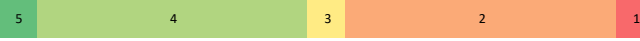


Bridge Evaluation

5-Level Scale:

Best addresses problem and opportunity statement, may or may not have impacts



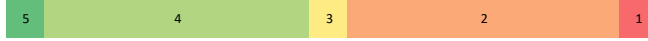
Does not address problem and opportunity statement and has most negative impacts

Criteria	Measure	Rank	Alternative 1: Steel I-Girder Bridge	Rank	Alternative 2: Precast Concrete Box Girder Bridge	Rank	Alternative 3: Steel Truss Bridge
Socio-Economic Environment	Conformity with Toronto Official Plan and Secondary Plan	5	Meets City of Toronto goals and objectives by providing a connection to the City's ravine system	5	Meets City of Toronto goals and objectives by providing a connection to the City's ravine system	5	Meets City of Toronto goals and objectives by providing a connection to the City's ravine system
Socio-Economic Environment	Meets City of Toronto Cycling and Complete Streets Policies and Objectives	5	Conforms to providing accessible sidewalk facilities that include clear, direct, unobstructed and continuous paths of context-sensitive width for all users-regardless of ability or age	5	Conforms to providing accessible sidewalk facilities that include clear, direct, unobstructed and continuous paths of context-sensitive width for all users-regardless of ability or age	5	Conforms to providing accessible sidewalk facilities that include clear, direct, unobstructed and continuous paths of context-sensitive width for all users-regardless of ability or age
Socio-Economic Environment	Conformity with applicable Provincial and Federal regulations and approvals	5	Conforms to the Provincial Policy Statement policy of supporting a land use pattern, density and mix of uses that minimize the length and number of vehicle trips and support current and future use of transit and active transportation	5	Conforms to the Provincial Policy Statement policy of supporting a land use pattern, density and mix of uses that minimize the length and number of vehicle trips and support current and future use of transit and active transportation	5	Conforms to the Provincial Policy Statement policy of supporting a land use pattern, density and mix of uses that minimize the length and number of vehicle trips and support current and future use of transit and active transportation
Socio-Economic Environment	Property Requirements	5	Minimizes property impacts	5	Minimizes property impacts	5	Minimizes property impacts
Cultural Environment	Any direct impacts to archaeology or designated built heritage resources	5	1. No archaeology impacts 2. Achieves 'steel ribbon' effect; reflects historical industrial character of the surrounding area	4	1. No archaeology impacts 2. Concrete materials; does not reflect area's cultural heritage	5	1. No archaeology impacts 2. Truss reflects historical industrial character of the surrounding area
Accessibility	Provides opportunities to create direct routes to destinations and places within the larger network	5	Provides a direct link to the existing Don Mills Trail to the planned mixed use development and transit connections	5	Provides a direct link to the existing Don Mills Trail to the planned mixed use development and transit connections	5	Provides a direct link to the existing Don Mills Trail to the planned mixed use development and transit connections
Accessibility	AODA compliance	5	Bridge will be constructed to AODA Standards	5	Bridge will be constructed to AODA Standards	5	Bridge will be constructed to AODA Standards
Accessibility	Considers all types of bikes and mobility devices	5	All cyclists and mobility devices can be accommodated	5	All cyclists and mobility devices can be accommodated	5	All cyclists and mobility devices can be accommodated
Accessibility	Ensures continuity with adjacent facilities i.e. existing trails and paths	5	Provides a missing connection across the CP Rail line to the planned mixed use development and new transit	5	Provides a missing connection across the CP Rail line to the planned mixed use development and new transit	5	Provides a missing connection across the CP Rail line to the planned mixed use development and new transit
Accessibility	Crossing and crossing approach is intuitive and easy to use	5	Bridge location is at the current terminus of the Don trail and is a logical extension to the trail	5	Bridge location is at the current terminus of the Don trail and is a logical extension to the trail	5	Bridge location is at the current terminus of the Don trail and is a logical extension to the trail
Public Realm / Aesthetics	Provides opportunities for views from bridge structure and ramps	5	Provides view opportunities from bridge with minimal structural obstructions	5	Provides view opportunities from bridge with minimal structural obstructions	4	Provides view opportunities from bridge with some structural obstructions from truss
Public Realm / Aesthetics	Provides opportunities for congregation/rest areas	5	Congregation areas by way of bump-outs can be built into bridge structure	5	Congregation areas by way of bump-outs can be built into bridge structure	5	Congregation areas by way of bump-outs can be built into bridge structure
Public Realm / Aesthetics	Consideration to visibility of bridge from adjacent property	5	1. Maintains consistent 'steel ribbon design' for visual interest 2. Steel contrasts with concrete deck	1	1. Uniform concrete material 2. Minimal design variation	3	1. Steel truss offers visual variety 2. Upkeep required to maintain aesthetics (e.g. susceptible to debris build-up)
Public Realm / Aesthetics	Impacts on adjacent properties e.g. vertical position of deck height in relation to adjacent property	5	Steele overhang enhances slenderness	2	1. Heavier visual impact 2. Concrete structure visible from adjacent buildings	3	1. Impacts adjacent building views 2. Increases height and visibility of bridge
Natural Environment	Impact the TRCA protection area	3	Requires some tree removal	3	Requires some tree removal	3	Requires some tree removal
Natural Environment	Reduces amount of vegetation (tree cover) removed	3	Adjacent vegetation will be required to be removed	3	Adjacent vegetation will be required to be removed	3	Adjacent vegetation will be required to be removed
Natural Environment	Provides opportunities to enhance natural heritage features	4	Removal of adjacent vegetation may help to enhance natural heritage features by preventing overcrowding	4	Removal of adjacent vegetation may help to enhance natural heritage features by preventing overcrowding	4	Removal of adjacent vegetation may help to enhance natural heritage features by preventing overcrowding
Safety	Provide pedestrian-scale lighting along bridge/ramps	5	Opportunities to light both the bridge and ramps at night for pedestrians	5	Opportunities to light both the bridge and ramps at night for pedestrians	5	Opportunities to light both the bridge and ramps at night for pedestrians
Safety	Reduce conflicts between bikes/pedestrians on bridge and landing areas	4	Bridge deck and is proposed to be 6.1 m wide; therefore minimizing pedestrian/cyclist conflicts	4	Bridge deck and is proposed to be 6.1 m wide; therefore minimizing pedestrian/cyclist conflicts	4	Bridge deck and is proposed to be 6.1 m wide; therefore minimizing pedestrian/cyclist conflicts
Maintenance	Ability of snow clearing equipment to maneuver on bridge and ramps	4	Ample room to use snow clearing equipment on bridge deck	4	Ample room to use snow clearing equipment on bridge deck	4	Ample room to use snow clearing equipment on bridge deck
Maintenance	Maintenance requirements (e.g. debris clearing, erosion mitigation, etc.)	3	Moderate maintenance required	4	Low maintenance required	2	Significant maintenance required
Maintenance	Consider windrow locations and comfort of cyclists/pedestrians	5	Bridge deck with is appropriate to allow for cyclists and pedestrians to pass without conflict	5	Bridge deck with is appropriate to allow for cyclists and pedestrians to pass without conflict	5	Bridge deck with is appropriate to allow for cyclists and pedestrians to pass without conflict
Cost	Life-cycle costs (ongoing maintenance and snow clearing)	5	Lower lifecycle and maintenance costs	5	Lower lifecycle and maintenance costs	1	1. Highest costs of maintenance 2. Lowest lifecycle
Cost	Service life	5	Highest service life	5	Highest service life	1	Lowest service life
Cost	Utility Impacts	3	Impacts to existing utilities are moderate	3	Impacts to existing utilities are moderate	3	Impacts to existing utilities are moderate
		Alternative 1 Final Rank	114	Alternative 2 Final Rank	107	Alternative 3 Final Rank	100

Approach Evaluation

5-Level Scale:

Best addresses problem and opportunity statement, may or may not have impacts



Does not address problem and opportunity statement and has most negative impacts

Criteria	Measure	Rank	Alternative 1: Elevated on Piers (Concrete Solid Slab)	Rank	Alternative 2: Elevated on Piers (Steel I-Girder)	Rank	Alternative 3: RSS Wall Supported
Socio-Economic Environment	Conformity with Toronto Official Plan and Secondary Plan	5	Meets City of Toronto goals and objectives by providing a connection to the City's ravine system	5	Meets City of Toronto goals and objectives by providing a connection to the City's ravine system	5	Meets City of Toronto goals and objectives by providing a connection to the City's ravine system
Socio-Economic Environment	Meets City of Toronto Cycling and Complete Streets Policies and Objectives	5	Conforms to providing accessible sidewalk facilities that include clear, direct, unobstructed and continuous paths of context-sensitive width for all users-regardless of ability or age	5	Conforms to providing accessible sidewalk facilities that include clear, direct, unobstructed and continuous paths of context-sensitive width for all users-regardless of ability or age	5	Conforms to providing accessible sidewalk facilities that include clear, direct, unobstructed and continuous paths of context-sensitive width for all users-regardless of ability or age
Socio-Economic Environment	Conformity with applicable Provincial and Federal regulations and approvals	5	Conforms to the Provincial Policy Statement policy of supporting a land use pattern, density and mix of uses that minimize the length and number of vehicle trips and support current and future use of transit and active transportation	5	Conforms to the Provincial Policy Statement policy of supporting a land use pattern, density and mix of uses that minimize the length and number of vehicle trips and support current and future use of transit and active transportation	5	Conforms to the Provincial Policy Statement policy of supporting a land use pattern, density and mix of uses that minimize the length and number of vehicle trips and support current and future use of transit and active transportation
Socio-Economic Environment	Property Requirements	5	Minimizes property impacts	5	Minimizes property impacts	5	Minimizes property impacts
Cultural Environment	Any direct impacts to archaeology or designated built heritage resources	5	No archaeology impacts	5	No archaeology impacts	5	No archaeology impacts
Accessibility	Provides opportunities to create direct routes to destinations and places within the larger network	5	Provides a direct link to the existing Don Mills Trail to the planned mixed use development and transit connections	5	Provides a direct link to the existing Don Mills Trail to the planned mixed use development and transit connections	5	Provides a direct link to the existing Don Mills Trail to the planned mixed use development and transit connections
Accessibility	AODA compliance	5	Ramps will be constructed to AODA Standards	5	Ramps will be constructed to AODA Standards	5	Ramps will be constructed to AODA Standards
Accessibility	Considers all types of bikes and mobility devices	5	All cyclists and mobility devices can be accommodated	5	All cyclists and mobility devices can be accommodated	5	All cyclists and mobility devices can be accommodated
Accessibility	Ensures continuity with adjacent facilities i.e. existing trails and paths	5	Provides a missing connection across the CP Rail line to the planned mixed use development and new transit	5	Provides a missing connection across the CP Rail line to the planned mixed use development and new transit	5	Provides a missing connection across the CP Rail line to the planned mixed use development and new transit
Accessibility	Crossing and crossing approach is intuitive and easy to use	5	Designed to meet Street F to bring both pedestrians and cyclists to/from the existing Don Valley trail	5	Designed to meet Street F to bring both pedestrians and cyclists to/from the existing Don Valley trail	5	Designed to meet Street F to bring both pedestrians and cyclists to/from the existing Don Valley trail
Public Realm / Aesthetics	Provides opportunities for landscaping adjacent to ramps/bridge	5	Provides opportunities for landscaping adjacent to ramp	5	Provides opportunities for landscaping adjacent to ramp	2	Reinforced soil slope wall supported ramp provides minimal landscaping opportunities beside the ramp
Public Realm / Aesthetics	Provides opportunities at ramp termini to create public space	5	Provides moderate opportunities to create public space at ramp termini	5	Provides moderate opportunities to create public space at ramp termini	5	Provides moderate opportunities to create public space at ramp termini
Public Realm / Aesthetics	Consideration to visibility of bridge from adjacent property	3	Significant concrete visible; somewhat open visually	5	Maintains continuous 'steel ribbon' design	1	Not visually open; has significant impacts on the landscape
Public Realm / Aesthetics	Provides opportunities for congregation/rest areas	5	Ramp terminus at street level provides opportunities for rest area	5	Ramp terminus at street level provides opportunities for rest area	5	Ramp terminus at street level provides opportunities for rest area
Natural Environment	Impact the TRCA protection area	3	Requires some tree removal	3	Requires some tree removal	3	Requires some tree removal
Natural Environment	Reduces amount of vegetation (tree cover) removed	3	Requires some vegetation removal	3	Requires some vegetation removal	3	Requires some vegetation removal
Natural Environment	Provides opportunities to enhance natural heritage features	3	Removal of adjacent vegetation may help to enhance natural heritage features by preventing overcrowding	3	Removal of adjacent vegetation may help to enhance natural heritage features by preventing overcrowding	3	Removal of adjacent vegetation may help to enhance natural heritage features by preventing overcrowding
Safety	Provide pedestrian-scale lighting along bridge/ramps	5	Provides opportunities for pedestrian scale lighting on ramp	5	Provides opportunities for pedestrian scale lighting on ramp	5	Provides opportunities for pedestrian scale lighting on ramp
Safety	Reduce conflicts between bikes/pedestrians on bridge and landing areas	4	Separated ramp is proposed to minimize conflicts between pedestrians and cyclists	4	Separated ramp is proposed to minimize conflicts between pedestrians and cyclists	4	Separated ramp is proposed to minimize conflicts between pedestrians and cyclists
Safety	Incorporates Crime Prevention Thorough Environmental Design (CEPTED) Elements	4	Opportunity for graffiti due to significant amount of concrete used	5	Least opportunity for graffiti; least amount of concrete used	3	Greatest opportunity for graffiti; most amount of concrete used
Safety	Reduce conflicts between bikes/pedestrians and vehicles where ramps meet Wynford Drive	5	Separated ramp is proposed to minimize conflicts between pedestrians and cyclists	5	Separated ramp is proposed to minimize conflicts between pedestrians and cyclists	5	Separated ramp is proposed to minimize conflicts between pedestrians and cyclists
Maintenance	Ability of snow clearing equipment to maneuver on bridge and ramps	4	Ample room to use snow clearing equipment on bridge deck	4	Ample room to use snow clearing equipment on bridge deck	4	Ample room to use snow clearing equipment on bridge deck
Maintenance	Maintenance requirements (e.g. mitigate deterioration, etc.)	3	Moderate maintenance required to mitigate deterioration	3	Moderate maintenance required to mitigate deterioration	4	Less structural maintenance required' some aesthetic maintenance required
Maintenance	Consider windrow locations and comfort of cyclists/pedestrians	4	Ramp is appropriate width to allow for cyclists and pedestrians to pass without conflict	4	Ramp is appropriate width to allow for cyclists and pedestrians to pass without conflict	4	Ramp is appropriate width to allow for cyclists and pedestrians to pass without conflict
Cost	Life-cycle costs (ongoing maintenance and snow clearing)	3	Lowest cost	3	Moderate cost	1	Highest cost
Cost	Service life	2	Lowest service life	5	Highest service life	2	Lowest service life
Cost	Utility Impacts	4	Impacts to existing utilities are moderate	4	Impacts to existing utilities are moderate	4	Impacts to existing utilities are moderate
	Alternative 1 Final Rank	115	Alternative 2 Final Rank	121	Alternative 3 Final Rank	108	