

Appendix F

Cost Estimates

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



ROUNDAOUBTS ALTERNATIVE

4/19/2019

Prj No.	PROJECT DESCRIPTION	Construction Costs	Right of Way	Support Costs	Total Project Costs
Retrofit/Improve Existing Facilities					
1	Carillion Blvd/Twin Cities Rd (SR 104) - Roundabout	\$2,150,000	\$70,000	\$555,000	\$2,775,000
2	Carillion Blvd/Lake Park Ave - Roundabout	\$1,330,000		\$333,000	\$1,663,000
3	Carillion Blvd/Lake Canyon Ave - Roundabout	\$1,330,000		\$333,000	\$1,663,000
4	Carillion Blvd/Elk Hills Dr - Roundabout	\$1,330,000		\$333,000	\$1,663,000
5	Carillion Blvd/Walnut Ave - Roundabout	\$2,970,000	\$102,000	\$768,000	\$3,840,000
6	Carillion Blvd/Vintage Oaks Dr - Roundabout	\$1,330,000		\$333,000	\$1,663,000
7	Carillion Blvd/Di Maggio Way - Protected Intersection	\$180,000		\$45,000	\$225,000
8	Carillion Blvd/Chelsham Ave - Roundabout	\$1,330,000		\$333,000	\$1,663,000
9	Carrillion Blvd - RRFB Xing	\$110,000		\$28,000	\$138,000
10	Carillion Blvd/Vauxhall Ave - Roundabout	\$1,330,000		\$333,000	\$1,663,000
11	Carillion Blvd - Signing/Striping btwn Roundabouts	\$100,000		\$25,000	\$125,000
TOTAL		\$13,490,000	\$172,000	\$3,419,000	\$17,081,000
New Growth Area Facilities (Roadway Extensions, etc)					
12	Carillion Blvd/Simmerhorn Rd - Roundabout	\$1,960,000	\$387,500	\$587,000	\$2,934,500
13	Carillion Blvd/A Street Extension - Roundabout	\$2,920,000	\$1,000,000	\$980,000	\$4,900,000
14	Carillion Blvd/Boessow Rd - Roundabout	\$2,020,000	\$420,000	\$610,000	\$3,050,000
15	Carillion Blvd Extension - S. of Vauxhall Ave to Simmerhorn Rd	\$1,500,000	\$300,000	\$450,000	\$2,250,000
16	Carillion Blvd Extension - Simmerhorn Rd to A Street Extension	\$930,000	\$412,500	\$336,000	\$1,678,500
17	Carillion Blvd Extension - A Street Extension to Boessow Rd	\$0	\$0	\$0	\$0
18	A Street Extension - Crystal Wy to Carillion Blvd Extension	\$1,080,000	\$510,000	\$398,000	\$1,988,000
19	Carillion Blvd Extension - Signing/Striping btwn Roundabouts	\$60,000	\$0	\$15,000	\$75,000
TOTAL		\$10,470,000	\$3,030,000	\$3,376,000	\$16,876,000
TOTAL PROJECT COSTS (Rounded)		\$23,960,000	\$3,202,000	\$6,795,000	\$33,957,000

Notes:

1) Construction Costs include a 20% contingency for these preliminary concepts (Typically a 30%-50% contingency is used by Caltrans when cost estimating in the PRE-PSR phase per Caltrans Cost Estimating Guidelines).

2) Support Costs estimated at 25% - includes PS&E, R/W Acquisition and Construction Support

3) Existing R/W based on County GIS data.

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Typical 1-Lane Roundabout at Residential Streets

11151293
19-Apr-2019
CMP# 2423

ROUNDAABOUT

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$60,000.00	\$60,000.00
2	Clearing and Grubbing	LS	1	\$20,000.00	\$20,000.00
3	Embankment	CY	0	\$30.00	\$0.00
4	Erosion Control	LS	1	\$25,000.00	\$25,000.00
5	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
6	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
7	Roadway Approaches (ac/ab/exc)	SF	11,000	\$8.00	\$88,000.00
8	Retaining Wall	SQFT	0	\$120.00	\$0.00
9	Minor Concrete (Curb)	LF	600	\$22.00	\$13,200.00
10	Minor Concrete (Curb and Gutter)	LF	600	\$35.00	\$21,000.00
11	Minor Concrete (Sidewalk)	SQFT	14,300	\$8.00	\$114,400.00
12	Storm Drain System	LS	1	\$80,000.00	\$80,000.00
13	Signing and Striping	LS	1	\$25,000.00	\$25,000.00
14	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
15	Signal and Lighting	LS	0	\$250,000.00	\$0.00
16	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
17	Lighting (Roundabout)	LS	1	\$72,000.00	\$72,000.00
18	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	20,100	\$22.00	\$442,200.00
19	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$60,000.00	\$60,000.00
20	Median Landscape	SF	7,500	\$5.00	\$37,500.00
21	Utilities (Public Only)	LS	1	\$50,000.00	\$50,000.00
Subtotal (Construction Costs)					\$ 1,108,300.00
Contingency					20% \$ 221,660.00
Total Construction Costs (Capital)					\$ 1,329,960.00
Total Construction Budget (Rounded)					\$ 1,330,000.00
Right of Way (Capital)					
Right of Way		SF			
			Undeveloped	0	\$ 5.00
			Developed	0	\$ 10.00
Total Right of Way (Capital)					\$ -
TOTAL PROJECT CAPITAL COSTS					\$ 1,330,000.00
Support Costs (PA-ED, PS&E, CE, R/W)					25% \$ 332,500.00
TOTAL PROJECT COSTS (Rounded)					\$ 1,662,500.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Blvd/Twin Cities Rd (SR 104)

11151293
19-Apr-2019
CMP# 2423

ROUNDAABOUT

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$120,000.00	\$120,000.00
2	Clearing and Grubbing	LS	1	\$25,000.00	\$25,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$30,000.00	\$30,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	25,000	\$8.00	\$200,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	1,500	\$22.00	\$33,000.00
	Minor Concrete (Curb and Gutter)	LF	1,200	\$35.00	\$42,000.00
	Minor Concrete (Sidewalk)	SQFT	15,600	\$8.00	\$124,800.00
	Storm Drain System	LS	1	\$120,000.00	\$120,000.00
	Signing and Striping	LS	1	\$25,000.00	\$25,000.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	1	\$120,000.00	\$120,000.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	32,000	\$22.00	\$704,000.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$80,000.00	\$80,000.00
	Median Landscape	SF	13,000	\$5.00	\$65,000.00
	Utilities (Public Only)	LS	1	\$100,000.00	\$100,000.00
	Subtotal (Construction Costs)				\$ 1,788,800.00
	Contingency			20%	\$ 357,760.00
	Total Construction Costs (Capital)				\$ 2,146,560.00
	Total Construction Budget (Rounded)				\$ 2,150,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		7000	\$ 10.00	\$ 70,000.00
	Total Right of Way (Capital)				\$ 70,000.00
	TOTAL PROJECT CAPITAL COSTS				\$ 2,220,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 555,000.00
	TOTAL PROJECT COSTS (Rounded)				\$ 2,775,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Rd/ Walnut Ave

11151293
19-Apr-2019
CMP# 2423

ROUNDAABOUT

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$120,000.00	\$120,000.00
2	Clearing and Grubbing	LS	1	\$30,000.00	\$30,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$35,000.00	\$35,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	50,700	\$8.00	\$405,600.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	1,800	\$22.00	\$39,600.00
	Minor Concrete (Curb and Gutter)	LF	1,900	\$35.00	\$66,500.00
	Minor Concrete (Sidewalk)	SQFT	31,200	\$8.00	\$249,600.00
	Storm Drain System	LS	1	\$150,000.00	\$150,000.00
	Signing and Striping	LS	1	\$25,000.00	\$25,000.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	1	\$120,000.00	\$120,000.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	42,500	\$22.00	\$935,000.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$60,000.00	\$60,000.00
	Median Landscape	SF	26,600	\$5.00	\$133,000.00
	Utilities (Public Only)	LS	1	\$100,000.00	\$100,000.00
	Subtotal (Construction Costs)				\$ 2,469,300.00
	Contingency			20%	\$ 493,860.00
	Total Construction Costs (Capital)				\$ 2,963,160.00
	Total Construction Budget (Rounded)				\$ 2,970,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		14000	\$ 5.00	\$ 70,000.00
	Developed		3200	\$ 10.00	\$ 32,000.00
	Total Right of Way (Capital)				\$ 102,000.00
	TOTAL PROJECT CAPITAL COSTS				\$ 3,072,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 768,000.00
	TOTAL PROJECT COSTS (Rounded)				\$ 3,840,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Di Maggio Protected Intersection

11151293
19-Apr-2019
CMP# 2423

PROTECTED INTERSECTION

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$10,000.00	\$10,000.00
2	Clearing and Grubbing	LS	1	\$5,000.00	\$5,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$2,500.00	\$2,500.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	400	\$22.00	\$8,800.00
	Minor Concrete (Curb and Gutter)	LF	1,900	\$35.00	\$66,500.00
	Minor Concrete (Sidewalk)	SQFT	125	\$8.00	\$1,000.00
	Minor Concrete (ADA Ramp)	EA	6	\$5,000.00	\$30,000.00
	Storm Drain System	LS	0	\$50,000.00	\$0.00
	Signing and Striping	LS	1	\$10,000.00	\$10,000.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$5,000.00	\$5,000.00
	Median Landscape	SF	0	\$5.00	\$0.00
	Median Paving	SF	400	\$8.00	\$3,200.00
	Utilities (Public Only)	LS	0	\$50,000.00	\$0.00
	Subtotal (Construction Costs)				\$ 142,000.00
	Contingency			20%	\$ 28,400.00
	Total Construction Costs (Capital)				\$ 170,400.00
	Total Construction Budget (Rounded)				\$ 180,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
TOTAL PROJECT CAPITAL COSTS					\$ 180,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 45,000.00
TOTAL PROJECT COSTS (Rounded)					\$ 225,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Di Maggio Protected Intersection

11151293
19-Apr-2019
CMP# 2423

PROTECTED INTERSECTION

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$5,000.00	\$5,000.00
2	Clearing and Grubbing	LS	1	\$5,000.00	\$5,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$2,500.00	\$2,500.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	50	\$22.00	\$1,100.00
	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
	Minor Concrete (Sidewalk)	SQFT	200	\$8.00	\$1,600.00
	Minor Concrete (ADA Ramp)	EA	2	\$5,000.00	\$10,000.00
	Storm Drain System	LS	0	\$50,000.00	\$0.00
	Signing and Striping	LS	1	\$7,500.00	\$7,500.00
	Modify Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Signal and Lighting	LS	0	\$25,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	2	\$25,000.00	\$50,000.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$5,000.00	\$5,000.00
	Median Landscape	SF	200	\$5.00	\$1,000.00
	Median Paving	SF	0	\$8.00	\$0.00
	Utilities (Public Only)	LS	0	\$50,000.00	\$0.00
	Subtotal (Construction Costs)				\$ 88,700.00
	Contingency			20%	\$ 17,740.00
	Total Construction Costs (Capital)				\$ 106,440.00
	Total Construction Budget (Rounded)				\$ 110,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
TOTAL PROJECT CAPITAL COSTS					\$ 110,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 27,500.00
TOTAL PROJECT COSTS (Rounded)					\$ 137,500.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs Carillion Blvd/Simmerhorn Rd

11151293
19-Apr-2019
CMP# 2423

ROUNDAABOUT

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$80,000.00	\$80,000.00
2	Clearing and Grubbing	LS	1	\$30,000.00	\$30,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$35,000.00	\$35,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	40,000	\$8.00	\$320,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	2,100	\$22.00	\$46,200.00
	Minor Concrete (Curb and Gutter)	LF	1,000	\$35.00	\$35,000.00
	Minor Concrete (Sidewalk)	SQFT	12,000	\$8.00	\$96,000.00
	Storm Drain System	LS	1	\$80,000.00	\$80,000.00
	Signing and Striping	LS	1	\$25,000.00	\$25,000.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	1	\$120,000.00	\$120,000.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	24,000	\$22.00	\$528,000.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$60,000.00	\$60,000.00
	Median Landscape	SF	15,000	\$5.00	\$75,000.00
	Utilities (Public Only)	LS	1	\$100,000.00	\$100,000.00
	Subtotal (Construction Costs)				\$ 1,630,200.00
	Contingency			20%	\$ 326,040.00
	Total Construction Costs (Capital)				\$ 1,956,240.00
	Total Construction Budget (Rounded)				\$ 1,960,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		55500	\$ 5.00	\$ 277,500.00
	Developed		11000	\$ 10.00	\$ 110,000.00
	Total Right of Way (Capital)				\$ 387,500.00
	TOTAL PROJECT CAPITAL COSTS				\$ 2,347,500.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 586,900.00
	TOTAL PROJECT COSTS (Rounded)				\$ 2,934,400.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs Carillion Blvd/A Street Extension

11151293
19-Apr-2019
CMP# 2423

ROUNDAABOUT

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$100,000.00	\$100,000.00
2	Clearing and Grubbing	LS	1	\$25,000.00	\$25,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$30,000.00	\$30,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	50,700	\$8.00	\$405,600.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	1,800	\$22.00	\$39,600.00
	Minor Concrete (Curb and Gutter)	LF	1,900	\$35.00	\$66,500.00
	Minor Concrete (Sidewalk)	SQFT	31,200	\$8.00	\$249,600.00
	Storm Drain System	LS	1	\$120,000.00	\$120,000.00
	Signing and Striping	LS	1	\$25,000.00	\$25,000.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	1	\$120,000.00	\$120,000.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	42,500	\$22.00	\$935,000.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$80,000.00	\$80,000.00
	Median Landscape	SF	26,600	\$5.00	\$133,000.00
	Utilities (Public Only)	LS	1	\$100,000.00	\$100,000.00
	Subtotal (Construction Costs)				\$ 2,429,300.00
	Contingency			20%	\$ 485,860.00
	Total Construction Costs (Capital)				\$ 2,915,160.00
	Total Construction Budget (Rounded)				\$ 2,920,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		200000	\$ 5.00	\$ 1,000,000.00
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ 1,000,000.00
	TOTAL PROJECT CAPITAL COSTS				\$ 3,920,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 980,000.00
	TOTAL PROJECT COSTS (Rounded)				\$ 4,900,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Blvd/Boessow Rd

11151293
19-Apr-2019
CMP# 2423

ROUNDAABOUT

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$80,000.00	\$80,000.00
2	Clearing and Grubbing	LS	1	\$30,000.00	\$30,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$35,000.00	\$35,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	33,000	\$8.00	\$264,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	2,400	\$22.00	\$52,800.00
	Minor Concrete (Curb and Gutter)	LF	1,000	\$35.00	\$35,000.00
	Minor Concrete (Sidewalk)	SQFT	6,000	\$8.00	\$48,000.00
	Storm Drain System	LS	1	\$80,000.00	\$80,000.00
	Signing and Striping	LS	1	\$25,000.00	\$25,000.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	1	\$120,000.00	\$120,000.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	32,500	\$22.00	\$715,000.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$40,000.00	\$40,000.00
	Median Landscape	SF	11,500	\$5.00	\$57,500.00
	Utilities (Public Only)	LS	1	\$100,000.00	\$100,000.00
	Subtotal (Construction Costs)				\$ 1,682,300.00
	Contingency			20%	\$ 336,460.00
	Total Construction Costs (Capital)				\$ 2,018,760.00
	Total Construction Budget (Rounded)				\$ 2,020,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		52000	\$ 5.00	\$ 260,000.00
	Developed		16000	\$ 10.00	\$ 160,000.00
	Total Right of Way (Capital)				\$ 420,000.00
	TOTAL PROJECT CAPITAL COSTS				\$ 2,440,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 610,000.00
	TOTAL PROJECT COSTS (Rounded)				\$ 3,050,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Existing Carillion Blvd - Improvements outside Roundabouts

11151293
19-Apr-2019
CMP# 2423

Signing & Striping

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$25,000.00	\$25,000.00
2	Clearing and Grubbing	LS	0	\$5,000.00	\$0.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	0	\$5,000.00	\$0.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	0	\$22.00	\$0.00
	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
	Minor Concrete (Sidewalk)	SQFT	0	\$8.00	\$0.00
	Minor Concrete (ADA Ramp)	EA	0	\$5,000.00	\$0.00
	Storm Drain System	LS	0	\$50,000.00	\$0.00
	Signing and Striping	LF	4,200	\$12.00	\$50,400.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$40,000.00	\$0.00
	Median Landscape	SF	0	\$5.00	\$0.00
	Median Paving	SF	0	\$8.00	\$0.00
	Utilities (Public Only)	LS	0	\$50,000.00	\$0.00
	Subtotal (Construction Costs)				\$ 75,400.00
	Contingency			20%	\$ 15,080.00
	Total Construction Costs (Capital)				\$ 90,480.00
	Total Construction Budget (Rounded)				\$ 100,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
TOTAL PROJECT CAPITAL COSTS					\$ 100,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 25,000.00
TOTAL PROJECT COSTS (Rounded)					\$ 125,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Rd Extension - Vauxhall to Simmerhorn

11151293
19-Apr-2019
CMP# 2423

Roadway Extension			LENGTH 1200		
Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$50,000.00	\$50,000.00
2	Clearing and Grubbing	LS	1	\$40,000.00	\$40,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$50,000.00	\$50,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Extension (ac/ab/exc)	LF	1,200	\$400.00	\$480,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	2,400	\$22.00	\$52,800.00
	Minor Concrete (Curb and Gutter)	LF	2,400	\$35.00	\$84,000.00
	Minor Concrete (Sidewalk)	SQFT	24,000	\$8.00	\$192,000.00
	Storm Drain System	LS	1	\$145,200.00	\$145,200.00
	Signing and Striping	LF	1,200	\$12.00	\$14,400.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$60,000.00	\$0.00
	Median Landscape	SF	16,800	\$5.00	\$84,000.00
	Utilities (Public Only)	LS	1	\$50,000.00	\$50,000.00
	Subtotal (Construction Costs)				\$ 1,242,400.00
	Contingency			20%	\$ 248,480.00
	Total Construction Costs (Capital)				\$ 1,490,880.00
	Total Construction Budget (Rounded)				\$ 1,500,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		60000	\$ 5.00	\$ 300,000.00
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ 300,000.00
TOTAL PROJECT CAPITAL COSTS					\$ 1,800,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 450,000.00
TOTAL PROJECT COSTS (Rounded)					\$ 2,250,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Rd Extension - Simmerhorn to A Street

11151293
19-Apr-2019
CMP# 2423

Roadway Extension			LENGTH 750		
Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$10,000.00	\$10,000.00
2	Clearing and Grubbing	LS	1	\$20,000.00	\$20,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$25,000.00	\$25,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Extension (ac/ab/exc)	LF	750	\$400.00	\$300,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	1,500	\$22.00	\$33,000.00
	Minor Concrete (Curb and Gutter)	LF	1,500	\$35.00	\$52,500.00
	Minor Concrete (Sidewalk)	SQFT	15,000	\$8.00	\$120,000.00
	Storm Drain System	LS	1	\$102,000.00	\$102,000.00
	Signing and Striping	LF	750	\$12.00	\$9,000.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$60,000.00	\$0.00
	Median Landscape	SF	10,500	\$5.00	\$52,500.00
	Utilities (Public Only)	LS	1	\$50,000.00	\$50,000.00
	Subtotal (Construction Costs)				\$ 774,000.00
	Contingency			20%	\$ 154,800.00
	Total Construction Costs (Capital)				\$ 928,800.00
	Total Construction Budget (Rounded)				\$ 930,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		82500	\$ 5.00	\$ 412,500.00
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ 412,500.00
TOTAL PROJECT CAPITAL COSTS					\$ 1,342,500.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 335,625.00
TOTAL PROJECT COSTS (Rounded)					\$ 1,678,125.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

A Street Extension - Crystal Wy to Carillion Blvd

11151293
19-Apr-2019
CMP# 2423

Roadway Extension			LENGTH		
			850		
Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$10,000.00	\$10,000.00
2	Clearing and Grubbing	LS	1	\$25,000.00	\$25,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$30,000.00	\$30,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Extension (ac/ab/exc)	LF	850	\$430.00	\$365,500.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	1,700	\$22.00	\$37,400.00
	Minor Concrete (Curb and Gutter)	LF	1,700	\$35.00	\$59,500.00
	Minor Concrete (Sidewalk)	SQFT	17,000	\$8.00	\$136,000.00
	Storm Drain System	LS	1	\$111,600.00	\$111,600.00
	Signing and Striping	LF	850	\$12.00	\$10,200.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$60,000.00	\$0.00
	Median Landscape	SF	11,900	\$5.00	\$59,500.00
	Utilities (Public Only)	LS	1	\$50,000.00	\$50,000.00
	Subtotal (Construction Costs)				\$ 894,700.00
	Contingency			20%	\$ 178,940.00
	Total Construction Costs (Capital)				\$ 1,073,640.00
	Total Construction Budget (Rounded)				\$ 1,080,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		102000	\$ 5.00	\$ 510,000.00
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ 510,000.00
TOTAL PROJECT CAPITAL COSTS					\$ 1,590,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 397,500.00
TOTAL PROJECT COSTS (Rounded)					\$ 1,987,500.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Blvd/A St - Improvements outside Roundabouts

11151293
19-Apr-2019
CMP# 2423

Signing & Striping

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$20,000.00	\$20,000.00
2	Clearing and Grubbing	LS	0	\$5,000.00	\$0.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	0	\$5,000.00	\$0.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	0	\$22.00	\$0.00
	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
	Minor Concrete (Sidewalk)	SQFT	0	\$8.00	\$0.00
	Minor Concrete (ADA Ramp)	EA	0	\$5,000.00	\$0.00
	Storm Drain System	LS	0	\$50,000.00	\$0.00
	Signing and Striping	LF	1,850	\$12.00	\$22,200.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$40,000.00	\$0.00
	Median Landscape	SF	0	\$5.00	\$0.00
	Median Paving	SF	0	\$8.00	\$0.00
	Utilities (Public Only)	LS	0	\$50,000.00	\$0.00
	Subtotal (Construction Costs)				\$ 42,200.00
	Contingency			20%	\$ 8,440.00
	Total Construction Costs (Capital)				\$ 50,640.00
	Total Construction Budget (Rounded)				\$ 60,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
TOTAL PROJECT CAPITAL COSTS					\$ 60,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 15,000.00
TOTAL PROJECT COSTS (Rounded)					\$ 75,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



TRAFFIC SIGNALS ALTERNATIVE

4/19/2019

Prj No.	PROJECT DESCRIPTION	Construction Costs	Right of Way	Support Costs	Total Project Costs
Retrofit/Improve Existing Facilities					
1	Carillion Blvd/Twin Cities Rd (SR 104) - Modify Traffic Signal	\$520,000		\$130,000	\$650,000
2	Carillion Blvd/Lake Park Ave - Traffic Signal	\$390,000		\$98,000	\$488,000
3	Carillion Blvd/Lake Canyon Ave - Traffic Signal	\$390,000		\$98,000	\$488,000
4	Carillion Blvd/Elk Hills Dr - Traffic Signal	\$390,000		\$98,000	\$488,000
5	Carillion Blvd/Walnut Ave - Traffic Signal	\$670,000		\$168,000	\$838,000
6	Carillion Blvd/Vintage Oaks Dr - Traffic Signal	\$390,000		\$98,000	\$488,000
7	Carillion Blvd/Di Maggio Way - Protected Intersection	\$180,000		\$45,000	\$225,000
8	Carillion Blvd/Chelsham Ave - Traffic Signal	\$390,000		\$98,000	\$488,000
9	Carillion Blvd - RRFB Xing	\$110,000		\$28,000	\$138,000
10	Carillion Blvd/Vauxhall Ave - Traffic Signal	\$390,000		\$98,000	\$488,000
11	Carillion Blvd - Signing/Striping	\$170,000		\$43,000	\$213,000
TOTAL		\$3,990,000	\$0	\$1,002,000	\$4,992,000
New Growth Area Facilities (Roadway Extensions, etc)					
12	Carillion Blvd/Simmerhorn Rd - Traffic Signal	\$670,000		\$168,000	\$838,000
13	Carillion Blvd/A Street Extension - Traffic Signal	\$520,000		\$168,000	\$688,000
14	Carillion Blvd/Boessow Rd - Traffic Signal	\$670,000		\$168,000	\$838,000
15	Carillion Blvd Extension - S. of Vauxhall Ave to Simmerhorn Rd	\$2,030,000	\$425,000	\$614,000	\$3,069,000
16	Carillion Blvd Extension - Simmerhorn Rd to A Street Extension	\$2,040,000	\$990,000	\$758,000	\$3,788,000
17	Carillion Blvd Extension - A Street Extension to Boessow Rd	\$1,140,000	\$523,000	\$416,000	\$2,079,000
18	A Street Extension - Crystal Wy to Carillion Blvd Extension	\$1,570,000	\$780,000	\$588,000	\$2,938,000
19	Carillion Blvd Extension - Signing/Striping	\$0		\$0	\$0
TOTAL		\$8,640,000	\$2,718,000	\$2,880,000	\$14,238,000
TOTAL PROJECT COSTS (Rounded)		\$12,630,000	\$2,720,000	\$3,890,000	\$19,230,000

Notes:

- 1) Construction Costs include a 20% contingency for these preliminary concepts (Typically a 30%-50% contingency is used by Caltrans when cost estimating in the PRE-PSR phase per Caltrans Cost Estimating Guidelines).
- 2) Support Costs estimated at 25% - includes PS&E and Construction Support
- 3) Existing R/W based on County GIS data.

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Typical MODIFY TRAFFIC SIGNAL at Majot Intersection

11151293
19-Apr-2019
CMP# 2423

MODIFY TRAFFIC SIGNAL

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	0	\$10,000.00	\$0.00
2	Clearing and Grubbing	LS	0	\$5,000.00	\$0.00
3	Embankment	CY	0	\$30.00	\$0.00
4	Erosion Control	LS	0	\$25,000.00	\$0.00
5	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
5	Roadway Intersection Widening (ac/ab/exc)	LEGS	3	\$75,000.00	\$225,000.00
6	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
7	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
8	Retaining Wall	SQFT	0	\$120.00	\$0.00
9	Minor Concrete (Curb)	LF	0	\$22.00	\$0.00
10	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
11	Minor Concrete (Sidewalk)	SQFT	0	\$8.00	\$0.00
12	Minor Concrete (ADA Ramp)	EA	8	\$5,000.00	\$40,000.00
13	Storm Drain System	LS	0	\$80,000.00	\$0.00
14	Signing and Striping	LS	1	\$5,000.00	\$5,000.00
15	Modify Signal and Lighting (Accessible Ped Signals)	EA	8	\$6,000.00	\$48,000.00
16	Modify Signal and Lighting	EA	1	\$100,000.00	\$100,000.00
16	Signal and Lighting	LS	0	\$250,000.00	\$0.00
17	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
18	Lighting (Roundabout)	LS	0	\$72,000.00	\$0.00
19	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
20	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$5,000.00	\$0.00
21	Median Landscape	SF	0	\$5.00	\$0.00
22	Utilities (Public Only)	LS	1	\$10,000.00	\$10,000.00
	Subtotal (Construction Costs)				\$ 428,000.00
	Contingency			20%	\$ 85,600.00
	Total Construction Costs (Capital)				\$ 513,600.00
	Total Construction Budget (Rounded)				\$ 520,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
	TOTAL PROJECT CAPITAL COSTS				\$ 520,000.00
	Support Costs (PS&E, CE, R/W)		25%		\$ 130,000.00
	TOTAL PROJECT COSTS (Rounded)				\$ 650,000.00

Assumptions

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Typical TRAFFIC SIGNAL Installation at Residential Streets

11151293
19-Apr-2019
CMP# 2423

TRAFFIC SIGNAL

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$10,000.00	\$10,000.00
2	Clearing and Grubbing	LS	1	\$5,000.00	\$5,000.00
3	Embankment	CY	0	\$30.00	\$0.00
4	Erosion Control	LS	0	\$25,000.00	\$0.00
5	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
6	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
7	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
8	Retaining Wall	SQFT	0	\$120.00	\$0.00
9	Minor Concrete (Curb)	LF	0	\$22.00	\$0.00
10	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
11	Minor Concrete (Sidewalk)	SQFT	0	\$8.00	\$0.00
12	Minor Concrete (ADA Ramp)	EA	8	\$5,000.00	\$40,000.00
13	Storm Drain System	LS	0	\$80,000.00	\$0.00
14	Signing and Striping	LS	1	\$5,000.00	\$5,000.00
15	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
16	Signal and Lighting	LS	1	\$250,000.00	\$250,000.00
17	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
18	Lighting (Roundabout)	LS	0	\$72,000.00	\$0.00
19	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
20	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$5,000.00	\$5,000.00
21	Median Landscape	SF	0	\$5.00	\$0.00
22	Utilities (Public Only)	LS	1	\$10,000.00	\$10,000.00
Subtotal (Construction Costs)					\$ 325,000.00
Contingency					\$ 65,000.00
Total Construction Costs (Capital)					\$ 390,000.00
Total Construction Budget (Rounded)					\$ 390,000.00
Right of Way (Capital)					
Right of Way		SF			
		Undeveloped	0	\$ 5.00	\$ -
		Developed	0	\$ 10.00	\$ -
Total Right of Way (Capital)					\$ -
TOTAL PROJECT CAPITAL COSTS					\$ 390,000.00
Support Costs (PS&E, CE, R/W)			25%		\$ 97,500.00
TOTAL PROJECT COSTS (Rounded)					\$ 487,500.00

Assumptions

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Typical TRAFFIC SIGNAL Installation MAJOR ROADS

11151293
19-Apr-2019
CMP# 2423

TRAFFIC SIGNAL at MAJOR ROADS

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$20,000.00	\$20,000.00
2	Clearing and Grubbing	LS	1	\$10,000.00	\$10,000.00
3	Embankment	CY	0	\$30.00	\$0.00
4	Erosion Control	LS	0	\$25,000.00	\$0.00
5	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
5	Roadway Intersection Widening (ac/ab/exc)	LEGS	2	\$75,000.00	\$150,000.00
6	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
7	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
8	Retaining Wall	SQFT	0	\$120.00	\$0.00
9	Minor Concrete (Curb)	LF	0	\$22.00	\$0.00
10	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
11	Minor Concrete (Sidewalk)	SQFT	0	\$8.00	\$0.00
12	Minor Concrete (ADA Ramp)	EA	8	\$5,000.00	\$40,000.00
13	Storm Drain System	LS	0	\$80,000.00	\$0.00
14	Signing and Striping	LS	1	\$10,000.00	\$10,000.00
15	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
16	Signal and Lighting	LS	1	\$300,000.00	\$300,000.00
17	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
18	Lighting (Roundabout)	LS	0	\$72,000.00	\$0.00
19	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
20	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$10,000.00	\$10,000.00
21	Median Landscape	SF	0	\$5.00	\$0.00
22	Utilities (Public Only)	LS	1	\$15,000.00	\$15,000.00
	Subtotal (Construction Costs)				\$ 555,000.00
	Contingency			20%	\$ 111,000.00
	Total Construction Costs (Capital)				\$ 666,000.00
	Total Construction Budget (Rounded)				\$ 670,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
	TOTAL PROJECT CAPITAL COSTS				\$ 670,000.00
	Support Costs (PS&E, CE, R/W)		25%		\$ 167,500.00
	TOTAL PROJECT COSTS (Rounded)				\$ 837,500.00

Assumptions

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs Di Maggio Protected Intersection

11151293
19-Apr-2019
CMP# 2423

PROTECTED INTERSECTION

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$10,000.00	\$10,000.00
2	Clearing and Grubbing	LS	1	\$5,000.00	\$5,000.00
3	Embankment	CY	0	\$30.00	\$0.00
4	Erosion Control	LS	1	\$2,500.00	\$2,500.00
5	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
6	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
7	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
8	Retaining Wall	SQFT	0	\$120.00	\$0.00
9	Minor Concrete (Curb)	LF	400	\$22.00	\$8,800.00
10	Minor Concrete (Curb and Gutter)	LF	1,900	\$35.00	\$66,500.00
11	Minor Concrete (Sidewalk)	SQFT	125	\$8.00	\$1,000.00
12	Minor Concrete (ADA Ramp)	EA	6	\$5,000.00	\$30,000.00
13	Storm Drain System	LS	0	\$50,000.00	\$0.00
14	Signing and Striping	LS	1	\$10,000.00	\$10,000.00
15	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
16	Signal and Lighting	LS	0	\$250,000.00	\$0.00
17	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
18	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
19	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
20	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$5,000.00	\$5,000.00
21	Median Landscape	SF	0	\$5.00	\$0.00
22	Median Paving	SF	400	\$8.00	\$3,200.00
23	Utilities (Public Only)	LS	0	\$50,000.00	\$0.00
	Subtotal (Construction Costs)				\$ 142,000.00
	Contingency			20%	\$ 28,400.00
	Total Construction Costs (Capital)				\$ 170,400.00
	Total Construction Budget (Rounded)				\$ 180,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
	TOTAL PROJECT CAPITAL COSTS				\$ 180,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 45,000.00
	TOTAL PROJECT COSTS (Rounded)				\$ 225,000.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

300ft N. of Vauxhall Ave

11151293
19-Apr-2019
CMP# 2423

Mid-Block Crossing with RRF

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$5,000.00	\$5,000.00
2	Clearing and Grubbing	LS	1	\$5,000.00	\$5,000.00
3	Embankment	CY	0	\$30.00	\$0.00
4	Erosion Control	LS	1	\$2,500.00	\$2,500.00
5	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
6	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
7	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
8	Retaining Wall	SQFT	0	\$120.00	\$0.00
9	Minor Concrete (Curb)	LF	50	\$22.00	\$1,100.00
10	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
11	Minor Concrete (Sidewalk)	SQFT	200	\$8.00	\$1,600.00
12	Minor Concrete (ADA Ramp)	EA	2	\$5,000.00	\$10,000.00
13	Storm Drain System	LS	0	\$50,000.00	\$0.00
14	Signing and Striping	LS	1	\$7,500.00	\$7,500.00
15	Modify Signal and Lighting	LS	0	\$250,000.00	\$0.00
16	Signal and Lighting	LS	0	\$25,000.00	\$0.00
17	Rectangular Rapid Flashing Beacon (RRFB)	EA	2	\$25,000.00	\$50,000.00
18	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
19	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
20	Planting and Irrigation (Sidewalk Planter Area)	LS	1	\$5,000.00	\$5,000.00
21	Median Landscape	SF	200	\$5.00	\$1,000.00
22	Median Paving	SF	0	\$8.00	\$0.00
23	Utilities (Public Only)	LS	0	\$50,000.00	\$0.00
	Subtotal (Construction Costs)				\$ 88,700.00
	Contingency			20%	\$ 17,740.00
	Total Construction Costs (Capital)				\$ 106,440.00
	Total Construction Budget (Rounded)				\$ 110,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
	TOTAL PROJECT CAPITAL COSTS				\$ 110,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 27,500.00
	TOTAL PROJECT COSTS (Rounded)				\$ 137,500.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Existing Carillion Blvd - Improvements outside Signals

11151293
19-Apr-2019
CMP# 2423

Signing & Striping

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$25,000.00	\$25,000.00
2	Clearing and Grubbing	LS	0	\$5,000.00	\$0.00
3	Embankment	CY	0	\$30.00	\$0.00
4	Erosion Control	LS	0	\$5,000.00	\$0.00
5	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
6	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
7	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
8	Retaining Wall	SQFT	0	\$120.00	\$0.00
9	Minor Concrete (Curb)	LF	0	\$22.00	\$0.00
10	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
11	Minor Concrete (Sidewalk)	SQFT	0	\$8.00	\$0.00
12	Minor Concrete (ADA Ramp)	EA	0	\$5,000.00	\$0.00
13	Storm Drain System	LS	0	\$50,000.00	\$0.00
14	Signing and Striping	LF	9,500	\$12.00	\$114,000.00
15	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
16	Signal and Lighting	LS	0	\$250,000.00	\$0.00
17	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
18	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
19	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
20	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$40,000.00	\$0.00
21	Median Landscape	SF	0	\$5.00	\$0.00
22	Median Paving	SF	0	\$8.00	\$0.00
23	Utilities (Public Only)	LS	0	\$50,000.00	\$0.00
	Subtotal (Construction Costs)				\$ 139,000.00
	Contingency			20%	\$ 27,800.00
	Total Construction Costs (Capital)				\$ 166,800.00
	Total Construction Budget (Rounded)				\$ 170,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
	TOTAL PROJECT CAPITAL COSTS				\$ 170,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 42,500.00
	TOTAL PROJECT COSTS (Rounded)				\$ 212,500.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Rd Extension - Vauxhall to Simmerhorn

11151293
19-Apr-2019
CMP# 2423

Roadway Extension			LENGTH		
			1700		
Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$50,000.00	\$50,000.00
2	Clearing and Grubbing	LS	1	\$40,000.00	\$40,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$50,000.00	\$50,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Extension (ac/ab/exc)	LF	1,700	\$400.00	\$680,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	3,400	\$22.00	\$74,800.00
	Minor Concrete (Curb and Gutter)	LF	3,400	\$35.00	\$119,000.00
	Minor Concrete (Sidewalk)	SQFT	34,000	\$8.00	\$272,000.00
	Storm Drain System	LS	1	\$215,000.00	\$215,000.00
	Signing and Striping	LF	1,700	\$12.00	\$20,400.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$60,000.00	\$0.00
	Median Landscape	SF	23,800	\$5.00	\$119,000.00
	Utilities (Public Only)	LS	1	\$50,000.00	\$50,000.00
	Subtotal (Construction Costs)				\$ 1,690,200.00
	Contingency			20%	\$ 338,040.00
	Total Construction Costs (Capital)				\$ 2,028,240.00
	Total Construction Budget (Rounded)				\$ 2,030,000.00
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		85000	\$ 5.00	\$ 425,000.00
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ 425,000.00
	TOTAL PROJECT CAPITAL COSTS				\$ 2,455,000.00
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ 613,750.00
	TOTAL PROJECT COSTS (Rounded)				\$ 3,068,750.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Rd Extension - Simmerhorn to A Street

11151293
19-Apr-2019
CMP# 2423

Roadway Extension			LENGTH		
			1800		
Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$10,000.00	\$10,000.00
2	Clearing and Grubbing	LS	1	\$20,000.00	\$20,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$25,000.00	\$25,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Extension (ac/ab/exc)	LF	1,800	\$400.00	\$720,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	3,600	\$22.00	\$79,200.00
	Minor Concrete (Curb and Gutter)	LF	3,600	\$35.00	\$126,000.00
	Minor Concrete (Sidewalk)	SQFT	36,000	\$8.00	\$288,000.00
	Storm Drain System	LS	1	\$230,000.00	\$230,000.00
	Signing and Striping	LF	1,800	\$12.00	\$21,600.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$60,000.00	\$0.00
	Median Landscape	SF	25,200	\$5.00	\$126,000.00
	Utilities (Public Only)	LS	1	\$50,000.00	\$50,000.00
Subtotal (Construction Costs)					\$ 1,695,800.00
Contingency					20% \$ 339,160.00
Total Construction Costs (Capital)					\$ 2,034,960.00
Total Construction Budget (Rounded)					\$ 2,040,000.00
Right of Way (Capital)					
	Right of Way	SF			
	Undeveloped		198000	\$ 5.00	\$ 990,000.00
	Developed		0	\$ 10.00	\$ -
Total Right of Way (Capital)					\$ 990,000.00
TOTAL PROJECT CAPITAL COSTS					\$ 3,030,000.00
Support Costs (PA-ED, PS&E, CE, R/W)					25% \$ 757,500.00
TOTAL PROJECT COSTS (Rounded)					\$ 3,787,500.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Rd Extension - A Street to Boessow

11151293
19-Apr-2019
CMP# 2423

Roadway Extension			LENGTH		
			950		
Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$10,000.00	\$10,000.00
2	Clearing and Grubbing	LS	1	\$20,000.00	\$20,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$25,000.00	\$25,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Extension (ac/ab/exc)	LF	950	\$400.00	\$380,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	1,900	\$22.00	\$41,800.00
	Minor Concrete (Curb and Gutter)	LF	1,900	\$35.00	\$66,500.00
	Minor Concrete (Sidewalk)	SQFT	19,000	\$8.00	\$152,000.00
	Storm Drain System	LS	1	\$125,000.00	\$125,000.00
	Signing and Striping	LF	950	\$12.00	\$11,400.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$60,000.00	\$0.00
	Median Landscape	SF	13,300	\$5.00	\$66,500.00
	Utilities (Public Only)	LS	1	\$50,000.00	\$50,000.00
Subtotal (Construction Costs)					\$ 948,200.00
Contingency					20% \$ 189,640.00
Total Construction Costs (Capital)					\$ 1,137,840.00
Total Construction Budget (Rounded)					\$ 1,140,000.00
Right of Way (Capital)					
	Right of Way	SF			
	Undeveloped		104500	\$ 5.00	\$ 522,500.00
	Developed		0	\$ 10.00	\$ -
Total Right of Way (Capital)					\$ 522,500.00
TOTAL PROJECT CAPITAL COSTS					\$ 1,662,500.00
Support Costs (PA-ED, PS&E, CE, R/W)					25% \$ 415,625.00
TOTAL PROJECT COSTS (Rounded)					\$ 2,078,125.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

A Street Extension - Crystal Wy to Carillion Blvd

11151293
19-Apr-2019
CMP# 2423

Roadway Extension			LENGTH		
			1300		
Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	1	\$10,000.00	\$10,000.00
2	Clearing and Grubbing	LS	1	\$25,000.00	\$25,000.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	1	\$30,000.00	\$30,000.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Extension (ac/ab/exc)	LF	1,300	\$430.00	\$559,000.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	2,600	\$22.00	\$57,200.00
	Minor Concrete (Curb and Gutter)	LF	2,600	\$35.00	\$91,000.00
	Minor Concrete (Sidewalk)	SQFT	26,000	\$8.00	\$208,000.00
	Storm Drain System	LS	1	\$170,000.00	\$170,000.00
	Signing and Striping	LF	1,300	\$12.00	\$15,600.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$60,000.00	\$0.00
	Median Landscape	SF	18,200	\$5.00	\$91,000.00
	Utilities (Public Only)	LS	1	\$50,000.00	\$50,000.00
Subtotal (Construction Costs)					\$ 1,306,800.00
Contingency					20% \$ 261,360.00
Total Construction Costs (Capital)					\$ 1,568,160.00
Total Construction Budget (Rounded)					\$ 1,570,000.00
Right of Way (Capital)					
	Right of Way	SF			
	Undeveloped		156000	\$ 5.00	\$ 780,000.00
	Developed		0	\$ 10.00	\$ -
Total Right of Way (Capital)					\$ 780,000.00
TOTAL PROJECT CAPITAL COSTS					\$ 2,350,000.00
Support Costs (PA-ED, PS&E, CE, R/W)					25% \$ 587,500.00
TOTAL PROJECT COSTS (Rounded)					\$ 2,937,500.00

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section

Carillion Blvd Complete Street Corridor Study

Prepared for:

Prepared By:



Preliminary Opinion of Costs

Carillion Blvd/A St - Improvements outside Traffic Signals

11151293
19-Apr-2019
CMP# 2423

Signing & Striping

Item No.	Item Description	Units	Quantity	Unit Cost	Total
1	Traffic Control System	LS	0	\$20,000.00	\$0.00
2	Clearing and Grubbing	LS	0	\$5,000.00	\$0.00
	Embankment	CY	0	\$30.00	\$0.00
	Erosion Control	LS	0	\$5,000.00	\$0.00
	Roadway Excavation (cut bank)	CY	0	\$20.00	\$0.00
	Roadway Widening (ac/ab/exc)	SF	0	\$10.00	\$0.00
	Roadway Approaches (ac/ab/exc)	SF	0	\$8.00	\$0.00
	Retaining Wall	SQFT	0	\$120.00	\$0.00
	Minor Concrete (Curb)	LF	0	\$22.00	\$0.00
	Minor Concrete (Curb and Gutter)	LF	0	\$35.00	\$0.00
	Minor Concrete (Sidewalk)	SQFT	0	\$8.00	\$0.00
	Minor Concrete (ADA Ramp)	EA	0	\$5,000.00	\$0.00
	Storm Drain System	LS	0	\$50,000.00	\$0.00
	Signing and Striping	LF	0	\$12.00	\$0.00
	Modify Signal and Lighting	LS	0	\$50,000.00	\$0.00
	Signal and Lighting	LS	0	\$250,000.00	\$0.00
	Rectangular Rapid Flashing Beacon (RRFB)	EA	0	\$25,000.00	\$0.00
	Lighting (Roundabout)	LS	0	\$120,000.00	\$0.00
	Roundabout (Exc/AC/AB/Curb/Conc Paving)	SQFT	0	\$22.00	\$0.00
	Planting and Irrigation (Sidewalk Planter Area)	LS	0	\$40,000.00	\$0.00
	Median Landscape	SF	0	\$5.00	\$0.00
	Median Paving	SF	0	\$8.00	\$0.00
	Utilities (Public Only)	LS	0	\$50,000.00	\$0.00
	Subtotal (Construction Costs)				\$ -
	Contingency			20%	\$ -
	Total Construction Costs (Capital)				\$ -
	Total Construction Budget (Rounded)				\$ -
	Right of Way (Capital)				
	Right of Way	SF			
	Undeveloped		0	\$ 5.00	\$ -
	Developed		0	\$ 10.00	\$ -
	Total Right of Way (Capital)				\$ -
TOTAL PROJECT CAPITAL COSTS					\$ -
	Support Costs (PA-ED, PS&E, CE, R/W)		25%		\$ -
TOTAL PROJECT COSTS (Rounded)					\$ -

Assumptions

1. Structural section = 4"AC over 12"AB
2. Shoulder structural section same as traveled way structural section



about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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