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UTILITIES

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

ELECTRIC:

DAYTON POWER & LIGHT CO.
1900 DRYDEN RD.
DAYTON, OH 45439
937.554.9063
BILL WARD
WILLIAM.WARD@AES.COM

CITY UTILITIES:

CITY OF PIQUA
219 W. WATER ST.
PIQUA, OH 45356
937.778.2016
AMY HAVENAR, PE
AHAVENAR@PIQUAOH.ORG

CITY OF PIQUA
POWER SYSTEM
123 BRIDGE ST.
PIQUA, OH 45356
937.778.2077
ED KREIGER
EKREIGER@PIQUAOH.ORG

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.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE THE RIGHT-OF-WAY PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: TYPE B W/ YELLOW "NCI TRAVERSE" CAP

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: GEOID12B

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83(2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, SOUTH ZONE (3041)
COMBINED SCALE FACTOR: 0.99999372
ORIGIN OF COORDINATE SYSTEM: 0,0,0

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.

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.

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.

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.

CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. IN ALL CASES, THE PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES INCLUDING THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS IS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

DRINKING WATER RESOURCES PROTECTION

PORTIONS OF THE PROJECT ARE LOCATED WITHIN THE BOUNDARIES OF A DESIGNATED SOLE SOURCE AQUIFER. BEST CONSTRUCTION PRACTICES ARE TO BE IMPLEMENTED TO MINIMIZE WATER QUALITY IMPACTS. IDLE EQUIPMENT, PETROCHEMICALS, AND TOXIC/HAZARDOUS MATERIALS SHALL NOT BE STORED NEAR DRAINAGE WAYS, DITCHES OR STREAMS. A SPILL CONTAINMENT KIT IS TO BE MAINTAINED ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY. IF THE SPILL IS A REPORTABLE AMOUNT, THE LOCAL FIRE DEPARTMENT (911), LOCAL EMERGENCY COORDINATOR (937-339-6400), AND THE OEPA (1-800-282-9378) MUST BE CONTACTED WITHIN 30 MINUTES OF KNOWLEDGE OF THE RELEASE.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

SEEDING AND MULCHING

THE SEEDING AND MULCHING AREAS BELOW ARE SHOWN SEPARATE FOR THE MOT CROSSOVERS AND PERMANENT ROADWAY IMPROVEMENTS. THESE TOTALS ARE COMBINED AND USED TO CALCULATE THE ADDITIONAL ITEM TOTALS LISTED BELOW

MOT CROSSOVERS:
659, REPAIR SEEDING AND MULCHING 2566 SQ. YD.

PERMANENT ROADWAY:
659, REPAIR SEEDING AND MULCHING 169 SQ. YD.

TOTAL CARRIED TO GENERAL SUMMARY:
659, REPAIR SEEDING AND MULCHING 2735 SQ. YD.

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST
1 EACH

659, TOPSOIL
304 CU. YD.

659, SEEDING AND MULCHING
2735 SQ. YD.

659, REPAIR SEEDING AND MULCHING
137 SQ. YD.

659, INTER-SEEDING
137 SQ. YD.

659, COMMERCIAL FERTILIZER
0.38 TON

659, LIME
0.57 ACRES

659, WATER
15 M. GAL.

659, MOWING
6 M. SQ.FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

EXCAVATION AND EMBANKMENT

THE VOLUMES BELOW SHOW THE SEPARATE TOTALS OF EXCAVATION AND EMBANKMENT FOR THE MOT CROSSOVERS AND PERMANENT ROADWAY IMPROVEMENTS. THESE TOTALS ARE COMBINED AND CARRIED TO THE GENERAL SUMMARY

MOT CROSSOVERS:
203, EXCAVATION 1261 CU. YD.
203, EMBANKMENT 671 CU. YD.

PERMANENT ROADWAY:
203, EXCAVATION 320 CU. YD.
203, EMBANKMENT 5 CU. YD.

TOTALS CARRIED TO GENERAL SUMMARY:
203, EXCAVATION 1581 CU. YD.
203, EMBANKMENT 676 CU. YD.

POST-CONSTRUCTION BRIDGE INSPECTION

AT LEAST TWO WEEKS PRIOR TO OPENING THE BRIDGE TO TRAFFIC, THE CONTRACTOR SHALL NOTIFY THE ODOT DISTRICT 7 BRIDGE INSPECTION ENGINEER (937-497-6884) TO ALLOW FOR THE NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) REQUIRED POST-CONSTRUCTION INITIAL INSPECTION OF THE BRIDGE.

TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS. PAYMENT FOR THE TEMPORARY DRAINAGE ITEMS ARE ITEMIZED AND CARRIED TO THE GENERAL SUMMARY.

REMOVAL OF TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE STRUCTURES LABELED ON THE MAINTENANCE OF TRAFFIC PLANS ARE TO BE REMOVED DURING COMPLETION OF PROPOSED ROADWAY WORK.

TEMPORARY DRAINAGE PIPES LABELED ON THE MAINTENANCE OF TRAFFIC PLANS THAT ARE LISTED BELOW ARE TO BE FILLED AND PLUGGED DURING COMPLETION OF PROPOSED ROADWAY WORK PER:
ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT.
SEE NOTE ON SHEET 8. OTHER TEMPORARY DRAINAGE ITEMS NOT LISTED CAN REMAIN IN PLACE FOLLOWING CONSTRUCTION OF THE PROJECT.

D-2 - 57 FT
D-3 - 32 FT
D-5 - 99 FT

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY:

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT - 188 FT

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

FOR QUANTITIES AND OUTLET INFORMATION SEE UNDERDRAIN SUBSUMMARY SHEET 73.

CALCULATED JAP CHECKED DLT

GENERAL NOTES

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7	8	9	13	14	17	70	71	72	95		01/IMS/BR	02/IMS/PV	03/SAF/OT						
																		ROADWAY	
											LS			201	11000	LS		CLEARING AND GRUBBING	
			24				523				547			202	23000	547	SY	PAVEMENT REMOVED	
				962							962			202	23001	962	SY	PAVEMENT REMOVED, AS PER PLAN	14
							2,877				2,877			202	38000	2,877	FT	GUARDRAIL REMOVED	
							5				5			202	47000	5	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
				2,110							2,110			202	48100	2,110	FT	CABLE BARRIER REMOVED FOR STORAGE	
					6						6			202	58100	6	EACH	CATCH BASIN REMOVED	
188											188			SPECIAL	20270000	188	FT	FILL AND PLUG EXISTING CONDUIT	7
1,581											1,581			203	10000	1,581	CY	EXCAVATION	
676											676			203	20000	676	CY	EMBANKMENT	
							182				182			255	20000	182	FT	FULL DEPTH PAVEMENT SAWING	
	775										775			606	15050	775	FT	GUARDRAIL, TYPE MGS	
	1,787.5										1,787.5			606	15100	1,787.5	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
	4										4			606	26150	4	EACH	ANCHOR ASSEMBLY, MGS TYPE E NCHRP 350/MASH 2016	
	1										1			606	26550	1	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
	4										4			606	35002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
	1										1			606	35102	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
				2,110							2,110			SPECIAL	60655020	2,110	FT	CABLE BARRIER, REPLACEMENT CABLE	14
				4							4			SPECIAL	60655150	4	EACH	CABLE BARRIER, ANCHOR ASSEMBLY	14
				2							2			SPECIAL	60655180	2	EACH	CABLE BARRIER, SPLICE	14
				23							23			SPECIAL	60655190	23	EACH	CABLE BARRIER, POST REFLECTOR	14
				2							2			SPECIAL	60655200	2	EACH	CABLE BARRIER, TENSIONING	14
				2							2			606	98100	2	EACH	GUARDRAIL, MISC.:CABLE BARRIER ANCHOR ASSEMBLY REMOVED	14
							84				84			609	24510	84	FT	CURB, TYPE 4-C	
				962							962			SPECIAL	69098300	962	SY	MOW STRIP	14
																		EROSION CONTROL	
							58				58			601	21060	58	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT	
									397		397			601	32200	397	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
1											1			659	00100	1	EACH	SOIL ANALYSIS TEST	
304											304			659	00300	304	CY	TOPSOIL	
2,735											2,735			659	00500	2,735	SY	SEEDING AND MULCHING, CLASS 1	
137											137			659	14000	137	SY	REPAIR SEEDING AND MULCHING	
137											137			659	15000	137	SY	INTER-SEEDING	
0.38											0.38			659	20000	0.38	TON	COMMERCIAL FERTILIZER	
0.57											0.57			659	31000	0.57	ACRE	LIME	
15											15			659	35000	15	MGAL	WATER	
6											6			659	40000	6	MSF	MOWING	
											LS			832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
											LS			832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
											LS			832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
											45,000			832	30000	45,000	EACH	EROSION CONTROL	
																		PAVEMENT	
						456					456			204	10000	456	SY	SUBGRADE COMPACTION	
	300											300		253	01001	300	SY	PAVEMENT REPAIR, AS PER PLAN	8
								106,096				106,096		254	01000	106,096	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.75"	
						1,089					1,089			254	01000	1,089	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25"	
	50											50		254	01601	50	SY	PATCHING PLANED SURFACE, AS PER PLAN	8
			7			139					146			302	46000	146	CY	ASPHALT CONCRETE BASE, PG64-22	
			4			157					161			304	20000	161	CY	AGGREGATE BASE	
			5			184					189			407	10000	189	GAL	TACK COAT	
								9,020				9,020		407	20000	9,020	GAL	NON-TRACKING TACK COAT	
					132						132			411	10000	132	CY	STABILIZED CRUSHED AGGREGATE	
								5,160				5,160		442	00100	5,160	CY	ANTI-SEGREGATION EQUIPMENT	
						64					64			442	10000	64	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	
			3			75					78			442	10100	78	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)	
								5,160				5,160		442	10301	5,160	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG 76-22M	8
								589				589		617	10100	589	CY	COMPACTED AGGREGATE	

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GENERAL SUMMARY

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ROUTE	STATION RANGE			SIDE	DISTANCE (D)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		204 SUBGRADE COMPACTION	254 PAVEMENT PLANING, ASPHALT CONCRETE		302 ASPHALT CONCRETE BASE, PG64-22	304 AGGREGATE BASE		407 TACK COAT (0.06 GAL/SY)	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)
					FT	SY	SY		SY	SY		CY	CY		GAL	CY	CY
IR-75	1001+96.67	TO	1002+60.52	LT	63.85		274.00			274.00					32.88	11.42	13.32
	1002+44.01	TO	1003+03.25	RT	59.24		270.00			270.00					32.40	11.25	13.13
	1004+59.83	TO	1005+19.07	LT	59.24		271.00			271.00					32.52	11.29	13.17
	1005+02.56	TO	1005+66.41	RT	63.85		274.00			274.00					32.88	11.42	13.32
IR-75	1002+60.07	TO	1002+85.05	LT	24.98	111.02									13.32	4.63	5.40
	1003+03.25	TO	1003+28.28	RT	25.03	111.24									13.35	4.64	5.41
	1004+34.95	TO	1004+59.83	LT	24.88	110.58									13.27	4.61	5.38
	1004+77.50	TO	1005+02.56	RT	25.06	111.38									13.37	4.64	5.41
IR-75	1002+60.07	TO	1002+85.05	LT	24.98	111.72						34.52					
	1003+03.25	TO	1003+28.28	RT	25.03	111.94						34.59					
	1004+34.95	TO	1004+59.83	LT	24.88	111.27						34.39					
	1004+77.50	TO	1005+02.56	RT	25.06	112.07						34.63					
IR-75	1002+60.07	TO	1002+85.05	LT	24.98	113.80			113.80				18.97				
	1003+03.25	TO	1003+28.28	RT	25.03	114.03			114.03				19.00				
	1004+34.95	TO	1004+59.83	LT	24.88	113.34			113.34				18.89				
	1004+77.50	TO	1005+02.56	RT	25.06	114.16			114.16				19.03				
IR-75	1002+85.52	TO	1003+10.52	LT	25.00	120.37							20.06				
	1003+28.25	TO	1003+53.25	RT	25.00	120.37							20.06				
	1004+09.83	TO	1004+34.83	LT	25.00	120.37							20.06				
	1004+52.56	TO	1004+77.56	RT	25.00	120.37							20.06				
SUBTOTALS									455.33	1089.00		138.13	156.13		183.99	63.88	74.53
TOTALS CARRIED TO GENERAL SUMMARY									456	1089		139	157		184	64	75

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PAVEMENT SUBSUMMARY

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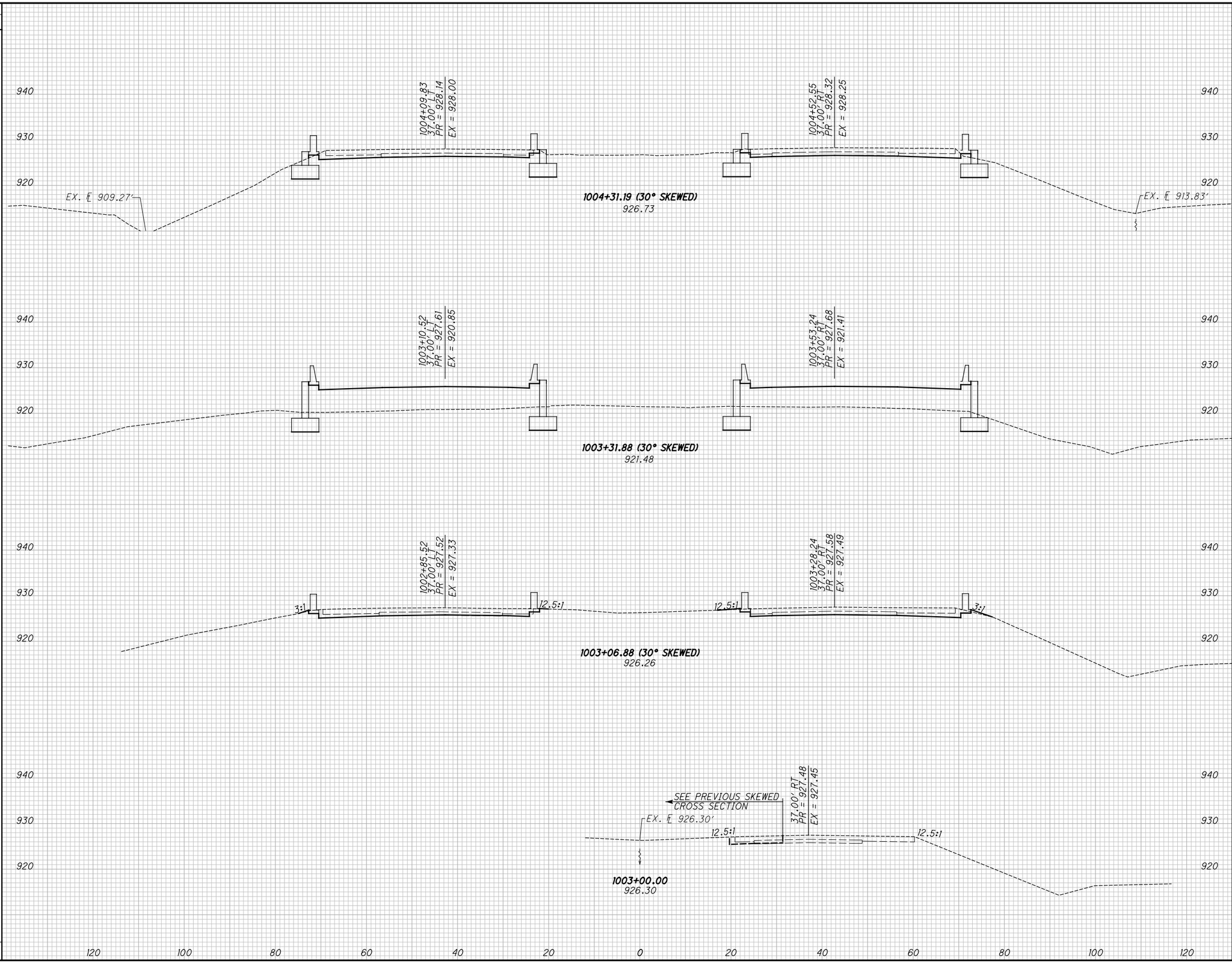
SEEDING	
END WIDTH	SQ. YDS.
3.90	0
14.02	7
2.22	5
	12



END AREA	
CUT	FILL
163	2
162	2
18	0

VOLUME	
CUT	FILL
23	0
59	0
82	0

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CROSS SECTIONS I.R. 75
STA. 1003+00.00 TO STA. 1004+31.19

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79
118