

YONGE STREET AND GARDEN AVENUE GATEWAY LIGHTING FEATURE: FINAL CONCEPT DESIGN

RICHMOND HILL, ON

OCTOBER, 2025



TABLE OF CONTENTS

Executive Summary	<u>3</u>
1. Introduction	<u>7</u>
2. Location	<u>8</u>
3. Vision And Guiding Principles	<u>9</u>
4. Gateway As A Civic Identity	<u>10</u>
5. Design Process	<u>12</u>
6. Design Evolution	<u>13</u>
6.1. Phase 1 (2012-2021)	<u>13</u>
6.2. Phase 2 (2012-2021)	<u>15</u>
7. Final Concept design	<u>20</u>
7.1. Refinement of the Preferred Concept Design	<u>20</u>
7.2. Public Feedback and TAT Review to Shape the Design	<u>20</u>
7.3. Design Inspiration	<u>23</u>
7.4. Gateway Design Details	<u>25</u>
7.4.1. Weathered Steel Panel	<u>25</u>
7.4.2. Rose Motif	<u>26</u>
7.4.3. Aluminum Graphical Panel	<u>26</u>
7.4.4. Stone-Clad Concrete Base	<u>27</u>
7.4.5. Lighting and Night Sky Protection	<u>27</u>
7.4.6. Flexible Graphics and Adaptive Messaging	<u>29</u>
7.5. Elevations	<u>30</u>
7.6. Eye-level Renderings	<u>31</u>
8. Materiality: Pros, Cons, And Suitability Of Finishes	<u>38</u>
9. High-level Cost Estimates And Contingencies	<u>39</u>
Appendices	<u>40</u>

EXECUTIVE SUMMARY

The Yonge Street and Garden Avenue Gateway Lighting Feature (the “Yonge and Garden Gateway project”) is envisioned as Richmond Hill’s southern landmark: a civic threshold that combines symbolism, durability, and innovation. Located in the median at Yonge Street and Garden Avenue, where Garden links directly to Highway 7, the feature establishes a strong public realm presence while reinforcing the Richmond Hill Centre Secondary Plan.

Vision and Identity

The gateway embodies civic pride, inclusivity, and sophistication. It references the City’s rose heritage, Oak Ridges Moraine geology, and multicultural growth, serving as a “front door” that marks arrival for thousands of commuters daily. As both a physical marker and symbolic expression, it celebrates Richmond Hill’s natural and cultural heritage while projecting confidence in its future. The benefits of a Gateway feature include creating and promoting a sense of arrival, direction, pride, public art installation, and economic development.

Design Process

Public surveys in 2022 and 2024, along with Technical Advisory Team input, shaped refinements and confirmed community preference for abstraction and elegance over literal symbolism. The final design balances the celebration of natural and cultural heritage with other key considerations such as constructability, long-term maintenance, and costs.

Key Attributes

The composition features angled sculptural fins with a strong visual identity, creating a distinctive rhythm and repetition that is dynamic by day and night. Its vertical reach enhances visibility for drivers and pedestrians, while integrated LED lighting enables programmable sequences for civic events, holidays, and cultural celebrations. The bent form adds expressive character, symbolizing growth and reinforcing place identity.

Materials and Finishes

Durable weathering steel (A588) provides warm rose-toned patina with low maintenance, while optional stone cladding recalls the layered geology of the Moraine. Elevated bases protect against salt and snow, ensuring resilience and longevity.

Community Role

Two public survey questionnaires were held to garner feedback and comments, which were addressed and incorporated within the final conceptual design of the gateway feature

Cost Considerations

The design emphasizes durability and low maintenance, ensuring long-term value while managing upfront construction costs.



EXECUTIVE SUMMARY



Rose Motif

- Cut-outs Inspired by Richmond Hill Flag
- Reflects local identity and pride
- Emphasizes symbolism and community connection

Weathered Steel Panel

- Bent at varying angles
- Creates a playful yet elegant visual
- Eye-catching sculptural form
- Inspired by motto: "En la rose je fleuris"

Aluminum Graphical Panel with Concealed LED and Visor

- Single-panel graphic display
- Low maintenance and easy to clean
- UV- and weather-resistant
- Supports any graphic application
- Durable aluminum construction
- Integrated top channel with concealed LED
- Downward-facing visor controls glare and light spill
- Provides targeted, ambient illumination
- Compliant with the City's Light Pollution By-law

Stone-Clad Concrete Column

Stone veneer depicts geological striations, symbolizing Richmond Hill's geological history. Durable – Resists loads and moments.

EXECUTIVE SUMMARY

KEY ATTRIBUTES

- **Strong visual identity:**

The angled and sculptural form has a memorable presence that strongly acts as a gateway feature or landmark.

- **Distinctive rhythm and repetition:**

The consistent spacing and angled gestures contribute to a strong streetscape rhythm—visually dynamic in both day and night scenes.

- **Enhanced visibility from vehicles:**

The vertical reach and size make it easily visible from a distance, especially from a driver's perspective, improving wayfinding.

- **Opportunities for lighting integration:**

The verticality and structural depth provide clear zones for linear or spotlight lighting, as seen in night renderings.

- **Expressive architectural gesture:**

The bent form allows for a more expressive aesthetic, potentially symbolising movement or growth—great for placemaking.



1. INTRODUCTION

The Yonge Street and Garden Avenue Gateway is envisioned as a civic landmark marking Richmond Hill's southern entrance and welcoming visitors to the City. Located at the intersection of Yonge Street and Garden Avenue, the first intersection north of Highway 7 and the 407 overpass, the site is a critical point of arrival, passed daily by thousands of vehicles. More than a visual marker, the gateway reflects Richmond Hill's identity, values, and aspirations. The initiative reflects the aspirations for Richmond Hill Centre and supports the six development principles of the Richmond Hill Centre Secondary Plan, which calls for vibrant, people-oriented public spaces that reinforce civic pride and design excellence.

In 2013, Richmond Hill's Council approved the principle of a gateway in the form of six (6) vertical lighting elements. Since then, two public consultations, technical reviews, and staff direction, including work in 2021-2022 and refinements in 2024–2025, have shaped the design. STUDIO tla, as lead consultant, guided the process, balancing community feedback, feasibility, and artistic ambition. The final design draws inspiration from the Oak Ridges Moraine, layered geological forms, and Richmond Hill's multicultural identity. It emphasizes durability, low maintenance, and a forward-looking vision of innovation and sophistication. As a symbolic "front door" to the city, the gateway is both functional and iconic: a civic landmark that creates a memorable sense of arrival and reinforces Richmond Hill's shared identity.



2. LOCATION

The intersection of Yonge Street and Garden Avenue is identified in the Official Plan as a major gateway and has strategic visibility and symbolic importance. Yonge Street is the region's spine, an important transportation corridor and the backbone of Richmond Hill's City Structure.

This location serves as the southern entry into Richmond Hill, a point where residents and visitors immediately perceive a legible entrance into the city. As the location is within Richmond Hill Centre, it ensures the gateway is not an isolated feature but a functioning landmark with maximum exposure, welcoming residents and visitors and asserting a strong civic presence at a regional scale while also reflecting shared values, history, and aspirations.



Eye-level view from Yonge Street at Garden Avenue intersection, looking south toward the green median — future gateway site.



Aerial view from Yonge-Garden intersection, looking south toward the site.



Aerial view from Yonge, looking north toward the site.

3. VISION AND GUIDING PRINCIPLES

Vision Statement:

Establish a strong civic presence at a key southern entrance to Richmond Hill. The gateway will signal arrival, create a memorable threshold, and welcome residents and visitors into an inclusive, dynamic, and people-oriented environment, while reinforcing Richmond Hill's distinct, local identity.

Guiding Principles:

The gateway feature will represent sections 10.1.2 and 10.1.3 of the Richmond Hill Secondary Plan, contributing to:

- A dynamic and vibrant urban environment;
- A safe, accessible, desirable, and inclusive place for people of all ages and abilities; and,
- A distinctive and beautiful place characterized by a welcoming public realm, great streets, and high-quality design.

4. GATEWAY AS A CIVIC IDENTITY

A gateway is more than a marker: it is a piece of civic infrastructure and a symbolic expression of place. Unlike conventional entry signage, which is primarily informational and often transient, gateways establish identity through their presence. Particularly, through form, scale, materiality, light, and how they occupy space. They signal arrival, evoke civic pride, and project aspiration without spelling everything out.

For Richmond Hill, the gateway is envisioned as an illuminated, sculptural composition visible both day and night. Rather than depicting symbols directly, the design employs abstraction to evoke layered meaning, representing the natural and cultural heritage of the City. This level of abstraction invites each observer—resident or visitor—to bring their own interpretation, helping build a shared sense of ownership and pride. In essence, a gateway provides both orientation and inspiration. It signals arrival while expressing Richmond Hill's evolving story.

The benefits of a Gateway feature include creating/promoting:

- a sense of arrival;
- a sense of direction;
- a sense of pride;
- public art installation; and,
- economic development.

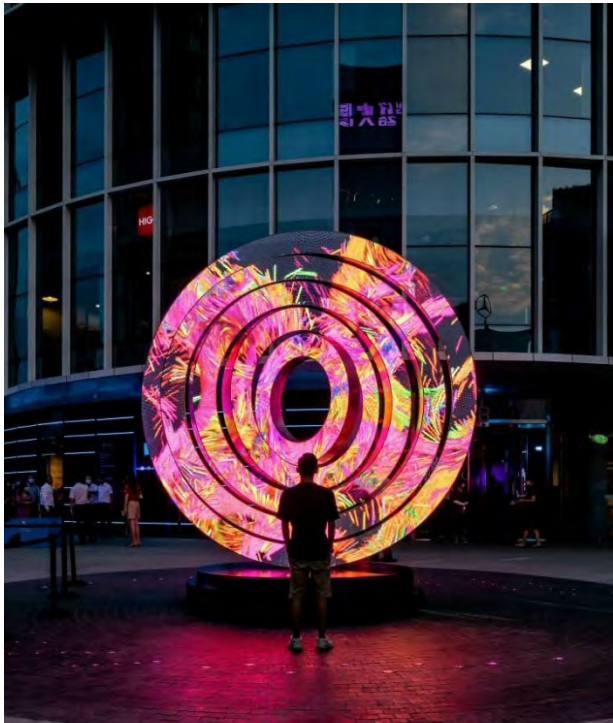


Old Strathcona Gateway Alberta



Barrie welcome sign on the northbound Highway 400

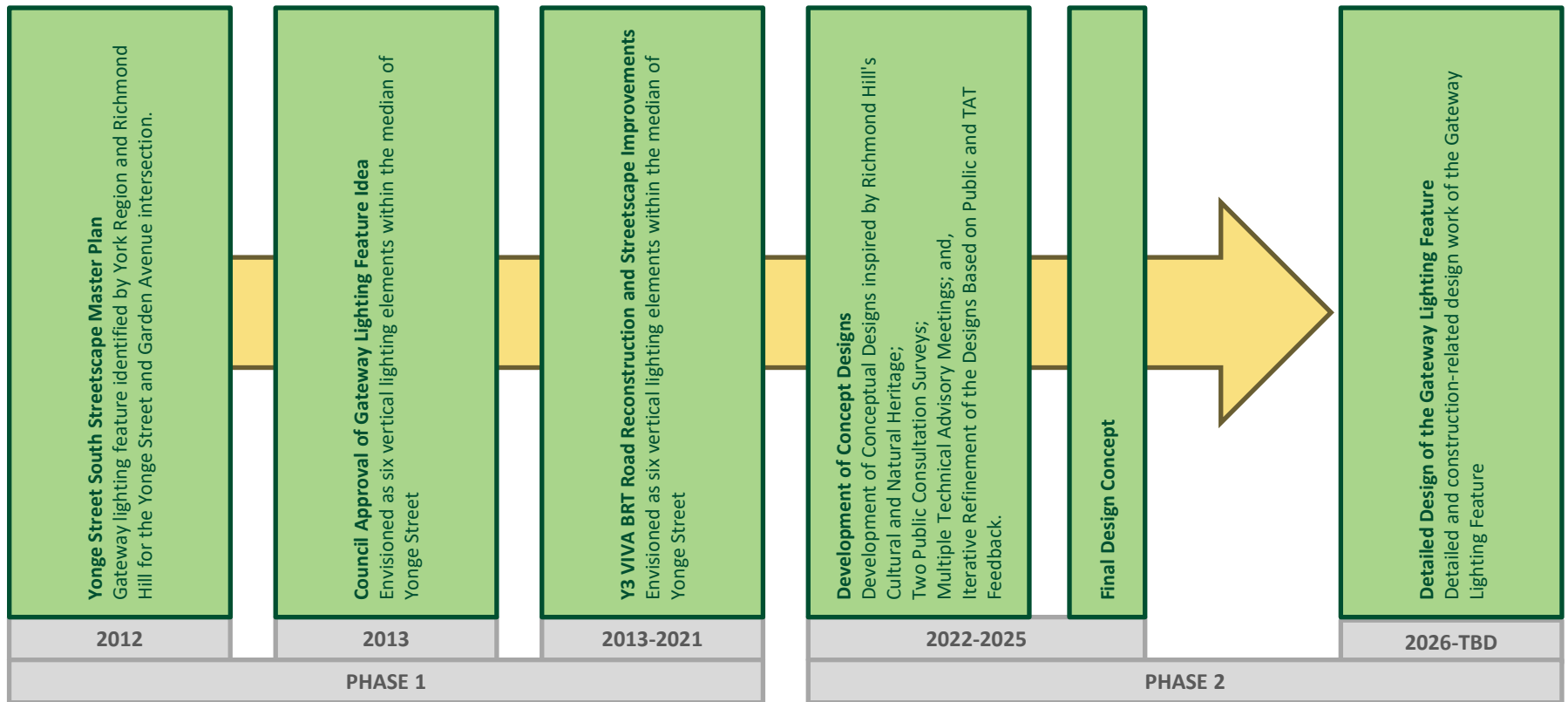
REFERENCE IMAGES – GATEWAY AND ENTRY FEATURES



5. DESIGN PROCESS

The concepts were advanced through iterative refinement, with public engagement central to the process.

Two public surveys in 2022 and 2024 shaped the gateway feature design. The 2024 survey questionnaire presented three design concepts and sought feedback to identify a preferred option. Public consultation along with technical direction provided by an internal Technical Advisory Team (TAT), comprised of staff with expertise in various and relevant subject matters, helped to shape the overall form and final design. The final gateway design was not imposed, but emerged collaboratively, guided by the vision and principles of the Richmond Hill Secondary Plan, informed by public voices, and shaped by technical expertise. It reflects Richmond Hill's identity in a form that is contemporary, resilient, and distinctly its own.



6. DESIGN EVOLUTION

6.1 PHASE 1 (2012-2021)

In 2010, York Region undertook the Yonge Street South Streetscape Master Plan in anticipation of a future Subway extension, with input from three municipalities, including Richmond Hill, Markham, and Vaughan, to guide streetscape design along Yonge Street between Steeles Avenue and Major Mackenzie Drive. The median located at the intersection of Yonge Street and Garden Avenue was identified as a viable site for a gateway entry feature for both the City of Richmond Hill and the Region. The streetscape master plan was approved by the Region in 2012, and a conceptual design concept was prepared. Through this process, the gateway feature was envisioned as six vertical lighting elements within the median.

In 2013, Council endorsed in principle, an entry feature be located at the Yonge Street and Garden Avenue intersection, which was in keeping with the vision from the Yonge Street South Streetscape Master Plan and was in the form of six vertical lighting elements, approximately 8 to 10 metres in height located within the median. As part of Phase 1 of the project, the Y2 VivaNext BRT road reconstruction, electrical conduits were added to the median in anticipation of Phase 2, which includes the future design and installation of the vertical lighting feature. The median, and associated streetscape improvements were completed in 2021.

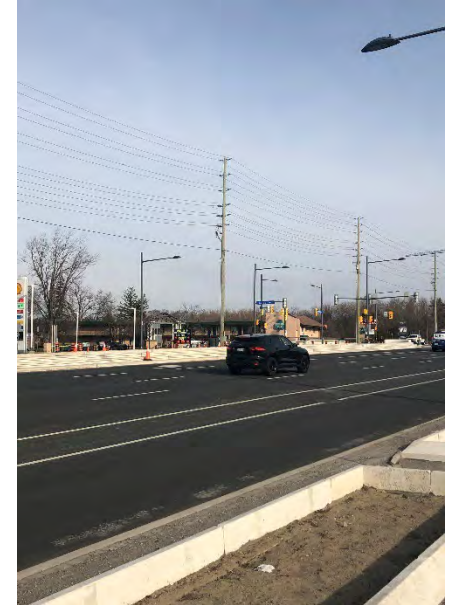


Early Concept Renderings - 2012



MEDIAN AND ASSOCIATED STREETScape IMPROVEMENTS, COMPLETED IN 2021

6.1 PHASE 1 (2012-2021)



6. DESIGN EVOLUTION

6.2 Phase 2 (2022- Present)

Phase 2 of the project includes the conceptual design, detailed design and construction of the Yonge and Garden Gateway Lighting Feature project.

The first portion of Phase 2 of the project included the conceptual design of the vertical multi-unit lighting feature at the median.

In July 2022, City staff published an online survey to solicit design input from the public on how this Gateway feature could represent Richmond Hill and reflect the broader community's aspirations. Over 390 residents participated, and the feedback indicated a vision for a sophisticated design that strikes a balance between history and the future of the City, through an abstract representation. The community also expressed a strong desire for the feature to embody the values of being "fair and responsible" and "trusting and wholesome."

Three design concepts were prepared by STUDIO tla and offered different interpretations of Richmond Hill's identity, each celebrating the City's history in a unique way, to achieve the public's preference for a modern, sophisticated, and visually engaging gateway feature. The design inspiration includes Richmond Hill's cultural and natural heritage.

In the early 20th century, several large greenhouse operations were built in Richmond Hill, while rose growing turned the City into the "rose capital" of Canada. In the 1920's, village council adopted the motto of the Duke of Richmond, for whom the City may have been named. A local artist and carriage painter, William Ashford Wright, created a City crest that included elements of the Duke of Richmond's coat of arms and roses. Other prominent features of the City's history include the hedgerows, which marked the boundary between farmsteads, agricultural lands, and concession lines, as well as the Church Spires that dominated the skyline of the Village of Richmond Hill along Yonge Street.

The City's natural heritage is equally as diverse. Richmond Hill sits atop the Oak Ridges Moraine; a significant geological formation created over 13,000 years ago during the last ice age. This moraine is a crucial natural feature, with its rolling hills, forests, kettle lakes, and wetlands that provide habitat for diverse plant and animal species. It also plays a vital role in the region's water cycle, storing groundwater that feeds into several major river systems.

6. DESIGN EVOLUTION

6.2 Phase 2 (2022- Present)

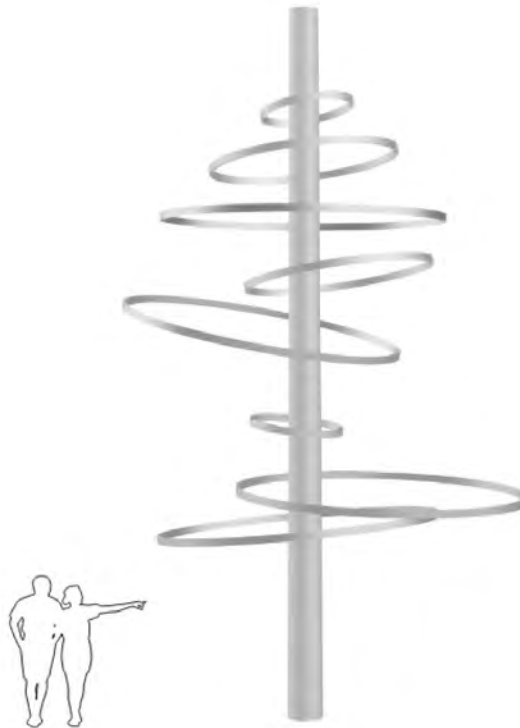
Preliminary Design Option 1

Honors Richmond Hill's unique geology and its historic rose industry. Six columns made of locally sourced layered stone represent the kettle lakes of the Oak Ridges Moraine. One side of each column features metal panels with a rose design, symbolizing the town's connection to its rose-growing past.



Preliminary Design Option 2

Inspired by Richmond Hill's farming history and the hedgerows that once separated early farms. The design includes six columns, each about 10 meters tall, wrapped in spiraling metal light rings of different sizes and heights to reflect the natural vegetation.



Preliminary Design Option 3

Highlights the geological importance of the Oak Ridges Moraine. Like Option 1, it features six columns covered in layers of locally sourced stratified stone to represent the Moraine's natural layers.



6. DESIGN EVOLUTION

6.2 Phase 2 (2022- Present)

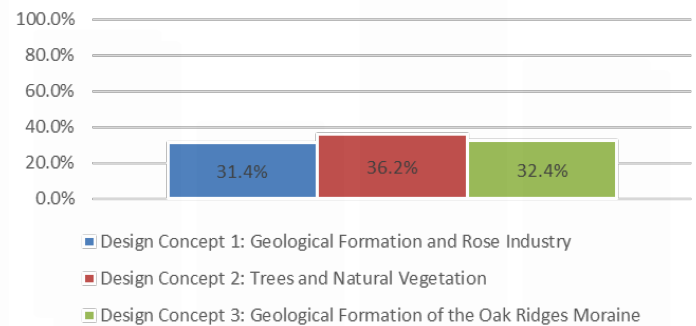
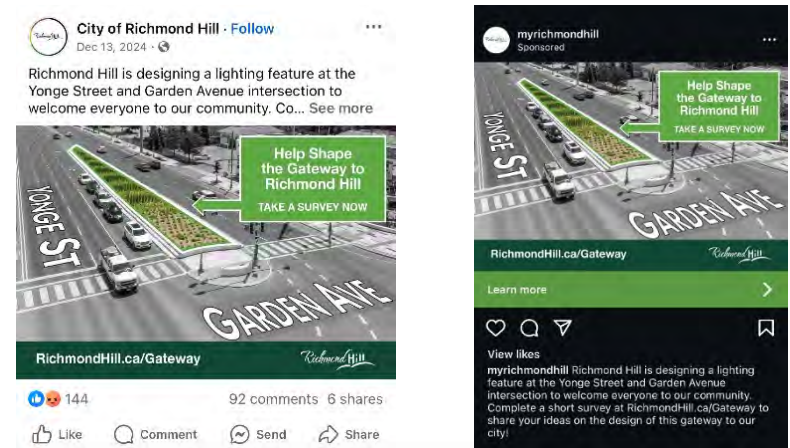
In 2024, a second public survey was posted from November until January 2025 and received over 520 responses. The aim of the public consultation was to assess the public's preferences on the aesthetic quality and design interpretation of the three design concepts. Respondents were asked to reflect on five qualitative statements and rank the three design concepts based on whether they agreed, disagreed, or were neutral.

Additionally, one question was asked following the qualitative statements to gauge which design concept was most preferred, preferred, and not preferred. Respondents also had an opportunity to provide additional feedback or comments through a long answer response at the end of the survey.

Of the three (3) design concepts, Design Concept 2 emerged as the preferred option, receiving the highest percentage of “Strongly Agree” and “Agree” responses across the qualitative statements. Although, when aggregating data across all qualitative statements to arrive at a total score as a percentage of weighted points, Design Concept 2 was only slightly more preferred than Design Concept 1 or Design Concept 3.

City Project Website:	Social Media Posts:	Posters & Display Boards:	Public Service Announcement:	Online Survey:
1,171 page views	1,135 engagements	10+ locations	181 unique views	524 responses

Communication Outreach: Various outreach activities to invite residents to respond to the public survey



Design Concept Preference

Public Survey Results, 2024 — Comparison of Design Concepts (Weighted Scores)

6. DESIGN EVOLUTION

6.2 Phase 2 (2022- Present)

The Technical Advisory Team comprised of various business groups was convened to review and provide input on the three design concepts. The TAT members provided a range of feedback and comments with respect to the Richmond Hill Centre Secondary Plan policies, construction, materiality and finishes, illumination, as well as maintenance considerations. The following criteria and key indicators were used in assessing the design concepts:

Construction Feasibility: Considerations related to fabrication of components and constructability. The most preferred design concept should be simple to fabricate, use materials and finishes that are durable as well as standardized components.

Maintenance Requirements: Considerations related to ongoing upkeep. The most preferred design concept should minimize need for maintenance and use readily available components.

Estimated Costs: Considerations related to preliminary costing for each design concept, including the materials, fabrication, and illumination. The most preferred concept should deliver value for money and provide an efficient design that reduces maintenance expenses.

Based on the feedback received from the TAT members, Design Concept 1 emerged as most preferred. This design concept was considered to be the simplest to fabricate and construct, requiring the least maintenance, and offered value for money.

Design Concept 3 was preferred, it's form would facilitate construction, however, more complex elements such as integrated light rings would result in high maintenance requirements.




Design Concept 2 was least preferred due to fabrication and construction challenges identified, as well as high maintenance requirements, but it was identified to have the lower construction costs of the three options.

6. DESIGN EVOLUTION

6.2 Phase 2 (2022- Present)

A comparative analysis was conducted to integrate the public survey findings with the internal TAT members' technical and cost estimate assessments.

Although the public survey favoured Design Concept 2, technical evaluation and cost analysis strongly favoured Design Concept 1. Based on this, Design Concept 1 emerged as the most balanced conceptual design to carry forward for further refinement.

Criteria	Design Concept 1	Design Concept 2	Design Concept 3
			
Aesthetic Design	Least preferred	Most preferred	Preferred
Construction	Most preferred	Least preferred	Preferred
Maintenance	Most preferred	Least preferred	Least preferred
Cost Estimates	Preferred	Most preferred	Least preferred
Overall	Most preferred	Least preferred	Preferred

Overall Evaluation of Design Concepts (Public Survey + TAT Feedback)

7. FINAL CONCEPT DESIGN

7.1 Refinement of the Preferred Concept Design

The refinement of the Yonge Street and Garden Avenue Gateway design represents a synthesis of extensive public engagement, technical evaluation, and a deliberate blending of the strongest aspects of the three earlier concept options.

The final concept is not a single representative of one idea but a carefully balanced hybrid that embodies the community’s aspirations, addresses the public comments, and incorporates the Technical Advisory Team’s (TAT) expertise.

7.2 Public Feedback and TAT Review to shape the Design

Public engagement in 2022 and 2024 played a defining role in shaping the design direction. The first survey established clear thematic guidance: residents preferred an abstract and sophisticated expression over literal symbolism—something that reflected the identified values of being ‘fair and responsible’, and ‘trusting and wholesome’, while striking a balance between the history and future of the City.

The 2024 survey directly sought the public’s design preferences and feedback based on the three design concepts presented and identified a preferred option. The project team carefully reviewed the comments gathered and thematically grouped and analyzed the feedback that was provided for all design concepts.

Category	Key Themes
Design Comments	Aesthetic qualities, literal vs abstract representation, symbolism, preferences, and other design-related feedback.
Technical Comments	Construction feasibility, maintenance concerns, light pollution, traffic safety, vandalism.
Costing Budget	Design Concept costs, calls for alternative spending priorities.
Other Comments	General comments, project opposition, non-constructive feedback, no connection to project scope of work.

7. FINAL CONCEPT DESIGN

Key design considerations that emerged from the public consultation include:

- Improving the legibility of the rose symbolism within the design concept for passing vehicles;
- Emphasising the geological significance of the Oak Ridges Moraine as a defining element;
- Including opportunities for additional text-based signage to welcome and display messages and celebrate City and community events; and,
- Enhancing the material selection to ensure the design concepts remain prominent and appealing well into the future.

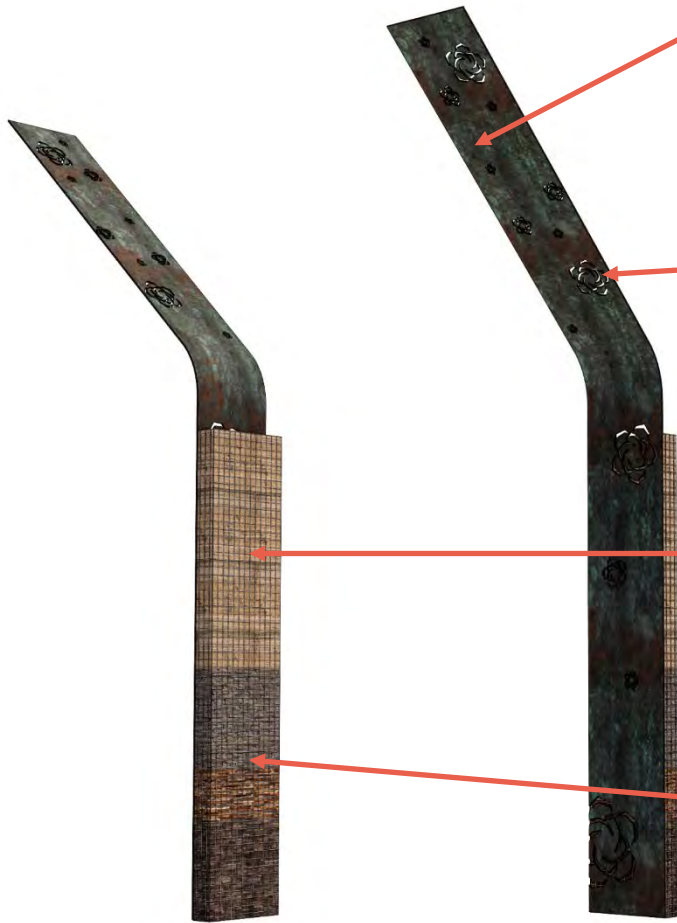
Over three TAT meetings and circulation of design materials, members provided feedback and comments with respect to the Richmond Hill Centre Secondary Plan policies, construction, materiality and finishes, illumination, as well as maintenance considerations.

Key design considerations that emerged from the TAT review include:

- Improving the structural integrity of the gateway feature to support the weight of the metal panels;
- Designing lighting elements using different luminaires, visors, and aiming angles to comply with the City's Light Pollution By-law;
- Ensuring ease of maintenance and readily available components;
- Considering alternative materials to copper panels, extend the lifespan of the gateway feature; and,
- Coordinating future construction of the gateway with future infrastructure improvements to support future growth in the Richmond Hill Centre.

This feedback guided the design team to reengage with the design inspiration, simplify assemblies, refine proportions, and prioritize material efficiency while maintaining artistic intent—ensuring that the gateway's expressive quality aligns with real-world construction and maintenance needs.

7. FINAL CONCEPT DESIGN



Copper Panel

Elegant forms bent at varying angles representing the future

Copper not recommended due to high cost, theft risk, denting, staining from runoff, and unpredictable patina.

Rose Motif

Represents the history of Richmond Hill being the rose capital of Canada

The rose motif is small and difficult to notice—especially for drivers—and does not clearly reflect the traditional pattern found on the City crest.

Potential signage opportunities and lighting design

Gabion Wall

Represents the geological heritage of Richmond Hill

The Gibbon Wall cannot support the weight of the metal panel, even with substantial reinforcement; a stone-clad concrete column is recommended as a structurally reliable alternative.

7. FINAL CONCEPT DESIGN

7.3 Design Inspiration

The final gateway design is the culmination of multiple conceptual threads, unified into a single civic expression that draws deeply from Richmond Hill's cultural and natural heritage. It celebrates the City's unique identity while projecting a confident, contemporary vision of its future.

The design maintains its inspiration from the early rose industry in Richmond Hill. To address comments collected through the public survey, the rose motif has been modified to improve legibility at different scales. Further inspiration has been drawn from the rose motif featured on Richmond Hill's flag and crest—a symbol of growth, beauty, and resilience that reflects the City's history as the Rose Capital of Canada. The gateway translates this symbol into sculptural form through elegant, upward-reaching gestures that evoke the same optimism embodied in the City's motto, "Like the rose, I flourish."

Equally central is the geological inspiration derived from the Oak Ridges Moraine. The design abstracts the Moraine's layered formations, subtle shifts, and natural rhythms through vertical fins and stratified geometry. These gestures connect the gateway to the land itself, grounding the civic landmark in the region's deep geological history and distinctive terrain.



Richmond Hill Flag & Crest: Rose Legacy in Civic Identity



Historic Village Emblem: Richmond Hill's Identity and Motto



Oak Ridges Moraine: Geological Strata in Warm Colours

7. FINAL CONCEPT DESIGN

An important consideration was the desire expressed from residents to include opportunities for text-based signage within the gateway feature. While the original gateway concept contemplated by the South Yonge Street Streetscape Master Plan was a sculptural vertical lighting element within the median, the comments received from the 2024 public consultation indicated that the gateway feature should include clear ‘welcome’ signage to greet residents and visitors to Richmond Hill. Examples of entry signage as well as other creative forms were reviewed and drawn upon as inspiration.

Lastly, due to cost increases for materials as a result of international tariffs and broad supply chain disruptions, a concerted effort was made to consider only locally sourced materials, fabricators, and Canadian made components in the conceptual design. While subject to further change through detailed design, the design preference to consider only, local and Canadian suppliers and manufacturers will be carried through to the detailed design and the ultimate construction of the gateway feature.

The global and domestic supply chain disruptions have led to notable increases in both lead times and unit costs for structural steel, specialty lighting, and custom-fabricated components across Canada. Pricing volatility, shipping delays, and limited availability of certain materials remain common, particularly for imported goods. As such, all conceptual cost assumptions should be considered provisional and subject to adjustment during detailed design and procurement as market conditions evolve.

Together, these influences form a hybrid expression— addressing public and technical feedback, melding cultural symbolism with geological structure to create a landmark that is rooted in Richmond Hill’s unique identity, and oriented toward the future. The result is a piece of civic infrastructure that combines cultural and natural heritage in a single, coherent design that expresses community identity.

7. FINAL CONCEPT DESIGN

7.4 Gateway Design Details

The Yonge Street and Garden Avenue Gateway Lighting Feature is envisioned as a sculptural landmark and programmable lighting installation marking the city's southern entrance. Its composition of six slender fins creates a rhythmic sequence of forms that merge civic symbolism with durable, low-maintenance construction. Each component — from the weathered steel fins to the programmable lighting and stone-clad bases — contributes to a unified expression of identity, innovation, and permanence.

7.4.1. Weathered Steel Panel

Fabricated from A588 weathering steel, the fins are bent at varying angles to form a dynamic sculptural rhythm visible from multiple approaches. Their warm oxidized finish evokes the rose's natural hue, connecting the piece to Richmond Hill's historic identity as the Rose Capital of Canada. The steel will be Canadian made and sourced through local supply chains.

Symbolism: Represents growth, resilience, and the City's forward momentum — “En la rose je fleuris.”

Technical Role: Provides structural integrity and visual height; the angled geometry facilitates fabrication, shipping, and modular assembly.

Performance: Durable, corrosion-resistant, and maintenance-light, eliminating the need for coatings or repainting.

Weathered Steel Panel

- Bent at varying angles
- Creates a playful yet elegant visual
- Eye-catching sculptural form



Edge-Stiffened Plate

Edge-stiffening weld enhances rigidity and minimises deflection.

7. FINAL CONCEPT DESIGN

7.4.2. Rose Motif

The laser-cut rose emblem is directly derived from Richmond Hill's crest and flag, enlarged and re-stylized to create a recognizable civic icon.

Symbolism: Embodies local heritage, pride, and community connection.

Integration: Incorporated into the steel fin at eye-catching intervals, allowing light to pass through at night and creating a glowing symbol visible from afar.

Fabrication Detail: Precision-cut openings minimize heat distortion, and the edge-stiffened plate design preserves a clean planar surface.

7.4.3. Aluminum Graphical Panel with Concealed LED and Visor

Mounted on the face of each pylon, this aluminum display panel provides a durable, low-maintenance surface for graphics or messaging.

Lighting Integration: Concealed top-mounted LED channel with a downward-facing visor ensures full shielding and compliance with the City's Light Pollution By-law.

Performance: UV-resistant, weatherproof, and easy to clean; aluminum construction resists deformation and corrosion.

Flexibility: Accommodates interchangeable digitally printed banners for civic events or multilingual greetings.

Technical Height: Elevated approximately 1.5 m above grade to protect against salt spray, snow accumulation, and mechanical wear.

Rose Motif

- Cut-outs Inspired by Richmond Hill Flag
- Reflects local identity and pride
- Emphasizes symbolism and community connection



Aluminum Graphical Panel with Concealed LED and Visor

7. FINAL CONCEPT DESIGN

7.4.4. Stone-Clad Concrete Base

The **reinforced concrete column** anchors the fin and panel assembly, providing stability and resistance to wind and impact. A stone veneer finish references the Oak Ridges Moraine’s geological strata — a defining landscape feature of the region.

Symbolism: Reflects the city’s geological legacy and connection to its natural setting.

Performance: Resistant to freeze–thaw cycles and de-icing salts, ensuring longevity and minimal maintenance.

7.4.5. Lighting and Night Sky Protection

Lighting transforms the gateway from day landmark to night-time beacon.

Uplighting: Concealed luminaires within the column wash the weathered steel fin, emphasizing form and texture while shielding upward light.

Downlighting: Integrated LEDs illuminate the graphical panel, maintaining legibility and reducing glare.

Compliance: Fully shielded system minimizes light trespass and sky glow, adhering to Richmond Hill’s Light Pollution By-law.

Programming: Color-changing capability enables dynamic lighting sequences for civic events, holidays, or cultural celebrations.

Lighting and Night Sky Protection

- Durable single-panel aluminum graphic
- Low maintenance and easy to clean
- UV- and weather-resistant
- Supports any graphic application
- Integrated top channel with concealed LED
- Downward-facing visor controls glare and light spill



Stone-Clad Concrete Column

Stone veneer depicts geological striations, symbolizing Richmond Hill’s geological history.

7. FINAL CONCEPT DESIGN

Lighting Strategy: Programmable Lighting Strategy for Civic Events



7. FINAL CONCEPT DESIGN

7.4.6. Flexible Graphics and Adaptive Messaging

Reflecting upon the public feedback that expressed a desire for ‘welcome’ or text-based signage, flexible metal panels were incorporated on the reverse of the individual vertical lighting elements.

The graphical panels support modular, replaceable graphics that can evolve over time — allowing the gateway to adapt to city branding, cultural events, or environmental themes.

Options: Patterns, color gradients, or thematic illustrations that celebrate community diversity and natural heritage.

Function: Ensures the installation remains contemporary and contextually relevant without physical modification to the structure.

Each component of the gateway — the weathered steel fins, rose motif, stone-clad base, illuminated graphic panel, and programmable lighting system — works together to create a civic landmark that balances symbolism and practicality. It stands as both a testament to Richmond Hill’s cultural roots and a marker of its modern identity, providing a memorable and enduring threshold for the city.

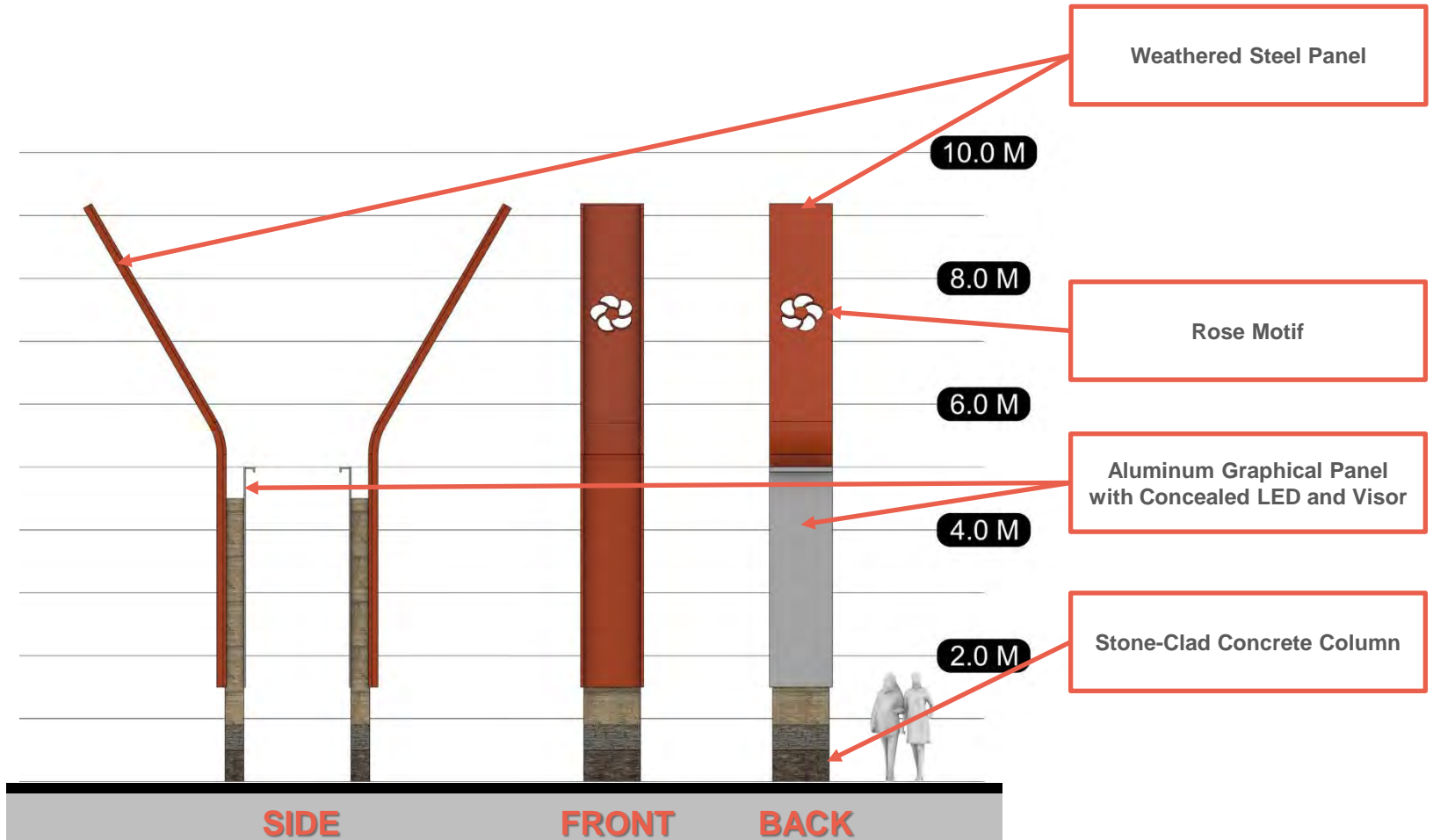
Flexible Graphics and Adaptive Messaging

- Supports any colors, patterns, or text
- May include multilingual greetings or decorative motifs reinforcing the cultural and natural heritage theme



7. FINAL CONCEPT DESIGN

7.5. Elevations



7.6. EYE-LEVEL RENDERINGS

Yonge and Garden Intersection Looking Southwest



7.6. EYE-LEVEL RENDERINGS

Yonge and Garden Intersection Looking Southwest – Night View



7.6. EYE-LEVEL RENDERINGS

Yonge and Garden Intersection Looking Southeast



7.6. EYE-LEVEL RENDERINGS

Yonge and Garden Intersection Looking Southeast – Night View



7.6. EYE-LEVEL RENDERINGS

Yonge St Northbound Looking North



7.6. EYE-LEVEL RENDERINGS

Yonge St Southbound Looking South



AERIAL VIEW RENDERING



8. MATERIALITY

Pros, Cons, and Suitability of Finishes

For further details on design materiality, refer to appendix 1.

	Weathered Steel (A588)	Powder-Coated Low Carbon Steel	Stainless Steel (Bead Blasted)	Aluminum	Copper
Pros	<ul style="list-style-type: none"> • Most cost-effective option • Patina develops in 3 natural stages (initial, intermediate, mature) • Self-healing from vandalism (e.g., paint) • Low maintenance after patina matures • Evokes permanence and resilience • Matte finish reduces glare • Warm, earthy aesthetic • Blends well with landscape • Durable in harsh environments • No need for protective coatings or paints • Becomes stronger over time through surface oxidation • Non-toxic runoff once patina is stabilized 	<ul style="list-style-type: none"> • Highly customizable colours and finishes • Strong visual impact and smooth, clean appearance • Easy to coordinate with lighting • Repaintable over time • Resistant to corrosion when coating is intact • Available in matte, satin, and gloss finishes 	<ul style="list-style-type: none"> • Premium look with civic character • Immediate visual clarity • Perceived as rich and high-end • Durable under ideal conditions • Resistant to corrosion in most environments • Maintains visual appearance over long duration in clean conditions 	<ul style="list-style-type: none"> • Lightweight compared to steel • Corrosion-resistant without coating • Easy to fabricate and shape • Recyclable and sustainable • Clean, modern finish • Naturally forms a protective oxide layer • Excellent for intricate or detailed fabrication 	<ul style="list-style-type: none"> • Visually rich and distinctive appearance • Develops a natural patina over time • Historically associated with civic and artistic value • Corrosion-resistant in many environments
Cons	<ul style="list-style-type: none"> • Initial rust runoff may stain nearby surfaces • Uneven patina development depending on exposure • Requires outdoor exposure to weather • Limited colour options • May require off-site pre-weathering • Requires specific environmental conditions to develop patina properly • Not suitable in marine or consistently wet climates (not the case) 	<ul style="list-style-type: none"> • More expensive than weathered steel • Susceptible to chipping and wear • Graffiti often requires repainting • Paint may deteriorate in high-pollution environments • Colours may become dated • Glare possible in bright light • Risk of coating failure if surface is scratched • Maintenance cycle includes full repainting rather than touch-ups 	<ul style="list-style-type: none"> • Most expensive and cost-prohibitive option • Shows smudges, scratches, and fingerprints easily • Glare and solar hotspots create safety issues • Difficult to restore after vandalism • Reflective surface feels sterile • High heat absorption, unsafe to touch • Prone to bending-related rust from backside dents • Bead-blasted surface can be difficult to match if repairs are needed • High embodied energy and carbon footprint 	<ul style="list-style-type: none"> • Softer metal, more prone to denting • Less durable than steel for structural use • More expensive than weathered steel • Lower perceived strength • Can appear too industrial or cold in tone • Poor structural performance in high-load applications • Anodizing or painting needed for colour, which adds cost 	<ul style="list-style-type: none"> • Very high material cost • Susceptible to theft due to high scrap value • Soft and prone to denting • Patina develops unpredictably and may cause staining • Staining from runoff onto nearby surfaces • Difficult to match appearance if repairs are needed
Recommendation	<p>Recommended</p> <ul style="list-style-type: none"> • Most cost-effective • Low maintenance after patina develops • Durable and blends well with natural settings 	<p>Recommended (Second Choice)</p> <ul style="list-style-type: none"> • Customizable appearance • Corrosion-resistant when coated • My chip and rust with time 	<p>Not Recommended</p> <ul style="list-style-type: none"> • Cost-prohibitive • Unsafe glare and hotspots • Difficult to maintain and restore 	<p>Not Recommended</p> <ul style="list-style-type: none"> • Lower structural durability • Requires coating for colour • Soft and highly prone to denting 	<p>Not Recommended</p> <ul style="list-style-type: none"> • Very expensive • High theft risk • Unpredictable patina and staining

Recommended

Less Recommended

Not Recommended

9. HIGH-LEVEL COST ESTIMATES AND CONTINGENCIES

1.0	FINAL DESIGN OPTION	Unit	Estimated Quantity	Unit Price	Total
1.1	Structural Pole With Weathered Steel Panels & Graphic panels	each	6	\$ 105,000.00	\$ 630,000
1.2	Structural Footings	each	6	\$ 60,000.00	\$ 360,000
1.3	Understory Planting Mix of Perennials & Grasses	m ²	350	\$ 80.00	\$ 28,000
1.4	Lighting	Lump	1	\$ 120,000.00	\$ 120,000
1.0 Subtotal					\$ 1,138,000

SUB-TOTAL	\$ 1,138,000
CLASS D CONTINGENCY @35%	\$ 399,000
EXCLUSIONS LISTED BELOW	\$ 250,000
GRAND TOTAL	\$ 1,787,000

*This cost estimate is based on concept design drawings dated June 2025. It is a preliminary projection relying on early-stage assumptions and excludes input from structural, electrical, and lighting consultants, as well as fabricators. Civil servicing, permits, plumbing, irrigation, site preparation, traffic management, and Harmonized Sales Tax are also excluded and will incur additional costs. Material pricing—particularly for steel—may vary significantly due to market uncertainty, including tariffs, supply chain disruptions, and volatility. At the time of preparing this document, civil, structural, electrical, and lighting consultants had not yet been fully engaged, and their future input may identify requirements that affect cost. No QL-A or QL-B utility information or geotechnical report is currently available; findings from these investigations may also alter the cost estimate once completed. As the design develops and technical inputs are incorporated, changes to dimensions, sizing, materials, finishes, and detailing are to be expected, which may affect the overall cost. Given these uncertainties, a variance of -10 to +15% should be anticipated at this stage. A more accurate estimate will be developed during the detailed design stage once input from other design consultants and reports are received, and details are refined. Account for a compounding escalation at 2.5% for each year the project is delayed.

Exclusions

- 1- Civil Servicing
- 2- Site Survey and SUE (QL-A & QL-B)
- 3- Geotechnical Report
- 4- Permits
- 5- Electrical Supply
- 6- Plumbing / Irrigation
- 7- Site Preparation / Demolitions
- 9- Traffic Management
- 10- Compounding Escalation
- 11- Harmonized Sales tax

APPENDICES

APPENDIX 1 MATERIALITY

APPENDIX 1: MATERIALITY

Weathered Steel



Recommended

Weathered Steel

Pros:

- **Most cost-effective option**
- **Warm, natural patina develops** over time, creating a rich, earthy aesthetic that blends well with landscapes.
- **Low maintenance** once patina is fully developed—no need for painting or coating.
- **Symbolic resonance** of resilience and time; often evokes permanence and strength.
- **Matte finish** reduces glare, especially in sunny conditions.
- **Distinctive character**—aged look feels artistic and industrial, ideal for abstract forms.

Cons:

- **Initial staining:** Runoff from the rusting process can stain nearby surfaces (paving, concrete, etc.). However, initial weathering could be done off-site.
- **Requires weather exposure** to develop patina—may be uneven or unpredictable. A fabricator can advise as we progress the design.

APPENDIX 1: MATERIALITY

Powder-Coated Low Carbon Steel



Powered-Coated Low Carbon Steel

Pros:

- **Highly customisable:** Wide range of colours and finishes (matte, gloss, textured) to align with branding, identity, or civic themes.
- **Strong visual impact:** Bold, crisp, and immediate presence
- **Smooth finish:** Safe and approachable
- **Corrosion protection:** If properly primed and coated, paint protects the underlying steel from rust and weathering.
- **Easier to coordinate with lighting:** Colour and finish can be tailored to work with night-time illumination.

Cons:

- **More expensive than weathered steel**
- **Maintenance required:** Susceptible to chipping, scratching, fading, or graffiti—will likely need repainting over time.
- **Visible wear:** Damage or aging is more obvious than with weathered or stainless steel.
- **Paint colour trends can date quickly:** May need updating sooner than natural finishes.
- **Environmental impact:** Paint and coatings may deteriorate faster in high pollution environments.
- **Less “material honesty”:** Conceals the natural look and texture of the steel beneath.

Not Recommended

APPENDIX 1: MATERIALITY

Stainless Steel – Bead Blasted



Stainless Steel – Bead Blasted

Pros:

- **Immediate visual clarity:** No weathering needed to reach final finish.
- **Public perception:** Often seen as more “premium” or civic in nature.

Cons:

- **Most expensive option** – cost prohibitive
- Prone to rust due to bending process
- **Hard to control glair, hot spots** - might be distracting to drivers
- **Visible fingerprints/smudges**—especially in high-touch areas.
- **More prone to vandalism visibility:** Scratches and graffiti are harder to conceal.
- **Can feel colder or more sterile** compared to the warmth of weathered steel.
- **Reflective properties** difficult to simulate how the final finish will interact with lights, sky, and surroundings.
- **Higher initial cost** compared to raw weathered steel.

**Not Recommended
Cost Prohibitive**

APPENDIX 2

MEDIAN SUE INFRASTRUCTURE

APPENDIX 3: MEDIAN SUE INFRASTRUCTURE

1. Limitations and Utility Information Gaps

- We received as-built drawings from the City for the median, adjacent intersection, and streetscape.
- Reviewed built composite utility, civil, and electrical drawings.
- No underground utilities appear within the median, **except for a water main near the north end.**
- The water main is **outside** the proposed entry feature footprint and poses no immediate conflict.
- **Depth of the water main is unknown** — not shown in the as-builts.
- As-built drawings contain **discrepancies** in curb and utility locations and **do not align** with our current backgrounds.
- These limitations are **not critical** at the concept stage but must be addressed before detailed design.

2. Electrical Utilities in the Median

- As-builts indicate embedded junction boxes for future lighting.
- Functionality and completeness of lighting infrastructure are not confirmed.

3. Required Next Steps Prior to Design Development

- Commission a **New Subsurface Utility Engineering survey** — QLB or QLA, based on findings.
- New SUE survey will provide accurate subsurface utility data to support detailed design. This step is essential for coordinated design and to avoid construction-stage conflicts.