

## EARTHWORK SCHEDULE

BAL	LOCATION STATION TO STATION	EARTH EXCAVATION	AVERAGE SHRINKAGE FACTOR	EARTH EXC. ADJUSTED FOR SHRINKAGE	EMBANKMENT	EXCESS EXCAVATION	EXCAVATION REQUIRED TO COMPLETE	BORROW EXCAVATION **	REMARKS
		CU YD	%	CU YD	CU YD	CU YD	CU YD	CU YD	
1	STA 10+00 TO STA 23+00	99	43.20	43	1777	0	1734	0	USED 1734 FROM BAL 2
2	STA 23+00 TO STA 50+63.57	33652	79.99	26918	3150	23768	0	0	
	TOTAL	33751						0	

• THE SHRINKAGE FACTOR WAS CALCULATED AT EVERY STATION BASED UPON THE END AREA OF CUT. THE SHRINKAGE FACTOR WAS CALCULATED USING THE FOLLOWING EQUATION:  
 $P = (2000 / (E + 37)) + 16$  WHERE: P = SHRINKAGE FACTOR IN PERCENT  
 E = END AREA OF CUT IN SQUARE FEET  
 AND WAS APPLIED TO THE END AREA BY USING THE FOLLOWING EQUATION: END AREA X (1 - P)  
 THE MAXIMUM SHRINKAGE FACTOR USED WAS 43.2%

•• A SWELL FACTOR OF 1.18 WAS USED TO CALCULATE BORROW EXCAVATION.

## END AREAS

STATION	CUT (SF)	FILL (SF)
10+00.00	0	0
11+00.00	0	60
12+00.00	0	52
13+00.00	0	120
14+00.00	1	34
15+00.00	0	68
16+00.00	1	22
17+00.00	2	22
18+00.00	7	21
19+00.00	11	21
20+00.00	14	25
21+00.00	0	19
22+00.00	0	22
23+00.00	0	22
24+00.00	0	24
25+00.00	8	22
26+00.00	18	18
27+00.00	13	30
28+00.00	14	22
29+00.00	12	21
30+00.00	28	19
31+00.00	54	20
32+00.00	56	21
33+00.00	31	21
34+00.00	123	127
35+00.00	232	83
36+00.00	326	66
37+00.00	379	61
38+00.00	316	29
39+00.00	267	33
40+00.00	315	35
41+00.00	443	23
42+00.00	518	21
43+00.00	666	20
44+00.00	710	21
45+00.00	796	20
46+00.00	800	24
47+00.00	820	28
48+00.00	872	26
49+00.00	855	21
50+00.00	801	99

FILE NAME =	USER NAME = rollavr	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EARTHWORK AND END AREA SCHEDULES</b>	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\rollavr\dms46104\98907	ehf.msc.dgn	DRAWN -	REVISED -			853	•	FRANKLIN	34	6	
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -			SCALE: SHEET NO. OF SHEETS STA. TO STA.					
	PLOT DATE = 12/7/2009	DATE -	REVISED -			ILLINOIS FED. AID PROJECT CONTRACT NO. 98907					