

**PARKSVILLE TRANSPORTATION MASTER PLAN & CORE AREA PARKING STUDY**

**November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS**

# of Questionnaires Processed: 205

**Question**

<b>2</b>	Suggestions for additional sidewalk / paths	9	Morison: Finholm to Accacia (school route)	5	Better / smoother let downs
		2	Morison: Moilliet to McMillan south side		Community Park by Lion's play park
		2	Pym Street: East side Brice to Morison		Pedestrian underpass tunnel downtown to beach
		5	Resort Drive	11	School zones / walking routes
		3	Stanford Ave (especially by school / sr.s housing)		Sidewalks need to accommodate increase # scooters
	5	Temple St (& fill in open ditches)	2	Waterfront walk from McMillan to French Creek	
			Weld Street: Hwy 19A to Jensen		Wider with buggy/bike/scooter stops & benches

<b>3</b>	Support proposed trolley	<b>Yes</b>	<b>No</b>	<b>No Ans.</b>
		139 68%	49 24%	17 8%

88%                      24%                      8%

*of total surveys*

<b>4</b>	Support TDM measures & NZEV's to encourage alternative modes & reduce parking demand	<b>Yes</b>	<b>No</b>	<b>No Ans.</b>
		92 45%	69 34%	44 21%

45%                      34%                      21%

*of total surveys*

<b>5</b>	Support traffic calming measures	<b>Yes</b>	<b>No</b>	<b>No Ans.</b>
		114 56%	61 30%	30 15%

56%                      30%                      15%

*of total surveys*

PARKSVILLE TRANSPORTATION MASTER PLAN & CORE AREA PARKING STUDY

November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS

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Question

**CITY-WIDE TRANSPORTATION**

<b>1</b>	Support proposed City wide intersection improvements	Yes	70%	No	30%	No Ans.	26% of total surveys
		106	46	53			
		52%	22%				
<b>2</b>	Support use of roundabouts	Yes	57%	No	43%	No Ans.	11% of total surveys
		104	78	23			
		51%	38%				
<b>3</b>	Long term City wide option you prefer	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Do Nothing	No Ans.
		40	28	25	31	61	20
		20%	14%	12%	15%	30%	10% of total surveys

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**November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS**

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Question	1=most imp	1	2	3	4	5	6	7	8	9	10
4 Rank transportation projects in terms of your priorities											
Highway 19 A Improvements	A	24	17	8	5	11	8	4	3	9	7
Jensen Extension	B	14	10	12	9	2	6	7	7	4	22
Bicycle lanes on major roads	C	31	26	14	9	13	10	4	3	5	6
Sidewalks downtown	D	23	18	19	17	5	12	2	2	2	2
Sidewalks near schools	E	30	23	21	15	8	8	3	6	2	1
Despard & Hirst extension to Church	F	16	7	8	9	12	2	8	8	6	7
Bay / Finholm realignment	G	5	14	11	4	3	6	10	3	6	11
Bay / Finholm left turn lanes	H	34	11	10	7	4	2	6	8	4	5
Shelly / Hwy 19A intersection improvement	I	6	12	11	15	11	8	9	8	5	4
Church / Humphrey intersection improvement	J	5	3	4	8	12	10	7	5	11	9

	Analysis	Rank
Highway 19 A Improvements	648	5
Jensen Extension	510	7
Bicycle lanes on major roads	888	2
Sidewalks downtown	773	3
Sidewalks near schools	903	1
Despard & Hirst extension to Church	507	8
Bay / Finholm realignment	412	9
Bay / Finholm left turn lanes	663	4
Shelly / Hwy 19A intersection improvement	541	6
Church / Humphrey intersection improvement	361	10

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Question

4	Other Priority Transportation Project (Stated as #1 Preference)	3	Stanhope to Church Corfield: Hwy 19A to Stanford Despard: Alberni to Corfield Despard to Martindale Extension 3 4 lane McMillan: Hirst to Hwy 19A Light at Hirst & McMillan McMillan @ Hirst intersection #1 problem area 11 Widen Hwy 19A: Dogwood to Pym Stanford	Traffic calming on Corfield: Stanford to Despard) 2 Twin Englishman River bridge Roundabout at Corfield & Jensen Extend S Martindale to Hwy19 via lane b/hd Chry Tuan / Resort / Hwy 19A intersection Extend Despard to Tuwan with 2nd crossing of river Round about at Church & Humphrey Widen Sanderson: Foster to Phillips
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DOWNTOWN CORE

1	Do you support beautification streetscaping major roads to enhance downtown core?	Yes	No	No Ans.	of total surveys
		142	42	23%	21
		69%	20%		10%
2	Do you support additional expenditures to relocate overhead wires underground?	Yes	No	No Ans.	of total surveys
		129	57	31%	19
		63%	28%		9%
3	Which downtown option(s) do you prefer? A = Hwy 19A 4 lanes; Jensen 2 lanes B = Hwy 19A 2 lanes; Jensen 2 lanes C = Hwy 19A 2 lanes one way WB Jensen EB	Option A	Option B	Option C	No Ans.
		96	22	55	32
		47%	11%	27%	16%

5 DOWNTOWN CORE (Continued)

PARKSVILLE TRANSPORTATION MASTER PLAN & CORE AREA PARKING STUDY

November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS

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**Question**

<b>4</b>	What services/commercial development would you like to see added to downtown core? <i>(See attached Comments DC(4))</i>
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Connecting waterfront to downtown core priority?	High	Medium	Low	No Ans.
68	35	90	12	
33%	17%	44%	6%	of total surveys

Would changes proposed in Master Plan encourage you to:	Same	More	Less	No Ans.
Walk	16	87	9	93
Bike	16	51	16	122
Use Transit	17	43	10	135

**DOWNTOWN PARKING**

<b>1</b>	Do you feel the parking approaches presented will result in improved downtown parking?	Yes	No	No Ans.
		52	69	84
		25%	34%	41%
				of total surveys

<b>2</b>	After parking, what do you think is a reasonable distance to walk between vehicle & destination?	< 1 block	1 block	2 blocks	3 blocks	4 blocks	> 4 blks	No Ans.
		5	19	59	46	12	7	57
		2%	9%	29%	22%	6%	3%	28%
								of total surveys

<b>3</b>	Explain any further steps you think should be taken to improve parking conditions in downtown core <i>(See attached Comments DP(3))</i>
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PARKSVILLE TRANSPORTATION MASTER PLAN & CORE AREA PARKING STUDY

November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS

# of Questionnaires Processed: 205

Question

GENERAL

Open House Assessment:	1 = Strongly Disagree					2 = Disagree					3 = Somewhat					
	Rating:	1	2	3	4	5	4 = Agree	3	2	1	5 = Strongly Agree	4	3	2	1	No. Ans
Overall the information presented was useful and informative		17	25	40	57	42										42
Information was easy to understand		20	34	46	49	30										30
Project representatives were helpful, friendly and accessible		10	17	36	52	51										51
I was able to find satisfactory answers to my questions		27	28	40	32	25										53

Overall the information presented was useful and informative	8%	12%	20%	28%	12%	20%
Information was easy to understand	10%	17%	22%	24%	13%	15%
Project representatives were helpful, friendly and accessible	5%	8%	18%	25%	19%	25%
I was able to find satisfactory answers to my questions	13%	14%	20%	16%	12%	26%

Which statement best applies (choose only one)		
Resident of Parksville		163
Business Owner/Operator in Parksville		26
Part of a Service Group in Parksville		3
Public Interest Organization in Parksville		5
None of the above (interested "neighbour")		5
No answer		3

80%  
13%  
1%  
2%  
2%  
1%

PARKSVILLE TRANSPORTATION MASTER PLAN & CORE AREA PARKING STUDY

November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS

# of Questionnaires Processed: 205

Question

COMMENTS:

DC (4) Downtown Core - Services or Commercial Development to be Added to Downtown Core

- 7 No more highrises (specifically along water)
- 8 No more big developments like the Beach Club
- 13 No more waterfront development  
Pedestrian circulation between beach and core
- 6 More safe pedestrian crossing on Hwy 19A
- 5 Pedestrian tunnel under / overpass across Hwy 19A to beach  
Shuttle between beach and downtown parking
- 3 Not so much what as when; encourage extended hours of operation (lot of local business closed by time I'm off work so I end up shopping Nanaimo)
- 16 No big box stores or chains
- 7 No big box stores
- 13 Movie theatre
- 3 Indoor / outdoor pool
- 10 More commercial/residential combo's (2-3 stories)  
Encourage multi-storey com/res combo's on south side Hwy 19A only  
Why spend \$ on removing green space (Jensen ext) when we already have routes that provide same result?
- 2 Directional signage for residents & tourists  
Enforce commercial vehicles using McMillan instead of more pedestrian-friendly Alberni
- 3 Wheelchair accessible public washroom downtown
- 4 Shoe store

PARKSVILLE TRANSPORTATION MASTER PLAN & CORE AREA PARKING STUDY

November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS

# of Questionnaires Processed: 205

**Question**

**DC (4) Downtown Core - Services or commercial development to be added to downtown core (continued)**

- Drinking fountains / cigarette butt disposal units
- More bus stops / benches
- Marina / fisherman's wharf
- 6 Mens' clothing store
- Garden / downtown square (farmers' markets etc)
- Marijuana dispensary
- 2 Eliminate drive thru use; promote idle free zones
- Improved train station access with trolley downtown
- 2 Bakery
- 5 Hospital /additional medical services / physical therapy centre (w/c access)
- Massage parlour
- 5 Canadian Tire
- Shopping centre near City Hall
- 3 Halt intrusion of car dealerships in core; keep downtown downtown not light industrial
- 11 Encourage more specialty/boutique shops
- Swiss Chalet restaurant
- Second Cup coffee shop
- Pier One store
- 2 Wemby Mall revitalization
- 3 Restaurants / pubs with outdoor patio



**PARKSVILLE TRANSPORTATION MASTER PLAN & CORE AREA PARKING STUDY**

**November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS**

**# of Questionnaires Processed: 205**

**Question**

**DC (4) Downtown Core - Services or commercial development to be added to downtown core (continued)**

Encourage stores/restaurants/services along Hwy 19A; encourage "offices" (i.e. insurance / realestate / medical further back

- 6 Pedestrian only shopping area (e.g. Hirst & Craig)
- 2 Tourism support businesses
- 2 Household / Linens store
- Decent department stores
- Ladies clothing stores
- Arts venues

**DP (3) Downtown Parking - further steps to improve parking conditions downtown**

Angle parking on Hwy 19A / Weld & McMillan would be good

- 5 Additional Hwy 19 parking please
- 5 Reverse angle parking will be total headache; will slow traffic as driver gets in position
- 4 Plan for reverse angle parking / bike lane risky given average drivers' age
- 11 Reverse angle parking would be difficult & unsafe on Hwy 19A; busy road
- 3 Reverse angle parking would threaten bike lanes
- 7 Hwy 19A is good as is without redesigning for any type of on street parking
- 4 City should develop off road free parking lots in downtown core
- 2 City Hall staff should not have priority parking at PCTC
- 3 City should build parking structure @ Jensen & Craig for staff/students; leave parking lot & street parking for others
- 7 Tiered parking structure @ Jensen & Craig
- 14 Tiered parking structure in downtown area
- 3 Expand parking areas around PCTC

PARKSVILLE TRANSPORTATION MASTER PLAN & CORE AREA PARKING STUDY

November 12, 2009 OPEN HOUSE - FEEDBACK RESULTS

# of Questionnaires Processed: 205

**Question**

**DP (3) Downtown Parking - further steps to improve parking conditions downtown (Continued)**

- 2 Create parking on corner of Alberni / Jensen
- 8 Enforce existing parking limits  
Expand 1hr parking areas to 2hr parking  
Limit downtown street parking to 1hr only
- 3 Meter high demand/specific downtown parking areas
- 24 No parking meters / pay kiosks (would only benefit Nanaimo malls)
- 4 Improved / Signage directing drivers to parking lots
- 5 Parking should be moved out of core; shuttle from periphery  
More parking on edge of commercial core
- 9 Businesses to provide employee assigned parking off street
- 3 Resorts/Hotels/Condo complexes should supply/use off street (park) parking
- 4 RV parking and signage directing to it
- 3 More angle parking rather than parallel parking  
No parking on Alberni between Hwy 19A & Jensen  
Any increase in downtown density must incorporate off street parking  
Commercial development to provide adequate off street parking  
Make Memorial one way with parking on both sides  
Need more small cluster parking downtown
- 2 More bicycle parking / bike locker downtown core  
Inset curbing with narrower sidewalks on side street  
Remove concrete dividers/use lines in exist parking lots

# APPENDIX C

## Level of Service Background Information

## MODELLING SOFTWARE DESCRIPTION

The traffic analysis was completed by using a software program called Synchro and SimTraffic, and the results were measured in delay, Level of Service (LOS) and 95<sup>th</sup> percentile queue length. Synchro is based on the Highway Capacity Manual (HCM) methodology. SimTraffic integrates established driver behaviours and characteristics to simulate actual conditions by randomly “seeding” or positioning vehicles travelling throughout the network. The simulation, is run five times (five different random seedings of vehicle types, behaviours and arrivals) to obtain statistical significance of the results.

### Levels of Service

Traffic operations are typically described in terms of Levels of Service (LOS) which rates the amount of delay per vehicle for each movement and the entire intersection. Levels of service range from LOS A (representing best operations) to LOS E/F (LOS E being poor operations and LOS F being unpredictable/disruptive operations). LOS E/F are generally undesirable operations for every day conditions.

The hierarchy of criteria for grading an intersection or movement not only includes delay times, but also takes into account traffic control type (stop signs or traffic signal). For example, if a vehicle is delayed for 19 seconds at an unsignalized intersection, it is considered to have an average operation, and would therefore be graded as an LOS C. However, at a signalized intersection, a 19 second delay would be considered a good operation and therefore it would be given an LOS B. The table below indicate the ranges of delay for LOS for signalized and unsignalized intersections.

Table C1: LOS Criteria

Level of Service	Average Control Delay (seconds/vehicle)	
	Unsignalized Intersection	Signalized Intersection
A	Less than 10	Less than 10
B	11 to 15	11 to 20
C	16 to 25	21 to 35
D	26 to 35	36 to 55
E	36 to 50	56 to 80
F	More than 51	More than 81

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E	36 to 50	56 to 80
F	More than 51	More than 81

# APPENDIX D

## Cost Estimates

# Capital Plans Working File

September 26, 2016

\*\*excludes land costs

## Improvement

Road	Cost	Length (east or north)	Length (west or south)
Corfield Multi-use Path	\$ 1,127,500	1190	860
Corfield Sidewalk	\$ 1,845,000	1190	860
Corfield Bike Lanes	\$ 536,250	975	975
Highway 19A Sidewalks	\$ 927,000	360	670
Highway 19A Bike Lanes** may be done by re-stripping	\$ 1,278,750	2325	2325
Dogwood right in/right out	\$ 25,000		
Community Park Bike Routes	\$ 44,975	1285	1285
Shelley Sidewalk	\$ 220,100	310	n/a
Stanford Sidewalk	\$ 383,400	410	130
Stanford Bike Lanes	\$ 291,500	530	530
Signal at Hwy 19A/Shelley	\$ 200,000		
Hirst Sidewalk	\$ 376,300	530	n/a
SBL p/p at Highway 19A/Pym	\$ 10,000		
<b>Total for 2016-2020</b>	<b>\$ 7,265,775</b>		

Beachside Drive Multi-Use Path	\$ 660,000	1200	
Forsyth Sidewalk	\$ 465,050	n/a	655
Pym Bike Lanes	\$ 605,000	1100	1100
Highway 19A Bike Routes	\$ 106,750	3050	3050
Morison Sidewalks	\$ 344,350	195	290
Morison Bike Lane	\$ 563,750	1025	1025
Morison Bike Route	\$ 17,850	510	510
Northwest Bay / Resort Bike Routes	\$ 130,200	3720	3720
Pioneer Bike Routes (and area)	\$ 98,525	2815	2815
Weld Sidewalk	\$ 117,150	n/a	165
Finholm Sidewalk	\$ 262,700	n/a	370
Finholm Bike Route	\$ 21,700	620	620
Four way stop at Hirst/Alberni	\$ 1,500		

**Total for 2021-2025** \$ 3,394,525

Despard Sidewalk	\$ 1,249,600	1075	685
Despard Bike Lanes	\$ 607,750	1105	1105
Hirst Bike Lanes	\$ 275,000	500	500
Chestnut Bicycle Lane **may be done by re-stripping	\$ 407,000	740	740
James/Harnish Bike Route	\$ 34,650	990	990
<b>Total for 2026-2030</b>	<b>\$ 2,574,000</b>		

Road	Cost	Length (east or north)	Length (west or south)
Craig Sidewalk	\$ 241,400	340	n/a
Industrial Way Bike Routes	\$ 25,725	735	735
Wembly area bicycle routes	\$ 41,300	1180	1180
NBL p/p at Alberni/Despard	\$ 10,000		
Roundabout at Jensen/Craig	\$ 400,000		
Roundabout at Jensen/Corfield	\$ 400,000		
Alberni Bike Lanes	\$ 781,000	1420	1420
<b>Total for 2031-2035</b>	<b>\$ 1,899,425</b>		

**Total 20 Year Capital Plan** \$ 15,133,725  
round to \$15,135,000

## Capital Plans Working File

September 26, 2016

\*\*excludes land costs

### Improvement

Road	Cost	Length (east or north)	Length (west or south)
Corfield Multi-use Path	\$ 1,127,500	1190	860
Corfield Sidewalk	\$ 1,845,000	1190	860
Corfield Bike Lanes	\$ 536,250	975	975
Highway 19A Sidewalks	\$ 927,000	360	670
Highway 19A Bike Lanes** may be done by re-stripping	\$ 1,278,750	2325	2325
Bay and Dogwood right in/right out	\$ 50,000		
Community Park Bike Routes	\$ 44,975	1285	1285
Shelley Sidewalk	\$ 220,100	310	n/a
Forsyth Sidewalk	\$ 465,050	n/a	655
SBL p/p at Highway 19A/Pym	\$ 10,000		
<b>Total for 2016-2020</b>	<b>\$ 6,504,625</b>		

Beachside Drive Multi-Use Path	\$ 220,000	400	
Stanford Sidewalk	\$ 383,400	410	130
Stanford Bike Lanes	\$ 291,500	530	530
Pym Bike Lanes	\$ 605,000	1100	1100
Highway 19A Bike Routes	\$ 106,750	3050	3050
Morison Sidewalks	\$ 344,350	195	290
Morison Bike Lane	\$ 563,750	1025	1025
Morison Bike Route	\$ 17,850	510	510
Northwest Bay / Resort Bike Routes	\$ 130,200	3720	3720
Pioneer Bike Routes (and area)	\$ 98,525	2815	2815
Weld Sidewalk	\$ 117,150	n/a	165
Finholm Sidewalk	\$ 262,700	n/a	370
Finholm Bike Route	\$ 21,700	620	620
Four way stop at Hirst/Alberni	\$ 1,500		
Signal at Hwy 19A/Shelley	\$ 200,000		
<b>Total for 2021-2025</b>	<b>\$ 3,364,375</b>		

Despard Sidewalk	\$ 1,249,600	1075	685
Despard Bike Lanes	\$ 607,750	1105	1105
Hirst Sidewalk	\$ 376,300	530	n/a
Hirst Bike Lanes	\$ 275,000	500	500
Chestnut Bicycle Lane **may be done by re-stripping	\$ 407,000	740	740
James/Harnish Bike Route	\$ 34,650	990	990
<b>Total for 2026-2030</b>	<b>\$ 2,950,300</b>		

Road	Cost	Length (east or north)	Length (west or south)
Craig Sidewalk	\$ 241,400	340	n/a
Industrial Way Bike Routes	\$ 25,725	735	735
Wembly area bicycle routes	\$ 41,300	1180	1180
NBL p/p at Alberni/Despard	\$ 10,000		
Roundabout at Jensen/Craig	\$ 400,000		
Roundabout at Jensen/Corfield	\$ 400,000		
Alberni Bike Lanes	\$ 781,000	1420	1420
<b>Total for 2031-2035</b>	<b>\$ 1,899,425</b>		

**Total 20 Year Capital Plan** \$ 14,718,725  
round to \$14,800,000





**Preliminary Cost Estimate**  
**Adding 2.0m Sidewalk and Curb & Gutter on one side of the road**  
**Cost per m of road**

Date: Feb 4, 2010  
 Project No.: 986  
 Prepared by: N. King

ITEMS	Quantity	units	Unit Cost	units	Total Cost
<b>General</b>					
Mobilization & Traffic Control	1	m	\$ 100.00	m	\$ 100.00
<b>Removals:</b>					
Clearing and Grubbing	2	m <sup>2</sup>	\$ 2.00	m <sup>2</sup>	\$ 4.00
Stripping & Excavation	0.8	m <sup>3</sup>	\$ 20.00	m <sup>3</sup>	\$ 16.00
<b>Installation - Civil Works:</b>					
Gravel - 75mm Crush at 250mm	0.5	m <sup>3</sup>	\$ 50.00	m <sup>3</sup>	\$ 25.00
Gravel - 25mm Crush at 150mm	0.3	m <sup>3</sup>	\$ 80.00	m <sup>3</sup>	\$ 24.00
Sidewalk (Concrete)	2	m <sup>2</sup>	\$ 100.00	m <sup>2</sup>	\$ 200.00
Non mountable curb and gutter	1	m	\$ 120.00	m	\$ 120.00

Subtotal	\$	489.00
Contingency - 30%	\$	146.70
Engineering - 15%	\$	73.35

**Total \$ 709.05**  
**Round to \$710/m**

**Disclaimer:**

Whereas any opinions of probable cost prepared by Boulevard Transportation Group ("the Engineer") will be based on incomplete or preliminary information, and will also be based on factors over which the Engineer has no control, the Engineer does not guarantee the accuracy of these opinions of probable cost and shall have no liability where the probable costs are exceeded.



## Preliminary Cost Estimate

**Adding 3.0m Sidewalk and Curb & Gutter on one side of the road  
Cost per m of road**

Date: Feb 4, 2010  
Project No.: 986  
Prepared by: N. King

ITEMS	Quantity	units	Unit Cost	units	Total Cost
<b>General</b>					
Mobilization & Traffic Control	1	m	\$ 100.00	m	\$ 100.00
<b>Removals:</b>					
Clearing and Grubbing	2	m <sup>2</sup>	\$ 2.00	m <sup>2</sup>	\$ 4.00
Stripping & Excavation	1.2	m <sup>3</sup>	\$ 20.00	m <sup>3</sup>	\$ 24.00
<b>Installation - Civil Works:</b>					
Gravel - 75mm Crush at 250mm	0.75	m <sup>3</sup>	\$ 50.00	m <sup>3</sup>	\$ 37.50
Gravel - 25mm Crush at 150mm	0.45	m <sup>3</sup>	\$ 80.00	m <sup>3</sup>	\$ 36.00
Sidewalk (Concrete)	3	m <sup>2</sup>	\$ 100.00	m <sup>2</sup>	\$ 300.00
Non mountable curb and gutter	1	m	\$ 120.00	m	\$ 120.00

Subtotal	\$ 621.50
Contingency - 30%	\$ 186.45
Engineering - 15%	\$ 93.23

**Total \$ 901.18**  
**Round to \$900/m**

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## Preliminary Cost Estimate

**Addition of sharrows and bicycle route signs. Assumes no road widening required.  
Cost per m of bicycle route (both directions)**

Date: Feb 4, 2010  
Project No.: 986  
Prepared by: N. King

ITEMS	Quantity	units	Unit Cost	units	Total Cost
<b>General</b>					
Mobilization & Traffic Control	1	m	\$ 10.00	m	\$ 10.00
<b>Installation - Civil Works:</b>					
Install sharrows (1 every 75m)	0.027	symbol	\$ 250.00	symbol	\$ 6.67
Install bike route signs (1 at start and end of block - assume block every 200m)	0.01	sign	\$ 500.00	sign	\$ 5.00

Subtotal	\$	21.67
Contingency - 30%	\$	6.50
Engineering - 15%	\$	3.25

**Total \$ 31.42**  
**Round to \$35/m**

**Disclaimer:**

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## Preliminary Cost Estimate

### Adding 1.5m Bike Lane on Both Sides of the Road Cost per m of road

Date: Feb 4, 2010  
 Project No.: 986  
 Prepared by: N. King

ITEMS	Quantity	units	Unit Cost	units	Total Cost
<b>General</b>					
Mobilization & Traffic Control	1	m	\$ 100.00	m	\$ 100.00
<b>Removals:</b>					
Sawcut	2	m	\$ 10.00	m	\$ 20.00
Asphalt Disposal	2	m <sup>2</sup>	\$ 10.00	m <sup>2</sup>	\$ 20.00
Clearing and Grubbing	1	m <sup>2</sup>	\$ 2.00	m <sup>2</sup>	\$ 2.00
Stripping & Excavation	1.2	m <sup>3</sup>	\$ 20.00	m <sup>3</sup>	\$ 24.00
<b>Installation - Civil Works:</b>					
Gravel - 75mm Crush at 250mm	0.75	m <sup>3</sup>	\$ 50.00	m <sup>3</sup>	\$ 37.50
Gravel - 25mm Crush at 150mm	0.45	m <sup>3</sup>	\$ 80.00	m <sup>3</sup>	\$ 36.00
Asphalt	3	m <sup>2</sup>	\$ 40.00	m <sup>2</sup>	\$ 120.00
Paint Marking	2	m	\$ 10.00	m	\$ 20.00

Subtotal	\$	379.50
Contingency - 30%	\$	113.85
Engineering - 15%	\$	56.93

**Total \$ 550.28**  
**Round to \$550/m**

Note: Cost does not include any relocation of sidewalks

**Disclaimer:**

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## Preliminary Cost Estimate

### Bus Stop Upgrade Cost per m of road

Date: May 25, 2012  
 Project No.: 986  
 Prepared by: N. King

ITEMS	Quantity	units	Unit Cost	units	Total Cost
<b>General</b>					
Mobilization & Traffic Control	1	lump sum	\$ 2,500.00	lump sum	\$ 2,500.00
<b>Removals:</b>					
Clearing and Grubbing	17.85	m <sup>2</sup>	\$ 2.00	m <sup>2</sup>	\$ 35.70
Stripping & Excavation	7.14	m <sup>3</sup>	\$ 20.00	m <sup>3</sup>	\$ 142.80
<b>Installation - Civil Works:</b>					
Gravel - 75mm Crush at 250mm	4.4625	m <sup>3</sup>	\$ 50.00	m <sup>3</sup>	\$ 223.13
Gravel - 25mm Crush at 150mm	2.55	m <sup>3</sup>	\$ 80.00	m <sup>3</sup>	\$ 204.00
Non mountable curb and gutter	8.5	m	\$ 100.00	m	\$ 850.00
Sidewalk (concrete)	17.85	m <sup>2</sup>	\$ 120.00	m <sup>2</sup>	\$ 2,142.00
Paint Marking	8.5	m	\$ 10.00	m	\$ 85.00
Garage Bin	1	lump sum	\$ 250.00	lump sum	\$ 250.00
Shelter	1	lump sum	\$ 2,000.00	lump sum	\$ 2,000.00

Subtotal	\$ 8,432.63
Contingency - 30%	\$ 2,529.79
Engineering - 15%	\$ 1,264.89

**Total \$ 12,227.31**  
**Round to \$12,500/m**

Notes:

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## Preliminary Cost Estimate

### Right in/Right out traffic islands (Dogwood and Bay)

Date: March 11, 2010  
 Project No.: 986  
 Prepared by: N. King

ITEMS	Quantity	units	Unit Cost	units	Total Cost
<b>General</b>					
Mobilization & Traffic Control	1	lump sum	\$ 10,000.00	m	\$ 10,000.00
<b>Removals:</b>					
Milling	15	m <sup>2</sup>	\$ 10.00	m <sup>2</sup>	\$ 150.00
Asphalt Removal	72	m <sup>3</sup>	\$ 20.00	m <sup>3</sup>	\$ 1,440.00
<b>Installation - Civil Works:</b>					
Gravel - 75mm Crush at 250mm	14.4	m <sup>3</sup>	\$ 50.00	m <sup>3</sup>	\$ 720.00
Gravel - 25mm Crush at 150mm	7.2	m <sup>3</sup>	\$ 80.00	m <sup>3</sup>	\$ 576.00
Curb	49	m	\$ 120.00	m	\$ 5,880.00
Concrete	72	m <sup>2</sup>	\$ 120.00	m <sup>2</sup>	\$ 8,640.00
Paint Marking	1	lump sum	\$ 2,500.00	lump sum	\$ 2,500.00
Signs	8	sign	\$ 500.00	sign	\$ 4,000.00

Subtotal	\$ 33,906.00
Contingency - 30%	\$ 10,171.80
Engineering - 15%	\$ 5,085.90

**Total \$ 49,163.70**

**Notes:**

Does not include any sanitary or water utilities are installed.  
 Does not include any utility relocations

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**Preliminary Cost Estimate**  
**New Collector Road - 20m right of way**  
**Cost per m of road**

Date: Feb 4, 2010  
 Project No.: 986  
 Prepared by: N. King

ITEMS	Quantity	units	Unit Cost	units	Total Cost
<b>General</b>					
Mobilization & Traffic Control	1	m	\$ 100.00	m	\$ 100.00
<b>Removals:</b>					
Clearing and Grubbing	17.5	m <sup>2</sup>	\$ 2.00	m <sup>2</sup>	\$ 35.00
Stripping & Excavation	7	m <sup>3</sup>	\$ 20.00	m <sup>3</sup>	\$ 140.00
<b>Installation - Civil Works:</b>					
Gravel - 75mm Crush at 250mm	4.375	m <sup>3</sup>	\$ 50.00	m <sup>3</sup>	\$ 218.75
Gravel - 25mm Crush at 150mm	2.625	m <sup>3</sup>	\$ 80.00	m <sup>3</sup>	\$ 210.00
Asphalt	13.5	m <sup>2</sup>	\$ 40.00	m <sup>2</sup>	\$ 540.00
Non mountable curb and gutter	2	m	\$ 100.00	m	\$ 200.00
Sidewalk (concrete)	4	m <sup>2</sup>	\$ 120.00	m <sup>2</sup>	\$ 480.00
Paint Marking	4	m	\$ 10.00	m	\$ 40.00
Lighting (1per 40m per side)	0.05	m	\$ 4,000.00	m	\$ 200.00
Grass	2.5	m <sup>2</sup>	\$ 50.00	m <sup>2</sup>	\$ 125.00
Drainage System	1	m	\$ 210.00	m	\$ 210.00

Subtotal	\$ 2,498.75
Contingency - 30%	\$ 749.63
Engineering - 15%	\$ 374.81

**Total \$ 3,623.19**  
**Round to \$3,700/m**

**Notes:**

Does not include any sanitary or water utilities are installed.

Does not include any utility relocations

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## Preliminary Cost Estimate

**Addition of a Three 3.6m wide Travel Lanes and Two Shoulders (2.0m)  
Cost per m of road**

Date: May 25, 2012  
Project No.: 986  
Prepared by: N. King

ITEMS	Quantity	units	Unit Cost	units	Total Cost
<b>General</b>					
Mobilization & Traffic Control	1	m	\$ 100.00	m	\$ 100.00
<b>Removals:</b>					
Sawcut	2	m	\$ 10.00	m	\$ 20.00
Clearing and Grubbing	14.8	m <sup>2</sup>	\$ 2.00	m <sup>2</sup>	\$ 29.60
Stripping & Excavation	5.92	m <sup>3</sup>	\$ 20.00	m <sup>3</sup>	\$ 118.40
<b>Installation - Civil Works:</b>					
Gravel - 75mm Crush at 250mm	0.25	m <sup>3</sup>	\$ 50.00	m <sup>3</sup>	\$ 12.50
Gravel - 75mm Crush at 250mm	3.7	m <sup>3</sup>	\$ 50.00	m <sup>3</sup>	\$ 185.00
Gravel - 25mm Crush at 150mm	2.22	m <sup>3</sup>	\$ 80.00	m <sup>3</sup>	\$ 177.60
Asphalt	14.8	m <sup>2</sup>	\$ 40.00	m <sup>2</sup>	\$ 592.00
Paint Marking	6	m	\$ 10.00	m	\$ 60.00
Lighting (1per 40m per side)	0.05	m	\$ 4,000.00	m	\$ 200.00

Subtotal	\$ 1,495.10
Contingency - 30%	\$ 448.53
Engineering - 15%	\$ 224.27

**Total \$ 2,167.90**  
**Round to \$2,200/m**

Notes:  
Does not include any utility relocations

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