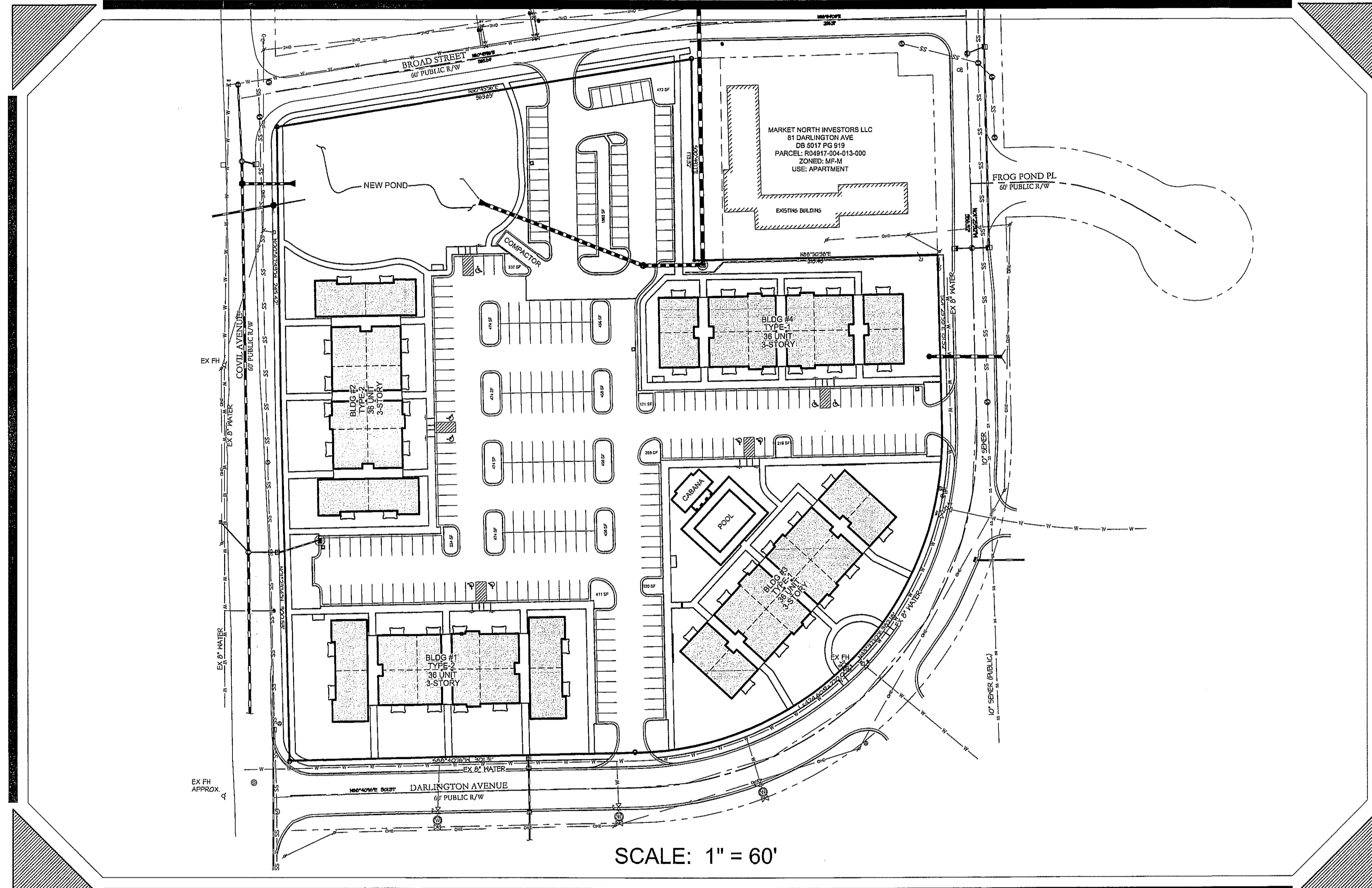
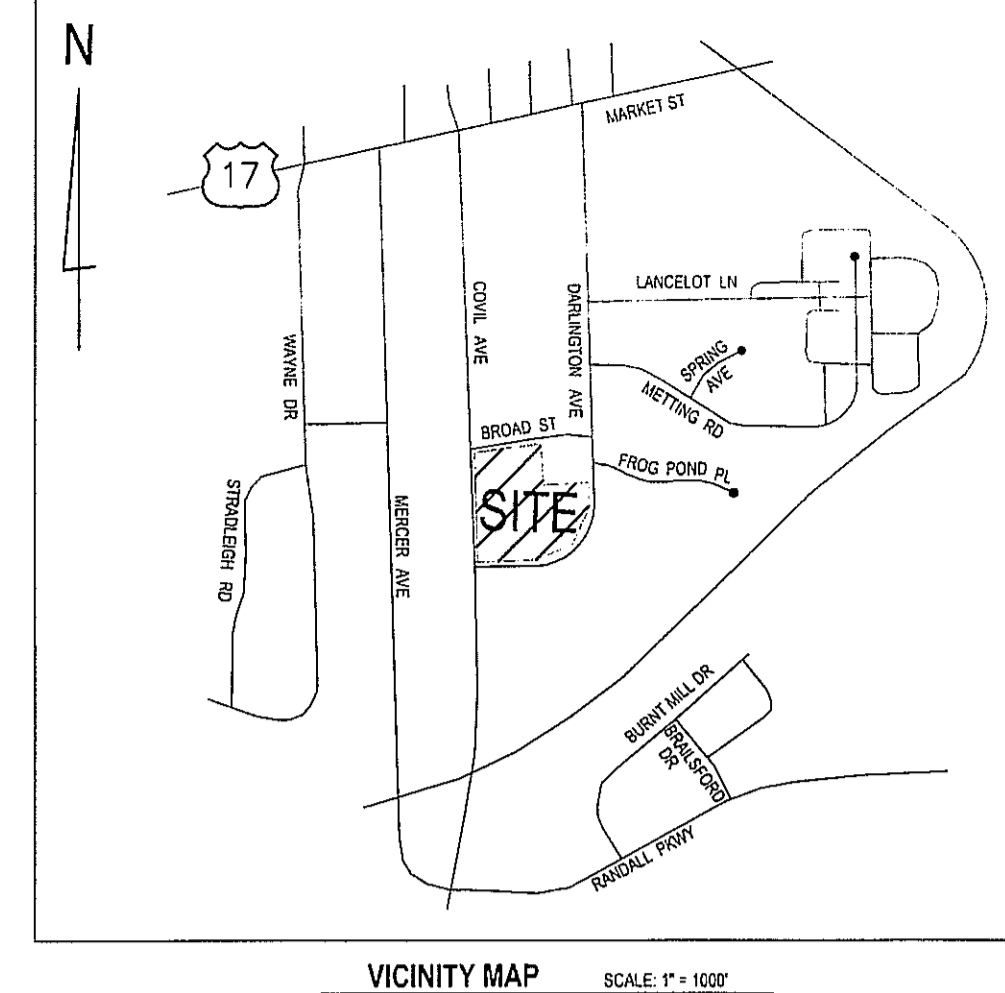


ANNEXE AT THE RESERVE

315 & 323 COVIL AVE.

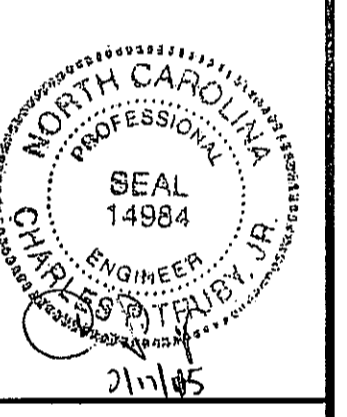
CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
NEW HANOVER COUNTY, NORTH CAROLINA



SCALE: 1" = 60'

REVISIONS

GPT ENGINEERING AND SURVEYING, INC.
LAND DEVELOPMENT CONSULTING
CORPORATE LICENSE NUMBER C-1875
4400 TYNING STREET
HIGH POINT, NORTH CAROLINA 27265
PHONE: (336) 812-8800 ~ FAX: (336) 812-8780



CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____

SHEET INDEX

NO.	TITLE
C1	Cover
C2	Existing Conditions (By Others)
C3	Demolition Plan
C4	Site Inventory Map
C5	Site Plan
C6	Utility Plan
C7	Grading & Drainage Plan
C8	Drainage Area Plan
C9	Stormwater Management Plan
C10	Tree Inventory Map
D1	Site Details
D2	Site Notes & Details
D3	Utility Details
L1	Landscape Plan (By Others)
L2	Landscape Plan (By Others)

COVER SHEET

ANNEXE AT THE RESERVE
CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
NEW HANOVER COUNTY, NORTH CAROLINA

COVER SHEET

SCALE: NTS
DATE: 03/17/15
PROJECT: 1140-12
DRAWN BY: TGL
SHEET **C1**

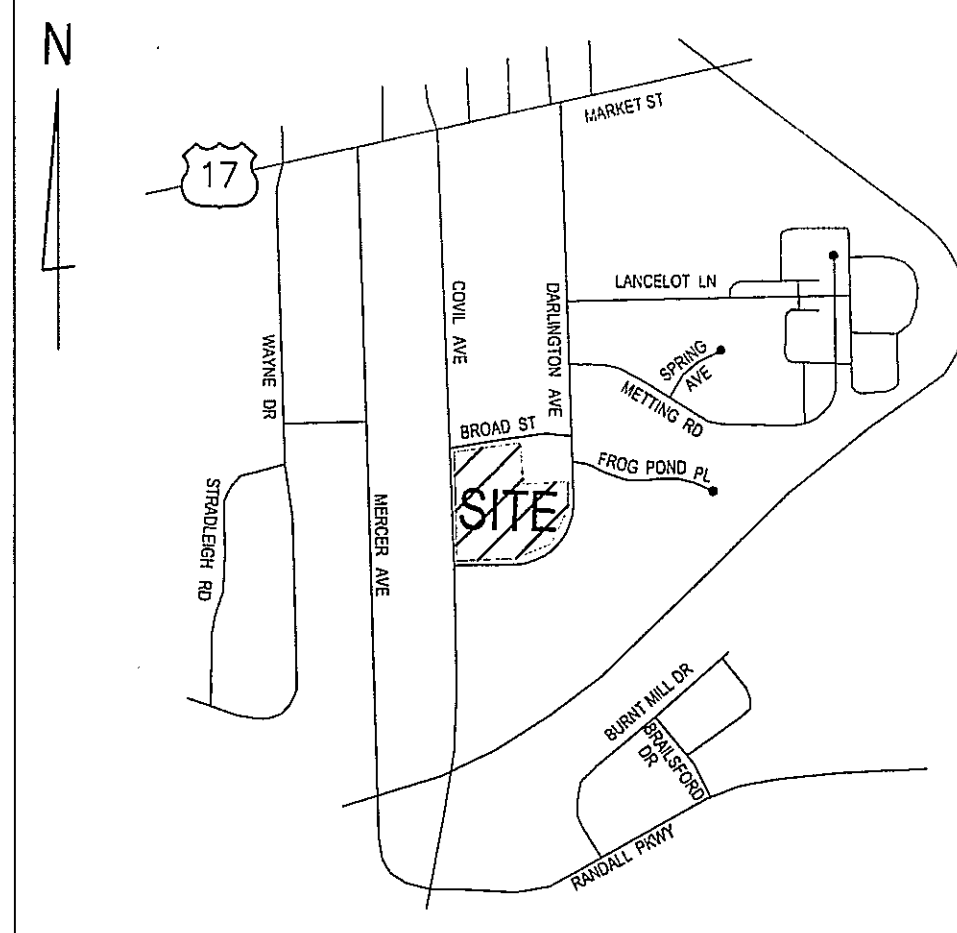
Nov 17, 2015 F:\Projects\1140-12\DWG\1140-12 CIVIL BASEMAP.dwg Tab Name: CoverSheet

REVISIONS

NO.	DATE	DESCRIPTION

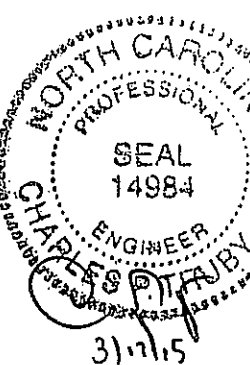
OWNER / DEVELOPER:
BRC WILMINGTON LLC
5826 SAWYER DRIVE, SUITE 105
HIGH POINT, NC 27285
PHONE: (336) 888-1512
FAX: (336) 888-1501

ENGINEER:
CPT ENGINEERING & SURVEYING, INC.
4400 TYNING STREET
HIGH POINT, NC 27285
CONTACT: CHUCK TRUBY, P.E.
PHONE: (336) 812-8800 ext:304
FAX: (336) 812-8780



VICINITY MAP
SCALE: 1" = 1000'

ENGINEERING AND SURVEYING, INC.
1505 WILSON ST
CORPORATE LICENSE NUMBER C-1876
4400 TYNING STREET
HIGH POINT, NORTH CAROLINA 27265
PHONE: (866) 512-6800 ~ FAX: (866) 512-6180



EXISTING CONDITIONS (BY OTHERS)
ANNEXE AT THE RESERVE
CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
NEW HANOVER COUNTY, NORTH CAROLINA

EXISTING CONDITIONS

SCALE: 1" = 40'

DATE: 03/17/15

PROJECT: 1140-12

DRAWN BY: TGL

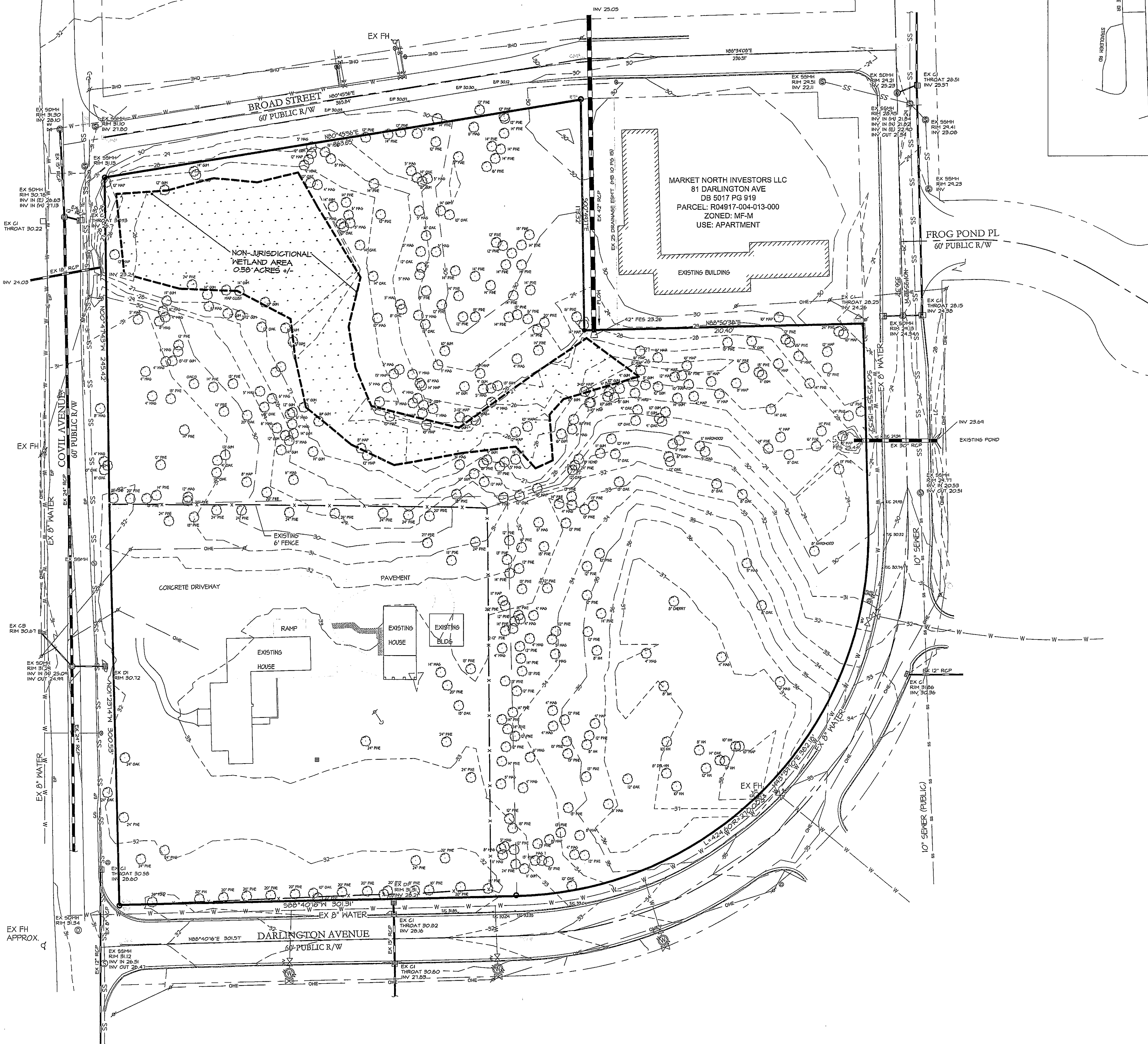
SHEET C2



GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.



MARKET NORTH INVESTORS LLC
81 DARLINGTON AVE
DB 5017 PG 919
PARCEL: R04917-004-013-000
ZONED: MF-M
USE: APARTMENT

NON-JURISDICTIONAL
WETLAND AREA
0.58 ACRES +/-

EXISTING BUILDING

FROG POND PL
60' PUBLIC R/W

EXISTING POND

CONCRETE DRIVEWAY

EXISTING HOUSE

EXISTING BLDG

DARLINGTON AVENUE
60' PUBLIC R/W

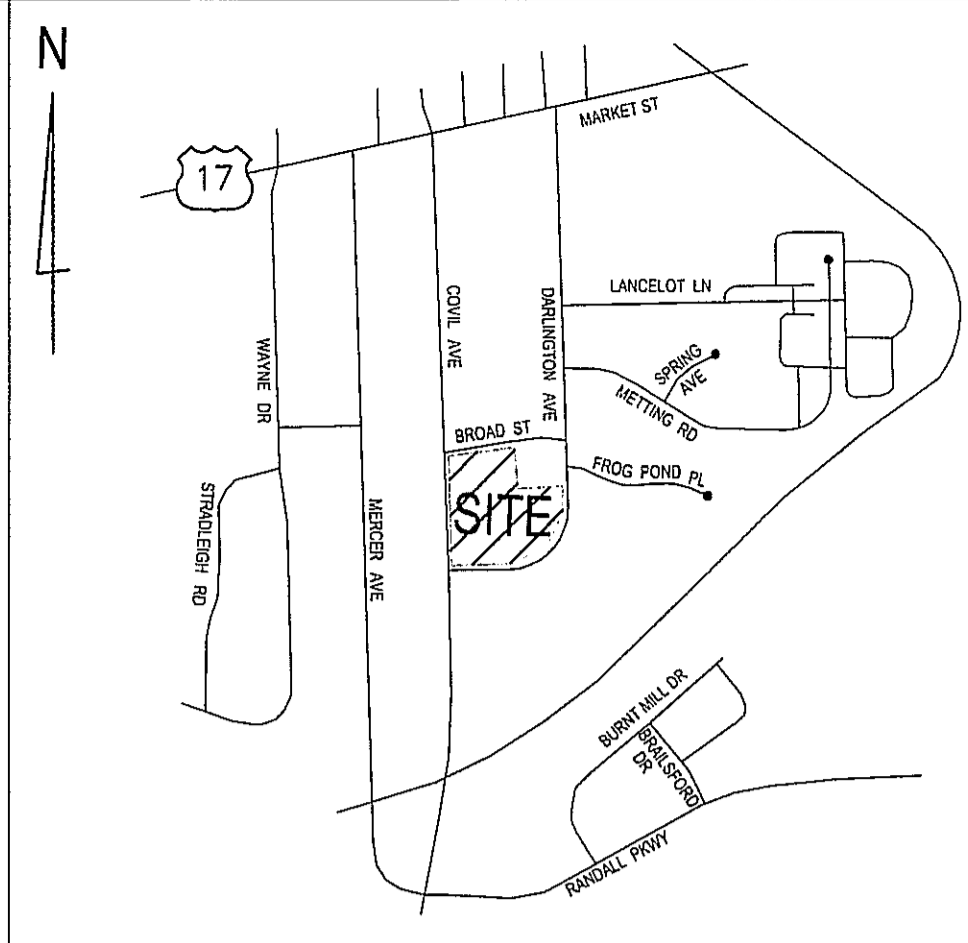
10" SEWER (PUBLIC)

LEGEND:

- IFF IRON PIPE FOUND
- IRF IRON ROD FOUND
- IRS IRON ROD SET
- ⊙ PK NAIL SET
- CONCRETE MONUMENT FOUND
- SIGN
- C/G CONCRETE CURB & GUTTER
- EP EDGE OF PAVEMENT
- ★ LIGHT POLE
- U UTILITY POLE
- ⌋ GUY ANCHOR
- ⊠ TRANSFORMER
- ⊙ TELEPHONE RISER
- WATER METER
- WATER VALVE
- FIRE HYDRANT
- IRRIGATION VALVE
- CLEAN-OUT
- ⊙ SANITARY SEWER MANHOLE
- ⊙ STORM DRAINAGE MANHOLE
- CURB INLET
- CATCH BASIN
- GAS METER
- OHE OVERHEAD UTILITIES
- UOT BURIED TELEPHONE LINE
- W WATER LINE
- SS SANITARY SEWER LINE
- SD STORM DRAINAGE LINE
- G UNDERGROUND GAS LINE
- CHAINLINK FENCE

Mod: 11, 2015 F:\Projects\1140-12\DWG\1140-12-CIVIL-BASEMAP.dwg Tab Name: C2-EX CONDITIONS

NO FIELD WORK HAS BEEN PERFORMED BY CPT ENGINEERING AND SURVEYING, INC.

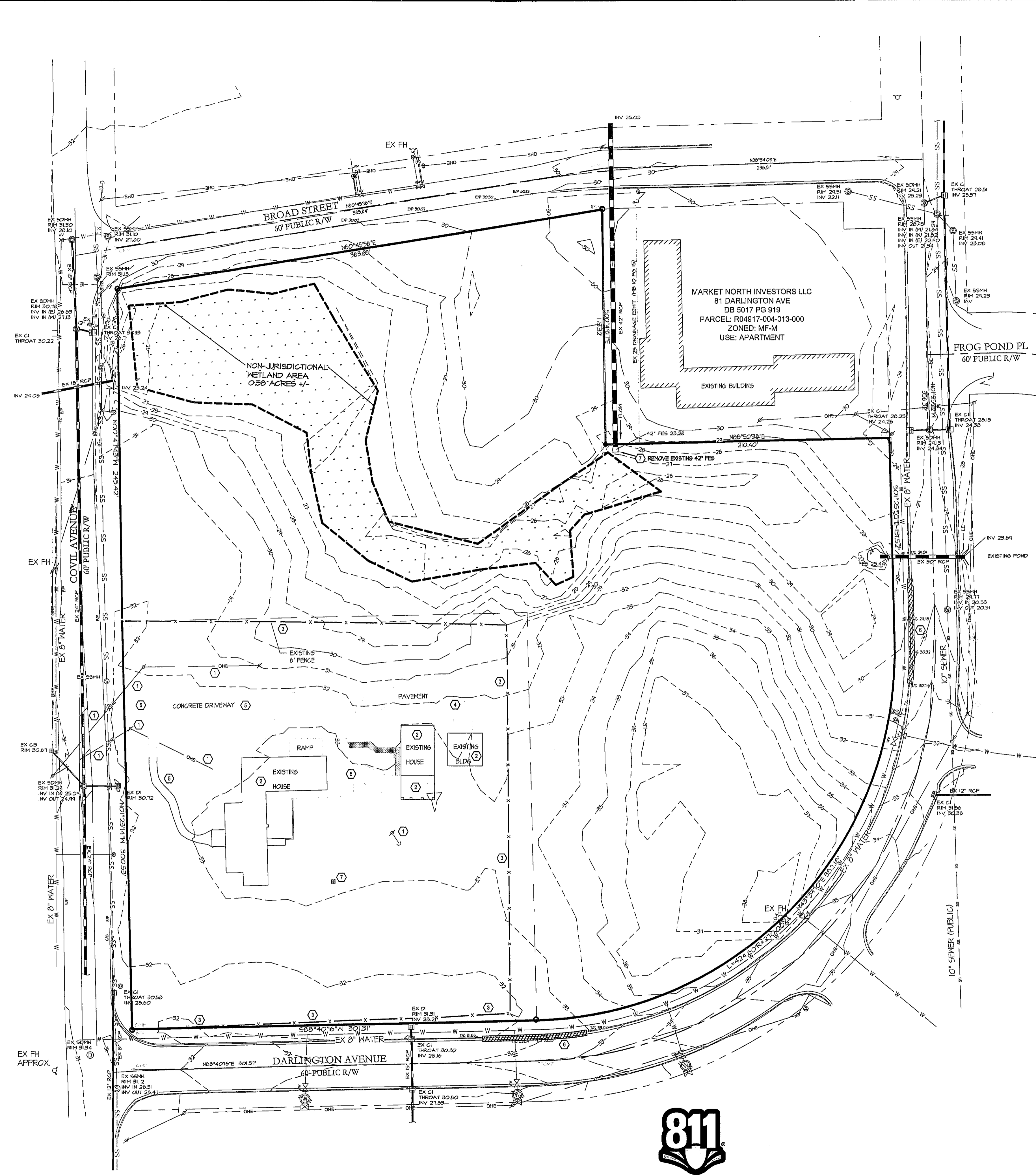
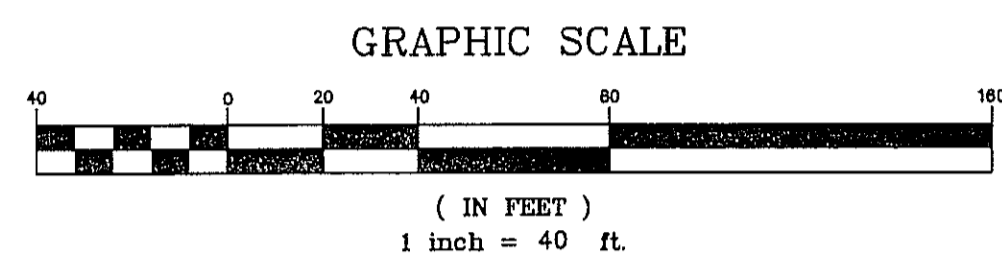


ENGINEERING AND SURVEYING, INC.
 LAND DEVELOPMENT CONSULTING
 CORPORATE LICENSE NUMBER C-19715
 4400 TYNING STREET
 HIGH POINT, NORTH CAROLINA, 27265
 PHONE: (336) 812-8800 ~ FAX: (336) 812-8780



DEMOLITION PLAN
ANNEXE AT THE RESERVE
 CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
 NEW HANOVER COUNTY, NORTH CAROLINA

DEMOLITION PLAN
 SCALE: 1" = 40'
 DATE: 03/17/15
 PROJECT: 1140-12
 DRAWN BY: TGL
 SHEET **C3**



- LEGEND:**
- IPI IRON PIPE FOUND
 - IRI IRON ROD FOUND
 - IRS IRON ROD SET
 - ⊙ PK NAIL SET
 - CONCRETE MONUMENT FOUND
 - SIGN
 - C&G CONCRETE CURB & GUTTER
 - EP EDGE OF PAVEMENT
 - ★ LIGHT POLE
 - UTILITY POLE
 - GUY ANCHOR
 - ⊠ TRANSFORMER
 - ⊙ TELEPHONE RISER
 - ⊙ WATER METER
 - ⊙ WATER VALVE
 - ⊙ FIRE HYDRANT
 - ⊙ IRRIGATION VALVE
 - ⊙ CLEAN-OUT
 - ⊙ SANITARY SEWER MANHOLE
 - ⊙ STORM DRAINAGE MANHOLE
 - ⊙ CURB INLET
 - ⊙ CATCH BASIN
 - ⊙ GAS METER
 - OHE OVERHEAD UTILITIES
 - UGT BURIED TELEPHONE LINE
 - W WATER LINE
 - SS SANITARY SEWER LINE
 - SD STORM DRAINAGE LINE
 - G UNDERGROUND GAS LINE
 - CHAINLINK FENCE

- DEMOLITION KEY:**
- 1 CONTACT POWER COMPANY TO SCHEDULE TO HAVE THE EXISTING ELECTRICAL SERVICE TO THE BUILDINGS/ SITE DISCONNECTED.
 - 2 DEMOLISH AND REMOVE EXISTING BUILDINGS AND FOUNDATIONS, CANOPIES, AND OTHER MISCELLANEOUS STRUCTURES.
 - 3 REMOVE EXISTING FENCE.
 - 4 REMOVE EXISTING PAVEMENT.
 - 5 REMOVE EXISTING CONCRETE.
 - 6 REMOVE EXISTING CURB AND GUTTER.
 - 7 REMOVE EXISTING INLETS AND STORM PIPES.
- IF APPLICABLE
 CONTACT GAS COMPANY TO SCHEDULE TO HAVE THE EXISTING GAS SERVICE TO THE BUILDINGS/ SITE DISCONNECTED. CONTRACTOR TO REMOVE EXISTING GAS LINES ON-SITE.
- REMOVE EXISTING WATER SERVICE AND METER PER CITY STANDARDS.
 CONTRACTOR TO REMOVE EXISTING WATER LINES ON-SITE.
- REMOVE EXISTING SANITARY SEWER SERVICE AND METER PER CITY STANDARDS.
 CONTRACTOR TO REMOVE EXISTING SEWER LINES ON-SITE.
- REMOVE EXISTING CATV AND TELEPHONE

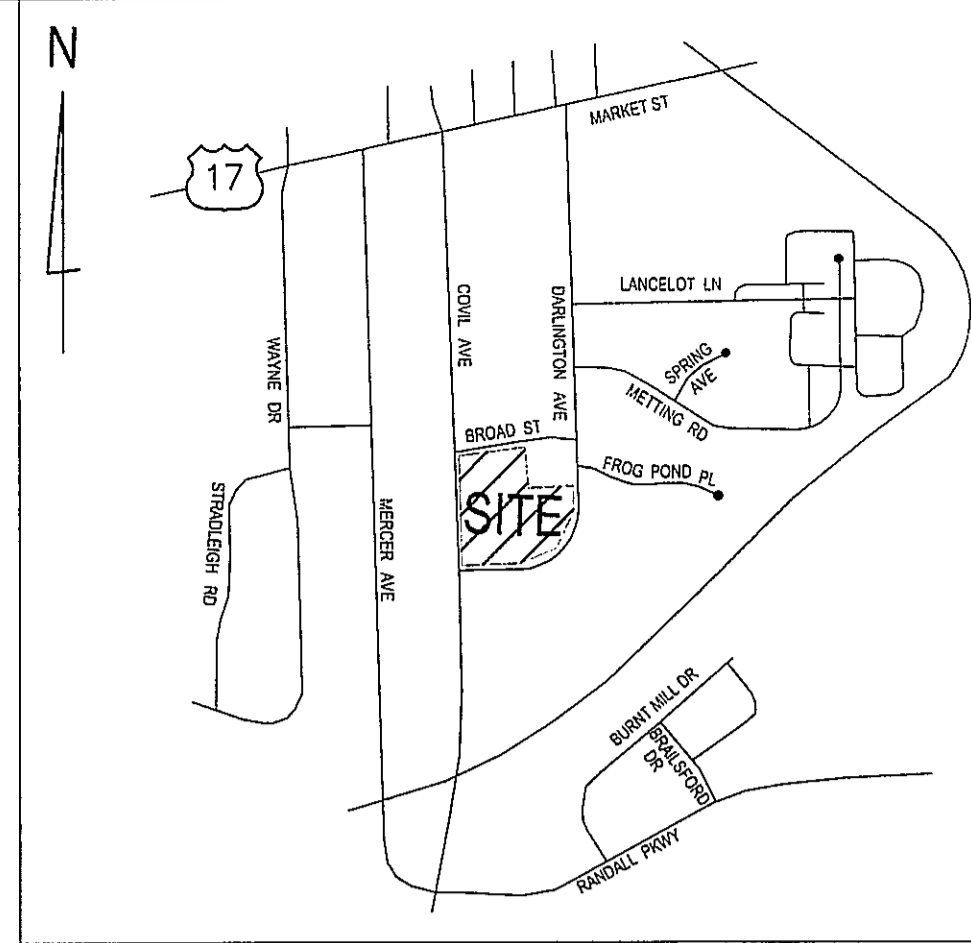
OWNER / DEVELOPER:
 BRC WILMINGTON LLC
 5626 SAMET DRIVE, SUITE 105
 HIGH POINT, NC 27265
 PHONE: (336) 889-1512
 FAX: (336) 889-1501

ENGINEER:
 CPT ENGINEERING & SURVEYING, INC.
 4400 TYNING STREET
 HIGH POINT, NC 27265
 CONTACT: CHUCK TRUBY, P.E.
 PHONE: (336) 812-8800 ext:304
 FAX: (336) 812-8780

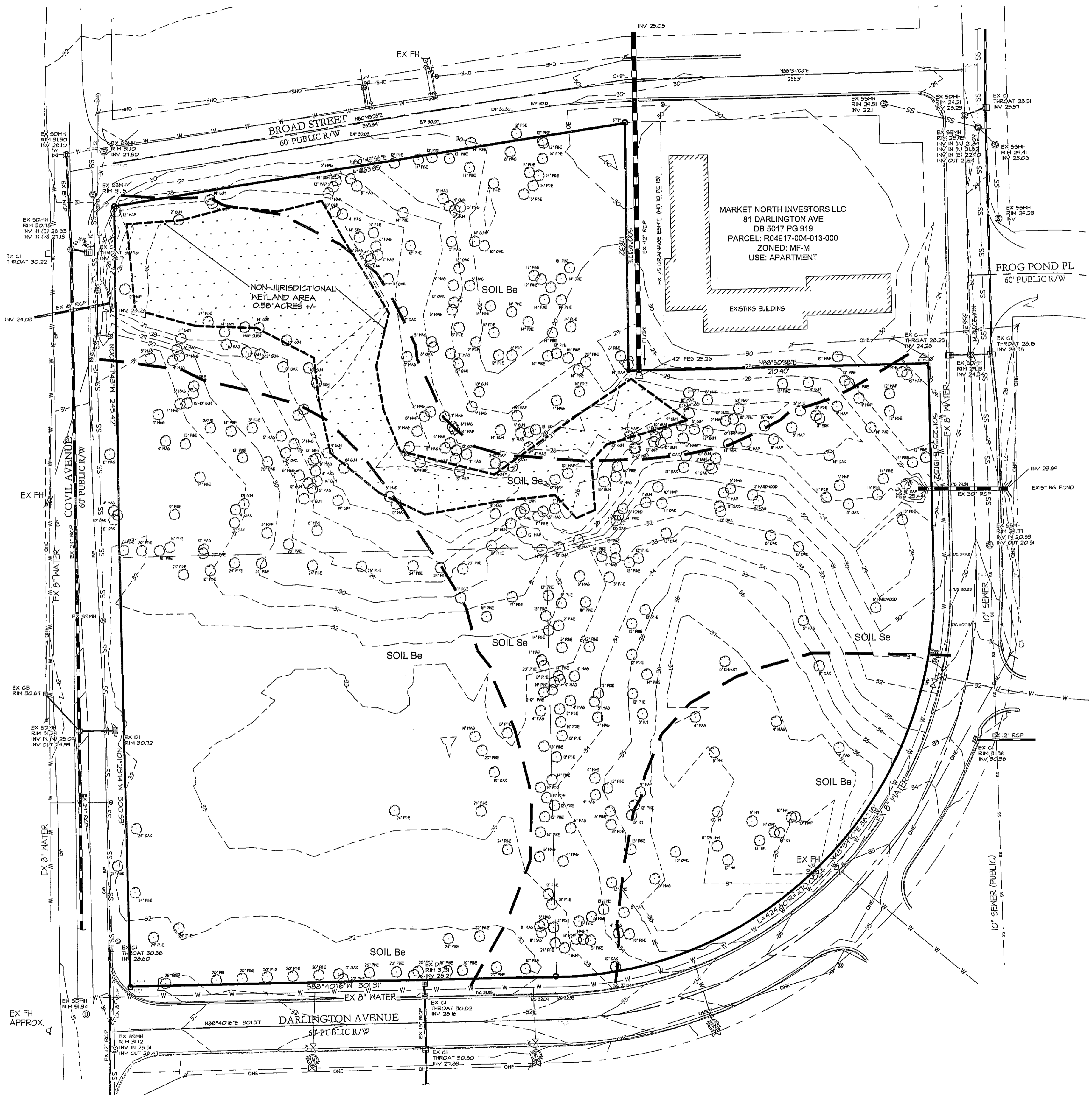


M:\P\140-1140-12 CIVIL BASEMAP.dwg Top Name: C4-SITE INVENTORY MAP

THIS IS NOT A SURVEY. NO FIELD WORK HAS BEEN PERFORMED BY CPT ENGINEERING AND SURVEYING, INC.



VICINITY MAP
SCALE: 1" = 1000'



SITE INFORMATION:
 SITE ACREAGE: 6.4± Ac.
 EXISTING ZONING: MF-MH
 SITE ADDRESS: 315 & 323 COVIL AVE.
 PARCEL ID: R05505-004-015-000 & R04917-004-012-000
 DEED REFERENCE: DEED BOOK 5673, PAGE 2248
 ACCORDING TO WWW.NCHISTORICSITES.ORG AND WWW.NATIONALREGISTEROFHISTORICPLACES.COM, THE SITE DOES NOT CONTAIN A RECOGNIZED STATE OR FEDERAL HISTORIC SITE.
 ACCORDING TO WWW.NCGENWEB.US/NEWHANOVER/CEMETERIES3.HTML THERE ARE NO CEMETERIES, BURIAL SITES OR BURIAL GROUNDS LOCATED ON THE SITE.
 ACCORDING TO WWW.FWS.GOV THERE ARE NO PROTECTED SPECIES HABITATES LOCATED ON THE SITE.
 THERE ARE NO PROPOSED THOROUGHFARES, BIKE ROUTES, TRAILS OR TRANSIT FACILITIES LOCATED ON SITE.
 CAMA LAND USE CLASSIFICATION: URBAN
 SITE DRAINS TO EXISTING STORM LOCATED ON COVIL AVENUE

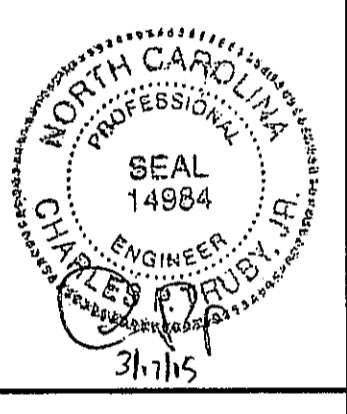
TREE LEGEND:
 MAP = MAPLE
 MAG = MAGNOLIA
 HW = HARDWOOD
 DBL = DOUBLE

REVISIONS

NO.	DATE	DESCRIPTION

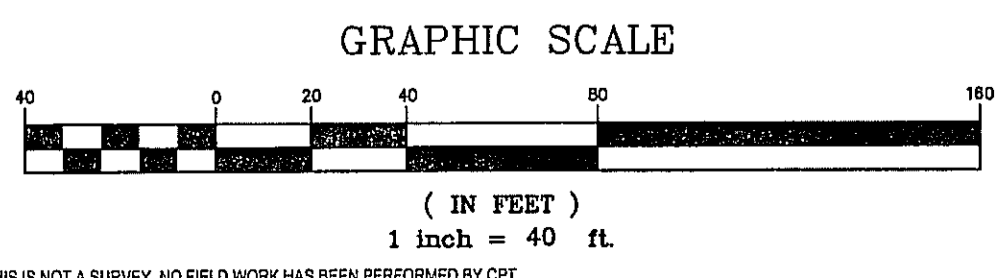
ENGINEERING AND SURVEYING, INC.
 LICENSED PROFESSIONAL ENGINEERS
 CORPORATE LICENSE NUMBER C-175

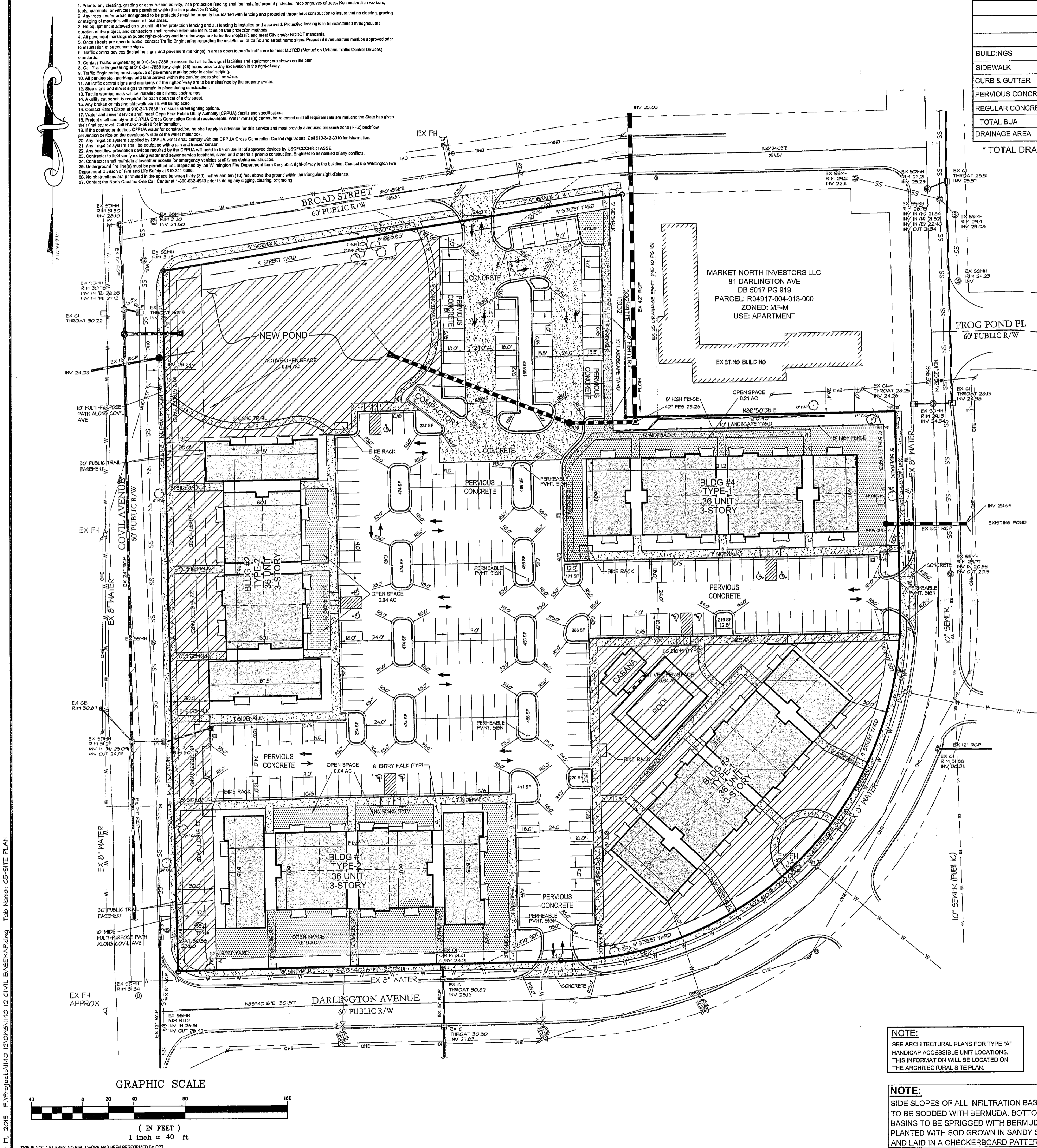
 4400 TRYING STREET
 HIGH POINT, NORTH CAROLINA 27262
 PHONE: (866) 912-6800 ~ FAX: (866) 912-6180



SITE INVENTORY MAP
ANNEXE AT THE RESERVE
 CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
 NEW HANOVER COUNTY, NORTH CAROLINA

SCALE: 1" = 40'
 DATE: 03/17/15
 PROJECT: 1140-12
 DRAWN BY: TGL
 SHEET **C-4**





IMPERVIOUS SURFACE CALCULATIONS

	PARKING			INFILTRATION AREAS					TOTALS
	AREA # 1	AREA # 2	AREA # 3	AREA # 1	AREA # 2	AREA # 3	AREA # 4	AREA # 5	
BUILDINGS	0.082 AC. / 3,556 SF	0.05 AC. / 2,170 SF	0.050 AC. / 2,170 SF	0.214 AC. / 9,319 SF	0.095 AC. / 4,146 SF	0.071 AC. / 3,096 SF	0.116 AC. / 5,037 SF	0.082 AC. / 3,556 SF	80,532 SF
SIDEWALK	1.610 SF	9,555 SF	1,738 SF	815 SF	109 SF	908 SF	1,319 SF	0	16,454 SF
CURB & GUTTER	0.014 AC. / 595 SF	0.144 AC. / 6,279 SF	0.015 AC. / 645 SF	0	0	0	0	0	7,519 SF
PERVIOUS CONCRETE	6.210 SF	62,868 SF	7,182 SF	0	0	0	0	0	76,260 SF
REGULAR CONCRETE	0	14,385 SF	0	0	0	0	0	0	14,385 SF
TOTAL BUA	0.275 AC. / 11,971 SF	2.79 AC. / 121,788 SF	0.300 AC. / 13,081 SF	0.233 AC. / 10,134 SF	0.098 AC. / 4,288 SF	0.082 AC. / 4,004 SF	0.146 AC. / 6,356 SF	0.082 AC. / 3,556 SF	175,130 SF
DRAINAGE AREA	0.323 AC. 3.433 AC. 0.367 AC. 0.294 AC. 0.215 AC. 0.268 AC. 0.431 AC. 0.179 AC. → 5.51 AC.								

TREE LEGEND:
 MAP = MAPLE
 MAG = MAGNOLIA
 HW = HARDWOOD
 DBL = DOUBLE

SITE INFORMATION:
 SITE ACREAGE: 6.42 AC.
 EXISTING ZONING: MF-MH
 SITE ADDRESS: 315 & 323 COVIL AVE.
 PARCEL ID: R05505-004-015-000 & R04917-004-012-000
 DEED REFERENCE: DEED BOOK 5673, PAGE 2248
 TOTAL NUMBER OF BUILDINGS: 4 (3 STORY)
 TOTAL NUMBER OF UNITS: 144
 USE: APARTMENTS
 UNIT MIX:
 48 (1 BEDROOM)
 72 (2 BEDROOM)
 24 (3 BEDROOM)
 MAXIMUM DENSITY ALLOWED PER ZONING: 25 UNITS / AC
 DENSITY SHOWN: 22.5 UNITS / AC
 BUILDING HEIGHT: 40 FT

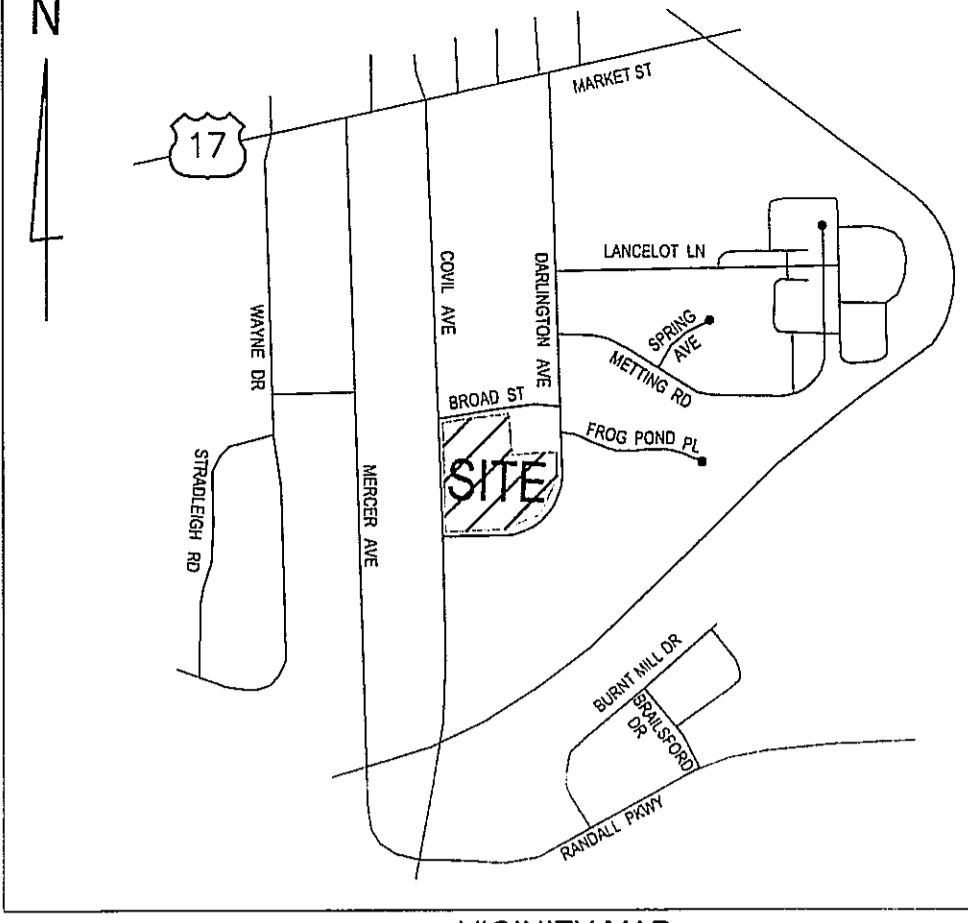
PARKING CALCULATION:
 PARKING REQUIRED:
 48 (1 BEDROOM) X 1.5 = 72
 72 (2 BEDROOM) X 2.0 = 144
 24 (3 BEDROOM) X 2.25 = 54
 TOTAL REQUIRED = 270
 TOTAL PARKING SPACES PROVIDED = 272
 (INCLUDES 9 HC SPACES)

BUILDING SETBACKS (MF-MH):
 FRONT: 30 FT
 REAR: 25 FT
 INTERIOR SIDE: 20 FT
 ADDITIONAL REAR AND SIDE YARD SETBACKS FOR BLDG HEIGHT ABOVE 35 FEET:
 FIRST 10 FEET ABOVE 35 FEET: 4 FEET FOR EACH 10 FOOT INCREMENT, OR PORTION THEREOF
 10.1 FEET TO 30 FEET ABOVE 35 FEET: 6 FEET FOR EACH 10 FOOT INCREMENT
 30.1 FEET OR MORE ABOVE 35 FEET: 8 FEET FOR EACH 10 FOOT INCREMENT

OPEN SPACE:
 TOTAL OPEN SPACE REQUIRED: 6.4 X 0.35 = 2.24 AC
 REQUIRED ACTIVE OR PASSIVE: 2.24 X 0.5 = 1.12 AC
 REQUIRED ACTIVE, PASSIVE, OR OPEN SPACE: 2.24 X 0.5 = 1.12 AC
 PROVIDED (ACTIVE): 1.58 AC
 PROVIDED (OPEN SPACE): 0.44 AC
 TOTAL PROVIDED: 2.02 AC
 (THIS SITE IS 9,583 SF UNDER THE REQUIRED OPEN SPACE, FEE IN LIEU OF WILL BE REQUIRED)

BUILT-UPON CALCULATION:
 EXISTING BUA: 14,039 SF
 PROPOSED:
 BUILDINGS: 56,383 SF (20.2 % LOT COVERAGE)
 PARKING LOT AND DRIVES: 96,021 SF (PERVIOUS CONCRETE)
 SIDEWALKS & POOL: 24,379 SF
 TOTAL: 176,783 SF OR 4.06 AC
 (INCLUDES PERVIOUS CONCRETE)

ALL THE NECESSARY APPROVALS HAVE BEEN/ WILL BE OBTAINED FROM THE STATE/ CORPS FOR ANY WETLAND DISTURBANCE AND STREAM CROSSING/DISTURBANCE



VICINITY MAP
 SCALE: 1" = 1000'

RETAINING WALL NOTES:
 1. PROPOSED RETAINING WALLS ARE FOR ILLUSTRATION PURPOSES ONLY. DEPENDING CHANGE IN GRADE REQUIREMENTS. CPT ENGINEERING AND SURVEYING, INC. IS NOT RESPONSIBLE FOR RETAINING WALL DESIGNS.
 2. RETAINING WALL PERMITS WILL BE REQUIRED BY THE CITY OF WILMINGTON INSPECTIONS DEPARTMENT.
 3. ANY RETAINING WALL > 4' REQUIRES A BUILDING PERMIT FROM BUILDING INSPECTIONS.

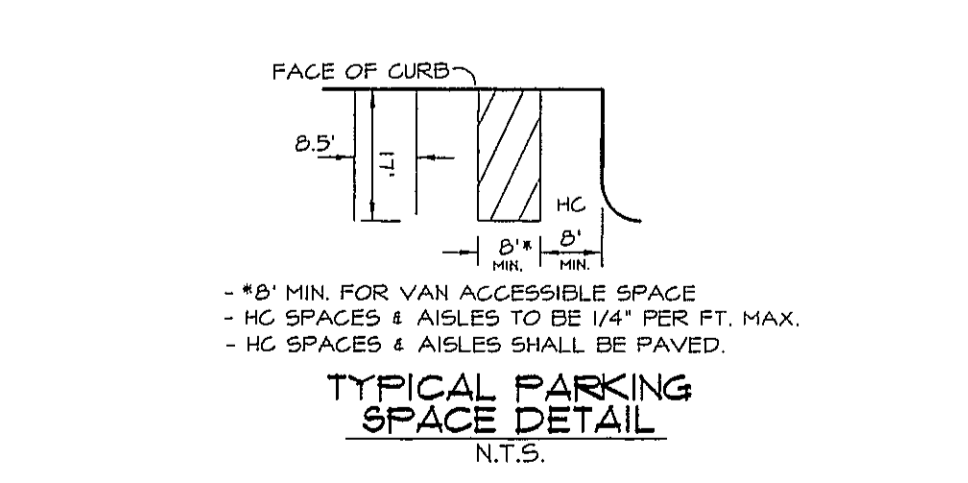
GENERAL H.C. ACCESSIBILITY NOTES:
 1. LANDINGS OUTSIDE ALL DOORS SHALL BE SIZED PER NBC, BE AT THE SAME ELEVATION AS THE FFE, AND SHALL HAVE A MAX. 2 % SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL.
 2. THE SLOPES IN THE H.C. PARKING SPACE/ACCESS AISLE AREA SHALL NOT EXCEED 2 % IN ANY DIRECTION INCLUDING IN THE DIAGONAL.
 3. THERE SHALL BE NO DESIGNATED PEDESTRIAN ROUTES/SIDEWALKS WITHIN THE SITE, EXCEPT WHERE LABELED AS A RAMP WITH RAILS, WHICH EXCEED A 5 % SLOPE IN THE DIRECTION OF TRAVEL AND A 2 % CROSSLOPE.
 4. ALL PEDESTRIAN ROUTES > 5' (1:20), IF ANY, ARE LABELED AS 'RAMPS' SHOWING SLOPES, LEVEL LANDINGS AT TOP AND BOTTOM (MAX. 2 % SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL), RAILINGS/GUARDRAILS, AND SHALL COMPLY WITH NBC.
 5. THERE SHALL BE LEVEL TURNING AREAS (MAX. 2 % SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL) ON ALL SIDEWALKS INCLUDING SIDEWALKS ALONG STREETS WHERE AN INTERSECTING SIDEWALK CONNECTS WITH IT.
 6. ALL STAIRS SHALL HAVE SLIGHTLY SLOPED LANDINGS (MAX. 2 % SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL), AT THE TOP AND BOTTOM AND SHALL COMPLY WITH NBC.
 7. STAIRS / STEPS WITH LESS THAN A 12" ELEVATION CHANGE SHALL COMPLY WITH NBC 1003.5.
 8. THE SLOPES AT THE PASSENGER LOADING ZONE AND ADJACENT VEHICLE PULL UP SPACE SHALL NOT EXCEED 2 % IN ANY DIRECTION INCLUDING IN THE DIAGONAL.

NOTE:
 ALL FILL PLACED BETWEEN EXISTING GROUND AND BOTTOM OF STONE BEDDING IN PERVIOUS PARKING AREAS SHALL BE CLEAN SAND.

MEDIA REQUIREMENTS NOTE:
 ALL FILL MATERIAL PLACED WITHIN THE INFILTRATION BASINS OR UNDER PERVIOUS CONCRETE SHALL BE CLEANED, WASHED, COURSE MASONRY SAND SUCH AS ASTM C33. THE SAND PARTICLES SHALL BE LESS THAN 2 mm AVERAGE DIAMETER.

BICYCLE PARKING:
 EACH NEW COMMERCIAL OR OFFICE DEVELOPMENT REQUIRING 25 OR MORE AUTO PARKING SPACES SHALL MAKE PROVISIONS FOR PARKING A MINIMUM OF 5 BICYCLES. EACH ADDITIONAL 100 AUTO PARKING SPACES ABOVE THE MINIMUM 25 SPACES SHALL REQUIRE PROVISIONS FOR PARKING OF 5 ADDITIONAL BICYCLES UP TO A MAXIMUM OF 26 BICYCLES. BICYCLE PARKING FACILITIES SHALL BE PROVIDED WITHIN 20 FEET OF THE PRIMARY ENTRANCE TO THE FACILITY. (SEE LOCATIONS ON PLAN)

AUTO PARKING SPACES:	BICYCLES REQUIRED:
25	5
+100	5
+100	5
+26	5
= 351 AUTO SPACES	25 MAX.



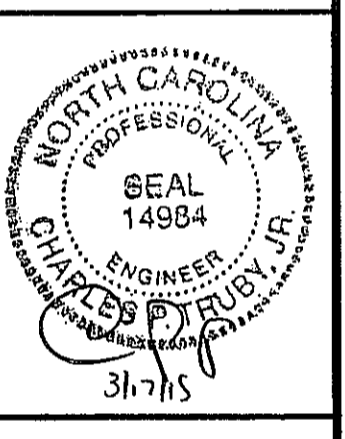
OWNER / DEVELOPER:
 BRC WILMINGTON LLC
 5826 SAMET DRIVE, SUITE 105
 HIGH POINT, NC 27285
 PHONE: (336) 889-1512
 FAX: (336) 889-1501

ENGINEER:
 CPT ENGINEERING & SURVEYING, INC.
 4400 TYNING STREET
 HIGH POINT, NC 27285
 CONTACT: CHUCK TRUBBY, P.E.
 PHONE: (336) 812-8800 ext:304
 FAX: (336) 812-8780

REVISIONS

NO.	DATE	DESCRIPTION

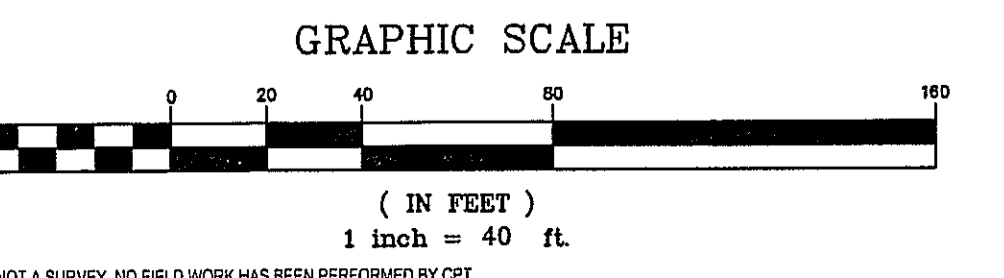
ENGINEERING AND SURVEYING, INC.
 LAND DEVELOPMENT CONSULTING
 CORPORATE LICENSE NUMBER C-1975
 4400 TYNING STREET
 HIGH POINT, NORTH CAROLINA 27265
 PHONE: (336) 812-8800 ~ FAX: (336) 812-8780

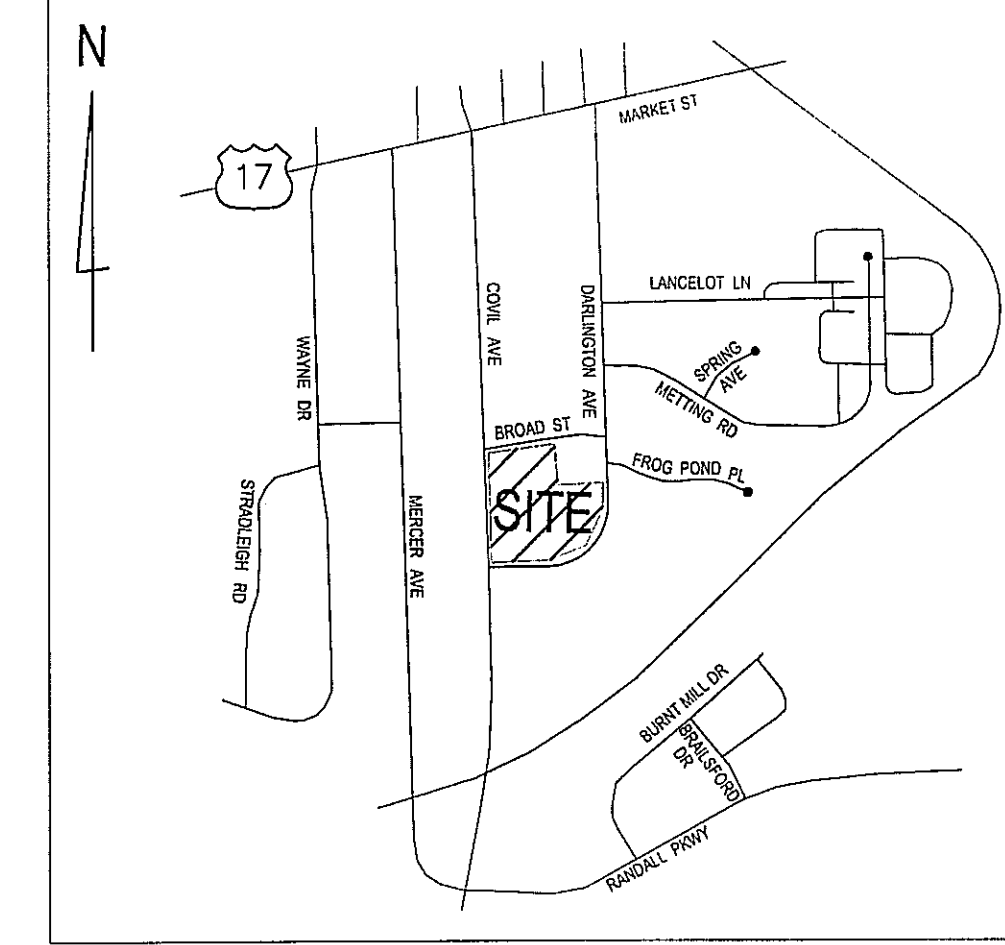


SITE PLAN
ANNEXE AT THE RESERVE
 CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
 NEW HANOVER COUNTY, NORTH CAROLINA

SITE PLAN
 SCALE: 1" = 40'
 DATE: 03/17/15
 PROJECT: 1140-12
 DRAWN BY: TGL
 SHEET: C-5

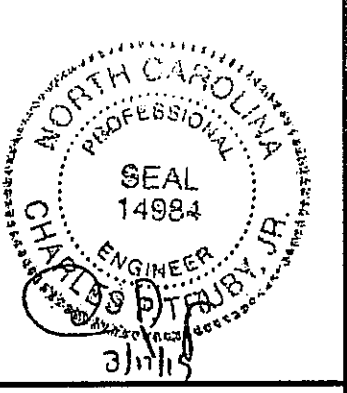
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 PROJECT: 1140-12 CIVIL BASEMAP.dwg 3/17/2015 11:26:50 AM
 THIS IS NOT A SURVEY. NO FIELD WORK HAS BEEN PERFORMED BY CPT ENGINEERING AND SURVEYING, INC.





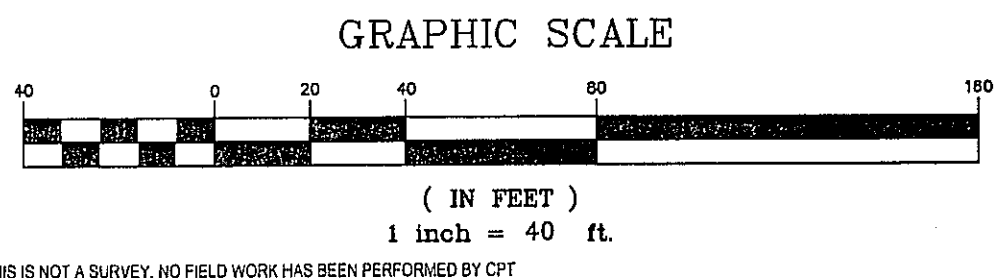
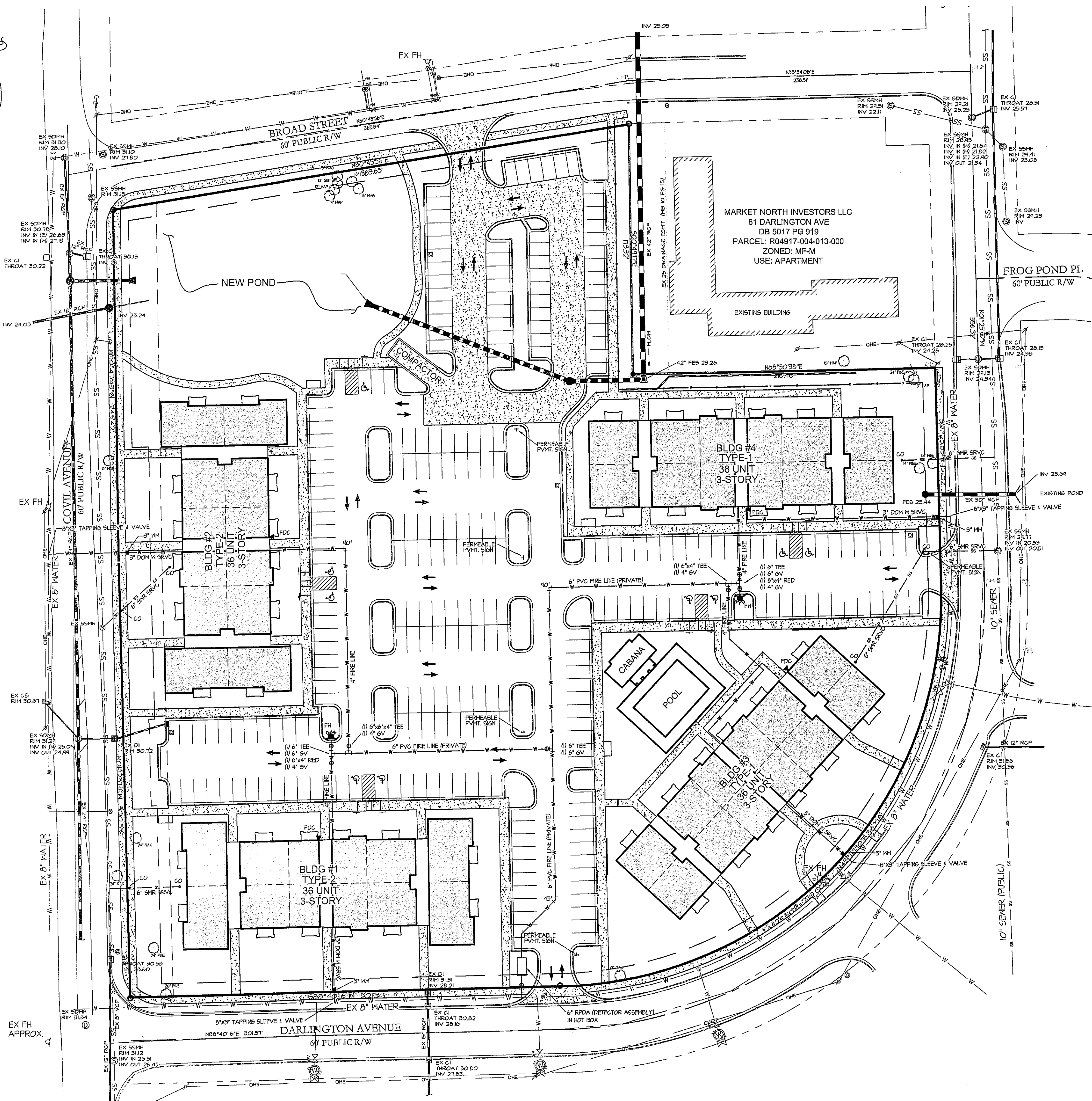
REVISIONS

ENGINEERING AND SURVEYING, INC.
 LAND DEVELOPMENT CONSULTING
 CORPORATE LICENSE NUMBER C-1875
 4400 TYNING STREET
 HIGH POINT, NORTH CAROLINA, 27265
 PHONE: (336) 812-8800 ~ FAX: (336) 812-8180



UTILITY PLAN
ANNEXE AT THE RESERVE
 CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
 NEW HANOVER COUNTY, NORTH CAROLINA

UTILITY PLAN
 SCALE: 1" = 40'
 DATE: 03/17/15
 PROJECT: 1140-12
 DRAWN BY: TGL
 SHEET C-6



FIRE DEPARTMENT REQUIREMENT NOTES:

- FDC NO FURTHER THAN 150' FROM A HYDRANT.
- FDC CANNOT BE FURTHER THAN 40' FROM FIRE DEPARTMENT VEHICLE ACCESS.
- HYDRANTS MUST BE OPERATIONAL AT TIME OF CONSTRUCTION
- PRIVATE FIRE MAINS REQUIRE A SEPARATE PERMIT FROM WILMINGTON FIRE AND LIFE SAFETY. PLEASE CALL (910) 343-0886 FOR FURTHER INFORMATION.
- HYDRANTS CANNOT BE FURTHER THAN 8' FROM A CURB.
- FDC'S AND FIRE HYDRANTS CANNOT BE BLOCKED BY LANDSCAPING OR PARKING.

CONTACT FOR QUESTIONS: CAPTAIN CHRIS ELROD,
 WILMINGTON FIRE DEPARTMENT
 Tele: (910) 343-3917
 Email: chris.elrod@wilmingtonnc.gov

LOCATION OF HOT BOXES FOR FIRE LINE:
 IF THE HOT BOXES ARE TO BE LOCATED ABOVE GROUND THE VALVES HAVE TO BE ELECTRICALLY SUPERVISED.
 IF THE VALVES ARE IN A ROADWAY BOX PROVIDED BY A PUBLIC UTILITY, VALVE SUPERVISION IS NOT REQUIRED.

THIS SITE APPEARS TO BE USING ABOVE GROUND BOXES SO IT WILL BE IMPORTANT TO NOTE TO THE ALARM CONTRACTOR THAT THE CONDUIT WILL HAVE TO BE RUN UNDER THE PARKING SURFACE FOR WIRING FOR THE VALVE TAMPER SWITCHES.

CONTACT FOR QUESTIONS: CAPTAIN CHRIS ELROD,
 WILMINGTON FIRE DEPARTMENT
 Tele: (910) 343-3917
 Email: chris.elrod@wilmingtonnc.gov

City of WILMINGTON NORTH CAROLINA
 Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

OWNER / DEVELOPER:
 BRC WILMINGTON LLC
 5826 SAMET DRIVE, SUITE 105
 HIGH POINT, NC 27285
 PHONE: (336) 888-1512
 FAX: (336) 888-1501

ENGINEER:
 CPT ENGINEERING & SURVEYING, INC.
 4400 TYNING STREET
 HIGH POINT, NC 27285
 CONTACT: CHUCK TRUBY, P.E.
 PHONE: (336) 812-8800 ext:304
 FAX: (336) 812-8780

Mar 17, 2015 F:\Projects\1140-12\ONS\1140-12 CIVIL BASEMAP.dwg Top Name: C6-UTILITY PLAN
 Project: 1140-12\ONS\1140-12 CIVIL BASEMAP.dwg 3/17/2015 11:37:53 AM

THIS IS NOT A SURVEY. NO FIELD WORK HAS BEEN PERFORMED BY CPT ENGINEERING AND SURVEYING, INC.

DRAINAGE CALCULATIONS
RATIONAL METHOD, Q = CIA (10 YEAR STORM)

PIPE #	AREA	TOTAL AREA	COEF.	RAINFALL	C X I	RUNOFF (CFS)	PIPE SIZE NEEDED			PIPE SIZE USED		
							SIZE	SLOPE	CAP	SIZE	SLOPE	LENGTH
Q1	0.33	0.33	0.60	7.88	4.61	1.32	16"	0.06	1.52	15'	6.05	RCP
Q2	0.40	28.40	0.45	7.88	3.45	91.08	42"	0.80	91.08	42"	0.80	RCP
Q3	0.00	28.40	0.45	7.88	3.45	91.08	42"	0.80	91.08	42"	0.80	RCP

IMPERVIOUS SURFACE CALCULATIONS

PARKING	INFILTRATION AREAS					IMPERVIOUS TOTALS
	AREA # 1	AREA # 2	AREA # 3	AREA # 4	AREA # 5	
ACRES	0.082	0.85	0.080	0.214	0.095	1.39
SQ. FT.	3,558	28,221	3,488	9,319	4,149	60,325
BUILDINGS	0.037	0.228	0.040	0.019	0.021	0.345
SIDEWALK	1.610	9,935	1,788	815	908	16,454
CURB & GUTTER	0.014	0.144	0.015	0	0	0.173
PERVIOUS CONCRETE	0.143	1.44	0.168	0	0	1.75
REGULAR CONCRETE	0	14,365	0	0	0	14,365
TOTAL BUA	0.275	2.79	0.300	0.233	0.098	4.02
DRAINAGE AREA	0.323	3.433	0.367	0.294	0.215	5.51

* TOTAL DRAINAGE AREA: 5.51 ACRES

TREE LEGEND:

- MAP = MAPLE
- MAG = MAGNOLIA
- HW = HARDWOOD
- DBL = DOUBLE

SITE INFORMATION:

SITE ACREAGE: 6.4± AC.
EXISTING ZONING: MF-MH
SITE ADDRESS: 315 & 323 COVIL AVE.
PARCEL ID: R05505-004-015-000 & R04917-004-012-000
DEED REFERENCE: DEED BOOK 5673, PAGE 2248
TOTAL NUMBER OF BUILDINGS: 4 (3 STORY)
TOTAL NUMBER OF UNITS: 144
USE: APARTMENTS
UNIT MIX:
48 (1 BEDROOM)
72 (2 BEDROOM)
24 (3 BEDROOM)
MAXIMUM DENSITY ALLOWED PER ZONING: 25 UNITS / AC
DENSITY SHOWN: 22.5 UNITS / AC
BUILDING HEIGHT: 40 FT

PARKING CALCULATION:

PARKING REQUIRED:
48 (1 BEDROOM) X 1.5 = 72
72 (2 BEDROOM) X 2.0 = 144
24 (3 BEDROOM) X 2.25 = 54
TOTAL REQUIRED = 270
TOTAL PARKING SPACES PROVIDED = 272
(INCLUDES 9 HC SPACES)

BUILDING SETBACKS (MF-MH):

FRONT: 30 FT
REAR: 25 FT
INTERIOR SIDE: 20 FT
ADDITIONAL REAR AND SIDE YARD SETBACKS FOR BLDG HEIGHT ABOVE 35 FEET:
FIRST 10 FEET ABOVE 35 FEET: 4 FEET FOR EACH 10 FOOT INCREMENT, OR PORTION THEREOF
10.1 FEET TO 30 FEET ABOVE 35 FEET: 6 FEET FOR EACH 10 FOOT INCREMENT
30.1 FEET OR MORE ABOVE 35 FEET: 8 FEET FOR EACH 10 FOOT INCREMENT

OPEN SPACE:

TOTAL OPEN SPACE REQUIRED: 6.4 X 0.35 = 2.24 AC
REQUIRED ACTIVE OR PASSIVE: 2.24 X 0.5 = 1.12 AC
REQUIRED ACTIVE, PASSIVE, OR OPEN SPACE: 2.24 X 0.5 = 1.12 AC
PROVIDED (ACTIVE): 1.58 AC
PROVIDED (OPEN SPACE): 0.44 AC
TOTAL PROVIDED: 2.02 AC
(THIS SITE IS 9,883 SF UNDER THE REQUIRED OPEN SPACE, FEE IN LIEU OF WILL BE REQUIRED)

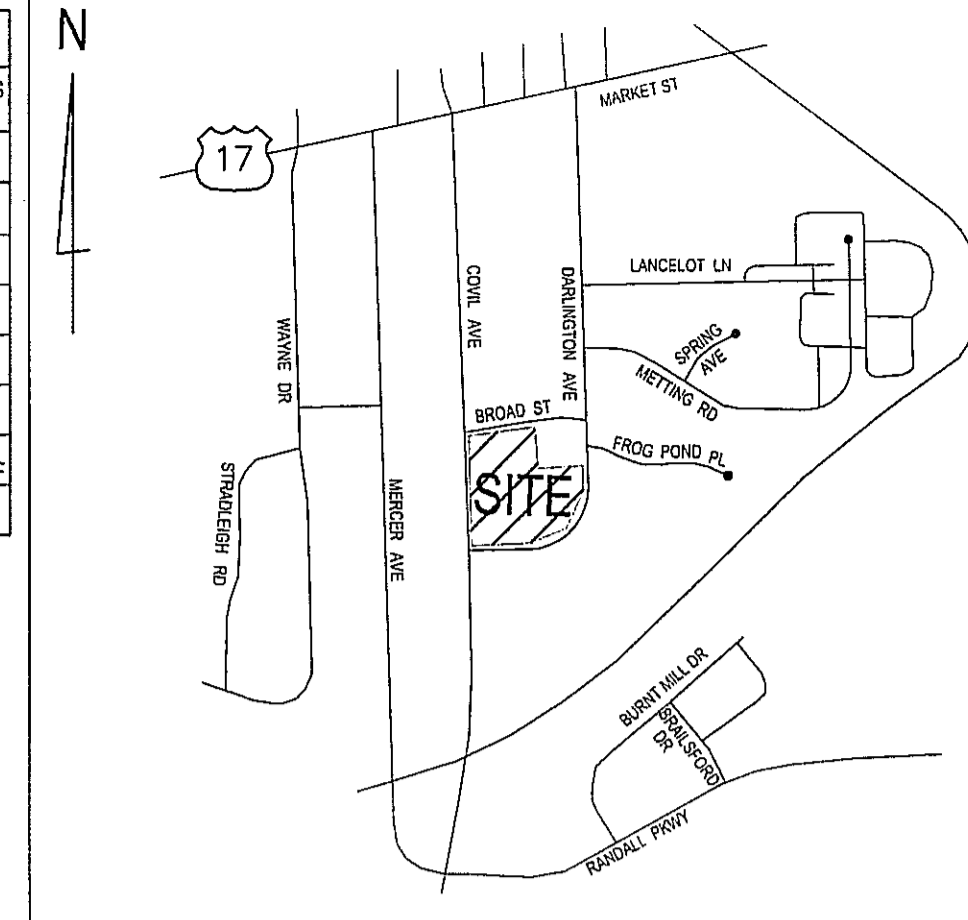
BUILT-UPON CALCULATION:

EXISTING BUA: 14,039 SF
PROPOSED:
BUILDINGS: 56,383 SF (20.2% LOT COVERAGE)
PARKING LOT AND DRIVES: 96,021 SF (PERVIOUS CONCRETE)
SIDEWALKS & POOL: 24,379 SF
TOTAL: 176,783 SF OR 4.06 AC
(INCLUDES PERVIOUS CONCRETE)
WITH PERVIOUS CONCRETE CREDIT:
56,383 + 96,021 (0.25) + 24,379 SF = 104,767 SF OR 2.41 AC
BUILT UPON AREA % = 2.41 AC / 6.4 AC = 37.58 %

ALL THE NECESSARY APPROVALS HAVE BEEN WILL BE OBTAINED FROM THE STATE/ CORPS FOR ANY WETLAND DISTURBANCE AND STREAM CROSSING/DISTURBANCE.

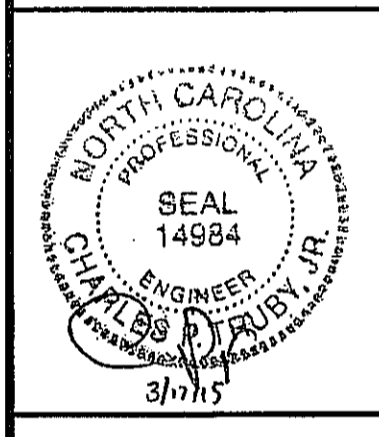
NOTE:
SEE ARCHITECTURAL PLANS FOR TYPE "A" HANDICAP ACCESSIBLE UNIT LOCATIONS. THIS INFORMATION WILL BE LOCATED ON THE ARCHITECTURAL SITE PLAN.

NOTE:
SIDE SLOPES OF ALL INFILTRATION BASINS TO BE SODDED WITH BERMUDA. BOTTOM OF BASINS TO BE SPRIGGED WITH BERMUDA OR PLANTED WITH SOD GROWN IN SANDY SOILS AND LAID IN A CHECKERBOARD PATTERN.

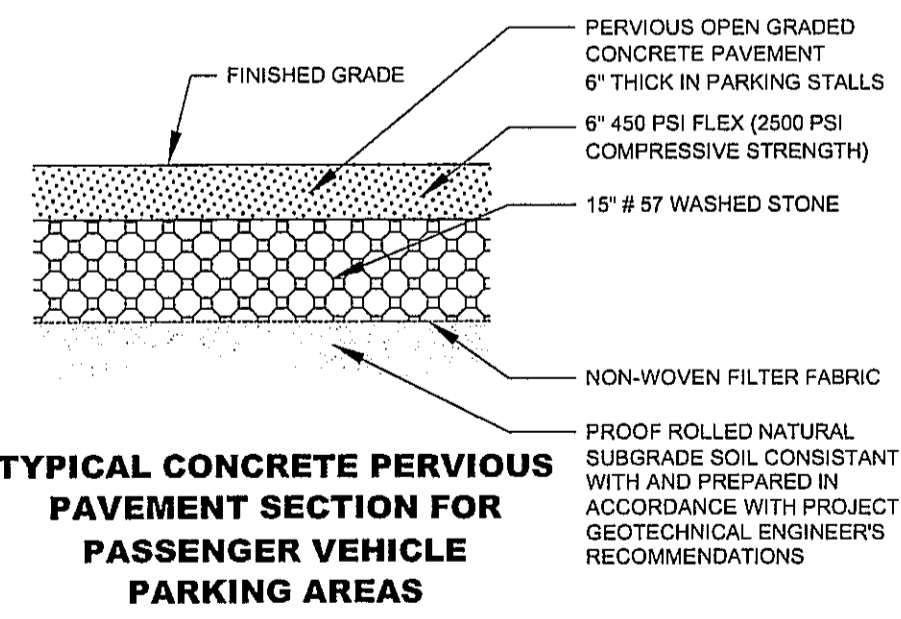


REVISIONS

ENGINEERING AND SURVEYING, INC.
LAND DEVELOPMENT CONSULTING
CORPORATE LICENSE NUMBER C-1815
4400 TYNING STREET
HIGH POINT, NORTH CAROLINA 27265
PHONE: (336) 812-8500 ~ FAX: (336) 812-8780



GRADING PLAN
ANNEXE AT THE RESERVE
CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
NEW HANOVER COUNTY, NORTH CAROLINA



OWNER / DEVELOPER:
BRC WILMINGTON LLC
5826 SAMET DRIVE, SUITE 105
HIGH POINT, NC 27285
PHONE: (336) 888-1512
FAX: (336) 888-1501
ENGINEER:
CPT ENGINEERING & SURVEYING, INC.
4400 TYNING STREET
HIGH POINT, NC 27265
CONTACT: CHUCK TRUBY, P.E.
PHONE: (336) 812-8600 ext.304
FAX: (336) 812-8780

Approved Construction Plan

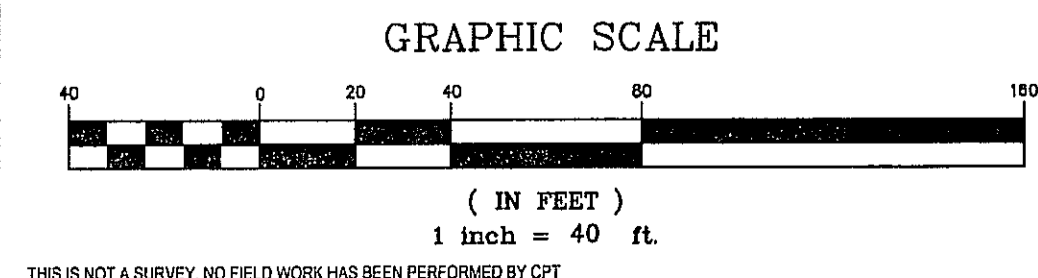
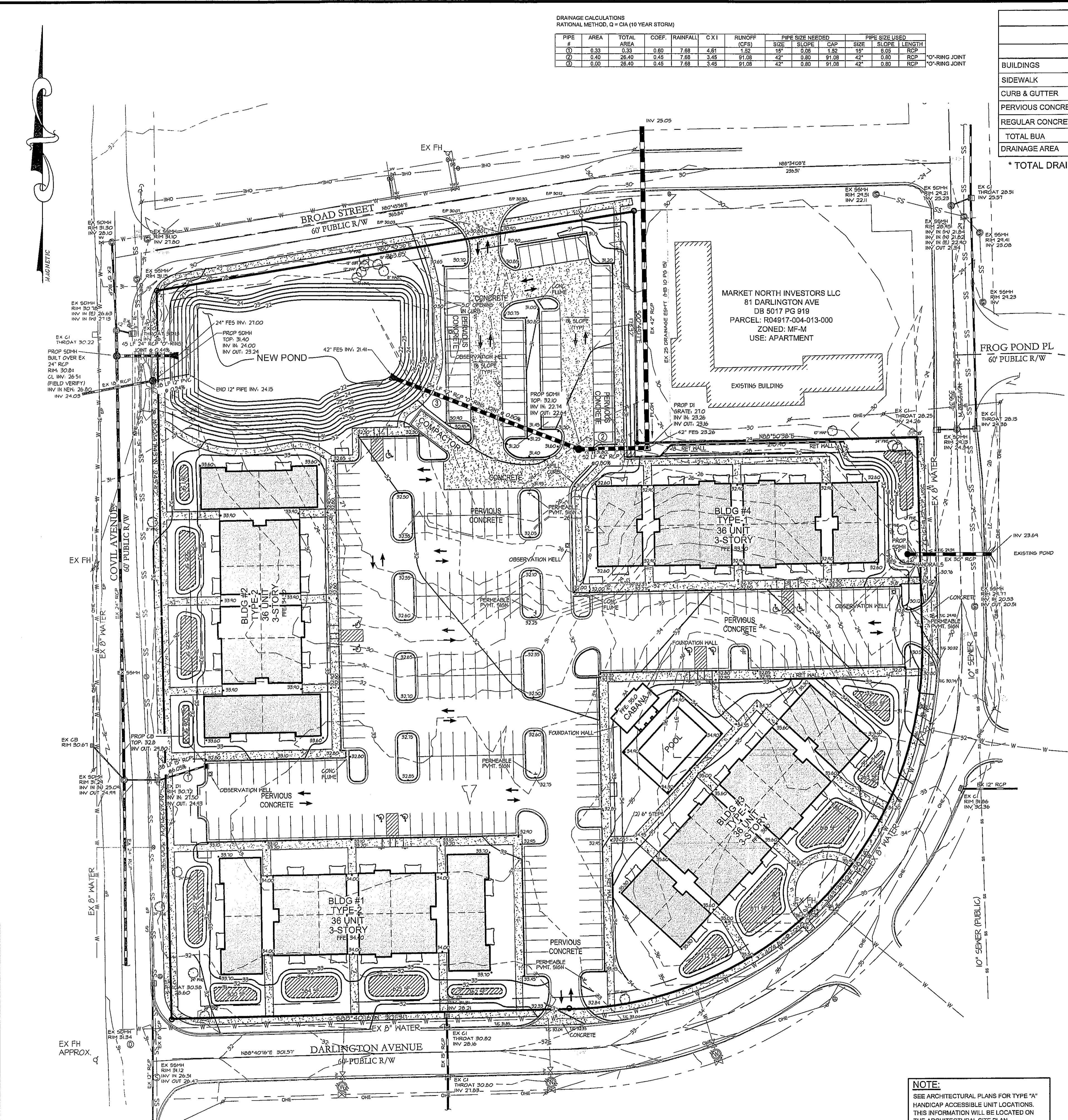
Name: _____ Date: _____

Planning: _____

Traffic: _____

Fire: _____

GRADING PLAN
SCALE: 1" = 40'
DATE: 03/17/15
PROJECT: 1140-12
DRAWN BY: TGL
SHEET C-7



THIS IS NOT A SURVEY. NO FIELD WORK HAS BEEN PERFORMED BY CPT ENGINEERING AND SURVEYING, INC.

Drainage Calculations Rational Method, Q = CIA (10 Year Storm)

PIPE #	AREA	TOTAL AREA	COEF.	RAINFALL	C X I	RUNOFF (CFS)	PIPE SIZE NEEDED	PIPE SIZE USED
							SIZE	SLOPE
0	0.33	0.33	0.50	7.88	4.61	1.92	18"	0.05
1	0.40	28.40	0.45	7.88	3.45	91.08	42"	0.80
2	0.50	28.40	0.45	7.88	3.45	91.08	42"	0.80

IMPERVIOUS SURFACE CALCULATIONS

CATEGORY	INFILTRATION AREAS					IMPERVIOUS TOTALS			
	AREA # 1	AREA # 2	AREA # 3	AREA # 4	AREA # 5				
PARKING	0.082 AC / 3,558 SF	0.082 AC / 3,558 SF	0.082 AC / 3,558 SF	0.082 AC / 3,558 SF	0.082 AC / 3,558 SF	1.39 AC / 50,522 SF			
BUILDINGS	0.037 AC / 1,610 SF	0.228 AC / 9,935 SF	0.040 AC / 1,758 SF	0.019 AC / 815 SF	0.003 AC / 109 SF	0.327 AC / 12,027 SF			
SIDEWALK	0.014 AC / 605 SF	0.144 AC / 6,379 SF	0.015 AC / 645 SF	0	0	0.173 AC / 7,919 SF			
CURB & GUTTER	0.143 AC / 6,210 SF	1.44 AC / 62,888 SF	0.165 AC / 7,282 SF	0	0	1.75 AC / 78,280 SF			
PERVIOUS CONCRETE	0	0	0	0	0	0.330 AC / 14,385 SF			
REGULAR CONCRETE	0	0	0	0	0	0.330 AC / 14,385 SF			
TOTAL BUA	0.275 AC / 11,871 SF	2.79 AC / 121,768 SF	0.300 AC / 13,081 SF	0.233 AC / 10,134 SF	0.098 AC / 4,094 SF	4.02 AC / 175,130 SF			
DRAINAGE AREA	0.323 AC	3.433 AC	0.367 AC	0.294 AC	0.215 AC	0.268 AC	0.431 AC	0.179 AC	5.51 AC

* TOTAL DRAINAGE AREA: 5.51 ACRES

TREE LEGEND:

- MAP = MAPLE
- MAG = MAGNOLIA
- HW = HARDWOOD
- DBL = DOUBLE

SITE INFORMATION:

SITE ACREAGE: 6.42 AC.

EXISTING ZONING: MF-MH

SITE ADDRESS: 315 & 323 COVIL AVE.

PARCEL ID: R05505-004-015-000 & R04917-004-012-000

DEED REFERENCE: DEED BOOK 5673, PAGE 2248

TOTAL NUMBER OF BUILDINGS: 4 (3 STORY)

TOTAL NUMBER OF UNITS: 144

USE: APARTMENTS

UNIT MIX:

- 48 (1 BEDROOM)
- 72 (2 BEDROOM)
- 24 (3 BEDROOM)

MAXIMUM DENSITY ALLOWED PER ZONING: 25 UNITS / AC

DENSITY SHOWN: 22.5 UNITS / AC

BUILDING HEIGHT: 40 FT

PARKING CALCULATION:

PARKING REQUIRED:

- 48 (1 BEDROOM) X 1.5 = 72
 - 72 (2 BEDROOM) X 2.0 = 144
 - 24 (3 BEDROOM) X 2.25 = 54
- TOTAL REQUIRED = 270

TOTAL PARKING SPACES PROVIDED = 272

(INCLUDES 9 HC SPACES)

BUILDING SETBACKS (MF-MH):

FRONT: 30 FT

REAR: 25 FT

INTERIOR SIDE: 20 FT

ADDITIONAL REAR AND SIDE YARD SETBACKS FOR BLDG HEIGHT ABOVE 35 FEET:
FIRST 10 FEET ABOVE 35 FEET: 4 FEET FOR EACH 10 FOOT INCREMENT, OR PORTION THEREOF

10.1 FEET TO 30 FEET ABOVE 35 FEET: 6 FEET FOR EACH 10 FOOT INCREMENT

30.1 FEET OR MORE ABOVE 35 FEET: 8 FEET FOR EACH 10 FOOT INCREMENT

OPEN SPACE:

TOTAL OPEN SPACE REQUIRED: 6.4 X 0.35 = 2.24 AC

REQUIRED ACTIVE OR PASSIVE: 2.24 X 0.5 = 1.12 AC

REQUIRED ACTIVE, PASSIVE, OR OPEN SPACE: 2.24 X 0.5 = 1.12 AC

PROVIDED (ACTIVE): 1.58 AC

PROVIDED (OPEN SPACE): 0.44 AC

TOTAL PROVIDED: 2.02 AC

(THIS SITE IS 9,593 SF UNDER THE REQUIRED OPEN SPACE, FEE IN LIEU OF WILL BE REQUIRED)

BUILT-UPON CALCULATION:

EXISTING BUA: 14,039 SF

PROPOSED:

BUILDINGS: 56,383 SF (20.2 % LOT COVERAGE)

PARKING LOT AND DRIVES: 96,021 SF (PERVIOUS CONCRETE)

SIDEWALKS & POOL: 24,379 SF

TOTAL: 176,783 SF OR 4.06 AC

(INCLUDES PERVIOUS CONCRETE)

WITH PERVIOUS CONCRETE CREDIT:

56,383 + 96,021 (0.25) + 24,379 SF = 104,767 SF OR 2.41 AC

BUILT UPON AREA % = 2.41 AC / 6.4 AC = 37.58 %

ALL THE NECESSARY APPROVALS HAVE BEEN/ WILL BE OBTAINED FROM THE STATE/ CORPS FOR ANY WETLAND DISTURBANCE AND STREAM CROSSING/DISTURBANCE

NOTE:
SEE ARCHITECTURAL PLANS FOR TYPE "A" HANDICAP ACCESSIBLE UNIT LOCATIONS. THIS INFORMATION WILL BE LOCATED ON THE ARCHITECTURAL SITE PLAN.

NOTE:
SIDE SLOPES OF ALL INFILTRATION BASINS TO BE SODDED WITH BERMUDA. BOTTOM OF BASINS TO BE SPRIGGED WITH BERMUDA OR PLANTED WITH SOD GROWN IN SANDY SOILS AND LAID IN A CHECKERBOARD PATTERN.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

OWNER / DEVELOPER:
BRC WILMINGTON LLC
5826 SAMET DRIVE, SUITE 105
HIGH POINT, NC 27265
PHONE: (336) 889-1512
FAX: (336) 889-1501

ENGINEER:
CPT ENGINEERING & SURVEYING, INC.
4400 TYNING STREET
HIGH POINT, NC 27265
CONTACT: CHUCK TRUBY, P.E.
PHONE: (336) 812-8800 ext:304
FAX: (336) 812-8780

DRAINAGE AREA PLAN

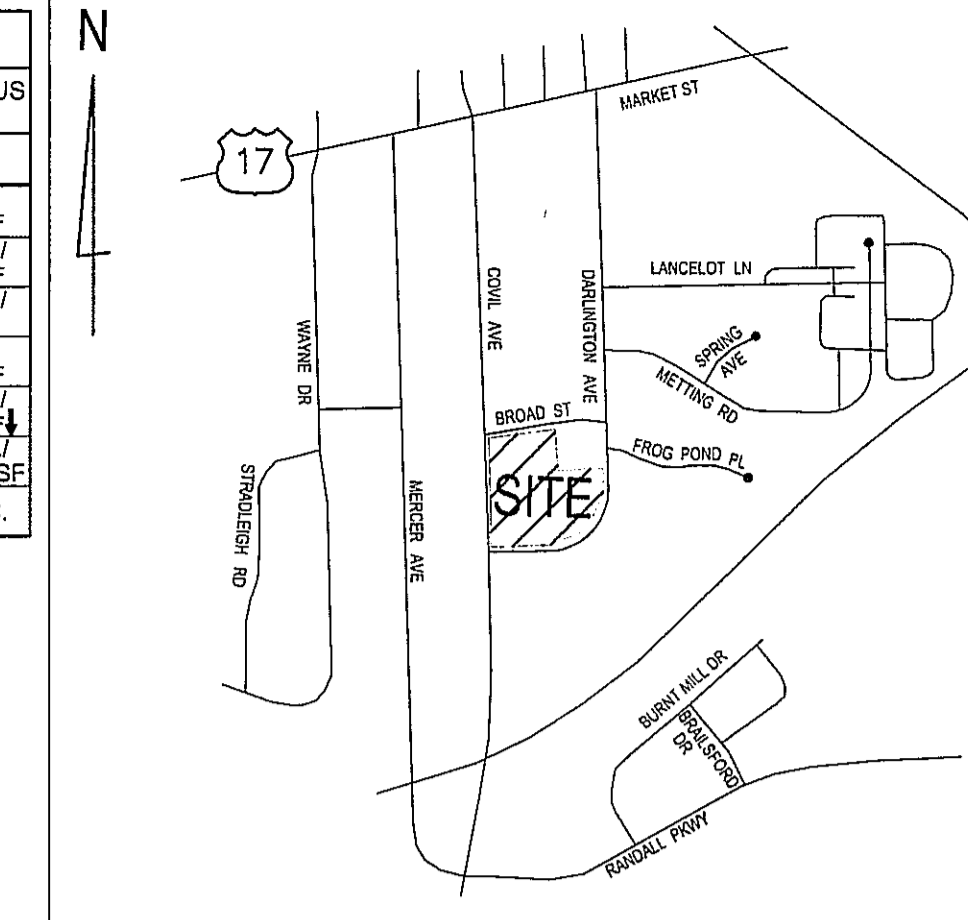
SCALE: 1" = 40'

DATE: 03/17/15

PROJECT: 1140-12

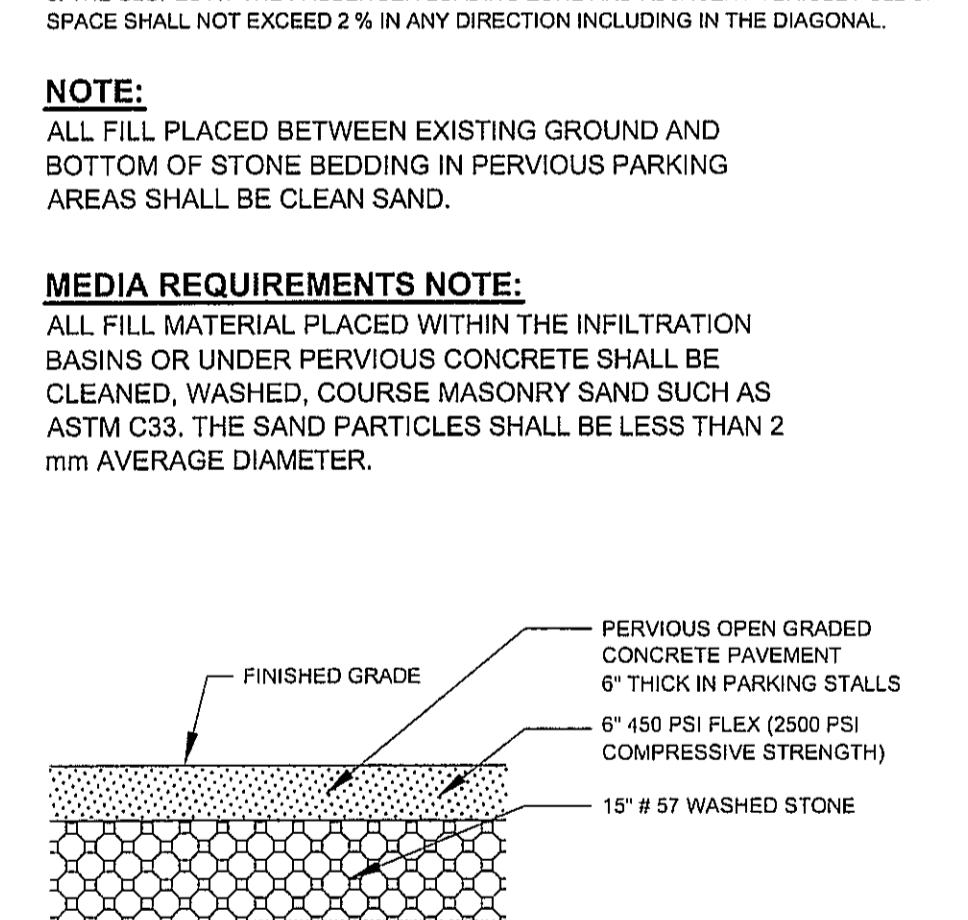
DRAWN BY: TGL

SHEET **C-8**

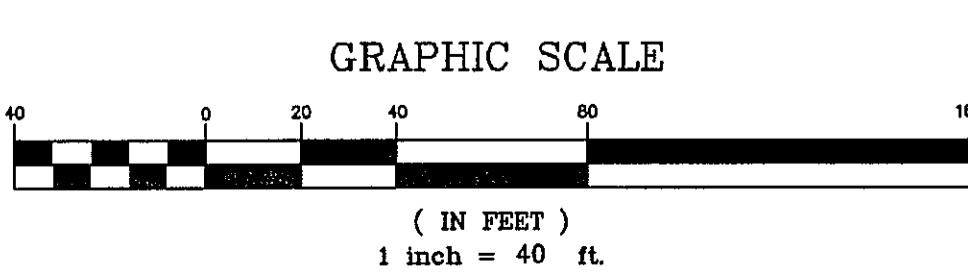
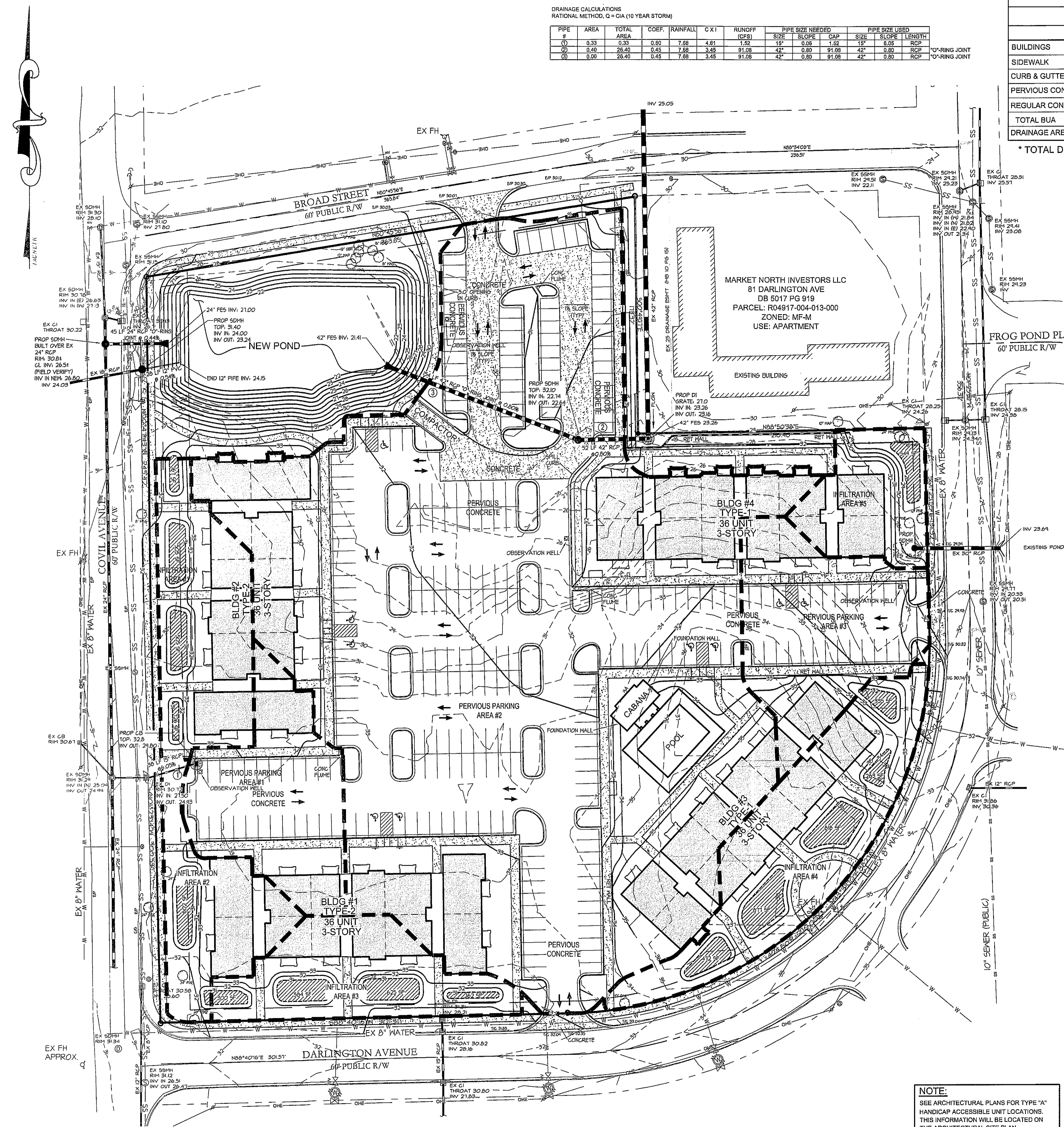


- RETAINING WALL NOTES:**
- PROPOSED RETAINING WALLS ARE FOR ILLUSTRATION PURPOSES ONLY. DEPICTING CHANGE IN GRADE REQUIREMENTS. CPT ENGINEERING AND SURVEYING, INC. IS NOT RESPONSIBLE FOR RETAINING WALL DESIGNS.
 - RETAINING WALL PERMITS WILL BE REQUIRED BY THE CITY OF WILMINGTON INSPECTIONS DEPARTMENT.
 - ANY RETAINING WALL > 4' REQUIRE A BUILDING PERMIT FROM BUILDING INSPECTIONS.
- GENERAL H.C. ACCESSIBILITY NOTES:**
- LANDINGS OUTSIDE ALL DOORS SHALL BE SIZED PER NCBC, BE AT THE SAME ELEVATION AS THE FFE, AND SHALL HAVE A MAX. 2 % SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL.
 - THE SLOPES IN THE H.C. PARKING SPACE/ACCESS AISLE AREA SHALL NOT EXCEED 2 % IN ANY DIRECTION INCLUDING IN THE DIAGONAL.
 - THERE SHALL BE NO DESIGNATED PEDESTRIAN ROUTES/SIDEWALKS WITHIN THE SITE, EXCEPT WHERE LABELED AS A RAMP WITH RAILS, WHICH EXCEED A 5 % SLOPE IN THE DIRECTION OF TRAVEL AND A 2 % CROSS-SLOPE.
 - ALL PEDESTRIAN ROUTES > 6" (1-20) IF ANY, ARE LABELED AS 'RAMPS' SHOWING SLOPES, LEVEL LANDINGS AT TOP AND BOTTOM (MAX. 2 % SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL), RAILINGS/GUARDRAILS, AND SHALL COMPLY WITH NCBC.
 - THERE SHALL BE LEVEL TURNING AREAS (MAX. 2 % SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL) ON ALL SIDEWALKS (INCLUDING SIDEWALKS ALONG STREETS) WHERE AN INTERSECTING SIDEWALK CONNECTS WITH IT.
 - ALL STAIRS SHALL HAVE SLIGHTLY SLOPED LANDINGS (MAX. 2 % SLOPE IN ANY DIRECTION INCLUDING IN THE DIAGONAL), AT THE TOP AND BOTTOM AND SHALL COMPLY WITH NCBC.
 - STAIRS / STEPS WITH LESS THAN A 12" ELEVATION CHANGE SHALL COMPLY WITH NCBC 1063.5
 - THE SLOPES AT THE PASSENGER LOADING ZONE AND ADJACENT VEHICLE PULL UP SPACE SHALL NOT EXCEED 2 % IN ANY DIRECTION INCLUDING IN THE DIAGONAL.
- NOTE:**
ALL FILL PLACED BETWEEN EXISTING GROUND AND BOTTOM OF STONE BEDDING IN PERVIOUS PARKING AREAS SHALL BE CLEAN SAND.

- MEDIA REQUIREMENTS NOTE:**
ALL FILL MATERIAL PLACED WITHIN THE INFILTRATION BASINS OR UNDER PERVIOUS CONCRETE SHALL BE CLEANED, WASHED, COURSE MASONRY SAND SUCH AS ASTM C33. THE SAND PARTICLES SHALL BE LESS THAN 2 mm AVERAGE DIAMETER.

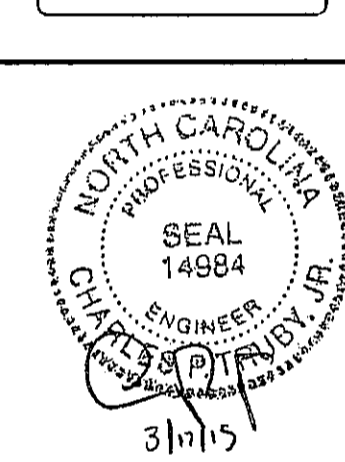


TYPICAL CONCRETE PERVIOUS PAVEMENT SECTION FOR PASSENGER VEHICLE PARKING AREAS



THIS IS NOT A SURVEY. NO FIELD WORK HAS BEEN PERFORMED BY CPT ENGINEERING AND SURVEYING, INC.

ENGINEERING AND SURVEYING, INC.
LAND DEVELOPMENT CONSULTING
CORPORATE LICENSE NUMBER C-1975
4400 TYNING STREET
HIGH POINT, NORTH CAROLINA 27265
PHONE: (336) 812-8800 ~ FAX: (336) 812-8780



DRAINAGE AREA PLAN
ANNEXE AT THE RESERVE
CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
NEW HANOVER COUNTY, NORTH CAROLINA

DRAINAGE CALCULATIONS
RATIONAL METHOD, Q = CIA (10 YEAR STORM)

PIPE #	AREA	TOTAL AREA	COEF. OF RAINFALL	C X I	RUNOFF (CFS)	PIPE SIZE NEEDED	PIPE SIZE USED
						SIZE	LENGTH
(1)	0.33	0.33	0.60	7.68	4.61	18"	0.08
(2)	0.40	26.40	0.45	7.58	3.45	18"	1.52
(3)	0.00	26.40	0.45	7.58	3.45	18"	0.80
(4)	0.00	26.40	0.45	7.58	3.45	18"	0.80

IMPERVIOUS SURFACE CALCULATIONS

BUILDINGS	PARKING					INFILTRATION AREAS					IMPERVIOUS TOTALS
	AREA # 1	AREA # 2	AREA # 3	AREA # 4	AREA # 5	AREA # 1	AREA # 2	AREA # 3	AREA # 4	AREA # 5	
ACRES / SQ. FT.	0.002 AC / 3,588 SF	0.355 AC / 15,410 SF	0.380 AC / 16,610 SF	0.214 AC / 9,319 SF	0.035 AC / 1,519 SF	0.214 AC / 9,319 SF	0.035 AC / 1,519 SF	0.035 AC / 1,519 SF	0.035 AC / 1,519 SF	0.035 AC / 1,519 SF	
SIDEWALK	0.037 AC / 1,610 SF	0.228 AC / 9,935 SF	0.040 AC / 1,758 SF	0.019 AC / 815 SF	0.003 AC / 109 SF	0.019 AC / 815 SF	0.003 AC / 109 SF	0.003 AC / 109 SF	0.003 AC / 109 SF	0.003 AC / 109 SF	
CURB & GUTTER	0.14 AC / 6,219 SF	0.144 AC / 6,279 SF	0.165 AC / 7,192 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.144 AC / 6,279 SF	0.165 AC / 7,192 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	
PERVIOUS CONCRETE	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	0.000 AC / 0 SF	
REGULAR CONCRETE	0.276 AC / 11,871 SF	2.79 AC / 121,788 SF	13.550 AC / 598,550 SF	0.233 AC / 10,288 SF	0.092 AC / 4,082 SF	0.233 AC / 10,288 SF	0.092 AC / 4,082 SF	0.092 AC / 4,082 SF	0.092 AC / 4,082 SF	0.092 AC / 4,082 SF	
TOTAL BUA	11.871 AC	121,788 SF	13,081 SF	10,134 SF	4,258 SF	10,134 SF	4,258 SF	4,084 SF	4,084 SF	4,084 SF	
DRAINAGE AREA	0.323 AC	3,433 AC	0.367 AC	0.294 AC	0.215 AC	0.268 AC	0.431 AC	0.179 AC	0.179 AC	0.179 AC	

* TOTAL DRAINAGE AREA: 5.51 ACRES

TREE LEGEND:

- MAP = MAPLE
- MAG = MAGNOLIA
- HW = HARDWOOD
- DBL = DOUBLE

SITE INFORMATION:

SITE ACREAGE: 6.45 AC.
EXISTING ZONING: MF-MH
SITE ADDRESS: 315 & 323 COVIL AVE.
PARCEL ID: R05505-004-015-000 & R04917-004-012-000
DEED REFERENCE: DEED BOOK 5673, PAGE 2248
TOTAL NUMBER OF BUILDINGS: 4 (3 STORY)
TOTAL NUMBER OF UNITS: 144
USE: APARTMENTS
UNIT MIX:
48 (1 BEDROOM)
72 (2 BEDROOM)
24 (3 BEDROOM)
MAXIMUM DENSITY ALLOWED PER ZONING: 25 UNITS / AC
DENSITY SHOWN: 22.5 UNITS / AC
BUILDING HEIGHT: 40 FT

PARKING CALCULATION:

PARKING REQUIRED:
48 (1 BEDROOM) X 1.5 = 72
72 (2 BEDROOM) X 2.0 = 144
24 (3 BEDROOM) X 2.25 = 54
TOTAL REQUIRED = 270

TOTAL PARKING SPACES PROVIDED = 272
(INCLUDES 9 HC SPACES)

BUILDING SETBACKS (MF-MH):

FRONT: 30 FT
REAR: 25 FT
INTERIOR SIDE: 20 FT
ADDITIONAL REAR AND SIDE YARD SETBACKS FOR BLDG HEIGHT ABOVE 35 FEET:
FIRST 10 FEET ABOVE 35 FEET: 4 FEET FOR EACH 10 FOOT INCREMENT, OR PORTION THEREOF
10.1 FEET TO 30 FEET ABOVE 35 FEET: 6 FEET FOR EACH 10 FOOT INCREMENT
30.1 FEET OR MORE ABOVE 35 FEET: 8 FEET FOR EACH 10 FOOT INCREMENT

OPEN SPACE:

TOTAL OPEN SPACE REQUIRED: 6.4 X 0.35 = 2.24 AC
REQUIRED ACTIVE OR PASSIVE: 2.24 X 0.5 = 1.12 AC
REQUIRED ACTIVE, PASSIVE, OR OPEN SPACE: 2.24 X 0.5 = 1.12 AC
PROVIDED (ACTIVE): 1.58 AC
PROVIDED (OPEN SPACE): 0.44 AC
TOTAL PROVIDED: 2.02 AC
(THIS SITE IS 9,583 SF UNDER THE REQUIRED OPEN SPACE, FEE IN LIEU OF WILL BE REQUIRED)

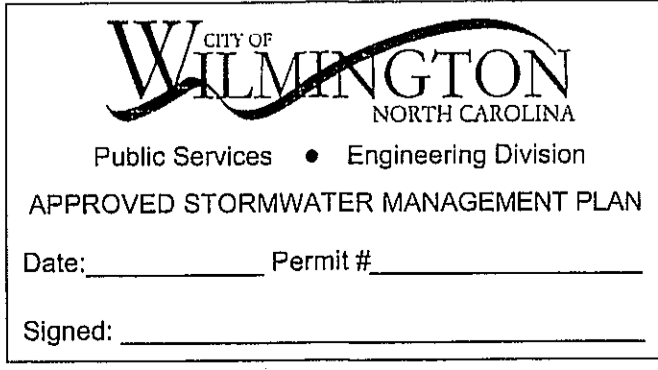
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EXISTING BUA: 14,039 SF
PROPOSED:
BUILDINGS: 56,383 SF (20.2% LOT COVERAGE)
PARKING LOT AND DRIVES: 96,021 SF (PERVIOUS CONCRETE)
SIDEWALKS & POOL: 24,379 SF
TOTAL: 176,783 SF OR 4.06 AC
(INCLUDES PERVIOUS CONCRETE)
WITH PERVIOUS CONCRETE CREDIT:
56,383 + 96,021 (0.25) + 24,379 SF = 104,767 SF OR 2.41 AC
BUILT UPON AREA % = 2.41 AC / 6.4 AC = 37.58 %

ALL THE NECESSARY APPROVALS HAVE BEEN / WILL BE OBTAINED FROM THE STATE / CORPS FOR ANY WETLAND DISTURBANCE AND STREAM CROSSING/DISTURBANCE

NOTE:
SEE ARCHITECTURAL PLANS FOR TYPE "A" HANDICAP ACCESSIBLE UNIT LOCATIONS. THIS INFORMATION WILL BE LOCATED ON THE ARCHITECTURAL SITE PLAN.

NOTE:
SIDE SLOPES OF ALL INFILTRATION BASINS TO BE SODDED WITH BERMUDA. BOTTOM OF BASINS TO BE SPRIGGED WITH BERMUDA OR PLANTED WITH SOD GROWN IN SANDY SOILS AND LAID IN A CHECKERBOARD PATTERN.



Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

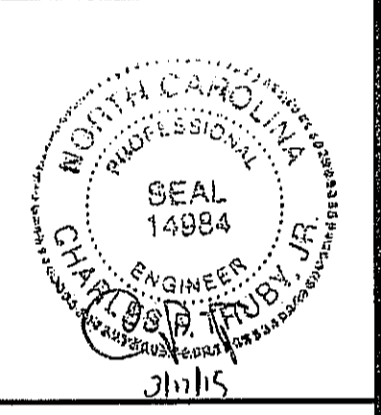
OWNER / DEVELOPER:
BRC WILMINGTON LLC
5826 SAADET DRIVE SUITE 105
HIGH POINT, NC 27285
PHONE: (336) 888-1512
FAX: (336) 888-1501

ENGINEER:
CPT ENGINEERING & SURVEYING, INC.
4400 TYNING STREET
HIGH POINT, NC 27285
CONTACT: CHUCK TRUBY, P.E.
PHONE: (336) 812-8800 ext:304
FAX: (336) 812-8780

REVISIONS

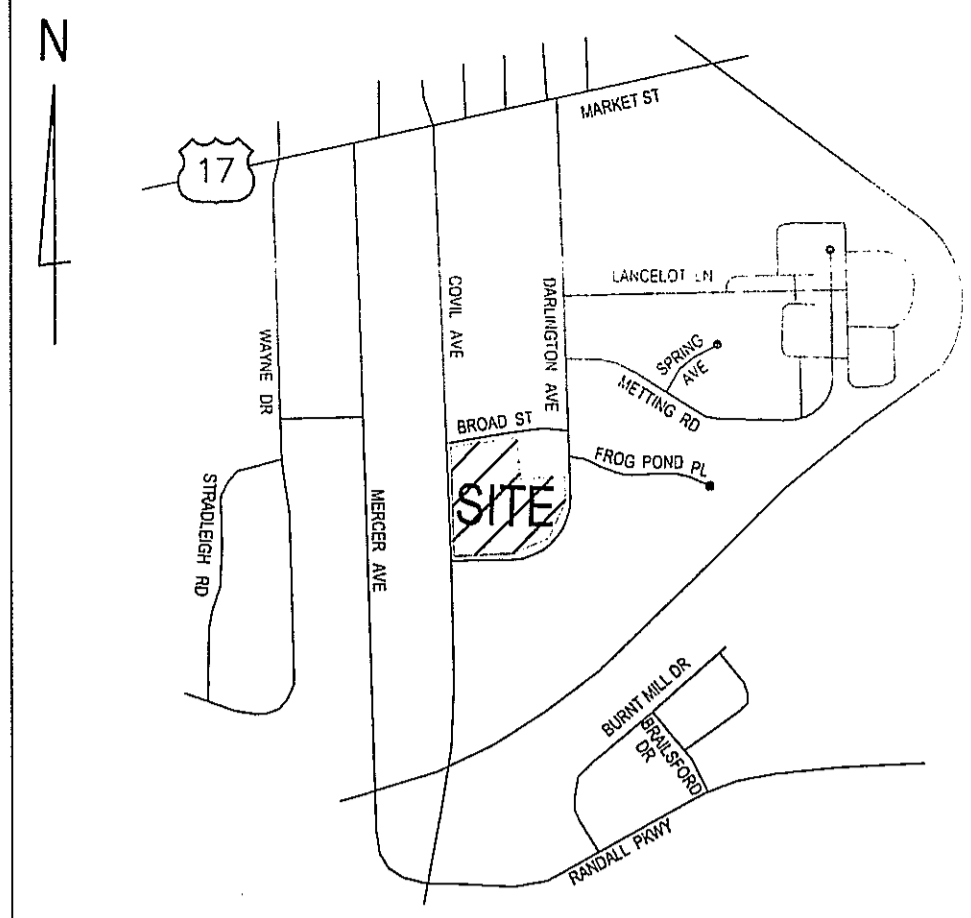
NO.	DATE	DESCRIPTION

ENGINEERING AND SURVEYING, INC.
LAND DEVELOPMENT CONSULTING
CORPORATE LICENSE NUMBER C-175
4400 TYNING STREET
HIGH POINT, NORTH CAROLINA 27285
PHONE: (336) 812-8800 ~ FAX: (336) 812-8780



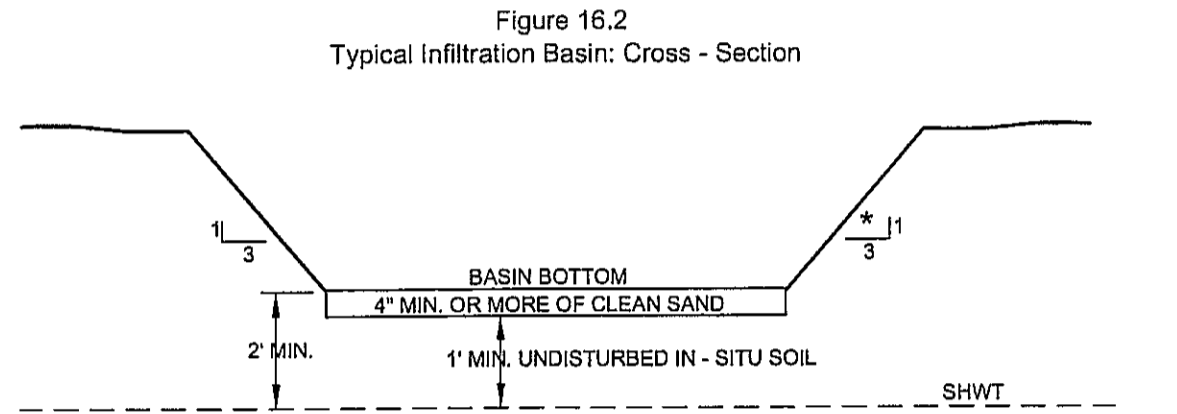
STORMWATER MANAGEMENT PLAN
ANNEXE AT THE RESERVE
CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
NEW HANOVER COUNTY, NORTH CAROLINA

STORMWATER MANAGEMENT PLAN
SCALE: 1" = 40'
DATE: 03/17/15
PROJECT: 1140-12
DRAWN BY: TGL
SHEET C-9



VICINITY MAP
SCALE: 1" = 1000'

INFILTRATION BASINS
INFILTRATION BASINS ARE NORMALLY DRY BASIN, MUCH LIKE EXTENDED DRY DETENTION BASINS. WITH THE EXCEPTION THAT THE STORMWATER DOES NOT FLOW OUT INTO A RECEIVING STREAM RATHER, THE STORMWATER IS ONLY ALLOWED TO INFILTRATE INTO THE SOILS AND EVENTUALLY TO THE GROUNDWATER.



TYPICAL X - SECTION

* RETAINING WALLS MAY BE USED IN PLACE OF THE 3:1 VEGETATED SIDE SLOPES.

RETAINING WALL NOTES:

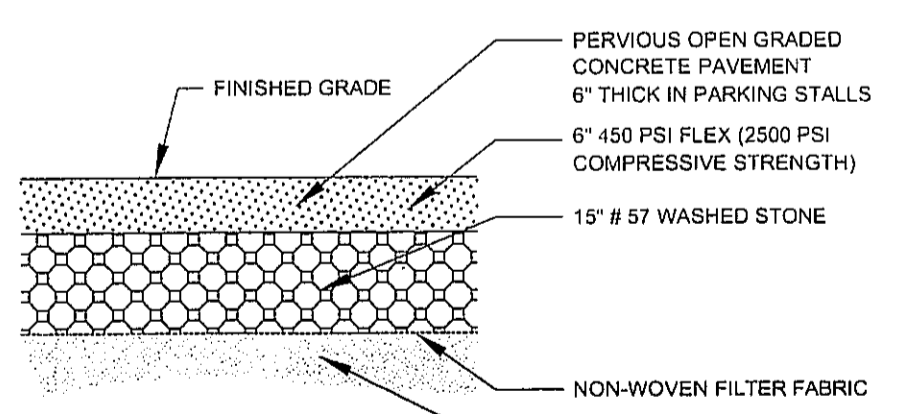
- PROPOSED RETAINING WALLS ARE FOR ILLUSTRATION PURPOSES ONLY. DEPICTING CHANGE IN GRADE REQUIREMENTS. CPT ENGINEERING AND SURVEYING, INC. IS NOT RESPONSIBLE FOR RETAINING WALL DESIGNS.
- RETAINING WALL PERMITS WILL BE REQUIRED BY THE CITY OF WILMINGTON INSPECTIONS DEPARTMENT.
- ANY RETAINING WALL > 4' REQUIRE A BUILDING PERMIT FROM BUILDING INSPECTIONS.

NOTE:

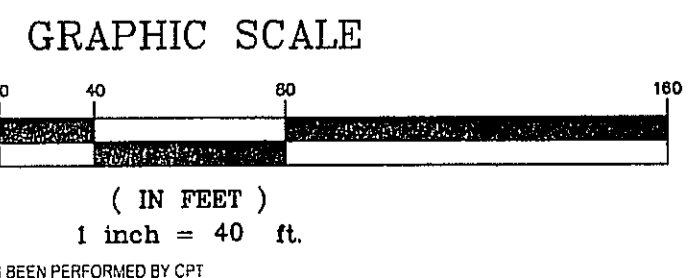
ALL FILL PLACED BETWEEN EXISTING GROUND AND BOTTOM OF STONE BEDDING IN PERVIOUS PARKING AREAS SHALL BE CLEAN SAND.

MEDIA REQUIREMENTS NOTE:

ALL FILL MATERIAL PLACED WITHIN THE INFILTRATION BASINS OR UNDER PERVIOUS CONCRETE SHALL BE CLEANED, WASHED, COURSE MASONRY SAND SUCH AS ASTM C33. THE SAND PARTICLES SHALL BE LESS THAN 2 mm AVERAGE DIAMETER.

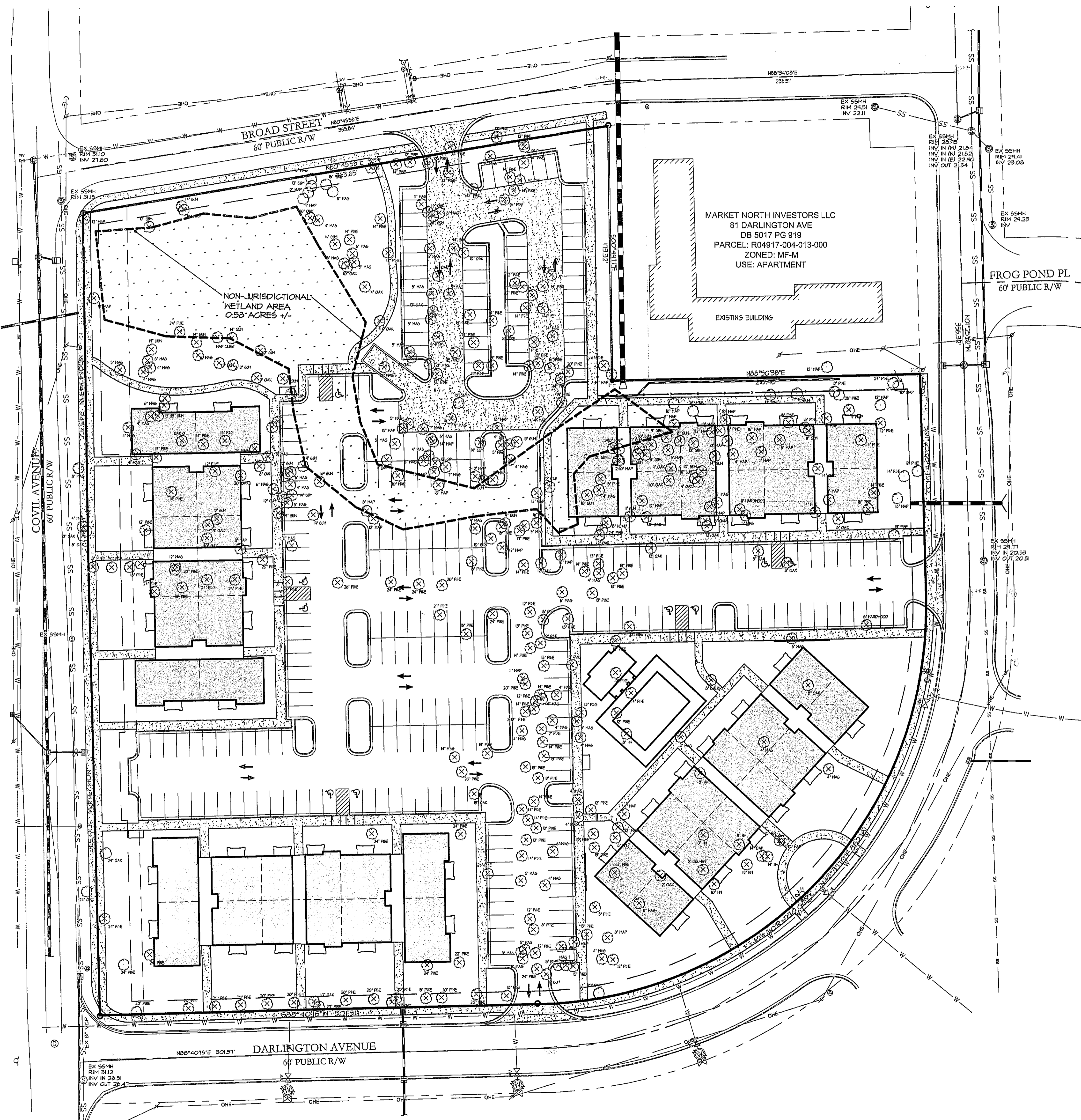


TYPICAL CONCRETE PERVIOUS PAVEMENT SECTION FOR PASSENGER VEHICLE PARKING AREAS

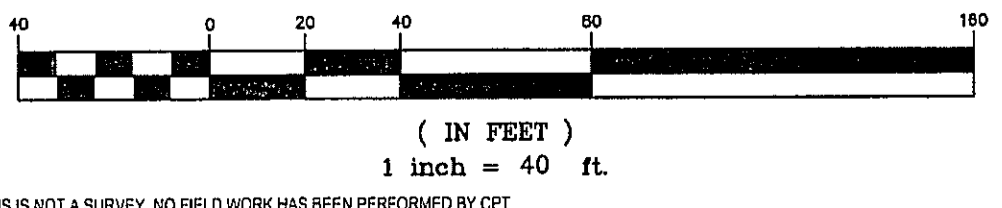


INFILTRATION AREA

MAR 11, 2015 F:\Projects\1140-12\DWG\1140-12-C1-Stormwater Main Plan
THIS IS NOT A SURVEY. NO FIELD WORK HAS BEEN PERFORMED BY CPT ENGINEERING AND SURVEYING, INC.

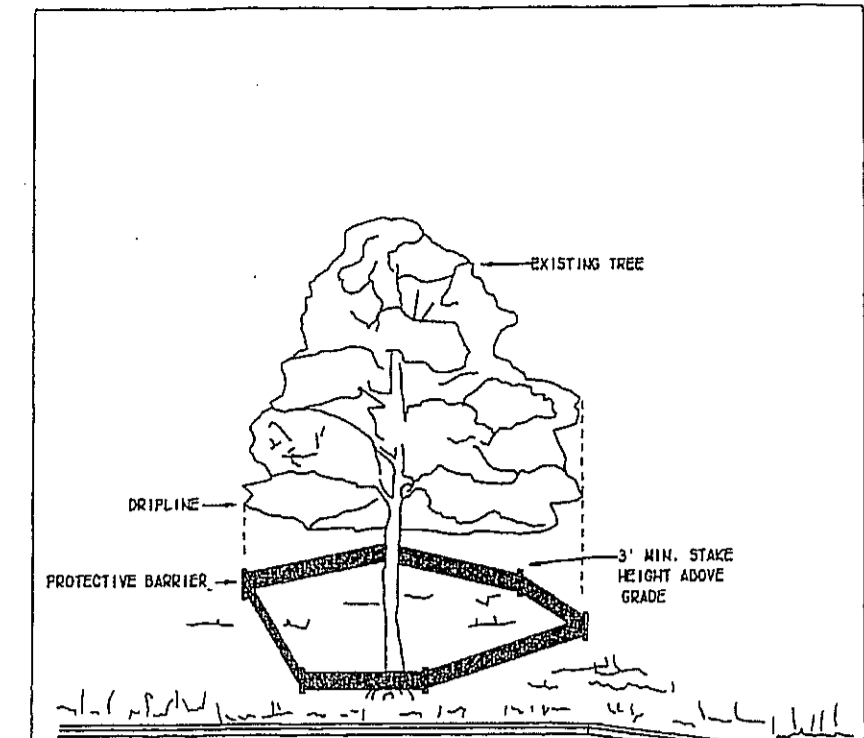


GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.

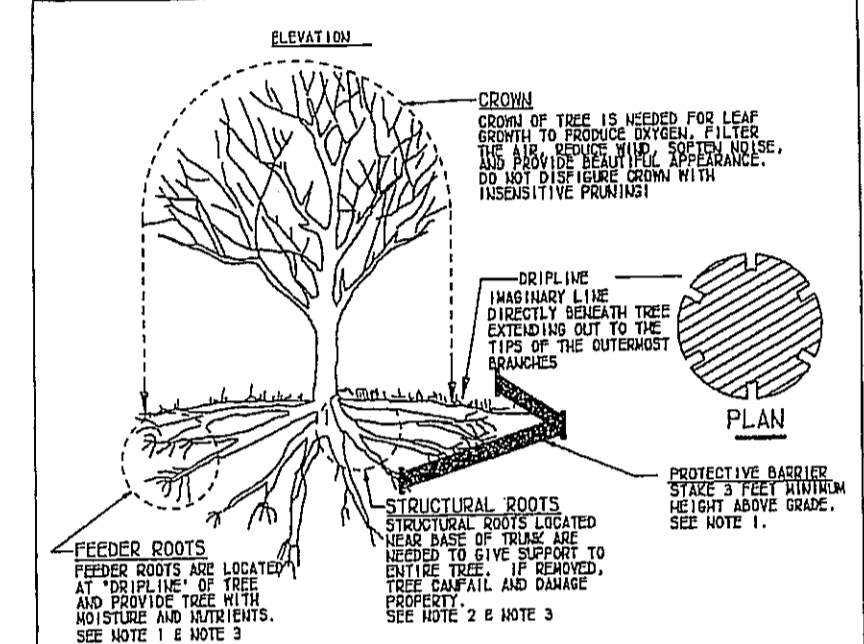
THIS IS NOT A SURVEY. NO FIELD WORK HAS BEEN PERFORMED BY CPT ENGINEERING AND SURVEYING, INC.



TREES TO BE SAVED WILL BE CLEARLY MARKED PRIOR TO CONSTRUCTION AND A PROTECTIVE BARRIER IS TO BE INSTALLED AT THE DRIFLINE.

DRIP LINE - THE AREA OF SOIL DIRECTLY BELOW THE TREE EXTENDING OUT TO THE TIPS OF THE OUTERMOST BRANCHES.

DATE:	12-14-09	STANDARD DETAIL	CITY OF WILMINGTON
SCALE:	N/A	METHOD OF TREE PROTECTION DURING CONSTRUCTION	ENGINEERING DEPARTMENT
DRAWN BY:	GC		
CHECKED BY:	JMH		
SD:	15-08		SD 15-08

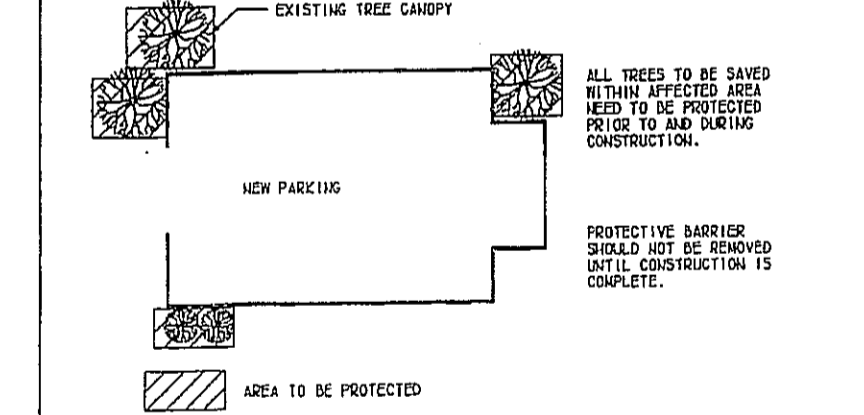


1. CLEARLY MARK THE TREE TO BE SAVED PRIOR TO CONSTRUCTION AND ERECT A PROTECTIVE BARRIER AT THE DRIFLINE. DO NOT COMPACT SOIL UNDER TREES.

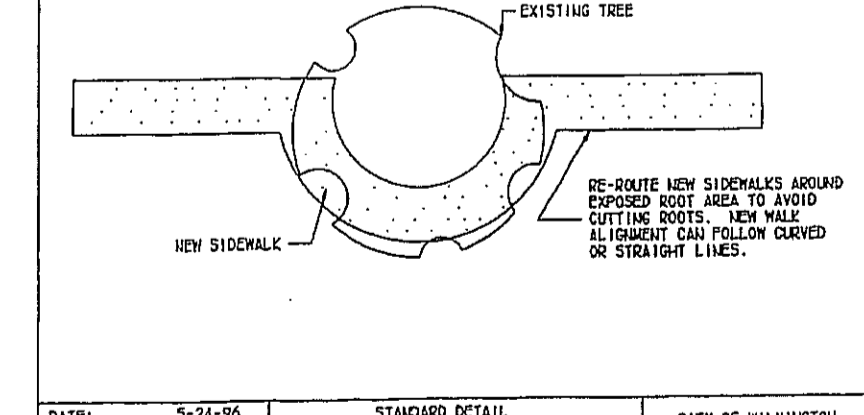
2. AVOID CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK. REMOVAL OF THESE ROOTS ALONG ONE SIDE IS PERMITTED IF NECESSARY FOR THE INSTALLATION OF A WALK, PAVING OR BUILDING WHICH IS BEING CONSTRUCTED. THIS IS CRITICAL TO SUPPORTING THE TREE AND SHOULD BE DONE IN HIGH WINDS.

3. AVOID CUT AND FILL WITHIN DIAMETER OF TREE CROWN DURING EXCAVATION.

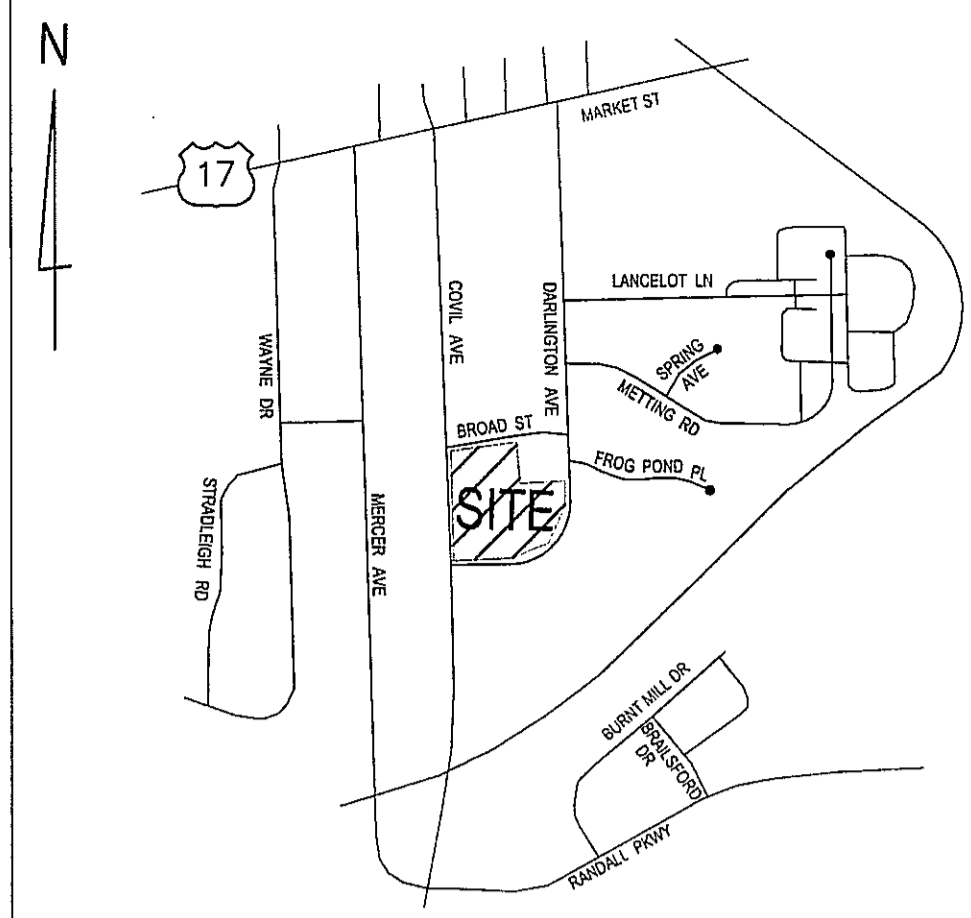
DATE:	5-22-06	STANDARD DETAIL	CITY OF WILMINGTON
SCALE:	N/A	METHOD OF TREE PROTECTION DURING CONSTRUCTION	ENGINEERING DEPARTMENT
DRAWN BY:	GC		
CHECKED BY:	JMH		
SD:	15-09		SD 15-09



ALL TREES TO BE SAVED WITHIN SPECIFIED AREA NEED TO BE PROTECTED PRIOR TO AND DURING CONSTRUCTION.



DATE:	5-24-06	STANDARD DETAIL	CITY OF WILMINGTON
SCALE:	N/A	EXISTING TREE PROTECTIVE BARRIERS	ENGINEERING DEPARTMENT
DRAWN BY:	GC		
CHECKED BY:	JMH		
SD:	15-15		SD 15-15



VICINITY MAP
SCALE: 1" = 1000'

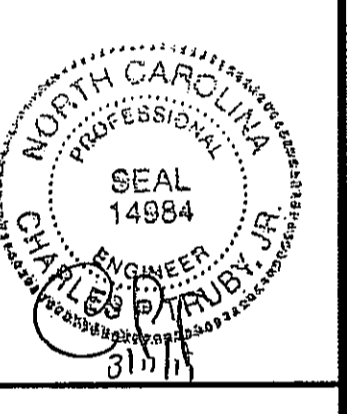
TREE LEGEND:
MAP = MAPLE
MAG = MAGNOLIA
HW = HARDWOOD
DBL = DOUBLE

○ EX TREE
⊗ EX TREE (TO BE REMOVED)

REVISIONS

Table with columns for revision number, description, and date.

ENGINEERING AND SURVEYING, INC.
LAND DEVELOPMENT CONSULTING
CORPORATE LICENSE NUMBER C-1785
4400 TYNING STREET
HIGH POINT, NORTH CAROLINA 27265
PHONE: (336) 812-8900 ~ FAX: (336) 812-8780



TREE INVENTORY MAP
ANNEXE AT THE RESERVE
CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
NEW HANOVER COUNTY, NORTH CAROLINA

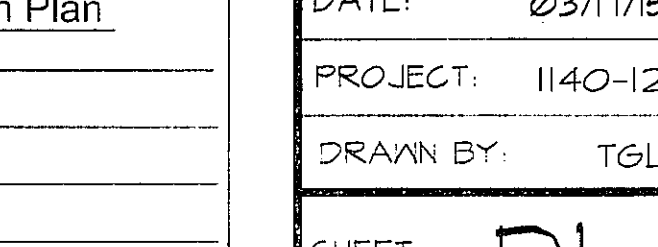
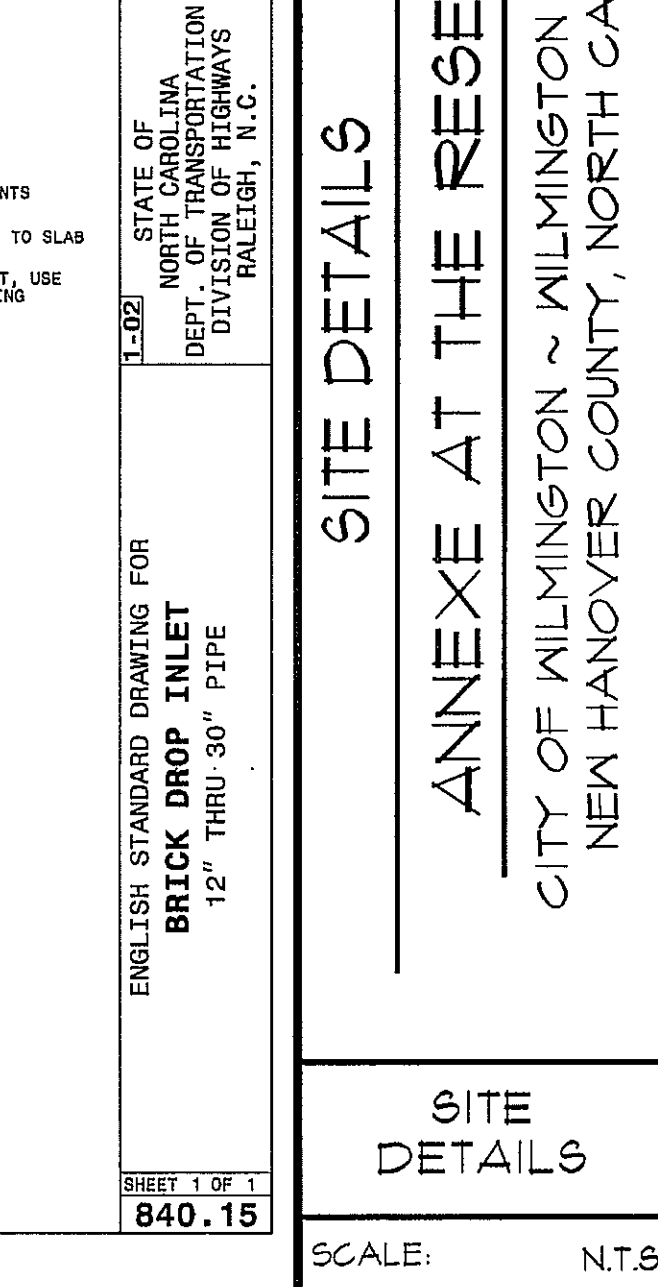
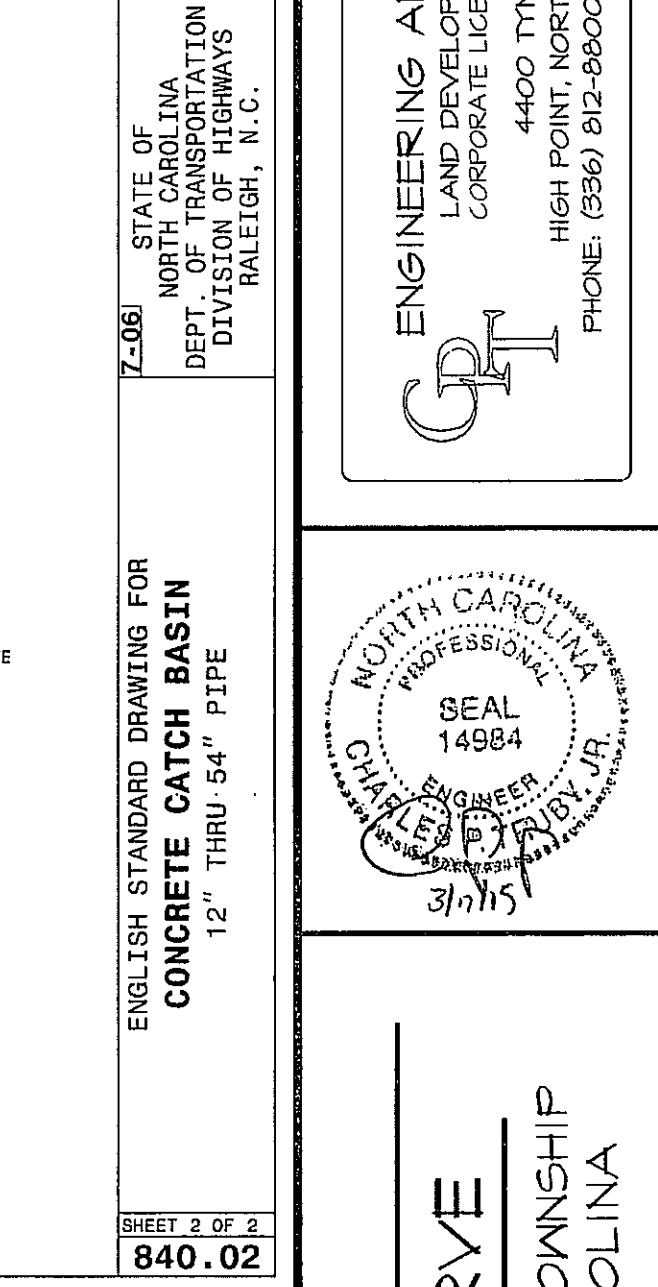
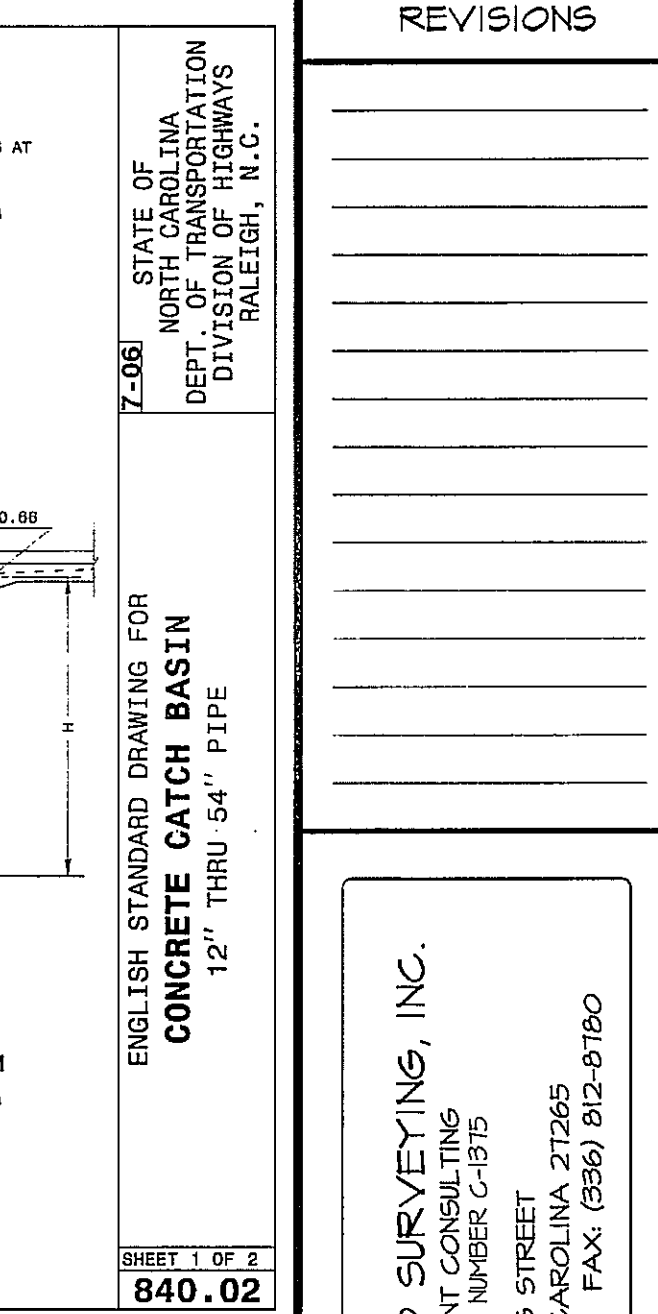
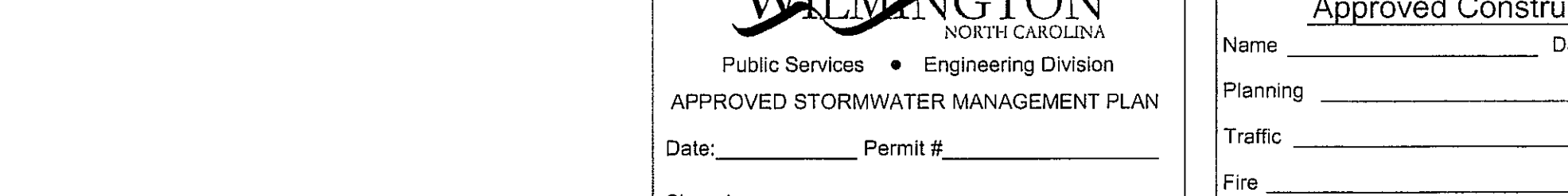
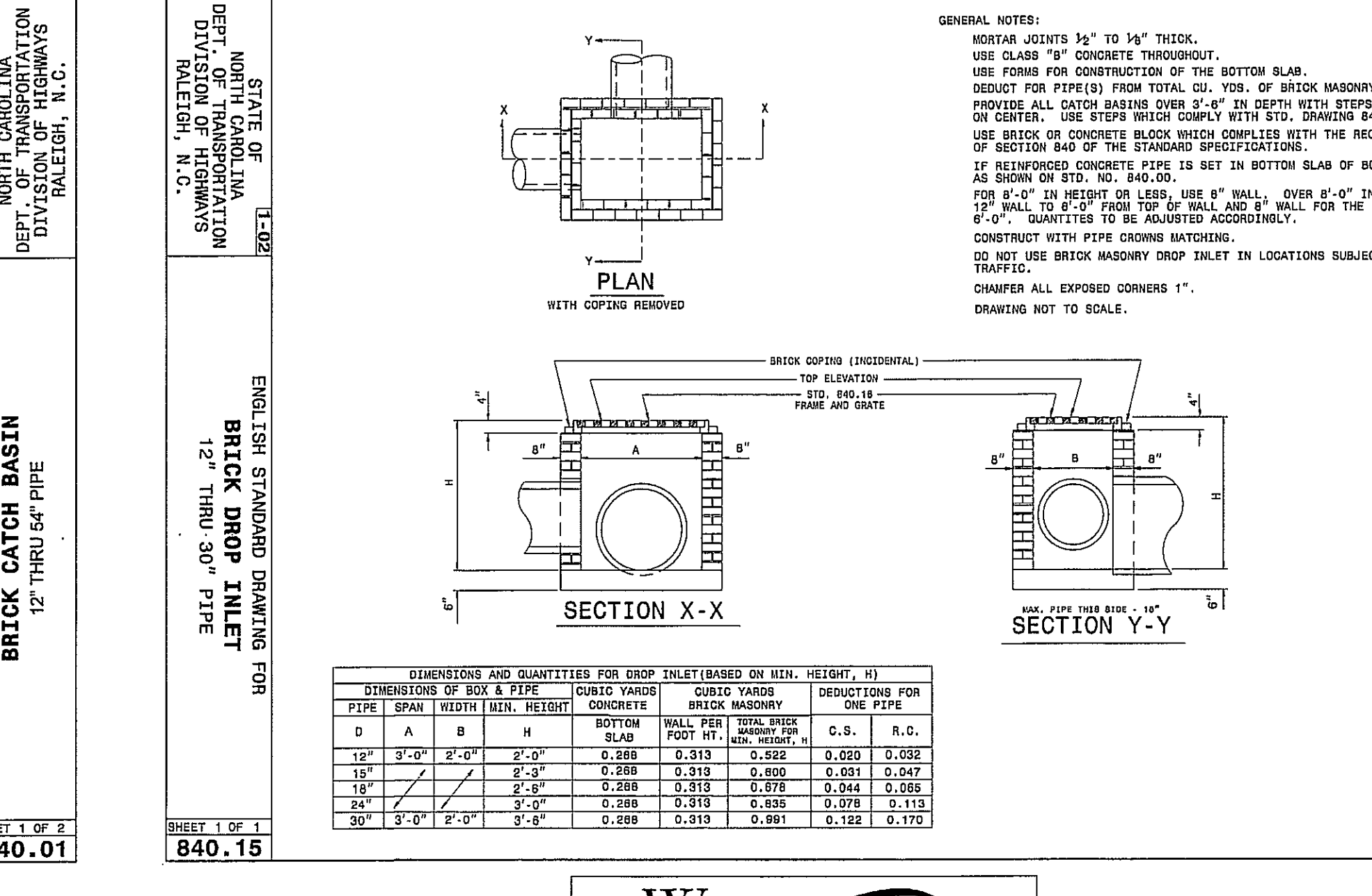
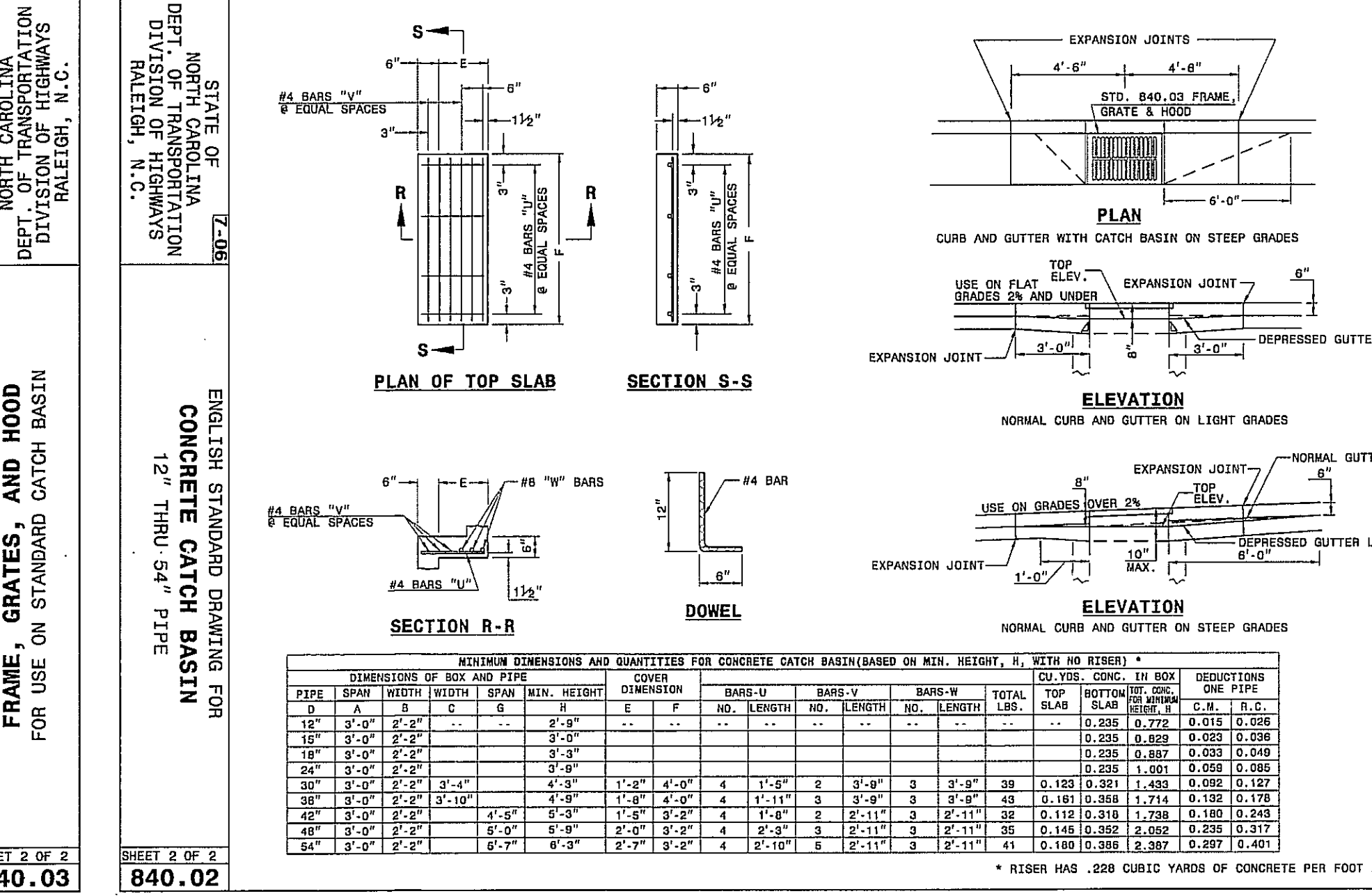
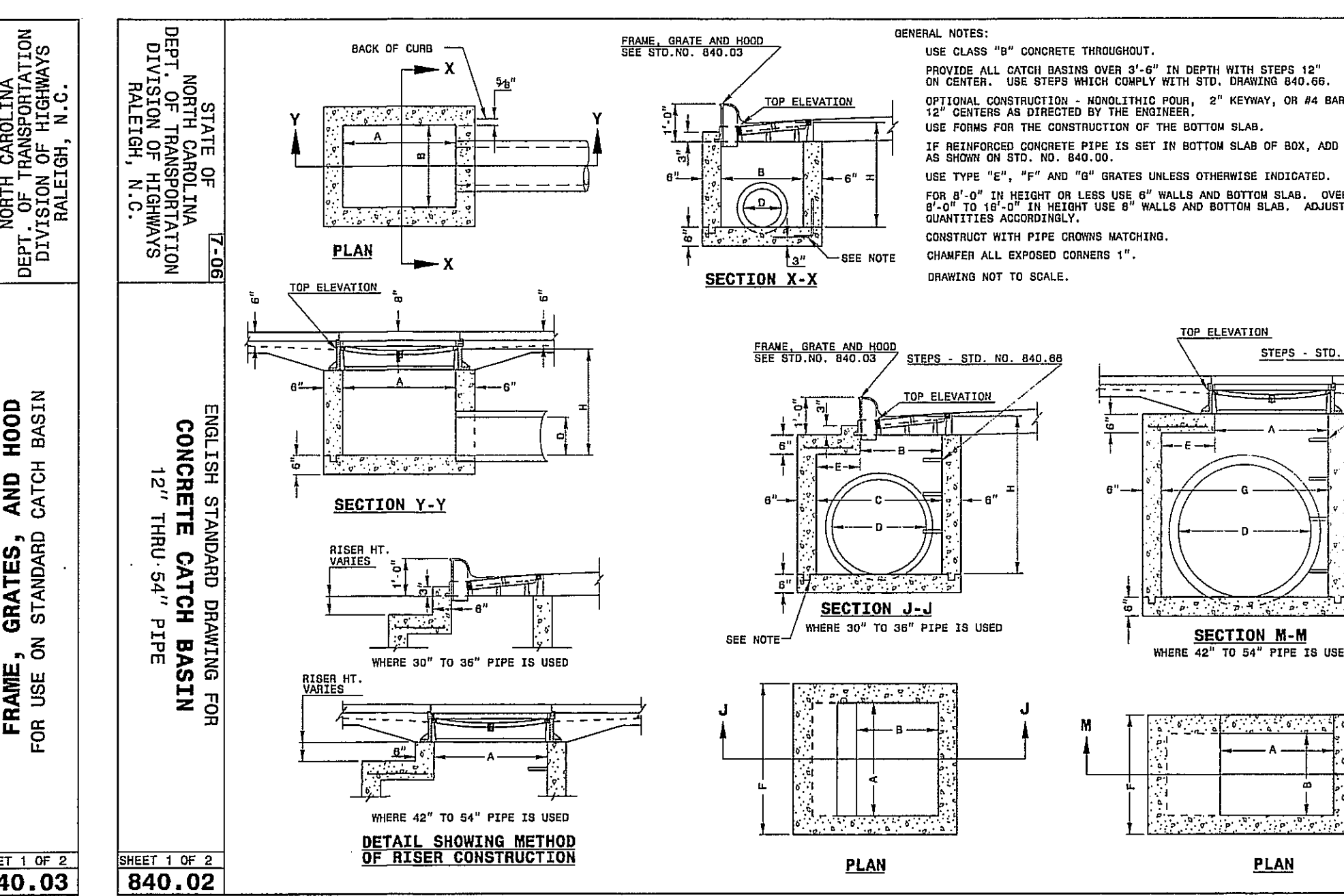
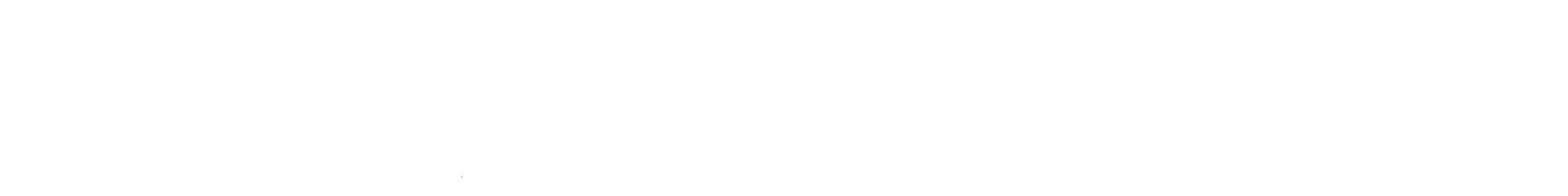
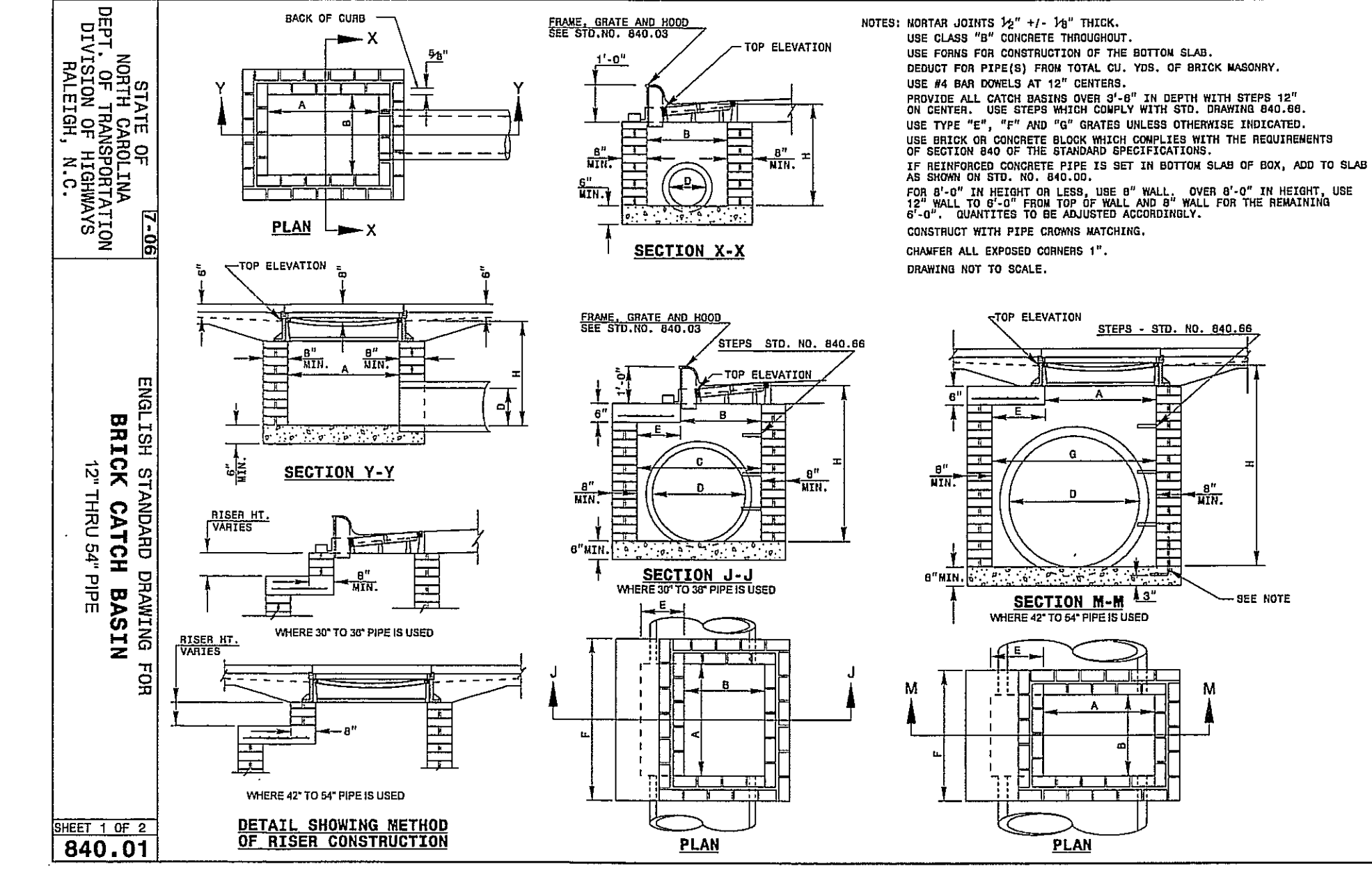
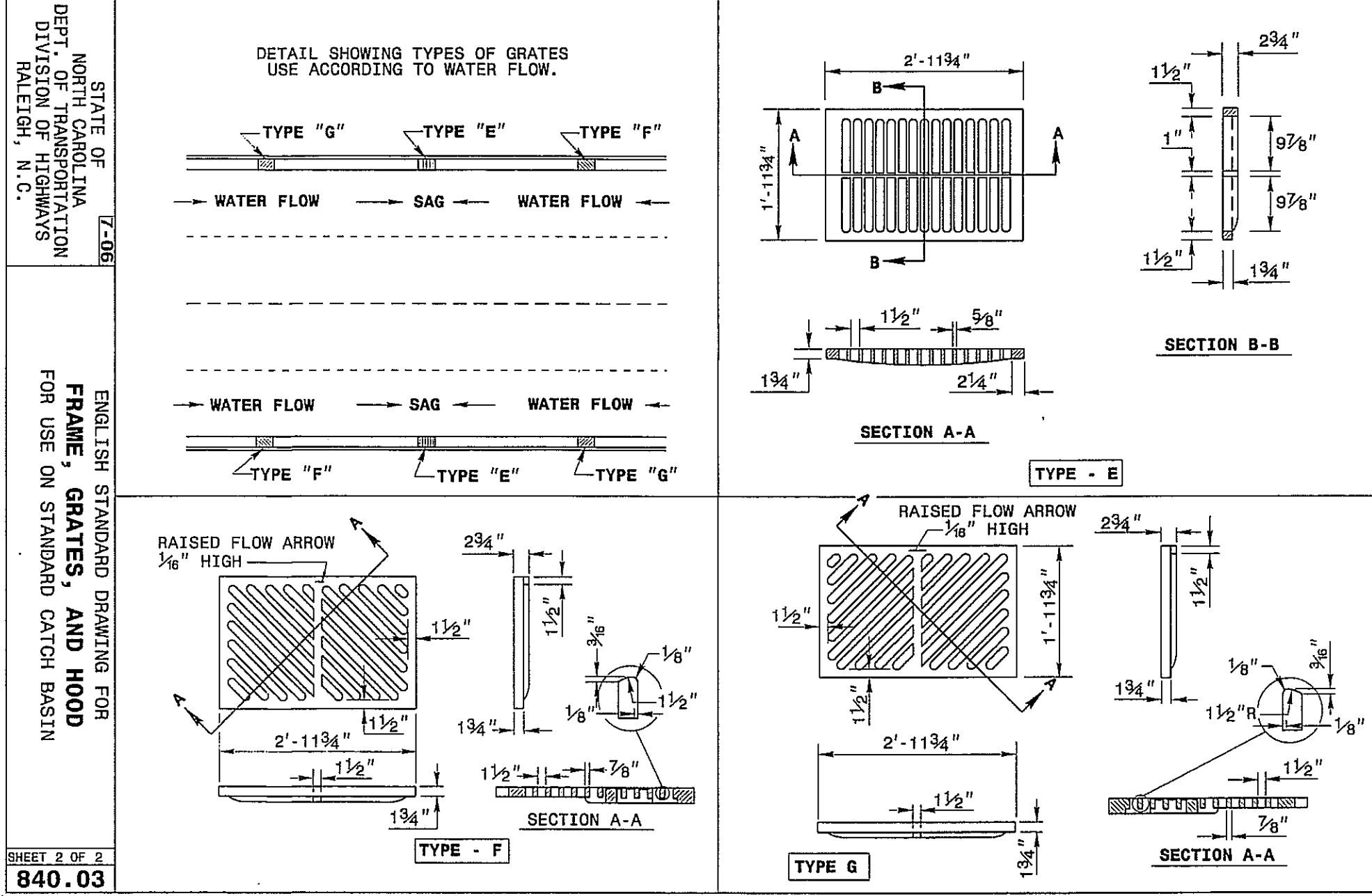
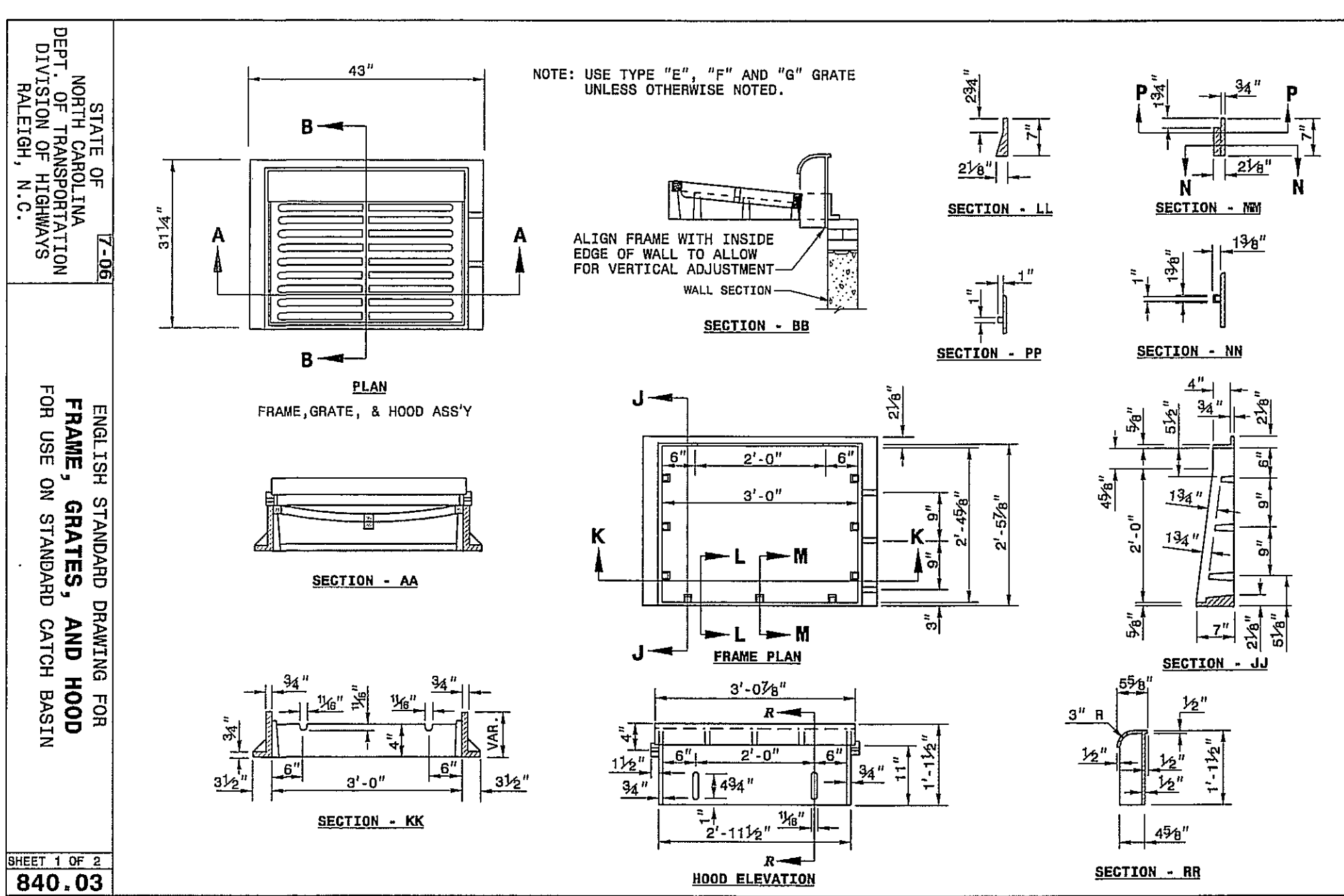
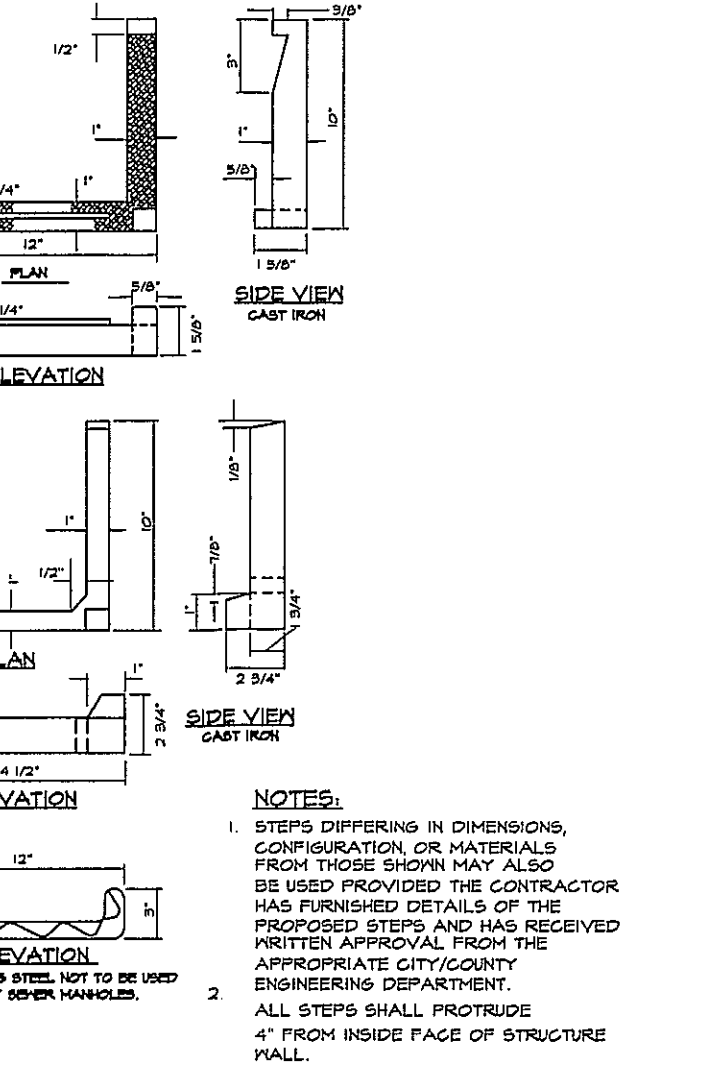
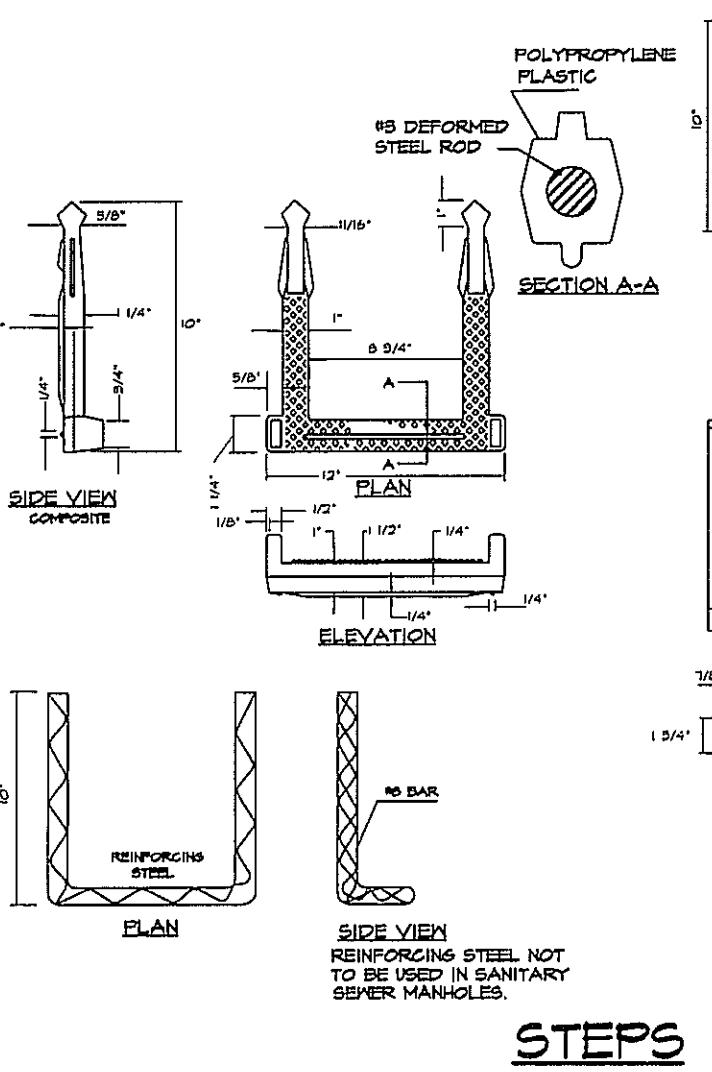
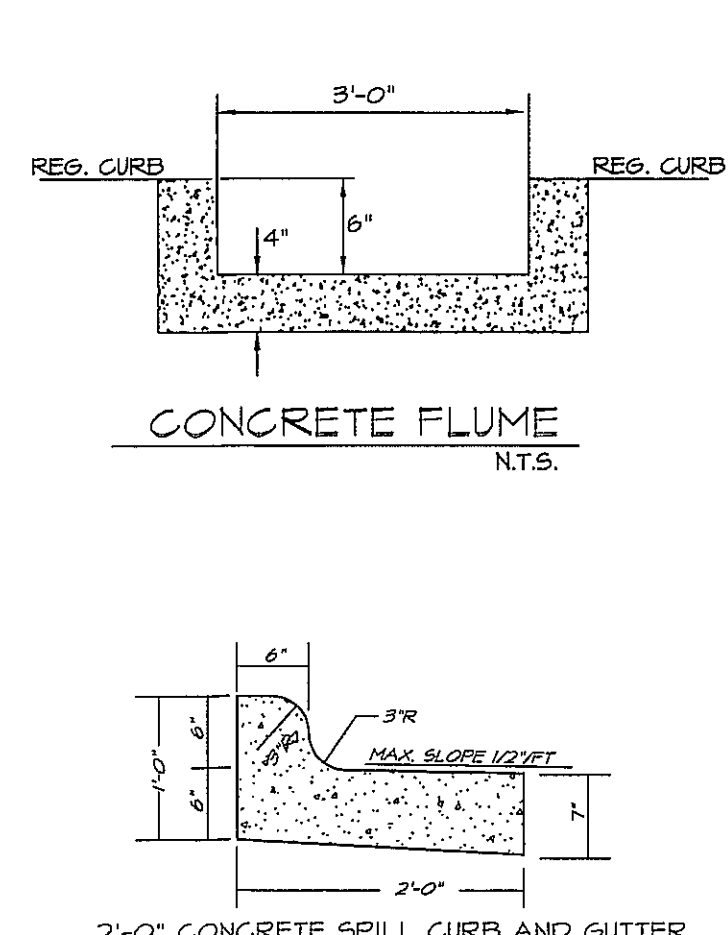
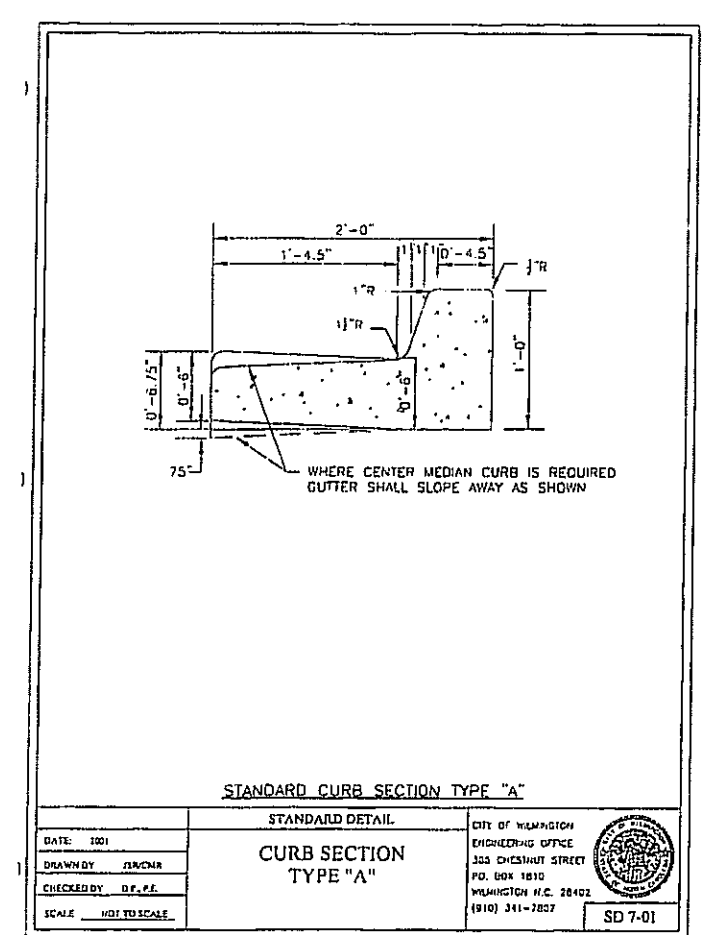
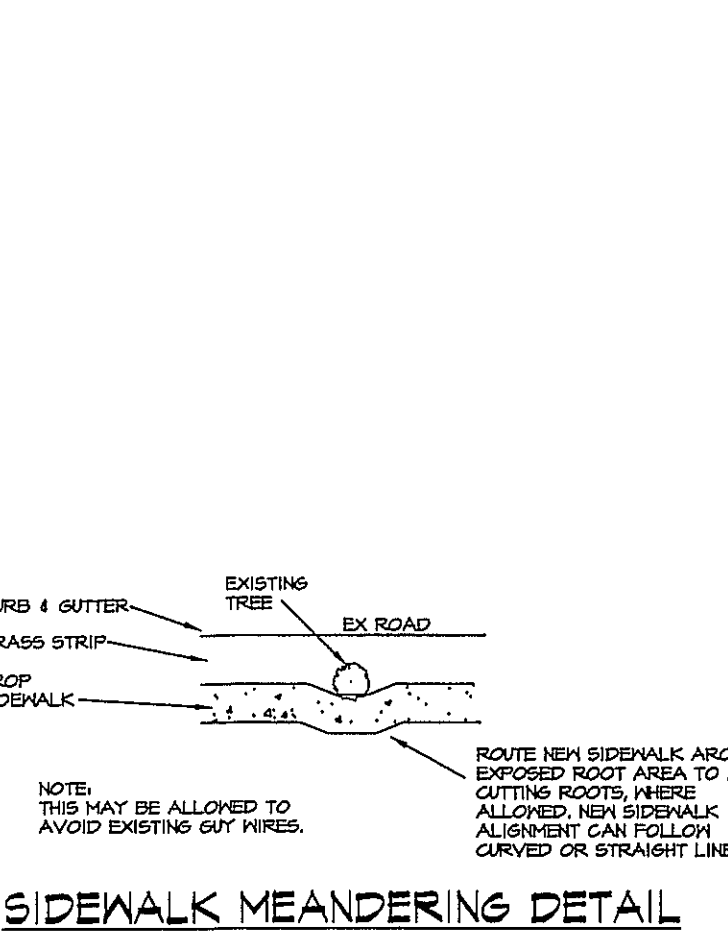
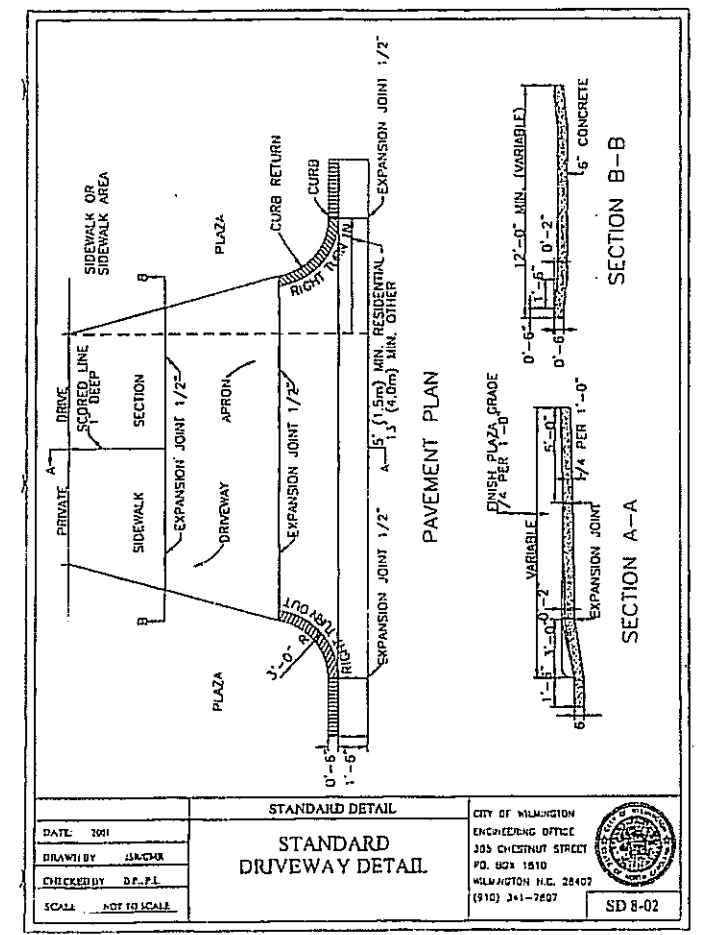
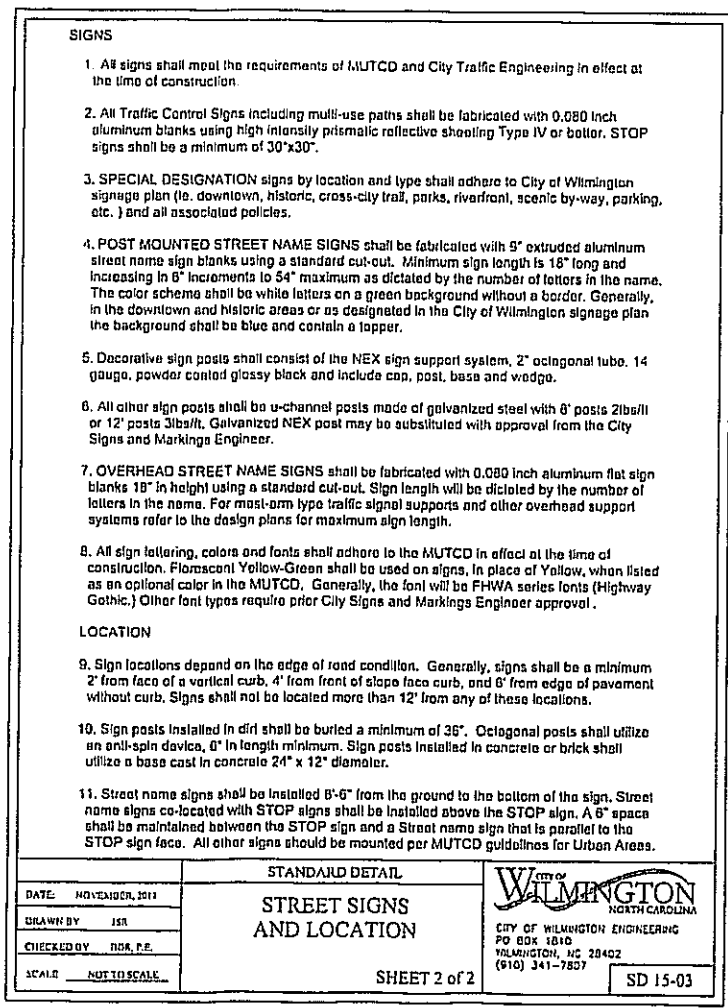
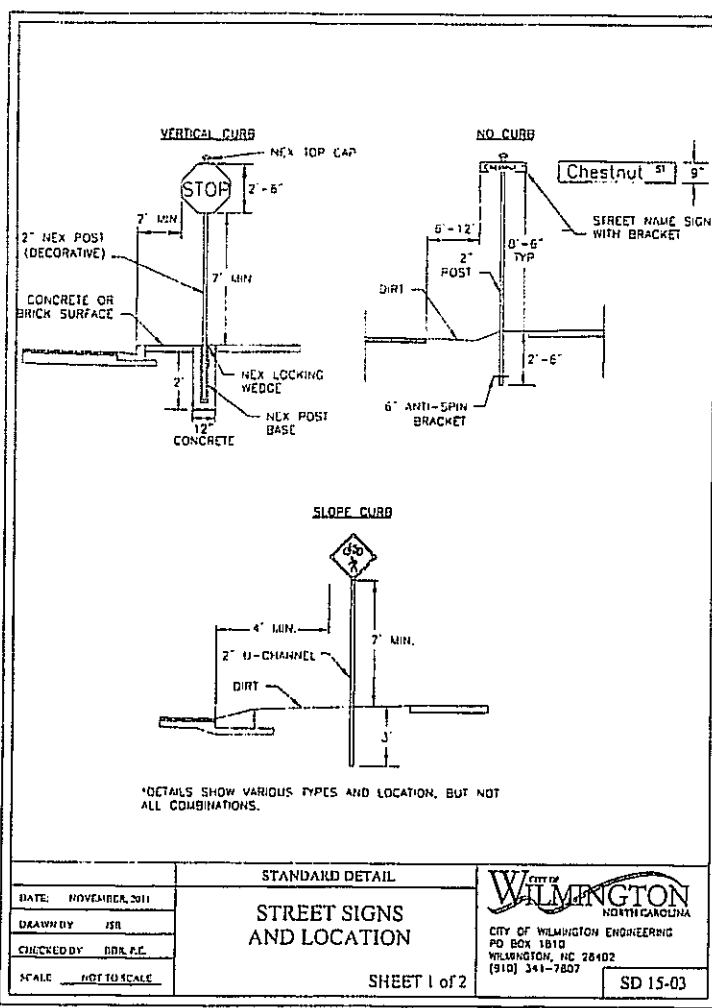
TREE INVENTORY MAP
SCALE: 1" = 40'
DATE: 03/17/15
PROJECT: 1140-12
DRAWN BY: TGL
SHEET C-10

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____

OWNER / DEVELOPER:
BRC WILMINGTON LLC
5826 SAMET DRIVE, SUITE 105
HIGH POINT, NC 27285
PHONE: (336) 869-1512
FAX: (336) 869-1501

ENGINEER:
CPT ENGINEERING & SURVEYING, INC.
4400 TYNING STREET
HIGH POINT, NC 27285
CONTACT: CHUCK TRUBY, P.E.
PHONE: (336) 812-8900 ext:304
FAX: (336) 812-8780



REVISIONS

NO.	DESCRIPTION	DATE

ENGINEERING AND SURVEYING, INC.
LAND DEVELOPMENT CONSULTING
CORPORATE LICENSE NUMBER C-1915
4400 TRYON STREET
HIGH POINT, NORTH CAROLINA 27265
PHONE: (336) 812-8800 ~ FAX: (336) 812-8780

SEAL 14984
CHAS. W. JONES, JR.
REGISTERED PROFESSIONAL ENGINEER
NO. 37175

SITE DETAILS
ANNEXE AT THE RESERVE
CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
NEW HANOVER COUNTY, NORTH CAROLINA

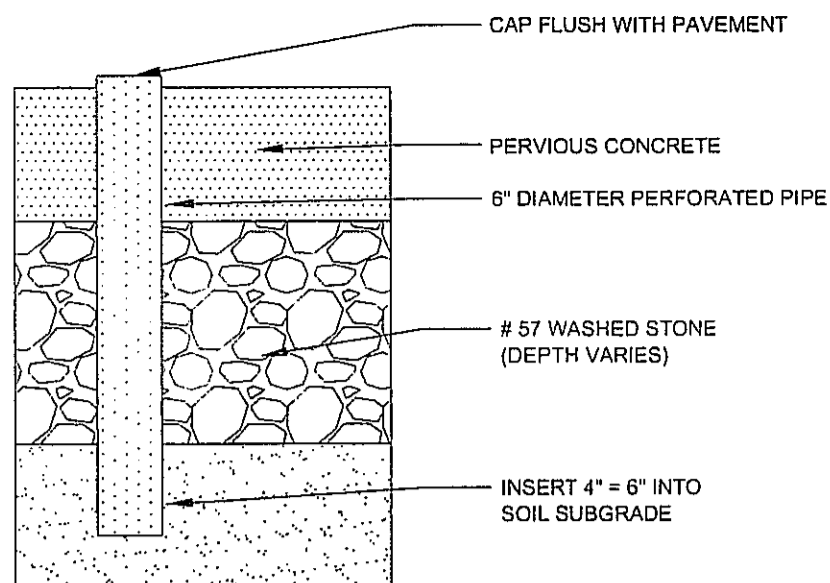
SCALE: N.T.S.
DATE: 03/17/15
PROJECT: 1140-12
DRAWN BY: TGL
SHEET: D1

Approved Construction Plan

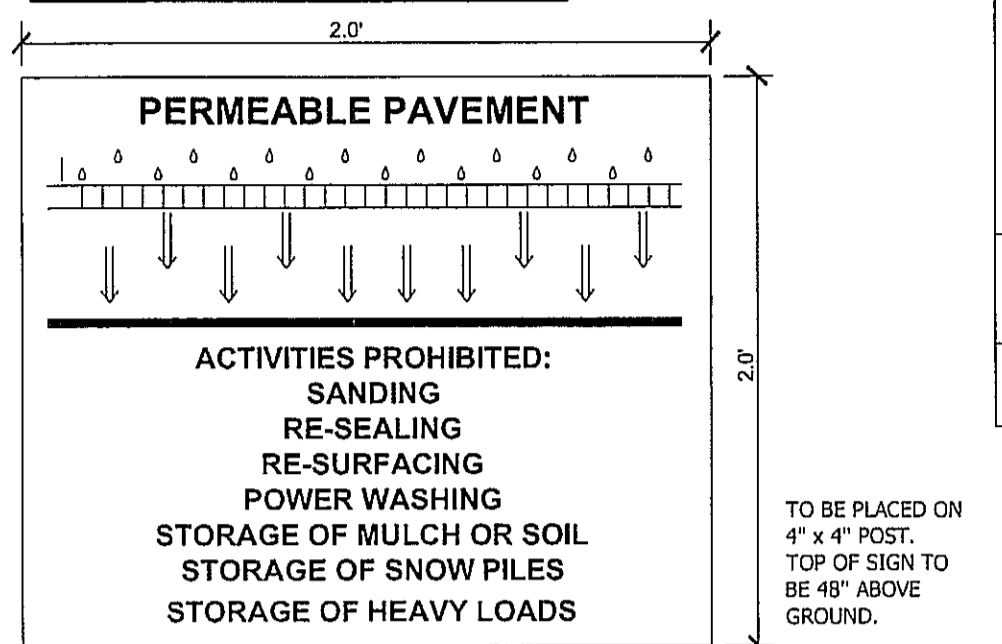
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____

Name: _____ Date: _____
Planning: _____
Traffic: _____
Fire: _____



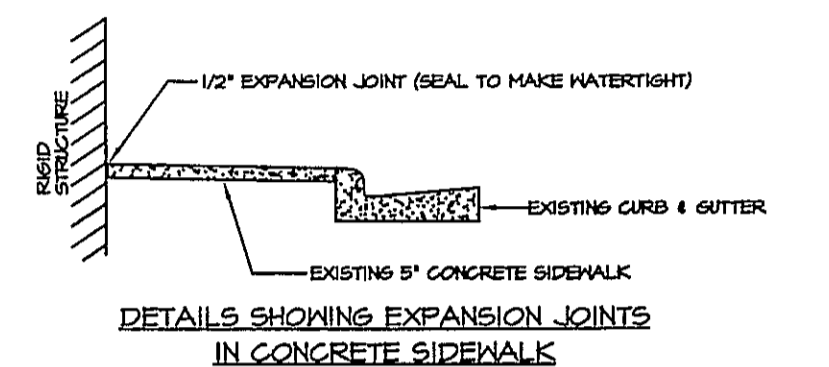
OBSERVATION WELL DETAIL



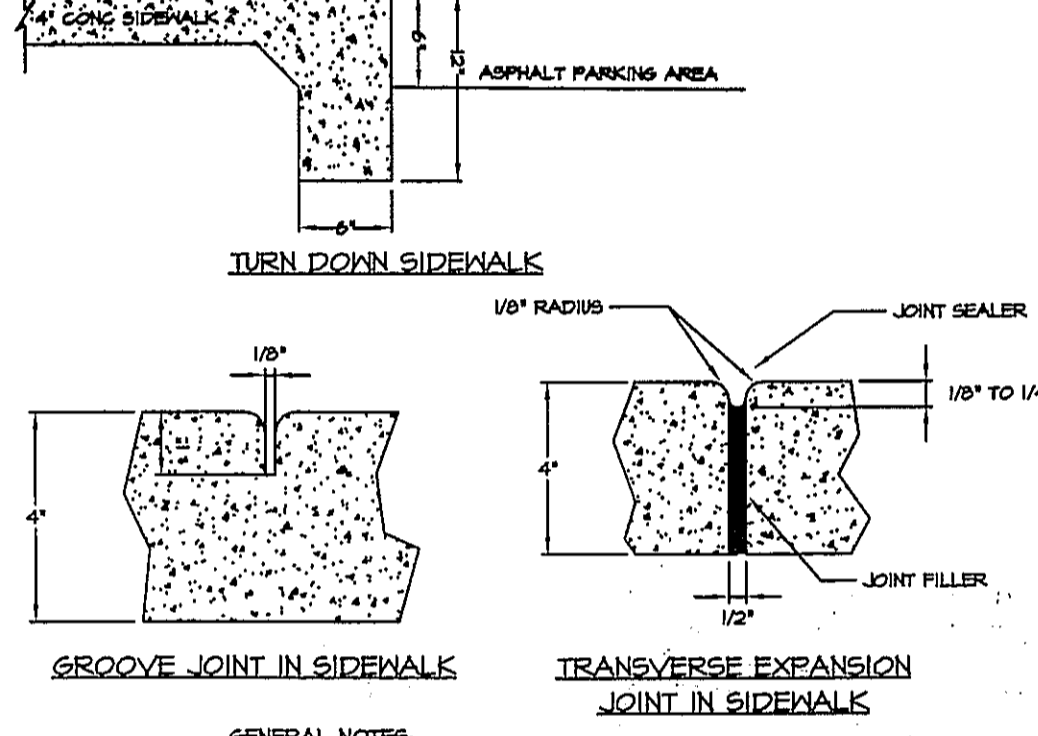
PERMEABLE PAVEMENT SIGN DETAIL

OPERATION AND MAINTENANCE PROVISIONS FOR PERMEABLE PAVEMENT

BMP element	Potential problem:	How to remediate the problem:
The perimeter of the permeable pavement	Areas of bare soil and / or erosive gullies have formed.	Regrade the soil if necessary to remove the gully, then plant a ground cover and water until it is established.
	A vegetated area drains toward the pavement.	Regrade the area so that it drains away from the pavement, then plant a ground cover and water until it is established.
The surface of the permeable pavement	Trash / debris is present.	Remove the trash / debris.
	Weeds are growing on the surface of the permeable pavement.	Do not pull the weeds (may pull out media as well). Spray them with a systemic herbicide such as glyphosate and then return within the week to pull them by hand. (Another option is to pour boiling water on them or steam them.)
	Sediment is present on the surface.	Vacuum sweep the pavement.
	The structure is deteriorating or damaged.	Consult an appropriate professional.
	The pavement is rutting, cracking or slumping.	Consult an appropriate professional.
Observation well	Water is present more than five days after a storm event.	Vacuum sweep the pavement. If the pavement still does not drain, consult a professional.
Educational Sign	The educational sign is missing or has been damaged.	Replace the sign.

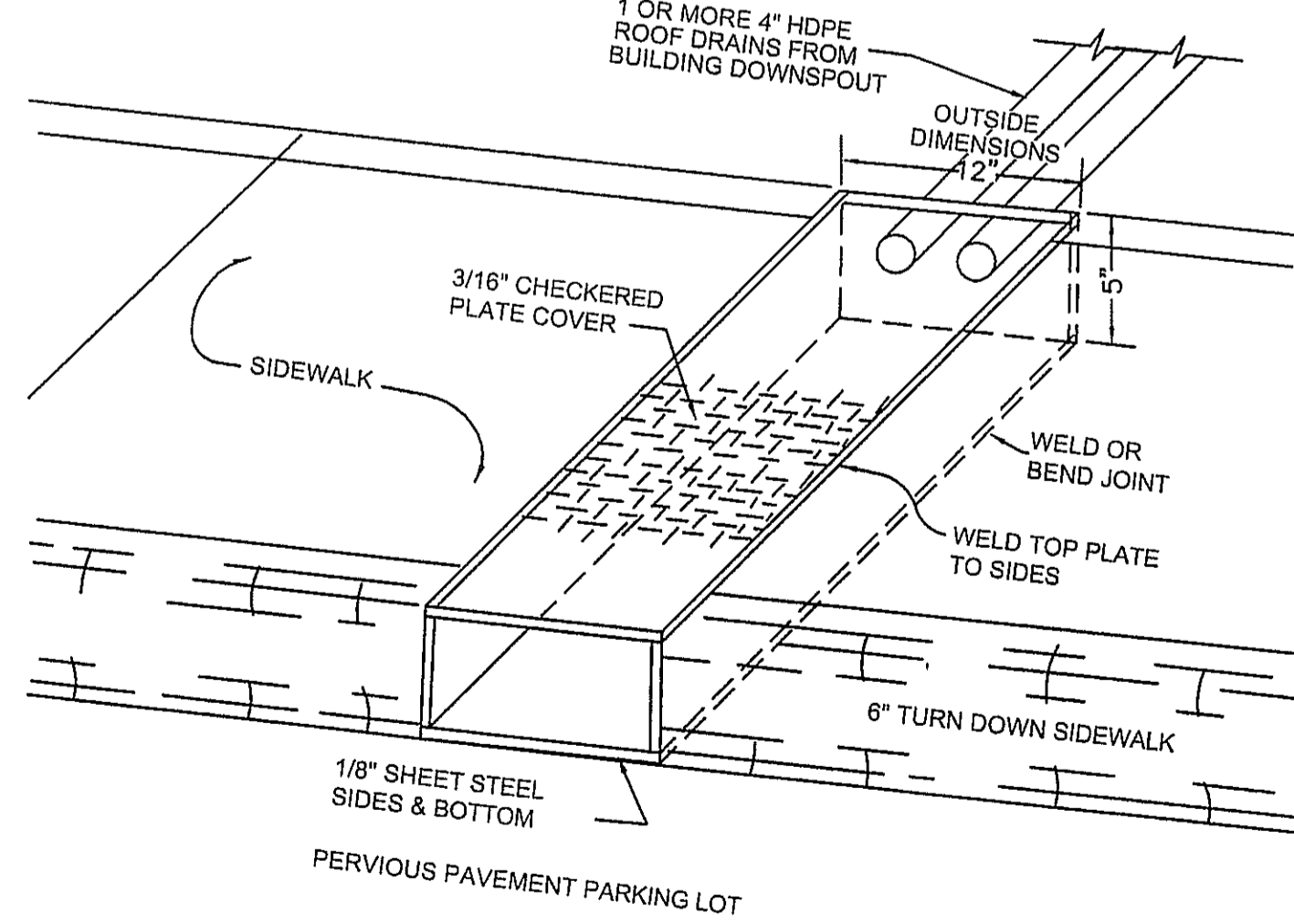


DETAILS SHOWING EXPANSION JOINTS IN CONCRETE SIDEWALKS



CONCRETE SIDEWALKS

- GENERAL NOTES:
- A GROOVE JOINT 1" DEEP WITH 1/8" RADIUS SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 3' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS NOT TO EXCEED 50' AND MATCHING EXPANSION JOINT IN ADJACENT CURB. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY ROAD STRUCTURE.
 - SIDEWALK AT DRIVEWAY ENTRANCES ARE TO BE 6" THICK.
 - ALL SIDEWALKS ADJACENT TO STREETS AND PARKING AREAS ARE 5'.
 - CONCRETE COMPRESSIVE STRENGTH SHALL BE 3800 PSI IN 28 DAYS.



STANDARD 5" X 12" GALVANIZED STEEL FLUME

CONSTRUCTION STEP 5: PLACE GEOTEXTILES AND GEOMEMBRANE (IF APPLICABLE)

IF THE SOILS ENGINEER REQUIRES USING GEOTEXTILES OR GEOMEMBRANES, THEN FOLLOW THE MANUFACTURER'S RECOMMENDATIONS SO FOR THE APPROPRIATE OVERLAP BETWEEN ROLLS OF MATERIAL. SECURE GEOTEXTILE OR GEOMEMBRANE SO THAT IT WILL NOT MOVE OR WRINKLE AS AGGREGATE IS PLACED.

CONSTRUCTION STEP 6: PLACE OBSERVATION WELL(S)

PLACE OBSERVATION WELLS ACCORDING TO THE DESIGN PLANS AND VERIFY THAT THE ELEVATIONS ARE CORRECT.

CONSTRUCTION STEP 7: PLACE AGGREGATE BASE

INSPECT ALL STONE TO INSURE THAT IT IS CLEAN, FREE OF FINES AND CONFORMS TO THE SPECIFICATIONS OF THE DESIGN PLANS. ALL AGGREGATES SHOULD BE STOCKPILED ON AN IMPERVIOUS SURFACE, A GEOTEXTILE OR OTHER IMPERVIOUS MATERIAL TO KEEP THE AGGREGATE FREE OF SEDIMENT. IF AGGREGATE BECOMES CONTAMINATED WITH SEDIMENT, THEN IT SHALL BE REPLACED WITH CLEAN MATERIALS BEFORE PLACING THE AGGREGATE BASE. REMOVE ANY ACCUMULATION OF SEDIMENTS ON THE FINISHED SURFACE WITH LIGHT EQUIPMENT. IF THE EXCAVATED SUBGRADE SURFACE IS SUBJECT TO RAINFALL BEFORE THE PLACEMENT OF THE AGGREGATE BASE, THE RESULTING SURFACE CRUST MUST BE EXCAVATED (TO AT LEAST AN ADDITIONAL TWO INCHES IN DEPTH), RAKED OR SCARIFIED TO BREAK UP THE CRUST. FOR SITES WITH AN IMPERMEABLE LINER OR GEOTEXTILES, REMOVE ANY ACCUMULATED SEDIMENTS AND CHECK THE PLACEMENT, SLOPES AND ELEVATIONS SHOULD BE CHECKED ON THE SOIL SUBGRADE AND THE FINAL BEDDING MATERIAL TO ASSURE THAT THEY CONFORM TO THE DESIGN SPECIFICATIONS.

ALL AGGREGATE SHOULD BE SPREAD (NOT DUMPED) BY A FRONT-END LOADER. MOISTEN AND SPREAD SIX INCH LIFTS OF THE WASHED STONE WITHOUT DRIVING ON THE SUBGRADE AND BEING CAREFUL NOT TO DAMAGE UNDERDRAINS AND THEIR FITTINGS, CATCH BASINS, OR OBSERVATION WELLS. THE AGGREGATE LAYER SHOULD BE LIGHTLY COMPACTED.

CONSTRUCTION STEP 8: INSTALL CURB RESTRAINTS AND PAVEMENT BARRIERS

EDGE RESTRAINTS AND BARRIERS BETWEEN PERMEABLE AND IMPERVIOUS PAVEMENT SHALL BE INSTALLED PER DESIGN BEFORE MOVING ON TO CONSTRUCTION STEP 9. BE CERTAIN THAT THE DESIGN AND INSTALLATION ARE CONSISTENT.

CONSTRUCTION STEP 9: INSTALL BEDDING AND PAVEMENT COURSES

PC PAVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF ACI 522.1 SPECIFICATION FOR PERVIOUS CONCRETE. IT IS REQUIRED THAT THE CONTRACTOR INSTALLING THE PERVIOUS CONCRETE MEET THE REQUIREMENTS OUTLINED IN THE LATEST VERSION OF ACI 522.1. INSTALLATION OF PC CAN BE ACCOMPLISHED USING EITHER THE ONE-STEP OR THE TWO-STEP METHOD. THE TWO-STEP METHOD IS THE MORE TRADITIONAL METHOD AND UTILIZES SEPARATE STEPS TO STRIKE-OFF THEN COMPACT THE PERVIOUS CONCRETE. IN THIS METHOD, THE PERVIOUS CONCRETE WILL USUALLY REQUIRE A SLUMP OF APPROXIMATELY 1-3 INCHES. THE ONE-STEP METHOD USES A COUNTER-ROTATING ROLLER SCREED TO BOTH STRIKE-OFF AND COMPACT THE PERVIOUS CONCRETE IN ONE STEP. THIS METHOD REQUIRES THE USE OF A PERVIOUS CONCRETE WITH A SLUMP IN THE RANGE OF 4-8 INCHES. IN THE CASE OF EITHER METHOD, THE USE OF DENSE-PASTE PERVIOUS CONCRETE MIXTURES IS REQUIRED. THESE MIXES ARE DEFINED BY THE USE OF CHEMICAL ADMIXTURES WHICH MODIFY THE VISCOSITY OF THE CEMENT PASTE TO A CONSISTENCY THAT WILL NOT RUN OFF OF THE AGGREGATE, BUT "STICK" TO THE AGGREGATE. THESE MIXES PROVIDE MORE COHESIVITY WHICH INCREASES STRENGTH AND DURABILITY. PC MIXES SHOULD ALSO INCLUDE A HYDRATION STABILIZER BUT SHALL BE REQUIRED TO INCLUDE A HYDRATION STABILIZER WHEN THE AMBIENT TEMPERATURE EXCEEDS 90 DEGREES F.

CONSTRUCTION STEP 10: PROTECT THE PAVEMENT THROUGH PROJECT COMPLETION

THE PERMEABLE PAVEMENT SHALL BE INSTALLED AT THE END OF THE SITE CONSTRUCTION TIMELINE. THE CONTRACTOR MUST PROTECT THE PERMEABLE PAVEMENT THROUGH PROJECT COMPLETION. THIS MUST BE DONE BY:
 - ROUTE CONSTRUCTION ACCESS THROUGH OTHER PORTIONS OF THE SITE SO THAT NO CONSTRUCTION TRAFFIC PASSES THROUGH THE PERMEABLE PAVEMENT SITE. INSTALL BARRIERS OR FENCES AS NEEDED.
 - PROTECT THE PAVEMENT PER THE CONSTRUCTION DOCUMENTS. PROTECTION TECHNIQUES THAT MAY BE SPECIFIED INCLUDE MATS, PLASTIC SHEETING, BARRIERS TO LIMIT ACCESS, OR MOVING THE STABILIZED CONSTRUCTION ENTRANCE.
 - SCHEDULE STREET SWEEPING DURING AND AFTER CONSTRUCTION TO PREVENT SEDIMENT FROM ACCUMULATING ON THE PAVEMENT.

CONSTRUCTION STEP 11: AS-BUILT INSPECTION

AFTER INSTALLATION, AN APPROPRIATELY LICENSED NC PROFESSIONAL MUST PERFORM A FINAL AS-BUILT INSPECTION AND CERTIFICATION THAT INCLUDES:
 - ENSURING THAT THE INSTALLATION REMAINS IN GOOD CONDITION AND THE SURFACE IS FREE OF FINES.
 - CHECKING THAT ALL PERVIOUS SURFACES ARE DRAINING AWAY FROM THE PAVEMENT AND THAT THE OVERALL SITE IS STABILIZED.
 - VERIFYING THAT THE PAVEMENT WAS INSTALLED PER THE DESIGN.
 - PREPARING THE AS-BUILT PLANS THAT INCLUDE ANY CHANGES THE UNDERDRAINS, OBSERVATION WELL LOCATIONS, TERRACE LAYOUTS, AGGREGATE DEPTH OR STORAGE STRUCTURES, ANY REVISED CALCULATIONS, ETC.
 - TESTING THE PERMEABILITY OF THE PAVEMENT SURFACE USING THE NCSU SHALLOW HEAD INFILTRATION TEST (SEE MAINTENANCE SECTION 18.5.5) OR OTHER APPROPRIATE TEST SUCH AS ASTM C1701 STANDARD TEST METHOD FOR INFILTRATION RATE OF IN-PLACE PERVIOUS CONCRETE. ANY DEFICIENCIES FOUND DURING THE AS-BUILT INSPECTION SHALL BE PROMPTLY ADDRESSED.

CONSTRUCTION NOTE:

CONTRACTORS WHO ARE NOT FAMILIAR WITH PERMEABLE PAVEMENT ARE ACCUSTOMED TO COMPACTING PAVEMENT SUBGRADES TO INCREASE STRUCTURAL STRENGTH. HOWEVER, THIS IS IN DIRECT OPPOSITION TO THE CORRECT TREATMENT OF SOIL BENEATH PERMEABLE PAVEMENT (FOR AN INFILTRATING DESIGN). IT IS HIGHLY RECOMMENDED TO HOLD A PRECONSTRUCTION MEETING TO ENSURE CONTRACTORS UNDERSTAND THE NEED TO PREVENT SUBGRADE COMPACTION AND CLOGGING OF THE PAVEMENT SURFACE AS WELL AS THE OTHER UNIQUE CONSTRUCTION CONSIDERATIONS FOR PERMEABLE PAVEMENT. IT IS HIGHLY RECOMMENDED THAT THE CONSTRUCTION PROCESS BE OVERSEEN BY A DESIGN PROFESSIONAL FAMILIAR WITH PERMEABLE PAVEMENT INSTALLATION TO INSURE THAT THE INVESTMENT IN MATERIALS WILL RESULT IN A FUNCTIONING PERMEABLE PAVEMENT SYSTEM.

PERVIOUS CONCRETE CONSTRUCTION SEQUENCE:

CONSTRUCTION STEP 1: ENSURE ACCEPTABLE CONDITIONS FOR CONSTRUCTION

DO NOT BEGIN CONSTRUCTION ON PERMEABLE PAVEMENT UNTIL ACCEPTABLE CONDITIONS ARE PRESENT. THIS INCLUDES THE FOLLOWING ITEMS:

- PERVIOUS SURFACES MUST BE GRADED SO THAT THEY DO NOT DISCHARGE TO THE PERMEABLE PAVEMENT, EXCEPT FOR INSTANCES WHEN THIS IS UNAVOIDABLE, SUCH AS PARKING LOT ISLANDS.
- IMPERVIOUS AREAS THAT WILL DRAIN TO THE PERMEABLE PAVEMENT MUST BE COMPLETED.
- AREAS OF THE SITE ADJACENT TO OR DRAINING TOWARDS THE PERMEABLE PAVEMENT MUST BE STABILIZED WITH VEGETATION, MULCH, STRAW, SEED, SOD, FIBER BLANKETS OR OTHER APPROPRIATE COVER IN ORDER TO PREVENT EROSION AND POSSIBLE CONTAMINATION WITH SEDIMENTS.
- CONSTRUCTION ACCESS TO OTHER PORTIONS OF THE SITE MUST BE ESTABLISHED SO THAT NO CONSTRUCTION TRAFFIC PASSES THROUGH THE PERMEABLE PAVEMENT SITE DURING INSTALLATION. INSTALL BARRIERS OR FENCES AS NEEDED.
- THE FORECAST SHOULD BE FOR A WINDOW OF DRY WEATHER TO PREVENT EXCESS COMPACTION OR SMEARING OF THE SUBGRADE WHILE IT IS EXPOSED.
- ALL PERMEABLE PAVEMENT AREAS MUST BE CLEARLY MARKED ON THE SITE.

CONSTRUCTION STEP 2: EXCAVATE THE PAVEMENT AREA AND PREPARE SUBGRADE SURFACE

CLEAR AND EXCAVATE THE AREA FOR PAVEMENT AND BASE COURSES IN A MANNER THAT PROTECTS AND MAINTAINS SUBGRADE INFILTRATION RATES BY:
 - EXCAVATING IN DRY SUBGRADE CONDITIONS AND AVOIDING EXCAVATING IMMEDIATELY AFTER STORMS WITHOUT A SUFFICIENT DRYING PERIOD.
 - NOT ALLOWING EQUIPMENT TO CROSS THE PAVEMENT AREA AFTER EXCAVATION HAS BEGUN.
 - OPERATING EXCAVATION EQUIPMENT FROM OUTSIDE THE PAVEMENT AREA OR FROM UNEXCAVATED PORTIONS OF THE AREA USING AN EXCAVATION STAGING PLAN.
 - USING EQUIPMENT WITH TRACKS RATHER THAN TIRES TO MINIMIZE SOIL COMPACTION WHEN EQUIPMENT ON THE SUBGRADE SURFACE IS UNAVOIDABLE.
 - DIGGING THE FINAL 9-12 INCHES BY USING THE TEETH OF THE EXCAVATOR BUCKET TO LOOSEN SOIL SO AS NOT TO SMEAR THE SUBGRADE SOIL SURFACE. FINAL GRADING OR SMOOTHING OF THE SUBGRADE SHOULD BE DONE BY HAND IF POSSIBLE.
 - MINIMIZING THE TIME BETWEEN EXCAVATION AND PLACEMENT OF THE AGGREGATE.

THE FINAL SUBGRADE SLOPE MAY NOT EXCEED 0.5%. SEE DESIGN STEP 6. SUBGRADE GRADING FOR MORE INFORMATION ON ACHIEVING FLAT SUBGRADE SLOPES. THE SLOPE OF THE SUBGRADE SHOULD BE CHECKED BEFORE PROCEEDING.
 AFTER THE SUBGRADE SLOPE IS VERIFIED, THE SUBGRADE SURFACE OF INFILTRATING PERMEABLE PAVEMENT SYSTEMS SHOULD BE SCARIFIED, RIPPED OR TRENCHED TO MAINTAIN ITS PREDISTURBANCE INFILTRATION RATE. IF THE PAVEMENT IS TO BE SCARIFIED, THEN THE DEPTH OF THE SCARIFICATION SHOULD BE SIX TO NINE INCHES. TO RIP THE SUBGRADE, USE A SUBSOIL RIPPER TO MAKE PARALLEL RIPS SIX TO NINE INCHES DEEP SPACED THREE FEET APART ALONG THE LENGTH OF THE PERMEABLE PAVEMENT EXCAVATION. IN SILTY OR CLAYEY SOILS, CLEAN COARSE SAND MUST BE POURED OVER THE RIPPED SURFACE TO KEEP IT FREE-FLOWING (BROWN AND HUNT 2005). AN ALTERNATIVE TO RIPPING IS TRENCHING. IF TRENCHING IS CHOSEN, THEN PARALLEL TRENCHES 12 INCHES WIDE BY 12 INCHES DEEP SHALL BE MADE ALONG THE LENGTH OF THE PERMEABLE PAVEMENT EXCAVATION. EXCAVATE TRENCHES EVERY 6 FEET (MEASURED FROM CENTER TO CENTER OF EACH TRENCH) AND FILL WITH 1/2 INCH OF CLEAN COURSE SAND AND 11.5 INCHES OF #67 STONE AGGREGATE (BROWN AND HUNT 2009).

CONSTRUCTION STEP 3: TEST THE SUBGRADE SOIL INFILTRATION RATE (INFILTRATION SYSTEMS ONLY)

A DIRECT MEASUREMENT OF THE SOIL'S INFILTRATION RATE MUST BE CONDUCTED IMMEDIATELY AFTER EXCAVATION AND BEFORE THE AGGREGATE IS PLACED. INFILTRATION RATE TESTING MUST BE CONDUCTED BY AN APPROPRIATELY-QUALIFIED PROFESSIONAL. THE RESULTS OF THE TESTING MUST BE GIVEN TO THE DESIGNER OF RECORD FOR REVIEW.

CONSTRUCTION STEP 4: TEST THE SUBGRADE SOIL INFILTRATION RATE (INFILTRATION SYSTEMS ONLY)

IF THE SOIL TEST SHOWS AN INFILTRATION RATE(S) THAT IS LOWER THAN THE RATE(S) USED IN THE FINAL DESIGN, THEN THE DESIGNER MUST CHECK THE CALCULATIONS AND MAY NEED TO ADJUST THE DESIGN. THE CONSTRUCTION DOCUMENTS WILL BE REVISED TO ACCOUNT FOR THESE CHANGES.

ACCESSIBLE PARKING REQUIREMENTS

TOTAL PARKING SPACES PROVIDED	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED	MINIMUM NUMBER OF SPACES REQUIRED TO BE VAN ACCESSIBLE
1 TO 25	1	1
26 TO 50	2	1
51 TO 75	3	1
76 TO 100	4	1
101 TO 150	5	1
151 TO 200	6	1
201 TO 300	7	1
301 TO 400	8	1
401 TO 500	9	1
501 TO 1000	2% OF TOTAL	1 FOR EVERY 4 ACCESSIBLE SPACES
1001 AND OVER	2% PLUS 1 FOR EACH 100 OVER 1000	1 FOR EVERY 4 ACCESSIBLE SPACES

SECTION 412.02 OF THE AMERICAN WITH DISABILITIES ACT (ADA) SEE 412.22(a) FOR MEDICAL CARE FACILITIES

ACCESSIBLE PARKING MARKINGS

LEGEND AND BORDER - GREEN BACKGROUND - WHITE

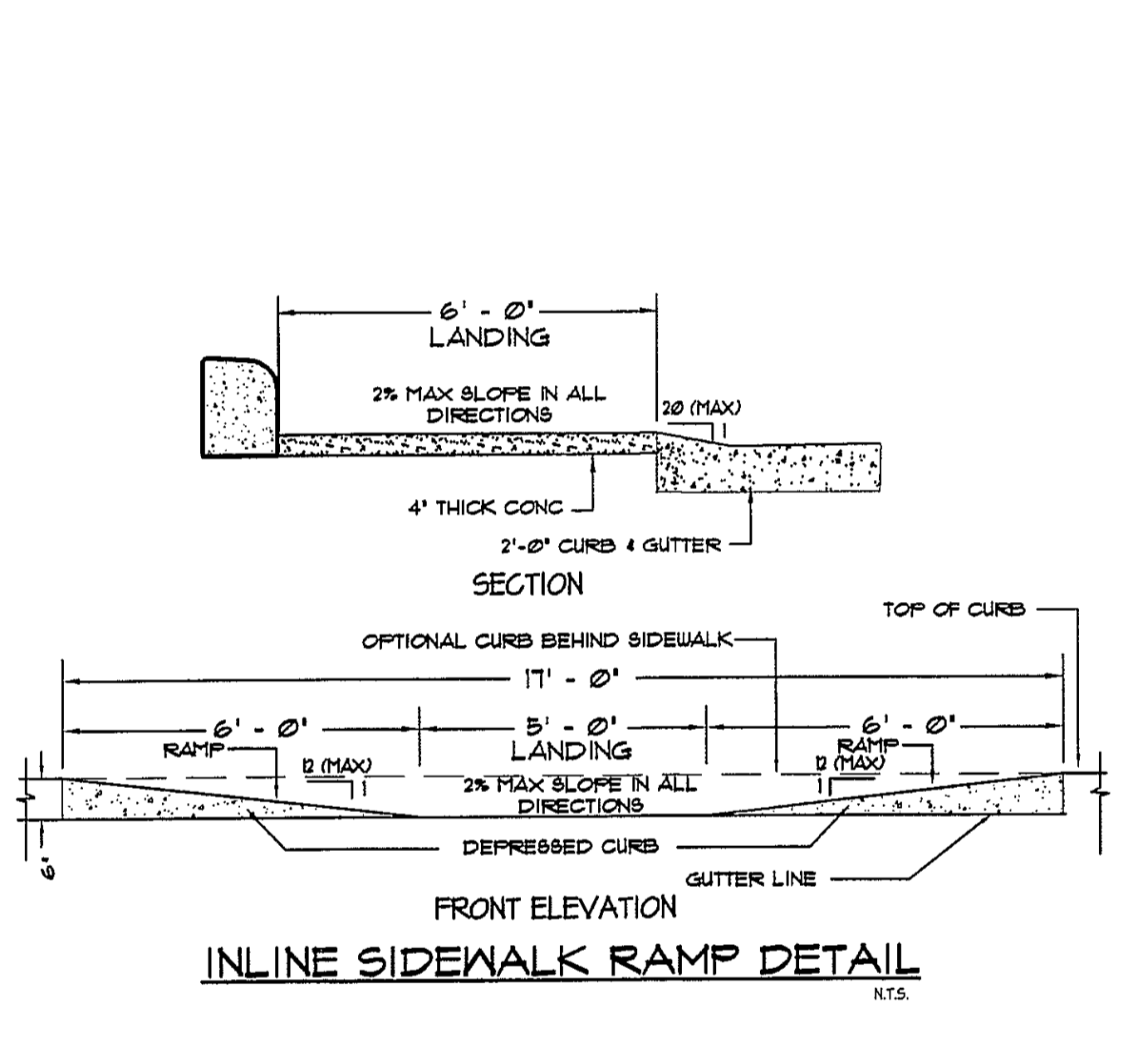
MAXIMUM PENALTY \$250

GS20-37.6

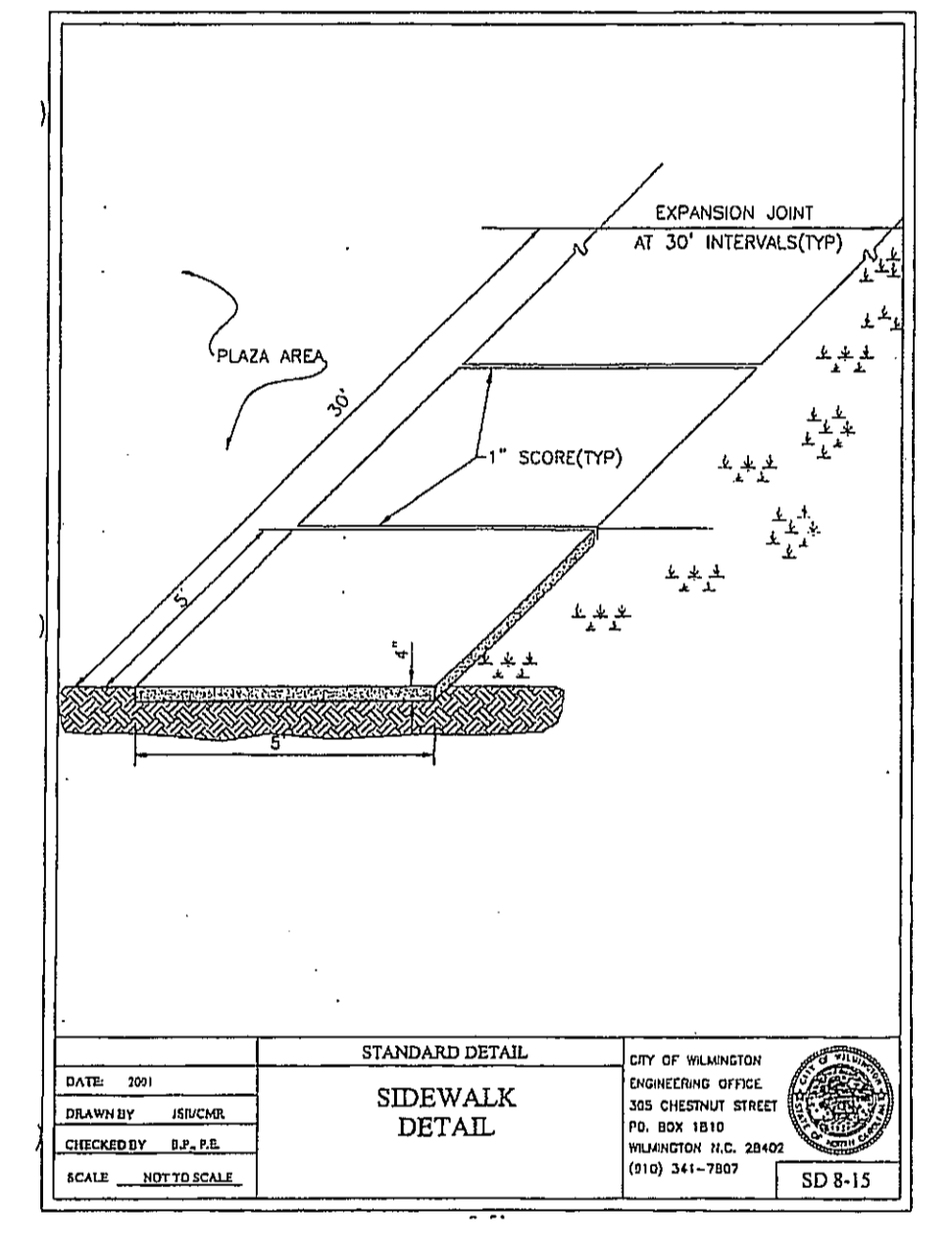
LEGEND AND BORDER - GREEN BACKGROUND - WHITE

LEGEND AND BORDER - GREEN BACKGROUND - WHITE

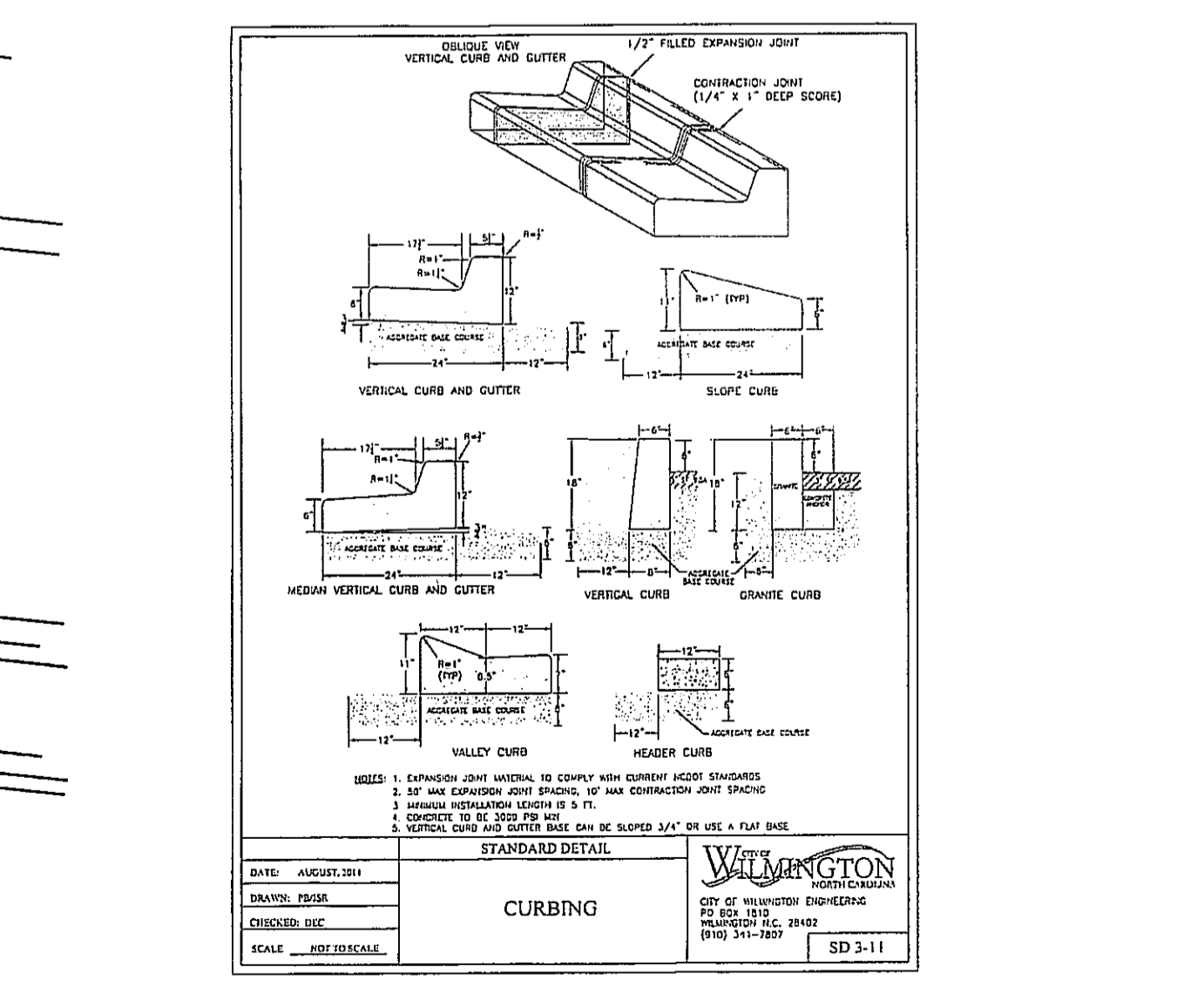
ACCESSIBLE PARKING STANDARDS N.T.S.



INLINE SIDEWALK RAMP DETAIL



CONCRETE SIDEWALKS



CURBING

* ALL NOTES ARE TAKEN FROM NCDENR STORMWATER BMP MANUAL Chapter Revised: 06-01-12

OWNER / DEVELOPER:
 BRC WILMINGTON LLC
 5826 SAMET DRIVE, SUITE 105
 HIGH POINT, NC 27265
 PHONE: (336) 889-1512
 FAX: (336) 889-1501

ENGINEER:
 CPT ENGINEERING & SURVEYING, INC.
 4400 TYNING STREET
 HIGH POINT, NC 27265
 CONTACT: CHUCK TRUBY, P.E.
 PHONE: (336) 812-8800 ext:304
 FAX: (336) 812-8780

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

REVISIONS

NO.	DATE	DESCRIPTION

ENGINEERING AND SURVEYING, INC.
 LAND DEVELOPMENT CONSULTING
 CORPORATE LICENSE NUMBER C-1975
 4400 TYNING STREET
 HIGH POINT, NORTH CAROLINA 27265
 PHONE: (336) 812-8800 ~ FAX: (336) 812-8780

SEAL 14984
 NORTH CAROLINA PROFESSIONAL ENGINEER
 CHUCK TRUBY, P.E.

ANNEXE AT THE RESERVE
 CITY OF WILMINGTON ~ WILMINGTON TOWNSHIP
 NEW HANOVER COUNTY, NORTH CAROLINA

NOTES and DETAILS

SCALE: N.T.S.

DATE: 03/17/15

PROJECT: 1140-12

DRAWN BY: TGL

SHEET D2

LANDSCAPE PLAN & INSTALLATION

Before the issuance of a building permit for the construction, renovation or alteration of any structure, a landscape plan including the type, amount and location of any required landscaping prepared in conformance with the provisions of this section shall be submitted by the property owner and shall be approved by the city manager.

(b) No certificate of occupancy for any construction or renovations shall be approved by the zoning inspector, until:

- The required landscaping is completed in accordance with the approved plan or
- A letter of credit or certified check has been posted, which is available to the city, and in sufficient amount to assure installation of the required landscaping. The amount shall be submitted by the developer and reviewed by the city manager as to acceptability.
- No surety or portion thereof, as provided for in this section, shall be released by the city until all landscaping has been installed, inspected, and approved, and until all required certification of such approval has been presented to the city.

(c) The board of adjustment may modify or waive the requirements of Division VII of this article, where it can be demonstrated by the property owner that the specific screening buffer or landscaped open space is not needed for the protection of surrounding residential areas because of intervening streets, roadways, drainage ways, or other factors such as natural growth of sufficient height and density to serve the same purpose as the required screening buffer.

(d) If any requirements of this article conflict with other requirements of this ordinance, the more stringent or higher standard shall control over the less stringent or lower standard.

TREE PROTECTION DURING CONSTRUCTION

(a) To preserve existing trees specified on the required landscape plan to remain on the site as a function of limiting purposes of this section, the critical root zone shall be protected by proper installation of barriers and signage from vehicular movement, material storage, compaction, grading, excavating, and other development related activities during construction and in the final landscape design.

(b) The critical root zone (CRZ) shall be protected during construction by approved tree protection fencing and practices. Tree protective fencing shall be shown on site plans and grading plans around each tree, cluster of trees, at perimeter of tree-free areas, and at limits of disturbance. No equipment is allowed on the site until all tree protection fencing and silt fencing has been installed and approved. Tree protective fencing shall remain in place through completion of construction activities.

(c) If the entire CRZ cannot be preserved, the disturbed area shall extend no closer to the protected tree trunk than one-half (1/2) the radius of the CRZ. In no case can more than forty (40) percent of the CRZ be disturbed.

(d) Disturbance of the CRZ will only be allowed on one (1) side of the retained tree and only with prior approval by the appropriate reviewing agency.

(e) Prior to grading, tree roots shall be pruned using appropriate arboriculture pruning tools and practices.

(f) Disturbance other than that allowed on the approved plan, including incorrectly placed tree protection fencing or improper root pruning constitutes negligence and will require the owner to post an irrevocable letter of credit or other means of financial assurance approved by the reviewing agency for three (3) years to provide for mitigation of the tree per section 18-400 to be released if determined by the reviewing agency that the tree is not at risk of dying due to the disturbance.

(g) Any person who is responsible for failing to properly install or maintain protection measures pursuant to this article shall be subject to a fine of five hundred dollars (\$500.00) per day and a stop work order shall be placed on the project. The owner of the property shall also be a jointly and severally responsible party if the improper practices are conducted by an employee, agent, or other person under the control, employ, or direction of the property owner.

MAINTENANCE

(a) All planted and retained living material, required to meet the provisions of this section, shall be perpetually protected and maintained to professionally accepted standards by joint and several responsibility of the owner, occupant, tenant, and respective agents of the property on which the material is located. Maintenance of trees on nonresidential property shall be performed by a professional that has qualified that they are knowledgeable of both the ANSI standards and the OSHA standards for tree protection, removal, and safety and that they are insured against potential damages. Any planted material that becomes damaged or diseased or dies, or is improperly maintained shall be replaced by the owner within sixty (60) days of the occurrence of such condition. If, in the opinion of the city manager, there are seasonal conditions which will not permit the timely replacement of the vegetation (e.g., too hot or too cool for successful replanting) this requirement may be administratively waived until a time certain such that the replanting would be safe.

(b) In addition to requirements for replacement, any person who is responsible for improper maintenance practices of trees on private or public property shall be subject to a fine of four hundred dollars (\$400.00) per tree. The owner of the property shall also be a responsible party if the improper practices are conducted by an employee, agent, or other person under the control or direction of the property owner. Improper maintenance practices for the purpose of this section means any of the following:

- Topping a tree (cutting a significant portion of the terminal growth);
- Cutting upon a tree that destroys its natural habit and pattern of growth;
- Pruning that leaves stubs or results in a flush cut, or splitting of limbs;
- Use of climbing spikes, nails or bolts, except for the purpose of total tree removal or as specified by the American National Standards Institute.

TREES REQUIRED:

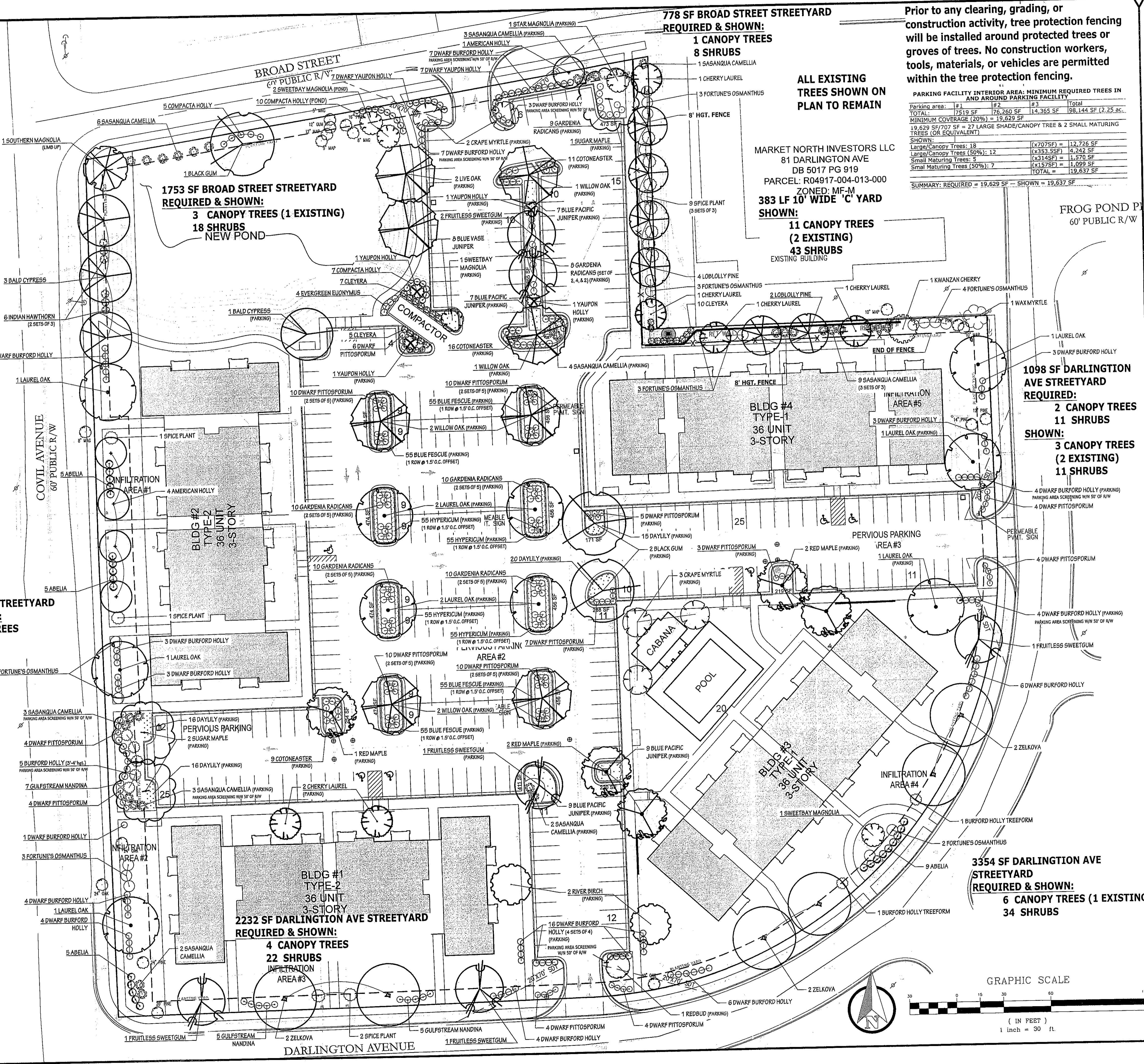
DISTURBED AREA: 6.8 acres x 15 trees/ac. = 102 TREES

EXISTING TREES TO BE PRESERVED:
 BROAD ST.: 12" Gum, 5" Magnolia, 12" Maple(s), 9" Maple, TREE CREDIT: 14
 COVIL AVE.: 8" Magnolia(s), 16" Pine, 8" Magnolia, 24" Oak(s), 24" Oak(s), 24" Pine(s), TREE CREDIT: 20
 DARLINGTON AVE.: 20" Pine, 10" Oak, 14" Pine, 12" Pine, TREE CREDIT: 12 - TOTAL TREE CREDIT = 46
 (S) = Significant tree

TREES TO BE PLANTED:
 LARGE/CANOPY: 47
 EVERGREEN TREES: 17
 SMALL/UNDERSTORY TREES: 15

TOTAL TREES TO BE PLANTED: 79
REQUIRED TREES: 102
TOTAL SITE TREES PRESERVED & PLANTED: 125

Qty.	Name	Botanical Name	Size
24	Abelia	Abelia grandiflora 'Edward Goucher'	12" hgt. min., 3 gal.
5	American Holly	Ilex opaca 'American Holly'	2"-2 1/2" cal., 8"-10" hgt.
4	Bald Cypress	Taxodium distichum	2"-2 1/2" cal., 8"-10" hgt.
3	Black Gum	Nyssa sylvatica	2"-2 1/2" cal., 8"-10" hgt.
220	Blue Fescue	Festuca ovina alba	1 gal.
32	Blue Pacific Juniper	Juniperus conferta 'Blue Pacific'	3 gal.
8	Blue Vase Juniper	Juniperus chinensis 'Blue Vase'	12" hgt. min., 3 gal.
5	Burford Holly	Ilex cornuta 'Burfordi'	3"-4" hgt.
2	Burford Holly Treeform	Ilex cornuta 'Burfordi'	4'-5" hgt., tree
6	Cherry Laurel	Prunus caroliniana	8"-10" hgt.
28	Cleyera	Cleyera japonica	36"+ hgt. min.
12	Compact Holly	Ilex crenata 'Compacta'	12" hgt. min., 3 gal.
36	Cotoneaster, Rockspray	Cotoneaster horizontalis var. perpusillus	3 gal.
5	Crape Myrtle	Lagerstroemia indica 'Dynamite'	8"-10" hgt., multi-stem
67	Daylily	Heemerocallis 'Happy Returns' or 'Suzie Wong'	1 gal.
83	Dwarf Burford Holly	Ilex cornuta 'Burfordi Nana'	12" hgt. min., 3 gal.
85	Dwarf Pittosporum	Pittosporum tobira 'Wheeler's Dwarf'	12" hgt. min., 3 gal.
14	Dwarf Yaupon Holly	Ilex vomitoria 'Nana'	12" hgt. min., 3 gal.
4	Evergreen Euonymus	Euonymus japonica	36"+ hgt. min.
20	Fortune's Osmanthus	Osmanthus fortunei	36"+ hgt. min.
6	Fruitless Sweetgum	Liquidambar styraciflua 'Rotundifolia'	2"-2 1/2" cal., 8"-10" hgt.
57	Gardenia Radicans	Gardenia jasminoides 'Radicans'	3 gal.
17	Gulfstream Nandina	Nandina domestica 'Gulfstream'	3 gal., 18" hgt. min.
220	Hypericum, St. John's Wort	Hypericum calycinum	1 gal.
6	Indian Hawthorn	Raphiolepis indica 'Clara'	36"+ hgt. min.
1	Kwanzan Cherry	Prunus serrulata 'Kwanzan'	8"-10" hgt.
10	Laurel Oak	Quercus laurifolia	2"-2 1/2" cal., 8"-10" hgt.
2	Live Oak	Quercus virginiana	2"-2 1/2" cal., 8"-10" hgt.
6	Loblolly Pine	Pinus taeda	2"-2 1/2" cal., 8"-10" hgt.
1	Redbud	Cercis canadensis 'Forest Pansy'	8"-10" hgt.
5	Red Maple	Acer rubrum 'October Glory'	2"-2 1/2" cal., 8"-10" hgt.
2	River Birch	Betula nigra 'Heritage'	8"-10" hgt., multi-stem
33	Sasanqua Camellia	Camellia sasanqua 'Yuletide' (or sim.)	36"+ hgt. min.
1	Southern Magnolia	Magnolia grandiflora 'D.D. Blanchard' (or sim.)	2"-2 1/2" cal., 8"-10" hgt.
13	Spice Plant	Magnolia stellata	8"-10" hgt., multi-stem
1	Sugar Maple	Acer saccharum 'Green Mountain' (or sim.)	2"-2 1/2" cal., 10" hgt.
4	Sweetbav Magnolia	Magnolia virginiana	8"-10" hgt., multi-stem
1	Wax Myrtle	Myrica carifera	36"+ hgt. min.
5	Willow Oak	Quercus phellos	2"-2 1/2" cal., 10" hgt.
4	Yaupon Holly	Ilex vomitoria	8"-10" hgt.
6	Zelkova	Zelkova serrata 'Village Green'	2"-2 1/2" cal., 8"-10" hgt.



Prior to any clearing, grading, or construction activity, tree protection fencing will be installed around protected trees or groves of trees. No construction workers, tools, materials, or vehicles are permitted within the tree protection fencing.

PARKING FACILITY INTERIOR AREA: MINIMUM REQUIRED TREES IN AND AROUND PARKING FACILITY

Parking Area	#1	#2	#3	Total
TOTAL	7519 SF	76,260 SF	14,365 SF	98,144 SF (2.25 ac.)
MINIMUM COVERAGE (20%)				19,629 SF
19,629 SF/707 SF = 27 LARGE SHADE/CANOPY TREE & 2 SMALL MATURING TREES (OR EQUIVALENT)				
SHOWN:				
Large/Canopy Trees: 18	(x707SF)			12,726 SF
Large/Canopy Trees (50%): 12	(x353.5SF)			4,242 SF
Small Maturing Trees: 5	(x314SF)			1,570 SF
Small Maturing Trees (50%): 7	(x157SF)			1,099 SF
TOTAL:				19,637 SF
SUMMARY: REQUIRED = 19,629 SF - SHOWN = 19,637 SF				

Signature
RANDAL SCOTT ROMIE, ASLA
 LANDSCAPE ARCHITECT

PO BOX 38903
 Greensboro, NC 27438

336/282-6582

ANNEXE
 AT
 THE
 RESERVE

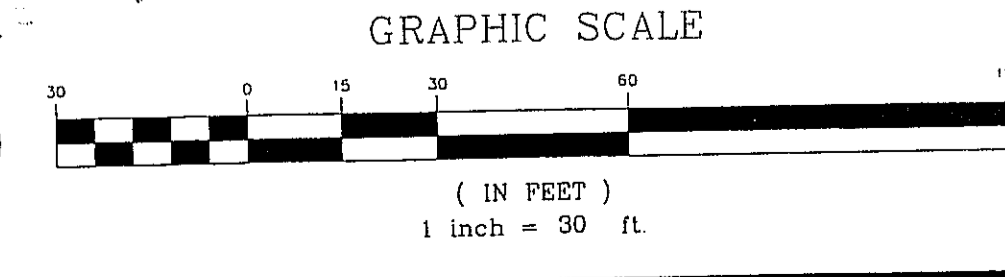
Wilmington,
 North Carolina

OWNER/DEVELOPER:
 BRC Wilmington LLC
 5826 Samet Drive,
 Suite 105
 High Point,
 North Carolina
 27265
 Phone: (336) 889-1512
 Fax: (336) 889-1501

ENGINEERING AND SURVEYING, INC.
 1000 W. HARRIS STREET, SUITE 200
 WILMINGTON, NC 28401
 PHONE: 336-836-2222 • FAX: 336-836-2220

Landscape
 Plan

DATE: 03/03/2015
 PROJECT NO.:
 SCALE: 1" = 30'
 DRAWN BY: SVK
 REVISION:
 03/11/2015 - Updated 6' wide streetyard



LANDSCAPE PLAN & INSTALLATION

Before the issuance of a building permit for the construction, renovation or alteration of any structure, a landscape plan indicating the type, amount and location of any required landscaping prepared in accordance with the provisions of this section shall be submitted by the property owner and shall be approved by the city manager.

- (b) No certificate of occupancy for any construction or renovations shall be approved by the zoning inspector, until:
 - (1) The required landscaping is completed in accordance with the approved plan or
 - (2) A letter of credit or certified check has been posted, which is available to the city, and in sufficient amount to assure installation of the required landscaping. The amount shall be submitted by the developer and reviewed by the city manager or its acceptability.
 - (3) No surety or portion thereof, as provided for in this section, shall be released by the city until all landscaping has been installed, inspected, and approved, and until all required certification of such approval has been presented to the city.
- (c) The board of adjustment may modify or waive the requirements of Division VII of this article, where it can be demonstrated by the property owner that the specific screening buffer or landscaped open space is not needed for the protection of surrounding residential areas because of intervening streets, roadways, drainage ways, or other factors such as natural growth of sufficient height and density to serve the same purpose as the required screening buffer.
- (d) If any requirements of this article conflict with other requirements of this ordinance, the more stringent or higher standard shall control over the less stringent or lower standard.

TREE PROTECTION DURING CONSTRUCTION

- (a) To preserve existing trees specified on the required landscape plan to remain on the site as a function of fulfilling purposes of this section, the critical root zone shall be protected by proper installation of barricades and signage from vehicular movement, material storage, compacting, grading, excavating, and other development related activities during construction and in the final landscape design.
- (b) The critical root zone (CRZ) shall be protected during construction by approved tree protection fencing and practices. Tree protective fencing shall be shown on the plans and grading plans around each tree, cluster of trees, or perimeter of tree-free areas, and at limits of disturbance. No equipment is allowed on the site until all tree protection fencing and silt fencing has been installed and approved. Tree protective fencing shall remain in place through completion of construction activities.
- (c) If the entire CRZ cannot be preserved, the disturbed area shall extend no closer to the protected tree trunk than one half (1/2) the radius of the CRZ. In no case can more than forty (40) percent of the CRZ be disturbed.
- (d) Disturbance of the CRZ will only be allowed on one (1) side of the retained tree and only with prior approval by the appropriate reviewing agency.
- (e) Prior to grading, tree roots shall be pruned using appropriate arboriculture pruning tools and practices.
- (f) Disturbance other than that allowed on the approved plan, including incorrectly placed tree protection fencing or improper root pruning constitutes negligence and will require the owner to post an irrevocable letter of credit or other means of financial assurance approved by the reviewing agency for three (3) years to provide for mitigation of the tree per section 19-400 to be released if determined by the reviewing agency that the tree is not at risk of dying due to the disturbance.
- (g) Any person who is responsible for failing to properly install or maintain protection measures pursuant to this article shall be subject to a fine of five hundred dollars (\$500.00) per day and a stop work order shall be placed on the project. The owner of the property shall also be a jointly and severally responsible party if the improper practices are conducted by an employee, agent, or other person under the control, employ, or direction of the property owner.

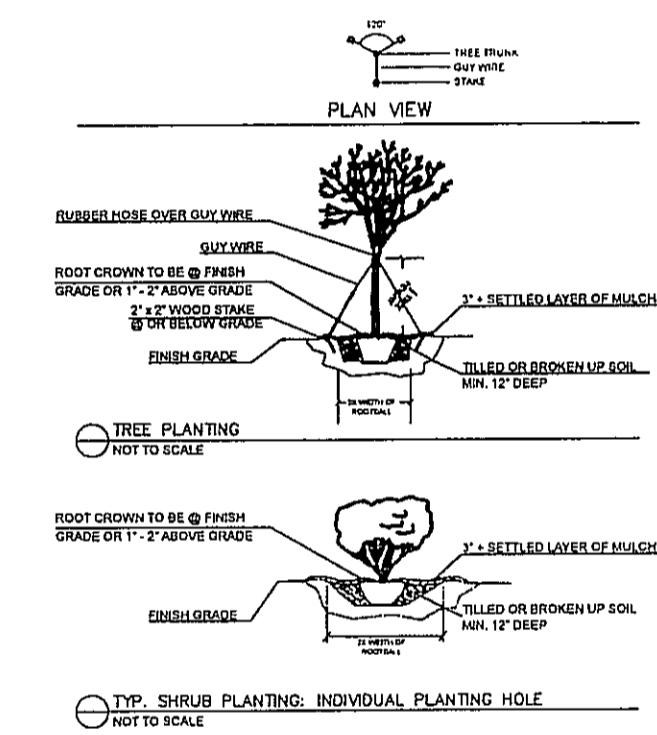
MAINTENANCE

- (a) All planted and retained living material, required to meet the provisions of this section, shall be perpetually protected and maintained to professionally accepted standards by joint and several responsibility of the owner, occupant, tenant, and respective agents of the property on which the material is located. Maintenance of trees on nonresidential property shall be performed by a professional that has signified that they are knowledgeable of both the ANSI standards and the OSHA standards for tree pruning, removal, and safety and that they are insured against potential damages. Any planted material that becomes damaged or diseased or dies, or is temporarily maintained shall be replaced by the owner within sixty (60) days of the occurrence of such condition. If in the opinion of the city manager, there are seasonal conditions which will not permit the timely replacement of the vegetation (e.g., too hot or too cool for successful replanting) this requirement may be administratively waived until a time certain such that the replanting would be safe.
- (b) In addition to requirements for replacement, any person who is responsible for improper maintenance practices of trees on private or public property shall be subject to a fine of four hundred dollars (\$400.00) per tree. The owner of the property shall also be a responsible party if the improper practices are conducted by an employee, agent, or other person under the control or direction of the property owner. Improper maintenance practices for the purpose of this section means any of the following:
 - (1) Topping a tree (cutting a significant portion of the terminal growth);
 - (2) Cutting upon a tree that destroys its natural habit and pattern of growth;
 - (3) Pruning that leaves stubs or results in a flush cut, or splitting of limbs;
 - (4) Use of climbing spikes, nails or hooks, except for the purpose of total tree removal or as specified by the American National Standards Institute.

FOUNDATION PLANTINGS:

- BUILDING TYPE 1 - FRONT/REAR = 212', BUILDING HGT. = 36'**
REQUIRED: 36' X 212' = 7632 SF X 12% minimum = 916 SF+
SHOWN: 970 SF*
- BUILDING TYPE 1 - SIDE = 60', BUILDING HGT. = 36'**
REQUIRED: 36' X 60' = 2160 SF X 12% minimum = 260 SF+
SHOWN: 300 SF*
- BUILDING TYPE 2 - FRONT/REAR = 204', BUILDING HGT. = 36'**
REQUIRED: 36' X 204' = 7344 SF X 12% minimum = 882 SF+
SHOWN: 884 SF*
- BUILDING TYPE 2 - SIDE = 88', BUILDING HGT. = 36'**
REQUIRED: 36' X 88' = 3168 SF X 12% minimum = 381 SF+
SHOWN: 390 SF*

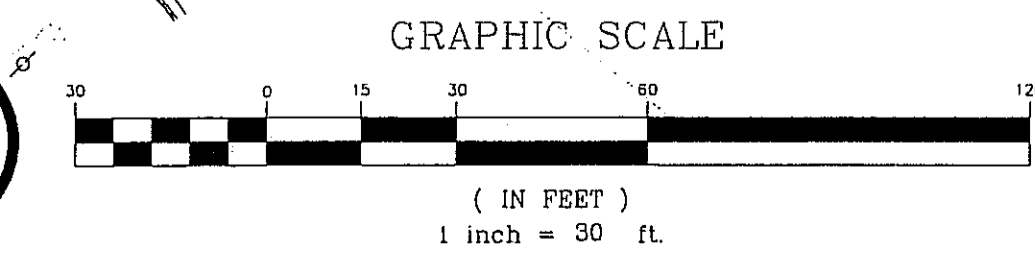
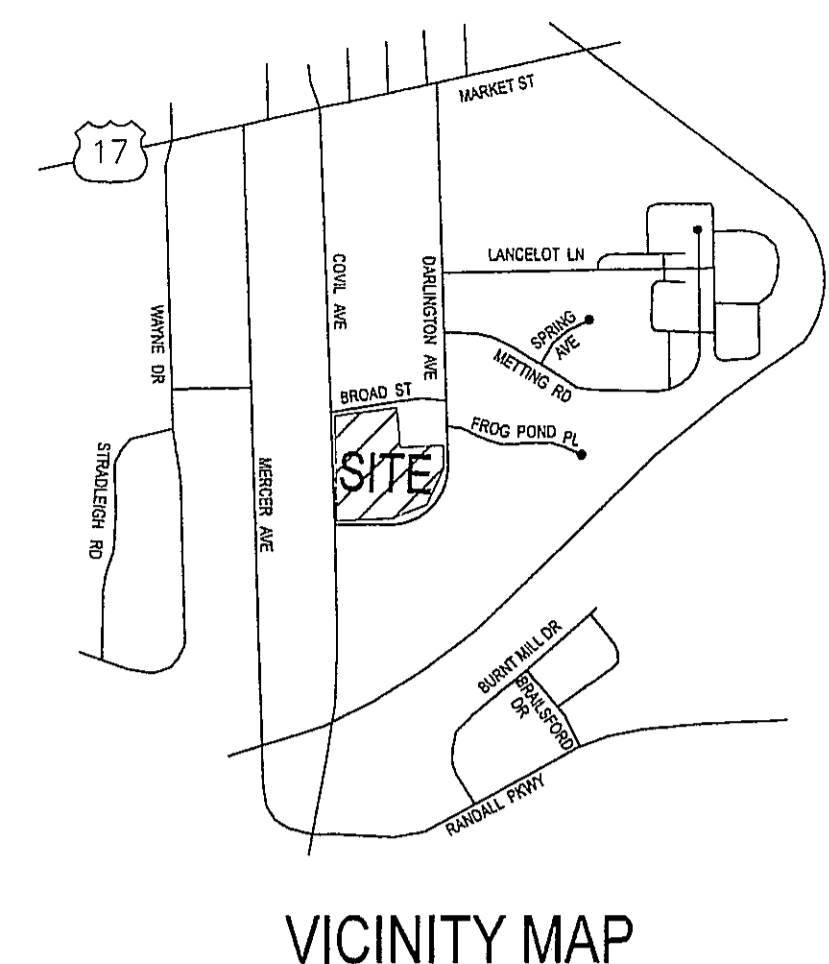
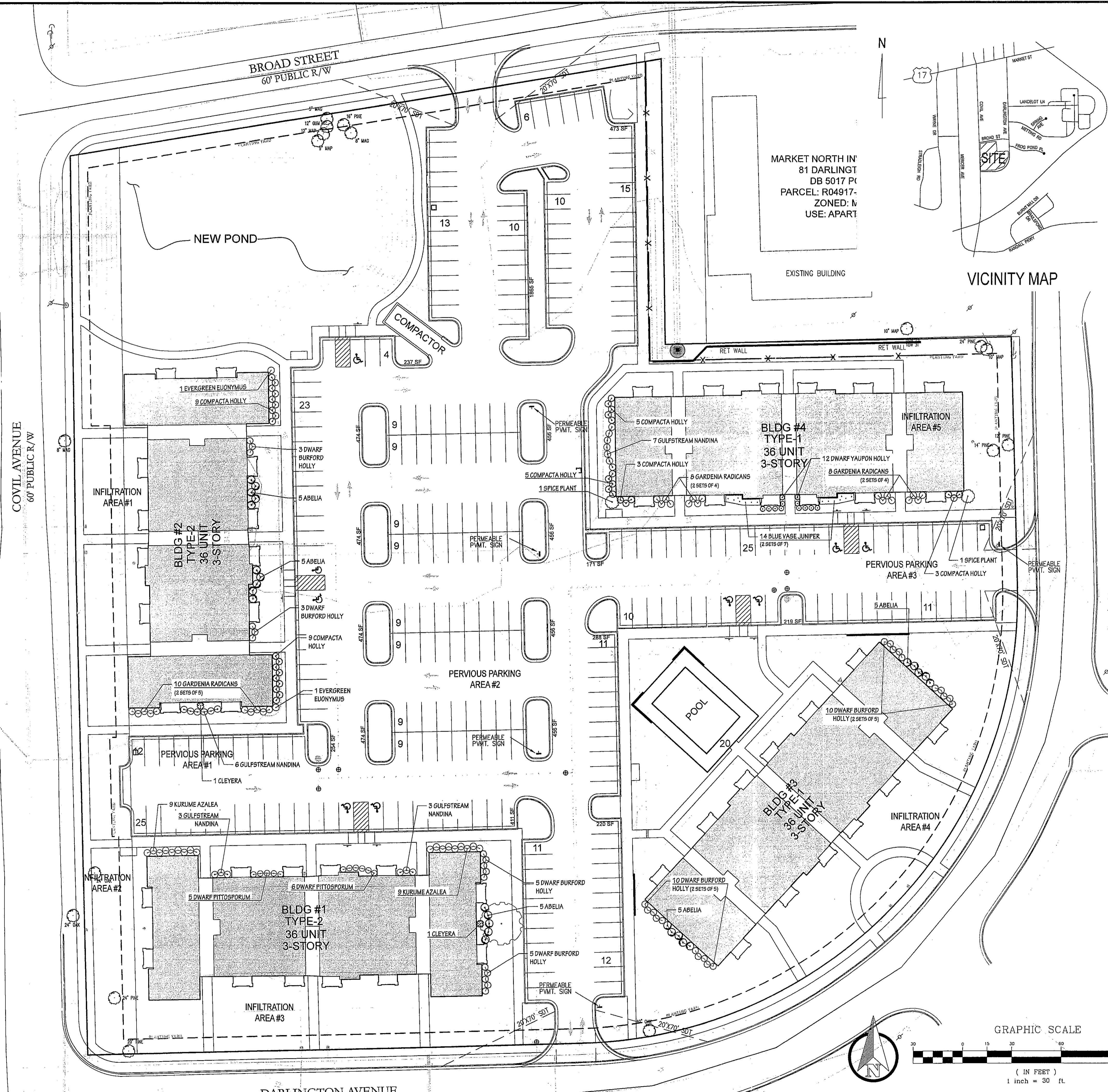
* SF REFLECTS THE AMOUNT OF MULCHED BEDS THAT WILL BE PROVIDED TO HOLD THE PLANTS SHOWN ON L2.



Qty.	Name	Botanical Name	Size
25	Abelia	Abelia grandiflora	12" hgt. min., 3 gal.
14	Blue Vase Juniper	Juniperus chinensis 'Blue Vase'	12" hgt. min., 3 gal.
2	Cleyera	Cleyera japonica	36" hgt. min.
34	Compacta Holly	Ilex crenata 'Compacta'	12" hgt. min., 3 gal.
36	Dwarf Burford Holly	Ilex cornuta 'Burford Nana'	12" hgt. min., 3 gal.
11	Dwarf Pittosporum	Pittosporum tobira 'Wheeler's Dwarf'	12" hgt. min., 3 gal.
12	Dwarf Yaupon Holly	Ilex vomitoria 'Nana'	12" hgt. min., 3 gal.
2	Evergreen Euonymus	Euonymus japonica	36" hgt. min.
26	Gardenia Radicans	Gardenia jasminoides 'Radicans'	12" hgt./spd., 3 gal.
19	Gulfstream Nandina	Nandina domestica 'Gulfstream'	12" hgt. min., 3 gal.
18	Kurume Azalea	Rhododendron obtusum	12" hgt. min., 3 gal.
2	Spice Plant	Illicium anisatum	36" hgt. min.

* This Developer will provide foundation plantings for all four sides of the buildings, will be more than what is shown, and will specifically address the architectural features of the buildings. The building landscape design will be completed in the near future and can be submitted to the city if desired. A pool landscape plan will also be provided to show additional plantings.

Prior to any clearing, grading, or construction activity, tree protection fencing will be installed around protected trees or groves of trees. No construction workers, tools, materials, or vehicles are permitted within the tree protection fencing.

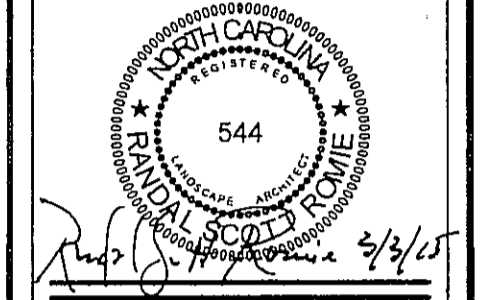


Designature

RANDAL SCOTT ROMIE, ASLA
LANDSCAPE ARCHITECT

PO BOX 38903
Greensboro, NC 27438

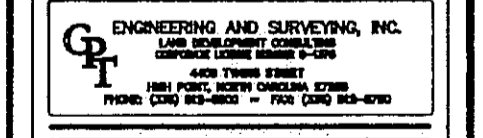
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ANNEXE
AT
THE
RESERVE

Wilmington,
North Carolina

OWNER/DEVELOPER:
BRC Wilmington LLC
5826 Samet Drive,
Suite 105
High Point,
North Carolina
27265
Phone: (336) 889-1512
Fax: (336) 889-1501



Building
Foundations
Landscape
Plan

DATE: 03/03/2015
PROJECT NO.
SCALE: 1" = 30'
DRAWN BY: SVK
REVISION: