



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

January 24, 2019

Division Six - District Two
Harnett County

Mr. Aaron L. Fleming, Superintendent
Harnett County Schools
1008 South 11th Street
Lillington, North Carolina 27546

SUBJECT: Encroachment Agreement on NC Highway 87 North and SR 2433 (Olive Farm Drive) for the removal of the existing box sign and the installation of a new breakaway sign inside the existing stone structure (E062-043-18-00275).

Dear Sir:

Attached is an approved R/W form 16.1A and plans for the removal of the existing box sign and the installation of a new breakaway sign inside the existing stone structure, which will be reduced by six (6) inches on the west side of the structure and the tall vegetation around the sign will be removed and replaced with low growing vegetation on NC Highway 87 North and SR 2433 (Olive Farm Drive) in Harnett County as shown on the attached plans (Benhaven School Sign).

Location:

Route	At a point	Towards
SR 2433	At the intersection of NC Highway 87 North and SR 2433 (Olive Farm Drive)	20'± east

This encroachment is approved subject to the following:

- The sign must meet the minimum clear zone requirements as stated in the AASHTO Roadside Design Guide.**
- Mr. Keith L. Anderson, Highway Maintenance Engineer at (910) 893-4020 and Mr. Earl C. Locklear, Assistant District Engineer at (910) 364-0601 shall be notified a minimum of three (3) days before construction is to begin.
- Traffic will be maintained and proper signs, signal lights, flagmen and other warning devices will be provided for the protection of traffic, in conformance with the latest **MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.** All contractor personnel will be required to wear a class II ANSI approved safety vest while working within the DOT right of way.

- 4. All lanes of traffic on NC Highway 87 North and SR 2433 (Olive Farm Drive) are to be open during the hours of 6:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. No lane of traffic shall be closed on holidays, special events, or as directed by the engineer. Traffic shall be maintained at all times.**
- 5. Any asphalt that is damaged as a result of construction shall be repaired at the encroaching party's expense. An NCDOT approved asphalt mix shall be used for all repairs within NCDOT rights of way. Contact Mr. Earl C. Locklear, Assistant District Engineer for acceptance of asphalt mix designs.**
6. Underground utilities may cross perpendicularly but may not run longitudinally nor at a skew under the pavement.
7. All open cuts on primary routes will require full depth patching with 5.0" of B 25.0 C (ACBC) Asphalt Concrete Base Course, 3.0" of I 19.0 C (ACIC) Asphalt Concrete Intermediate Course and 2.0" of S 9.5 C (ACSC) Asphalt Concrete Surface Course the same day as cut is made. It will also be required to mill the existing pavement surface at a depth of 2.0" and a width of 1.0' on each side of the cut to key in the patch with the existing pavement surface in accordance with the attached detail.
8. All open cuts on secondary routes will require full depth patching with 4.0" of B 25.0 C (ACBC) Asphalt Concrete Base Course and 3.0" of S 9.5 C (ACSC) Asphalt Concrete Surface Course the same day as cut is made. It will also be required to mill the existing pavement surface at a depth of 1.5" and a width of 1.0' on each side of the cut to key in the patch with the existing pavement surface in accordance with the attached detail.
9. All concrete installed within NCDOT rights of way shall be constructed in accordance with the NCDOT Standard Specifications for Roads and Structures and Roadway Standard Drawings and Amendments or Supplementals thereto. All concrete shall be an approved NCDOT Class B mix. All materials testing results shall be provided to the District Engineer upon completion of the project.
10. All concrete sidewalk installed within NCDOT rights of way shall be constructed in accordance with the NCDOT Standard Specifications for Roads and Structures and Roadway Standard Drawings (Std. Dwg. No. 846.01 and 848.01) and Amendments or Supplementals thereto. All concrete shall be an approved NCDOT Class B mix. All materials testing results shall be provided to the District Engineer upon completion of the project.
11. All ADA compliant curb ramps shall be constructed in accordance with the NCDOT Standard Specifications for Roads and Structures and Roadway Standard Drawings (Std. Dwg. No. 848.06) and Amendments or Supplementals thereto including but not limited to the Alternate Curb Ramp Designs (Curb Ramp Details - Parallel Ramps). All concrete shall be an approved NCDOT Class B mix. All materials testing results shall be provided to the District Engineer upon completion of the project.
12. All 30" curb and gutter within NCDOT rights of way shall be constructed with Class B concrete in accordance with Section 846 of the latest NCDOT Standard Specifications for Roads and Structures and Standard Drawing numbers 846.01 of the NCDOT Roadway Standards Drawings or as directed by the engineer. All concrete testing results shall be provided to the District Engineer's office at time of project completion.

13. **A qualified NCDOT inspector should be on site at all times during construction. The encroaching party should be required to reimburse NCDOT for the cost of providing the inspector. If NCDOT cannot supply an inspector, the encroaching party (not the utility contractor) should make arrangements to have a qualified inspector under the supervision of a Professional Engineer registered in North Carolina, on site at all times. The Registered Engineer should be required to certify that the utility was installed in accordance with the encroachment agreement and that the backfill material meets the Statewide Borrow Criteria.**
14. Eight inches of ABC will be used as the base. Compaction tests shall be performed at the location of every open cut that crosses NCDOT roadways. The owner will be required to have an approved laboratory furnish the District office a copy of the test results.
15. All fill areas/backfill shall be compacted to 95% density in accordance with AASHTO T99 as modified by the North Carolina Department of Transportation. All material to a depth of 8 inches below the finished surface shall be compacted to a density equal to at least 100% of that obtained by compacting a sample of the material in accordance with AASHTO T99 as modified by the department. The subgrade shall be compacted at a moisture content which is approximately that required to produce the maximum density indicated by the above test method. The contractor shall dry or add moisture to the subgrade when required to provide a uniformly compacted and acceptable subgrade. The trench backfill material shall meet the Statewide Borrow criteria. The trench should be backfilled in accordance with Section 300-7 of the latest NCDOT Standard Specifications for Roads and Structures and Amendments or Supplementals thereto.
16. Excavations inside the theoretical 1:1 slope from the existing edge of pavement to the bottom of the nearest excavation wall should be made in accordance with the following conditions:
 - The trench backfill material should meet the Statewide Borrow Criteria. The trench should be backfilled in accordance with Section 300-7 of the latest NCDOT Standard Specifications for Roads and Structures, which basically requires the backfill material to be placed in layers not to exceed 6 inches loose and compacted at least 95% of the density obtained by compacting a sample in accordance with AASHTO T99 as modified by the NCDOT.
 - All trench excavation inside the limits of the theoretical 1:1 slope, as defined by the policy, should be completely backfilled and compacted at the end of each construction day. No portion of the trench shall be left open overnight.
17. The contractor shall not begin construction until after all traffic control and erosion control devices have been installed to the satisfaction of the District Engineer.
18. An executed copy of this encroachment agreement shall be present at the construction site at all times during construction. If safety or traffic conditions warrant such an action, NCDOT reserves the right to further limit, restrict or suspend operations within the right of way.
19. Disturbed areas shall have an established stand of vegetation according to the attached specifications for erosion control.

20. The party of the second part agrees to provide traffic control devices, lane closures, road closures, positive protection and/or any other warning or positive protection devices necessary for the safety of motorists and workers during construction and any subsequent maintenance. This shall be performed in conformance with the latest NCDOT Roadway Standard Drawings and Standard Specifications for Roads and Structures and Amendments or Supplementals thereto. When there is no guidance provided in the Roadway Standard Drawings or Specifications, comply with the Manual on Uniform Traffic Control Devices for Streets and Highways and Amendment or Supplemental thereto. Information as to the above rules and regulations may be obtained from the Division Engineer of the party of the first part. **All contractor personnel will be required to wear a class II ANSI approved safety vest while working within the DOT right of way.**
21. Written notice of the completion of the work will be furnished to the District Engineer, P. O. Box 1150, Fayetteville, North Carolina 28302, when the work has been completed.
22. SDR-26 PVC pipe shall not be used on NCDOT Rights of Way for lines under pressure.
23. Please be reminded that all OSHA Standards regarding trenching and shoring should be strictly adhered to.
24. The Contractor shall comply with all OSHA requirements and provide a competent person on site to supervise excavation at all times.
25. No material storage shall be allowed along the shoulders of the roadway, and during non-working hours, equipment shall be parked as close to the right of way line as possible and shall be properly barricaded so that no equipment obstruction shall be within the Clear Recovery Area. No parking or material storage shall be allowed along the shoulders of any state maintained roadway.
26. The Department of Transportation does not guarantee the right of way on this road, nor will it be responsible for any claim for damages brought by any property owner by reason of the installation.
27. The encroaching party shall comply with all applicable federal, state, and local environmental regulations, and shall obtain all necessary federal, state, and local environmental permits, including but not limited to, those related to sediment control, storm water, wetland, streams, endangered species, and historical sites.
28. Excavation within 500 feet of a signalized intersection will require notification by the party of the second part to the Division Traffic Engineer at telephone number 910-364-0606. All traffic signal or detection cables must be located prior to excavation.
29. Trenching, bore pits and/or other excavations shall not be left overnight. The contractor shall comply with all OSHA requirements and provide a competent person on site to supervise excavation at all times.

- 30. When personnel and/or equipment are working on the shoulder and within five (5) feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working within a lane of travel of an undivided or divided facility, close the lane according to the traffic control plans, or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Do not perform work involving heavy equipment within fifteen (15) feet of the edge of travel way when work is being performed behind a lane closure on the opposite side of the travel way. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.**
31. Drainage structures shall not be blocked with excavation materials. Any drainage structure disturbed or damaged shall be restored to its original condition as directed by the District Engineer.
32. Any disturbed guardrail shall be reset according to the applicable standard or as directed by the District Engineer.
33. All driveways altered during construction shall be returned to a state comparable with the condition of the driveways prior to construction.
34. All roadway signs which are removed which are removed due to construction shall be reinstalled as soon as possible.
- 35. Any proposed driveway connections onto NCDOT roadways will require an approved driveway permit. The approval of this Two Party encroachment (RW 16.1A) does not constitute approval of any proposed driveway connections. For further information, contact Mr. Earl C. Locklear, Assistant District Engineer at (910) 364-0601.**
36. Excavated areas adjacent to pavement having more than a 2" drop shall be safed up at a 6:1 or flatter slope and designated by appropriate delineation during periods of inactivity, including, but not limited to, night and weekend hours. Excavated material shall not be placed on the roadway at any time.
- 37. NCDOT reserves the right to further limit, restrict, or suspend operations within the Right of Way if, in the opinion of NCDOT, safety or traffic conditions warrant such action.**
38. It shall be the responsibility of the encroaching party to determine the location of other utilities within the encroachment area. The encroaching party shall be responsible for notifying other utility owners and providing protection and safeguards to prevent damage or interruption to existing facilities and to maintain accessibility to existing utilities.
39. Any utility marker required shall be as close to the right of way line as possible. If it is not feasible to install markers at or near the right of way line, written approval specific to this site shall be obtained from the District Engineer.

40. All utility facilities, including but not limited to manholes, valve boxes, meter boxes, splice boxes, junction boxes, vaults, and covers within NCDOT right of way shall have been designed for HS-20 loading. A listing of currently approved manholes, valve boxes, and vaults is available at the following site:
<https://apps.dot.state.nc.us.vendor/approvedproducts> . If any proposed structure is not of a design pre-approved by NCDOT, the encroaching party shall submit details and calculations designed by a Professional Engineer registered in North Carolina for approval prior to construction.
41. All utility access points, including but not limited to manholes, splice boxes, junction boxes, and vaults shall be located outside of the right of way line. Manholes, splice boxes, junction boxes, and vaults shall not be placed in the ditch line, side slopes of the ditches, or in the pavement. All manholes, splice boxes, junction boxes, vaults, and covers shall be flush with the ground when located within the vehicle recovery area.
42. All temporary and final paving markings are the responsibility of the encroaching party. Final pavement markings and sign plans shall be submitted to the Division Traffic Engineer at telephone number 910-364-0606 for review and approval.
43. The pavement marking contractor is required to have at least one member of every pavement marking crew that is working on the project, preferably the Crew Supervisor, be certified through the NCDOT Pavement Marking Technician Certification Process. For more information please contact the Work Zone Traffic Control Unit at (919) 773-2800 or <http://www.ncdot.org/doh/preconstruct/wztc/>".
44. Prior to installing pavement markings, contact Mr. Frank West with the NCDOT Division Six Traffic Services Unit at 910-364-0606 to review the proposed pavement-marking layout. This notification should take place a minimum of 48 hours in advance of the pavement marking installation.
45. Failure to contact the Traffic Services Unit to review the pavement-marking layout prior to installation may result in the removal and reinstallation of the markings at the expense of the Permittee.

NCDOT WORK ZONE TRAFFIC CONTROL QUALIFICATIONS AND TRAINING PROGRAM

All personal performing any activity inside the highway right of way are required to be familiar with the NCDOT Maintenance / Utility Traffic Control Guidelines (MUTCG). No specific training course or test is required for qualification in the Maintenance / Utility Traffic Control Guidelines (MUTCG).

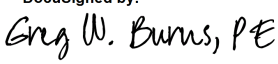
All flagging, spotting, or operating Automated Flagger Assist Devices (AFAD) inside the highway right of way requires qualified and trained Work Zone Flaggers. Training for this certification is provided by NCDOT approved training resources and by private entities that have been pre-approved to train themselves.


All personnel in charge of overseeing work zone Temporary Traffic Control operations and installations inside the highway right of way are required to be qualified and trained Work Zone Supervisors. Training for this certification is provided by NCDOT approved training resources.

Encroachment – NC 87 North and SR 2433 (E062-043-18-00275)
Harnett County School System — Harnett County
Page Seven

For questions and/or additional information regarding this training program please refer to our web site at <https://connect.ncdot.gov/projects/WZTC/Pages/Training.aspx> or call **J.S. (Steve) Kite, PE at (919) 662-4339 or skite@ncdot.gov or **Roger Garrett** at (919) 662-4383 or rmgarrett@ncdot.gov, both with the NCDOT Work Zone Traffic Control Section.**

If further information or assistance is needed in reference to this project, please feel free to call Mr. Lee R. Hines, Jr. (Richie), PE, District Engineer at (910) 364-0601.

Sincerely,
DocuSigned by:

Greg W. Burns, PE
Division Engineer

DS


GWB:ecl

cc: <https://connect.ncdot.gov/site/Permits/Pages/All-Submissions.aspx>