



March 12, 2026

Mr. Drew Riddle
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**Summary of Foundation Soils Evaluation
Cross Creek Mailbox Shelter
Spring Lake, North Carolina
Our Project Number 121-26-121380**

Gentlemen:

As requested, a representative of NV5 Engineers and Consultants, Inc. was present at the above-referenced site on February 24, 2026, to evaluate the subgrade soil conditions in the spread footing excavations for the planned mailbox shelter. The purpose of our evaluation was to determine if the shallow foundation subgrade soils were suitable to support the planned structure. We were provided sealed drawings prepared by JDS Consulting, from which we understand that the footings have been designed with an allowable foundation bearing pressure of 2,000 pounds per square foot (psf). Our scope of services did not include surveying the planned structure location. The locations of our testing were based on our field observations. We note that the interior slab-on-grade referenced in the provided drawings was constructed prior to our arrival, and the soils subjacent are excluded from our evaluation.

Our evaluation comprised a combination of visual observations, hand rod probing, and hand auger borings and dynamic cone penetrometer testing (in general accordance with ASTM STP-399). Dynamic cone penetrometer testing was performed in our hand auger borings to a maximum depth of approximately 3 feet below the existing ground surface elevation in each of four (4) spread footing excavations. Our scope of services did not include machine-drilled soil test borings to evaluate deeper subgrade soil conditions that could affect foundation support. Such services can be provided, if desired.

Based on our observations and the results of our testing, soft and wet subgrade soils were encountered to depths of between approximately 4 and 12 inches below the excavated foundation bearing surface in several of our test locations. The locations of the encountered soft and wet soils were brought to the attention of the contractor's representative on site. We recommended the removal of the soft and wet soils encountered in the footing excavations and backfilling the over-excavations with lean Portland cement concrete. After the recommended remedial measures are completed, the footing excavations will be suitable to support the reported foundation design bearing pressure of 2,000 psf, in the locations and elevations tested at the time of our investigation.

Exposure to the environment, especially rainfall, may weaken subgrade soils. If the subgrade soils become so-exposed, remedial measures may be required to achieve the design foundation bearing pressure.

Sincerely,
NV5 Engineers and Consultants, Inc. (F-1333)

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Project Manager

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