

BRIAR CHAPEL

US STEEL - SECTION 2

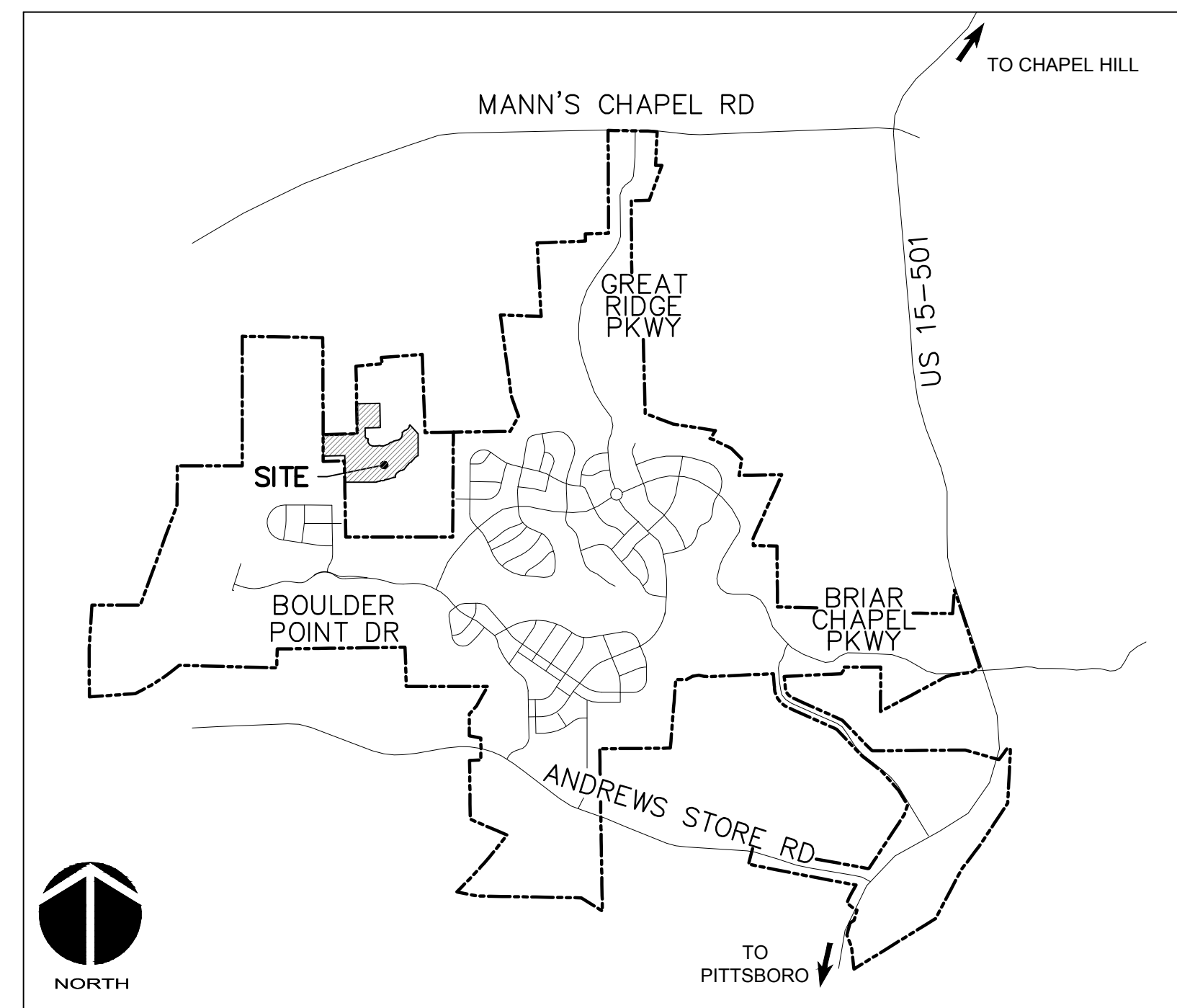
CONSTRUCTION DRAWINGS

U.S. HWY 15-501 and MANN'S CHAPEL ROAD

CHATHAM COUNTY, NORTH CAROLINA

DATE: APRIL 11, 2018
 REVISED: MAY 7, 2018

| COUNTY AND AGENCY CONTACTS | |
|---|---|
| <p>A. Chatham County Planning Department Dunlap Building 80 East Street Pittsboro, NC 27312 (919) 542-8204 phone Contact: Jason Sullivan Email: jason.sullivan@chathamnc.org</p> | <p>E. NCDOT Division 8, District 1 300 DOT Drive P.O. Box 1164 Asheboro, NC 27204 (336) 318-4000 phone Contact: Matthew Kitchen, PE Email: mwkitchen@ncdot.gov</p> |
| <p>B. Chatham County Environmental Services Dunlap Building 80 East Street Pittsboro, NC 27312 (919) 542-0945 phone Contact: Brian Burkhart, PE Email: brian.burkhart@chathamnc.org</p> | <p>F. NCDENR Division of Environmental Health Public Water Supply Section 1634 Mail Service Center Raleigh, NC 27699-1634 (919) 707-9064 phone Contact: Shashi Bhatta Email: shashi.bhatta@ncdenr.gov</p> |
| <p>C. Chatham County Soil Erosion and Sedimentation Control Dunlap Building 80 East Street Pittsboro, NC 27312 (919) 545-8339 phone Contact: Rachael Thorn Email: rachael.thorn@chathamnc.org</p> | <p>H. NCDENR Division of Water Quality Surface Water Protection 3800 Barrett Drive Raleigh, NC 27609 (919) 791-4200 phone Contact: Danny Smith Email: danny.smith@ncdenr.gov</p> |
| <p>D. Chatham County Public Works 964 East Street, 2nd Floor, Suite 205 Pittsboro, NC 27312 (919) 542-8270 phone Contact: Larry Bridges Email: larry.bridges@chathamnc.org</p> | |



VICINITY MAP
 NTS

PROJECT DATA

NAME OF PROJECT:
 US STEEL - SECTION 2
 CHATHAM COUNTY, NORTH CAROLINA

OWNER:
 NNP BRIAR CHAPEL, LLC
 16 WINDY KNOLL CIRCLE
 CHAPEL HILL, NC 27516
 PHONE: (919) 951-0700
 FAX: (919) 240-4963
 CONTACT: LEE BOWMAN
 EMAIL: lbowman@newlandco.com

PREPARED BY:
 MCKIM & CREED
 1730 VARSITY DRIVE, SUITE 500
 RALEIGH, NORTH CAROLINA 27606
 PHONE: (919) 233-8091
 FAX: (919) 233-8031
 CONTACT: GARETH AVANT, PE
 EMAIL: gavant@mckimcreed.com

PROJECT AREA: 18.5 AC

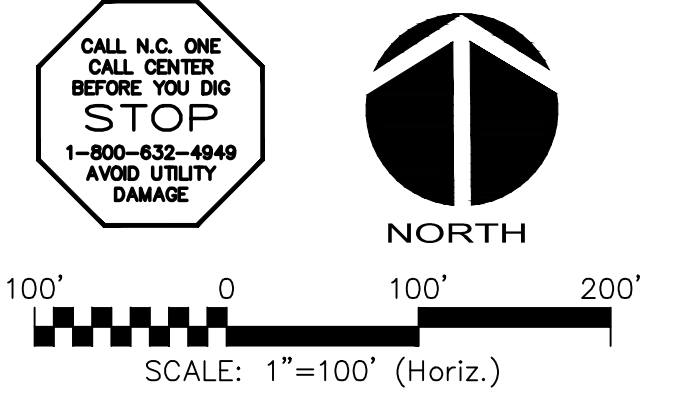
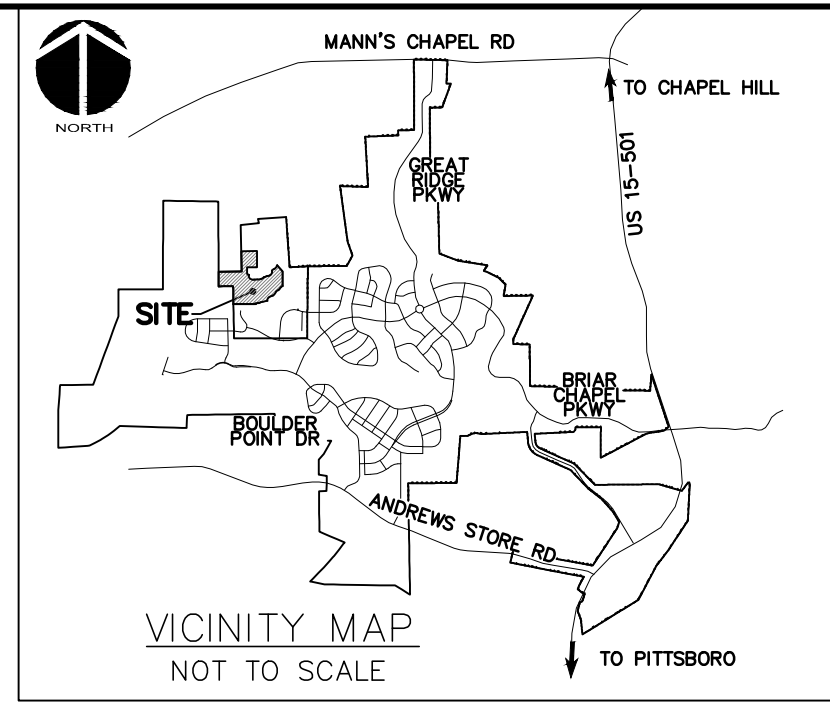
These improvements shall be constructed in accordance with the following plans, and the Standard Specifications of NCDOT and Chatham County.

SHEET INDEX

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| C0.2 | EXISTING CONDITIONS/DEMOLITION PLAN |
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| C4.4 | PLAN & PROFILE WATER LINE CONNECTION TO PHASE 16N STA. 10+00.00 TO 14+49.92 PLAN & PROFILE BMP #37 OUTFALL STA. 10+00.00 TO 11+05.72 |
| D1.1 | EROSION AND SEDIMENTATION CONTROL DETAILS |
| D1.2 | EROSION AND SEDIMENTATION CONTROL DETAILS |
| D2.1 | NCDOT ROADWAY DETAILS |
| D2.2 | NCDOT DRAINAGE DETAILS |
| D3.1 | UTILITY DETAILS |
| D3.2 | UTILITY DETAILS |
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| D4.2 | BMP #37 PLAN & DETAILS |
| D4.3 | BMP #37 PLAN & DETAILS |
| D4.4 | STORM DRAINAGE & SANITARY SEWER TABLES |



FINAL DRAWINGS
 FOR REVIEW PURPOSES ONLY



CALL N.C. ONE
CALL CENTER
BEFORE YOU DIG
STOP
1-800-832-4949
WOOD UTILITY
DAMAGE

N/F
TWIN LAKES GOLF COURSE INC
DB 460, PG. 94
PIN# 9765-39-3037.000
ZONING: R1
ACREAGE: 81.70

N/F
MEACHAM WADE ROOK ETAL
DB 814, PG. 447
PIN# 9765-58-3620.000
ZONING: R1
ACREAGE: 47.00

N/F
NNP BRIAR CHAPEL LLC
DB 1722, PG. 1163
PIN# 9765-47-2252
ZONING: R1
ACREAGE: 131.38

LEGEND:

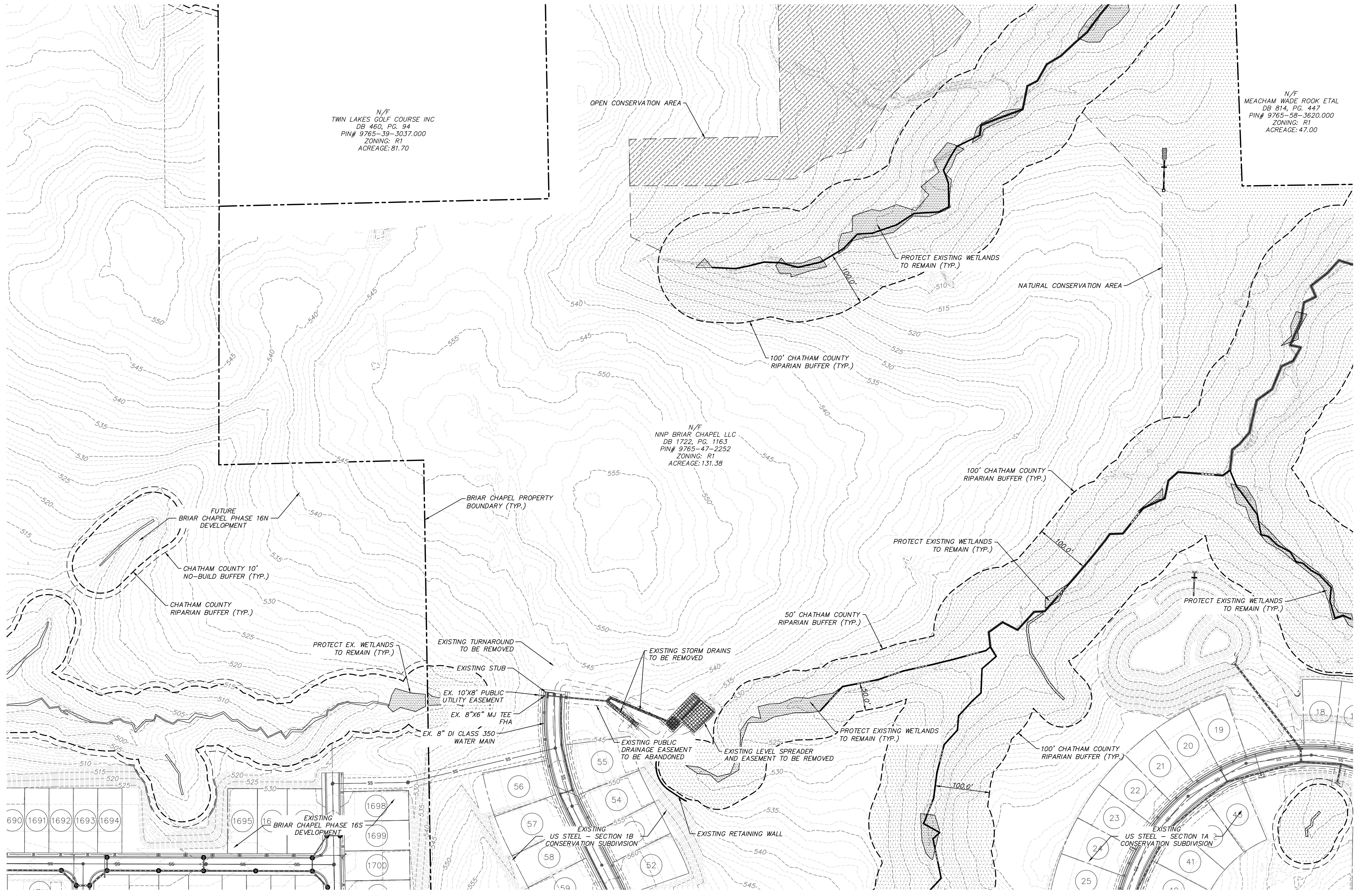
- EXISTING WETLANDS
- CONSERVATION AREA (OPEN)
- CONSERVATION AREA (NATURAL)
- AREA OF DEMOLITION
- OVERALL PROPERTY BOUNDARY
- 100' PROPERTY BOUNDARY BUFFER
- STREAM BUFFER LINE
- 480' EX. CONTOUR
- EX. WATER MAIN
- EX. SANITARY SEWER
- EX. STORM DRAINAGE PIPE
- PROJECT LIMITS

GENERAL NOTES:

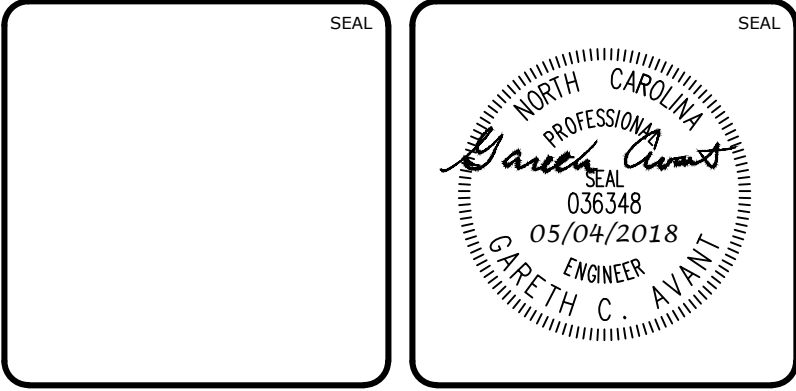
1. REFER TO THE FOLLOWING MCKIM & CREED, INC. CONSTRUCTION PLANS, AND ALL SUBSEQUENT CONSTRUCTION BULLETINS FOR INFORMATION ON EXISTING SITE INFRASTRUCTURE:
- BRIAR CHAPEL - PHASE 16S CONSTRUCTION PLANS SEALED JUNE 13, 2016
- BRIAR CHAPEL - US STEEL SECTION 1 CONSTRUCTION PLANS SEALED JUNE 14, 2016
2. THIS PROPERTY IS ZONED CUD-CC.
3. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND MEASUREMENTS.
4. BEARINGS SHOWN HEREON ARE BASED ON NC GRID NAD83. THIS PROJECT IS LOCALIZED ABOUT NCGS MONUMENT "MEACHAM" HAVING NC GRID COORDINATES N: 768,395.12', E: 1,963,424.93' USING A COMBINED FACTOR OF 0.99990676.
5. EXISTING TOPOGRAPHIC DATA IS BASED ON AERIAL MAPPING PERFORMED BY AVIOMAGE MAPPING SERVICES IN FEBRUARY 2010. ELEVATIONS ARE BASED ON NAVD 88 NCGS MONUMENT "F-92" WITH AN ELEVATION OF 476.06'.
6. HORIZONTAL AND VERTICAL CONTROL FOR THIS SITE WAS INSTALLED BY GPA PROFESSIONAL LAND SURVEYORS OF NC.
7. PROJECT IS LOCATED IN THE CAPE FEAR RIVER BASIN.
8. STREAM AND WETLAND LOCATIONS ARE BASED ON INFORMATION PROVIDED BY HUYSMAN AND BANDY, INC. - CONTACT CHRIS HUYSMAN AR 336-306-0906.
9. NO PORTION OF THIS PROPERTY IS LOCATED IN SPECIAL FLOOD HAZARD AREA "AE" AS SHOWN ON FEMA FIRM MAPS #371097650K DATED NOVEMBER 17, 2017.

DEMOLITION NOTES:

1. NO EARTH-DISTURBING ACTIVITIES SHALL COMMENCE UNTIL ALL PERIMETER EROSION CONTROL MEASURES ARE IN PLACE IN ACCORDANCE WITH THE EROSION CONTROL SEQUENCE SHOWN IN THESE PLANS.
2. NO EARTH-DISTURBING ACTIVITY OR OTHER WORK SHALL TAKE PLACE WITHIN WETLAND AREAS NOTED ON SURVEY. CONTRACTOR SHALL FIELD VERIFY WETLAND LIMITS FLAGGING IS IN PLACE AND SHALL NOT ENTER WETLAND AREAS. IF WETLAND FLAGGING IS MISSING OR OTHERWISE DAMAGED, IT IS CONTRACTOR'S RESPONSIBILITY TO NOTE WETLAND LIMITS AND PREVENT DISTURBANCE OR OTHER ACTIVITY WITHIN WETLANDS.
3. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL PROPERTY CORNER MONUMENTS, AND SHALL HAVE, AT HIS EXPENSE, ALL CORNER MONUMENTS REPLACED WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES.
4. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS, AT HIS EXPENSE, DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE UTILITIES, PAVEMENT STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE PUBLIC DURING CONSTRUCTION, WHICH INCLUDES, BUT IS NOT LIMITED TO, CONSTRUCTION FENCING, BARRICADES, SIGNAGE, ETC.
6. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH ALL REGULATIONS GOVERNING THE DEMOLITION, REMOVAL, TRANSPORTATION AND DISPOSAL OF ALL DEMOLITION DEBRIS.
7. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS FOR EXCAVATION AND TRENCHING PROCEDURES. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, ETC. AS NECESSARY FOR THESE OPERATIONS, AND SHALL COMPLY WITH ALL OSHA PERFORMANCE CRITERIA.
8. CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ALL UTILITIES AND APPURTENANCES TO REMAIN.



| REV. NO. | DESCRIPTIONS | DATE |
|----------|---|------------|
| 2 | REVISED PER NCDOT COMMENTS | 2018.05.07 |
| 1 | REVISED PER CHATHAM COUNTY EROSION CONTROL AND STORMWATER | 2018.05.04 |
| 0 | INITIAL SUBMITTAL | 2018.04.11 |



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1730 Varsity Drive, Suite 500
Raleigh, North Carolina 27606
Phone: (919)233-8091, Fax: (919)233-8031
F-1222
www.mckimcreed.com

BRIAR CHAPEL™
by
Newland COMMUNITIES

**BRIAR CHAPEL
US STEEL - SECTION 2
CHATHAM COUNTY, NORTH CAROLINA**
EXISTING CONDITIONS/DEMOLITION PLAN

| | | |
|---|------------------------------|-----------------------|
| DATE: APRIL 11, 2018 | SCALE: HORIZONTAL: 1" = 100' | M&C FILE NUMBER: C0.2 |
| MCE PROJ. #: 02735-0206 | VERTICAL: N/A | DRAWING NUMBER: C0.2 |
| DRAWN: LEG | | |
| DESIGNED: LEG | | |
| CHECKED: GCA | | |
| PROJ. MGR.: CHS | | |
| STATUS: FINAL DRAWINGS FOR REVIEW PURPOSES ONLY | REVISION: 2 | |

| LOT # | AREA (SF) | AREA (AC) |
|-------|-----------|-----------|
| 67 | 6692.09 | 0.15 |
| 68 | 6600.00 | 0.15 |
| 69 | 6600.00 | 0.15 |
| 70 | 6600.00 | 0.15 |
| 71 | 6600.00 | 0.15 |
| 72 | 6600.00 | 0.15 |
| 73 | 6600.00 | 0.15 |
| 74 | 7357.94 | 0.17 |
| 75 | 7700.00 | 0.18 |
| 76 | 7700.00 | 0.18 |
| 77 | 6469.17 | 0.15 |
| 78 | 6600.00 | 0.15 |
| 79 | 6600.00 | 0.15 |
| 80 | 6600.00 | 0.15 |
| 81 | 6600.00 | 0.15 |
| 82 | 6615.53 | 0.15 |
| 83 | 7474.16 | 0.17 |
| 84 | 7330.59 | 0.17 |
| 85 | 7837.50 | 0.18 |
| 86 | 7837.50 | 0.18 |

| LOT # | AREA (SF) | AREA (AC) |
|-------|-----------|-----------|
| 87 | 7837.50 | 0.18 |
| 88 | 10801.23 | 0.25 |
| 89 | 10820.10 | 0.25 |
| 90 | 15768.51 | 0.36 |
| 91 | 14867.31 | 0.34 |
| 92 | 13744.57 | 0.32 |
| 93 | 13932.75 | 0.32 |
| 94 | 9112.90 | 0.21 |
| 95 | 8641.44 | 0.20 |
| 96 | 6600.00 | 0.15 |
| 97 | 6600.00 | 0.15 |
| 98 | 8923.12 | 0.20 |
| 99 | 7952.36 | 0.18 |
| 100 | 6600.00 | 0.15 |
| 101 | 6599.93 | 0.15 |
| 102 | 6597.61 | 0.15 |
| 103 | 6600.00 | 0.15 |
| 104 | 7563.75 | 0.17 |
| 105 | 7837.50 | 0.18 |
| 106 | 8957.63 | 0.21 |

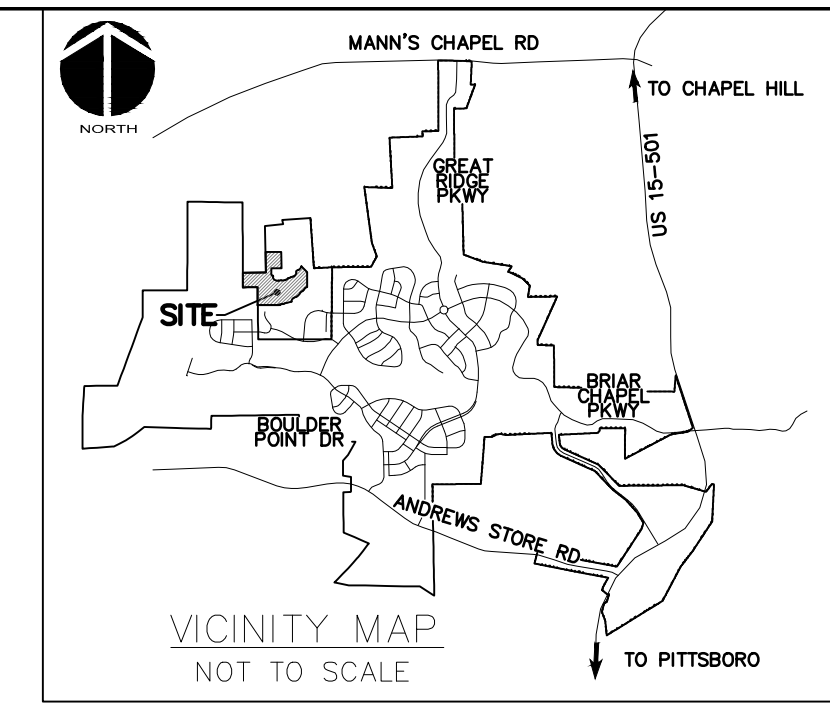
| LOT # | AREA (SF) | AREA (AC) |
|-------|-----------|-----------|
| 107 | 7304.11 | 0.17 |
| 108 | 6600.00 | 0.15 |
| 109 | 6600.00 | 0.15 |
| 110 | 6600.00 | 0.15 |
| 111 | 6600.00 | 0.15 |
| 112 | 6720.67 | 0.15 |
| 113 | 7361.54 | 0.17 |
| 114 | 7361.54 | 0.17 |
| 115 | 7361.54 | 0.17 |
| 116 | 7283.49 | 0.17 |
| 117 | 6600.00 | 0.15 |
| 118 | 6600.00 | 0.15 |
| 119 | 6600.00 | 0.15 |
| 120 | 6600.00 | 0.15 |
| 121 | 10654.77 | 0.24 |

SITE GENERAL NOTES:

- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY OWNER IF ANY DISCREPANCIES EXIST PRIOR TO CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- STREAM AND WETLAND LOCATIONS ARE BASED ON DELINEATIONS PROVIDED BY WETLAND AND NATURAL RESOURCES CONSULTANTS - CONTACT CHRIS HUYSMAN AT 336-408-0906.

SITE GENERAL NOTES (CONT.):

- ALL PROPOSED ROADWAY DIMENSIONS AS SHOWN ARE MEASURED FROM BACK OF CURB TO BACK OF CURB. ALL PROPOSED ALLEY DIMENSIONS AS SHOWN ARE MEASURED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT, UNLESS NOTED OTHERWISE.
- BEFORE STARTING ANY CONSTRUCTION OF IMPROVEMENTS WITHIN ANY NCDOT STREET OR HIGHWAY RIGHT-OF-WAY, CONTACT NCDOT DISTRICT OFFICE AND OBTAIN ALL PERMITS AND ENCROACHMENTS. KEEP COPIES ON CONSTRUCTION SITE. ALSO CONTACT NCDOT DISTRICT OFFICE 24 HOURS IN ADVANCE BEFORE PLACING CURB AND GUTTER AT 336-629-1423.
- REFER TO PLAN AND PROFILE SHEETS FOR DETAILED SANITARY SEWER AND STORM DRAINAGE INFORMATION WITHIN PUBLIC ROADS.

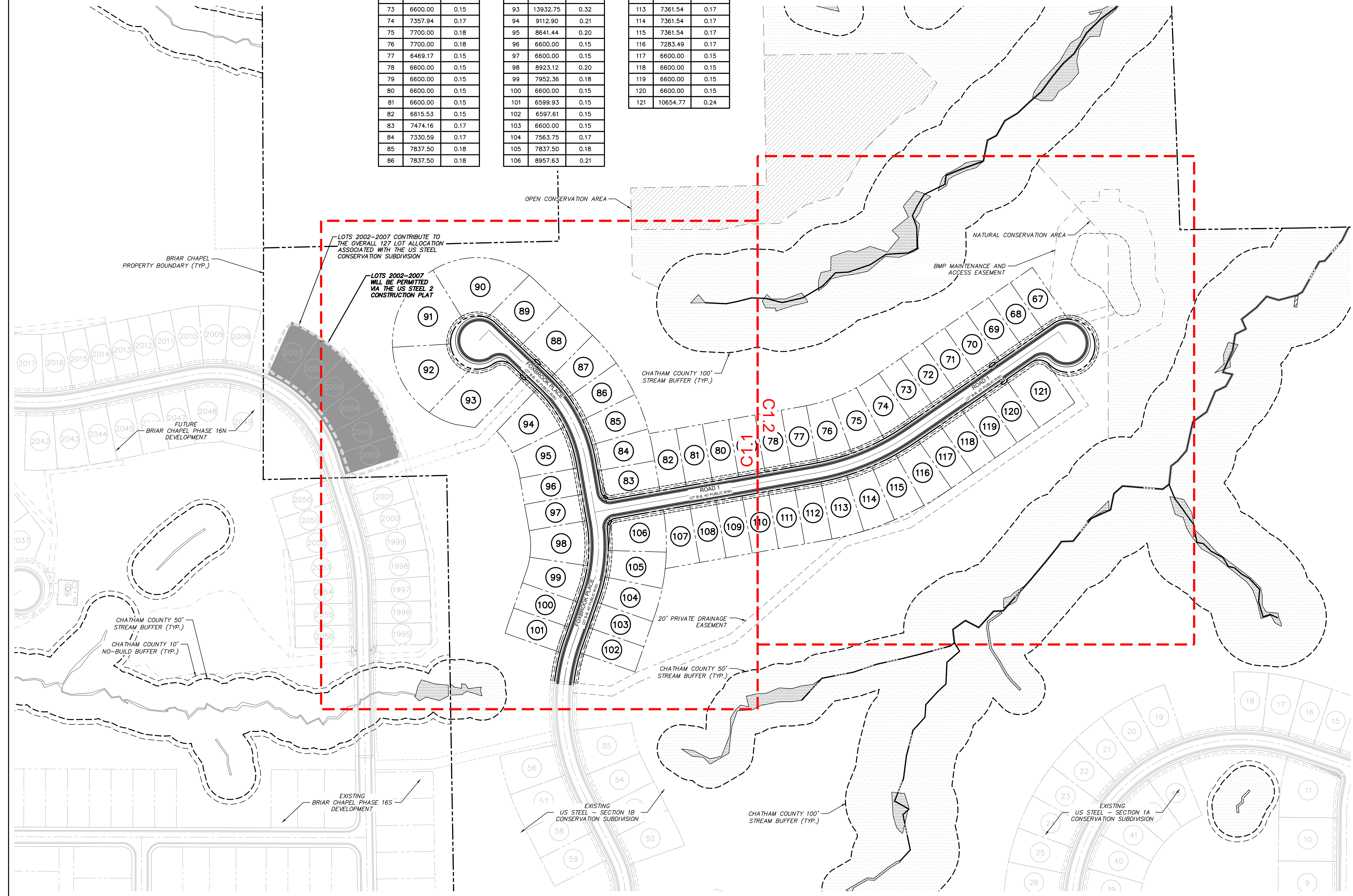
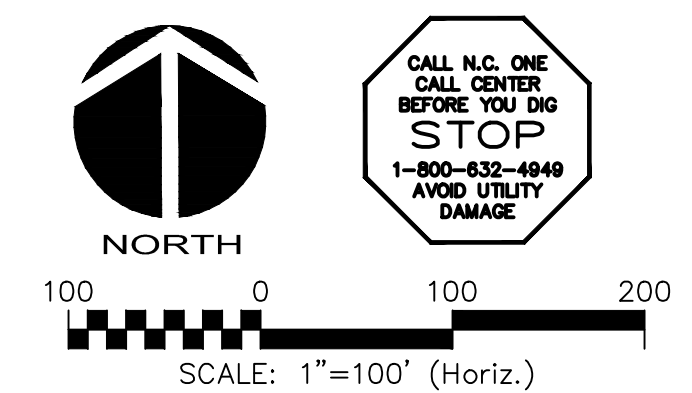


CHATHAM COUNTY REQUIRED SITE NOTES

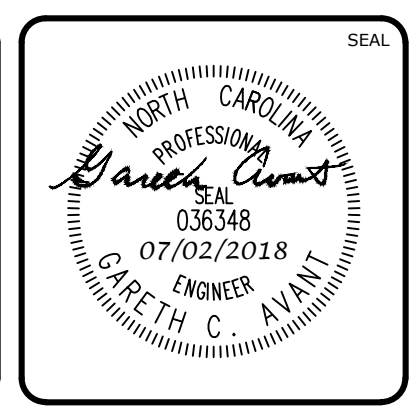
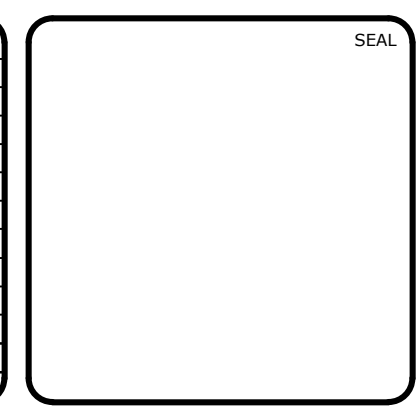
- PROPERTY OWNER/DEVELOPER:
NNP BRIAR CHAPEL, LLC
16 WINDY KNOLL CIRCLE
CHAPEL HILL, NC 27516
PHONE: (919) 951-0700
- SITE AKPAR #: 2177
- TOTAL ENTITLED LOTS: 127
- TOTAL LOTS PREVIOUS PHASES:
SECTION 1A - 43
SECTION 1B - 23
- TOTAL LOTS THIS PHASE: 61
SECTION 2 AREA - 55
PHASE 16N AREA - 6
- CONSERVATION ACREAGE TOTALS:
-TOTAL PARCEL ACREAGE 131.384
-TOTAL NATURAL SPACE 1,875,360 SF 43.05 AC
-TOTAL OPEN SPACE 468,255 SF 10.71 AC
TOTAL CONSERVATION AREA 2,343,615 SF 53.76 AC
ADDITIONAL CONSIDERATIONS
-WITHIN RIPARIAN BUFFERS AND FLOODPLAIN 1,320,163 SF 30.30 AC
-CONTIGUOUS NATURAL SPACE 1,803,968 SF 37.47 AC
- BUILT UPON AREA CALCULATIONS - SECTION 1
-ROADWAYS: 138,296 SF 3.17 AC
-SIDEWALKS 34,919 SF 0.80 AC
-LOT 256,100 SF 5.88 AC
TOTALS 429,315 SF 9.86 AC
IMPERVIOUS % FOR SECTION 1 DEVELOPMENT: 7.50%
- BUILT UPON AREA CALCULATIONS - SECTION 2
-ROADWAYS: 60,325 SF 1.38 AC
-SIDEWALKS 15,948 SF 0.37 AC
-LOT 209,100 SF 4.80 AC
TOTALS 285,373 SF 6.55 AC
IMPERVIOUS % FOR SECTION 2 DEVELOPMENT: 4.99%
- TOTAL IMPERVIOUS % IN CONSERVATION AREA DEVELOPMENT (INCLUDING AMENITY SITE): 13.25%

LEGEND:

| | |
|--|-----------------------------------|
| | R/W LINE |
| | FUTURE R/W LINE |
| | EXISTING R/W LINE |
| | HOA EASEMENT LINE |
| | PUBLIC UTILITY EASEMENT LINE |
| | PRIVATE UTILITY EASEMENT LINE |
| | PUBLIC DRAINAGE EASEMENT |
| | PRIVATE DRAINAGE EASEMENT |
| | 10' NO BUILD BUFFER LINE |
| | RIPARIAN BUFFER LINE |
| | EX. WETLANDS |
| | BMP MAINTENANCE & ACCESS EASEMENT |
| | ROADWAY CENTERLINE |
| | SIGN |
| | 10'x70' SIGHT TRIANGLE |
| | NEW ROADWAY PAVEMENT |



| REV. NO. | DESCRIPTIONS | DATE |
|----------|---|------------|
| 3 | LOW PRESSURE SEWER REVISIONS | 07/02/2018 |
| 2 | REVISED PER NCDOT COMMENTS | 2018.05.07 |
| 1 | REVISED PER CHATHAM COUNTY EROSION CONTROL AND STORMWATER | 2018.05.04 |
| 0 | INITIAL SUBMITTAL | 2018.04.11 |



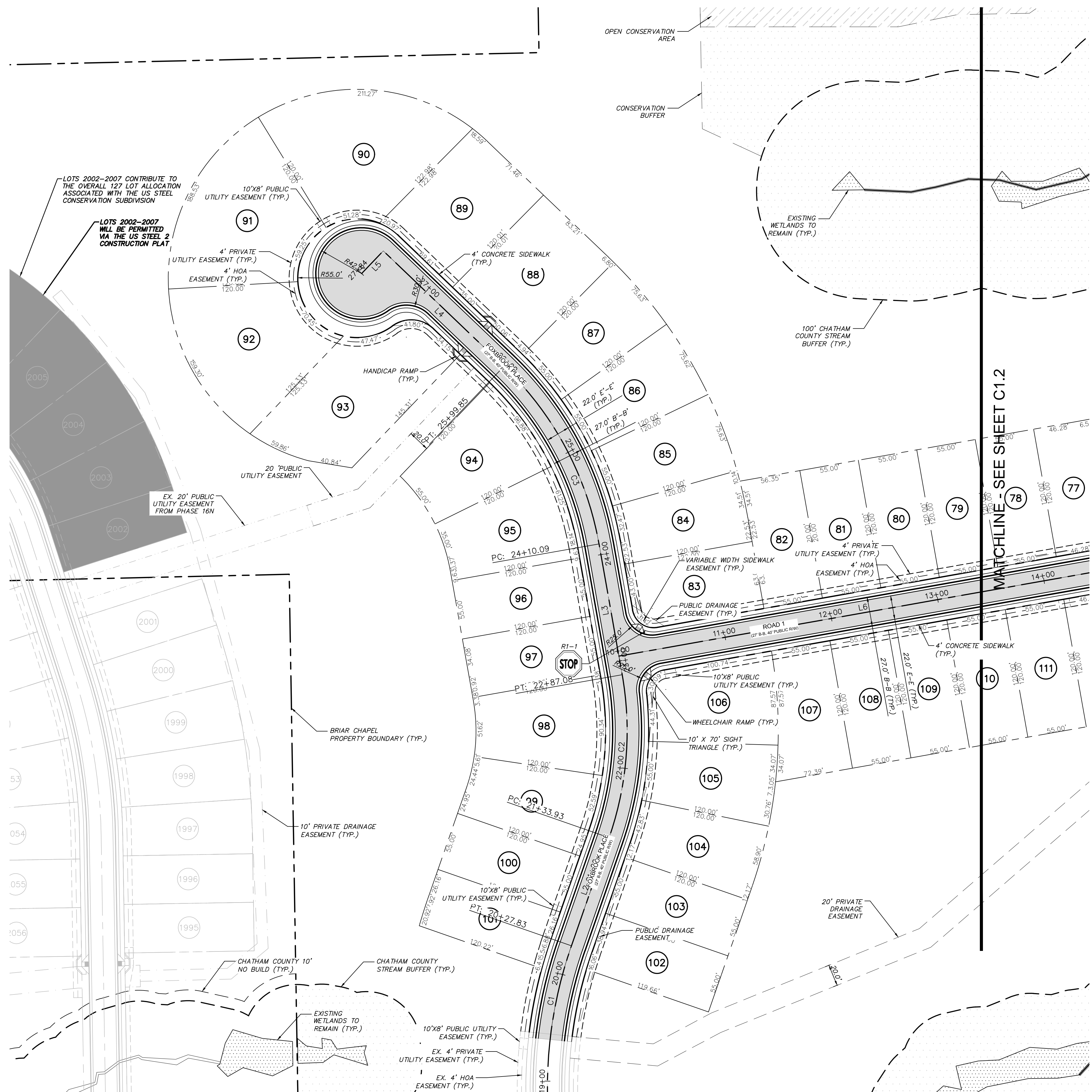
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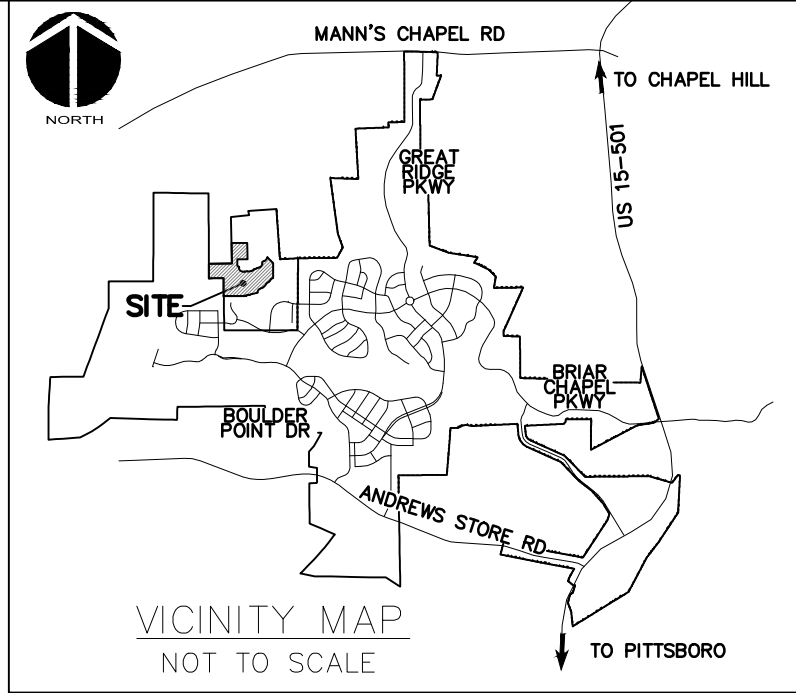
OVERALL SITE PLAN

| | | |
|---|-----------------------|-----------------------|
| DATE: APRIL 11, 2018 | SCALE: 1" = 100' | HMC FILE NUMBER: C1.0 |
| MCE PROJ. #: 02735-0206 | HORIZONTAL: 1" = 100' | DRAWING NUMBER: C1.0 |
| DRAWN: LEG | VERTICAL: N/A | |
| DESIGNED: LEG | | |
| CHECKED: GCA | | |
| PROJ. MGR.: CHS | | |
| STATUS: FINAL DRAWINGS FOR REVIEW PURPOSES ONLY | | REVISION: 3 |



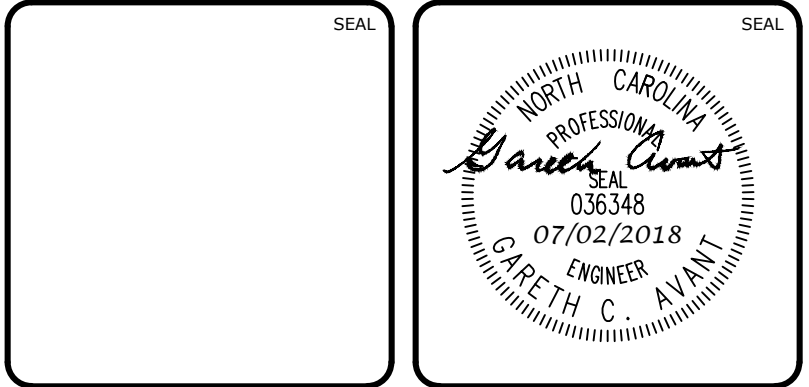
| LINE # | LENGTH | BEARING |
|--------|---------|-------------|
| L1 | 5.60' | N26°56'55"W |
| L2 | 106.11' | N19°12'28"E |
| L3 | 123.01' | N10°02'26"W |
| L4 | 154.68' | N46°16'59"W |
| L5 | 29.00' | S43°43'01"W |
| L6 | 461.28' | N79°57'34"E |
| L7 | 371.43' | N55°22'47"E |
| L8 | 29.00' | S34°37'13"E |

| ALIGNMENT CURVE DATA | | | | | |
|----------------------|---------|-------------|---------------|--------------|-----------|
| CURVE # | RADIUS | ARCH LENGTH | CHORD BEARING | CHORD LENGTH | DELTA |
| C1 | 400.00' | 322.23' | N3°52'13"W | 313.59' | 46°09'23" |
| C2 | 300.00' | 153.15' | N4°35'01"E | 151.49' | 29°14'55" |
| C3 | 300.00' | 189.76' | N28°09'43"W | 186.62' | 36°14'32" |
| C4 | 500.00' | 214.50' | N67°40'10"E | 212.86' | 24°34'47" |



- LEGEND:**
- R/W LINE
 - FUTURE R/W LINE
 - EXISTING R/W LINE
 - HOA EASEMENT LINE
 - PUBLIC UTILITY EASEMENT LINE
 - PRIVATE UTILITY EASEMENT LINE
 - PUBLIC DRAINAGE EASEMENT
 - PRIVATE DRAINAGE EASEMENT
 - 10' NO BUILD BUFFER LINE
 - RIPARIAN BUFFER LINE
 - EX. WETLANDS
 - BMP MAINTENANCE & ACCESS EASEMENT
 - ROADWAY CENTERLINE
 - SIGN
 - 10'x70' SIGHT TRIANGLE
 - NEW ROADWAY PAVEMENT

| REV. NO. | DESCRIPTIONS | DATE |
|----------|---|------------|
| 3 | LOW PRESSURE SEWER REVISIONS | 07/02/2018 |
| 2 | REVISED PER NCDOT COMMENTS | 2018.05.07 |
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| 0 | INITIAL SUBMITTAL | 2018.04.11 |



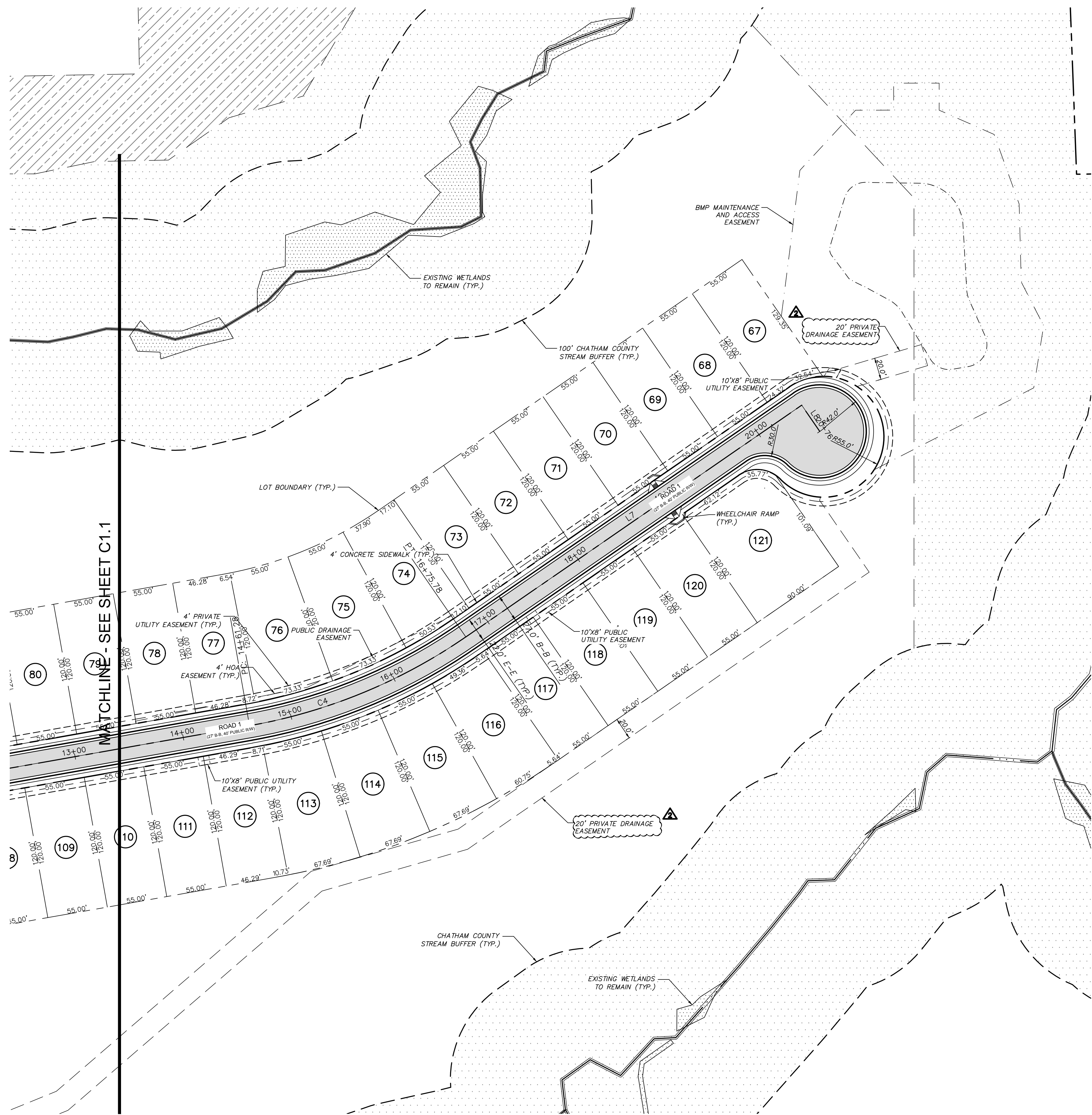
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 Raleigh, North Carolina 27606
 Phone: (919)233-8091, Fax: (919)233-8031
 F-1222
 www.mckimcreed.com

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Newland COMMUNITIES

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 US STEEL - SECTION 2
 CHATHAM COUNTY, NORTH CAROLINA**

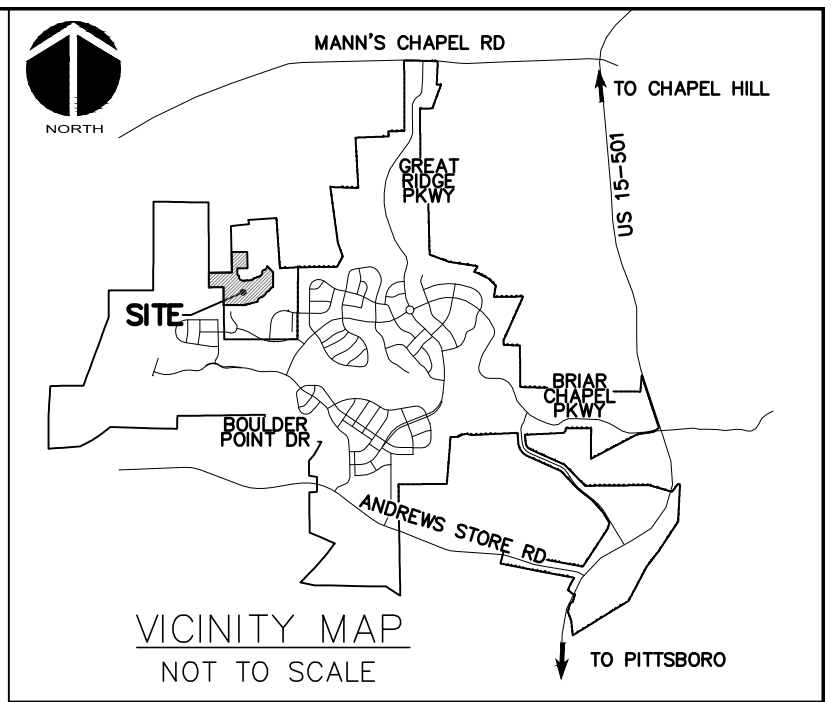
SITE PLAN

| | | |
|---|----------------------|-----------------------|
| DATE: APRIL 11, 2018 | SCALE: 1" = 50' | HMC FILE NUMBER: C1.0 |
| MCE PROJ. # 02735-0206 | HORIZONTAL: 1" = 50' | DRAWING NUMBER: C1.1 |
| DRAWN: LEG | VERTICAL: N/A | REVISION: 3 |
| DESIGNED: LEG | | |
| CHECKED: GCA | | |
| PROJ. MGR.: CHS | | |
| STATUS: FINAL DRAWINGS FOR REVIEW PURPOSES ONLY | | |



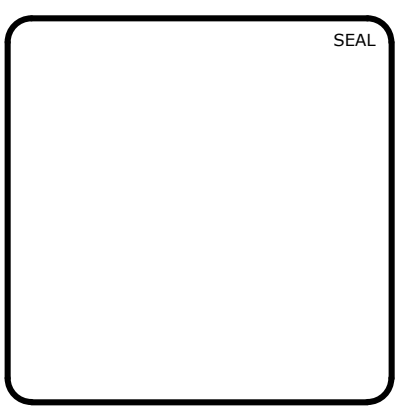
| ALIGNMENT LINE DATA | | |
|---------------------|---------|-------------|
| LINE # | LENGTH | BEARING |
| L1 | 5.60' | N26°56'55"W |
| L2 | 106.11' | N19°12'28"E |
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| L4 | 154.68' | N46°16'59"W |
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| L7 | 371.43' | N55°22'47"E |
| L8 | 29.00' | S34°37'13"E |

| ALIGNMENT CURVE DATA | | | | | |
|----------------------|---------|-------------|---------------|--------------|-----------|
| CURVE # | RADIUS | ARCH LENGTH | CHORD BEARING | CHORD LENGTH | DELTA |
| C1 | 400.00' | 322.23' | N3°52'13"W | 313.59' | 46°09'23" |
| C2 | 300.00' | 153.15' | N4°35'01"E | 151.49' | 29°14'55" |
| C3 | 300.00' | 189.76' | N28°09'43"W | 186.62' | 36°14'32" |
| C4 | 500.00' | 214.50' | N67°40'10"E | 212.86' | 24°34'47" |



- LEGEND:**
- R/W LINE
 - FUTURE R/W LINE
 - EXISTING R/W LINE
 - HOA EASEMENT LINE
 - PUBLIC UTILITY EASEMENT LINE
 - PRIVATE UTILITY EASEMENT LINE
 - PUBLIC DRAINAGE EASEMENT
 - PRIVATE DRAINAGE EASEMENT
 - 10' NO BUILD BUFFER LINE
 - RIPARIAN BUFFER LINE
 - EX. WETLANDS
 - BMP MAINTENANCE & ACCESS EASEMENT
 - ROADWAY CENTERLINE
 - SIGN
 - 10'x70' SIGHT TRIANGLE
 - NEW ROADWAY PAVEMENT

| REV. NO. | DESCRIPTIONS | DATE |
|----------|---|------------|
| 2 | REVISED PER NCDOT COMMENTS | 2018.05.07 |
| 1 | REVISED PER CHATHAM COUNTY EROSION CONTROL AND STORMWATER | 2018.05.04 |
| 0 | INITIAL SUBMITTAL | 2018.04.11 |



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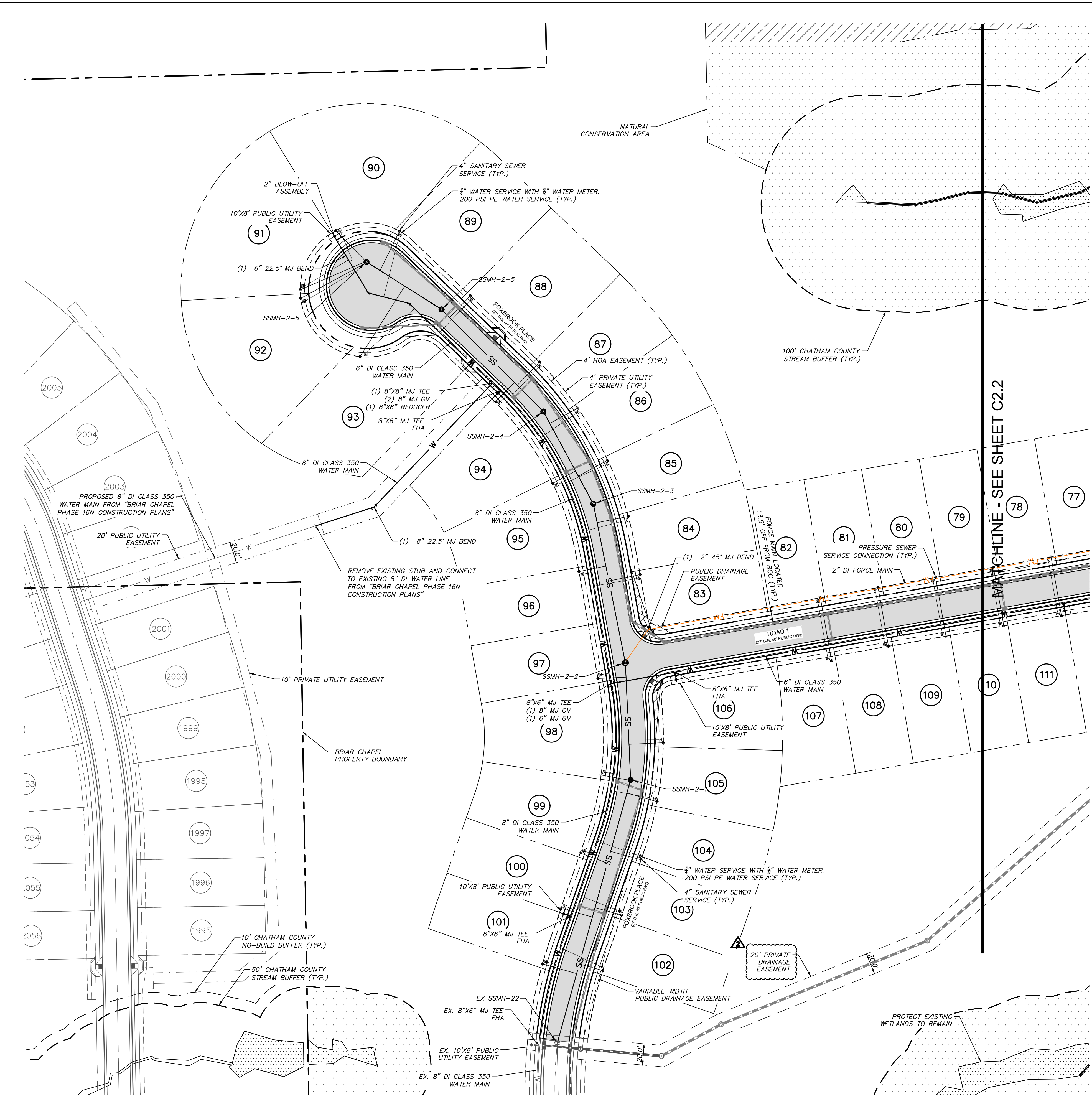
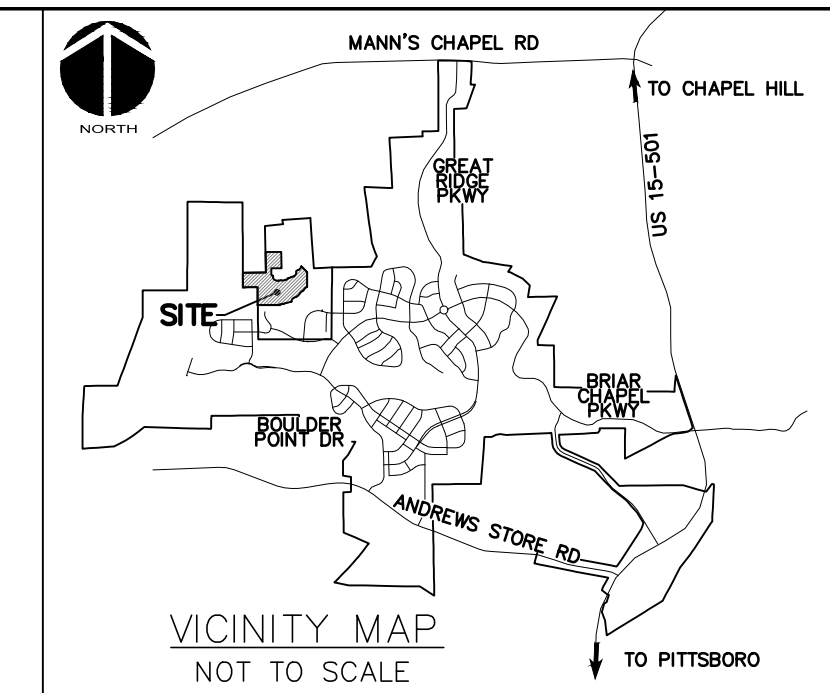
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**BRIAR CHAPEL
 US STEEL - SECTION 2
 CHATHAM COUNTY, NORTH CAROLINA**

SITE PLAN

| | | |
|------------------------|---|-----------------------|
| DATE: APRIL 11, 2018 | SCALE: HORIZONTAL: 1" = 50' | HMC FILE NUMBER: C1.0 |
| MCE PROJ. # 02735-0206 | VERTICAL: N/A | DRAWING NUMBER: C1.2 |
| DRAWN: LEG | PROJ. MGR.: CHS | REVISION: 2 |
| DESIGNED: LEG | STATUS: FINAL DRAWINGS FOR REVIEW PURPOSES ONLY | |
| CHECKED: GCA | | |

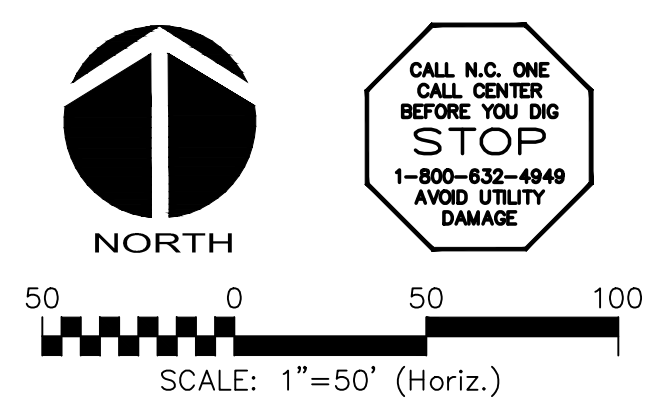




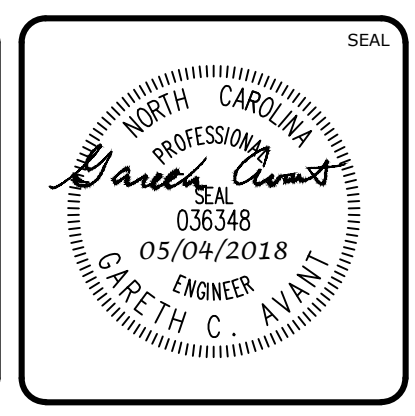
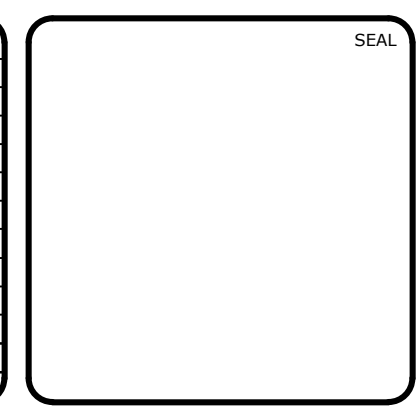
LEGEND

| | |
|--|--|
| | SANITARY SEWER LINE |
| | WATER MAIN |
| | SANITARY SEWER FORCE MAIN (DESIGNED BY OTHERS) |
| | EXISTING SANITARY SEWER LINE |
| | EXISTING SS FORCE MAIN |
| | EXISTING WATER MAIN |
| | PRIVATE WATER EASEMENT |
| | PUBLIC DRAINAGE EASEMENT |
| | SANITARY SEWER MANHOLE |
| | SANITARY SEWER CLEANOUT |
| | WATER METER |
| | FIRE HYDRANT ASSEMBLY (FHA) |
| | ROW |
| | LOT LINE |
| | CHATHAM COUNTY STREAM BUFFER |
| | 4' H.O.A. EASEMENT |
| | 4' PRIVATE UTILITY EASEMENT |
| | EXISTING WETLANDS |

- UTILITY NOTES:**
- ALL SANITARY SEWER CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH CURRENT NCDENR & CHATHAM COUNTY STANDARDS, SPECIFICATIONS & DETAILS.
 - ALL WATER MAIN CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH CURRENT CHATHAM COUNTY STANDARDS, SPECIFICATIONS & DETAILS.
 - ALL PERMITS RELATING TO THIS PROJECT MUST BE OBTAINED PRIOR TO CONSTRUCTION.
 - ALL WATER MAINS SHALL HAVE A MIN. OF 3'-6" OF COVER AS MEASURED FROM FINISHED GRADE TO TOP OF PIPE AT THE LOCATION WHERE INSTALLED.
 - WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10-FOOT LATERAL SEPARATION, IN WHICH CASE:
 - THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER; OR
 - THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
 WHERE A WATER MAIN CROSSES OVER A SANITARY SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 18-INCH VERTICAL SEPARATION - IN WHICH CASE BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
 - CONTRACTOR SHALL USE A MIN. 20' SECTION DIP CLASS 350 CENTERED UNDER STORMWATER PIPE WHERE 18" MIN. VERTICAL CLEARANCE CANNOT BE MET BETWEEN STORMWATER AND WATER.
 - TRACER WIRE AND TRACER WIRE TEST STATIONS ARE TO BE INSTALLED ON ALL WATER MAINS. TRACER WIRE TEST STATIONS ARE TO BE LOCATED AT ALL FIRE HYDRANTS WITHIN A 3 FOOT RADIUS OF THE HYDRANT AND PREFERABLY TO THE REAR OF THE HYDRANT.
 - WATER SERVICES SHALL BE EXTENDED FROM THE MAIN TO A METER BOX LOCATED WITHIN THE RIGHT OF WAY. THE METER SHALL BE PLACED AT THE EDGE OF THE SERVICED LOT'S RIGHT OF WAY LINE OR EASEMENT. SERVICE LINE SHALL BE RUN ON A TRUE LINE FROM THE WATER MAIN TO THE METER BOX, AND WHERE POSSIBLE, SERVICE LINE SHALL BE PERPENDICULAR TO THE MAIN LINE. NO WATER BOXES OR VAULTS SHALL BE PLACED IN STREETS, SIDEWALKS, PARKING AREAS, OR DRIVEWAYS.
 - MANHOLES SHALL BE SPACED A MAXIMUM DISTANCE OF 400 FEET APART.
 - MANHOLES SHALL BE INSTALLED AT EACH DEFLECTION OF LINE AND/OR GRADE WITH A MINIMUM DROP OF 0.2 FEET. MANHOLES FOR SEWERS GREATER THAN 21 INCHES IN DIAMETER SHALL BE 5 FOOT MANHOLES. MANHOLES FOR SEWERS 12 FEET OR DEEPER SHALL BE MINIMUM 5 FOOT DIAMETER. MANHOLE TOPS SHALL BE SET FLUSH WITH PAVEMENT WHERE INSTALLED IN A STREET.
 - SERVICE CONNECTIONS FOR THE SANITARY SEWER LINES SHOULD BE PERPENDICULAR FROM THE MAIN LINE TO THE EDGE OF THE SERVICED LOT'S RIGHT OF WAY LINE OR EASEMENT WITH A MINIMUM GRADE OF 1/4 INCH/FOOT FOR 4 INCH AND .6 FOOT/100 FOOT FOR 6 INCH. ALL CLEANOUTS SHALL EXTEND A MINIMUM OF 6 INCHES ABOVE THE FINISHED GRADE. WHERE A SERVICE LINE IS CONNECTED TO A MANHOLE, THE LINE SHALL TERMINATE AT THE EDGE OF THE INVERT IN THE MANHOLE. NO CLEANOUTS SHALL BE PLACED IN STREETS, SIDEWALKS, PARKING AREAS, OR DRIVEWAYS.
 - ALL SANITARY SEWER LINES ARE 8" PVC SDR 35 UNLESS OTHERWISE NOTED AND ALL WATER MAIN LINES ARE 8" DI CLASS 350 UNLESS OTHERWISE NOTED. ALL SANITARY SEWER SERVICES ARE 4" SCHEDULE 40 PVC AND ALL WATER MAIN SERVICES ARE 3/4" WITH 5/8" METERS.
 - MINIMUM COVER OF 5 FEET IN TRAFFIC AREAS TO BE PROVIDED FOR ALL COLLECTOR LINES 4 INCHES AND LARGER. IF LESS THAN 5 FEET, DUCTILE IRON PIPE SHALL BE REQUIRED.
 - SANITARY SEWER WITHIN PRIVATE EASEMENTS TO BE OWNED, OPERATED AND MAINTAINED BY HOME OWNERS ASSOCIATION OR AGENT THEREOF.
 - WATER MAINS WILL BE 3.5' AS MEASURED HORIZONTALLY BEHIND CURB AND GUTTER UNLESS SHOWN OTHERWISE.
 - ALL WATER MAINS WITHIN PUBLIC EASEMENTS AND PUBLIC RIGHT-OF-WAY TO BE OWNED, OPERATED AND MAINTAINED BY CHATHAM COUNTY, AND WILL BE CONTAINED WITHIN 20' WIDE PUBLIC WATER LINE EASEMENT (MINIMUM) CENTERED ON THE PROPOSED WATER MAIN.
 - CONTRACTOR TO COORDINATE WITH CHATHAM COUNTY PUBLIC WORKS FOR ALL IRRIGATION SLEEVE SIZING.



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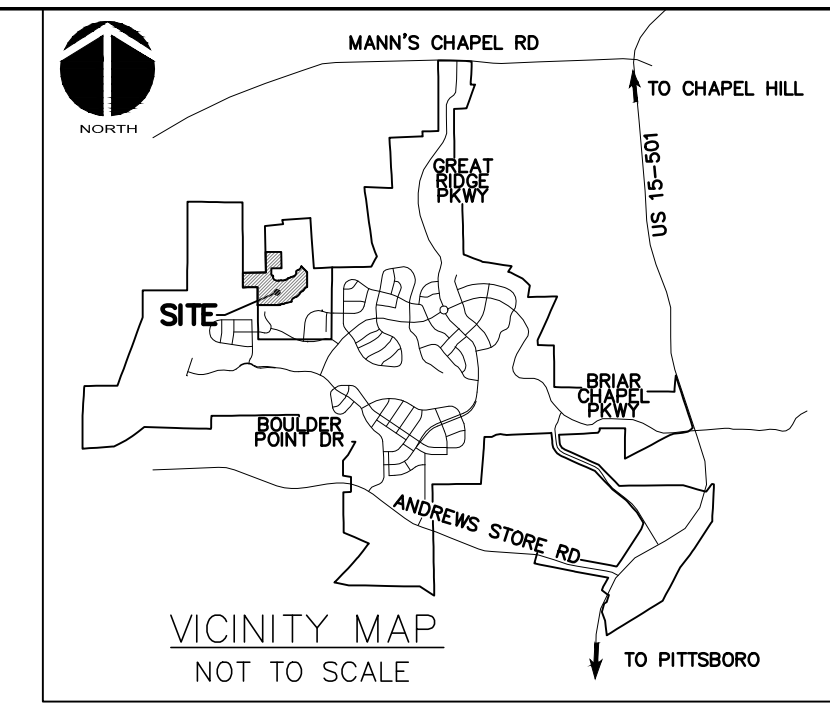
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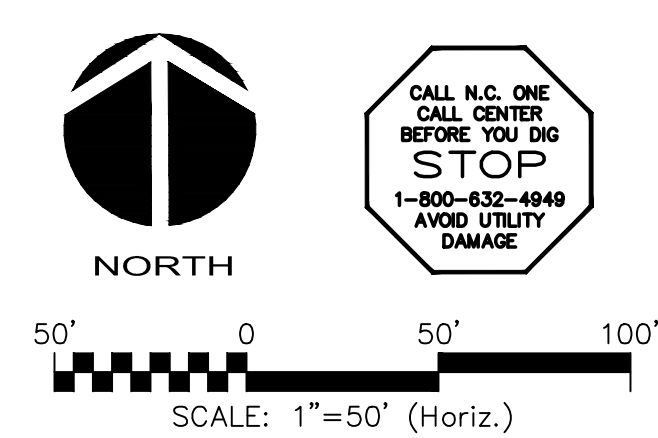
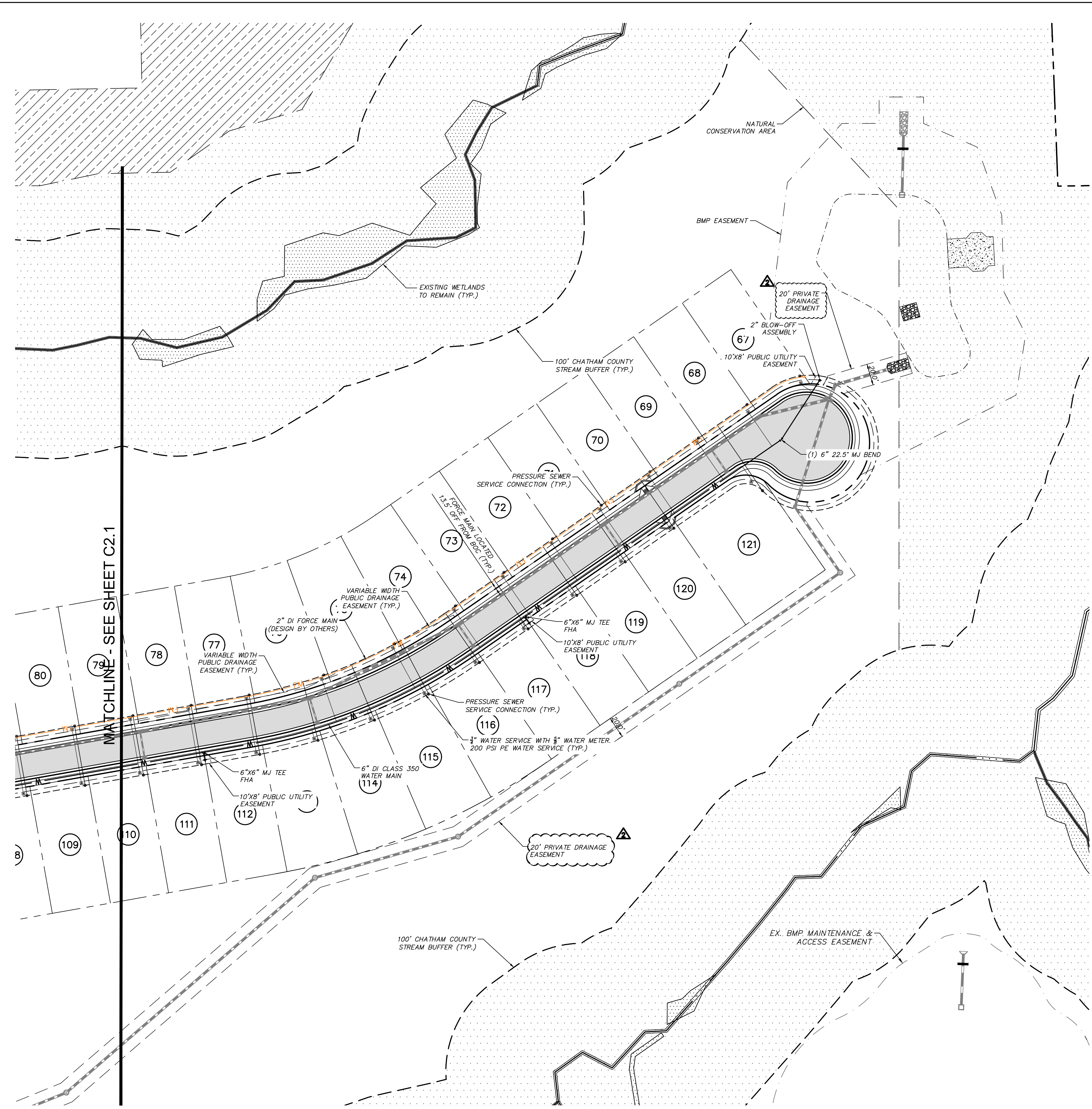
UTILITY PLAN

| | | |
|---|-----------------------------|-----------------------|
| DATE: APRIL 11, 2018 | SCALE: HORIZONTAL: 1" = 50' | H&C FILE NUMBER: C2.X |
| MCE PROJ. #: 02735-0206 | VERTICAL: N/A | DRAWING NUMBER: C2.1 |
| DRAWN: LEG | | |
| DESIGNED: LEG | | |
| CHECKED: GCA | | |
| PROJ. MGR.: CHS | | |
| STATUS: FINAL DRAWINGS FOR REVIEW PURPOSES ONLY | REVISION: 2 | |

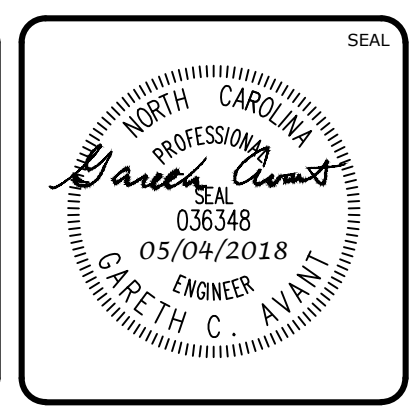
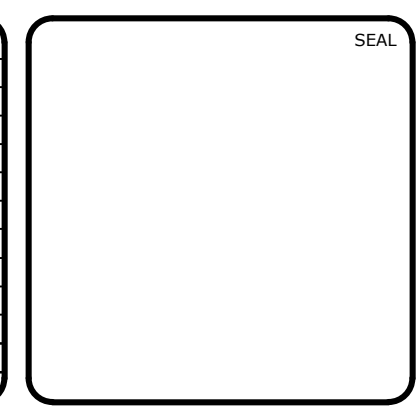


LEGEND

| | |
|-----------|--|
| SS | SANITARY SEWER LINE |
| W | WATER MAIN |
| FM | SANITARY SEWER FORCE MAIN (DESIGNED BY OTHERS) |
| SS | EXISTING SANITARY SEWER LINE |
| FM | EXISTING SS FORCE MAIN |
| W | EXISTING WATER MAIN |
| - - - - - | PRIVATE WATER EASEMENT |
| - - - - - | PUBLIC DRAINAGE EASEMENT |
| ⊙ | SANITARY SEWER MANHOLE |
| ⊗ | SANITARY SEWER CLEANOUT |
| ⊕ | WATER METER |
| ⊕ | FIRE HYDRANT ASSEMBLY (FHA) |
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| MCE PROJ. # 02735-0206 | VERTICAL: N/A | DRAWING NUMBER: C2.2 |
| DRAWN: LEG | | |
| DESIGNED: LEG | | |
| CHECKED: GCA | | |
| PROJ. MGR.: CHS | | |
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