

EARTHWORK SCHEDULE

LOCATION	END AREAS				TOPSOIL			EARTH WORK			ESTIMATED UNSUITABLE (UNDERCUT) CU YD
	*CUT SQ FT	FILL SQ FT	TOPSOIL STRIPPING SQ FT	TOPSOIL PLACEMENT CU YD	EXCAVATION CU YD	PLACEMENT CU YD	BALANCE CU YD	EARTH EXCAVATION CU YD	EMBANKMENT CU YD	BALANCE WASTE(-) OR STORAGE(+) CU YD	
STATION											
306+50.00	4.3	0.0	0.0	0.0							
307+00.00	30.5	35.2	30.0	21.1	27.8	19.5	8.2	32.22	32.59	-5.20	125.00
307+43.69	34.4	29.7	30.0	19.8	48.5	33.1	15.5	52.51	52.51	-7.88	(NOM. QTY.)
307+50.00	34.8	23.3	30.0	20.6	7.0	4.7	2.3	8.09	6.19	+0.69	
307+68.75	42.5	8.2	12.4	8.2	14.7	10.0	4.7	26.84	10.94	+11.87	
308+00.00	28.7	31.8	30.0	23.1	24.5	18.1	6.4	41.20	23.15	+11.87	
308+13.60	30.7	42.0	32.0	25.1	15.6	12.1	3.5	14.96	18.59	-5.87	
308+36.05	40.4	63.1	35.4	23.5	28.0	20.2	7.8	29.56	43.69	-18.56	
308+50.00	42.0	67.7	37.5	25.6	18.8	12.7	6.2	21.29	33.79	-15.69	
308+73.36	47.7	90.2	37.5	25.6	32.4	22.2	10.3	38.80	68.31	-35.33	
309+00.00	33.6	80.9	50.1	33.3	43.2	29.1	14.2	40.11	84.41	-50.32	
309+25.64	36.1	46.0	10.6	16.6	28.8	23.7	5.1	33.09	60.25	-32.12	
309+50.00	21.1	76.8	42.5	25.8	24.0	19.1	4.8	25.80	55.40	-33.47	
310+00.00	7.0	59.7	30.0	21.5	67.1	43.8	23.3	26.02	126.39	-104.27	
310+50.00	5.4	53.9	13.0	8.8	39.8	28.1	11.8	11.48	105.19	-95.43	
310+75.00	1.9	94.2	30.0	21.5	19.9	14.0	5.9	3.38	68.56	-65.69	
310+97.14	2.4	53.8	5.4	0.0	14.5	8.8	5.7	1.76	60.68	-59.18	
				SUBTOTAL	455	319	136	407	851	-505	125
OMIT BOX CULVERT											
311+23.86	2.4	44.2	5.4	0.0							
311+50.00	117.8	89.2	42.5	34.0	23.2	16.5	6.7	58.19	64.58	-15.12	125.00
312+00.00	53.2	61.4	36.3	27.8	73.0	57.2	15.7	158.33	139.44	-4.86	(NOM. QTY.)
312+50.00	37.3	45.5	32.6	24.3	63.8	48.2	15.6	83.80	98.98	-27.75	
312+81.85	25.1	44.3	28.7	20.2	36.2	26.3	9.9	36.80	52.97	-21.69	
313+00.00	27.2	53.9	27.5	16.5	18.9	12.3	6.6	17.58	33.01	-18.07	
313+06.85	27.6	57.1	27.5	15.6	7.0	4.1	2.9	6.95	14.08	-8.17	
313+44.35	32.3	51.6	27.5	15.6	38.2	21.7	16.5	41.60	75.49	-40.13	
313+50.00	32.9	47.3	27.5	16.3	5.8	3.3	2.4	6.82	10.35	-4.55	
313+95.02	36.4	31.6	27.5	21.8	45.9	31.8	14.1	57.78	65.78	-16.67	
314+00.00	35.9	30.8	27.5	21.9	5.1	4.0	1.0	6.67	5.75	-0.08	
314+20.04	11.2	10.4	4.8	5.3	12.0	10.1	1.9	17.48	15.29	-0.43	
314+50.00	12.1	8.8	5.2	5.4	5.6	5.9	-0.4	12.93	10.65	+0.34	
315+00.00		0.0	0.0	0.0	4.8	5.0	-0.2	22.41	8.15	+10.90	
				SUBTOTAL	339	246	93	527	595	-146	125
SHRINKAGE FACTOR	15%			TOTAL	794	566	228	934	1,445	-651	250
				PAY ITEM(S)	20201200	21101625		20200100	20400800	20201200	20700420

EARTHWORK GENERAL NOTES

ALL EARTHWORK QUANTITIES ARE CALCULATED BY THE METHOD OF AVERAGE END AREAS USING THE PLAN CROSS SECTIONS. SHRINKAGE FACTOR, ASSUMED TO BE 15% FOR THIS PROJECT, ARE ESTIMATED FOR THE SOLE PURPOSE OF DETERMINING A BALANCE OF EARTHWORK. THE CONTRACTOR SHALL ESTIMATE HIS OWN SHRINKAGE FACTORS IN DETERMINING HIS EARTHWORK. NO PAYMENT WILL BE MADE ON EARTHWORK QUANTITIES DUE TO VARIATION IN THE SHRINKAGE FACTOR SINCE EARTHWORK IS MEASURED IN ITS FINAL POSITION.

IN DEVELOPING THE EARTHWORK QUANTITIES FOR KESLINGER RD, IT WAS ASSUMED THAT IN THOSE AREAS WHERE SOIL BORINGS INDICATED THAT UNDERCUT/PGE IS REQUIRED, ALL THE EXCAVATED MATERIAL MEASURED BY METHOD OF AVERAGE END AREAS IN THAT CROSS ROADWAY SECTION WILL BE CONSIDERED UNSUITABLE OR UNSTABLE MATERIAL.

IN ADDITION TO NUCLEAR DENSITY TESTING OF EMBANKMENTS AND SUBGRADES, THE FINAL SHALL BE PROOF ROLLED USING A FULLY LOADED SEMI TRUCK. THE PROOF-ROLL SHOULD DEMONSTRATE A MAXIMUM ONE-QUARTER (1/4) INCH DEFLECTION AT TOP OF SUBGRADE LEVEL. THE NUMBER OF PROOF ROLLS AS REQUIRED BY THE ENGINEER SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

ANTICIPATED UNDERCUT/PGE LIMITS ARE SHOWN IN THE CROSS SECTIONS. ONCE THE SUBGRADE HAS BEEN PREPARED, FINAL DETERMINATION OF THE NEED FOR UNDERCUT/PGE SHALL BE BASED ON PROOF ROLLS. THE FINAL DETERMINATION SHALL BE BY THE ENGINEER. PAYMENT WILL BE MADE FOR THE ACTUAL AREAS WHERE UNDERCUT AND PGE IS PLACED. THERE WILL BE NO ADJUSTMENT TO THE UNIT PRICE OF THE ASSOCIATED ITEMS IF THE QUANTITIES ARE LESS THAN ANTICIPATED.

TEMPORARY EARTH STOCKPILES WILL NOT BE ALLOWED ON THE ADJACENT PROPERTIES WITHOUT THE PERMISSION OF THE OWNER AND APPROVAL OF THE COUNTY. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE PERMISSION FROM THE APPROPRIATE OWNER PRIOR TO STOCK PILING ANY MATERIALS ON THOSE PROPERTIES. IF THIS SPACE IS NOT AVAILABLE, THE CONTRACTOR SHALL MAKE OTHER PROVISIONS FOR HANDLING THESE MATERIALS DURING CONSTRUCTION OPERATIONS. ADJUSTMENTS TO THE UNIT PRICE OF EARTH EXCAVATION, FURNISHED EXCAVATION, AND TOPSOIL EXCAVATION SHALL BE MADE IF PROPERTY ACCESS IS GRANTED.

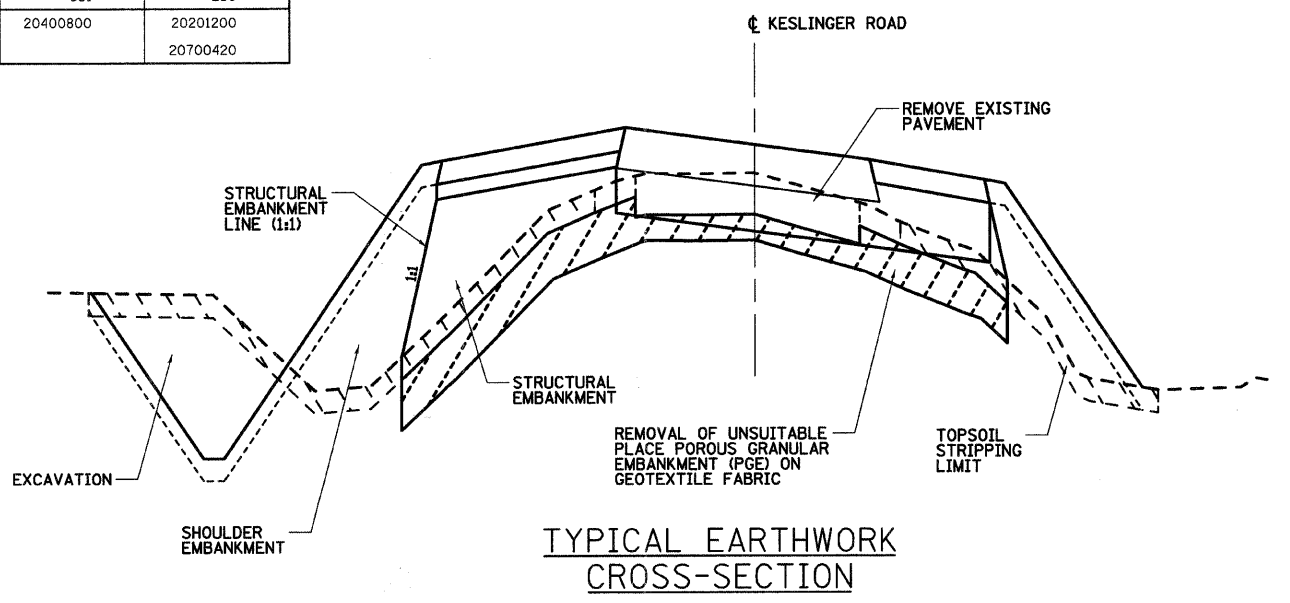
GEOTEXTILE FABRIC SHALL BE PLACED AT THE BOTTOM OF ALL UNDERCUT AREAS. ALL FABRIC PLACED WILL BE MEASURED FOR PAYMENT.

EARTH EXCAVATION AND EMBANKMENT SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING OR SEQUENCING OF CONTRACTORS OPERATIONS THAT REQUIRE STOCKPILING OF MATERIALS FOR LATER USE, REDISTRIBUTION AND RESPREADING IN SHOULDERS AND CONSTRUCTING OF EMBANKMENTS.

TOPSOIL EXCAVATED SHALL BE USED IN THE SHOULDER FILLS FOR THE ROADWAY EMBANKMENT SHORTAGE (-).

IN ADDITION TO THE AREAS SHOWN IN THE PLANS, 250 CY OF POROUS GRANULAR EMBANKMENT, SUBGRADE HAS BEEN PROVIDED FOR LOCATIONS WHERE SOILS TEND TO BE UNSTABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGE WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER (BY USE OF A CONE PENETROMETER IN CONJUNCTION WITH THE IDOT SUBGRADE STABILITY MANUAL, AND PROOF ROLLED USING A FULL LOAD SEMI). IF UNSTABLE AND/OR UNSUITABLE MATERIALS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

*AREAS EXCLUDE EXISTING PAVEMENT



TYPICAL EARTHWORK CROSS-SECTION

FILE NAME = P:\CBBEL_MEST Projects\2008\123135Kasalingr\PH11\Design\Drawn\31Eearthwork.dgn

WILLS BURKE KELSEY ASSOCIATES LTD. 710 West Main Street, Suite 201 St. Charles, Illinois 60174 (630) 443-7755	USER NAME = #USER#	DESIGNED - SBP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EARTH WORK SUMMARY		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - NDP	REVISED -		0110	01-00267-00-BR	KANE	37	31		
	PLOT DATE = 8/5/2009	CHECKED -	REVISED -		CONTRACT NO. 83994						
		DATE - January 2008	REVISED -		SCALE:	SHEET NO. 31 OF 37 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	