

# Deck Core Report

For

Masardis, St Croix Bridge #3766

WIN 018965.00

Deck Replacement



# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303326** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 19** Offset, ft: **11' 3"**

Contractor: Resident: Dbfg, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>3.5-4.0</b>	<b>2.81</b>
<b>4.5-5.0</b>	<b>0.7</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Masardis - St. Croix Bridge. Bridge # 3766 Core is not long enough for compressive test.

### AUTHORIZATION AND DISTRIBUTION

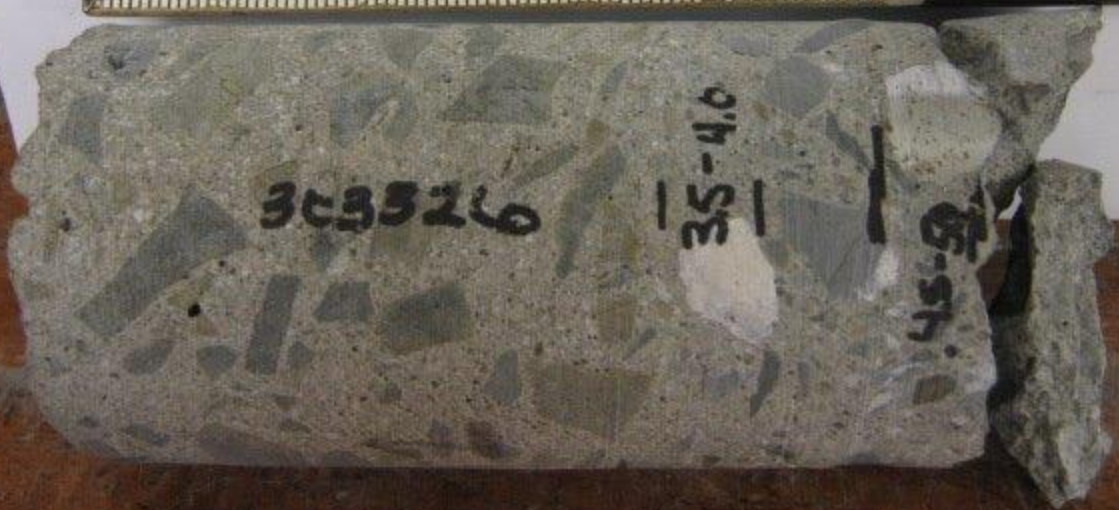
Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

Paper Copy: Structure File Electronic: Customer —

# St Croix Bridge # 3766

Ref. No. 303326 Core 1 STA. 0 + 19 11'3" Rt



**St Croix Bridge # 3766**

Ref. No. 303326 Core 1 STA. 0 + 19 11'3" Rt





# St Croix Bridge # 3766

Ref. No. 303327 Core 2 STA. 0 + 29 10' Rt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303328** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 47** Offset, ft: **9, RT**

Contractor: Resident: Dbf, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>5.75-6</b>	<b>0.47</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1	<b>3.5" - 5.75"</b>	<b>8860.00</b>
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge Bridge #3766.

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

# St Croix Bridge # 3766

Ref. No. 303328 Core 3 STA. 0 + 47 9' Rt



303328

3 1/2 - 5 3/4



# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303329** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 69** Offset, ft: **5' 6", R**

Contractor: Resident: Dbfg, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>5.0-5.5</b>	<b>1.59</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1	<b>2.25" - 4.75"</b>	<b>8570.00</b>
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge. Bridge # 3766. Compressive sample encompasses part of the wear surface (1/2" to 3/4")

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

Paper Copy: Structure File      Electronic: Customer —

# St Croix Bridge # 3766

Ref. No. 303329 Core 4 STA. 0 + 69 5' 6" Rt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303330** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 78** Offset, ft: **10' 6"**

Contractor: Resident: Dbfg, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>3.5-4.0</b>	<b>1.5</b>
<b>4.5-5.0</b>	<b>0.74</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardls - St. Croix Bridge. Bridge #3766. Sample is too small to compressive test.

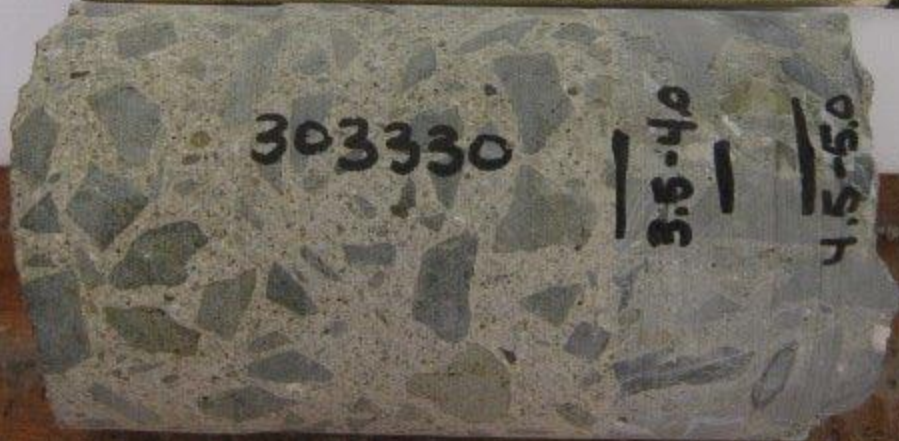
### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

# St Croix Bridge # 3766

Ref. No. 303330 Core 5 STA. 0 + 78 10' 6" Rt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303331** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 99** Offset, ft: **10" 6"**

Contractor: Resident: Dbf, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>4.0-4.5</b>	<b>1.55</b>
<b>6.0-6.25</b>	<b>0.29</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

Paper Copy: Structure File Electronic: Customer —

# St Croix Bridge # 3766

Ref. No. 303331 Core 6 STA. 0 + 99 10' 6" Rt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303332** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **1 + 35** Offset, ft: **10, RT**

Contractor: Resident: Dbf, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>4.25-4.75</b>	<b>0.69</b>
<b>5.5-6.0</b>	<b>0.33</b>
<b>6.5-7.0</b>	<b>0.31</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge. Bridge #3766. Rebar was located 4.25" from roadway surface. The core does not have a large enough entacted piece to obtain a compressive test sample.

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

Paper Copy: Structure File Electronic: Customer —

# St Croix Bridge # 3766

Ref. No. 303332 Core 7 STA. 1 + 35 10' Rt



# St Croix Bridge # 3766

Ref. No. 303332 Core 7 STA. 1 + 35 10'





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303333** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **1 + 49.5** Offset, ft: **11' 6"**

Contractor: Resident: Dbfg, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>3.5-4.0</b>	<b>1.23</b>
<b>5.0-5.5</b>	<b>0.89</b>
<b>6.5-7.0</b>	<b>0.7</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge. Bridge #3766. Sample is too short to compressive test.

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

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3766

1 + 15

# St Croix Bridge # 3766

Ref. No. 303333 Core 8 STA. 1 + 49.5 11'6" Lt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
<b>303334</b>		<b>BRIDGE CORE</b>	8/17/2016	8/17/2016
Sample Type: <b>OTHER</b>	Sampler: <b>LAMONT DUTRA</b>	Sample Location: <b>ROADWAY</b>		
WIN/Town -		Station: <b>1 + 15.4</b>	Offset, ft: <b>1' 9", L</b>	
Contractor:	Resident:	Dbfg, ft:		

### TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd <sup>3</sup>
5.0-5.5	1.07

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1	2.5" - 5"	7380.00
Specimen 2		
Specimen 3		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

**Comments:**  
 Final report. Masardis - St. Croix Bridge Bridge #3766.

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

# St Croix Bridge # 3766

Ref. No. 303334 Core 9 STA. 1 + 15.4 1'9" Lt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303335** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **MAINTENANCE** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 98** Offset, ft: **10' 6"**

Contractor: Resident: Dbf, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>6.0-6.5</b>	<b>0.32</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1	<b>3.0" - 6.0"</b>	<b>6960.00</b>
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge Bridge #3766.

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

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# St Croix Bridge # 3766

Ref. No. 303335 Core 10 STA. 0 + 98 10' 6" Lt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303336** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 74** Offset, ft: **11' 3"**

Contractor: Resident: Dbfg, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>4.0-4.5</b>	<b>0.95</b>
<b>6.0-6.5</b>	<b>0.31</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge. Bridge #3766. Core is too short to test for compressive strength.

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

Paper Copy: Structure File Electronic: Customer —

# St Croix Bridge # 3766

Ref. No. 303336 Core 11 STA. 0 + 74 11'3" Lt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303337** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 60.4** Offset, ft: **11', LT**

Contractor: Resident: Dbfg, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>5.5-6.0</b>	<b>0.33</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1	<b>2" - 4.5"</b>	<b>7230.00</b>
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge Compressive sample has 1/2" - 3/4" of the concrete wear surface in the sample.

### AUTHORIZATION AND DISTRIBUTION

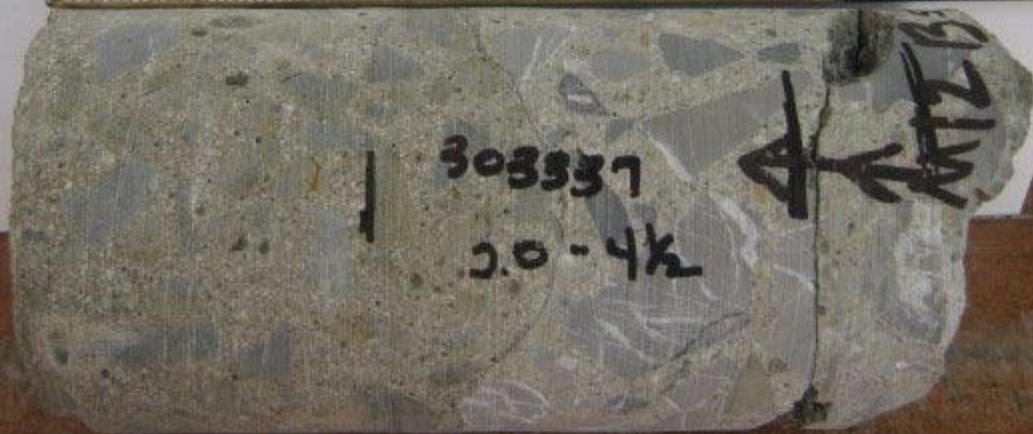
Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

Paper Copy: Structure File Electronic: Customer —

# St Croix Bridge # 3766

Ref. No. 303337 Core 12 STA. 0 + 60.4 11' Lt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303338** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 + 42.5** Offset, ft: **2' 6", L**

Contractor: Resident: Dbfg, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>5.75-6.25</b>	<b>0.42</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1	<b>2.75" - 5.75"</b>	<b>6980.00</b>
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge. Bridge # 3766.

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

Paper Copy: Structure File Electronic: Customer —

# St Croix Bridge # 3766

Ref. No. 303338 Core 13 STA. 0 + 42.5 2'6" Lt





# BRIDGE CORE TEST REPORT

## Central Laboratory

### SAMPLE INFORMATION

Reference No. **303339** Boring No./Sample No.  Sample Description **BRIDGE CORE** Sampled **8/17/2016** Received **8/17/2016**

Sample Type: **OTHER** Sampler: **LAMONT DUTRA** Sample Location: **ROADWAY**

WIN/Town - Station: **0 +09** Offset, ft: **11' 3"**,  
 Contractor: Resident: Dbfg, ft:

### TEST RESULTS

#### Shear Bond (MeDOT)

	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

#### Chloride Content (T 260)

Location, inch	Chloride Level, lb/yd <sup>3</sup>
<b>5.0-5.5</b>	<b>0.72</b>

#### Compressive Strength (T 22)

	Location, inch	Strength, psi
Specimen 1	<b>2.5" - 5.0"</b>	<b>7180.00</b>
Specimen 2		
Specimen 3		

#### Rebar Corrosion (MeDOT)

	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

#### Comments:

Final report. Masardis - St. Croix Bridge. Bridge #3766.

### AUTHORIZATION AND DISTRIBUTION

Reported by: **ROBERT HARADON**

Date Reported: **10/5/2016**

Paper Copy: Structure File Electronic: Customer —

# St Croix Bridge # 3766

Ref. No. 303339 Core 14 STA. 0 + 09 11' 3" Lt



# St Croix Bridge # 3766

Ref. No. 303339 Core 14 STA. 0 + 09 11' 3" Lt

