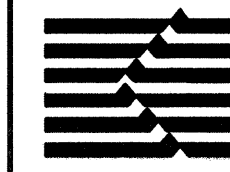


8/17/99



KCI Associates
of North Carolina, P.A.
RALEIGH OFFICE
ENGINEERS • PLANNERS • ECOLOGISTS

SUITE 200, LANDMARK CENTER I
4601 SIX FORKS RD.
RALEIGH, N.C. 27609-5210
(919) 783-9214

PROJECT REFERENCE NO. B-3450	SHEET NO. 3-D
RW SHEET NO.	
ROADWAY DESIGN ENGINEER MARLENE R. BRANTLEY 22761	

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT+%	BORROW	WASTE
SUMMARY 1					
-DETI- LINE					
STA. 1+12.19 TO STA. 6+84.08	78		6584	6506	0
-DET2- LINE					
STA. 1+48.07 TO STA. 3+50.00 (BRIDGE)	49		548	499	0
STA. 4+20.00 (BRIDGE) TO STA. 5+86.05	65		2574	2509	0
SUBTOTAL	192		9706	9514	0
WASTE TO BE USED IN LIEU OF BORROW					0
SUMMARY 1 TOTAL	192		9706	9514	0
SUMMARY 2					
-L- LINE					
STA. 10+00.00 TO STA. 13+86.00 (BRIDGE)	87		1310	1223	0
STA. 14+76.00 (BRIDGE) TO STA. 21+82.00 (BRIDGE)	24		3754	3730	0
STA. 22+92.00 (BRIDGE) TO STA. 26+00.00	174		1045	871	0
SUBTOTAL	285		6109	5824	0
WASTE TO BE USED IN LIEU OF BORROW					0
SUMMARY 2 TOTAL	285		6109	5824	0
SUMMARY 3					
REMOVE -DETI- & REPLACE					
STA. 1+12.19 TO STA. 6+84.08	5659		454	0	5205
REMOVE -DET2- & REPLACE					
STA. 1+48.07 TO STA. 3+50.00 (BRIDGE)	699		196	0	503
STA. 4+20.00 (BRIDGE) TO STA. 5+86.05	1004		152	0	852
SUBTOTAL	7362		802	0	6560
WASTE TO BE USED IN LIEU OF BORROW					0
SUMMARY 3 TOTAL	7362		802	0	6560
PROJECT SUBTOTAL	7839		16,617	15,338	6560
LOSS DUE TO CLEARING & GRUBBING	-500			500	
ESTIMATE FOR SHOULDER MATERIAL			700	700	
PROJECT TOTAL					
EST. FOR REPL. TOPSOIL ON BORROW PITS				827	
GRAND TOTAL	7339...SAY 7400		17,317	17,365...SAY 17,400	6560

APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, BORROW EXCAVATION, SHOULDER BORROW, FINE GRADING, CLEARING & GRUBBING, AND REMOVAL OF EXISTING ASPHALT PAVEMENT WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR "GRADING".

SUMMARY OF PAVEMENT REMOVAL

LOCATION	SY
-L- LINE (LT. & RT.)	
STA. 13+00.00 TO STA. 14+10.00	323
STA. 14+41.00 TO STA. 15+50.00	402
STA. 20+50.00 TO STA. 21+99.00	568
STA. 22+75.00 TO STA. 24+00.00	515
DETOURS (LT. & RT.)	
-DETI- STA. 1+12.00 TO STA. 6+84.00	1684
-DET2- STA. 1+48.00 TO STA. 3+50.00	588
-DET2- STA. 4+20.00 TO STA. 5+86.00	490
TOTAL	4570

REVISIONS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

ESTIMATED UNDERCUT EXCAVATION = 500 CY -DETI- PAVEMENT STRUCTURE VOLUME = 18 CY DDE = 160 CY
 -L- PAVEMENT STRUCTURE VOLUME = 274 CY -DET2- PAVEMENT STRUCTURE VOLUME = 32 CY