

**Brandon Select Board Meeting**  
**August 12, 2019**  
**7:00 p.m.**

The Brandon Select Board will meet Monday, August 12, 2019 at 7:00 p.m. at the Brandon Town Hall located at 1 Conant Square expecting to consider the items noted on this agenda. Agendas shall be posted on the community bulletin board located at the Town Office at 49 Center Street and on the community bulletin board located between Dave's Grocery and the Forest Dale Post Office. The Select Board reserves the right to add additional items, if necessary, at the beginning of the meeting.

- 1) Call to Order
  - a) Agenda Adoption
- 2) Approval of Minutes
  - a) Select Board Minutes – July 29, 2019
- 3) Town Manager's Report
- 4) Public Comment and Participation
- 5) Energy Committee Appointment
- 6) Bridge 114 Slab Discussion
- 7) Fiscal
  - a) Warrant - August 12, 2019 - \$77,015.83
  - b) Route 7 Construction Warrant - August 12, 2019 - \$537,198.92
- 8) Adjournment

## **Brandon Select Board Meeting July 29, 2019**

**NOTE: These are unapproved minutes, subject to amendment and/or approval at the subsequent board meeting.**

**Board Members In Attendance:** Seth Hopkins, Brian Coolidge, Tim Guiles, Doug Bailey

**Others In Attendance:** Dave Atherton, Steve Bisette, Marietta Sheehan, Jeff Biasuzzi, Ray Jobst, Bernie Carr, Mike Frankiewicz, Brent Buehler, Dick Kirby, Chris Brickell, Joe Jankosky, Lindsey Berk, Kevin Kareckas, Michael Shank, Roland Fay

The meeting was called to order by Seth Hopkins – Chair at 7:00PM.

The 24<sup>th</sup> EVEN Better Brandon drawing was held and Chris Greco won \$50.00 in Brandon Bucks.

### **1. Call to order**

**a) Agenda Adoption – Motion** by Brian Coolidge/Doug Bailey to adopt the agenda, as amended. **The motion passed unanimously.**

Addition of Executive Session in accordance with 1 VSA 313(a) (1) – relating to contracts.

### **2. Approval of Minutes**

**a/b) Approval of Minutes – July 8, 2019 - Select Board Meeting**

**Motion** by Brian Coolidge/Tim Guiles to approve the July 8, 2019 Select Board Meeting minutes. **The motion passed with one abstention – Doug Bailey.**

### **3. Town Manager's Report**

Dave Atherton provided a report for the weeks of July 8<sup>th</sup>, 15<sup>th</sup> and 22<sup>nd</sup>.

#### ***Park Street:***

Markowski Excavating was the apparent low bid at \$1,327,216.36. The project will be completed in Spring 2020.

#### ***Segment 6 Two-Week "Look Ahead":***

- . Continued roadway box cut and materials placement within US Rte. 7, Segment 'A' – High Street extending to the North.
- . Week of August 5th, base paving within the above referenced Segment 'A' area.

- . Installation of sewer and water improvements beginning at approximately the Monument area  
extending South within US Rte. 7 to approximately 43 Franklin Street.
- . Continued installation of sidewalks and other improvements within Segment 'C', the downtown area. To be a combination of night and day work.
- . Continued plantings of trees and landscape features project wide.
- . Adjustment of stormwater and other structures elevations in preparation of final paving.
- . Fountains' completion for operational status.

### **Route 73:**

Base layer of paving along the Brandon portion of the project is scheduled to begin mid-week next week, weather permitting. Paving operations will begin at the Brandon/Goshen town line and progress west toward the junction of Routes 73 and 53.

### **Other Happenings:**

McConnell Road culvert, ditch and wheel rut repairs will continue for the next few weeks. We are looking at paving mid-August.

Met with Glen at ChargePoint to discuss the installation of the vehicle charging station. We are tentatively scheduling the installation for April of 2020.

We completed another property buyout on Newton Road through FEMA/Hazard Mitigation. I will be preparing a bid this week for demolition of the two properties we have acquired.

### **Rec Dept. News:**

The Brandon Rec Hosted the VT State Cornhole Tournament as a partnership with the Downtown Brandon Alliance and the Brandon Forest Dale Lion Club on July 20<sup>th</sup>! A hot day still netted us dozens of teams with many folks already planning on visiting the host site Brandon Inn in 2020.

Awesome Afternoons, our summer SOAR companion program is in its final week. We have averaged 25 kids per session at this Branbury Beach hosted day enrichment camp. Camp director, Colleen Wright along with counselors Caitlin Sulik, Christina Currid, Evan Diaz and Olivia White worked hard to make sure that the kids had a fun and safe time.

The Youthworks volunteers have painted their way through Brandon this summer over the last 6 weeks. Their work on behalf of Brandon is always a big boost to Brandon and this year they were kind enough to help augment the already fabulous "Music at the Riverbend" with free community meals in July. If you know of any projects (public or for those in need in our

community) with which they can help, please contact me so we can start planning the summer of 2020! Seth Hopkins noted the Youthworks volunteers have done painting projects throughout the Town such as the deck at Kennedy Park, the pavilion at Estabrook Park and the town hall basement areas.

Swimming Lessons with Jake Jacobs at the Brandon Inn July session begins this week. 36 kids are learning how to be safe and comfortable in the water. Huge thank you's to the Brandon Inn (for hosting) and our fitness/aquatics commissioner, Sue Danforth for all her hard work with both the June and July sessions.

Summer is not quite over yet and neither are the Brandon Rec Camps. The following camps will happen in the first 3 weeks of August: Cheer Camp (5<sup>th</sup> – 9<sup>th</sup>), Pre-Season Football Camp (5<sup>th</sup> – 7<sup>th</sup>), Renegade Wrestling Camp (12<sup>th</sup> - 14<sup>th</sup>) Pre-Season Soccer Camp (14<sup>th</sup> – 16<sup>th</sup>).

Fall is on the way. Next report will detail fall offerings including the just announced Estabrook Music Fest, Kids Idol-Brandon Style and the Volunteer Appreciation on Labor Day Weekend! PLUS FALL SPORTS!

Brian Coolidge noted concern there is grass growing between the bricks in the park. Dave Atherton will speak to the contractor about this issue.

Seth Hopkins had a question from a resident about who is responsible for the new trees when observing the trees need 5 to 10 gallons of water per day. Bernie Carr reported the trees are the responsibility of the subcontractor, Mr. Lowell. Mr. Carr was advised that water bags will be placed on the trees to assist with the watering during the summer weather. Mr. Carr advised the trees have an extended warranty and the Public Works Director will keep an eye on them. Doug Bailey noted that he has received comments from residents about how good the Casella workers have been with assisting people in traveling around the downtown. Brent Buehler asked if there will also be something done with the grass, as there appears to be a lot of weeds. Mr. Carr advised that due to the massive storms after the seeding had been completed, it caused issues with the grass. The contractor will be redoing some of the areas. Mr. Hopkins noted a couple of residents in the downtown have expressed the same concern. Mr. Buehler questioned where the staging area will be located for the Park Street project. Mr. Atherton advised that it has not been determined at this time, however the Town has the Wheeler Road lot that is close to the site and could be a potential area. It was questioned when the Estabrook Music Festival will be held, and it was recommended to contact Bill Moore for details. Steve Bissette questioned who is responsible for the upkeep of the new grass areas and Mr. Atherton advised that it is the property of the residents that live in the area.

#### **4. Zoning Administrator's Report**

Jeff Biasuzzi reported the Town has seen the normal permitting activity to the end of July as has been received in the past. There were 4 single-family residential housing permits in the past 6 months, noting that some other towns have had none. The commercial projects have been busy with 13 permits. Mr. Biasuzzi noted some permit updates include the request by Elemental Partners to amend their Planned Unit Development permit to a nine-lot subdivision, which has been approved by the DRB. This will now need to go through Act 250. Regarding the

Walgreen's signage issue, they cannot advertise as Rite-Aid after July and the preferred sign will not conform with the new Sign ordinance. After several conversations, Walgreen's did agree to conform with the zoning, with one unapproved sign design. There is currently one tall pedestal sign and one shorter pedestal sign that do not meet with Sign ordinance criterion of no higher than 10 feet. They have asked for approval of a temporary sign and will get the permanent signs for the building up as soon as possible and redesign one pedestal sign to conform with the zoning ordinance. Naylor and Breen have submitted a permit for 24 private parking spaces to the side of Mill Street and the river to service the tenants in the Smith Block building. An engineering firm completed the application, and in the review of the application it was determined to be incomplete, as they have not provided approvals from the Wetland Department. Mr. Atherton advised the road that goes behind the Smith Block is a Class 4 and it had been previously brought before the Board to not do winter maintenance. Mr. Biasuzzi stated the building is being prepared to be rented and Naylor and Breen are working to get the parking for the building. Mr. Biasuzzi advised the lot is in a flood plain, but because the vehicles can be moved, it conforms to the zoning and flood plain regulations and will serve as a private parking lot. Mr. Biasuzzi does not expect any red flags, but it was not noted whether it would be an illuminated parking lot or asking the Town for maintenance.

Mr. Biasuzzi noted each permit submitted requires all abutters be locally noticed and advised this takes a lot of time to process. Mr. Biasuzzi suggested amending the zoning ordinance to have the burden of notice on the individuals submitting the permit and adding regular Notice of Permits to the Town's website. He noted many towns place the burden of notice on the applicants. Mr. Hopkins questioned whether the suggestion would be brought before the Planning Commission. Mr. Biasuzzi has discussed this with the Town Manager and will propose it to the Planning Commission for consideration.

Mr. Biasuzzi advised the Planning Commission has focused on adopting an enhanced energy plan and has referred the document to the Select Board for their review and hearings. The Planning Commission intends to work on the River Corridor matter and update the flood hazard regulations before the end of the year. Mr. Biasuzzi noted three zoning violation updates in his report and advised the individuals named will be receiving letters of violation from the Zoning Administrator. There is a history to all the violations, and he has received inquiries from some of the neighbors interested in results. Mr. Biasuzzi advised the Board has received a separate report on the Spring Zoning and Planning forum held by the VLCT. A legislative review was done, and the three legislations postponed to the next session include the increase in minimum wage, the Marijuana legislation and the Act 250 changes.

Seth Hopkins asked if the resident of 31 Franklin Street has had a discussion with the Zoning Administrator. Mr. Biasuzzi reported there was a discussion and the meeting ended with all questions answered. Doug Bailey noted appreciation for the detailed report and for the work in dealing with the zoning violations. Mr. Biasuzzi noted Tom Kilpeck deserves a lot of credit as there has been a lot of time spent on the violations. Mr. Bailey appreciated the work that is done and realizes this is an unpleasant part of the job.

It was questioned where the RV waste is going relating to the RV on Old Basin Road. Mr. Biasuzzi stated there is no discharge of waste from the RV and the occupants are using the house as a regular staging area. They do not have working water or sewer and the individuals staying in

the RV have been guests of the property owner and have been using the house. The front yard seems to have some improvement and Mr. Biasuzzi did not see any garbage in the yard. It was noted there are seven vehicles on the property. Mr. Biasuzzi advised only those that are not registered fall under the regulations and currently there are three unregistered.

Roland Fay suggested he would like to see the Fay Road reclassified to a "Foot and Horseback" with a 32 right of way. He noted the Town would have nothing to do with it, but it would be a town-width highway so that people along that road could bring it to Class 3 standards. Seth Hopkins stated the Fay Road was pent in 1991 or 1992 and was pent at the request of the landowner at the time. Mr. Fay advised Goshen made it a town road, but Brandon did not, and he felt the road should be as he previously noted and extend it to the old Churchill property. Mr. Atherton stated Mr. Rickson had requested the road be a pent road and there has been discussion through the years, and he has indicated that he wants it to remain as is.

## **5. Public Comment and Participation**

Joe Jankosky questioned the next step for the Old Brandon Road issue. Jeff Biasuzzi advised the Town has sent notices of violation out and has received one notice back from the post office. Mr. Biasuzzi has spoken with the Brandon Police Chief about delivering the notice of violation when the residents are home. Once the certified letter is signed for, the resident has 7 days to correct the issue or 15 days to go through a hearing with the DRB, with the DRB then having 45 days to render a decision. Mr. Biasuzzi noted there is no wastewater violation the State can enforce. Dave Atherton stated there has been some improvement regarding this issue and they are trying to rectify the situation and felt the process will likely work better than issuing a ticket or involving the environmental court. Mr. Biasuzzi has asked the neighbors if there have been other issues the Town is not aware of and received no other comments. Mr. Atherton advised if the RV becomes permanent, it becomes taxable and the wastewater division would be contacted. Mr. Hopkins appreciated the situation and suggested the Health Officer and Zoning Administrator would be the contacts at the Town to communicate with. Brent Buehler questioned the discussion of the property at the bottom of Mill Road as there had been a grant application to build at park in that area. Mr. Atherton advised that is the Blake property, which is a different property from the previous discussion. Mr. Atherton advised the DBA has applied for a grant for that area.

## **6. Energy Committee Vacancy**

Seth Hopkins advised that Mrs. Smith at the Town Office has requested the Select Board retain the copies of the Energy Plan, as prepared by the Energy Committee, that was supplied to the Board members for the August 26<sup>th</sup> and September 23<sup>rd</sup> Select Board public hearings.

Michael Shank, Chair of the Energy Committee, advised there is a vacancy on the Committee and suggested the possibility of a high school student representative to the Committee. Mr. Shank suggested the selection process could include a submission from the students indicating their interest in serving on the Committee with the top 3 to 5 submissions being forwarded to the Select Board for choosing the representative. Seth Hopkins was not in support of the idea, noting concern of the qualifications of a student representative. Mr. Hopkins would encourage high

school students to apply for the seat, but he would not restrict the vacancy for just students. Mr. Bailey noted there could potentially be a slot filled by a resident interested in serving on the Committee. Mr. Shank stated the aim of having a high school student representative is to get students interested early and another town in Vermont had included a student rep on their Committee with success. Mr. Hopkins suggested advertising a broad opening for the vacancy on the Energy Committee. Mr. Atherton will advertise for the vacancy on the Energy Committee. Mr. Hopkins thanked Mr. Shank for all the work the Energy Committee has done and encouraged anyone interested in serving on the Energy Committee to contact the Town Manager. It was suggested to also post the opening on Front Porch Forum and the Town's website.

## **7. Fiscal**

### ***a) Warrant FY 2018/2019 – July 29, 2019 - \$53,322.35***

**Motion** by Doug Bailey/Brian Coolidge to approve the July 29, 2019 FY 2018/2019 warrant in the amount of \$53,322.35. **The motion passed unanimously.**

### ***b) Warrant FY 2019/2020 – July 29, 2019 - \$219,491.65***

**Motion** by Brian Coolidge/Doug Bailey to approve the July 29, 2019 FY 2019/2020 warrant in the amount of \$219,491.65. **The motion passed unanimously.**

### ***d) Route 7 Construction Warrant – July 29, 2019 - \$1,091,402.63***

**Motion** by Brian Coolidge/Seth Hopkins to table the Route 7 Construction warrant in the amount of \$1,091,402.63. **The motion passed unanimously.**

### ***e) Bridge 114 Warrant – July 29, 2019 - \$103,963.54***

**Motion** by Brian Coolidge/Doug Bailey to approve the Bridge 114 warrant in the amount of \$103,963.54. **The motion passed unanimously.**

The Select Board recessed at 8:05PM.

The Select Board reconvened at 8:15PM.

**Motion** by Tim Guiles/Seth Hopkins to find that premature general public knowledge of the Brandon Transfer Station contract negotiation will clearly place the Town of Brandon at a substantial disadvantage. **The motion passed unanimously.**

**Motion** by Tim Guiles/Seth Hopkins to enter executive session at 8:16PM in accordance with 1 VSA 313(a) (1) – Confidential attorney-client communications made for the purpose of discussing the Brandon Transfer Station contract negotiation with the session to include the Town Manager. **The motion passed unanimously.**

## **7. Executive Session**

The Select Board came out of executive session at 9:33PM. There was no action required.

#### **8. Adjournment**

**Motion** by Brian Coolidge/Seth Hopkins to adjourn the Select Board meeting at 9:34PM. **The motion passed unanimously.**

Respectfully submitted,

Charlene Bryant  
Recording Secretary



## **Town Manager Report for weeks of July 26<sup>th</sup> and August 5<sup>th</sup>, 2019**

**Segment 6:** Here is the 2 week “look ahead”:

- Installation of curbing and sidewalk preparations starting at High Street area to the North. Crescent Park and Central Park fountain completions.
- Crescent Park and Central Park brick paver installations.
- Driveway apron preparations and paving generally Prospect Street extending to the North.
- Installation of imprinted, brick colored crosswalks, Crescent park area.
- Continued installation of precast concrete retaining wall adjacent to Briggs Lane.
- Sidewalk and brick banding installations within Downtown, Segment ‘C’.
- Construction of retaining wall generally in front of Brandon House of Pizza.
- Water, Sewer and Drainage improvements within Segment ‘A’ generally from the monument South.
- Initiation of construction for the retaining wall which generally begins at High Street and extends along US Rte. 7 North.

### **Route 73:**

Crews are scheduled to work on Saturday, 8/10. The contractor will continue putting down base layer of asphalt along the Brandon portion of the project until the middle of next week. Paving operations will progress to the east. Intermediate course (second layer) of paving in Goshen is scheduled to be completed late next week, after base course has been completed in Brandon. Once intermediate course has been completed in Goshen, crews will set back and begin paving intermediate course in Brandon.

### **Churchill Road:**

Met with both landowners to discuss the culvert replacement and get signatures on temporary easements for construction. Hoping to see signed easements this week.

### **Newton Road:**

We have received the funding obligation for the acquisition of 250 & 477 Newton Road. I will be requesting quotes for appraisers soon.

The Notice to Bid for demolition of 419 & 449 Newton Road was sent out on August 9<sup>th</sup>. There is an on-site mandatory pre-bid meeting on August 19<sup>th</sup> and bid deadline is August 30<sup>th</sup> at 2 p.m.

### **Other Happenings:**

McConnell Road and Smalley have been paved.

**Other items will be covered in the agenda.**

**From:** David Atherton <datherton@townofbrandon.com>  
**Sent:** Wednesday, August 7, 2019 11:24 AM  
**To:** esmith@townofbrandon.com; Ernie Saunders  
**Subject:** FW: Energy Committee Member Proposal

Elaine,

Can you add Energy Committee Appointment to the agenda and include this email?

D

**From:** Matthew Orchard [mailto:matthewleightorchard@gmail.com]  
**Sent:** Wednesday, August 7, 2019 11:12 AM  
**To:** datherton@townofbrandon.com  
**Subject:** Energy Committee Member Proposal

Dear Mr. Atherton,

I am writing to express my interest in joining the Brandon Energy committee. My name is Matthew Orchard, I am a new member to the Brandon community after moving here with my wife in February of 2019. I believe the combination of my experience, skills and passions make me an ideal candidate to help navigate Brandon to a more sustainable and energy secure future.

One of the things my wife and I immediately realized upon moving to Brandon was the strong potential to become an active and positive voice in our new town. After attending a Brandon Energy Committee meeting a few weeks ago and then upon hearing there was an opening on the Committee, I thought that this could be the perfect opportunity to contribute civically.

I am aware of the increasingly worsening environmental dangers that the planet is facing today, and as I continue to make changes to my own lifestyle and home, see my community as the next logical place I can step up to effect change. I have faith in our collective ingenuity and intelligence and believe that through the appropriate use of modern technologies and intentional planning, we can find solutions to some of our greatest challenges.

My work as the Environmental Project Coordinator for a disaster relief organization in Peru gave me first-hand experience implementing small and large projects throughout a community in often challenging circumstances.

The experiences I gained as a small business owner and international program leader and educator for the past six years have also given me great perspective in working with diverse groups of people, problem solving on the fly and finding innovative solutions to complex problems.

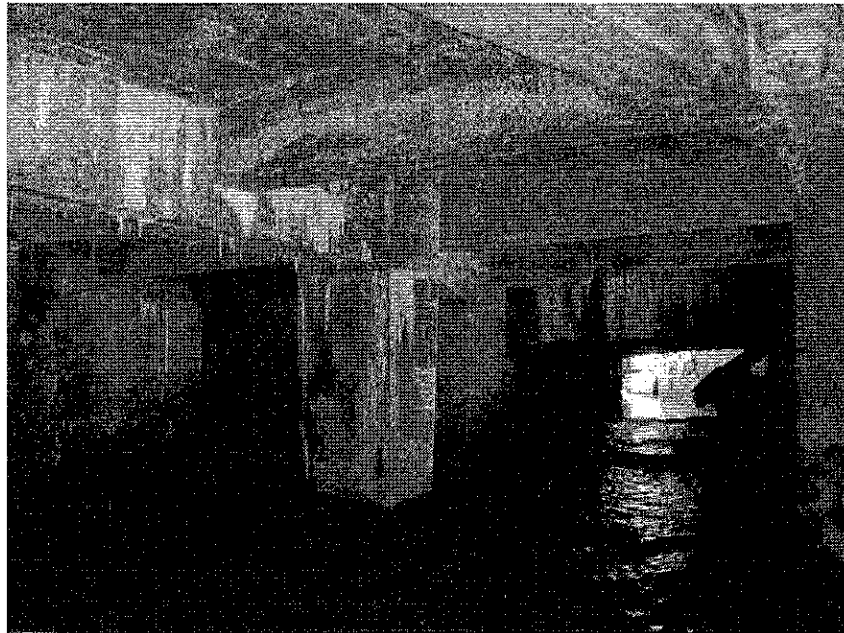
I believe having a new community member on the council may provide a fresh voice and perspective to the team and I promise I will work hard and listen harder, in working towards becoming an effective and contributing member of the committee.

I appreciate your time and for all the work, you and your team do for our town, I look forward to hearing from you soon,

Kindly,  
Matthew Orchard

.....  
Co-Founder, Origins of Food  
(561) 325-3408  
[matthewleighorchard@gmail.com](mailto:matthewleighorchard@gmail.com)

**SCOPING STUDY**  
**FOR**  
**WEST SEMINARY STREET STRUCTURE**  
**BRANDON, VT**



*Prepared for:*

The Town of Brandon, VT  
49 Center Street  
Brandon, VT 05733

*Prepared by:*



**FUSS & O'NEILL**

## *Table of Contents*

I.	INTRODUCTION .....	2
II.	EXISTING CONDITIONS .....	2
III.	SUMMARY OF ALTERNATIVES .....	3
IV.	ALTERNATIVE 1 – REMOVE BEAMS 2 TO 4 AND REPAIR CENTER COLUMN .....	7
V.	ALTERNATIVE 2 – REMOVE BEAMS 1 TO 4 AND REPLACE CENTER COLUMN .....	13
VI.	ALTERNATIVE 3 – REMOVE ALL EXISTING BEAMS AND REPLACE CENTER COLUMN .....	20
VII.	LIMITATIONS .....	24
VIII.	COST ESTIMATES .....	31
IX.	CONCLUSION .....	33

### APPENDICES

#### Appendix A: Plan Sheets

Sheet 1: Existing Conditions Plan

Sheet 2: Alternative 1 Framing Plan

Sheet 3: Alternative 2 Framing Plan

Sheet 4: Alternative 3 Framing Plan

Sheet 5: Typical Beam End Detail

#### Appendix B: Compression and Petrographic Test Results

#### Appendix C: Summary of Estimates

## **I. INTRODUCTION**

During re-construction of West Seminary Street at the corner with US Route 7 (part of the Segment 6 Route 7 widening project) the top slab of the concrete structure in this area was damaged. This structure, herein referred to as the West Seminary Street Structure or more simply the Structure, is a concrete beam and slab structure spanning the Neshobe River. It is situated between the Town Office building, which spans the river, and Bridge 114 which is the double arch stone bridge recently rehabilitated. The Town asked Fuss & O'Neill (F&O) to inspect the structure and develop options for replacing or rehabilitating the structures.

This report summarizes the findings of the rehabilitation alternatives evaluated.

## **II. EXISTING CONDITIONS**

The existing structure extends upstream of the twin stone arch bridge spanning the Neshobe River connecting the arch bridge to the adjacent building (Town Offices Building). The Structure carries West Seminary Street, the sidewalk along West Seminary Street, and a grassy area between the sidewalk and the building. It is assumed that the Structure was built in 1921 when the downstream sidewalk structure was built on the twin arch structure.

The Structure consists of a series of concrete beams supported by concrete walls, a center column, the downstream pier (upstream pier of the twin arch bridge), and the upstream building pier (downstream pier of the building). A concrete slab was laid on top of the beams underneath the roadway subbase of West Seminary Street. See Existing Conditions Plan in Appendix A.

During construction operations for the Segment 6 project, the slab was discovered to be severely deteriorated and a hole was created at the corner of one of the beams. A full inspection of the Structure was completed and cores were taken through the north wall, west wall, center concrete column, and Beam 1. Refer to Existing Conditions Plan in Appendix A for these locations. Please also refer to the results of the compression and petrographic tests (petrographic not available yet) in Appendix B.

The inspection revealed the following results:

- Beams 3 and 4 of the Structure are in poor condition with large spalls along the bottom of the beam, full length longitudinal cracks along the full length of each beam, and extensive delamination along the lengths of the cracks. Beam 4 has what appears to be the bottom of two railroad tracks exposed at the bottom of it due to spalled off concrete. There also appears to be a railroad track on the top of the beam. In addition, at the end of the beam where it is supported along the wall, a 45 degree crack extends from the bottom of the beam upwards. This type of crack is indicative of a possible shear failure. Beam 3 is in similar condition to Beam 4 except the concrete spall at the end of the beam has not yet separated, however, cracks and delamination in that area indicate that the spall will break loose imminently. No steel reinforcement is evident in any of the spalls.

- The concrete for Beams 1 and 2 appear to be sound with minor delamination and cracking, as well as efflorescence. Beam 1 appears to have a piece of wood sticking out of the bottom, likely a piece of formwork that was displaced during construction of the beams. The core taken in Beam 1 revealed a large chunk of marble that appears to have been used as aggregate in the concrete. No steel reinforcement or railroad tracks were encountered in the core, however, as the core did not extend the full depth of the beam, it does not rule out the possibility that they exist in the bottom of the beam.

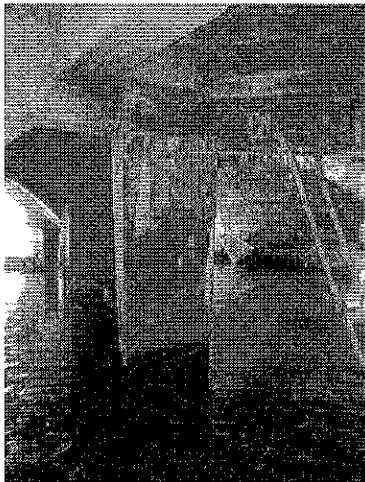


Possible Railroad Tracks Exposed in the Bottom of Beam 4



Cracking and Efflorescence in the Bottom of Beam 3

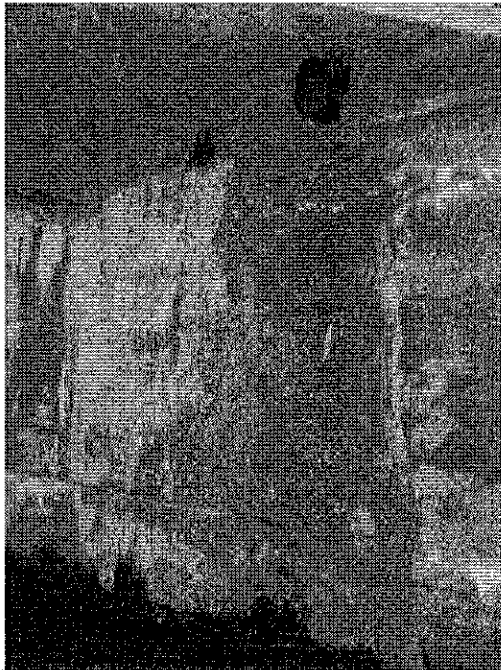
- Beams 5 through 10 have some minor delaminations and cracks, but the concrete does not appear to be extensively deteriorated. These beams are primarily located under the sidewalk and the grassy area between the sidewalk and the building and do not currently experience vehicular live load unless a vehicle mounts the sidewalk.



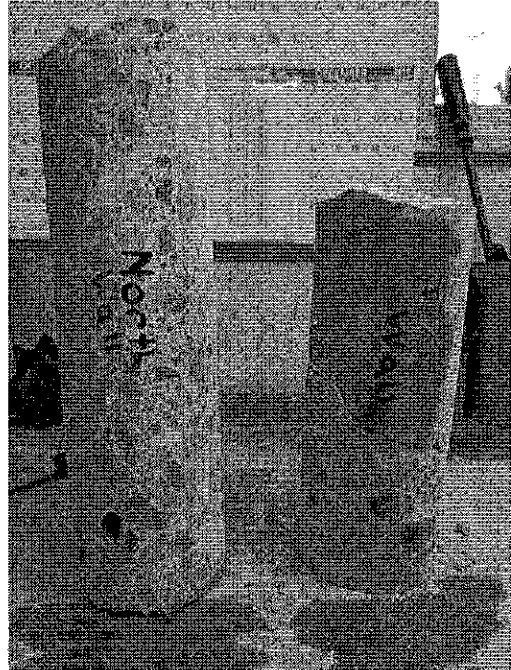
Left: View Looking Downstream at Center Column with the Ends of Beams 3, 4, 5, and 6 shown (right to left); Right: Connection of Beams into Center Column

- The wall cores indicate several inches of concrete along the west wall with stone behind it, whereas the north wall went a full 14 inches through concrete without encountering stone. A compression test completed using the core from the North Wall showed competent concrete strength of 6,066 psi. Please refer to the compression test results in Appendix B. At this time, the petrographic tests are not available yet, therefore a complete assessment of the concrete cannot be made.

The geometry and configuration of the walls are unknown, however, there is no evidence of rotating, bulging, cracking or settlement that would indicate they are failing. However, the walls do have extensive spalling, delaminations, and concrete deterioration along the waterline, as well as spalling and delamination underneath two existing drainage pipes. These pipes have been abandoned and are no longer connected to a drainage system, however, there is significant water leakage through the lower part of the concrete walls in some locations.

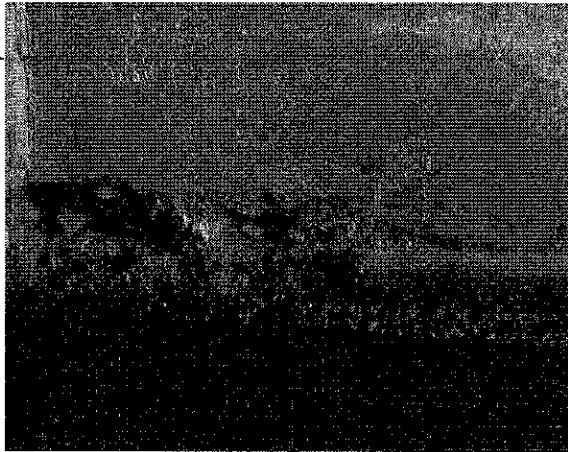


Spalling of North Wall below Drain Pipe

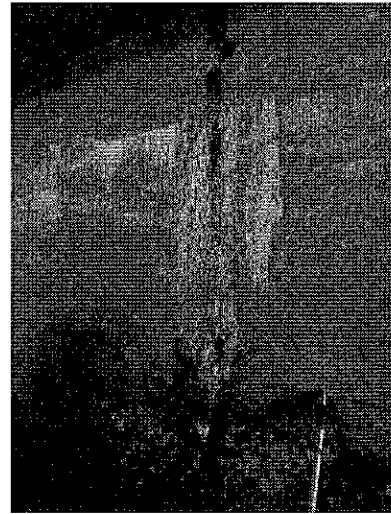


Concrete Cores of Walls





Spalls/Delamination/Concrete Deterioration  
along the waterline



Spalling Below Abandoned Drain Pipe

- The center column supporting the majority of the beams is undermined for the full width of the column in one direction. It appears to be supported on only two of the four sides, with a grade drop of several feet due to aggradation and degradation of the channel from one side of the column to the other. The column may also be stabilized by the beams connected to it.

A compression test performed on a core taken from the column determined the concrete to have an adequate concrete strength of 5,670 psi. Please refer to the compression test results in the Appendix B. At this time, the petrographic tests are not available yet, therefore a complete assessment of the concrete cannot be made.



Undermining of Center Column



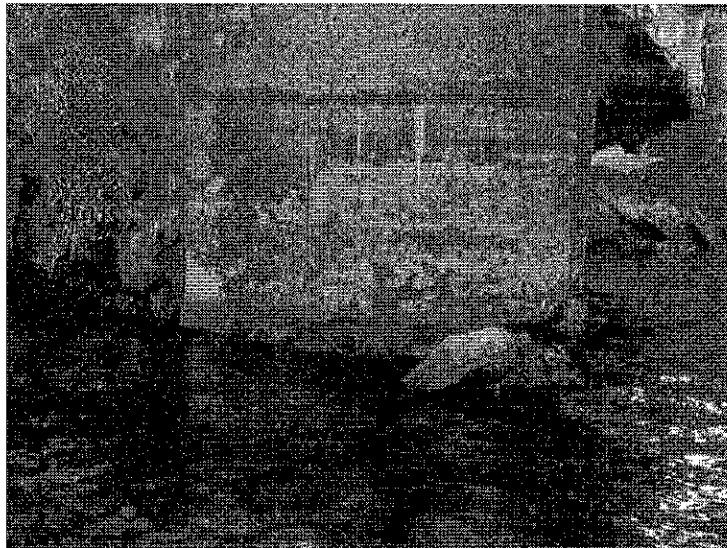
Concrete Core into Center Column

- The upstream building pier is in relatively good condition above the waterline, however, there is extensive concrete deterioration at and below the waterline with section loss. There is no evidence of undermining.



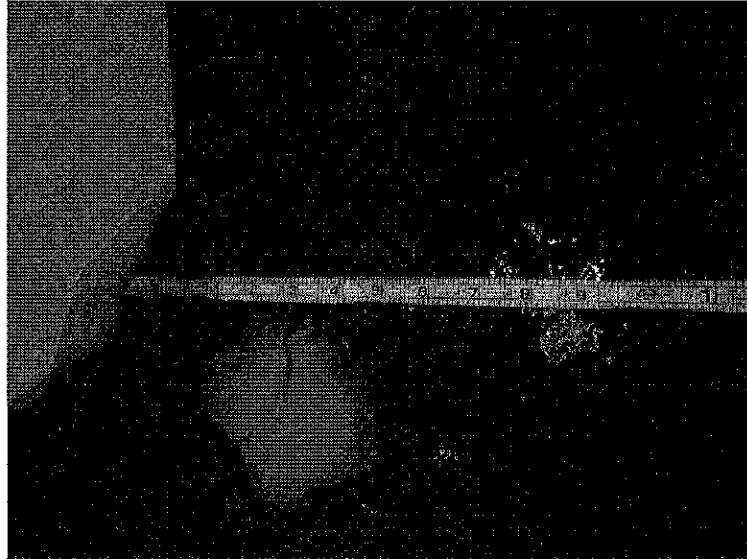
Deteriorated Concrete along the Waterline at the Upstream Building Pier

- The downstream pier is partially undermined and there is concrete deterioration at and below the waterline with section loss. Large rip rap placed during the bridge rehabilitation now covers this area. There are also delaminations and spalls at the face of the pier. A horizontal crack was repaired as part of the bridge rehabilitation project.



Deteriorated Concrete along the Waterline at the Downstream Pier

- The foundation of the building was outside the scope of the inspection, however, it was discovered during the inspection that the center wall supporting the building appears to be undermined almost 4 feet in one location.



Undermining of the Center Wall of the Building Foundation

Please note the water level was relatively high during the inspection and hammer sounding and a visual inspection could only occur on concrete areas above the waterline. During construction when the water is diverted and all the concrete is in a dry condition, the Contractor and Resident Engineer should inspect and repair as needed the areas not previously inspected.

### III. SUMMARY OF ALTERNATIVES

The alternatives detailed below are based on the beam and center column configuration only. It is assumed for all alternatives that the existing concrete walls will be repaired only and will remain in-place. While there is no visual evidence that the walls are failing, the wall configuration is still unknown. Although the removal and replacement of the walls would be ideal, that work would require extensive excavation and result in significant impacts to the project location, local traffic, and the Neshobe River. It would also be extremely expensive. It should be noted that Fuss and O'Neill cannot give any assurances of the integrity of the walls other than what could physically be seen during the inspection along with the results of the compression and petrographic testing of the cores taken through the walls. Every effort will be made to maintain or reduce the structural loads on the existing walls as compared to the current loads to ensure they can accommodate future loads. In addition, as it appears that significant groundwater is present behind the wall and seeping through the concrete, weep holes will be drilled through the existing walls every 10 feet to create a flow path for the water and help to minimize the water flowing through the concrete itself.

According to the Town, all portions of the existing concrete slab supporting the road are in poor condition. Therefore, the entire slab is to be replaced for all alternatives. A new 8-inch slab will be utilized on top of the existing and proposed beams, as applicable, for all alternatives. A lightweight cast-in-place concrete will be utilized to reduce the weight of the slab on the existing walls. The slab will be sloped to drain, and a membrane will be applied prior to placing new subbase and fill materials over the top. The removal of the existing slab will be complicated by the presence of an existing concrete encased fiber optic telephone ducts over the twin arch barrels at the southern edge of the slab. Coordination will be required to ensure the fiber optic ducts are not damaged.

The upstream and downstream piers will also remain in-place with only concrete repairs for all alternatives. The concrete above the waterline appears solid and requires only minimal repairs, so once the abrasion of the concrete along the waterline and any undermining are resolved, the piers should be usable. The existing rip rap placed in the channel as part of the Brandon Arch Rehabilitation project will have to be removed to perform the repairs and then placed back into the channel once repairs are complete.

The undermining of the center wall underneath the Town Offices Building will also be repaired for all alternatives.

See Section VIII of this report for a breakdown of the costs for each alternative.

#### **ALTERNATIVE 1 – REMOVE BEAMS 2 TO 4 AND REPAIR CENTER COLUMN**

See Appendix A for a framing plan for this Alternative.

As noted under the existing conditions section above, Beams 3 and 4 are in the worst condition of all the beams. The poor condition of the existing concrete combined with the uncertainties associated with the presence of multiple railroad tracks and the shear crack all indicate that the beams cannot be adequately repaired. Although Beam 2 does not appear to be in poor condition, due to the configuration of the beams and its connection to Beam 3, Beam 2 also needs to be removed. Therefore, this alternative would replace Beams 2 through 4 with a single steel beam connecting into the existing center column. Concrete repairs would be performed on the beams that remain in-place. Although concrete is more durable in damp locations, a galvanized rolled steel beam was chosen to minimize the load on the existing wall and to accommodate a quick fabrication period.

The existing column will be utilized for this alternative. Given the extent of the undermining at the column, the existing beams would need to be shored prior to removing Beams 2 through 4. While the beams are being supported, a concrete skirt would be formed around the base of the column to repair the undermining. Concrete repairs would also be performed on the column above and below the waterline.

The new beam would sit on top of the west existing wall. Some portions of the top of the wall would be removed to accommodate a cast-in-place concrete cap on top of the wall and a backwall for the new steel beam. See Appendix A for a Typical Beam End Detail.

Alternative 1 is intended to identify the least required work and cost to shore up the existing structure and open West Seminary Street back up to traffic. As most of the existing beams

will remain in-place, the life span of the structure is unknown. It will need to be monitored to ensure the remaining beams do not further deteriorate. As the existing beams would not have been designed for current live loads, and their unknown configuration makes it impossible to perform an accurate bridge rating, there are risks associated with maintaining the existing beams. However, this alternative does replace all but one beam directly underneath traffic. The beams to remain in-place are underneath the sidewalk and grass adjacent to the Town Office Building.

## **ALTERNATIVE 2 – REMOVE BEAMS 1 TO 4 AND REPLACE CENTER COLUMN**

See Appendix A for a framing plan for this Alternative.

Alternative 2 replaces Beams 1 through 4 with two new rolled steel beams. Although the existing Beam 1 does not appear to be in as poor shape as existing Beams 3 and 4, its configuration is still unknown and exhibits some cracking and efflorescence. Beam 1 is under the traffic portion of the structure so may be subject to the most future deterioration. The replacement for Beam 1 will be a new steel beam supported by the west wall and the downstream pier. This beam will be placed closer to the upstream entrance of the arch than the existing Beam 1. The single steel beam replacing Beams 3 and 4 (similar to Alternate 1, will be supported by the west wall and a new center column. The existing center column will be removed. Concrete repairs will be performed on the beams that remain in-place.

The new center column will be a cast-in-place concrete rectangular column and will be placed in approximately the same location as the existing column. It is assumed that the existing column sits on ledge, as will the new column. As with Alternative 1, the existing beams to remain in-place shall be shored prior to removing Beams 1 through 4 and the existing column. The shoring will remain in-place until the new column has been poured and cured. The new steel beam will be placed on top of the new column, and a new connection will be formed for the existing beams

Similar to Alternative 1, the new steel beams will sit on top of the existing west wall. Some portions of the top of the wall will be removed to accommodate a concrete cap on top of the wall to build a beam seat and concrete backwall for the new beam. See Appendix A for a Typical Beam End Detail.

Alternative 2 is intended to eliminate some of the risks associated with Alternative 1 without fully replacing all of the beams. For this Alternative, all beams directly under West Seminary Street and therefore subject to live loading would be replaced. In addition, rather than repairing the center pier, it would be replaced. However, issues may arise during construction once the beam to column connection is removed and the existing beams are connected to the new column, as the existing connection configuration is not clear. Extreme care will be needed when removing the column in the area of the concrete beams to remain in-place so as not to damage the existing beams and leave enough “reinforcing” to make the reconnection. As with Alternative 1, the existing beams that remain will need to be monitored to ensure they do not further deteriorate. This alternative also removes any uncertainties associated with the existing center column itself. It is currently assumed that the existing column bears on ledge given the exposed ledge adjacent to it. However, there

are still some uncertainties related to the concrete makeup of the column. This alternative replaces the center column and eliminates the risks associated with reusing the existing column. The new column would bear directly on ledge. This alternative will increase the lifespan of this structure as compared to Alternative 1, but the actual lifespan is still unknown due to the existing beams to remain in-place.

If during construction, it is determined that the existing column does not bear on ledge and that ledge is not in the immediate vicinity of the bottom of the column, a new foundation configuration for the new column will need to be determined in the field. The column may need to be extended significantly to ledge, or a spread footing on soil may need to be constructed. This spread footing would need to be constructed deep enough to avoid scour.

### **ALTERNATIVE 3 – REMOVE ALL EXISTING BEAMS AND REPLACE CENTER COLUMN**

See Appendix A for a framing plan for this Alternative.

Alternative 3 replaces all of the existing beams and the center column with an entirely new framing layout that simplifies the complicated geometry of the existing structure. Three lines of beams will be constructed and will consist of simply supported steel rolled beams. The first line will be constructed immediately upstream of the existing arch opening. It will consist of two beams, one supported by the east wall and downstream pier and the other supported by the west wall and the downstream pier. The second line will be constructed approximately 3.8 meters upstream of the first line and consist of two beams, one supported by the east wall and a new center column, and the other supported by the west wall and the new center column. The third line will be constructed approximately 4.3 meters upstream of the second line and will consist of a single beam supported by the upstream building pier and the north wall. Two additional existing beams at the downstream entrance of the two barrels of the channel underneath the Town Offices Building will also be replaced with two new steel beams.

As with the other alternatives, a cast-in-place concrete cap and backwall will be utilized on top of the existing walls to accommodate new steel beams. New concrete caps will also be constructed on top of the existing upstream and downstream piers requiring some removal of the tops of the piers in order to accommodate the new beams.

The new center column will be a cast-in-place concrete circular column to facilitate hydraulic flow and will be assumed to be founded on ledge (see discussion above). As all of the beams are being replaced, shoring will not be required.

Alternative 3 is intended to replace all the unknown entities associated with the existing structure, with the exception of the existing walls and piers, and provide new framing members that can accommodate current live loads. All risks associated with the existing beams and center column are removed by this alternative, and the lifespan of the structure is greatly increased over the other two alternatives.

#### **IV. LIMITATIONS**

The configuration of the upstream structure, including beams, walls, piers, and columns, are largely unknown, despite cores and field inspections. It is expected that changes to the plans and possibly the design will be required in the field as unexpected geometry is encountered during removal operations. Fuss and O'Neill has made every effort to minimize the loads on the existing walls, but cannot vouch for their integrity. The configuration of the existing beams is also unknown, and although concrete repairs will be performed, Fuss and O'Neill cannot vouch for their integrity should Alternatives 1 or 2 be chosen.

#### **V. COST ESTIMATES**

The following cost estimates are preliminary and were prepared using applicable reference material including the Segment 6 and Bridge No. 114 Rehabilitation project unit bid prices and Fuss and O'Neill's best engineering judgment. The estimates will be subject to change as the design is updated and refined. They are considered reliable for the purposes of planning and decision-making. Additional costs may be required during construction due to the unknown configuration of the walls, piers, and columns.

Alternative 1: \$513,600

Alternative 2: \$536,300

Alternative 3: \$620,500

See summary of estimates in Appendix C.

#### **VI. CONCLUSION**

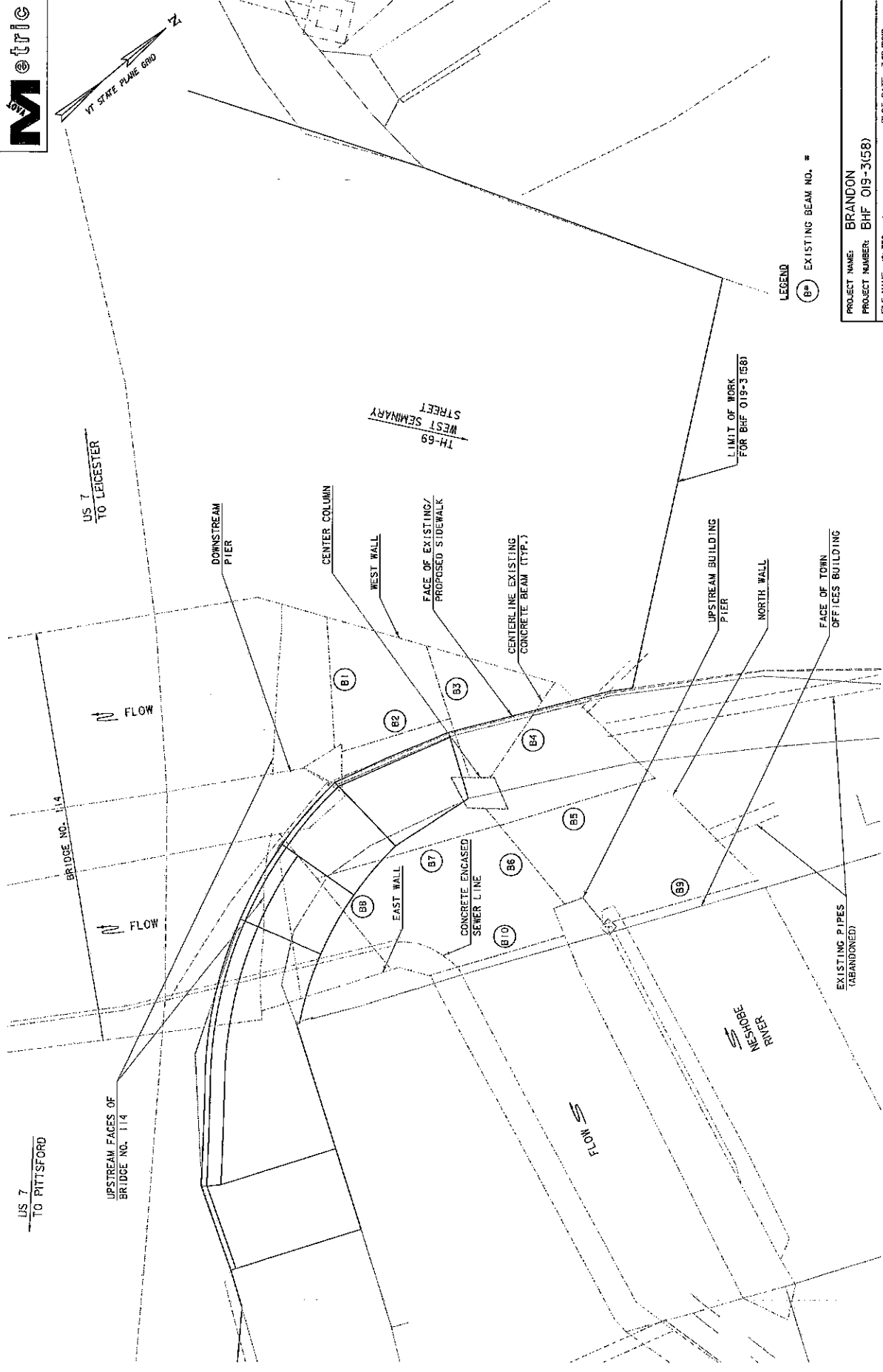
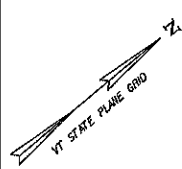
Based on the review of risk, cost, constructability, construction duration, Fuss and O'Neill recommends Alternative 3. This option provides the greatest life span, thus eliminating the need for future repairs to the existing concrete beams. Future repairs will be considerably more difficult in the future as all work will need to be done from as the slab will be in place. Alternative 3 also eliminates the risk of continuing to use beams of unknown capacity. There are potential constructability issues with Alternate 2 when attempting to connect the existing beams to be reused to a new column but Alternate 1 reuses a significantly deteriorated column. Alternate 3 eliminates both of these risks.

# Appendix A

---

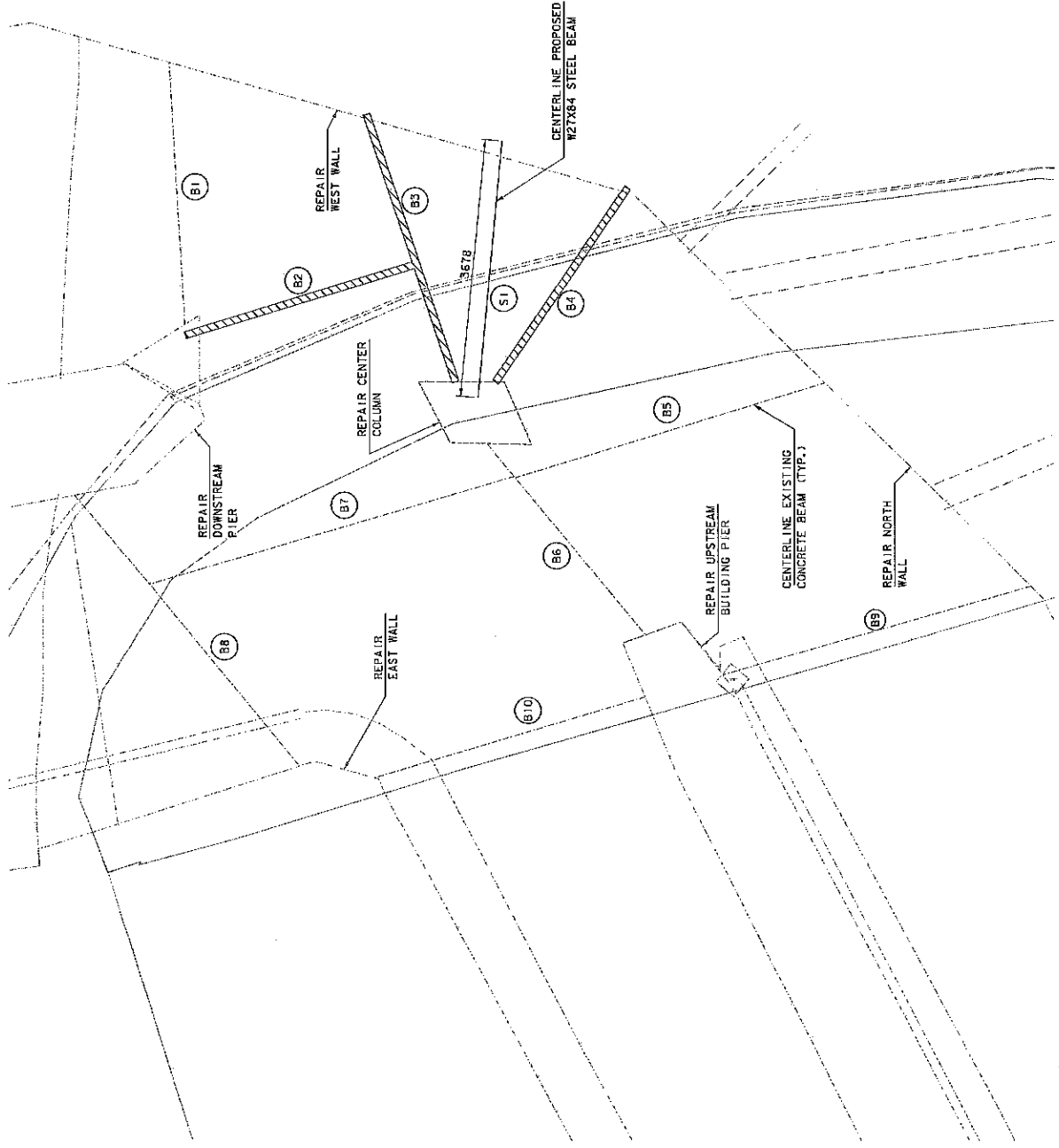
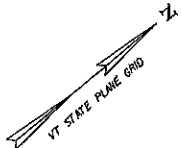
## Plan Sheets





PLAN VIEW  
50 SCALE

PROJECT NAME: BRANDON	FILE NAME: 200558b.dgn	PLOT DATE: 7/19/2019
PROJECT NUMBER: BHF 019-3(58)	PROJECT LEADER: J. BYATT	DRAWN BY: M. SMITH
	DESIGNED BY: S. BEAUMONT	CHECKED BY: J. BYATT
	EXISTING CONDITIONS PLAN	SHEET 1 OF 5



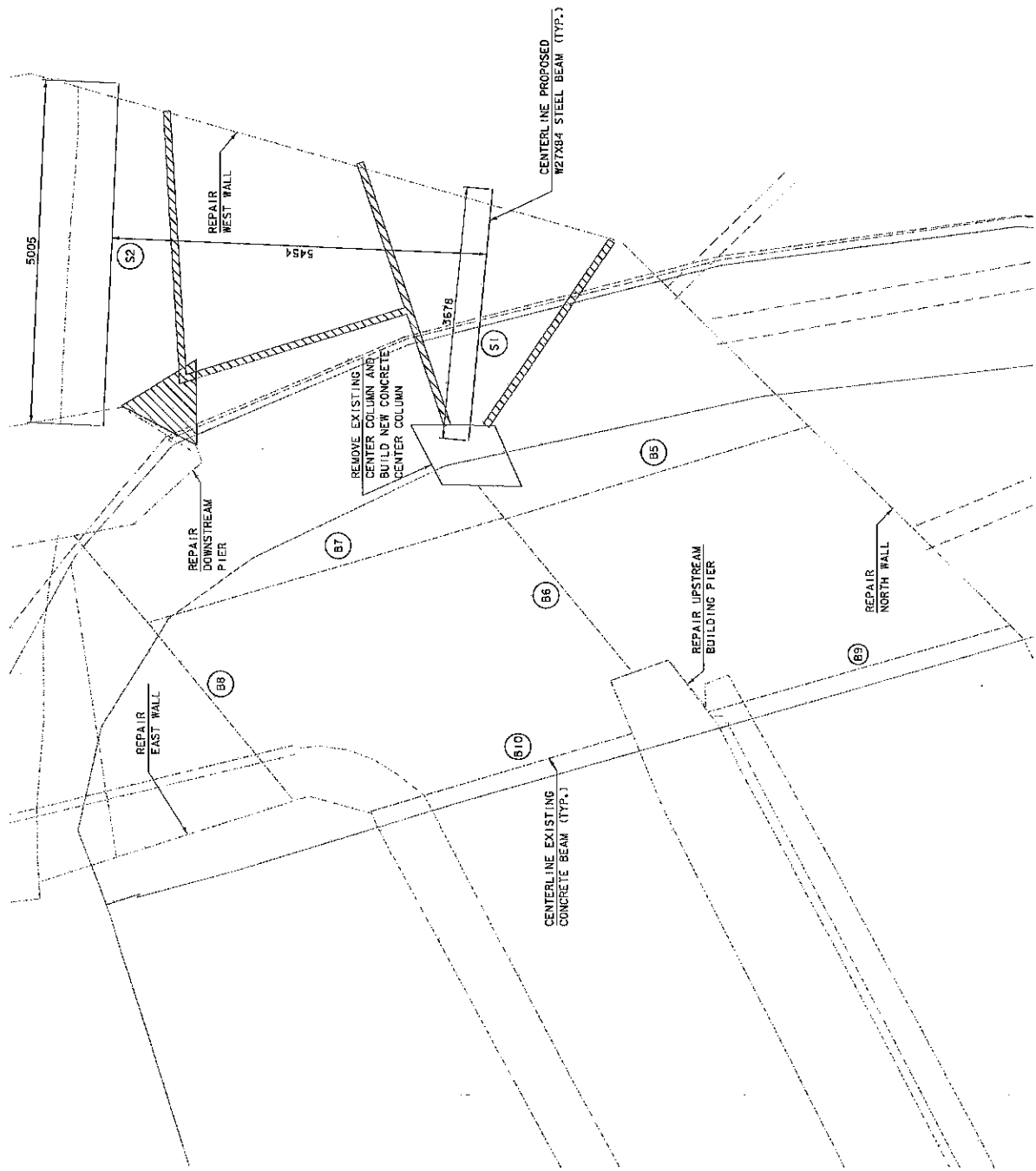
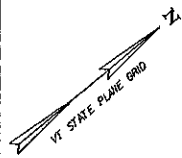
LEGEND

- (8#) EXISTING BEAM NO. #
- (S#) PROPOSED BEAM NO. #
- EXISTING BEAM REMOVAL

PROJECT NAME: BRANDON  
PROJECT NUMBER: BHF 019-3(58)

FILE NAME: 20030509-007  
PLOT DATE: 7/19/2009  
PROJECT LEADER: J. BYATT  
DESIGNED BY: S. BEAUMONT  
CHECKED BY: J. BYATT  
ALTERNATIVE 1 FRAMING PLAN  
SHEET 2 OF 5

PLAN VIEW  
90 SCALE



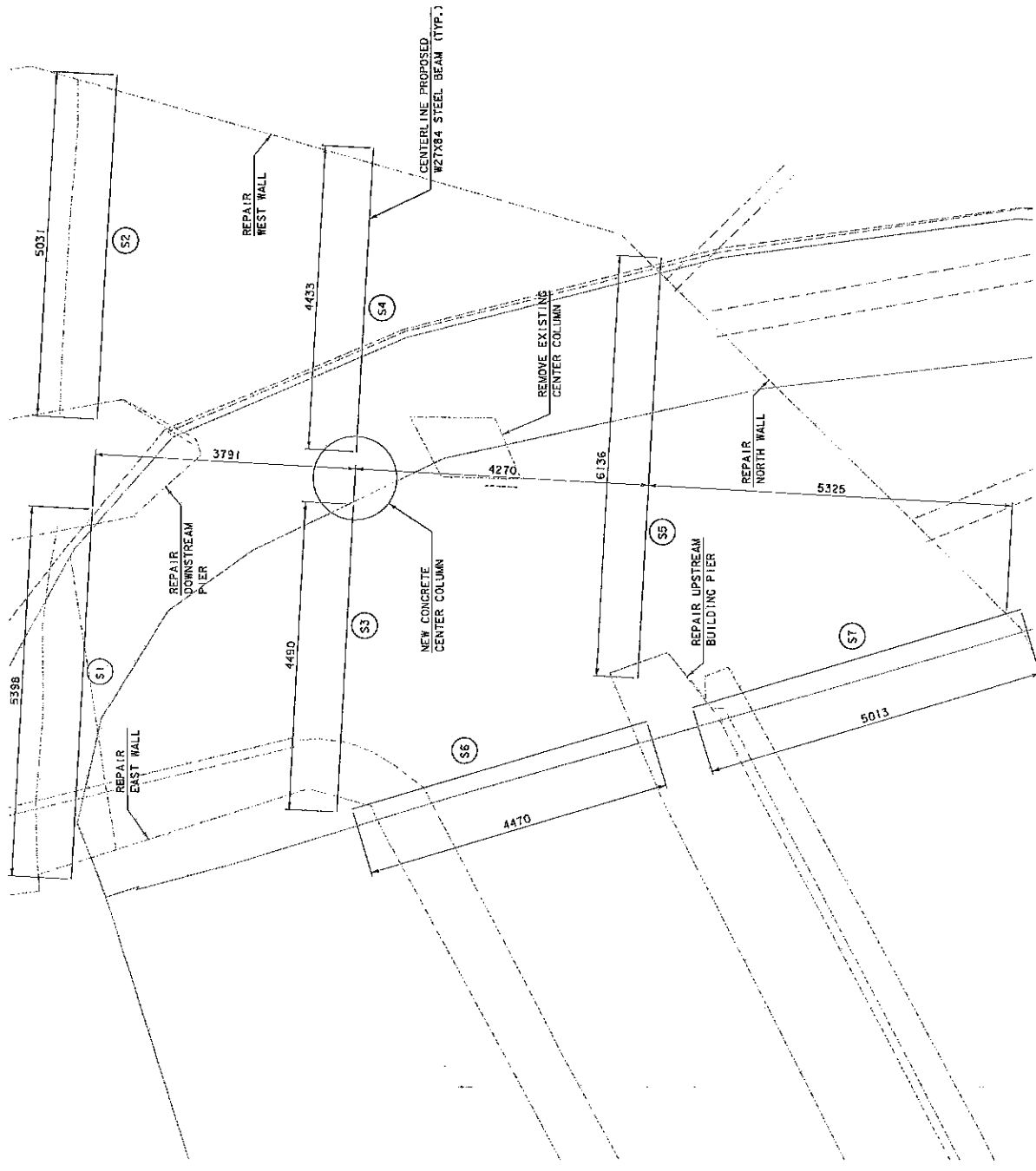
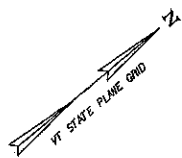
**LEGEND**

- (B#) EXISTING BEAM NO. #
- (S#) PROPOSED BEAM NO. #
- ▨ EXISTING BEAM REMOVAL

PROJECT NAME: BRANDON  
PROJECT NUMBER: BHF 019-3(58)

FILE NAME: 20052896.dgn  
PROJECT LEADER: J. BYATT  
DESIGNED BY: S. BEAUMONT  
ALTERNATIVE 2 FRAMING PLAN  
PLOT DATE: 7/19/2018  
DRAWN BY: M. SMITH  
CHECKED BY: J. BYATT  
SHEET 3 OF 5

**PLAN VIEW**  
50 SCALE



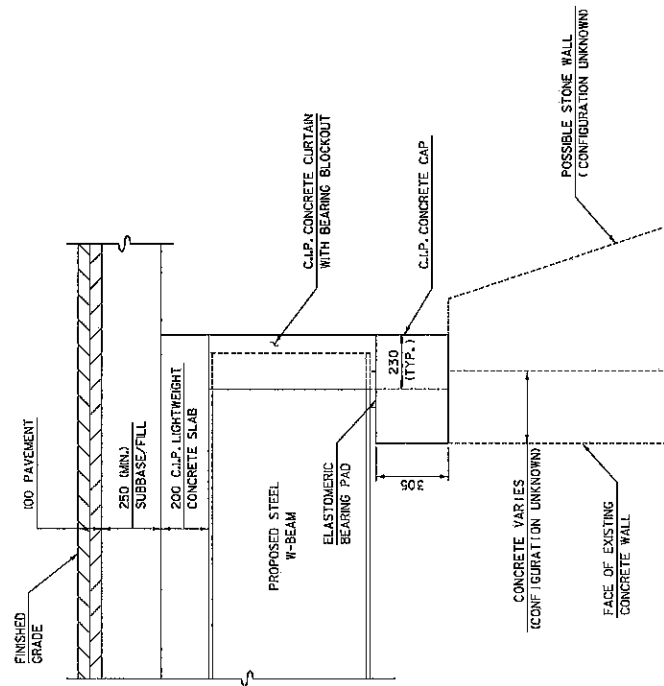
**PLAN VIEW**  
SCALE: 3/8"

LEGEND

(S#) PROPOSED BEAM NO. #

NOTE: REMOVE ALL EXISTING BEAMS.

PROJECT NAME	BRANDON
PROJECT NUMBER	BHF 019-3(58)
FILE NAME	20030801.dgn
PROJECT LEADER	J. BYATT
DESIGNED BY	S. BEJUMANT
CHECKED BY	J. BYATT
ALTERNATIVE	3 FOUND PLAN
PLOT DATE	7/19/2019
DRAWN BY	M. SMITH
CHECKED BY	J. BYATT
SHEET	4 OF 3



**PROPOSED BEAM END DETAIL**  
10 SCALE

PROJECT NAME:	BRANDON	FILE NAME:	20035826.dgn	PLOT DATE:	7/19/2019
PROJECT NUMBER:	BHF 019-3(58)	PROJECT LEADER:	J. BYATT	DRAWN BY:	M. SMITH
		DESIGNED BY:	S. BEAUMONT	CHECKED BY:	J. BYATT
				SHEET	5 OF 5
				BEAM END DETAIL SHEET	

# Appendix B

---

## Compression and Petrographic Test Results

# Report of Drilled Concrete Core Compressive Strength

ASTM C42

**Project Name:** Neshobe River Platform Concrete Coring  
**Project Location:** Brandon, VT  
**Client:** Town of Brandon  
**Material Description:** Concret Cores  
**Material Source:** Brandon, VT

**Project Number:** 19-0878  
**Lab ID:** multiple  
**Date Received:** 07/28/19  
**Date Completed:** 07/05/19  
**Tested By:** CLB

## Sample Info:

	N. Wall	Center Pier
Core ID		
Date Drilled:	6/28/2019	6/28/2019
Date prepared for testing (wet cut of core ends)	7/3/2019	7/3/2019
Date Tested:	7/5/2019	7/5/2019
Date Concrete was Placed	-	-
Nominal Max. Agg Size	1.5"	1.5"

## Dimensions:

	N. Wall	Center Pier
Diameter (in)	3.91	3.91
Ave. Received Length (in)	4.55	5.70
Ave. Trimmed Length (in)	4.6	5.7
Ave. Capped Length (in)	4.55	5.70
Weight (lbs)	4.7	6.1
Density (lbs/ft3)	147	154

## Reinforcement:

	N. Wall	Center Pier
Type	None	None
Location		

## Break Results:

	#VALUE!	#VALUE!
Age of Concrete (days)		
Direction of Load Application	Perpendicular	Perpendicular
Max Load (kips)	80.06	68.08
Break Type (see Figure 1)	2	4
<b>Strength (psi)</b>	<b>6670</b>	<b>5670</b>
<b>Corrected Strength (psi)</b>	<b>6065</b>	<b>5414</b>

Figure 1:



Type 1  
Reasonably well-formed  
cones on both ends, less  
than 1 in. (25 mm) of  
cracking through caps



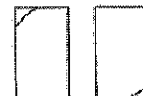
Type 2  
Well-formed cone on one  
end, vertical cracks running  
through caps, no well-  
defined cone on other end



Type 3  
Columnar vertical cracking  
through both ends, no well-  
formed cones



Type 4  
Diagonal fracture with no  
cracking through ends;  
tap with hammer to  
distinguish from Type 1



Type 5  
Side fractures at top or  
bottom (occur symmetrically  
with unbonded caps)



Type 6  
Similar to Type 5 but end  
of cylinder is painted

Comments:

Reviewed By: \_\_\_\_\_



# Appendix C

---

## Summary of Estimates





FUSS & O'NEILL

JOB West Seminary Structure

SHEET NO.	OF
CALCULATED BY <u>AEG</u>	DATE <u>7/19</u>
CHECKED BY <u>SRB</u>	DATE <u>7/19</u>

### Alternative 1

ITEM #	ITEM NAME	UNIT	QUANTITY	UNIT COST	COST
203.15	COMMON EXCAVATION	CM	51	\$ 15.97	\$ 814.47
203.31	SAND BORROW	CM	10	\$ 30.77	\$ 307.70
208.40	COFFERDAM	LS	1	\$ 30,000.00	\$ 30,000.00
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE	CM	30	\$ 40.81	\$ 1,224.30
490.30	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	T	26	\$ 93.61	\$ 2,433.86
501.37	HIGH PERFORMANCE CONCRETE, CLASS PCD	CM	25	\$3,270.00	\$ 81,750.00
501.38	HIGH PERFORMANCE CONCRETE, CLASS PCS	CM	2	\$ 1,380.00	\$ 2,760.00
502.10	SHORING FOR SUPERSTRUCTURE	LS	1	\$ 30,000.00	\$ 30,000.00
506.50	STRUCTURAL STEEL, ROLLED BEAM	KG	580	\$23.00	\$ 13,340.00
507.11	REINFORCING STEEL, LEVEL 1	KG	6,500	\$ 2.20	\$ 14,300.00
508.15	SHEAR CONNECTORS	LS	1	\$ 1,500.00	\$ 1,500.00
519.20	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	SM	100	\$ 214.00	\$ 21,400.00
529.25	REMOVAL OF CONCRETE OR MASONRY	CM	31	\$ 1,743.00	\$ 54,033.00
531.16	BEARING DEVICE ASSEMBLY, PLAIN ELASTOMERIC PAD	EACH	2	\$ 540.00	\$ 1,080.00
580.10	REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS I	SM	2	\$ 1,500.00	\$ 3,000.00
580.11	REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS II	SM	2	\$ 3,500.00	\$ 7,000.00
580.13	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS I	SM	15	\$1,170.00	\$ 17,550.00
580.14	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS II	SM	22	\$ 3,154.00	\$ 68,867.28
580.15	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS III	CM	6	\$4,070.00	\$ 24,420.00
635.11	MOBILIZATION/DEMObILIZATION	LS	1	\$ 40,600.00	\$ 40,600.00
900.608	SPECIAL PROVISION (REMOVE AND RESET STONE FILL, TYPE III)	CM	14	\$125.00	\$ 1,750.00
900.620	SPECIAL PROVISION (CORE WEEPHOLES INTO STONE MASONRY)	EACH	6	\$ 998.00	\$ 5,988.00
900.640	SPECIAL PROVISION (PRESSURE INJECTION OF CRACKS)	M	47	\$ 400.00	\$ 18,800.00
900.675A	SPECIAL PROVISION (BRICK PAVING)	SM	4	\$ 246.40	\$ 985.60
900.675B	SPECIAL PROVISION (FIBER REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK, 200 MM)	SM	29	\$ 91.00	\$ 2,639.00
	SUBTOTAL				\$ 446,543.21
	15% CONTINGENCY				\$ 66,981.48
	TOTAL COST				\$ 513,600.00



**FUSS & O'NEILL**

JOB West Seminary Structure

SHEET NO.	OF
CALCULATED BY <u>AEG</u>	DATE <u>7/19</u>
CHECKED BY <u>SRB</u>	DATE <u>7/19</u>

**Alternative 2**

ITEM #	ITEM NAME	UNIT	QUANTITY	UNIT COST	COST
203.15	COMMON EXCAVATION	CM	51	\$ 15.97	\$ 814.47
203.31	SAND BORROW	CM	10	\$ 30.77	\$ 307.70
208.40	COFFERDAM	LS	1	\$ 30,000.00	\$ 30,000.00
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE	CM	30	\$ 40.81	\$ 1,224.30
490.30	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	T	26	\$ 93.61	\$ 2,433.86
501.37	HIGH PERFORMANCE CONCRETE, CLASS PCD	CM	26	\$3,270.00	\$ 85,020.00
501.38	HIGH PERFORMANCE CONCRETE, CLASS PCS	CM	7	\$ 1,380.00	\$ 9,660.00
502.10	SHORING FOR SUPERSTRUCTURE	LS	1	\$ 30,000.00	\$ 30,000.00
506.50	STRUCTURAL STEEL, ROLLED BEAM	KG	1,240	\$23.00	\$ 28,520.00
507.11	REINFORCING STEEL, LEVEL 1	KG	7,200	\$ 2.20	\$ 15,840.00
508.15	SHEAR CONNECTORS	LS	1	\$ 1,960.00	\$ 1,960.00
519.20	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	SM	100	\$ 214.00	\$ 21,400.00
529.25	REMOVAL OF CONCRETE OR MASONRY	CM	38	\$ 1,743.00	\$ 66,234.00
531.16	BEARING DEVICE ASSEMBLY, PLAIN ELASTOMERIC PAD	EACH	4	\$ 540.00	\$ 2,160.00
580.10	REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS I	SM	2	\$ 1,500.00	\$ 3,000.00
580.11	REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS II	SM	2	\$ 3,500.00	\$ 7,000.00
580.13	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS I	SM	14	\$1,170.00	\$ 16,380.00
580.14	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS II	SM	21	\$ 3,154.00	\$ 65,559.03
580.15	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS III	CM	3	\$4,070.00	\$ 12,210.00
635.11	MOBILIZATION/DEMOBILIZATION	LS	1	\$ 42,400.00	\$ 42,400.00
900.608	SPECIAL PROVISION (REMOVE AND RESET STONE FILL, TYPE III)	CM	14	\$125.00	\$ 1,750.00
900.620	SPECIAL PROVISION (CORE WEEPHOLES INTO STONE MASONRY)	EACH	6	\$ 998.00	\$ 5,988.00
900.640	SPECIAL PROVISION (PRESSURE INJECTION OF CRACKS)	M	32	\$ 400.00	\$ 12,800.00
900.675A	SPECIAL PROVISION (BRICK PAVING)	SM	4	\$ 246.40	\$ 985.60
900.675B	SPECIAL PROVISION (FIBER REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK, 200 MM)	SM	29	\$ 91.00	\$ 2,639.00
	SUBTOTAL				\$ 466,285.96
	15% CONTINGENCY				\$ 69,942.89
	TOTAL COST			total cost	\$ 536,300.00



**FUSS & O'NEILL**

JOB West Seminary Structure

SHEET NO.		OF	
CALCULATED BY	<u>AEG</u>	DATE	<u>7/19</u>
CHECKED BY	<u>SRB</u>	DATE	<u>7/19</u>

**Alternative 3**

ITEM #	ITEM NAME	UNIT	QUANTITY	UNIT COST	COST
203.15	COMMON EXCAVATION	CM	51	\$ 15.97	\$ 814.47
203.31	SAND BORROW	CM	10	\$ 30.77	\$ 307.70
208.40	COFFERDAM	LS	1	\$ 40,000.00	\$ 40,000.00
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE	CM	30	\$ 40.81	\$ 1,224.30
490.30	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	T	26	\$ 93.61	\$ 2,433.86
501.37	HIGH PERFORMANCE CONCRETE, CLASS PCD	CM	29	\$3,270.00	\$ 94,830.00
501.38	HIGH PERFORMANCE CONCRETE, CLASS PCS	CM	10	\$ 1,380.00	\$ 13,800.00
502.10	SHORING FOR SUPERSTRUCTURE	LS	1	\$ 30,000.00	\$ 30,000.00
506.50	STRUCTURAL STEEL, ROLLED BEAM	KG	4,990	\$14.00	\$ 69,860.00
507.11	REINFORCING STEEL, LEVEL 1	KG	7,500	\$ 2.20	\$ 16,500.00
508.15	SHEAR CONNECTORS	LS	1	\$ 4,870.00	\$ 4,870.00
519.20	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	SM	100	\$ 214.00	\$ 21,400.00
529.25	REMOVAL OF CONCRETE OR MASONRY	CM	45	\$ 1,743.00	\$ 78,435.00
531.16	BEARING DEVICE ASSEMBLY, PLAIN ELASTOMERIC PAD	EACH	14	\$ 540.00	\$ 7,560.00
580.13	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS I	SM	14	\$1,170.00	\$ 16,380.00
580.14	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS II	SM	21	\$ 3,154.00	\$ 66,827.83
580.15	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS III	CM	3	\$4,070.00	\$ 12,210.00
635.11	MOBILIZATION/DEMOBILIZATION	LS	1	\$ 49,100.00	\$ 49,100.00
900.608	SPECIAL PROVISION (REMOVE AND RESET STONE FILL, TYPE III)	CM	14	\$125.00	\$ 1,750.00
900.620	SPECIAL PROVISION (CORE WEEPHOLES INTO STONE MASONRY)	EACH	6	\$ 998.00	\$ 5,988.00
900.640	SPECIAL PROVISION (PRESSURE INJECTION OF CRACKS)	M	4	\$ 400.00	\$ 1,600.00
900.675A	SPECIAL PROVISION (BRICK PAVING)	SM	4	\$ 246.40	\$ 985.60
900.675B	SPECIAL PROVISION (FIBER REINFORCED PORTLAND CEMENT	SM	29	\$ 91.00	\$ 2,639.00
	CONCRETE SIDEWALK, 200 MM)				
	SUBTOTAL				\$ 539,515.76
	15% CONTINGENCY				\$ 80,927.36
	TOTAL COST			total cost	\$ 620,500.00



FUSS & O'NEILL

JOB West Seminary Structure

SHEET NO.		OF	
CALCULATED BY	AEG	DATE	7/19
CHECKED BY	SRB	DATE	7/19

**"No Slab" Alternative**

ITEM #	ITEM NAME	UNIT	QUANTITY	UNIT COST	COST
203.15	COMMON EXCAVATION	CM	51	\$ 15.97	\$ 814.47
208.40	COFFERDAM	LS	1	\$ 30,000.00	\$ 30,000.00
	MOMENT SLAB AND 4 BAR STEEL RAIL	LS	1	\$ 95,213.43	\$ 95,213.43
502.10	SHORING FOR SUPERSTRUCTURE	LS	1	\$ 30,000.00	\$ 30,000.00
529.25	REMOVAL OF CONCRETE OR MASONRY	CM	55	\$23.00	\$ 1,265.00
580.13	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS I	SM	15	\$1,170.00	\$ 17,550.00
580.14	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS II	SM	22	\$ 3,154.00	\$ 68,867.28
580.15	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS III	CM	2	\$4,070.00	\$ 8,140.00
635.11	MOBILIZATION/DEMOBILIZATION	LS	1	\$ 26,000.00	\$ 26,000.00
900.608	SPECIAL PROVISION (REMOVE AND RESET STONE FILL, TYPE III)	CM	14	\$125.00	\$ 1,750.00
900.620	SPECIAL PROVISION (CORE WEEPHOLES INTO STONE MASONRY)	EACH	6	\$ 998.00	\$ 5,988.00
	SUBTOTAL				\$ 285,588.18
	15% CONTINGENCY				\$ 42,838.23
	TOTAL COST				\$ 328,500.00

All Invoices For Check Acct 01(10 General Fund) 08/12/2019 To 08/12/2019

Vendor	Invoice	Invoice Description	Purchase Amount	Discount Amount	Amount Paid	Check Number	Check Date
200263	ALDRICH & ELLIOTT, PC	78537	WWTF & Collection System	2490.00	0.00	2490.00	47137 08/12/19
200263	ALDRICH & ELLIOTT, PC	78566	Park Street Step III	3366.00	0.00	3366.00	47138 08/12/19
100015	ALLEN ENGINEERING & CHEMICAL C	11151682001	chlorine	478.50	0.00	478.50	47139 08/12/19
310590	AMERICAN WINDOW CLEANING II	A73029	July windows - half	25.00	0.00	25.00	47140 08/12/19
300541	ARC RUTLAND AREA	AUG 2019	appropriation	875.00	0.00	875.00	47141 08/12/19
100598	AUBUCHON HARDWARE	1624884418	keys, gloves, rope	80.34	0.00	80.34	47142 08/12/19
100598	AUBUCHON HARDWARE	1624884420	car wash	26.97	0.00	26.97	47143 08/12/19
100598	AUBUCHON HARDWARE	1624884422	misc & painting supplies	513.49	0.00	513.49	47144 08/12/19
100125	BARTOL, CURT R PH D	JULY2019	evaluation & report	25.00	0.00	25.00	47145 08/12/19
310861	BIASUZZI, JEFFREY	AUG2019	postage reimbursement	62.00	0.00	62.00	47146 08/12/19
100655	BLSG INSECT CONTROL DISTRICT	AUG 2019	APPROPRIATION	10150.00	0.00	10150.00	47147 08/12/19
100245	BRANDON AREA CHAMBER OF COMMER	AUG 2019	appropriation	250.00	0.00	250.00	47148 08/12/19
100305	BRANDON AREA RESCUE SQUAD	AUG 2019	appropriation	7000.00	0.00	7000.00	47149 08/12/19
100900	BRANDON FIRE DIST #1	0860	over paid on sewer	736.16	0.00	736.16	47150 08/12/19
100900	BRANDON FIRE DIST #1	0922	over paid sewer	73.56	0.00	73.56	47151 08/12/19
100275	BRANDON FREE PUBLIC LIBRARY	AUG 2019	appropriation	7666.67	0.00	7666.67	47152 08/12/19
100625	BRANDON INDEPENDENCE DAY CELEB	AUG 2019	appropriation	1500.00	0.00	1500.00	47153 08/12/19
100280	BRANDON LUMBER & MILLWORK CO.	763781/3	flagging tape	6.86	0.00	6.86	47154 08/12/19
100280	BRANDON LUMBER & MILLWORK CO.	764142/3	2x6's & bit	80.38	0.00	80.38	47154 08/12/19
100280	BRANDON LUMBER & MILLWORK CO.	765568/3	grade stakes	50.00	0.00	50.00	47154 08/12/19
100280	BRANDON LUMBER & MILLWORK CO.	765637/3	trimmer string	21.99	0.00	21.99	47154 08/12/19
100310	BRANDON SENIOR CITIZENS CENTER	AUG 2019	appropriation	1125.00	0.00	1125.00	47155 08/12/19
301503	CHAMPLAIN VALLEY FUELS	449763	gasoline	708.31	0.00	708.31	47156 08/12/19
301503	CHAMPLAIN VALLEY FUELS	450425	diesel fuel	916.55	0.00	916.55	47156 08/12/19
301043	CIVES CORPORATION, DBA	4491367	tailgate valve	306.46	0.00	306.46	47157 08/12/19
100346	CLARK'S TRUCK CENTER	422661	diesel exhaust fluid	141.35	0.00	141.35	47158 08/12/19
310097	COMCAST	PD07/27/19	service 08/04 - 09/03	303.51	0.00	303.51	47159 08/12/19
310097	COMCAST	T/07/27/19	town office for August	477.42	0.00	477.42	47160 08/12/19
310097	COMCAST	WW7/21/19	waste water for august	185.76	0.00	185.76	47161 08/12/19
310177	COTT SYSTEMS, INC.	129212	august host fee	233.00	0.00	233.00	47162 08/12/19
310713	CREATIVE COMPETITIONS, INC.	248296	access card	10.00	0.00	10.00	47163 08/12/19
100470	CROSBY'S SALES & SERVICE	0062888	idler pulley & switch	63.90	0.00	63.90	47164 08/12/19
100470	CROSBY'S SALES & SERVICE	0062970	string trimmer head	29.99	0.00	29.99	47164 08/12/19
310733	DENTON & SON	JULY2019	rubbish removal	380.00	0.00	380.00	47165 08/12/19
300466	DUNDON PLUMBING & HEATING INC	49970	pump out wet well	270.00	0.00	270.00	47166 08/12/19
300466	DUNDON PLUMBING & HEATING INC	50136	pumped out Brookdale PS	360.00	0.00	360.00	47166 08/12/19
100494	ENDYNE INC	304560	testing	23.00	0.00	23.00	47167 08/12/19
100494	ENDYNE INC	304743	testing	150.00	0.00	150.00	47167 08/12/19
100494	ENDYNE INC	305699	testing	23.00	0.00	23.00	47167 08/12/19
330422	FERGUSON WATERWORKS #590	0902174	pipe	612.60	0.00	612.60	47168 08/12/19
330422	FERGUSON WATERWORKS #590	0902706	erosion blanket	399.84	0.00	399.84	47168 08/12/19
300187	FLORENCE CRUSHED STONE	226934	3/4 minus & Dolomite	1680.06	0.00	1680.06	47169 08/12/19
300187	FLORENCE CRUSHED STONE	227029	rock, dolomite	1907.75	0.00	1907.75	47169 08/12/19
100925	FOLEY SERVICES INC	1256155	uniforms	40.00	0.00	40.00	47170 08/12/19
100650	GALLS LLC	013231909	shirts	136.43	0.00	136.43	47171 08/12/19
100650	GALLS LLC	013277130	baton	122.80	0.00	122.80	47171 08/12/19
100650	GALLS LLC	013319771	baton holder	45.94	0.00	45.94	47171 08/12/19
100725	GREEN MOUNTAIN GARAGE	139505	temp head, tubing	15.60	0.00	15.60	47172 08/12/19
100725	GREEN MOUNTAIN GARAGE	139585	wiper blades	28.94	0.00	28.94	47172 08/12/19
100725	GREEN MOUNTAIN GARAGE	139621	fuses	2.25	0.00	2.25	47172 08/12/19

08/09/19  
01:22 pm

TOWN OF BRANDON Accounts Payable  
Check Warrant Report # 63218 Current Prior Next FY Invoices  
All Invoices For Check Acct 01(10 General Fund) 08/12/2019 To 08/12/2019

Page 2  
Jacolyn

Vendor	Invoice	Invoice Description	Purchase Amount	Discount Amount	Amount Paid	Check Number	Check Date
310552	INNOVATIVE SURFACE SOLUTIONS INV50546	Proguard Mag	3601.08	0.00	3601.08	47173	08/12/19
310745	JACOBS, JAKE 08/01/19	swim lessons	490.00	0.00	490.00	47174	08/12/19
100679	JOSEPH P. CARRARA & SONS, INC. 259957	hydraulic cement	113.60	0.00	113.60	47175	08/12/19
310840	LITTLE ROADSIDE MANAGEMENT 2510	blades	614.18	0.00	614.18	47176	08/12/19
310840	LITTLE ROADSIDE MANAGEMENT 2541	timing belt	165.83	0.00	165.83	47176	08/12/19
310564	MAGEE OFFICE PRODUCTS 041346	staplers, deodorizer	22.08	0.00	22.08	47177	08/12/19
300880	MARBLE VALLEY REGIONAL TRANSIT 0720030	JULY 1 2019-JUNE 30 2020	3500.00	0.00	3500.00	47178	08/12/19
100588	MARKOWSKI EXCAVATING, INC. V-21164	1-1/2 minus	1264.40	0.00	1264.40	47179	08/12/19
100588	MARKOWSKI EXCAVATING, INC. V-21205	1-1/2 & 3/4 minus	595.80	0.00	595.80	47179	08/12/19
100451	MARYLAND BIOCHEMICAL CO INC 7MM1103	degreaser	371.70	0.00	371.70	47180	08/12/19
310843	MISSION COMMUNICATIONS, LLC 1031843	service package	407.40	0.00	407.40	47181	08/12/19
100788	NEW ENGLAND MUNICIPAL RESOURCE 44165	AUG ASSESSMENT	7550.00	0.00	7550.00	47182	08/12/19
100788	NEW ENGLAND MUNICIPAL RESOURCE 44177	ANNUAL SUPP/LICESNE	1460.81	0.00	1460.81	47182	08/12/19
310736	POCKETTE PEST CONTROL 12961	pest control/Police Dept	65.00	0.00	65.00	47183	08/12/19
310736	POCKETTE PEST CONTROL 12963	pest control/storage are	50.00	0.00	50.00	47183	08/12/19
310736	POCKETTE PEST CONTROL 12964	pest control/Town Office	70.00	0.00	70.00	47183	08/12/19
310736	POCKETTE PEST CONTROL 12965	pest control/Town Hall	80.00	0.00	80.00	47183	08/12/19
310494	PRORIDER INC 75695	helmets	725.00	0.00	725.00	47184	08/12/19
200179	ROOTX 56778	root killer	460.00	0.00	460.00	47185	08/12/19
100005	RUTLAND COUNTY SOLID WASTE DIS M2195	JULY RECYCLING	625.43	0.00	625.43	47186	08/12/19
100491	RUTLAND HERALD 52069	ENERGY PLAN HEARING	99.31	0.00	99.31	47187	08/12/19
100492	RUTLAND MENTAL HEALTH SERVICES AUG 2019	APPROPRIATION	1656.00	0.00	1656.00	47188	08/12/19
100006	SOUTHWESTERN VT COUNCIL ON AGI AUG 2019	APPROPRIATION	600.00	0.00	600.00	47189	08/12/19
310921	STEARNS SERVICES LLC 1018	July payroll processing	495.00	0.00	495.00	47190	08/12/19
310099	STEPHEN A DOUGLAS BIRTHPLACE AUG 2019	APPROPRIATION	625.00	0.00	625.00	47191	08/12/19
200277	THUNDER TOWING & AUTO RECOVERY 5837	tire repair, oil change	73.88	0.00	73.88	47192	08/12/19
200277	THUNDER TOWING & AUTO RECOVERY 5857	oil & filter change	55.29	0.00	55.29	47192	08/12/19
100209	TOOLCRAFT, INC 127261	compactor rental	1971.60	0.00	1971.60	47193	08/12/19
330348	VERIZON WIRELESS 9834630766	service Jun 23 - Jul 22	240.06	0.00	240.06	47194	08/12/19
300194	VERMONT POLICE ACADEMY 190713018	SRO class	55.00	0.00	55.00	47195	08/12/19
200284	VMCTA OCT 2019	ANNUAL MEMBERSHIP	55.00	0.00	55.00	47196	08/12/19
200284	VMCTA SEPT 2019	ANNUAL MEETING	130.00	0.00	130.00	47197	08/12/19
100485	VNA & HOSPICE OF THE SOUTHWEST AUG 2019	APPROPRIATION	2550.00	0.00	2550.00	47198	08/12/19

08/09/2019

01:22 pm

TOWN OF BRANDON Accounts Payable

Check Warrant Report # 63218 Current Prior Next FY Invoices

All Invoices For Check Acct 01(10 General Fund) 08/12/2019 To 08/12/2019

Page 3 of 3

Jacelyn

Vendor	Invoice	Invoice Description	Purchase Amount	Discount Amount	Amount Paid	Check Number	Check Date
Report Total			77,015.83	0.00	77,015.83		

Selectboard

To the Treasurer of TOWN OF BRANDON, We Hereby certify  
that there is due to the several persons whose names are  
listed hereon the sum against each name and that there  
are good and sufficient vouchers supporting the payments  
aggregating \$ \*\*\*\*77,015.83  
Let this be your order for the payments of these amounts.

---

---

---

---

---

08/09/2019

TOWN OF BRANDON Accounts Payable

Page 1 of 1

01:23 pm

Check Warrant Report # 63219 Current Prior Next FY Invoices

Jacelyn

All Invoices For Check Acct 99(10 General Fund) 08/12/2019 To 08/12/2019

Vendor	Invoice	Invoice Description	Purchase Amount	Discount Amount	Amount Paid	Check Number	Check Date
100051	CARR, BERNIE	PIO JUL 19	S6 PIO July 2019	4080.00	0.00	4080.00	47133 08/09/19
300286	CASELLA CONSTRUCTION INC	PR45	S6 PR 45	428166.66	0.00	428166.66	47134 08/09/19
100456	DUBOIS & KING INC	719173	S6 CI Progress rpt # 55	70669.34	0.00	70669.34	47135 08/09/19
310760	FUSS & O'NEILL INC	214210	S6 Roadway Design	34282.92	0.00	34282.92	47136 08/09/19
Report Total			537,198.92	0.00	537,198.92		

Selectboard

To the Treasurer of TOWN OF BRANDON, We Hereby certify  
that there is due to the several persons whose names are  
listed hereon the sum against each name and that there  
are good and sufficient vouchers supporting the payments  
aggregating \$ \*\*\*537,198.92  
Let this be your order for the payments of these amounts.

Segment 6



# VERMONT LEAGUE OF CITIES & TOWNS

89 Main Street, Suite 4  
Montpelier, VT 05602  
802-229-9111  
www.vlct.org

## MUNICIPAL BUDGET WORKSHOP

Wednesday,  
September 18, 2019

Capitol Plaza Hotel  
Montpelier, Vermont

PRSRT STD  
U.S. POSTAGE PAID  
MONTPELIER, VT  
PERMIT NO. 358



Selectboard  
Brandon Town  
49 Center St  
Brandon VT 05733-1105

### REGISTRATION DEADLINE:

Wednesday  
Sept. 11

### REGISTER ONLINE:

www.vlct.org/  
training-events

### Cost:\*

\$60 PACIF Members  
\$90 VLCT Members

\*Add \$10 to the  
rates above after the  
registration deadline.

## MUNICIPAL BUDGET WORKSHOP

In this essential training, you will learn about the legal requirements and best practices for effectively managing municipal budgets, how you can address conflicts of interest, and find cost saving opportunities through state procurement contracts. Presenters will introduce updated model policies and guidance beneficial to both small and large municipalities. If you're involved in municipal budgeting and financial planning, this training is for you. Selectboard members, town managers, town administrators, treasurers and finance directors will all benefit from reviewing fundamentals and discussing updated policies and programs. Come learn what your town can do to ensure a sufficient return on taxpayer dollars.

Wednesday, September 18 | Capitol Plaza, Montpelier

### Program Highlights:

- ▲ Practical guidance for managing large and small municipal budgets
- ▲ How to comply with state and federal laws
- ▲ How you can save money with state procurement contracts

### Attendee Takeaways:

- ▲ VLCT model financial management and conflict of interest policies
- ▲ Recommendations for utilizing nationally recognized financial best practices

### Policies to Help You Reduce Fraud and Embezzlement:

- ▲ Conflict of Interest
- ▲ Accounting, Auditing, and Financial Reporting
- ▲ Cash Receipts, Petty Cash, and Returned Checks
- ▲ Credit Card Policy
- ▲ Purchasing
- ▲ Fraud

### Questions?

Email [info@vlct.org](mailto:info@vlct.org)