

PCO CONCEPT PLANS FOR COURTYARDS AT QUAIL PARK

TOWN OF MINT HILL

MECKLENBURG COUNTY, NORTH CAROLINA

OWNER:
CLINTON MONTGOMERY BLACK JR. ESTATE
D.B. 1472 PAGE: 231

DEVELOPER:
EPCON COMMUNITIES
11020 DAVID TAYLOR DRIVE, SUITE 105
CHARLOTTE, NC 28262
704-607-0152

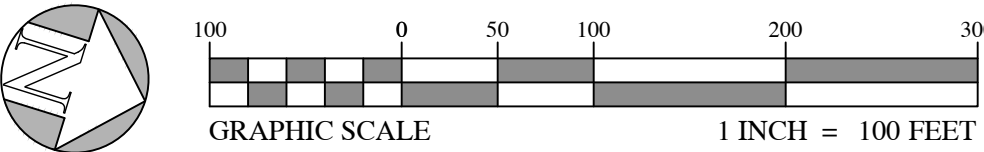
EPM #: XXXXXXXXXX

DEVELOPMENT DATA
EXISTING ZONING: R (RESIDENTIAL DISTRICT)
PROPOSED ZONING: R-CD (RESIDENTIAL - CONDITIONAL DISTRICT) & B-G (BUSINESS - GENERAL -DEDICATED)
USE: AGE RESTRICTED DETACHED HOUSING
SITE AREA: 32.84 ACRES

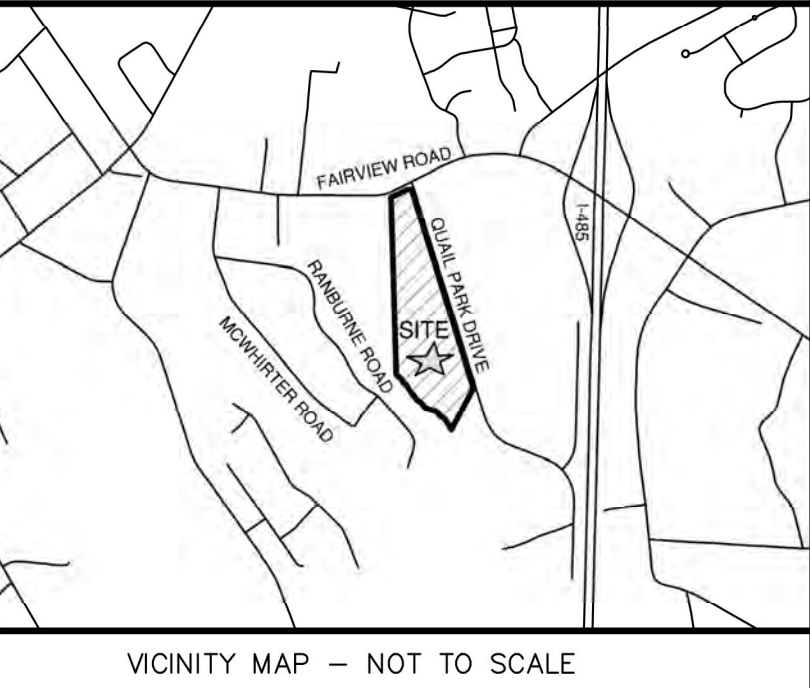
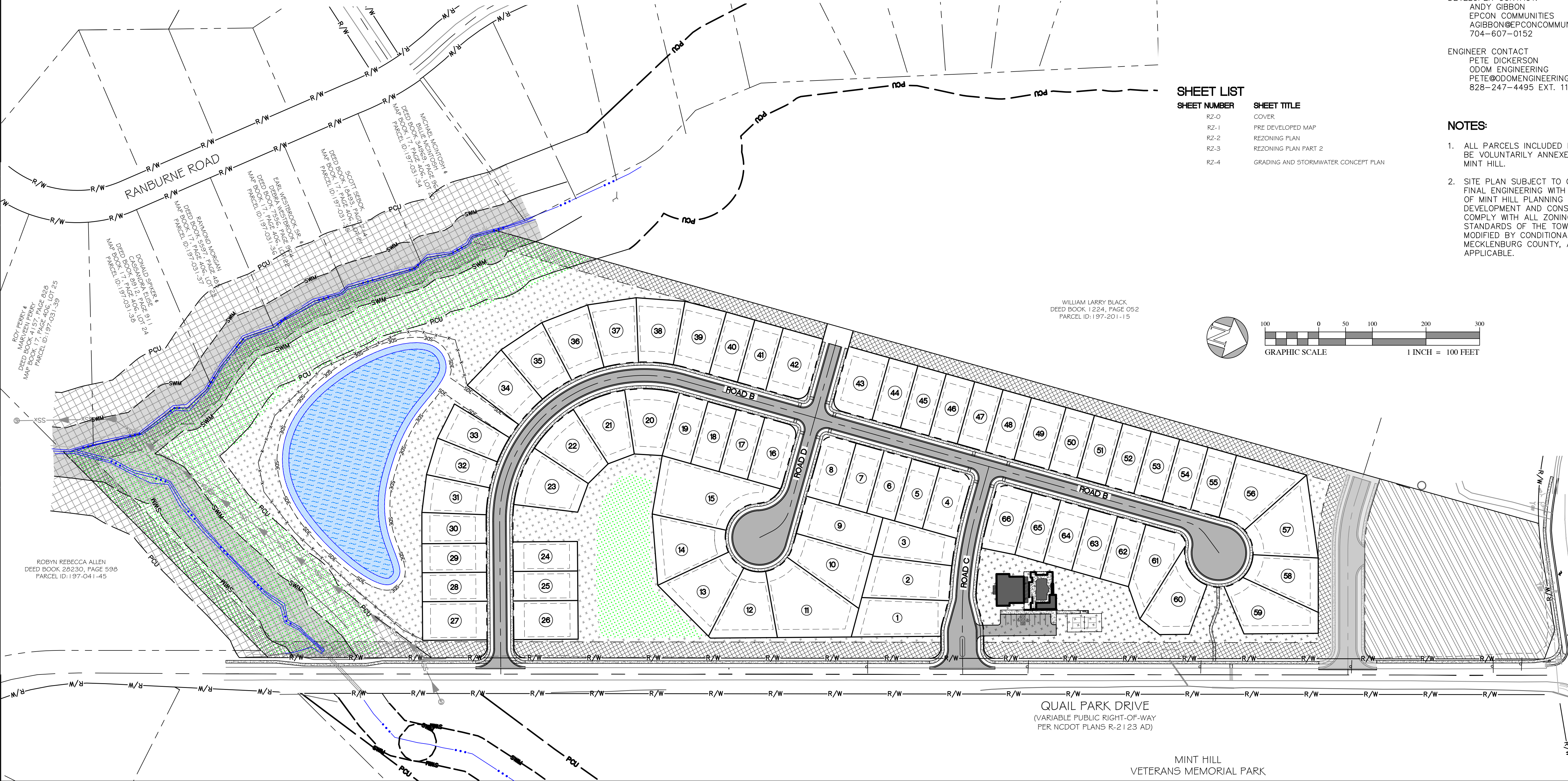
MECKLENBURG COUNTY GIS PROPERTY
PIN # 19720114
PROPERTY ADDRESS
8612 FAIRVIEW RD
CHARLOTTE, NC 28227
DEVELOPER CONTACT:
ANDY GIBBON
EPCON COMMUNITIES
AGIBBON@EPCONCOMMUNITIES.COM
704-607-0152
ENGINEER CONTACT
PETE DICKERSON
ODOM ENGINEERING
PETE@ODOMENGINEERING.COM
828-247-4495 EXT. 11

NOTES:
1. ALL PARCELS INCLUDED IN THIS PROJECT WILL BE VOLUNTARILY ANNEXED INTO THE TOWN OF MINT HILL.
2. SITE PLAN SUBJECT TO CHANGE BASED ON FINAL ENGINEERING WITH APPROVAL FROM TOWN OF MINT HILL PLANNING DEPARTMENT. ALL DEVELOPMENT AND CONSTRUCTION SHALL COMPLY WITH ALL ZONING AND SUBDIVISION STANDARDS OF THE TOWN OF MINT HILL AS MODIFIED BY CONDITIONAL ZONING AGREEMENTS, MECKLENBURG COUNTY, AND NCDOT AS APPLICABLE.

SHEET NUMBER	SHEET TITLE
RZ-0	COVER
RZ-1	PRE DEVELOPED MAP
RZ-2	REZONING PLAN
RZ-3	REZONING PLAN PART 2
RZ-4	GRADING AND STORMWATER CONCEPT PLAN



APPROVAL OF THIS REZONING/SKETCH/CONCEPT PLAN DOES NOT IMPLY OR GUARANTEE APPROVAL AND/OR VESTING OF THE FINAL CONSTRUCTION PLANS.
FINAL CONSTRUCTION PLAN WILL BE REVIEWED FOR COMPLIANCE PER ALL TOWN, COUNTY, AND STATE REGULATIONS IN EFFECT AT THE TIME OF SUBMITTAL.
PLANS ARE FOR CONCEPTUAL PURPOSES ONLY AND ARE BEING SIGNED TO COMPLY WITH THE POST-CONSTRUCTION ORDINANCE (PCO) SKETCH PLAN SUBMITTAL REQUIREMENTS PER THE TOWN OF MINT HILL AND MECKLENBURG COUNTY. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION.



JOB NUMBER:
22250

DATE									
BY									

DESCRIPTION

REV	1	2	3	4	5	6	7	8	9
DATE									
DESCRIPTION									

1. I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF NORTH CAROLINA AS SIGNIFIED BY MY HAND AND SEAL.

02/03/2023

REZONING PCO CONCEPT PLANS FOR
COURTYARDS AT QUAIL PARK
MINT HILL
MECKLENBURG COUNTY, NC

COVER

Odom Engineering
PLLC
169 Oak Street, Forest City, N.C. 28043
ph: 828.247.4495 fax: 828.247.4498
NC License # 00000000000000000000000000000000

DATE: 02/02/2023
DRAWN BY: WFM
CHECKED BY: FED
PROJECT MGR: DWO
SHEET:
RZ-0

TIME OF CONCENTRATION

PRE-DEVELOPED TOC

DA-1 TOC

SHEET FLOW

$T_t = \frac{0.42(L)^{0.58}}{(F_2)^{0.77}}$

WHERE T_t = TRAVEL TIME MINUTES
 n = MANNING'S ROUGHNESS COEFFICIENT
 L = FLOW LENGTH
 F_2 = 2- YEAR, 24 HOUR RAINFALL = 3.12 INCHES

$n = 0.400$
 $L = 100$ FT
 $S = 0.042$ FT/FT

SHEET FLOW T_t 16.16 MINUTES

SHALLOW CONCENTRATED FLOW

$V = 16.1345(S)^{0.5}$

UNPAVED

WHERE V = AVERAGE VELOCITY (FT/S)
 S = SLOPE OF HYDRAULIC

$V = 20.3282(S)^{0.5}$

PAVED

$T_t = \frac{L}{V} \times 0.0167$

TRAVEL TIME

$T_t = 1.28$ MINUTES

CHANNEL FLOW

$t_c = 0.0078 \times \frac{L^{0.77}}{S^{0.38}}$

**TRAVEL TIME

$T_t = 17.30$ MINUTES

ROUGH OVERLAND

$L = 1611$ FT
 $S = 0.032$ FT/FT

**MULTIPLY T_c BY 2 FOR ROUGH OVERLAND
UNPAVED SURFACES (DENSE GRASS/WOODS)
BY 0.4 FOR PAVED SURFACE FLOWS
BY 0.2 FOR PAVED CHANNEL FLOW

NORMAL

$L = 1344$ FT
 $S = 0.016$ FT/FT

$T_t = 9.83$ MINUTES

CHANNEL T_t

$T_t = 9.83$ MINUTES

$t_c = 0.0078 \times \frac{L^{0.77}}{S^{0.38}}$

**TRAVEL TIME

TOTAL TOC = SHEET FLOW T_t + SHALLOW CONCENTRATED T_t + CHANNEL FLOW T_c

DA-1 TOC 44.57 MINUTES

POST DEVELOPED TOC

DA-1 TOC 5.00 MINUTES*

*ASSUMED FOR POST DEVELOPED REAS ROUTED TO SCMs

Map Unit Legend				
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
CeB2	Cecil sandy clay loam, 2 to 8 percent slopes, moderately eroded	28.9	79.4%	
CuB	Cecil-Urban land complex, 2 to 8 percent slopes	1.2	3.4%	
HeB	Helena sandy loam, 2 to 8 percent slopes	3.4	9.3%	
MO	Monacan loam, 0 to 2 percent slopes, frequently flooded	2.6	7.3%	
PaE	Pacolet sandy loam, 15 to 25 percent slopes	0.2	0.6%	
Totals for Area of Interest		36.5	100.0%	

DRAINAGE AREA SUMMARY

TOTAL DRAINAGE AREA: 36.457 AC

TOTAL SITE AREA: 32.842 AC

TOTAL ROUTED TO SCM: 36.457 AC

TOTAL SITE AREA BYPASS: -3.615 AC

PRE-DEVELOPED DRAINAGE AREA SUMMARY

DA-1: PRE DEVELOPED DRAINAGE AREA

DESCRIPTION	AREA (SF)	AREA (AC)	CN	WEIGHTED CN
WOODS/GRASS B SOIL	1,543,545	35.435	58	56.37
IMPERVIOUS	44,537	36.457	98	2.75
			CN:	59.122

TOTAL AREA (SF): 1,588,082

TOTAL AREA (AC): 36.46

IMPERVIOUS TOTAL (AC): 1.02

WEIGHTED CN: 59

TIME OF CONCENTRATION (MINUTES): 44.57

LEGEND

UTILITY/STRUCTURE

EXISTING

OVERHEAD ELECTRICAL: OHEx

UNDERGROUND ELECTRICAL: UGEx

NATURAL GAS: GASx

OVERHEAD TELEPHONE: OHTx

FIBER OPTIC: FBRx

SANITARY SEWER: SSx

WATER: Wx

FORCEMAIN: FMx

CULVERT

FIRE HYDRANT

GATE VALVE

SEWER MANHOLE

POWER POLE

PROPERTY LINE

ADJACENT PROPERTY LINE

RIGHT OF WAY

MINOR CONTOURS

MAJOR CONTOURS

DRAINAGE AREA

SOIL AREA LINE

SHEET FLOW PATH

SHALLOW CONCENTRATED PATH

CHANNEL FLOW PATH

NOTES:

1. RIGHT-OF-WAY TO BE DEDICATED DURING FINAL PLATTING

2. TOPO & BOUNDARY SHOWN PER SURVEY COMPLETED BY EMHT.

PLANS ARE FOR CONCEPTUAL PURPOSES ONLY AND ARE BEING SIGNED TO COMPLY WITH THE POST-CONSTRUCTION ORDINANCE (PCO) SKETCH PLAN SUBMITTAL REQUIREMENTS PER THE TOWN OF MINT HILL AND MECKLENBURG COUNTY. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION.

GRAPHIC SCALE

100 0 50 100 200 300

1 INCH = 100 FEET

REVISIONS

REV	DATE	DESCRIPTION
1	06/20/22	ISSUED FOR PERMITTING

ENGINEER

WILLIAM F. McBRIDE

052503

PRE REZONING SKETCH PLANS

COURTYARDS AT QUAIL PARK

MINT HILL

MECKLENBURG COUNTY, NC

PRE-DEVELOPED MAP

Odom Engineering PLLC

169 Oak Street, Forest City, N.C. 28043

ph: 828.247.4406 fax: 828.247.4408

NC License #4086

1" = 100'

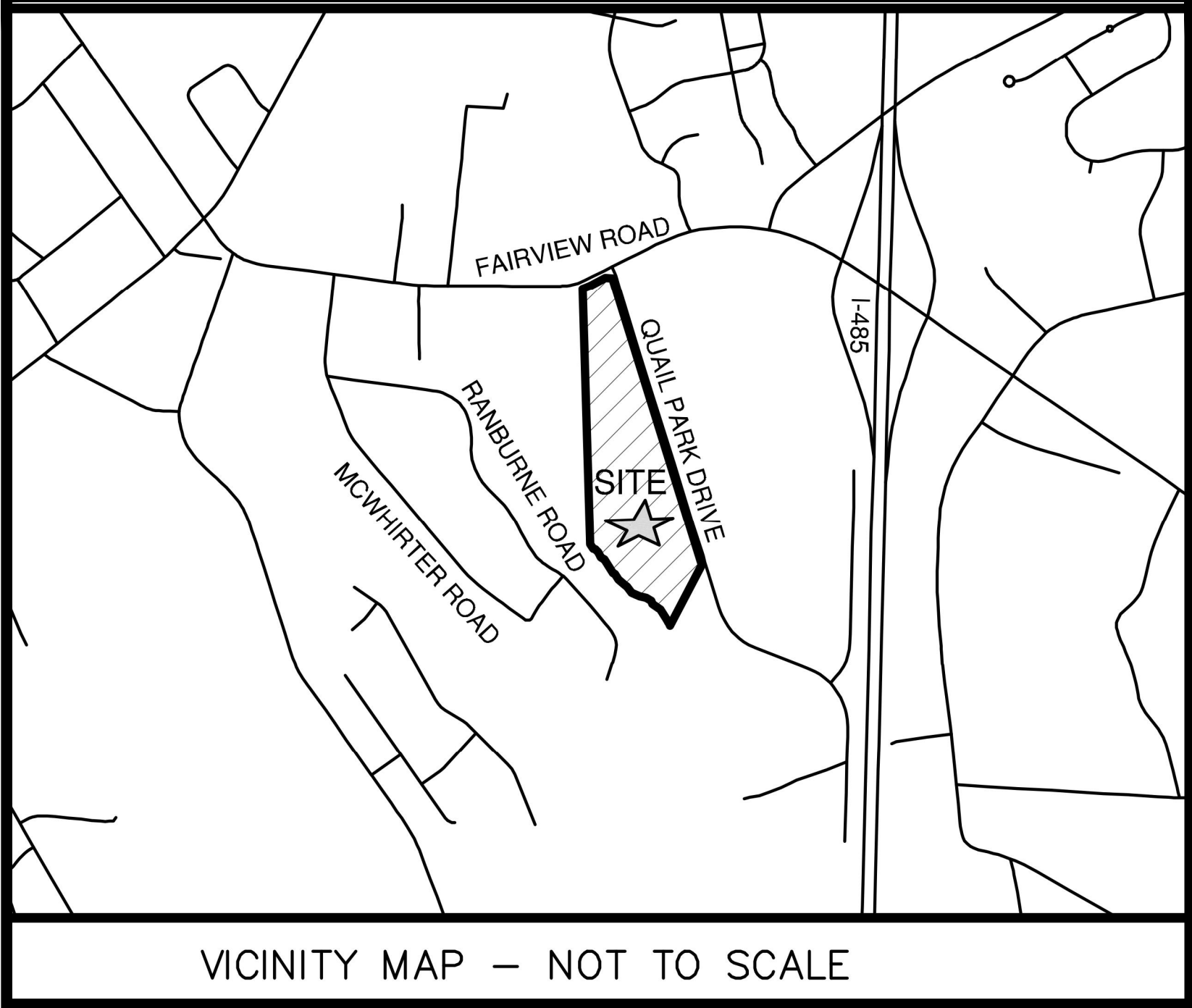
DATE: 12/06/2022

DRAWN BY: WFM

CHECKED BY: WFM

PROJECT MGR: DWO

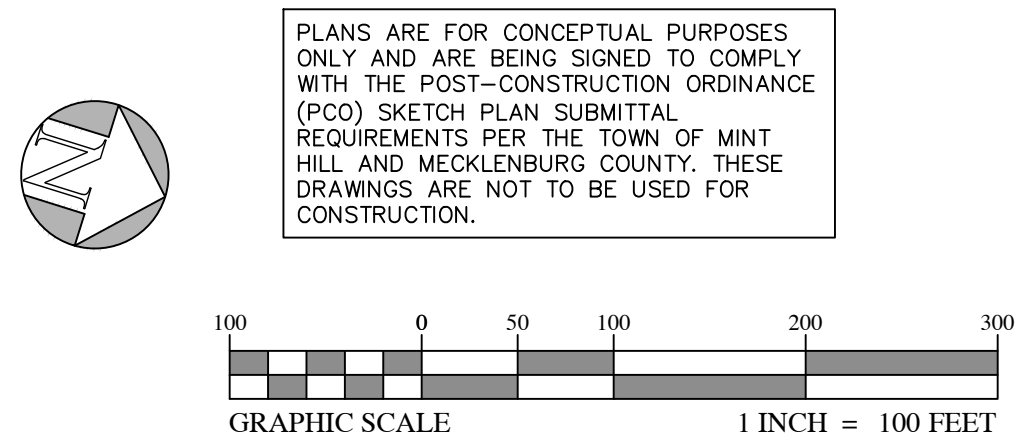
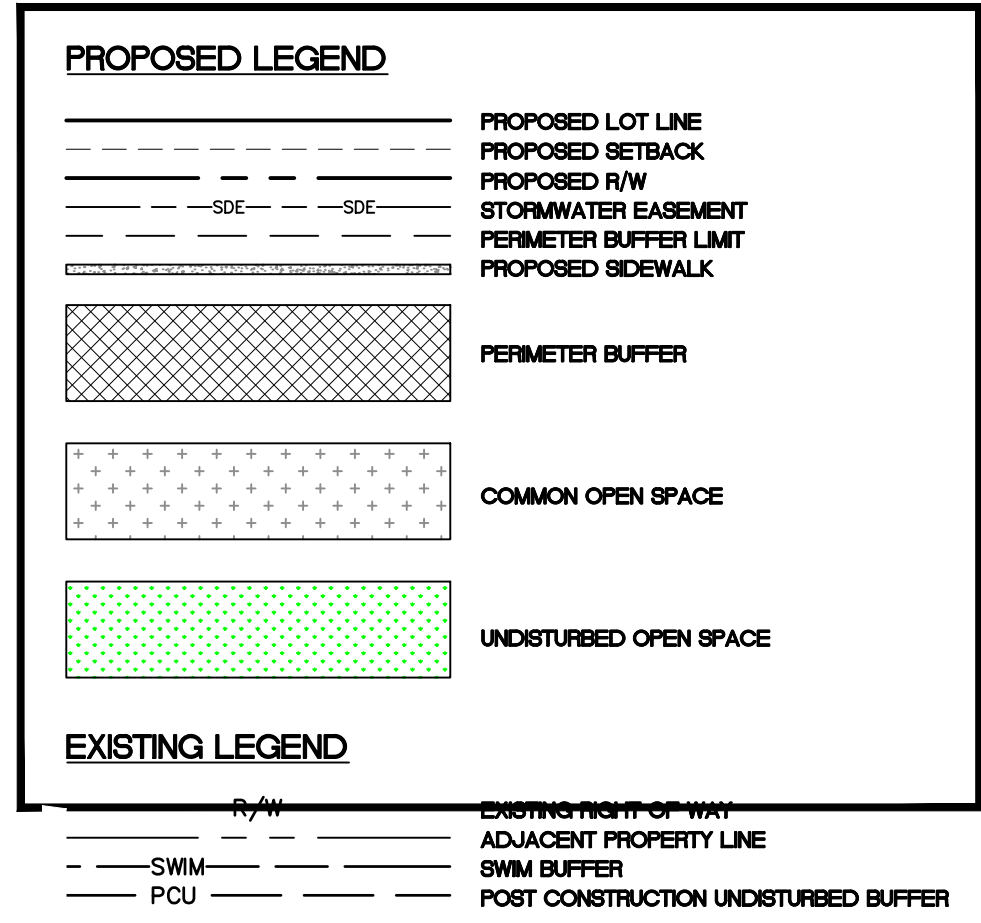
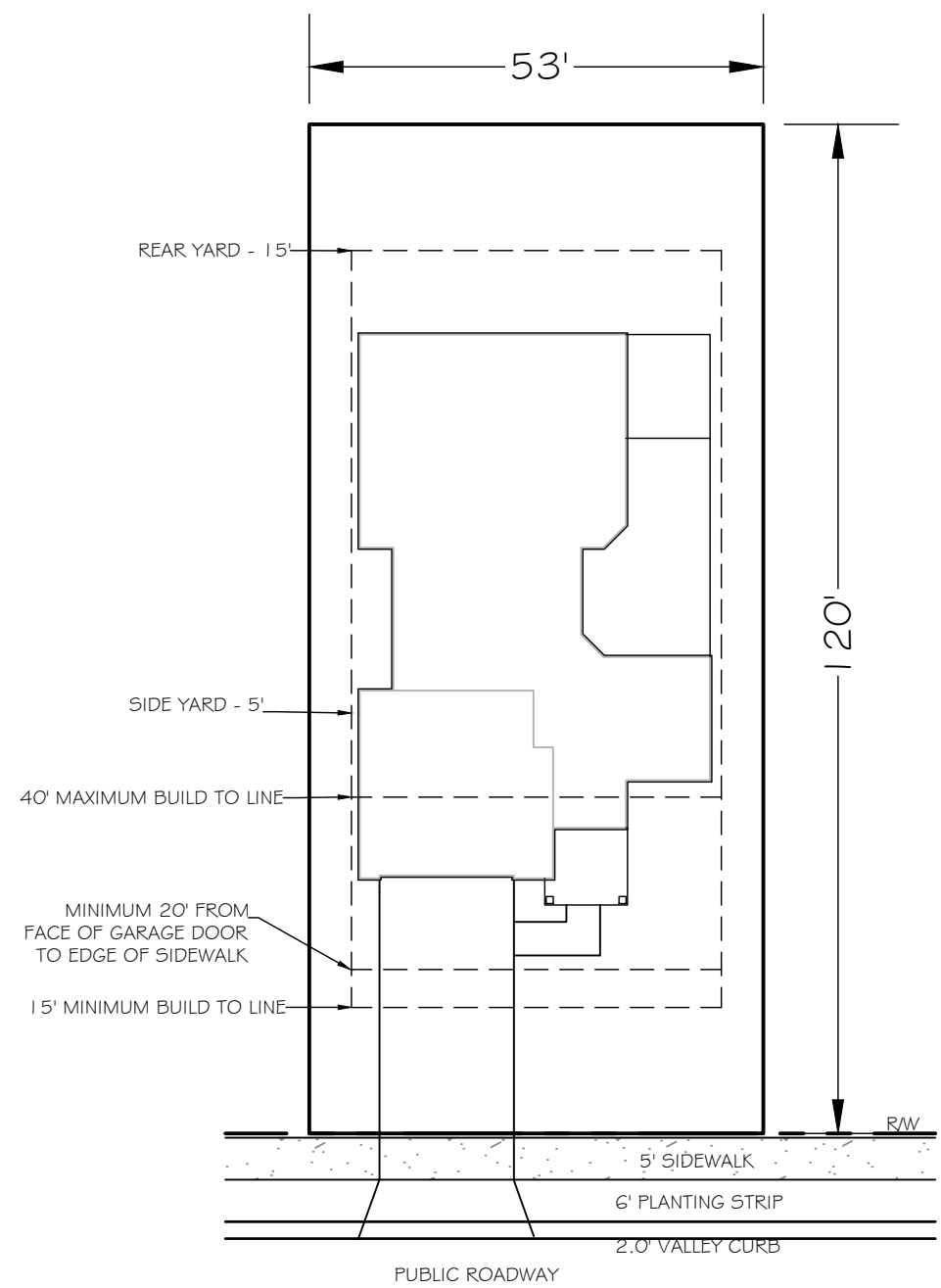
SHEET: RZ-1



VICINITY MAP – NOT TO SCALE

NOTES:

1. All development and construction shall comply with all zoning and subdivision standards of the Town of Mint Hill, Mecklenburg County, and NCDOT, as applicable.
2. This property may be subject to any easements and/or rights of way of record.
3. All areas designated as common and undisturbed open space shall be owned and maintained by the homeowners association and dedicated for perpetuity.
4. Access (ingress/egress) location and design shown in this sketch plan are subject to achieving vertical and horizontal sight distances, turn lane improvements (including right-of-way) and intersection with adjacent and opposing access points. Modifications to the plan may result.
5. Large maturing trees will be planted 40' on center within the required planting strip along the streets with the exception of forested areas where existing trees can satisfy the existing tree requirement. Small maturing trees are to be used when overhead power lines exist.
6. Mail service will be provided in clusters. Kiosk locations are to be determined and be coordinated with the USPS during final engineering.
7. Trash service to be provided by the Town of Mint Hill for each lot.
8. Direct access from lots to a thoroughfare is prohibited.
9. The Build-to line is a line extending through a lot which is generally parallel to the front property line and marks the location from which the principle vertical plane of the front building elevation, exclusive of porches, bay windows and similar appurtenances, must be erected intended to create an even facade line on a street. The build-to line is established on the record plat (final Plat).
10. SCM access and maintenance easements shall be provided around around each SCM and recorded on a plat after construction plan approval.
11. Based on the existing condition of the tree canopy, the 25' external buffer is intended to be undisturbed along the south side (plan west) of the property. Along the North, West, and East sides (Plan North, South, and East) of the property the buffer shall be disturbed and replanted in accordance with the Town's ordinance.
12. Fire hydrants shall be provided within 600 feet of the most remote point of the structure as the apparatus travels. Final hydrant locations to be approved by Charlotte Water.
13. Stormwater management/detention provided by the proposed SCM's, located on the subject property. SCM's provided are shown for general conformance with the Town of Mint Hill requirements. Size, shape and type of proposed SCM's provided are subject to change and will be finalized with details as part of final engineering/construction documents, subject to the Town of Mint Hill engineering approval.
14. Proposed water service connection shall be made to the existing Charlotte Water System watermain located near the intersection of Quail Park Drive and Fairview Road.
15. Proposed sewer connection shall be made to Charlotte Water Sanitary Sewer system which crosses the southern portion of the project parcel.
16. Appropriate environmental permitting will be obtained through NCDEQ for impacts to existing stream, if required.
17. Proposed signs, lighting & landscaping will be designed in accordance with the Town of Mint Hill standards and regulations. Proposed locations will be prepared and reviewed as part of the construction plans.
18. Street trees to be maintained by the Homeowners Association.
19. Any sidewalk proposed outside of the right-of-way shall be placed in a permanent sidewalk easement.
20. Quail Park Drive is exempt from curb & gutter requirements.
21. The Amenity Center shall be exempt from 7.2.25 Supplementary Use Regulations for Community Recreation Centers (C).
22. The Developer will provide a flashing pedestrian light (RRFB) and associated crosswalk from the site to the park entrance located on Quail Park Drive. Details to be finalized with the Town of Mint Hill.
23. The non-residential site can discharge to the proposed stormwater pond. The stormwater pond will be designed to accommodate up to 60% impervious area from the non-residential site.



Site Data
Overall Project Data:

Developer / Applicant
EPCOM Communities
11020 David Taylor Blvd. Suite. 105
Charlotte, NC 28262
(704) 997-8004

Tax Parcel ID: 197-201-14

Total Site Area
Per Alta Survey: 32.84 ± Ac

Note: For the purposes of rezoning, Parcel # 197-201-14 is to be divided into two project areas:
1) An area of approximately 2.78 acres as shown on the plan including a roadway to be dedicated as public right-of-way. Rezoning request for the commercial area to be B-G District.
2) A Residential area containing approximately 30.07 acres to be subdivided into individual lots, with dedicated open space areas, and roadways dedicated as public rights-of-way. Rezoning request for the residential area to be R-CZ (Conditional Zoning).

Specific Site Data for Residential Project:

Existing Zoning R (Residential)
Proposed Zoning R-CZ (Residential Portion 30.07 Acres)

The proposed development will be age-restricted in accordance with the Federal Fair Housing Act's Housing for Older Persons Act (HOPA). The HOPA regulations will be incorporated into the Homeowners Association Documents.

Total Number of Residential Lots: 66 Lots

Proposed Density: 2.0 Dwelling Units/Ac*
*Based on gross parcel area 32.84 Ac

Site Area
Original Parcel Area 32.84 ± Ac
Less Area Dedicated to Town -2.78 ± Ac
Residential Site Area 30.07 ± Ac
Right of Way to be Dedicated 3.45 ± Ac

Proposed Building Setbacks:
Rear Yard 15'
Build to Line 15' Minimum / 40' Maximum
Side Yard 5' (12' Corner)
Lot Depth 115' (min.)
Lot Width 53' (min.)
Lot Size 0.14 Ac (min.)

Provided Parking
Inside Garage 132
Outside Garage 132
Amenity Area 9
Total 273 Spaces

Watershed: Goose Creek District
High Density Option
(70% Max. Impervious Area)

Existing Impervious Area
Buildings 0 ± Ac
Pavement 0 ± Ac
Right-Of-Way: 0 ± Ac
Total Impervious Area: 0 ± Ac

Proposed Impervious Area
Buildings 4.82 ± Ac
Sidewalks 0.79 ± Ac
Pavement, Drives & Parking 2.89 ± Ac
Wet Pond 1.74 ± Ac
Other 0 ± Ac
Total Impervious Area: 10.25 ± Ac 34% ±

Undisturbed Open Space (15%)
Project Area = Residential Site Area Less Dedicated Right of way
Project Area = 30.07Ac - 3.45Ac = 26.62 ± Ac
Required = 15% of Project Area = 3.99 ± Ac
Provided 4.51 ± Ac

Specific Site Data for Commercial Portion of Project:
(to be Dedicated to Town of Mint Hill)

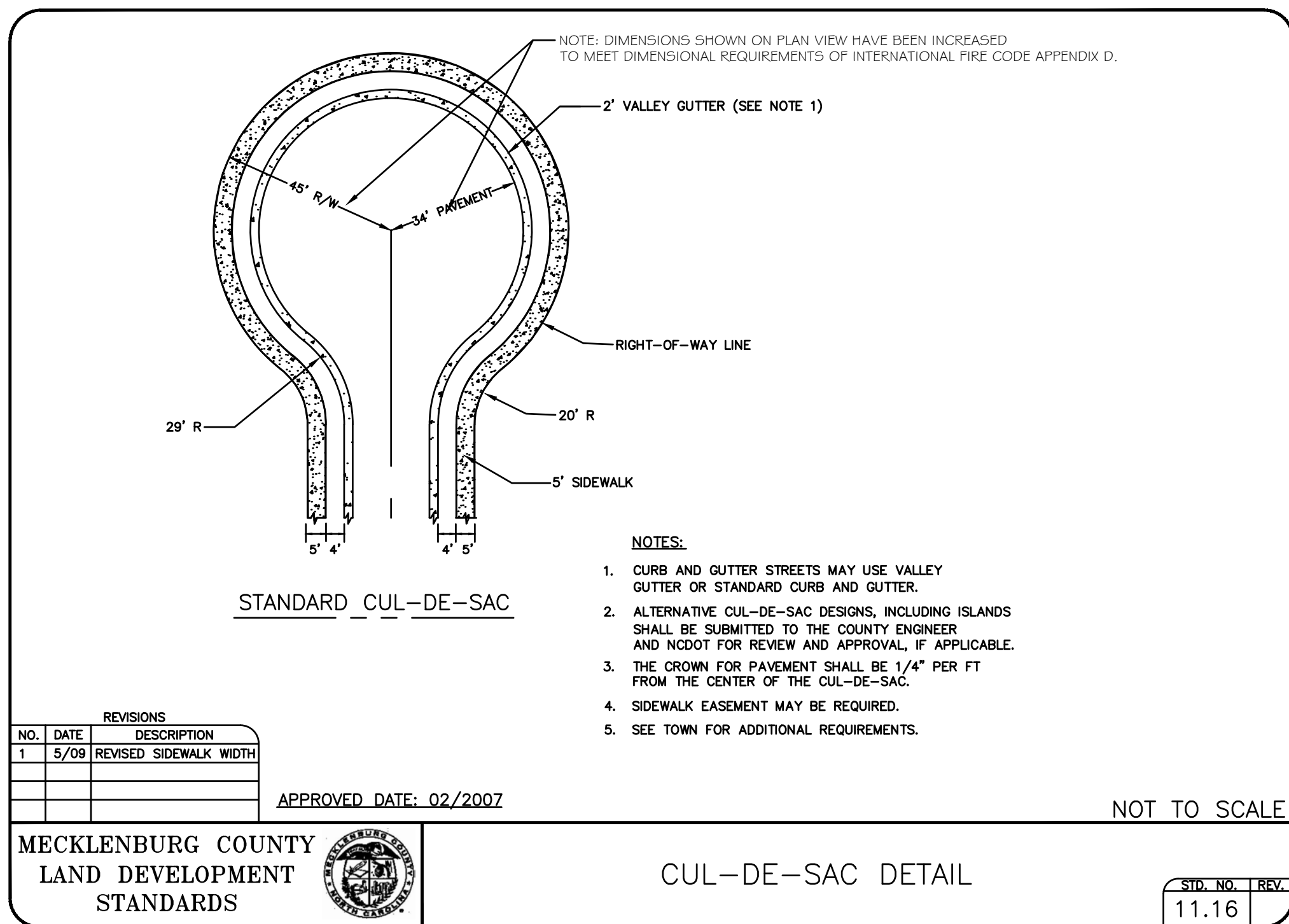
Existing Zoning R (Residential)
Proposed Zoning B-G (Commercial Portion 2.78 Acres)

REZONING PCO CONCEPT PLANS FOR
COURTYARDS AT QUAIL PARK
MINT HILL
MECKLENBURG COUNTY, NC

REZONING PLAN

Odom Engineering PLLC
169 Oak Street, Forest City, N.C. 28043
ph: 828.247.4486 fax: 828.247.4488
NC License # 4086

DATE: 02/02/2023
DRAWN BY: WFM
CHECKED BY: FED
PROJECT MGR: DWO
SHEET:
RZ-2



EPCON COMMUNITIES DEVELOPMENT CONDITIONS + STANDARDS

RETAINING WALL NOTE:

ALL RETAINING WALLS REQUIRING SPECIAL INSPECTIONS (>5' IN HEIGHT) SHALL MEET THE REQUIREMENTS OF THE MCSBC CHAPTER 17--SPECIAL INSPECTIONS AS DETAILED PER THE MECKLENBURG COUNTY CODE ENFORCEMENT SPECIAL INSPECTIONS PROCESS. ADDITIONALLY, COPIES OF THE RETAINING WALL PLANS SHALL BE SUBMITTED TO THE MINT HILL ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL. THE TOWN OF MINT HILL SHALL BE COPIED ON ALL STATEMENTS OF SPECIAL INSPECTIONS, SPECIAL INSPECTIONS FINAL REPORTS, AND DESIGN PRINCIPAL IN CHARGE (DPIRC) LETTERS. RETAINING WALLS THAT IN AND/OR AFFECT THE PUBLIC RIGHT-OF-WAY MUST BE REVIEWED AND APPROVED BY THE TOWN.

BUILT UPON AREA

Existing Impervious Area		
Buildings	0 ± Ac	
Pavement	0 ± Ac	
Right-Of-Way:	0 ± Ac	
Total Impervious Area:	0 ± Ac	
Proposed Impervious Area		
Buildings	4.82 ± Ac	
Sidewalks	0.79 ± Ac	
Pavement, Drives & Parking	2.89 ± Ac	
Wet Pond	1.74 ± Ac	
Other	0 ± Ac	
Total Impervious Area:	10.25 ± Ac	34% ±
Undisturbed Open Space (15%)		
Project Area = Residential Site Area Less Dedicated Right of way		
Project Area = 30.07Ac - 3.45Ac =	26.62 ± Ac	
Required = 15% of Project Area =	3.99 ± Ac	
Provided	4.51 ± Ac	

DRAINAGE:

EXISTING CONDITIONS

THE EXISTING SITE DRAINAGE GENERALLY FLOWS FROM NORTH TO SOUTH TOWARDS GOOSE CREEK. A SMALL PORTION OF THE SITE DRAINS FROM SOUTH TO NORTH AND ACROSS FAIRVIEW RD.

PROPOSED CONDITIONS

THE PROPOSED DEVELOPMENT WILL CONVEY STORMWATER TO A SINGLE SCM ON THE SOUTHERN PORTION OF THE SITE. ALL RUNOFF FROM ROOFTOPS, SIDEWALKS, ROADWAYS AND LAWNS WILL BE DIRECTED TO THE SCM. THE SCM WILL DISCHARGE THE STORMWATER NEAR THE EXISTING STREAM AND WILL CONFORM WITH THE TOWN OF MINT HILL STORMWATER MANAGEMENT REQUIREMENTS.

SCMs PROVIDED ARE SHOWN FOR GENERAL CONFORMANCE WITH THE TOWN OF MINT HILL REQUIREMENTS. SIZE, SHAPE, AND TYPE OF SCMs ARE SUBJECT TO CHANGE AND WILL BE FINALIZED WITH DETAILS AS PART OF THE FINAL ENGINEERING/CONSTRUCTION DOCUMENTS, SUBJECT THE TOWN OF MINT HILL APPROVAL.

DRAINAGE AREAS

WETPOND

ONSITE DRAINAGE AREA =	±29.46 AC
OFFSITE DRAINAGE AREA =	±1.50 AC
STORAGE VOLUME REQUIRED =	2.86 AC-FT

OVERALL STORMWATER SUMMARY

2 YEAR ALLOWABLE RELEASE RATE =	3.63 CFS
10 YEAR ALLOWABLE RELEASE RATE =	19.09 CFS
25 YEAR ALLOWABLE RELEASE RATE =	28.68 CFS
50 YEAR ALLOWABLE RELEASE RATE =	20.18 CFS

50 YEAR WATER ELEVATION FREEBOARD SHALL BE GREATER THAN 6"

NOTES:

- STORMWATER MANAGEMENT/DETENTION PROVIDED BY THE PROPOSED SCM'S LOCATED ON THE SUBJECT PROPERTY. SCMs PROVIDED ARE SHOWN FOR GENERAL CONFORMANCE WITH THE TOWN OF MINT HILL REQUIREMENTS. SIZE, SHAPE, LOCATION, AND TYPE OF PROPOSED SCMs PROVIDED ARE SHOWN SUBJECT TO CHANGE AND WILL BE FINALIZED WITH DETAILS AS PART OF FINAL ENGINEERING/CONSTRUCTION DOCUMENTS, SUBJECT TO TOWN OF MINT HILL ENGINEERING APPROVAL.
- STORMS SEWER STRUCTURES AND PIPE ARE SHOWN FOR GENERAL CONFORMANCE WITH THE TOWN OF MINT HILL REQUIREMENTS. STORM SEWER SYSTEM AS SHOWN IS SUBJECT TO CHANGE AND WILL BE FINALIZED WITH DETAILS AS PART OF FINAL ENGINEERING/CONSTRUCTION DOCUMENTS, SUBJECT TO TOWN OF MINT HILL ENGINEERING APPROVAL.
- POST DEVELOPMENT RELEASE RATES WILL BE EQUAL TO OR LESS THAN PRE-DEVELOPMENT RELEASE RATES.
- SEE SHEET RZ-3 FOR TYPICAL STREET SECTION.
- PROPOSED ZONING FOR PROJECT SITE IS R/CD.
- AN ADS YARD DRAINAGE SYSTEM WILL BE INCORPORATED TO EACH LOT TO CAPTURE ROOF RUNOFF AND DIRECT TO SCM.

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DESCRIPTION

REV

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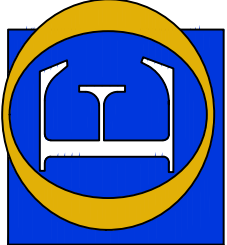
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RZ-4