

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)

Location	Estimated Cost
Twin Oaks Drive to Service Road B - Build 4 Lanes	\$6.6
Service Road B - Build New Signalized Intersection	\$1.9
Service Road B to County Road 42 - Build 4 Lanes	\$6.2
County Road 42 - Build New Signalized Intersection	\$5.6
County Road 42 to Baseline Road - Build 4 Lanes	\$3.5
Baseline Road - Build New 2-lane Roundabout (includes 400 m realignment of Baseline Road)	\$2.9
Baseline Road to E-W Arterial - Build 4 Lanes	\$2.6
E-W Arterial - Build New 2-lane Roundabout	\$4.6
E-W Arterial to Highway 401 Interchange - Build 4 Lanes	\$2.4
Total (M)	\$36.3

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)

Location	Estimated Cost
Forest Glade Drive - Intersection Improvements	\$0.1
E.C. Row Expressway - Interchange Improvements	\$0.9
Twin Oaks Drive - Intersection Improvements	\$0.3
Twin Oaks Drive to County Road 42 - Widen from 4 to 6 Lanes	\$1.6
County Road 42 Intersection Improvements	\$0.4
County Road 42 to Baseline Road - Widen from 4 to 6 Lanes	\$0.7
Baseline Road Intersection - Convert to Signalized Intersection	\$0.9
Baseline Road to E-W Arterial - Widen from 4 to 6 lanes	\$0.6
E-W Arterial Intersection - Convert to Signalized Intersection	\$1.2
E-W Arterial to Highway 401 Interchange - Widen from 4 to 6 Lanes	\$0.5
Total (M)	\$7.2

LAUZON PARKWAY - HIGHWAY 401 INTERCHANGE (2021)

Location	Estimated Cost
Highway 401 Interchange - Teardrop Roundabout	\$25.3
Estimated Cost to Convert Teardrop Roundabout Interchange to Parclo A-4 Interchange (not included in total project cost)	\$15.8*
Total (M)	\$25.3

LAUZON PARKWAY - Active Transportation Bridge over Highway 401

Active Transportation Bridge over Highway 401	\$5.5
Total (M)	\$5.5

LAUZON PARKWAY - HIGHWAY 401 TO HIGHWAY 3 (County of Essex) - BUILD 4 LANES (2021)

Location	Estimated Cost
Highway 401 Interchange to County Road 46 - Build 4 Lanes	\$2.6
Lauzon Parkway and County Road 46 Intersection	\$2.0
County Road 46 to Highway 3 - Build 4 Lanes	\$2.1
Lauzon Parkway and Highway 3 Intersection	\$1.5
Highway 3 to Sexton Sideroad - Build 2 Lanes	\$0.8
Total (M)	\$9.0

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)

Location	Estimated Cost
Walker Road Intersection Improvements	\$0.5
Walker Road to 7th Concession Road and Baseline Road - Build 4 Lanes	\$1.4
7th Concession Road and Baseline Road Roundabout	\$2.9
7th Concession Road to 8th Concession Road - Build 4 Lanes	\$3.6
8th Concession Road Roundabout	\$2.9
8th Concession Road to 9th Concession Road - Build 4 Lanes	\$4.8
9th Concession Road Roundabout	\$2.9
9th Concession Road to Lauzon Parkway - Build 4 Lanes	\$3.6
Lauzon Parkway Intersection (cost included in Lauzon Parkway total)	\$5.6*
Lauzon Parkway to City/County Boundary - Build 4 Lanes	\$3.1
Total (M)	\$25.7

COUNTY ROAD 42 - CITY/COUNTY BOUNDARY to COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 4 LANES (2031)

Location	Estimated Cost
Town of Tecumseh (2021)	
City/County Boundary to County Road 43 (Banwell Road) - Build 4 Lanes	\$2.5
Build County Road 42 and County Road 43 (Banweel Road) Roundabout Including Re-alignment of County Road 43	\$9.9
County Road 43 (Banwell Road) to Lesperance Road - Build 4 Lanes	\$5.8
Lesperance Road to County Road 19 (Manning Road) - Build 4 Lanes	\$2.8
Reconstruction of County Road 42 and County Road 19 (Manning Road) Signalized Intersection to Roundabout	\$4.8
Total (M)	\$25.8
Town of Lakeshore (2031)	
County Road 19 (Manning Road) to Patillo Road - Widen from 2 to 4 Lanes	\$7.0
Reconstruction of County Road 42 and Patillo Road Signalized Intersection to Roundabout	\$2.3
Patillo Road to County Road 25 (E. Puce Road) - Widen from 2 to 4 Lanes	\$5.1
Reconstruction of County Road 42 and County Road 25 (E. Puce Road) Signalized Intersection to Roundabout	\$2.3
Total (M)	\$16.7

E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)

Location	Estimated Cost
Walker Road Intersection Improvements	\$0.4
Walker Road to 4490 7th Concession Road Roundabout Access - Build 2 Lanes	\$0.8
4490 7th Concession Road Roundabout Access	\$2.2
Future Collector Road Roundabout	\$2.2
Future Collector Road to 8th Concession Road - Build 2 Lanes	\$0.9
8th Concession Road Roundabout	\$2.2
8th Concession Road to 9th Concession Road - Build 2 Lanes	\$2.9
9th Concession Road Roundabout	\$2.2
9th Concession Road to Lauzon Parkway - Build 2 Lanes	\$1.0
E-W Arterial and Lauzon Parkway Intersection (cost included in Lauzon Parkway total)	\$4.6*
Lauzon Parkway to County Road 17 (10th Concession Road) - Build 2 Lanes	\$1.1
County Road 17 (10th Concession Road) Roundabout	\$2.2
Total (M)	\$18.1

NOTES:

Items not included in cost estimate:

- Land acquisition
- Utilities: Water, Sanitary, Cable, Hydro
- Utility relocation

Active Transportation facilities including bike lanes, multi-use trails, sidewalks, and paved shoulders are included in the cost estimates.

County Road 42 in the City of Windsor and Town of Lakeshore is being converted from a 2-lane rural roadway to a 4-lane urban roadway, and was considered to be a full reconstruction. Whereas County Road 42 in the Town of Lakeshore was considered to be widened from 2 to 4 lanes.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)
Twin Oaks Drive to Service Road B - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items Roadway Lauzon Parkway ^{1,2} STA: 11+200 - 11+750	Cut/Fill	m3	\$11	73650	\$819,000	
	Asphalt - 4 lanes	m2	\$36	8050	\$290,000	
	Granular - 4 lanes	m2	\$28	8050	\$224,000	
	Contingency ³		25%		\$334,000	\$1,667,000
Illumination	Conventional poles in boulevards	each	\$6,600	37	\$250,000	
	Contingency		10%		\$25,000	\$275,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	1440	\$90,000	
	Multi-Use Trail (3.0 m)	m2	\$56	2400	\$140,000	
	Contingency		10%		\$23,000	\$253,000
Structures	Lauzon Parkway over CP Rail	m2	\$2,200	610	\$1,350,000	
	Lauzon Parkway over McGill Drain	m2	\$3,200	18	\$60,000	
	Contingency		25%		\$353,000	\$1,763,000
Minor Items	Including					Sub Total
	Storm Sewer & SWM		30%		\$1,190,000	
	Landscaping		4%		\$160,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
Design/Contract Admin					\$640,000	
					\$600,000	
					Total	\$6,600,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
- 2) Section of Lauzon Parkway from Twin Oaks Drive south approximately 350 m is already widened to 4 lanes.
- 3) Contingency of 25% taken from the City and County Banwell EA's

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)
Lauzon Parkway and Service Road B Intersection Improvements

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Intersection Improvements						
Lauzon Parkway ¹ STA: 11+750 - 12+050	Cut/Fill	m3	\$11	10280	\$115,000	
	Asphalt - 4 lanes	m2	\$36	6550	\$236,000	
	Granular - 4 lanes	m2	\$28	6550	\$182,000	
	Contingency ²		25%		\$134,000	\$667,000
Traffic Signals						
	Permanent 4-way signals	lump sum	\$150,000	1	\$150,000	
	Contingency		25%		\$38,000	\$188,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	20	\$140,000	
	Contingency		10%		\$14,000	\$154,000
Active Transportation						
	Concrete Sidewalk (1.8 m)	m2	\$56	540	\$40,000	
	Multi-Use Trail (3.0 m)	m2	\$56	900	\$60,000	
	Contingency		10%		\$10,000	\$110,000
					Sub Total	\$1,119,000
Minor Items						
	Including					
	Storm Sewer & SWM		30%		\$340,000	
	Landscaping		4%		\$50,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$180,000	
			15%		\$170,000	
Design/Contract Admin						
					Total	\$1,900,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
- 2) Contingency of 25% taken from the City and County Banwell EA's

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)
Service Road B to County Road 42 - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items Roadway Lauzon Parkway ¹ STA: 12+050 - 12+750	Cut/Fill	m3	\$11	23950	\$267,000	
	Asphalt - 4 lanes	m2	\$36	10200	\$368,000	
	Granular - 4 lanes	m2	\$28	10200	\$283,000	
	Contingency ²		25%		\$230,000	\$1,148,000
Illumination	Conventional poles in boulevards	each	\$6,600	47	\$320,000	
	Contingency		10%		\$32,000	\$352,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	1260	\$80,000	
	Multi-Use Trail (3.0 m)	m2	\$56	2100	\$120,000	
	Contingency		10%		\$20,000	\$220,000
Structures	Lauzon Parkway over Little River	m2	\$3,200	500	\$1,600,000	
	Contingency		25%		\$400,000	\$2,000,000
					Sub Total	\$3,720,000
Minor Items	Including					
	Storm Sewer & SWM		30%		\$1,120,000	
	Landscaping		4%		\$150,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
Design/Contract Admin					\$600,000	
						\$560,000
					Total	\$6,200,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
- 2) Contingency of 25% taken from the City and County Banwell EA's

**LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor)
INTERIM BUILD 4 LANES (2021)
County Road 42 - Build New Signalized Intersection**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
Lauzon Parkway ^{1,2} STA: 12+750 - 13+150	Cut/Fill Asphalt - 6 lanes Granular - 6 lanes	m3 m2 m2	\$11 \$36 \$28	13020 8750 8750	\$145,000 \$315,000 \$243,000	
County Road 42 STA: 14+550 - 14+650	Cut/Fill Asphalt - 7 lanes Granular - 7 lanes	m3 m2 m2	\$11 \$36 \$28	1800 3050 3050	\$21,000 \$110,000 \$85,000	
County Road 42 STA: 14+700 - 14+850	Cut/Fill Asphalt - 7 lanes Granular - 7 lanes	m3 m2 m2	\$11 \$36 \$28	2650 4600 4600	\$30,000 \$166,000 \$128,000	
	Contingency ³		25%		\$311,000	\$1,554,000
Traffic Signals						
	Permanent 4-way signals	lump sum	\$150,000	1	\$150,000	
	Contingency		25%		\$38,000	\$188,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	44	\$291,000	
	Contingency		10%		\$30,000	\$321,000
Active Transportation						
	Concrete Sidewalk (1.8 m) Multi-Use Trail (3.0 m)	m2 m2	\$56 \$56	1170 1950	\$66,000 \$109,000	
	Contingency		10%		\$18,000	\$193,000
Gateway Feature						
	City gateway feature at intersection	lump sum	\$1,000,000	1	\$1,000,000	
	Contingency		10%		\$100,000	\$1,100,000
					Sub Total	\$3,356,000
Minor Items						
	Including Storm Sewer & SWM		30%		\$1,010,000	
	Landscaping		4%		\$140,000	
	Traffic Control Temporary Staging Pavement Marking Signaling Curb and Gutter Subdrains					
			16%		\$540,000	
			15%		\$510,000	
Design/Contract Admin						
					Total	\$5,600,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
- 2) Due to the proximity of the future Lauzon Parkway and County Road 42 intersection to the County Road 17 (10th Concession Road) intersection, the traffic signals at County Road 17 (10th Concession Road) will be removed and replaced with a stop control on County Road 17 (10th Concession Road)
- 3) Contingency of 25% taken from the City and County Banwell EA's

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)
County Road 42 to Baseline Road - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items Roadway Lauzon Parkway ¹ STA: 13+150 - 14+000	Cut/Fill	m3	\$11	30530	\$340,000	
	Asphalt - 4 lanes	m2	\$36	12400	\$447,000	
	Granular - 4 lanes	m2	\$28	12400	\$344,000	
	Contingency ²		25%		\$283,000	\$1,414,000
Illumination	Conventional poles in boulevards	each	\$6,600	57	\$380,000	
	Contingency		10%		\$38,000	\$418,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	1530	\$90,000	
	Multi-Use Trail (3.0 m)	m2	\$56	2550	\$150,000	
	Contingency		10%		\$24,000	\$264,000
					Sub Total	\$2,096,000
Minor Items	Including					
	Storm Sewer & SWM		30%		\$630,000	
	Landscaping		4%		\$90,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
Design/Contract Admin					\$340,000	
					\$320,000	
					Total	\$3,500,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lane roadway.
- 2) Contingency of 25% taken from the City and County Banwell EA's

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)
Baseline Road - Build New 2-lane Roundabout (includes 400 m realignment of Baseline Road)

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
Baseline Road ¹ STA: 9+900 - 10+300	Cut/Fill Asphalt 1 - lane Granular 1 - lane	m ³ m ² m ²	\$11 \$36 \$28	9700 1450 1450	\$108,000 \$53,000 \$41,000	
	Contingency ²		25%		\$51,000	\$253,000
Modern Roundabout Lauzon Parkway / Baseline Road STA: 14+000 - 14+350	Urban 2-lane modern roundabout - 67 m dia. including approach legs ³	LS	\$2,850,000	1	\$2,850,000	
				Total		\$2,900,000

NOTES:

- 1) Includes realignment of 200 m of Baseline Road; the remaining costs are included in the roundabout cost.
- 2) Contingency of 25% taken from the City and County Banwell EA's
- 3) Includes the total construction cost for a 2-lane 67 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor items including: clearing and grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)
Baseline Road to E-W Arterial - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items Roadway Lauzon Parkway ¹ STA: 14+350 - 15+000	Cut/Fill	m3	\$11	17400	\$194,000	
	Asphalt - 4 lanes	m2	\$36	9500	\$342,000	
	Granular - 4 lanes	m2	\$28	9500	\$264,000	
	Contingency ²		25%		\$200,000	\$1,000,000
Illumination	Conventional poles in boulevards	each	\$6,600	44	\$300,000	
	Contingency		10%		\$30,000	\$330,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	1170	\$70,000	
	Multi-Use Trail (3.0 m)	m2	\$56	1950	\$110,000	
	Contingency		10%		\$18,000	\$198,000
Minor Items	Including					Sub Total
	Storm Sewer & SWM		30%		\$460,000	
	Landscaping		4%		\$70,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
Curb and Gutter						
Subdrains			16%		\$250,000	
Design/Contract Admin			15%		\$230,000	
					Total	\$2,600,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lane roadway.
- 2) Contingency of 25% taken from the City and County Banwell EA's

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)
E-W Arterial - Build New 2-lane Roundabout

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout Lauzon Parkway / E-W Arterial STA: 15+000 - 15+350	Urban 2-lane modern roundabout - 67 m dia. including approach legs ¹	LS	\$2,850,000	1	\$2,850,000	\$2,850,000
Gateway Feature	City gateway feature at roundabout	lump sum	\$1,000,000	1	\$1,000,000	\$1,100,000
	Contingency		10%		\$100,000	\$3,950,000
				Sub Total	\$600,000	
Design/Contract Admin			15%			
				Total		\$4,600,000

NOTES:

- Includes the total construction cost for a 2-lane 67 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor items including: clearing and grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

**LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - INTERIM BUILD 4 LANES (2021)
E-W Arterial to Highway 401 Interchange - Build 4 Lanes - Urban**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items Roadway Lauzon Parkway ¹ STA: 15+350 - 15+950	Cut/Fill	m3	\$11	15200	\$169,000	
	Asphalt - 4 lanes	m2	\$36	8750	\$315,000	
	Granular - 4 lanes	m2	\$28	8750	\$243,000	
	Contingency ²		25%		\$182,000	\$909,000
Illumination	Conventional poles in boulevards	each	\$6,600	41	\$280,000	
	Contingency		10%		\$28,000	\$308,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	1080	\$70,000	
	Multi-Use Trail (3.0 m)	m2	\$56	1800	\$110,000	
	Contingency		10%		\$18,000	\$198,000
Minor Items	Including				Sub Total	\$1,415,000
	Storm Sewer & SWM		30%		\$430,000	
	Landscaping		4%		\$60,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
Curb and Gutter						
Subdrains			16%		\$230,000	
Design/Contract Admin			15%		\$220,000	
					Total	\$2,400,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes.
- 2) Contingency of 25% taken from the City and County Banwell EA's

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
Forest Glade Drive - Intersection Improvements

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items Intersection Improvements Forest Glade Drive ¹	Asphalt - 1 lane	m2	\$36	460	\$17,000	
	Granular - 1 lane	m2	\$28	460	\$13,000	
	Contingency ²		25%		\$8,000	\$38,000
				Sub Total		\$38,000
Minor Items³	Including Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$10,000	
			15%		\$10,000	
				Total		\$100,000

NOTES:

- 1) Includes the addition of 1 exclusive right-turn lane for east and westbound approaches.
- 2) Contingency of 25% taken from the City and County Banwell EA's
- 3) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

**LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
E.C. Row Expressway - Interchange Improvements**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Interchange Improvements						
N/S-E Ramp ¹	Asphalt	m2	\$36	3700	\$134,000	
	Granular	m2	\$28	3700	\$103,000	
	Contingency ²		25%		\$60,000	\$297,000
Traffic Signals	Permanent 4-way North and South Terminals ³ Contingency	each	\$150,000	2	\$300,000	
			10%		\$30,000	\$330,000
					Sub Total	\$627,000
Minor Items⁴						
Design/Contract Admin	Including Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$110,000	
			15%		\$100,000	
					Total	\$900,000

NOTES:

- 1) Includes the reconstruction of the N/S-E Ramp.
- 2) Contingency of 25% taken from the City and County Banwell EA's
- 3) Includes the signalization of the North Ramp Terminal and South Ramp Terminal
- 4) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
Twin Oaks Drive - Intersection Improvements

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Intersection Improvements						
Lauzon Parkway ^{1,2}	Asphalt - 2 lanes	m ²	\$36	1850	\$67,000	
STA: 10+700 - 10+950	Granular - 2 lanes	m ²	\$28	1850	\$52,000	
	Contingency ³		25%		\$30,000	\$149,000
				Sub Total		\$149,000
Minor Items⁴	Including Topsoil and Sodding Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$30,000	
			15%		\$30,000	
Design/Contract Admin						
				Total	Total	\$300,000

NOTES:

- 1) Includes the addition of 1 lane in each direction.
- 2) Cut / Fill quantities for widening Lauzon Parkway from 4 to 6 lanes is included in the Interim Cut / Fill quantities.
- 3) Contingency of 25% taken from the City and County Banwell EA's
- 4) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
Twin Oaks Drive to Service Road B - Widen from 4 to 6 Lanes

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Road Widening						
Lauzon Parkway ^{1,2} STA: 10+950 - 11+750	Asphalt - 2 lanes Granular - 2 lanes	m2 m2	\$36 \$28	5850 5850	\$211,000 \$163,000	
	Contingency ³		25%		\$94,000	\$468,000
				Sub Total		\$468,000
Minor Items⁴	Including Topsoil and Sodding Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$80,000	
			15%		\$80,000	
Design/Contract Admin						
				Total		\$700,000

NOTES:

- 1) Includes the addition of 1 lane in each direction.
- 2) Cut / Fill quantities for widening Lauzon Parkway from 4 to 6 lanes is included in the Interim Cut / Fill quantities.
- 3) Contingency of 25% taken from the City and County Banwell EA's
- 4) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
Service Road B Intersection Improvements

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Intersection Improvements Lauzon Parkway ^{1,2} STA: 11+750 - 12+050	Asphalt - 2 lanes	m ²	\$36	2200	\$80,000	
	Granular - 2 lanes	m ²	\$28	2200	\$61,000	
	Contingency ³		25%		\$36,000	\$177,000
				Sub Total		\$177,000
Minor Items⁴	Including Topsoil and Sodding Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$30,000	
			15%		\$30,000	
					Total	\$300,000

NOTES:

- 1) Includes the addition of 1 lane in each direction.
- 2) Cut / Fill quantities for widening Lauzon Parkway from 4 to 6 lanes is included in the Interim Cut / Fill quantities.
- 3) Contingency of 25% taken from the City and County Banwell EA's
- 4) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
County Road 42 Intersection Improvements

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Intersection Improvements Lauzon Parkway ^{1,2} STA: 12+750 - 13+150	Asphalt - 2 lanes	m2	\$36	3100	\$112,000	
	Granular - 2 lanes	m2	\$28	3100	\$86,000	
	Contingency ³		25%		\$50,000	\$248,000
				Sub Total		\$248,000
Minor Items⁴						
	Including Topsoil and Sodding Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$40,000	
			15%		\$40,000	
				Total		\$400,000

NOTES:

- 1) Includes the addition of 1 lane in each direction.
- 2) Cut / Fill quantities for widening Lauzon Parkway from 4 to 6 lanes is included in the Interim Cut / Fill quantities.
- 3) Contingency of 25% taken from the City and County Banwell EA's
- 4) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
Baseline Road Intersection Improvements - Convert to Signalized Intersection

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Intersection Improvements						
Lauzon Parkway ^{1,2}	Asphalt - 4 lanes	m ²	\$36	1450	\$53,000	
STA: 14+050 - 14+150	Granular - 4 lanes	m ²	\$28	1450	\$41,000	
STA: 14+250 - 14+350	Contingency ³		25%		\$24,000	\$118,000
Traffic Signals						
Lauzon Parkway / Baseline Road	Convert roundabout to signalized intersection ⁴	LS	\$500,000	1	\$500,000	
STA: 14+150 - 14+250	Contingency		10%		\$50,000	\$550,000
					Sub Total	\$668,000
Minor Items⁵						
	Including Topsoil and Sodding Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$110,000	
			15%		\$110,000	
Design/Contract Admin						
					Total	\$900,000

NOTES:

- 1) Includes the widening from 4 lanes to 8 lanes on Lauzon Parkway approaching the intersection; additional exclusive turning lanes required at intersection.
- 2) Cut / Fill quantities for widening Lauzon Parkway from 4 to 6 lanes is included in the Interim Cut / Fill quantities.
- 3) Contingency of 25% taken from the City and County Banwell EA's
- 4) For the purpose of cost estimating, the cost to convert a roundabout to a signalized intersection was estimated to be the same as converting a signalized intersection to a roundabout.
- 5) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
Baseline Road to E-W Arterial - Widen from 4 to 6 Lanes

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items Road Widening Lauzon Parkway ^{1,2} STA: 14+350 - 15+000	Asphalt - 2 lanes	m ²	\$36	4750	\$171,000	
	Granular - 2 lanes	m ²	\$28	4750	\$132,000	
	Contingency ³		25%		\$76,000	\$379,000
				Sub Total		\$379,000
Minor Items⁴	Including Topsoil and Sodding Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$70,000	
Design/Contract Admin			15%		\$60,000	
				Total		\$600,000

NOTES:

- 1) Includes the addition of 1 lane in each direction.
- 2) Cut / Fill quantities for widening Lauzon Parkway from 4 to 6 lanes is included in the Interim Cut / Fill quantities.
- 3) Contingency of 25% taken from the City and County Banwell EA's
- 4) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
E-W Arterial Intersection Improvements - Convert to Signalized Intersection

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Intersection Improvements						
Lauzon Parkway ^{1,2} STA: 15+000 - 15+150	Asphalt - 4 lanes Granular - 4 lanes	m2 m2	\$36 \$28	2200 2200	\$80,000 \$61,000	
Lauzon Parkway ^{1,2} STA: 15+250 - 15+350	Asphalt - 4 lanes Granular - 4 lanes	m2 m2	\$36 \$28	1450 1450	\$53,000 \$41,000	
	Contingency ³		25%		\$59,000	\$294,000
Traffic Signals						
Lauzon Parkway / E-W Arterial STA: 15+150 - 15+250	Convert roundabout to signalized intersection ⁴ Contingency	LS	\$500,000 10%	1	\$500,000 \$50,000	\$550,000
					Sub Total	\$844,000
Minor Items⁵						
	Including Topsoil and Sodding Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains				\$140,000 \$130,000	
Design/Contract Admin						
					Total	\$1,200,000

NOTES:

- 1) Includes the widening from 4 lanes to 8 lanes on Lauzon Parkway approaching the intersection; additional exclusive turning lanes required at intersection.
- 2) Cut / Fill quantities for widening Lauzon Parkway from 4 to 6 lanes is included in the Item Cut / Fill quantities.
- 3) Contingency of 25% taken from the City and County Banwell EA's
- 4) For the purpose of cost estimating, the cost to convert a roundabout to a signalized intersection was estimated to be the same as converting a signalized intersection to a roundabout.
- 5) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - FOREST GLADE DRIVE TO HIGHWAY 401 (City of Windsor) - ULTIMATE WIDEN FROM 4 TO 6 LANES (2031)
E-W Arterial to Highway 401 Interchange - Widen from 4 to 6 Lanes

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Road Widening						
Lauzon Parkway ^{1,2}	Asphalt - 2 lanes	m ²	\$36	4400	\$159,000	
STA: 15+350 - 15+950	Granular - 2 lanes	m ²	\$28	4400	\$122,000	
	Contingency ³		25%		\$71,000	\$352,000
				Sub Total		\$352,000
Minor Items⁴	Including Topsoil and Sodding Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$60,000	
			15%		\$60,000	
Design/Contract Admin						
				Total		\$500,000

NOTES:

- 1) Includes the addition of 1 lane in each direction.
- 2) Cut / Fill quantities for widening Lauzon Parkway from 4 to 6 lanes is included in the Interim Cut / Fill quantities.
- 3) Contingency of 25% taken from the City and County Banwell EA's
- 4) Minor Items including Storm Sewer and SWM, and Landscaping are included in the Interim (2021) cost estimates.

LAUZON PARKWAY - HIGHWAY 401 INTERCHANGE (2021)

Highway 401 Interchange - Teardrop Roundabout

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Structure	4-lane Lauzon Parkway	m2	\$4,000	1390	\$5,560,000	
	Contingency		10%		\$560,000	\$6,120,000
Grading and Pavement						
N/S-W Ramp	Cut/Fill	m	\$400	1330	\$540,000	
	Asphalt	m2	\$36	10550	\$380,000	
	Granular	m2	\$28	10550	\$300,000	
W-N/S Ramp	Cut/Fill	m	\$400	550	\$220,000	
	Asphalt	m2	\$36	3500	\$130,000	
	Granular	m2	\$28	3500	\$100,000	
E-N/S Ramp	Cut/Fill	m	\$400	1170	\$470,000	
	Asphalt	m2	\$36	9050	\$330,000	
	Granular	m2	\$28	9050	\$260,000	
N/S-E Ramp	Cut/Fill	m	\$400	450	\$180,000	
	Asphalt	m2	\$36	2650	\$100,000	
	Granular	m2	\$28	2650	\$80,000	
Lauzon Parkway	Cut/Fill	m3	\$11	13400	\$149,000	
	Asphalt	m2	\$36	4600	\$170,000	
	Granular	m2	\$28	4600	\$130,000	
	Contingency		10%		\$360,000	\$3,899,000
Illumination						
	High Mast Poles	LS	\$65,000	20	\$1,300,000	
	Contingency		10%		\$40,000	\$1,340,000
Modern Roundabout						
	North Terminal South Terminal	LS	\$2,850,000	2	\$5,700,000	
	Contingency		10%		\$570,000	\$6,270,000
Gateway Features						
	North Terminal	LS	\$1,000,000	1	\$1,000,000	
	Contingency		10%		\$100,000	\$1,100,000
					Sub Total	\$18,729,000
Minor Items						
	Including					
	Landscaping		4%		\$750,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$3,000,000	
Design/Contract Admin		15%		\$2,809,350		
					Total	\$25,300,000

Preliminary Construction Cost Estimate

Highway 401 - Lauzon Parkway Underpass
Convert Teardrop Roundabout Interchange to Parclo A4 Interchange

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Build Parclo A4 2051						
Major Items						
Structure Widening	Widening to accommodate loop ramps Area	m2	\$5,700	495	\$2,830,000	\$2,830,000
Deck Rehabilitation	Area	m2	\$2,000	1400	\$2,800,000	\$2,800,000
Grading and Pavement	N-W Ramp	m	\$1,200	1250	\$1,500,000	
	S-E Ramp	m	\$1,200	1150	\$1,380,000	
Traffic Signals	Permanent 4 - way	each	\$150,000	2	\$300,000	\$2,880,000
					Sub Total (A)	\$8,810,000
Minor Items	Including Clearing and Grubbing Topsoil / Sodding Traffic Signs Pavement Markings Landscaping and Gateway Feature Traffic Control Temporary Staging					
		40%			\$3,524,000	
	Design/Contract Admin (20%)	20%			\$1,762,000	
	Contingency (20%)	20%			\$1,762,000	
					Sub Total (B)	\$7,000,000
					Total (A+B)	\$15,800,000

LAUZON PARKWAY - HIGHWAY 401 INTERCHANGE (2021)
Active Transportation Bridge over Highway 401

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items Structure	3-span structure	m2	\$3,500	610	\$2,140,000	
	Contingency		10%		\$220,000	\$2,360,000
Fills	Earth fill	m3	\$11	12750	\$150,000	
	Contingency		10%		\$20,000	\$170,000
Multi-Use Trail Approaches	MUT (asphalt)	m	\$250	1350	\$340,000	
	Contingency		10%		\$40,000	\$380,000
Illumination	Conventional lighting poles (6 m)	each	\$5,600	66	\$370,000	
	Contingency		10%		\$40,000	\$410,000
					Sub Total	\$3,320,000
Minor Items					\$1,660,000	
Design/Contract Admin		50%			\$500,000	
		15%				
					Total	\$5,500,000

LAUZON PARKWAY - HIGHWAY 401 TO HIGHWAY 3 (County of Essex) - BUILD 4 LANES (2021)
Highway 401 Interchange to County Road 46 - Build 4 Lanes - Rural

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
Lauzion Parkway ¹ STA: 16+900 - 17+700	Cut/Fill Asphalt - 4 lanes Granular - 4 lanes Contingency ²	m3 m2 m2	\$11 \$40 \$28 25%	43700 12800 12800	\$486,000 \$506,000 \$353,000 \$337,000	\$1,682,000
Active Transportation						
	Multi-Use Trail (3.0 m) Contingency	m	\$250 10%	800	\$200,000 \$20,000	\$220,000
					Sub Total	\$1,902,000
Minor Items						
	Including Clearing and Grubbing Sodding and Landscaping Pavement Markings Signage Traffic Management		20% 15%		\$380,400 \$290,000	
Design/Contract Admin					Total	\$2,600,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lane roadway.
- 2) Contingency of 25% taken from the City and County Banwell EA's

**LAUZON PARKWAY - HIGHWAY 401 TO HIGHWAY 3 (County of Essex) - BUILD 4 LANES (2021)
Build County Road 46 Intersection**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
Lauzon Parkway ¹ STA: 17+700 - 18+100	Cut/Fill	m3	\$11	8710	\$97,000	
	Asphalt - 6 lanes	m2	\$40	10900	\$431,000	
	Granular - 6 lanes	m2	\$28	10900	\$301,000	
County Road 46 ²	Asphalt - 2 lanes	m2	\$36	1500	\$54,000	
	Granular - 2 lanes	m2	\$28	1500	\$42,000	
	Contingency ³		25%		\$232,000	\$1,157,000
Traffic Signals						
	Permanent 4-way signals	lump sum	\$150,000	1	\$150,000	
	Contingency		10%		\$15,000	\$165,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	2	\$14,000	
	Contingency		10%		\$2,000	\$16,000
Active Transportation						
	Multi-Use Trail (3.0 m)	m	\$250	400	\$100,000	
	Contingency		10%		\$10,000	\$110,000
					Sub Total	\$1,448,000
Minor Items						
	Including Clearing and Grubbing Sodding and Landscaping Pavement Markings Signage Traffic Management				\$289,600	
Design/Contract Admin			15%		\$220,000	
					Total	\$2,000,000

NOTES:

- 1) Includes 4 through lanes plus exclusive left and right turn lanes on Lauzon Parkway.
- 2) Widening of County Road 46 from 2 to 4 lanes to include exclusive left and right turn lanes.
- 3) Contingency of 25% taken from the City and County Banwell EA's

LAUZON PARKWAY - HIGHWAY 401 TO HIGHWAY 3 (County of Essex) - BUILD 4 LANES (2021)
County Road 46 to Highway 3 - Build 4 Lanes - Rural

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway Lauzon Parkway ¹ STA: 18+100 - 18+950	Cut/Fill	m3	\$11	7340	\$82,000	
	Asphalt - 4 lanes	m2	\$40	13600	\$538,000	
	Granular - 4 lanes	m2	\$28	13600	\$375,000	
	Contingency ²		25%		\$249,000	\$1,244,000
Active Transportation	Multi-Use Trail (3.0 m)	m	\$250	850	\$220,000	
	Contingency		10%		\$22,000	\$242,000
					Sub Total	\$1,486,000
Minor Items						
Design/Contract Admin	Including Clearing and Grubbing Sodding and Landscaping Pavement Markings Signage Traffic Management		20%		\$297,200	
			15%		\$230,000	
					Total	\$2,100,000

NOTES:

- 1) Although the alignment of Lauzon Parkway follows the existing Sexton Sideroad, it was estimated that the entire roadway will be reconstructed.
- 2) Contingency of 25% taken from the City and County Banwell EA's

**LAUZON PARKWAY - HIGHWAY 401 TO HIGHWAY 3 (County of Essex) - BUILD 4 LANES (2021)
Build Highway 3 Intersection**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
Lauzon Parkway ¹ STA: 18+950 - 19+300	Cut/Fill	m3	\$11	5140	\$58,000	
	Asphalt - 4 lanes	m2	\$40	9000	\$356,000	
	Granular - 4 lanes	m2	\$28	9000	\$248,000	
	Contingency ²		25%		\$166,000	\$828,000
Traffic Signals						
	Permanent 4-way signals	lump sum	\$150,000	1	\$150,000	
	Contingency		10%		\$15,000	\$165,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	2	\$14,000	
	Contingency		10%		\$2,000	\$16,000
Active Transportation						
	Multi-Use Trail (3.0 m)	m	\$250	350	\$90,000	
	Contingency		10%		\$9,000	\$99,000
					Sub Total	\$1,108,000
Minor Items						
	Including Clearing and Grubbing Sodding and Landscaping Pavement Markings Signage Traffic Management					
			20%		\$221,600	
			15%		\$170,000	
Design/Contract Admin						
					Total	\$1,500,000

NOTES:

- 1) Includes additional right-turn channelized lanes from southbound Lauzon Parkway to westbound Highway 3, and westbound Highway 3 to northbound Lauzon Parkway.
- 2) Contingency of 25% taken from the City and County Banwell EAs

**LAUZON PARKWAY - HIGHWAY 401 TO HIGHWAY 3 (County of Essex) - BUILD 4 LANES (2021)
Highway 3 to Sexton Sideroad - Build 2 Lanes - Rural**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway Lauzon Parkway ¹ STA: 19+300 - 19+800	Cut/Fill	m3	\$11	2750	\$31,000	
	Asphalt - 2 lanes	m2	\$40	4250	\$168,000	
	Granular - 2 lanes	m2	\$28	4250	\$118,000	
	Contingency ²		25%		\$80,000	\$397,000
Active Transportation	Multi-Use Trail (3.0 m)	m	\$250	500	\$130,000	
	Contingency		10%		\$13,000	\$143,000
					Sub Total	\$540,000
Minor Items						
Design/Contract Admin	Including Clearing and Grubbing Sodding and Landscaping Pavement Markings Signage Traffic Management				\$108,000	
					\$90,000	
					Total	\$800,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 2-lane roadway.
- 2) Contingency of 25% taken from the City and County Banwell EA's

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)
Walker Road to 7th Concession Road and Baseline Road - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ^{1,2}	Cut/Fill	m3	\$11	5300	\$59,000	
STA: 10+150 - 10+450	Asphalt - 4 lanes	m2	\$36	5900	\$213,000	
	Granular - 4 lanes	m2	\$28	5900	\$164,000	
	Contingency ³		25%		\$109,000	\$545,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	20	\$140,000	
	Contingency		10%		\$14,000	\$154,000
Active Transportation						
	Concrete Sidewalk (1.8 m)	m2	\$56	540	\$40,000	
	Multi-Use Trail (3.0 m)	m2	\$56	900	\$60,000	
	Contingency		10%		\$10,000	\$110,000
					Sub Total	\$809,000
Minor Items						
	Including					
	Storm Sewer & SWM		30%		\$250,000	
	Landscaping		4%		\$40,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains					
					\$130,000	
					\$130,000	
Design/Contract Admin						
					Total	\$1,400,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
- 2) Includes area for bike lanes and buffers.
- 3) Contingency of 25% taken from the City and County Banwell EA's

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)
7th Concession Road and Baseline Road Roundabout

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
CR42 / 7th Conc. / Baseline Road STA: 10+450 - 10+800	Urban 2-lane modern roundabout - 67 m dia. including approach legs ¹	LS	\$2,850,000	1	\$2,850,000	\$2,850,000
				Total		\$2,900,000

NOTES:

- Includes the total construction cost for a 2-lane 67 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)
7th Concession Road to 8th Concession Road - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ^{1,2} STA: 10+800 - 10+900 STA: 10+900 - 11+900	Cut/Fill	m3	\$11	19400	\$216,000	
	Asphalt - 4 lanes	m2	\$36	21950	\$791,000	
	Granular - 4 lanes	m2	\$28	21950	\$609,000	
	Contingency ³		25%		\$404,000	\$2,020,000
Illumination						
	Conventional poles in boulevards ³	each	\$6,600	10	\$70,000	
	Contingency		10%		\$7,000	\$77,000
Active Transportation						
	Concrete Sidewalk (1.8 m)	m2	\$56	180	\$20,000	
	Multi-Use Trail (3.0 m)	m2	\$56	300	\$20,000	
	Contingency		10%		\$4,000	\$44,000
				Sub Total		\$2,141,000
Minor Items						
	Including					
	Storm Sewer & SWM		30%		\$650,000	
	Landscaping		4%		\$90,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$350,000	
			15%		\$330,000	
				Total		\$3,600,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
- 2) Includes area for bike lanes and buffers.
- 3) Illumination in this section beside the Airport Operational Area will be subject to Airport height restrictions; however the difference in cost between conventional poles and shorter poles is minimal.
- 4) Contingency of 25% taken from the City and County Banwell EA's

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)
8th Concession Road Roundabout

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
CR42 / 8th Concession Road STA: 11+900 - 12+250	Urban 2-lane modern roundabout - 67 m dia. including approach legs ¹	LS	\$2,850,000	1	\$2,850,000	\$2,850,000
				Total		\$2,900,000

NOTES:

- 1) Includes the total construction cost for a 2-lane 67 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)
8th Concession Road to 9th Concession Road - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ^{1,2} STA: 12+250 - 13+350	Cut/Fill	m3	\$11	19400	\$216,000	
	Asphalt - 4 lanes	m2	\$36	21550	\$776,000	
	Granular - 4 lanes	m2	\$28	21550	\$598,000	
	Contingency ³		25%		\$398,000	\$1,988,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	70	\$470,000	
	Contingency		10%		\$47,000	\$517,000
Active Transportation						
	Concrete Sidewalk (1.8 m)	m2	\$56	1980	\$120,000	
	Multi-Use Trail (3.0 m)	m2	\$56	3300	\$190,000	
	Contingency		10%		\$31,000	\$341,000
					Sub Total	\$2,846,000
Minor Items						
	Including					
	Storm Sewer & SWM		30%		\$860,000	
	Landscaping		4%		\$120,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$460,000	
			15%		\$430,000	
					Total	\$4,800,000
Design/Contract Admin						

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
- 2) Includes area for bike lanes and buffers.
- 3) Contingency of 25% taken from the City and County Banwell EA's

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)
9th Concession Road Roundabout

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
CR42 / 9th Concession Road STA: 13+350 - 13+700	Urban 2-lane modern roundabout - 67 m dia. including approach legs ¹	LS	\$2,850,000	1	\$2,850,000	\$2,850,000
				Total		\$2,900,000

NOTES:

- 1) Includes the total construction cost for a 2-lane 67 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)
9th Concession Road to Lauzon Parkway - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ^{1,2} STA: 13+700 - 14+550	Cut/Fill	m3	\$11	15000	\$167,000	
	Asphalt - 4 lanes	m2	\$36	16650	\$600,000	
	Granular - 4 lanes	m2	\$28	16650	\$462,000	
	Contingency ³		25%		\$308,000	\$1,537,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	50	\$330,000	
	Contingency		10%		\$33,000	\$363,000
Active Transportation						
	Concrete Sidewalk (1.8 m)	m2	\$56	1530	\$90,000	
	Multi-Use Trail (3.0 m)	m2	\$56	2550	\$150,000	
	Contingency		10%		\$24,000	\$264,000
					Sub Total	\$2,164,000
Minor Items						
	Including					
	Storm Sewer & SWM		30%		\$650,000	
	Landscaping		4%		\$90,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$350,000	
			15%		\$330,000	
					Total	\$3,600,000
Design/Contract Admin						

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
- 2) Includes area for bike lanes and buffers.
- 3) Contingency of 25% taken from the City and County Banwell EA's

COUNTY ROAD 42 - WALKER ROAD TO CITY/COUNTY BOUNDARY (City of Windsor) - WIDEN FROM 2 TO 4 LANES (2021)
Lauzon Parkway to City/County Boundary - Build 4 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ^{1,2} STA: 14+850 - 15+500 Re-alignment of Lauzon Road STA: 10+000 - 10+150	Cut/Fill	m3	\$11	11450	\$128,000	
	Asphalt - 4 lanes	m2	\$36	13300	\$479,000	
	Granular - 4 lanes	m2	\$28	13300	\$369,000	
	Asphalt - 2 lanes	m2	\$36	1100	\$40,000	
	Granular - 2 lanes	m2	\$28	1100	\$31,000	
	Contingency ³		25%		\$262,000	\$1,309,000
Traffic Signals CR42 / Lauzon Road	Permanent 4-way	Lump sum	\$150,000	1	\$150,000	
	Contingency		25%		\$38,000	\$188,000
Illumination	Conventional poles in boulevards	each	\$6,600	30	\$200,000	
	Contingency		10%		\$20,000	\$220,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	720	\$50,000	
	Multi-Use Trail (3.0 m)	m2	\$56	1200	\$70,000	
	Contingency		10%		\$12,000	\$132,000
					Sub Total	\$1,849,000
Minor Items	Including Storm Sewer & SWM		30%		\$560,000	
	Landscaping		4%		\$80,000	
	Traffic Control					
	Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
					\$300,000	
Design/Contract Admin					\$280,000	
					Total	\$3,100,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 4-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road.
Includes a median two-way-left-turn-lane from Lauzon Road to City/County Boundary.
- 2) Includes area for bike lanes and buffers.
- 3) Contingency of 25% taken from the City and County Banwell EA's

**COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 5 LANES
City/County Boundary to County Road 43 (Banwell Road) - Build 5 Lanes - Urban**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ¹ STA: 15+500 - 16+050	Cut/Fill	m3	\$11	9700	\$108,000	
	Asphalt - 5 lanes	m2	\$36	8050	\$290,000	
	Granular - 5 lanes	m2	\$28	8050	\$224,000	
	Contingency ²		25%		\$156,000	\$778,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	40	\$270,000	
	Contingency		10%		\$27,000	\$297,000
Active Transportation³						
	Concrete Sidewalk (1.8 m)	m	\$180	550	\$100,000	
	Multi-Use Trail (3.0 m)	m	\$250	550	\$140,000	
	Bike Lane (Asphalt and Granular) - and Buffer (2.5 m)	m	\$200	550	\$110,000	
	Contingency		10%		\$35,000	\$385,000
					Sub Total	\$1,460,000
Minor Items						
	Including Storm Sewer & SWM		30%		\$440,000	
	Landscaping		4%		\$60,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$240,000	
			15%		\$220,000	
					Total	\$2,500,000
Design/Contract Admin						

NOTES:

- 1) For the purposes of cost estimating, assuming new 5-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road, with a median two-way-left-turn-lane. Costs for bike lanes and buffer are listed separately.
- 2) Contingency of 25% taken from the City and County Banwell EAs
- 3) Unit cost for on-road active transportation facilities includes both sides of roadway. Unit cost for off-road active transportation facilities includes one side.

**COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 5 LANES
County Road 43 (Banwell Road) Roundabout and Realignment**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
CR43 Re-alignment ¹ STA: 1+000 - 1+700 STA: 1+800 - 2+400	Construction	m	\$2,400	1300	\$3,120,000	\$3,120,000
Modern Roundabout						
CR42 / CR43 Roundabout STA: 16+050 - 16+400	Urban 2-lane modern roundabout - 67 m dia. including approach legs ²	LS	\$2,850,000	1	\$2,850,000	\$2,850,000
Minor Items						
	Including					
	Storm Sewer & SWM		30%		\$1,800,000	
	Landscaping		4%		\$240,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$960,000	
Design/Contract Admin			15%		\$900,000	
					Total	\$9,900,000

NOTES:

- 1) County Road 43 (Banwell Road) EA previously approved the re-alignment of County Road 43 (Banwell Road) at County Road 42. With the consideration of a new roundabout and widening of County Road 42, it was assumed that the re-alignment would occur simultaneously. Unit price was calculated based on the Construction costs from the County Road 43 (Banwell Road) EA. The minimum amount of re-alignment was assumed.
- 2) Includes the total construction cost for a 2-lane 67 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

**COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 5 LANES
County Road 43 (Banwell Road) to Lesperance Road - Build 5 Lanes - Urban**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ¹	Cut/Fill	m3	\$11	29800	\$332,000	
STA: 16+400 - 17+700	Asphalt - 5 lanes	m2	\$36	23750	\$855,000	
	Granular - 5 lanes	m2	\$28	23750	\$659,000	
	Contingency ²		25%		\$462,000	\$2,308,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	80	\$530,000	
	Contingency		10%		\$53,000	\$583,000
Active Transportation³						
	Concrete Sidewalk (1.8 m)	m	\$180	1300	\$240,000	
	Bike Lane (Asphalt and Granular) - and Buffer (2.5 m)	m	\$200	1300	\$260,000	
	Contingency		10%		\$50,000	\$550,000
					Sub Total	\$3,441,000
Minor Items						
	Including Storm Sewer & SWM		30%		\$1,040,000	
	Landscaping		4%		\$140,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$560,000	
Design/Contract Admin			15%		\$520,000	
					Total	\$5,800,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 5-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road, with a median two-way-left-turn-lane. Costs for bike lanes and buffer are listed separately.
- 2) Contingency of 25% taken from the City and County Banwell EA's
- 3) Unit cost for on-road active transportation facilities includes both sides of roadway. Unit cost for off-road active transportation facilities includes one side.

**COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 5 LANES
Lesperance Road to County Road 19 (Manning Road) - Build 5 Lanes - Urban**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ¹ STA: 17+700 - 18+200	Cut/Fill	m3	\$11	11450	\$128,000	
	Asphalt - 5 lanes	m2	\$36	9150	\$330,000	
	Granular - 5 lanes	m2	\$28	9150	\$254,000	
	Contingency ²		25%		\$178,000	\$890,000
Illumination						
	Conventional poles in boulevards	each	\$6,600	75	\$500,000	
	Contingency		10%		\$50,000	\$550,000
Active Transportation³						
	Concrete Sidewalk (1.8 m)	m	\$180	500	\$90,000	
	Bike Lane (Asphalt and Granular) - and Buffer (2.5 m)	m	\$200	500	\$100,000	
	Contingency		10%		\$19,000	\$209,000
				Sub Total		\$1,649,000
Minor Items						
	Including Storm Sewer & SWM		30%		\$500,000	
	Landscaping		4%		\$70,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
			16%		\$270,000	
			15%		\$250,000	
Design/Contract Admin						
				Total		\$2,800,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 5-lanes due to the extensive reconstruction required to convert a 2-lane rural road to a 4-lane urban road, with a median two-way-left-turn-lane. Costs for bike lanes and buffer are listed separately.
- 2) Contingency of 25% taken from the City and County Banwell EAs
- 3) Unit cost for on-road active transportation facilities includes both sides of roadway. Unit cost for off-road active transportation facilities includes one side.

**COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 5 LANES
Reconstruction of County Road 19 (Manning Road) Signalized Intersection to Roundabout**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
CR42 / CR19 Roundabout STA: 18+200 - 18+550	Urban 2-lane modern roundabout - 67 m dia. including approach legs ¹	LS	\$2,850,000	1	\$2,850,000	\$2,850,000
				Sub Total		\$2,850,000
Minor Items						
	Including					
	Storm Sewer & SWM		30%		\$860,000	
	Landscaping		4%		\$120,000	
	Traffic Control					
	Temporary Staging					
	Pavement Marking					
	Signing					
	Curb and Gutter					
	Subdrains		16%		\$460,000	
Design/Contract Admin			15%		\$430,000	
				Total		\$4,800,000

NOTES:

- 1) Includes the total construction cost for a 2-lane 67 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 4 LANES (2031)
County Road 19 (Manning Road) to Patillo Road - Widen from 2 to 4 Lanes - Rural

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ¹	Cut/Fill	m3	\$11	57600	\$641,000	
STA: 18+450 - 22+450	Asphalt - 2 lanes	m2	\$36	32700	\$1,178,000	
	Granular - 2 lanes	m2	\$28	32700	\$907,000	
	Contingency ²		25%		\$682,000	\$3,408,000
Active Transportation³						
	Buffer Area	m	\$110	3800	\$420,000	
	Paved Shoulders (2.0 m)	m	\$110	3800	\$420,000	
	Contingency		10%		\$84,000	\$924,000
Structures						
	CR42 and Pike Creek Bridge	m2	\$3,200	200	\$640,000	
	Contingency		25%		\$160,000	\$800,000
					Sub Total	\$5,132,000
Minor Items						
	Including Clearing and Grubbing Sodding and Landscaping Pavement Markings Signage Traffic Management		20%		\$1,026,400	
Design/Contract Admin			15%		\$770,000	
					Total	\$7,000,000

NOTES:

- 1) For the purposes of cost estimating, assuming widening of a 2-lane rural road to a 4-lane urban road. Costs for bike lanes and buffer are listed separately.
- 2) Contingency of 25% taken from the City and County Banwell EAs
- 3) Unit cost for on-road active transportation facilities includes both sides of roadway. Unit cost for off-road active transportation facilities includes one side.
- 4) Sidewalks on both sides of road included from County Road 19 (Manning Road) to Pike Creek Bridge.

COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 4 LANES (2031)
Reconstruction of County Road 42 and Patillo Road Signalized Intersection to Roundabout

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
CR42 / Patillo Road Roundabout	Rural 2-lane modern roundabout - 67 m dia. ¹	LS	\$2,220,000	1	\$2,220,000	\$2,220,000
				Total		\$2,300,000

NOTES:

- 1) Includes the total construction cost for a 1-lane 55 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Paved shoulders and buffers
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Cut / Fill

COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 4 LANES (2031)
Patillo Road to County Road 25 (E. Puce Road) - Widen from 2 to 4 Lanes - Rural

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway						
County Road 42 ¹ STA: 22+600 - 25+350	Cut/Fill Asphalt - 2 lanes Granular - 2 lanes Contingency ²	m3 m2 m2	\$11 \$36 \$28 25%	39350 22450 22450	\$438,000 \$809,000 \$623,000 \$468,000	\$2,338,000
Active Transportation³						
	Buffer Area Paved Shoulders (2.0 m) Contingency	m m	\$110 \$110 10%	2550 2550	\$290,000 \$290,000 \$58,000	\$638,000
Structures						
	CR42 and Puce River Bridge Contingency	m2	\$3,200 25%	190	\$610,000 \$153,000	\$763,000
				Sub Total		\$3,739,000
Minor Items						
	Including Clearing and Grubbing Sodding and Landscaping Pavement Markings Signage Traffic Management		20% 15%		\$747,800 \$570,000	
Design/Contract Admin						
					Total	\$5,100,000

NOTES:

- 1) For the purposes of cost estimating, assuming widening of a 2-lane rural road to a 4-lane urban road. Costs for bike lanes and buffer are listed separately.
- 2) Contingency of 25% taken from the City and County Banwell EA's
- 3) Unit cost for on-road active transportation facilities includes both sides of roadway.

COUNTY ROAD 42 - CITY/COUNTY BOUNDARY TO COUNTY ROAD 25 (PUCE ROAD) (County of Essex) - WIDEN FROM 2 TO 4 LANES (2031)
Reconstruction of County Road 42 and County Road 25 (E. Puce Road) Signalized Intersection to Roundabout

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
CR42 / Patillo Road Roundabout	Rural 2-lane modern roundabout - 67 m dia. ¹	LS	\$2,220,000	1	\$2,220,000	\$2,220,000
				Total		\$2,300,000

NOTES:

- 1) Includes the total construction cost for a 1-lane 55 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Paved shoulders and buffers
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Cut / Fill

E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
Walker Road Intersection Improvements

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Intersection Improvements E-W Arterial and Walker Road ¹ Intersection	Cut/Fill	m3	\$11	1550	\$18,000	
	Asphalt	m2	\$36	2400	\$87,000	
	Granular	m2	\$28	2400	\$67,000	
	Contingency ²		25%		\$43,000	\$215,000
Illumination	Conventional poles in boulevards	each	\$6,600	4	\$30,000	
	Contingency		10%		\$3,000	\$33,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	180	\$20,000	
	Multi-Use Trail (3.0 m)	m2	\$56	300	\$20,000	
	Contingency		10%		\$4,000	\$44,000
				Sub Total		\$292,000
Minor Items	Including Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains				\$50,000	
			15%		\$50,000	
Design/Contract Admin						
				Total		\$400,000

NOTES:

- 1) For the purposes of cost estimating, includes new E-W Arterial approach to intersection;
Includes north and south bound exclusive right turn lanes on Walker Road
Includes area for bike lanes and buffers
- 2) Contingency of 25% taken from the City and County Banwell EA's

**E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
Walker Road to 4490 7th Concession Road Roundabout Access - Build 2 Lanes - Urban**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway E-W Arterial ¹ STA: 10+100 - 10+300	Cut/Fill	m3	\$11	6250	\$70,000	
	Asphalt - 2 lanes	m2	\$36	2250	\$81,000	
	Granular - 2 lanes	m2	\$28	2250	\$63,000	
	Contingency ²		25%		\$54,000	\$268,000
Illumination	Conventional poles in boulevards	each	\$6,600	8	\$60,000	
	Contingency		10%		\$6,000	\$66,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	360	\$30,000	
	Multi-Use Trail (3.0 m)	m2	\$56	600	\$40,000	
	Contingency		10%		\$7,000	\$77,000
					Sub Total	\$411,000
Minor Items	Including					
	Storm Sewer & SWM		30%		\$130,000	
	Landscaping		4%		\$20,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
					\$70,000	
Design/Contract Admin					\$70,000	
					Total	\$800,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 2-lane roadway, including area for bike lanes and buffers.
- 2) Contingency of 25% taken from the City and County Banwell EA's

**E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
4490 7th Concession Road Roundabout Access**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
E-W Arterial / 4490 7th Conc. Road STA: 10+300 - 10+600	1-lane modern roundabout - 55 m dia. and approach legs ¹	LS	\$2,200,000	1	\$2,200,000	\$2,200,000
				Total	Total	\$2,200,000

NOTES:

- 1) Includes the total construction cost for a 1-lane 55 m dia. modern roundabout including:
- Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

**E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
Future Collector Road Roundabout**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
E-W Arterial / 4490 7th Conc. Road STA: 10+600 - 10+950	1-lane modern roundabout - 55 m dia. and approach legs ¹	LS	\$2,200,000	1	\$2,200,000	\$2,200,000
					Total	\$2,200,000

NOTES:

- 1) Includes the total construction cost for a 1-lane 55 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

**E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
Future Collector Road to 8th Concession Road - Build 2 Lanes - Urban**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway E-W Arterial ¹ STA: 10+950 - 11+250	Cut/Fill	m3	\$11	2350	\$27,000	
	Asphalt - 2 lanes	m2	\$36	3400	\$123,000	
	Granular - 2 lanes	m2	\$28	3400	\$95,000	
	Contingency ²		25%		\$62,000	\$307,000
Illumination	Conventional poles in boulevards	each	\$6,600	12	\$80,000	
	Contingency		10%		\$8,000	\$88,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	540	\$40,000	
	Multi-Use Trail (3.0 m)	m2	\$56	900	\$60,000	
	Contingency		10%		\$10,000	\$110,000
					Sub Total	\$505,000
Minor Items	Including Storm Sewer & SWM		30%		\$160,000	
	Landscaping		4%		\$30,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
Design/Contract Admin				\$90,000		
			15%		\$80,000	
					Total	\$900,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 2-lane roadway, including area for bike lanes and buffers.
- 2) Contingency of 25% taken from the City and County Banwell EA's

**E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
8th Concession Road Roundabout**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
E-W Arterial / 8th Conc. Road STA: 11+250 - 11+600	1-lane modern roundabout - 55 m dia. and approach legs ¹	LS	\$2,200,000	1	\$2,200,000	\$2,200,000
					Total	\$2,200,000

NOTES:

- 1) Includes the total construction cost for a 1-lane 55 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

**E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
8th Concession Road to 9th Concession Road - Build 2 Lanes - Urban**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway E-W Arterial ¹ STA: 11+600 - 12+650	Cut/Fill	m3	\$11	9550	\$107,000	
	Asphalt - 2 lanes	m2	\$36	11850	\$427,000	
	Granular - 2 lanes	m2	\$28	11850	\$329,000	
	Contingency ²		25%		\$216,000	\$1,079,000
Illumination	Conventional poles in boulevards	each	\$6,600	42	\$280,000	
	Contingency		10%		\$28,000	\$308,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	1890	\$110,000	
	Multi-Use Trail (3.0 m)	m2	\$56	3150	\$180,000	
	Contingency		10%		\$29,000	\$319,000
					Sub Total	\$1,706,000
Minor Items	Including					
	Storm Sewer & SWM		30%		\$520,000	
	Landscaping		4%		\$70,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
					\$280,000	
Design/Contract Admin					\$260,000	
					Total	\$2,900,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 2-lane roadway, including area for bike lanes and buffers.
- 2) Contingency of 25% taken from the City and County Banwell EA's

**E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
9th Concession Road Roundabout**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
E-W Arterial / 9th Conc. Road STA: 12+650 - 13+050	1-lane modern roundabout - 55 m dia. and approach legs ¹	LS	\$2,200,000	1	\$2,200,000	\$2,200,000
					Total	\$2,200,000

NOTES:

- 1) Includes the total construction cost for a 1-lane 55 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill

E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
9th Concession Road to Lauzon Parkway - Build 2 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway E-W Arterial ¹ STA: 13+050 - 13+400	Cut/Fill	m3	\$11	4150	\$47,000	
	Asphalt - 2 lanes	m2	\$36	3950	\$143,000	
	Granular - 2 lanes	m2	\$28	3950	\$110,000	
	Contingency ²		25%		\$75,000	\$375,000
Illumination	Conventional poles in boulevards	each	\$6,600	14	\$100,000	
	Contingency		10%		\$10,000	\$110,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	630	\$40,000	
	Multi-Use Trail (3.0 m)	m2	\$56	1050	\$60,000	
	Contingency		10%		\$10,000	\$110,000
					Sub Total	\$595,000
Minor Items	Including Storm Sewer & SWM		30%		\$180,000	
	Landscaping		4%		\$30,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
Design/Contract Admin			16%		\$100,000	
			15%		\$90,000	
				Total	Total	\$1,000,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 2-lane roadway, including area for bike lanes and buffers.
- 2) Contingency of 25% taken from the City and County Banwell EA's

E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
Lauzon Parkway to County Road 17 (10th Concession Road) - Build 2 Lanes - Urban

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Roadway E-W Arterial ¹ STA: 13+750 - 14+000	Cut/Fill	m3	\$11	2800	\$32,000	
	Asphalt - 2 lanes	m2	\$36	4650	\$168,000	
	Granular - 2 lanes	m2	\$28	4650	\$129,000	
	Contingency		25%		\$83,000	\$412,000
Illumination	Conventional poles in boulevards	each	\$6,600	20	\$140,000	
	Contingency ²		10%		\$20,000	\$160,000
Active Transportation	Concrete Sidewalk (1.8 m)	m2	\$56	450	\$30,000	
	Multi-Use Trail (3.0 m)	m2	\$56	450	\$30,000	
	Contingency		10%		\$10,000	\$70,000
					Sub Total	\$642,000
Minor Items	Including Storm Sewer & SWM		30%		\$200,000	
	Landscaping		4%		\$30,000	
	Traffic Control Temporary Staging Pavement Marking Signing Curb and Gutter Subdrains					
Design/Contract Admin					\$110,000	
					\$100,000	
					Total	\$1,100,000

NOTES:

- 1) For the purposes of cost estimating, assuming new 2-lane roadway, including area for bike lanes and buffers.
- 2) Contingency of 25% taken from the City and County Banwell EA's

**E-W ARTERIAL - WALKER ROAD TO COUNTY ROAD 17 (10TH CONCESSION ROAD) (City of Windsor) - BUILD NEW 2-LANE ROAD (2031)
County Road 17 (10th Concession Road) Roundabout**

Component	Item Description	Units	Unit Price	Quantity	Sub Total	Total
Major Items						
Modern Roundabout						
E-W Arterial / CR17 STA: 12+650 - 13+050	1-lane modern roundabout - 55 m dia. and approach legs ¹	LS	\$2,200,000	1	\$2,200,000	\$2,200,000
					Total	\$2,200,000

NOTES:

- 1) Includes the total construction cost for a 1-lane 55 m dia. modern roundabout including:
 - Asphalt and granular of roundabout and approach legs extending approximately 100 m from roundabout
 - Illumination
 - Multi-use trail and sidewalk on approach legs
 - Minor Items including: clearing and Grubbing, topsoil and sodding, curb and gutter, pavement marking
 - Clearing and Grubbing
 - Landscaping
 - Traffic Control
 - Temporary Staging
 - Pavement Marking
 - Signing
 - Curb and Gutter
 - Subdrains
 - Cut / Fill