Appendix G Cost Estimate





ROAD

Intersection of Highway 50 and Mayfield Daylight Triangle From: Daylight Triangle To:

- 20% Sub Total	ha lump sum km	300000 14 350 19 18 70 90 10 40.7	3,700 210 1350 2550 1440 800 420	\$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$114,000 \$36,000
Sub Total	ha lump sum ha lump sum km m3 m per diam tonne tonne tonne tonne mm	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$25,000 \$19,000 \$30,000 \$6,000 \$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	
Sub Total	ha lump sum km m3 m per diam tonne tonne tonne tonne tonne mm	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$19,000 \$30,000 \$6,000 \$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	
Sub Total	ha lump sum km m3 m per diam tonne tonne tonne tonne mm m	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$30,000 \$6,000 \$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	
Sub Total	ha lump sum km m3 m per diam tonne tonne tonne tonne mm m	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$30,000 \$6,000 \$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	
-20%	ha lump sum km m3 m per diam tonne tonne tonne tonne mm m	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	
-20%	km m3 m per diam tonne tonne tonne tonne m m	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
-20%	km m3 m per diam tonne tonne tonne tonne m m	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
-20%	m3 m per diam tonne tonne tonne tonne m	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
	m3 m per diam tonne tonne tonne tonne m	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
	m3 m per diam tonne tonne tonne tonne m	14 350 19 18 70 90	3,700 210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
	m3 m per diam tonne tonne tonne tonne m	350 19 18 70 90 10	210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
	m3 m per diam tonne tonne tonne tonne m	350 19 18 70 90 10	210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
	m3 m per diam tonne tonne tonne tonne m	350 19 18 70 90 10	210 1350 2550 1440 800 420	\$51,800 \$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
Sub Tota	m3 m per diam tonne tonne tonne tonne m	350 19 18 70 90 10	210 1350 2550 1440 800 420	\$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	\$36,000
	m3 m per diam tonne tonne tonne tonne m	350 19 18 70 90 10	210 1350 2550 1440 800 420	\$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	. ,
	m per diam tonne tonne tonne tonne m	350 19 18 70 90 10	210 1350 2550 1440 800 420	\$73,500 \$25,650 \$45,900 \$100,800 \$72,000 \$4,200	
	tonne tonne tonne tonne m	19 18 70 90 10	1350 2550 1440 800 420	\$25,650 \$45,900 \$100,800 \$72,000 \$4,200	
	tonne tonne tonne m m	18 70 90 10	2550 1440 800 420	\$45,900 \$100,800 \$72,000 \$4,200	
	tonne tonne m m	70 90 10	1440 800 420	\$100,800 \$72,000 \$4,200	
	tonne m m	90 10	800 420	\$72,000 \$4,200	
	m m	10	420	\$4,200	
	m				
		40 7	400	\$17.094	
	m		420		
		60	210		
	m			. ,	
	each				
	each	2670	1	\$2,670	
	each			4-,010	
	each				
	each	4000	1	\$4,000	
	each			4 1,000	
	m2	4	4100	\$16,400	
	m2			413,133	
		20000	1	\$20,000	
	m	5			
- 20%				\$89,723	
Sub Tota					\$538,337
Cub i Olu					ψ000,001
pecify					
al split)					
. ,					
	1				
		1			
;	Sub Total	m2 m2 each m	m2 m2 each 20000 m 5	m2 m2 each 20000 1 m 5 400 - 20% Sub Total	m2 m2 each 20000 1 \$20,000 m 5 400 \$2,000 \$89,723 Sub Total pecify all split)





ROAD Intersection of Highway 50 and Mayfield

From: Daylight Triangle To: Daylight Triangle

Component/ Category	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Streetlights	Both sides Centre median Median	km or each km or each km	300,000	0.15	\$45,000	
	Contingency (specify %) - 20%				\$9,000	
	Sub Tota	I				\$54,000
Traffic Signals	Permanent 4 - way (Modification Only)	each	150,000	1	\$150,000	
	Permanent 3 - way Temporary	each each	100000	1	\$100,000	
	Contingency (specify %) - 20%				\$50,000	
	Sub Tota	I				\$300,000
Culverts	Rehabilitation of existing Widening of existing Removal of existing New structure	m m m				
	Contingency (specify %) - 20%					
	Sub Tota	I				
Bridges	Rehabilitation of existing Widening of existing Removal of existing New structure					
	Contingency (specify %) Sub Total	ı				
Noise Walls	Installation Removal of existing					
	Contingency (specify %) Sub Total	ı				
Landscaping/ Sidewalks	Sidewalk (1.5m) Trees and shrubs Other (specify)	m2	80	85	\$6,800	
	3.0m Combined Pathway Potential Sidewalk 1.5m (on East of		80	100	\$8,000	
	Highway 50 Contingency (specify %) - 20%) m2	80	40	\$3,200 \$3,600	
	Sub Tota	I				\$21,600

PROJECT TOTAL							
		Without Potential Sidewalk					
CASH FLOW	Year I	Year II	Year III	Year IV	Total		
CASH FLOW							





ROAD Highway 50

From: Intersection of Mayfield North Limit To: 320m north of Mayfield Road

Component/	Hama Daganintian		Units	Unit Dries	Overstite	Cub Tatal	Tatal
Category	Item Description			Unit Price	Quantity	Sub Total	Total
Design/Contract	Design		lump sum			\$70,000	
Administration	Contract Administration		lump sum			\$25,000	
	Contingency (specify %) - 20%					\$19,000	
	Contingency (specify %) - 20 %					\$19,000	
		Sub Total					\$114,000
		Oub Total					Ψ114,000
Property	Strip property purchase		ha				
Acquisition	Whole purchase (specify)		lump sum				
			-				
	General		km	300000	0.27	\$81,000	
Utility Relocation	Other (specify)						
	Contingency (specify %)-20%					\$16,200	
		Sub Total					¢07 000
		Sub rotai					\$97,200
Construction	Excavation/Earthworks		m3	14	4,000	\$56,000	
	Install storm sewer		m per diam	350	260	\$91,000	
	Granular 'A'		tonne	19	2950	\$56,050	
	Granular 'B'		tonne	18	5700	\$102,600	
	Asphalt Base		tonne	70	2400	\$168,000	
	Asphalt Top		tonne	90	1000	\$90,000	
	Remove curb and gutter		m	10	520	\$5,200	
	Install curb and gutter		m	40.7	520	\$21,164	
	Install subdrains		m	60	260	\$15,600	
	Install catch-basin leads		m				
	Remove catch-basin		each				
	Install catch-basin		each				
	Adjust catch-basin		each				
	Remove manhole		each				
	Install manhole		each	4000	14	\$56,000	
	Adjust manhole		each	_			
	Asphalt removal		m2	4	5500	\$22,000	
	Asphalt planing		m2				
	Asphalt in place recycle		m2 m2				
	Asphalt pulverising Pavement Marking		m	5	1050	\$5,250	
	i aveinent marking		1111	5	1030	φυ,∠υυ	
	Contingency (specify %)- 20%					\$137,773	
		Sub Total					\$826,637
Intersections	Additional turning lane (specify						
	extra lanes and Municipal split)						
	Section of the sect						
	Contingency (specify %)						
		Sub Total					





ROAD Highway 50

From: Intersection of Mayfield North Limit To: 320m north of Mayfield Road

Component/ Category	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Streetlights	Both sides	km or each	300,000	0.27	\$81,000	
3	Centre median	km or each	,		, , , , , , , , , , , , , , , , , , , ,	
	Median	km				
	Contingency (specify %) - 20%				\$16,200	
	Sub To	tal				\$97,200
Traffic Signals	Permanent 4 - way (Modification Only)	each				
_	Permanent 3 - way	each				
	Temporary	each				
	Contingency (specify %) - 20%					
	Sub To	tal				
Culverts	Rehabilitation of existing					
	Widening of existing	m				
	Removal of existing	m				
	New structure	m				
	Contingency (specify %) - 20%					
	Sub To	tal				
Bridges	Rehabilitation of existing					
2114900	Widening of existing					
	Removal of existing					
	New structure					
	Contingency (specify %)					
	Sub To	tal				
Noise Walls	Installation					
	Removal of existing					
	Contingency (specify %)					
	Sub To	*-1				
	Sub 10	lai				
Landscaping/	Sidewalk (1.5m)	m2	80	405	\$32,400	
Sidewalks	Trees and shrubs					
	Other (specify)					
	3.0m Combined Pathw		80			
	Potential Sidewalk 1.5m (on East					
	Highway !	ō0) m2	80			
	Contingency (specify %) - 20%				\$6,480	
	Sub To	tal				\$38,880
	300 10					Ψ00,000

PROJECT TOTAL

\$1,173,917

CASH FLOW	Year I	Year II	Year III	Year IV	Total
CASITILOW					





ROAD Highway 50 From: Castlemore Road

From: Castlemore Road To: South of Mayfield Intersection Limit

Component/ Category	Item Description		Units	Unit Price	Quantity	Sub Total	Total
Design/Contract Administration	Design Contract Administration		lump sum lump sum			\$1,200,000 \$400,000	
	Contingency (specify %) - 20%					\$320,000	
		Sub Total					\$1,920,000
Property	Strip property purchase		ha		2.3		
Acquisition	Whole purchase (specify)		lump sum				\$5,494,921
	General		km	300000	5.28	\$1,584,000	
Utility Relocation	Other (specify)						
	Contingency (specify %)-20%					\$316,800	
		Sub Total					\$1,900,800
Construction	Excavation/Earthworks		m3	14	110,300	\$1,544,200	
	Install storm sewer		m per diam	350	5275	. , ,	
	Granular 'A' Granular 'B'		tonne tonne	19 18	14700 28650	-	
	Asphalt Base		tonne	70	3260	-	
	Asphalt Top		tonne	90	16100	\$1,449,000	
	Remove curb and gutter		m	10	1510	\$15,100	
	Install curb and gutter		m	40.7	14460	\$588,522	
	Install subdrains		m	60	5275	\$316,500	
	Install catch-basin leads		m				
	Remove catch-basin		each	0070	0.5	400.450	
	Install catch-basin Adjust catch-basin		each each	2670	35	\$93,450	
	Remove manhole		each				
	Install manhole		each	4000	171	\$684,000	
	Adjust manhole		each	.000		400 1,000	
	Asphalt removal		m2	4	100400	\$401,600	
	Asphalt planing		m2				
	Asphalt in place recycle		m2				
	Asphalt pulverising		m2	500	00	640.000	
	Retaining Wall OGS		m each	500 20000	38 17	\$19,000 \$340,000	
	Pavement Marking		m	5	23000	\$340,000 \$115,000	
	Transit Infrastructure		each	2000	5	\$10,000	
	Contingency (specify %)- 20%					\$1,689,164	
		Sub Total					\$10,134,986
Intersections	Additional turning lane (specify extra lanes and Municipal split)						
	Contingency (specify %)						
		Sub Total					





ROAD Highway 50 From: Castlemore Road

From: Castlemore Road To: South of Mayfield Intersection Limit

Component/ Category	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Streetlights	Both sides Centre median Median	km or each km or each km	300,000	5.28	\$1,584,000	
	Contingency (specify %) - 20%				\$316,800	
	Sub Tota	ı				\$1,900,800
Traffic Signals	Permanent 4 - way (Modification Only) Permanent 3 - way	each each	150,000	3	\$450,000	
	Temporary	each	100000	3	\$300,000	
	Contingency (specify %) - 20%				\$150,000	
	Sub Tota	I				\$900,000
Culverts	Rehabilitation of existing Widening of existing Removal of existing New structure	m m m	1100 36 1100	210 100 300	\$231,000 \$3,600 \$330,000	
	Contingency (specify %) - 20% Sub Tota	I			\$112,920	\$677,520
Bridges	Rehabilitation of existing Widening of existing Removal of existing New structure					
	Contingency (specify %) Sub Tota	1				
Noise Walls	Installation Removal of existing					
	Contingency (specify %)					
	Sub Tota	1				
Landscaping/ Sidewalks	Sidewalk (1.5m) Trees and shrubs Other (specify)	m2	80	1560	\$124,800	
	3.0m Combined Pathway Potential Sidewalk 1.5m (on East o		80	15900	\$1,272,000	
	Highway 50 Contingency (specify %) - 20%		80	7960	\$636,800 \$406,720	
	Sub Tota					\$2,440,320

PROJECT TOTAL	PROJECT TOTAL						
		Without Potential Sidewalk					
CASH FLOW	Year I	Year II	Year III	Year IV	Total		
CASH FLOW							





ROAD

Mayfield Road 85m east of Coleraine Drive From: To: Intersection of Highway 50

Component/ Category	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Design/Contract	Design	lump sum			\$300,000	
Administration	Contract Administration	lump sum			\$100,000	
	0 11 / 15 04) 0004				***	
	Contingency (specify %) - 20%				\$80,000	
	Sub To	tal				\$480,000
Property	Strip property purchase	ha		1.6		
Acquisition	Whole purchase (specify)	lump sum				\$2,505,079
	General	km	300000	1.3	\$390,000	
Utility Relocation	Other (specify)					
	Contingency (aposity 9/) 0.2				¢70 000	
	Contingency (specify %) - 0.2 Sub To	tal			\$78,000	\$468,000
	Gub 10	· · ·				ψ-100,000
Construction	Excavation/Earthworks	m3	14	32,100	\$449,400	
	Install storm sewer	m per diam	350	1250	\$437,500	
	Granular 'A'	tonne	19	3700	\$70,300	
	Granular 'B'	tonne	18	7320	\$131,760	
	Asphalt Base	tonne	70	1280	\$89,600	
	Asphalt Top	tonne	90	2880	\$259,200	
	Remove curb and gutter	m	10	650	\$6,500	
	Install curb and gutter	m	40.7	2800	\$113,960	
	Install subdrains	m	60	1250	\$75,000	
	Install catch-basin leads	m				
	Remove catch-basin	each		_		
	Install catch-basin	each	2670	8	\$21,360	
	Adjust catch-basin	each				
	Remove manhole	each	4000	50	#000 000	
	Install manhole	each each	4000	52	\$208,000	
	Adjust manhole	m2	4	12960	¢51 040	
	Asphalt removal Asphalt planing	m2	4	12900	\$51,840	
	Asphalt in place recycle	m2				
	Asphalt pulverising	m2				
	OGS	each	20000	4	\$80,000	
	Pavement Marking	m	5	3500	\$17,500	
	Contingency (specify %)- 20%				\$402,384	
	Sub To	tal				\$2,414,30
	Additional tracks of the second					
Intersections	Additional turning lane (specify extra lanes and Municipal split)	m	500	680	\$340,000	
	Contingency (20 %)				\$68,000	
		tal			+-3, 0	\$408,00
	Sub To	tal			. ,	\$4





ROAD

Mayfield Road 85m east of Coleraine Drive To: Intersection of Highway 50 From:

Component/ Category	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Streetlights	Both sides	km or each	300,000	_	\$450,000	Total
ou counginto	Centre median	km or each	000,000	1.0	ψ 100,000	
	Median	km				
	Contingency (specify %) - 20%				\$90,000	
	Sub Tot	al				\$540,000
Traffic Signals	Permanent 4 - way (Modification Only)	each				
	Permanent 3 - way	each				
	Temporary	each				
	Contingency (specify %)					
	Sub Tot	al				
Culverts	Rehabilitation of existing					
	Widening of existing	m	1100	30	\$33,000	
	Removal of existing	m				
	New structure	m	1100	50	\$55,000	
	Contingency (specify %) - 20%				\$17,600	
	Sub Tot	al				\$105,600
Bridges	Rehabilitation of existing					
2agoo	Widening of existing					
	Removal of existing					
	New structure					
	Contingency (specify %)					
	Sub Tot	al				
Noise Walls	Installation					
	Removal of existing					
	Contingency (specify %)					
	Sub Tot	al				
I	Cidewalls (4 Fee)	0		450	# 00 000	
Landscaping/ Sidewalks	Sidewalk (1.5m)	m2	80	450	\$36,000	
Sidewarks	Trees and shrubs Other (specify)					
	3.0m Combined Pathwa	wm2	80	3800	\$304,000	
	Contingency (specify %) - 20%	y 1112	30	3000	\$68,000	
					, , , , , , ,	
	Sub Tot	أاد	1			\$408,000

PROJECT TOTAL

\$7,328,983

CASH FLOW	Year I	Year II	Year III	Year IV	Total
CASITILOW					





ROAD Albion Vaughan Road

From: East of Intersection of Hwy 50 To: 350m East of Highway 50

Component/ Category	Item Description		Units	Unit Price	Quantity	Sub Total	Total
Design/Contract	Design Term Description			JIIII FIICE	Guaritity	\$70,000	i Olai
Administration	Contract Administration		lump sum lump sum			\$70,000 \$20,000	
Administration	Contract Administration		iump sum			Ψ20,000	
	Contingency (specify %) - 20%					\$18,000	
	Contingency (speemy 70) 2070					Ψ10,000	
		Sub Total					\$108,000
							. ,
Property	Strip property purchase		ha		0.1		
Acquisition	Whole purchase (specify)		lump sum				
	General		km	300000	0.3	\$90,000	
Utility Relocation	Other (specify)						
						440.000	
	Contingency (specify %) - 0.2					\$18,000	
		Sub Total					¢100 000
		Sub rotar					\$108,000
Construction	Excavation/Earthworks		m3	14	3,900	\$54,600	
oonstruction	Install storm sewer		m per diam	350	300	\$105,000	
	Granular 'A'		tonne	19	2200	\$41,800	
	Granular 'B'		tonne	18	4180	\$75,240	
	Asphalt Base		tonne	70	920	\$64,400	
	Asphalt Top		tonne	90	780	\$70,200	
	Remove curb and gutter		m	10	50	\$500	
	Install curb and gutter		m	40.7	600		
	Install subdrains		m	60	300	\$18,000	
	Install catch-basin leads		m				
	Remove catch-basin		each				
	Install catch-basin		each	2670	14	\$37,380	
	Adjust catch-basin		each				
	Remove manhole		each				
	Install manhole		each	4000	2	\$8,000	
	Adjust manhole		each		07.40	444000	
	Asphalt removal		m2	4	3740	\$14,960	
	Asphalt planing Asphalt in place recycle		m2 m2				
	Asphalt pulverising		m2				
	Pavement Marking		m	5	1500	\$7,500	
	avenient warking		111	5	1500	Ψ1,500	
	Contingency (specify %)- 20%					\$104,400	
		Sub Total					\$626,400
Intersections	Additional turning lane (specify						
mersections	extra lanes and Municipal split)						
	Contingency (specify %)						
		Sub Total					





ROAD Albion Vaughan Road

From: East of Intersection of Hwy 50 To: 350m East of Highway 50

Component/ Category	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Streetlights	Both sides Centre median Median	km or each km or each km	300,000	0.3	\$90,000	
	Contingency (specify %) - 20% Sub Total	I			\$18,000	\$108,000
Traffic Signals	Permanent 4 - way (Modification Only) Permanent 3 - way Temporary	each each each				
	Contingency (specify %) Sub Total	ı				
Culverts	Rehabilitation of existing Widening of existing Removal of existing New structure	m m m				
	Contingency (specify %) - 20% Sub Tota					
Bridges	Rehabilitation of existing Widening of existing Removal of existing New structure					
	Contingency (specify %)					
	Sub Tota	I				
Noise Walls	Installation Removal of existing					
	Contingency (specify %)					
	Sub Tota	ı				
Landscaping/ Sidewalks	Sidewalk (1.5m) Trees and shrubs Other (specify) 3.0m Combined Pathwa Contingency (specify %) - 20%	m2 / m2				
	Sub Tota	I				

PROJECT TOTAL \$950,400

CASH FLOW	Year I	Year II	Year III	Year IV	Total
CASITILOW					