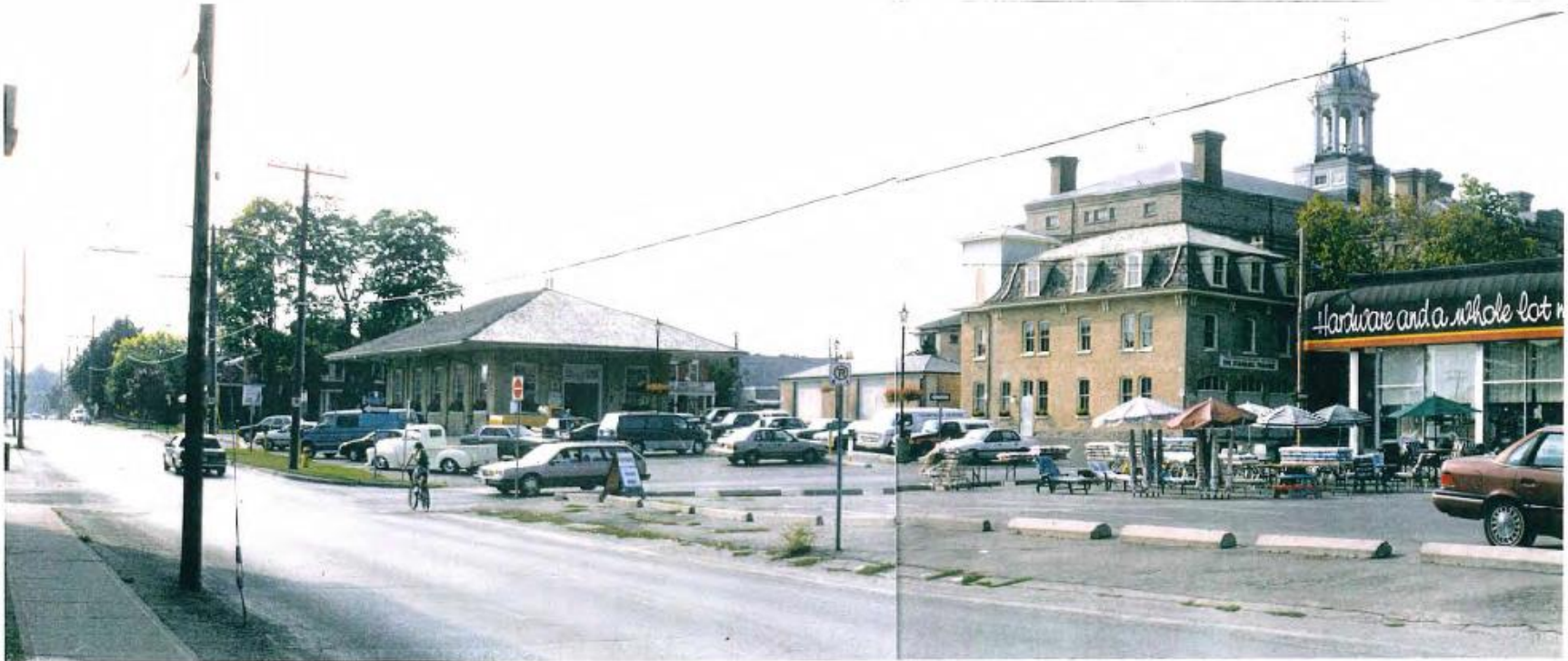


+ Agenda

- Project background
- Detailed Design process
- Design elements and Perspective Views:
 - Parking and Roadway Design
 - Development along Second Street
 - Surface Treatment
 - Low Impact Development
 - Site Furniture
 - Planting
 - Public Art
 - Lighting Design

April 17, 2017

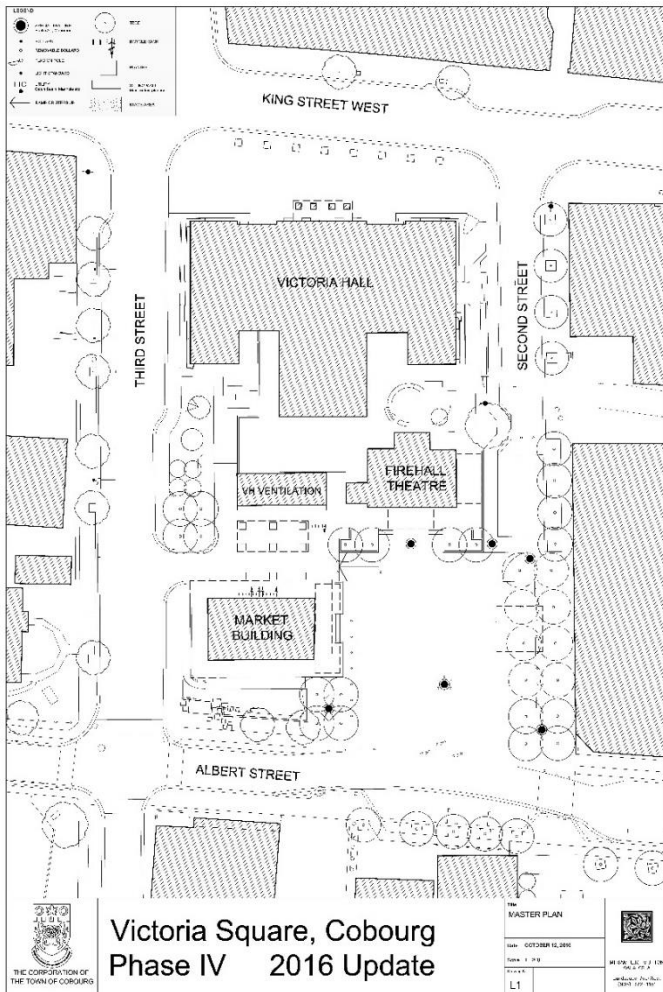
+Project background



Late 1990's – Photo by M. Mutton

+Project background

- October 2016 Approved concept

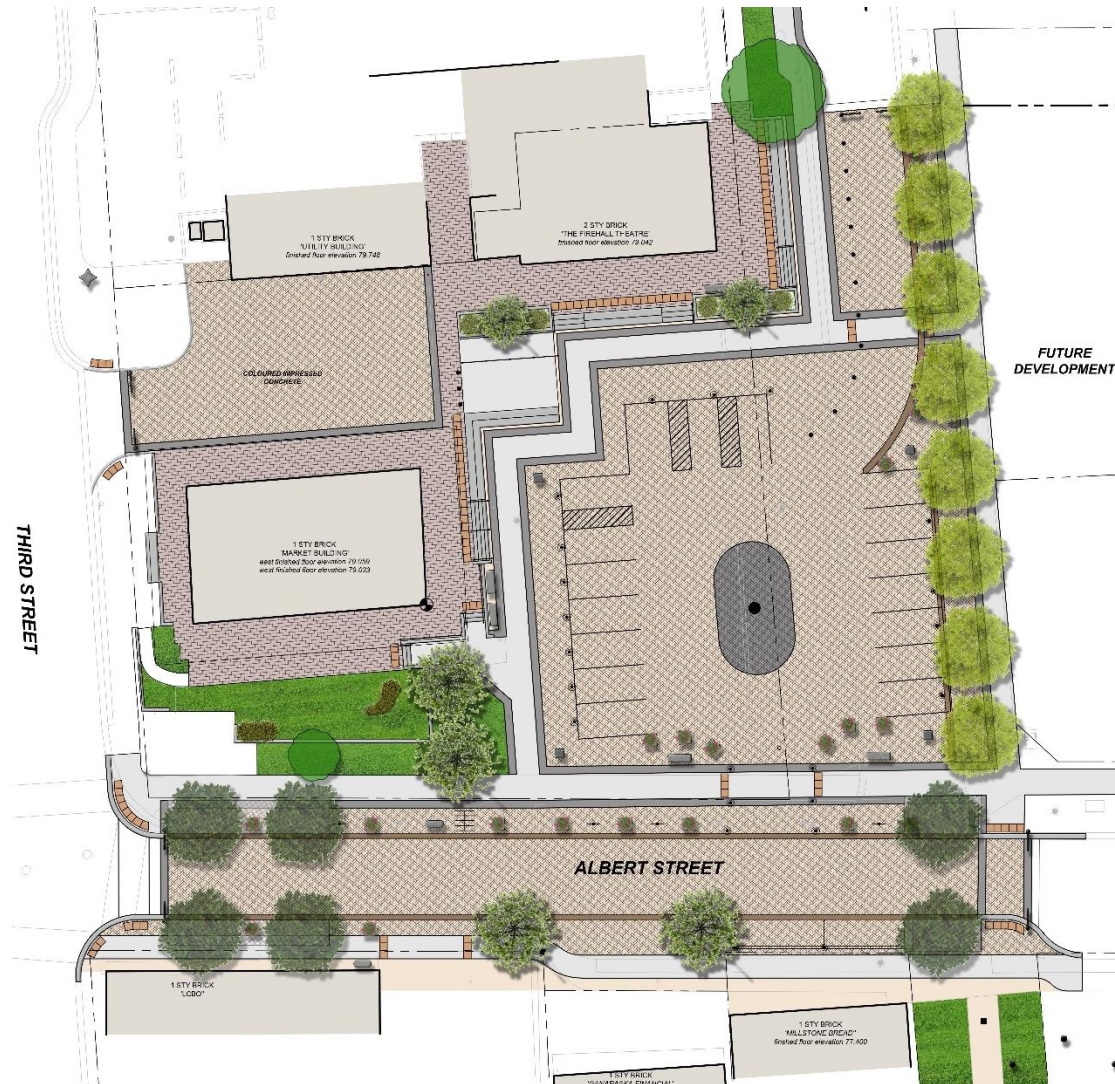


+Project background

- Video of approved concept (Video production by Jeremy Nicholls)



+ Detailed Design Process



+ Business Mode



+ Market Mode



+ Event Mode



+ Event Mode



+ Looking South on Second Street



+ Bollards and Trench Drain



+ South on Second Street at Square entrance



+ Coordination with future development on Second Street



+ Looking West on Albert Street



+ Looking East on Albert Street from Third Street



+ Entrance to Square from Albert Street



+ Surface Treatment – Upper Level

- Existing red/grey name pavers to remain adjacent to Firehall Theatre and Market Building
- Matching pavers to be relocated for consistent treatment through upper level

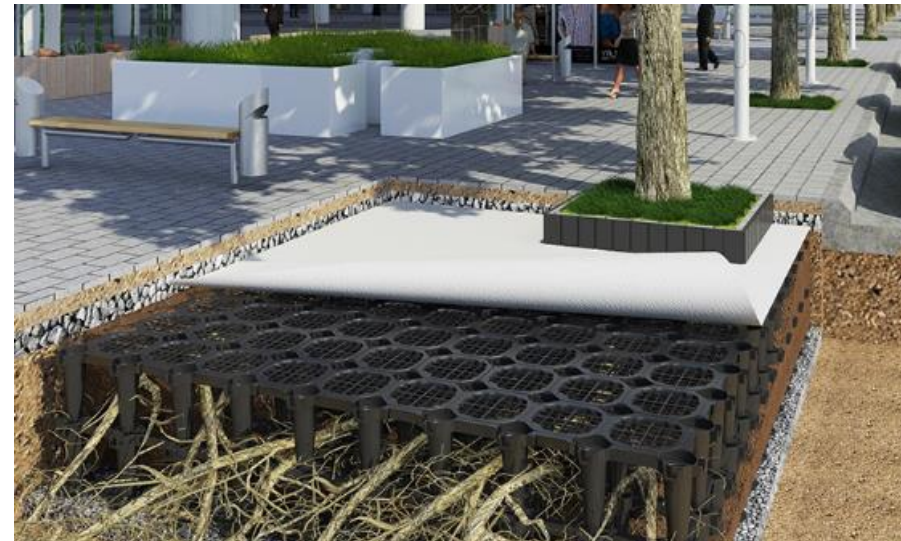


+ Surface Treatment – Lower Level



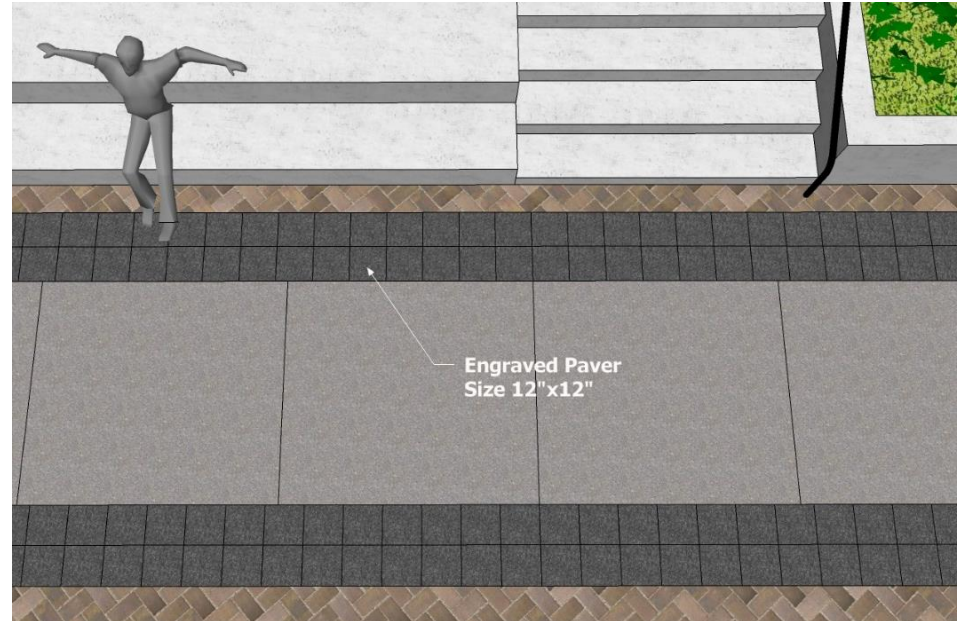
+ Low Impact Development

- Soil cells along Albert Street to maximize tree growth
- Permeable pavers above soil cells to reduce surface runoff and increase water available to trees
- Central area of square in permeable pavers – creates test area for sustainable treatment



+ Fundraising opportunities

- Engraved pavers
- Bike racks
- Benches with plaques



+ Site Furniture

- + Benches – match existing
- + Waste Receptacles
 - 3 compartments
- + Planters
 - Similar to existing square planters in front of Victoria Hall to delineate traffic
 - Round planters similar to those at Rotary Waterfront Park



+ Site Furniture

+ Bike Racks

- Post and ring, 'Town of Cobourg'
- Multi Bike Rack
- Custom design options



Cobourg Market Square - Market Building



Cobourg Market Square - Market Building



Cobourg Market Square – Looking East, North of Market Building



Cobourg Market Square - Market Mode



Cobourg Market Square - Market Mode



Cobourg Market Square - Market Mode

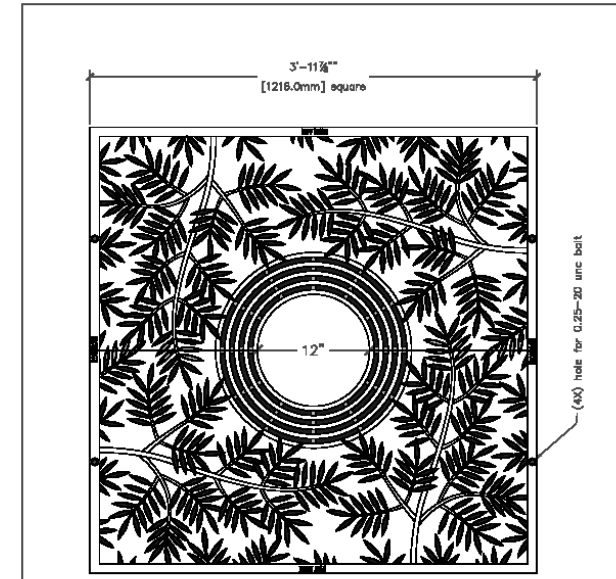


Cobourg Market Square - Market Mode



+ Tree Planting

- Keep existing trees along Second Street until construction of future development
- Future planting of trees in soil cells along Second Street
- Tree grate to match trench drain pattern
- Proposed tree species: Ginkgo, London Planetree, and Honeylocust

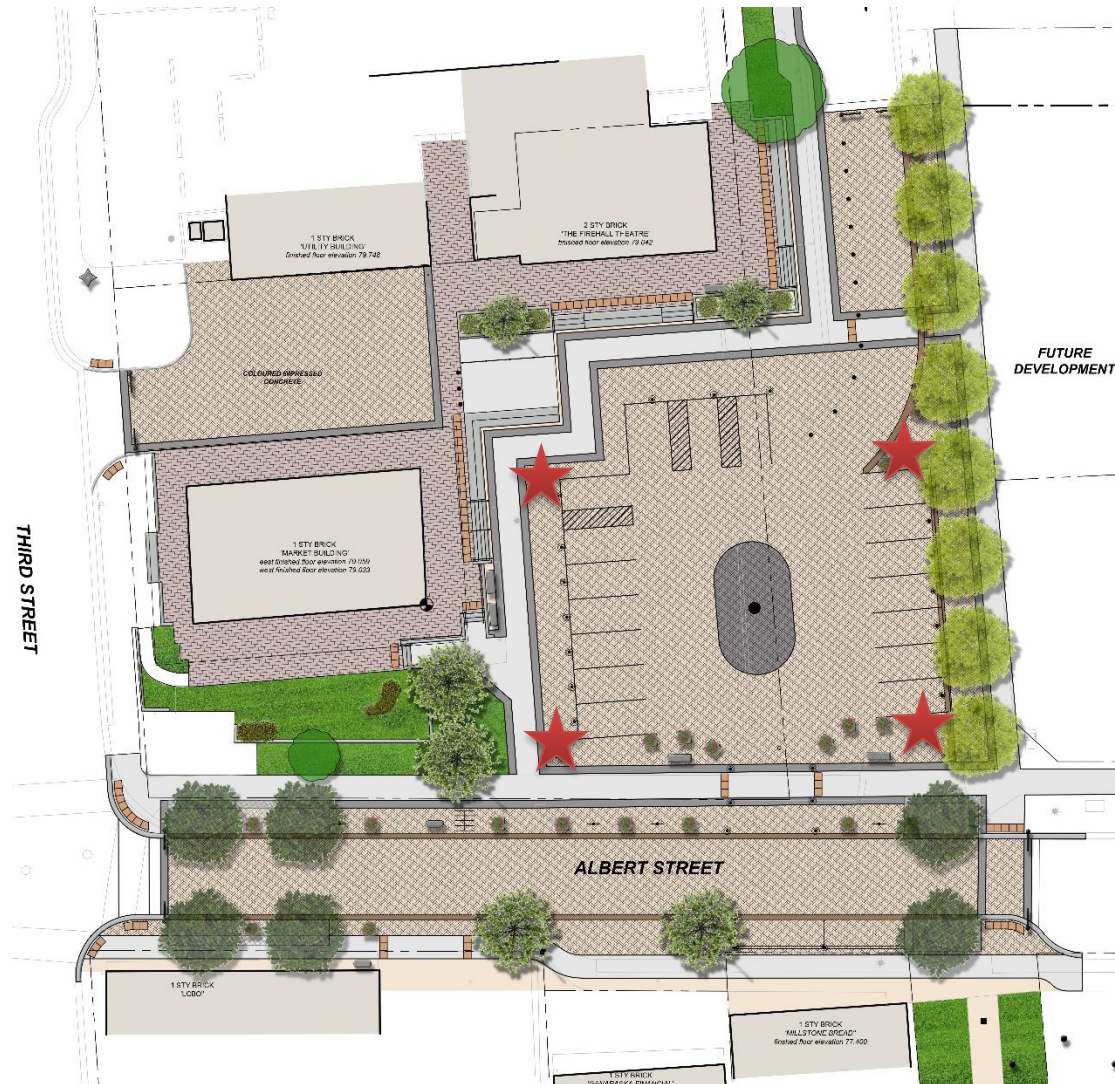


+ Public Art

- Located at corners of square
- Footing and lighting requirements to be coordinated



+ Public Art Location



Cobourg Market Square – Event Mode – Firehall East Stage



Cobourg Market Square – Event Mode – Firehall East Stage



+ Lighting

- Traditional post top Coach Lantern on existing 16' pole to match existing street lighting, upgraded to LED fixtures
- Albert Street and Second Street

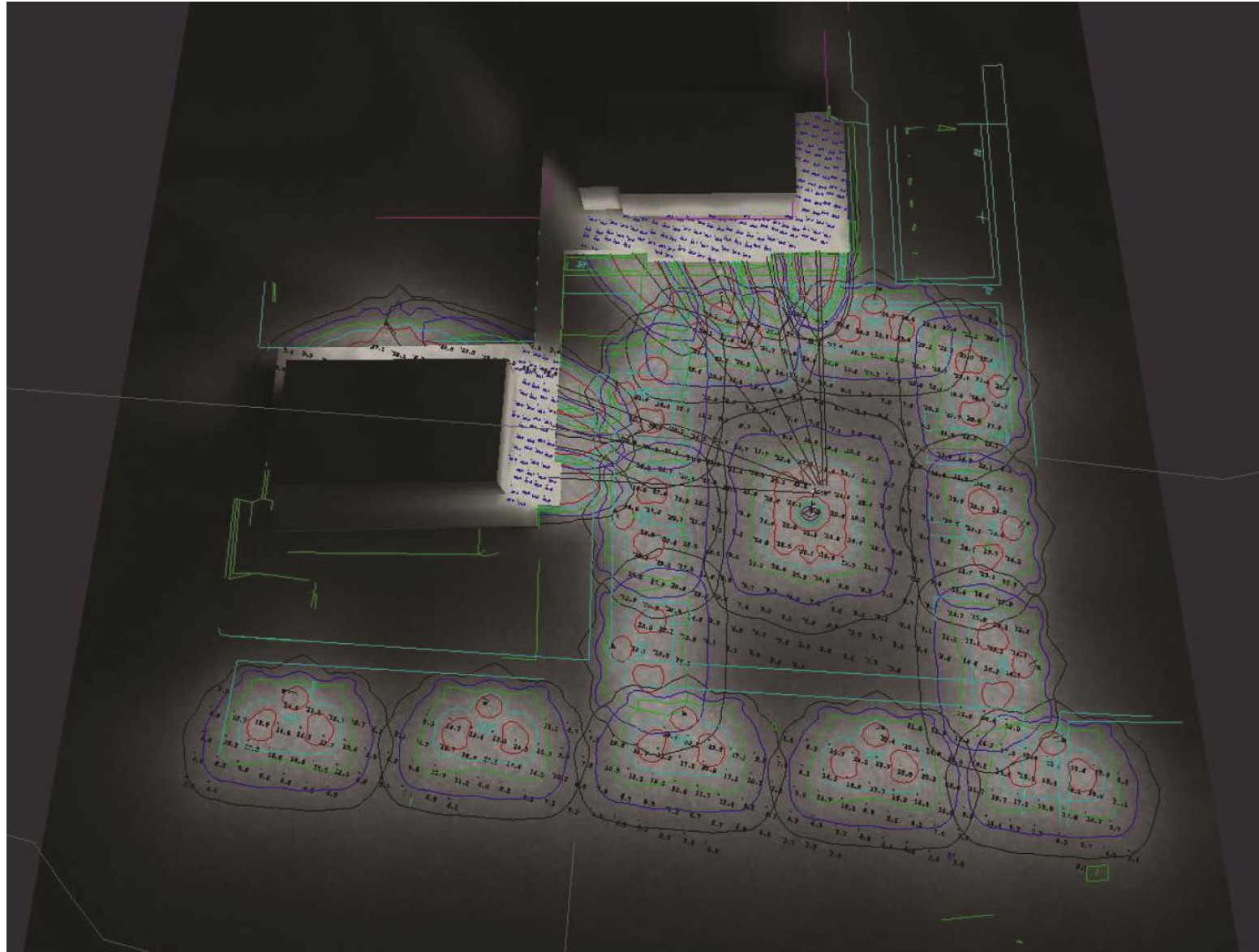


+ Lighting

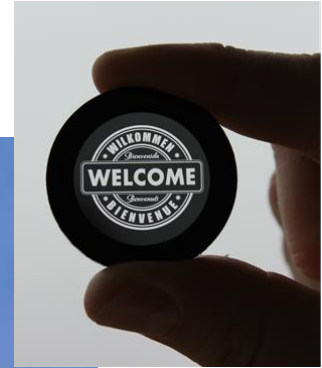
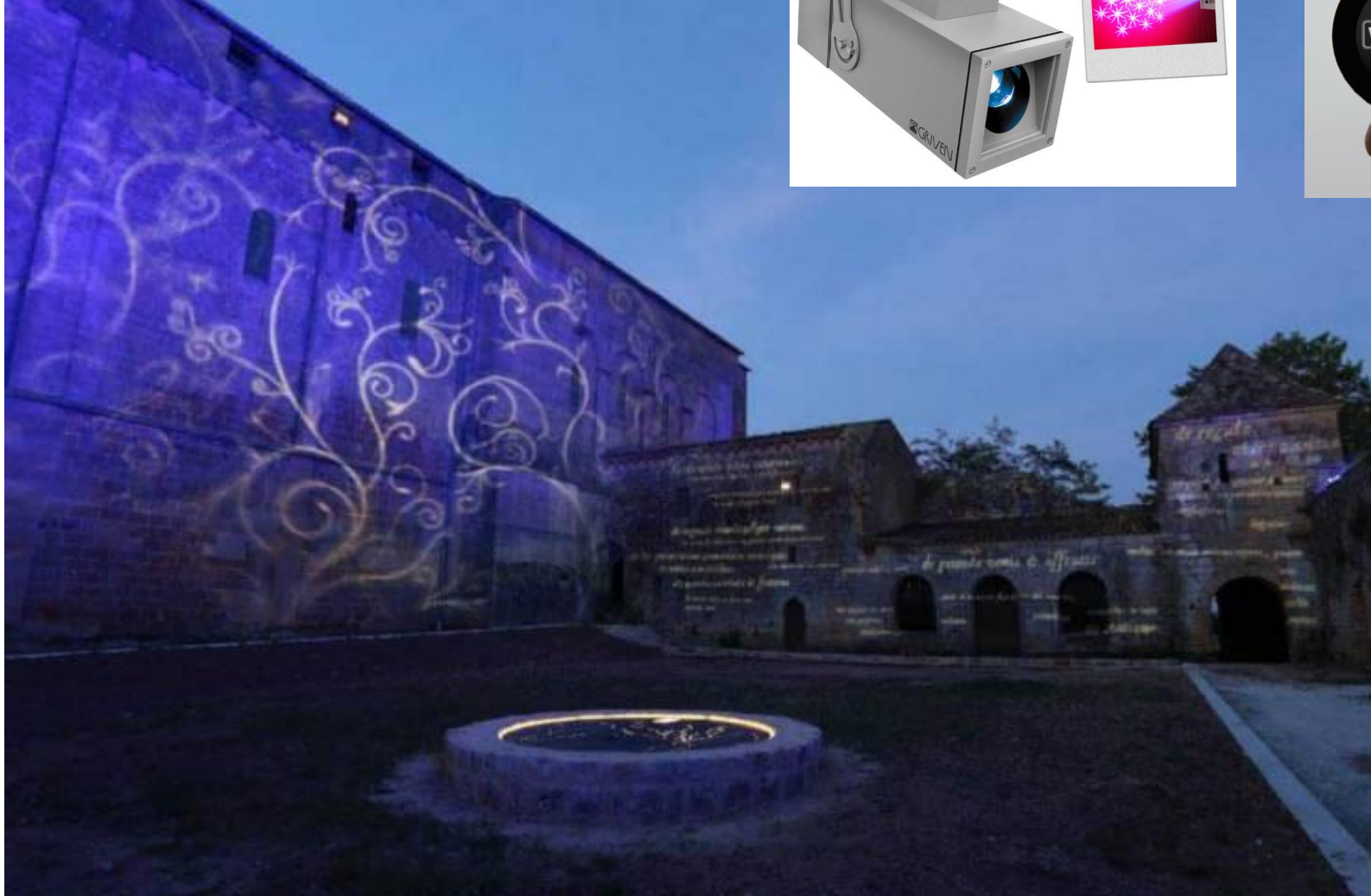
- Central pole feature with cross arms to support fixtures
- Accent / stage lighting poles near corners of square
- Light directed to front of stage areas
- GOBO Floodlight Fixture to produce static image or provide a moving/animated image
- Fixed floodlight with dynamic colour changing & white LED



Cobourg Market Square – Lighting Intensity



+ Lighting



Cobourg Market Square - Lighting – Central Pole



+ Business Mode



+ Market Mode



+ Event Mode



+ Event Mode



Cobourg Market Square - Budget

Preliminary Cost Summary

Item	Unit	Quantity	Unit Cost	Total
Mobilization	LS	1	\$ 1,000	\$ 1,000
Bonds, Insurance and Maintenance	LS	1	\$ 7,500	\$ 7,500
Maintenance of Pedestrian and Vehicular Traffic	LS	1	\$ 2,500	\$ 2,500
Earth Excavation	LS	1	\$ 50,000	\$ 50,000
Hard Surface				
Concrete Sidewalk	m2	630	\$ 120	\$ 75,600
Unit Pavers on Gravel base incl. Drivegrid (back of curb to building façade) installed	m2	2050	\$ 120	\$ 246,000
Permeable Unit Pavers on Gravel base, installed	m2	100	\$ 140	\$ 14,000
Engraved pavers to be salvaged and relocated	m2	145	\$ 100	\$ 14,500
Tactile Plates (Intersections + top of walls)	each	110	\$ 500	\$ 55,000
Trench Drains	linear m	200	\$ 450	\$ 90,000
Retaining Walls	face m	225	\$ 400	\$ 90,000
Concrete Ramps	m2	60	\$ 120	\$ 7,200
Impressed coloured concrete (North of Market Building)	m2	250	\$ 160	\$ 40,000
Trees				
Soil Cells along Albert Street				
West Side Tree Pit	each	4	\$ 6,000	\$ 24,000
East side Tree Pit	each	2	\$ 7,500	\$ 15,000
Soil Cells East of Second Street (NIC)	each	7	\$ 5,800	\$ 40,600
Tree grates	each	13	\$ 1,700	\$ 22,100
Trees in Planters & Sod	each	4	\$ 500	\$ 2,000
Street Furnitures				
Benches with Centre Arm (Trystan FLSS)	each	10	\$ 1,500	\$ 15,000
Trash Receptacles (Maglin MRC253-ST)	each	3	\$ 2,500	\$ 7,500
Bollards				
Type 1 - Victoria Bollard	each	10	\$ 900	\$ 9,000
Type 2 - Victoria Bollard P-Gate Option (Traffic Control)	each	8	\$ 1,500	\$ 12,000
Type 3 - Flexible Polyurethane Bollard (Ontario Bollards FRB100)	each	14	\$ 650	\$ 9,100
Type 4 - Fixed Steel Bollard Flexible Polyurethane Bollard (Ontario Bollards FRB100)	each	22	\$ 750	\$ 16,500
Railings	linear m	30	\$ 500	\$ 15,000
Bike Racks				
Type 1 - Post & Ring (Maglin MBR200-DB-L)	each	4	\$ 500	\$ 2,000
Type 2 - Multi Bike Rack (Maglin 5 bikes MBR-5-DB)	each	1	\$ 750	\$ 750
Type 3 - Custom Bike Rack (Maglin)	each	3	\$ 1,000	\$ 3,000
E-bike Charging Stations	LS	1	\$ 5,000	\$ 5,000
Planters	each	16	\$ 500	\$ 8,000
Lighting				
Fixtures + Control units + Central Pole Structure	LS	1	\$ 150,000	\$ 150,000
Upgrade Power Supply	LS	1	\$ 25,000	\$ 25,000
Electrical outlets	LS	1	\$ 25,000	\$ 25,000
Miscellaneous				
Infrastructure Changes such as adjust MH's + CB's	LS	1	\$ 25,000	\$ 25,000
Replacement of sanitary sewer service	linear m	60	\$ 300	\$ 18,000
Subtotal				\$ 1,142,850
10% Contingency				\$ 114,285
Total				\$ 1,257,135
<i>Public Art Installation (Stephen Cruise 4 Columns)</i>				\$ 140,000
<i>Design, Tender, Construction Administration, Site Inspections</i>				\$ 100,000
<i>Anticipated Total Construction Budget of 1.375 Million (Including Public Art Installation)</i>				
Total				\$ 1,497,135

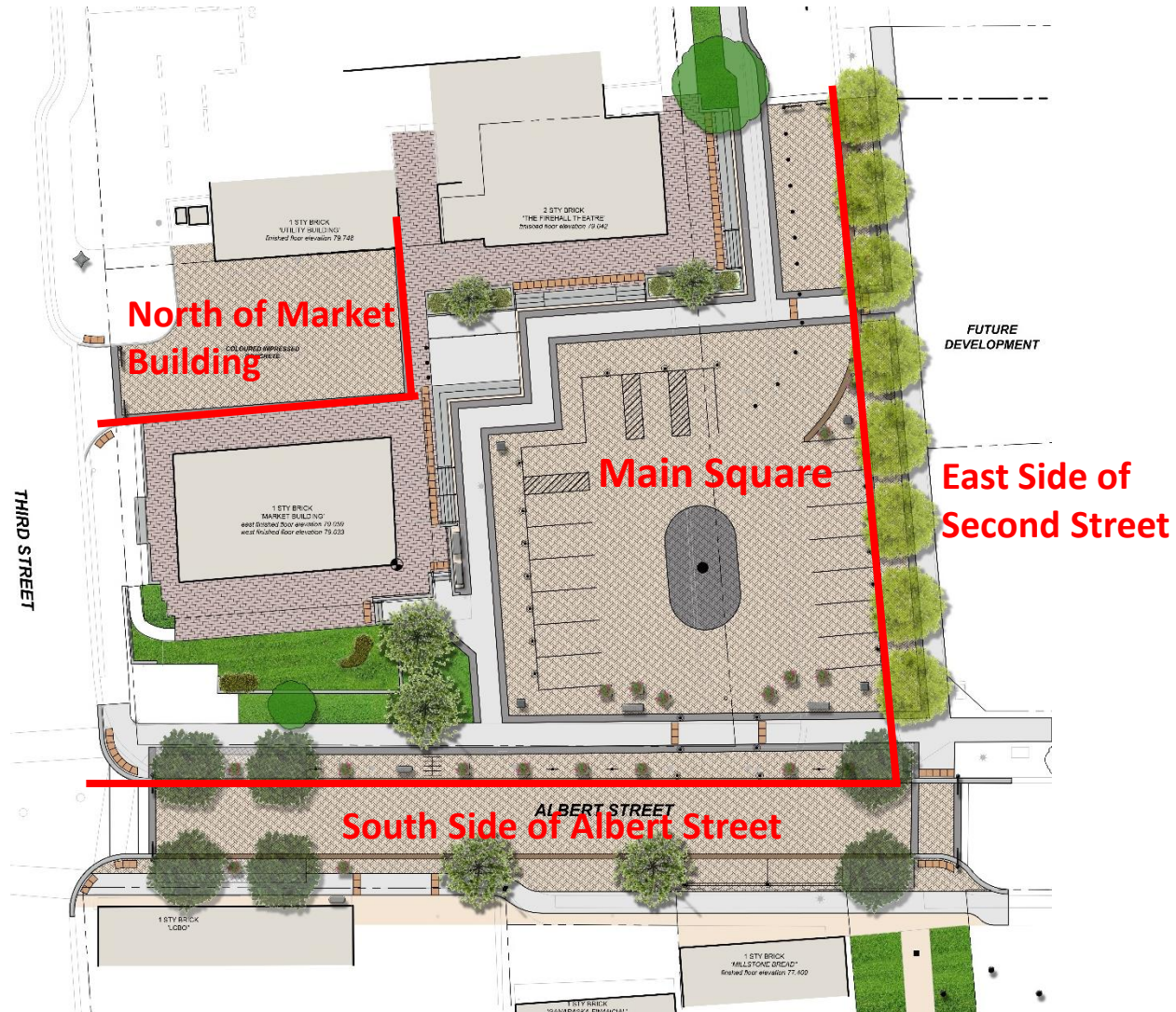
+ Potential Phasing – Approximate Cost Breakdown

North of Market Building
\$ 65,000

East Side of Second Street
\$ 175,000

South Side of Albert Street
\$ 250,000

Main Square
\$ 1,200,000



Questions?