2026-07-06

MEMORANDUM

338 Ave Off-Site Levy Cost Allocation Adjustments

The 338 Avenue expansion is a key transportation project included in the Town's servicing strategy and off-site levy framework. The 338 Avenue Functional Study (Arcadis, 2024) was completed by the Town to inform growth-related improvements along 338 Avenue. Along with the Functional Study, a cost estimate was prepared by Arcadis and subsequently used as the basis for inclusion in the levy modeling.

In response to feedback from Industry and further review by the Town, the Town engaged Urban Systems (USL) to amend the cost estimate to include within the Off-Site Levy (OSL) Bylaw update. The updated estimate has been integrated into the current OSL Bylaw update (2026). A detailed summary of the cost estimate amendments is captured in **Appendix A**. For ongoing transparency, the below summary of implications to the levy model and cost recovery is provided to ensure all parties supporting the delivery of growth-related infrastructure are aware.

Implications to Levy Model and Cost Recovery

While the revisions described in **Appendix A** reduce the total project cost and resulting levy rate, it is important to clearly understand the broader implications:

Reduced Levy Rate and Recoverable Costs

- Removing eligible components lowers the levy rate; however, it also reduces the total amount recoverable through the OSL program.
- Costs excluded from the levy are transferred to boundary developers or funding mechanisms outside of the levy program, or deferred to future OSL Bylaws.

Boundary Developer Obligations

- Adjacent developers are required to construct half of the arterial roadway. Their base obligation is equivalent to half of a collector road based on the City of Calgary Development Agreement (DA) rates. If a boundary developer is to construct the full arterial, the difference between actual construction cost and this base obligation is eligible for recovery through the levy.
- Shifting costs out of the levy (e.g., earthworks) increases the unrecoverable portion borne directly by developers.

Model Risk and Underestimation

- If project costs are reduced below realistic construction values:
    - Levy rates will be correspondingly understated;
    - A funding shortfall may occur; and
    - Recovery timelines may be extended.
- This is particularly relevant where City of Calgary DA rates are used as actual project conditions (retrofit corridor, utilities, staging constraints, etc.) differ materially from greenfield assumptions.

Relationship to Collections and Cash Flow

- Reduced eligible costs decrease overall levy collections; however, the upfront capital requirements for infrastructure delivery remain unchanged. As a result, this can increase reliance on developer-fronted construction and the associated financial risk.

Transparency to Industry

- It is critical that Industry understands the trade-offs associated with these changes. While lower modeled costs and levy rates may appear beneficial in the short term, they may result in increased direct developer costs, reduced cost recovery opportunities, and greater exposure to future funding gaps. These implications are not always immediately visible in the levy rate and must be clearly communicated.

The Town appreciates Industry's feedback through the OSL Bylaw update, and trusts this Memorandum supports in providing additional clarity and transparency around the delivery of growth-related infrastructure and cost recovery.

Sincerely,

J. Cameron

James Cameron
Engineering Manager
Town of Okotoks

APPENDIX A – 338 AVENUE COST ESTIMATE AMENDMENT DETAILS

BACKGROUND

The 338 Avenue expansion is a key transportation project included in the Town's servicing strategy and off-site levy framework. The 338 Avenue Functional Study (Arcadis, 2024) was completed by the Town to inform growth-related improvements along 338 Avenue. Along with the Functional Study, a functional level cost estimate was prepared by Arcadis and subsequently used as the basis for inclusion in the levy modeling.

In response to feedback from Industry and further review by the Town, Urban Systems (USL) has undertaken updates to the functional level cost estimate to include within the Off-Site Levy Bylaw update. The updated estimate has been integrated into the current OSL model to be reflected in the levy rates and cost recovery table.

SUMMARY OF KEY UPDATES

REMOVAL OR MODIFICATION OF PROJECT COMPONENTS

The updated estimate reflects several adjustments in response to Industry feedback, including:

- Removal of earthworks from levy eligibility (to be fully borne by boundary developers);
- Reduction of street lighting costs to align with City of Calgary Development Agreement rates;
- Removal of site furniture elements (bench seating, bicycle racks, etc.)
- Adjustment from decorative surface treatments to standard finishes.
- Removal of traffic signals, reflecting current practice where arterial signals are typically delivered as developer obligations.

COST ADJUSTMENTS

A summary table of all modifications to the Arcadis functional level cost estimate is provided in Table 1 (to accompany detailed spreadsheets). The table presents each adjustment itemized by category and the corresponding cost change. It should be noted that USL has not independently verified the values or assumptions associated with items that have not been adjusted as part of this review, and these amounts remain as presented in the original Arcadis estimate.

It is noted that several items that have generated significant discussion (e.g., decorative works) represent a very small fraction of total project cost and are not material drivers of the levy rate.

Table 1: USL OPC Revision -WEST

USL REVISIONS (2026)						
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Amount**	**Notes**
A	**Site Preparation**					
	Removals				$ 1,947,850	
	~~Earthworks~~				~~$~~	Removed
B	**Storm Infrastructure**					
	Storm Sewer				$ 1,689,115	
	Catchbasins				$ 743,175	
	Miscellaneous				$ 309,000	
C	**Surface Works**					
	Asphalt				$ 9,455,000	
	Concrete				$ 2,467,500	
	Miscellaneous				$ 197,500	
D	**Landscaping**					
	Hardscapes				$ 2,104,175	
	Subgrade Prep				$ 38,700	
	3m Asphalt MUP	m2	12750	$ 70.00	$ 892,500	
	Concrete Unit Pavers	m2	350	$ 70.00	$ 24,500	Adjusted to Arcadis asphalt unit rate
	Reinforced Light Duty Concrete Paving					
	Decorative Jointing	m2	3175	$ 230.00	$ 730,250	Adjusted to Arcadis light broom finish unit rate
	Light Broom Finish	m2	900	$ 230.00	$ 207,000	
	Painted Multi-use Path Symbol				$ 18,750	
	Concrete Edger				$ 37,800	
	Softscapes				$ 984,250	
	Bioretention Areas				$ 402,000	
	Planting				$ 492,750	
	~~Site Furniture~~				~~$~~	Removed
E	**Streetlighting / Traffic Signals**					
	Streetlighting	m	2500	$ 598.00	$ 1,495,000	Using 2026 CofC DA rate
	~~Traffic Signals~~				~~$~~	Removed
F	**Land Acquisitions**					
	Ultimate Road ROW (6 Lanes)				$ 1,255,280.00	As per Arcadis
	Credit for Deferral of Ultimate Road ROW	ac	5.54	-$127,000.00	-$ 702,957.00	Reduction of two 3.5m lanes
G	**Engineering / Construction Admin Fees (5%)**				**$ 745,753.0**	
H	**Contingency (10%)**				**$ 2,553,489.1**	
	Total 338 Ave (West) Project Cost				**$ 28,088,380**	

Table 2: USL OPC Revision - EAST

USL REVISIONS (2026)						
Item	**Description**	**Unit**	**Quantity**	**Unit Price**	**Amount**	**Notes**
A	**Site Preparation**					
	Removals				$1,478,240	
	~~Earthworks~~				~~$ -~~	removed
B	**Storm Infrastructure**					
	Storm Sewer					
	Catchbasins				$590,040	
	Miscellaneous				$246,250	
C	**Surface Works**					
	Asphalt					
	Waste Excavation				$300,000	
	Common Excavation				$625,000	
	Pavement - 338 Ave					
	Subgrade Prep	m2	30000	$5.00	$150,000	Updated asphalt area based on 14m pavement width from 21m
	80mm GBC - 300mm	m2	30000	$25.00	$750,000	
	25mm GBC - 100mm	m2	30000	$12.50	$375,000	
	Prime Coat	m2	30000	$1.50	$45,000	
	APC Mix "A" - 100mm	m2	30000	$60.00	$1,800,000	
	Tack Coat	m2	30000	$1.50	$45,000	
	APC Mix "C" - 80mm	m2	30000	$30.00	$900,000	
	Milling & Overlay				$150,000	
	Concrete				$1,861,500	
	Miscellaneous				$184,000	
D	**Landscaping**					
	Hardscapes					
	Subgrade Prep				$38,700	
	3m Asphalt MUP	m2	9600	$70.00	$672,000	
	Concrete Unit Pavers	m2	260	$70.00	$18,200	Adjusted to Arcadis asphalt unit rate
	Reinforced Light Duty Concrete Paving					
	Decorative Jointing	m2	2400	$230.00	$552,000	Adjusted to Arcadis light broom finish unit rate
	Light Broom Finish	m2	680	$230.00	$156,400	
	Painted Multi-use Path Symbol				$18,750	
	Concrete Edger				$37,800	
	Softscapes				$745,250	
	Bioretention Areas				$308,200	
	Planting				$369,650	
	~~Site Furniture~~				~~$ -~~	removed
E	**Streetlighting / Traffic Signals**					
	Streetlighting	m	2000	$598.00	$1,196,000	Using 2026 CofC DA rate of $598/m
	~~Traffic Signals~~				~~$ -~~	removed
F	**Land Acquisitions**					
	Ultimate Road ROW (6 Lanes)				$1,066,988.00	As per Arcadis
	Credit for Deferral of Ultimate Road ROW	ac		-$127,000.00	-$307,544.00	Reduction of two 3.5m lanes
G	**Engineering / Construction Admin Fees (10%)**				**$1,492,205.0**	
H	**Contingency (20%)**				**$3,434,739.8**	
	Total 338 Ave (East) Project Cost				**$20,608,439**	

CONCLUSION

Urban Systems notes that the updated 338 Avenue cost estimate responds to Industry feedback while maintaining alignment with the Town's infrastructure objectives and cost recovery framework. Urban Systems further notes that it is not responsible for the original cost estimate prepared through the 338 Avenue Functional Study (Arcadis, 2024).

Sincerely,

URBAN SYSTEMS LTD.

Kris Nelson, RPP, MCIP
Community Consultant

cc: Derek Fagan, P.Eng.

/df
Enclosure

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338 Avenue EAST
(East of Trilogy B to Highway 2)
CLASS 5 OPINION OF PROBABLE COST

ARCADIS ESTIMATE (2025)

Item	Description	Unit	Quantity	Unit Price	Amount
A	**Site Preparation**				
	Removals				$ 1,478,240
	Earthworks				$ 1,259,500
B	**Storm Infrastructure**				
	Storm Sewer				$ 1,309,070
	Catchbasins				$ 590,040
	Miscellaneous				$ 246,250
C	**Surface Works**				
	Asphalt				
	Waste Excavation				$ 300,000
	Common Excavation				$ 625,000
	Pavement - 338 Ave				
	Subgrade Prep	m2	45000	$ 5.00	$ 225,000
	80mm GBC - 300mm	m2	45000	$ 25.00	$ 1,125,000
	25mm GBC - 100mm	m2	45000	$ 12.50	$ 562,500
	Prime Coat	m2	45000	$ 1.50	$ 67,500
	APC Mix "A" - 100mm	m2	45000	$ 60.00	$ 2,700,000
	Tack Coat	m2	45000	$ 1.50	$ 67,500
	APC Mix "C" - 80mm	m2	45000	$ 30.00	$ 1,350,000
	Milling & Overlay				$ 150,000
	Concrete				$ 1,861,500
	Miscellaneous				$ 184,000
D	**Landscaping**				
	Hardscapes				
	Subgrade Prep				$ 38,700
	3m Asphalt MUP	m2	9600	$ 70.00	$ 672,000
	Concrete Unit Pavers	m2	260	$ 240.00	$ 62,400
	Reinforced Light Duty Concrete Paving				
	Decorative Jointing	m2	2400	$ 250.00	$ 600,000
	Light Broom Finish	m2	680	$ 230.00	$ 156,400
	Painted Multi-use Path Symbol				$ 18,750
	Concrete Edger				$ 37,800
	Softscapes				$ 745,250
	Bioretention Areas				$ 308,200
	Planting				$ 369,650
	Site Furniture				$ 271,200
E	**Streetlighting / Traffic Signals**				
	Streetlighting	ea	40	$ 68,350.00	$ 2,734,000
	Traffic Signals				$ 1,700,000
F	**Land Acquisitions**				**$ 1,066,988.00**
G	**Engineering / Construction Admin Fees (10%)**				**$ 2,181,545.0**
H	**Contingency (20%)**				**$ 5,012,796.6**
	Total 338 Ave (East) Project Cost				**$ 30,076,780**

USL REVISIONS (2026)

Item	Description	Unit	Quantity	Unit Price	Amount	Notes
A	**Site Preparation**					
	Removals				$ 1,478,240	
	~~Earthworks~~				~~$ -~~	removed
B	**Storm Infrastructure**					
	Storm Sewer				$ 1,309,070	
	Catchbasins				$ 590,040	
	Miscellaneous				$ 246,250	
C	**Surface Works**					
	Asphalt					
	Waste Excavation				$ 300,000	
	Common Excavation				$ 625,000	
	Pavement - 338 Ave					
	Subgrade Prep	m2	30000	$ 5.00	$ 150,000	
	80mm GBC - 300mm	m2	30000	$ 25.00	$ 750,000	
	25mm GBC - 100mm	m2	30000	$ 12.50	$ 375,000	Updated asphalt area based on 14m pavement width from 21m
	Prime Coat	m2	30000	$ 1.50	$ 45,000	
	APC Mix "A" - 100mm	m2	30000	$ 60.00	$ 1,800,000	
	Tack Coat	m2	30000	$ 1.50	$ 45,000	
	APC Mix "C" - 80mm	m2	30000	$ 30.00	$ 900,000	
	Milling & Overlay				$ 150,000	
	Concrete				$ 1,861,500	
	Miscellaneous				$ 184,000	
D	**Landscaping**					
	Hardscapes					
	Subgrade Prep				$ 38,700	
	3m Asphalt MUP	m2	9600	$ 70.00	$ 672,000	
	Concrete Unit Pavers	m2	260	$ 70.00	$ 18,200	Adjusted to asphalt rate
	Reinforced Light Duty Concrete Paving					
	Decorative Jointing	m2	2400	$ 230.00	$ 552,000	Adjusted to light broom rate
	Light Broom Finish	m2	680	$ 230.00	$ 156,400	
	Painted Multi-use Path Symbol				$ 18,750	
	Concrete Edger				$ 37,800	
	Softscapes				$ 745,250	
	Bioretention Areas				$ 308,200	
	Planting				$ 369,650	
	~~Site Furniture~~				~~$ -~~	removed
E	**Streetlighting / Traffic Signals**					
	Streetlighting	m	2000	$ 598.00	$ 1,196,000	Using 2026 CofC DA rate of $598/m
	~~Traffic Signals~~				~~$ -~~	removed
F	**Land Acquisitions**					
	Ultimate Road ROW (6 Lanes)				$ 1,066,988.00	As per Arcadis
	Credit for Deferral of Ultimate Road ROW				-$ 307,544.00	Reduction of two 3.5m lanes
G	**Engineering / Construction Admin Fees (10%)**				**$ 1,492,205.0**	
H	**Contingency (20%)**				**$ 3,434,739.8**	
	Total 338 Ave (East) Project Cost				**$ 20,608,438.80**	

City of Calgary 2026 DA - Streetlighting Rates

ITEM	DESCRIPTION	UNIT	UNIT RATE
1	**Local Roads**		
	Walkway and Reserve Pathway	Lineal Metre	$280.00
	Residential Street M, M-L, SW_L (9.0 / 16.0)		
	Collector Street (10.8 / 21.0)		
	Collector Street (12.3 / 22.5)		
	Collector Street (15.0 / 25.2)		
	Industrial Street (9.0 / 19.0)		
2	**Intermediate Roads**	Lineal Metre	$329.00
	Residential Street Entrance (2 x 6.0 / 22.5)		
	Residential Street Entrance (2 x 6.5 / 23.5)		
	Primary Collector Street (2 x 7.7 / 29.0)		
	Primary Collector Street (2x 8.3 / 30.0)		
	Activity Centre Street (15.4 / 26.0)		
	Neighborhood Boulevard (15.4 / 30.0)		
3	**Arterial Streets**		
	Single Carriageway	Lineal Metre	$299.00
	Dual Carriageway	Lineal Metre	$598.00
	Arterial Street (2 x 9.5 / 36.0)		
	Arterial Street (2 x 7.0 / 36.0)		
	Arterial Street (2 x 13.0 / 46.0)		
	Arterial Street (2 x 10.5 / 46.0)		
	Industrial Arterial Street (14.4 /30.0)		
	Local Arterial Street (2 x 9.3 / 32.0)		
	Urban Boulevard (2 x 12.0 / 42.6)		
	Urban Boulevard (2 x 9.1 / 36.0)		
	Parkway (2 x 9.1 / 36.0)		

Land Acquisition Table

	ROW Expansion	Width (m)	Length (m)	Area (ha)	Unit Price	Amount	
46m ROW	30.5m to 39m	8.5	1400	1.19	$ 313,820.00	$ 373,446.00	
	39m to 46m	7	1400	0.98	$ 313,820.00	$ 307,544.00	CREDIT

338 Avenue WEST
(Northridge Drive to East of Trilogy B)
CLASS 5 OPINION OF PROBABLE COST

ARCADIS ESTIMATE (2025)

Item	Description	Unit	Quantity	Unit Price	Amount
A	**Site Preparation**				
	Removals				$ 1,947,850
	Earthworks				$ 1,605,000
B	**Storm Infrastructure**				
	Storm Sewer				$ 1,689,115
	Catchbasins				$ 743,175
	Miscellaneous				$ 309,000
C	**Surface Works**				
	Asphalt				$ 9,455,000
	Concrete				$ 2,467,500
	Miscellaneous				$ 197,500
D	**Landscaping**				
	Hardscapes				
	Subgrade Prep				$ 51,525
	3m Asphalt MUP	m2	12750	$ 70.00	$ 892,500
	Concrete Unit Pavers	m2	350	$ 240.00	$ 84,000
	Reinforced Light Duty Concrete Paving				
	Decorative Jointing	m2	3175	$ 250.00	$ 793,750
	Light Broom Finish	m2	900	$ 230.00	$ 207,000
	Painted Multi-use Path Symbol				$ 25,000
	Concrete Edger				$ 50,400
	Softscapes				$ 984,250
	Bioretention Areas				$ 402,000
	Planting				$ 492,750
	Site Furniture				$ 359,300
E	**Streetlighting / Traffic Signals**				
	Streetlighting	ea	40	$ 68,350.00	$ 3,417,500
	Traffic Signals				$ 2,800,000
F	**Land Acquisitions**				**$ 1,255,280.00**
G	**Engineering / Construction Admin Fees (5%)**				**$ 1,448,710**
H	**Contingency (10%)**				**$ 3,167,820.0**
	Total 338 Ave (West) Project Cost				**$ 34,845,925**

USL REVISIONS (2026)

Item	Description	Unit	Quantity	Unit Price	Amount	Notes
A	**Site Preparation**					
	Removals				$ 1,947,850	
	~~Earthworks~~				~~$ -~~	removed
B	**Storm Infrastructure**					
	Storm Sewer				$ 1,689,115	
	Catchbasins				$ 743,175	
	Miscellaneous				$ 309,000	
C	**Surface Works**					
	Asphalt				$ 9,455,000	
	Concrete				$ 2,467,500	
	Miscellaneous				$ 197,500	
D	**Landscaping**					
	Hardscapes				$ 2,104,175	
	Subgrade Prep				$ 38,700	
	3m Asphalt MUP	m2	12750	$ 70.00	$ 892,500	
	Concrete Unit Pavers	m2	350	$ 70.00	$ 24,500	Adjusted to asphalt rate
	Reinforced Light Duty Concrete Paving					
	Decorative Jointing	m2	3175	$ 230.00	$ 730,250	Adjusted to light broom rate
	Light Broom Finish	m2	900	$ 230.00	$ 207,000	
	Painted Multi-use Path Symbol				$ 18,750	
	Concrete Edger				$ 37,800	
	Softscapes				$ 984,250	
	Bioretention Areas				$ 402,000	
	Planting				$ 492,750	
	~~Site Furniture~~				~~$ -~~	removed
E	**Streetlighting / Traffic Signals**					
	Streetlighting	m	2500	$ 598.00	$ 1,495,000	Using 2026 CofC DA rate of $598/m
	~~Traffic Signals~~				~~$ -~~	removed
F	**Land Acquisitions**					
	Ultimate Road ROW (6 Lanes)				$ 1,255,280.00	As per Arcadis
	Credit for Deferral of Ultimate Road ROW	ac	5.54	$ 127,000.00	-$ 702,957.00	Reduction of two 3.5m lanes
G	**Engineering / Construction Admin Fees (5%)**				**$ 745,753.0**	
H	**Contingency (10%)**				**$ 2,553,489.1**	
	Total 338 Ave (West) Project Cost				**$ 28,088,380.10**	

City of Calgary 2026 DA - Streetlighting Rates

ITEM	DESCRIPTION	UNIT	UNIT RATE
1	**Local Roads**		
	Walkway and Reserve Pathway	Lineal Metre	$280.00
	Residential Street M, M-L, SW_L (9.0 / 16.0)		
	Collector Street (10.8 / 21.0)		
	Collector Street (12.3 / 22.5)		
	Collector Street (15.0 / 25.2)		
	Industrial Street (9.0 / 19.0)		
2	**Intermediate Roads**	Lineal Metre	$329.00
	Residential Street Entrance (2 x 6.0 / 22.5)		
	Residential Street Entrance (2 x 6.5 / 23.5)		
	Primary Collector Street (2 x 7.7 / 29.0)		
	Primary Collector Street (2x 8.3 / 30.0)		
	Activity Centre Street (15.4 / 26.0)		
	Neighborhood Boulevard (15.4 / 30.0)		
3	**Arterial Streets**		
	Single Carriageway	Lineal Metre	$299.00
	Dual Carriageway	Lineal Metre	$598.00
	Arterial Street (2 x 9.5 / 36.0)		
	Arterial Street (2 x 7.0 / 36.0)		
	Arterial Street (2 x 13.0 / 46.0)		
	Arterial Street (2 x 10.5 / 46.0)		
	Industrial Arterial Street (14.4 /30.0)		
	Local Arterial Street (2 x 9.3 / 32.0)		
	Urban Boulevard (2 x 12.0 / 42.6)		
	Urban Boulevard (2 x 9.1 / 36.0)		
	Parkway (2 x 9.1 / 36.0)		

Land Acquisition Table

	ROW Expansion	Width (m)	Length (m)	Area (ha)	Unit Price	Amount	
43m ROW	30.5m to 36m	5.5	800	0.44	$ 313,820.00	$ 138,081.00	
	36m to 43m	7	800	0.56	$ 313,820.00	$ 175,739.00	CREDIT
46m ROW	30.5m to 39m	8.5	2400	2.04	$ 313,820.00	$ 640,193.00	
	39m to 46m	7	2400	1.68	$ 313,820.00	$ 527,218.00	CREDIT