



**MUNICIPAL CLASS ENVIRONMENTAL
ASSESSMENT INFORMATION**

**ANDREWSVILLE BRIDGE
FALL 2022**

PROBLEM STATEMENT

THE ANDREWSVILLE BRIDGE HAS GREATLY EXCEEDED ITS ANTICIPATED SERVICE LIFE. WITH ONGOING CORROSION AND DETERIORATION POSING A RISK OF LOCALIZED FAILURES, THE ANDREWSVILLE BRIDGE HAS BEEN IDENTIFIED AS A PRIORITY FOR THE COUNTIES OF LANARK AND LEEDS AND GRENVILLE. THE COUNTIES HAVE THEREFORE COMMENCED THE PLANNING PROCESS TO IDENTIFY OPTIONS FOR THE FUTURE OF THE BRIDGE.



LOOKING EAST

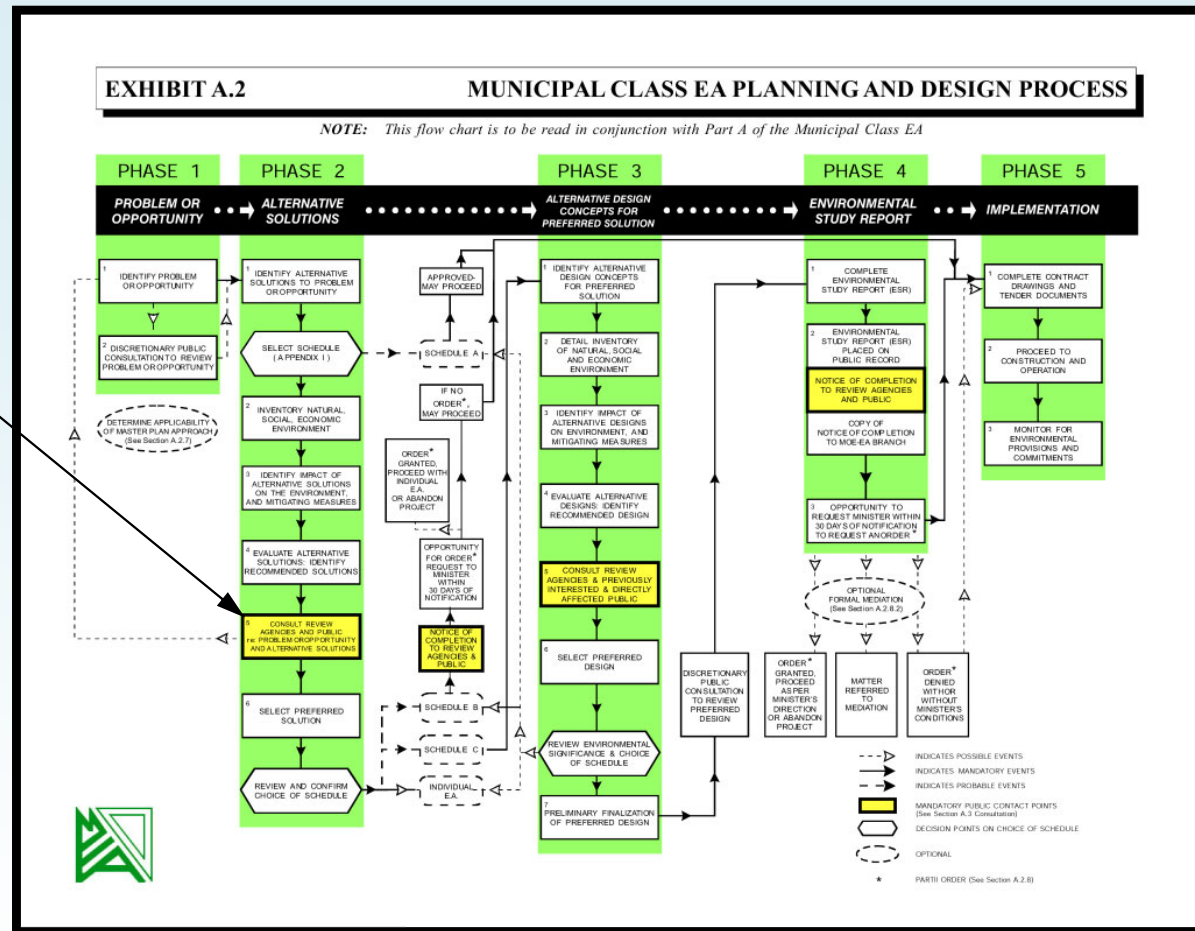


LOOKING WEST

MUNICIPAL CLASS EA PROCESS

THE COUNTIES ARE CONDUCTING A SCHEDULE B MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR THE PROJECT, AS PER THE PROCESS BELOW:

WE ARE HERE IN THE PROCESS (CONSULT REVIEW AGENCIES AND REVIEW ALTERNATIVES)



AERIAL VIEW OF PROJECT SITE



EXISTING STRUCTURE

- THE BRIDGE ASSET PROVIDES ACCESS OVER THE RIDEAU RIVER AT ANDREWSVILLE, AND PROVIDES A SINGLE LANE OF TRAFFIC AND ACCESS TO THE ADJACENT PARKS CANADA SWING BRIDGE AT NICHOLSON'S LOCK
- HAS AN AVERAGE DAILY VEHICLE COUNT OF LESS THAN 200 AND A VEHICLE HEIGHT RESTRICTION DUE TO TRUSS MEMBERS
- ORIGINALLY CONSTRUCTED IN THE EARLY 1900'S, HAS UNDERWENT MANY UPGRADES AND REHABILITATIONS IN PAST SO THAT STRUCTURE CAN REMAIN OPEN TO TRAFFIC
- CURRENTLY A SEASONALLY OPERATED BRIDGE WITH A 5 TONNE LOAD RESTRICTION THAT UNDERGOES A DETAILED INSPECTION EACH YEAR TO CONFIRM CONDITION
- PREVIOUS INSPECTIONS HAVE INDICATED THE BRIDGE HAS OUTLIVED ITS EXPECTED SERVICE LIFE
- DETOUR LENGTH SOUTH FROM ANDREWSVILLE BRIDGE TO MERRIKVILLE – 12.4km – SEE FIG. 1 BELOW
- DETOUR LENGTH NORTH FROM ANDREWSVILLE BRIDGE TO BURRITTS AVE. – 9.3km – SEE FIG. 2 BELOW

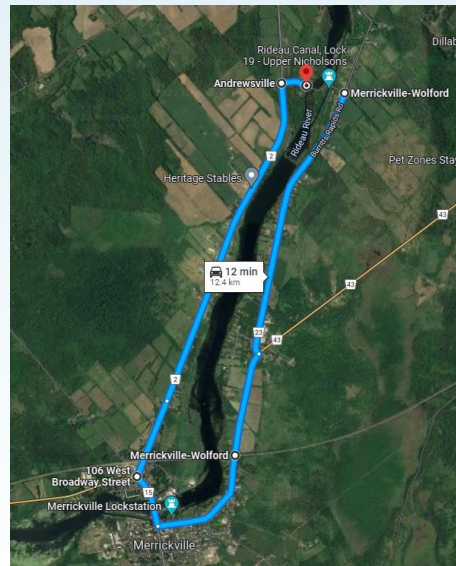


FIGURE 1: 12.4km, 12 MINS

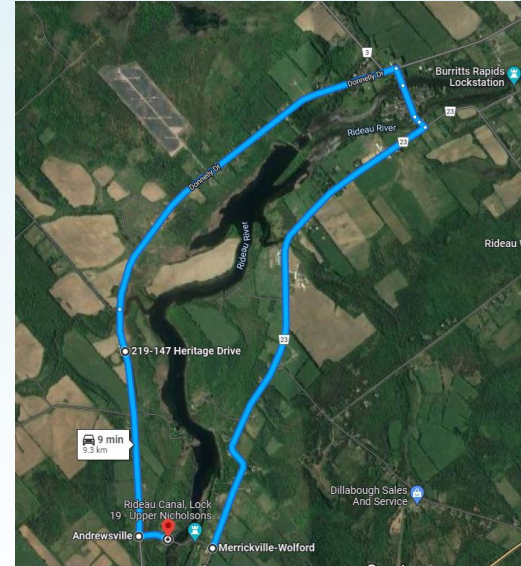


FIGURE 2: 9.3km, 9 MINS

PROPOSED CONSTRUCTION OPTIONS

THE FOLLOWING CONSTRUCTION OPTIONS ARE BEING CONSIDERED FOR THE BRIDGE:

OPTION	DESCRIPTION	PRELIMINARY CONSTRUCTION COSTS
1	REHABILITATE THE EXISTING BRIDGE AND RECONSTRUCT/REPLACE THE APPROACH ROADWAYS AND DRY-STONE RETAINING WALL AS NECESSARY. WOULD INCLUDE MAINTAINING EXISTING WEIGHT AND HEIGHT RESTRICTIONS HOWEVER BRIDGE WOULD REMAIN OPEN ALL-YEAR. ANOTHER MAJOR REHABILITATION NOT EXPECTED FOR 25 YEARS.	\$2,000,000
2	CONSTRUCTION OF A NEW SINGLE LANE BRIDGE AND RECONSTRUCTION/REPLACEMENT OF DRY-STONE RETAINING WALLS. VEHICLES WOULD NOT BE RESTRICTED BY LOAD OR HEIGHT. SIGNIFICANT EFFORT AND COST TO OBTAIN APPROVALS REQUIRED PENDING FOUNDATION SCOPE AND LOCATION	\$4,000,000
3	COMPLETE REMOVAL OF THE EXISTING BRIDGE STRUCTURE AND APPROACH RETAINING WALLS, NO NEW BRIDGE OR TURNING BASINS INCLUDED. ROAD WOULD BE CLOSED AND CROSSING RIVER AT ANDREWSVILLE NOT POSSIBLE.	\$500,000
4	CONVERSION TO PREDESTRIAN BRIDGE. BRIDGE WOULD REMAIN WITH ACCESS MODIFICATIONS AT EACH END, SO THAT ONLY PEDESTRIANS CAN ENTER, NO MOTORIZED VEHICLES OF ANY TYPE. REGULAR BRIDGE INSPECTIONS AND MINOR MAINTENANCE WOULD BE REQUIRED INCLUDING SNOW REMOVAL IN WINTER.	\$50,000
5	DO NOTHING. CONTINUE WITH SEASONAL OPERATION OF BRIDGE WITH EXISTING WEIGHT RESTRICTION IN PLACE UNTIL BRIDGE IS DEEMED TO BE CLOSED – ESTIMATED TO BE NO LATER THAN YEAR 2027.	\$0

PROS AND CONS OF ALTERNATIVES

OPTION	DESCRIPTION	PROS	CONS	OPTION SCORE
1	REHABILITATE THE EXISTING BRIDGE AND ROADWAY APPROACHES, MAINTAIN CURRENT LOAD POSTING	<ul style="list-style-type: none"> BRIDGE WILL REMAIN OPEN FOR A SIGNIFICANT PERIOD OF TIME 	<ul style="list-style-type: none"> SIGNIFICANT COST BRIDGE WILL STILL REQUIRE A LOAD RESTRICTION 	4.1
2	CONSTRUCTION OF A NEW SINGLE LANE BRIDGE AND RECONSTRUCTION OF APPROACH RETAINING WALL	<ul style="list-style-type: none"> BRIDGE WILL REMAIN OPEN FOR AT LEAST 75 YEARS 	<ul style="list-style-type: none"> SIGNIFICANT COST MOST EXPENSIVE OPTION 	4.3
3	COMPLETE REMOVAL OF THE EXISTING BRIDGE STRUCTURE AND APPROACH ROADWAY	<ul style="list-style-type: none"> LESS COSTLY THAN OPTIONS 1 AND 2 	<ul style="list-style-type: none"> CLOSURE TO ALL VEHICLES AND PEDESTRIANS 	5.0
4	CONVERSION TO PEDESTRIAN BRIDGE	<ul style="list-style-type: none"> LOW COST MAINTAINS ACCESS FOR PEDESTRIANS 	<ul style="list-style-type: none"> CLOSURE OF BRIDGE TO ALL VEHICLES 	7.2
5	DO NOTHING, EVENTUALLY CLOSE BRIDGE	<ul style="list-style-type: none"> NO PRESENT DAY CONSTRUCTION COSTS MAINTAINS VEHICLE ACCESS FOR VEHICLES FOR TIME BEING AND FOR PEDESTRIANS/CYCLISTS FOR A PERIOD OF TIME THEREAFTER LOWEST COST 	<ul style="list-style-type: none"> LOAD RESTRICTION REMAINS EVENTUAL BRIDGE CLOSURE TO VEHICLES AND THEN PEDESTRIANS 	6.7

PREFERRED OPTION

DUE TO THE SIGNIFICANT COST TO REHABILITATE THE BRIDGE THAT WOULD INCLUDE A LOAD POSTING, AND THE SIGNIFICANT COST OF A COMPLETE BRIDGE AND WALL REPLACEMENT, COMBINED WITH THE LOW TRAFFIC VOLUME, THE COUNTIES' PREFERRED ALTERNATIVE IS OPTION 4, BEING THE CLOSURE OF THE BRIDGE TO ALL VEHICLE TRAFFIC AND CONVERSION TO A PEDESTRIAN BRIDGE. THIS OPTION WOULD INCLUDE THE FOLLOWING:

- **CONTINUED SEASONAL OPERATION OF THE BRIDGE INCLUDING ANNUAL ENHANCED INSPECTION OF THE COMPLETE BRIDGE, BY A PROFESSIONAL ENGINEER**
- **IT IS ESTIMATED THE BRIDGE WILL FUNCTION IN THIS MANNER FOR ANOTHER 4 – 5 YEARS UNTIL IT IS RECOMMENDED FOR CLOSURE TO PUBLIC VEHICLES BY THE ENGINEER UPON INSPECTION.**
- **UPON CLOSURE TO ALL PUBLIC VEHICLES, THE BRIDGE WILL UNDERGO MINOR MODIFICATIONS INCLUDING THE INSTALLATION OF BARRIERS AT EACH END TO PREVENT MOTORIZED VEHICLES FROM CROSSING THE BRIDGE. OTHER MINOR STRUCTURAL REPAIRS MAY BE REQUIRED AT THAT TIME AS WELL.**
- **ONGOING IN THE FUTURE, CONTINUING INSPECTION OF BRIDGE AND APPROACH RETAINING WALLS WILL BE REQUIRED, AT THE INTERVAL RECOMMENDED BY THE INSPECTION ENGINEER, IN ADDITION TO SNOW REMOVAL FROM THE BRIDGE DECK AND APPROACHES.**

NEXT STEPS



- RECEIVE AND REVIEW ANY ADDITIONAL COMMENTS FROM AGENCIES AND GROUPS OF INTEREST
- PUBLISH EA NOTICE OF COMPLETION ADVERTISEMENT
- CONTINUED SEASONAL VEHICLE OPERATION OF BRIDGE WITH EXISTING WEIGHT RESTRICTION IN PLACE UNTIL SUCH TIME THAT ANNUAL INSPECTION DETERMINES BRIDGE SHOULD BE PERMANENTLY CLOSED TO ALL PUBLIC VEHICLES
- IMPLEMENTATION OF PREFERRED ALTERNATIVE, OPTION 4, INCLUDING CONTINUED BRIDGE INSPECTIONS AND ONGOING MAINTENANCE PROTOCOLS, AS REQUIRED.
- ESTIMATED THE IMPLEMENTATION OF CONVERSION TO PEDESTRIAN BRIDGE TO OCCUR IN 5 YEARS TIME