

SNC-Lavalin Inc.

Suite 500 - 745 Thurlow Street Vancouver, BC, Canada, V6E 0C5 604.662.3555 4 604.662.7688

Date:

November 16, 2016

642612-0001

Nash Johnston LLP
595 Burrard Street, Suite 3013
PO Box 49043 - Three Bentall Centre
Vancouver BC
V7X 1C4

Attn:

Mr. Brent Johnston

Re:

Marine Review | BILCON NAFTA CLAIM

Dear Brent Johnston,

As requested, SNC-Lavalin Inc. (SNC-Lavalin) has reviewed costing associated with the construction of the proposed Bilcon Ship Loading Facility to have been constructed at White's Point, Nova Scotia between 2006 and 2008. SNC-Lavalin was specifically asked:

Whether in your opinion Seabulk's Construction Cost Estimate is a reasonable estimate of the probable cost, in 2008, of the Ship Loading Facility proposed for White's Point, Nova Scotia?

SNC-Lavalin is one of the leading engineering and construction firms in the world, and a key player in the ownership and management of infrastructure. The company provides engineering, procurement, construction, project management and project financing services to a variety of industry sectors, including; water, power, chemicals and petroleum, mining and metallurgy, pharmaceuticals, agri-food, infrastructure and buildings, mass transit, environment, defence and telecommunications.

Our port and marine solutions connect communities and markets. We build partnerships and relationships with every marine project, whether for people or cargo. SNC-Lavalin offers a full range of services and solutions for marine transport and infrastructure. Through its global presence, SNC-Lavalin is able to deliver quality solutions for ports, marine, inland waterway transportation and coastal development projects, regardless of the size, scope or location.

SNC-Lavalin approached this mandate in two ways. First, SNC-Lavalin's Senior Marine Engineer Mr. Bill Collins reviewed the available documentation. Mr. Collins has 55 years experience in the design and construction of ports and marine facilities, bridges, industrial buildings, and heavy civil works, some of which included the application of pre-stressed concrete, concrete slip forming and heavy lift methods and systems. As a Chief Design Engineer, Mr. Collins has had extensive experience in conceptual, preliminary and detail design of





wharves, breakwaters, bulk handling and oil terminal facilities both nationally and internationally. He also has construction experience as former chief engineer for Beaver Marine completing major marine work and bridges.

Mr. Collins assessed the costing based on his experience in marine construction and engineering and his familiarity with the proposed construction site and the area in general. He also compared the provided costing to other facilities constructed in Atlantic Canada of comparable size. From this, he found

SNC-Lavalin also completed a construction cost estimate using the sketches provided. Component sizes were estimated based on these sketches. Assumptions were made on the size of certain components including

Pricing was based on current day unit pricing found on recent project construction. The costing obtained was then adjusted using historical inflation rates for 2008 construction. From this construction cost estimate, it was found

If there are any questions or you wish to discuss, please do not hesitate to contact Christopher Fudge, at (709) 368-0118 or christopher.fudge@snclavalin.com.

Yours truly,

SNC-LAVALIN INC.

Christopher Fudge

Department Manager - Ports and Marine

Infrastructure Engineering – Eastern Canada (Atlantic)
Infrastructure

Ryan MacPherson

Vice President - Ports and Marine

Infrastructure Engineering – Western Canada Infrastructure



SNC-Lavalin Inc.

Suite 500 - 745 Thurlow Street Vancouver, BC, Canada, V6E 0C5 604.662.3555 604.662.7688

Date:

December 2, 2016

642612

Nash Johnston LLP

595 Burrard Street, Suite 3013
PO Box 49043 - Three Bentall Centre
Vancouver BC
V7X 1C4

Attn:

Mr. Brent Johnston

Re:

Marine Review | BILCON NAFTA CLAIM

Dear Brent Johnston.

As requested, SNC-Lavalin Inc. (SNC-Lavalin) has reviewed the potential maintenance of the proposed Bilcon Ship Loading Facility to have been constructed at White's Point, Nova Scotia between 2006 and 2008. The following letter details the questions posed to SNC-Lavalin and corresponding responses.

SNC-Lavalin is one of the leading engineering and construction firms in the world, and a key player in the ownership and management of infrastructure. The company provides engineering, procurement, construction, project management and project financing services to a variety of industry sectors, including; water, power, chemicals and petroleum, mining and metallurgy, pharmaceuticals, agri-food, infrastructure and buildings, mass transit, environment, defence and telecommunications.

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The first question posed to SNC-Lavalin:

What in your opinion would be reasonable ballpark estimates of the major repair and replacement costs you would expect to be incurred and at what time intervals would those costs likely be incurred?





Christopher Fudge

Infrastructure

Department Manager - Ports and Marine

Infrastructure Engineering - Eastern Canada (Atlantic)

| For major repair and replacement costs — assuming year round operations – the first |
|--|
| should only have routine maintenance. It is expected there would be replacement of |
| bearings at or approximately |
| Replacement of would likely occur at Our estimate of this cost is |
| at |
| |
| |
| The second question posed to SNC-Lavalin is: |
| |
| What in your opinion would be reasonable ballpark estimates of the routine maintenance costs you |
| would expect to be incurred and at what time intervals |
| would those costs likely be incurred?? |
| Routine maintenance is considered to be done on a yearly basis. Much of the maintenance is in the form of |
| minor repairs to steel works, shiploading equipment, and concrete surfaces. For routine maintenance costs over |
| - again assuming year round operations - it is assumed |
| |
| The following estimates are provided for maintenance cost: |
| |
| |
| |
| |
| All of the above assumes |
| All of the above stated costs are based on present value and no |
| escalation has been applied to yearly costing. |
| |
| If there are any questions or you wish to discuss, please do not hesitate to contact Christopher Fudge, at (709) |
| 368-0118 or christopher.fudge@snclavalin.com. |
| Voure truly |
| Yours truly, |
| SNC-LAVALIN INC. |
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| MI |

Ryan MacPherson

Infrastructure

Vice President - Ports and Marine

Infrastructure Engineering - Western Canada



SNC-Lavalin Inc.

Suite 500 - 745 Thurlow Street Vancouver, BC, Canada, V6E 0C5 604.662.3555 604.662.7688

Date:

December 13, 2016

642612

Nash Johnston LLP

595 Burrard Street, Suite 3013
PO Box 49043 - Three Bentall Centre
Vancouver BC
V7X 1C4

Attn:

Mr. Brent Johnston

Re:

Marine Review | BILCON NAFTA CLAIM

Dear Brent Johnston,

As requested, SNC-Lavalin Inc. (SNC-Lavalin) has reviewed the permitting requirements for the construction of the proposed Bilcon Ship Loading Facility to have been constructed at White's Point, Nova Scotia between 2006 and 2008. The following letter details the questions posed to SNC-Lavalin and corresponding responses regarding these permits.

SNC-Lavalin is one of the leading engineering and construction firms in the world, and a key player in the ownership and management of infrastructure. The company provides engineering, procurement, construction, project management and project financing services to a variety of industry sectors, including; water, power, chemicals and petroleum, mining and metallurgy, pharmaceuticals, agri-food, infrastructure and buildings, mass transit, environment, defence and telecommunications.

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The first question posed to SNC-Lavalin:

Assuming Bilcon's quarry project at White's Point received environmental assessment (EA) approval for the development and operation of the marine terminal; and assuming the EA approval included implementing Bilcon's mitigation and monitoring commitments made in its Environmental Impact Study (EIS) as well as conditions comparable to the authorizations of projects of a similar nature, would Bilcon in your opinion have secured all the permits needed to operate the marine terminal?



On the stated assumptions and the letter from Transport Canada (reference number CMA 8200-02-2042-1) dated January 10, 2006, the only requirements left to be met would be those of the Nova Scotia Submerged Crown Lands and Watercourse Altercation permits. In this respect, it is our opinion these requirements could have been met by Bilcon for the Marine Terminal construction.

The second question posed to SNC-Lavalin is:

How long would it ordinarily take to secure the permits?

The time to secure these permits can be divided into two phases. The first is the time associated with completing the required applications, assessments of the land, surveys, letters of ownership of adjacent onshore land, and other supplementary documents required for the applications. It is estimated Bilcon's portion of this work would take 1 to 2 months to complete. For a consultant to complete the application and supplementary documentation on behalf of Bilcon is estimated to be an additional 1 to 2 months, with both applications completed simultaneously.

With regards to application processing time, the Crown Lands application has the longer processing time at eighty (80) business days, which is taken as four (4) months to account for any additional time which may be necessary during application processing. The Watercourse Alteration application has a sixty (60) day processing timeline. Simultaneous submittal of applications can occur, thus having a 4 month timeframe for approval of both applications.

The total time expected for approval of these two applications is estimated at six (6) to eight (8) months.

The final question posed to SNC-Lavalin is:

How much would it ordinarily cost to secure the permits?

Like that of timelines, costing can be broken into two categories; cost of completing applications and supplementary documentation, and fees for application processing. The anticipated time to complete the applications and supplementary documentation by a consultant is estimated at 1 to 2 months. The expectation is that on average, 1.5 people would be utilized for this activity for the full duration. The average cost per person is estimated at \$100 per hour, which equates to a total of approximately 520 hours or \$52,000 (upper limit). Bilcon's internal costing to complete their requirements of the work are not included and assumed to be borne by them as part of the overall project cost.

With regards to application fees, the Submerged Crown Lands Permit administration fee is less than \$100. However, as part of this application, there would likely be a requirement for a Water lot Grant. This grant entails the following costs:





Administration fee: \$747.93
Fair Market value of property
Appraisal cost
Survey costs
Migration fee (if applicable): \$500.00.

The appraisal and survey costs are estimated at \$15,000 to \$20,000 and are comprised mostly of survey costs. If a survey is already available, this cost can be greatly reduced. Fair market value of the water lot cannot be assessed at this time. It is unknown at this time whether Bilcon had already secured the water lot for this project.

The application administration fee for the Watercourse Alteration is \$311.45.

The overall costs associated with filing the applications for Submerged Crown Lands (including the water lot grant) and Watercourse Alteration is estimated at approximately \$75,000 plus fair market value of the proposed water lot.

In summary, the total time expected to complete the additional required permits beyond the Environmental Assessment component and Federal Government application (DFO and Transport Canada) is six to eight months. The estimated total cost to complete these applications is \$75,000 plus fair market value of the water lot.

If there are any questions or you wish to discuss, please do not hesitate to contact Christopher Fudge, at (709) 368-0118 or christopher.fudge@snclavalin.com.

Yours truly,

SNC-LAVALIN INC.

Christopher Fudge

Department Manager - Ports and Marine

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Ryan MacPherson

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