



Soil & Environmental Consultants, PA

11010 Raven Ridge Road • Raleigh, North Carolina 27614 • Phone: (919) 846-5900 • Fax: (919) 846-9467
www.SandEC.com

March 20, 2006
Project #9221.S1

Glen Phillips
221 Providence Road
Chapel Hill, NC 27514

Re: Soil/Site Evaluation on Dixon Property, 63- Acre Site on Manns Chapel Road, Chatham County, NC

Dear Mr. Phillips:

Soil & Environmental Consultants, PA (S&EC) performed a detailed soil and site evaluation on the above referenced tract. This was performed at your request as part of the preliminary planning process in order to determine areas of soil that have potential for subsurface wastewater disposal. Fieldwork was performed in December 2004.

S&EC traversed the property and observed landforms (slope, drainage patterns, past use, etc.) as well as soil conditions (depth, texture, structure, seasonal wetness, restrictive horizons, etc.) through the use of hand auger borings. The site was evaluated during moist soil conditions. From these observations, an evaluation of the site was developed, relative to subsurface disposal of wastewater. Soil boundaries were flagged in the field and were located by S&EC using a GPS unit. The soil/site evaluation criteria used is that contained in 15 A NCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems".

FINDINGS

This site is located in the Piedmont region of Chatham County. The upland soils on this tract are similar to the Wedowee and Helena soil series. The Wedowee soil series has a sandy loam surface material over a clay subsoil. These soils are at least 24 inches deep to prohibitive soil characteristics and are generally useable for subsurface septic systems. The Helena soils have an expansive clay subsoil and soil wetness before 24 inches and are generally unsuitable for conventional subsurface septic systems.

The accompanying GPS/AutoCAD map indicates the areas with potential use for subsurface wastewater disposal. The "CONV." (hatched areas) units indicate areas of soils which are at least 24 to 30 inches deep to prohibitive soil characteristics and these areas have potential for a conventional septic system, a modified conventional (shallow placed lines with no fill required over the disposal area) or a low pressure pipe system (LPP) and/or ultra-shallow conventional (shallow placed lines with fill required over the disposal field) system. Unit "UN" on the attached map indicates areas of soils that are less than 24 inches to prohibitive soil characteristics and are generally unsuitable for the type of systems mentioned above. There are some unsuitable soils and areas due to very bouldery conditions with rocks to large boulders. However, there may be some fringe areas around the boulders where the boulders and rocks decrease in number and may be removed since they are mainly surface inclusions. If the removal of the boulders does not disturb the soils, then the areas may be potentially useable for a drainfield area. Also, this tract of

land contains intermediate rocks and felsic crystalline rocks which can cause the soil mineralogy to be "marginal" and possibly expansive. The useable soils areas on the map may contain inclusions of these "boarderline" soils. Soil samples may be necessary for CEC analysis to help determine if they are expansive or slightly expansive. However, the "UN" areas may be suitable for more expensive alternative septic systems, i.e. pretreatment drip or spray irrigation, etc. Such systems are expensive and, if requested, S&EC can provide additional information concerning these types of systems.

The site plan for each lot must ensure that adequate soil area for system and repair is unaffected by site elements (house placement, driveway, wells, patios, decks, etc.) on that or adjacent lots. The area ultimately designated by the health department on the site plan for the septic system and repair must remain undisturbed (no mechanical clearing, excavation, heavy traffic or other significant site disturbing activities) until authorized by the health department. A lot with initially adequate useable soil area may be rendered unusable as a result of improper site planning and/or disturbance. A field layout of the proposed septic systems may be required as part of the individual lot development process.

Upon completion of a subdivision plan, S&EC recommends reviewing the plan before recording the subdivision lots. It is important to note that any preliminary certification that a subdivision plan meets does not represent approval or a permit for any site work, nor does it guarantee issuance of an improvement permit for any lot. Final site approval for issuance of improvements is based on regulations in force at the time of permitting and is dependent on satisfactory completion of individual site evaluations following application for an improvement permit detailing a specific use and sitting.

GENERAL WASTEWATER CONSIDERATIONS

Once potentially useable areas are located through vertical borings, the next consideration is the horizontal extent of those areas. The size and configuration of the useable soil area dictate the utility of that area. The size of a subsurface disposal field is determined by: 1) the design flow from the source (120 gallons/bedroom/day in residences), and 2) the long term acceptance rate (LTAR) of the soil (based on the hydraulic conductivity of the soil, a function of the soil's texture, mineralogy, structure, porosity, etc.). The configuration must be such that an efficient layout of disposal lines (on contour) is possible. An additional consideration is the required setbacks for the system from various elements such as wells (100'), streams and ponds (50') or more (depending on watershed regulations), property lines (10'), top of embankment (15'), watershed buffers, etc. (see Attachment 1).

The utility of a potential useable soil area for a subsurface system is most accurately determined by an on-ground layout of the proposed system. The total area needed for system and repair areas will depend upon the system type, the layout of that system and the total design flow (factors mentioned above). A typical area needed for a three bedroom residence is approximately 10,000 to 12,000 ft² (could be more depending on site features) or 720 to 960 linear feet of conventional line (system and repair) or 1,440 linear feet of LPP line (system and repair). These estimates reference Laws and Rules for Sewage Treatment and Disposal Systems for North Carolina and use a LTAR of 0.25gpd/ft² for conventional septic systems (.1955), a LTAR of 0.25gpd/ft² for modified conventional (.1956) and 0.1gpd/ft² for LPP septic systems (.1957a). The health department will determine the ultimate LTAR after their lot evaluation. S&EC will be glad to assist in any system layout or sizing calculations if requested.

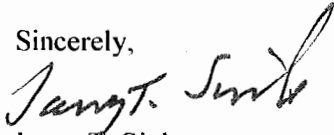
This report discusses the general location of potentially useable soils for on-site subsurface wastewater disposal and, of course, does not constitute or imply any approval or permit as needed

by the client from the local health department. S&EC is a professional consulting firm that specializes in the delineation of soil areas for wastewater disposal, and the layout and design of wastewater treatment systems. As a professional consulting firm, S&EC is hired for its professional opinion in these matters. The rules governing wastewater treatment (interpreted and governed by local and state agencies) are evolving constantly, and in many cases, affected by the opinions of individuals employed by these governing agencies. Because of this, S&EC cannot guarantee that areas delineated and/or systems designed will be permitted by the governing agencies. As always, S&EC recommends that anyone making financial commitments on a tract be fully aware of individual permit requirements on that tract prior to final action.

An individual septic system permit will be required for each lot prior to obtaining a building permit. This will involve a detailed evaluation by the local health department to determine, among other things, system size and layout, well, drive and house location. Only after developing this information can a final determination be made concerning specifics of system design and site utilization.

Soil & Environmental Consultants, PA is pleased to be of service in this matter and we look forward to assisting in any site analysis needs you may have in the future. Please feel free to call with any questions or comments.

Sincerely,



Larry T. Sink

NC Licensed Soil Scientist #1054

Encl: Attachment 1
Soil Suitability Map



Attachment 1

.1950 Location of Sanitary Sewage Systems

(c) (c) Every sanitary sewage treatment and disposal system shall be located at least the minimum horizontal distance from the following:

- | | |
|--|-------------------------------------|
| (1) any private water supply source including a well or spring | 100 feet |
| (2) any public water supply source | 100 feet |
| (3) streams classified as WS-I | 100 feet |
| (4) water classified as S.A. | 100 feet from mean high water mark |
| (5) Other coastal waters | 50 feet from mean high water mark |
| (6) any other stream, canal, marsh, or other surface waters | 50 feet |
| (7) any Class I or Class II reservoir | 100 feet from normal pool elevation |
| (8) any permanent storm water retention pond | 50 feet from flood pool elevation |
| (9) any other lake or pond | 50 feet from normal pool elevation |
| (10) any building foundation | 5 feet |
| (11) any basement | 15 feet |
| (12) any property line | 10 feet |
| (13) top of slope of embankments or cuts of 2 feet or more vertical height | 15 feet |
| (14) any water line | 10 feet |
| (15) drainage systems: | |
| (A) Interceptor drains, foundation drains and storm water diversions | |
| (i) upslope | 10 feet |
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| (iii) downslope | 25 feet |
| (B) Groundwater lowering ditched and devices | 25 feet |
| (16) any swimming pool | 15 feet |
| (17) any other nitrification field (except repair area) | 20 feet |
| (b) Ground absorption, sewage treatment and disposal systems may be located closer than 100 feet from a private well supply, except springs and uncased wells located downslope and used as a source of drinking water, repairs, space limitations and other site-planning considerations but shall be located the maximum feasible distance and, in no case, less than 50 feet. | |
| (c) (c) Nitrification fields and repair areas shall not be located under paved areas or areas subject to vehicular traffic. If effluent is to be conveyed under areas subject to vehicular traffic, ductile iron or its equivalent pipe shall be used. However, pipe specified in Rule .1955 (e) may be used if a minimum of 30 inches of compacted cover is provided over the pipe. | |

Note: Systems over 3000 GPD or an individual nitrification fields with a capacity of 1500 GPD or more have more restrictive setback requirements, see .1950 (a) (17) (d) for specifics.

102002.00 "E"
✓ Trey (FYI)
(see note)



Soil & Environmental Consultants, PA

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December 13, 2004
Project #9221.S1

Glen Phillips
221 Providence Road
Chapel Hill, NC 27514

Re: Soil/Site Evaluation on Dixon Property, 57- Acre Site on Manns Chapel Road, Chatham
County, NC

Dear Mr. Phillips:

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Charlotte Office:
236 LePhillip Court, Suite C
Concord, NC 28025
Phone: (704) 720-9405
Fax: (704) 720-9406

Greensboro Office:
3817-E Lawndale Drive
Greensboro, NC 27455
Phone: (336) 540-8234
Fax: (336) 540-8235

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*
→ Note -
set this
area aside
for each
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lot

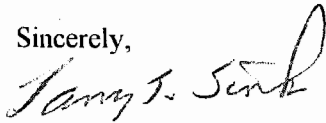
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09 May 2007



**BALLENTINE
ASSOCIATES, P.A.**

Attn. Lynn Richardson
Chatham County Planning Department
80-A East Street
Pittsboro, NC 27312

221 Providence Road
Eastowne Office Park
Chapel Hill, NC 27514

919/929-0481 Chapel Hill
919/489-4789 Durham
919/489-2803 Fax

Subject: Fieldstone Subdivision
102002.00 "M"

Dear Ms. Richardson,

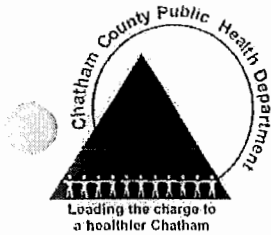
This letter serves as the official "Water / Sewer Impact Statement". By this letter, Ballentine Associates, PA certifies that the Fieldstone Subdivision will be served by public water and each lot will be required to apply for individual septic permits.

Sincerely,
BALLENTINE ASSOCIATES, P.A

Brice A. Nelson, E.I.
Engineer Intern II

Distribution: Lynn Richardson
James Dixon

Enclosures: None



CHATHAM COUNTY PUBLIC HEALTH DEPARTMENT
Division of Environmental Health
Soil Erosion and Sedimentation Control

August 14, 2006

LETTER OF APPROVAL WITH MODIFICATIONS

James E. Dixon
94 Chatham Drive
Chapel Hill, NC 27516

RE: Project Name: James Dixon Property
Acres Approved: .98
Submitted: Ballentine Associates, PA
Date Received: 07/28/06
Plan Type: Approved with Modifications
Permit Number: 2006-047

Dear Sir or Madam:

This office has reviewed the subject erosion and sedimentation control plan. We find the plan to be acceptable with modifications and hereby issue this letter of Approval With Modifications. The Modifications Required for Approval are listed on the attached page. This plan approval shall expire two (2) years following the date of approval, if no land-disturbing activity has been undertaken.

Please be advised that Section 6 (I) of the Chatham County Sedimentation and Erosion Control Ordinance requires that a copy of the approved erosion control plan be on file at the job site. Also, you should consider this letter to give the Notice required by G.S. 113A-61.1(a) of our right of periodic inspection to insure compliance with the approved plan.

North Carolina's Sedimentation Pollution Control Program is performance-oriented, requiring protection of existing natural resources and adjoining properties. If, following the commencement of this project, it is determined that the erosion and sedimentation control plan is inadequate to meet the requirements of the Chatham County Sedimentation and Erosion Control Ordinance, this office may require

revisions to the plan and implementation of the revisions to insure compliance with the Act.

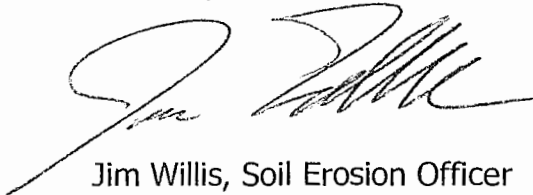
Acceptance and approval of this plan is conditioned upon your compliance with Federal and State water quality laws, regulations, and rules. In addition, local city or county ordinances or rules may also apply to this land-disturbing activity. This approval does not supersede any other permit or approval.

Please be aware that your project will be covered by the enclosed NPDES General Stormwater Permit NCGO1000 (Construction Activities). You should first become familiar with all of the requirements for compliance with the enclosed general permit.

Please note that this approval is based in part on the accuracy of the information provided in the Financial Responsibility Form, which you have provided. You are requested to file an amended form if there is any change in the information included on the form. Please notify us when you would like to schedule a preconstruction conference. Notification shall be given at least 7 days prior to initiation of activity.

Your cooperation is appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jim Willis', written over a horizontal line.

Jim Willis, Soil Erosion Officer
Chatham County Erosion Control

Enclosures: Certificate of Approval
Modifications Required for Approval
NPDES Permit

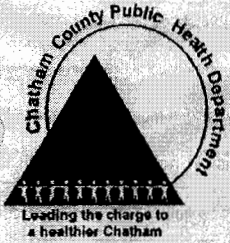
cc: Trey Fulcher



MODIFICATIONS REQUIRED FOR APPROVAL

James Dixon Property

1. Graphically denote inlet protection on drop inlet #2.
2. Replace the silt fence diverting runoff to the proposed sediment basin with diversion ditches.



Chatham County, North Carolina
Certificate of Sedimentation and Erosion Control Plan Approval and
Land-Disturbing Permit
For

THE James Dixon Property
Project Name and Location

2006-047
Permit Number

The posting of this certificate certifies that an erosion and sedimentation control plan has been approved for this project by Chatham County, North Carolina in accordance with North Carolina General Statute 113A-57 (4) and 113A-54 (d)(4), the North Carolina Administrative Code, Title 15A, Chapter 4B.0007 (c) and as per applicable sections of the Chatham County Soil Erosion and Sedimentation Control Ordinance. This certificate must be posted at the primary entrance of the job site before construction begins and until establishment of permanent ground cover as required by North Carolina Administrative Code, Title 15A, Chapter 4B.0027 (b) and as per Chatham County's Erosion and Sediment Control Ordinance, Section 5 (d).

Responsible Person: James Dixon Phone: 919-929-
Ballentine + Assoc. 0481

This plan was approved with "modifications" Yes No and / or
"performance reservations" Yes No.

Reviewer: [Signature]

Date: 8-10-06

THE ORDINANCE REQUIRES THAT A COPY OF
THE EROSION CONTROL PLAN
MUST BE KEPT AVAILABLE AT THE JOB SITE
AT ALL TIMES FOR INSPECTION



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MICHAEL F. EASLEY.
GOVERNOR

LYNDO TIPPETT
SECRETARY

June 24, 2006

Chatham County County Driveway Permit File Number 19-671
(Dixon Property Subdivision)

Subject: Commercial Driveway Permit Application with Entrance on SR 1532

Mr. James E. Dixon
94 Chatham Dr.
Chapel Hill, NC 27516


Dear Mr. Dixon:

Personnel assigned to this office have conducted a review of the permit Application and approval is granted subject to the following stipulations:

1. The entrance onto SR 1532 is to be constructed in accordance with the attached detail sheet.
2. The entrance onto SR 1532 shall be paved for at least 50' along the centerline of the entrance.
3. The entrance onto SR 1532 shall require radii on each side of the driveways as shown on the attached drawing.
4. No parking or outdoor advertising (signs) shall be allowed inside the right of way of SR 1532.
5. Any areas inside the right of way disturbed during construction shall be seeded and mulched immediately upon completion of construction.
6. This driveway permit accompanies encroachment # 19-3272.

Attached to this correspondence please find an approved copy of TEB Form 65-04 (Driveway Permit Application - N. C. Department of Transportation). Upon completion of the driveway entrance construction please notify the Chatham County Maintenance Department (Phone 919-742-3431) so a final inspection of the entrance can be made.

Yours very truly,


J. L. Picklesimer, P.E., P.L.S.
District Engineer

JLP/jek
Attachments

cc: Mr. Timothy Johnson P.E., Division Engineer
Mr. B.F. Sloan, County Maintenance Engineer

19.671

LOCATION OF PROPERTY:

County Chatham Access to Route No. 1532
Exact Distance 2.35 Miles Feet N S E W
From the Intersection of Route No. 15-501 and Route No. 1532 Toward West

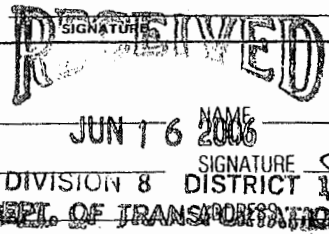
N. C. DEPARTMENT OF TRANSPORTATION
STREET AND DRIVEWAY ACCESS
PERMIT APPLICATION

PROPERTY WILL BE USED FOR: Special Commercial Regular Commercial Residential/Subdivision Other
PROPERTY is is not within Pittsboro City Zoning Area
PROPERTY IS LOCATED IN: Rural Urban Development Classification

AGREEMENT

I, the undersigned property owner, request access and permission to construct driveway(s) or street(s) on public right-of-way at the above location.
I agree to construct and maintain driveway(s) or street entrance(s) in absolute conformance with the current "Policy on Street and Driveway Access to North Carolina Highways" as adopted by the North Carolina Department of Transportation.
I agree that no signs or objects will be placed on or over the public right-of-way.
I agree that the driveway(s) or street(s) will be constructed as shown on the sketch on (the reverse side) (the attached plans).
I agree that driveway(s) or street(s) as used in this agreement include any approach tapers, storage lanes or speed change lanes as deemed necessary.
I agree that if any future improvements to the roadway become necessary, the portion of driveway(s) or street(s) located on public right-of-way will be considered the property of the North Carolina Department of Transportation, and I will not be entitled to reimbursement or have any claim for present expenditures for driveway or street construction.
I agree that this permit becomes void if construction of driveway(s) or street(s) is not completed within the time specified by the "Policy on Street and Driveway Access to North Carolina Highways".
I agree to pay an installation fee for pipe installed by the Division of Highways or pay a \$50 inspection fee for installation by others. Make checks payable to NCDOT. The inspection fee will be reimbursed if application is denied.
I agree to construct and maintain the driveway(s) or street(s) in a safe manner so as not to interfere with or endanger the public travel.
I agree to provide during construction proper signs, signal lights, flaggers and other warning devices for the protection of traffic in conformance with the current "Manual on Uniform Traffic Control Devices for Streets and Highways" and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the Division Engineer.
I agree to indemnify and save harmless the North Carolina Department of Transportation from all damages and claims for damages that may arise by reason of this construction.
I agree that the North Carolina Department of Transportation will assume no responsibility for any damages that may be caused to such facilities, within the highway right-of-way limits, in carrying out its construction.
I agree to provide a Performance Bond in the amount specified by the Division of Highways for any construction proposed on the State Highway system.
I AGREE TO NOTIFY THE DISTRICT ENGINEER WHEN THE PROPOSED WORK BEGINS AND WHEN IT IS COMPLETED.

Entrance Width(s)	Pipe Size	Pipe Length	Pipe Installation Costs	Inspection Satisfactory (Yes/No)	AMOUNT RECEIVED	INSTALLATION BY: () NCDOT () OTHERS	Dollars \$	DATE
1.			\$		<u>Fifty Dollars</u>	<u>J. E. Kyle</u>	<u>50.00</u>	<u>6-16-0</u>
2.			\$					
3.			\$					



PROPERTY OWNER: NAME James E. Dixon SIGNATURE James E. Dixon ADDRESS 94 Chatham Drive, Chapel Hill, NC 27516 Phone No. _____
WITNESS: NAME Glenn Phillips SIGNATURE Glenn Phillips ADDRESS 221 Providence Road, Chapel Hill, NC 27514

APPLICANT: NAME James E. Dixon SIGNATURE James E. Dixon ADDRESS 94 Chatham Drive, Chapel Hill, NC 27516 Phone No. _____
WITNESS: NAME Glenn Phillips SIGNATURE Glenn Phillips ADDRESS 221 Providence Road, Chapel Hill, NC 27514

APPROVALS

APPROVAL BY: Local Governmental Authority (when required)

SIGNATURE

TITLE

DATE

APPLICATION RECEIVED BY DISTRICT ENGINEER

APPLICATION APPROVED BY DISTRICT ENGINEER

Jed Proklesin

6-16-06

Jed Proklesin

6-24-06

SIGNATURE

DATE

SIGNATURE

DATE

COMMENTS:

SHOW:

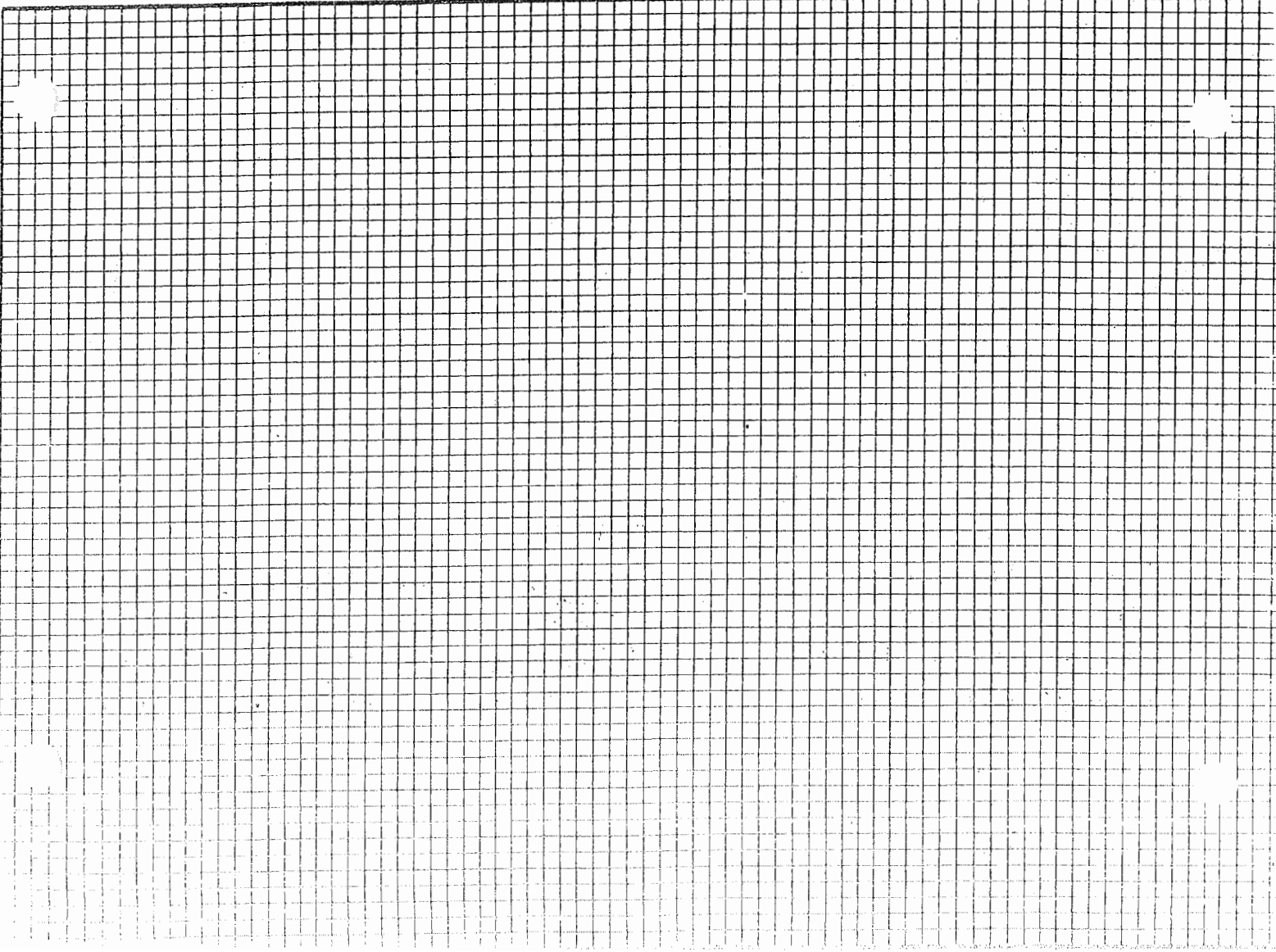
1. LOCATION OF DRIVEWAYS
2. DETAILS OF WORK, INCLUDING PIPES
3. EXISTING BUILDING, WALL, ETC.
4. PROPOSED BUILDING, WALL, ETC.
5. HIGHWAY FEATURES

PROPOSED PLANS

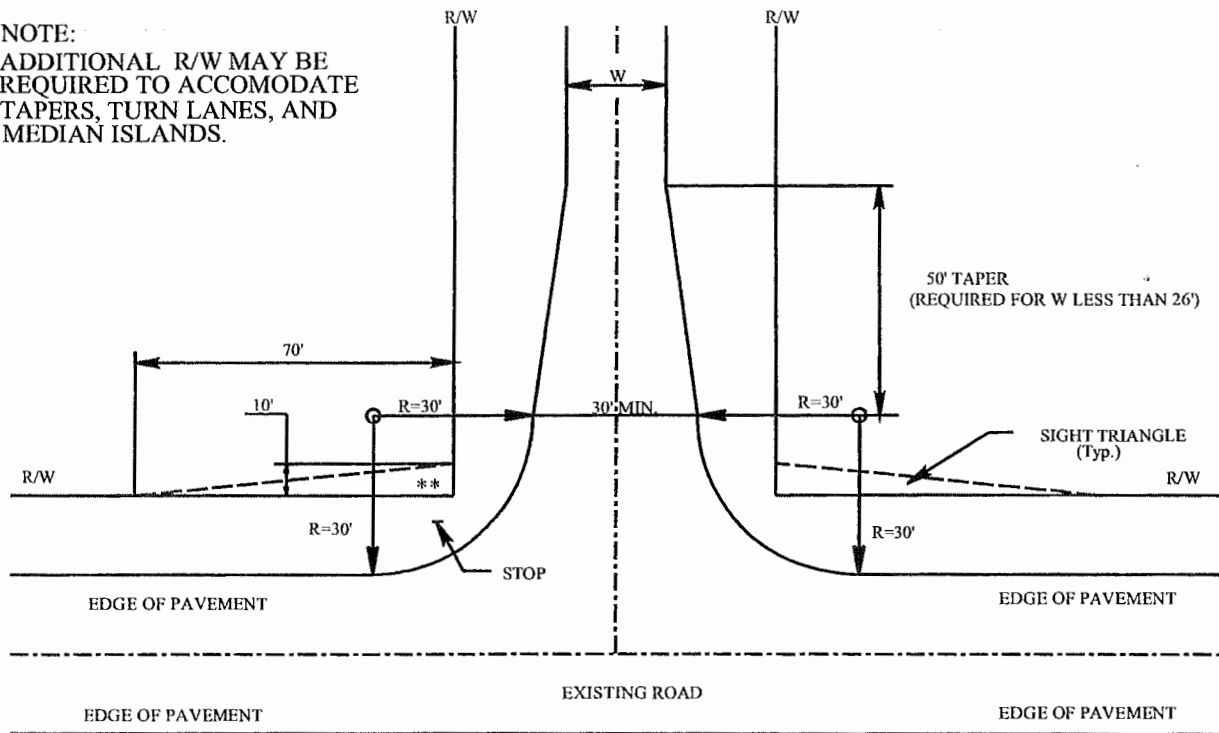
DRAW OR SKETCH BELOW, OR ATTACH
CONSTRUCTION PLANS FOR STREETS
OR DRIVEWAYS.



INDICATE
NORTH



NOTE:
 ADDITIONAL R/W MAY BE
 REQUIRED TO ACCOMODATE
 TAPERS, TURN LANES, AND
 MEDIAN ISLANDS.



**NOTE: Permanent Drainage easements may be required to accomodate drainage beyond the right-of-way.

FIGURE 4

RECOMMENDED ROAD CONNECTION

**NEW LOCAL RESIDENTIAL ROAD OR RESIDENTIAL
 COLLECTOR ROAD AND EXISTING STATE MAINTAINED
 ROAD WITHOUT CURB AND GUTTER**

STOP CONDITION



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

P.O. BOX 25201, RALEIGH, N.C. 27611-5201

LYNDO TIPPETT
SECRETARY

June 24, 2006

Mr. James Dixon
94 Chatham Dr.
Chapel Hill, NC 27516

SUBJECT: ENCROACHMENT AGREEMENT (19-3272)
Widening for left turn lane
SR 1532
Chatham County

Dear Mr. Dixon,

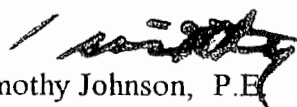
Attached is a properly executed copy of a Right of Way Encroachment Agreement which covers the following:

Widening for left turn lane on SR 1532 in Chatham Co.

This agreement is approved subject to the Special Provisions which are attached to and made a part of the Encroachment Agreement. This encroachment agreement accompanies driveway permit # 19-671.

8312

Sincerely


Timothy Johnson, P.E.
Division Engineer

TJ:jek

Attachments

c: Robert Memory, State Utility Agent, Utility Coordination Unit (w/orig.)
J.L. Picklesimer, P.E. P.L.S., District Engineer

(19-3272)

ENCROACHMENT SPECIAL PROVISIONS
JAMES DIXON PROPERTY (SUBDIVISION)
19-3272 (CHATHAM)

Approval of the encroachment agreement is made subject to the following Special Provisions:

1. Changes noted in red on the plans shall be incorporated into and made a part of the encroachment agreement. An executed copy of the encroachment agreement shall be available at the construction site at all times. NCDOT reserves the right to stop all work unless evidence of approval can be shown.
2. Notify the following prior to beginning work:
 - *B.F. Sloan, County Maintenance Engineer*
1404 E Raleigh St.
Siler City, N.C. 27344
(919) 742-3431
3. **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, stormwater, wetland, streams, endangered species, and historical sites.**
4. All materials and construction shall be in accordance with NCDOT standards and specifications, including but not limited to the NCDOT Standard Specifications for Roads and Structures 2002, the NCDOT Roadway Standards Drawings, and NCDOT Policies and Procedures for Accommodating Utilities on Highway Rights of Way.
5. It shall be the responsibility of the Encroacher to determine the location of other utilities within the encroachment area in accordance with General Statute 87-102. The Encroacher 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. Costs to repair, restore, or relocate existing utilities due to this encroachment shall be the responsibility of the encroaching party.
6. NCDOT 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 this encroachment. All Right of Way and easements necessary for construction and maintenance shall be dedicated to NCDOT with the proof of dedication furnished to the District Engineer prior to beginning work. Encroachment within the Right of Way does not imply approval for encroachment onto adjacent property. The Encroacher shall be responsible for securing any easement, permit, permission, or approval for encroachment or other use of property outside the state maintained right of way. Right of Way monuments disturbed during construction shall be referenced by a Professional Land Surveyor and reset immediately after construction.
7. The encroaching Party shall take whatever measures are necessary to minimize soil erosion and siltation, water pollution, and air pollution. It shall be the responsibility of the Encroaching Party to keep fully informed to comply with the applicable regulations of all legally constituted authorities relating to pollution prevention and control. In the event of conflict between regulations, specifications, or requirements, the more restrictive requirement shall apply. All erosion and pollution control devices and measures shall be constructed, installed, maintained and removed by the encroaching party in accordance with all applicable Federal, State and Local laws, regulations, ordinances, and policies. No construction shall begin until all erosion control devices have been installed to the satisfaction of the District Engineer. Failure to comply with this provision shall be grounds for immediate suspension of all activities within the Right of Way.
8. A \$100,000 Performance and Indemnity Bond shall be executed and posted with the District Engineer prior to beginning any work on the Right of Way. The required bond may be executed in any of the following methods.
 - Cash bond in the form of a certified check payable to the North Carolina Department of Transportation.

- Performance and indemnity bond underwritten by a surety company legally authorized to do business in North Carolina.
 - Continuing bond for the performance of work within the NCDOT Right of Ways.
 - Cashiers check or bank letter of credit (2 copies with original signature) in the amount of the bond.
 - The Bond shall be submitted to the District Engineer, North Carolina Department of Transportation, P.O. Box 1164 Asheboro N.C. 27204. Please identify the Encroachment Agreement by including File # 19-3272 on the Bond.
9. Bonds shall remain in effect for a period of one (1) year following completion of the job. The encroaching party shall notify the District Engineer in writing when all work within the Right of Way has been completed. Upon receipt of written notification, the District Engineer will inspect the project and provide certification that the project has been completed. When the project has been satisfactorily completed for one year the bonding company shall submit a written request along with a copy of the encroachment authorization to the District Engineer for release of the Bond. The Bond will be released upon satisfactory final inspection, review, and approval by the District Engineer.
 10. In the event this encroachment is constructed under multiple contracts and the bond requirement is delegated to the contractor or contractors, separate bonds may be posted. The amount of the bond secured by each contractor shall be proportional to the length and size of the contract. The bond will be held for a period of one (1) year following completion of the contract.
 11. No work shall commence until all Bond requirements have been satisfied.
 12. Storage of materials or equipment within the Right of Way is prohibited. 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.
 13. Construction equipment or vehicles shall not be parked on the pavement or roadway shoulder.
 14. Construction is authorized to be performed on Monday through Friday during the hours between sunrise and sunset.
 15. The encroaching party may delegate the performance of certain provisions of this agreement to contractors or other parties. However, this shall not in any way release the encroaching party from its obligations to the terms and provisions of the encroachment.
 16. Written notification shall be provided to the District Engineer upon completion of the work proposed under this agreement. Materials test frequencies and methods shall be in conformance with the NCDOT Materials and Tests guidelines, or as directed by NCDOT. A letter of approval, or recommendations for compliance, will be provided upon receipt and review of test reports.
 17. The encroaching party or the contractor(s) for the encroaching party may request a written letter stating that the encroachment has been satisfactorily completed by making a request in writing to the appropriate County Maintenance Engineer. The letter of completion does not relieve the encroaching party from any obligations or responsibilities under the terms and provisions of the encroachment or from obligations or responsibilities for making repairs needed for a reasonable time period.
 18. The traveling public shall be warned of construction with complete and proper signing and traffic control devices in accordance with the current Manual on Uniform Traffic Control Devices (MUTCD). No work shall be performed in the Right of Way unless this requirement is satisfied. NCDOT reserves the right to require a written traffic control plan for encroachment operations. Traffic control devices and operations shall include, but are not limited to the following:
 - Adequate and appropriate advance warning signs for any and all work zones, closed or obstructed areas.
 - "End Construction" signage beyond the end of all work zones.

- Adequate and appropriate delineation and control devices for all work zone areas including but not limited to lane closures, disturbed areas, and active work sites.
 - Properly trained and equipped flagmen.
 - Proper maintenance of all traffic control devices, including but not limited to proper signage and controls during periods of inactivity and removal of inappropriate traffic control signage and/or devices.
19. Traffic shall not be detoured or rerouted without the prior written approval of the Division Engineer. Two way traffic shall be maintained at all times.
 20. In the event work is completed in less time than permitted, the normal traffic pattern shall be restored as soon as the work has been completed.
 21. The Traffic Services Supervisor shall be notified at (910) 947-3930 in Carthage, NC, prior to beginning work on the Right of Way if there are existing NCDOT signs, traffic signals, or signal equipment in or near the proposed work zone. Costs to relocate, replace, or repair NCDOT signs, signals, or associated equipment shall be the responsibility of the Encroacher.
 22. All temporary and final pavement markings, reflective pavement markers, traffic control devices, and signage are the responsibility of the encroaching party and shall be installed in accordance with current NCDOT standards. **Final pavement marking plans shall be submitted to and approved by the Division Traffic Engineer at (910)944-2344, at 902 Sandhills Boulevard, Aberdeen, NC 28315.** Plans should be submitted as soon as possible to allow adequate time for review. **Pavement markings shall be pre-marked and the Division Traffic Services Supervisor shall be notified at (910) 947-3930 for inspection of pre-marking before permanent pavement markings are placed.** The encroaching party shall provide at least two working days notification for the inspection. Pavement markings and reflective pavement markers which are damaged, obscured, or obliterated during construction shall be replaced in conformance with current NCDOT standards. Thermoplastic pavement markings shall be installed at locations where the adjacent pavement are thermoplastic or as directed by the Division Traffic Engineer.
 23. All pavement markings shall be thermoplastic and shall conform to the requirements of the **NCDOT Standard Specifications for Roads and Structures 2002.**
 24. Curb cuts and ramps for handicapped persons shall be constructed in accordance with the current NCDOT "Standard for Wheelchair Ramp Curb Cuts" and the Americans With Disabilities (ADA) Accessibility Guidelines for Buildings and Facilities.
 25. Ingress and egress shall be maintained to businesses and dwellings. Driveways altered during construction shall be restored to a condition equal to that prior to beginning construction.
 26. Excavated material shall not be placed on the paved roadway surface at any time unless specifically approved by the District Engineer. Drainage structures shall not be blocked with excavated material at any time.
 27. Trenches/excavations/bore pits shall not remain open longer than a 24 hour period. No trench/excavation/bore pit shall be left open overnight except in the event of emergency, in which case the encroacher shall notify the District Engineer and inform him as to the nature and anticipated duration of the emergency. Any excavation left open overnight due to emergency shall be protected and delineated with complete, adequate and appropriate safety and traffic control devices.
 28. All backfill shall meet the Statewide Borrow Criteria and shall be placed in accordance with section 300-6 of **NCDOT Standard Specifications for Roads and Structures 2002.** Backfill material shall be free from rocks and debris placed in six inch loose layers and compacted to at least 95% of standard density as determined by AASHTO Method T-99 as modified by NCDOT, except that backfill material placed within eight (8) inches of the pavement subgrade shall be compacted to 100% of standard density. (Copies of these testing procedures are available on request from the NCDOT Materials and Tests Unit.) Each layer must be fully compacted by an approved mechanical tamp before the next layer is placed.

29. Excavated areas adjacent to pavement having more than a 2 inch drop shall be back filled and made safe with a 6:1 or flatter slope and shall be designated by appropriate delineation during periods of construction inactivity including, but not limited to, night and weekend hours.
30. Drainage structures and systems shall be preserved and protected. Any structure that is disturbed or damaged during construction shall be immediately restored to its original condition at no expense to the Department of Transportation. All utility installations shall be designed and constructed so as not to hinder, disrupt or interfere with the existing storm drainage. All facilities shall pass over or under highway drainage facilities.
31. The encroaching party shall contact the District Engineer for inspection of forms or grade line prior to placing concrete for curb and gutter. A minimum of 24 hours notice is required for inspections.
32. A ¼ inch per foot pavement slope based on the existing centerline in tangent sections is required. In addition, a smooth transition must be maintained along areas of super elevation. The proposed widening may necessitate wedging or resurfacing one half of the existing roadway to accomplish this requirement. Widened areas less than 6 feet in width shall utilize a full depth asphalt pavement design. The minimum pavement design shall be:
- 3 inches Asphalt Surface Course – S9.5B
 - 4 inches Asphalt Intermediate Course – I-19.0B
 - 5 inches Asphalt Base Course- -B25.0B
33. All disturbed soil areas shall be promptly seeded and mulched. The encroaching party shall obtain the County Maintenance Engineer's approval of ditch and shoulder grading prior to seeding and mulching.
34. All earth areas shall be re-graded, seeded and mulched in accordance with Section 1660 of the **NCDOT Standard Specifications for Roads and Structures 2002**. Final determination of soil type shall be made by the Engineer. The following rates in pounds per acre apply:
- *YEAR ROUND MIXTURE (Sandy Soils)*
 - KY 31 Tall Fescue or Alta Tall Fescue – 50 pounds
 - Pensacola Bahiagrass – 50 pounds
 - Centipede – 5 pounds
 - Fertilizer (10-20-20 analysis) – 500 pounds
 - Limestone – 4000 pounds
 - *YEAR ROUND MIXTURE (Clay Soils)*
 - KY 31 Tall Fescue or Alta Tall Fescue – 100 pounds
 - Kenblue Bluegrass – 15 pounds
 - Fertilizer (10-20-20 analysis) – 500 pounds
 - Limestone – 4000 pounds
 - Add 10 pounds of Kobe or Korean Lespedeza and 10 pounds of Millet to the above mixture from May 1 to August 31.
 - On cut and fill slopes 2:1 or steeper, add 30# Sericea Lespedeza from January 1 to December 31.
 - Fertilizer shall be 10-20-20 analysis. Upon written approval of the Engineer, a different analysis may be used provided the 1-2-2 ratio is maintained and the rate of application is adjusted to provide the same amount of plant food as a 10-20-20 analysis.
35. Notify the County Maintenance Engineer's office at (919) 742-3431, 1404 E Raleigh St. Siler City, N.C. 27344, prior to beginning work. The encroaching party shall provide the County Maintenance Engineer with the following information at least 3 working days prior to commencing operations:
- Proposed schedule of operations
 - The name(s) and phone number(s) of project contact person(s). (See Special Provision 17)

DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY ENCROACHMENT AGREEMENT FOR
CURB AND GUTTER, PAVEMENT WIDENING AND
STORM DRAINAGE

-AND-

JAMES E. DIXON

THIS AGREEMENT, made and entered into this the 24th day of JUNE, 20 06, by and between the Department of Transportation, party of the first part; and JAMES E. DIXON party of the second part,

WITNESSETH

THAT WHEREAS, the party of the second part desires to encroach on the right of way of the public road designated Route(s) 1532, located 2.35 MILES WEST OF THE INTERSECTION OF ROUTE 15-501 AND ROUTE No. 1532

with the construction and/or erection of: WEST BOUND LEFT TURN LANE (100' STACKING) AND ASSOCIATED SYMMETRICAL WIDENING, (2) CONCRETE DROP INLETS, (1) CONCRETE JUNCTION BOX, APPROX. 50' OF CONCRETE DITCH AND 92 LF OF 18" RCP

WHEREAS, it is to the material advantage of the party of the second part to effect this encroachment, and the party of the first part in the exercise of authority conferred upon it by statute, is willing to permit the encroachment within the limits of the right of way as indicated, subject to the conditions of this agreement;

NOW, THEREFORE, IT IS AGREED that the party of the first part hereby grants to the party of the second part the right and privilege to make this encroachment as shown on attached plan sheet(s), specifications and special provisions which are made a part hereof upon the following conditions, to wit:

That the said party of the second part binds and obligates himself to install the encroaching facility in such safe and proper condition that it will not interfere with or endanger travel upon said highway.

That the party of the second part agrees to provide during construction proper signs, signal lights, flagmen and other warning devices for the protection of traffic in conformance with the latest Manual on Uniform Traffic Control Devices for Streets and Highways and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the Division Engineer of the party of the first part.

That the party of the second part hereby agrees to indemnify and save harmless the party of the first part from all damages and claims for damage that may arise by reason of the installation and maintenance of this encroachment.

It is clearly understood by the party of the second part that the party of the first part will assume no responsibility for any damage that may be caused to such facilities, within the highway rights of way limits, in carrying out its construction.

That the party of the second part agrees to restore all areas disturbed during construction to the satisfaction of the Division Engineer of the party of the first part. The party of the second part agrees to exercise every reasonable precaution during construction and maintenance to prevent eroding of soil; silting or pollution of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces or other property; or pollution of the air. There shall be compliance with applicable rules and regulations of the North Carolina Division of Environmental Management, North Carolina Sedimentation Control Commission, and with ordinances and regulations of various counties, municipalities and other official agencies relating to pollution prevention and control. When any construction operation disturbs the ground surface and existing ground cover, the party of the second part agrees to remove and replace the sod or otherwise reestablish the grass cover to meet the satisfaction of the Division Engineer of the party of the first part.

That the party of the second part agrees to assume the actual cost of any inspection of the work considered to be necessary by the Division Engineer of the party of the first part.

That the party of the second part agrees to have available at the encroaching site, at all times during construction, a copy of this agreement showing evidence of approval by the party of the first part. The party of the first part reserves the right to stop all work unless evidence of approval can be shown.

Provided the work contained in this agreement is being performed on a completed highway open to traffic; the party of the second part agrees to give written notice to the Division Engineer of the party of the first part when all work contained herein has been completed. Unless specifically requested by the party of the first part, written notice of completion of work on highway projects under construction will not be required.

That in the case of noncompliance with the terms of this agreement by the party of the second part, the party of the first part reserves the right to stop all work until the facility has been brought into compliance or removed from the right of way at no cost to the party of the first part.

That it is agreed by both parties that this agreement shall become void if actual construction of the work contemplated herein is not begun within one (1) year from the date of authorization by the party of the first part unless written waiver is secured by the party of the second part from the party of the first part.

RW (161B) : Party of the Second Part certifies that this agreement is true and accurate copy of the form RW (161B) incorporating all revisions to date.

IN WITNESS WHEREOF, each of the parties to this agreement has caused the same to be executed the day and year first above written.

DEPARTMENT OF TRANSPORTATION

BY: *[Signature]*

DIVISION ENGINEER

ATTEST OR WITNESS:

[Signature]
IREY FULCHER, BALLETINE ASSOCIATES, PA

[Signature]

JAMES E. DIXON, OWNER

Second Party 94 CHATHAM DRIVE
CHAPEL HILL, NC 27514

INSTRUCTIONS

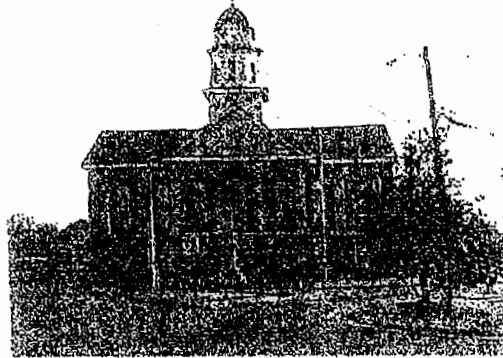
When the applicant is a corporation or a municipality, this agreement must have the corporate seal and be attested by the corporation secretary or by the empowered city official, unless a waiver of corporate seal and attestation by the secretary or by the empowered City official is on file in the Raleigh office of the Manager of Right of Way. In the space provided in this agreement for execution, the name of the corporation or municipality shall be typed above the name, and title of all persons signing the agreement should be typed directly below their signature.

When the applicant is not a corporation, then his signature must be witnessed by one person. The address should be included in this agreement and the names of all persons signing the agreement should be typed directly below their signature.

This agreement must be accompanied, in the form of an attachment, by plans or drawings showing the following applicable information:

1. All roadways and ramps.
2. Right of way lines and where applicable, the control of access lines.
3. Location of the proposed encroachment.
4. Length and type of encroachment.
5. Location by highway survey station number. If station number cannot be obtained, location should be shown by distance from some identifiable point, such as a bridge, road, intersection, etc. (To assist in preparation of the encroachment plan, the Department's roadway plans may be seen at the various Highway Division Offices, or at the Raleigh office.)
6. Drainage structures or bridges if affected by encroachment.
7. Typical section indicating the pavement design and width, and the slopes, widths and details for either a curb and gutter or a shoulder and ditch section, whichever is applicable.
8. Horizontal alignment indicating general curve data, where applicable.
9. Vertical alignment indicated by percent grade, P.I. station and vertical curve length, where applicable.
10. Amount of material to be removed and/or placed on NCDOT right of way, if applicable.
11. Cross-sections of all grading operations, indicating slope ratio and reference by station where applicable.
12. All pertinent drainage structures proposed. Include all hydraulic data, pipe sizes, structure details and other related information.
13. Erosion and sediment control.
14. Any special provisions or specifications as to the performance of the work or the method of construction that may be required by the Department must be shown on a separate sheet attached to encroachment agreement provided that such information cannot be shown on plans or drawings.
15. The Department's Division Engineer should be given notice by the applicant prior to actual starting of installation included in this agreement.
16. Method of handling traffic during construction where applicable.
17. Scale of plans, north arrow, etc.

CHATHAM COUNTY EMERGENCY OPERATIONS



P.O. BOX 613
297 WEST STREET
PITTSBORO, N.C. 27312
PHONE: 919-542-2911
EMERGENCY OPERATIONS FAX: 919-542-2498
COMMUNICATIONS FAX: 919-542-4830

FAX TRANSMITTAL COVER SHEET

DATE: 2 / 6 / 07

PAGES TO FOLLOW 1

SUBJECT: Road Name Approval - Fieldstone

SENT TO: Trey Fletcher

FAX NUMBER: 919-489-2803

FROM: Denise Suits

COMMENTS: _____

- EMERGENCY MGT • EMS • 911 COMMUNICATIONS • ROAD NAMING/SIGNAGE
- 911 ADDRESSING

SUBDIVISION: FIELDSTONE (Formerly JAMES DIXON PROPERTY)

DIRECTIONS: SE CORNER OF MANN'S CHAPEL ROAD & PERSIMMON HILL ROAD LOCATED 2.35 MILES WEST OF MANN'S CHAPEL ROAD / I-501 INTERSECTION

DEVELOPER: JAMES E. DIXON PHONE NUMBER: _____

Major Development: Minor Development: _____
Development with acreage of 10 acreage of 10 acres or more: _____

Proposed road names	OK to submit	DUPLICATED Do not Submit
<u>FIELDSTONE LANE</u>	<input checked="" type="checkbox"/>	_____
<u>LINDA LEE CIRCLE</u>	<input checked="" type="checkbox"/>	_____
<u>CLARENCE LANE</u>	<input checked="" type="checkbox"/>	_____
<u>RUNA COURT</u>	<input checked="" type="checkbox"/>	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

DATE SUBMITTED TO EOC: 05 FEB 2007
 SUBMITTED BY: TREY FULCHER (BALLENTINE ASSEC.)
 EOC OFFICER: Denix Sults
 DATE ROADS APPROVED: 2-5-2007
 DATE FINAL PLAT RECEIVED: _____
 DATE GIVEN TO 911: _____
 DATE CONTACT MADE WITH NUMBERS: _____
 SURROUNDING COUNTY CONTACTED: _____
 PERSON SPOKEN WITH: _____
 COMMENTS: _____

revised 4/19/02



Providence Road
Eastowne Office Park
Chapel Hill, NC 27514
(919) 929-0481 Chapel Hill
(919) 489-4789 Durham
(919) 489-2803 Fax



102002.00401.1A 'M'

Ballentine
Associates, P.A.

Fax Memorandum

To: EDC ATTN: DENISE SUITS

From: TREY FULCHER

Fax: (919) 542-2498

Pages: 2 (including cover sheet)

Phone:

Date: 05 FEB 07

Re: ROAD NAME REQUEST FORM
FIELDSTONE

CC:

Urgent For Review For Approval Please Comment As Requested

Ms. SUITS,

PER OUR PHONE CONVERSATION, PLEASE FIND THE ATTACHED ROAD NAME REQUEST FORM WITH THE (4) ROAD NAMES WE WOULD LIKE TO USE. PLEASE CALL ME IF YOU HAVE ANY QUESTIONS -

THANK YOU,

TREY

SUBDIVISION: FIELDSTONE (Formerly JAMES DIXON PROPERTY)

DIRECTIONS: SE CORNER OF MANN'S CHAPEL ROAD & PERSIMMON HILL ROAD LOCATED 2.35 MILES WEST OF MANN'S CHAPEL ROAD / 15.501 INTERSECTION

DEVELOPER: JAMES E. DIXON PHONE NUMBER: _____

Major Development: ✓ Minor Development: _____
Development with acreage of 10 acreage of 10 acres or more: _____

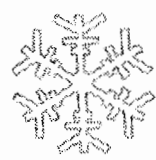
Proposed road names	OK to submit	DUPLICATED Do not Submit
<u>FIELDSTONE LANE</u>	_____	_____
<u>LINDA LEE CIRCLE</u>	_____	_____
<u>CLARENCE LANE</u>	_____	_____
<u>RUNA COURT</u>	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

DATE SUBMITTED TO EOC: 05 FEB 2007
SUBMITTED BY: TREY FULCHER (BALLETINE ASSOC.)
EOC OFFICER: _____
DATE ROADS APPROVED: _____
DATE FINAL PLAT RECEIVED: _____
DATE GIVEN TO 911: _____
DATE CONTACT MADE WITH NUMBERS: _____
SURROUNDING COUNTY CONTACTED: _____
PERSON SPOKEN WITH: _____
COMMENTS: _____

revised 4/19/02



GJR ✓



**BALLENTINE
ASSOCIATES, P.A.**

16 April 2007

Attn. Dr. Ann Hart
Chatham County Schools
P.O. Box 128
Pittsboro, NC 27312

221 Providence Road
Eastowne Office Park
Chapel Hill, NC 27514

919/929-0481 Chapel Hill
919/489-4789 Durham
919/489-2803 Fax

Re: James Dixon Property
102002.00 "L"

Dear Dr. Hart,

Attached is a Sketch Plat Plan for your review. This plan has been submitted to the Chatham County Planning Department for review for the June 5, 2007 County Commissioners Board Meeting. The attached has four (4) new roadways that have already been approved through the Sheriff's Department Emergency Services. Please review the attached Sketch Plat Plan and contact me should you have any questions or comments.

Thank you for your time.

Sincerely,

Brice A. Nelson, E.I.
BALLENTINE ASSOCIATES, P.A.



Terry L. Pierce, Director

Michael F. Easley, Governor

Public Water Supply Section

Department of Environment
and Natural Resources

William G. Ross, Secretary

Jessica G. Miles, Section Chief

May 8, 2007

Mr. Charles Horne, County Manager
Chatham County Water System
Post Office Box 910
Pittsboro, North Carolina 27312

Re: Engineering Plans and Specifications Approval
Water Main Extension
Chatham County Water System to serve
Fieldstone Subdivision
Chatham County
I.D. # 03-19-126

This is not an Authorization to Construct

Dear Mr. Horne:

Enclosed please find one copy of the "Application for Approval..." together with one copy of the referenced engineering plans and specifications bearing the Division of Environmental Health stamp of approval for the referenced project. These engineering plans and specifications are approved under Division of Environmental Health serial number 07-00533, dated May 8, 2007.

Engineering plans and specifications prepared by George J. Retschle, P.E., call for the installation of approximately 3,050 feet of 8-inch and 403 feet of 2-inch water mains, valves, hydrants and other related appurtenances along Fieldstone Lane, Linda Lee Circle, Clarence Lane and Runa Court to serve Fieldstone Subdivision with 27 lots located off Mann's Chapel Road.

Please note that an "Authorization to Construct" requires both this approval of Engineering Plans and Specifications and submittal of a complete Water System Management Plan. No construction shall be undertaken, and no contract for construction, alteration, or installation shall be entered into until the Department issues an Authorization to Construct letter in accordance with 15A NCAC 18C .0305(a).

These plans and specifications cited in the foregoing application are approved insofar as the protection of public health is concerned as provided in the rules, standards and criteria adopted under the authority of Chapter 130A-317 of the General Statutes. This approval does not constitute a warranty of the design, construction or future operation of the water system.

One copy of each enclosed document is being forwarded to our Raleigh Regional Office. The third copy is being retained in our permanent files.

If we can be of further service, please call on us at (919) 733-2321.

Sincerely,

Tony C. Chen, P.E.
Lead Engineer, Plan Review
Technical Services Branch

TCC/HSO/db

Enclosures: Approval Documents
cc: Michael L. Douglas, Regional Engineer
Chatham County Health Department
Ballentine Associates, P.A.

1634 Mail Service Center, Raleigh, North Carolina 27699-1634
Telephone 919-733-2321 ▲ Fax 919-715-4374 ▲ Lab Form Fax 919-715-6637
<http://ncdrinkingwater.state.nc.us/>

An Equal Opportunity / Affirmative Action Employer

One
North Carolina
Naturally



Terry L. Pierce, Director

State of North Carolina
Michael F. Easley, Governor**Public Water Supply Section**

Jessica G. Miles, Section Chief

Department of Environment and
Natural Resources
William G. Ross, Secretary

May 9, 2007

CHARLIE HORNE
P O BOX 910
CHATHAM COUNTY, NC 27312Re: **Authorization to Construct**
FIELDSTONE
CHATHAM CO WATER SYSTEM
CHATHAM COUNTY NC0319126

Dear Applicant:

This letter is to confirm that a complete Engineer's Report and a Water System Management Plan have been received, and that engineering plans and specifications have been approved by the Department for **FIELDSTONE**, **DEH Serial No. 07-00533**.

The Authorization to Construct is valid for 24 months from the date of this letter. Authorization to Construct may be extended if the Rules Governing Public Water Supplies and site conditions have not changed. The Authorization to Construct and the engineering plans and specifications approval letter, shall be posted at the primary entrance of the job site before and during construction.

Approval must be secured from the Department before any construction or installation if:

- Deviation from the approved engineering plans and specifications is necessary; or
- There are changes in site conditions affecting capacity, hydraulic conditions, operating units, the function of water treatment processes, the quality of water to be delivered, or conditions imposed by the Department in any approval letters.

Upon completion of the construction or modification and in accordance with Rule .0303, the applicant shall submit a certification statement directly to HENRI OU of this office. This statement must be signed and sealed by a registered professional engineer stating that construction was completed in accordance with approved engineering plans and specifications, including any provisions stipulated in the Department's engineering plan and specification approval letter. Prior to Final Approval, the applicant shall submit a signed certification stating that the requirements in 15A NCAC 18C .0307 (d) and (e) have been satisfied and if applicable, a completed application for an Operating Permit and fee. Once the certification statements and operating permit application and fee, if applicable, are received and determined adequate, the Department will grant Final Approval in accordance with Rule .0309 (a). Therefore, no construction, alteration, or expansion of a water system shall be placed into service until Final Approval has been issued by the Department.

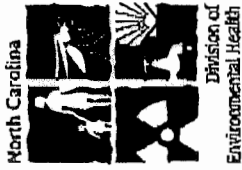
If we can be of further assistance, please call (919) 733-2321.

Sincerely,

Tony C. Chen, P.E.
Technical Services Branch
Public Water Supply Section

TCC:HSO

cc: MICHAEL L. DOUGLAS, P.E., REGIONAL ENGINEER
BALLENTINE ASSOCIATES PA



State of North Carolina
Department of Environment and Natural Resources
Division of Environmental Health



Public Water System Authorization to Construct

CHATHAM CO WATER SYSTEM
 NC0319126

**Public Water System Name
and PWSID No. (if available):**

FIELDSTONE

Project Name:

07-00533

Serial No.

5/8/2007

Issue Date:

24 months after Issue Date

Expiration Date:

in accordance with NCAC 18C 0305, this Authorization to Construct must be posted for inspection
 at the primary entrance to the job site during construction.

CHATHAM COUNTY WATER UTILITY

UTILITIES

- Maintenance and Construction
- Water Treatment Plant
- Wastewater Treatment Plant
- Customer Service



PHONE
(919) 542-8270

FAX
(919) 542-8282

POST OFFICE BOX 910
PITTSBORO, N. C. 27312-0910

ORGANIZED 1770

707 SQUARE MILES

March 9, 2007

Ballentine Associates, P.A.
221 Providence Road
Chapel Hill, NC 27514

Re: Reviewed Plans for Fieldstone Subdivision

The plans for Fieldstone Subdivision have been reviewed by Chatham County. If there are any changes to the plans, please revise and resubmit. Also, we will need the original mark-ups (redlines) back as well.

If I can be of further assistance, please contact me at 919-542-8270.

Sincerely,

COUNTY OF CHATHAM

A handwritten signature in black ink, appearing to read 'Michelle Ballard'.

Michelle Ballard
Customer Service Supervisor



This paper is made from recycled waste.

**North Carolina Department of Environment
And Natural Resources
Division of Environmental Health
Public Water Supply Section**

**Application for Approval
of Engineering Plans and Specifications
For Water Supply Systems**

Instructions & Checklist: To apply for approval for plans and specifications, submit the following materials & information:

Project Name: Fieldstone

(This is the name to appear on Public Water Supply records and tracking system)

Attached are three copies of each of the following items:

- This completed "Application for Approval...;"
- The plan drawings;
- The Engineering Report (ER) addressing each of the items listed in 15A NCAC 18C .0307(b), including the design basis of the project.[15A NCAC 18C .0307(b)(12)]

One of the following:

- The project will use the following system's previously approved standard specifications:

Name of System: Chatham County ;

OR

- Attached are three copies of the specifications.

One of the following:

- The applicant is the Public Water System;

OR

- Attached is a letter from the Owner of the Public Water System agreeing to serve the project and stating that the system has adequate supply.

Note the following:

- Beginning January 1, 2007, attached is a check for the proper plan review fee amount, in accordance with NCGS 130A-328. See note 4 on page 4.

Date _____
(for DENR use only)

Serial No. _____
(for DENR use only)

To: Division of Environmental Health,
Department of Environment and Natural Resources

The Chatham County Department of Utilities
(name of board, or council, authorized official and title, or owner)

of Chatham County Department of Utilities
(name of city, town, corporation, sanitary district, water company or other)

in the County of Chatham, State of North Carolina authorized by law to act for the said

Fieldstone
(name of city, town, corporation, sanitary district, water company or other)

and to expend its funds for the water project described below, herewith submit for the counsel and advice of the Division of

Environmental Health plans and specifications prepared by Ballentine Associates, P.A.
(engineer or firm)

(919) 929-0481
(Phone Number of Engineer – optional for faster contact)

georger@bapa.eng.pro
(Email Address of Engineer – optional for faster contact)

of 221 Providence Rd. Chapel Hill, NC 27514 for the installation or construction of
(address of engineer)

3,050.5 LF of 8" DIP water main and 403.4 LF of 2" PVC water main
serving 27 single family lots
(description of project)

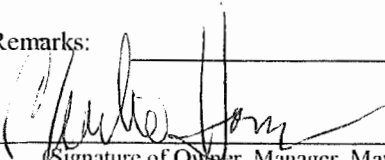
Located 2.35 miles west of the intersection of Rt. 15-501 and SR 1532 @ SE
corner of SR 1532 (Mann's Chapel Road) and Persimmon Hill Road
(location of project)

in Chatham County, and make application to the Division of Environmental Health for
the approval of said plans and specifications as related to public health and protection of public water supplies and public
water systems.

These plans have been approved and accepted by the applicant.

This application is made under and in full accord with the provision of NCGS 130A-317, and such other statutes as related to
public water systems. The applicant agrees that no change or deviation from the engineering plans and specifications
approved by the Division of Environmental Health will be made except as allowed by 15A NCAC 18C .0306 or with the
written consent and approval of the Division of Environmental Health or its authorized representative. The applicant agrees
that a professional engineer licensed to practice in the State of North Carolina shall submit a statement reflecting that
adequate observations during and upon completion of construction, by the engineer or by a representative of the engineer's
office who is under the engineer's supervision, indicates that construction was completed in accordance with approved plans
and specifications.

Remarks:


(Signature of Owner, Manager, Mayor or Chairman)

Charlie Horne
(Type Name Signed Above)

P.O. Box 910
(Street or Box Number)

Chatham County 27312
(City, State, Zip Code)

(Phone Number – optional for faster contact)

(Email Address – optional for faster contact)

Status of Water System Management Plan (WSMP)

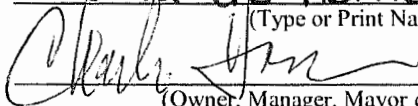
Check one of the following, and if applicable, provide the required information:

- The WSMP for the project, as defined in the attached engineering plans and specifications, is submitted with this application.
- The WSMP that includes this project, as defined in the attached engineering plans and specifications, was previously submitted.

Provide the following:

Water System Name: N. Chatham Co. Water System
 Owner Name: Chatham County
 PWS I.D. No.: 03-19-126
 WSMP No.: 99-02125
 WSMP Submittal Date: 11/23/99
 County: Chatham

By my signature below, I certify that the previously submitted WSMP contains the information required by 15A NCAC 18C .0307(c) for the project defined in the attached engineering plans and specifications.

NAME: Charlie Horne
(Type or Print Name)
 SIGNATURE:  DATE: 3/26/07
(Owner, Manager, Mayor or Chairman)

- The WSMP for the project, as defined in the attached engineering plans and specifications, has not been submitted.

Note: When the WSMP is submitted, the applicant must clearly identify the previously submitted project engineering plans and specifications for which the WSMP was prepared.

Status of Engineer's Report

Check one of the following, and if applicable, provide the required information.

- The Engineer's Report for the project, as defined in the attached engineering plans and specifications, is submitted with this application.
- The Engineer's Report that includes this project, as defined in the attached engineering plans and specifications, was previously submitted.

Provide the following:

Water System Name: N. Chatham Co. Water System
 Owner Name: Chatham County
 PWS I.D. No.: 03-19-126
 Engineer's Report No.: N/A
 Engineer's Report Title: Water System Ext. for Fieldstone
 Engineer's Report Submittal Date: 03/15/07
 County: Chatham

Note: If the previously submitted Engineer's Report covered multiple projects, then attach to this Application, a letter from the engineer stating that the previously submitted Engineer's Report contains the information required by 15A NCAC 18C .0307(b) for the project defined in the attached engineering plans and specifications.

In accordance with NCGS 130A-328, there will be a fee charged for plan review by the NC DENR Public Water Supply Section. **Any documents submitted for review on or after January 1, 2007 must be accompanied by a check payable to DENR-Public Water Supply Section before the review will begin.**

** There is a \$25 fee for returned checks **

The charges for review of plans are shown below. Check one of the following.

Distribution System fees

- | | | |
|-------------------------------------|---|-------|
| <input checked="" type="checkbox"/> | Construction of water lines, less than 5000 linear feet | \$150 |
| <input type="checkbox"/> | Construction of water lines, 5000 linear feet or more | \$200 |
| <input type="checkbox"/> | Other construction or alteration to a distribution system | \$ 75 |

Ground Water System fees

- | | | |
|--------------------------|--|-------|
| <input type="checkbox"/> | Construction of a new ground water system or adding a new well | \$200 |
| <input type="checkbox"/> | Alteration to an existing ground water system | \$100 |

Surface water system fees

- | | | |
|--------------------------|---|-------|
| <input type="checkbox"/> | Construction of a new surface water treatment facility | \$250 |
| <input type="checkbox"/> | Alteration to existing surface water treatment facility | \$150 |

Other fees

- | | | |
|--------------------------|--|-------|
| <input type="checkbox"/> | Water System Management Plan review | \$ 75 |
| <input type="checkbox"/> | Miscellaneous changes or maintenance not covered above | \$ 50 |

Notes:

1. The fee is not refundable if the plans are not approved
2. Revisions to plans to address PWS or other state agency's comments do not incur an additional fee.
3. If one set of plans has multiple related parts, such as a new well with construction of water lines, only one fee must be submitted for highest price item (the amounts are not cumulative).
4. **Ten days after the receipt of plans and specifications for approval, if the appropriate plan review fee is not received, then all plan documents will be recycled. A new set of documents must then be submitted with the appropriate fee for approval.**

These plans and specifications cited in the foregoing application, including any provisos in the approval letter, are approved insofar as the protection of public health is concerned as provided in the rules, standards and criteria adopted under the authority of NCGS 130A-315 and 130A-317. This approval does not address all applicable laws, rules, standards and criteria, and other approvals and licenses that may be required by the local, state or federal government.

This approval is given with the understanding that upon installation of such works, its operation shall be placed under the care of a competent person, and the operation shall be carried out according to best accepted practice and in accordance with the recommendations of the Division of Environmental Health.

The official copies of plans and specifications accompanying this application have been sealed and stamped with the serial number of this application _____. Any erasures, additions or alterations of the proposed improvements except those permitted in 15A NCAC 18C .0306 will make this approval null and void.

This approval does not constitute a warranty of the design, construction or future operation of the water system.

Signed: _____

Public Water Supply Section
Division of Environmental Health