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Victoria F. Sheehan
Commissioner

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



William Cass, P.E.
Assistant Commissioner

Bureau of Construction
July 16, 2018

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Transportation to enter into a contract amendment, (Contract # 26162) with C.L.H. & Son, Inc. (Vendor #153124) of Auburn, ME by increasing the contract amount by \$86,000.00, (from \$1,783,089.00 to \$1,869,089.00) for the rock face stabilization work effective upon G&C approval. 100% Federal Funds.

Funding is available as follows:

04-96-96-963515-3054

Consolidated Federal Aid

400-500870 Highway Contract Payments

FY 2019

\$86,000.00

EXPLANATION

The Hart's Location – Carroll 26162 contract was approved by Governor and Council on December 20, 2017 (Item # 35) on a basis of a low bid for an original contract encumbrance of \$1,783,089.00. The contract is proposed to be increased by \$86,000.00 to address the following items:

1. The existing rock slope has additional instabilities that were revealed once the trees were removed from the slope. This resulted in additional rock scaling and rock bolting work than previously anticipated. Estimated Cost: \$86,000.00

This project funding is 80% federal funds with 20% state match. Turnpike toll credit is being utilized for match requirements, effectively using 100% federal funds.

Your approval of this resolution is respectfully requested.

Sincerely,

Victoria F. Sheehan
Commissioner

Attachment



Victoria F. Sheehan
Commissioner

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

G+C #35
Date 12-20-17



William Cass, P.E.
Assistant Commissioner

Bureau of Construction
October 11, 2017

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

1. Authorize the Department of Transportation to enter into a contract with C.L.H. & Son, Inc. (Vendor 153124) of Auburn, ME on the basis of a low bid of \$1,783,089.00 for rehabilitation of bridge 055/091, located on US 302 in Crawford Notch, from the date of Governor and Council approval through October 5, 2018 unless extended by the Department in accordance with the Standard Specifications. 100% Federal Funds.

Funding is available in State Fiscal Year 2018 and 2019 as follows, with the ability to adjust encumbrances through the Budget Office between State Fiscal Years if needed and justified:

Funding is available as follows:	<u>FY 2018</u>	<u>FY 2019</u>
04-96-96-963515-3054		
Consolidated Federal Aid		
400-500870 Highway Contract Payments	\$1,383,089.00	\$400,000.00

2. Further authorize that a contingency in the amount of \$89,154.45 be approved for payment of latent conditions, which may appear during the construction of the project. The contingency requested is 5% of the contract amount.

Funding is available as follows:	<u>FY 2018</u>	<u>FY 2019</u>
04-96-96-963515-3054		
Consolidated Federal Aid		
400-500870 Highway Contract Payments		\$89,154.45

EXPLANATION

This project is part of the State's Ten Year Transportation Improvement Plan, under the Culvert Replacement/Rehabilitation and Drainage Repair Program (CRDR). This project involves rehabilitation of Bridge 055/091, located on US 302 in Crawford Notch. The bridge is a corrugated metal plate arch culvert carrying the headwaters of the Saco River under US 302. The inlet is just north of the Harts Location/Carroll Town Line at the head of the Notch. The length of the culvert is approximately 950' and is composed of five segments: a complex cast in place concrete inlet structure, an upper pipe segment 137" wide x 87" high x 325' long, a middle segment 103" wide x 71' high x 322' long, a lower pipe segment 103" wide x 71' high x 276' long, and a concrete energy dissipator at the outlet. Rock scaling along the east side of US 302 (directly across from the culvert location) is also included. Rock Cut #110R begins near the Town Line and extends about 900' south, with a maximum height of 100'. Rock scaling involves removal of vegetation from the rock face and to 10' back from the crest, removal of loose rock by hand methods, and installation of rock bolts to stabilize large blocks of rock.

The existing corrugated metal plate arch culvert was constructed in 1958 and modified in 1961. This culvert runs under the southbound travel lane of US 302 for about 825', with less than 3 feet of cover. The culvert is deteriorating, and temporary repairs were required in 2012, which resulted in the emergency closure of one lane of US 302 for about 2 weeks. Continued deterioration of the culvert will likely result in the need for additional emergency repairs and a more costly permanent solution in the future.

There is also a need for rock scaling along the east side of US 302 directly across from the culvert location. Rock Cut #110R was constructed in 1961 using production blasting methods resulting in significant blast-induced joint displacement and extensive fracturing in the rock mass. The distance from the base of the rock slope to the edge of US 302 varies from 2' - 8'.

The proposed contingency amount is 5% of the contract amount. This is to account for the risks associated with the unknown extent of the rock remediation, unanticipated culvert repairs, maintenance of traffic, and the potential cost of weather related delays.

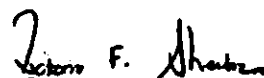
Although the bid costs exceeded the Department's estimate by 13%, the low bid is felt to be reasonable for the work involved. The most significant difference is found in the structural plate pipe item (\$224,100). All bids received on this item were in excess of the Department's estimate. Re-advertising this project would result, in our opinion, in higher prices and prevent the completion of the work in a timely manner. The Department considers it to be in the best interest of the State to accept this bid to accomplish these needed repairs.

The Contractor has been prequalified by this Department. The Contract has been approved by the Attorney General as to form and execution, and the Department has certified that the necessary funds are available and the bid reasonably conforms to the engineer's estimate in accordance with State procedure. Copies of the fully executed contract are on file at the Secretary of State's Office and the Department of Administrative Service's Office, and subsequent to Governor and Council approval will be on file at the Department of Transportation.

This project funding is 80% federal funds with 20% state match. Turnpike toll credit is being utilized for match requirements, effectively using 100% federal funds.

A copy of the Tabulation of Bids received for this project is attached along with the Contract Supplemental Sheet and a map indicating the location of the project.

Sincerely,



Victoria F. Sheehan
Commissioner

VFS/md

Department Estimate: \$1,582,650.00
Contract Amount: \$1,783,089.00
Over Estimate: \$ 200,439.00

Attachments

August 1, 2017

SUPPLEMENTAL PROJECT INFORMATION SHEET

DESCRIPTION: This project involves rehabilitation of Bridge 055/091, located on US 302 in Crawford Notch. The bridge is a corrugated metal plate arch culvert carrying the headwaters of the Saco River under US 302. The inlet is just north of the Harts Location/Carroll Town Line. The length of the culvert is approximately 950' and is composed of five segments: a complex cast in place concrete inlet structure, an upper pipe segment 137" wide x 87" high x 325' long, a middle segment 103" wide x 71' high x 322' long, a lower pipe segment 103" wide x 71' high x 276' long, and a concrete energy dissipator at the outlet. Rock scaling along the east side of US 302 (directly across from the culvert location) is also included. Rock Cut #110R begins near the Town Line and extends about 900' south, with a maximum height of 100'. Rock scaling involves removal of vegetation from the rock face and to 10' back from the crest, removal of loose rock by hand methods, and installation of rock bolts to stabilize large blocks of rock.

FEDERAL FUNDING: 80% (Culvert Rehabilitation CRDR) with anticipated utilization of Turnpike Toll Credits for the State's 20% match.

CONTINGENCY: The proposed contingency amount is 5% of the contract amount. This is to account for the risks associated with the unknown extent of the rock remediation, unanticipated culvert repairs, maintenance of traffic, and the potential cost of weather related delays.

PROJECT INITIATED: This project was initiated through the Culvert Replacement/Rehabilitation and Drainage Repair (CRDR) Program.

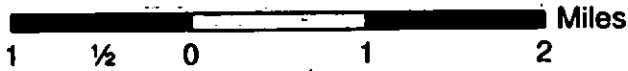
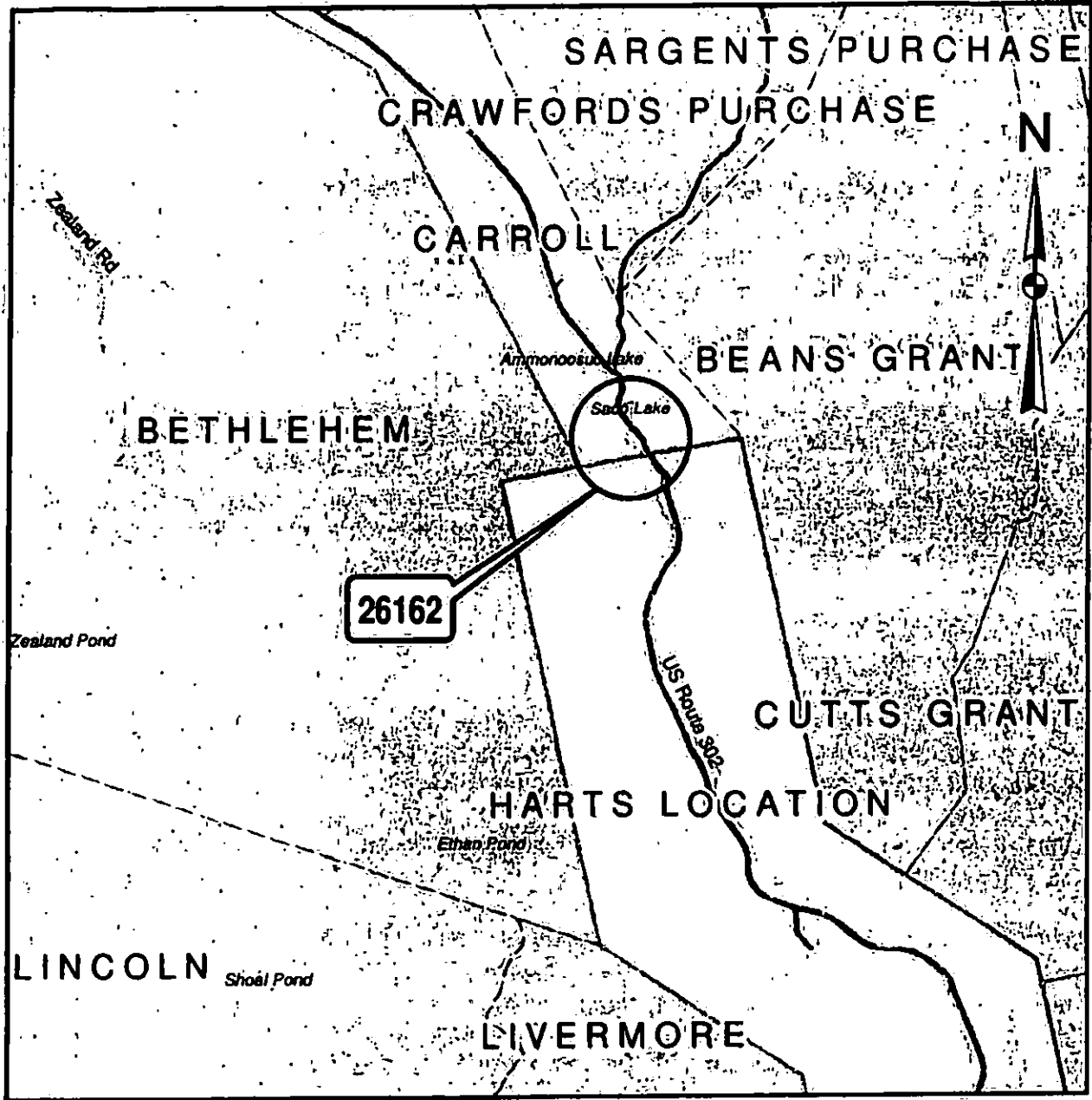
PROJECT EXPLANATION: The existing corrugated metal plate arch culvert was constructed in 1958 and modified in 1961. This culvert runs under the southbound travel lane of US 302 for about 825', with less than 3 feet of cover. The culvert is deteriorating, and temporary repairs were required in 2012, which resulted in the emergency closure of one lane of US 302 for about 2 weeks. Continued deterioration of the culvert will likely result in the need for additional emergency repairs and a more costly permanent solution in the future.

There is also a need for rock scaling along the east side of US 302 directly across from the culvert location. Rock Cut #110R was constructed in 1961 using production blasting methods resulting in significant blast-induced joint displacement and extensive fracturing in the rock mass. The distance from the base of the rock slope to the edge of US 302 varies from 2' - 8'.

TRAFFIC IMPLICATION: Culvert rehabilitation will take about 3 months in the summer of 2018, and will involve occasional lane and shoulder closures for delivery of materials and equipment. Rock scaling will require closure of the northbound side of US 302, with concrete barrier and temporary signals, for about 1 month in the spring of 2018.

FINAL COMPLETION DATE: October 5, 2018

HARTS LOCATION / CARROLL - U.S. ROUTE 302



LEGEND

- Streams
- Water Bodies
- US Routes
- State Routes
- Interstates
- Local Roads
- Town Boundary

New Hampshire
DOT
Department of Transportation

State # 26162
Federal # X:A003(275)
LOCATION MAP

