APPENDIX G

STRUCTURAL EVALUATION OF MAIN CULVERT
The Regional Municipality of Halton
Class Environmental Assessment Study for Ninth Line

Structure Name  Ninth Line, Lot 3, Conc IX/X
ID Number  13-1159210 CU01
Classification  Bridge  ☑ Culvert  ☑ Structure  ☐ Municipal
Location  1.00 km North of Steeles Avenue
Load Posting  No Posting  Span Lengths  3.02 m

Yr Constructed  1960
Yr Rehabilitated  N/A
Inspection Date  22-May-14
Previous Inspection  09-Oct-12

Effects of Deterioration
There are no steel-beam guide rails or hazard signs over the structure. The asphalt roadway is in good condition with a longitudinal crack along the centre of the roadway. The abutment walls are generally in fair condition. The deck soffit is good condition. There is leakage through the cold joints on the abutment wall and efflorescent staining. There are areas of light honeycombing/segregation throughout the culvert abutment walls and deck soffit. There are areas of light to medium scaling on the culvert abutment walls. There is light spalling on the bridge deck soffit at the southeast corner. There is scaling on the fascia of the outlets of the structure. There is severe concrete disintegration of the east end of the south abutment wall. The footings are exposed near the east end of the structure and are exposed up to 500mm at the southeast corner due to scour and erosion. There is rip-rap placed at the southeast corner of the structure, with vegetation at all other corners. There are overhead lines directly over the east outlet.

Recommendation
We recommend completing a rehabilitation/replacement analysis to determine if it is more economical to rehabilitated the existing structure or replace the structure.

Estimated Total Cost  $5,000.00

Priority Rating  NOW  Implementation Ranking  Medium
General Overall Condition  Fair  BCI:  65
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Location: 1.00 km North of Steeles Avenue

Recommended Rehabilitation

Engineering Cost
Rehabilitation/Replacement Analysis $5,000.00
$0.00
Sub Total $5,000.00

Construction Cost
$0.00
$0.00
$0.00
$0.00
$0.00
$0.00
Sub Total $0.00
Total $5,000.00

RRA - Rehabilitation Replacement Analysis

Tuesday, May 27, 2014

Bridge Management Database: Developed jointly by The Town of Fort Erie and ELLIS Engineering Inc.
Photograph No. 1: 8633: Roadway over structure looking North

Photograph No. 2: 8638: West Elevation
Photograph No. 3: 8665: North abutment wall looking west

Photograph No. 4: 8662: Deck soffit at Southeast corner of structure