

EVALUATION CRITERIA ¹		NULL ALTERNATIVE		ALT 1 – Steel cable Suspension Truss – Single Span	
		Score	Explanation	Score	Explanation
Physical and Natural Criteria		16		8	
Hydraulics & Flooding	Impact on conveyance of the Speed River	4	Existing hydraulic conveyance maintained	2	Minimal impacts on hydraulic conveyance, only under extreme flood scenarios
Aquatic Habitat	Impact on aquatic habitat	4	No impacts to warmwater fish species	2	Minimal impact on aquatic habitat but garbage could potentially increase.
Terrestrial	Impact on connectivity and quantity/quality of habitat	4	No impact to terrestrial habitat and vegetation	2	Removal of mature vegetation and habitat within bridge span.
Policy Conformity	Conformity with City's Natural Heritage System (NHS)	4	Meets NHS policies	2	Meets the spirit of NHS policies
Social and Cultural Criteria		10		9	
Public Safety	Impact on Public Safety <ul style="list-style-type: none"> • Transport – Speedvale • Transport – Earl trucks • Vandalism/theft • Drug use • Garbage 	1	No change to status quo - Crossing alternative at Speedvale puts users in close proximity to traffic as it has been since 2011.	2	Allows for separation between Speedvale traffic and recreational users but users must eventually cross Speedvale after potential conflicts with 36 wheeler trucks entering/exiting Armtec plant on Earl Street. Potentially more vandalism, theft, drug use and garbage (assuming no increased police/bylaw patrol).
Landowner Impact	Impact on City of Guelph ROW and adjacent landowners	4	No change. Council resolution for bridge consideration must be reconsidered (as it will be for Speedvale Bridge underpass consideration).	2	Increased pedestrian & cyclist traffic to low volume Earl and Emma Streets. Sidewalks along Earl Street may require road/hydro realignment.
Benefits to Community	Access to trails, enjoyment of surrounding lands	1	Existing opportunities for access to Downtown Trail (assuming Speedvale Avenue is not improved with railway to Marlborough crosswalk). Other East quadrant routes are available downtown via Delhi, Arthur, Norwich.	3	Better connection to Downtown Trail, hospital, Bullfrog Park/Mall but currently no O-D data/evidence of existing trips and most destinations do not have bike security. Majority of hospital staff do not bicycle due to long shifts.

¹ Compare with June 2017 city evaluation at http://guelph.ca/wp-content/uploads/20170607_EmmaEarlBridge_OpenHouseInformation.pdf (p. 23).

Cultural & Archaeological Impacts	Impact on areas of archaeological potential or built or cultural heritage	4	No impacts to existing heritage potential	2	Impacts associated with construction generally contained beyond top of bank
Technical and Engineering Criteria		8		4	
Impacts on existing infrastructure	Potential impacts on existing infrastructure (watermain, storm sewer, hydro,roadway)	4	No impacts on existing infrastructure	2	Some interaction and conflict with existing infrastructure
Lifespan of Works	Expected lifespan of alternative	4	No lifespan consideration	2	Bridge design for 50 year timeframe
Economic Criteria		6		1	
Capital Costs	One time cost to City	3	No capital costs, however, Speedvale Ave alteration may be required.	0	Highest costs associated with: <ul style="list-style-type: none"> • single span suspension bridge • Earl Street guarded sidewalks habitat management plan • Sidewalks along Earl Street may require road/hydro realignment. • Possible Armttec land expropriation. • Speedvale alterations may be required.
Operations & Maintenance Costs <ul style="list-style-type: none"> • Engineering/trans • Police • Habitat plan • Lighting • Garbage (by-law) 	Requirement for regular, irregular or no maintenance activities as well as police and by-law patrol	3	No O&M costs, however, Speedvale Ave may be impacted. Following activities must be enhanced: <ul style="list-style-type: none"> • Policing • Lighting/monitoring • Garbage (by-law) 	1	Most maintenance to confirm bridge safety as well as: <ul style="list-style-type: none"> • Policing • Snow removal • Earl sidewalks • Lighting/monitoring • Garbage (by-law)
TOTAL SCORE		40		23	

Other Scores:

- ALT 3 – Steel Box Truss – Double Span = 18
- ALT 4 – Steel Box Truss – Triple Span = 12