QCPR - IPDR - APPENDIX

Stantec

Queen City Park Road Bridge
Initial Project Definition Report
Appendix

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Doc. #	**APPENDIX A - BACKGROUND**
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V	CRASH DATA CORRESPONDENCE

STRUCTURAL INSPECTION, INVENTORY and APPRAISAL SHEET

Vermont Agency of Transportation ~ Structures Section ~ Bridge Management and Inspection Unit

Inspection Report for BURLINGTON bridge no.: 00002 District: 5

Located on: C2007 over VERMONT RAILWAY approximately 0.18 MI TO JCT W CL2 TH Owner: 03 TOWN-OWNED

CONDITION

Deck Rating: 5 FAIR

Superstructure Rating: 6 SATISFACTORY

Substructure Rating: 7 GOOD

Channel Rating: N NOT APPLICABLE

Culvert Rating: N NOT APPLICABLE

Federal Str. Number: 100403000204031

Federal Sufficiency Rating: 44.2

Deficiency Status of Structure: FD

STRUCTURE TYPE and MATERIALS

I

Bridge Type: ROLLED BEAM

Number of Approach Spans: 0000 Number of Main Spans: 001

Kind of Material and/or Design: 3 STEEL

Deck Structure Type: 1 CONCRETE CIP

Type of Wearing Surface: 6 BITUMINOUS

Type of Membrane: 0 NONE

Deck Protection: 0 NONE

AGE and SERVICE

Year Built: 1966 Year Reconstructed: 1973

Service On: 5 HIGHWAY-PEDESTRIAN

Service Under: 2 RAILROAD

Lanes On the Structure: 01

Lanes Under the Structure: 00

Bypass, Detour Length (miles): 99

ADT: 001890 % Truck ADT: 20

Year of ADT: 1999

APPRAISAL

Bridge Railings: 0 DOES NOT MEET CURRENT STANDARD

Transitions: 0 DOES NOT MEET CURRENT STANDARD

Approach Guardrail: 0 DOES NOT MEET CURRENT STANDARD

Approach Guardrail Ends: 0 DOES NOT MEET CURRENT STANDARD

Structural Evaluation: 6 EQUAL TO MINIMUM CRITERIA

Deck Geometry: 2 INTOLERABLE, REPLACEMENT NEEDED

Underclearances Vertical and Horizontal: 2 INTOLERABLE, REPLACEMENT NEEDED

Waterway Adequacy: N NOT OVER WATER

Approach Roadway Alignment: 5 BETTER THAN MINIMUM TOLERABLE CRITERIA

Scour Critical Bridges: N NOT OVER WATERWAY

GEOMETRIC DATA

Length of Maximum Span (ft): 0079

Structure Length (ft): 000081

Lt Curb/Sidewalk Width (ft): 4.2

Rt Curb/Sidewalk Width (ft): 0

Bridge Rdwy Width Curb-to-Curb (ft): 14.1

Deck Width Out-to-Out (ft): 17.2

Appr. Roadway Width (ft): 028

Skew: 00

Bridge Median: 0 NO MEDIAN

Min Vertical Clr Over (ft): 99 FT 99 IN

Feature Under: RAILROAD BENEATH STRUCTURE

Min Vertical Underclr (ft): 21 FT 00 IN

LOAD RATING and POSTING

Rating Method (Inv): 2 ALLOWABLE STRESS (AS)

Rating (Inv): 2 HS LOADING 38 Tons

Rating Method (Oper): 2 ALLOWABLE STRESS (AS)

Rating (Oper): 2 HS LOADING 66 Tons

Bridge Posting: 5 NO POSTING REQUIRED

Posting Status: A OPEN, NO RESTRICTION

Design Load: 3 HS 15

INSPECTION and CROSS REFERENCE

Cross Ref. Route:

Insp. Date: 112005 Insp. Freq. (months) 24 Cross Ref. BrNum:

INSPECTION SUMMARY and NEEDS

11/15/2005 The overall condition of this bridge is satisfactory except for the slow ongoing deterioration of the deck surface and corroding steel beams.

STATE OF VERMONT - VTrans

BRIDGE INSPECTION FORM

ROUTE TH#7 QCPR - IPDR - APPENDIX BRIDGE NO. 2 DISTRICT 5 DATE 11-15-2005
TOWN Burlington CROSSING TH#7 over UTRR
BRIDGE TYPE Rolled Beam INSPECTORS PLB, DAK

ITEM 72 – APPROACH ALIGNMENT

* Problem Areas ** Critical Areas

I

Alignment: straight in, thru and out.

Rail: Galv. Stl Bm

Rail Posts: Galv. Stl H-Bm A few posts w/ bends and twists

Settlement/Erosion: med on both approach ends

CONDITION RATING: 5

ITEM 58 - DECK

Wearing Surface: Asphalt overlay multiple patched potholes w/ minor voids throughout

Fascia: Several spalled areas w/ rust stain spots and mod to med section loss w/ exposed rebar

Soffit: soffit areas near the fascias have spalled exposed rebar rust stain spots w/ mod to med section loss of the minor thrust curbs w/ [illegible]

Curbs: None

Sidewalk: Galv. Stl grating good condition

Br. Rail: Galv Stl Bm w/ wide Stl Angle. Hoy angle damage on the LT side of Appr. No. 2

Rail Posts: Galv. Stl H-Bm. mod to med rusting along bottom of all posts.

Exp. Joint: None

Joint Leakage:

Drains:

CONDITION RATING: 5

ITEM 59 - SUPERSTRUCTURE

Verticals: N/A

Diagonals:

Chords:

Lateral Bracing:

Stringers:

Floorbeams:

Girders/Beams: Exterior bms have mod to med rust scaling

Cover Plates: none

Paint: 40% paint peel and loss w/ mod to med rusting

Paint Rating: 5

Bearings: mod to med rusting

Arches: N/A

Roof/Portal/Siding:

Alignment: Good

Impact Damage: None

FCM Yes No Comment:

CONDITION RATING: 6

ITEM 60 – SUBSTRUCTURE

QCPR - IPDR - APPENDIX

☐ Abutments * Problem Areas * Critical Areas

Backwall:	[illegible] chipped areas w/ delams and spalls around bm pockets especially on the East abutment
Bridge Seat:	
Stem:	Minor delams especially on the west abutment
Wingwall:	minor random cracks.
Footings:	not seen
Undermining:	
Settlement:	

I

☐ Piers

Bridge Seat:	N/A
Cap:	
Shaft:	
Columns:	
Footings:	
Undermining	
Settlement:	

CONDITION RATING: 7

ITEM 61 – CHANNEL

Alignment:	N/A
Scour:	
Erosion:	
Debris/Bars:	
Protection:	
Waterway Opening:	

CONDITION RATING: N

- Posting: *Yes* (No) Posted Loading: Abut #1 _____ Abut #2 _____
- Posted Vert Clr: None Measured Vert. Clr: Lt Shoulder _____ Centerline _____ Rt Shoulder _____
- Additional Signing/Restrictions: one Lane Bridge (Both approach ends)
- Special Equipment/Access: Staging _____ Servi-lift _____ Boat _____ Divers _____ NDT _____

Comments: The overall condition of this bridge is satisfactory except for the slow ongoing deterioration of the deck surface and corroding stl. Bms.

Burlington Town Highway 7 Bridge 2 **6/17/03**

Structure Type: Steel beam bridge over the VT Railroad

I

Approach: Bituminous pavement wearing surface has many areas of patches and some cracking. There is some collision damage in the approach guard rail on the left side in the west abutment and on the east side on the left of the underside of the deck has numerous cracks and leaks in both bays. There is heavy spalling on the ends of the deck and under the fascia over hang with rebar exposed there is heavy rust scale in the rebar.

Superstructure: There are 3 heavy duty rolled beams; the two fascia beams have heavy rust scale especially the south beam on the bottom flange in random areas through out and in the top flange. The webs have some areas of paint peal to bare metal there is heavy rust scale down along the bottom of the webs. This is on the south side also on the north side. The north fascia beam has areas of freckled rust through out, with areas of paint peal in the top flange however this is mainly surface rust. There is heavy rust scale in the webs in top and bottom flanges at the curtain wall at this beam. Beam 2 has areas of freckled rust along the top and bottom flanges in random spots. Abutment 2 has bronze plates for expansion bearings; they were fixed at abutment 1. The curtain walls have areas of pop out under beam 1 which is the left fascia beam and cracking and delamination in the other two beams.

Substructure: Abutment 1 has some cracking and leaking with a few delaminations in the curtain wall and a horizontal crack just below the bridge seat. Otherwise The abutments are in good condition for the most part. There is galvanized bridge system in the sidewalk, galvanized floor beams , with diagonal galvanized box beam angles that are bolted to the south fascia beam in the webs. The ends at the abutment are anchored in to the concrete retainer type wings on a diagonal angle and vertical angle. There is a one lane bridge sign on each abutment on the right side at abutment 1 and the left at abutment 2.

Inspectors: Doane Preedom & Floyd Earle
DCP0606_0620.doc

STATE OF VERMONT - *VTrans*

BRIDGE INSPECTION FORM

QCPR - IPDR - APPENDIX

ROUTE TH7 BRIDGE NO 2 DISTRICT 5 DATE 6-17-03

TOWN Burlington CROSSING TH7 over Vermont R.R.

BRIDGE TYPE Simple Span Rolled Bm INSPECTORS DCP+FE

ITEM 72 – APPROACH ALIGNMENT * Problem Areas ** Critical Areas

I

Alignment: Straight Gradual Cress Vertical

Rail: Galv STL Bm rail w/ galv angle at the bottom

Posts: Galv Posts

Settlement/Erosion: None

CONDITION RATING: 8

ITEM 58 - DECK

Wearing Surface: Bit Paint Some Patches and

Fascia: deep spalls on Fascia especially the Right Side or South Fascia.

Soffit: Numerous Cracks Leaks

Curbs: None

Sidewalk: Rigt Side which hanges of the rolled bms

Br. Rail: on Galv Box Bms which are bolted to the web of Bm 3

Posts: Galv STL Bm rail
Galv deck mounted posts

Exp. Joint: None Saw cuts

Joint Leakage: Minor Leakage

[illegible]ns: None Seen Paved over

CONDITION RATING: 5

ITEM 59 - SUPERSTRUCTURE

Verticals:

Diagonals:

Chords:

Lateral Bracing:

Stringers:

Floorbeams:

Girders/Beams: 3 [illegible] South [illegible] Bm

Cover Plates: [illegible] w/ slight Section loss

Paint: webs & flanges at [illegible] the Box ends

Paint Rating: 6

Bearings: Bronze [illegible] abutz

Arches:

Roof/Portal/Siding:

[illegible]ber Alignment: [illegible]

Impact Damage: [illegible]

FCM Yes No Comment:

CONDITION RATING: [illegible]

ITEM 60 – SUBSTRUCTURE

☐ **Abutments** * Problem Areas ** Critical Areas

Backwall:	Cartain walls have some popouts at abut2
Bridge Seat:	Some Conc From popouts abut2 (I)
Stem:	Relatively Clean abut 1 has small horrizontal
Wingwall:	crack at abut1 Just below the bridge seat Between [illegible] wall hung Bms #2
Footings:	top expose at abut2
Undermining:	None
Settlement:	None

☐ **Piers**

Bridge Seat:	N
Cap:	
Shaft:	
Columns:	
Footings:	
Undermining	
Settlement:	A

CONDITION RATING: 7

ITEM 61 – CHANNEL

Alignment:	N
Scour:	
Erosion:	
Debris/Bars:	
Protection:	
Waterway Opening:	A

CONDITION RATING: N

- Posting: *Yes* *No* Posted Loading: Abut. #1 _____ Abut. #2 _____
- Posted Vert. Clr: _____ Measured Vert. Clr: Lt. Shoulder _____ Centerline _____ Rt. Shoulder _____
- Additional Signing/Restrictions: _____
- Special Equipment/Access: Staging _____ Servi-lift _____ Boat _____ Divers _____ NDT _____

Comments: Structure is in good to Fair condition
It has been paved in the Deck w/ Possibly a membrain
in 2002.

Burlington T-H #7 Bridge #2 **June 20, 2001**

I

Structure Type: Steel Beam Bridge over the Vermont Railroad

Approach: Both approaches are paved. There are many areas of cracking and potholing in the approaches adjacent to the bridge. There are slight curves onto the structure. There is a gradual upgrade through the structure. Approach guardrail consists of galvanized steel beam rail on galvanized posts. There is also a galvanized angle iron rail on the bottom. There is slight collision damage in the rail on abutment #1 and on abutment #2 left side post is bent and twisted and disconnected from the railing. The galvanized channel rail on the bottom has cracked at mid span between the two posts. The channel angle rail is bent and twisted on the first bridge posts. There is some slight settlement in the approach in the same location behind the concrete retainer wall type wing.

Deck: Deck consists of bare concrete deck. There are numerous map cracks in the concrete deck. There are numerous patches in the concrete deck. There are areas of spalls starting on the ends of the patches with rebar exposed. These spalls are quite deep in places up to two or three inches. There are many pending potholes. Bridge guardrail consist of galvanized steel beam rail with a galvanized angle iron rail under the galvanized steel beam rail on deck mounted galvanized posts. There is a steel angle plate under the steel plate for the posts on the right side. This angle plate box beam floor beam support for the sidewalk. This box beam is welded to the plate. The plate is bolted down through the deck along with the posts. The sidewalk consists of open galvanized plate on channel angles bolted to the floor beams with a welded steel plate. There is box beam diagonal bracing bolted to the right fascia beam. All of these members are galvanized. However there is some rusting in the galvanizing of the steel plate for the bridge guardrail posts. The bolts have heavy rust scale along with the plates under the fascia on both sides. The fascias have areas of spalls with rebar exposed on both sides. There are many spalls. The underside of the deck in the interior bays have many areas of cracking and staining with leaking. There is leaking at the top of the curtain walls at both abutments.

Superstructure: Superstructure consists of three rolled beams. The rolled beams are cast into the curtain walls at both abutments. Rolled beams have freckled rust along the top and bottom flanges and the webs. The rolled beam on the fascia beam has areas of heavy rust scale at the abutment and the bottom flange and the web area. All of the ends of the beams have heavy rust scale with minor section loss in the webs and flanges at the abutments especially abutment #1. There is heavy rust scale on the radius steel plates at abutment #1 also at abutment #2. There are bronze plate bearings at abutment #2. Rolled beams appear to have slight positive camber. There are three sets of cross-angle diaphragms in bay #2. Bay #1 has some cross-angle bracing connected to the top flange only. There are three sets.

Burlington T-H #7 Bridge #2 **June 20, 2001 Continued**

I

Substructure: Both abutments are concrete abutments. Abutments are relatively good condition and have a lot of graffiti on them. There is some cracking and leaking in the back walls with some delaminations in abutment #2 at the box outs for the bearings. The concrete retaining wall type wings are in relatively good condition. Abutment #1 also has a small spall on the end of the right bridge seat area. There are many areas of map cracks in the retainer wall type wing area. The sidewalk bears on its own wing type extension off the retainer wall type wing. This bridge seat area for the sidewalk has a few areas of cracking. The wing has a few areas of cracking at both abutments. There are areas of map cracks on the abutment #1 north wing. Track runs through the middle of the structure. There are concrete footings exposed in front of the abutments. Just their tops are exposed.

Posting: This structure is not posted

Summary: **It may be wise to replace the deck and at the same time clean and paint the rolled beams and bearings. Approach railing on abutment #2 left side should be fixed from collision damage.**

Inspectors: Doane Preedom & Peter Bergeron

DCP618.01

BY _____ DATE _____ SUBJECT _____ SHEET NO. _____ OF _____

CHKD. BY _____ DATE _____ JOB NO. _____

QCPR - IPDR - APPENDIX

ROUTE NO. _____ BRIDGE NO _____

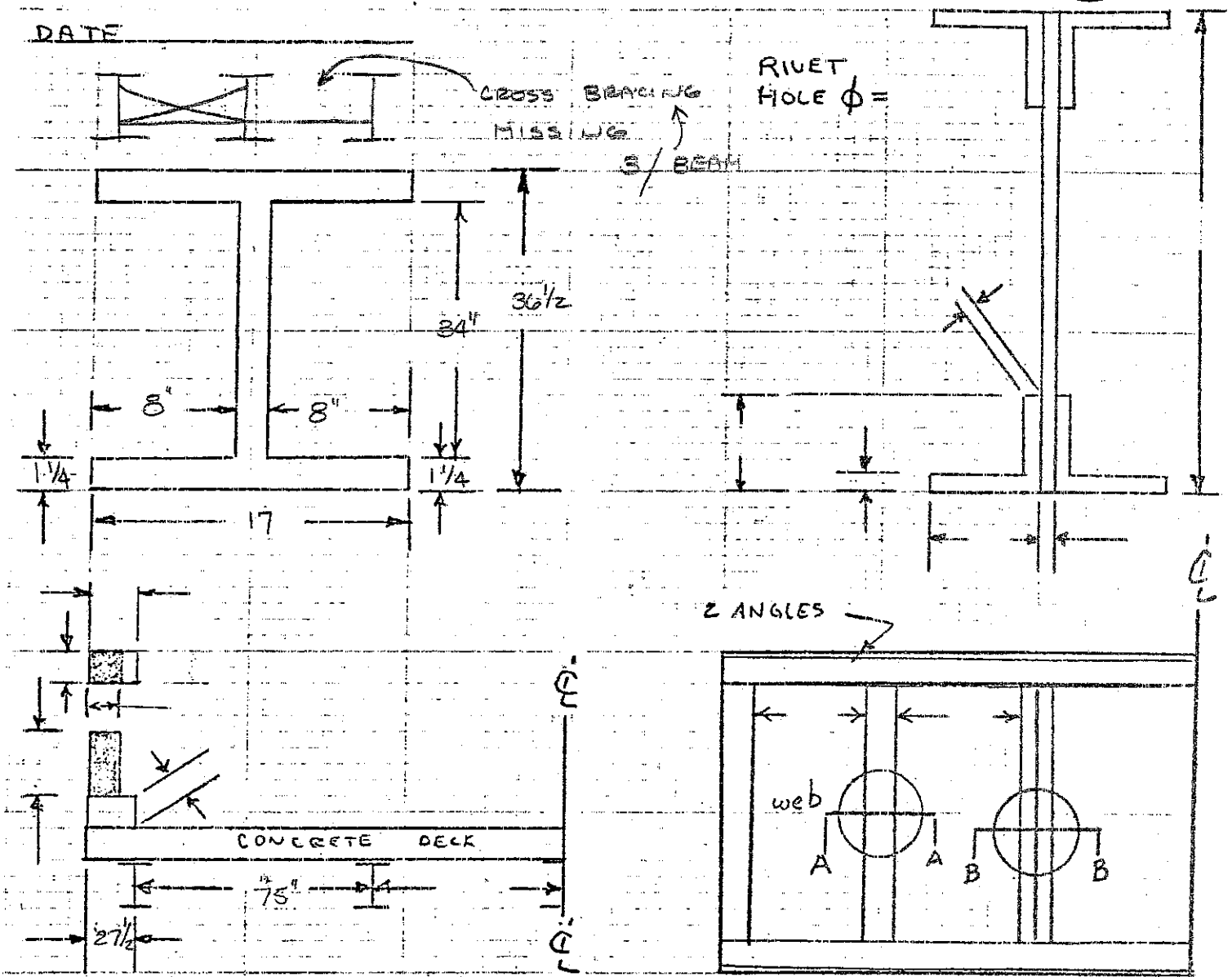
TOWN _____

INSPECTORS _____

DATE _____

BEAM DETAILS

I



NUMBER OF BEAMS 3

BEAM LENGTH C-C BEARING _____

COVER PLATE: THICKNESS _____

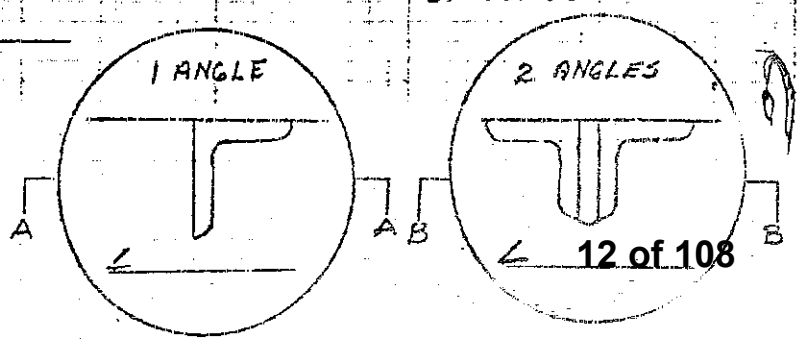
WIDTH _____

SIDE VIEW FOR RIVET SPACING

RAIL POST SPACING C-C 8'

REMARKS 6" x 8" I-BEAM WITH [illegible]

3-CABLE



BRIDGE INSPECTION SHEET
OFF - SYSTEM BRIDGES

Inspected by: QCPR - IPDR - APPENDIX

Highway No. Cl. 2, TH7
Bridge No. 2
Bridge Code No. 04030002
Town BURLINGTON

ABUT. #2 | 4 TO Cl. 2, TH7 | ABUT. #1

I

90 Deck

Wearing Surface	Structural Condition	Curbs Walks	Railing	Drains	Fixed Joint	Expantion Joint	Type Joint
7	7	7			7		ELASTOMETRIC

Remarks: BOLTED ON CURBS BENT IN PLACES [illegible] ABUT #2

91 Superstructure

Supporting Members	Bracing	Paint Cond.	Year Painted	Alignment	Bearings Abut 1	Bearings Piers	Bearings Abut 2
7	6	7		7	6		6

Remarks: X-BRACES MISSING BETWEEN [illegible] 2 X 3 SPOT PAINTING NEEDED.

92 Substructure

Walls	Stem	Bearing Seats	Erosion	Pier Caps	Pier Column	Bearing Seats	Erosion	Wings Abut 1	Wings Abut 2
7	7	7						7	7

Remarks: LOOK GOOD - TRIANGULAR CHUNKS OF CONCRETE STARTING TO BREAK OFF BACKWALL @ BEAM ENDS - ABUT #2

3 Channel

Scour	Obstructions	Embankment	Riprap	Adequacy

Remarks: N/A

94 Culverts

Barrel	Wings	Apron	Debris	Embankment	Channel Inlet	Channel Outlet

Remarks: N/A

95 Approach

Vertical Alignment	Horizontal Alignment	Approach Rial	Approach Pavement	Approach Embankment
6	7	6		6

Remarks: APPROACH RAIL SHORT

98 & 103 Estimated Remaining Life 020 STRU 20 DECK General Remarks: LOOKS GOOD.

Road Posted Yes [ ] No [X] Limit [ ] Traffic Volume [illegible]

Date Inspected: 05-25-79

Suggested Field Rating H-5 [ ] H-10 [X] H-15 [ ] HS-20 [ ] Remarks:

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Edwards, Greg

From: Christine Forde [cforde@ccmpo.org]
Sent: Friday, May 19, 2006 10:00 AM
To: Edwards, Greg; Carol Duncan; Bogue, George
Subject: FW: Queen City Park Road Bridge

II

Return

-----Original Message-----
From: Weaver, John [mailto:John.Weaver@state.vt.us]
Sent: Friday, May 19, 2006 8:40 AM
To: Christine Forde
Cc: Weaver, John
Subject: Queen City Park Road Bridge

Christine:

I offer the following assessment of the situation at TH 7, Bridge 2:

According to our last bridge inspection report of 11/20/05, the bridge demonstrates the following conditions:

Last rehabilitated in 1973, for HS 15 live load capacity (27 ton truck).

Present inventory rating is 26.4 tons live load capacity. ← SEE ATTACHED ☆

Federal sufficiency Rating is 43.2 (out of 100).

The bridge is rated as functionally deficient.

1999 ADT is estimated at 1890.

Deck out to out width is 17.2 feet.

Span of the bridge is 79 feet.

Looking at Vermont State Standards for Local Roads and assuming design ADT > 2000, a two lane typical section width would be 3/11/11/3. A new superstructure width would be 31 feet. Looking at photos of the site, I verified that complete re-construction – both foundations and superstructure -- would be required to make this structure a two lane bridge. ~~Using present square foot costs, such a project would cost between $950,000 - $1,000,000 for construction alone.~~

I hope this information is helpful to you.

VERMONT AGENCY OF TRANSPORTATION - STRUCTURES DIVISION Page 1
STEEL BEAM LOAD RATING SC5 BEAM R.CAL DATE 3/ 6/1992
PROJECT: BURLINGTON QUEEN PK RD BR2 BY:R. TETREAULT 7:25 AM
Note to user: Spread sheet load rates simple span steel beams.
Maximum span length allowed is 120 ft.
H891 look up table for truck moments is used.

II

****

STRUCTURAL DATA: NUMBER OF BEAMS : 3

****

NUMBER OF LANES :	1	BEAM DEPTH (IN) :	36.12
DECK THICKNESS (IN) :	7.5	BEAM WEIGHT (KIPS/LF) :	.25
HAUNCH THICKNESS (IN) :	1	BEAM I VALUE (IN^4) :	16465.90
CUMULATIVE CURB WIDTH (FT):	0	WIDTH OF COV. PL (IN) :	0
PAVEMENT THICKNESS (IN) :	0	THICKNESS OF COV. PL (IN):	0
LENGTH OF BEAM (FT) :	78.75	BEAM YIELD STRENGTH (KSI):	33
BEAM SPACING (FT) :	6.25	COMPOSITE 1(YES) OR 2(NO):	2
MISC. SUPER. DL (K/LF/BM) :	.00	ES/EC LIVE LOAD COND. :	10
WHEEL LINE DIST FACT. S/??:	7	ES/EC SUPER. DL COND. :	30

****

OUTPUT:

****

TOTAL DEAD LOAD (K/LF) =	.90	DEAD LOAD I VALUE (IN^4) =	16465.90
SUPERIMPOSED DL (K/LF) =	<NA>	SUPER. DL I VALUE (IN^4) =	16465.90
LIVE LOAD IMPACT FACTOR =	1.25	LIVE LOAD I VALUE (IN^4) =	16465.90

LOADING	MOMENT(FT-K)	STRESS (KSI)
DEAD LOADS.....	696.46	9.167
SUPERIMPOSED DEAD LOADS...	.00	.000
H20 TRUCK (20 TONS).....	472.86	6.224
HS20 TRUCK (36 TONS).....	635.20	8.360
3S2 (36 TONS).....	531.82	7.000
6 AXLE TRAILER (66 TONS)..	813.77	10.711
3 AXLE STRAIGHT (30 TONS).	580.19	7.636
4 AXLE STRAIGHT (34 TONS).	650.90	8.567
5 AXLE SEMI (38 TONS).....	613.65	8.077

LOAD RATINGS IN TONS:

	H20	HS20	3S2	6AXLE	3AXLE	4AXLE	5AXLE
.55Fy	28.3	38	45.4	54.4	34.7	35.5	41.5
.67Fy	41.2	55.2	66	79	50.4	51.6	60.3
.75Fy	49.2	66	78.8	94.4	60.2	61.7	72.1

****

****

COMMENTS: ASSUMING LIKE NEW CONDITION.

Checked 3-6-92 RMT

78'-9" C-C BEARINGS

ONE LANE STRUCTURE

3 BEAMS 36 WF 250 w/ (3) CF-1 DIAPHRAGMS / BAY
6'-3" BEAM SPACING

7 1/2" CONC. SLAB

36 WF 250 → FROM OLD STEEL BOOK

W = 250
A = 73.49
D = 36.12
I = 16,465.9

NON - COMPOSITE

1" HAUNCH → ASSUMED

B_1 = 27.5 → FROM FIELD NOTES
B_2 = 9.5 → TO FACE OF GUIDE RAILS

NO PAVEMENT

GUIDE POSTS ARE 8 WF 24 - 8.0' HIGH w/ SPACERS & 3 CABLE RAIL, ALSO A 6" x 6" x 3/8" CRASH RAIL MOUNTED ON 7" x 4" x 3/8" BRACKETS

10 POSTS EACH SIDE

USE 35#/FT. FOR WEIGHT OF DECK MOUNTED RAIL

$$D_L = \frac{(10)(0.035^{k}/_{FT})(3.0')}{78.75'} = 0.013\ ^{k}/_{FT.}$$

$$D_{L\,(\text{CRASH RAIL})} = \frac{[(.5')+(.5')](.0312)(490^{\#}/_{FT^3})}{78.75} = 0.0153\ ^{k}/_{FT.}$$

$$D_{L\,(TOT.)} = 0.0283^{k}/_{FT}$$

USE 15 LBS./FT.² FOR WT. OF OPEN GRID DECKING

5.10' x 78.75' = 401.63

$$D_L = \frac{(0.015)(401.63\,FT.^2)}{78.75} = 0.0765\ ^{k}/_{FT.}$$

DATE _____ SUBJECT _____ SHEET NO _____ OF _____

HKD. BY _____ DATE _____ ROAD RATING

JOB NO BURLINGTON QUEEN CITY PARK ROAD BR. 2

STRUCTURAL STEEL FOR SIDEWALK = 8900 LBS (FROM QUANTITY SHT.)

II

$$\frac{3.90\ K}{78.75\ FT.} = 0.050\ K/FT.$$

SIDEWALK GUIDERAIL - USE 25#/LIN. FT.

$$D_L = \frac{0.025\ K/FT\ (78.75)}{78.75} = 0.025\ K/FT$$

TRICK PROGRAM FOR ONE LANE BRIDGE

ONE LANE = S/7.0 TWO LANES = S/5.5

$$\frac{6.25}{7.0} = S/5.5 = 4.91 = \underline{58.9''}\ \text{SPACING}$$

$$6.25 \times (.625) = 4.91 \times$$

$$t = 0.796 \times 12'' = \underline{9.5''}\ \text{THICK}$$

NO NEED TO TRICK PROGRAM FOR EXT. BEAMS

VERMONT DEPT. OF HIGHWAYS **STEEL SPANS** Made by _____ Card ___ of ___

HD-103 8C 9/64

District No. 3 Date Oct. 28, 1966 Checked By _____

QCPR - IPDR - APPENDIX

Route No. Queen City Park Road Town Burlington Log Sta. _____ Bridge No. _____

Bridge Name Queen City Park Bridge Over Vermont Railway Year Built _____

Rating _____ Design Live Load HS 15 44 Desired Capacity Live Load _____ Posted Live Load _____ II

Overall Length 80'-9 Approach Pavement (Type & Width) Single Tk. Ct. 17'-0 approx.

Skew 0° Superelevation _____ Crown Partial Parabolic

GENERAL	Alinement	Grade	Sight Distance	Span Length		Width		Clearance			
Bridge	Tangent	+0.80%		c/c Bearings	78'-9	Betw. Curbs	None				
Rear Approach	"	60'V.C.		Floor	80'-9	Betw. Rails	14'	Horiz	14'	To Vt Ry.	
Forward Approach	"	"		Clear Span	76'-9	Walks	None	Vert.	Clear		22

Designed By Vt. State Hwy Dept. Bridge Div. Built By State of Vermont & City of Burlington

Maintained By City of Burlington Plans Vt. State Hwy Dept. Toll or Free Free

Contract No. 1001 APPN.4280.2220 Contractor Pizzagallic Constr. Co., Inc.

Fabricator _____ Contract Price $23,089.35

Traffic Vol. _____

SUBSTRUCTURE	Material	Type	Height	Supporting Material	Piles-Type	No	Size	Ave Lgth.	El. Footings Bottom
Rear Abut.	Rein.Conc.	Cant.	9.59						490.00
Fwd. Abut.	"	"	10.10						"
Piers									
Wings									

Remarks _____

SUPERSTRUCTURE - Material Reinf.Conc. & Structural Steel Type Span Non-composite WF Beam

Grade to Low Bridge Seat 4.06 Grade to Low Steel 3.85 Rivets _____

Depth _____ Panels _____ At _____ Paint _____

	Surfacing	Floor	Curbs	Road Rail	S. W. Rail	Floor Drainage
Material		Concrete	None	Steel		Floor Joints
Type		Reinf.		3 cable &	crast rail	Fixed Bearings Fixed ⅊s
Height						Expansion Bearings Sliding ⅊s
Thickness		7½"				Slab Reinforcement (Parallel) to ℄#5
Fastenings						#5 @ 6" c/c (Normal)

FLOOR SYSTEM

Longitudinal Beams	No.	Spacing	Type	Size	Span	Connection Type	Size	Connection to Bm Rivets	Weld	Conn to Main Mem Rivets	Weld
	3	6'-3	36WF	250	79'-9						
Diaphragm-Sets	3 sets @ 4th points / 3x3x5/16				6'-0	Weld					

PLATE GIRDERS		One Flange		Depth	Supports			
No.	Spacing	Flange ∠s	Cover ⅊s	Web	Bearing Stiffeners	Intermediate Stiffeners	Bearings	Welding

Wings

Remarks

SUPERSTRUCTURE - Material Reinf.Conc. & Structural Steel Type Span Non-composite WF Beam

Grade to Low Bridge Seat 4.06 Grade to Low Steel 3.85 Rivets

Depth Panels At Paint

II

	Surfacing	Floor	Curbs	Road Rail	S. W. Rail	Floor Drainage
Material		Concrete	None	Steel		Floor Joints
Type		Reinf.		3 cable &	crast rail	Fixed Bearings Fixed Ps
Height						Expansion Bearings Sliding Ps
Thickness		7½"				Slab Reinforcement (Parallel) to ℄#5
Fastenings						#5 @ 6" c/c (Normal)

FLOOR SYSTEM

Longitudinal Beams	No	Spacing	Type Size	Span	Connection Type Size	Connection to Bm Rivets Weld	Conn to Main Me Rivets Weld
	3	6'-3	36WF 250	79'-9			
Diaphragm-Sets	3 sets @ 4th points ∠ 3x3x5/16			6'-0	Weld		

PLATE GIRDERS

No	Spacing	One Flange: Flange ∠s	One Flange: Cover ℞s	Depth: Web	Supports: Bearing Stiffeners	Supports: Intermediate Stiffeners	Supports: Bearings	Supports: Welding

TRUSSES Number Spacing Rivets

Upper Chord Member	Upper Chord Size	Lower Chord Member	Lower Chord Size	Diagonals Member	Diagonals Size	Verticals Member	Verticals Size

MISCELLANEOUS

Upper Laterals

Lower Laterals

Portals

Sway Bracing

Arch Ribs

Frames (Crown)

Columns

Bent Bracing

Hangers

Pins

Remarks

SOURCE OF AGGREGATE FOR CONCRETE

Type of Cement

Batch Weights	Concrete AA	Concrete A	Concrete B	Concrete C	Concrete D
Cement					
No. 1 Stone					
No. 2 Stone					
Sand					

Burlington Project	Br. No.	Dist. No.	Route No.	Log Sta.	Bridge Name	Loading H 10	H 12	H 15	H20	Roadway Curb-to-Curb	Vertical Clearance Limited To	Clear
1001APPN		5										

Memorandum

III

Date: Feb 2, 2007

To: Dale Spaulding

From: Dane Ismart and Ed Bromage

Regarding: Analysis of Queen City Park Road bridge

The intent of the memorandum is to describe the model runs recently completed for the analysis of the Queen City Park Road. The Queen City Park Road is located in Burlington, to the west of Route 7, and south of I-189 and the Southern Connector. Queen City Park Road connects to Route 7 on the east and to Industrial Parkway on the west. A railroad underpass is located closer to the western end of the Queen City Park Road.

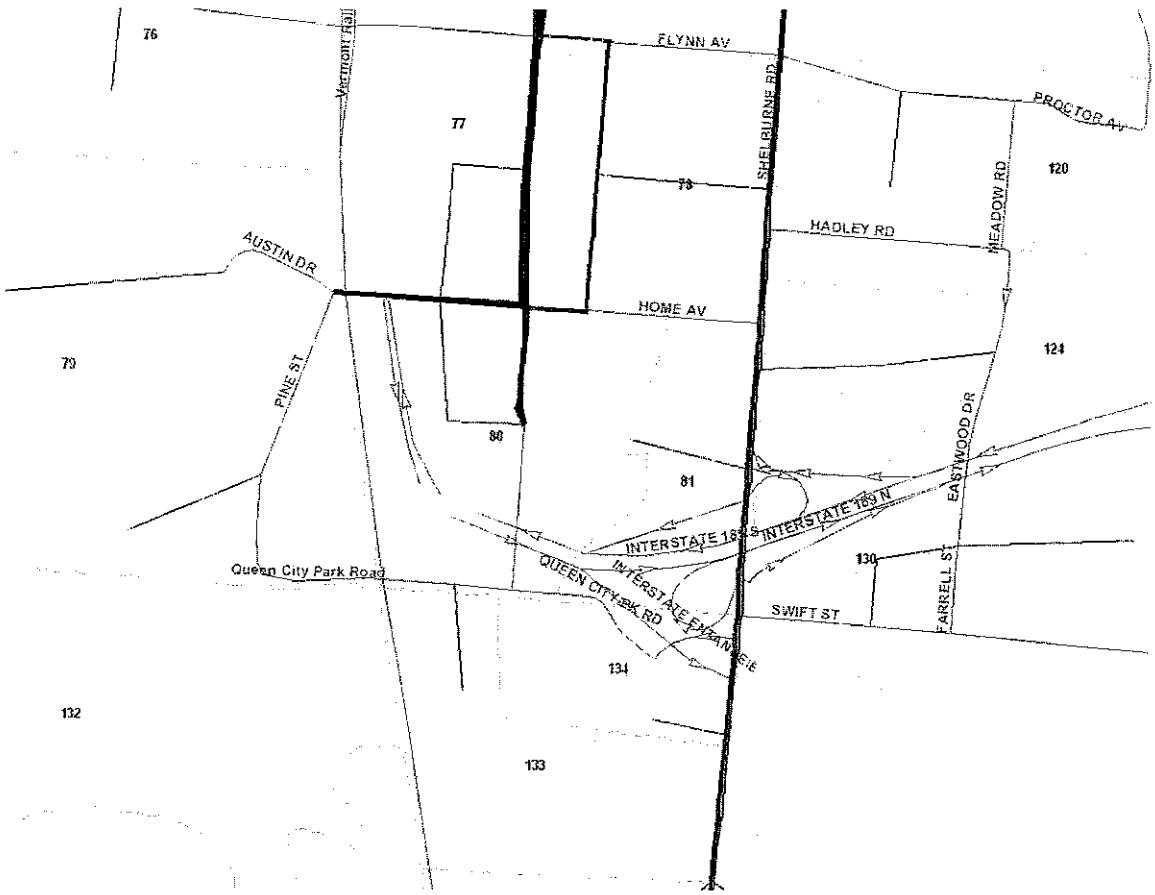
The Southern Connector is not currently open. When it does open (by 2010) it will connect I-189 to Home Ave. The intent of this analysis is to estimate traffic volumes changes as predicted by the CCMPO (Chittenden County Metropolitan Planning Organization) model.

The CCMPO model is a PM peak hour model. It has a base year of 2000, and forecast years of 2005, 2010, 2015, 2020, 2025, and 2030. The model contains all the features of a 4 step model (trip generation, trip distribution, mode split, and trip assignment). The CCMPO model also contains a land use allocation model, and bus and rail transit assignment.

To use the model for the Queen City Park Road analysis, the network representation of the roads in the project area were reviewed. Since the CCMPO model is a regional model, only major roads, and local connecting roads are actually in the model. The model also, represents the area land use in traffic analysis zones. The following graphic Figure 1 shows the traffic analysis zones (in yellow), the modeled street network (black), and the location of zone centroid connectors (in red). Some roads have colored lines atop the streets. These lines represent bus routes. The red numbers in the center of traffic analysis zones are the zone identification numbers.

III

Figure 1
Model Representation of Project Area



Note in Figure 1 that the Southern Connector links are broken. This is a copy of the 2005 network. Starting with the 2010 network, these lines are connected.

The key traffic analysis zones for this model are zones 79, 132, and 133. The CCMPO forecasts that these zones will be fairly stable over the period 2005 to 2020. Between 2005 and 2020, these zones are predicted to grow by 112 households and 4 jobs.

Traffic counts taken on the Queen City Park Road bridge as posted on the CCMPO web page, showed a daily traffic volume of 2200 taken in June 2006.

Running the model for 2005, the PM peak hour traffic volume on the Queen City Park Road bridge was 245 vehicles. In 2010, the volume was 76 vehicles, in 2015 the volume was 123 and in 2020 the volume was 156 vehicles. Using a K factor of .10 which is based hourly traffic counts the model is forecasting the following ADT at the Queen City Park Road Bridge:

2005 - 2,450 ADT

III

2010	- 760 ADT
2015	- 1230 ADT
2020	- 1560 ADT

As shown above the opening of the Southern Connector will reduce the future traffic on the Queen City Park Road Bridge. After an initial decline in traffic, the ADT on the Bridge will begin to rise due to growth in households.

III

02/06/07 - Dave Ismart - Louis Berger

Model runs indicate:

2005 - existing ~ 2500 vpd

2005 w/So. connector = 900 vpd

2015 = 1100 vpd

2025 1500 vpd

III

CCMPO TRAFFIC COUNT - VOLUME
Start Date: 6/19/2006
Start Time: 3:00:00 PM
Station ID: Burl26
Location 1: EAST OF PINE ST. NEAR RR X-ING BRIDGE

Date	Time	WB	EB	TOTAL	Buses	5 Axl and (
Tuesday, June 20, 2006	12:00:00 AM	6	10	16	0	0
6/20/2006	1:00:00 AM	4	4	8	0	0
6/20/2006	2:00:00 AM	2	0	2	0	0
6/20/2006	3:00:00 AM	4	0	4	0	0
6/20/2006	4:00:00 AM	4	10	14	3	0
6/20/2006	5:00:00 AM	59	22	81	5	2
6/20/2006	6:00:00 AM	61	72	133	6	4
6/20/2006	7:00:00 AM	92	85	177	1	3
6/20/2006	8:00:00 AM	113	90	203	4	3
6/20/2006	9:00:00 AM	73	101	174	9	3
6/20/2006	10:00:00 AM	56	77	133	2	1
6/20/2006	11:00:00 AM	68	108	176	4	1
6/20/2006	12:00:00 PM	105	121	226	4	1
6/20/2006	1:00:00 PM	103	92	195	4	0
6/20/2006	2:00:00 PM	85	145	230	4	2
6/20/2006	3:00:00 PM	68	126	194	4	2
6/20/2006	4:00:00 PM	73	154	227	3	1
6/20/2006	5:00:00 PM	88	183	271	2	1
6/20/2006	6:00:00 PM	70	95	165	5	4
6/20/2006	7:00:00 PM	71	51	122	5	0
6/20/2006	8:00:00 PM	41	47	88	3	0
6/20/2006	9:00:00 PM	42	22	64	2	0
6/20/2006	10:00:00 PM	17	12	29	1	0
6/20/2006	11:00:00 PM	8	9	17	1	0
				2949	72	28
Wednesday, June 21, 2006	12:00:00 AM	8	6	14	0	0
6/21/2006	1:00:00 AM	6	2	8	0	0
6/21/2006	2:00:00 AM	1	3	4	0	0
6/21/2006	3:00:00 AM	3	2	5	0	0
6/21/2006	4:00:00 AM	3	7	10	2	2
6/21/2006	5:00:00 AM	62	27	89	4	2
6/21/2006	6:00:00 AM	69	50	119	4	3
6/21/2006	7:00:00 AM	81	79	160	0	1
6/21/2006	8:00:00 AM	124	87	211	4	0
6/21/2006	9:00:00 AM	74	70	144	3	2
6/21/2006	10:00:00 AM	62	66	128	2	2
6/21/2006	11:00:00 AM	63	87	150	3	0
6/21/2006	12:00:00 PM	107	147	254	6	2
6/21/2006	1:00:00 PM	105	83	188	3	1
6/21/2006	2:00:00 PM	75	131	206	2	3
6/21/2006	3:00:00 PM	72	138	210	2	1
6/21/2006	4:00:00 PM	104	155	259	4	6
6/21/2006	5:00:00 PM	66	140	206	3	2
6/21/2006	6:00:00 PM	81	102	183	6	2

III

	6/21/2006	7:00:00 PM	61	72	133	7	0
	6/21/2006	8:00:00 PM	53	60	113	3	0
	6/21/2006	9:00:00 PM	49	39	88	2	0
	6/21/2006	10:00:00 PM	23	22	45	2	0
	6/21/2006	11:00:00 PM	8	11	19	1	0
					2946	63	29
Thursday, June 22, 2006		12:00:00 AM	10	3	13	0	0
	6/22/2006	1:00:00 AM	4	7	11	0	0
	6/22/2006	2:00:00 AM	2	2	4	0	0
	6/22/2006	3:00:00 AM	2	5	7	0	0
	6/22/2006	4:00:00 AM	5	8	13	2	2
	6/22/2006	5:00:00 AM	64	24	88	5	1
	6/22/2006	6:00:00 AM	65	65	130	6	6
	6/22/2006	7:00:00 AM	76	68	144	5	1
	6/22/2006	8:00:00 AM	117	75	192	4	1
	6/22/2006	9:00:00 AM	60	73	133	3	0
	6/22/2006	10:00:00 AM	49	72	121	4	0
	6/22/2006	11:00:00 AM	58	82	140	1	1
	6/22/2006	12:00:00 PM	112	136	248	3	1
	6/22/2006	1:00:00 PM	86	94	180	4	5
	6/22/2006	2:00:00 PM	80	130	210	2	0
	6/22/2006	3:00:00 PM	76	121	197	3	4
	6/22/2006	4:00:00 PM	88	127	215	2	3
	6/22/2006	5:00:00 PM	99	167	266	1	0
	6/22/2006	6:00:00 PM	66	102	168	3	1
	6/22/2006	7:00:00 PM	68	66	134	6	0
	6/22/2006	8:00:00 PM	48	62	110	2	0
	6/22/2006	9:00:00 PM	38	37	75	0	0
	6/22/2006	10:00:00 PM	29	18	47	1	0
	6/22/2006	11:00:00 PM	19	9	28	1	0
					2874	58	26
Friday, June 23, 2006		12:00:00 AM	5	7	12	0	0
	6/23/2006	1:00:00 AM	3	2	5	0	0
	6/23/2006	2:00:00 AM	3	3	6	0	0
	6/23/2006	3:00:00 AM	5	4	9	0	0
	6/23/2006	4:00:00 AM	4	5	9	3	0
	6/23/2006	5:00:00 AM	54	20	74	6	0
	6/23/2006	6:00:00 AM	54	61	115	7	6
	6/23/2006	7:00:00 AM	82	58	140	4	1
	6/23/2006	8:00:00 AM	98	75	173	8	2
	6/23/2006	9:00:00 AM	65	71	136	3	0
	6/23/2006	10:00:00 AM	66	86	152	3	2
	6/23/2006	11:00:00 AM	84	94	178	3	1
	6/23/2006	12:00:00 PM	101	114	215	5	1
	6/23/2006	1:00:00 PM	102	103	205	3	2
	6/23/2006	2:00:00 PM	84	122	206	2	0
	6/23/2006	3:00:00 PM	81	123	204	6	1
	6/23/2006	4:00:00 PM	80	153	233	3	4
	6/23/2006	5:00:00 PM	96	139	235	2	0
	6/23/2006	6:00:00 PM	58	100	158	6	1
	6/23/2006	7:00:00 PM	62	58	120	7	1
	6/23/2006	8:00:00 PM	42	35	77	2	0

III

	6/23/2006	9:00:00 PM	43	37	80	1	1
	6/23/2006	10:00:00 PM	29	20	49	1	0
	6/23/2006	11:00:00 PM	11	6	17	1	0
					2808	76	23
Saturday, June 24, 2006		12:00:00 AM	9	6	15	0	0
	6/24/2006	1:00:00 AM	4	6	10	0	0
	6/24/2006	2:00:00 AM	4	3	7	0	0
	6/24/2006	3:00:00 AM	0	0	0	0	0
	6/24/2006	4:00:00 AM	1	1	2	1	0
	6/24/2006	5:00:00 AM	5	16	21	3	0
	6/24/2006	6:00:00 AM	18	15	33	1	0
	6/24/2006	7:00:00 AM	16	38	54	0	0
	6/24/2006	8:00:00 AM	34	55	89	1	0
	6/24/2006	9:00:00 AM	60	72	132	4	0
	6/24/2006	10:00:00 AM	55	75	130	1	1
	6/24/2006	11:00:00 AM	69	62	131	3	1
	6/24/2006	12:00:00 PM	76	58	134	1	0
	6/24/2006	1:00:00 PM	81	74	155	4	0
	6/24/2006	2:00:00 PM	92	68	160	1	0
	6/24/2006	3:00:00 PM	64	72	136	1	0
	6/24/2006	4:00:00 PM	60	65	125	3	0
	6/24/2006	5:00:00 PM	58	66	124	1	0
	6/24/2006	6:00:00 PM	45	62	107	6	0
	6/24/2006	7:00:00 PM	35	36	71	2	0
	6/24/2006	8:00:00 PM	38	39	77	1	0
	6/24/2006	9:00:00 PM	39	24	63	0	0
	6/24/2006	10:00:00 PM	19	12	31	0	0
	6/24/2006	11:00:00 PM	10	6	16	0	0
					1823	34	2
Sunday, June 25, 2006		12:00:00 AM	9	5	14	0	0
	6/25/2006	1:00:00 AM	2	2	4	0	0
	6/25/2006	2:00:00 AM	3	2	5	0	0
	6/25/2006	3:00:00 AM	3	4	7	0	0
	6/25/2006	4:00:00 AM	0	1	1	0	0
	6/25/2006	5:00:00 AM	7	4	11	0	0
	6/25/2006	6:00:00 AM	1	5	6	0	0
	6/25/2006	7:00:00 AM	10	8	18	0	0
	6/25/2006	8:00:00 AM	13	26	39	1	0
	6/25/2006	9:00:00 AM	32	50	82	0	0
	6/25/2006	10:00:00 AM	52	49	101	0	0
	6/25/2006	11:00:00 AM	51	64	115	0	0
	6/25/2006	12:00:00 PM	55	48	103	0	0
	6/25/2006	1:00:00 PM	73	57	130	0	0
	6/25/2006	2:00:00 PM	78	64	142	0	0
	6/25/2006	3:00:00 PM	70	78	148	0	0
	6/25/2006	4:00:00 PM	59	70	129	1	0
	6/25/2006	5:00:00 PM	70	68	138	0	0
	6/25/2006	6:00:00 PM	66	68	134	1	1
	6/25/2006	7:00:00 PM	47	52	99	0	0
	6/25/2006	8:00:00 PM	40	26	66	0	0
	6/25/2006	9:00:00 PM	25	28	53	0	0
	6/25/2006	10:00:00 PM	19	11	30	0	0

Vehicle Hourly Variation - Queen City Park Road West of Pine St.

III

Stantec

QUEEN CITY PARK ROAD BRIDGE SCOPING
PROJECT LOCATION PLAN

400' 0 400' 800'

SCALE: 1" = 400'

N

5 Pine Street

MONDAY – FRIDAY

Cherry Street 1	230 St. Paul St. 2	VT Transit 3	Howard Center 5	CCTA 6	Pine & Baird Sts. 7	Champlain School 8	Howard @ Caroline Sts. 9	230 St. Paul St. 2	Cherry 1
6:15	6:19	6:20	6:22	6:25	6:27	6:29	6:32	6:35	6:40
6:45	6:49	6:50	6:52	6:55	6:57	6:59	7:02	7:05	7:10
7:15	7:19	7:20	7:22	7:25	7:27	7:29	7:32	7:35	7:40
7:45	7:49	7:50	7:52	7:55	7:57	7:59	8:02	8:05	8:10
8:15	8:19	8:20	8:22	8:25	8:27	8:29	8:32	8:35	8:40
8:45	8:49	8:50	8:52	8:55	8:57	8:59	9:02	9:05	9:10
9:15	9:19	9:20	9:22	9:25	9:27	9:29	9:32	9:35	9:40
9:45	9:49	9:50	9:52	9:55	9:57	9:59	10:02	10:05	10:10
10:15	10:19	10:20	10:22	10:25	10:27	10:29	10:32	10:35	10:40
10:45	10:49	10:50	10:52	10:55	10:57	10:59	11:02	11:05	11:10
11:15	11:19	11:20	11:22	11:25	11:27	11:29	11:32	11:35	11:40
11:45	11:49	11:50	11:52	11:55	11:57	11:59	12:02	12:05	12:10
12:15	12:19	12:20	12:22	12:25	12:27	12:29	12:32	12:35	12:40
12:45	12:49	12:50	12:52	12:55	12:57	12:59	1:02	1:05	1:10
1:15	1:19	1:20	1:22	1:25	1:27	1:29	1:32	1:35	1:40
1:45	1:49	1:50	1:52	1:55	1:57	1:59	2:02	2:05	2:10
2:15	2:19	2:20	2:22	2:25	2:27	2:29	2:32	2:35	2:40
2:45	2:49	2:50	2:52	2:55	2:57	2:59	3:02	3:05	3:10
3:15	3:19	3:20	3:22	3:25	3:27	3:29	3:32	3:35	3:40
3:45	3:49	3:50	3:52	3:55	3:57	3:59	4:02	4:05	4:10
4:15	4:19	4:20	4:22	4:25	4:27	4:29	4:32	4:35	4:40
4:45	4:49	4:50	4:52	4:55	4:57	4:59	5:02	5:05	5:10
5:15	5:19	5:20	5:22	5:25	5:27	5:29	5:32	5:35	5:40
5:45	5:49	5:50	5:52	5:55	5:57	5:59	6:02	6:05	6:10
6:15	6:19	6:20	6:22	6:25	6:27	6:29	6:32	6:35	6:40

Please see page 22 for Saturday Pine Street *service schedule*

QCPR - DR APPENDIX

IV

www@cctaride.org

PROJECT LOCATION

n: Erin Demers [edemers@ci.Burlington vt us]
it: Friday, February 16, 2007 9:34 AM
To: Bogue, George
Subject: accident reports for Queen City Park Bridge

Attachments: RE: accident reports for Queen City Park Bridge

V

RE: accident reports for Queen.

George,

We were not able to find any accident reports on the Burlington side for Queen City Park Road near the bridge. Also, we have no immediate plans to build sidewalks or rehab near this area, though if this went to construction depending on when, I may be able to try to work around it.

I will send you the orthos of the area in another email. It is a rather large file and I am going to try and zip it or compress it down.

If you have any questions please feel free to let me know.

Thanks,
Erin Demers

n L. Demers, E.I.T.
lic Works Engineer
City of Burlington Dept. of Public Works
645 Pine Street
Burlington, VT 05401

Voice: 802-865-5831
Fax: 802-863-0466
edemers@ci burlington.vt.us

m: Dumas, Margarite M. [mdumas@bpdvt.org]
nt: Tuesday, February 13, 2007 9:43 AM
To: Erin Demers
Subject: RE: accident reports for Queen City Park Bridge

V

I went back to January 2005 until today. No record for Burlington.Sorry but Try South Burlington Police Dept. telephone #846-4111

peg

-----Original Message-----
From: Erin Demers [mailto:edemers@ci.Burlington.vt.us]
Sent: Monday, February 12, 2007 2:28 PM
To: Dumas, Margarite M.
Subject: accident reports for Queen City Park Bridge

Peggy,

Hi there, I am the new engineer here at Public Works. I am looking for accident reports for Queen City Park Road in the South End of the city.
Could you help me find these. The area of concentration which I am examining is about 500 feet to the East and West of the single-lane Queen City Park Bridge. Any help would be greatly appreciated.

Thanks so much,
Erin

Erin L. Demers, E I T.
Public Works Engineer
City of Burlington Dept. of Public Works
645 Pine Street
Burlington, VT 05401

Voice: 802-865-5831
Fax: 802-863-0466
edemers@ci.burlington.vt.us

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APPENDIX B - RESOURCES

VI WOODLOT ALTERNATIVES - ENVIRONMENTAL LETTER REPORT (8/13/07)

VII VT GIS ANR

VI

WOODLOT ALTERNATIVES, INC.
ENVIRONMENTAL CONSULTANTS

August 13, 2007

George Bogue, PE
Associate, Transportation
Stantec
55 Green Mountain Drive
South Burlington, VT 05403
george.bogue@stantec.com

Subject: Environmental Review, Queen City Park Road Bridge South Burlington, Vermont

Dear George:

Thank you for the opportunity to complete an environmental review for the Queen City Park Road Bridge project in South Burlington, Vermont. Woodlot Alternatives, Inc. (Woodlot) understands that Stantec is providing scoping services for two alternatives for improving or replacing the Queen City Park Road Bridge. As part of this project, the environmental resources present in the area must be documented

Woodlot visited the site on August 7, 2007, to identify and characterize any rare, threatened or endangered (RTE) species; wetlands; wildlife habitat; agricultural land; or conservation zones within the project location. The project area includes the existing bridge site as well as a proposed sidewalk extension within the right-of-way from Central Avenue to the west and Arthur Court to the east of the bridge (totaling approximately 700 feet). Following is a description of our findings

Rare, Threatened, or Endangered Species. No rare or uncommon plant species were observed in the project area during the August 7, 2007, site investigation. The majority of the site has been disturbed, and consists of maintained lawns, roadsides, or railroad cut. However, according to the Vermont Nongame & Natural Heritage Program, the area does occur on Adams and Windsor A soils, a sandy soil type known to support a number of rare, threatened, and endangered plant species. Based on the disturbed site conditions, it is unlikely that any rare plant species occur within the project right-of-way.

Wetlands. One small area of wetland was identified in the vicinity of the project. It is located in the southwest portion of the project area, south of the existing recreation path and east of Central Avenue. This small, palustrine wetland is dominated by quaking aspen, red maple, red-osier dogwood, and sensitive fern, which are all wetland indicator species. In addition, the soils are hydric and water-stained leaves were observed, indicating water is present in the area. The wetland is not shown on the Vermont Significant Wetlands Inventory maps and would be considered a Vermont Class Three wetland. Such wetlands are not subject to the Vermont Wetland Rules (VWR) and have no required buffers under the VWR. The wetland would be under the jurisdiction of the U.S. Army Corps of Engineers. Projects with

VERMONT: 69 SWIFT STREET, SUITE 305, SOUTH BURLINGTON, VT 05403, 802-863-5865
MAINE: 30 PARK DRIVE, TOPSHAM, ME 04086, 207-729-1199, FAX: 207-729-2715
MASSACHUSETTS: 100 NORTH STREET, SUITE 317, PITTSFIELD, MA 01201, 413-442-9389
WEBSITE: WWW.WOODLOTALT.COM

less than 3,000 square feet of wetland impact qualify for Category A (non-reporting) of the Vermont General Permit Finally, the City of South Burlington regulates wetlands under Section 12.02 of its Land Development Regulations (effective October 26, 2006) All wetlands require a 50-foot buffer in South Burlington, but wetland and buffer impacts may be allowed by the Design Review Board if impacts are minimized and/or mitigation is provided It is not clear from the preliminary project designs whether there would be any impact to this small wetland area.

VI

Streams No streams were observed within the project right-of-way

Wildlife and Wildlife Habitat The project corridor is developed with a road, railroad, sidewalk, and power poles. Two sub-stations are located adjacent to the project corridor The area does provide habitat for birds and wildlife species such as raccoon, skunk, and squirrels characteristic of residential areas.

Agricultural Land The project corridor is not used for agriculture. The original soil type mapped for the project area is Adams and Windsor loamy sand, a prime agricultural soil type. However, based on the history of land use and development, it is unlikely that any agricultural use would take place within the narrow undeveloped portion of the project right-of-way

Conservation Zones. There are no known conservation zones within the project right-of-way A recreation path is located within the project corridor, and to the west of the site is Red Rocks Park, a City of South Burlington park and natural area The project corridor is located within an impaired watershed.

In summary, Woodlot recommends that the project area be revisited for a formal wetland delineation, as well as an additional survey for potential rare sand plain species, once a preferred alternative is selected. The intent of these surveys will be to determine if there will be any impacts to wetlands or rare plants based on the preferred alternative.

If you have any questions about this project, or if would like more information, please contact me via email at pharris@woodlotalt.com, or by phone at 802 922 4349

Thank you

Best regards,
Woodlot Alternatives, Inc.

Polly Harris

Polly Harris
Project Manager

WAI PN 107225

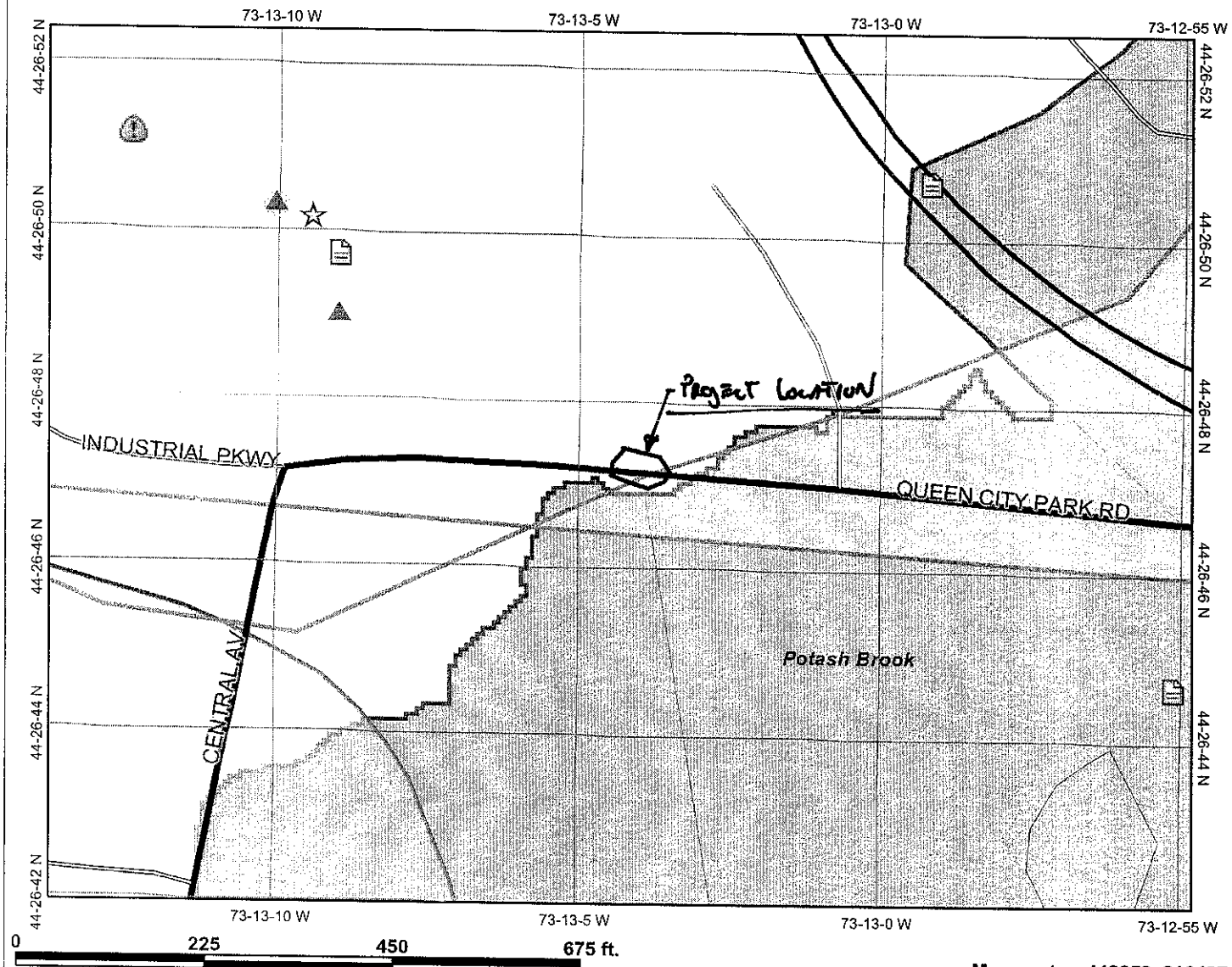
WOODLOT ALTERNATIVES, INC.

VERMONT

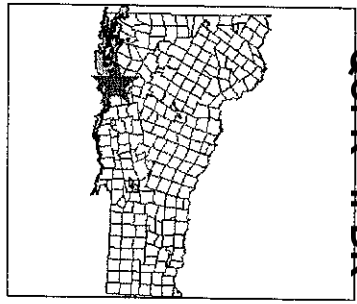
ANR Environmental Interest Locator

Vermont Agency of Natural Resources (ANR)

QCPR



Map center: 442859, 216497



Legend

- ACT250 PERMITS
- Stormwater Permits (Status: Issued)
- Stormwater Permits (Status: Pending)
- Administratively Incomplete
- Awaiting Technical Information
- Below 2004 Threshold
- On Hold per Applicant
- Pre-1978
- Public Notice
- Refer to 3-9010
- Refer to 3-9015
- Refer to INDS
- Under Administrative Review
- Under Review
- Under Technical Review
- Hazardous Waste Site
- Hazardous Waste Site Generator
- Underground Storage Tank

Roads

- US Highway
- Vermont State Highway
- Class One
- Class Two
- Legal Trail
- Emergency U-Turn Area
- Proposed Class Two
- Proposed Class Three
- Proposed Vermont State Highway
- Proposed US Highway
- Proposed Interstate
- Discontinued
- Interstate
- Class Three
- Class Four
- State/National Forest Highway
- Military Road (No Public Access)
- Private Road
- VSWI
- SurfaceWaterSPA
- GroundWaterSPA
- Stormwater Impaired SubWatershed
- Stormwater Impaired Watershed

VII

VT State Plane Meters (NAD83)

Scale: 1:2,252

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. VCGI and the State of Vermont make no representations of any kind, including but not limited to the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

URL: http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/launch.jsp

3/4/08

Stantec
Queen City Park Road Bridge
Initial Project Definition Report
Appendix

APPENDIX C - ALTERNATIVES/PUBLIC INPUT

VIII PROJECT STEERING COMMITTEE MEETING
IX LOCAL CONCERNS MEETING MINUTES/COMMENTS
X CORRESPONDENCE WITH RAILROAD
XI STANTEC MEMO - SAFETY OF 1 LANE BRIDGE
XII COMPARISON COST OF ALTERNATIVES
XIII ALTERNATIVES PRESENTATION MEETING MINUTES/COMMENTS
XIV COMMITTEE COMMENTS ON DRAFT REPORT

VIII

tantec.com

Meeting Notes

Stantec

Queen City Park Road Bridge

Queen City Park Road Bridge Scoping / FILE 195310130

Date:	February 7, 2007
Place/Time:	Burlington Department of Public Works / 10:00 AM
Next Meeting:	March 21, 2007
Attendees:	Erin Demers, Burlington Public Works
	Nicole Losch, Burlington Public Works
	Chuck Hafter, South Burlington City Manager
	Bruce Hoar, South Burlington
	Christine Forde, CCMPO
	Greg Edwards, Stantec
	George Bogue, Stantec
Distribution:	Attendees

Item:	Action:
Existing Information	
Greg Edwards presented the existing information that has been collected to date, including:	
Bus Route information, Location Map, Traffic Data (Pre and post Southern Connector), GIS data, Bridge inspection report, Bridge rating, and other information from VTrans	
Additional Information	
Erin Demers will obtain accident information, and color orthophoto	Erin Demers
George Bogue will solicit input/information from Vermont Railway and VTrans Rail Group.	George Bogue
Project Purpose and Needs	
The general needs of the project were discussed and include :	

- Maintain/improve mobility of QCP road (including CCTA)
- Improve safety of bicyclists crossing the bridge

VIII

- Accommodate Railroad requirements for vertical clearance.
- Address Structural and functional deficiencies of the bridge.

Alternatives:

The general alternatives were discussed briefly, including:

- Do nothing.
- Replace with a two lane bridge with sidewalk.
- Rehabilitate the existing bridge and maintain the current width.

One question that came up was whether the city has any plans to construct a sidewalk on the north side of the bridge in the near future Erin Demers will check to see if there are any plans to construct a sidewalk on North side of QCP road. — Erin Demers

Local Concerns Meeting

Mailing list to include:

- QCP residents
- CWD
- Velco
- Industrial Parkway businesses
- Red Rocks committee
- South Burlington Recreation Path Committee
- Ward 5 Neighborhood Planning Committee
- Bicycle Council
- Local Motion
- Walking Work Committee
- Vermont Railway
- VTrans
- Burlington Free Press Community Calendar

George Bogue to obtain Mailing list for QCP residents from City of South Burlington — George Bogue

A draft Notice will be developed and circulated to the attendees in the next week. — George Bogue

The tentative date for the Local Concerns meeting is March 14, 2007 at 6:30pm in the DPW conference room.

VIII

The next Meeting is scheduled for March 21, 2007 at 1:30 pm in the DPW conference room. Results of the Local Concerns meeting will be discussed and alternatives to be developed will be finalized.

The meeting adjourned at 11:30 AM.
The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

STANTEC CONSULTING SERVICES INC.

George Bogue, PE
Associate, Transportation
george.bogue@stantec.com

Attachment:

stantec.com

Stantec

Meeting Notes

Local Concerns Meeting

Queen City Park Road Bridge / FILE 195310130

IX

Date:	March 14, 2007
Place/Time:	Burlington Public Works / 6:30 PM
Next Meeting:	TBD
Attendees:	Greg Edwards George Bogue Christine Forde Nicole Losch Erin Demers See attached for additional attendees
Distribution:	Greg Edwards Erin Demers Christine Forde Nicole Losch Chuck Hafter Bruce Hoar

Item:

Erin Demers opened the meeting and introduced the Project Steering Committee, and explained the purpose of the meeting and scoping process

Greg Edwards then took over and facilitated the meeting covering the Existing Conditions and then solicited community input.

The following represents input from the attendees and items that were discussed at the meeting:

EXISTING CONDITIONS:

- Concern with condition of pavement and walkway
- One resident doesn't like 1-way bridge He finds it frustrating and irritating, and doesn't regard it as a traffic calming measure.
- Many attendees expressed the opinion the existing bridge and sidewalk is unsafe for pedestrians

USAGE:

School / Pedestrian

- School buses travel over the bridge to reach Red Rocks Park.

- Neighbors walk across the bridge to go to stores along Shelburne Road.
- Humane Society uses the bridge when walking animals.
- Day camps walk across the bridge to get to Red Rocks Park
- The open grating on the sidewalk is scary for walkers and dogs. The open grating is dangerous.
- All bikers and many walkers use roadway instead of the sidewalk on the bridge
- Bikers / walkers use middle of bridge.

Traffic Operations

- During commuting hours 2-3 vehicles have to wait there to cross the bridge.
- With Southern Connector, traffic on QCPR is predicted to be reduced by 50%.
- There has been increased traffic with CCTA buses and Burton Store.
- There is a concern with traffic noise, one resident indicated there is more noise since trees have been cut on Shelburne Road, and they can hear trucks crossing the bridge They were concerned a 2-lane bridge would increase noise. Another attendee said a two-lane bridge may help with noise since trucks would not have to stop and go at the bridge.
- Several attendees indicated the lack of sidewalks forced people to walk along the side of the road and were concerned a 2-lane bridge would promote higher vehicle speeds making it more dangerous for pedestrians. They felt the one lane bridge forces drivers to slow down.

Miscellaneous

- What width of 2-lane bridge is needed and what are impacts. This will be determined during the development of alternatives
- Bruce Hoar (SBPW) indicated there is an agreement between Burlington and South Burlington where South Burlington will share in the cost of the project.
- Will use sign-up list to keep everyone informed of upcoming meetings

Possible Alternatives

IX

- Do nothing
- Repave and smooth deck and improve walkway.
- Signalize approaches. 27-year resident doesn't want light or 2-lane bridge.
- Replace bridge. Home Avenue resident opposes stop light – prefers 2-lanes.
- Traffic calming measures should be considered in the alternatives.
- Stantec has received numerous emails from residents that were unable to attend the meeting. The vast majority of these residents desire to maintain a one-lane bridge as it acts as a traffic calming device and slows down vehicles that are entering the neighborhood or leaving the businesses. Another concern was the improvements should consider the Champlain Parkways Connection to Home Avenue. A two-lane bridge on QCPR would provide an alternate route for traffic going to Industrial Parkway (See attached)

The next step is to develop alternatives, present them to the public, and try to select a Preferred Alternative.

The meeting adjourned at 7:30 PM.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

STANTEC CONSULTING SERVICES INC.

George Bogue, PE
Associate, Transportation
george.bogue@stantec.com

Attachment: Meeting sign up sheet
Emails received prior to the meeting

LOCAL CONCERNS MEETING

IX

Project: Queen City Park Road Bridge **Meeting Date:** 3/14/07

Name	Company	Phone	E-Mail
George Bogue	Stantec	864-0223	G.Bogue@stantec.com
Marcia Gustafson	Burlington resident	864-5908	
Paul Beebe	" "	"	
Lisa Yankowski	So Burl Queen City Park	862-6081	Lisay@gardeners.com
Diane Bacon	Q.C.P. S. Burl.	862-7271	
Bill Stuono	Burlington	865-2805	coyote@uvm.edu
Stephen Crowley	QCP, So Burl	658 5782	scrow@sover.net
Sabrina Joy Milbury	8 Maple Ave QCP, So. Burl	863-3530	Sabrinajoy78@hotmail.com
René Kaczka-Talliere	86 Lyman Ave Burlington	864-0993	reneralliere@riseup.net
Basil Vansuch	76 Home Ave Burlington	658-0963	basil.vansuch@comcast.net
Peter Von Doepp	83 Home Ave Burlington VT	862-7240	pvondoep@uvm.edu
Bruce K. Haar	South Burlington Public Works	658-7961	sbpwbh@comcast.net
Lou Bresee		658-0597	lakelou@comcast.net
Jackie Thonet Dave Dielsi	2 Arthur Ct Burlington	860-7506	jmthonet@yahoo.com
Lynn Vera Pam Gale	11 Pavilion S. Burl. VT	658 2711	Lvera@cte.k12.vt.us
Harry Clark	8 Conger Ave Citizen	233-4206	harry.clark@verizon.net
Wesley Eldred	114 Central So Burl.	658-7724	wpeldred@comcast.net

Bogue, George

IX

From: Nicole Losch [NLosch@ci.Burlington vt.us]
Sent: Monday, March 19, 2007 10:34 AM
To: Erin Demers; Bogue, George
Subject: Fwd: Five Sisters Neighborhood Forum No. 1350

Scroll down for some comments following the QCPR Bridge Local Concerns Meeting.

Nicole Losch
Bicycle/Pedestrian/Environmental Planner
City of Burlington Department of Public Works
645 Pine Street, Suite A
PO Box 849
Burlington VT 05402
802-865-5833 phone
802-863-0466 fax
nlosch@ci.burlington.vt.us
Online at: www.dpw.ci.burlington.vt.us

>>> neighbors@frontporchforum.com 03/16/07 12:11 AM >>>

--- Powered by Front Porch Forum ---

*** FIVE SISTERS NEIGHBORHOOD FORUM NO. 1350 ***

URGENT NEED FOR HEATERS
By Lisa Cutler, Catherine Street

SEEKING TREE ADVICE
By Kerrie Mathes, Charlotte Street

SCIENCE COURSES AT ECHO
By The Sullivans, Catherine Street

YES TO HISTORIC PRESERVATION
By Carolyn Bates, Caroline Street

QUEEN CITY PARK BRIDGE COMMENTS
By Harry Clark, NPA Steering Committee - Ward 5, Conger Avenue

EVER WONDER ABOUT YOUR NPA?
By Ita Meno, Community Development Specialist - Wards 1, 5 & 6,College St

---

URGENT NEED FOR HEATERS
By Lisa Cutler, Catherine Street, lisa@twosonjewelry.com

IX

YES TO HISTORIC PRESERVATION
By Carolyn Bates, Caroline Street, cbates@carolynbates.com
Thu, 15 March 2007

am I excited All of us deserve huge credit for keeping your homes looking like the ones that exist here, and also, for those of you who have restored your homes back to what they once were.

Seeing the mad destruction all around me, I am 100% for letting historic preservation come in and check out what we have here.

It will keep the scale of homes down in size which will mean keeping the great local friendliness we have with all of our front porches, and will allow us to keep our sunlight on our homes, too. And to me, without sunlight, I am dead.

cb

http://carolynbates.com

QUEEN CITY PARK BRIDGE COMMENTS
By Harry Clark, NPA Steering Committee - Ward 5, Conger Avenue, harry.clark@verizon.net
Thu, 15 March 2007

Hello all: I attended the Wednesday evening public forum on the Queen City Park Bridge repair/replacement issue, thought it might be of interest to South End residents.

Oh, you say you aren't aware of the issue? Well, in the true Orwellian manner of our city administration, an open public meeting was scheduled to get input from city residents on the need to repair or replace the railroad bridge on Queen City Park Road, with the usual complement of an already-engaged consulting firm, participation from the Metropolitan Planning Commission and a city engineer already assigned to the project.

Whoops, did I say project? Sorry, according to the city, despite the array of forces already deployed, it's only a preliminary look into what might be needed. To my mind, it's a done deal as was the Southern Connector, with only a sham show of concern for public participation.

At any rate, it seems the residents of the Queen City Park neighborhood, actually part of South Burlington, are for the most part opposed to any increase in traffic that would likely result from any "improvements" to the bridge. That concern, however, is in opposition to the concerns of many of the South End residents, who see Queen City Park Road as an alternative pathway for truck traffic, which would be furthered by improving the bridge. Quite the dilemma, particularly since the Queen City Park residents have recently been subject to an assault from VELCO, a new substation having been dropped in their quiet neighborhood despite their protests.

IX

So, if a new two lane bridge suddenly appears on the Queen City Park Road, the City has duly warned us all and will protest with all vehemence, as in the past, that the public has had every opportunity to comment. As to the effectiveness of the comments, hmmmm....

EVER WONDER ABOUT YOUR NPA?
By Ita Meno, Community Development Specialist - Wards 1, 5 & 6,College St, IMeno@ci.Burlington.vt.us
Thu, 15 March 2007

Below are the minutes from the most recent Ward 5 NPA meeting. If you like what you see, consider joining us at our next meeting:

Tueday, March 27th

7:00 pm

DPW Conference Room, 345 Pine Street

If you need transportation or childcare, contact Ita Meno at 865-7172 or imeno@ci.burlington.vt.us the week prior to the meeting.

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Minutes of the Ward 5 Neighborhood Planning Assembly

February 27, 2007

Department of Public Works building, 345 Pine Street, 7:00pm

7:05pm â€" Introduction and Ground Rules

7:10pm â€" Open Forum

1) There are openings on the NPA steering committee. Elections are in April. If anyone is interested in serving, please contact a steering committee member for more information.

2) A group is working on a possible community garden in Baird Park.

3) Nominations are being sought for neighborhood leaders to be honored at the Neighborhood Night of success. Contact Ita Meno at CEDO.

4) Bill Keogh announced that the South Park/Callahan Park softball diamond will be changed to a baseball diamond this spring.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Bogue, George

IX

From: Nicole Losch [NLosch@ci.Burlington vt us]
Sent: Monday, March 19, 2007 10:38 AM
To: Erin Demers; Bogue, George
Subject: Fwd: Five Sisters Neighborhood Forum No. 1351

More QCPR comments.

--Nicole

>>> neighbors@frontporchforum.com 03/16/07 8:37 PM >>>

--- Powered by Front Porch Forum ---

*** FIVE SISTERS NEIGHBORHOOD FORUM NO. 1351 ***

KIDS SNOWSHOES TO LOAN?
By Pamela Laser, Ledgemere Street

OAK DESK FOR SALE
By Jean Cannon, Catherine St

QUEEN CITY PARK BRIDGE COMMENTS
By Robyn Schenck, Howard Street

QUEEN CITY PARK BRIDGE COMMENTS
By Robert Backus, NPA Steering Committee - Ward 5, Home Ave

BLUEGRASS GOSPEL PROJECT AND VOLUNTEER VERMONT
By Lanny Watts, Catherine Street

KIDS SNOWSHOES TO LOAN?
By Pamela Laser, Ledgemere Street, plaser@hartlaser.net
Fri, 16 March 2007

With the snowstorm approaching I was wondering if anyone had any snowshoes for a 45 pound child that I could borrow? Corey and I were hoping to try snowshoeing this weekend in maybe this last storm of the season. Thanks in advance,

--Pam

Pam Laser

Ledgemere St.

plaser@hartlaser net

863-3846

OAK DESK FOR SALE
By Jean Cannon, Catherine St, canpaint5@yahoo.com
Fri, 16 March 2007

Old oak desk for sale. It's in pretty good condition. All 8 drawers work and the dimensions are: 48" wide x 26" deep, 29 1/2" high. Price: $95, UCarry it! -Jean Cannon, 46 Catherine, 862-9978.

QUEEN CITY PARK BRIDGE COMMENTS
By Robyn Schenck, Howard Street, RGSchenck@aol com
Fri, 16 March 2007

Hello Neighbors: Just a quick comment in regard to Harry Clark's information about the bridge repair... I hear what you're saying about projects moving forward without public input and I agree and respect the point of your letter.

I would like to say that as a frequent traveler of that bridge, I am HUGELY in favor of repairing or replacing it. It is incredibly old and dangerous, especially to those of us on foot. That bridge is on my regular running route and I have had many near-death experiences navigating it. Buses are coming from the bus garage in one direction, residential traffic comes from the other two directions. The bridge is not wide enough for two vehicles traveling in different directions, especially in bad weather, and the pedestrian section is rickety at best. It is a rare occasion when anyone comes to a complete stop before deciding who's turn it is to go. It's a disaster waiting to happen.

I know the bridge itself is not the issue that was being addressed - you were speaking to the process, and again, I agree with you there. Nonetheless, I will be happy to see that old, dangerous bridge replaced by something safer.

Robyn Schenck

rgschenck@aol.com

118 Howard Street

QUEEN CITY PARK BRIDGE COMMENTS
By Robert Backus, NPA Steering Committee - Ward 5, Home Ave, robbackus@gmail.com
Fri, 16 March 2007

There has been a push from South End residents, and other Burlingtonians, to have the bridge replaced at least since I moved to Burlington in 1992. The city has consistently acknowledged the need to replace an aging one lane bridge with a more or less modern two lane bridge. One idea was to get an old two lane metal bridge that had been replaced and install it. The big issue has always been money. Ten years ago the estimated cost was somewhere around a million dollars for a new bridge and half that for a recycled one (dependent on finding one that fit and was usable). I would assume the costs have risen a lot

The meeting on Wednesday was part of a scoping study. The very first step to getting the project onto the state list of projects. At best, this will lead to a new bridge in about ten years. The state is strapped for transportation funds and likely will be until fuel taxes go up, but no one seems willing to bite into that apple. - Rob Backus

---

BLUEGRASS GOSPEL PROJECT AND VOLUNTEER VERMONT
By Lanny Watts, Catherine Street, lannyw@burlingtontelecom.net
Fri, 16 March 2007

I've been on work trips with Volunteer Vermont three times so far. It's a good cause, they could use your support, and p.s. -- Great Music.

~~~~~~~~~~~~~~~~~~~~

Who: The Bluegrass Gospel Project

When: Saturday, March 24, 2007

Time: 7:30 pm

Where: First Congregational Church in Burlington, 38 South Winooski Ave.

Tickets: $15 per person, $10 student, children 12 & under free. Tickets available at http://www.flynntix.org or by calling 86-FLYNN or at the door.

Why: To benefit for Volunteer Vermont!*

Come hear why Robert Resnik, host of VPR's All the Traditions calls them "... one of the greatest acoustic bands ever to spring from northern Vermont."

*Volunteer Vermont began as a group of volunteers who came together to help rebuild a South Carolina church burned down by racially-motivated arson in 1998. Their relationship with this small parish community has continued ever since. Every April school break, they take a couple dozen area high school students to the same town of Summerton to work on a variety of building projects.

This year they are building a community library/reading room inside the community center and are organizing a book drive to fill it. Please bring a children's, young adult or adult book with you to the concert to donate - one that is in good condition and you think would be meaningful to have in a community library.
~~~~~~~~~~~~~~~~~~~~

From: Barbara Pawluk [bpawluk@verizon net]
Sent: Monday, March 12, 2007 4:12 PM
To: Bogue, George
Subject: QCP Bridge

Hello,
Like many of my neighbors in Queen City Park, I cannot attend the upcoming meeting but would like to respond to your offer of providing feedback regarding the future of the bridge.
Please keep it at one lane. It helps to slow traffic down but is not an inconvenience as we never have to wait for more than 30 seconds or so. Please update and repair the bridge, both the vehicle lane and pedestrian lane as both are in desperate need of a good safety check and updating
The one lane bridge works well Changing it to two lanes would be inviting many problems!!
Sincerely,
Barbara Pawluk
62 Central Ave
So Burlington
862-1567

om: Ellen Gittelsohn [ellen@vidsync.com]
nt: Monday, March 12, 2007 9:49 PM
To: Bogue, George
Cc: Gary Keller@UVM.edu; bkandgk@yahoo com; sabrinajoy78@hotmail com; lakeside@vtlink.net; sheldonkatz@verizon net; yahladassa@yahoo.com; altc11@gmail com; efrish@sover.net; Steve Caflisch@rcn com; comittiNA@comcast net; mandymc@verizon net; robert.baran@adelphia.net; suzanne baran@vtmednet.org; central4@sover net; Karen Alence; woodchuck37@hotmail.com; wendycopp@msn.com; Jbarna@zoo.uvm edu; crowley@winooski k12 vt us; tkerr@vtlegalaid org; javrutick@yahoo.com; KJGScout@aol.com; mseyler9@hotmail.com; JEntis@aol com; mc27@adelphia.net; elleng@sover net; Simon; vtroundhouse@aol.com; littlehouseQCP1@verizon.net; JWilson@cctv.org; Mark Furnari; Sunquietjesse@yahoo.com; Barbara Pawluk; gsonjake@verizon.net; Marilyn2m@aol.com; labossa1@hotmail.com; ron@bikerecycle.localmotion.org; smg0319@cs.com; Tpiper@adelphia.net; Ljpiper@adelphia.net; LVera@CTE.K12.VT US; rtcassidy@gmail com; Pigeonmr54 @yahoo com; janissima@surfglobal net; Jim@mickdunn.com; mediatevermont@yahoo com; poco05403@yahoo com; lisay@gardeners com; diane@deterrafirma.net; waorleans@ppdbrochure.com; sbehar@together net; rparlato@gmail com; kirschner49 @aol.com; weldred@adelphia net; wingtao@sover net; jabbott@adelphia net; kslayton@adelphia net; joep@competitive.com; rfeeed@burlingtonhousing org
Subject: bridge

I agree with some of the other comments. The bridge should be repaired but not made into two lanes. Cars going over the bridge need to be slowed down. Thank you.
Ellen Gittelsohn
5 Pleasant Ave.

QCPR - IPDR - APPENDIX

Bogue, George

From: Tom Piper [tom.puremarketing@comcast.net]

Sent: Tuesday, March 13, 2007 8:54 AM

To: Bogue, George

Subject: QCP bridge

Dear Mr. Bogue,

My wife and I live in Queen City Park. We would like to add our voice to those that would like structural improvements to the bridge, but to keep it as one lane at the same time. It works fine as is and there is no reason to spend the money to widen it which will only encourage speeding and people using it as an alternate route from Pine St.

Thanks,
Tom & Lori Piper

Tom Piper
Pure Marketing
7 Pavilion Avenue
South Burlington, VT 05403

802.846.7626
tom.puremarketing@comcast.net

PURE
MARKETING

QCPR - IPDR - APPENDIX

Bogue, George

From: Gauthier, John [jgauthi@vdh state vt us]

Sent: Thursday, March 15, 2007 10:59 AM

To: Bogue, George

Subject: QUEEN CITY PARK ROAD BRIDGE OVER VERMONT RAILWAY

Mr Bogue:
I am a resident of 80 Austin Drive

I was unable to make the public meeting held last night, 15 March 2007 on the Queen City Park Road rail overpass.

I support the installment of a two lane bridge, with sidewalk and bike lane.

It seems obvious to me that this improvement should not be examined without consideration of the Champlain Parkway's connection on to Home Avenue Of particular concern is a possible diversion onto Home Ave of industrial traffic (to/from the Austin Drive-Indsutrial Pkwy sites) curently using QCP Road, once the Champlain Parkway is open.

The installation of a wide bridge at the study site would give some of this traffic an alternate route The advantage of designating QCP Road for industrial traffic would be the elimination of some awkward turning movements onto Industrial Pkwy at Home Ave Additionally, the channelized rail crossing on Home Avenue between the Parkway intersection and industrial sites is already stressed -- a site visit will reveal the poor surface condition of the crossing after 5 years of channelization. Having a full service connection over the rail at QCP road will relieve this crossing from carrying the full burden of heavy vehicles.

Thank you for incorporating my comments in to your study It is my hope that you choose to incorporate the widest consideration of factors outside the pinpoint area of the bridge itself into your analysis.

Sincerely,

John Gauthier

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CAUTION: The Agency of Human Services / Vermont Department of Health cannot ensure the confidentiality or security of email transmissions

QCPR - IPDR - APPENDIX

Bogue, George

IX

From: Tom Piper [tom puremarketing@comcast.net]

Sent: Tuesday, March 13, 2007 8:54 AM

To: Bogue, George

Subject: QCP bridge

Dear Mr Bogue,

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Thanks,
Tom & Lori Piper

Tom Piper
Pure Marketing
7 Pavilion Avenue
South Burlington, VT 05403

802.846.7626
tom.puremarketing@comcast.net

PURE
MARKETING

From: Ellen Gittelsohn [ellen@vidsync com]
Sent: Monday, March 12, 2007 9:49 PM
To: Bogue, George
Cc: Gary Keller@UVM edu; bkandgk@yahoo com; sabrinajoy78@hotmail com; lakeside@vtlink net; sheldonkatz@verizon net; yahladassa@yahoo com; altc11@gmail com; efrish@sover.net; Steve Caflisch@rcn com; comittiNA@comcast net; mandymc@verizon net; robert baran@adelphia.net; suzanne baran@vtmednet org; central4@sover net; Karen Alence; woodchuck37@hotmail com; wendycopp@msn com; Jbarna@zoo uvm edu; crowley@winooski k12 vt us; tkerr@vtlegalaid org; javrutick@yahoo.com; KJGScout@aol com; mseyler9@hotmail.com; JEntis@aol com; mc27@adelphia.net; elleng@sover net; Simon; vtroundhouse@aol com; littlehouseQCP1@verizon net; JWilson@cctv.org; Mark Furnari; Sunquietjesse@yahoo com; Barbara Pawluk; gsonjake@verizon net; Marilyn2m@aol com; labossa1@hotmail com; ron@bikerecycle localmotion.org; smg0319@cs com; Tpiper@adelphia.net; Ljpiper@adelphia.net; LVera@CTE.K12.VT US; rtcassidy@gmail com; Pigeonmr54 @yahoo com; janissima@surfglobal net; Jim@mickdunn com; mediatevermont@yahoo com; poco05403@yahoo com; lisay@gardeners com; diane@deterrafirma net; waorleans@ppdbrochure.com; sbehar@together net; rparlato@gmail com; kirschner49 @aol com; weldred@adelphia net; wingtao@sover net; jabbott@adelphia net; kslayton@adelphia net; joep@competitive com; rfeeed@burlingtonhousing org
Subject: bridge

I agree with some of the other comments. The bridge should be repaired but not made into two lanes. Cars going over the bridge need to be slowed down. Thank you
Ellen Gittelsohn
5 Pleasant Ave.

QCPR - IPDR - APPENDIX

Bogue, George

From: Steve Foster [sfoster@edlundco.com]

Sent: Tuesday, February 27, 2007 11:21 AM

To: Bogue, George

Subject: Queen City Park Road Bridge

Hello George,
Just a comment on the bridge Most of the adequacy concerns must stem not from Queen City Park traffic, but from the traffic generated out of Industrial Parkway and Barrett's Trucking on Austin Drive No doubt the bridge was not intended to handle the volume we have today, and I don't know about its load capacity, but seldom do I see backups of more than a couple of cars waiting their turn to cross. I'm one of the owners of the Edlund Company, and have been using the bridge for more than 35 years. I am not aware of any accidents, but we did receive a complaint a few years back from a Queen City Park resident who was perturbed because she had to wait on the east side of the bridge for more than one car to pass before she could take her turn. She thought it was because Edlund's employees were in a hurry to get home at the end of their shift that they were so discourteous as to cross more than one-at-a-time. So count me as a regular user who doesn't see a problem there, eventhough the idea of a one-lane bridge in Vermont's largest city is a bit of an anachronism
Regards,
Stephen P. Foster, V P & COO
Edlund Company, Inc.

QCPR - IPDR - APPENDIX

Bogue, George

From: sbehar@together net

Sent: Tuesday, February 27, 2007 2:05 PM

To: Bogue, George

Subject: QCP Road Bridge

Dear George –
We will not be able to attend the March 14th meeting, so want to send a few thoughts your way.

Our main concern is pedestrian traffic – we need a safe way to be able to walk across the bridge – with strollers. . bikes....
Our next concern is not making the bridge too wide for car traffic – it fits the nature of our area well to have it small and 1 lane If you do choose to widen it, how will you keep traffic going SLOW???? Right now, it works really well to slow everyone down, making it possible to cross sides of the road. Those leaving work going out to Rte 7 will get up a big head of steam with a wide, open bridge
We like the funkiness of this area – please consider making something that is safe, but that honors the funky and different nature of this area.

Thanks!
Sharon

Sharon Behar
Organizational Development Consultant
108 Central Ave
So Burlington, VT 05403
(802)862-3830

Emails Rec'd for Local Concerns MTG

IX

From: Mike Turner [comittina@comcast.net]
Sent: Friday, March 09, 2007 5:45 PM
To: Jess Wilson; Lynn Vera; Wesley & Patty Eldred; Anne Connell; Barbara Pawluk; joni avrutick; Bogue, George
Cc: jabbott@adelphia.net; kslayton@adelphia.net; Ljpiper@adelphia.net; mc27@adelphia.net; robert.baran@adelphia.net; Tpiper@adelphia.net; weldred@adelphia.net; JEntis@aol.com; Ellen Kirschner; KJGScout@aol.com; Marilyn2m@aol.com; vtroundhouse@aol.com; Ron Manganiello; rfeeed@burlingtonhousing.org; joep@competitive.com; smg0319@cs.com; diane@deterrafirma.net; lisay@gardeners.com; Richard Parlato; Richard Cassidy; kalence@gmavt.net; labossa1@hotmail.com; mseyler9@hotmail.com; sabrinajoy78@hotmail.com; woodchuck37@hotmail.com; Jim@mickdunn.com; wendycopp@msn.com; andy.johnson@ogaragroup.com; Bill Orleans; Steve Caflisch; central4@sover.net; efrish@sover.net; elleng@sover.net; wingtao@sover.net; janissima@surfglobal.net; Iris MacDonald; Sharon Behar; Gary Keller@uvm.edu; gsonjake@verizon.net; littlehouseQCP1@verizon.net; Mandy McDermott; Mark Furnari; sheldonkatz@verizon.net; tkerr@vtlegalaid.org; Dave Wilber; suzanne.baran@vtmednet.org; crowley@winooski.k12.vt.us; sfrishkoff@world.oberlin.edu; bkandgk@yahoo.com; mediatevermont@yahoo.com; Pigeonmr54@yahoo.com; poco05403@yahoo.com; Sunquietjesse@yahoo.com; yahladassa@yahoo.com; Jbarna@zoo.uvm.edu
Subject: Re: Bridge Public Meeting

All,

I live at the end of Central Ave and use the bridge almost every day since moving here in 1995. I find the bridge to be adequate in every way except poor maintenance of the road surface and the hazardous nature of the structure along the walkway. The bridge slows traffic down, a big plus in my book. The traffic behavior can be unpredictable at times but I've not been involved in or witnessed an accident involving the bridge.

The walkway is narrow and kids on bikes are at risk of injury from the sharp girder edges that support the roadway side structure. If there was a way to prevent or reduce that possibility it would help. Maybe signs to "walk bikes" , at least it would plant the seed I do not advocate widening the bridge though I'd listen to arguments for and against this. I'll try to make it to the meeting.
Thanks > Mike Turner, 110 Central Ave, QCP

----- Original Message -----
From: "Jess Wilson" <jwilson@cctv.org>
To: "Lynn Vera" <lvera@ejhs.k12.vt.us>; "Wesley & Patty Eldred" <wpeldred@comcast.net>; "Anne Connell" <altc11@gmail.com>; "Barbara Pawluk" <bpawluk@verizon.net>; "joni avrutick" <javrutick@yahoo.com>
Cc: <jabbott@adelphia.net>; <kslayton@adelphia.net>; <Ljpiper@adelphia.net>; <mc27@adelphia.net>; <robert.baran@adelphia.net>; <Tpiper@adelphia.net>; <weldred@adelphia.net>; <JEntis@aol.com>; "Ellen Kirschner" <kirschner49@aol.com>; <KJGScout@aol.com>; <Marilyn2m@aol.com>; <vtroundhouse@aol.com>; "Ron Manganiello" <ron@bikerecycle.localmotion.org>; <rfeeed@burlingtonhousing.org>; <comittiNA@comcast.net>; <joep@competitive.com>; <smg0319@cs.com>; <diane@deterrafirma.net>; <lisay@gardeners.com>; "Richard Parlato" <rparlato@gmail.com>; "Richard Cassidy" <rtcassidy@gmail.com>; <kalence@gmavt.net>; <labossa1@hotmail.com>; <mseyler9@hotmail.com>; <sabrinajoy78@hotmail.com>; <woodchuck37@hotmail.com>; <Jim@mickdunn.com>; <wendycopp@msn.com>; <andy.johnson@ogaragroup.com>; "Bill Orleans" <waorleans@ppdbrochure.com>; "Steve Caflisch" <Steve.Caflisch@rcn.com>; <central4@sover.net>; <efrish@sover.net>; <elleng@sover.net>; <wingtao@sover.net>; <janissima@surfglobal.net>; "Iris MacDonald" <irismcd@together.net>; "Sharon Behar" <sbehar@together.net>; <Gary.Keller@uvm.edu>; <gsonjake@verizon.net>; <littlehouseQCP1@verizon.net>; "Mandy McDermott" <mandymc@verizon.net>; "Mark Furnari" <mfurnari@verizon.net>; <sheldonkatz@verizon.net>; <tkerr@vtlegalaid.org>; "Dave Wilber" <lakeside@vtlink.net>; <suzanne.baran@vtmednet.org>; <crowley@winooski.k12.vt.us>; <sfrishkoff@world.oberlin.edu>; <bkandgk@yahoo.com>; <mediatevermont@yahoo.com>; <Pigeonmr54@yahoo.com>; <poco05403@yahoo.com>; <Sunquietjesse@yahoo.com>; <yahladassa@yahoo.com>; <Jbarna@zoo.uvm.edu>

Sent: Friday, March 09, 2007 5:06 PM
Subject: Bridge Public Meeting

PUBLIC MEETING - QUEEN CITY PARK ROAD BRIDGE OVER VERMONT RAILWAY

The Cities of Burlington and South Burlington and the Chittenden County Metropolitan Planning Organization (CCMPO) are sponsoring a public meeting to discuss the existing traffic volumes, safety, capacity, and deficiencies of the bridge carrying Queen City Park Road over Vermont Railway. The purpose of this public meeting is to hear your ideas and concerns about this crossing.

The meeting will be held on Wednesday, March 14 at the Burlington Department of Public Works, 645 Pine Street, at 6:30 p.m. If you are unable to attend and have comments or questions, you can contact George Bogue, Project Manager, at Stantec Consulting Services Inc., 55 Green Mountain Drive, South Burlington, VT 05403 or george.bogue@stantec.com

****

Jess Wilson
Executive Producer
CCTV Productions/Channel 17
294 North Winooski Avenue
Burlington, VT 05401
802.862.1645 Ext. 15
Cell 802.355 4445
www.cctv.org

From: Mark Furnari [mfurnari@verizon.net]
Sent: Saturday, March 10, 2007 4:31 PM
To: Bogue, George
Cc: andy.johnson@ogaragroup com; Gary.Keller@UVM.edu; bkandgk@yahoo.com; sabrinajoy78 @hotmail.com; lakeside@vtlink net; sheldonkatz@verizon net; yahladassa@yahoo com; altc11@gmail com; efrish@sover net; Steve Caflisch@rcn com; comittiNA@comcast net; mandymc@verizon net; robert.baran@adelphia.net; suzanne.baran@vtmednet.org; central4 @sover.net; kalence@gmavt.net; woodchuck37@hotmail.com; wendycopp@msn.com; Jbarna@zoo.uvm.edu; crowley@winooski.k12.vt us; tkerr@vtlegalaid.org; javrutick@yahoo com; KJGScout@aol.com; mseyler9@hotmail.com; JEntis@aol com; mc27 @adelphia net; elleng@sover.net; sfrishkoff@world.oberlin.edu; vtroundhouse@aol com; littlehouseqcp1@yahoo.com; JWilson@cctv.org; mfurnari@verizon.net; Sunquietjesse@yahoo.com; bpawluk@verizon.net; gsonjake@verizon net; Marilyn2m@aol com; labossa1@hotmail.com; ron@bikerecycle.localmotion.org; smg0319 @cs.com; Tpiper@adelphia net; Ljpiper@adelphia.net; LVera@CTE.K12 VT US; rtcassidy@gmail.com; Pigeonmr54@yahoo.com; janissima@surfglobal.net; Jim@mickdunn com; mediatevermont@yahoo com; poco05403@yahoo.com; lisay@gardeners com; diane@deterrafirma net; waorleans@ppdbrochure com; sbehar@together.net; rparlato@gmail.com; kirschner49@aol.com; weldred@adelphia net; wingtao@sover.net; jimabbott77@comcast net; kateslayton@comcast.net; joep@competitive.com; oligino@alumdartmouth.org; rfeeed@burlingtonhousing.org; irismcd@together.net
Subject: QCP Road Bridge

George:

I live in QCP and just received the notice for public comment concerning the evaluation of the QCP Bridge. While I cannot make this meeting (prior committment) I want to say that my sense is that this bridge needs to be seriously repaird or replaced and that as a frequent walker there are some safety concerns that a newly designed pedestrian walk could address. However I believe that the bridge should be kept as a single lane bridge despite some inconvenience during the peak rush hour as it serves to reduce the speed of vehicles along QCP Road in a very positive waw. This is a tricky thoroughfare as cars that come east from Shelburne Road and continue west past Pine Street are usually "flying" and the bridge is and "excellent" calming device. You would be hard pressed to design a better one. I would oppose any attempt by the municipalities involved to make this a two lane bridge and I am sure most residential neighbors would also.

Please call with questions, thank you.

Mark Furnari
62 Central Avenue
S. Burlington, Vermont 05403
802-233-9395

QCPR - IPDR - APPENDIX

Bogue, George

From: Anne Connell [altc11@gmail.com]
Sent: Saturday, March 10, 2007 8:30 AM
To: Bogue, George
Subject: Re: Queen City Park Road bridge

IX

George-

I live in Queen City Park, so use the bridge daily. The one lane is dangerous cause obviously everyone relies on everyone being rational and cooperative when crossing the bridge. It works pretty well, but there are close calls. So if the bridge has to be rebuilt because it is falling apart - make it two lanes.

BUT this must be contingent on making the three way intersection of Central Avene a THREE WAY STOP. That intersection is far more dangerous than the bridge, in my opinion. the sight lines from Central Ave toward the bridge (looking east) are terrible and there is no stop sign there. CCTA busses and Barretts trucks (among other things) come flying along at 30 mph. I'm a bicycle commuter and I've been almost hit once by a bus - had to ditch it in the gravel. There's no time to react at that intersection by the time you see who is coming across the bridge. Another stop sign is needed.

that's it for me - thank you for taking my views into consideration

Anne Connell
56 Central Avenue

QCPR - IPDR - APPENDIX

Bogue, George

IX

From: Ellen Bernstein [mediatevermont@yahoo.com]
Sent: Saturday, March 10, 2007 7:41 PM
To: Bogue, George
Subject: Re: QCP Road Bridge

Dear Mr Bogue,
As a Queen City Park resident, I am writing to commend the letter written by Mark Furnari (below) I think it is an inventive idea because the bridge does need repair but having a two lane bridge will cause excessive speeds. A new one lane bridge, with pedestrian/bike access will be a wonderful addition I strongly oppose a two lane bridge.
Thank you for your attention,
Ellen Bernstein

Mark Furnari <mfurnari@verizon.net> wrote:

> George:
>
> I live in QCP and just received the notice for public comment concerning the evaluation of the QCP Bridge While I cannot make this meeting (prior committment) I want to say that my sense is that this bridge needs to be seriously repaird or replaced and that as a frequent walker there are some safety concerns that a newly designed pedestrian walk could address.
> However I believe that the bridge should be kept as a single lane bridge despite some inconvenience during the peak rush hour as it serves to reduce the speed of vehicles along QCP Road in a very positive waw This is a tricky thoroughfare as cars that come east from Shelburne Road and continue west past Pine Street are usually "flying" and the bridge is and "excellent" calming device. You would be hard pressed to design a better one I would oppose any attempt by the municipalities involved to make this a two lane bridge and I am sure most residential neighbors would also.
>
> Please call with questions, thank you.
>
> Mark Furnari
> 62 Central Avenue
> S. Burlington, Vermont 05403
> 802-233-9395

Never miss an email again!
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From: Bill Orleans [waorleans@ppdbrochure.com]
Sent: Sunday, March 11, 2007 11:47 PM
To: Mike Turner; Jess Wilson; Lynn Vera; Wesley & Patty Eldred; Anne Connell; bpawluk@verizon net; joni avrutick; Bogue, George
Cc: jabbott@adelphia net; kslayton@adelphia.net; Ljpiper@adelphia.net; mc27@adelphia net; robert.baran@adelphia.net; Tpiper@adelphia.net; weldred@adelphia net; JEntis@aol.com; Ellen Kirschner; KJGScout@aol.com; Marilyn2m@aol com; vtroundhouse@aol.com; Ron Manganiello; rfeeed@burlingtonhousing.org; joep@competitive.com; smg0319@cs.com; diane@deterrafirma.net; lisay@gardeners com; Richard Parlato; Richard Cassidy; kalence@gmavt.net; labossa1@hotmail com; mseyler9@hotmail.com; sabrinajoy78 @hotmail com; woodchuck37@hotmail com; Jim@mickdunn.com; wendycopp@msn com; andy johnson@ogaragroup.com; Steve Caflisch; central4@sover.net; efrish@sover.net; elleng@sover.net; wingtao@sover.net; janissima@surfglobal net; Iris MacDonald; Sharon Behar; Gary.Keller@uvm.edu; gsonjake@verizon.net; littlehouseQCP1@verizon.net; Mandy McDermott; Mark Furnari; sheldonkatz@verizon.net; tkerr@vtlegalaid.org; Dave Wilber; suzanne.baran@vtmednet.org; crowley@winooski.k12.vt.us; sfrishkoff@world.oberlin.edu; bkandgk@yahoo.com; mediatevermont@yahoo.com; Pigeonmr54@yahoo.com; poco05403 @yahoo.com; Sunquietjesse@yahoo com; yahladassa@yahoo com; Jbarna@zoo.uvm edu
Subject: Re: Bridge Public Meeting

Dear Mr Bogue,

I will be unable to attend Wednesdays meeting, due to a weekly commitment

I have been living in Queen City Park since 1982 and have probably crossed the discussed bridge over 20,000 times Although I'd like to see the potholes fixed and a better pedestrian / bike lane, I believe it serves the community very well as a one lane bridge.

I am concerned with the speed of drivers crossing the bride. I feel terribly old saying this, but there is a very large number of young Burton Snowboard employees and customers who cross that bridge regularly. They already drive at excessive speeds If you increase it to two lanes, you might as well a add banked turn and checkered flags.

Thank your for receiving feedback from our community I hope you consider our thoughts before spending valuable taxpayer money that could be going to some many much more pressing needs.

Sincerely,

Bill Orleans
84 Central Ave
So. Burlington, VT 05403
802-658-3837

From: Trinka Kerr [TKerr@vtlegalaid org]
Sent: Monday, March 12, 2007 8:19 AM
To: 'Bill Orleans'; Mike Turner; Jess Wilson; Lynn Vera; Wesley & Patty Eldred; Anne Connell; bpawluk@verizon net; joni avrutick; Bogue, George
Cc: jabbott@adelphia net; kslayton@adelphia net; Ljpiper@adelphia.net; mc27@adelphia net; robert baran@adelphia net; Tpiper@adelphia.net; weldred@adelphia net; JEntis@aol.com; Ellen Kirschner; KJGScout@aol.com; Marilyn2m@aol com; vtroundhouse@aol.com; Ron Manganiello; rfeeed@burlingtonhousing org; joep@competitive.com; smg0319@cs com; diane@deterrafirma net; lisay@gardeners.com; Richard Parlato; Richard Cassidy; kalence@gmavt net; labossa1@hotmail.com; mseyler9@hotmail com; sabrinajoy78 @hotmail com; woodchuck37@hotmail.com; Jim@mickdunn.com; wendycopp@msn.com; andy.johnson@ogaragroup.com; Steve Caflisch; central4@sover net; efrish@sover net; elleng@sover.net; wingtao@sover net; janissima@surfglobal net; Iris MacDonald; Sharon Behar; Gary.Keller@uvm edu; gsonjake@verizon net; littlehouseQCP1@verizon net; Mandy McDermott; Mark Furnari; sheldonkatz@verizon net; Trinka Kerr; Dave Wilber; suzanne.baran@vtmednet.org; crowley@winooski.k12.vt us; sfrishkoff@world.oberlin.edu; bkandgk@yahoo.com; mediatevermont@yahoo.com; Pigeonmr54@yahoo.com; poco05403 @yahoo.com; Sunquietjesse@yahoo.com; yahladassa@yahoo.com; Jbarna@zoo.uvm edu
Subject: Bridge Public Meeting

Dear Mr. Boque:
Unfortunately I won't be able to attend the public meeting on the Queen City Park Road bridge.

I am glad to hear that the bridge might be upgraded, but please keep it one lane. It most definitely slows people down. Quite a few people accelerate along Queen City Park Road, and without the one lane bridge I'm afraid more people would do so, and those who already drive too fast would go even faster.

That being said, here are the things I don't like about the bridge.

1) It's ugly.
2) It always has terrible potholes
3) It's scary to walk over because of the grating that you can see through.
4) It's not safe for people on bicycles because it's too narrow and the fencing on the sides looks like it would kill you if you fell on it.

And even though it's on a route that connects bike paths, there's no bike lane

Thank you for this opportunity to comment

Trinka Kerr
86 Central Avenue
South Burlington, VT 05403

From: wingtao@sover net
Sent: Monday, March 12, 2007 8:55 AM
To: Bogue, George
Subject: Re: Bridge Public Meeting

IX

Dear Mr. Bogue,

I know you have received several comments from my neighbors in Queen City Park. I'd like to add one more voice to the mix. My family moved to QCP 11 years ago with the hope of raising our children in a safe quiet neighborhood, where they could ride their bikes and walk to their friend's houses.

We already live in a neighborhood with no sidewalks, where walking down the street can be dangerous with the speed of cars. The one-lane bridge starts to slow folks down as they approach our neighborhood It feels safer knowing that as people arrive to and leave work from the several large businesses just outside our doors, they are forced to slow down as they approach the bridge. Without that one lane bridge, QCP Road will turn into a high speed thoroughfare.

Having said that, the bridge does need some work The potholes constantly reappear, the metal grate and metal sides feel unsafe.

Recently our neighborhood has been undergoing many changes. Lowe's and all its noise is moving in, the Velco station is expanding, the highway is coming. Please leave some of the slow quiet pace of our lovely neighborhood intact. Thanks for taking the time to hear from our neighborhood We appreciate it.

Stacy Jolles and Nina Beck
88 Central Avenue
South Burlington

QCPR - IPDR - APPENDIX

Bogue, George

From: Phil Hammerslough [Phil Hammerslough@dail state vt us]
Sent: Monday, March 12, 2007 1:04 PM
To: Bogue, George
Subject: The Bridge

IX

Hi George,

If a new bridge is necessary, (more than likely), I hope you will allow for a bike lane. Considering the proximity to the bike path and parks, this area is a great place to get to via bicycle. Creating more bike lanes will reduce car traffic, and encourage more bike traffic.

Best,
Phil

Phil Hammerslough
(802) 657-4238
phil hamerslough@dail state vt us

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QCPR - IPDR - APPENDIX

Bogue, George

From: Aaron Frank [afrank@cctaride.org]
Sent: Monday, March 12, 2007 1:27 PM
To: Erin Demers
Cc: Meredith Birkett; Christine Forde; Daniel Bradley; Bogue, George
Subject: RE: Queen City Park Road Bridge Scoping

Erin,

CCTA has one concern regarding this project given our understanding of it to date.

Currently, in agreement with the City of Burlington and out of respect for residents of Home Avenue, CCTA buses do not travel on Home Ave before 9:00 AM or after 6:00 PM The one exception is the Pine Street route, which travels on Home Ave. as part of its fixed route. All other buses, before 9:00 AM and after 6:00 PM, travel from the CCTA garage to their starting point (most often Cherry Street) via Queen City Park As a result, any closure of the Queen City Park bridge will require CCTA buses to use Home Ave. throughout the day, from the early morning through the late evening. CCTA would like the City of Burlington to be aware of this and requests permission for all CCTA buses to use Home Ave during the duration of any Queen City Park bridge closure

I'm not sure this warrants our participation in public meetings on the project, but we will be happy to do so, if there are aspects of this matter that you feel we need to work out in public or in collaboration with others.

Thanks for your consideration.

Aaron

Aaron Frank
Director of Planning and Program Development
Chittenden County Transportation Authority
15 Industrial Pkwy.
Burlington, VT 05401
AFrank@CCTARide.org
Ph. 802.864.0211
Fx 802.864.5564

-----Original Message-----
From: Bogue, George [mailto:george.bogue@stantec.com]
Sent: Friday, March 09, 2007 1:20 PM
To: Aaron Frank
Cc: Meredith Birkett; Erin Demers; Christine Forde
Subject: RE: Queen City Park Road Bridge Scoping

Hi Aaron,

The contact at the city of Burlington for this project is Erin Demers. I would appreciate a copy of you concerns since we will be developing the alternatives for the project.

George Bogue, PE

From: Barbara Pawluk [bpawluk@verizon.net]
Sent: Monday, March 12, 2007 4:12 PM
To: Bogue, George
Subject: QCP Bridge

IX

Hello,
Like many of my neighbors in Queen City Park, I cannot attend the upcoming meeting but would like to respond to your offer of providing feedback regarding the future of the bridge.
Please keep it at one lane. It helps to slow traffic down but is not an inconvenience as we never have to wait for more than 30 seconds or so. Please update and repair the bridge, both the vehicle lane and pedestrian lane as both are in desperate need of a good safety check and updating.
The one lane bridge works well. Changing it to two lanes would be inviting many problems!!
Sincerely,
Barbara Pawluk
62 Central Ave
So Burlington
862-1567

IX

From: Ellen Gittelsohn [ellen@vidsync.com]
Sent: Monday, March 12, 2007 9:49 PM
To: Bogue, George
Cc: Gary.Keller@UVM.edu; bkandgk@yahoo.com; sabrinajoy78@hotmail.com; lakeside@vtlink net; sheldonkatz@verizon net; yahladassa@yahoo.com; altc11@gmail.com; efrish@sover.net; Steve.Caflisch@rcn com; comittiNA@comcast net; mandymc@verizon.net; robert baran@adelphia.net; suzanne.baran@vtmednet.org; central4@sover.net; Karen Alence; woodchuck37@hotmail com; wendycopp@msn.com; Jbarna@zoo uvm.edu; crowley@winooski.k12.vt us; tkerr@vtlegalaid.org; javrutick@yahoo.com; KJGScout@aol.com; mseyler9@hotmail.com; JEntis@aol.com; mc27@adelphia.net; elleng@sover net; Simon; vtroundhouse@aol.com; littlehouseQCP1@verizon.net; JWilson@cctv.org; Mark Furnari; Sunquietjesse@yahoo com; Barbara Pawluk; gsonjake@verizon.net; Marilyn2m@aol.com; labossa1@hotmail.com; ron@bikerecycle.localmotion.org; smg0319@cs.com; Tpiper@adelphia.net; Ljpiper@adelphia.net; LVera@CTE.K12.VT US; rtcassidy@gmail.com; Pigeonmr54 @yahoo com; janissima@surfglobal net; Jim@mickdunn.com; mediatevermont@yahoo.com; poco05403@yahoo.com; lisay@gardeners com; diane@deterrafirma.net; waorleans@ppdbrochure.com; sbehar@together net; rparlato@gmail com; kirschner49 @aol com; weldred@adelphia.net; wingtao@sover.net; jabbott@adelphia net; kslayton@adelphia.net; joep@competitive.com; rfeeed@burlingtonhousing.org
Subject: bridge

I agree with some of the other comments. The bridge should be repaired but not made into two lanes. Cars going over the bridge need to be slowed down. Thank you.
Ellen Gittelsohn
5 Pleasant Ave.

QCPR - IPDR - APPENDIX

Bogue, George

From: Tom Piper [tom puremarketing@comcast.net]

Sent: Tuesday, March 13, 2007 8:54 AM

To: Bogue, George

Subject: QCP bridge

Dear Mr Bogue,

My wife and I live in Queen City Park. We would like to add our voice to those that would like structural improvements to the bridge, but to keep it as one lane at the same time. It works fine as is and there is no reason to spend the money to widen it which will only encourage speeding and people using it as an alternate route from Pine St

Thanks,
Tom & Lori Piper

Tom Piper
Pure Marketing
7 Pavilion Avenue
South Burlington, VT 05403

802.846.7626
tom.puremarketing@comcast.net

PURE
MARKETING

tantec.com **Memo**

X

Stantec

To: Greg Edwards, file From: George Bogue

File: 195310130 QCPR bridge Date: February 16, 2007

Telephone call with Dick Hoskings, Rail Manager at Vtrans:

I contacted Dick for input on the QCPR Bridge crossing and he provided the following:

He doesn't anticipate any need for another track in the future although he suggested locating the abutments as far away from the tracks as possible.

He doesn't think additional width (adjacent to the track) for access vehicles in necessary.

The bridge is owned by the City of Burlington.

The railroad has to grant a waiver if the clearance is going to be less than AREMA requirements. He thought double stacked cars could pass with 20'-8" of vertical clearance but the RR would have to sign off on anything less than 23'-0"

If we are going to consider lowering the tracks he suggested getting a profile of the tracks that extends 1 mile in either direction of the crossing The profile could be obtained with shots at 200' intervals.

STANTEC CONSULTING SERVICES INC.

George Bogue, PE
Associate, Transportation
george bogue@stantec com

c. [Click here and type a cc list]

gb document4

QCPR - IPDR - APPENDIX

Knight, Tom

From: Knight, Tom
Sent: Friday, April 13, 2007 11:37 AM
To: Bogue, George
Subject: Phone Log with VT Railway (Queen City Park Road over Vermont Railway Scoping Study)

X

George,

I just spoke with Charlie Lemieux (VT Railway) regarding the QCPR bridge. Charlie's responses to the questions we provided by email are inserted below in ***bold red italics***.

Thomas E. Knight, PE
Project Engineer
Stantec
55 Green Mountain Drive
South Burlington VT 05403
Ph: (802) 864-0223 Ext 136
Fx: (802) 864-0165
tom knight@stantec.com
stantec.com

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From: Knight, Tom
Sent: Monday, April 09, 2007 12:44 PM
To: 'Dwwulfson@aol.com'; 'dwulfson@vermontrailway.com'
Cc: 'clemieux@vermontrailway.com'
Subject: RE: Queen City Park Road over Vermont Railway Scoping Study

Dave,

I just have a few follow-up questions regarding your comments on the Queen City Park Road crossing and a little more background information on the alternatives we are considering Any additional detail you could provide would be appreciated.

1) Vertical Clearance for Bridge Alternatives:

Alternative 1: rehabilitation of the existing 1 lane structure. This work would involve replacing the bridge deck, bearings backwalls, bridge rail, painting existing steel and providing minor alteration to the existing sidewalk.

It is our assumption that under this alternative, we would provide the same vertical clearance as provided by the existing structure (21'-3" +/-) However, if VT Railway has substantial concerns with this vertical clearance, we could consider alterations to the bridge configuration that would improve this clearance. Please advise us if this vertical clearance is an issue

VT Railway Charlie confirmed that if existing bridge is rehabilitated the existing vertical clearance will be adequate.

QCPR - IPDR - APPENDIX

Alternative 2: Construct new 2 lane structure This work would involve complete removal of the existing bridge and replacement with new 2 lane structure. It is assumed under this alternative that we would provide standard 23'-0" vertical clearance, unless for some reason more or less vertical clearance is required by VT Railway Again please advise us if there is an issue with this assumption regarding the vertical clearance.

*VT Railway: **Charlie confirmed that if the a new bridge is built, 23'-0" of vertical clearance will be adequate.***

2) Drainage Improvements: Your previous email mentioned the need for drainage improvements We noticed some standing water near the rail bed during our recent site visit Is this the concern, and what do you see as the remedy? For example, if a deeper ditch were provided adjacent to the track, would letting the water infiltrate be an acceptable solution, or do you think the remedy is to alter the track or ditch profile to eliminate the low spot? Any additional information you have about this problem (track profile, existing drainage structure, etc) would be helpful in estimating that portion of the proposed project.

*VT Railway: **Charlie explained that he thinks the drainage issues can be resolved by reshaping the ditch profile in the vicinity of the bridge (He thinks the current ditch drains to the south). He did not anticipate a need to change the track profile.***

3) Slope work: We noticed the timber cribbing adjacent to the track is failing. Is this the slope concern, or are there additional concerns? Do you know if this cribbing was installed to mitigate sloughing of the existing slopes or if this is part of the original grading plan (the plans that we have show a wall adjacent to the tracks as an existing condition in 1966, but the 1973 plans we have don't show it as part of the existing or proposed condition) Any additional information would be helpful. Also if you could describe proposed repair work that VT railway has in mind, that would be helpful.

*VT Railway: **Charlie explained that the concern with the slopes is the failing timber cribbing. He envisioned any replacement wall being a cantilevered concrete structure set back 7' from the tracks (he thinks the existing wall is closer than that). He confirmed that if the wall could be eliminated by revising the slope or lengthening the wingwall or bridge, that would be acceptable and helpful.***

4) Fiber optics: Could you provide a more accurate location of the fiber optic relative to the tracks?

*VT Railway: **Charlie explained that he thinks the fiber optic cables are on the west side of the structure approximately 6' off the centerline of the tracks, this is closer than typical because of conflicts with the retaining wall. Charlie explained that Engineers Construction installed the line and has records of the exact location and depth of the cables.***

Thomas E. Knight, PE
Project Engineer
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QCPR - IPDR - APPENDIX

From: Dwwulfson@aol.com [mailto:Dwwulfson@aol.com]
Sent: Wednesday, March 28, 2007 9:47 AM
To: Knight, Tom
Cc: clemieux@vermontrailway.com
Subject: Re: Queen City Park Road over Vermont Railway Scoping Study

hi tom,
if there is any work on this bridge in the future, the railroad will require slopework and drainage improvements in the vicinity of the project. we also have fiber running parallel to our tracks.
any further questions, please contact me via e mail
thanks

dave wulfson
president
vtr

D.W.

QCPR - IPDR - APPENDIX

X

AOL now offers free email to everyone. Find out more about what's free from AOL at **AOL.com**

Mr. Wulfson,

On behalf of the Chittenden County Metropolitan Planning Organization, Stantec Consulting is conducting a scoping study for the rehabilitation or replacement of the Queen City Park Road bridge over Vermont Railway in Burlington. As part of this study we would like to solicit any comments that Vermont Railway might have about the function of the existing structure. Please respond to this email with any comments, or feel free to call me at the number below.

Thomas E. Knight, PE
Project Engineer
Stantec
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South Burlington VT 05403
Ph: (802) 864-0223 Ext. 136
Fx: (802) 864-0165
tom.knight@stantec.com
stantec.com

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Stantec

XI

To:	Tom Knight	From:	David DeBaie
	South Burlington, VT		Manchester, NH
File:	195310130	Date:	July 11, 2007

Reference: Queen City Park Road

Existing Roadway and Bridge Geometry,and Regulations

The existing Queen City Park Road bridge is located approximately 0.XX miles west of Route 7 Shelburne Road. The one lane 15 foot wide bridge over the xx railroad provides access to the Queen City Park, to the Central Avenue and Maple Avenue residential neighborhoods located to the south of Queen City Park Road and to businesses located on Industrial Parkway to the north. Central Avenue has no other outlet. These land uses are also served by Home Avenue for crossing the railroad and accessing Shelburne Road and Pine Street.

Industrial Parkway connects to Home Avenue which runs parallel to Queen City Park Road and intersects Shelburne Road north of the intersection with Interstate 89. Land use along Queen City Park Road between the Bridge and Shelburne Road is generally undeveloped or part of the roadway right of way. Land use along Home Avenue is residential. Queen City Park Road Bridge is the primary crossing of the railroad for the recreational and residential land uses on Central Avenue and Maple Avenue and the commercial land uses on Industrial Parkway.

The Queen City Park Road is a two lane roadway with the exception of the one lane bridge section. On the approaches to the one lane bridge, the roadway width is transitioned from two lane width to the 15 foot width of the bridge within a distance of 150 feet. Queen City Park Road in the immediate vicinity of the bridge is generally straight and provides good line of sight. More particularly, the centerline of the bridge extends along centerline of the eastbound approach and forms an angle of less than five degrees with the centerline of the westbound approach. The bridge is slightly higher than the elevation than both approaches which are generally flat. As recognized more easily in the field, this roadway alignment and profile provides good sight lines through the 300 feet of single lane roadway/bridge on both approaches.

Queen City Park Road has a posted speed limit of 30 mph. A warning sign with the legend, ONE LANE BRIDGE, is posted approximately 50 feet in advance of the bridge on both approaches. The sign is clearly visible sufficiently in advance of the sign to allow the driver to react by looking down the road on the bridge and on the bridge approach to determine if a vehicle is approaching in the opposite direction

Reference: Queen City Park Road

XI

Traffic Volume Conditions

The CCMPO conducted a traffic count near the bridge in June 2006. Based on this count, the average daily traffic is approximately 2500 vehicles per day. As part of this scoping study, the CCMPO travel demand model was run to forcast the changes in traffic volumes on QCPR if the Southern Connector was constructed. Based on this analysis, opening the Southern Connector will reduce the traffic on QCPR. In the event the Southern Connector is constructed the traffic volume is predicted to decrease to 900 vehicles per day (based on 2005) and then increase to 1500 vpd in 2020. More recently Burton's which is located on Industrial Way announced plans to expand their snowboard business.

To better appreciate the operating conditions, hourly traffic volumes are typically analyzed. For this reason, Design Hourly Volumes (DHV) have been interpreted from the observed and projected average daily traffic volumes using the Vtrans standard tables for that purpose. These DHVs are presented in Table xx.

Condition	Average Daily Volume	Design Hour Volume
Existing	2500	320
Horizon Year with Southern Connector	1500	220
Design Year with Southern Connector	900	155

Operation

For a worse case consideration, the following discussion is based on the existing traffic volume conditions. Although the Southern Connector project is expected to reduce the daily and hourly traffic flow, the increase in traffic volumes due to the Burton expansion is not known but assumed to be no greater than the 1000 vehicle per day difference between the existing and the horizon year with the Southern Connector.

During most of the day, under the existing traffic volume conditions, the rate of vehicles approaching the bridge is generally equal on both approaches with vehicles arriving on the average of one every 36 seconds or more on each approach and one every 18 seconds on either approach. Under this average hourly condition, delays at the bridge at minimal because more often another vehicle will not be approaching from the opposite direction. If another vehicle is approaching, traversing the opposite approach and bridge at a reduced speed of 20 mph would require about 10 seconds of travel time that the second vehicle would of course be required to wait.

During the existing peak hour conditions, the existing one lane operation causes vehicle delay. This delay is greatest when a group of opposing vehicles approaches the bridge and cross as a platoon. More widely spaced vehicles traveling in the same direction will

Reference: Queen City Park Road

XI

also cross the bridge in succession if vehicles are following within 200 feet (about 10 - 12 twelve vehicle lengths). When this occurs, waiting vehicle delays exceed 30 seconds.

In general, for the average driver under average daily conditions, delays associated with the crossing are not significant. Under peak hour conditions the average delays are greater and in some instances can be significantly greater when the flow of traffic is continuous in one direction for extended periods. The conditions would occur at the beginning or ending of a workday at one of the businesses or at the end of an event at the park.

Safety is as important as convenience and minimal delay. Safety considerations include driving conditions and the range of driver types who travel this uncommon one-lane bridge. Conditions include reduced visibility during rain, snow and fog weather conditions. Night time conditions are less of a concern for seeing other vehicles but pedestrians on the bridge would not have the benefit of headlights. Driver types that are a concern would include:

- aggressive drivers;
- multitasking drivers (on telephone);
- less perceptive drivers (youth and elderly).

The safety of the one lane bridge relies on driver's ability to navigate with the benefit of whatever control measures are in place. The ONE LANE BRIDGE warning sign is adequate under most conditions for most drivers. Improved control measures on the approaches to the Queen City Park Bridge were considered including traffic signal control, STOP sign control and YIELD sign control. A brief discussion of each of these follows:

Traffic Signal Control
The most common occurrence of one lane bridges is as part of ongoing construction. The temporary nature of the traffic signal allows for its use on lesser volume roadways which is very often a situation where approaching vehicles do not have the ability to see across the bridge. On permanent construction, geometric deficiencies would be resolved before a traffic signal was considered. Consideration of a traffic signal requires that minimum volume and/or other thresholds are satisfied in accordance with warrants stated in the Manual on Uniform Traffic Control Devices (MUTCD).

Of the eight traffic signal warrants, the Eight Hour Warrant and the Peak Hour Warrant are probably most relevant to the bridge condition. Under the volume requirements for the eight hour warrant the major road must experience an hourly flow of 500 vehicles for each of eight hours of the average day, while the minor flow experiences 150 vehicles per hour. Under the worse case condition the total hourly volume is 320 vehicles split between the two directions which is significantly less than the minimum warrant.
The threshold of the minimum delay element of the Peak Hour Warrant is 4 hours of total delay on one approach. To meet this criteria each vehicle on one of the

Reference: Queen City Park Road

XI

approaches would be delayed approximately one minute. Average delay per vehicle during the peak hour is less than 20 seconds.

On the basis of the above a traffic signal does not appear to be an appropriate control measure at the Queen City Park Road Bridge.

STOP Sign Control
STOP control on both approaches was considered. The MUTCD also cites specific warrants for Multiway STOP signs as follows:

1. The major approach traffic volume averages 300 vehicles per hour for each any eight hours in the average day, and
2. The minor approach volume averages 200 vehicles per hour for the same eight hours in the average day and the average delay to this minor street traffic is a t least 30 seconds per vehicle during the peak hour.

On this basis the bridge does not meet Multiway STOP warrant conditions.

STOP control on one approach was considered. The MUTCD states that a STOP sign can be used if there is a correctible crash history, but should not be used on the major street. At the bridge location, the Major Street, or approach carrying the highest volume changes during the day. There is not an imposing crash history. If one approach is to be selected, it would be the eastbound approach whose centerline is slightly different than the bridge centerline and consequently has lesser sight distance.

YIELD Sign Control
The MUTCD states that a YIELD sign may be used instead of a STOP sign at an intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign. In this instance the YIELD sign would be used on the eastbound approach. As a result, the following is expected:

- When vehicles arrive at the bridge on both approaches simultaneously, the eastbound approach would be required to yield;
- Eastbound traffic would experience more delay as each vehicle on the eastbound approach would be required to yield to a waiting or approaching westbound vehicle rather than the successive vehicles continuing behind the leading vehicle of a group or platoon of vehicles under the existing ONE LANE BRIDGE sign control condition.

Recommendation
Given the existing volumes which do not meet traffic signal or multiway STOP sign warranting conditions, the following is recommended:

- If traffic volumes decrease maintain the existing ONE LANE BRIDGE sign control.

XI

- If traffic volumes increase consider the addition of a YIELD sign on the minor volume approach or the eastbound approach if volumes are balanced.

CHITTENDEN COUNTY METROPOLITAN PLANNING ORGANIZTION
QUEEN CITY PARK ROAD OVER VERMONT RAILWAY
MAJOR ITEM ESTIMATE - REDECKING/SOLID SURFACE SIDEWALK
DATE: 4/24/07

XII

Stantec

ITEM No.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL COST
204 25	STRUCT EXC	CY	35	$ 28 00	$ 980 00
406 27	PAVEMENT	TON	8	$ 284.00	$ 2,272 00
501 33	HP CONC CLASS A	CY	65	$ 700.00	$ 45,500.00
506 60	STRUCTURAL STEEL (GRID FLOORING)	SF	500	$ 11 50	$ 5,750 00
508.15	SHEAR CONN.	LS	1	$ 2,000 00	$ 2,000.00
513 30	STRUCTURAL PAINTING,FIELD APPLIED	LS	1	$ 15,000.00	$ 15,000.00
513 36	CONTAINMENT & ENVIRONMENTAL PROTECTION,FIELD	LS	1	$ 15,000 00	$ 15,000 00
513 41	SURFACE PREPARATION, FIELD	LS	1	$ 20,000.00	$ 20,000 00
525.15	HAND RAIL	LF	100	$ 112 00	$ 11,200 00
525 34	NETC 4 BAR	LF	100	$ 140 00	$ 14,000 00
529 20	PART REMOVAL OF STRUCT (1400 SF)	LS	1	$ 35,000.00	$ 35,000.00
531 11	BEARING DEVICE ASSEMBLY, ELASTOMERIC PAD	EA	6	$ 2,000 00	$ 12,000 00
621 73	APPROACH RAIL	EA	4	$ 7,500.00	$ 30,000.00
635.11	MOBILIZATION/DEMOBILIZATION	LS	1	$ 25,044.24	$ 25,044.24
			SUBTOTAL		$ 233,746
			20% CONTINGENCY		$ 46,749

TOTAL BRIDGE CONSTRUCTION COST ESTIMATE ..... **$ 280,495**

QCPR - IPDR - APPENDIX

Knight, Tom

XII

From: Bruce Bove [bbove@vtprotectivecoatings.com]

Sent: Thursday, April 05, 2007 2:52 PM

To: Knight, Tom

Subject: RE: Budget Price for Queen City Park Road over VT Railway

Tom,

Kirk looked at the bridge earlier this week. He feels that $40,000 to $50,000 would be a good budget range for cleaning and painting the steel on the bridge.

As far as the Termarust goes, we have not had any experience with that particular product, but we have used other products that make similar claims. Our experience with them is that they look good for awhile, but that their service life is much shorter than a regular paint job that is applied after a proper surface preparation. However, we have no experience with the Termarust product.

Let me know if you have any further questions.

Bruce Bove
Vermont Protective Coatings
(802) 247-3237
bbove@vtprotectivecoatings.com

-----Original Message-----
From: Knight, Tom [mailto:tom.knight@stantec.com]
Sent: Monday, March 26, 2007 10:18 AM
To: Bruce Bove
Cc: kthomas@vtprotectivecoatings.com
Subject: RE: Budget Price for Queen City Park Road over VT Railway

Bruce/Kirk,

Stantec is doing a scoping project for a bridge in Burlington (Queen City Park Road over VT Railway) I was wondering if I could get a budget number for cleaning and painting the existing girders

The bridge is an 80' simple span steel beam structure with a concrete deck (3 W36 x 250 girders @ 6.25 feet o/c) I am sure there will be some requirement regarding the vertical clearance over the track during construction (sorry, don't have that pinned down yet). There is a galvanized sidewalk structure that is bracketed to the fascia girder on the south side of the bridge. You can assume there will be a deck replacement as part of this work and that the sidewalk bracket is removed during painting if that helps.

Photos are attached. I don't think it will require a site visit, but a location map is also attached just in case

Also, we are looking into an alternative coating project for the bridge in Richmond that would allow water jet cleaning of the existing steel Do you have any experience or info on Termarust (http://www termarust com/) or similar products?

GCPR / VT RAILWAY

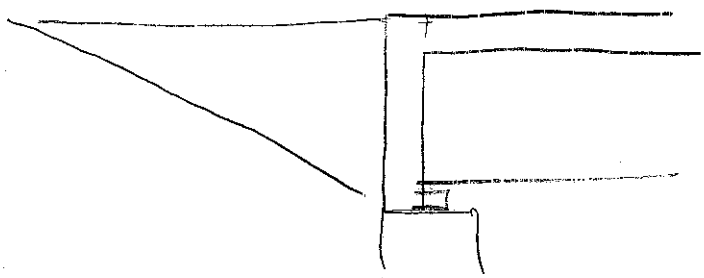
Stantec

MAJOR ITEM ESTIMATE

XII

ITEM 204.25

ASSUME EXC FOR REPLACING CURTAIN WALL



5' x 10'/2 x 17' WIDE /27 x 2 LOC = 31.5 CY

SAY 35 CY

ITEM 406.27

ASSUME 10' x 20' WIDE x 6"/12 x 2 ENDS = 100 CF

x 148#/CY/2000

7.4 TONS

USE 8 TONS

Designed by: Checked by:

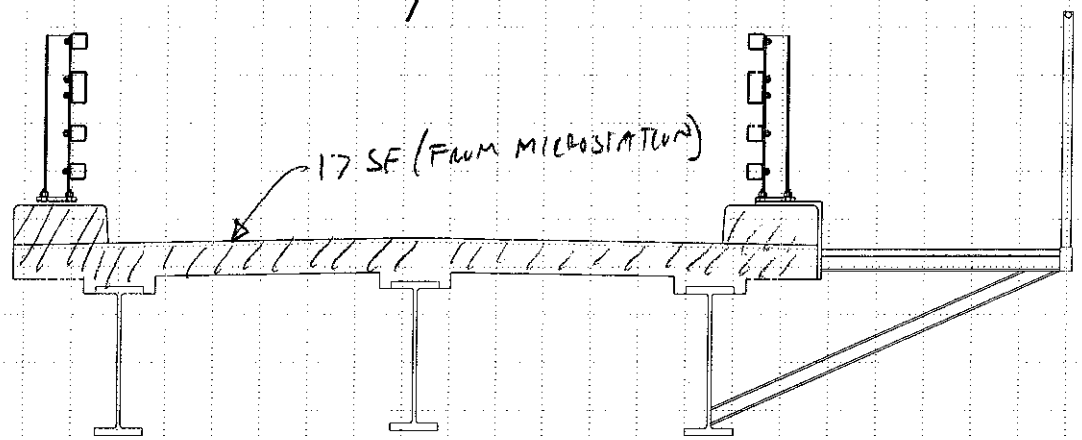
JOB

Stantec

XII

ITEM 510.33

EST. OF CONC. QUANTITY



COST ESTIMATE FOR REHABILITATION OF EXISTING BRIDGE

CONC = 17 SF * 80.75 LF + 2 * 5 * 17 x 1' CURTAIN WALL = 1547 SF

= 57.3 cy

CONC TO FILL IN SW GRATING = $\frac{1.5}{12}$ * 5' * 100'/27 = 2.3 cy

SUB TOTAL = 59.6 cy

SAY 65

CALCULATED BY _____ DATE _____

CHECKED BY _____ DATE _____

V:\1953\active\195310130\transportation\drawing\bridge sections.dgn

Stantec

ITEM 508.55

XII

ASSUME 2 PER SECTION
SPACED @ 16" O/C => (80/1.33 +1) x 2 = 122 PER BEAM

USE 366 TOTAL ASSUME $4 EACH = $1464

SAY $2000 FOR LUMP SUM

~~USE 0~~

ITEM 525.15 METAL HAND RAIL

100 LF ← VTRANS COST MAY BE LOW B/C THEY USE THIS ITEM W/ OUT SCREENING

ITEM 525.34 ASSUME GO TO END OF WINGS

Designed by: Checked by:

Stantec

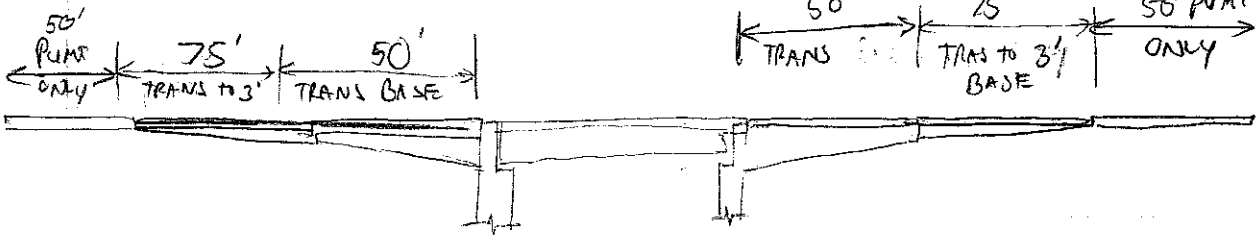
APPROACH WORK ASSOCIATED W/ REHAB

XII

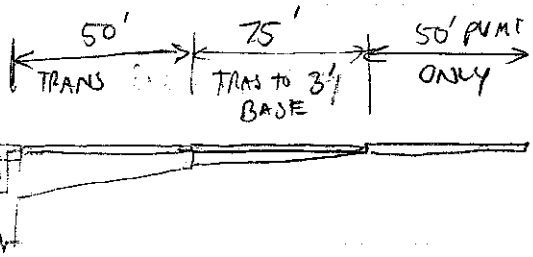
1

LENGTH OF PROJECT

WIDTH = 24' AVG WIDTH = 18'



AVG WIDTH = 18' WIDTH = 24'



COST OF ROADWAY WORK

SEE NEXT PAGE

FULL DEPTH 18' x 50' x 2 LOCATION x $11/SF = $19 800

+

TRANSITION 75' x 24' WIDE x 2 LOCATIONS x $11/SF = $39 600

PUMP ONLY 50' x 24' WIDE x 2 (LOC) * $4/SF = $9 600

$69 000

DOES NOT INCLUDE MOBILIZATION, CONTINGENCY

ROADWAY APP. COSTS

★ $70,000

SIDEWALK COSTS

ASSUME SIDEWALK SAME LENGTH OF ROADWAY WORK

$350/LF * $100/LF = $35,000

OR

OR $70 000 IF MATCH REPLACEMENT OPTION

$70 000

Designed by: ZIC Checked by:

Stantec

QCPR COST OF APPROACH WORK (ROADWAY)

XII (2)

USE HUNTINGTON - EAST ST. BRIDGE BID PRICES TO ESTIMATE SQUARE FOOT COST OF ROADWAY WORK FOR QUEEN CITY PARK ROAD

HUNTINGTON, FULL TYPICAL / FULL DEPTH CONSTRUCTION = 7+75 TO 13+25

550'
− 188' BRIDGE
362
× 28' WIDE
10136 □

ROADWAY ITEMS

	ITEM		ASSUMED % FOR ROADWAY	
CLR/GRUB	201.10	$12 000	× .2 =	2400
COMMON X	203.15	10 230	=	10 230
SAND	203.31	$10 075	=	10 075
GRAVEL	301.15	23 780	=	23 780
AGG	401.10	1820	=	1820
EMUL	404.65	1300	* =	1300
PVMT	406.27	121 105 × .50	=	60 550
				110 155

★ ROAD PVMT = .5' × 362' = 181 SY/LA
TOTAL PVMT = (.5' × 362) + (150' × 25) + (188' × 25) = 379 RATIO =
ROAD APP. BRIDGE

★ SAY 50%

COST PER SQ FOOT OF FULL DEPTH = 110,155 / 10 136 □ = $10.86/SF (SAY $11/SF)

COST OF JUST PAVING (APPROACHES) = 121 105 × 10% ** = 12110 ÷ 3500 SF = $3.46/SF (SAY $4/SF)

** % APPROACHES = 150'(.25)/379 = 10%

Designed by: DEK Checked by:

APPROACH WORK ASSOCIATED W/ NEW BUILD OPTION XII (3)

FULL DEPTH = 125' x 2 LOC x 28' * $11/SF = $77 000

TRANSITIONS = (75' + 160') (28') $11/SF (.5) = $36 190

PVMT ONLY = 50' x 28 x 2 * 4 = $11,200

$124,390 * SAY $125 000

SEE ATTACHED PLAN

* DOES NOT INCLUDE MOBILIZATION OR CONTINGENCY

ESTIMATE OF SIDEWALK COSTS

NEW 5' SIDEWALK = $50/SY * 5'/9 = $28/LF

CURB = $55/LF = $55/LF

TOPSOIL/SEED/MULCH = $5/SF * 4/9 = $220/LF

EXC/BACKFILL = 6 * $25/cy * 1/27 = $5 60/LF
6 SF/LF

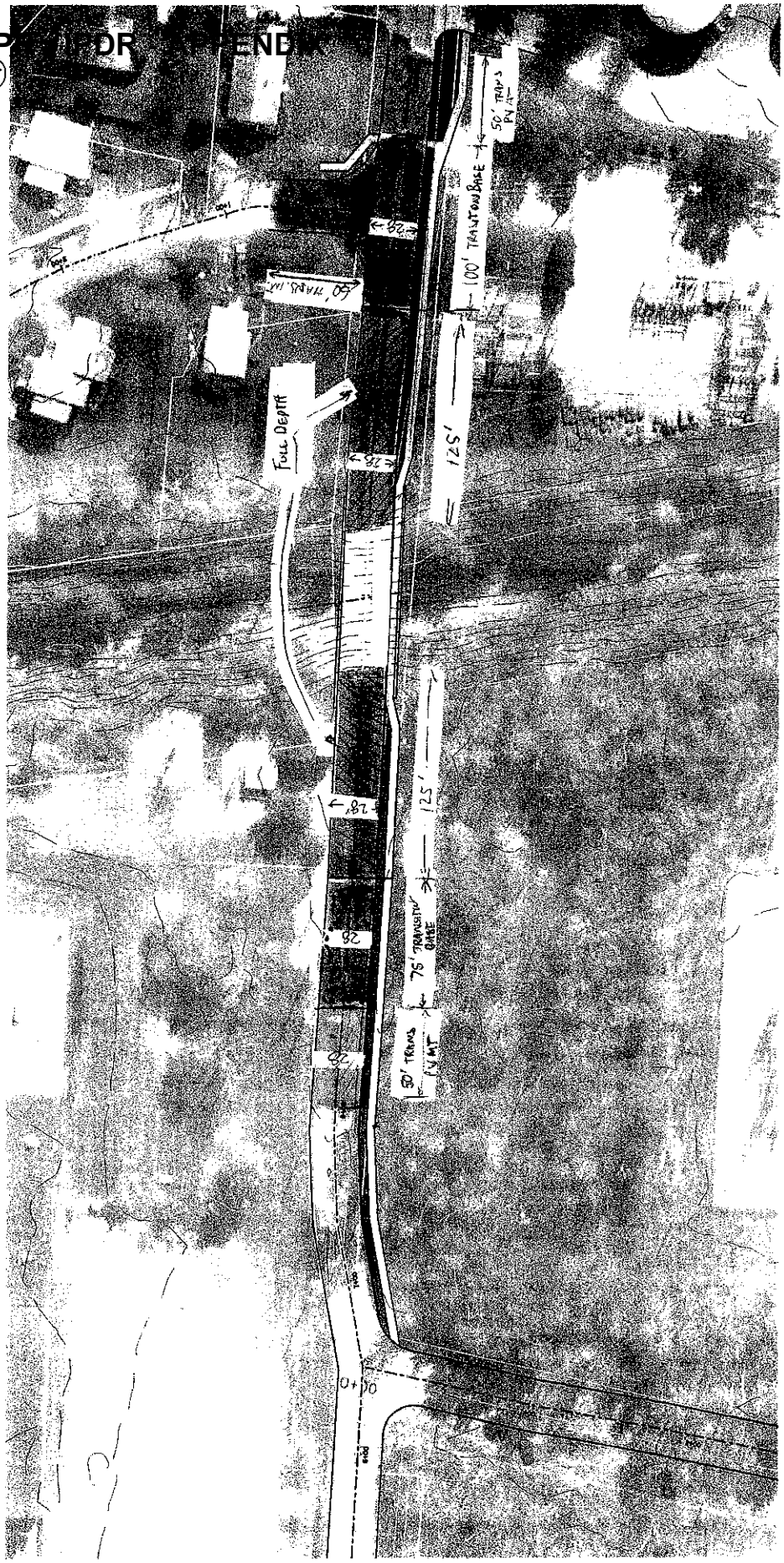
$91/LF SAY $100/LF
700

SIDEWALK → * $70,000

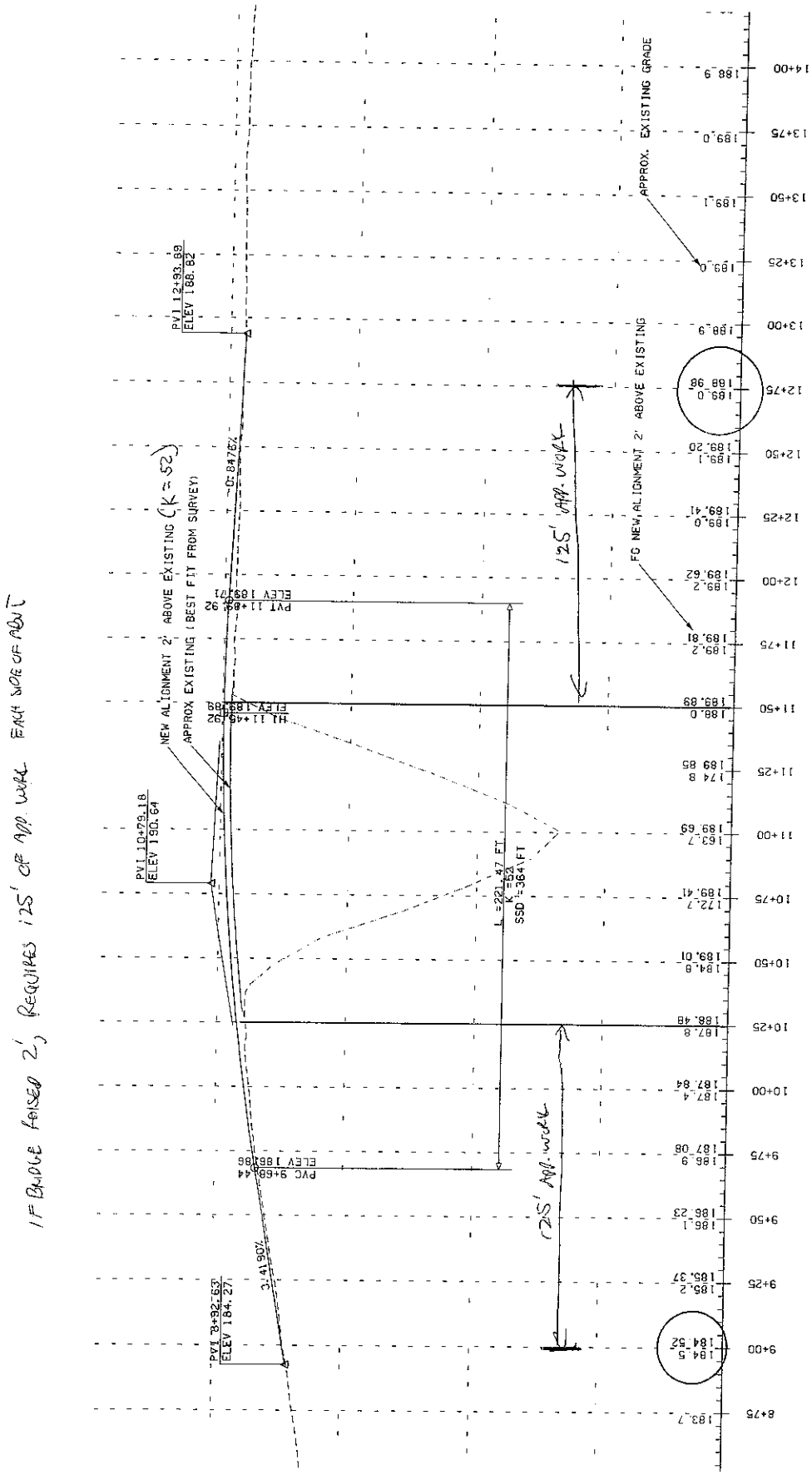
Designed by: Checked by:

(4)

XII


50' TRANS PVMT
100' TRANSITION BASE
60' TRANS. PVMT
FULL DEPTH
125'
125'
75' TRANSITION BASE
50' TRANS PVMT
28
28
28
28
28
0+00

XII


IF BRIDGE RAISED 2', REQUIRES 125' OF APP. WORK EACH SIDE OF ABUT
APPROX. EXISTING GRADE
FG NEW ALIGNMENT 2' ABOVE EXISTING
NEW ALIGNMENT 2' ABOVE EXISTING (K = 52)
APPROX EXISTING (BEST FIT FROM SURVEY)
PVI 12+93.89
ELEV 188.82
PVI 10+79.18
ELEV 190.64
PVI 8+92.63
ELEV 184.27
PVT 11+49.92
ELEV 189.71
HI 11+49.92
ELEV 189.89
PVC 9+68.44
ELEV 188.86
-0.847%
3.41.90%
L = 221.47 FT
K = 52
SSD = 364 FT
125' APP. WORK
125' APP. WORK

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QCPR
ESTIMATE COST TO REPLACE BRIDGE w/
2 LANE STRUCTURE

XII

FROM EXISTING PLANS, THE TOP OF RAIL ELEV = 478.4
AND FINISHED GRADE ≈ 504

THE PLANS ALSO INDICATE 22' OF VERTICAL CLEARANCE IS PROVIDED OVER THE RR TRACKS. HOWEVER FIELD MEASUREMENTS & INSPECTION REPORTS INDICATE 21 V.C. IS PROVIDED ∴ FINISHED GRADE HAS TO BE RAISED 2' TO PROVIDE THE 23' REQUIRED V.C.

ALSO TOE OF EXISTING SLOPE IS APPROX 1 BELOW TOP OF RAIL

$$\text{LENGTH OF BRIDGE} \approx \frac{8' + (506 - 477.4)(15)^{-1}}{\cos 144°} * 2$$

$$= 104'$$

$$\text{APPROX COST} = 104' \, 36^{\text{ft}} \, (170/SF) = \$636480$$

SAY 700000
(SEE FOLLOWING SHEETS

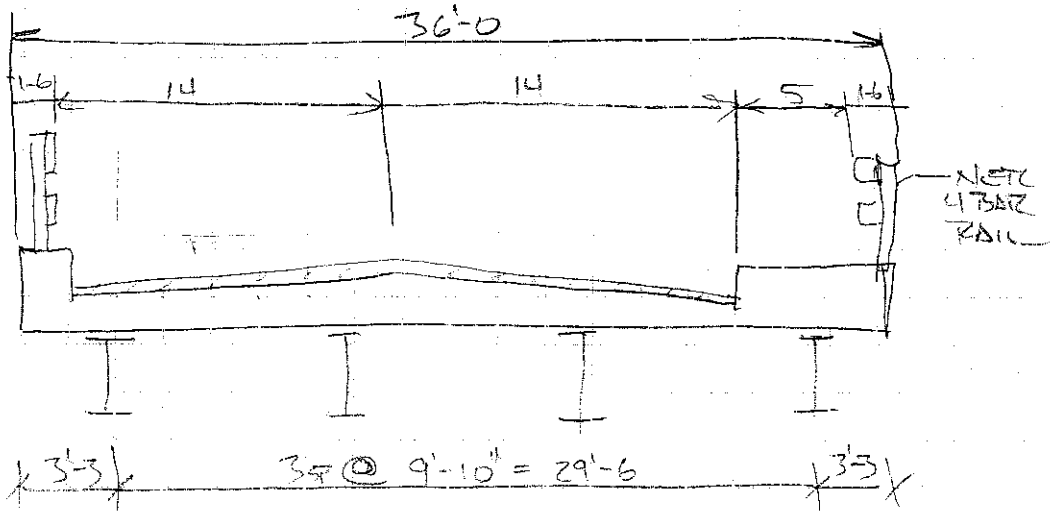
Designed by: Checked by:

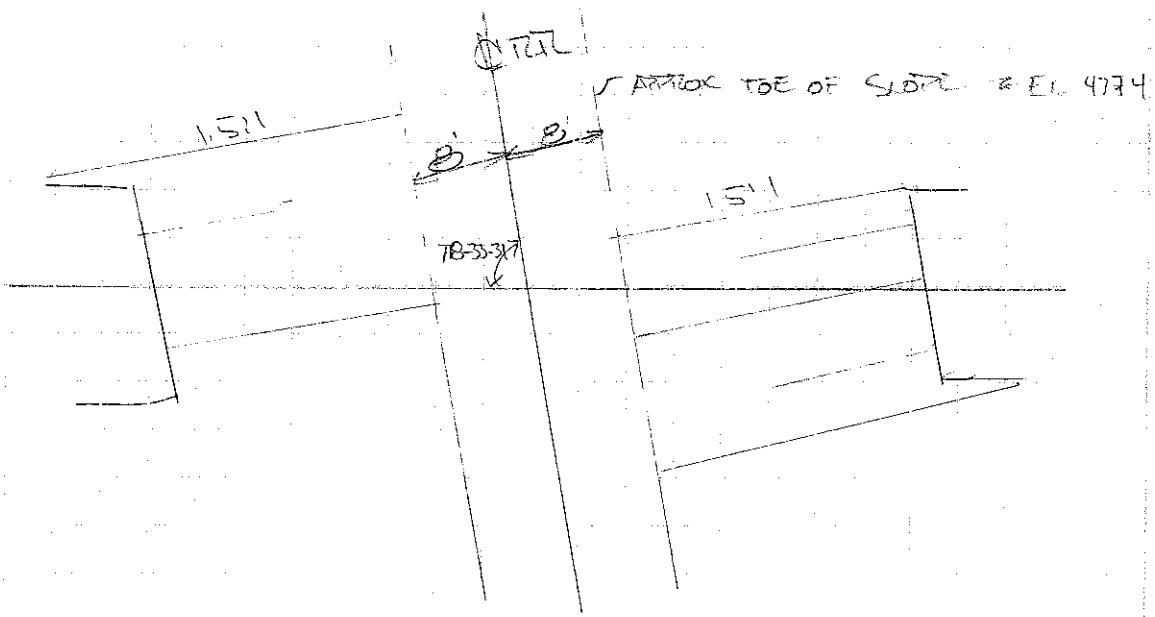
Stantec

SWEETS CITY PARK RD
CONCEPTUAL ESTIMATE FOR REPLACEMENT

XII

SLOPE-INTERCEPT METHOD:
ASSUME TYP SECTION IS AS FOLLOWS





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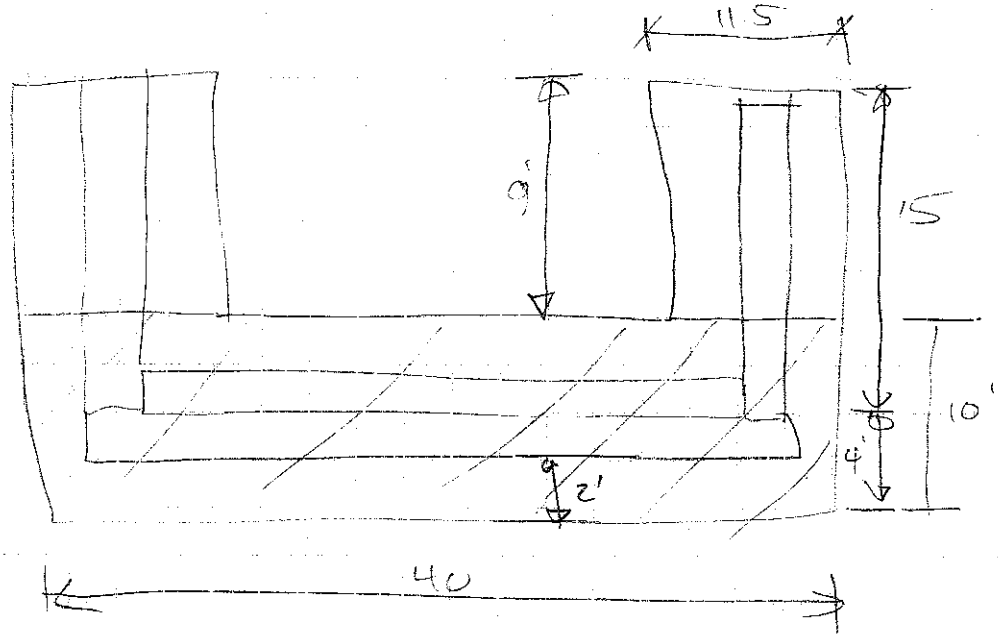
ESTIMATE MAJOR ITEMS XII 2

ASSUME 36' WIDE STEM & 15' LONG WINGS



$$\text{VOL FTG} = \{10'(40)(2) + 9'(11.5)(2')(2)\}\ 27$$

$$= 45\text{CY/FTG}$$

VOL STEM ≈ 0.89 CY/LF * 36' = 32 CY

VOL WING STEM ≈ 0.65 CY/LF * 15' * 2 = 20 CY

TOTAL = 97 SAY 100 CY/ABUT

⇒ 200 CY ABUT CONCRETE

ESTIMATE 90#/CY FOR FTG REINFORCING (FROM ABUT B-SITE 7)
65#/CY FOR STEM REINFORCING

→

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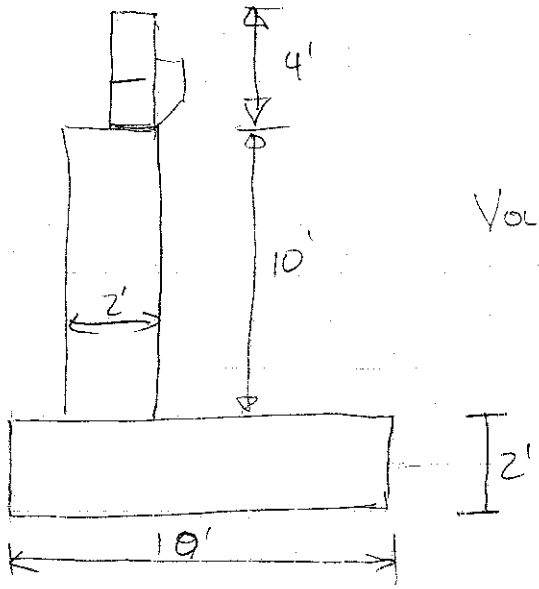
XII

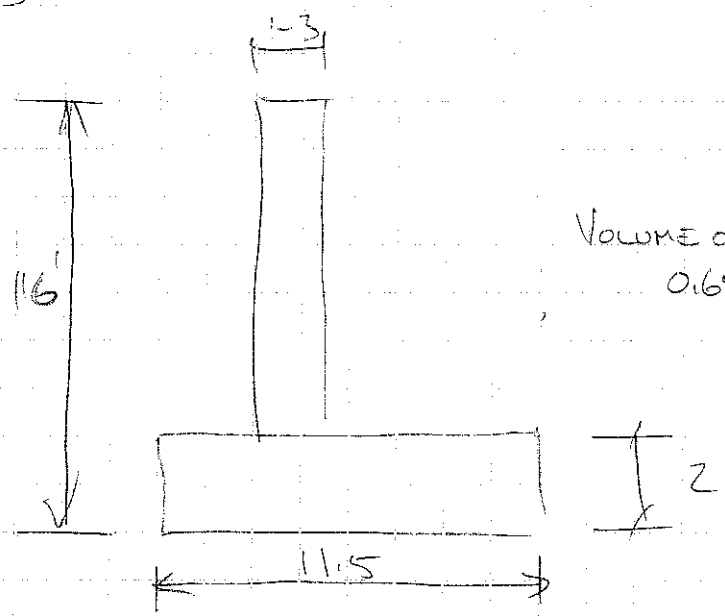
MAJOR ITEMS

ABUTMENTS. ASSUME HEIGHT ≃ 16' (APPROX 2' HIGHER THAN EXIST



VOLUME ≃ 0.89 CY/LF FOR STEM

WINGWALLS



VOLUME OF STEM ≃ 0.65 CY/LF

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XII 3

REINFORCING STEEL

FOOTINGS 90 CY * 90#/CY = 8100#

STEMS 110 CY * 65#/CY = 7150#

SAY 16,000#

CONCRETE DECK / CURBS / SWK

ASSUME 9" DECK

{36'(.75') + 2'(.83) + 65(.83)} * 80'/27

= 101 CY SAY 125 CY DECK CONCRETE

ASSUME 260#/CY FOR REINFORCING STEEL

⇒ 29,000# OF EPOXY COATED REINFORCING

STEEL BEAMS: ASSUME W36X250 (SAME AS EXIST)

4 BEAMS * 82' * 250#/FT * 1.1 ⇒ 90,500# STEEL

Designed by: Checked by:

Stantec

XII

OTPIZ - Notes from telephone call w/ John @ Fort Miller

BUDGETS - ~~GRAND STAND~~ - 280 - 300 $/SF
DELIVERED BUT NOT INSTALLED
-- NEEDS OVERLAY!
2 GRADES
~~2 DAYS~~ / WK ASSEMBLY

THE PIKE CO - ROCHESTER
DAVE BLUMSTEIN

"INVERSET" - $150/SF

DELIVERED TO JOB SITE
3 DAYS TO ERECT
- NO RIGID OVERLAY
- ASPHALT OK -

Designed by: Checked by:

QUEEN CITY PARK ROAD OVER VERMONT RAILROAD
FULL EVALUATION MATRIX

XII

		Alternative A Rehabilitate Existing Bridge	Alternative B New Two lane bridge	Do Nothing
Cost	Roadway	$ 90,000	$ 150,000	
	Sidewalk	$ 70,000	$ 70,000	
	Bridge	$ 290,000	$ 700,000	
	Traffic and Saftey	$ 50,000	$ 90,000	
	Engineering	$ 50,000	$ 90,000	
	Total	$ 550,000	$ 1,100,000	Maintinence/Saftey
	Relative Cost Rank	2	3	1
Engineering	Typical Bridge section	2-10-2	3-11-11-3-5	2-10-2
	Typical Roadway Section	2-12-12-2-5	3-11-11-3-5	2-12-12-2-5
	Live load capacity (inventory)	>HS-20	>HS-20	>HS-20
	Change in bridge elevation	None	+2'	None
	Clearance over Railroad	21'	23'	21'
	Pedestrian Access	Yes	Yes	Yes
Impacts	Archeological	TBD	TBD	No
	Historic Structures	TBD	TBD	No
	Hazardous materials	No	No	No
	Rare threatened and endangered species	TBD	TBD	No
	Noise	No Change	Possibly Improved	No
	Wetlands	No	Possible Minor Impact	No
	Right of Way	No	Yes, slope easement	
	Below Ground Utility Impacts	TBD	TBD	No
	Above Ground Utility Impacts	Yes, Minor	Yes	
Purpose & Need	Satisfies Purpose and Need Statement			
	a. Address ongoing deterioration & provide safe crossing for vehicles	Yes	Yes	No
	b Provide a safe crossing for pedestrians	Yes	Yes	Yes
	c. Provide a safe crossing for cyclists	No	Yes	No
Permits	Act 250	Not Req'd	Not Req'd	Not Req'd
	401 Water Quality	Not Req'd	Not Req'd	Not Req'd
	404 COE Permit	Not Req'd	Not Req'd	Not Req'd
	Stream Alterations Permit	Not Req'd	Not Req'd	Not Req'd
	Conditional Use Deterination	Not Req'd	Not Req'd	Not Req'd
	Stormwater Discharge	Possible	Possible	Not Req'd
	Construction General Permit	Not Req'd	Not Req'd	Not Req'd
	Lake and Ponds	Not Req'd	Not Req'd	Not Req'd
	Threatened and Endangered Species	TBD	TBD	Not Req'd
	SHPO	TBD	TBD	Not Req'd

XIII

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Alternatives Presentation
November 8, 2007

NAME	ADDRESS	EMAIL
Lisa Yankowski	35 Central Ave SBurl.	lisay@gardeners.com
Sonny Audetta	[illegible]	
Anne Marie Crawford	76 Central Ave SB	gsonjake@verizon.net
JOHN WILKING / FOR BURTON SNOWBOARDS	30 KIMBALL AVE SB	JWILKING@NEVILLE.CO.CA
Wesley Eldred	114 Central, SB.	WPeldred@comcast.net
Robert W Vogel	95 Central SB	
Bill Stuono	128 S. Cove Rd	WSTUONO@zoo.uvm.edu
Dave DiElsi	2 Arthur Ct.	jmthonet@yahoo.com
Robert Marshall	161 Austin Dr Btv	Bmaia@smartgate.net
Bruce Albert	52 Central Ave	
Gary Keller	11 Lyons Ave	bkandgk@yahoo.com
Sabrina Joy Milbury	8 Maple Ave SBurl	Sabrinajoy78@hotmail.com
Thomas Piper	7 Pavilion Ave S.Burl	tom.piper@pure-mktg.com
John Page	10 Birch Lane S.Bur	
Bill Keogh	31 Old Farm BTV	on file
Pamela Pace	11 Pavilion	
Lynn Vera	11 Pavilion Ave QCP	
Mark Furnaro	62 Central Ave	SBurlington VT
Peter Von Doepp	83 Home Ave	[illegible]
Neil Smith	155 Austin Dr. Burlington	NELSMITH@BURLINGTONTELECOM.NET
Alan Bagshaw	15 Lyons Ave.	alhasemail@yahoo
Elisa Nelson	155 Austin Dr Burlington	NELSMITH@BURLINGTONTELECOM.NET
BRUCE K. HOAR	S BURL. PW	bhoar@sburl.com

Mail or email comments to:

George Bogue, PE
Stantec Consulting Services Inc
55 Green Mountain Drive
South Burlington VT 05403
george bogue@stantec.com

QCPR - IPDR - APPENDIX

Knight, Tom

XIII

From: Aaron Frank [afrank@cctaride.org]
Sent: Monday, November 05, 2007 3:38 PM
To: Bogue, George
Cc: Chris Cole; Meredith Birkett; Dan Bradley; Christine Forde
Subject: QCP Bridge Scoping - CCTA Comments

George,

Chris Cole forwarded me an invite to comment on this topic on behalf of CCTA.

CCTA's comments are that:

1) We would like the rehabilitation or replacement with the minimal elapsed construction time as it will a) interrupt our Pine Street route which is steadily gaining riderhsip after some major reworking about two years ago; and b) cause us to operate deadhead trips to our route beginnings/endings on Home Avenue in conflict with an agreement between the City and CCTA to use Queen City Park Road and Pine Street for such trips in the early morning and late evening.

2) We would prefer a two way replacement with a pedestrian sidewalk on at least one side to the one lane rehab and the do nothing alternatives.

3) We will require a capacity of at least 45,000 in each direction

4) Rehabilitation or construction of Queen City Park Bridge should not coincide with Southern Connector construction. If it must coincide with Southern Connector construction CCTA needs to have construction phased in coordination with CCTA operational needs, or else we may be unable to offer our current level of services.

Thanks for consideration of CCTA's needs in this process.

If you could put me on the list of people to receive copies of draft reports, public hearing minutes, etc. I would appreciate it.

Thanks,

Aaron

Aaron Frank
Director of Planning and Program Development
Chittenden County Transportation Authority
15 Industrial Pkwy.
Burlington, VT 05401
AFrank@CCTARide.org
Ph. 802.864.0211
Fx 802.864.5564

XIII

Stantec

Alternatives Presentation
November 8, 2007

Name: Bill STUONO
Phone or Email: 865-2805 wstuono@zoo.uvm.edu

Comments:

The two lane bridge is a good idea -- eventually this is needed. I like the design.

However, I believe that we need an actual narrowing of the bridge to keep traffic slowing down. It doesn't have to be much (just a few feet), but the road should appear to narrow, otherwise residents like myself will eventually not slow down. I recommend using an actual raised median (not just textured) before the bridge, and then real curbing on the bridge itself that narrows the roadway. These can easily be removed at a later date if deemed necessary.

Mail or email comments to:

George Bogue, PE
Stantec Consulting Services Inc
55 Green Mountain Drive
South Burlington VT 05403
george bogue@stantec com

XIII

Stantec

Alternatives Presentation
November 8, 2007

Name: Peter Van Dorpp
Phone or Email: 862-7280

Comments:

Please build a 2 lanner - we need relief on Home Avenue - without a 2 lane bridge we will bear the cost of any future industrial growth!

Mail or email comments to:

George Bogue, PE
Stantec Consulting Services Inc
55 Green Mountain Drive
South Burlington VT 05403
george bogue@stantec com

XIII

Stantec

Alternatives Presentation
November 8, 2007

Name: Gary Keller
Phone or Email: 497-0199

Comments:

~~[illegible] speed~~

~~speed safety~~

~~to city park~~

My main concern is to insure that the speed of traffic ~~d~~ stay very slow. Minimal traffic calming measures as presented is no where near adequate to slow the traffic. Putting a ~~bridge~~ 2 lanes bridge needs a very clear extreme traffic calming plan planned right from the start like a stop sign. I am for keeping it as a one lane bridge.

Mail or email comments to:

George Bogue PE
Stantec Consulting Services Inc
55 Green Mountain Drive
South Burlington VT 05403
george bogue@stantec com

Alternatives Presentation
November 8, 2007

Name: Bruce Alvarez
Phone or Email:

Comments:

One lane bridge preferable - I have never seen any traffic calming devices that work better. People race from speed bump to speed bump on Park St. then slam on their brakes. The speed bumps are uncomfortable at 15 mph.

If it is 2 lanes, people turning left onto Central Ave will either back up traffic, get hit from behind or require signaling that is more a detriment to traffic flow 95% of the time.

Mail or email comments to:

George Bogue, PE
Stantec Consulting Services Inc
55 Green Mountain Drive
South Burlington VT 05403
george bogue@stantec.com

XIII

Name: Mark Furnari
Phone or Email: 862-1567, mfurnari@verizon.net

Comments:

Thank you to both you and your colleague for the information that was made available at the meeting.
A few neighbors got together after the meeting and decided to communicate these observations to you and the Burlington DPW staff.

Observations:

a. The current structure is in need of significant structural rehabilitation and safety enhancements.
b. While safety concerns exist, there is, in fact, no record of accidents or incidents on the bridge that warrant a redesign of the bridge.
c. Traffic is conveyed over the bridge with little or no wait at the current traffic levels.
d. The two lane alternative is twice the price of the one lane rehabilitation. Approximately $510,000 vs. $1,100,000
e. The proposed calming devices for the bridge do not deal with the QCP road speeding issue and are inadequate to calm the roadway.
f. Appropriate signage at the bridge could eliminate a great deal of the current confusion concerning Right of Way questions.
g. There will be increased volume on the bridge due to increased development in the Industrial Park, however no studies have been done to determine the true impact on the bridge and the surrounding neighborhood.
h. There were equity concerns raised in terms of traffic impact on the Home Avenue and QCP Road.
i. The completed Southern Connector was offered as a solution to reducing traffic on QCP road and the impacted neighborhoods.
j. Community members suggested that the Southern Connector question should be resolved before the bridge decision is made
k. While those presenting the information stated they had no preference for either alternative, the presentation was, at this time, biased in favor of the two lane alternative.
l. The overwhelming majority of community members present, concerned about speeding and accidents, do not want the one lane bridge replaced with the two lane solution based on the information presented.
m. Officials from the MPO and the Vermont legislature suggested that the funding for this project was 7-30 years in the future.
n. The City of Burlington indicated that until the plan is approved and funded they would be repairing the bridge and would explore new signage to enable the easier passage over the bridge

QCPR - IPDR - APPENDIX

Bogue, George

XIII

From: Jim Foster [jfoster@edlundco.com]
Sent: Monday, November 12, 2007 4:16 PM
To: Bogue, George
Subject: RE: QCP Bridge

Thanks for the quick reply Apparently, my brother Steve participated in a survey several months ago and expressed our satisfaction with the utility of the current configuration
Please keep us on the mailing list, and if you require more information on our use patterns and requirements, we would be happy to provide them
Jim

From: Bogue, George [mailto:george.bogue@stantec.com]
Sent: Monday, November 12, 2007 3:44 PM
To: Jim Foster
Subject: FW: QCP Bridge

Mr. Foster,
We regret that you were not included in the notifications for the meeting. Attached are PDF files depicting the two alternatives being considered, a copy of our power point presentation including an evaluation matrix from our public presentation and a comment sheet. (I have to break this into two emails due to the size of the attachments)

You should know that we did present a time range for construction of anywhere from 5 to 15+years from completion of the scoping process I hope this gives you adequate information to comment on the alternatives being considered.

If you have any questions, please do not hesitate to call

George Bogue, PE
Associate, Transportation
Stantec
55 Green Mountain Drive
South Burlington VT 05403
Ph: (802) 864-0223 Ext 108
Fx: (802) 864-0165
george.bogue@stantec.com
stantec.com

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QCPR - IPDR - APPENDIX

Knight, Tom

XIII

From: Edwards, Greg
Sent: Tuesday, March 20, 2007 4:39 PM
To: Bogue, George
Cc: Knight, Tom
Subject: FW: Queen City Park Rd Bridge
Attachments: Queen City Park Bridge Upgrade xls

FYI

From: Lou Bresee [mailto:lakelou@comcast.net]
Sent: Tuesday, March 20, 2007 5:39 PM
To: Erin Demers
Cc: Edwards, Greg; Christine Forde
Subject: Queen City Park Rd Bridge

Hello Erin:

I stopped by the subject bridge today to confirm a suspicion that I had. The thought was that a minor change to the walkway part of the bridge could be made could provide a major improvement at a very modest cost. When I looked at the bridge I was surprised at how easy it could be. Here is the basic idea.

The steel grate surface is the major source of complaint and that problem can be solved by eliminating the grate as a walking surface My choice for a new surface would be the new decking made from recycled plastic and I would pick the gray to match other colors in the area. The textured surface of this decking would be nice in the event of wet weather. There are two options for the installation of this material but both methods would take advantage of the structural members that support the current grate. They provide a 3" flat surface on each side of the walkway One installation method is to simply bolt the decking through the grate to these structural members. The nominal 1 X 6 decking would work fine. The other method would be to remove the grate and use the nominal 2 X 4 decking. This method is complicated by the fact that the grating is welded to the structural members and sections of the grating are welded to each other.

Ideally the City could step up to the bar and make this change. Should this not be possible, and I can understand that, I believe that several volunteers could do the project in a day or two if the materials and a portable power source, generator, could be made available The material costs, based on a 4ft. wide by 100ft. long bridge are calculated on the attachment

Using the nominal 1 inch decking the material cost is less than $3300 but using the 2 X 4 material increases the cost by a factor of almost 2 5. There is a 1/2 inch material available that may be cheaper but there may be some concerns with the attachments. Wood would definitly be less expensive but it gets slippery when wet as the City has found on the Bike Pate bridge south of Lakeside. A very simple lip could be added to the north side of the walkway to eliminate the problem of small things getting caught between the walkway and the pavement that was describded at the meeting last week.

I don't know what the cost of the current study is but I am sure that the above estimate is a very small faction of it. This could be a fun project for a couple of volunteers and I am sure that I could find them.

Let me know if you have any questions etc If there is interest lets do it this summer rather than waiting for the study to get completed

Lou Bresee
Lake Champlain Bikeways

XIV

South Burlington Public Works
575 DORSET STREET
SOUTH BURLINGTON, VERMONT 05403
TEL: (802)658-7961
FAX: (802)658-7976

OFFICE
104 LANDFILL RD

March 10, 2008

To: Christine Ford
Senior Transportation Planner
CCMPO

From: Bruce K. Hoar, Director

Re: Comments on Queen City Road Bridge Initial Project Definition Report

The preferred alternative for the Queen City Park Road Bridge is Alternative B - Two Lane Bridge. It is important that some sort of traffic calming is explored with this alternative It is also important to keep in mind that any type of calming be done with the understanding that this is a truck route as well as a pedestrian corridor.