STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Janet T. Mills
GOVERNOR

Bruce A. Van Note
COMMISSIONER

January 5, 2023
Subject: Tracy Brook Bridge Replacement
State WIN: 023657.00
Location: **Durham**
Amendment No. 2

Dear Sir/Ms.:

Make the following changes in the Bid Documents

In the Plan Sheet:

Remove Page 15 SOIL NAIL PLAN totaling one page and **Replace** with the attached SOIL NAIL PLAN totaling one page.

The following questions have been received:

Question: Riprap or stacked stone appear to be present along portions of the existing riverbank slope where soil nails are proposed. Will the Contractor be compensated for the extra time and materials resulting from grout overruns that may occur from voids in these areas? Also, the soil nail tolerances in Specification Section 675.05 may be difficult to achieve in these areas. Will there be some flexibility granted in these situations?

Response: No additional pay item or measurement is included in the Specifications for grout overruns. See boring logs on Plan Sheet 12 and 13 for anticipated subsurface conditions within drilling limits, and note that excavation is required prior to soil nail installation in the vicinity of the bridge abutments where surficial riprap erosion protection is currently installed. The 6-inch tolerance for soil nail locations may be relaxed by the Engineer on a case-by-case basis in areas where existing riprap or stone obstruct nail installation.

Question: Specification Sections 513 and 675.04, and Plan Sheet 16 call out double twisted mesh, which is more typically used on rock slopes. Is double twisted mesh required and if so, does the Department have a specific product in mind that can meet the requirements of Specification Section 513.02?

Response: Wire mesh for slope protection need not specifically be double-twist; wire mesh meeting or exceeding the load capacity and corrosion protection requirements of Geobrugg TECCO G45/2 high-tensile steel wire mesh shall be deemed acceptable.

Question: Specification Section 675.06 - If verification testing reveals that the minimum grout to ground bond is not achieved and the Department requires increased soil nail lengths, will the Contractor be compensated for the extra time and materials to install the longer nails?

Response: Yes, soil nails are measured for payment per Section 675.07, "as the entire approved length of nail as indicated in the Contract Plans or as modified by the Department based on Verification Test results." Soil nails are paid for based on linear foot unit cost.

Question: Specification Section 675.05 - Are three grout cubes really required for each cubic yard of grout placed, or is this a typo?

Response: Specification is correct, and requires one set of grout cubes, "for every 1 cubic yard of grout placed, with at least one set of cubes tested for each day of grouting." Testing frequency is based on volume of final grout placed after reaching final tip elevation and cleaning out hole and excludes drilling grout/flush. Based on small theoretical volume of grout per nail, this criteria is anticipated to result in one batch of grout cubes per day.

Question: Specification Section 675.04 - Would the Department consider galvanizing as an alternative to the epoxy coating on soil nail plates, nuts, and washers?

Response: In lieu of epoxy coating, the plates, nuts, and washers may be hot dip galvanized in accordance with ASTM A153. If the Contractor elects to galvanize this hardware, the portions of the tendon remaining exposed shall be cold galvanized in the field prior to installing hardware.

Question: Sheet 15 of the plans shows 3 rows of soil nails between approximate stations 13+31 and 13 +60, but the table on sheet 16 indicates 4 rows in this area. Which is correct?

Response: Four rows of soil nails are required between stations 13+31 and 13+60. Sheet 15 will be revised to reflect the additional soil nails. See revised sheet.

Question:
Does the top 4 strand in the NEXT beam decks (2 above each leg) have to have a tensioning force of 44 kips? Our form is only capable of tensioning these top strands to 7 kips.

Response: Top 4 strands in NEXT beams may be reduced to 7 kips of tensioning force. Reduction of the tensioning force in top strands will increase the mild reinforcing in the beam. At a minimum, #4 mild reinforcing will require 4.5" spacing and 21' bars.

Question: Soil Nails Details
Sheet 16 of 29
Note 5 - Requires a 10x10x2" thick bearing plate.
This is considerably larger than we would typical expect. Please confirm a 2" thick plate is required.

Response: Bearing plates shall be 2" as specified in the plans.

Question: Sheet 16 of 29 and Special Provision 675 require epoxy coated Nail Plate and hex nut. Would a galvanized finish also be acceptable?

Response: In lieu of epoxy coating, the plates, nuts, and washers may be hot dip galvanized in accordance with ASTM A153. If the Contractor elects to galvanize this hardware, the portions of the tendon remaining exposed shall be cold galvanized in the field prior to installing hardware.

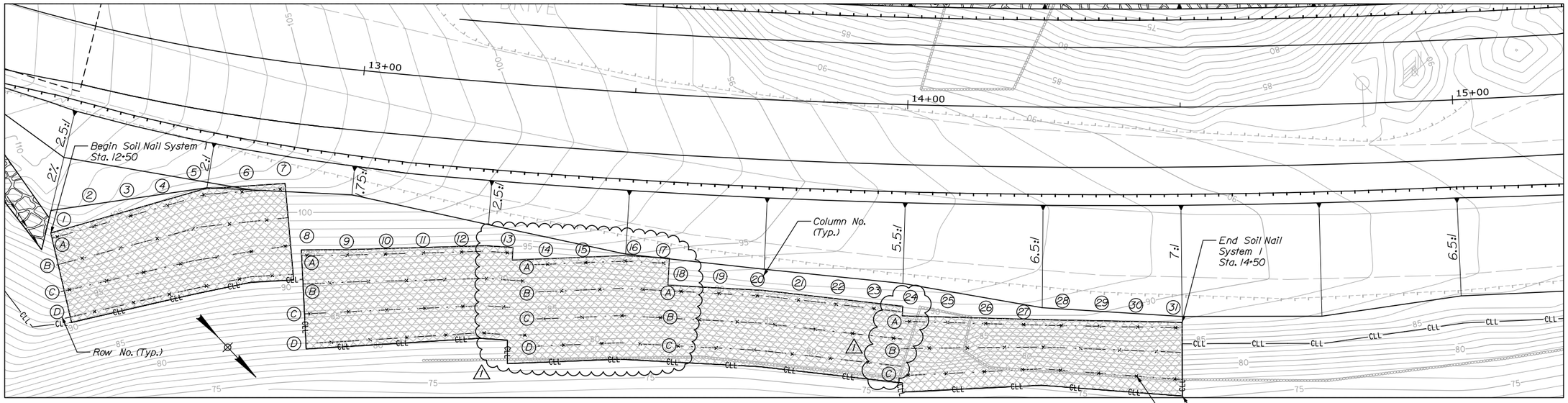
Question: Would the Department accept a Composite Tub Girder Alternate for this structure?

Response: The Department will consider change proposals as set forth in Standard Specification Section 109.6 – Value Engineering.

Consider these changes and information prior to submitting your bid on **January 11, 2023**.

Sincerely,

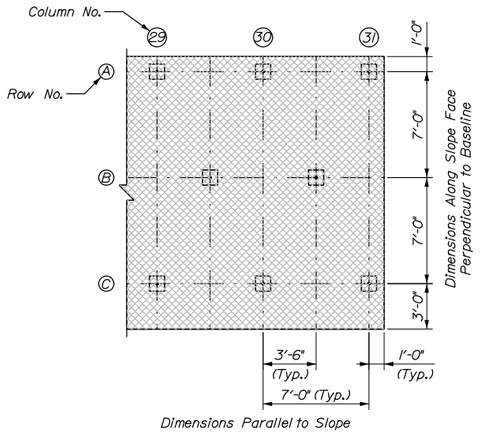
George M. A. Macdougall P.E.
Contracts & Specifications Engineer



PLAN

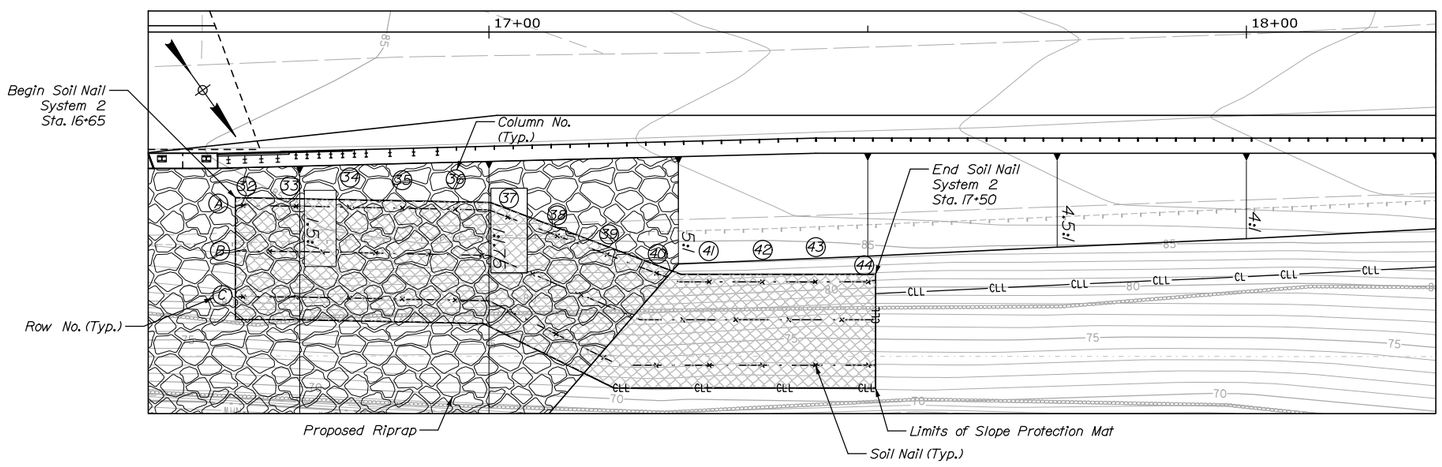
10 0 10 20

Scale of Feet



TYPICAL SOIL NAIL SPACING

NOT TO SCALE



PLAN

10 0 10 20

Scale of Feet

Note:

1. *Soil nail plan layout as shown is schematic only. Final layout shall be determined per Contractor's shop drawing as reviewed and approved by the Department. Soil nails shall be located in accordance with the Typical Soil Nail Spacing detail on this sheet and per the Soil Nail Details.*

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2365700

WIN 023657.00

BRIDGE NO. 2852

BRIDGE PLANS

PROJ. MANAGER	M. KERSBERGEN		
DESIGN-DETAILED	J. Zwettekenbaum	P. Mckechnie	10\2022
CHECKED-REVIEWED	B. Materek	J. Jurwin	10\2022
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1	Soil Nail Wall Change		01\2023
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

TRACY BROOK BRIDGE
MEADOW BROOK
ANDROSCOGGIN
DURHAM

SOIL NAIL PLAN

SHEET NUMBER

15

OF 79

Filename: 015_Soil Nail Plan Rev1.dgn Division: Username: Date:1/3/2023