

**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. 93RD ST
MEDLEY, FLA. 33166
(305)885-0301 FAX (305) 844-3253

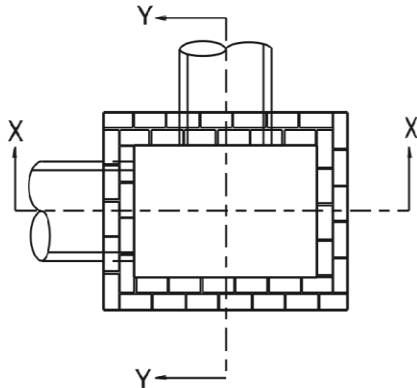
SUPER CAST, INC.
1104 US HWY. 117 BYPASS, S.
GOLDSBORO, N.C. 27530
(919)736-9010 FAX (919)736-0290

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

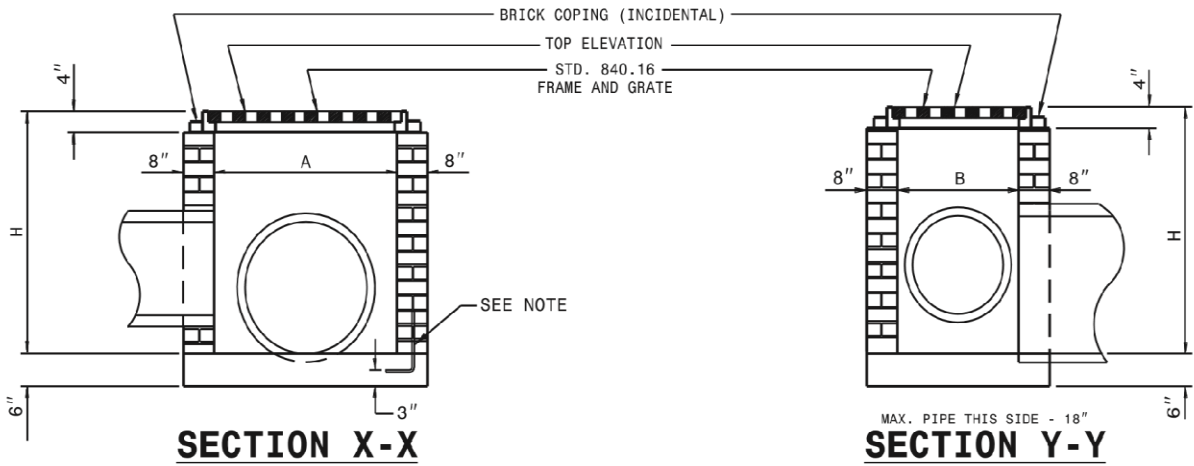
ENNIS ENTERPRISES
P.O. BOX 931
WILMINGTON, N.C. 28402
(910) 371-9323



PLAN
WITH COPING REMOVED

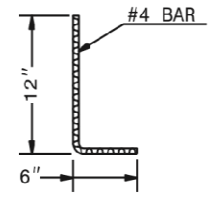
GENERAL NOTES:

- MORTAR JOINTS $\frac{1}{2}$ " +/- $\frac{1}{8}$ " THICK.
- USE CLASS "B" CONCRETE THROUGHOUT.
- USE FORMS FOR CONSTRUCTION OF THE BOTTOM SLAB.
- USE #4 BAR DOWELS AT 12" CENTERS.
- DEDUCT FOR PIPE(S) FROM TOTAL CU. YDS. OF BRICK MASONRY.
- PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
- USE BRICK OR CONCRETE BLOCK WHICH COMPLIES WITH THE REQUIREMENTS OF SECTION 840 OF THE STANDARD SPECIFICATIONS.
- IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
- FOR 8'-0" IN HEIGHT OR LESS, USE 8" WALL. OVER 8'-0" IN HEIGHT, USE 12" WALL TO 6'-0" FROM TOP OF WALL AND 8" WALL FOR THE REMAINING 6'-0". QUANTITIES TO BE ADJUSTED ACCORDINGLY.
- CONSTRUCT WITH PIPE CROWNS MATCHING.
- SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES.
- DO NOT USE BRICK MASONRY DROP INLET IN LOCATIONS SUBJECT TO TRAFFIC.
- CHAMFER ALL EXPOSED CORNERS 1".
- DRAWING NOT TO SCALE.



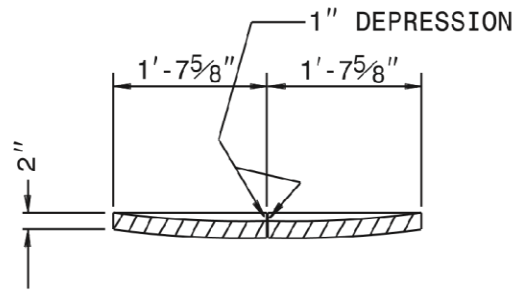
SECTION X-X

SECTION Y-Y

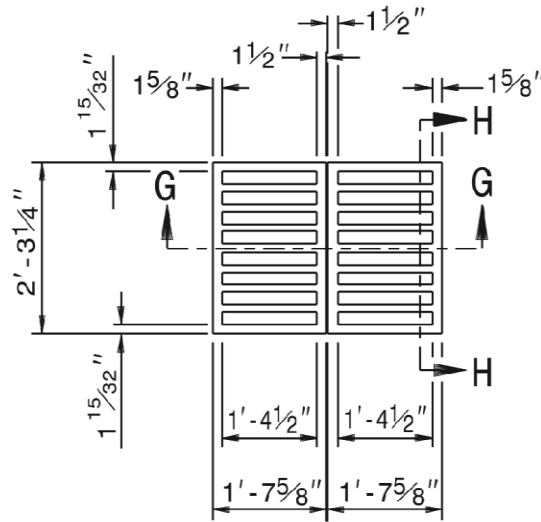


DOWEL

DIMENSIONS AND QUANTITIES FOR DROP INLET (BASED ON MIN. HEIGHT, H)									
DIMENSIONS OF BOX & PIPE				CUBIC YARDS CONCRETE	CUBIC YARDS BRICK MASONRY			DEDUCTIONS FOR ONE PIPE	
PIPE	SPAN	WIDTH	MIN. HEIGHT		BOTTOM SLAB	WALL PER FOOT HT.	TOTAL BRICK MASONRY FOR MIN. HEIGHT, H	C.S.	R.C.
12"	3'-0"	2'-0"	2'-0"	0.268	0.313	0.522	0.020	0.032	
15"	/	/	2'-3"	0.268	0.313	0.600	0.031	0.047	
18"	/	/	2'-6"	0.268	0.313	0.678	0.044	0.065	
24"	/	/	3'-0"	0.268	0.313	0.835	0.078	0.113	
30"	3'-0"	2'-0"	3'-6"	0.268	0.313	0.991	0.122	0.170	

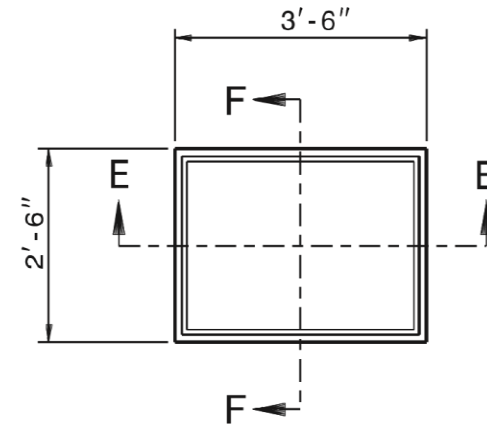


SECTION G-G



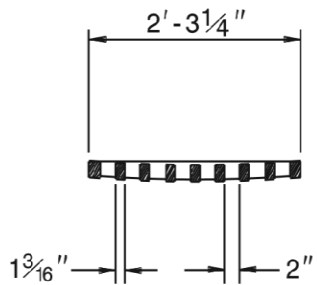
PLAN OF GRATING

CAST IRON

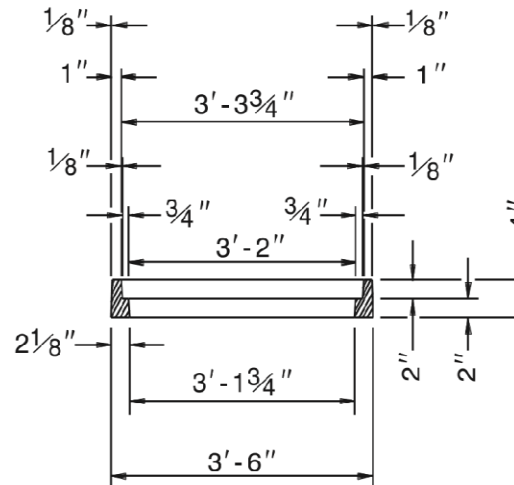


PLAN OF FRAME

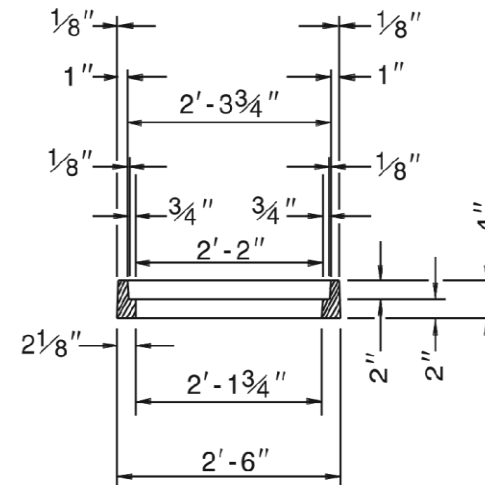
CAST IRON



SECTION H-H



SECTION E-E



SECTION F-F

1-18

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

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

SHEET 1 OF 1

840.16

STABILIZATION REQUIREMENTS:

Stabilization for this project shall comply with the time frame guidelines as specified by the NCG-010000 general construction permit effective August 3, 2011 issued by the North Carolina Department of Environment and Natural Resources Division of Water Quality. Temporary or permanent ground cover stabilization shall occur within 7 calendar days from the last land- disturbing activity, with the following exceptions in which temporary or permanent ground cover shall be provided in 14 calendar days from the last land-disturbing activity:

- Slopes between 2:1 and 3:1, with a slope length of 10 ft. or less
- Slopes 3:1 or flatter, with a slope of length of 50 ft. or less
- Slopes 4:1 or flatter

The stabilization timeframe for High Quality Water (HQW) Zones shall be 7 calendar days with no exceptions for slope grades or lengths. High Quality Water Zones (HQW) Zones are defined by North Carolina Administrative Code 15A NCAC 04A.0105 (25). Temporary and permanent ground cover stabilization shall be achieved in accordance with the provisions in this contract and as directed.

NATIVE GRASS SEEDING AND MULCHING:

(West)

Native Grass Seeding and Mulching shall be performed on the disturbed areas of wetlands and riparian areas, and adjacent to Stream Relocation and/or trout stream construction within a 50 foot zone on both sides of the stream or depression, measured from top of stream bank or center of depression. The stream bank of the stream relocation shall be seeded by a method that does not alter the typical cross section of the stream bank. Native Grass Seeding and Mulching shall also be performed in the permanent soil reinforcement mat section of preformed scour holes, and in other areas as directed.

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

August 1 - June 1		May 1 – September 1	
18#	Creeping Red Fescue	18#	Creeping Red Fescue
8#	Big Bluestem	8#	Big Bluestem
6#	Indiangrass	6#	Indiangrass
4#	Switchgrass	4#	Switchgrass
35#	Rye Grain	25#	German or Browntop Millet
500#	Fertilizer	500#	Fertilizer
4000#	Limestone	4000	Limestone

Approved Creeping Red Fescue Cultivars: Aberdeen

Boreal

Epic

Cindy Lou

Fertilizer shall be 10-20-20 analysis. 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 and as directed.

Temporary Seeding

Fertilizer shall be the same analysis as specified for *Seeding and Mulching* and applied at the rate of 400 pounds and seeded at the rate of 50 pounds per acre. German Millet or Browntop Millet shall be used in summer months and rye grain during the remainder of the year. The Engineer will determine the exact dates for using each kind of seed.

Fertilizer Topdressing

Fertilizer used for topdressing shall be 16-8-8 grade and shall be applied at the rate of 500 pounds per acre. A different analysis of fertilizer may be used provided the 2-1-1 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as 16-8-8 analysis and as directed.

Supplemental Seeding

The kinds of seed and proportions shall be the same as specified for *Seeding and Mulching*, and the rate of application may vary from 25# to 75# per acre. The actual rate per acre will be determined prior to the time of topdressing and the Contractor will be notified in writing of the rate per acre, total quantity needed, and areas on which to apply the supplemental seed. Minimum tillage equipment, consisting of a sod seeder shall be used for incorporating seed into the soil as to prevent disturbance of existing vegetation. A clodbuster (ball and chain) may be used where degree of slope prevents the use of a sod seeder.

Mowing

The minimum mowing height shall be 6 inches.

Measurement and Payment

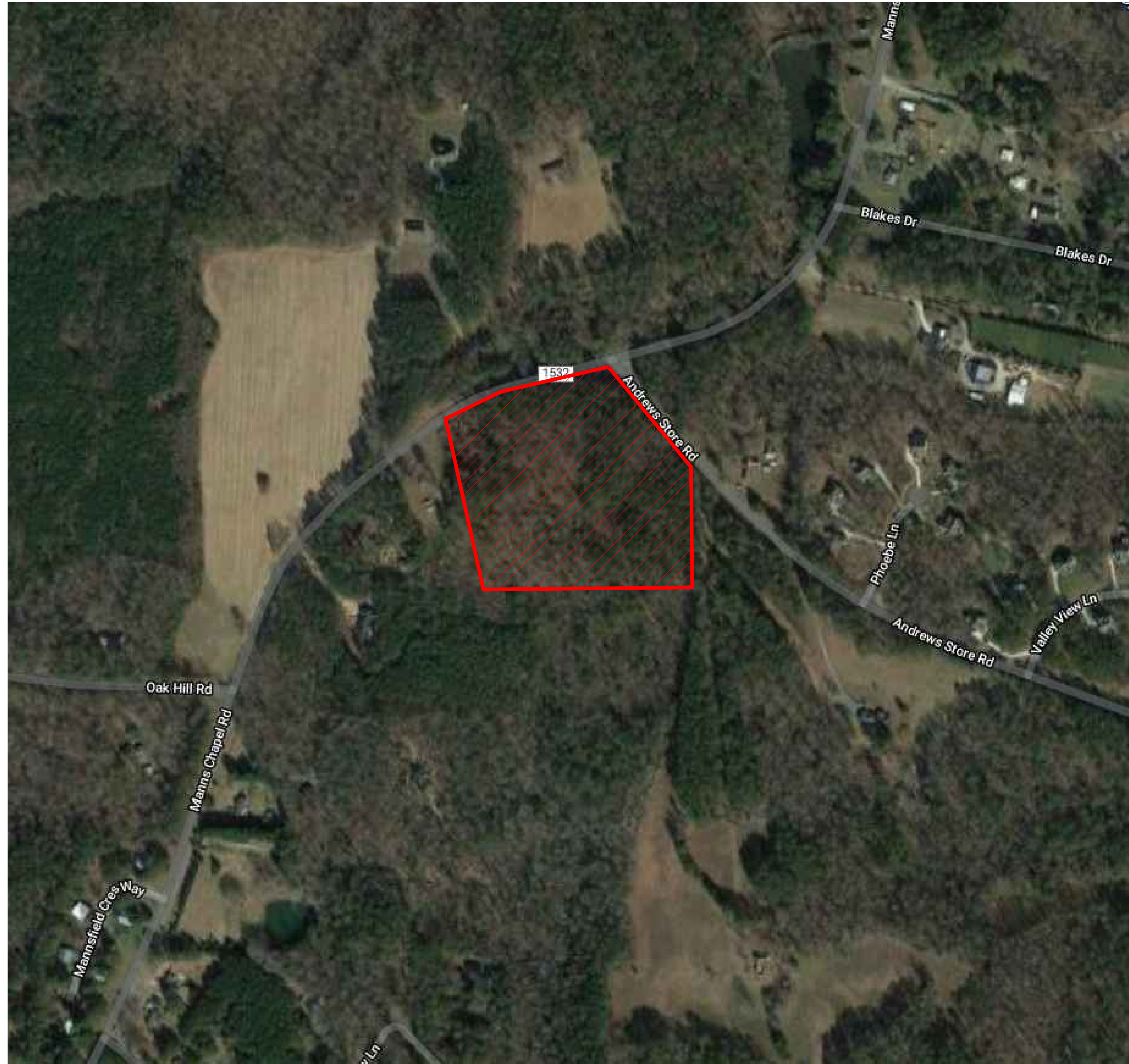
Native Grass *Seeding and Mulching* will be measured and paid for in accordance with Article 1660-8 of the *Standard Specifications*.

DRAWING INDEX

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FIRST PLAT	C-1.2
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UTILITY DETAILS	C-2.4
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HOBBY FARM SUBDIVISION

3267 ANDREWS STORE ROAD, PITTSBORO, NC 27312
CHATHAM COUNTY, NORTH CAROLINA



VICINITY MAP



SITE INFORMATION

CURRENT OWNER: LOVIN' SPOONFUL, LLC
727 WEST HARGETT STREET, SUITE 209
RALEIGH, NC 27603

AKPAR PIN: 0068308
9755 00 53 9236

JURISDICTION: CHATHAM COUNTY PLANNING
TOWNSHIP: BALDWIN
COUNTY: CHATHAM COUNTY
STATE: NORTH CAROLINA
FEMA FLOOD MAP: 3710975500K
FEMA FLOOD ZONE: X
RIVER BASIN: CAPE FEAR
WATERSHED: JORDAN LAKE (WS-IV PA)

REFERENCES: DB 2082 / PG 722

EXIST PARCEL SIZE: ±12.92 AC
AREA TO BE DEDICATED TO ROW: ±0.90 ACRES
TOTAL PARCEL SIZE: ±12.02 AC

CURRENT USE: VACANT / UNDEVELOPED
PROPOSED USE: SINGLE FAMILY RESIDENTIAL SUBDIVISION
LAND USE CLASS:
CURRENT ZONING: R-1

REQUIRED

STRUCTURE SETBACKS
FRONT SETBACK: 40'
SIDE SETBACK: 25'
REAR SETBACK: 25'
MIN. LOT WIDTH: 100'
MIN. LOT SIZE: 40,000 SF

AREA OF NEW ROW: 37,423 SF / 0.86 AC
LINEAR FOOTAGE OF NEW ROAD: 547'

PROPOSED WATER SUPPLY: CHATHAM COUNTY PUBLIC UTILITIES
PROPOSED SEWAGE TREATMENT: CONVENTIONAL SEPTIC SYSTEM

PROJECT CONTACTS

ENGINEER: C3 DESIGN & ENGINEERING, PLLC
CHAD E. ABBOTT, PE
2537 E LYON STATION ROAD, SUITE 201
PO BOX 0361
CREEDMOOR, NC 27522
(919) 625-7368

SURVEYOR: VAN R. FINCH - LAND SURVEYS, P.A.
109 HILLSBORO STREET
PITTSBORO, NC 27312
(919) 542-2503

PLANNING: KIMBERLY TYSON
80 EAST STREET
PO BOX 54
PITTSBORO, NC 27312
(919) 542-8283

WATER: CHATHAM COUNTY UTILITIES & WATER DIVISION
LARRY BRIDGES
964 EAST ST., 2nd FLOOR/SUITE 205
PITTSBORO, NC 27312
(919) 542-8238

SEPTIC: CHATHAM COUNTY ENVIRONMENTAL HEALTH
THOMAS BOYCE
12 EAST STREET
PITTSBORO, NC 27312
(919) 545-8378

EROSION CONTROL: CHATHAM COUNTY WATERSHED PROTECTION DEPT.
DREW BLAKE
12 EAST STREET
PITTSBORO, NC 27312
(919) 545-8334

STORMWATER: CHATHAM COUNTY WATERSHED PROTECTION DEPT.
MORGAN DEWIT
12 EAST STREET
PITTSBORO, NC 27312
(919) 542-8268

NCDOT: MICKEY PATE
300 DOT DRIVE
ASHEBORO, NC 27204
(336) 318-4005

FIRE: WILLIAM JUDSON (FIRE MARSHAL)
80 EAST STREET
PO BOX 548
PITTSBORO, NC 27312
(919) 545-8342

ELECTRIC: DUKE ENERGY PROGRESS
800-452-2777

RICKY SPOON BUILDERS
RICKY SPOON
2400 REDBUD ROAD
PITTSBORO, NORTH CAROLINA, 27312
RICKYSPOON@GMAIL.COM
919-422-1517

C3 DESIGN & ENGINEERING, PLLC
NC Firm License #: P-1764
2537 E LYON STATION RD, STE 102(PHYSICAL)
P.O. Box 361(MAILING)
Creedmoor, NC 27522-0361
chad@ce3design.com
919.625.7368



NO.	DATE	BY	REVISIONS
6			
5	1/24/20	CEA	
4	2/19/20	ABA	
3	02/06/20	JHS	
2	12/20/19	JHS	
1			FIRST ISSUED

CONSTRUCTION DRAWINGS
HOBBY FARM SUBDIVISION
3267 ANDREWS STORE ROAD, PITTSBORO NC 27312
CHATHAM COUNTY, NORTH CAROLINA

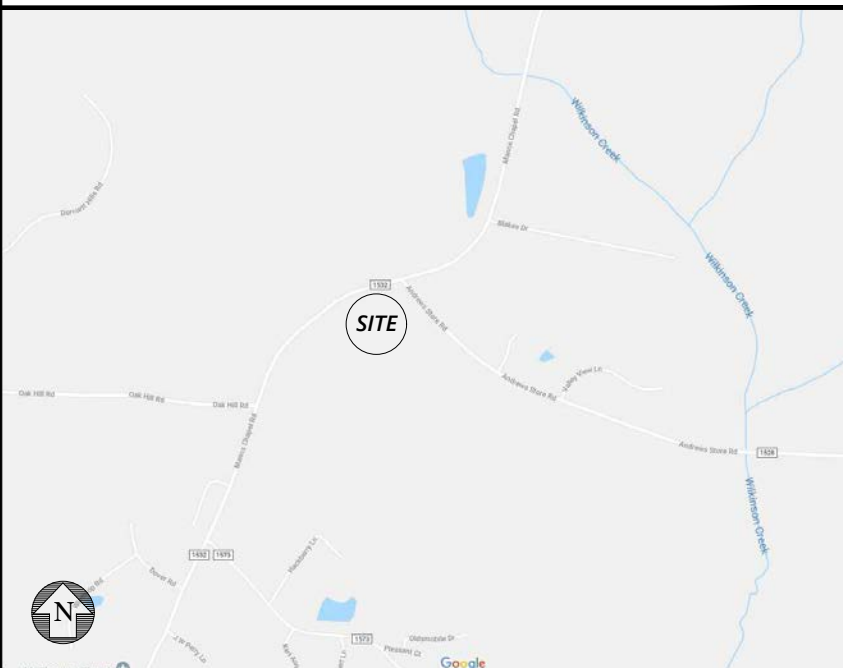
COVER SHEET

C3 PROJECT #:
18-067

REVIEW PROJECT #:
XX-XXX

SHEET #:
C-1.1

VICINITY MAP



SITE INFORMATION

CURRENT OWNER: BARBARA HACKNEY
368 WHITE OAK TRAIL
CHAPEL HILL, NC 27516
(919) 932-1026

AKPAR PIN: 0068308
9755 00 53 9236

JURISDICTION: CHATHAM COUNTY PLANNING
TOWNSHIP: BALDWIN
COUNTY: CHATHAM COUNTY
STATE: NORTH CAROLINA
FEMA FLOOD MAP: 3710975500K
FEMA FLOOD ZONE: X
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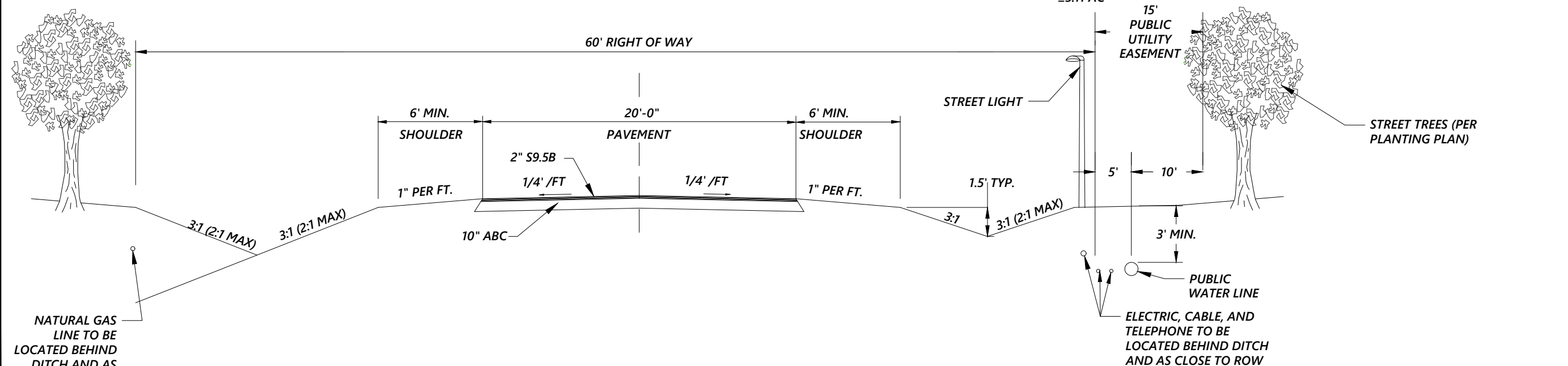
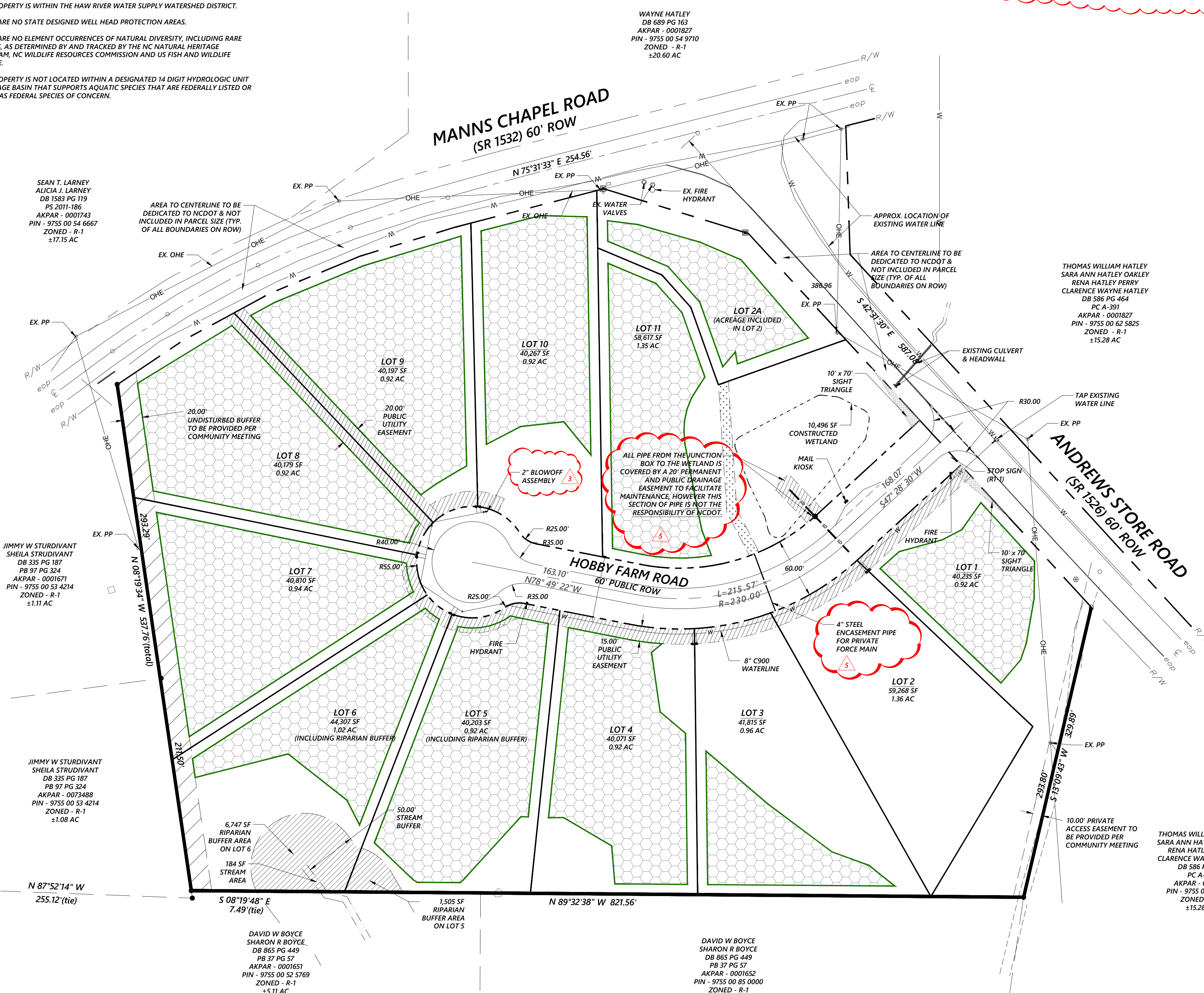
NOTES & CONDITIONS OF APPROVAL:

- THERE ARE NO SIGNIFICANT CULTURAL AND/OR HISTORICAL SITES AS DEFINED BY NC OFFICE OF ARCHAEOLOGY, DEPARTMENT OF CULTURAL RESOURCES AND/OR CHATHAM HISTORICAL ASSOCIATION ON THE PROPERTY.
- THERE ARE NO EXISTING BUILDINGS, CEMETERIES OR HISTORICAL STRUCTURES GREATER THAN 50 YEARS OF AGE ON THE PROPERTY.
- THERE ARE NO CEMETERIES OR HISTORICAL STRUCTURES LOCATED WITHIN 100 FEET OF THE DEVELOPMENT ON ANY ADJACENT PROPERTY.
- NO NON-DISCHARGE PERMIT FOR A LAND APPLICATION WASTE DISPOSAL SYSTEM IS NECESSARY.
- NO PERMIT FOR ANY SUBSURFACE WASTEWATER DISPOSAL SYSTEM OF 3000 GALLON/DAY OR LARGER IS NECESSARY.
- NO 404 PERMIT/401 CERTIFICATION IS NECESSARY.
- THE PROPERTY IS WITHIN THE HAW RIVER WATER SUPPLY WATERSHED DISTRICT.
- THERE ARE NO STATE DESIGNED WELL HEAD PROTECTION AREAS.
- THERE ARE NO ELEMENT OCCURRENCES OF NATURAL DIVERSITY, INCLUDING RARE SPECIES, AS DETERMINED BY AND TRACKED BY THE NC NATURAL HERITAGE PROGRAM, NC WILDLIFE RESOURCES COMMISSION AND US FISH AND WILDLIFE SERVICE.
- THE PROPERTY IS NOT LOCATED WITHIN A DESIGNATED 14 DIGIT HYDROLOGIC UNIT DRAINAGE BASIN THAT SUPPORTS AQUATIC SPECIES THAT ARE FEDERALLY LISTED OR LISTED AS FEDERAL SPECIES OF CONCERN.

SOILS LEGEND



NOTE:
ANY EASEMENT OUTSIDE OF THE RIGHT OF WAY IS NOT THE RESPONSIBILITY OF NCDOT TO MAINTAIN, EVEN IF CONTIGUOUS TO THE RIGHT OF WAY.

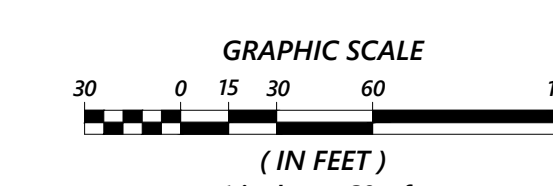


MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCDOT STANDARDS AND SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO THE LATEST VERSIONS OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS STRUCTURES, THE NCDOT ROADWAY STANDARDS DRAWINGS, AND NCDOT POLICIES AND PROCEDURES FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHTS OF WAY.

CONTRACTOR/OWNER SHALL PROVIDE CERTIFICATION SIGNED BY A LICENSED PROFESSIONAL ENGINEER VERIFYING THE CONSTRUCTION MEETS THE NCDOT DESIGN REQUIREMENTS AND PER APPROVED PLANS. CERTIFICATION SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:

- DENSITY
- DENSITY AND THICKNESS BY TYPE
- BASE DENSITY
- AND TEST LOCATIONS

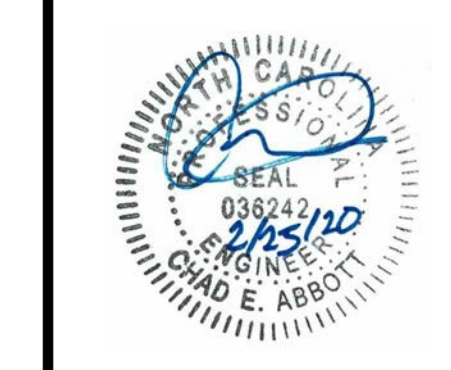
CONTRACTOR/OWNER SHALL PROVIDE NCDOT WITH 24 HOUR NOTICE PRIOR TO PROOF ROLLING.



Know what's below.
Call before you dig.

RICKY SPOON BUILDERS
RICKY SPOON
2400 REDBUD ROAD
PITTSBORO, NORTH CAROLINA, 27312
RICKYSPOON@GMAIL.COM
919.422.1517

CA DESIGN & ENGINEERING, PLLC
NC Firm License #: P-1764
2537 E LYON STATION RD, STE 102 (PHYSICAL)
P.O. Box 361 (MAILING)
Greensboro, NC 27402-0361
Credentialed by: NCEM.org
919.625.7269



NO.	REVISIONS	DATE	BY
6	CEA	2/25/20	
5	NCDOT COMMENTS	2/24/20	
4	NCDOT COMMENTS	2/19/20	
3	NCDOT COMMENTS	02/06/20	
2	CC. UTILITY, STORM, NCDOT COMMENTS	12/20/19	
1	CC. EROSION CONTROL COMMENTS		
	FIRST ISSUED		

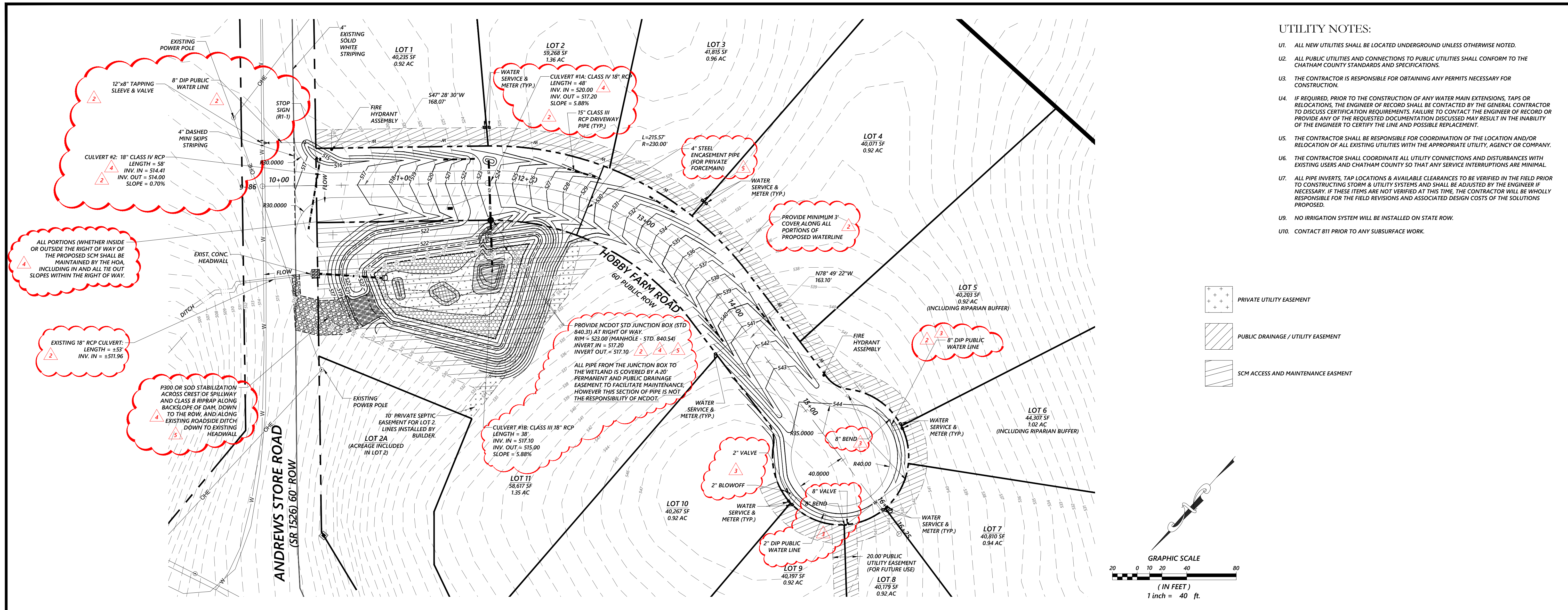
CONSTRUCTION DRAWINGS
HOBBY FARM SUBDIVISION
3267 ANDREWS STORE ROAD, PITTSBORO NC 27312
CHATHAM COUNTY, NORTH CAROLINA

FIRST PLAT

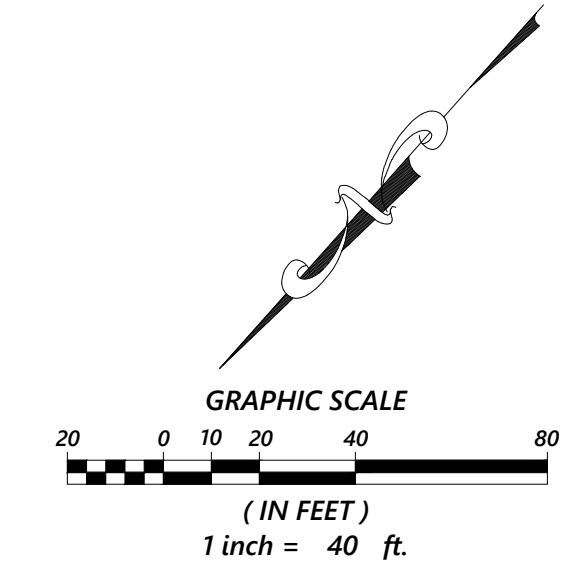
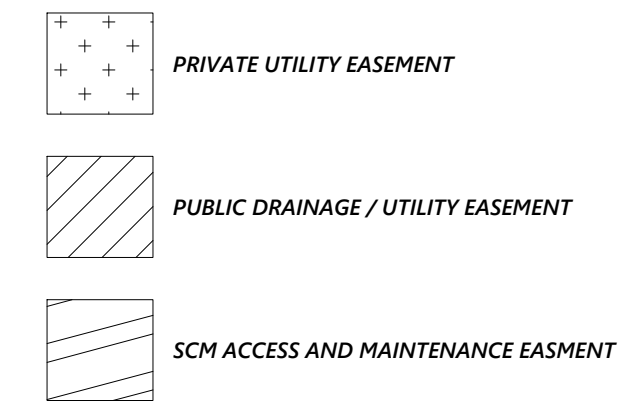
C3 PROJECT #:
18-067

REVIEW PROJECT #:
XX-XXX

SHEET #:
C-1.2

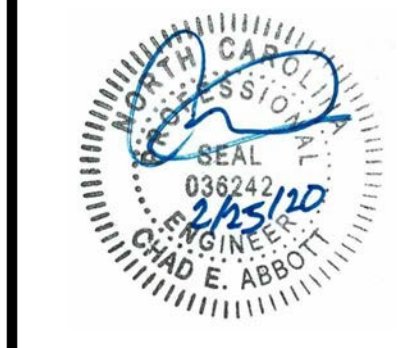


- UTILITY NOTES:**
- U1. ALL NEW UTILITIES SHALL BE LOCATED UNDERGROUND UNLESS OTHERWISE NOTED.
 - U2. ALL PUBLIC UTILITIES AND CONNECTIONS TO PUBLIC UTILITIES SHALL CONFORM TO THE CHATHAM COUNTY STANDARDS AND SPECIFICATIONS.
 - U3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS NECESSARY FOR CONSTRUCTION.
 - U4. IF REQUIRED, PRIOR TO THE CONSTRUCTION OF ANY WATER MAIN EXTENSIONS, TAPS OR RELOCATIONS, THE ENGINEER OF RECORD SHALL BE CONTACTED BY THE GENERAL CONTRACTOR TO DISCUSS CERTIFICATION REQUIREMENTS. FAILURE TO CONTACT THE ENGINEER OF RECORD OR PROVIDE ANY OF THE REQUESTED DOCUMENTATION DISCUSSED MAY RESULT IN THE INABILITY OF THE ENGINEER TO CERTIFY THE LINE AND POSSIBLE REPLACEMENT.
 - U5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE LOCATION AND/OR RELOCATION OF ALL EXISTING UTILITIES WITH THE APPROPRIATE UTILITY, AGENCY OR COMPANY.
 - U6. THE CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS AND DISTURBANCES WITH EXISTING USERS AND CHATHAM COUNTY SO THAT ANY SERVICE INTERRUPTIONS ARE MINIMAL.
 - U7. ALL PIPE INVERTS, TAP LOCATIONS & AVAILABLE CLEARANCES TO BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTING STORM & UTILITY SYSTEMS AND SHALL BE ADJUSTED BY THE ENGINEER IF NECESSARY. IF THESE ITEMS ARE NOT VERIFIED AT THIS TIME, THE CONTRACTOR WILL BE WHOLLY RESPONSIBLE FOR THE FIELD REVISIONS AND ASSOCIATED DESIGN COSTS OF THE SOLUTIONS PROPOSED.
 - U9. NO IRRIGATION SYSTEM WILL BE INSTALLED ON STATE ROAD.
 - U10. CONTACT 811 PRIOR TO ANY SUBSURFACE WORK.



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 RICKY SPOON
 2400 REDBUD ROAD
 PITTSBORO, NORTH CAROLINA, 27312
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 C3engr@cs3engr.com
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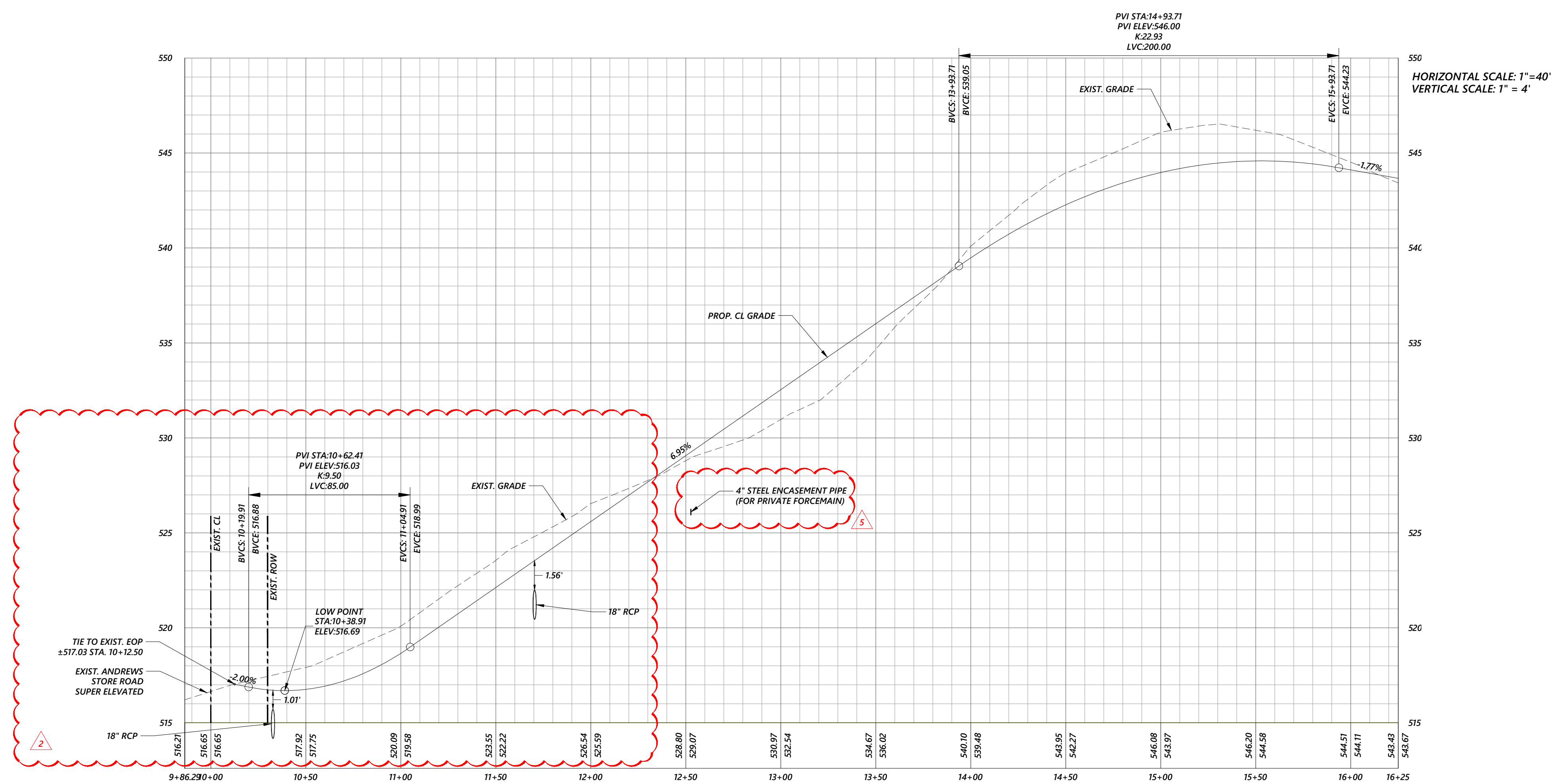


NO.	DATE	REVISIONS	BY
6	2/25/20	CEA	
5	2/24/20	CEA	
4	2/19/20	ABA	
3	02/06/20	JHS	
2	12/20/19	JHS	
1		CC. EROSION CONTROL COMMENTS	
		CC. UTILITY, STORM, NCDOT COMMENTS	
		FIRST ISSUED	

CONSTRUCTION DRAWINGS
HOBBY FARM SUBDIVISION
 3267 ANDREWS STORE ROAD, PITTSBORO NC 27312
 CHATHAM COUNTY, NORTH CAROLINA

HOBBY FARM ROAD PLAN & PROFILE STA. 10+00 - 16+25

C3 PROJECT #: 18-067
 REVIEW PROJECT #: XX-XXX
 SHEET #: C-1.3



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