



MUNICIPALITY OF PRINCETON

Department of Infrastructure
& Operations

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MEMORANDUM

To: Mayor and Council
From: James J. Purcell, PE, *Assistant Municipal Engineer*
Subject: Rehabilitation/Replacement of Two Pedestrian Bridges in the Mountain Lakes Preserve
Construction Contract Change Order
Date: April 10, 2026

Attached for consideration by Princeton Council at its April 13, 2026 meeting is a resolution to approve a Change Order to the Construction Contract for the Rehabilitation/Replacement of Two Pedestrian Bridges in the Mountain Lakes Preserve. This Change Order is necessary due to unforeseen conditions of the Red Trail bridge over Mountain Brook.

The Red Trail bridge is an historic stone arch bridge dating to the time of the Princeton Ice Company's operations between 1884 and the 1920s. While not listed as a specific historic structure, its significance contributes to the designation of the Mountain Lakes Preserve as an historic district. The bridge was determined to be in a significant state of disrepair and, in 2021, an application for its rehabilitation was made to the New Jersey Historic Trust (NJHT) for a grant to offset the cost of the work. NJHT awarded Princeton \$395,218 representing 50% of the estimated cost of rehabilitation of the stone arch bridge of \$790,435.

In addition to the rehabilitation of the Red Trail stone arch bridge, the bridge carrying the Green Trail over the stream by the upper Mountain Lake was in need of replacement. Construction documents were prepared by French & Parello Associates for both the replacement of the Green Trail Bridge and the rehabilitation of the Red Trail bridge.

Upon receipt of bids for the project, Council awarded a construction contract to Colonelli Brothers Inc. in April 2025 for an amount not to exceed \$947,200.00, \$648,300 of which was for the Red Trail Bridge. In August 2025, Colonelli completed the exacting work of dismantling the Red Trail bridge with each stone removed being marked for replacement in the same location. Upon completing the dismantling of the wingwalls, it was discovered that the footings for the walls were twisted out of alignment to the extent that the walls could not be reconstructed in a stable, secure manner and would need to be replaced. In addition, when the trail surface was removed from the stone arch structure, it was discovered that the arch consisted of mortared stone that protruded in varying degrees above the arch. The reconstruction of the bridge includes a reinforced concrete stress relief slab that was to be constructed above the stone arch. This stress relief slab was not designed to compensate for these protrusions and required redesign with more reinforcing steel and additional concrete.

Colonelli Brothers continued work on the Green Trail bridge while the Red Trail bridge was redesigned. Upon review of the changes, in early December 2025, Colonelli requested a change in the amount of \$386,000.00. Recognizing that potentially protracted negotiations might ensue and to avoid delay claims by Colonelli, we issued a stop work order until such time as an agreement could be reached. Negotiations took place in March and we agreed that:

1. The additional work was due to unforeseen conditions;
2. The work stoppage was due to Princeton's invoking the contractual clause allowing such

stoppage;

3. Colonelli Brothers is entitled to compensation for remobilizing equipment and personnel, and the mobilization will require reconstruction of an access road to reach the site, re-establishment of cofferdams, re-establishment of soil erosion and sediment control fencing, and establishment of stable platforms for equipment; and
4. The removal of the existing and construction of new footings would require methods not anticipated in the original design or bid, requiring multiple concrete pours and pump trucks.

In accordance with the General Conditions of the Agreement, and in keeping with State law, if the quantity for an item changes by more than 20%, the unit price is subject to a negotiated change in price. The Change Order included five items with increases in quantities over 20%. Colonelli agreed to hold the unit prices on four of these and will be paid based on the actual quantity constructed at the price bid. The remaining item, Concrete Footing, was negotiated due to the complexity, as stated above, of the means and methods necessary to construct. In addition, there were three items that were not included in the original bid – Remobilization, Demolition of Footings, and Coarse Aggregate Layer for the footing bedding. Engineering staff reviewed the quantities and costs for all the items and deemed them to be reasonable.

In considering all alternatives, Engineering staff also investigated whether it was reasonable to cancel the contract and not complete the reconstruction. The consequences of such cancellation would be the loss of the New Jersey Historic Trust Grant of \$395,218.00, an undetermined cost to remove the cofferdams and silt fence and restore the streambanks, securing and storing the historic stones currently stockpiled on site, and permanent closure of the Red Trail.

An application for a grant to offset the additional cost is being prepared for submission to the NJHT. The NJHT Capital Level II grant is on a 1:1 match basis and the request will be for \$157,355.00.

Engineering staff performed an analysis of invoices to date and expected costs to complete and anticipates that there will be savings in other items on the overall project that sum to approximately \$170,000.00. The table below summarizes the anticipated costs, with an assumption of the second grant being awarded:

	Red Trail Bridge	Green Trail Bridge	Total Contract
Original Contract	\$648,300.00	\$298,900.00	\$947,200.00
Change Order 1 (This C.O.)	\$314,670.00		\$314,670.00
NJHT Grant (Original)	(\$395,218.00)		(\$395,218.00)
NJHT Grant (to be applied for)	(\$157,355.00)		(\$157,355.00)
Anticipated Savings		(\$170,000.00)	(\$170,000.00)
Projected Cost to Princeton			\$539,297.00

In consideration of the above, it is recommended that the Change Order in the amount of \$314,670 be approved and that the total not-to-exceed amount of the contract with Colonelli Brothers Inc. be increased to \$1,261,870.00. The Change Order is attached.