

Central Carolina Soil Consulting, PLLC

1900 South Main Street, Suite 110

Wake Forest, NC 27587

919-569-6704

March 8, 2023

Job # 1580-D

Warren Mitchell

RE: Site plan review for Morgan Ridge Phase CD's.

Dear Mr. Mitchell:

Central Carolina Soil Consulting, PLLC has reviewed the proposed construction drawings for Morgan Ridge phase 2 (Chatham County) in regards to potential impacts to proposed subsurface wastewater systems. The initial soils mapping for the site was completed in January 2018 with septic system layouts in 2019 to establish off-site septic easements.

The current construction drawings showed a possible impact the septic areas for lots 2A, 3, 4 and 6 due to a 20' drainage easement for a 24" RCP. The attached map illustrates the CD's with the septic layouts for the above mentioned lots. The revised septic layouts on lots 2A, 3, 4 & 6 will all support either a 3 to 4-bedroom on lots with Accepted Status pressure manifold systems.

No other site improvements that I see should impact the proposed septic systems (off-site areas) for the lots in Phase 2 Morgan Ridge. Please note that some lot lines may need to be revised before final plat configuration due to septic layouts on lots not previously completed by CCSC. For example the lot lines between 23 and 24 may need to be revised so the initial septic system on lot 24 isn't a subsurface drip system to save money on septic installation. Also, the supply line corridors with multiple supply lines in the same trench will have to follow the standards set IWWS-2016 (Innovative Wastewater Approval) for off-site septic easements.

During the site construction process of a property, it is important not to impact any suitable soil areas with such activities as excavating or filling. Only the actual roadways and required drainage ditches and/or sediment basins should be constructed during this process. If the contractor requires a staging area to place fill from the construction process, then areas of unsuitable soils on the property should be utilized

as long as they are not state/county buffers, jurisdictional wetlands or other areas protected by local zoning regulations. If this is not possible, then the disturbed areas should be minimized as much as possible. The same precautions should be taken when the individual lots are cleared for home sites. Only the vegetation should be removed in the areas of the proposed drain fields on lots to prevent any disturbance of the naturally occurring soil. A lot with adequate areas of suitable soils can be deemed unsuitable due to poor planning or site disturbance. Central Carolina Soil Consulting recommends that all lot clearing activities are delayed until a permit is issued by the local health department, with the exception of clearing thick vegetation to access the lot.

If you have any questions regarding the findings on the attached map or in this report, please feel free contact me at anytime. Thank you allowing Central Carolina Soil Consulting to perform this site evaluation for you.

Sincerely,



Jason Hall
NC Licensed Soil Scientist #1248



Encl: Soil Map

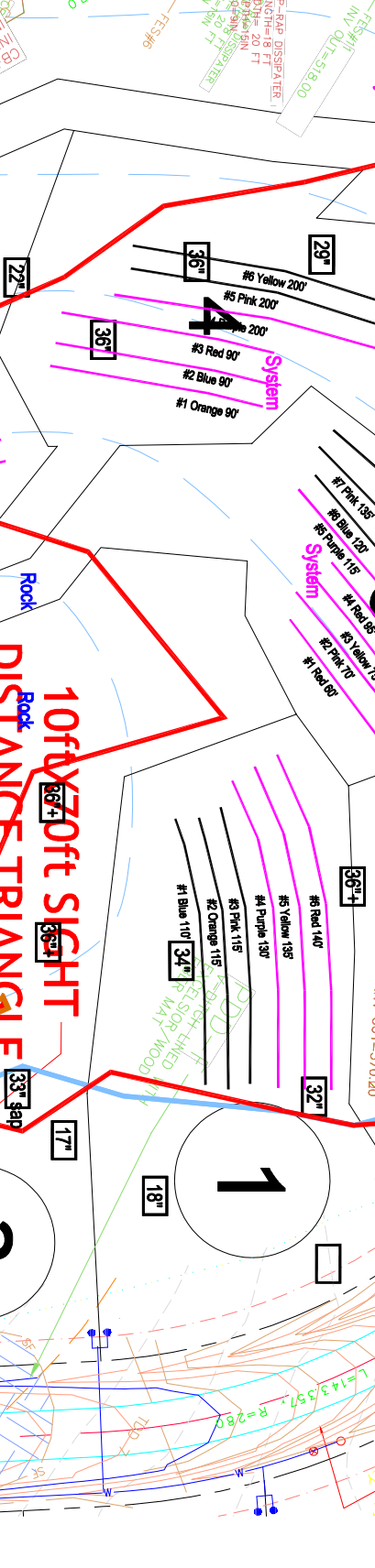
10ft x 70ft SIGHT DISTANCE TRIANGLE (typ)

Soils Line, LPP & Conv. System

Soils Line, LPP & Conv. System

Black Bear St 50ft Public Pink Soils Line

OPEN SPACE



CB#5 (840.04)
INLET=534.70
INV=534.50
OUT=534.50

Repair
#1 Red 45'
#10 Pink 55'
#8 Purple 55'
#7 Yellow 65'
#5 Blue 65'
#4 Pink 65'
#3 Yellow 75'
#1 Purple 65'

Repair
#1 Yellow 15'
#2 Red 65'
#3 Yellow 75'
#4 Red 85'
#5 Blue 120'
#6 Pink 135'
#7 Pink 135'

PDD-1
EXPOSED
INLET=547.70
INV=547.50
OUT=547.50

PDD-1
EXPOSED
INLET=570.00
INV=570.00
OUT=570.00

WATER HANDLING
PDD-1
EXPOSED
INLET=559.40
INV=559.40
OUT=559.40

PDD-1
EXPOSED
INLET=564.70
INV=564.70
OUT=564.70

PROPOSED 2" BLOWOFF ASSEMBLY
L=143.57' F=2.80%

OPEN SPACE
PDD-1
EXPOSED

OPEN SPACE
PDD-1
EXPOSED

MORGAN RIDGE CONSERVATION SUBDIVISION PHASE 2

CHATHAM COUNTY, NC

First Plat Site Plan

July 19, 2019
(revised Aug 22, 2019)
(revised Sept 18, 2019)

SITE DATA

Tract #1
Owner: Robert Bruce Page and Douglas Page
AKPAR: 69883
DB:1822 Page:0156
PIN: 9756-00-37-7676
Size: 56.25 acres

Tract #2
Owner: William Bruce Page
AKPAR: 1435
DB: 16E Page: 0057
PIN: 9756-00-47-8960
Size: 24 Acres

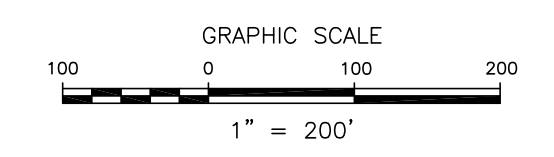
CURRENT ZONING: R-1
WATERSHED: WS-IV PA
TOTAL ACREAGE: 56.25 AC + 24 AC = 80.25 AC
TOTAL LOTS ALLOWED: +/- 58 LOTS
TOTAL LOTS PROPOSED: +/- 36 LOTS
AVG LOT SIZE +/- 1.11 ACRES GLA
MINIMUM LOT SIZE +/- 0.72 ACRES GLA
LENGTH OF ROAD +/- 2175 LF onsite
+/- 395 LF offsite

CONSERVATION SPACE
TOTAL AREA REQ'D: 40% GLA(min) = 32.1 ACRES
Natural Space(min): (80% cons. space)= 28.1 ACRES
Natural Space Shown: +/- 35.27 ACRES (43.95% GLA)
Open Space(max): 8% GLA = 6.41 ACRES
Open Space Shown: +/- 6.35 ACRES (7.9% GLA)
(2.20ac + 1.35ac + 0.50ac + 2.30ac = 6.35 acres)
TOTAL AREA SHOWN: 35.27+ 6.35 = +/- 41.62 (51.75%)

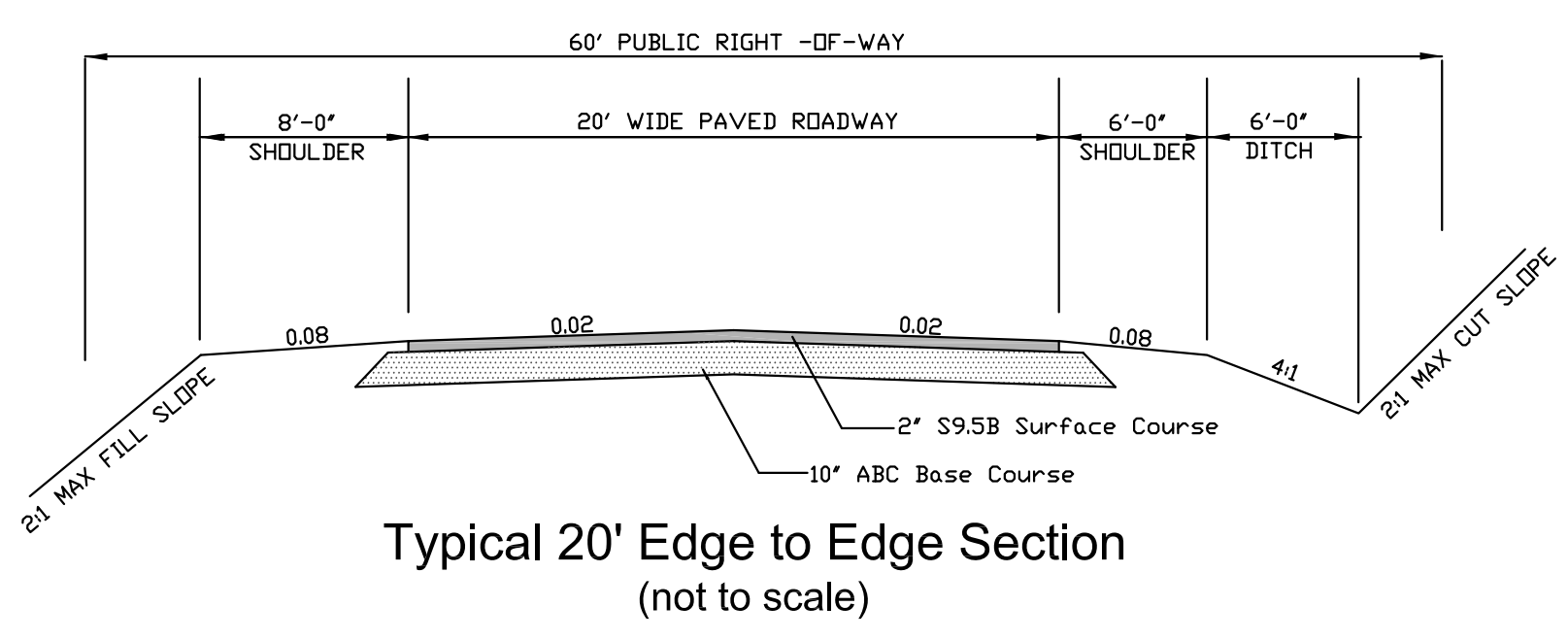
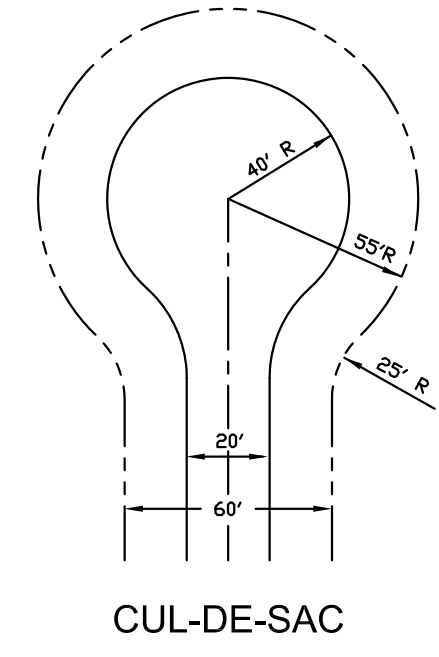
SUMMARY OF PROPERTY

Conservation Space	41.62 acres
Lot Area	35.4 acres
Road r/w	3.23 acres
TOTAL AREA	80.25 acres

Stormwater Ponds located inside Open Space
Community Well located inside Open Space
Septic Fields NOT included in Conservation Space Total
Steep Slopes on Property (>25%) = 0 sf



Plan prepared by:
Warren D. Mitchell, PE
104 Amber Wood Run
Chapel Hill, NC 27516
919-593-1916



Lot	Gross Size	Offsite Septic Area	Lot	Gross Size	Offsite Septic Area
1.	0.92 ac		20.	0.75 ac	0.36
2.	0.85 ac	0.44	21.	1.17 ac	0.70
3.	1.06 ac		22.	0.96 ac	
4.	1.08 ac		23.	0.95 ac	
5.	0.88 ac		24.	1.21 ac	
6.	0.97 ac		25.	0.77 ac	0.36
7.	1.75 ac		26.	0.72 ac	0.33
8.	1.08 ac		27.	0.69 ac	0.31
9.	1.17 ac		28.	1.02 ac	
10.	1.01 ac		29.	0.94 ac	
11.	1.55 ac		30.	0.66 ac	
12.	1.49 ac		31.	0.71 ac	
13.	1.28 ac		32.	0.81 ac	
14.	1.19 ac		33.	0.52 ac	
15.	1.31 ac		34.	0.58 ac	
16.	0.65 ac	0.26	35.	0.96 ac	
17.	0.76 ac	0.33	36.	1.55 ac	
18.	0.71 ac	0.31			
19.	0.72 ac	0.35			

TOTAL: 35.40 acres
AVG LOT SIZE: 0.98 acres

- Represents Suitable Septic Soils
- Represents Stream buffers
- Represents Wetlands
- Conservation Area- Natural Space
- HOA / Community owned property
- Represents Intermittent Streams
- Represents Perennial Streams

Vicinity Map