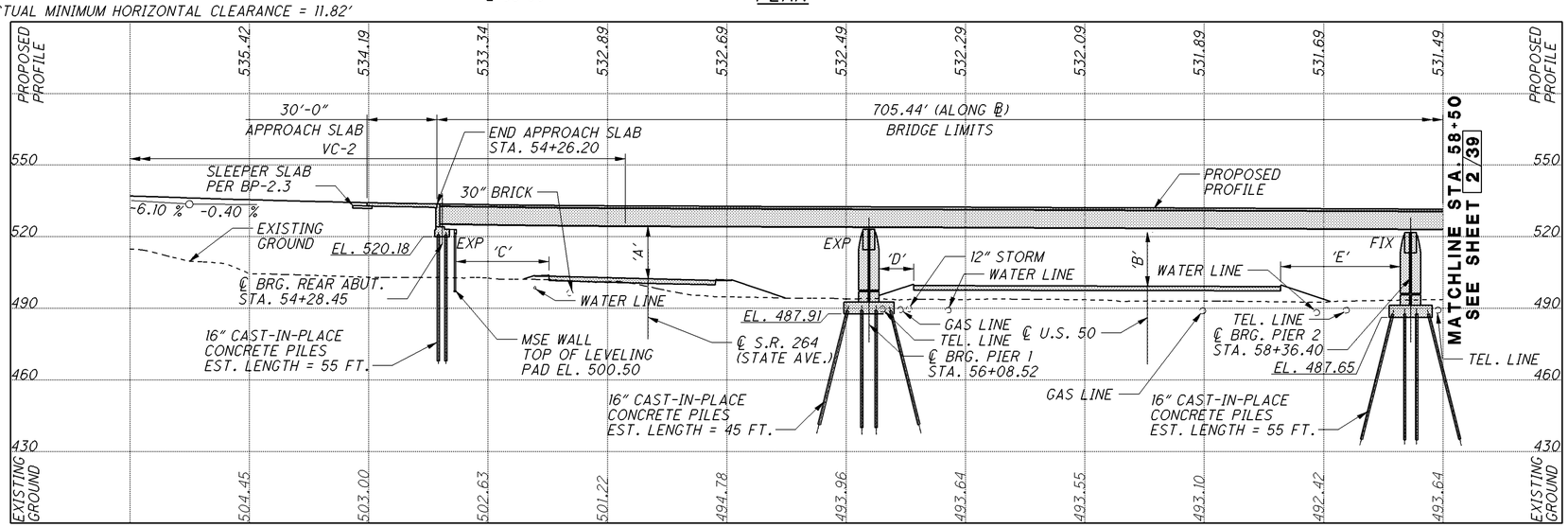
DESIGNED SJA | CHECKED XAC

ESTIMATED QUANTITIES
BRIDGE NO. HAM-264-1457
W.B. ELBERON AVE. RAMP OVER S.R. 264

HAM-50-18.79
PID No. 20082



PLAN



PROFILE ALONG ℄ EB. ELBERON AVE. RAMP

VERTICAL CLEARANCE

REQUIRED MINIMUM VERTICAL CLEARANCE = 16.50'
'A' ACTUAL MINIMUM VERTICAL CLEARANCE = 21.71'
'B' ACTUAL MINIMUM VERTICAL CLEARANCE = 24.27'

HORIZONTAL CLEARANCE

REQUIRED MINIMUM HORIZONTAL CLEARANCE = 15.00' (FROM EDGE OF PAVEMENT)
'C' ACTUAL MINIMUM HORIZONTAL CLEARANCE = 28.67'
'D' ACTUAL MINIMUM HORIZONTAL CLEARANCE = 11.52'
'E' ACTUAL MINIMUM HORIZONTAL CLEARANCE = 11.82'

BENCHMARK DATA

BM STA. 52+50.05 , ELEV. 541.03 , OFFSET 42.78', LT.
CHISELED BENCH MARK FOUND

BM STA. 54+04.22 , ELEV. 508.93 , OFFSET 78.32', LT.
PK NAIL SET

BM STA. 62+91.20 , ELEV. 493.11 , OFFSET 85.06', LT.
PK NAIL FOUND

BM STA. 63+96.84 , ELEV. 493.63 , OFFSET 112.06', LT.
BENCH MARK

NOTES:

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:

1996 ADT = 7,082 1996 ADTT = 284
2020 ADT = 9,171 2020 ADTT = 367

LEGEND:

SOIL BORING LOCATION

CURVE DATA

HORIZONTAL	VERTICAL	
	VC-1	VC-2
P.I. STA. 52+65.68 Δ = 37°24'59" (RT) Dc = 7°18'11" R = 784.56' T = 265.68' L = 512.35' E = 43.77'	P.V.I. STA 50+75.35 ELEV = 548.82' 105.00' VC -5.00 % -6.10 %	P.V.I. STA 53+25.00 ELEV = 533.59' 364.99' VC -6.10 % -0.40 %

EXISTING STRUCTURE

TYPE: 4-SPAN STEEL FRAMES WITH ALTERNATING SUSPENDED SPANS SUPPORTING A GIRDER - FLOORBEAM - STRINGER SYSTEM WITH REINFORCED CONCRETE DECK. THE SUPERSTRUCTURE IS SUPPORTED BY REINFORCED CONCRETE ABUTMENTS ON SPREAD FOOTINGS AND TAPERED, BUILT UP STEEL COLUMN STRADDLE BENTS ON PEDESTALS AND PILING.

LENGTH OF SPANS: 60.171', 84.254', 77.055' 57.668' (MEASURED ALONG CHORDS BETWEEN ℄ BEARING ABUTMENT AND PIERS)

ROADWAY WIDTH: VARIES 22'-24' FACE TO FACE CURB WITH 5' SIDEWALK

SKEW ANGLE: TANGENT

LOADING: POSTED 16 TON

DATE OF CONSTRUCTION: 1947

STRUCTURE FILE NO.: 3102785

APPROACH SLAB: 25'-0" (ESTIMATED)

WEARING SURFACE: ASPHALT

PROPOSED STRUCTURE

TYPE: 4-SPAN CONTINUOUS COMPOSITE STEEL GIRDERS WITH REINFORCED CONCRETE DECK, STUB ABUTMENTS, AND T-TYPE PIERS. (A709 GRADE 50 STEEL)

SPANS: 180' - 228' - 171' - 121' C/C BRGS. ALONG REFERENCE CHORD

ROADWAY: 30'-0" TOE/TOE PARAPET

LOADING: HS25 CASE II AND ALTERNATE MILITARY, FWS = 60 PSF

SKEW: NONE (RADIAL)

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG (AS-1-81)

ALIGNMENT: RIGHT CURVE (784.56' RADIUS), TANGENT, LEFT CURVE (1,300' RADIUS)

SUPERELEVATION: VARIES TO 0.046 MAX.

COORDINATES: LATITUDE 39°06'04" N
LONGITUDE 84°33'10" W

DESIGN AGENCY
PB AMERICAS, INC.
312 ELM STREET
SUITE 2500
CINCINNATI, OHIO 45202

DRAWN	REVIEWED	DATE
LEL	EBS	11/16/10
DESIGNED	CHECKED	STRUCTURE FILE NUMBER
PJL	SAP	3102793

HAMILTON COUNTY
STA. 54+26.20
STA. 61+31.64

SITE PLAN 1
BRIDGE NO. HAM-050-1875
EB ELBERON AVE. RAMP OVER S.R. 264 AND U.S.R. 50

HAM-50-18.79
PID No. 20082

1 / 39

438
657

ITEM	EXTENSION	STRUCTURE TOTAL ODOT	STRUCTURE TOTAL CITY	UNIT	ESTIMATED QUANTITIES DESCRIPTION	HAM-050-1875 ABUT.	PIER	SUPER.	GEN.	SEE SHEET NO.
202	11203			LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					4/39
202	22901	134		SQ YD	APPROACH SLAB REMOVED, AS PER PLAN				134	4/39
SPECIAL	203E65000			EACH	SETTLEMENT PLATFORM	7				
503	11100	1		LUMP	COFFERDAMS AND EXCAVATION BRACING					4/39
503	21300	1		LUMP	UNCLASSIFIED EXCAVATION					
505	11100	1		LUMP	PILE DRIVING EQUIPMENT MOBILIZATION					
507	00700	4,645		FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1,165	3,480			
507	00750	5,100		FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1,260	3,840			
509	10000	356,968		LB	EPOXY COATED REINFORCING STEEL	15,101	106,280	235,587		
512	10001	84		SQ YD	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)		84			4/39
512	10050	1,763		SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY)	141		1,622		
512	10100	404		SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		404			
513	10300	1,484,020		LB	STRUCTURAL STEEL MEMBERS, LEVEL 5			1,484,020		
513	20000	5,432		EACH	WELDED STUD SHEAR CONNECTORS			5,432		
514	00060	62,649		SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			62,649		
514	00066	62,649		SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			62,649		
514	10000	26		EACH	FINAL INSPECTION REPAIR			26		
516	11211	33		FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN (5" SEAL)			33		10/39
516	11211	33		FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN (4" SEAL)			33		12/39
516	13600	37		SQ FT	1" PREFORMED EXPANSION JOINT FILLER			37		
516	13900	75		SQ FT	2" PREFORMED EXPANSION JOINT FILLER			75		
516	44301	4		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (20" x 26" x 4 5/16" BEARING WITH 21" x 39" LOAD PLATE		4			23/39
516	44301	4		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (16" x 24" x 4 5/8" BEARING WITH 17" x 25" LOAD PLATE		4			23/39
516	44401	4		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10" x 15" x 5 1/16" BEARING WITH 11" x 20" LOAD PLATE	4				23/39
516	44401	4		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (22" x 28" x 6 7/16" BEARING WITH 23" x 29" LOAD PLATE		4			23/39
516	44401	4		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" x 20" x 6 3/4" BEARING WITH 13" x 26" LOAD PLATE	4				23/39
517	76300		1,467	FT	RAILING, MISC.: RAILING ALTERNATE, MINNESOTA RAILING (SEE NOTE 2)			1,467		
518	12300	9		EACH	SCUPPERS, INCLUDING SUPPORTS			9		
518	51100	430		FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS			430		
523	20000	5		EACH	DYNAMIC LOAD TESTING	2	3			
SPECIAL	690E98400	1		LUMP	SPECIAL-MISC.: TEMPORARY SURCHARGE					
898	10201	707		CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN			707		4/39
898	10709	111		SQ YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN			111		4/39
898	11000	180		CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			180		
898	20100	268		CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		268			
898	20160	135		CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT INCLUDING FOOTING)	135				
898	20300	245		CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)		245			

CALC. BY: BKJ DATE: 8-07
CHK'D BY: PJL DATE: 9-07

NOTES:

1. FOR LIST OF ABBREVIATIONS SEE SHEET 5/39.

2. RAILING, MISC: RAILING ALTERNATIVE, MINNESOTA RAILING IS A REQUIRED BID ITEM. IF SELECTED BY THE OWNER IT WILL REPLACE BID ITEM 898: QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET). CONCRETE IN ALTERNATE RAILING SHALL BE QC/QA CONCRETE, CLASS QSC2. IF SELECTED BY THE OWNER ALTERNATE RAILING AND ALL NECESSARY TRANSITIONS SHALL BE DETAILED PER MINNESOTA STANDARD DRAWING FIGURE 5-397.157 AND SUBMITTED FOR SHOP DRAWING REVIEW PRIOR TO FABRICATION. THE COST OF ALL LABOR MATERIALS, AND EQUIPMENT NECESSARY FOR PAINTING, REINFORCEMENT, SEALING, RAILINGS, AND SHOP DRAWING PREPARATION SHALL BE INCLUDED WITH THIS ITEM FOR PAYMENT. SEE SHEET 4/39 FOR COLOR REQUIREMENTS. ALL REINFORCEMENT SHALL BE EPOXY COATED. THE ALTERNATE RAILING OPTION WILL REPLACE 37,888 POUNDS OF REINFORCEMENT AND 1,182 SQ.YD. OF SEALING.

DESIGN AGENCY
PB AMERICAS, INC.
312 ELM STREET
SUITE 2500
CINCINNATI, OHIO 45202

DESIGNED PJL | DRAWN LEL | REVIEWED EBS | DATE 11/16/10
CHECKED SAP | REVISED | STRUCTURE FILE NUMBER 3102793

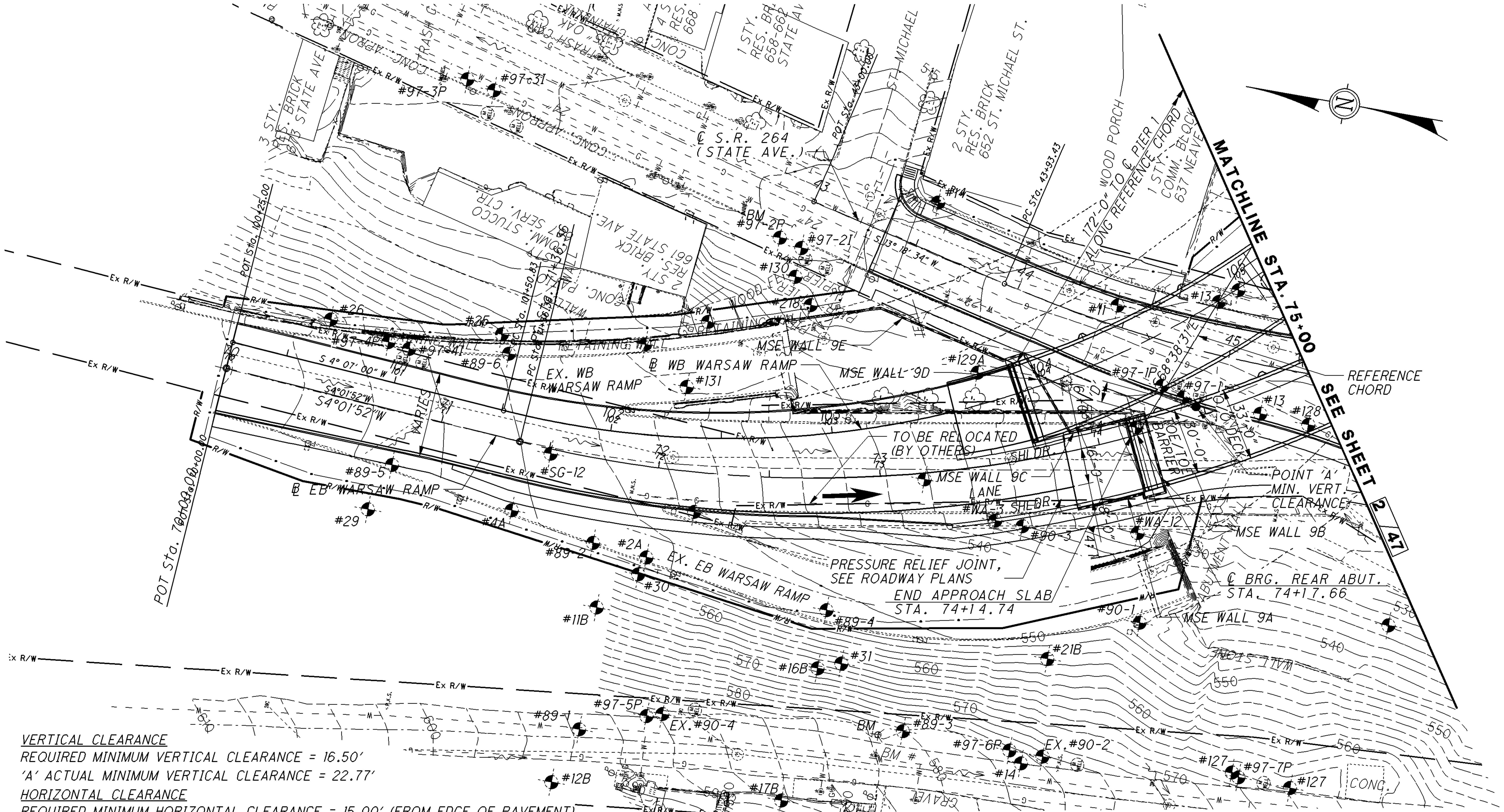
ESTIMATED QUANTITIES
BRIDGE NO. HAM-050-1875
EB ELBERON AVE. RAMP OVER S.R. 264 AND U.S.R. 50

HAM-50-18.79
PID No. 20082

6/39

443
657

J:\Projects\HAM-20082\STRUCTURES\HAM050_1875C\sheets\050_1875PEQ001.dgn 15-MAY-2011 10:01PM jint



PLAN

VERTICAL CLEARANCE

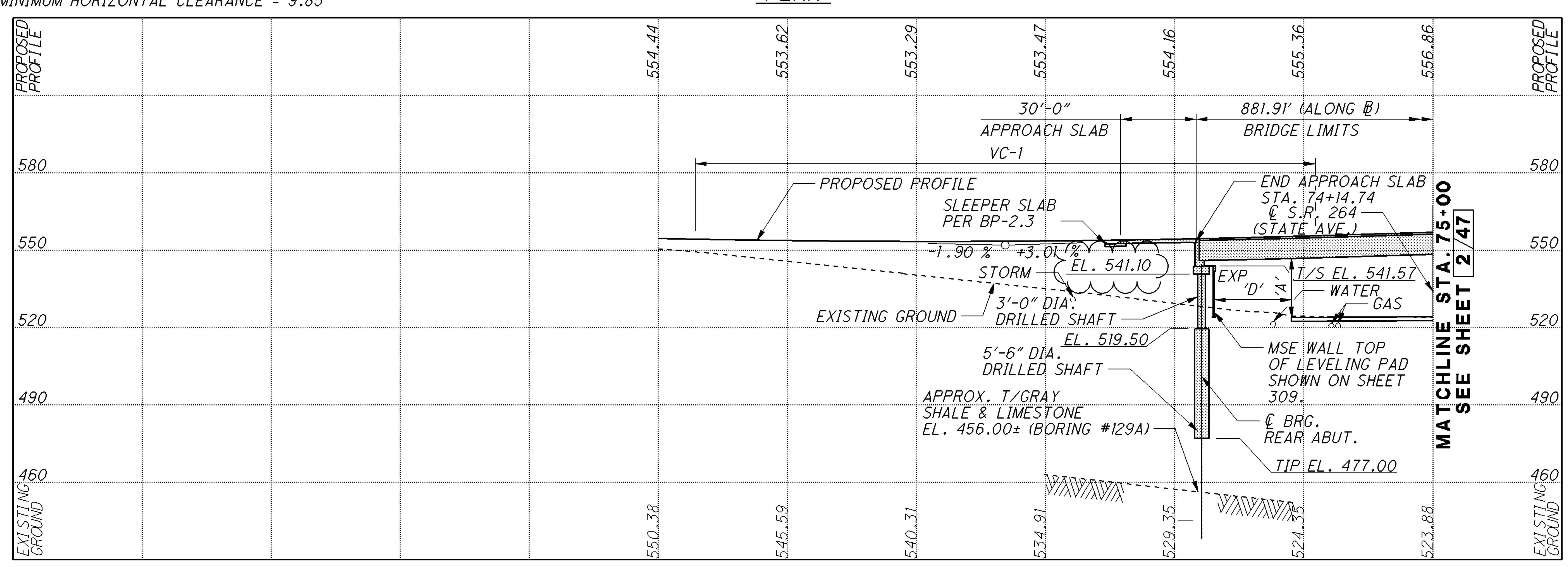
REQUIRED MINIMUM VERTICAL CLEARANCE = 16.50'

'A' ACTUAL MINIMUM VERTICAL CLEARANCE = 22.77'

HORIZONTAL CLEARANCE

REQUIRED MINIMUM HORIZONTAL CLEARANCE = 15.00' (FROM EDGE OF PAVEMENT)

'D' ACTUAL MINIMUM HORIZONTAL CLEARANCE = 9.85'



PROFILE ALONG ℄ EB WARSAW AVE. RAMP

BENCHMARK DATA

BM STA. 72+29.05 , ELEV. 520.21 , OFFSET 116.15', LT.
PK NAIL FOUND

BM STA. 72+94.26 , ELEV. 583.44 , OFFSET 116.32', RT.
BENCH MARK

BM STA. 84+35.65 , ELEV. 493.11 , OFFSET 49.60', LT.
PK NAIL FOUND

BM STA. 85+57.92 , ELEV. 493.63 , OFFSET 79.64', LT.
BENCH MARK

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:

1996 ADT = 5,065 1996 ADTT = 203

2020 ADT = 6,559 2020 ADTT = 263

LEGEND

SOIL BORING LOCATION

CURVE DATA

HORIZONTAL	VERTICAL
P.I. STA. 77+55.47 Δ = 96°45'57" (LT) Dc = 10°25'03" R = 550.00' T = 619.11' L = 928.89' E = 278.13'	VC-1 P.V.I. STA. 73+34.46 ELEV = 551.89' 240.39' VC K=49 -1.90 % +3.01 %

EXISTING STRUCTURE

TYPE: 4-SPAN STEEL FRAMES WITH ALTERNATING SUSPENDED SPANS SUPPORTING A GIRDER - FLOORBEAM - STRINGER SYSTEM WITH REINFORCED CONCRETE DECK. THE SUPERSTRUCTURE IS SUPPORTED BY REINFORCED CONCRETE ABUTMENTS ON SPREAD FOOTINGS AND TAPERED, BUILT UP STEEL COLUMNS STRADDLE BENTS ON DRILLED CAISONS OR PEDESTALS AND PILING.

LENGTH OF SPANS: 62.518', 92.218', 54.588' 55.479' (C/C BRGS. MEASURED ALONG CHORDS BETWEEN ℄ ABUTMENT AND PIERS)

ROADWAY WIDTH: 24' FACE TO FACE CURB

SKEW ANGLE: VARIES

LOADING: POSTED 16 TON

DATE OF CONSTRUCTION: 1947

STRUCTURE FILE NO.: 3102785

APPROACH SLAB: 25'-0" (ESTIMATED)

WEARING SURFACE: ASPHALT

PROPOSED STRUCTURE

TYPE: 5-SPAN CONTINUOUS COMPOSITE STEEL GIRDERS WITH REINFORCED CONCRETE DECK, STUB ABUTMENTS, AND T-TYPE PIERS. (A709 GRADE 50 STEEL)

SPANS: 172' - 155' - 116' - 192' - 172' C/C BEARINGS ALONG REFERENCE CHORD

ROADWAY: 30'-0" TOE/TOE PARAPET

LOADING: HS25 CASE II AND ALTERNATE MILITARY, FWS = 60 PSF

SKEW: NONE (RADIAL)

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG (AS-1-81)

ALIGNMENT: CURVE LEFT (RADIUS 550') TO CURVE LEFT (RADIUS 2684.87')

SUPERELEVATION: VARIES TO 0.046 MAX.

COORDINATES: LATITUDE 41°40'07" N
LONGITUDE 88°12'44" W

DESIGN AGENCY
PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
6235 ENTERPRISE COURT
DUBLIN, OHIO 43016

DESIGNED	CHECKED	DRAWN	REVISED	REVIEWED	DATE	STRUCTURE FILE NUMBER
PJL	SAP	LEL		EBS	11/16/10	3102858

HAMILTON COUNTY
STA. 74+14.74
STA. 82+96.65

SITE PLAN 1

BRIDGE NO. HAM-050-1881
EB WARSAW AVE. RAMP OVER S.R. 264 AND U.S.R. 50

HAM-50-18.79
PID No. 20082

ITEM	EXTENSION	STRUCTURE TOTAL ODOT	STRUCTURE TOTAL CITY	UNIT	ESTIMATED QUANTITIES DESCRIPTION	HAM-050-1881 ABUT.	PIER	SUPER.	GEN.	SEE SHEET NO.
202	11203			LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER					5/47
202	22901	134		SQ YD	APPROACH SLAB REMOVED, AS PER PLAN				134	5/47
SPECIAL	203E65000	4		EACH	SETTLEMENT PLATFORM	4				
SPECIAL	203E07502	1		EACH	INCLINOMETER	1				
503	11100	1		LUMP	COFFERDAMS AND EXCAVATION BRACING					
503	21300	1		LUMP	UNCLASSIFIED EXCAVATION					
505	11100	1		LUMP	PILE DRIVING EQUIPMENT MOBILIZATION					
507	00700	6,190		FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	630	5,560			
507	00750	6,755		FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	675	6,080			
509	10000	499,718		POUND	EPOXY COATED REINFORCING STEEL	14,995	157,261	327,462		
512	10001	112		SQ YD	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)		112			5/47
512	10050	2,108		SQ YD	SEALING OF CONCRETE SURFACES (NON-EPOXY)	133		1,975		
512	10100	1,302		SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		1,302			
513	10300	1,827,097		POUND	STRUCTURAL STEEL MEMBERS, LEVEL 5			1,827,097		
513	20000	5,910		EACH	WELDED STUD SHEAR CONNECTORS			5,910		
513	95030	2		EACH	STRUCTURAL STEEL, MISC.: SURVEY PRISM MOUNTS			2		
514	00060	77,023		SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			77,023		
514	00066	77,023		SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			77,023		
514	10000	31		EACH	FINAL INSPECTION REPAIR			31		
516	11211	65		FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN			65		11&13/47
516	13600	25		SQ FT	1" PREFORMED EXPANSION JOINT FILLER			25		
516	13900	79		SQ FT	2" PREFORMED EXPANSION JOINT FILLER			79		
516	44401	4		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (20" x 20" x 14¼" BEARING WITH 21" x 21" x 2" LOAD PLATE)	4				30/47
516	44401	16		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (22" x 24" x 8⅝" BEARING WITH 23" x 25" x 2" LOAD PLATE)		16			30/47
516	44401	4		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (16" x 20" x 11⅝" BEARING WITH 17" x 21" x 2" LOAD PLATE)	4				30/47
517	76300		1,840	FT	RAILING, MISC.: RAILING ALTERNATE, MINNESOTA RAILING (SEE NOTE 2)			1,840		
518	12300	5		EACH	SCUPPERS, INCLUDING SUPPORTS			5		
518	51100	235		FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS			235		
523	20000	4		EACH	DYNAMIC LOAD TESTING	1	3			
524	94702	86		FT	DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK	86				
524	94930	170		FT	DRILLED SHAFTS, 66" DIAMETER, ABOVE BEDROCK	170				
SPECIAL	690E98400	1		LUMP	SPECIAL-MISC.: TEMPORARY SURCHARGE					
898	10201	1,063		CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN			1,063		5/47
898	10709	323		SQ YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN			323		5/47
898	11000	236		CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			236		
898	20100	447		CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		447			
898	20160	135		CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT INCLUDING FOOTING)	135				
898	20300	351		CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)		351			

CALC. BY: BKJ DATE: 3/2008
CHK'D BY: PJL DATE: 3/2008

NOTES:

1. FOR LIST OF ABBREVIATIONS SEE SHEET 6/47.

2. RAILING, MISC: RAILING ALTERNATIVE, MINNESOTA RAILING IS A REQUIRED BID ITEM. IF SELECTED BY THE OWNER IT WILL REPLACE BID ITEM 898: QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET). CONCRETE IN ALTERNATE RAILING SHALL BE QC/QA CONCRETE, CLASS QSC2. IF SELECTED BY THE OWNER ALTERNATE RAILING AND ALL NECESSARY TRANSITIONS SHALL BE DETAILED PER MINNESOTA STANDARD DRAWING FIGURE 5-397.157 AND SUBMITTED FOR SHOP DRAWING REVIEW PRIOR TO FABRICATION. THE COST OF ALL LABOR MATERIALS, AND EQUIPMENT NECESSARY FOR PAINTING, REINFORCEMENT, SEALING, RAILINGS, AND SHOP DRAWING PREPARATION SHALL BE INCLUDED WITH THIS ITEM FOR PAYMENT. SEE SHEET 5/47 FOR COLOR REQUIREMENTS. ALL REINFORCEMENT SHALL BE EPOXY COATED. THE ALTERNATE RAILING OPTION WILL REPLACE 47,363 POUNDS OF REINFORCEMENT AND 1,471 SQ.YD. OF SEALING.

DESIGN AGENCY YD
PB AMERICAS, INC.
312 ELM STREET
SUITE 2500
CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
PJL	LEL	EBS	11/16/10
CHECKED	REVISED	STRUCTURE FILE NUMBER	
SAP		3102793	

ESTIMATED QUANTITIES
BRIDGE NO. HAM-050-1881
EB WARSAW AVE. RAMP OVER S.R. 264 AND U.S.R. 50

HAM-50-18.79
PID No. 20082

CALCULATED BY: RBK DATE: 02/25/09
CHECKED BY: DAT DATE: 02/27/09

PARTICIPATION	ESTIMATED QUANTITIES									
100% DISTRICT	ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	A.P.P.
LUMP	202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	5/65
LUMP	503	11101	LUMP		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LUMP	5/65
LUMP	503	21300	LUMP		UNCLASSIFIED EXCAVATION				LUMP	
LUMP	505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
1870	507	00500	1870	FT	12″ CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1430	440			
440	507	00501	440	FT	12″ CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN		440			5/65
2500	507	00550	2500	FT	12″ CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1540	960			
1980	507	00600	1980	FT	14″ CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		1980			
2160	507	00650	2160	FT	14″ CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		2160			
142793	509	10000	142793	POUND	EPOXY COATED REINFORCING STEEL	10226	24568	107999		
936	512	10100	936	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	82	291	471	92	
4	512	33000	4	SQ YD	TYPE 2 WATERPROOFING	4				
324089	513	10240	324089	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 2			324089		
3969	513	20000	3969	EACH	WELDED STUD SHEAR CONNECTORS			3969		
14548	514	00060	14548	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			14548		
14548	514	00066	14548	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			14548		
7	514	10000	7	EACH	FINAL INSPECTION REPAIR			7		
66	516	11210	66	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			66		
14	516	13600	14	SQ FT	1″ PERFORMED EXPANSION JOINT FILLER			14		
352	516	13900	352	SQ FT	2″ PREFORMED EXPANSION JOINT FILLER	21		331		
100	516	14021	100	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	100				5/65
7	516	44100	7	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 15″x15″x2½″ BEARING WITH 16″x16″ LOAD PLATE			7		
7	516	44100	7	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 19″x19″x2½″ BEARING WITH 27″x21″ LOAD PLATE			7		
7	516	44100	7	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 16″x12″x2½″ BEARING WITH 18″x14″ LOAD PLATE			7		
154	517	75120	154	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING)			154		
3	518	12201	3	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN			3		65/65
55	518	21200	55	CU YD	POROUS BACKFILL WITH FILTER FABRIC				55	
67	518	40000	67	FT	6″ PERFORATED CORRUGATED PLASTIC PIPE				67	
48	518	51101	48	FT	8″ PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN			48		65/65
8	519	11101	8	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN		8			5/65
~~3~~	~~523~~	~~20000~~	~~3~~	~~EACH~~	~~DYNAMIC LOAD TESTING~~	~~1~~	~~2~~			
29	898	10200	29	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)			29		
~~345~~	~~898~~	~~10201~~	~~345~~	~~CU YD~~	~~QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN~~			~~345~~		5/65
223	898	10709	223	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17″), AS PER PLAN				223	5/65
51	898	11000	51	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			47	4	
~~67~~	898	20100	~~67~~	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		67			
72	898	20160	72	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT INCLUDING FOOTING)	72				
81	898	20300	81	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)		81			

DESIGN AGENCY
KZF DESIGN
Architecture | Engineering | Interiors | Planning
KZF DESIGN INC. 700 Broadway Street Cincinnati, OH 45202-6010
TEL 513.621.6211 FAX 513.621.36530 WEB www.kzf.com

REVIEWED BMB DATE 11-29-10
STRUCTURE FILE NUMBER 3102807/3102815
DRAWN RBK REVISED —
DESIGNED DEF CHECKED DAT

ESTIMATED QUANTITIES
BRIDGE HAM-50-1903 L
OVER VACANT LAND

HAM-50-18.79
PID No. 20082

CALCULATED BY: RBK DATE: 02/25/09
CHECKED BY: DAT DATE: 02/27/09

ESTIMATED QUANTITIES

PARTICIPATION 100% DISTRICT	ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	A.P.P.
LUMP	202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	5/65
LUMP	503	11101	LUMP		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LUMP	5/65
LUMP	503	21300	LUMP		UNCLASSIFIED EXCAVATION				LUMP	
LUMP	505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
1370	507	00500	1370	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	1100	270			
270	507	00501	270	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN		270			5/65
1800	507	00550	1800	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	1200	600			
1125	507	00600	1125	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		1125			
1250	507	00650	1250	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		1250			
123826	509	10000	123826	POUND	EPOXY COATED REINFORCING STEEL	8834	24569	90423		
640	512	10100	640	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	73	247	268	52	
4	512	33000	4	SQ YD	TYPE 2 WATERPROOFING	4				
277593	513	10240	277593	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 2			277593		
3402	513	20000	3402	EACH	WELDED STUD SHEAR CONNECTORS			3402		
12470	514	00060	12470	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			12470		
12470	514	00066	12470	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			12470		
6	514	10000	6	SQ YD	FINAL INSPECTION REPAIR			6		
58	516	11210	58	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			58		
10	516	13600	10	SQ FT	1" PERFORMED EXPANSION JOINT FILLER			10		
352	516	13900	352	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	21		331		
82	516	14021	82	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	82				5/65
6	516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 15"x15"x2½" BEARING WITH 16"x16" LOAD PLATE			6		
6	516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 19"x19"x2½" BEARING WITH 27"x21" LOAD PLATE			6		
6	516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 16"x12"x2½" BEARING WITH 18"x14" LOAD PLATE			6		
LUMP	516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		15/65
3	518	12201	3	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN			3		65/65
49	518	21200	49	CU YD	POROUS BACKFILL WITH FILTER FABRIC				49	
58	518	40000	58	FT	6" PERFORATED CORRUGATED PLASTIC PIPE				58	
15	518	40012	15	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE				15	
48	518	51101	48	FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN			48		65/65
~~5~~	~~519~~	~~11101~~	~~5~~	~~SQ FT~~	~~PATCHING CONCRETE STRUCTURE, AS PER PLAN~~		5			5/65
26	898	10200	26	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)			29		
~~282~~	~~898~~	~~10201~~	~~282~~	~~CU YD~~	~~QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN~~			~~282~~		5/65
198	898	10709	198	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), (T=17"), AS PER PLAN				198	5/65
47	898	11000	47	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			43	4	
52	898	20100	52	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING)		52			
64	898	20160	64	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT INCLUDING FOOTING)	64				
63	898	20300	63	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING)		63			

DESIGN AGENCY KZF DESIGN
Architecture | Engineering | Interiors | Planning

DESIGNED DEF | CHECKED DAT | DRAWN RBK | REVISED — | REVIEWED BMB | DATE 11-29-10
STRUCTURE FILE NUMBER 3102807/3102815

ESTIMATED QUANTITIES
BRIDGE HAM-50-1903 R
OVER VACANT LAND

HAM-50-18.79
PID No. 20082