

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS			
		LEFT SIDE WIDTH	RIGHT SIDE WIDTH	LEFT SIDE	RIGTH SIDE									
		(m)	(m)	(m ²)	(m ²)	(m ²)	(m ²)	(m ²)	(m ²)	(m ³)	(m ³)	(m ³)	(m ²)	
1 + 060.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 073.199	13.199	7.00	7.00	0.854	0.854	1.408	7.32	7.32	96.56	96.56				
1 + 080.000	6.801	7.00	7.00	0.854	0.854	1.408	7.32	7.32	49.76	49.76				
1 + 100.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 120.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 140.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 160.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 180.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 200.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 220.000	20.000	7.00	7.00	0.854	0.000	1.408	6.46	6.89	137.78	137.78				
1 + 240.000	20.000	7.00	7.00	0.854	0.000	1.408	6.46	6.46	129.24	121.79	7.45			
1 + 260.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	6.89	137.78	137.78				
1 + 280.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 300.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 320.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 340.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 360.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 380.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 400.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 420.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 440.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 460.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 480.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 500.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 520.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 525.443	5.443	7.00	7.00	0.854	0.854	1.408	7.32	7.32	39.82	39.82				
1 + 540.000	14.557	7.00	7.00	0.854	0.854	1.408	7.32	7.32	106.50	106.50				
1 + 560.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	73.47	72.85			
1 + 580.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 600.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 620.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
1 + 640.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		R O C K FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS			
		LEFT SIDE WIDTH	RIGHT SIDE WIDTH	LEFT SIDE	RIGHT SIDE									
												(m)	(m)	
1 + 660.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	(m ³)	(m ²)		
1 + 680.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 700.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 720.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 740.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 760.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 780.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 800.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 820.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 840.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 860.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 880.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 900.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 920.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 940.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 960.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
1 + 970.243	10.243	7.00	7.00	0.854	0.854	1.408	7.32	7.32	74.94	74.94				
1 + 980.000	9.757	7.00	7.00	0.854	0.854	1.408	7.32	7.32	71.38	71.38				
2 + 000.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 020.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 040.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 060.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 080.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 100.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 120.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 140.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 160.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 180.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 200.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 220.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 240.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
2 + 260.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			

COMPUTATION OF SUBGRADE VOLUMES
MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER		SECTION RIGHT SIDE (m2)	CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)		
		LEFT WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)									
2 + 280.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 300.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 320.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 340.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 360.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 380.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 400.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 420.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 440.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 460.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 480.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 500.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 520.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 540.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 560.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 580.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 600.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 620.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 640.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 660.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 680.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 700.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 720.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 727.000	7.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	51.21	51.21			
2 + 740.000	13.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	95.11	95.11			
2 + 760.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 780.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 800.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 820.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 840.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 860.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 880.000	20.000	7.00	7.00	0.854	0.854	0.854	1.408	7.32	7.32	146.32	146.32			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGTH SIDE (m2)								
2 + 900.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 920.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 940.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 960.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
2 + 980.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 000.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 020.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 040.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 060.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 080.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 100.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 120.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 140.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 160.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 180.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 200.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 220.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 240.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 260.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 280.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 300.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 320.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 340.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 360.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 380.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 400.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 420.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 440.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 460.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 480.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 500.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
3 + 509.294	9.294	7.00	7.00	0.854	0.854	1.408	7.32	7.32	67.99	67.99			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					CENTRAL RESERVE SECTION (m ²)	SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		R O C K FORMATION LEVELLING (m ²)
		CARRIAGE ROAD		SHOULDER SECTION				SECTION (m ²)	AVERAGE (m ²)	VOLUME (m ³)	FILL AREAS (m ³)	CUT AREAS (m ³)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)									
3 + 520.000	10.706	7.00	7.00	0.854	0.854	1.408	7.32	7.32	78.33	61.07	17.26			
3 + 540.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 560.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 580.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 600.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 620.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 640.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 660.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 680.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 700.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 720.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 740.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 760.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 780.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 800.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 820.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 840.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 860.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 880.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 900.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 920.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 940.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 960.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
3 + 980.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
4 + 000.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
4 + 020.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
4 + 040.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
4 + 060.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
4 + 080.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
4 + 100.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
4 + 120.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
4 + 140.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		R O C K FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION			CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)	
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGTH SIDE (m2)								
4 + 160.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 180.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 200.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 220.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 240.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 260.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 280.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 300.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 320.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 340.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 360.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 380.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 400.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 420.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 440.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 460.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 480.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 500.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 520.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 535.215	15.215	7.00	7.00	0.854	0.854	1.408	7.32	7.32	111.31	111.31			
4 + 540.000	4.785	7.00	7.00	0.854	0.854	1.408	7.32	7.32	35.01	35.01			
4 + 560.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 580.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 600.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 620.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 640.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 660.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 680.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 700.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 720.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 740.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 760.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	54.56		

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					CENTRAL RESERVE SECTION (m ²)	SUBGRADE VOLUME			SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m ²)
		CARRIAGE ROAD		SHOULDER		SECTION (m ²)		AVERAGE (m ²)	VOLUME (m ³)	FILL AREAS (m ³)	CUT AREAS (m ³)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGTH SIDE (m ²)								
4 + 780.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	71.94	21.22		
4 + 800.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	72.85	20.69		
4 + 820.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 840.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 860.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 880.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 900.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
4 + 910.000	10.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	73.16	73.16			
4 + 920.000	10.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	73.16	73.16			
4 + 940.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	72.85	73.47		
4 + 960.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	72.85	73.47		
4 + 980.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	72.55	73.77		
5 + 000.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
5 + 020.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
5 + 040.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	36.27	110.05		
5 + 060.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	51.82	94.50		
5 + 080.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	72.85	73.47		
5 + 091.257	11.257	7.00	7.00	0.854	0.854	1.408	7.32	7.32	82.36	41.01	41.35		
5 + 100.000	8.743	7.00	7.00	0.854	0.854	1.408	7.32	7.32	63.96	37.36	26.61		
5 + 120.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	125.59	20.73		
5 + 140.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 160.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 180.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 200.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 220.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 240.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 260.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 280.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 291.000	11.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	80.48	80.48			
5 + 300.000	9.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	65.84	65.84			
5 + 320.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			
5 + 340.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					CENTRAL RESERVE SECTION (m ²)	SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m ²)
		CARRIAGE ROAD		SHOULDER SECTION				SECTION (m ²)	AVERAGE (m ²)	VOLUME (m ³)	FILL AREAS (m ³)	CUT AREAS (m ³)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)									
5 + 360.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 380.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 400.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 420.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 440.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 460.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 480.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 500.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 520.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 540.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 560.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 580.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 600.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 617.777	17.777	7.00	7.00	0.854	0.854	1.408	7.32	7.32	130.06	130.06				
5 + 620.000	2.223	7.00	7.00	0.854	0.854	1.408	7.32	7.32	16.26	16.26				
5 + 640.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 660.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 680.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 700.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 720.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 740.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 760.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
5 + 780.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
5 + 800.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32	146.32			
5 + 817.000	17.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	124.37	124.37				
5 + 820.000	3.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	21.95	21.95				
5 + 840.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 860.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 880.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 900.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 920.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				
5 + 940.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	146.32				

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADEDISTRIBUTION		R O C K FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGTH SIDE (m2)								
5 + 960.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
5 + 980.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
6 + 000.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	73.77	72.55		
6 + 001.864	1.864	7.00	7.00	0.854	0.854	1.408	7.32	7.32	13.64		13.64		
6 + 020.000	18.136	7.00	7.00	0.854	0.854	1.408	7.32	7.32	132.68	66.93	65.75		
6 + 040.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
6 + 060.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
6 + 080.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
6 + 100.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
6 + 120.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
6 + 140.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	21.54	124.78		
6 + 160.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32		146.32		
6 + 180.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	65.23	81.09		
6 + 200.000	20.000	7.00	7.00	0.854	0.854	1.408	7.32	7.32	146.32	100.05	46.27		
6 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	7.14	142.74	142.74			
6 + 230.000	10.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	69.58	69.58			
6 + 240.000	10.000	7.00	7.70	0.854	0.854	1.050	7.17	7.06	70.63	70.63			
6 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	7.48	7.32	146.49	146.49			
6 + 280.000	20.000	7.00	10.50	0.854	0.747	1.050	7.90	7.69	153.82	153.82			
6 + 299.957	19.957	7.00	10.50	0.854	0.747	1.050	7.90	7.90	157.68	157.68			
6 + 300.000	0.043	7.00	10.50	0.854	0.747	1.050	7.90	7.90	0.34	0.34			
6 + 320.000	20.000	8.08	10.50	0.854	0.747	1.050	8.23	8.06	161.27	161.27			
6 + 340.000	20.000	9.16	10.50	0.854	0.747	1.050	8.55	8.39	167.74	167.74			
6 + 360.000	20.000	10.23	10.50	0.854	0.747	1.050	8.87	8.71	174.19	174.19			
6 + 363.556	3.556	10.42	10.50	0.854	0.747	1.050	8.93	8.90	31.64	31.64			
6 + 379.176	15.620	11.27	11.05	0.854	0.747	1.050	9.35	9.14	142.72	142.72			
6 + 380.000	0.824	11.31	11.08	0.854	0.747	1.050	9.37	9.36	7.71	7.71			
6 + 400.000	20.000	12.39	11.79	0.854	0.747	1.050	9.91	9.64	192.73	192.73			
6 + 420.000	20.000	13.46	12.49	0.854	0.747	1.050	10.44	10.17	203.41	203.41			
6 + 429.957	9.957	14.00	12.84	0.854	0.747	1.050	10.70	10.57	105.24	105.24			
6 + 429.957	0.000	8.50	12.84	0.225	0.747	1.050	8.42						
6 + 439.957	10.000	8.50	13.20	0.225	0.747	1.050	8.53	8.48	84.78	84.78			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m ²)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m ²)	SECTION (m ²)	AVERAGE (m ²)	VOLUME (m ³)	FILL AREAS (m ³)	CUT AREAS (m ³)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)								
6 + 439.957	0.000	7.00	13.20	0.854	0.747	1.050	8.71						
6 + 440.000	0.043	7.00	13.20	0.854	0.747	1.050	8.71	8.71	0.37	0.37			
6 + 440.000	20.000	7.00	13.91	0.854	0.747	1.050	8.92	8.82	176.35	176.35			
6 + 462.691	2.691	7.00	14.00	0.854	0.747	1.050	8.95	8.94	24.05	24.05			
6 + 462.691	0.000	7.00	8.50	0.854	0.225	1.050	6.78						
6 + 472.691	10.000	7.00	8.50	0.854	0.225	1.050	6.78	6.78	67.79	67.79			
6 + 472.691	0.000	7.00	7.00	0.854	0.854	1.050	6.96						
6 + 480.000	7.309	7.00	7.00	0.854	0.854	1.050	6.96	6.96	50.86	50.86			
6 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
6 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
6 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
6 + 560.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.85	137.02	137.02			
6 + 580.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 600.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 620.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 640.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 660.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 675.890	15.890	7.00	7.00	0.747	0.747	1.050	6.74	6.74	107.16	107.16			
6 + 680.000	4.110	7.00	7.00	0.747	0.747	1.050	6.74	6.74	27.72	27.72			
6 + 700.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 706.000	6.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	40.46	40.46			
6 + 714.490	8.490			0.000	0.000		0.00	3.37	28.63	28.63			
6 + 720.000	5.510			0.000	0.000		0.00	0.00	0.00	0.00			
6 + 740.000	20.000			0.000	0.000		0.00	0.00	0.00	0.00			
6 + 744.000	4.000	7.00	7.00	0.747	0.747	1.050	6.74	3.37	13.49	13.49			
6 + 760.000	16.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	107.90	107.90			
6 + 780.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 800.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 820.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 840.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 860.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
6 + 880.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.80	135.95	135.95			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS				SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)	
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)							
6 + 900.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02	(m3)	(m2)
6 + 920.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02		
6 + 940.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02		
6 + 959.957	19.957	7.00	7.00	0.854	0.747	1.050	6.85	6.85	136.73	136.73		
6 + 959.957	0.000	8.50	8.50	0.854	0.225	1.050	7.23					
6 + 960.000	0.043	8.50	8.50	0.854	0.225	1.050	7.23	7.23	0.31	0.31		
6 + 969.957	9.957	8.50	8.50	0.225	0.225	1.050	6.60	6.91	68.85	68.85		
6 + 969.957	0.000	14.00	14.00	0.747	0.747	1.050	10.94					
6 + 980.000	10.043	13.51	13.30	0.747	0.747	1.050	10.59	10.77	108.12	108.12		
7 + 000.000	20.000	12.55	11.90	0.747	0.747	1.050	9.88	10.23	204.66	204.66		
7 + 020.000	20.000	11.58	10.50	0.747	0.747	1.050	9.17	9.52	190.47	190.47		
7 + 028.438	8.438	11.17	9.91	0.747	0.747	1.050	8.87	9.02	76.09	76.09		
7 + 040.000	11.562	10.61	9.10	0.747	0.747	1.050	8.46	8.66	100.16	100.16		
7 + 042.235	2.235	10.50	8.94	0.747	0.747	1.050	8.38	8.42	18.81	18.81		
7 + 060.000	17.765	10.50	7.70	0.747	0.747	1.050	8.00	8.19	145.50	145.50		
7 + 069.957	9.957	10.50	7.00	0.854	0.747	1.050	7.90	7.95	79.18	79.18		
7 + 080.000	10.043	10.50	7.00	0.854	0.747	1.050	7.90	7.90	79.35	79.35		
7 + 100.000	20.000	10.50	7.00	0.854	0.747	1.050	7.90	7.90	158.02	158.02		
7 + 120.000	20.000	10.50	7.00	0.854	0.854	1.050	8.01	7.95	159.09	132.15	26.94	
7 + 130.000	10.000	10.50	7.00	0.854	0.854	1.050	8.01	8.01	80.08	62.62	17.46	
7 + 140.000	10.000	9.63	7.00	0.854	0.854	1.050	7.75	7.88	78.78	57.83	20.94	
7 + 160.000	20.000	7.88	7.00	0.854	0.854	1.050	7.22	7.48	149.69	102.55	47.14	
7 + 170.000	10.000	7.00	7.00	0.854	0.854	1.050	6.96	7.09	70.90	44.96	25.94	
7 + 180.000	10.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	69.58	40.46	29.12	
7 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	81.53	57.63	
7 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	77.86	61.30	
7 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	75.40	63.76	
7 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	38.66	100.50	
7 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	116.07	23.09	
7 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	129.35	9.81	
7 + 320.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	6.10	122.08	93.71	28.37	
7 + 340.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	78.94	26.06	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER		SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)								
											CENTRAL RESERVE SECTION (m2)		
7 + 360.000	20.000	7.00	7.00	0.000	0.854	1.050	6.10	5.68	113.54	113.54			
7 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.53	130.62	130.62			
7 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
7 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
7 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
7 + 450.000	10.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	69.58	69.58			
7 + 460.000	10.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	69.58	69.58			
7 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
7 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
7 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	128.69	10.47		
7 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	85.55	53.61		
7 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	90.94	48.22		
7 + 580.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	79.61	59.55		
7 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
7 + 600.107	0.107	7.00	7.00	0.854	0.854	1.050	6.96	6.96	0.74	0.15	0.59		
7 + 620.000	19.893	7.00	7.00	0.854	0.854	1.050	6.96	6.96	138.42	88.42	50.00		
7 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	79.96	59.20		
7 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	115.25	23.91		
7 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
7 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
7 + 720.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
7 + 740.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	127.51	11.65		
7 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	97.47	41.69		
7 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
7 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	14.71	124.45		
7 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
7 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
7 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
7 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
7 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
7 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
7 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)									
7 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
7 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 153.505	13.505	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
8 + 160.000	6.495	7.00	7.00	0.854	0.854	1.050	6.96	6.96	93.97			313.23		
8 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	45.19	2.18	43.01			
8 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	27.26	111.90			
8 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	112.05	27.11			
8 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	122.07	17.09			
8 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	131.87	7.29			
8 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.85	6.90	138.09	138.09				
8 + 300.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
8 + 303.505	3.505	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
8 + 320.000	16.495	7.00	7.00	0.854	0.747	1.050	6.85	6.85	24.01	24.01				
8 + 340.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	113.01	113.01				
8 + 358.544	18.544	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	132.85	4.17			
8 + 360.000	1.456	7.00	7.00	0.854	0.747	1.050	6.85	6.85	127.04	94.31	32.73			
8 + 380.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	9.98	7.41	2.57			
8 + 400.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	69.14	67.88			
8 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.90	138.09	19.47	118.62			
8 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
8 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	2.94	136.22			
8 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	26.97	112.19			
8 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	64.37	74.79			
8 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	78.20	60.96			
8 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	48.22	90.94			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)								
8 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
8 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 580.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 608.544	8.544	7.00	7.00	0.854	0.854	1.050	6.96	6.96	59.45			198.16	
8 + 620.000	11.456	7.00	7.00	0.854	0.854	1.050	6.96	6.96	79.71			265.70	
8 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 720.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 740.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
8 + 875.638	15.638	7.00	7.00	0.854	0.854	1.050	6.96	6.96	108.81	2.93	136.23		
8 + 880.000	4.362	7.00	7.00	0.854	0.854	1.050	6.96	6.96	30.35	108.81			
8 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
8 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
8 + 940.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.90	138.09	138.09			
8 + 960.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.85	137.02	137.02			
8 + 980.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.80	135.95	135.95			
9 + 000.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
9 + 020.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
9 + 040.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
9 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.85	137.02		137.02		
9 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
9 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
9 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)									
9 + 125.638	5.638	7.00	7.00	0.854	0.854	1.050	6.96	6.96	39.23		39.23			
9 + 140.000	14.362	7.00	7.00	0.854	0.854	1.050	6.96	6.96	99.93		99.93			
9 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	23.39		115.77		
9 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	39.59		99.57		
9 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	54.95		84.21		
9 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	78.84		60.32		
9 + 275.638	15.638	7.00	7.00	0.854	0.854	1.050	6.96	6.96	108.81	68.90		39.91		
9 + 280.000	4.362	7.00	7.00	0.854	0.854	1.050	6.96	6.96	30.35	19.88		10.47		
9 + 300.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.90	138.09	99.50		38.59		
9 + 320.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	95.32		41.70		
9 + 340.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	92.94		44.08		
9 + 360.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	92.94		44.08		
9 + 380.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	107.10		29.92		
9 + 400.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 420.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 440.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 460.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 480.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 500.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 520.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 540.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 560.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 580.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 600.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 620.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 640.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	137.02				
9 + 660.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	128.64	8.38			
9 + 680.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	118.99	18.03			
9 + 700.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	115.48	21.54			
9 + 720.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	108.17	28.85			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)									
9 + 740.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	105.91	31.11			
9 + 760.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	99.32	37.70			
9 + 780.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.85	137.02	82.68	54.34			
9 + 783.604	3.604	7.00	7.00	0.854	0.854	1.050	6.96	6.90	24.88	14.80	10.08			
9 + 800.000	16.396	7.00	7.00	0.854	0.854	1.050	6.96	6.96	114.08	41.17	72.91			
9 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	9.20	129.96			
9 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
9 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 083.604	3.604	7.00	7.00	0.854	0.854	1.050	6.96	6.96	25.08		25.08			
10 + 100.000	16.396	7.00	7.00	0.854	0.854	1.050	6.96	6.96	114.08		114.08			
10 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
10 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)									
10 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		463.87	
10 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 415.887	15.887	7.00	7.00	0.854	0.854	1.050	6.96	6.96	110.54				368.47	
10 + 420.000	4.113	7.00	7.00	0.854	0.854	1.050	6.96	6.96	28.62				95.39	
10 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 565.887	5.887	7.00	7.00	0.854	0.854	1.050	6.96	6.96	40.96				136.54	
10 + 580.000	14.113	7.00	7.00	0.854	0.854	1.050	6.96	6.96	98.20				327.33	
10 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 620.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 715.887	15.887	7.00	7.00	0.854	0.854	1.050	6.96	6.96	110.54				368.47	
10 + 720.000	4.113	7.00	7.00	0.854	0.854	1.050	6.96	6.96	28.62				95.39	
10 + 740.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS			
		LEFT SIDE WIDTH	RIGHT SIDE WIDTH	LEFT SIDE	RIGHT SIDE							(m ²)	(m ²)	
10 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			(m ³)	463.87	
10 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
10 + 963.121	3.121	7.00	7.00	0.854	0.854	1.050	6.96	6.96	21.72				72.39	
10 + 980.000	16.879	7.00	7.00	0.854	0.854	1.050	6.96	6.96	117.44				391.48	
11 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 113.121	13.121	7.00	7.00	0.854	0.854	1.050	6.96	6.96	91.30				304.32	
11 + 120.000	6.879	7.00	7.00	0.854	0.854	1.050	6.96	6.96	47.86				159.55	
11 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
11 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	87.28	51.88			
11 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
11 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
11 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	120.32	18.84			
11 + 263.121	3.121	7.00	7.00	0.854	0.854	1.050	6.96	6.96	21.72	15.05	6.67			
11 + 280.000	16.879	7.00	7.00	0.854	0.854	1.050	6.96	6.96	117.44		117.44			
11 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
11 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
11 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	
11 + 422.939	2.939	7.00	7.00	0.854	0.854	1.050	6.96	6.96	20.45				68.17	
11 + 440.000	17.061	7.00	7.00	0.854	0.854	1.050	6.96	6.96	118.71				395.70	
11 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16				463.87	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS				SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)	
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)							
11 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
11 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
11 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
11 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
11 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
11 + 572.939	12.939	7.00	7.00	0.854	0.854	1.050	6.96	6.96	90.03			300.10
11 + 580.000	7.061	7.00	7.00	0.854	0.854	1.050	6.96	6.96	49.13			163.77
11 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
11 + 620.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
11 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
11 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 720.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 740.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
11 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	97.10	42.06	
11 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		
11 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		
11 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		
11 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		
12 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		
12 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		
12 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		
12 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	128.74	10.42	
12 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	33.72	105.44	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS			
		LEFT SIDE WIDTH	RIGHT SIDE WIDTH	LEFT SIDE	RIGHT SIDE									
												(m)	(m)	
12 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		(m ³)	463.87		
12 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
12 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
12 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
12 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
12 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	37.84	101.32			
12 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	50.27	88.89			
12 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
12 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	32.49	106.67			
12 + 555.218	15.218	7.00	7.00	0.854	0.854	1.050	6.96	6.96	105.89	66.70	39.18			
12 + 560.000	4.782	7.00	7.00	0.854	0.854	1.050	6.96	6.96	33.27	19.96	13.31			
12 + 580.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	17.62	121.54			
12 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	17.02	122.14			
12 + 620.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
12 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
12 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
12 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
12 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER		SECTION	CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)									
12 + 705.272	5.272	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	36.68		36.68		
12 + 720.000	14.728	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	102.48		102.48		
12 + 740.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
12 + 760.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
12 + 780.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
12 + 800.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
12 + 820.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
12 + 840.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
12 + 860.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
12 + 880.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
12 + 896.298	16.298	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	113.40	113.40			
12 + 900.000	3.702	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	25.76	25.76			
12 + 920.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
12 + 940.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
12 + 960.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
12 + 980.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
13 + 000.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
13 + 020.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
13 + 040.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	139.16			
13 + 046.298	6.298	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	43.82	37.09	6.73		
13 + 060.000	13.702	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	95.34		95.34		
13 + 080.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
13 + 100.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
13 + 120.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
13 + 140.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
13 + 160.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
13 + 180.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
13 + 200.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
13 + 220.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16		139.16		
13 + 240.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	32.63	106.53		
13 + 260.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	88.44	50.72		
13 + 280.000	20.000	7.00	7.00	0.854	0.854	6.96	1.050	6.96	6.96	139.16	105.91	33.25		

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

MAIN ROAD														
STATION	DISTANCE	SUBGRADE AREAS				SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		R O C K FORMATION LEVELLING		
		CARRIAGE ROAD		SHOULDER		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGTH SIDE (m ²)									
13 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	123.15	16.01	(m ²)		
13 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	125.61	13.55			
13 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	128.69	10.47			
13 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	126.23	12.93			
13 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	125.61	13.55			
13 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
13 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	91.13	48.03			
13 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 484.164	4.164	7.00	7.00	0.854	0.854	1.050	6.96	6.96	28.97		28.97			
13 + 500.000	15.836	7.00	7.00	0.854	0.854	1.050	6.96	6.96	110.19		110.19			
13 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 580.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 606.664	6.664	7.00	7.00	0.854	0.854	1.050	6.96	6.96	46.37		46.37			
13 + 620.000	13.336	7.00	7.00	0.854	0.854	1.050	6.96	6.96	92.79		92.79			
13 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
13 + 720.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	15.39	123.77			
13 + 740.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
13 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
13 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
13 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
13 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
13 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
13 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
13 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		R C C K FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS		
		LEFT SIDE WIDTH	RIGHT SIDE WIDTH	LEFT SIDE	RIGHT SIDE								
												(m)	
13 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16	(m ³)	(m ²)	
13 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
13 + 924.397	4.397	7.00	7.00	0.854	0.854	1.050	6.96	6.96	30.59	30.59			
13 + 940.000	15.603	7.00	7.00	0.854	0.854	1.050	6.96	6.96	108.57	108.57			
13 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
13 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
14 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
14 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
14 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	137.02	137.02			
14 + 046.897	6.897	7.00	7.00	0.854	0.854	1.050	6.96	6.96	134.88	134.88			
14 + 060.000	13.103	7.00	7.00	0.854	0.854	1.050	6.96	6.96	46.51	46.51			
14 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	88.37	88.37			
14 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	134.88	134.88			
14 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	134.88	134.88			
14 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	135.95	135.95			
14 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	138.09	138.09			
14 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	101.32	37.84		
14 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	44.14	95.02		
14 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
14 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME			SUBGRADE DISTRIBUTION			ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS		
		LEFT SIDE WIDTH	RIGHT SIDE WIDTH	LEFT SIDE	RIGHT SIDE								
												(m)	
14 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	(m ²)
14 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 580.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 595.083	15.083	7.00	7.00	0.854	0.854	1.050	6.96	6.96	104.95			104.95	
14 + 600.000	4.917	7.00	7.00	0.854	0.854	1.050	6.96	6.96	34.21			34.21	
14 + 620.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 720.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 740.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 745.083	5.083	7.00	7.00	0.854	0.854	1.050	6.96	6.96	35.37			35.37	
14 + 760.000	14.917	7.00	7.00	0.854	0.854	1.050	6.96	6.96	103.79			103.79	
14 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	
14 + 865.086	5.086	7.00	7.00	0.854	0.854	1.050	6.96	6.96	35.39	6.39		29.00	
14 + 880.000	14.914	7.00	7.00	0.854	0.854	1.050	6.96	6.96	103.77	103.77			
14 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
14 + 920.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.85	137.02	137.02			
14 + 940.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
14 + 960.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
14 + 980.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
15 + 000.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.80	135.95	135.95			
15 + 015.086	15.086	7.00	7.00	0.747	0.747	1.050	6.85	6.85	103.35	52.77		50.59	
15 + 020.000	4.914	7.00	7.00	0.854	0.854	1.050	6.96	6.90	33.93			33.93	
15 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			139.16	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADEDISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)									
15 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 165.086	5.086	7.00	7.00	0.854	0.854	1.050	6.96	6.96	35.39		35.39			
15 + 180.000	14.914	7.00	7.00	0.854	0.854	1.050	6.96	6.96	103.77		103.77			
15 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 372.375	12.375	7.00	7.00	0.854	0.854	1.050	6.96	6.96	86.11		86.11			
15 + 380.000	7.625	7.00	7.00	0.854	0.854	1.050	6.96	6.96	53.05		53.05			
15 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 484.875	4.875	7.00	7.00	0.854	0.854	1.050	6.96	6.96	33.92		33.92			
(15 + 300.000)	0.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96						
15 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
15 + 340.000	20.000	7.00	7.00	0.000	0.854	1.050	6.10	6.53	130.62		130.62			
15 + 360.000	20.000	7.00	7.00	0.000	0.854	1.050	6.10	6.10	122.08		122.08			
15 + 380.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.68	113.54		113.54			
15 + 384.000	4.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	21.00		21.00			
15 + 384.000	0.000	7.00	8.50	0.000	0.225	1.050	5.93							

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)								
15 + 400.000	16.000	7.00	7.00	0.000	0.225	1.050	5.48	5.70	91.20		91.20		
15 + 416.000	16.000	7.00	7.00	0.000	0.225	1.050	5.48	5.48	87.60		87.60		
15 + 416.000	0.000	7.00	8.50	0.000	0.000	1.050	5.70						
15 + 420.000	4.000	7.00	8.50	0.000	0.000	1.050	5.70	5.70	22.80		22.80		
15 + 424.000	4.000	7.00	8.50	0.000	0.000	1.050	5.70	5.70	22.80		22.80		
15 + 424.000	0.000	8.50	7.00	0.225	0.000	1.050	5.93						
15 + 440.000	16.000	8.50	7.00	0.225	0.000	1.050	5.93	5.93	94.80		94.80		
15 + 456.000	16.000	8.50	7.00	0.225	0.000	1.050	5.93	5.93	94.80		94.80		
15 + 456.000	0.000	7.00	7.00	0.000	0.000	1.050	5.25						
15 + 460.000	4.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	21.00		21.00		
15 + 480.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00		105.00		
15 + 500.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00		105.00		
15 + 520.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00		105.00		
15 + 540.000	20.000	7.00	7.00	0.000	0.747	1.050	6.00	5.62	112.47		112.47		
15 + 560.000	20.000	7.00	7.00	0.000	0.747	1.050	6.00	6.00	119.94		119.94		
15 + 580.000	20.000	7.00	7.00	0.000	0.747	1.050	6.00	6.00	119.94		119.94		
15 + 600.000	20.000	7.00	7.00	0.000	0.747	1.050	6.00	6.00	119.94		119.94		
15 + 620.000	20.000	7.00	7.00	0.000	0.747	1.050	6.00	6.00	119.94		119.94		
15 + 640.000	20.000	7.00	7.00	0.000	0.747	1.050	6.00	6.00	119.94		119.94		
15 + 660.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.62	112.47	85.28	27.19		
15 + 680.000	20.000	7.00	7.00	0.747	0.000	1.050	6.00	5.62	112.47		112.47		
15 + 700.000	20.000	7.00	7.00	0.747	0.000	1.050	6.00	6.00	119.94		119.94		
15 + 720.000	20.000	7.00	7.00	0.000	0.854	1.050	6.10	6.05	121.01		121.01		
15 + 740.000	20.000	7.00	7.00	0.000	0.854	1.050	6.10	6.10	122.08		122.08		
15 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.53	130.62			435.40	
15 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
15 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
15 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
15 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
15 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
15 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
15 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		R O C K FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)									
15 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
15 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
15 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
15 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
16 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
16 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
16 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
16 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
16 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87		
16 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 456.704	16.704	7.00	7.00	0.854	0.854	1.050	6.96	6.96	116.23		116.23			
16 + 460.000	3.296	7.00	7.00	0.854	0.854	1.050	6.96	6.96	22.93		22.93			
16 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
16 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGTH SIDE (m2)								
16 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	(m3)	139.16	(m2)	
16 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
16 + 580.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
16 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
16 + 620.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
16 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
16 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
16 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
16 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	62.43	76.73		
16 + 720.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	111.57	27.59		
16 + 723.371	3.371	7.00	7.00	0.854	0.854	1.050	6.96	6.96	23.46	139.16			
16 + 740.000	16.629	7.00	7.00	0.854	0.854	1.050	6.96	6.96	115.70				
16 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	22.17	116.99		
16 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	25.02	114.14		
16 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	27.67	111.49		
16 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	46.59	92.57		
16 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	112.19	26.97		
16 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	128.83	10.33		
16 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
16 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
16 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
16 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
16 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
16 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
17 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
17 + 001.586	1.586	7.00	7.00	0.854	0.854	1.050	6.96	6.96	11.04				
17 + 020.000	18.414	7.00	7.00	0.854	0.854	1.050	6.96	6.96	128.12		128.12		
17 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					CENTRAL RESERVE SECTION	SUBGRADE VOLUME			SUBGRADE DISTRIBUTION		R O C K FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION				SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS	
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)	(m ²)							
17 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	55.66	83.50		
17 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	114.64	24.52		
17 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16			
17 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.85	6.90	138.09	138.09			
17 + 341.462	1.462	7.00	7.00	0.747	0.747	1.050	6.85	6.85	10.02	10.02			
17 + 360.000	18.538	7.00	7.00	0.747	0.747	1.950	6.85	6.85	127.00	127.00			
17 + 380.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	119.97	17.05		
17 + 400.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02			
17 + 420.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02			
17 + 440.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02			
17 + 460.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02			
17 + 480.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02			
17 + 500.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	132.10	4.92		
17 + 520.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	110.11	26.91		
17 + 540.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	108.57	28.45		
17 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.90	138.09	94.48	43.61		
17 + 580.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	69.28	69.88		
17 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 620.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
17 + 717.493	17.493	7.00	7.00	0.854	0.854	1.050	6.96	6.96	121.72		121.72		
17 + 720.000	2.507	7.00	7.00	0.854	0.854	1.050	6.96	6.96	17.44		17.44		

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m ²)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m ²)	SECTION (m ²)	AVERAGE (m ²)	VOLUME (m ³)	FILL AREAS (m ³)	CUT AREAS (m ³)			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)									
17 + 740.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
17 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
17 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
17 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
17 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
17 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
17 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
17 + 867.493	7.493	7.00	7.00	0.854	0.854	1.050	6.96	6.96	52.14	14.30	121.38			
17 + 880.000	12.507	7.00	7.00	0.854	0.854	1.050	6.96	6.96	87.02	34.12	37.83			
17 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	84.23	52.90			
17 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	79.43	54.93			
17 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	62.82	59.73			
17 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	64.65	76.34			
17 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	53.33	74.51			
18 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	51.27	85.83			
18 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	54.32	87.89			
18 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	68.06	84.84			
18 + 060.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.90	138.09	66.33	71.10			
18 + 080.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	103.06	71.76			
18 + 100.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	107.21	33.96			
18 + 120.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	113.09	29.81			
18 + 136.257	16.257	7.00	7.00	0.747	0.747	1.050	6.85	6.85	111.38	101.12	23.93			
18 + 140.000	3.743	7.00	7.00	0.747	0.747	1.050	6.85	6.85	25.64	101.12	10.26			
18 + 160.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	23.08	2.56			
18 + 180.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	132.23	4.79			
18 + 200.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02				
18 + 220.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02				
18 + 240.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02				
18 + 260.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02				
18 + 280.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02				
18 + 286.257	6.257	7.00	7.00	0.747	0.747	1.050	6.85	6.85	42.87	42.87				
18 + 300.000	13.743	7.00	7.00	0.747	0.747	1.050	6.85	6.85	94.15	94.15				

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					CENTRAL RESERVE SECTION (m ²)	SUBGRADE VOLUME			SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m ²)
		CARRIAGE ROAD		SHOULDER		SECTION (m ²)		AVERAGE (m ²)	VOLUME (m ³)	FILL AREAS (m ³)	CUT AREAS (m ³)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGTH SIDE (m ²)								
18 + 320.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.85	137.02	137.02		(m ²)	
18 + 340.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.80	135.95	135.95			
18 + 360.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
18 + 380.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
18 + 400.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
18 + 420.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
18 + 440.000	20.000	7.00	7.00	0.747	0.858	1.050	6.86	6.80	135.99	135.99			
18 + 460.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.85	137.06	137.06			
18 + 480.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	6.05	121.01	121.01			
18 + 500.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
18 + 520.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00	17.04		
18 + 540.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.05	121.01	73.89	47.12		
18 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.90	138.09	120.69	17.40		
18 + 580.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	9.77	129.39		
18 + 620.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 720.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 736.257	16.257	7.00	7.00	0.854	0.854	1.050	6.96	6.96	113.12		113.12		
18 + 740.000	3.743	7.00	7.00	0.854	0.854	1.050	6.96	6.96	26.04		26.04		
18 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
18 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS						SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS			
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGTH SIDE (m ²)									
18 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
18 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	44.75	94.41			
18 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	83.99	55.17			
19 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16				
19 + 020.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.90	138.09	138.09				
19 + 040.000	20.000	7.00	7.00	0.747	0.747	1.050	6.85	6.85	137.02	137.02				
19 + 051.992	11.992	7.00	7.00	0.747	0.747	1.050	6.74	6.80	81.52	81.52				
19 + 060.000	8.008	7.00	7.00	0.747	0.747	1.050	6.74	6.74	54.01	54.01				
19 + 080.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 100.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 120.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 140.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 160.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 180.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 200.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 220.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.80	135.95	120.22	15.73			
19 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.90	138.09	58.75	79.34			
19 + 260.000	20.000	7.03	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
19 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
19 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
19 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
19 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16			
19 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	4.29	134.87			
19 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	95.21	43.95			
19 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	115.55	23.61			
19 + 420.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.90	138.09	138.09				
19 + 440.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.85	137.02	137.02				
19 + 460.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.80	135.95	135.95				
19 + 480.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 500.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88				
19 + 501.992	1.992	7.00	7.00	0.747	0.747	1.050	6.74	6.74	13.43	13.43				
19 + 520.000	18.008	7.00	7.00	0.747	0.747	1.050	6.74	6.74	121.45	121.45				

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)							(m ²)	
19 + 540.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88		(m ²)	
19 + 560.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
19 + 580.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
19 + 600.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
19 + 620.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
19 + 640.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
19 + 660.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
19 + 665.167	5.167	7.00	7.00	0.747	0.747	1.050	6.74	6.74	34.85	34.85			
19 + 680.000	14.833	7.00	7.00	0.747	0.747	1.050	6.74	6.74	100.03	100.03			
19 + 700.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
19 + 720.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
19 + 740.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	6.80	135.95	135.95			
19 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.90	138.09		78.13		
19 + 780.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		138.09		
19 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
19 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
19 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
19 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
19 + 873.500	13.500	7.00	7.00	0.854	0.854	1.050	6.96	6.96	93.93		93.93		
19 + 880.000	6.500	7.00	7.00	0.854	0.854	1.050	6.96	6.96	45.23		45.23		
19 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
19 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
19 + 940.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
19 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
19 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
20 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
20 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
20 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
20 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
20 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
20 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
20 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	93.80		45.36		

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					CENTRAL RESERVE SECTION (m ²)	SUBGRADE VOLUME			SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m ²)
		CARRIAGE ROAD		SHOULDER SECTION		SECTION (m ²)		AVERAGE (m ²)	VOLUME (m ³)	FILL AREAS (m ³)	CUT AREAS (m ³)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)								
20 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	80.31	58.85			
20 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 200.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	138.09	138.09				
20 + 220.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	137.02	137.02				
20 + 240.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	137.02	137.02				
20 + 260.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	137.02	137.02				
20 + 280.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	137.02	137.02				
20 + 300.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	137.02	137.02				
20 + 320.000	20.000	7.00	7.00	0.747	0.854	1.050	6.85	137.02	137.02				
20 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	138.09	138.09				
20 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	139.16	139.16				
20 + 540.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	122.08	122.08				
20 + 560.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	105.00	105.00				
20 + 580.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	105.00	105.00				
20 + 600.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	105.00	105.00				
20 + 620.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	105.00	105.00				
20 + 624.000	4.000	7.00	7.00	0.000	0.000	1.050	5.25	21.00	21.00				
20 + 624.000	0.000	8.50	7.00	0.225	0.000	1.050	5.93						
20 + 640.000	16.000	8.50	7.00	0.225	0.000	1.050	5.93	94.80	94.80				
20 + 656.000	16.000	8.50	7.00	0.225	0.000	1.050	5.93	94.80	94.80				
20 + 656.000	0.000	7.00	7.00	0.000	0.000	1.050	5.25						
20 + 660.000	4.000	7.00	7.00	0.000	0.000	1.050	5.25	21.00	21.00				
20 + 676.232	16.232	7.00	7.00	0.000	0.000	1.050	5.25	85.22	85.22				

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION	SECTION	AVERAGE	VOLUME	FILL AREAS	CUT AREAS		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m ²)	RIGHT SIDE (m ²)							(m ²)	
20 + 680.000	3.768	7.00	7.00	0.000	0.000	1.050	5.25	5.25	19.78	19.78		(m ²)	
20 + 700.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
20 + 720.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
20 + 740.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
20 + 744.000	4.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	21.00	21.00			
20 + 744.000	0.000	7.00	8.50	0.000	0.225	1.050	5.93	5.93					
20 + 760.000	16.000	7.00	8.50	0.000	0.225	1.050	5.93	5.93	94.80	94.80			
20 + 776.000	16.000	7.00	8.50	0.000	0.225	1.050	5.93	5.93	94.80	94.80			
20 + 776.000	0.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25					
20 + 780.000	4.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	21.00	21.00			
20 + 800.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
20 + 820.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
20 + 840.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
20 + 860.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
20 + 880.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
20 + 884.565	4.565	7.00	7.00	0.000	0.000	1.050	5.25	5.25	23.97	23.97			
20 + 900.000	15.435	7.00	7.00	0.000	0.000	1.050	5.25	5.25	81.03	81.03			
20 + 920.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.00	119.94	119.94			
20 + 940.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
20 + 960.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
20 + 980.000	20.000	7.00	7.00	0.747	0.747	1.050	6.74	6.74	134.88	134.88			
21 + 000.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	6.00	119.94	119.94			
21 + 020.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
21 + 040.000	20.000	7.00	7.00	0.000	0.000	1.050	5.25	5.25	105.00	105.00			
21 + 060.000	20.000	7.00	7.00	0.854	0.747	1.050	6.85	6.05	121.01	121.01			
21 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.90	138.09	138.09			
21 + 092.898	12.898	7.00	7.00	0.854	0.854	1.050	6.96	6.96	89.74	89.74			
21 + 100.000	7.102	7.00	7.00	0.854	0.854	1.050	6.96	6.96	49.42	49.42		164.72	
21 + 120.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		463.87	
21 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		463.87	
21 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		463.87	
21 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	139.16		463.87	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME			SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)	
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGHT SIDE (m2)							
21 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	(m3)	(m3)	463.87
21 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 280.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 380.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 400.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 420.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 440.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 460.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 480.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 500.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 520.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 540.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 560.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87
21 + 563.141	3.141	7.00	7.00	0.854	0.854	1.050	6.96	6.96	21.86			72.85
21 + 580.000	16.859	7.00	7.00	0.854	0.854	1.050	6.96	6.96	117.30			391.02
21 + 600.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
21 + 620.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
21 + 640.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
21 + 660.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	43.53		95.63
21 + 680.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16	15.87		123.29
21 + 700.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
21 + 720.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
21 + 740.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
21 + 760.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16	
21 + 771.474	11.474	7.00	7.00	0.854	0.854	1.050	6.96	6.96	79.84		79.84	
21 + 780.000	8.526	7.00	7.00	0.854	0.854	1.050	6.96	6.96	59.32		59.32	

COMPUTATION OF SUBGRADE VOLUMES

MAIN ROAD

STATION	DISTANCE	SUBGRADE AREAS					SUBGRADE VOLUME				SUBGRADE DISTRIBUTION		ROCK FORMATION LEVELLING (m2)
		CARRIAGE ROAD		SHOULDER SECTION		CENTRAL RESERVE SECTION (m2)	SECTION (m2)	AVERAGE (m2)	VOLUME (m3)	FILL AREAS (m3)	CUT AREAS (m3)		
		LEFT SIDE WIDTH (m)	RIGHT SIDE WIDTH (m)	LEFT SIDE (m2)	RIGTH SIDE (m2)								
21 + 800.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
21 + 820.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
21 + 840.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
21 + 860.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
21 + 880.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
21 + 900.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
21 + 920.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
21 + 931.474	11.474	7.00	7.00	0.854	0.854	1.050	6.96	6.96	79.84		79.84		
21 + 940.000	8.526	7.00	7.00	0.854	0.854	1.050	6.96	6.96	59.32			197.75	
21 + 960.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
21 + 980.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 000.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 020.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 040.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 060.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 080.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 100.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 103.231	3.231	7.00	7.00	0.854	0.854	1.050	6.96	6.96	22.48			74.94	
22 + 120.000	16.769	7.00	7.00	0.854	0.854	1.050	6.96	6.96	116.68			388.93	
22 + 140.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 160.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 180.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 200.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16			463.87	
22 + 220.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
22 + 240.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
22 + 260.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
22 + 263.231	3.231	7.00	7.00	0.854	0.854	1.050	6.96	6.96	22.48		22.48		
22 + 280.000	16.769	7.00	7.00	0.854	0.854	1.050	6.96	6.96	116.68		116.68		
22 + 300.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
22 + 320.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
22 + 340.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		
22 + 360.000	20.000	7.00	7.00	0.854	0.854	1.050	6.96	6.96	139.16		139.16		