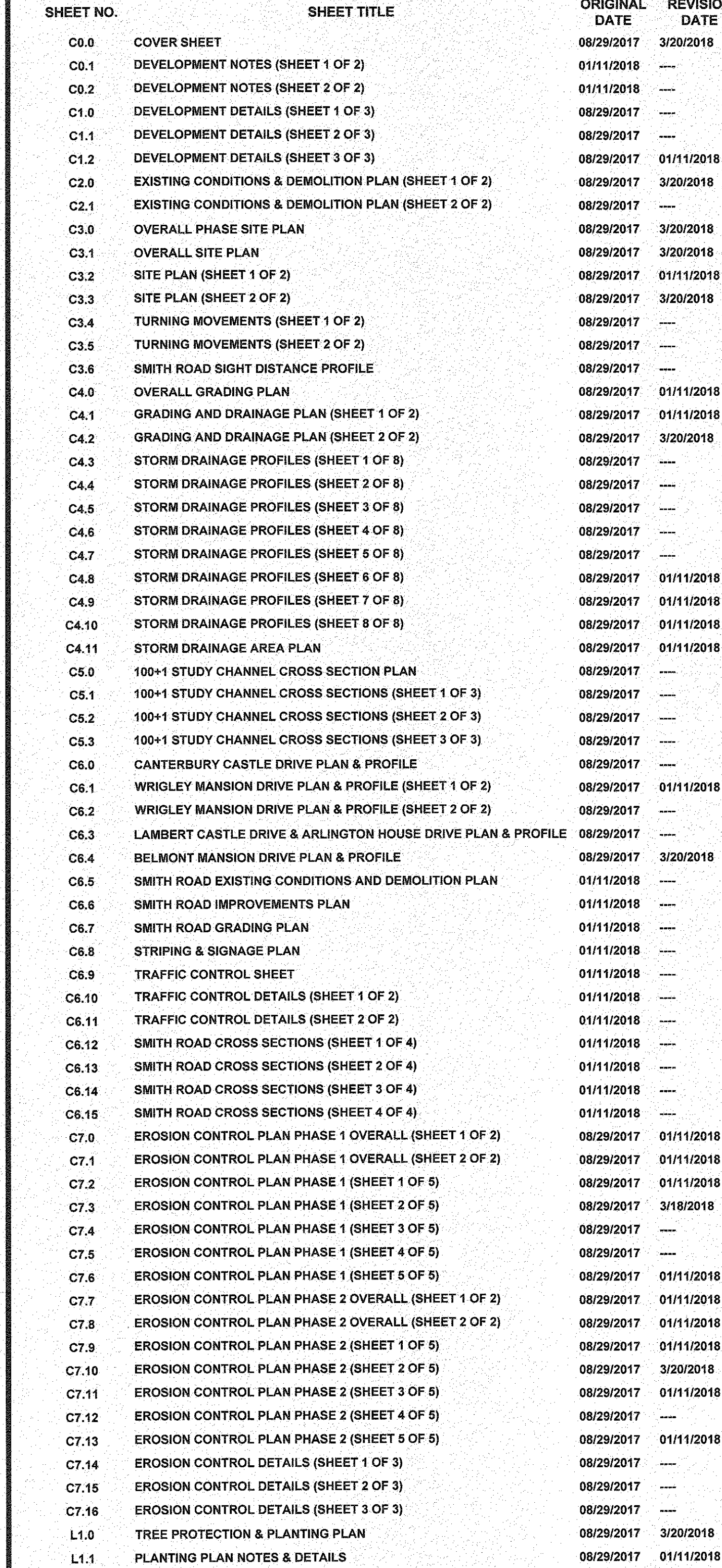
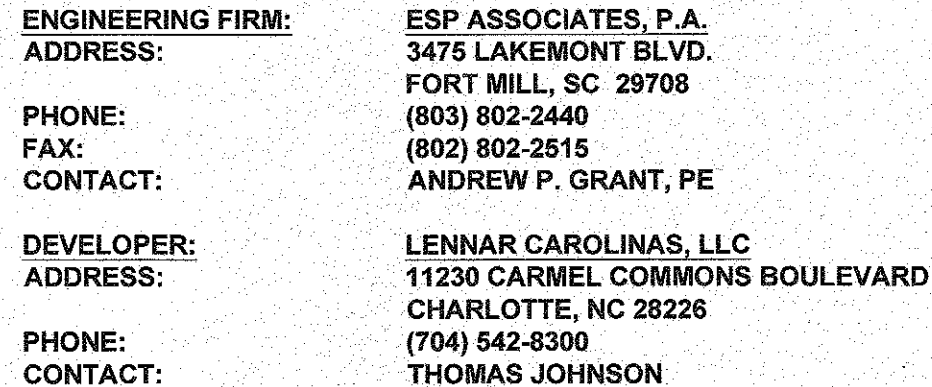




FINAL APPROVAL	
PROJECT NUMBER:	SDRSF-2017-00088
ENGINEERING PCSO / DETENTION / DRAINAGE PLAN	APPROVED By Emily Chien at 3:30 pm, Apr 11, 2018
EROSION CONTROL	APPROVED
URBAN FORESTRY TREE ORDINANCE	APPROVED Henry Kunzju
CDOT	APPROVED Carlos Alzate
NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld	

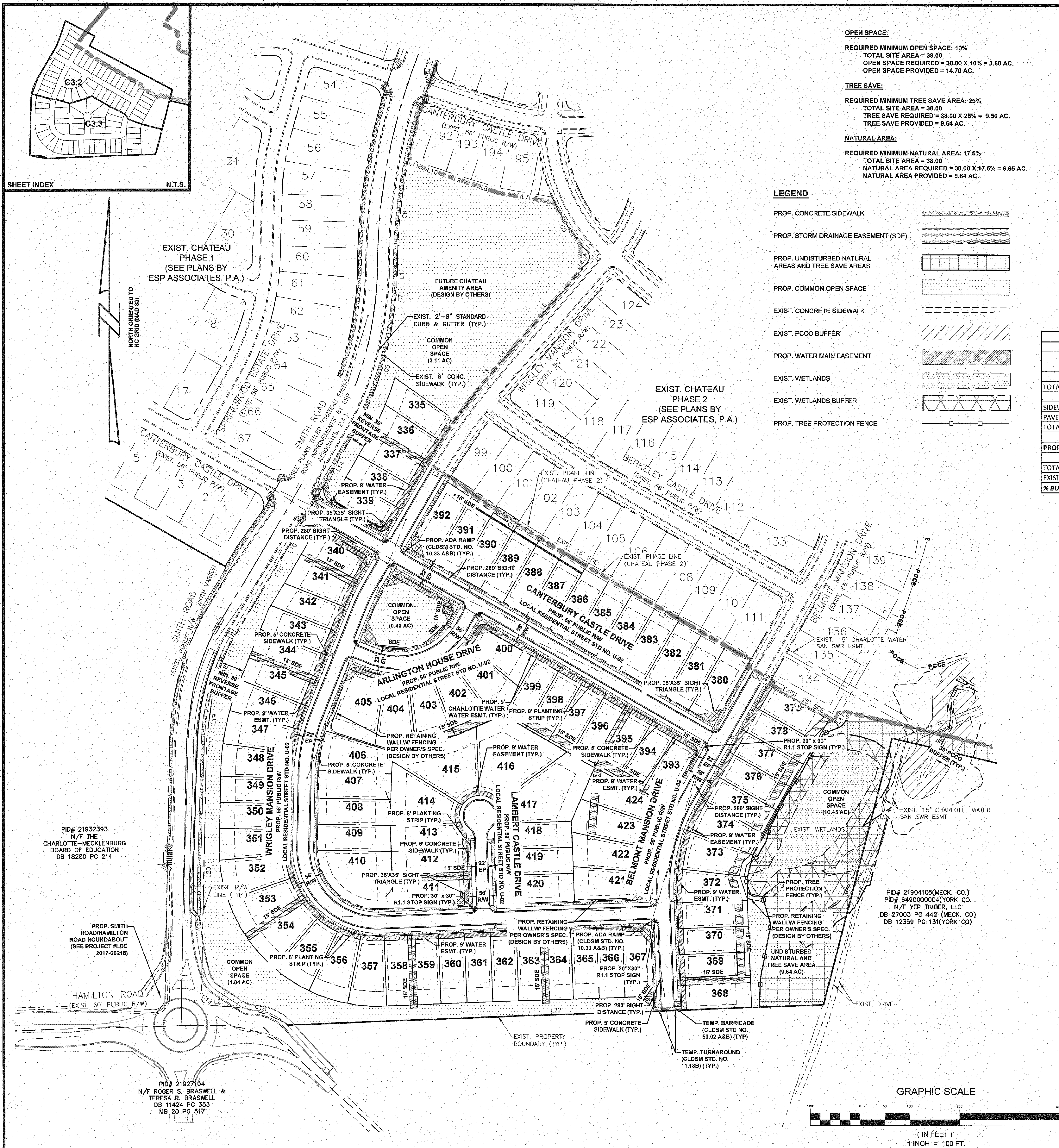


GRAPHIC SCALE

(IN FEET)
1 INCH = 100 FT.

[illegible]

V:\01141410 - Chateau Phase 4 - CIV\13.440\Sheet\CHV13.440-SITE-Overall.dwg, C3.1, 1/2/2017



OPEN SPACE:

REQUIRED MINIMUM OPEN SPACE: 10%
TOTAL SITE AREA = 38.00
OPEN SPACE REQUIRED = 38.00 X 10% = 3.80 AC.
OPEN SPACE PROVIDED = 14.70 AC.

TREE SAVE:

REQUIRED MINIMUM TREE SAVE AREA: 25%
TOTAL SITE AREA = 38.00
TREE SAVE REQUIRED = 38.00 X 25% = 9.50 AC.
TREE SAVE PROVIDED = 9.64 AC.

NATURAL AREA:

REQUIRED MINIMUM NATURAL AREA: 17.5%
TOTAL SITE AREA = 38.00
NATURAL AREA REQUIRED = 38.00 X 17.5% = 6.65 AC.
NATURAL AREA PROVIDED = 9.64 AC.

LEGEND

PROP. CONCRETE SIDEWALK	
PROP. STORM DRAINAGE EASEMENT (SDE)	
PROP. UNDISTURBED NATURAL AREAS AND TREE SAVE AREAS	
PROP. COMMON OPEN SPACE	
EXIST. CONCRETE SIDEWALK	
EXIST. PCCO BUFFER	
PROP. WATER MAIN EASEMENT	
EXIST. WETLANDS	
EXIST. WETLANDS BUFFER	
PROP. TREE PROTECTION FENCE	

NOTES:

- BOUNDARY SURVEY INFORMATION:
 - BOUNDARY SURVEY INFORMATION BY ESP ASSOCIATES, P.A. TITLED "BOUNDARY SURVEY AND MINOR SUBDIVISION PLAT OF THE ELISHA PROPERTY" DATED 08/29/2014.
- TOPOGRAPHIC SURVEY INFORMATION:
 - TOPOGRAPHIC SURVEY INFORMATION FROM FIELD SURVEY BY ESP ASSOCIATES, P.A. TITLED "TOPOGRAPHIC SURVEY OF TAX PARCELS 21932392, 21904113, 21904102, 21928112" DATED 07/09/2014.
 - PROJECT BENCHMARK: NCSS MONUMENT "M 050" NC GRID COORDINATES: NAD 83(2011) N=491,710.76 E=1,409,457.77 ELEVATION=645.67 (NAVD 88)
- WETLAND AND STREAM INFORMATION:

WETLAND DETERMINATION BY ENVIRONMENTAL PLANNING CONSULTANTS TITLED "WETLANDS SURVEY OF TAX PARCELS 21932392, 21904113, 21904102, 21928112" DATED 08/23/2014
- NO TREE EQUAL TO OR LARGER THAN TWO (2) INCHES CALIPER MAY BE TRIMMED, PRUNED, OR REMOVED FROM THE TREE SAVE AREA WITHOUT A PERMIT. NO GRADING, DEMOLITION, TRENCHING, OR OTHER ACTIVITY WHICH MAY ADVERSELY AFFECT TREES IN THIS ZONE MAY PROCESS PRIOR TO APPROVAL AND ISSUANCE OF NECESSARY PERMITS BY THE CITY.
- S.W.I.M. BUFFER UPLAND ZONE DEPICTED ON PLANS IS GREATER THAN OR EQUAL TO 50% OF THE AREA BETWEEN THE 100' S.W.I.M. BUFFER AND THE FEMA FRINGE LINE

PHASE 4 BUILT UPON AREA			
LOTS	NUMBER OF LOTS	IMPERVIOUS AREA PER HOUSE (SF)*	IMPERVIOUS AREA (SF)
385-424	90	3,800	342,000
TOTAL (SF)			342,000
SIDEWALK (SF)			35,880
PAVEMENT / CURB & GUTTER (SF)			99,830
TOTAL (SF)			135,710
PROPOSED BUILT UPON AREA (AC.)			10.97
TOTAL SITE AREA (AC.)			38.00
EXISTING BUILT UPON AREA (SF)			0.00
% BUILT UPON AREA			28.86%

PHASE CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD	BEARING	DELTA
C1	308.74	2668.00	154.54	308.56	N56° 50' 14"W	6° 37' 49"
C2	199.33	1528.00	94.79	199.21	N35° 13' 36"E	7° 05' 58"
C3	53.81	1528.00	26.76	53.51	N39° 46' 46"E	2° 00' 24"
C4	21.92	15.00	13.44	20.02	N01° 04' 35"W	83° 43' 06"
C5	131.57	378.00	66.46	130.90	N32° 57' 52"W	19° 56' 32"
C6	230.14	1140.98	115.46	229.75	S05° 38' 50"W	11° 33' 24"
C7	88.96	640.00	44.55	88.88	S05° 28' 25"W	7° 67' 60"
C8	195.32	668.79	98.36	194.63	S16° 33' 34"W	16° 44' 00"
C9	35.70	645.50	17.85	35.69	S28° 26' 57"W	3° 10' 07"
C10	10.48	566.50	5.24	10.48	S30° 34' 25"W	1° 04' 45"
C11	60.02	243.50	25.10	49.93	S25° 13' 43"W	11° 46' 09"
C12	51.06	243.50	25.62	50.96	S13° 20' 16"W	12° 00' 48"
C13	20.94	193.50	10.48	20.93	S04° 13' 49"W	6° 12' 05"
C14	25.19	16.50	15.78	22.81	S42° 35' 52"E	67° 27' 17"
C15	128.11	279.50	65.20	126.99	S73° 11' 40"E	26° 15' 41"

PCCO SUMMARY	
Original Parcel ID Number(s):	21904102
Development Type:	Single-Family
Subject to PCCO? Y/N	Y
If NO, why?	N/A
Watershed:	Central Catawba
Disturbed Area (ac):	50.0
Site Area (ac):	38.0
	DA (PH. 2 BMP 2)
Total Ph. 4 On-site Drainage Area (ac):	22.72
Exist. Ph. 2 On-site Drainage Area (ac):	24.24
Exist. Ph. 2 Amenity On-site Drainage Area (ac):	2.83
Future Phase On-site Drainage Area (ac):	12.13
Existing Ph. 4 Built-upon-area (SF):	0
Existing Ph. 4 BUA to be removed (SF):	0
Existing Ph. 4 BUA to remain (SF):	0
Proposed Ph. 4 New BUA (SF):	470,110
Ex. Ph. 2 BUA (SF):	425,147
Ex. Ph. 2 Amenity BUA (SF):	58,806
Future Phase BUA (SF):	+/- 127,532
Proposed % BUA:	40.1%
Density (High / Low):	High
Total Post-Project BUA for site (Phase 4):	10.97 AC.
Total Post-Project BUA for site (Phase 4):	28.86%
Development or Redevelopment?	Development
Natural Area Required (ac):	6.65
Natural Area provided, total (ac):	9.64
Undisturbed Treed Natural Area Preserved (ac):	9.64
Total stream buffer protected on-site (ac):	0.79
Transit Station Area? Y/N	N
Distressed Business District? Y/N	N
Mitigation Type (if applicable)	N/A
Natural Area mitigation? Y/N	N
Buffer Mitigation? Y/N	N
Total Phosphorus Mitigation? Y/N	N

DEVELOPMENT INFORMATION:

NAME: CHATEAU PHASE 4
USE: SINGLE FAMILY RESIDENTIAL
ZONING: R-3 (R-4 CLUSTER STANDARDS PER TREE ORDINANCE INCENTIVES)
PROPERTY OWNER: LENNAR CAROLINAS, LLC DB 27950, PG. 127 & PG. 142 TAX PARCEL ID#: 219-32-392
DEVELOPER: LENNAR CAROLINAS, LLC 11230 CARMEL COMMONS BOULEVARD CHARLOTTE, NC 28226
ENGINEER: ESP ASSOCIATES, P.A. ANDREW P. GRANT, PE P.O. BOX 7030 CHARLOTTE, NC 28241

SITE DATA:

PHASE 4 AREA: 38.00 AC.
PHASE 4 MAX. DENSITY: 3 DU/AC.
PHASE 4 MAX. ALLOWABLE LOTS: 114
PHASE 4 DENSITY: 2.37 DU/AC.
PHASE 4 PROPOSED LOTS: 90
PHASE 4:
PROP. AREA IN LOTS: 17.43 AC.
PROP. AREA IN R/W: 4.77 AC.
PROP. COMMON OPEN SPACE: 14.70 AC.
LINEAR FEET OF STREET: 3,892 FT.
SETBACKS:
MIN. FRONT YARD: 17 FT.
MIN. FRONT OF GARAGE: 20 FT.
MIN. SIDE YARD: 5 FT. (6 FT. ON EXTERIOR LOT)
MIN. REAR YARD: 10 FT.
MIN. REAR YARD: 30 FT.
*SETBACKS MEASURED FROM R/W UNLESS NOTED OTHERWISE
INTERIOR LOTS:
MIN. LOT WIDTH REQUIRED: 50 FT.
MIN. LOT WIDTH PROVIDED: 52 FT.
MIN. LOT AREA PROVIDED: 6,480 SF
AVG. LOT AREA PROVIDED: 8,436.17 SF
EXTERIOR LOTS (LOT 388):
MIN. LOT WIDTH REQUIRED: 60 FT.
MIN. LOT WIDTH PROVIDED: 60 FT.
MIN. LOT AREA PROVIDED: 8,400 SF
AVG. LOT AREA PROVIDED: 8,400 SF

PHASE LINE TABLE		
LINE	LENGTH	BEARING
L1	14.22	N29° 50' 52"E
L2	396.06	N60° 09' 08"W
L3	56.00	N56° 19' 23"W
L4	46.54	N40° 46' 58"E
L5	207.54	N40° 46' 58"E
L6	21.33	N40° 46' 58"E
L7	105.33	N80° 23' 27"W
L8	60.48	N73° 24' 21"W
L9	52.72	N71° 26' 01"W
L10	52.00	N71° 25' 40"W
L11	28.37	N67° 24' 51"W
L12	8.30	S01° 29' 30"W
L13	23.96	S30° 02' 01"W
L14	117.88	S30° 02' 01"W
L15	82.20	S30° 01' 58"W
L16	98.20	S30° 02' 03"W
L17	158.07	S31° 06' 48"W
L18	30.73	S19° 20' 39"W
L19	72.27	S07° 19' 51"W
L20	501.93	S01° 07' 47"W
L21	37.92	S86° 19' 31"E
L22	1072.95	N87° 50' 48"E
L23	552.76	N14° 26' 43"E
L24	900.71	S76° 40' 58"E
L25	1495.38	N62° 43' 04"E
L26	38.78	N56° 12' 54"E
L27	296.48	N57° 33' 48"E
L28	67.61	N56° 27' 57"E
L29	227.04	N56° 27' 57"E
L30	788.41	N89° 53' 28"W
L31	146.02	S30° 25' 02"W
L32	104.49	S26° 37' 20"W
L33	14.97	S33° 59' 34"W
L34	30.41	S57° 45' 31"E
L35	15.00	S32° 14' 29"W
L36	30.87	N57° 45' 31"W
L37	17.86	S33° 59' 34"W
L38	91.96	S43° 55' 37"W
L39	104.38	S42° 56' 59"W
L40	50.82	S63° 07' 35"W
L41	14.54	S41° 25' 09"E
L42	41.77	S08° 39' 23"E
L43	118.53	S00° 00' 00"E
L44	861.98	S62° 43' 04"W
L45	985.15	N76° 40' 58"W
L46	20.03	N85° 33' 49"W
L47	21.00	S29° 48' 18"W
L48	150.01	N60° 09' 08"W
L49	8.54	N29° 50' 52"E
L50	56.00	N60° 18' 04"W

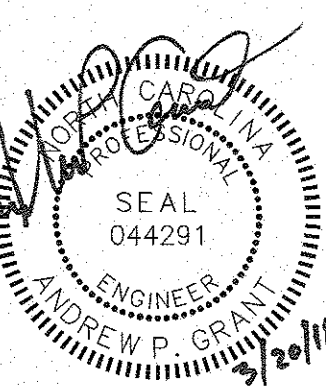
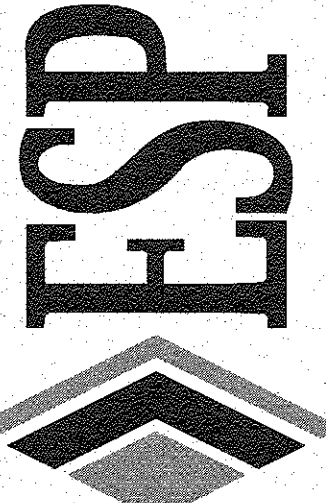
OVERALL SITE PLAN

CHATEAU PHASE 4

PROJECT INFORMATION

PROJECT MANAGER: APG
DESIGNED BY: ECB
DRAWN BY: ECB
PROJECT NUMBER: CN13.440
ORIGINAL DATE: 08/29/2017
SHEET: C3.1

ESP ASSOCIATES, P.A.
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Fort Mill, SC 29708
704-553-4548 (NC)
803-555-5440 (SC)
www.espassociates.com



NO.	DATE	REVISION	BY	REVISION	REVISION PER AGENCY AND CLIENT COMMENTS
1	01/11/2018		BMF		
2	03/20/2018		BMF		

CHARLOTTE, NC

LENNAR CAROLINAS, LLC



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