Coleraine Drive - Road under Rail Option Construction Cost Estimate 0+400 - 0+660

tem	Description	Unit	Estimated Quantity	Unit	Total
No.				Price	Price
1	Clearing and Grubbing	m^2	5200	\$13.50	\$70,200
2	Earth Borrow	m ³	0	\$13.00	\$0
3	Earth Excavation	m ³	3120	\$13.50	\$42,120
4	Remove Ex. Curb/gutter	m	580	\$11.00	\$6,380
5	Remove Ex. Sidewalk	m^2	0	\$7.00	\$0
6	Remove Ex. Median/other concrete	m ²	565	\$14.00	\$7,910
7	Remove Asphalt	m ²	5720	\$11.50	\$65,780
8	Asphalt HL-1	t	436	\$115.00	\$50,094
9	HDBC	t	1452	\$100.00	\$145,200
10	Granular A	m ³	660	\$55.00	\$36,300
11	Granular B	m ³	1760	\$35.00	\$61,600
12	Asphalt Multi-Trail	m	910	\$300.00	\$273,000
13	Concrete Curb & Gutter	m	1040	\$60.00	\$62,400
14	Concrete Median & Splash Pad	m ²	1570	\$50.00	\$78,500
15	Concrete Sidewalk	m ²	520	\$55.00	\$28,600
16	Catch Basin	each	12	\$2,500.00	\$30,000
17	Storm Pipe	m	260	\$250.00	\$65,000
18	Pavement Marking & Symbols	m	780	\$5.00	\$3,900
19	Illumination	m	260	\$100.00	\$26,000
20	Traffic Management-Staging	LS	0.2	\$200,000.00	\$40,000
21	Traffic Signal Reconstruction	each	1	\$200,000	\$200,000
22	Utility Relocaton-Hydro	each	6	\$25,000.00	\$150,000
23	Utility Relocaton-Watermain	m	100	\$350.00	\$35,000
24	Utility Relocaton-Sewer	m	100	\$350.00	\$35,000
25	Utility Relocaton-Other	m	100	\$200.00	\$20,000
Sub-To	otal Construction Cost				\$1,532,984
Minor	Items (15% of Construction Cost)				\$229,948
Estima	ted Engineering - Civil, Geo, etc. (20%)				\$306,597
Γotal	Construction Cost				\$2,069,528

\$2,100,000

Total Construction Cost (Rnd)

Coleraine Drive - Road under Rail Option Construction Cost Estimate - Structures 0+660 - 1+180

ltem	Description	Unit	Estimated	Unit	Total
			Quantity		
No.				Price	Price
1	Bridge (from Structure Report)	LS	1	\$6,922,498	\$6,922,498
2	Approaches & RSS walls (From Structure Report)	LS	1	\$12,324,375	\$12,324,375
3	RSS walls (From Structure Report removed)	m ²	4500	-\$1,000	-\$4,500,000
4	Retaining wall - Secant Wall	m ²	4000	\$2,500	\$10,000,000
5	Retaining wall - MSE Wall	m ²	1800	\$1,000	\$1,800,000
6	Intersection Relocation	each	1	\$300,000.00	\$300,000
7	Railway Diversion	LS	1	\$5,000,000	\$5,000,000
8	Catch Basin	each	26	\$2,500.00	\$65,000
9	Storm Pipe	m	520	\$250.00	\$130,000
10	Pavement Marking & Symbols	m	1560	\$5.00	\$7,800
11	Pumping Station	LS	1	\$3,900,000	\$3,900,000
12	Illumination	m	520	\$100.00	\$52,000
13	Traffic Management-Staging	LS	1	\$200,000	\$200,000
14	Traffic Signal Reconstruction	each	1	\$200,000	\$200,000
15	Utility Relocaton-Hydro	each	9	\$25,000	\$225,000
16	Utility Relocaton-Watermain	m	520	\$350.00	\$182,000
17	Utility Relocaton-Sewer	m	520	\$350.00	\$182,000
18	Utility Relocaton-other	m	520	\$200.00	\$104,000
Sub-To	otal Construction Cost				\$37,094,673
∕linor I	Items (15% of Construction Cost)				\$5,564,201
stimat	ted Engineering - Civil, Geo, etc. (20%)				\$7,418,935
	Construction Cost Construction Cost (Rnd)				\$50,077,809 \$50,100,000

Coleraine Drive - Road under Rail Option Construction Cost Estimate 1+180 - 1+250

	Description	Unit	Estimated	Unit	Total
			Quantity		
No.				Price	Price
1	Clearing and Grubbing	m^2	1400	\$13.50	\$18,900
2	Earth Borrow	m ³	0	\$13.00	\$0
3	Earth Excavation	m ³	1050	\$13.50	\$14,175
4	Remove Ex. Curb/gutter	m	140	\$11.00	\$1,540
5	Remove Ex. Sidewalk	m ²	210	\$7.00	\$1,470
6	Remove Ex. Median/other concrete	m ²	0	\$14.00	\$0
7	Remove Asphalt	m^2	1540	\$11.50	\$17,710
8	Asphalt HL-1	t	99	\$115.00	\$11,396
9	HDBC	t	330	\$100.00	\$33,033
10	Granular A	m ³	150.15	\$55.00	\$8,258
11	Granular B	m ³	400.4	\$35.00	\$14,014
12	Asphalt Multi-Trail	m	245	\$300.00	\$73,500
13	Concrete Curb & Gutter	m	280	\$60.00	\$16,800
14	Concrete Median & Splash Pad	m ²	280	\$50.00	\$14,000
15	Concrete Sidewalk	m ²	140	\$55.00	\$7,700
16	Steel Beam Guide Rail	m	140	\$110.00	\$15,400
17	Retaining Wall - Secant Wall	m ²	70	\$2,500.00	\$175,000
18	Catch Basin	each	4	\$2,500.00	\$10,000
19	Storm Pipe	m	70	\$250.00	\$17,500
20	Pavement Marking & Symbols	m	190	\$5.00	\$950
21	Illumination	m	70	\$100.00	\$7,000
22	Traffic Management-Staging	LS	0.1	\$200,000.00	\$20,000
23	Utility Relocaton-Hydro	each	2	\$25,000.00	\$50,000
24	Utility Relocaton-Watermain	m	70	\$350.00	\$24,500
25	Utility Relocaton-Sewer	m	70	\$350.00	\$24,500
26	Utility Relocaton-Other	m	70	\$200.00	\$14,000

Coleraine Drive - Road Over Rail Option Construction Cost Estimate 0+400 - 0+660

	Description	Unit	Estimated	Unit	Total
			Quantity		
lo.				Price	Price
1	Clearing and Grubbing	m^2	5200	\$13.50	\$70,200
2	Earth Borrow	m^3	200	\$13.00	\$2,600
3	Earth Excavation	m ³	2340	\$13.50	\$31,590
4	Remove Ex. Curb/gutter	m	580	\$11.00	\$6,380
5	Remove Ex. Sidewalk	m ²	0	\$7.00	\$0
6	Remove Ex. Median/other concrete	m ²	565	\$14.00	\$7,910
7	Remove Asphalt	m ²	5720	\$11.50	\$65,780
8	Asphalt HL-1	t	436	\$115.00	\$50,094
9	HDBC	t	1452	\$100.00	\$145,200
10	Granular A	m ³	660	\$55.00	\$36,300
11	Granular B	m ³	1760	\$35.00	\$61,600
12	Asphalt Multi-Trail	m	910	\$300.00	\$273,000
13	Concrete Curb & Gutter	m	1040	\$60.00	\$62,400
14	Concrete Median & Splash Pad	m ²	1570	\$50.00	\$78,500
15	Concrete Sidewalk	m ²	520	\$55.00	\$28,600
16	Catch Basin	each	12	\$2,500.00	\$30,000
17	Storm Pipe	m	260	\$250.00	\$65,000
18	Pavement Marking & Symbols	m	780	\$5.00	\$3,900
19	Illumination	m	260	\$100.00	\$26,000
20	Traffic Management-Staging	LS	0.2	\$200,000.00	\$40,000
21	Traffic Signal Reconstruction	each	1	\$200,000	\$200,000
22	Utility Relocaton-Hydro	each	6	\$25,000.00	\$150,000
23	Utility Relocaton-Watermain	m	100	\$350.00	\$35,000
	Utility Relocaton-Sewer	m	100	\$350.00	\$35,000
24	Utility Relocaton-Other		100	\$200.00	

\$2,100,000

Total Construction Cost (Rnd)

Coleraine Drive - Road Over Rail Option Construction Cost Estimate - Structures 0+660 - 1+180

tem	Description	Unit	Estimated	Unit	Total
			Quantity		
No.				Price	Price
1	Bridge (from Structure Report)	LS	1	\$4,380,228	\$4,380,228
2	Approaches & RSS walls (From Structure Report)	LS	1	\$12,217,020	\$12,217,020
3	RSS walls (From Structure Report removed)	m ²	6200	-\$750	-\$4,650,000
4	RSS walls updated quantity	m ²	7200	\$750	\$5,400,000
5	Track Protection	m ²	560	\$1,500.00	\$840,000
6	Intersection Relocation	each	1	\$500,000.00	\$500,000
7	Bridge link Ellwood Drive/Grapevine Road	m ²	400	\$3,500.00	\$1,400,000
8	Catch Basin	each	26	\$2,500.00	\$65,000
9	Storm Pipe	m	520	\$250.00	\$130,000
10	Pavement Marking & Symbols	m	1560	\$5.00	\$7,800
11	Illumination	m	520	\$100.00	\$52,000
12	Traffic Management-Staging	LS	1	\$200,000	\$200,000
13	Traffic Signal Reconstruction	each	1	\$200,000	\$200,000
14	Utility Relocaton-Hydro	each	7	\$25,000	\$175,000
15	Utility Relocaton-Watermain	m	520	\$350.00	\$182,000
16	Utility Relocaton-Sewer	m	520	\$350.00	\$182,000
17	Utility Relocaton-other	m	520	\$200.00	\$104,000
			I		
					\$21,385,048
Sub-To	otal Construction Cost				-
∕linor l	Items (15% of Construction Cost)				\$3,207,757
stima	ted Engineering - Civil, Geo, etc. (20%)				\$4,277,010
Total	Construction Cost				\$28,869,815
Γotal	Construction Cost (Rnd)				\$28,900,000

Coleraine Drive - Road Over Rail Option Construction Cost Estimate 1+180 - 1+250

ow vation x. Curb/gutter x. Sidewalk sphalt1 ulti-Trail curb & Gutter Median & Splash Pad idewalk a Guide Rail	m ² m ³ m ³ m m ² m ² t t t m ³ m ³ m and m ² 2	1400 3780 700 140 210 1540 99 330 150.15 400.4 245 280	Price \$13.50 \$13.00 \$13.50 \$11.00 \$7.00 \$11.50 \$115.00 \$100.00 \$55.00 \$35.00 \$300.00 \$60.00	Price \$18,900 \$49,140 \$9,450 \$1,540 \$17,710 \$11,396 \$33,033 \$8,258 \$14,014 \$73,500
vation x. Curb/gutter x. Sidewalk sphalt -1 ulti-Trail curb & Gutter Median & Splash Pad idewalk	m ³ m ³ m m m ² m ² t t m ³ m m m m ²	3780 700 140 210 1540 99 330 150.15 400.4 245 280	\$13.50 \$13.00 \$13.50 \$11.00 \$7.00 \$11.50 \$115.00 \$100.00 \$55.00 \$35.00	\$18,900 \$49,140 \$9,450 \$1,540 \$1,470 \$17,710 \$11,396 \$33,033 \$8,258 \$14,014
vation x. Curb/gutter x. Sidewalk sphalt -1 ulti-Trail curb & Gutter Median & Splash Pad idewalk	m ³ m ³ m m m ² m ² t t m ³ m m m m ²	3780 700 140 210 1540 99 330 150.15 400.4 245 280	\$13.00 \$13.50 \$11.00 \$7.00 \$11.50 \$115.00 \$100.00 \$55.00 \$35.00 \$300.00	\$49,140 \$9,450 \$1,540 \$1,470 \$17,710 \$11,396 \$33,033 \$8,258 \$14,014
vation k. Curb/gutter k. Sidewalk sphalt L-1 ulti-Trail curb & Gutter Median & Splash Pad idewalk	m ³ m m ² m ² t t m ³ m m m m and m m m m m m m m m m m m	700 140 210 1540 99 330 150.15 400.4 245 280	\$13.50 \$11.00 \$7.00 \$11.50 \$115.00 \$100.00 \$55.00 \$35.00 \$300.00	\$9,450 \$1,540 \$1,470 \$17,710 \$11,396 \$33,033 \$8,258 \$14,014
x. Curb/gutter x. Sidewalk sphalt1 ulti-Trail Curb & Gutter Median & Splash Pad idewalk	m m ² m ² t t m ³ m ³ m m m m	140 210 1540 99 330 150.15 400.4 245 280	\$11.00 \$7.00 \$11.50 \$115.00 \$100.00 \$55.00 \$35.00 \$300.00	\$1,540 \$1,470 \$17,710 \$11,396 \$33,033 \$8,258 \$14,014
x. Sidewalk sphalt L-1 ulti-Trail curb & Gutter Median & Splash Pad idewalk	m ² m ² t t m ³ m ³ m m m m	210 1540 99 330 150.15 400.4 245 280	\$7.00 \$11.50 \$115.00 \$100.00 \$55.00 \$35.00 \$300.00	\$1,470 \$17,710 \$11,396 \$33,033 \$8,258 \$14,014
sphalt L-1 L-1 ulti-Trail Curb & Gutter Median & Splash Pad idewalk	m ² t t m ³ m ³ m m m m	1540 99 330 150.15 400.4 245 280	\$11.50 \$115.00 \$100.00 \$55.00 \$35.00 \$300.00	\$17,710 \$11,396 \$33,033 \$8,258 \$14,014
ulti-Trail Curb & Gutter Median & Splash Pad idewalk	t t m³ m³ m m m m²	99 330 150.15 400.4 245 280	\$115.00 \$100.00 \$55.00 \$35.00 \$300.00	\$11,396 \$33,033 \$8,258 \$14,014
ulti-Trail Curb & Gutter Median & Splash Pad idewalk	t m ³ m ³ m m m m ²	330 150.15 400.4 245 280	\$100.00 \$55.00 \$35.00 \$300.00	\$33,033 \$8,258 \$14,014
ulti-Trail Curb & Gutter Median & Splash Pad idewalk	m ³ m ³ m m m m	150.15 400.4 245 280	\$55.00 \$35.00 \$300.00	\$8,258 \$14,014
ulti-Trail Curb & Gutter Median & Splash Pad idewalk	m ³ m m m ²	400.4 245 280	\$35.00 \$300.00	\$14,014
ulti-Trail Curb & Gutter Median & Splash Pad idewalk	m m m²	245 280	\$300.00	
Curb & Gutter Median & Splash Pad idewalk	m m ²	280		\$73,500
Median & Splash Pad idewalk	m ²		\$60.00	
idewalk			Ψ00.00	\$16,800
	2	280	\$50.00	\$14,000
n Guide Rail	m^2	140	\$55.00	\$7,700
	m	140	\$110.00	\$15,400
Wall - RSS Wall	m ²	280	\$750.00	\$210,000
n	each	4	\$2,500.00	\$10,000
	m	70	\$250.00	\$17,500
Marking & Symbols	m	210	\$5.00	\$1,050
n	m	70	\$100.00	\$7,000
nagement-Staging	LS	0.1	\$200,000.00	\$20,000
ocaton-Hydro	each	1	\$25,000.00	\$25,000
ocaton-Watermain	m	70	\$350.00	\$24,500
ocaton-Sewer	m	70	\$350.00	\$24,500
ocaton-Other	m	70	\$200.00	\$14,000
1	Marking & Symbols on anagement-Staging ocaton-Hydro ocaton-Watermain ocaton-Sewer ocaton-Other	m anagement-Staging LS ocaton-Hydro each ocaton-Watermain m ocaton-Sewer m	on m 70 nagement-Staging LS 0.1 ocaton-Hydro each 1 ocaton-Watermain m 70 ocaton-Sewer m 70	on m 70 \$100.00 anagement-Staging LS 0.1 \$200,000.00 ocaton-Hydro each 1 \$25,000.00 ocaton-Watermain m 70 \$350.00 ocaton-Sewer m 70 \$350.00

Coleraine Drive at King St Intersection Signal Option Construction Cost Estimate Coleraine 1+250 - 1+530

ltem	Description	Unit	Estimated	Unit	Total
No.			Quantity	Price	Price
1	Clearing and Grubbing	m ²	2900	\$13.50	\$39,150
2	Earth Borrow	m^3	1500	\$13.00	\$19,500
3	Earth Excavation	m ³	3000	\$13.50	\$40,500
4	Remove Ex. Curb/gutter	m	900	\$11.00	\$9,900
5	Remove Ex. Sidewalk	m ²	1350	\$7.00	\$9,450
6	Remove Ex. Median/other concrete	m ²	350	\$14.00	\$4,900
7	Remove Asphalt	m^2	0	\$11.50	\$0
8	Asphalt HL-1	t	960	\$115.00	\$110,435
9	HDBC	t	957	\$100.00	\$95,700
10	Granular A	m^3	435	\$55.00	\$23,925
11	Granular B	m ³	1160	\$35.00	\$40,600
12	Asphalt Multi-Trail	m	280	\$300.00	\$84,000
13	Concrete Curb & Gutter	m	1430	\$60.00	\$85,800
14	Concrete Median & Splash Pad	m^2	1500	\$50.00	\$75,000
15	Concrete Sidewalk	m ²	480	\$55.00	\$26,400
16	Steel Beam Guide Rail	m	230	\$110.00	\$25,300
17	Retaining Wall - RSS Wall	m ²	300	\$750.00	\$225,000
19	Catch Basin	each	20	\$2,500.00	\$50,000
20	Storm Pipe	m	500	\$250.00	\$125,000
21	Pavement Marking & Symbols	m	2200	\$5.00	\$11,000
23	Illumination	m	500	\$100.00	\$50,000
24	Traffic Management-Staging	LS	1	\$25,000	\$25,000
25	Traffic Signal Reconstruction	each	1	\$200,000	\$200,000
26	Utility Relocaton-Hydro	each	6	\$25,000	\$150,000
27	Utility Relocaton-Watermain	m	280	\$350.00	\$98,000
28	Utility Relocaton-Sewer	m	280	\$350.00	\$98,000
29	Utility Relocaton-other	m	280	\$200.00	\$56,000
ub-To	otal Construction Cost		•	<u>. </u>	\$1,778,560
⁄linor l	tems (15% of Construction Cost)				\$266,784
stimat	ted Engineering - Civil, Geo, etc. (20%)				\$355,712
	Construction Cost				\$2,401,055
otal (Construction Cost (Rnd)				\$2,500,000

Coleraine Drive at King St Intersection Roundabout Option Construction Cost Estimate Coleraine 1+250 - 1+530

Item	Description	Unit	Estimated	Unit	Total
			Quantity		
No.				Price	Price
1	Clearing and Grubbing	m ²	4800	\$13.50	\$64,800
2	Earth Borrow	m ³	1200	\$13.00	\$15,600
3	Earth Excavation	m ³	2400	\$13.50	\$32,400
4	Remove Ex. Aspalt Trail	m2	990	\$5	\$4,950
5	Remove Ex. Curb/gutter	m	1500	\$11.00	\$16,500
6	Remove Ex. Sidewalk	m ²	765	\$7.00	\$5,355
7	Remove Ex. Median/other concrete	m ²	290	\$14.00	\$4,060
8	Remove Asphalt Pavement	m ²	3000	\$11.50	\$34,500
9	Asphalt HL-1	t	941	\$115.00	\$108,158
10	HDBC	t	858	\$100.00	\$85,800
11	Granular A	m ³	390	\$55.00	\$21,450
12	Granular B	m ³	1040	\$35.00	\$36,400
13	Asphalt Multi-Trail	m	510	\$300.00	\$153,000
14	Concrete Curb & Gutter	m	2100	\$60.00	\$126,000
15	Concrete Median & Splash Pad	m ²	2850	\$50.00	\$142,500
16	Concrete Sidewalk	m ²	380	\$55.00	\$20,900
17	Steel Beam Guide Rail	m	100	\$110.00	\$11,000
18	Retaining Wall - RSS Wall	m ²	300	\$750.00	\$225,000
19	Catch Basin	each	20	\$2,500.00	\$50,000
20	Storm Pipe	m	500	\$250.00	\$125,000
21	Pavement Marking & Symbols	m	2200	\$5.00	\$11,000
22	Illumination	m	500	\$100.00	\$50,000
23	Traffic Management-Staging	LS	1	\$100,000	\$100,000
24	Utility Relocaton-Hydro	each	4	\$25,000	\$100,000
25	Utility Relocaton-Watermain	m	280	\$350.00	\$98,000
26	Utility Relocaton-Sewer	m	280	\$350.00	\$98,000
27	Utility Relocaton-Other	m	280	\$200.00	\$56,000
Sub-To	otal Construction Cost				\$1,796,373
Minor I	Items (15% of Construction Cost)				\$269,456
Estimat	ted Engineering - Civil, Geo, etc. (20%)				\$359,275
Total	Construction Cost				\$2,425,103
Total	Construction Cost (Rnd)				\$2,500,000

Coleraine Drive - Road under Rail Option with Signal at King Construction Cost Estimate Summary 0+400 - 1+530

Item	Description	Unit	Estimated	Unit	Total
			Quantity		
No.				Price	Price
1	King Intersection Signal	LS	1	\$1,778,560	\$1,778,560
2	Rail over Road Option 1+180-1+250	LS	1	\$591,347	\$591,347
3	Rail over Road Option 0+660-1+180	LS	1	\$37,094,673	\$37,094,673
4	Raild over Road Option 0+400-0+660	LS	1	\$1,532,984	\$1,532,984

Sub-Total Construction Cost	\$40,997,563
Minor Items (15% of Construction Cost)	\$6,149,634
Estimated Engineering - Civil, Geo, etc. (20%)	\$8,199,513
Total Construction Cost	\$55,346,710
Total Construction Cost (Rnd)	\$55,400,000

Coleraine Drive - Road under Rail Option with Roundabout at King					
Construction Cost Estimate Summary					
0+400 - 1+530					

Item	Description	Unit	Estimated Quantity	Unit	Total
No.				Price	Price
1	King Intersection Roundabout	LS	1	\$1,796,373	\$1,796,373
2	Rail over Road Option 1+180-1+250	LS	1	\$591,347	\$591,347
3	Rail over Road Option 0+660-1+180	LS	1	\$37,094,673	\$37,094,673
4	Raild over Road Option 0+400-0+660	LS	1	\$1,532,984	\$1,532,984

Sub-Total Construction Cost	\$41,015,376
Minor Items (15% of Construction Cost)	\$6,152,306
Estimated Engineering - Civil, Geo, etc. (20%)	\$8,203,075
Total Construction Cost	\$55,370,758
Total Construction Cost (Rnd)	\$55,400,000

Coleraine Drive - Road Over Rail Option with Signal at King Construction Cost Estimate Summary 0+400 - 1+530

Item	Description	Unit	Estimated	Unit	Total
			Quantity		
No.				Price	Price
1	King Intersection Signal	LS	1	\$1,778,560	\$1,778,560
2	Road over Rail Option 1+180-1+250	LS	1	\$645,862	\$645,862
3	Road over Rail Option 0+660-1+180	LS	1	\$21,385,048	\$21,385,048
4	Road over Rail Option 0+400-0+660	LS	1	\$1,525,054	\$1,525,054
	.1				

Sub-Total Construction Cost	\$25,334,523
Minor Items (15% of Construction Cost)	\$3,800,178
Estimated Engineering - Civil, Geo, etc. (20%)	\$5,066,905
Total Construction Cost	\$34,201,606
Total Construction Cost (Rnd)	\$34,300,000

Coleraine Drive - Road Over Rail Option with Roundabout at King		
Construction Cost Estimate Summary		
0+400 - 1+530		

Item	Description	Unit	Estimated	Unit	Total
			Quantity		
No.				Price	Price
1	King Intersection Roundabout	LS	1	\$1,796,373	\$1,796,373
2	Road over Rail Option 1+180-1+250	LS	1	\$645,862	\$645,862
3	Road over Rail Option 0+660-1+180	LS	1	\$21,385,048	\$21,385,048
4	Road over Rail Option 0+400-0+660	LS	1	\$1,525,054	\$1,525,054

Sub-Total Construction Cost	\$25,352,336
Minor Items (15% of Construction Cost)	\$3,802,850
Estimated Engineering - Civil, Geo, etc. (20%)	\$5,070,467
Total Construction Cost	\$34,225,654
Total Construction Cost (Rnd)	\$34,300,000