

ALTERNATIVES PRESENTATION MEETING

DEPOT STREET BRIDGE

JAMAICA BO 1442(42)

TH 19, BRIDGE NO. 32 OVER WEST RIVER



PRESENTATION OUTLINE



- Introductions
- Purpose of Meeting
- Location Map
- Updates to Alternatives
- Recommended Alternative
- Preliminary Project Schedule
- Questions

INTRODUCTIONS



- Gary Laroche, P.E.
 - VTrans Project Manager
- Sean James, P.E.
 - Hoyle Tanner Project Manager
- Megan Ooms, P.E.
 - Hoyle Tanner Senior Structural Engineer

PURPOSE OF MEETING



- Provide an Update of Project Alternatives
- Discuss Updated Recommended Alternative
- Provide an Opportunity to Ask Questions and Voice Concerns

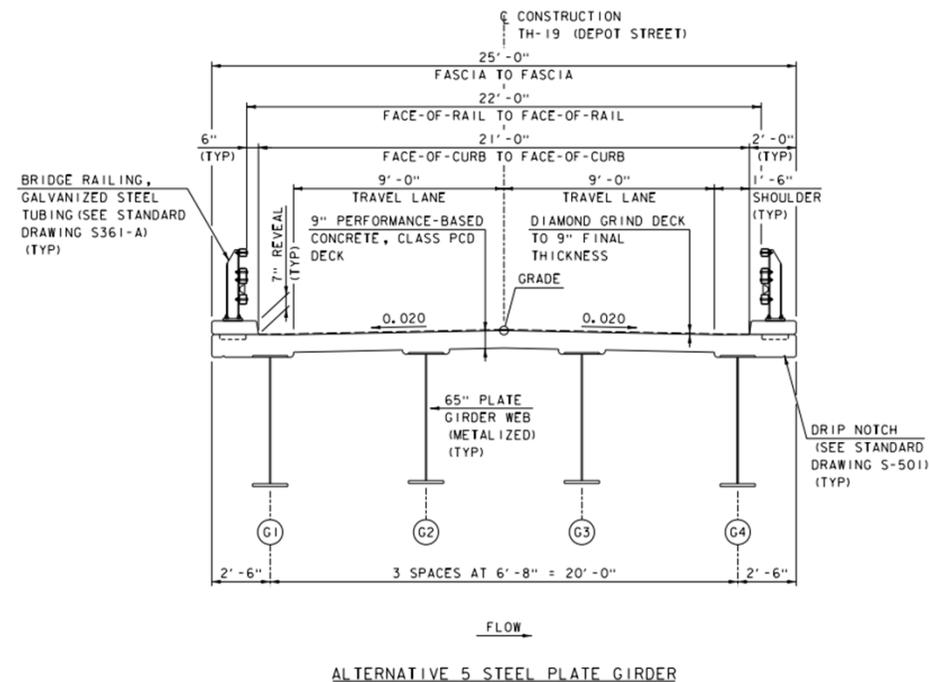
LOCATION MAP



ALTERNATIVES ANALYSIS UPDATE



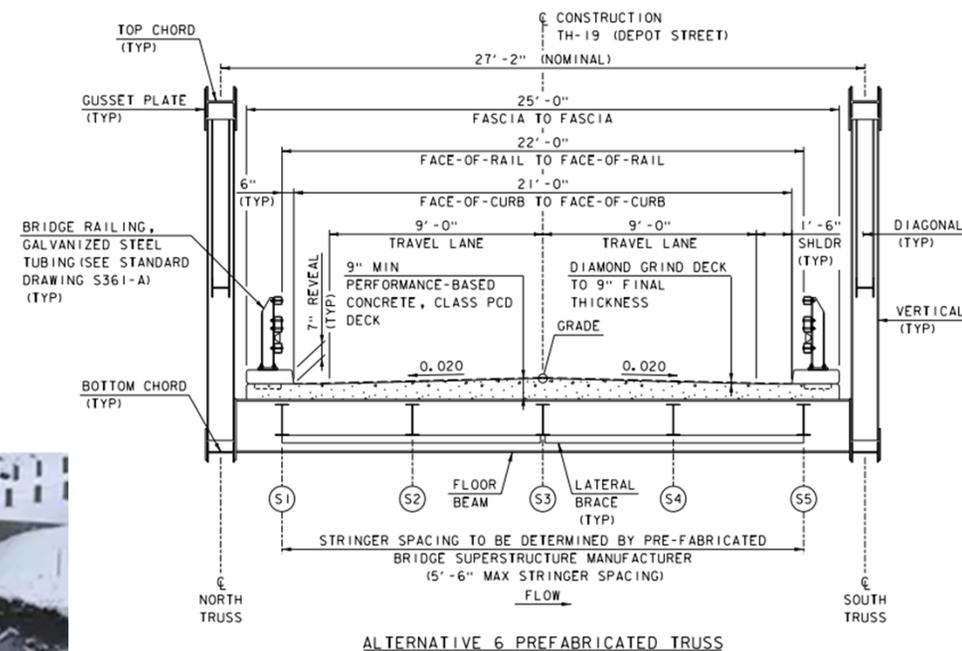
- Alternative 5: Replace Bridge with New Steel Girder Bridge
 - Temporary Bridge Off-Line
 - Requires Crane/Equipment on West Side to Set Steel
 - HL-93 Design Vehicle



ALTERNATIVES ANALYSIS UPDATE



- Alternative 6: Replace Bridge with New Truss Bridge
 - Temporary Bridge Off-Line
 - Requires Temporary Support on West Side to Launch
 - Requires Large Laydown Area to Assemble Trusses
 - HL-93 Design Vehicle



ALTERNATIVES ANALYSIS UPDATE



- Alternative 7: Replace Bridge with New Through Truss Bridge
 - Temporary Bridge Off-Line
 - Requires Temporary Support on West Side to Launch
 - Requires Large Laydown Area to Assemble Trusses
 - HL-93 Design Vehicle
 - Large erection and maintenance costs



ALTERNATIVE ANALYSIS UPDATE



- Additional Geotechnical Information-Deep Foundations Recommended
 - Alternative 5: Integral abutments on minimum number of piles
 - Alternatives 6 & 7: Standard pile abutment requiring significant number of pile

COST MATRIX



Jamaica BO 1442(42)		Alternative 5	Alternative 6	Alternative 7
		New Steel Girder Bridge On-Alignment with Temporary Bridge	New Steel Truss Bridge On-Alignment with Temporary Bridge	New Steel Through Truss Bridge On-Alignment with Temporary Bridge
COST	Bridge Cost	\$3,833,000	\$5,417,000	\$5,627,000
	Removal of Structure	\$650,000	\$650,000	\$650,000
	Roadway	\$523,000	\$523,000	\$523,000
	Maintenance of Traffic	\$942,000	\$942,000	\$942,000
	Construction Costs	\$5,948,000	\$7,532,000	\$7,742,000
	Construction Engineering & Contingencies	\$1,190,000	\$1,190,000	\$1,190,000
	Accelerated Premium	\$0	\$0	\$0
	Total Construction Costs w CEC	\$7,138,000	\$8,722,000	\$8,932,000
	Preliminary Engineering	\$1,740,000	\$1,566,000	\$1,566,000
	Right of Way	\$10,000	\$10,000	\$10,000
	Total Project Costs	\$8,888,000	\$10,298,000	\$10,508,000
	Annualized Costs	\$118,500	\$137,300	\$140,100

	Girder Bridge (ALT5)	Pony Truss (ALT 6)	Thru Truss (ALT 7)
TOTAL ESTIMATED TOWN SHARE	\$138,554.37	\$129,554.37	\$129,554.37
	Plus Future Maintenance	Plus Future Maintenance	Plus Future Maintenance

FINANCE & MAINTENANCE AGREEMENT



The Finance and Maintenance Agreement is an overarching project agreement required for all municipally owned assets to define responsibilities and for VTrans to perform activities on behalf of the Town. E.g. Acquire Right-of-Way.

Bridge Rehabilitation: (Executed Agreement)

- Scoping / Preliminary Engineering
 - (80% Fed, 15% State, 5% Town)
- Right-of-Way
 - (80% Fed, 15% State, 5% Town)
- Construction Cost
 - (100% Fed, 0% State, 0% Town)

Bridge Replacement: (Amendment Required)

- Scoping / Preliminary Engineering
 - (80% Fed, 10% State, 10% Town)
- Right-of-Way
 - (80% Fed, 10% State, 10% Town)
- Construction Cost
 - (100% Fed, 0% State, 0% Town)

The costs presented are the current estimate including preliminary engineering, right-of-way, construction engineering and construction contingency. While developing each construction estimate, the most recent bid data is utilized and compared to the items in this project.

Please note, price escalations have been impacting project costs across the country. Also, unknown inflationary pressures and the competitive bidding climate cannot be accounted for. Construction cost estimate may fluctuate from this design phase (**Scoping**) to the next (**Preliminary**).



PRELIMINARY PROJECT SCHEDULE



- Construction Start- TBD
 - Total Project Cost Estimate - \$8,888,000
 - Town Share - \$138,554



BRIDGE REHABILITATION				
	Funding Split	Rehabilitation Approx. Expended		
Preliminary Engineering (PE)	5%	\$36,488.49		
Right-of-Way	5%	\$43.07		
Construction (CE)	0%	\$0.00		
Approximate Town Expended to date		\$36,531.56		
BRIDGE REPLACEMENT				
	Funding Split	Girder Bridge (ALT5)	Pony Truss (ALT 6)	Thru Truss (ALT 7)
Preliminary Engineering (PE)	10%	\$101,022.81	\$92,022.81	\$92,022.81
Right-of-Way	10%	\$1,000.00	\$1,000.00	\$1,000.00
Construction (CE)	0%	\$0.00	\$0.00	\$0.00
Est. Town Share		\$102,022.81	\$93,022.81	\$93,022.81
COST SCHEDULE JULY 2025 - 2028				
	Estimated Cost / Year	Girder Bridge (ALT5)	Pony Truss (ALT 6)	Thru Truss (ALT 7)
July 2025 to July 2026	50%	\$51,011.41	\$46,511.41	\$46,511.41
July 2026 to July 2027	30%	\$30,606.84	\$27,906.84	\$27,906.84
July 2027 to July 2028	20%	\$20,404.56	\$18,604.56	\$18,604.56
Est. Town Share		\$102,022.81	\$93,022.81	\$93,022.81
		Girder Bridge (ALT5)	Pony Truss (ALT 6)	Thru Truss (ALT 7)
TOTAL ESTIMATED TOWN SHARE		\$138,554.37	\$129,554.37	\$129,554.37
		Plus Future Maintenance	Plus Future Maintenance	Plus Future Maintenance



RECOMMENDED ALTERNATIVE



- Alternative 5: New Steel Girder Bridge
 - Cost
 - Less Expensive
 - More Fabricator Options offer More Competitive Pricing
 - Maintenance of Traffic
 - Less Staging Space Required On-Site
 - More Space Between Structures to Aid in Construction
 - Provides same level of service as Truss Bridge
 - Temporary Bridge Off-Line

Questions?



THANK YOU