

SCHEDULE OF EARTHWORK QUANTITIES

LOCATION	END AREAS				TOPSOIL	EARTH WORK			SUBGRADE IMPROVEMENT		
	TOPSOIL STRIPPING (TSS)	UNDERCUTS (UC)	CUT (C)	FILL (F)	20201100	20200100	EMBANKMENT	20400800	20201200	30300001	21001000
					EARTH EXCAVATION	EARTH EXCAVATION		FURNISHED EX. BALANCE	REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	AGGREGATE SUBGRADE IMPROVEMENT	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
	(SQ FT)	(SQ FT)	(SQ FT)	(SQ FT)	(CU YD)	(CU YD)	(CU YD)	WASTE (+) or SHORTAGE (-)	(CU YD)	(CU YD)	(SQ YD)
10+50.00	0.6	0.0	27.9	0.0							
11+00.00	8.8	0.0	24.6	12.5	8.70	48.61	11.57	+29.75	0.00	0.00	
11+50.00	9.2	0.0	28.2	17.0	16.67	48.89	27.31	+14.25	0.00	0.00	
12+00.00	11.0	0.0	30.2	24.7	18.70	54.07	38.61	+7.35	0.00	0.00	
12+50.00	12.4	0.0	31.5	27.8	21.67	57.13	48.61	-0.05	0.00	0.00	
13+00.00	9.9	14.3	32.6	22.8	20.65	59.35	46.85	+3.60	13.24	13.24	79.44
13+50.00	10.1	14.4	34.1	4.8	18.52	61.76	25.56	+26.94	26.57	26.57	159.42
14+00.00	8.9	14.4	37.6	6.6	17.59	66.39	10.56	+45.87	26.67	26.67	160.02
14+50.00	15.0	14.3	40.1	19.6	22.13	71.94	24.26	+36.89	26.57	26.57	159.42
15+00.00	14.0	14.6	26.3	36.8	26.85	61.48	52.22	+0.04	26.76	26.76	160.56
15+50.00	17.4	13.2	30.6	68.9	29.07	52.69	97.87	-53.08	25.74	25.74	154.44
15+87.00	7.2	0.0	21.8	0.4	16.86	35.90	47.48	-16.97	9.04	9.04	54.24
19+85.00	5.9	7.8	11.9	0.4							
20+00.00	11.8	7.8	8.4	12.1	4.92	5.64	3.47	+1.32	4.33	4.33	8.66
20+50.00	19.8	43.7	17.6	105.3	29.26	24.07	108.70	-88.24	47.69	47.69	95.38
21+00.00	19.2	14.6	13.6	93.2	36.11	28.89	183.80	-159.24	53.98	53.98	107.96
21+50.00	18.2	14.6	18.0	87.0	34.63	29.26	166.85	-141.98	27.04	27.04	162.24
22+00.00	24.1	14.5	27.9	54.5	39.17	42.50	131.02	-94.90	26.94	26.94	161.64
22+50.00	20.0	15.5	16.0	61.2	40.83	40.65	107.13	-72.58	27.78	27.78	166.68
23+00.00	19.2	14.5	12.7	67.8	36.30	26.57	119.44	-96.86	27.78	27.78	166.68
23+50.00	17.5	13.7	15.7	68.9	33.98	26.30	126.57	-104.22	26.11	26.11	156.66
24+00.00	17.7	12.8	34.1	12.1	32.59	46.11	75.00	-35.81	24.54	24.54	147.24
24+50.00	15.1	11.8	26.2	48.7	30.37	55.83	56.30	-8.84	22.78	22.78	136.68
25+00.00	12.7	11.6	30.0	38.0	25.74	52.04	80.28	-36.05	21.67	21.67	130.02
25+50.00	11.5	11.6	33.5	28.2	22.41	58.80	61.30	-11.32	21.48	21.48	128.88
26+00.00	10.9	11.6	31.9	20.6	20.74	60.56	45.19	+6.29	21.48	21.48	128.88
26+50.00	10.5	8.6	27.0	10.9	19.81	54.54	29.17	+17.19	18.70	18.70	112.20
26+87.00	12.1	8.6	34.8	0.8	15.49	42.34	8.02	+27.97	11.79	11.79	70.74
27+00.00	5.5	0.0	4.7	0.0	4.24	9.51	0.19	+7.89	2.07	2.07	12.42
27+50.00	4.4	0.0	5.0	0.0	9.17	8.98	0.00	+7.63	0.00	0.00	0.00
28+14.00	4.5	0.0	4.8	0.0	10.55	11.61	0.00	+9.87	0.00	0.00	0.00
SHRINKAGE FACTOR		15%		TOTAL	663.7	1,242.4	1,733.3	-771.9	540.8	540.8	2,820.5
				ADJ. TOTAL	665.0	1,245.0		775.0	600.0	600.0	2,900.0

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 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.

IT HAS BEEN ASSUMED THAT STAGING WILL PREVENT SURPLUS EARTH FROM THE WEST SIDE OF THE BRIDGE FROM BEING AVAILABLE FOR FILL ON THE EAST SIDE. THEREFORE, THE SURPLUS BETWEEN STATIONS 10+50 AND 15+87 DO NOT FACTOR INTO THE TOTAL FOR FURNISHED EXCAVATION.

RECOMMENDATIONS OUTLINED IN THE ROADWAY GEOTECHNICAL REPORT PREPARED BY TESTING SERVICE CORPORATION, DATED SEPTEMBER 5, 2006 AND UPDATED AUGUST 10, 2007 WERE USED IN PREPARATION OF THE ROADWAY PLANS AND RELATED EARTHWORK CALCULATIONS.

AS OUTLINED IN THE ROADWAY GEOTECHNICAL REPORT, THE TOPSOIL THICKNESS WAS ESTIMATED AT 3-8 INCHES. FOUR (4) INCHES WAS ASSUMED ON THIS PROJECT FOR THE PURPOSE OF CALCULATING TOPSOIL STRIPPING QUANTITIES.

IF UNDERCUTS ARE ENCOUNTERED, UNDERCUTS WILL BE PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL. AFTER TOPSOIL STRIPPING AND VEGETATION CLEARING AND PRIOR TO UNDERCUTTING, THE SUBGRADE WILL BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER IN ACORDANCE WITH THE IDOT SUBGRADE STABILITY MANUAL TO DETERMINE REMEDIAL TREATMENT.

TESTING OF SUBGRADES AND EMBANKMENTS WILL BE REQUIRED. TESTING REQUIREMENTS WILL BE PER THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND THE SUBGRADE STABILITY MANUAL. IF PROOF ROLLS ARE REQUIRED BY THE ENGINEER, THE COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

EARTH EXCAVATION 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. HANDLING OF TOPSOIL WHETHER FROM AN ON-SITE STOCKPILE OR FROM AN OFF-SITE LOCATION WILL BE PAID FOR AS "TOPSOIL FURNISH AND PLACE, 4\"". UNDERCUTS QUANTITIES HAVE BEEN CALCULATED BASED ON THE FOLLOWING UNDERCUT RECOMMENDATIONS:

STA. 13+00 TO STA. 16+87; UNDERCUT 6" AND REPLACE WITH AGG. SUBGRADE IMPROVEMENT
 STA. 18+80 TO STA. 20+56; UNDERCUT 18" AND REPLACE WITH AGG. SUBGRADE IMPROVEMENT
 STA. 20+56 TO STA. 23+50; NO SPECIAL TREATMENT SUGGESTED
 STA. 23+50 TO STA. 26+50; UNDERCUT 6" AND REPLACE WITH AGG. SUBGRADE IMPROVEMENT

AGGREGATE SUBGRADE IMPROVEMENT, 12" IS PROPOSED UNDER THE FULL DEPTH PAVEMENT. ANY AGGREGATE SUBGRADE IMPROVEMENT FOR UNDERCUT BELOW THIS 12" BASE WILL BE PAID FOR SEPARATELY PER CUBIC YARD OF "AGGREGATE SUBGRADE IMPROVEMENT".

THE TOTAL ESTIMATED QUANTITY FOR "AGGREGATE SUBGRADE IMPROVEMENT", HAS BEEN ROUNDED UP APPROXIMATELY 60 CU YD TO ACCOUNT FOR POSSIBLE ADDITIONAL UNDERCUT THAT MAY BE REQUIRED DEPENDING ON FIELD CONDITIONS.

FILE NAME: W:\Projects\2012\120125_Bathonia\fig3\CADD\Drawn\DWG\SHAS\SCHEDULE16.dwg

WILLIS BURKE KELSEY ASSOCIATES LTD.
 116 West Main Street, Suite 201
 St. Charles, Illinois 60174

USER NAME = nper118	DESIGNED - KMA	REVISED -
PLOT SCALE = 1/1	DRAWN - KMA	REVISED -
PLOT DATE = 12/28/2012	CHECKED - DPB	REVISED -
	DATE - 12/21/12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES			
SCALE:	SHEET NO. 6 OF 6 SHEETS	STA.	TO STA.

F.A.U. RTE. 5355	SECTION 10-00167-01-WR	COUNTY DEKALB	TOTAL SHEETS 78	SHEET NO. 14
CONTRACT NO. 87544				ILLINOIS FED. AID PROJECT