

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR JAMES H. TROGDON, III
SECRETARY

July 10, 2018 **Chatham County** 

Subject: Subdivision Final Plan Review – US Steel Phase 2 – Briar Chapel Subdivision off of Briar Chapel Parkway near SR 1528

Newland Communities, LLC c/o Bill Mumford 13777 Ballantyne Corporate Pl, Ste. 550 Charlotte, North Carolina 28277

Dear Mr. Mumford:

The N. C. Department of Transportation, Division of Highways has reviewed the construction plans signed and sealed by Gareth Avant P.E. on May 7, 2018 as submitted to this office and approval is granted subject to the following stipulations and recommendations:

- 1. All Construction is to be in accordance with the details as shown on the plans, as well as conform to the most recent edition of the *Standard Specifications for Roads and Structures*.
- 2. A Driveway Permit is not needed for this package.
- 3. The entire proposed right of way is to be cleared and grubbed throughout the whole phase of the project. Please be aware that the areas within the sight distance quadrants are to be treated as right of way.
- 4. All soil areas within the proposed right of way and any other soil areas disturbed during construction shall be seeded and mulched immediately upon completion of roadway construction. The seeding shall be done as outlined in the seeding specification attachment.
- 5. The crossline drainage is approved as proposed on the construction plans. If, however field conditions dictate any changes, these shall be made upon approval by NCDOT. If any of the property owners desire to pipe their ditches within the proposed NCDOT right of way, please advise them that this work should conform to NCDOT specifications for this type of work (see attached). If any ditches are piped and not satisfactorily completed to NCDOT specifications,

Mailing Address: NC DEPARTMENT OF TRANSPORTATION DIVISION 8 DISTRICT 1 P.O. BOX 1164 ASHEBORO, NC 27205 Telephone: (336) 318-4000 Fax: (336) 318-4010 Location: 300 DOT DRIVE ASHEBORO, NC 27205

Website: www.ncdot.gov

US Steel Phase 2 of the Briar Chapel Subdivision Final Plan Approval Plans signed and sealed by Gareth Avant P.E. May 7, 2018 Page 2 of 13

this could result in the road not being accepted for addition to the state maintained system of roads. Any ditches piped or other encroachment prior to addition to the state maintained system are subject to an encroachment agreement, as are utility companies, when the road is added.

- 6. The typicals as shown in the plans, are approved.
- 7. The Division of Highways will only allow mailboxes, with non-rigid type post, such as 4" x 4" wooden or small diameter metal type on new additions. Brick columns or mailboxes on rigid stands such as block, stone or any other type deemed to be a traffic hazard will not be allowed within the right of way. This policy applies to all roads being considered for addition to the State Maintained System.
- 8. An erosion control plan shall require approval from Chatham County. The developer should forward this plan to Mr. Rachel Thorn, Erosion and Sediment Control Officer, 80 East, P.O. Box 130, Pittsboro, N.C. 27312, phone (919) 545-8343 for his review and approval.
- 9. As this subdivision is proposed to be public and is likely to be requested to be added to the state maintained system of roads, the developer will be responsible for providing a PE Certification, (See Attached) and testing results for base and asphalt density stating that the streets have been built in accordance with the most current "Subdivision Roads: Minimum Construction Standards" manual and with the attached approved plans. Please be advised that this PE Certification does not approve the road for addition to the State Highway System for maintenance. When the proper home density is achieved and roads have been satisfactorily maintained, the developer or property owners must submit Form SR-1, Petition for Road Addition (copy attached to this correspondence), and four (4) copies of the recorded plat to request that the road or roads be added to the State Highway system. Any maintenance problems found when the road is requested to be added must be repaired by the developer prior to the road becoming state maintained. As stated in GS 136-102.6, final acceptance by the Division of Highways of the public streets and placing them on the State highway system for maintenance shall be conclusive proof that the streets have been constructed according to the minimum standards of the Board of Transportation.
- 10. The developer shall comply with all applicable local, state, and federal environmental regulations, and shall obtain all necessary local, state, and federal environmental permits, including, but not limited to, those related to sediment control, stormwater, wetlands, streams, endangered species, and historical sites.
- 11. A properly completed Verification of Compliance with the Department of Environment and Natural Resources (DENR)(page 35, attached) must be submitted prior to the road(s) being considered for addition to the NCDOT System.

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US Steel Phase 2 of the Briar Chapel Subdivision Final Plan Approval Plans signed and sealed by Gareth Avant P.E. May 7, 2018 Page 3 of 13

- 12. In preparing the final plat for certification by this office and subsequent recording, the following information will be incorporated:
  - A. The sight distance quadrants at the intersections shall be shown either as a public easement or as the property line.
  - B. Public easements for drainage throughout the development.
  - C. All roads shall be shown as public and the right of way width shown
- 13. If the plans of this subdivision change in a way that would cause a change in the classification of these roads from Local Residential to Residential Collector the developer will be responsible for upgrading roads to meet Residential Collector standards prior to addition the state maintenance system.
- 14. This approval does not approve the utilities within this subdivision. Any utilities shall be submitted for approval to this office via a properly executed Encroachment Agreement to be approved at the time the roads within the subdivision are petitioned to be added to the state system for maintenance. Please note that water valves should be located a minimum of 6' from edge of pavement, fire hydrants should be behind the right of way line and all service taps should be installed prior to paving.

If you have any further questions regarding this matter, please do not hesitate to call this office at 336. 318.4000

Mattlew Littlen, PE Matt Kitchen P.E. District Engineer

#### Attachments

cc: Brandon Jones P.E., Division Engineer Justin Bullock, P.E., Chatham County Maintenance Engineer Lynn Richardson, Chatham County Planning Chris Seamster, RLA McKim & Creed File

Website: www.ncdot.gov



## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PAT MCCRORY GOVERNOR DIVISION OF HIGHWAYS

NICHOLAS J. TENNYSON SECRETARY

## PROFESSIONAL ENGINEER CERTIFICATION SUBDIVISIONS AND COMMERCIAL DRIVEWAYS DIVISION 8, DISTRICT 1

| DATE:                                 | -                        |                                    |                      |
|---------------------------------------|--------------------------|------------------------------------|----------------------|
| COUNTY:                               | _                        |                                    |                      |
| SUBDIVISION NAME:                     |                          |                                    |                      |
| STREET NAMES                          | From Sta. No.            | To Sta. No.                        | _                    |
|                                       |                          |                                    |                      |
|                                       |                          |                                    |                      |
|                                       |                          |                                    |                      |
|                                       |                          |                                    |                      |
|                                       |                          |                                    | <u> </u>             |
| This is to certify that the above lis | eted roads have been cor | nstructed in accordance with the a | pproved plans and al |
| aspects of the most current Subdiv    | vision Roads: Minimum    | Construction Standards manual.     |                      |
|                                       | NAME:                    |                                    |                      |
| SIGNA                                 | ATURE:                   |                                    |                      |
| NC PE LICE                            | ENSE #:                  |                                    |                      |
|                                       |                          |                                    |                      |

Professional Engineer Seal

# North Carolina Department of Transportation Division of Highways Petition for Road Addition

| ROADWAT INFORMA   | (Please Print/Type)                             |  |                       |
|---|---|--|-----------------------|
| County:   | Road Name:                                      | itional street names and lengths on th | a hade of this farm   |
|   | (Please list addi                               | monai street names and lengths on th   | e back of this form.) |
| Subdivision Name:                                       |   | Length (miles):                        |                       |
| Number of occupied hom                                  | es having street frontage:                      | Located (miles):                       |                       |
| miles N $\square$ S $\square$ E $\square$ W (Check one) | of the intersection of Route                    | (SR, NC, US) and Route                 | (SR, NC, US)          |
| We, the undersigned, bei                                | ing property owners and/or develo               | pers of                                | in                    |
| County,   | do hereby request the Division of               | Highways to add the a                  | bove described road.  |
| CONTACT PERSON:   | Name and Address of First Petitioner. (Please I | Print/Type)                            |                       |
| Name:   |   | Phone Number:                          |                       |
| Street Address:   |   |  |                       |
| Mailing Address:  |   |  |                       |
|   | PROPERTY OWNE                                   | ERS                                    |                       |
| <u>Name</u>   | Mailing Address                                 |  | <u>Telephone</u>      |
|   |   |  |                       |
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# INSTRUCTIONS FOR COMPLETING PETITION: Complete Information Section Identify Contact Person (This person serves as spokesperson for petitioner(s)). Attach four (4) copies of recorded subdivision plat or property deeds, which refer to candidate road. Adjoining property owners and/or the developer may submit a petition. Subdivision roads with prior NCDOT review and approval only require the developer's signature. If submitted by the developer, encroachment agreements from all utilities located within the right of way shall be submitted with the petition for Road addition. However, construction plans may not be required at this time. Submit to District Engineer's Office.

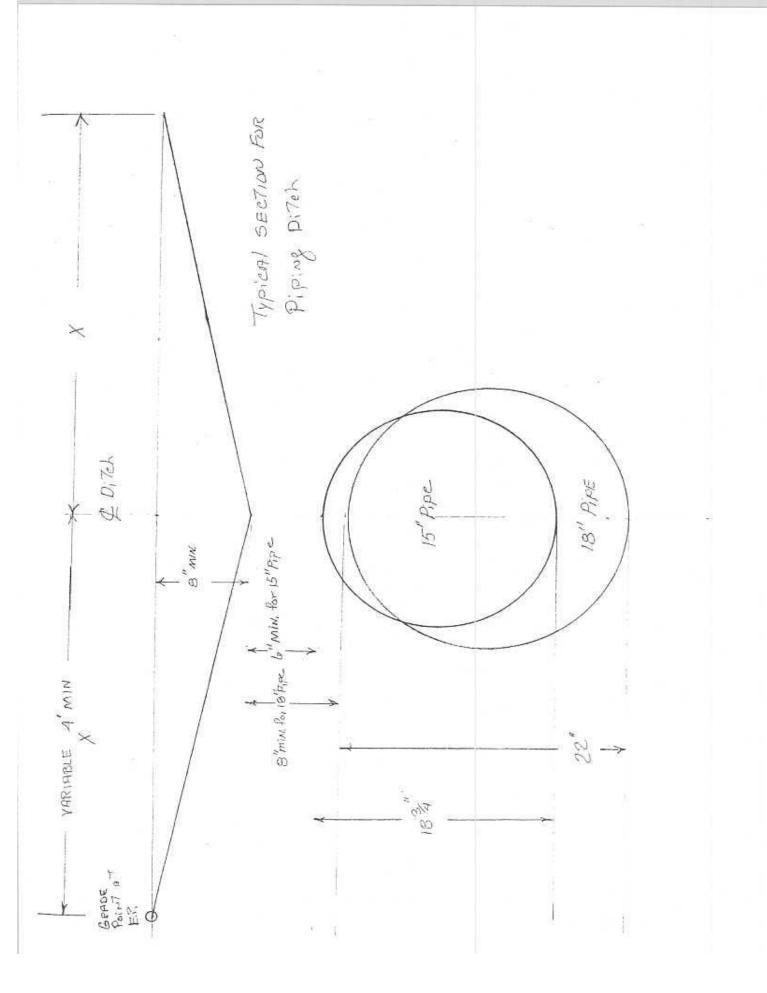
| FOR NCDOT    | <b>USE ONLY:</b> Please check the appropriat   | te block                                       |
|--------------|--|--|
| ☐ Rural Road | ☐ Subdivision platted prior to October 1, 1975 | ☐ Subdivision platted after September 30, 1975 |

#### REQUIREMENTS FOR ADDITION

If this road meets the requirements necessary for addition, we agree to grant the Department of Transportation a right-of-way of the necessary width to construct the road to the minimum construction standards of the NCDOT. The right-of-way will extend the entire length of the road that is requested to be added to the state maintained system and will include the necessary areas outside of the right-or-way for cut and fill slopes and drainage. Also, we agree to dedicate additional right-of-way at intersections for sight distance and design purposes and execute said right-of-way agreement forms that will be submitted to us by representatives of the NCDOT. The right-of-way shall be cleared at no expense to the NCDOT, which includes the removal of utilities, fences, other obstructions, etc.

General Statute 136-102.6 (see page 29 for Statute) states that any subdivision recorded on or after October 1, 1975, must be built in accordance with NCDOT standards in order to be eligible for addition to the State Road System.

| ROAD NAME | <u>HOMES</u> | <u>LENGTH</u> | ROAD NAME | <u>HOMES</u> | <u>LENGTH</u> |
|-----------|--------------|---------------|-----------|--------------|---------------|
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|           |              |               |           |              |               |



## POSSIBLE SUPPLIERS FOR GRATES AND FRAMES

SOUTHERN FOUNDRY P.O. BOX 186 APEX, N.C. 27502 (919) 362-7744 NORFOLK CAST, INC. P.O. BOX 328 NORFOLK, VA. 23501

VULCAN FOUNDRY CORP. P.O. BOX 905 DENHAM SPRINGS, LA. 1(800)626-4653 US FOUNDRY 8351 N. W.93<sup>RD</sup> ST MEDLEY, FLA.33166 (305)885-0301 FAX (305) 844-3253

SUPER CAST, INC. 1104 US HWY. 117 BYPASS, S. GOLDSBORO, N.C. 27530 (919)736-9010 FAX (919)736-0290

BUNCH PATTERN WORKS, INC. P.O. BOX 267 HWY 308 N. LEWISTON-WOODVILLE,N.C. 27849

CAPITAL FOUNDRY OF VIRGINIA, INC. P.O. BOX 2212 VIRGINIA BEACH, VIRGINIA 23450

EMPORIA FOUNDRY, INC. 620 REESE STREET EMPORIA, VIRGINIA 23847

ENNIS ENTERPRISES P.O. BOX 931 WILMINGTON, N.C. 28402 (910) 371-9323

840.15

## 12" THRU 30" PIPE BHICK DHOP INLET ENGLISH STANDARD DRAWING FOR

1-12| STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

USE BRICK OF CONCRETE BLOCK WHICH COMPLIES WITH THE REQUIREMENTS OF SECTION 640 OF THE STANDARD SPECIFICATIONS.

CONSTRUCT WITH PIPE CROWNS MATCHING.

CHYMMER ALL EXPOSED CORNERS I"

DRAWING NOT TO SCALE.

PROVIDE ALL CATCH BASINS ONER S'-8" IN DEPTH WITH STEPS 12" ON CENTER, USE STEPS WHICH COMPLY WITH STD, DRAWING 840,88

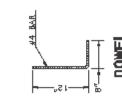
DEDJOT FOR FIPE(S) FROM TOTAL CU. YDS. OF BRICK MASCURY.

USE FORMS FOR CONSTRUCTION OF THE BOTTOM SLAB

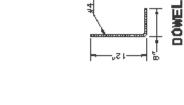
USE CLASS "E" CONCRETE THROUGHOUT. HSP d4 B48 COMPLS AT 12" CENTERS

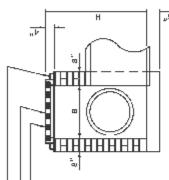
MORTAN JOINTE 15" +/- 16" THICK.

IT REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STO. ND. 040.00.
FOR 6.0" IN HIGH- OR LESS, USE 8" WALL. OVER 8'-0" IN HIGHT, USE 18" WALL TO 8'-0" FROM TOP DF WALL AND 8" WALL FOR THE REMAINING 6'-0". 04.ANITIES -0 OF ADJUSTED ACCORDINGLY. SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES DO NOT USE BRICK MASKWAY DROP INLET IN LOCATIONS SUBJECT TO TRAFFIC.



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SECTION X-X

| ÷   | DEDUCTIONS FOR           | ONS FOR     | P.C.  | 0.032 | D.C47 | 0.085 | 0.118  | 0.170 |
|---|--------------------------|-------------|---|-------|-------|-------|--------|-------|
| HEIGHT, H   | DEDUCT                   | ONE         | , e, o                                      | 0.000 | 0.331 | 0.074 | 0.078  | 0.122 |
| ED ON MICH.   | CUBIC YARDS              | MASONTY     | H '1481EH 'NEM<br>PVB3MEV FDE<br>TUTTE FEET | 3.622 | 3.600 | 0.578 | 5.885  | 0.991 |
| INLET (BAS  | CUBIC                    | BAICK       | MALL PER<br>FOOT HT.                        | 0.313 | 0.913 | 6.818 | 0.913  | 0.913 |
| ES FOR DROP   | CUBIC YARDS              | CONCRETE    | ROTTON<br>SLAB                              | 0.268 | 6.268 | 0.250 | 853" Q | 0.288 |
| DIMENSIOMS AND OUANTITIES FOR DROP INLET(BASED ON MIN. HEIGHT, H) | DIMENSIONS OF BOX & PIPE | NIN. HEIGHT | Ŧ   | 21-04 | 2'-8' | 2'-6" | 3'-0"  | 36"   |
| ENGIÓMS   | 1 OF BOX                 | MIDIM       | В   | 50.,  | 1     | /     |        | 06    |
| DIM   | NENSI DYS                | NVdS        | ٧   | 30    | 1     | /     | 1      | 3,-0% |
|   | DIR                      | PIPE        | a   | 15"   | 15"   | 18"   |        | 36"   |
|   |                          |             |   |       |       |       |        | _     |

STATE OF 11-12
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR BRICK DROP INLET 12" THRU 30" PIPE

840.15 HEET 4 OF 1

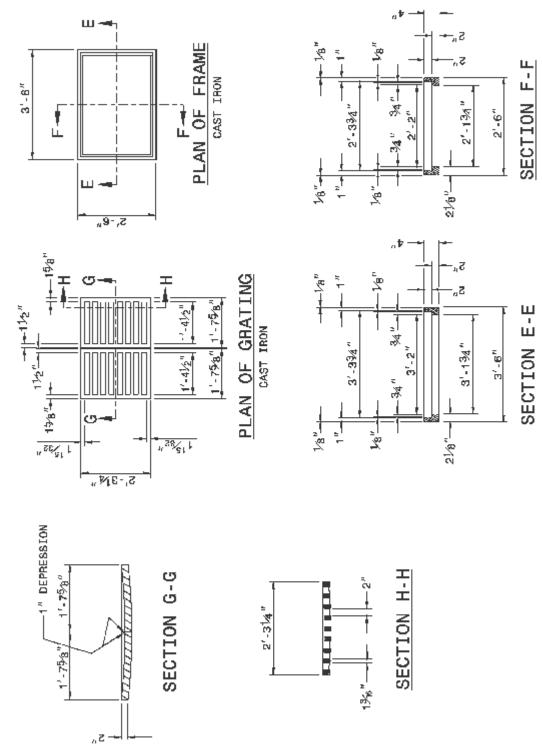
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ENGLISH STANDAND DRAWING FOR DROP INLET FRAME AND GRATES FOR USE WITH SID. DWG.S 840.14 AND 840.15

1-12| STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION OF HIGHWAYS RELEIGH, N.C.

STATE OF

NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.



ENGLISH STANDARD DRAWING FOR DROP INLET FRAME AND GRATES FOR USE WITH STD. DWG.S 840.14 AND 840.15

## VERIFICATION OF COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

(Check Appropriate Box)

| Permits from the N.C. Department of U.S. Army Corp of Engineers are rapplicable federal and state regulations         | not required for this p  | ural Resources and the<br>project. However, all    |
|---|--------------------------|--|
| The required permits from the N.C Resources and the U.S. Army Corp of Copies of permits and Completion Certification  | Engineers have been of   | ironment and Natural<br>btained for this project.  |
| All applicable NPDES Stormwater Perr<br>(The applicant should contact the N. determine if a stormwater permit is requ | C. Division of Water     | een met for this project.<br>Quality in Raleigh to |
| The project is in compliance with all aplaws and regulations.   | plicable sedimentation a | and erosion control                                |
| Project Name:   |                          |  |
| Township:   | County:                  |  |
| Project Engineer:   | Phone No.:               | 1  |
| Project Contact:  |                          |  |
| Applicants Name:  | - 1                      | P.E. SEAL  |
| Date Submitted:   |                          |  |
|   |                          |  |
| (Reference Page 11, Item 10)  |                          | 11/07/2003   |
|   | 35                       |  |

#### ATTACHMENT "A"

Seeding and mulching shall be in accordance with Section 880 of the North Carolina Standard Specifications for Roads and Structures, except that Articles 880-8(B) shall not apply. Final determination of soil type shall be made by the Engineer. The following rates in pounds per acre shall apply:

#### SANDY SOIL

### CLAY SOIL

50# - KY 31 Tall Fescue or Alta Tall Fescue 100# - KY 31 Tall Fescue or Alta Tall Fescue

5# - Centipede

15# - Kenblue Bluegrass

50# - Pensacola Bahiagrass

500# - Fertilizer

500# - Fertilizer

4000# - Limestone

4000# - Limestone

Add 10# Kobe or Korean Lespedeza and 10# 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 of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis.