

# EARTHWORK SCHEDULES

LOCATION	END AREAS			EARTH WORK					SUBGRADE IMPROVEMENT			
	TOPSOIL STRIPPING (TSS)	CUT (C)	FILL (F)	20201200 REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	20200100 EARTH EXCAVATION	20200100 COMP STORAGE EARTH EXCAVATION	EMBANKMENT	BALANCE WASTE (+) or SHORTAGE (-)	20300100 CHANNEL EXCAVATION	20201200 REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	Z0042002 POROUS GRANULAR EMBANKMENT SUBGRADE	21001000 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
	(SQ FT)	(SQ FT)	(SQ FT)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(SQ YD)
<b>MAINLINE</b>												
87+95.00	18.4	43.9	0.0									
88+00.00	17.2	45.1	0.1	3.3	8.2							
88+20.00	18.2	48.2	0.1	13.1	34.6		0.1					
88+50.00	16.5	51.7	0.0	19.3	55.5		0.1					
88+95.65	8.4	66.2	0.0	21.1	99.7							
89+00.00	8.2	67.0	0.0	1.3	10.7							
89+36.07	9.5	78.4	0.0	11.8	97.1							
89+50.00	18.8	73.8	0.0	7.3	39.3							
90+00.00	19.2	53.5	1.5	35.2	117.9		1.4					
90+50.00	26.0	46.9	6.2	41.9	93.0		7.1					
90+88.13	16.4	28.9	6.0	29.9	53.5		8.6					
91+00.00	27.8	102.0	4.4	9.7	9.7	19.0	2.3					
91+50.00	36.8	147.7	18.4	59.8	36.7	194.5	21.1					
91+89.60	37.2	133.0	31.4	54.3	28.1	177.8	36.5					
92+00.00	39.4	117.3	29.9	14.8	8.3	39.9	11.8					
92+19.10	39.2	62.7	66.5	27.8	14.2	49.5	34.1					34.4
<b>BRIDGE</b>												
92+85.10	23.0	17.0	68.9									41.1
93+00.00	21.7	14.8	47.6	12.3	8.8		32.2					
93+14.60	22.5	16.6	44.9	12.0	8.5		25.0					
93+50.00	20.7	7.0	42.4	28.3	15.5		57.2					
94+00.00	24.7	15.6	59.4	42.0	20.9		94.3					
94+23.63	8.5	23.6	29.5	14.5	17.2		38.9					
94+50.00	28.4	17.9	51.6	18.0	20.3		39.6					
94+77.00	30.4	19.9	51.0	29.4	18.9		51.3					
94+97.00	30.5	22.7	54.5	22.6	15.8		39.1					
95+00.00	30.4	23.0	54.6	3.4	2.5		6.1					
95+50.00	7.3	45.1	5.9	34.9	63.1		56.0					
95+59.04	8.4	48.0	8.2	2.6	15.6		2.4					
96+00.00	20.7	70.5	3.5	22.1	89.9		8.9					
96+50.00	21.5	48.4	4.2	39.1	110.1		7.1					
97+00.00	19.8	46.9	3.3	38.2	88.2		6.9					
97+50.00	17.9	34.0	17.6	34.9	74.9		19.4					
97+60.00	17.5	37.3	13.6	6.6	13.2		5.8					
<b>CHANNEL EX</b>												
1+00.00		18.3	0.0									
1+13.00		150.0	0.0					40.5				
1+30.00		209.8	0.0					113.3				
1+47.00		120.9	0.0					104.1				
1+60.00		8.2	0.0					31.1				
<b>ESTIMATED</b>										500.0	500.0	1500.0
<b>SHRINKAGE FACTOR</b>	15%		<b>TOTAL</b>	711.5	1,289.7	480.7	613.1	483.1	289.0	500.0	500.0	1,575.6
			<b>ADJ. TOTAL</b>	715.0	1,290.0	481.0	613.0	484.0	290.0	500.0	500.0	1,576.0
				1,771.0								

### 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 IS 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.
- RECOMMENDATIONS OUTLINED IN THE ROADWAY GEOTECHNICAL REPORT PREPARED BY TESTING SERVICE CORPORATION, DATED, JANUARY 19, 2011 WERE USED IN PREPARATION OF THE ROADWAY PLANS AND RELATED QUANTITY CALCULATIONS.
- AS OUTLINED IN THE ROADWAY GEOTECHNICAL REPORT, THE TOPSOIL THICKNESS WAS ESTIMATED AT 3-8 INCHES. SIX (6) 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 REQUIRMENTS 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 INCLUDED IN THE COST OF EXCAVATION.
- IN ADDITION TO ANY AREAS SHOWN ON THE PLANS, 500 CY OF POROUS GRANUALR EMBANKMENT SUBGRADE HAS BEEN PROVIDED FOR LOCATIONS WHERE SOILS TEND TO BE UNSTABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE SOILS ENGINEER (BY USE OF A CONE PENETROMETER IN CONJUNCTION WITH THE IDOT SUBGRADE STABILITY MANUAL AND ROLL USING FULL LOAD SEMD), IF UNSUITABLE AND/OR UNSTABLE MATERIALS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.
- EARTH EXCAVATION SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING OR SEQUENCING OF CONTRACTORS OPERATIONS THAT REQUIRE STOCKPILING OF MATERIALS FOR LATER USE FOR REDISTRIBUTION AND RESPREADING IN SHOULDERS AND CONSTRUCTING OF EMBANKMENTS.

### FURNISHED EXCAVATION

LOCATION	EARTH EXC.	SHRINKAGE	EMBANKMENT	BALANCE
WEST	706	15%	123	+477.37
EAST	583	15%	490	+5.75
<b>TOTAL</b>	<b>1290</b>		<b>613</b>	<b>+484.00</b>

- FURNISHED EXCAVATION DETERMINED SEPERATELY ON EAST AND WEST SIDE
- ASSUMED COMP STORAGE MATERIAL TO BE UNSUITABLE FOR FURNISHED EXCAVATION
- ASSUMED 15% SHRINKAGE FACTOR IS APPLIED ON EAST AND WEST SIDE
- ASSUMED THE REMAINING MATERIAL ON THE EAST AND WEST SIDE WILL BE UNSUITABLE

FILE NAME = P:\CIBEL\WEST Projects\2009\09-0073\_Hesperia\TAC\civil\Drawings\Sched\LE4.dgn



USER NAME = nparris	DESIGNED - KMA	REVISED -
PLOT SCALE =	DRAWN - RPD	REVISED -
PLOT DATE = 12/16/2011	CHECKED - RPD	REVISED -
	DATE - 12/19/11	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

### SCHEDULE OF QUANTITIES

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2442	04-08107-00-BR	KANE	80	10
CONTRACT NO. 63644				
SCALE:	SHEET NO. 10 OF 80 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.
				ILLINOIS FED. AID PROJECT