

PHIFER CREST

CHARLOTTE, NORTH CAROLINA

PREPARED FOR :

PHIFER CREST, LLC

10801 Johnston Road, Suite 127
Charlotte, NC 28226

March 28, 2014



VICINITY MAP - N.T.S.

PREPARED BY



R. Joe Harris & Associates, P.L.L.C.

Engineering • Land Surveying • Planning
Management

1698 W. Hwy 160, Suite 130, Fort Mill, SC 29708 (803) 802-1799 Fax: (803) 802-0886



APPROVED FOR
CONSTRUCTION
CHARLOTTE-MECKLENBURG PLANNING DEPARTMENT
By: Joshua Weaver 4-30-2014

ENGINEERING
PCO / DETENTION / DRAINAGE PLAN

APPROVED
By Brendan Smith (bmsmith@charlottenc.gov) at 9:05 am, Apr 30, 2014

EROSION CONTROL
NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM AT <http://development.charmeck.org>

APPROVED
By Brendan Smith (bmsmith@charlottenc.gov) at 9:05 am, Apr 30, 2014

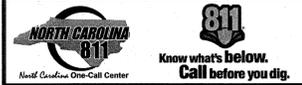
URBAN FORESTRY
TREE ORDINANCE

APPROVED

CDOT

APPROVED

DATE	ISSUED FOR	REV
8/21/13	FIRST SUBMITAL	0
01/31/14	RESPONSE TO CITY COMMENTS	1
03/28/14	RESPONSE TO CITY COMMENTS	2



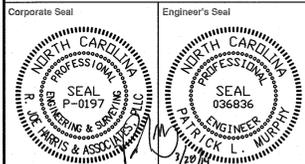
Engineer:

R. Joe Harris & Associates, P.L.L.C.
Engineering • Land Surveying • Planning
Management

1698 W. Hwy 160, Suite 130, Fort Mill, S.C. 29708 P: (803) 802-1799 F: (803) 802-0886

www.rjoharris.com

This drawing shall not be used for construction purposes until the seal and signature of the responsible registrant appears on the drawing, and proper permit forms and related fees are transmitted by the Owner, Owner's Agent or Contractor to the Authority having jurisdiction.



Project Manager P. Murphy	Drawn J. Woodruff Jr.
Department Manager B. Pridmore	Checked P. Murphy

Print/Plot Date
March 28, 2014

Client
PHIFER CREST, LLC
10801 JOHNSTON ROAD, SUITE 127
CHARLOTTE, NC 28226
P: (980) 406-3818

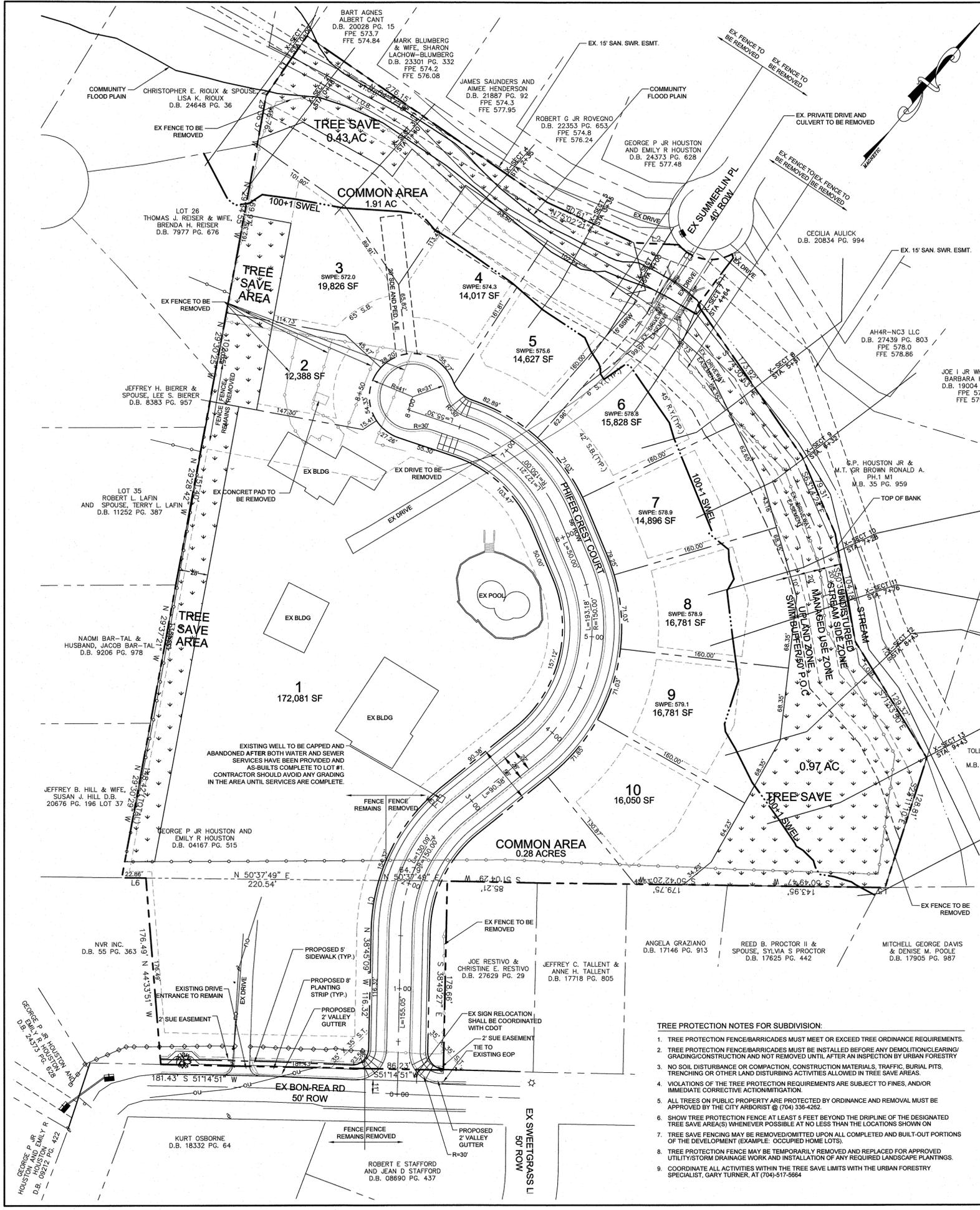
Project:
PHIFER CREST
CHARLOTTE, NC

Drawing Title:
COVER SHEET

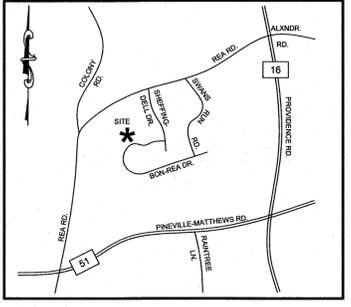
Project No. 1816	Drawing No.
DWG File Name: 1816_SITE	COVER

PLAN SHEET INDEX:

- | | |
|-------|--|
| COVER | COVER SHEET |
| SP-1 | PRELIMINARY PLAT |
| SP-2 | STREET TREE AND PLANTING PLAN |
| SP-3 | SIGHT DISTANCE PLAN |
| SP-4 | SITE PLAN DETAILS |
| SP-5 | SITE PLAN DETAILS |
| SP-6 | SITE PLAN DETAILS |
| EC-1 | EROSION CONTROL INITIAL PHASE |
| EC-2 | EROSION CONTROL FINAL PHASE |
| EC-3 | EROSION CONTROL DETAILS |
| EC-4 | EROSION CONTROL DETAILS |
| EC-5 | EROSION CONTROL DETAILS |
| GP-1 | GRADING AND STORM DRAINAGE PLAN |
| GP-2 | BON REA RD. CROSS SECTIONS |
| RP-1 | ROAD PLAN AND PROFILE, STORM DRAIN PROFILE |
| FS-1 | FLOOD STUDY DRAINAGE AREA |
| FS-2 | FLOOD STUDY CHANNEL CROSS SECTIONS |
| DA-1 | STORM DRAINAGE AREA |



OFF SITE TOPOGRAPHY PROVIDED BY MECKLENBURG COUNTY LIDAR.
 ON SITE TOPOGRAPHY PROVIDED BY "CLASS A" FIELD SURVEY PERFORMED BY R. JOE HARRIS AND ASSOCIATES ON 07-22-2013.
 NO PORTION OF THESE 11 LOTS IS LOCATED WITHIN THE 100 YEAR FLOOD HAZARD ZONE AS DEFINED ON FEMA FLOOD INFORMATION AND COMMUNITY FLOOD INFORMATION TAKEN FROM AVAILABLE DATA AS DOWNLOADED FROM THE NORTH CAROLINA FLOODPLAIN MAPPING CENTER, CURRENT AS OF AUGUST 1, 2011.
 FIRM: CHARLOTTE, CITY OF MECKLENBURG COUNTY
 EFFECTIVE DATE: MARCH 2, 2009
 PANEL NUMBER: 3710-4469-00-J
 HORIZONTAL DATUM TIED TO NAD 83 BY R. JOE HARRIS
 BOUNDARY INFORMATION AS PROVIDED BY R. JOE HARRIS AND ASSOCIATES. BOUNDARY INFORMATION FROM SURVEY ENTITLED BOUNDARY SURVEY OF GEORGE HOUSTON PROPERTY AND DATED 05/28/13. SURVEY MEETS OR EXCEEDS REQUIREMENTS FOR A CLASS "A" SURVEY, OR MAXIMUM ERROR OF CLOSURE IS 1:10,000.
 SITE SOILS INFORMATION:
 VKD, M6B, MO



VICINITY MAP - N.T.S.

EXISTING IMPERVIOUS

EXISTING TO REMAIN	27,000 SF
CONCRETE PAD TO BE REMOVED	108 SF
DRIVE TO BE REMOVED	3656 SF
BRIDGE AND DRIVE TO BE REMOVED	1554 SF
	5317 SF SUM

PROPOSED IMPERVIOUS

SIDE WALK	8476 SF
ROAD	23923 SF
	32399 SF SUM

NEW IMPERVIOUS

32,399 SF OR 10.88% OF THE 7.72 AC. DRAINAGE AREA
 REMAIN AREA OF ALLOWABLE 24%
 41,829 SF OR 13.52%
 ALLOWABLE IMPERVIOUS FOR LOTS 2 THRU 10 = 4,648 SF EACH

DEVELOPMENT INFORMATION

- PROJECT NAME: PHIFER CREST CHARLOTTE, NC
- OWNER: GEORGE P. HOUSTON, JR., AND WIFE, EMILY R. HOUSTON 3933 BON REA DR CHARLOTTE NC 28226-3153
- DEVELOPER: SCOTT DEVELOPMENT GROUP, INC 10801 JOHNSTON ROAD, SUITE 127 CHARLOTTE, NC 28226
- TAX PARCEL NO.: 211-293-08 - 39 - 40 211-295-14 - 16
- EXISTING ZONING: R-3
- TOTAL SITE AREA: 10.46 AC
- TREE SAVE: REQUIRED: 10% X 10.46 AC = 1.05 AC PROVIDED: IN COMMON OPEN SPACE = 1.40 AC (13.4%)
- DENSITY: ALLOWABLE: 10.46 ACRES X 3 LOTS = 31 LOTS PROVIDED: 10 LOTS
- OPEN SPACE: REQUIRED: 10.46 ACRES X 0.10 = 1.05 ACRES PROVIDED: 2.19 ACRES (20.9%)
- DISTRICT STANDARDS: FRONT SETBACK - 42' SIDE YARD - 8' REAR YARD - 45' MIN. LOT WIDTH - 70' MIN. LOT AREA - 10,000 SQ.FT. TOTAL NO. LOTS - 10 TOTAL ACREAGE - 10.46 AC

MAXIMUM ALLOWABLE BUILT-UPON AREA - BY LOT

LOT #	LOT SIZE (SQ. FT.)	MAX. BUA (%)	MAX. BUA (SQ. FT.)
LOT 1	172,081	30	51,624
LOT 2	12,388	27	3,345
LOT 3	19,826	23	4,564
LOT 4	14,017	33	4,648
LOT 5	14,627	32	4,688
LOT 6	15,828	29	4,598
LOT 7	14,896	31	4,618
LOT 8	16,781	27	4,548
LOT 9	16,781	27	4,548
LOT 10	16,050	29	4,648

PER TABLE 9.205(b)(9) OF THE CITY OF CHARLOTTE ZONING ORDINANCE.

GENERAL NOTES - SITE DEVELOPMENT (AS APPLICABLE):

- COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
- ALL ROAD IMPROVEMENTS AT EX BON-REA RD ARE TO BE COORDINATED WITH THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
- DEVELOPER WILL PROVIDE STREET SIGNS PER CLDSM# 50.05 (9" SIGNS ONLY)
- SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
- DIRECT VEHICULAR ACCESS TO EX. SUMMERLIN PL. FROM LOTS 5 AND 6 IS PROHIBITED.
- IN ROLLING AND HILLY TERRAINS, SWEEPING OF THE STONE BASE AND/OR APPLICATION OF A TACK COAT MAY BE REQUIRED NEAR INTERSECTIONS. THESE REQUIREMENTS WILL BE ESTABLISHED BY THE INSPECTOR AND BASED ON FIELD CONDITIONS.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
- IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
- SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
- CURB AND GUTTER SHOWN ON PLANS ALONG EX. BON-REA RD MAY BE ADJUSTED BASED UPON FIELD STAKING BY CITY ENGINEERING. ASSOCIATED STORM DRAINAGE MAY ALSO REQUIRE MODIFICATION BASED UPON FIELD CONDITIONS.
- THE PURPOSE OF THE STORM DRAINAGE EASEMENT (SDE) IS TO PROVIDE STORM WATER CONVEYANCE. BUILDINGS ARE NOT PERMITTED IN THE EASEMENT AREA. ANY OTHER OBJECTS WHICH IMPEDE STORM WATER FLOW OR SYSTEM MAINTENANCE ARE ALSO PROHIBITED.
- HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINAGE PIPE INSTALLED WITHIN EXISTING OR PROPOSED PUBLIC STREET RIGHT-OF-WAY MUST BE APPROVED BY THE CITY'S INSPECTOR PRIOR TO ANY BACKFILL BEING PLACED. BACKFILL MATERIAL MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL WITHIN THE PUBLIC STREET RIGHT-OF-WAY.
- THE DEVELOPER SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN AN UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TIMBER, JUNK AND OTHER ACCUMULATIONS.
- ANY BUILDING WITHIN THE 100+1 STORMWATER ELEVATION LINE IS SUBJECT TO THE RESTRICTIONS OF THE (CITY OF CHARLOTTE/MECKLENBURG COUNTY) SUBDIVISION ORDINANCE, SECTION 7.200.8.
- ANY CONSTRUCTION OR USE WITHIN THE FUTURE CONDITIONS FLOOD FRINGE LINE IS SUBJECT TO THE RESTRICTIONS IMPOSED BY THE FLOODWAY REGULATIONS OF THE CITY OF CHARLOTTE AND MECKLENBURG COUNTY.
- ALL OPENINGS (E.G., DOORS, WINDOWS, VENTS) IN STRUCTURES BUILT ON LOT #S (NA) SHOULD BE LOCATED A MINIMUM OF ONE FOOT ABOVE THE ADJACENT FINISHED GROUND SURFACE (APPLIES TO LOTS WHICH MAY EXPERIENCE SIGNIFICANT OVERLAND FLOW NOT CONSIDERED IN THE 100+1 FLOOD ANALYSIS.)
- "AS-BUILT" DRAWINGS AND PLANS OF THE STORM DRAINAGE SYSTEM, INCLUDING DESIGNED DITCHES, MUST BE SUBMITTED PRIOR TO SUBDIVISION FINAL INSPECTION TO THE CITY/COUNTY ENGINEERING DEPARTMENT IN ACCORDANCE WITH THE CITY/COUNTY SUBDIVISION ORDINANCE.
- NO ONSITE DEMOLITION LANDFILL SHALL BE USED ON SITE.
- ESTIMATED TIMETABLE OF COMPLETION OF PROJECT TO BE DETERMINED BY OWNER. PLANS ARE VALID FOR 3 YEARS FROM DATE OF APPROVAL.
- NON-STANDARD ITEMS (IE: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY REQUIRE A RIGHT-OF-WAY ENCROACHMENT AGREEMENT WITH THE (CHARLOTTE DEPARTMENT OF TRANSPORTATION/NORTH CAROLINA DEPARTMENT OF TRANSPORTATION) BEFORE INSTALLATION.
- PRIOR TO PLAT RECORDATION, OFFSITE R/W AND/OR CONSTRUCTION EASEMENTS ARE REQUIRED TO BE OBTAINED ACCORDING TO THE GUIDELINES OF THE "OFFSITE R/W ACQUISITION PROCESS". THESE NEEDED R/W AND CONSTRUCTION LIMITS ARE CLEARLY SHOWN ON THE ROADWAY IMPROVEMENT PLAN.
- THE DEVELOPER SHALL CONTACT THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (GUS JORDI, 704-336-7889) TO IDENTIFY ANY CONFLICTS WITH TRAFFIC SIGNALIZATION EQUIPMENT. 60-90 DAYS WILL BE REQUIRED TO COORDINATE RELOCATION. DEVELOPER SHALL BE RESPONSIBLE FOR ALL RELATED RELOCATION COST AND/OR ANY REPAIR COST CAUSED BY THE CONTRACTOR/DEVELOPER.
- CERTIFICATION AND STREET CUT PERMITS ARE REQUIRED FOR UTILITY CUTS ON CITY STREETS. ALLOW 7 DAYS PROCESSING FOR PERMIT. FOR INFORMATION CONTACT CHARLOTTE DEPARTMENT OF TRANSPORTATION (704-336-4025) OR VISIT HTTP://WWW.CHARMECK.ORG/DEPARTMENTS/TRANSPORTATION/STREET-MAINTENANCE/HOME.HTM
- PER SECTION 18-175(e) OF CITY CODE AND SECTION 100.0 OF THE CITY'S POST CONSTRUCTION CONTROLS ADMINISTRATIVE MANUAL, ALL REQUIRED NATURAL AREAS AND/OR POST CONSTRUCTION CONTROLS EASEMENTS (PCCES) MUST BE RECORDED PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY. BOB STANLEY (704-432-1562) FOR RIGHT-OF-WAY USE PERMIT.

FLOOD STUDY CROSS SECTIONS

RIVER STATION	Q TOTAL (CFS)	EXISTING 100+1 ELEVATION	PROPOSED 100+1 ELEVATION
12	1997.05	578.23	578.06
13	1997.05	577.99	577.74
14	1997.05	577.79	577.46
11	1997.05	577.69	577.30
10	1997.05	577.55	577.07
9	1997.05	577.43	576.87
8	1997.05	577.32	576.82
7	1997.05	577.16	576.13
6	2016.47	576.08	575.97
5	2016.47	574.74	574.74
4	2016.47	574.28	574.28
3	2016.47	572.67	572.67
2	2016.47	571.89	571.89
1	2016.47	570.76	570.76

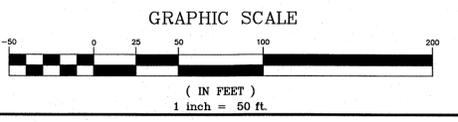
CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD	BEARING	DELTA
C1	47.19	178.00	47.05	S31°09'29"E	151°11'22"
C2	23.56	15.00	21.21	N06°14'51"E	90°00'00"
C3	55.50	40.00	51.15	N59°45'56"E	79°30'10"

LINE TABLE

LINE	LENGTH	BEARING
L1	68.19	N05°30'08"W
L2	42.72	N52°32'47"E
L3	3.92	S55°18'42"E
L4	55.69	S03°15'05"E
L5	5.61	S50°49'19"W
L6	22.86	S50°37'49"W

- TREE PROTECTION NOTES FOR SUBDIVISION:**
- TREE PROTECTION FENCE/BARRICADES MUST MEET OR EXCEED TREE ORDINANCE REQUIREMENTS.
 - TREE PROTECTION FENCE/BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION/CLEARING/GRADING/CONSTRUCTION AND NOT REMOVED UNTIL AFTER AN INSPECTION BY URBAN FORESTRY
 - NO VOL. DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITIES ALLOWED IN TREE SAVE AREAS.
 - VIOLATIONS OF THE TREE PROTECTION REQUIREMENTS ARE SUBJECT TO FINES, AND/OR IMMEDIATE CORRECTIVE ACTION/MITIGATION.
 - ALL TREES ON PUBLIC PROPERTY ARE PROTECTED BY ORDINANCE AND REMOVAL MUST BE APPROVED BY THE CITY ARBORIST @ (704) 336-4262.
 - SHOW TREE PROTECTION FENCE AT LEAST 5 FEET BEYOND THE DRIPLINE OF THE DESIGNATED TREE SAVE AREA(S) WHENEVER POSSIBLE AT NO LESS THAN THE LOCATIONS SHOWN ON
 - TREE SAVE AREAS(S) WHENEVER POSSIBLE UPON ALL COMPLETED AND BUILT-OUT PORTIONS OF THE DEVELOPMENT (EXAMPLE: OCCUPIED HOME LOTS).
 - TREE PROTECTION FENCE MAY BE TEMPORARILY REMOVED AND REPLACED FOR APPROVED UTILITY/STORM DRAINAGE WORK AND INSTALLATION OF ANY REQUIRED LANDSCAPE PLANTINGS.
 - COORDINATE ALL ACTIVITIES WITHIN THE TREE SAVE LIMITS WITH THE URBAN FORESTRY SPECIALIST, GARY TURNER, AT (704) 517-5664



DATE	ISSUED FOR	REV
8/21/13	FIRST SUBMITAL	0
01/31/14	RESPONSE TO CITY COMMENTS	1
03/28/14	RESPONSE TO CITY COMMENTS	2

North Carolina One-Call Center
 Know what's below. Call before you dig.

Engineer:

 R. Joe Harris & Associates, P.L.L.C.
 Engineering • Land Surveying • Planning Management
 1698 W. Hwy 100, Suite 110, Fort Mill, S.C. 29708 P: (803) 802-1799 F: (803) 802-0886
 www.rjoeharris.com

This drawing shall not be used for construction purposes until the seal and signature of the responsible registrant appears on the drawing, and proper permit forms and related fees are transmitted by the Owner, Owner's Agent or Contractor to the Authority having jurisdiction.

Corporate Seal

 Engineer's Seal

Project Manager: P. Murphy
 Department Manager: B. Pridemore
 Print/Plot Date: March 28, 2014
 Client: PHIFER CREST, LLC
 10801 JOHNSTON ROAD, SUITE 127 CHARLOTTE, NC 28226
 P: (980) 406-3818

Project:

 PHIFER CREST CHARLOTTE, NC

Drawing Title:
 PRELIMINARY PLAT

Project No.: 1816
 DWG File Name: 1816 SITE
 Drawing No.: SP-1