FORT YORK PEDESTRIAN AND CYCLE BRIDGE

Alignment #1 Alignment #2 Alignment #3 Alignment #4

<table>
<thead>
<tr>
<th>Environment</th>
<th>Preferred Concept</th>
<th>Least desirable option</th>
<th>Not comparable to any other alternative design concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on Archaeological Resources</td>
<td>The extent of potential archaeological impact is consistent for all 4 alternative design concepts. A Stage 2 Assessment is proposed to be completed.</td>
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</tr>
<tr>
<td>Impact on Natural Environment (Vegetation)</td>
<td>Option 1 and 2 are equal and approximately the greatest impact on vegetation and are the least desirable options.</td>
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<tr>
<td>Impact on Built Heritage Environment</td>
<td>No impact on Built Heritage Resources in the area.</td>
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<tr>
<td>Impact on Cultural Heritage Environment</td>
<td>The Garrison Common is within the Fort York National Historic Site and Heritage Conservation District and is impacted by the bridge touchdown, ramps and connecting trails. The extent of potential impact in the area is, for the most part, generally equal for all 4 alternative design concepts.</td>
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</tr>
</tbody>
</table>

Planning and Land Use:

| Compatibility with Fort York and Garrison Common Open Space Planning Objectives | Provides a direct connection from the southern bridge touchdown to the future Fort York Visitor Information Centre, and offers a visual link to the Garrison Common "parkland". Is generally compatible with the Planning Objectives of the Fort York historic site. | Provides a direct connection from the southern bridge touchdown to the future Fort York Visitor Information Centre, and offers a visual link to the Garrison Common "parkland". Is generally compatible with the Planning Objectives of the Fort York historic site. | Provides a direct connection from the southern bridge touchdown to the future Fort York Visitor Information Centre, and offers a visual link to the Garrison Common "parkland". Is generally compatible with the Planning Objectives of the Fort York historic site. | Provides a direct connection from the southern bridge touchdown to the future Fort York Visitor Information Centre, and offers a visual link to the Garrison Common "parkland". Is generally compatible with the Planning Objectives of the Fort York historic site. |
| Connectivity to Toronto Waterfront | Provides a direct connection to Fort York Boulevard – pedestrians and cyclists could continue across Lakeshore towards the Toronto Waterfront. | Provides a direct connection to Fort York Boulevard – pedestrians and cyclists could continue across Lakeshore towards the Toronto Waterfront. | Provides a direct connection to Fort York Boulevard – pedestrians and cyclists could continue across Lakeshore towards the Toronto Waterfront. | Provides a direct connection to Fort York Boulevard – pedestrians and cyclists could continue across Lakeshore towards the Toronto Waterfront. |
| Connectivity to Stanley Park | Provides for an extension of Stanley Park, creating a continuous parkland link from existing Stanley Park to Fort York. | Provides for an extension of Stanley Park, creating a continuous parkland link from existing Stanley Park to Fort York. | Provides for an extension of Stanley Park, creating a continuous parkland link from existing Stanley Park to Fort York. | Provides for an extension of Stanley Park, creating a continuous parkland link from existing Stanley Park to Fort York. |
| Compatibility with proposed Strachan Avenue railway overpass (MetroLink) | Will accommodate a potential touchdown point in the Ordinance Street Triangle. The potential for a pedestrians connection across Strachan Avenue, to East Liberty Street, should be considered during the design of the Strachan Avenue overpass. | Will accommodate a potential touchdown point in the Ordinance Street Triangle. The potential for a pedestrians connection across Strachan Avenue, to East Liberty Street, should be considered during the design of the Strachan Avenue overpass. | Will accommodate a potential touchdown point in the Ordinance Street Triangle. The potential for a pedestrians connection across Strachan Avenue, to East Liberty Street, should be considered during the design of the Strachan Avenue overpass. | Will accommodate a potential touchdown point in the Ordinance Street Triangle. The potential for a pedestrians connection across Strachan Avenue, to East Liberty Street, should be considered during the design of the Strachan Avenue overpass. |
| Compatibility with future plans for Ordinance Street Triangle lands | City plans for redevelopment of Ordinance lands are unclear at this time. Concept will provide for pedestrian access to these lands to accommodate future linkages to Liberty Village and other sites. | City plans for redevelopment of Ordinance lands are unclear at this time. Concept will provide for pedestrian access to these lands to accommodate future linkages to Liberty Village and other sites. | City plans for redevelopment of Ordinance lands are unclear at this time. Concept will provide for pedestrian access to these lands to accommodate future linkages to Liberty Village and other sites. | City plans for redevelopment of Ordinance lands are unclear at this time. Concept will provide for pedestrian access to these lands to accommodate future linkages to Liberty Village and other sites. |
| Integration with Proposed Pathways at Garrison Common/Fort York | Integrates well with the future east-end pathway north of the Fort to Bathurst Street, as well as links to the Garrison Common via Garrison Avenue. "Landscaped Plaza" nodes are possible. | Integrates well with the future east-end pathway north of the Fort to Bathurst Street, as well as links to the Garrison Common via Garrison Avenue. "Landscaped Plaza" nodes are possible. | Integrates well with the future east-end pathway north of the Fort to Bathurst Street, as well as links to the Garrison Common via Garrison Avenue. "Landscaped Plaza" nodes are possible. | Integrates well with the future east-end pathway north of the Fort to Bathurst Street, as well as links to the Garrison Common via Garrison Avenue. "Landscaped Plaza" nodes are possible. |
| Impact on Garrison Common | Greatest impact on Garrison Common; more or less equivalent to Alternative 2. | Greatest impact on Garrison Common; more or less equivalent to Alternative 2. | Greatest impact on Garrison Common; more or less equivalent to Alternative 2. | Greatest impact on Garrison Common; more or less equivalent to Alternative 2. |
| Property Impacts | No direct impact on private property. North side of bridge is close to corner of Epinal lands. | No direct impact on private property. North side of bridge is close to corner of Epinal lands. | No direct impact on private property. North side of bridge is close to corner of Epinal lands. | No direct impact on private property. North side of bridge is close to corner of Epinal lands. |

Historical Context:

| Harmony with Historic Garrison Creek Alignment | Not sympathetic to the original alignment of Garrison Creek. | Mild curvature of structure provides some "relief" from a straight bridge, but is not sympathetic to the original alignment of Garrison Creek. | Mild curvature of structure provides some "relief" from a straight bridge, but is not sympathetic to the original alignment of Garrison Creek. | Mild curvature of structure provides some "relief" from a straight bridge, but is not sympathetic to the original alignment of Garrison Creek. |
| Proximity of South Touchdown to Fort York Entrance | Alternative 1, 2 and 4 are essentially the same distance away from the Fort York entrance. | Alternative 1, 2 and 4 are essentially the same distance away from the Fort York entrance. | Alternative 1, 2 and 4 are essentially the same distance away from the Fort York entrance. | Alternative 1, 2 and 4 are essentially the same distance away from the Fort York entrance. |
| Proximity of South Touchdown to Garrison Military Cemetery | South bridge abutment is about 130 meters away from the stone wall entrance to the cemetery. | South bridge abutment is about 130 meters away from the stone wall entrance to the cemetery. | South bridge abutment is about 130 meters away from the stone wall entrance to the cemetery. | South bridge abutment is about 130 meters away from the stone wall entrance to the cemetery. |

Viota Options:

- Northerly to Stanley Park and the Niagara Neighbourhood | View to Stanley Park would be ``fronit'' the on site line of the bridge, with supplementary views to the northeast. Views to the northeast are somewhat limited. The truss structure design would harmonize the views from the bridge in all cases. | View to Stanley Park would be ``fronit'' the on site line of the bridge, with supplementary views to the northeast. Views to the northeast are somewhat limited. The truss structure design would harmonize the views from the bridge in all cases. | View to Stanley Park would be ``fronit'' the on site line of the bridge, with supplementary views to the northeast. Views to the northeast are somewhat limited. The truss structure design would harmonize the views from the bridge in all cases. | View to Stanley Park would be ``fronit'' the on site line of the bridge, with supplementary views to the northeast. Views to the northeast are somewhat limited. The truss structure design would harmonize the views from the bridge in all cases. |
FORT YORK PEDESTRIAN AND CYCLE BRIDGE
EVALUATION OF ALTERNATIVE ALIGNMENT DESIGN CONCEPTS

Vista views to the west are excellent, especially with the arch bridge design. Alignment of structure enhances opportunities to view the current and historic land uses.

Views to the Visitor Information Centre and other points of interest are limited, especially with the truss design. Users would typically have to look "thru" the structure due to its alignment.

Southerly to Proposed Visitor Information Centre, Princes' Gates and Toronto Waterfront

Views to the Visitor Information Centre are limited, although there would be modest improvement in the views to the Princes' Gates and the Waterfront. Slight improvement over alternative 1.

Vista views to Fort York and the Toronto Skyline are excellent, with both the truss and arch structure types.

Views to the Visitor Information Centre are limited, especially with the truss design. Users would typically have to look "thru" the structure due to its geometry. The arch bridge design enhances viewing opportunities with this alignment, while the truss design would be severely detrimental.

o Westerly to Liberty Village, Garrison Military Cemetery and Garrison Common

Vista views to the west are excellent, especially with the arch bridge design. Alignment of structure enhances opportunities to view these current and historic land uses.

Views to the Visitor Information Centre and other points of interest are limited, especially with the truss design. Users would typically have to look "thru" the structure due to its alignment.

Vista views to Fort York and the Toronto Skyline are excellent, with both the truss and arch structure types.

Vista views to Fort York and the Toronto Skyline are somewhat reduced, over alternatives 1 and 2, due to the "flat" alignment of the structure. Views to the Toronto Skyline are not affected significantly when compared to alternatives 1 and 2.

Vista views to Fort York and the Toronto Skyline are variable as pedestrians and cyclists cross the bridge, due to its geometry. It enhances the trip by offering continual change to the horizon views, making the trip more interesting for users.

o Easterly to Fort York and Toronto Skyline

Vista views to Fort York and the Toronto Skyline are excellent, with both the truss and arch structure types.

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Vista views to Fort York and the Toronto Skyline are somewhat reduced, over alternatives 1 and 2, due to the "flat" alignment of the structure. Views to the Toronto Skyline are not affected significantly when compared to alternatives 1 and 2.

Architectural and Engineering:

• Bridge Aesthetics

The straight alignment offers the least interesting alternative design, in terms of aesthetics. The arch design greatly enhances the "aesthetic feel" of the bridge, in comparison to the truss design type.

The long, graceful curve of alternative 3 enhances the "aesthetic impression" of the bridge design. It is subjectively better than alternatives 1 and 2. The arch design remains superior in aesthetics to the truss design.

The "S" layout of alternative 4 offers a departure from the typical configuration of pedestrian/cycle bridge design, creating an aesthetically pleasing and innovative design. This design works well with an arch superstructure, while a truss design would detract from it overall architectural objectives of "symmetry and flow".

• Ramp Configuration and Location at Garrison Common (South)

Switchback ramp will intrude significantly into the prime vegetative park area of Garrison Common.

Switchback ramp will intrude significantly into the prime vegetative park area of Garrison Common.

Ramp will not intrude into the prime Garrison Common parkland, but parallels the rail property line in the existing Fort York Nursery area. Least impact of the 4 alternatives.

Bridge touchdown and ramp configuration will be located in the prime Garrison Common parkland, but attempts to "hug" the rail property line will help to mitigate the impacts compared to alternatives 1 and 2.

• Ramp Configuration and Location at Stanley Park Extension (North)

Bridge touchdown and ramp configuration will be "central" to the Stanley Park extension, consuming a large part of the park.

Bridge touchdown and ramp configuration is schematically within the west part of the Stanley Park extension, thereby allowing for more open space use in the east part of the park. Subjectively better than alternatives 1 and 2.

Bridge touchdown and ramp configuration is schematically within the west part of the Stanley Park extension, thereby allowing for more open space use in the east part of the park. Subjectively better than alternatives 1 and 2.

All alternatives are, subjectively, equal in terms of offering accessibility to the Ordnance Lands, if and when the proponent determines that access is desirable.

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All alternatives are subjectively equal in terms of offering accessibility to the Ordnance Lands, if and when the proponent determines that access is desirable.

Constructability

Straightforward construction, although working over rail corridors will require contract special provisions within the performance specifications.

Straightforward construction, although working over rail corridors will require contract special provisions within the performance specifications. The slight curvature in the alignment is not considered a major constructability issue.

Construction may be slightly more challenging in comparison to alternatives 1 and 2, due to the "view angle" of the bridge over the rail corridors, especially the south tracks. Contract special provisions will be required within the performance specifications. The gradual curvature of the alignment is not considered a major constructability issue.

Suitability of Alignment to "Truss" versus "Arch" Structure

Suitable to either the truss or arch structure options.

Suitable to either the truss or arch structure options.

Suitable to either the truss or arch structure options.

The arch design is preferable for this alternative, due to the "S" alignment. The truss option would work, from an engineering perspective, but would be undesirable from an architectural and aesthetics perspective.

• Structure Length

Approximately 220 meters

Approximately 235 meters

Approximately 305 meters

Approximately 232 meters