

LOT 3, CONCESSION 9-10 N. WALSINGHAM

Site Number 000302

10TH CONCESSION ROAD, NORTH WALSINGHAM

1.5km E of County Road 23

Inventory Data:			
Structure Name	<input type="text" value="Lot 3 Concession 9 -10 N. Walsingham"/>		
Main Hwy/Road #	<input type="text" value="10TH CON N WALS"/>	<input checked="" type="checkbox"/> On <input type="checkbox"/> Under	Crossing Type: <input type="checkbox"/> Rail <input type="checkbox"/> Road <input type="checkbox"/> Navig. Water <input type="checkbox"/> Ped. <input type="checkbox"/> Other <input checked="" type="checkbox"/> Non-Navig. Water
Hwy/Road Name	<input type="text" value="10TH CONCESSION ROAD, NORTH WALSINGHAM"/>		
Structure Location	<input type="text" value="1.5km E of Count Road 23"/>		
Latitude	<input n"="" type="text" value="42d 41' 38.2"/>	Longitude	<input type="text" value="80d 37' 30.5" w"=""/>
Owner(s)	<input type="text" value="Norfolk County"/>	Heritage Designation:	<input checked="" type="checkbox"/> Not Cons. <input type="checkbox"/> List/not Design. <input type="checkbox"/> Desig. & List <input type="checkbox"/> Cons./not App. <input type="checkbox"/> Desig./not List
MTO Region	<input type="text" value="30 Southwestern"/>	Road Class:	<input type="checkbox"/> Freeway <input type="checkbox"/> Arterial <input type="checkbox"/> Collector <input checked="" type="checkbox"/> Local
MTO District	<input type="text" value="31 London / Stratford"/>	Posted Speed	<input type="text" value="80"/> No. of Lanes <input type="text" value="2"/>
Old County	<input type="text" value="20 Norfolk"/>	AADT	<input type="text" value="184"/> % Trucks <input type="text"/>
Geographic Twp.	<input type="text" value="586 North Walsingham"/>	Inspection Route Sequence	<input type="text"/>
Structure Type	<input type="text" value="10 Arch Culvert"/>	Interchange Number	<input type="text"/>
Total Deck Length	<input type="text" value="6"/> (m)	Interchange Structure Number	<input type="text"/>
Overall Str. Width	<input type="text" value="40"/> (m)	Min. Vertical Clearance	<input type="text" value="2.5"/> (m)
Total Deck Area	<input type="text" value="240"/> (m ²)	Special Route	<input type="checkbox"/> Truck <input type="checkbox"/> Emergency <input type="checkbox"/> School <input type="checkbox"/> Bicycle
Roadway Width	<input type="text" value="9"/> (m)	Detour Length Around Bridge	<input type="text" value="10"/> (km)
Skew Angle	<input type="text" value="10"/> (Degrees)	Direction of Structure	<input type="text" value="North / South"/>
No. of Spans	<input type="text" value="1"/>	Fill on Structure	<input type="text" value="12"/> (m)
Span Length	<input type="text" value="6."/> (m)		

Historical Data:			
Year Built	<input type="text" value="1970"/>	Year of Last Major Rehab.	<input type="text"/>
Last OSIM Inspection	<input type="text" value="May 12, 2014"/>	Last Evaluation	<input type="text"/>
Last Enhanced OSIM Inspection	<input type="text"/>	Current Load Limit	<input type="text" value="/ /"/> (tonnes)
Enhanced Access Equipment (ladder, boat, lift, etc.)	<input type="text"/>	Load Limit By-Law #	<input type="text"/>
Last Underwater Inspection	<input type="text"/>	By-Law Expiry Date	<input type="text"/>
Last Condition Survey	<input type="text"/>		
Rehab History:	(Date/description)		

Ontario Structure Inspection Manual - Inspection Form

Site Number:

Field Inspection Information:	
Date of Inspection:	July 26, 2016
Type of Inspection:	<input checked="" type="checkbox"/> OSIM <input type="checkbox"/> Enhanced OSIM
Inspector:	Matt Alderson, G. Douglas Vallee Ltd.
Others in Party:	N/A
Access Equipment Used:	Hammer, Binoculars, Measuring Tape, Camera, etc.
Weather:	Sunny
Temperature:	25 °C

Additional Investigation Required:	Priority		
	None	Normal	Urgent
Material Condition Survey			
<input checked="" type="checkbox"/> Detailed Deck Condition Survey:		X	
<input checked="" type="checkbox"/> Non-destructive Delamination Survey of Asphalt-Covered Deck:	X		
<input checked="" type="checkbox"/> Concrete Substructure Condition Survey:	X		
<input checked="" type="checkbox"/> Detailed Coating Condition Survey:	X		
<input checked="" type="checkbox"/> Detailed Timber Investigation	X		
<input checked="" type="checkbox"/> Post-Tensioned Strand Investigation	X		
Underwater Investigation:	X		
Fatigue Investigation:	X		
Seismic Investigation:	X		
Structure Evaluation:	X		
Monitoring			
<input checked="" type="checkbox"/> Monitoring of Deformations, Settlements and Movements:		X	
<input checked="" type="checkbox"/> Monitoring Crack Widths:	X		
Investigation Notes:			

Overall Structure Notes:	
Recommended Work on Structure:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Minor Rehab. <input type="checkbox"/> Replace <input type="checkbox"/> Maintenance <input type="checkbox"/> Major Rehab.
Timing of Recommended Work:	<input checked="" type="checkbox"/> 1 to 5 years <input type="checkbox"/> 6 to 10 years
Overall Comments:	No access due to thick vegetation and steep embankments. To be inspected during spring.
Date of next Inspection:	July 26, 2018

Suspected Performance Deficiencies

- | | | |
|--|---|-------------------------------------|
| 01 Load carrying capacity | 07 Bearing not uniformly loaded/unstable | 12 Slippery surfaces |
| 02 Excessive deformations (deflections & rotations) | 08 Jammed expansion joint | 13 Flooding/channel blockage |
| 03 Continuing settlement | 09 Pedestrian/vehicular hazard | 14 Undermining of foundation |
| 04 Continuing movements | 10 Rough riding surface | 15 Unstable embankments |
| 05 Seized bearings | 11 Deck drainage | 16 Other |

Maintenance Needs

- | | | |
|---|--|---|
| 01 Lift and swing bridge maintenance | 07 Repair to structural steel | 13 Erosion control at bridges |
| 02 Bridge cleaning | 08 Repair of bridge concrete | 14 Concrete sealing |
| 03 Bridge handrail maintenance | 09 Repair of bridge timber | 15 Rout and seal |
| 04 Painting steel bridge structures | 10 Bailey bridges - maintenance | 16 Bridge deck drainage |
| 05 Bridge deck joint repair | 11 Animal/pest control | 17 Scaling (Loose concrete or ACR steel) |
| 06 Bridge bearing maintenance | 12 Bridge surface repair | 18 Other |

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Rehabilitation Required:		Element	Priority				Estimated Construction Cost
Rehab	Replace		Urgent	Within 1 yr	1-5 yrs	6-10 yrs	
		Approaches Drainage (app)					
		Wearing Surface (Approaches)					
	X	Posts			X		
		Barrels					
		Inlet Components					
		Outlet Components					
		Embankments					
		Foundation (below ground level)					
		Embankments					
Total Cost						\$0	

Associated Work:	Comments	Estimated Construction Cost
Additional Investigations		
Traffic Management		
Utilities		
Road Allowance		
Environmental Assessment		
Engineering		
Other		
Contingencies		
Total Cost		\$0

Justification:	
Notes:	Construction Cost: \$0 Associated Work Cost: \$0 <hr style="width: 100px; margin-left: auto; margin-right: 0;"/> TOTAL Estimated Cost: \$0

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Site Number:

Element Data

Element Group:	1600 Approaches					Length:	
Element Name:	1603 Approaches Drainage (app)					Width:	
Location:	Top of Fill					Height:	
Material:	10	Other				Count:	1
Element Type:						Total Quantity:	1 Each
Environment:	Moderate					Limited Inspection:	
Protection System:	Unknown					Perform. Deficiencies	
Condition Data:	Units	Exc.	Good	Fair	Poor		
	Each	0	0	0.75	0.25		
Comments: Roadway slopes are steep but stable. No signs.							
Recommended Work:				Rehab <input type="checkbox"/>		Replace <input type="checkbox"/>	
Timing:				Urgent <input type="checkbox"/>		< 1yr <input type="checkbox"/>	
				1 - 5 yr <input type="checkbox"/>		6 - 10 yr <input type="checkbox"/>	
				Maintenance Needs:			
				Urgent <input type="checkbox"/>			
				1 year <input type="checkbox"/>			
				2 year <input type="checkbox"/>			

Element Group:	1600 Approaches					Length:	
Element Name:	1601 Wearing Surface (Approaches)					Width:	
Location:	Top of Fill					Height:	
Material:	2	Asphalt				Count:	2
Element Type:						Total Quantity:	2 Each
Environment:	Moderate					Limited Inspection:	
Protection System:	Unknown					Perform. Deficiencies	
Condition Data:	Units	Exc.	Good	Fair	Poor		
	Each	0	2	0	0		
Comments: Crack along center line of culvert from drain to drain (2014). Road resurfaced with tar and chip.							
Recommended Work:				Rehab <input type="checkbox"/>		Replace <input type="checkbox"/>	
Timing:				Urgent <input type="checkbox"/>		< 1yr <input type="checkbox"/>	
				1 - 5 yr <input type="checkbox"/>		6 - 10 yr <input type="checkbox"/>	
				Maintenance Needs:			
				Urgent <input type="checkbox"/>			
				1 year <input type="checkbox"/>			
				2 year <input type="checkbox"/>			

Element Group:	400 Barriers					Length:	100
Element Name:	403 Posts					Width:	
Location:						Height:	
Material:	18	Wood				Count:	2
Element Type:						Total Quantity:	200 m
Environment:	Severe					Limited Inspection:	
Protection System:	Unknown					Perform. Deficiencies	
Condition Data:	Units	Exc.	Good	Fair	Poor		
	m	0	0	100	100		
Comments: North guiderail leaning outward. Single cable guiderail at North. Three cable guiderail at South has loose cables. Posts are rotting.							
Recommended Work:				Rehab <input type="checkbox"/>		Replace <input checked="" type="checkbox"/>	
Timing:				Urgent <input type="checkbox"/>		< 1yr <input type="checkbox"/>	
				1 - 5 yr <input checked="" type="checkbox"/>		6 - 10 yr <input type="checkbox"/>	
				Maintenance Needs:			
				Erosion Control at Bridges			
				Urgent <input type="checkbox"/>			
				1 year <input checked="" type="checkbox"/>			
				2 year <input type="checkbox"/>			

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Element Data

Element Group:	1200 Culverts	Length:	40										
Element Name:	1203 Barrels	Width:	6										
Location:	Inside	Height:	2.5										
Material:	5 Corrugated Steel	Count:	1										
Element Type:		Total Quantity:	40 m										
Environment:	Moderate	Limited Inspection:	X										
Protection System:	Hot Dip Galvanized	Perform. Deficiencies											
Condition Data:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">Units</th> <th style="width: 15%;">Exc.</th> <th style="width: 15%;">Good</th> <th style="width: 15%;">Fair</th> <th style="width: 15%;">Poor</th> </tr> <tr> <td>m</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Units	Exc.	Good	Fair	Poor	m						
Units	Exc.	Good	Fair	Poor									
m													
Comments: Limited inspection due to access. Surface rust visible at water level and at various locations at bolts (2014).													
Recommended Work: Rehab <input type="checkbox"/> Replace <input type="checkbox"/> Timing: Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input type="checkbox"/>		Maintenance Needs: Bridge Railing System Maint <input type="checkbox"/> Urgent <input checked="" type="checkbox"/> 1 year <input type="checkbox"/> 2 year											

Element Group:	1200 Culverts	Length:	6										
Element Name:	1201 Inlet Components	Width:											
Location:		Height:	2.5										
Material:	10 Other	Count:	1										
Element Type:		Total Quantity:	m										
Environment:	Moderate	Limited Inspection:	X										
Protection System:	Unknown	Perform. Deficiencies											
Condition Data:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">Units</th> <th style="width: 15%;">Exc.</th> <th style="width: 15%;">Good</th> <th style="width: 15%;">Fair</th> <th style="width: 15%;">Poor</th> </tr> <tr> <td>m</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Units	Exc.	Good	Fair	Poor	m					Flooding/channel blockage	
Units	Exc.	Good	Fair	Poor									
m													
Comments: Limited inspection due to access. Clear vegetation													
Recommended Work: Rehab <input type="checkbox"/> Replace <input type="checkbox"/> Timing: Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input type="checkbox"/>		Maintenance Needs: <input type="checkbox"/> Urgent <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year											

Element Group:	1200 Culverts	Length:	6										
Element Name:	1202 Outlet Components	Width:											
Location:		Height:	2.5										
Material:	4 Cast-in-place Concrete	Count:	1										
Element Type:		Total Quantity:	m										
Environment:	Moderate	Limited Inspection:	X										
Protection System:	Unknown	Perform. Deficiencies											
Condition Data:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">Units</th> <th style="width: 15%;">Exc.</th> <th style="width: 15%;">Good</th> <th style="width: 15%;">Fair</th> <th style="width: 15%;">Poor</th> </tr> <tr> <td>m</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Units	Exc.	Good	Fair	Poor	m					Flooding/channel blockage	
Units	Exc.	Good	Fair	Poor									
m													
Comments: Limited inspection due to access. Clear vegetation. Beaver dam under construction at outlet (2014).													
Recommended Work: Rehab <input type="checkbox"/> Replace <input type="checkbox"/> Timing: Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input type="checkbox"/>		Maintenance Needs: Animal/Pest Control <input type="checkbox"/> Urgent <input checked="" type="checkbox"/> 1 year <input type="checkbox"/> 2 year											

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Site Number:

Element Data

Element Group:	1400 Embankments & Streams					Length:	
Element Name:	1402 Embankments					Width:	
Location:						Height:	
Material:						Count:	1
Element Type:						Total Quantity:	1 All
Environment:						Limited Inspection:	
Protection System:						Perform. Deficiencies	
Condition Data:	Units	Exc.	Good	Fair	Poor		
	All	0	0	1	0		
Comments: Beaver dam under construction at south end (2014). Embankments steep.							
Recommended Work:				Rehab <input type="checkbox"/> Replace <input type="checkbox"/>		Maintenance Needs:	
Timing:				Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input type="checkbox"/>		<input type="checkbox"/> Urgent <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year	

Element Group:	1300 Foundations					Length:	
Element Name:	1301 Foundation (below ground level)					Width:	
Location:						Height:	
Material:						Count:	2
Element Type:						Total Quantity:	2 m
Environment:						Limited Inspection:	X
Protection System:						Perform. Deficiencies	
Condition Data:	Units	Exc.	Good	Fair	Poor		
	m						
Comments: Limited inspection. Not visible.							
Recommended Work:				Rehab <input type="checkbox"/> Replace <input type="checkbox"/>		Maintenance Needs:	
Timing:				Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input type="checkbox"/>		<input type="checkbox"/> Urgent <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year	

Element Group:	1400 Embankments & Streams					Length:	
Element Name:	1402 Embankments					Width:	
Location:						Height:	
Material:						Count:	2
Element Type:						Total Quantity:	2 Each
Environment:						Limited Inspection:	
Protection System:	Unknown					Perform. Deficiencies	
Condition Data:	Units	Exc.	Good	Fair	Poor		
	Each	0	0	0	2		
Comments: Slope protected with masonry rubble - failing at curb stop.							
Recommended Work:				Rehab <input type="checkbox"/> Replace <input type="checkbox"/>		Maintenance Needs: Erosion Control at Bridges	
Timing:				Urgent <input type="checkbox"/> < 1yr <input type="checkbox"/> 1 - 5 yr <input type="checkbox"/> 6 - 10 yr <input type="checkbox"/>		<input type="checkbox"/> Urgent <input checked="" type="checkbox"/> 1 year <input type="checkbox"/> 2 year	



Figure 1 East Approach



Figure 2 West Approach



Figure 3 Upstream



Figure 4 Downstream



Figure 5 Single Cable Guiderail at North



Figure 6 Three Cable Guiderail at South, Loose Cables