



Minimum Bar Lap	
#4 bar	1'-9"
#5 bar	2'-2"

REINFORCEMENT BAR LIST				
Bar	No.	Size	Length	Shape
a	166	#7	26'-8"	—
a1	166	#7	28'-4"	U
d	56	#4	4'-6"	J
h	304	#5	32'-6"	—
h1	18	#6	26'-7"	—
h2	20	#9	18'-9"	—
h3	28	#9	10'-0"	—
h4	32	#9	8'-0"	—
h5	26	#9	8'-0"	—
v	340	#7	8'-11"	—
v1	340	#7	5'-0"	—
v2	16	#4	13'-1"	—

BILL OF MATERIAL		
Item	Unit	Total
Concrete Box Culverts	Cu. Yd.	188.9
Reinforcement Bars	Pound	43,470