



Gabriel Mackinnon

**CAMBRIDGE MILL**  
LIGHTING DESIGN CONCEPT



**PROJECT OVERVIEW**  
*PROPOSED LIGHTING SCOPE*

The Cambridge Mill is a historic mill property located on the Grand River in the town of Galt Ontario. The complex has new life as a riverside restaurant and event venue.

Cambridge Mill, the property owner and part of Pearle Hospitality, are proud to be part of the Cambridge community and intend to illuminate some areas of the falls, bridge and riverwalk.

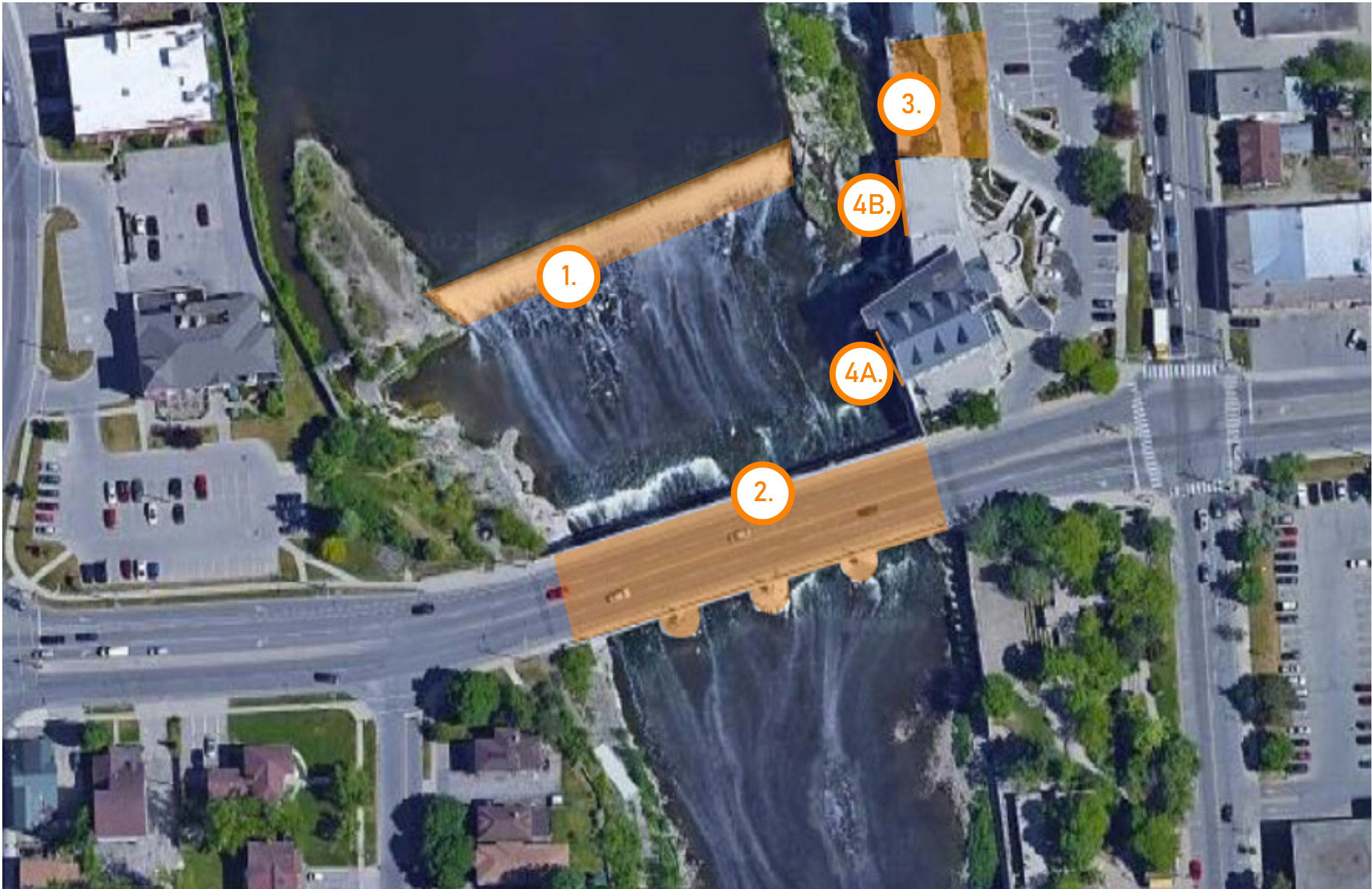
A lighting concept encompassing the falls (1), bridge (2), immediate landscape (3) and mill facades (4) is presented to support a grant application process.

*LIGHTING DESIGN PRINCIPLES*

The lighting design concept represents an efficient and minimal application of light to reveal highlights of the view while allowing naturalized areas to remain dark. Durable specification grade fixtures are proposed, mounted in areas where they will be out of reach of high water.

Lighting would be white most of the time with colours programmed for holidays and at special request.

Simple lighting controls will turn lights on at sunset and switch fixtures off overnight for ecological reasons.





## **LIGHTING CONCEPT**

WARM WHITE LIGHT

**CAMBRIDGE MILL**  
LIGHTING DESIGN CONCEPT



Three elements of lighting design are demonstrated:

- Falls illumination
- Highlights on the mill and restaurant facades
- Riverside landscape and path illumination



**LUMINAIRE SELECTION**  
*RENDER DEMONSTRATING CANADA DAY COLOURS*

**CAMBRIDGE MILL**  
*LIGHTING DESIGN CONCEPT*

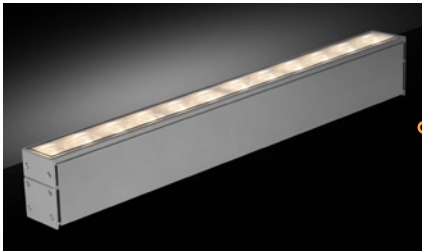
Lighting for the falls is provided by three elliptical beam linear floodlights, mounted below underside of bridge. This allows colour mixing for holidays and events.

The mill facade is illuminated with 4 linear facade grazers, mounted to mortar joints to preserve heritage stonework.

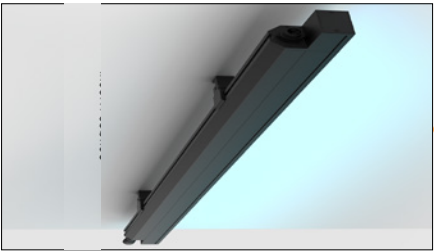
River facing restaurant columns receive compact floodlights, connecting the nocturnal landscape of the mill to the riverside landscape and falls.



COMPACT LINEAR  
UPLIGHTS AT COLUMNS  
Colour matched to facade



FACADE MOUNTED GRAZE  
LIGHTING  
Colour matched to facade



ELLIPTICAL BEAM  
FLOODLIGHTS  
Mounted under edge of bridge  
to illuminate falls









**LUMINAIRE SELECTION**  
*RENDER DEMONSTRATING CANADA DAY COLOURS*

**CAMBRIDGE MILL**  
*LIGHTING DESIGN CONCEPT*

Lighting for the falls is provided by three elliptical beam linear floodlights, mounted below underside of bridge. This allows colour mixing for holidays and events.

The underside of the bridge receives a glow from 6 fixtures, illuminating each side of the pier with an elliptical beam.

The riverside landscape receives a simple pattern of glow from step lights recessed into the wood guardrail posts, and soft light in the landscape and on sculptural elements helps provide vertical brightness and a sense of safety.



RECESSED STEP  
LIGHTS IN POSTS

Soft Glow for paths



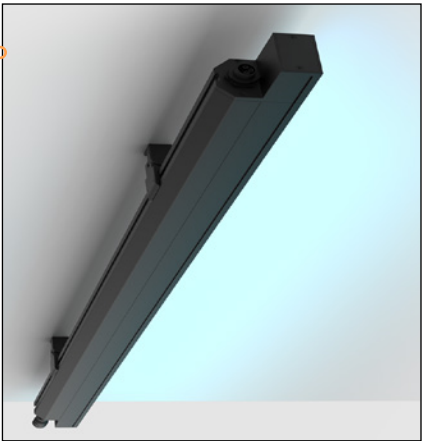
COMPACT  
GROUND MOUNT  
FLOODLIGHTS

For art & landscape



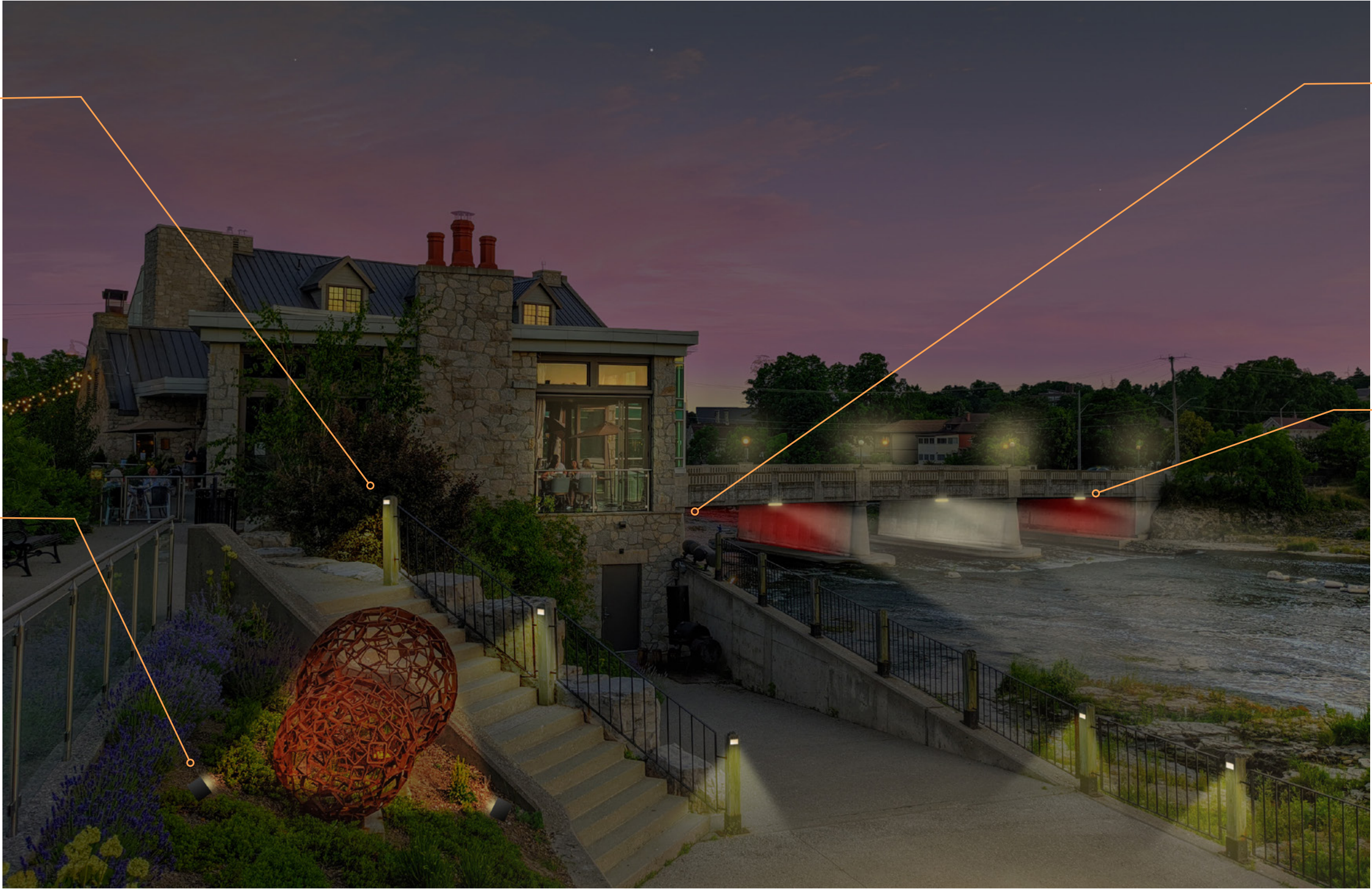
ELLIPTICAL BEAM  
FLOODLIGHTS

Illuminate bridge piers

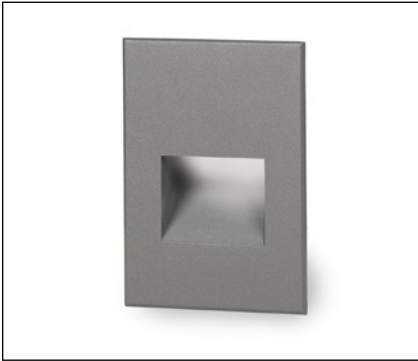


ELLIPTICAL BEAM  
FLOODLIGHTS

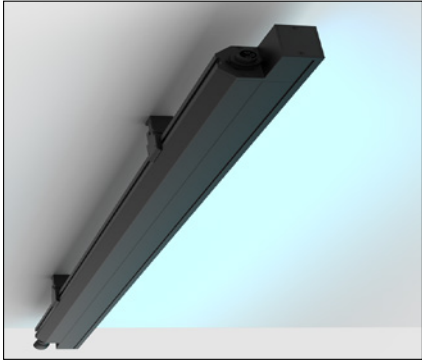
Mounted under edge of  
bridge to illuminate falls







TYPE A  
RECESSED STEP LIGHTS  
IN POSTS  
Soft Glow for paths



TYPE C  
ELLIPTICAL BEAM  
FLOODLIGHTS - LINEAR  
Mounted under edge of  
bridge to illuminate falls



TYPE B  
COMPACT GROUND  
MOUNT FLOODLIGHTS  
For art & landscape



TYPE D  
ELLIPTICAL BEAM  
FLOODLIGHTS  
Illuminate bridge piers



TYPE E  
FACADE MOUNTED GRAZE  
LIGHTING  
Colour matched to facade



TYPE F  
COMPACT LINEAR  
UPLIGHTS AT COLUMNS  
Colour matched to facade



PROJECT BUDGET

Budgets represent Class D level estimates for planning purposes only. Costs do not include any travel expenses or applicable HST. Installation costs to be confirmed by local trades.

EQUIPMENT COSTS					
TYPE	LOCATION	EXAMPLE FIXTURE	QTY	BUDGET	TOTAL
A	Optional Step lights in posts	WAC LEDme	12	\$300	\$3,600
B	Optional Landscape Floodlights	WAC 5011	8	\$350	\$2,800
C	Linear floodlights for falls - Colour	Lumenpulse Lumenfacade	3	\$3500	\$10,500
D		Lumenpulse Lumenbeam 4'	6	\$1200	\$7,200
E	Optional Grazers for Mill - White	Lumenpulse Lumenfacade 4'	4	\$3,500	\$14,000
F	Column Luminaires - White	Lumenpulse Lumenfacade 1'	4	\$900	\$3,600
	Lighting Control System and enclosure	Pharos LPC+TPC	1	\$10,000	\$10,000
				SUBTOTAL	\$51,700



Includes optional \$20,400 for Mill Face and Trail Lighting

SOFT COSTS & LABOUR		
LINE ITEM	SCOPE	BUDGET
Lighting Designer Consulting Fees	Provision of specifications, lighting layouts, installation details, Participation in construction admin	\$6,750
Electrical installation	Provision of power supply to fixture locations, procurement and installation of fixtures, commissioning of dynamic coloured lighting systems. (Based on electrical fixture cost X 1.5 as rough order of magnitude estimate only)	\$50,000-\$77,550
	SUBTOTAL	\$56,750-\$84,300

TOTAL PROJECT BUDGET

Estimated equipment, soft costs and labour total \$88,050 plus additional \$47,950 for optional Mill face and trail lighting add ons (as reflected in renderings)