



Contract Number 008968	Contract Title Hood Canal Bridge Special Repair – Gear Boxes	Federal Aid Number NH-0104(055)
Change Order Number 11	Change Description April 2018 Clear All	Date 4/2/18
Region Olympic Region	Project Engineer Michele Britton	Phone Number 360-874-3000
Prime Contractor / Design-Builder Northbank Civil & Marine		

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications or the RFP
- Change proposed by Contractor / Design-Builder

Evolution & Description Of Change

In 2017, the Contractor adjusted guide rollers on the West and East Halves of the Hood Canal Bridge. Adjustment work took the entire 2017 season, significantly longer than anticipated. WSDOT's original estimated duration for this work was 40 working days. Northbank's schedule showed completion of all guide roller work in 16 working days. The contract did not adequately address the level of effort necessary to complete this item of work

The original contract was scheduled to take 100 working days. The bridge design office's conceptual construction sequence was to adjust guide rollers on one side, move to the other side of the bridge and adjust guide rollers concurrently with replacement of gear boxes (on the side that had just been aligned) and then replace gear boxes on the remaining side. Replacement of the Hydraulic System was to be a concurrent activity. With the guide roller work taking longer than anticipated, the contractor was directed via Change Order #7 to resequence work in order to get the remaining guide roller work complete this season.

Northbank began guide roller work on the east half of the HCB on 5/18/17, a full two weeks late from the first working day. Guide Rollers on the east half were given interim acceptance on 8/10/17. At that point, Northbank was directed to begin guide roller work adjustment on the west side (Change Order #7). Northbank requested an equitable adjustment for the extra time and effort required to complete the guide roller adjustments due to changed conditions (see Northbank SL-18).

After a WSDOT schedule analysis, we determined the following:

- Northbank's late start in 2017 resulted in some of the contract work being delayed to the 2018 construction season. (one set of gear boxes)
- WSDOT's eccentric issue (eccentrics freezing) resulted in one set of gear boxes being delayed to the 2018 construction season.
- Northbank's difficulty in providing acceptable submittals limited their ability to work effectively.
- The Contract did not adequately represent the level of work required to adjust guide rollers. WSDOT recognizes that additional time is warranted to accomplish the work.
- The Contract included installation of shims at 25 different locations. This quantity was exceeded by 12 shims. The additional work to install the shims along with the associated eccentric adjustments and measurements warrant addition compensation and Contract time.

The remaining contract work (replace and rehabilitate gear boxes, complete the hydraulic work) will now occur in the 2018 construction season.

Distribution: Copy of Change Record & Change Order w/Backup - Project Engineer  
 Copy of ONLY Change Order - Prime Contractor / Design-Builder  
 Copy of Change Record & Change Order w/Backup - Region Construction Office  
 Electronic Copy & Original of Change Record & Change Order w/Backup - State Construction Office

## Change Record

Contract Number 008968	Contract Title Hood Canal Bridge Special Repair – Gear Boxes	Change Order Number 11
---------------------------	---	---------------------------

### Basis Of Cost & Justification:

In WSDOT's discussions with Northbank, the parties identified the known issues and eventually focused on a settlement for the other, less obvious impacts. The approach looked at a cost per day for the crew, which was easily agreed to, and the number of days that could be attributed to WSDOT. WSDOT determined there were 67 days of remaining impacts that could not be easily quantified. The negotiated settlement with Northbank assigned 42 of the days to WSDOT with Northbank assuming the remaining 25 days which were due to their inefficiencies. The Engineer's estimated cost for the crew for each day is \$8,553.47; resulting in a cost of \$359,246 for the 42 days.

In addition, extra shims were required to be installed at 12 locations. The Contractor and Engineer agreed that this increased the Contractor's cost and time (2 days per each location) to do the work. WSDOT has agreed to pay the Contractor's cost for labor and equipment to do the shims for quantities in excess of the plan quantity, rather than at unit bid prices. At \$8,553.47 per day, the Engineer's estimated cost is \$205,283.

The Engineer's estimated total cost is \$564,529. The Contractor and Engineer agreed to a lump sum price of \$561,000.

As stated above, the Engineer has determined that the Plans do not adequately represent the level of work required to adjust guide rollers. Also, additional shim installation increased the Contractor's cost and time to do the Work; therefore, the Contractor is due an equitable adjustment in accordance with Section 1-04.4.

### Contract Time:

As part of the negotiation the Contractor has agreed to complete the remaining Work under the Contract within 90 working days. The Contractor has 62 working days remaining; therefore, this change order adds 28 working days.

### Prior Approvals:

Change Approval: Project Engineer, Michele Britton; Region Construction, Dave Ziegler; and HQ Construction, Marco Foster (2/27/18).

### List Attachments:

Checklist  
Attachment A: Change Approvals  
Attachment B: Independent Engineer's Estimate

Distribution: Copy of Change Record & Change Order w/Backup - Project Engineer  
Copy of ONLY Change Order - Prime Contractor / Design-Builder  
Copy of Change Record & Change Order w/Backup - Region Construction Office  
Electronic Copy & Original of Change Record & Change Order w/Backup - State Construction Office

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

DATE: 03/21/18  
Page 1 of 3

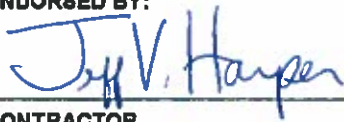

CONTRACT NO: 008968 FEDERAL AID NO: NH-0104 (055)  
 CONTRACT TITLE: SR 104, HOOD CANAL BRIDGE SPECIAL REPAIR GEAR BOX  
 CHANGE ORDER NO: 11 APRIL 2018 CLEAR ALL

PRIME CONTRACTOR: SW0215050 NORTHBANK CIVIL AND MARINE, INC.  
 2119 SE COLUMBIA WAY STE 330  
 VANCOUVER WA 98661-8037

Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications



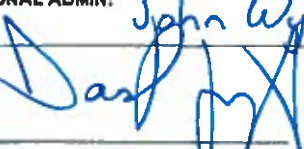
Change proposed by Contractor

Bond # 023036496

<p><b>ENDORSED BY:</b>                    _____  <b>CONTRACTOR</b>  <u>03/30/2018</u>                  _____  <b>DATE</b></p>	<p><b>SURETY CONSENT:</b>                  Liberty Mutual Insurance Company                    _____  <b>ATTORNEY IN FACT</b> Vicki Mather                  _____                  March 30, 2018                  _____  <b>DATE</b></p>
--	---

ORIGINAL CONTRACT AMOUNT: 2,643,803.00  
 CURRENT CONTRACT AMOUNT: 3,060,232.59  
 ESTIMATED NET CHANGE THIS ORDER: 561,000.00  
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 3,621,232.59

Approval Required:  PE (X) Region  Olympia Service Center ( ) Local Agency

<p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED ( ) EXECUTED</p> <p>                  _____  <b>PROJECT ENGINEER</b>  <u>4/2/18</u>                  _____  <b>DATE</b></p>	<p><b>EXECUTED:</b>                    _____  <b>STATE CONSTRUCTION ENGINEER</b>  <u>4/16/18</u>                  _____  <b>DATE</b></p>
<p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED ( ) EXECUTED</p> <p>REGIONAL ADMIN: John Wynands                  BY:                   _____  <b>DATE</b> <u>4/11/18</u>                  _____</p>	<p><b>OTHER APPROVAL WHEN REQUIRED</b></p> <p>SIGNATURE _____ DATE _____                  REPRESENTING _____</p>

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

DATE: 03/21/18  
Page 2 of 3

**CONTRACT NO: 008968**

**CHANGE ORDER NO: 11**

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

**Description:**

The Contractor, Northbank Civil and Marine Inc., by signing this change order agrees and certifies that:

Upon execution of this change order in the amount of \$561,000.00, any and all claims in any manner arising out of, or pertaining to, Contract No. 8968 through April 30, 2018, except as expressly identified below, have been satisfied in full and the State of Washington is released and discharged from any such claims for extra compensation and Contract time in any manner arising out Contract of No. 8968 through April 30, 2018.

**Exceptions:**

The parties reserve the right to negotiate Variations in Estimated Quantities as defined in Section 1-04.6, except costs associated with the overrun of shim installation (Bid Item No.6) and associated measuring and adjusting under Bid Item No.2.

The following exceptions are an inclusive list of all known future Contract changes identified prior to May 1, 2018, for which the parties are reserving certain rights:

1. The parties reserve the right to negotiate, in accordance with Section 1-04.4, pending Change Orders, No. 12 (2018 Measure and Adjust) and No. 13 (Field Painting Requirements).

**Schedule:**

Within 30 days of execution of this change order the Contractor shall furnish the Engineer an updated progress schedule showing completion of work within the remaining contract time.

**Measurement**

There is no specific unit of measure for the new lump sum item, C011 April 2018 Clear-All.

**Payment**

The lump sum item, "C011 April 2018 Clear-All", shall be full compensation for all direct and indirect cost claims through April 30, 2018, with specific exceptions as outlined in this change order.

**Contract Time**

Contract time is extended by twenty eight (28) working days.

---

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

DATE: 03/21/18  
Page 3 of 3

<b>CONTRACT NO: 008968</b>	<b>CHANGE ORDER NO: 11</b>
----------------------------	----------------------------

ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE
1003	02		CO11 APRIL 2018 CLEAR-ALL	L.S.	0.00	0.00	448,800.00
1003	01		CO11 APRIL 2018 CLEAR-ALL	L.S.	0.00	0.00	112,200.00

-----  
561,000.00  
-----