

Addendum #4.

This Addendum is in addition to, and forms a part of the Contract. The cost, if any, of this revision(s) shall be included in the Contract price. All bidders shall acknowledge receipt and acceptance of this addendum by indicating Addendum number, date, and description, on the Tender Form provided. The revision(s) is as follows:

**Revise The Specifications as follows:**

1. Specification Section 01 11 05, Project General Instructions, Sub clause 7.2- work Schedule: change two week notice to one week notice.
2. Section 32 12 16, Asphalt paving,3.2.21-Preparation, Replace "three (3) working days", with immediately.
3. Section 32 01 11.02, Pavement Crack Cleaning and Filling, Clause 2.1 Materials, add sub-clause 2.1.4 : or Use Crafcro Rs 221 or equivalent sealant in accordance with manufacturer instructions.
4. Section 32 01 11.02, Pavement Crack Cleaning and Filling, delete clause 3.4, protection of completed work.
5. Section 32 12 16, Asphalt paving,1.2 Measurement Procedures, delete existing sub clause 1.2.2, add new sub-clause 1.2.2- The Repair of major cracks will be measured in linear meters, including all labour, equipment, and materials.

**Revise The Unit Price Table as follows:**

1. Add Unit cost item : 21, Specification Reference: 32 12 16, Class of Labour, Plant, or Material: Repair of major cracks, Unit of measurement : lin m, Estimated Quantity: 500.

**INQUIRIES AND RESPONSES**

**Question #22** Project specifications and scope call for asphalt milling, crack-filling, existing pavement full-depth crack repairs, and HMAC paving on airside runways and taxiways. This scope of work is not achievable as it is presently specified. The reasons for this are as follows:

- a. Section 32.12.16.3.2.2.1  
This section specifies that the 'longitudinal and transverse full depth crack repairs of the milled HMAC areas shall be completed as instructed by the department representative following his assessment of the exposed surface. The assessment shall be completed within three (3) working days following completion of the milling activity.

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Addendum #2 issued April 3, 2012 stipulates that the stage 2 construction must be done at night and that the runway will be operational during the day.

How is this achievable with the potential of waiting 3 days for crack assessments? An immediate assessment is imperative if we are to accomplish the scope specified.

**Answer:** Agreed, Assessment will be done immediately.

b. Section 32.01.11.02.3.4.1 Pavement Crack Cleaning and Filling

This section specifies that the contractor must "protect work for 6 hours to allow material to cure."

- i. Does this mean that once filled, the cracks must have 6 hours of curing before the lower course HMAC is placed over top? If so, how is this achievable if we must have the runway reopened for aircraft operations during the day?
- ii. Who assesses which cracks are to be cleaned, routed and filled?
- iii. What is the timeframe of this assessment?
- iv. The assessment must be made immediately after milling has uncovered the cracks.

In summary, based on the specifications listed in 32.12.16.3.2.2.1 and 32.01.11.02.3.4.1 how can the work that is specified be completed in the night time hours of 16:30 pm to 06:00 am on Phase #2 and Phase #3A and #3B following the June 16, 2012 daytime shutdown of Runway 11-29 as per the plan of construction operations?

**Answer:** Agreed, assessment will be done immediately after milling, no curing will be required.

c. In addition, there is an alternate crack routing and filling methodology that is available and widely used on Vancouver Island and the Lower Mainland that would expedite the crack-filling operations.

The methodology is as follows:

Clean and rout cracks to ¼" (18.75mm) x ¾" (18.75mm) and then seal with Crafcro RS221 Product (product sheet attached as Appendix 1).

This methodology had the following advantages over the specified SS1/Sand Slurry hot pour method:

- i. Cure time of Crafcro is 15 minutes compared to 6 hours. This quick cure time will allow immediate HMAC overlay. Due to the length of time that the specified

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method requires to cure, it would be far more susceptible to being rained on during curing which could cause washing out. Washing out has cost and environments implications.

- ii. Crafcro methodology takes 3-4 times less time to do than the specified method.

**Answer:** Yes, Crafcro RS 221 or equivalent can be used in accordance with manufacturers instruction.

**Question #23:** We realize that the runways, taxiways and apron construction, is first priority and must be finished first before any other asphalt paving. That being said, we do not anticipate that all of the airside paving will be completed by June 16<sup>th</sup>.

Reasons for this are:

- a. Scope of work and specifications as referenced in Item #1 of this letter.
- b. Section 01.11.05.7.2 – Work Schedule:  
This section states that the contractor shall provide the Departmental Representative with a minimum of (2) weeks' notice prior to commencing work. The tender closes on April 12<sup>th</sup> and assuming an award on April 16<sup>th</sup>, a minimum 2 week notice prior to commencing work means no work (including mobilization) until April 30, 2012 at the earliest. That leaves only 45 calendar days until the June 16<sup>th</sup> Runway 11-29 closure deadline.  
  
We request that the 2 week notice to the Departmental Representative is waived. In order to meet the specified schedule we must be permitted to proceed as soon as we receive an award.
- c. Weather almanacs for the Port Hardy area show that in May and June it rains on average 16 days each month and of those days, 6 days each month have greater than 6mm of accumulation.

The scope and specifications of this project will not allow any paving to occur during precipitation including on surfaces that are wet.

In summary, these 3 issues, among others, are why we do not believe all airside paving will be completed by June 15, 2012 and paving of airside work during September should be anticipated and permitted (see item 24 for more detail).

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**Answer:** Notice will be reduced to 7 days, (minimum required for issuing NOTAMS). The estimated HMAC quantities for Runways are less than 22,000 tonne. With estimated 1800 tonne production and placement every day it should require less than 18 days to complete the Runway paving.

**Question #24:** The Plan of construction operations states that Runway 11-29 can only be completed at night from June 16<sup>th</sup>, 2012 to September 4<sup>th</sup>, 2012. The present scope and specifications do not permit this to be possible.

The operations plan indicates that the daytime closure of Runway 11-29 is only in effect until September 4, 2012. This leads us to believe that it is possible for Runway 11-29 to be completely closed to all air traffic from September 5<sup>th</sup> until the October 30<sup>th</sup> completion date. This second complete closure would allow us to complete any airside paving that was not accomplished by June 15<sup>th</sup>, 2012.

**Answer:** See the explanation provided under answer to question #24.

**Question #25:** Can we work in Stage 3A at the same time as Stage 3B during the April 30<sup>th</sup>, 2012 to June 15<sup>th</sup> complete shutdown of Runway 11-29?

**Answer:** Yes

**Question #26:** Section 02.41.13.14.2.1.1 Asphalt Paving Removal Equipment:

This section states that the grinding equipment to be equipped with "automatic grade controls capable of operating from string-line..." Can a laser operated grade control system (Topcon) be used instead of string-line assuming that tolerances are met?

**Answer:** Yes

**Question #27:** In reference to the answer given to question 12 of Addendum No. 2, we still require anticipated quantities of 'existing pavement full depth crack repairs' that must be repaired by grinding out a minimum of 1000mm and paved back in prior to bottom lift paving. This information is necessary as this methodology is more expensive than the runway profiling and overlay paving. In addition this methodology is more time consuming and will drastically affect our ability to meet the June 16<sup>th</sup>

**Answer:** Yes, we will provide quantities.

**Project No. R.034893.001**  
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**Port Hardy Airport, Port Hardy, British Columbia.**

**Date: 05 April 2012**

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**Question #28:** We realize that time is of the essence and that is likely why our initial request for an extension to the closing on this tender was denied.

That being said, we require some extra time to prepare our tender and again hereby request for an extension to the current tender closing date of April 12, 2012. We request an extension to April 17, 2012.

**Answer:** No

**Question #29:** reference to Section 32.92.19.16.3.6.2.2 – Hydraulic seeding (maintenance during establishment period):

This section states that the grass that is established from the hydraulic seeding is to mown to 50mm in length whenever it reaches the height of 70mm.

We would like to hire the Transport Canada Maintenance crew at the Port Hardy Airport to perform the mowing operations for this project. Is this permitted and if so, can we contact Transport Canada directly to get pricing?

**Answer:** No

**END OF ADDENDUM #4**