



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
February 27, 2019



Victoria F. Sheehan
Commissioner

William Cass, P.E.
Assistant Commissioner

Claudia Lamphier
Effingham Town Administrator
68 School Street
Effingham, NH 03844

RE: COPY OF INTERIM INSPECTION REPORTS OF MUNICIPALLY OWNED BRIDGES AND NHDOT'S
RECOMMENDED BRIDGE POSTINGS FOR WEIGHT, HEIGHT, WIDTH, AND/OR CLOSURE
TOWN OF EFFINGHAM

Dear Ms. Lamphier:

Enclosed are copies interim bridge inspection reports for three municipally owned bridges in the Town of Effingham
which have been made to update our annual submission to the Federal Government.

In addition, NHDOT'S recommended bridge postings for weight, height, width, and/or closure are noted below.
Please note that Red List bridges are in bold type.

Table with 3 columns: Bridge #, Location, NHDOT Recommended Posting. Rows include: 165/112 Snow Road over South River E2 - Weight Posting; 166/082 Granite Road over South River Bridge Closed - Closure Posting - Barricades Required; 181/072 Stevens Road over Brook No Posting Recommended

Please note if there are any changes in the recommended weight postings, width postings, height postings, closure
postings, or lack of postings for your bridge. Even though a bridge may be recommended for a weight, height, width or
closure posting by the State, the decision to properly post or close the structure is the responsibility of the municipal officials.

Our bridge inspectors have indicated that the bridges listed above are in compliance with DOT's closure posting
recommendation; therefore no posting or closure action needs to be taken by the Town. Please call if there are any
questions.

Sincerely,

C. R. Willeke (handwritten signature)

C. R. Willeke, P.E.
Municipal Highways Engineer
Bureau of Planning and Community Assistance
Tel.: (603) 271-6472 / Fax: (603) 271-8093

CRW
Enclosures

cc: Commissioner, Department of Education
S:\Planning\Community Assistance\1-Municipalities\Effingham\Bridge Insp\Interim 2-27-19.doc

# Bridge Inspection Report

NBI Structure Number: 007401650011200

## Effingham 165/112

**Date of Inspection:** 10/31/2018  
**Date Report Sent:** 01/09/2019  
**Owner:** Municipality  
**Bridge Inspection Group:** C-Team  
**Bridge Maintenance Crew:** OTHER

**SNOW ROAD**  
over  
**SOUTH RIVER**

### Recommended Postings:

**Weight: E-2**

Weight Sign OK

*SIGNS IN PLACE 10/31/2018.*

**Width: Not Required**

Width Sign OK

**Primary Height Sign Recommendation:** None  
**Optional Centerline Height Sign Rec:** None

**Clearances:** Over: 99.99  
(Feet) Under: 0.00  
Route: 99.99

Height Sign OK

### Condition:

Red List Status: Municipal Redlist  
Deck: N N/A (NBI)  
Superstructure: N N/A (NBI)  
Substructure: N N/A (NBI)  
Culvert: 3 Serious  
Sufficiency Rating: 44 %  
NBI Status: Structurally Deficient  
Bridge Rail: Substandard  
Rail Transition: Substandard  
Bridge Approach Rail: Substandard  
Approach Rail Ends: Substandard

### Structure Type and Materials:

Number of Main Spans: 4  
Number of Approach Spans: 0

**Main Span Material and Design Type**  
Steel Culvert

### Bridge Dimensions:

Length Maximum Span: 6.0 ft  
Left Curb/Sidewalk Width: 0.0 ft  
Width Curb to Curb: 0.0 ft  
Approach Roadway Width: 20.0 ft  
(W/Shoulders)

NH Bridge Type: MP (Metal Pipe)  
Deck Type: No Deck ( N/A - NBI)  
Wearing Surface: No Deck ( N/A - NBI)  
Membrane: No Deck ( N/A - NBI)  
Deck Protection: No Deck ( N/A - NBI)  
Curb Reveal: 0 in  
Plan Location: unknown  
Total Bridge Length: 32.0 ft  
Right Curb/Sidewalk Width: 0.0 ft  
Total Bridge Width: 0.0 ft  
Median: No median  
Bridge Skew: 0.00°  
Year Built/Rebuilt: 1972  
Detour Length: 2.0 mi

# Bridge Inspection Report

NBI Structure Number: 007401650011200

Effingham 165/112

## Bridge Service:

Type of Service on Bridge: Highway

Type of Service Under: Waterway

Lanes on Bridge: 2

Lanes Under: Not Applicable

AADT: 80

Percent Trucks: 0%

Year of AADT: 2015

Future AADT: 118

Year of Future AADT: 2039

Federal or State Definition Bridge: Fed-Definition Bridge

National Highway System: Bridge does not carry NHS

Roadway Functional Class: Rural Local

New Hampshire Highway System and Class: Municipal Highway

Eligibility for the National Register of Historic Places: Possibly eligible

Traffic Direction: Two-way traffic

# Bridge Inspection Report

NBI Structure Number: 007401650011200

Effingham 165/112

**Element Details (see disclaimer below)**

No.	Description	Material Notes and Condition Notes:
240	Steel Culvert	4 @ 6'-2" CLEAR SPAN ROUND PIPE. 2-2/3" X 1/2" X 8/64" CORRUGATIONS. GALVANIZED STEEL WITH BITUMINOUS COATING. HEAVILY RUSTED AND PITTED WITH SCALE. SCATTERED PERFORATIONS AND HOLES. 60% SECTION LOSS IS TYPICAL OF ALL 4 MPS. FEW SMALL TEARS AT INLET ENDS. FEW DENTS AND LIGHT DISTORTION. HEADWALL STONE DROPPED AT SOUTH. STONES MISSING AND LOOSE / UNSTABLE AT NORTH. EROSION BEHIND WING AT NORTHEAST. BEAVER DAM DEBRIS IN ALL PIPES AT INLET ENDS.
L 1000	Corrosion	
330	Metal Bridge Railing	PLOW DAMAGE. MINOR RUSTING. BROKEN WELDS. NORTHWEST TIPPED DOWN.

**Element States (see disclaimer below)**

No.	Description	Quantity	Units	State 1	State 2	State 3	State 4
240	Steel Culvert	98	ft	0%	0%	40%	60%
L 1000	Corrosion	98	each	0%	0%	40%	60%
330	Metal Bridge Railing	64	ft	80%	10%	10%	0%

Element Disclaimer: NHDOT is transitioning from CoRe elements to AASHTO elements. The AASHTO element data shown above is the product of the automated element migration routine from the AASHTOWare BrM software. This migrated data has undergone limited field verification. Adequate quality control of this element data is not expected to be achieved until the conclusion of the 2020 inspection season. Please utilize element data with caution.

**Bridge Notes:**

ADDED TO THE MUNICIPAL RED LIST 8/24/2015.  
HIGH WATER 12/1/16, 10/31/2018.

**Inspection Notes: 10/31/2018**

MAS - inspection comments -  
CULVERT: ASPHALT - HEAVILY CRACKED AND PATCHED, CRACKS ARE SEALED. METAL PIPE - HEAVY RUSTING AND PITTING WITH SCATTERED PERFORATIONS AND HOLES; 60 % SECTION LOSS IS TYPICAL OF ALL MP'S. THIN WITH FEW SMALL TORN AREAS. FEW DENTS AND LIGHT DISTORTION. HEADWALL STONES ARE MISSING WITH VOIDS AND APPEAR UNSTABLE; EROSION BEHIND WING AT NORTHEAST. BEAVER DAM DEBRIS IN ALL BARRELS. RAIL - PLOW DAMAGE, MINOR RUSTING.

PICTURES: C590-

- 27. STONES MISSING BETWEEN PIPES #3 AND #4 AT NORTH.
- 28. TYPICAL SCATTERED PERFORATIONS.
- 29. BEAVER DAM IN PIPE #2. TYPICAL OF ALL.

**Previous Inspection Notes: 08/31/2017**

MAS - inspection comments -  
CULVERT: ASPHALT - HEAVILY CRACKED, DEPRESSED AND PATCHED. METAL PIPE - HEAVY RUSTING AND PITTING WITH SCATTERED PERFORATIONS AND HOLES; 60 % SECTION LOSS IS TYPICAL OF ALL MP'S. THIN WITH FEW SMALL TORN AREAS. FEW DENTS AND LIGHT DISTORTION. HEADWALL STONES ARE MISSING WITH VOIDS AND APPEAR UNSTABLE; EROSION BEHIND WING AT NORTHEAST. BEAVER DAM DEBRIS IN ALL BARRELS. RAIL - PLOW DAMAGE, MINOR RUSTING. LOW WATER 8/31/2017.

PICTURES: C574-

- 39. MP #1 IS THIN AND HOLED WITH 60% SECTION LOSS.
- 40. MP #1 IS THIN AND HOLED WITH 60% SECTION LOSS.
- 41. MP #2 IS THIN AND HOLED WITH 60% SECTION LOSS.
- 42. MP #3 IS THIN AND HOLED WITH 60% SECTION LOSS.
- 43. MP #4 IS THIN AND HOLED WITH 60% SECTION LOSS.
- 44. MP #4 IS THIN AND HOLED WITH 60% SECTION LOSS.
- 45. STONE DISPLACED BETWEEN #3 AND #4 MP'S AT NORTH.
- 46. SOUTH ELEVATION, BEAVER DAM DEBRIS IN ALL MP'S.

**Approach and Roadway Notes:**

ASPHALT- (6) CRACKS ARE SEALED, SETTLED AND PATCHED.  
W- BEAM RAIL - HEAVILY DAMAGED AND CRACKED WELDS.  
EMBANKMENT WASHED WITH EROSION BEHIND WING AT NORTHEAST.

# Bridge Inspection Report

NBI Structure Number: 007401650011200

Effingham 165/112

## Inspection History

Inspection Date	Inspector Initials	Inspection Type(s) Performed				Major Element Ratings				Red list	Posting
		NBI	Elem	FCM	U/W	Deck	Super	Sub	Culvert		
10/31/2018	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	3	<input checked="" type="checkbox"/>	E-2
08/31/2017	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	3	<input checked="" type="checkbox"/>	E-2
12/01/2016	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	4	<input checked="" type="checkbox"/>	E-2
08/24/2015	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	4	<input checked="" type="checkbox"/>	E-2
08/16/2013	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	5	<input type="checkbox"/>	E-2
10/12/2012	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	5	<input type="checkbox"/>	E-2
10/22/2010	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	5	<input type="checkbox"/>	E-2
08/27/2008	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	5	<input type="checkbox"/>	E-2
09/27/2006	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	5	<input type="checkbox"/>	E-2
08/25/2004	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	5	<input type="checkbox"/>	E-2
10/03/2002	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	5	<input type="checkbox"/>	E-2
10/19/2000	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	5	<input type="checkbox"/>	E-2
10/02/1998	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	6	<input type="checkbox"/>	E-2
08/01/1996		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	6	<input type="checkbox"/>	E-2
09/01/1994		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	6	<input type="checkbox"/>	E-2
09/01/1992		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	N	<input type="checkbox"/>	E-2

Inspection Frequency (mo.)			
NBI	Elem	FCM	U/W
16	16	N/A	N/A

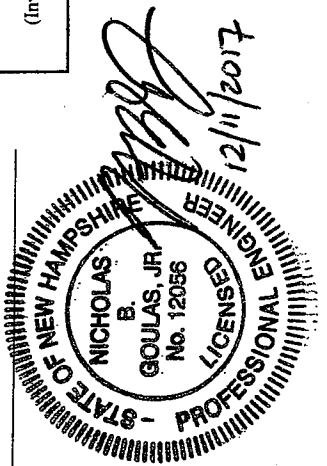
BRIDGE CAPACITY SUMMARY

TOWN: EFFINGHAM  
 BRIDGE NUMBER: 165/112  
 RATED BY: NBG DATE: 12/8/2017  
 CHECK BY: JTP DATE: 12/11/17  
 OVER: SOUTH RIVER

DESIGN LOAD: UNKNOWN DESIGN METHOD: UNKNOWN  
 RATING METHOD: LOAD FACTOR PLAN FILE: UNKNOWN  
 ROUTE: SNOW ROAD

RATED MEMBER	LONGITUD. EFFECTIVE SPAN LENGTH	REQUIRED CAPACITY (HS Tons)		AVAILABLE CAPACITY (HS Tons)						
		CURRENT LEGAL LOADS	CERTIFIED VEHICLES SINGLE UNIT	MULTIPLE LANES LOADED INVENTORY	MULTIPLE LANES LOADED OPERATING	SINGLE LANES LOADED INVENTORY	SINGLE LANES LOADED OPERATING	POSTING		
Corrugated Metal Pipes (1'-6" of fill, 60% losses)	3'-0"	HS 14.0	HS 15.4	HS 13.1	HS 21.8	HS 13.1	HS 21.8	HS 13.1	HS 21.8	
				Rating Method		English Tons		Metric Tons		
				(Op.) 63.	LF	64. (Op.)	39.2	35.6		
				(Inv.) 65.	LF	66. (Inv.)	23.5	21.3		

RECOMMENDED POSTING: E-2

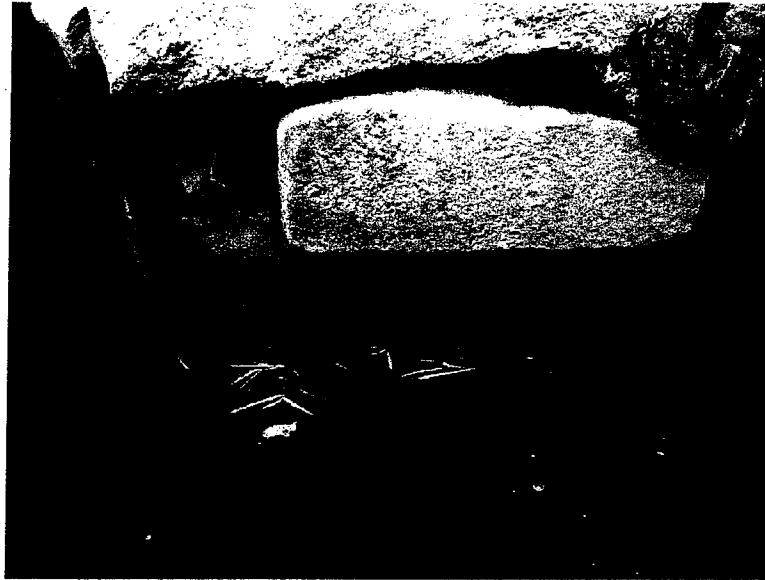


**EFFINGHAM 165/112**  
**SNOW ROAD over SOUTH RIVER**

Owner: Municipality  
Inspection Team: C

Wednesday, October 31, 2018

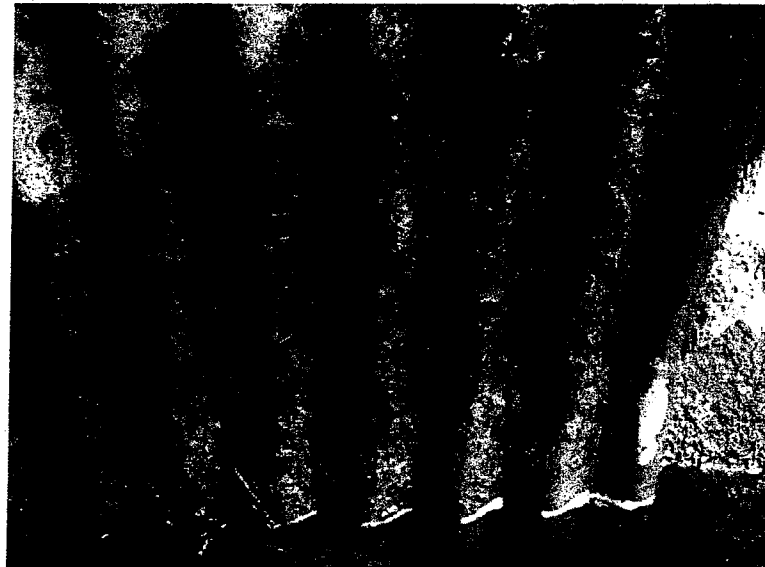
STONES MISSING  
BETWEEN PIPES #3 AND #4  
AT NORTH. (RL)



C590 27

Wednesday, October 31, 2018

TYPICAL SCATTERED  
PERFORATIONS. (RL)



C590 28

Wednesday, October 31, 2018

BEAVER DAM IN PIPE #2.  
TYPICAL OF ALL. (RL)



C590 29

# Bridge Inspection Report

NBI Structure Number: 007401660008200

Effingham 166/082

Date of Inspection: 10/26/2018  
Date Report Sent: 01/09/2019  
Owner: Municipality  
Bridge Inspection Group: C-Team  
Bridge Maintenance Crew: OTHER

**GRANITE ROAD**  
over  
**SOUTH RIVER**

### Recommended Postings:

Weight: **'Bridge Closed' and barricaded at both ends**  
*CLOSED AND BARRICADED 10/26/2018.*

Weight Sign OK

Width: **Narrow Bridge**  
*Bullet holes in signs, still legible.*

Width Sign OK

Primary Height Sign Recommendation: *None*  
Optional Centerline Height Sign Rec: *None*

Clearances: Over: 99.99  
(Feet) Under: 0.00  
Route: 99.99

Height Sign OK

### Condition:

Red List Status: Municipal Redlist  
Deck: 5 Fair  
Superstructure: 2 Critical  
Substructure: 5 Fair  
Culvert: N N/A (NBI)  
Sufficiency Rating: 36 %  
NBI Status: Structurally Deficient  
Bridge Rail: Substandard  
Rail Transition: Substandard  
Bridge Approach Rail: Substandard  
Approach Rail Ends: Substandard

### Structure Type and Materials:

Number of Main Spans: 2  
Number of Approach Spans: 0

**Main Span Material and Design Type**  
Steel Continuous Multiple Beam

### Bridge Dimensions:

Length Maximum Span: 14.0 ft  
Left Curb/Sidewalk Width: 0.0 ft  
Width Curb to Curb: 17.8 ft  
Approach Roadway Width: 14.0 ft  
(W/Shoulders)

NH Bridge Type: IB-C (I Beams w/ Concrete Deck)  
Deck Type: Concrete, Cast in Place  
Wearing Surface: Other  
Membrane: None  
Deck Protection: None  
Curb Reveal: Not Measured  
Plan Location: N-O-F  
Total Bridge Length: 36.0 ft  
Right Curb/Sidewalk Width: 0.0 ft  
Total Bridge Width: 18.5 ft  
Median: No median  
Bridge Skew: 0.00°  
Year Built/Rebuilt: 1920/1950  
Detour Length: 2.0 mi

**FEB 11 REC'D**



# Bridge Inspection Report

NBI Structure Number: 007401660008200

Effingham 166/082

## Bridge Service:

Type of Service on Bridge: Highway

Type of Service Under: Waterway

Lanes on Bridge: 2

Lanes Under: Not Applicable

AAADT: 60

Percent Trucks: 0%

Year of AADT: 1985

Future AADT: 88

Year of Future AADT: 2039

Federal or State Definition Bridge: Fed-Definition Bridge

National Highway System: Bridge does not carry NHS

Roadway Functional Class: Rural Local

New Hampshire Highway System and Class: Municipal Highway

Eligibility for the National Register of Historic Places: Possibly eligible

Traffic Direction: Two-way traffic

# Bridge Inspection Report

NBI Structure Number: 007401660008200

Effingham 166/082

**Element Details (see disclaimer below)**

No.	Description	Material Notes and Condition Notes:
12	Reinforced Concrete Deck	CLOSED AND BARRICADED. 5" OF GRAVEL ON DECK. WASHED AT EDGES. CURBS ARE CRACKED AND SPALLED. POST IS BROKEN FROM CURB AT SOUTHWEST.
L 1130	Cracking (RC and Other)	
107	Steel Open Girder/Beam	8 STRINGERS. HEAVILY RUSTED WITH SCALE AND SECTION LOSS AT ABUTMENTS AND EXTERIORS. GIRDERS #1, 2, 3 AND 7 ARE HOLED THROUGH WEB AND FLANGE AT WEST; GIRDERS #4, 5, 6 AND 8 HAVE HEAVY RUSTING WITH SCALE AND SECTION LOSS. GIRDERS #2, 6, AND 7 ARE HOLED THROUGH WEB AND FLANGE AT EAST ABUTMENT; GIRDERS #3 AND 4 HAVE LIGHT TO MODERATE RUSTING AND GIRDERS #1 AND 8 HAVE HEAVY SECTION LOSS. HEAVY SECTION LOSS AND SCALE EXTENDS OUT TYPICALLY TO ABOUT THREE FEET FROM ABUTMENT FACE (ROUGHLY FIVE FEET FROM BACKWALL). TIMBER FORMS THAT ARE IN PLACE IN MOST AREAS ARE HIDING MORE SECTION LOSS.
L 515	Steel Protective Coating	
L 1000	Corrosion	
210	Reinforced Concrete Pier Wall	LIGHT CRACKS AND MINOR SPALLS. UNDERMINED AT SOUTH (SOME SCOUR PRESENT BUT NO UNDERMINING NOTED 8/24/2015, 8/31/2017).
215	Reinforced Concrete Abutment	ABUTMENTS HAVE LIGHT CRACKS, SPALLS AND SMALL DELAMINATIONS. WINGS - STONEMASONRY WITH VOIDS, SETTLED, UNSTABLE. SOME STONE FALLEN.
330	Metal Bridge Railing	NO OFFSET BLOCKS. POST BROKEN SOUTHWEST. W - BEAM DAMAGED.

**Element States (see disclaimer below)**

No.	Description	Quantity	Units	State 1	State 2	State 3	State 4
12	Reinforced Concrete Deck	667	sq.ft	0%	100%	0%	0%
L 1130	Cracking (RC and Other)	667	sq.ft	0%	100%	0%	0%
107	Steel Open Girder/Beam	289	ft	0%	0%	70%	30%
L 515	Steel Protective Coating	—	—	0%	0%	100%	0%
L 1000	Corrosion	288	each	0%	0%	70%	30%
210	Reinforced Concrete Pier Wall	20	ft	0%	100%	0%	0%
215	Reinforced Concrete Abutment	39	ft	0%	100%	0%	0%
330	Metal Bridge Railing	249	ft	0%	90%	0%	10%

Element Disclaimer: NHDOT is transitioning from CoRe elements to AASHTO elements. The AASHTO element data shown above is the product of the automated element migration routine from the AASHTOWare BrM software. This migrated data has undergone limited field verification. Adequate quality control of this element data is not expected to be achieved until the conclusion of the 2020 inspection season. Please utilize element data with caution.

**Bridge Notes:**

OVERWEIGHT TRUCKING WITNESSED WHILE AT SITE BY LOADED TRI-AXLE DUMP TRUCK ON 8/24/2015.

**Inspection Notes: 10/26/2018**

MAS - inspection comments - BRIDGE IS CLOSED AND BARRICADED  
 DECK: GRAVEL - WASHED AT DECK EDGES. CURBS - CRACKED AND SPALLED. RAIL - DAMAGED, POST BROKEN AWAY FROM CURB AT SOUTHWEST. SOFFIT - LIGHT CRACKS AND LEAKING WITH EFFLORESCENCE; DELAMINATIONS AND SPALLS WITH REBAR EXPOSED. TIMBER FORMS IN PLACE IN AREAS.  
 SUPERSTRUCTURE: GIRDERS - HEAVILY RUSTED WITH SCALE AND SECTION LOSS AT ABUTMENTS AND EXTERIORS. SEVERAL WEBS AND FLANGES ARE HOLED AT ABUTMENTS FOR UP TO 39" IN LENGTH. HEAVY SECTION LOSS EXTENDS OUT TYPICALLY TO ABOUT THREE FEET FROM ABUTMENT FACE (ROUGHLY FIVE FEET FROM BACKWALL).  
 SUBSTRUCTURE: ABUTMENTS - CRACKS, DELAMINATIONS AND SEVERAL SPALLS. PIER - CRACKS, DELAMINATIONS AND SPALLS.  
 SCOUR - AT PIER NOSE, NO UNDERMINING NOTED.

# Bridge Inspection Report

Effingham 166/082

NBI Structure Number: 007401660008200

**Previous Inspection Notes:** 08/31/2017

MAS - inspection comments - BRIDGE IS CLOSED AND BARRICADED  
 DECK: GRAVEL - WASHED AT DECK EDGES. CURBS - CRACKED AND SPALLED. RAIL - DAMAGED, POST BROKEN AWAY FROM CURB AT SOUTHWEST. SOFFIT - LIGHT CRACKS AND LEAKING WITH EFFLORESCENCE; DELAMINATIONS AND SPALLS WITH REBAR EXPOSED. TIMBER FORMS IN PLACE IN AREAS.  
 SUPERSTRUCTURE: GIRDERS - HEAVILY RUSTED WITH SCALE AND SECTION LOSS AT ABUTMENTS AND EXTERIORS. SEVERAL WEBS AND FLANGES ARE HOLED AT ABUTMENTS FOR UP TO 39" IN LENGTH. HEAVY SECTION LOSS EXTENDS OUT TYPICALLY TO ABOUT THREE FEET FROM ABUTMENT FACE (ROUGHLY FIVE FEET FROM BACKWALL).  
 SUBSTRUCTURE: ABUTMENTS - CRACKS, DELAMINATIONS AND SEVERAL SPALLS. PIER - CRACKS, DELAMINATIONS AND SPALLS. SCOUR - AT PIER NOSE, NO UNDERMINING NOTED.

**Approach and Roadway Notes:**

GRAVEL - (7) GOOD CONDITION, WASHED.  
 W- BEAM RAIL - DAMAGED.  
 STONE WINGS UNSTABLE.  
 MODERATE VEGETATION.

**Inspection History**

Inspection Date	Inspector Initials	Inspection Type(s) Performed				Major Element Ratings				Red list	Posting
		NBI	Elem	FCM	U/W	Deck	Super	Sub	Culvert		
10/26/2018	MAS	✓	✓	□	□	5	2	5	N	✓	Bridge Closed
08/31/2017	MAS	✓	✓	□	□	5	2	5	N	✓	Bridge Closed
12/01/2016	MAS	✓	✓	□	□	5	2	5	N	✓	Bridge Closed
08/24/2015	MAS	✓	✓	□	□	5	2	5	N	✓	Bridge Closed
12/08/2014	MAS	✓	✓	□	□	5	3	5	N	✓	6 Tons
08/23/2013	TDC	✓	✓	□	□	5	3	5	N	✓	6 Tons
10/12/2012	KJT	✓	✓	□	□	5	3	5	N	✓	6 Tons
12/08/2011	KJT	✓	✓	□	□	5	3	5	N	✓	6 Tons
10/26/2010	DPC	✓	✓	□	□	5	3	5	N	✓	6 Tons
12/11/2009	DPC	✓	✓	□	□	5	3	5	N	✓	6 Tons
08/27/2008	KJT	✓	✓	□	□	5	3	6	N	✓	6 Tons
12/13/2007	KJT	✓	✓	□	□	5	3	7	N	✓	6 Tons
09/19/2006	DPC	✓	✓	□	□	5	3	7	N	✓	6 Tons
12/15/2005	DPC	✓	✓	□	□	5	3	6	N	✓	6 Tons
08/25/2004	DPC	✓	✓	□	□	5	3	7	N	✓	6 Tons
02/04/2004	DPC	✓	✓	□	□	5	3	7	N	✓	6 Tons
04/17/2003	RLM	✓	✓	□	□	5	3	7	N	✓	6 Tons
10/03/2002	DPC	✓	✓	□	□	5	5	7	N	✓	6 Tons
11/29/2001	DPC	✓	✓	□	□	5	5	7	N	✓	6 Tons
10/19/2000	DPC	✓	✓	□	□	5	5	7	N	✓	6 Tons
12/09/1999	RLM	✓	✓	□	□	6	5	7	N	✓	6 Tons
10/02/1998	DPC	✓	✓	□	□	6	5	7	N	✓	6 Tons
10/01/1997		✓	✓	□	□	6	5	7	N	✓	6 Tons
02/01/1996		✓	✓	□	□	6	5	7	N	✓	6 Tons
02/01/1994		✓	✓	□	□	6	5	7	N	✓	6 Tons
09/01/1992		✓	✓	□	□	7	5	7	N	✓	6 Tons

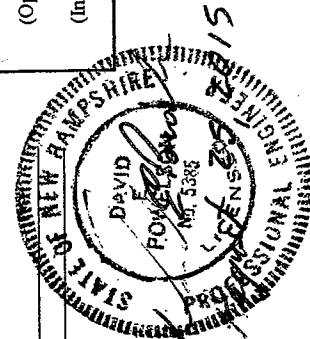
Inspection Frequency (mo.)			
NBI	Elem	FCM	U/W
16	16	N/A	N/A

TOWN: EFFINGHAM  
 BRIDGE NUMBER: 166/082  
 RATED BY: NBG DATE: 8/25/2015  
 CHECK BY: DEF DATE: 8/25/15  
 OVER: SOUTH RIVER

**BRIDGE CAPACITY SUMMARY**

DESIGN LOAD: UNKNOWN DESIGN METHOD: UNKNOWN  
 RATING METHOD: FIELD EVAL. & ENG. JUDGMENT PLAN FILE: UNKNOWN  
 ROUTE: GRANITE ROAD

RATED MEMBER	LONGITUD. EFFECTIVE SPAN LENGTH	REQUIRED CAPACITY (HS Tons)		AVAILABLE CAPACITY (HS Tons)		SINGLE LANES LOADED			POSTING					
		CURRENT LEGAL LOADS	CERTIFIED VEHICLES SINGLE UNIT	CERTIFIED VEHICLES MULTIPLE UNIT	INVENTORY	OPERATING	POSTING	INVENTORY		OPERATING				
STEEL BEAMS, Shear (100% losses in beam webs)	16'-0"	HS 22.5	HS 27.5	HS 24.7	HS 0.0	HS 0.0	HS 0.0	HS 0.0	HS 0.0	HS 0.0	HS 0.0	HS 0.0	HS 0.0	Metric Tons 0.0
RECOMMENDED POSTING: "BRIDGE CLOSED" and barricaded.														
Rating Method (Op.) 63. By Insp. 0.0 (Inv.) 65. By Insp. 0.0														



# Bridge Inspection Report

NBI Structure Number: 007401810007200

## Effingham 181/072

Date of Inspection: 12/11/2018

**STEVENS ROAD**

Date Report Sent: 01/09/2019

over

Owner: Municipality

**BROOK**

Bridge Inspection Group: C-Team

Bridge Maintenance Crew: OTHER

### Recommended Postings:

Weight: **No Posting Required**

Weight Sign OK

Width: **Not Required**

Width Sign OK

Primary Height Sign Recommendation: *None*

Clearances: Over: 99.99

Height Sign OK

Optional Centerline Height Sign Rec: *None*

(Feet) Under: 0.00

Route: 99.99

### Condition:

Red List Status: Not on the Redlist

Deck: N N/A (NBI)

Superstructure: N N/A (NBI)

Substructure: N N/A (NBI)

Culvert: 9 Excellent

Sufficiency Rating: 100%

NBI Status: Not Applicable

Bridge Rail: N/A or Not Required

Rail Transition: N N/A or not required

Bridge Approach Rail: Meets Standards

Approach Rail Ends: Meets Standards

### Structure Type and Materials:

Number of Main Spans: 1

Number of Approach Spans: 0

#### Main Span Material and Design Type

Prestressed Concrete Culvert

NH Bridge Type: CB-P (Concrete Box-Precast)

Deck Type: No Deck ( N/A - NBI)

Wearing Surface: No Deck ( N/A - NBI)

Membrane: No Deck ( N/A - NBI)

Deck Protection: No Deck ( N/A - NBI)

Curb Reveal: Not Measured

Plan Location: N-O-F

Total Bridge Length: 10.0 ft

Right Curb/Sidewalk Width: 0.0 ft

Total Bridge Width: 0.0 ft

Median: No median

Bridge Skew: 5.00°

Year Built/Rebuilt: 2018

Detour Length: 2.0 mi

### Bridge Dimensions:

Length Maximum Span: 10.0 ft

Left Curb/Sidewalk Width: 0.0 ft

Width Curb to Curb: 0.0 ft

Approach Roadway Width: 18.0 ft

(W/Shoulders)

FEB 11 REC'D

# Bridge Inspection Report

NBI Structure Number: 007401810007200

Effingham 181/072

## Bridge Service:

Type of Service on Bridge: Highway

Type of Service Under: Waterway

Lanes on Bridge: 2

Lanes Under: Not Applicable

AAADT: 230

Percent Trucks: 10 %

Year of AADT: 1987

Future AADT: 340

Year of Future AADT: 2039

Federal or State Definition Bridge: NH-Definition Bridge

National Highway System: Bridge does not carry NHS

Roadway Functional Class: Rural Local

New Hampshire Highway System and Class: Municipal Highway

Eligibility for the National Register of Historic Places: Not Eligible

Traffic Direction: Two-way traffic

# Bridge Inspection Report

NBI Structure Number: 007401810007200

Effingham 181/072

**Element Details (see disclaimer below)**

No.	Description	Material Notes and Condition Notes:
215	Reinforced Concrete Abutment	<i>Element record added 12/11/2018</i> 4 PRECAST CONCRETE WINGS. PRECAST CONCRETE WINGS. NEW CONDITION. MINOR INSTALLATION DAMAGE.
245	Prestressed Concrete Culvert	<i>Element record added 12/11/2018</i> 4 PRECAST CONCRETE BOX SECTIONS, 10" THICK. NEW PRECAST CONCRETE BOX 10" THICK.

**Element States (see disclaimer below)**

No.	Description	Quantity	Units	State 1	State 2	State 3	State 4
215	Reinforced Concrete Abutment	40	ft	100%	0%	0%	0%
245	Prestressed Concrete Culvert	26	ft	100%	0%	0%	0%

Element Disclaimer: NHDOT is transitioning from CoRe elements to AASHTO elements. The AASHTO element data shown above is the product of the automated element migration routine from the AASHTOWare BrM software. This migrated data has undergone limited field verification. Adequate quality control of this element data is not expected to be achieved until the conclusion of the 2020 inspection season. Please utilize element data with caution.

**Bridge Notes:**

REMOVED FROM MUNICIPAL RED LIST 12/11/2018.  
NEW PRECAST CONCRETE CULVERT 12/11/2018.

**Inspection Notes: 12/11/2018**

MAS - inspection comments -  
CULVERT: GRAVEL - GOOD CONDITION, ICE AND SNOW COVERED. CONCRETE BOX - NEW CONDITION. WINGS - NEW CONDITION, MINOR INSTALLATION SPALLS.

PICTURES: C591-  
07. WEST APPROACH.  
08. SOUTH ELEVATION.

**Previous Inspection Notes: 08/31/2017**

KJT - inspection comments -  
DECK: GRAVEL - GOOD CONDITION. RAIL - MINOR DAMAGE. JERSEY BARRIERS AT SOUTH ONLY. SOFFIT - FORMS IN PLACE.  
SUPERSTRUCTURE: MASONRY SLABS APPEAR TO BE IN GOOD CONDITION WITH NONE FRACTURED. I BEAMS ARE RUSTED WITH SCALE AT EXPOSED BEAM FLANGES.  
SUBSTRUCTURE: STONE MASONRY HAS VOIDS AT BASES, MORTAR MISSING. WINGS ARE SETTLED AND UNDERMINED, EMBANKMENT IS WASHED. SOUTHEAST ABUTMENT AND WING SETTLED AND UNDERMINED WITH UP TO 5' PENETRATION X 3' WIDE. NORTHWEST ABUTMENT AND WING SETTLED AND UNDERMINED WITH UP TO 5' PENETRATION X 1' WIDE.

PICTURE: C574.  
47. JERSEY BARRIERS AT SOUTH.

**Approach and Roadway Notes:**

GRAVEL - (7) GOOD CONDITION.  
W- BEAM RAIL - NEW CONDITION.

**Unusual or experimental features:**

# Bridge Inspection Report

NBI Structure Number: 007401810007200

Effingham 181/072

## Inspection History

Inspection Date	Inspector Initials	Inspection Type(s) Performed				Major Element Ratings				Red list	Posting
		NBI	Elem	FCM	U/W	Deck	Super	Sub	Culvert		
12/11/2018	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	9	<input type="checkbox"/>	No Posting Req'd
08/31/2017	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/01/2016	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
08/24/2015	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/08/2014	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
08/23/2013	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
10/12/2012	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/08/2011	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
10/26/2010	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/11/2009	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
08/26/2008	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/13/2007	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
09/19/2006	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
12/15/2005	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
08/25/2004	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
02/04/2004	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
04/17/2003	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
10/03/2002	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
11/29/2001	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
10/19/2000	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	5	N	<input checked="" type="checkbox"/>	6 Tons
12/09/1999	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	5	N	<input checked="" type="checkbox"/>	6 Tons
10/02/1998	FNM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons
10/01/1997		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons
02/01/1996		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons
02/01/1994		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons
09/01/1992		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons

Inspection Frequency (mo.)			
NBI	Elem	FCM	U/W
24	24	N/A	N/A



TOWN: EFFINGHAM  
 BRIDGE NUMBER: 181/072  
 RATED BY: JTP DATE: 1/8/2019  
 CHECK BY: LOCC DATE: 1/8/2019  
 OVER: STREAM

**BRIDGE CAPACITY SUMMARY**

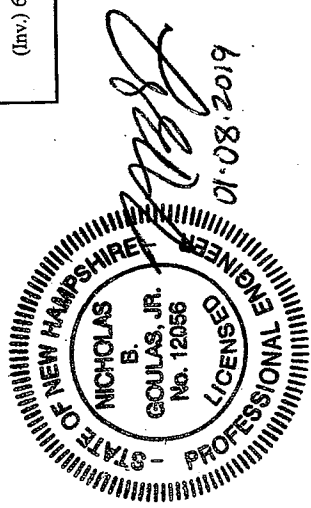
DESIGN LOAD: HL-93 (ASSUMED) DESIGN METHOD: LRFD (ASSUMED)  
 RATING METHOD: FIELD EVAL. & ENG. JUDGMENT PLAN FILE: SCANNED PLANS

ROUTE: STEVENS ROAD

RATED MEMBER	LONGITUD. EFFECTIVE SPAN LENGTH	REQUIRED CAPACITY (HS Tons)		AVAILABLE CAPACITY (HS Tons)					
		CURRENT LEGAL LOADS	CERTIFIED VEHICLES SINGLE UNIT	MULTIPLE LANES LOADED		SINGLE LANES LOADED			
				INVENTORY	OPERATING	INVENTORY	OPERATING	POSTING	
Precast Concrete Box Culvert* Flexure Shear	10'-0" 10'-0"	HS 17.9 HS 22.4	HS 19.7 HS 24.8	HS 17.2 HS 22.3	HS 22.0 HS 27.2	HS 28.5 HS 35.3	HS 22.0 HS 27.2	HS 28.5 HS 35.3	
		Rating Method (Op.) 63. By Insp. (Inv.) 65. By Insp.		English Tons 64. (Op.) 51.3 66. (Inv.) 39.6		Metric Tons 46.5 35.9			

\*Load ratings are assigned per engineering judgment utilizing inventory rating factors of 1.0 and operating rating factors of 1.296 (=1.75/1.35), corresponding to HL-93 design assumed per the date of construction.

RECOMMENDED POSTING: NO POSTING REQUIRED



**EFFINGHAM 181/072**  
**STEVENS ROAD over BROOK**

Owner: Municipality  
Inspection Team: C

Tuesday, December 11, 2018

WEST APPROACH.



C591 07.

Tuesday, December 11, 2018

SOUTH ELEVATION.



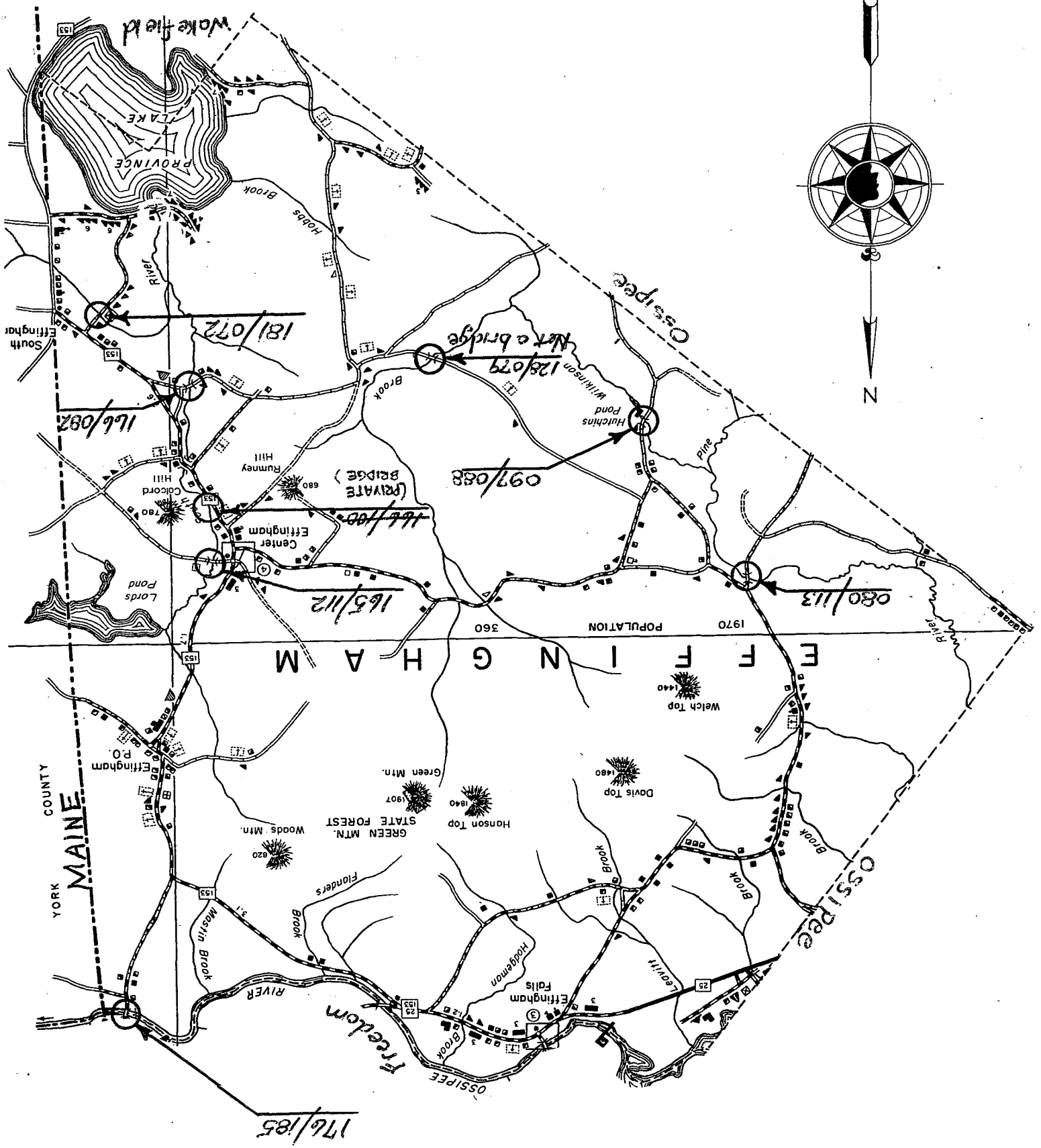
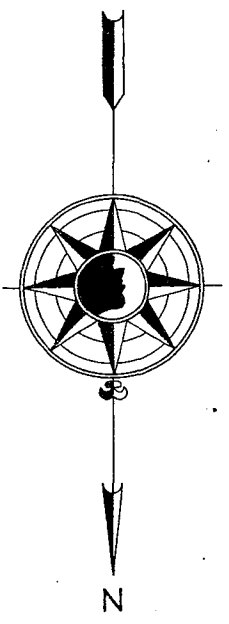
C591 08

**EFFINGHAM MUNICIPAL BRIDGES**

<b>BRIDGE NUMBER</b>	<b>TYPE</b>	<b>NO. SPANS</b>	<b>ROAD INV.NO.</b>	<b>ROAD NAME</b>	<b>OVER</b>	<b>LENGTH (O-T-O)</b>	<b>RECOMMENDED POSTING</b>
080/113	IB-C	1	82	ELM STREET	PINE RIVER	62'-0"	E-2
097/088	JACK	1	83	DRAKE ROAD	WILKINSON BROOK	22'-0"	WEIGHT LIMIT 6 TONS; ONE LANE BRIDGE
165/112	MP	4	68	SNOW ROAD	SOUTH RIVER	32'-0"	E-2
166/082	IB-C	2	65	GRANITE ROAD	SOUTH RIVER	36'-0"	BRIDGE CLOSED
176/185	HT	1	53	HUNTRESS BRIDGE ROAD	OSSIPEE RIVER	139'-0"	NO POSTING REQ'D; MIN. VERT. CLR. 12'-03"
181/072	CB-P	1	63	STEVENS ROAD	BROOK	10'-0"	NO POSTING REQ'D;

REMARKS: 166/082 SENT AS A CRITICAL DEFICIENCY ON 8/25/2015.  
 165/112 SENT AS A DEFICIENCY ON 8/26/2015.  
 166/100 REMOVED FROM THE INVENTORY (PRIVATE BRIDGE PER TOWN DOCUMENTS).

REVISED/REVIEWED: 1/19



YORK COUNTY MAINE

E P P I N G H A M

1970 POPULATION 360

WAKEFIELD

OSISPEE

Freedom

176/185

166/082

181/072

128/079

097/088

166/100

165/112

080/113

Lords Pond

Eppingham P.O.

Center Eppingham

Colcord Hill

Rumney Hill

Green Mt. State Forest

Woods Mt.

Hanson Top

Davis Top

Welch Top

Hodgeman Falls

Eppingham

Leavitt

Brook

Brook

Brook

Flonders Brook

Mosin Brook

Flowers Brook

Flowers Brook

Flowers Brook

Flowers Brook

Flowers Brook

Flowers Brook

Flowers Brook

Flowers Brook

Hods Brook

Brook

Hutchins Pond

Wilkinson

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