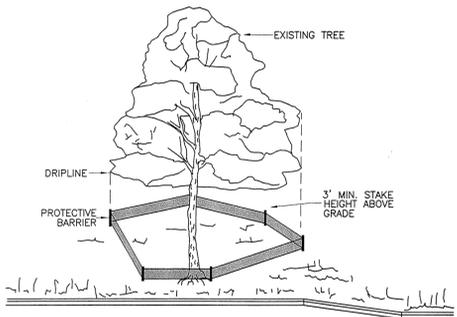
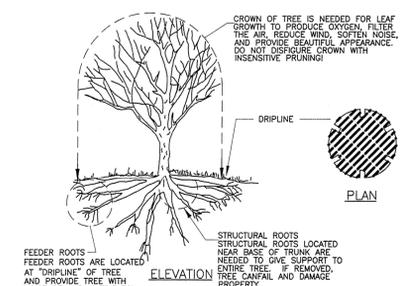


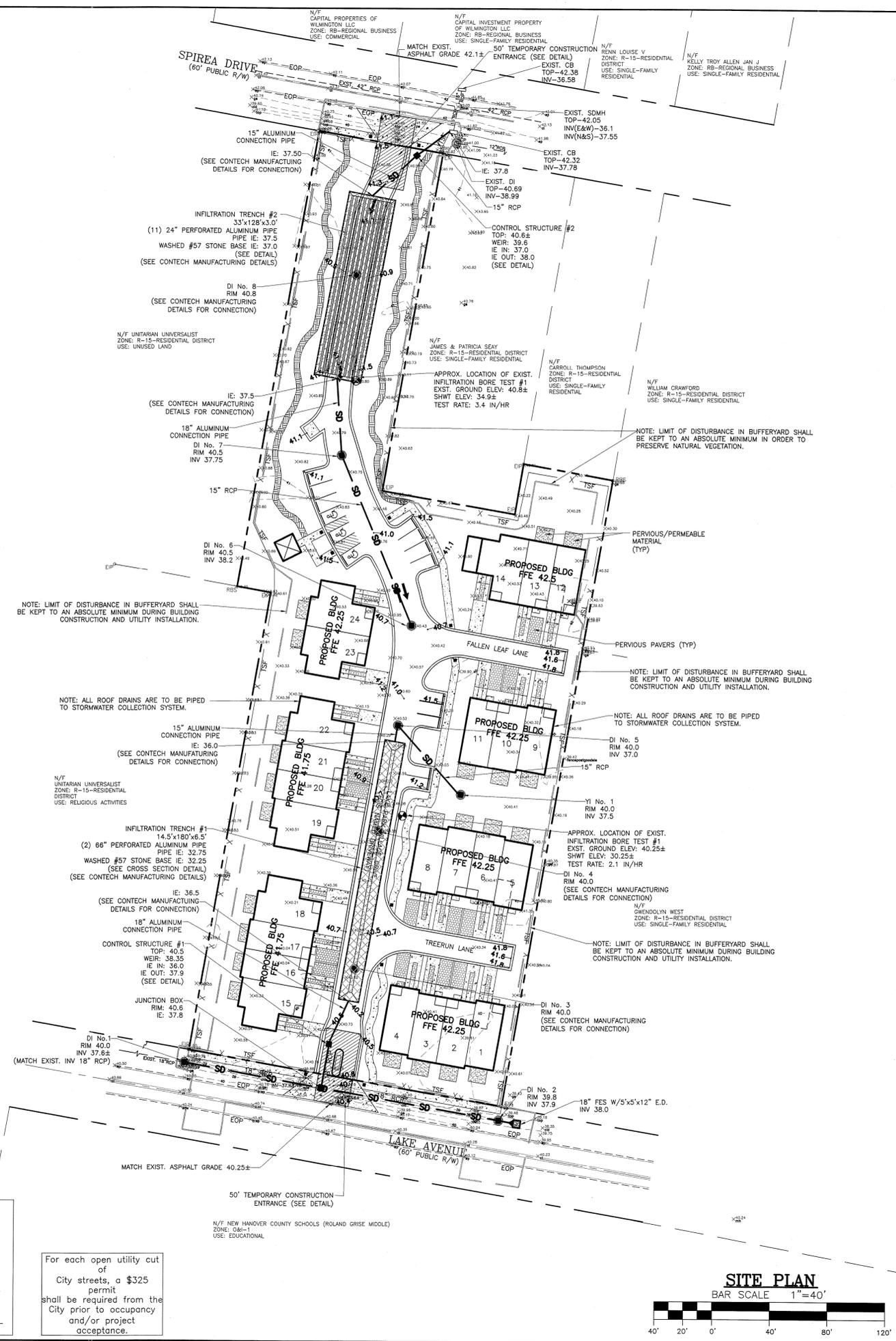
- NOTES:**
- 1) TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
 - 2) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
 - 3) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
 - 4) ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
 - 5) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
 - 6) A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
 - 7) INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
 - 8) CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
 - 9) PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES.
 - 10) NO CONSTRUCTION WORKERS, TOOLS MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
 - 11) NO OBSTRUCTIONS, INCLUDING VEGETATION SHALL BE PERMITTED IN THE SPACE BETWEEN 30' AND 10' ABOVE GROUND LEVEL WITHIN THE SIGHT DISTANCE TRIANGLE.
 - 12) SITE LIGHTING WILL NOT SHINE ONTO ADJACENT RESIDENTIALLY ZONED OR USED PROPERTIES. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
 - 13) SEE LANDSCAPE PLAN AND TREE REMOVAL PLAN FOR TREE PROTECTION LAYOUT.
 - 14) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO RECORDING OF THE FINAL PLAT.
 - 15) PIPE MANUFACTURING REPRESENTATIVE TO BE ON-SITE AT LEAST 2 DAYS FOR TECHNICAL ASSISTANCE DURING INFILTRATION TRENCH PIPE CONSTRUCTION. CONTRACTOR TO COORDINATE WITH CONTECH ENGINEERED SOLUTIONS PRIOR TO CONSTRUCTION. (CONTACT: PHILIP BYRD, 910-228-8421)
 - 16) ALL PATIOS TO BE PERVIOUS/PERMEABLE MATERIALS. (TYP.)
 - 17) CONTRACTOR TO LOCATE DEPTH, MATERIAL, SIZE, AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - 18) INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
 - 19) ANY BROKEN OR MISSING SIDEWALK PANELS AND CURBING WILL BE REPLACED.
 - 20) THE SUBDIVIDER SHALL INSTALL TRAFFIC SIGNALS, TRAFFIC SIGNS, STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION, DEAD-END BARRICADES AND MARKINGS, AND OTHER REQUIRED TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CITY'S TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL.
 - 21) ALL IMPROVEMENTS IN THE RIGHT-OF-WAY INVOLVING STORMWATER MANAGEMENT SHALL COMPLY WITH THE CITY OF WILMINGTON CONSTRUCTION/INSTALLATION STANDARDS (SECTION V-J PER THE CITY OF WILMINGTON TECHNICAL STANDARDS)
 - 22) ALL R/W WORK WILL BE COMPLETED PRIOR TO ANY RAIN EVENT OR WILL NEED SEDIMENT TRAP IN DITCH WITH DETAIL, MAINTENANCE AND CALCULATIONS.



METHOD OF TREE PROTECTION DURING CONSTRUCTION
SD 15-08
NOT TO SCALE



METHOD OF TREE PROTECTION DURING CONSTRUCTION
SD 15-09
NOT TO SCALE

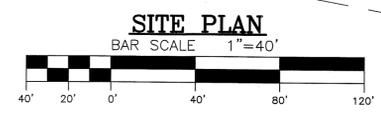


SITE DATA:

PROPERTY OWNER	CENTER 206, LLC
PREVIOUS SITE ADDRESSES	4317, 4319, 4321, 4329 LAKE AVENUE WILMINGTON, NC 28411
PIN NUMBERS	06106-006-006-000 06106-006-005-001 06106-006-042-000 06106-006-005-000 06106-006-043-000
NO WETLANDS LOCATED ON-SITE	
LATITUDE AND LONGITUDE	34°12'25"N 77°52'24"W
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE	
ZONING DISTRICT	MF-L (CD), MULTI-FAMILY LOW DENSITY (CONDITIONAL DISTRICT)
DISTURBED AREA	2.79 AC (TOTAL) 2.57 AC (ON-SITE) 0.22 AC (OFF-SITE)
SETBACKS REQUIRED	FRONT: 15' REAR: 15' SIDE (INTERIOR): 5' SIDE (CORNER): 10'
SETBACKS PROPOSED	FRONT: 18' REAR: 20' SIDE (INTERIOR): 10' AND 25.5' SIDE (CORNER): N/A
TRACT AREA	112,171 SF (2.57 AC)
BUILDING USE	MULTI-FAMILY
PROPOSED # OF UNITS	24 (2-STORY UNITS)
MAXIMUM BUILDING HEIGHT	REQUIRED: 35' PROPOSED: 27'
CAMA LAND USE:	URBAN
EXISTING IMPERVIOUS AREAS (ON-SITE):	
EXISTING BUILDINGS	2,000 SF
EXISTING GRAVEL ROAD	7,100 SF
EXISTING IMPERVIOUS TO BE REMOVED	9,100 SF
EXISTING IMPERVIOUS TO REMAIN	0 SF (0.0%)
PROPOSED IMPERVIOUS AREAS (ON-SITE):	
PROPOSED BUILDINGS	23,856 SF
PROPOSED SHED	188 SF
TOTAL BUILDING LOT COVERAGE	24,044 SF (21.5%)
PROPOSED ASPHALT/CURB	21,540 SF
PROPOSED CONCRETE (SIDEWALK/PATIO/D.W.)	9,815 SF
PROPOSED PERVIOUS PAVERS/CONCRETE	720 SF
(TOTAL: 2,879 SF)	
(WITH 75% IMPERVIOUS CREDIT)	
PROPOSED FUTURE IMPERVIOUS	2,000 SF
PROPOSED ON-SITE IMPERVIOUS AREA	58,127 SF (52%)
PROPOSED+EXISTING IMPERVIOUS AREA	58,127 SF (52%)
PROPOSED IMPERVIOUS AREAS (OFF-SITE):	
PROPOSED DRIVEWAY APRON	1,895 SF
PROPOSED OFF-SITE SIDEWALK	975 SF
PROPOSED OFF-SITE IMPERVIOUS AREA	2,660 SF
ON-SITE+OFF-SITE IMPERVIOUS AREA	60,787 SF (50%)
PARKING INFO:	
MINIMUM: 2.25/3-BED UNIT (24 UNITS)	54 SPACES
MAXIMUM: 2.50/3-BED UNIT (24 UNITS)	60 SPACES
PROPOSED OFF-STREET PARKING	12 SPACES
PROPOSED HANDICAPPED PARKING	3 SPACES
REQUIRED HANDICAPPED PARKING	3 SPACES
PROPOSED DRIVEWAY PARKING	41 SPACES
TOTAL PARKING SPACES PROVIDED	56 SPACES
PUBLIC WATER AND SEWER BY CEPWA	
PROPOSED WATER FLOW: (360 GPD/UNIT x 24 UNITS x 110%)	9,504 GPD
PROPOSED SEWER FLOW: (360 GPD/UNIT x 24 UNITS)	8,640 GPD
*NOTE: 1 UNIT = 3 BEDROOMS	
*NOTE: OPEN SPACE, SETBACKS, AND BUFFERS SHOWN ON LANDSCAPE PLAN.	

LEGEND

---+31.2	EXIST. SPOT ELEVATION
---31.2	PROPOSED SPOT ELEVATION
---	PROPERTY LINE (BOUNDARY)
---	RIGHT OF WAY
---	LIMITS OF DISTURBANCE
TSF x TSF	TEMPORARY SILT FENCE
[Pattern]	PROPOSED CONCRETE AREA
[Pattern]	PROPOSED MULCHED AREA
[Pattern]	INFILTRATION TRENCH
[Pattern]	PERVIOUS PAVERS
[Pattern]	PROPOSED PERVIOUS CONCRETE PATIO
[Pattern]	INLET PROTECTION



Approved Construction Plan
Name: *Dawn M. Smith*
Date: *7/20/13*
Traffic
Fire

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE: *7/30/13* PERMIT # *Grading Only*
SIGNED: *[Signature]*

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

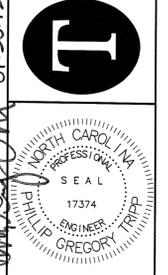
REVISIONS

No./Date	Description	By

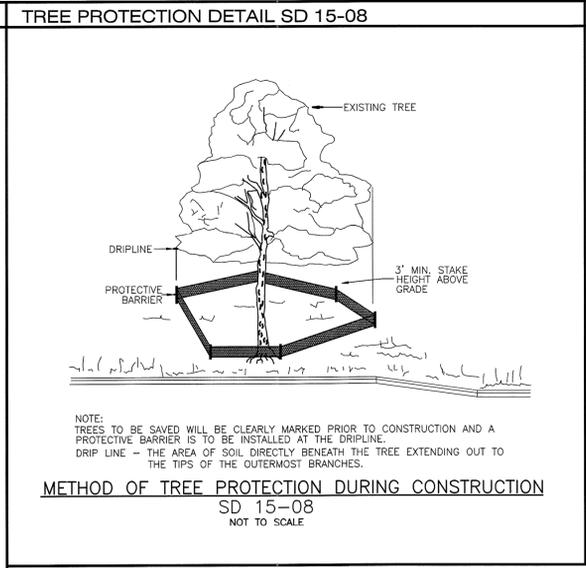
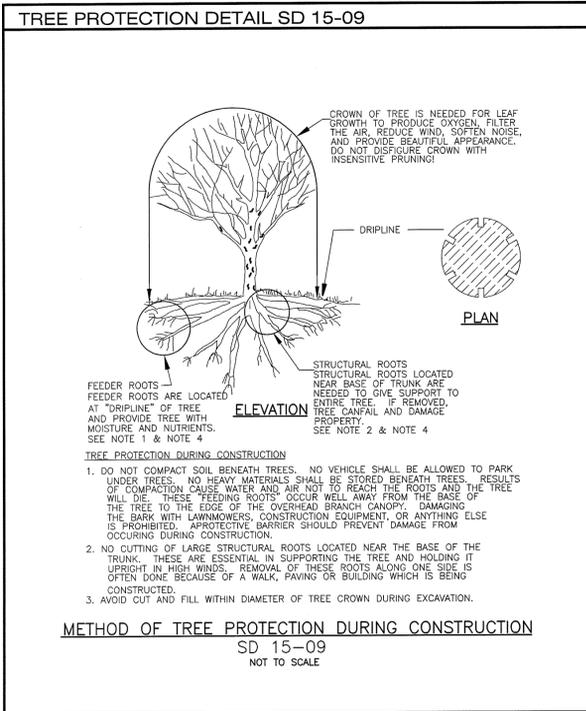


GRADING, DRAINAGE, EROSION CONTROL, AND STORMWATER MANAGEMENT PLAN
LAKE PARK VILLAGE
4329 LAKE AVENUE
WILMINGTON, NORTH CAROLINA

TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631
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NC LICENSE NO. C-15197



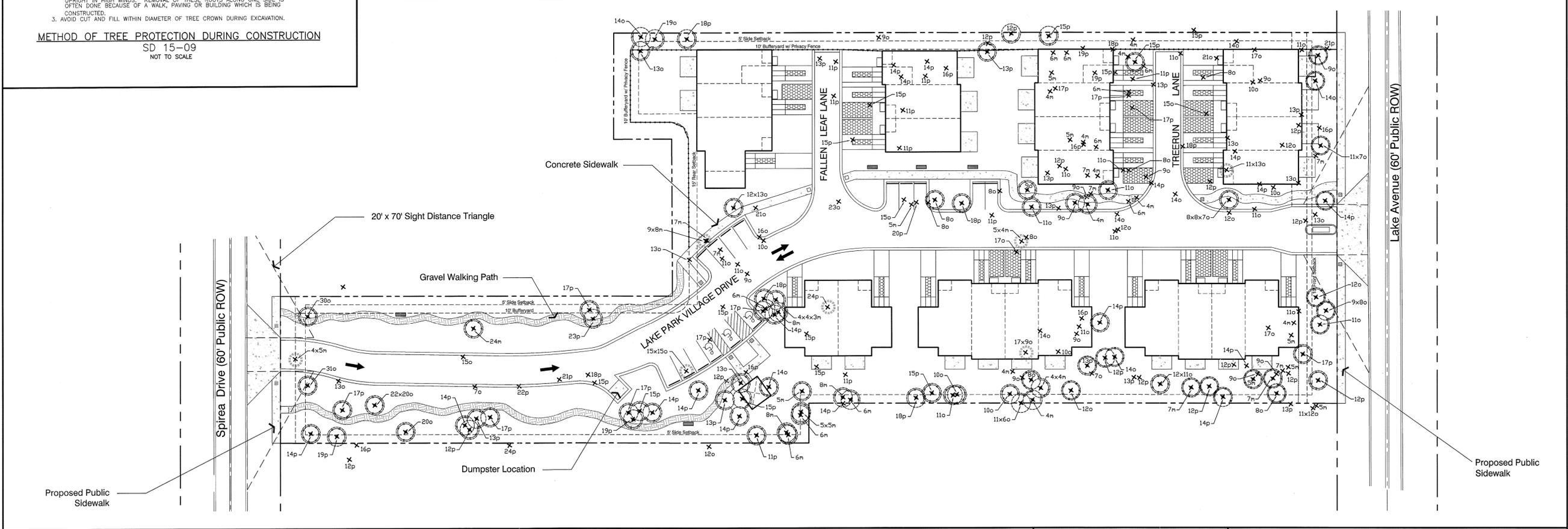
DATE: 07-30-13
DESIGN: PGT
DRAWN: EJW
C3
SHEET 3 OF 5
12034



TREE REMOVAL AND MITIGATION

SIGNIFICANT TREES TO BE REMOVED			
QUANT.	SIZE	COMMON NAME	%MITIGATION
1	24"	OAK / OTHER HARDWOOD	100% =24
1	26"	OAK / OTHER HARDWOOD	100% =26
1	30"	OAK / OTHER HARDWOOD	100% =30
1	24"	PINE / OTHER CONIFER	100% =24
2	9"	MAGNOLIA / OTHER FLOWERING	100% =9
1	17"	MAGNOLIA / OTHER FLOWERING	100% =17
TOTAL:			130"
TOTAL MITIGATION REQUIRED: 130" x 2 = 260" / 3 = 87 TREES			
PROPOSED TREES TO BE PLANTED (OUTSIDE BUFFER / STREET YARD)			
QUANT.	SIZE	COMMON NAME	CREDITS
29	2.5-3"	CHINESE ELM	29
27	2-2.5"	GRAPE MYRTLE	27
18	2-2.5"	FLOWERING CHERRY	18
TOTAL:			74 CREDITS

EXISTING RETAINED TREES TO COUNT TOWARDS MITIGATION (OUTSIDE BUFFER / STREET YARD)			
QUANT.	SIZE	COMMON NAME	CREDITS
8	6-11"	OAK / OTHER HARDWOOD	8x2=16
5	12-17"	OAK / OTHER HARDWOOD	5x3=15
3	18-23"	OAK / OTHER HARDWOOD	3x4=12
1	25"	OAK / OTHER HARDWOOD	25/6=4
1	30"	OAK / OTHER HARDWOOD	30/6=5
1	31"	OAK / OTHER HARDWOOD	31/6=5
1	42"	OAK / OTHER HARDWOOD	42/6=7
21	12-17"	PINE / OTHER CONIFER	21x3=63
4	18-23"	PINE / OTHER CONIFER	4x4=16
3	2-5"	MAGNOLIA / OTHER FLOWERING	3
7	6-11"	MAGNOLIA / OTHER FLOWERING	7x2=14
1	24"	MAGNOLIA / OTHER FLOWERING	24/6=4
TOTAL:			164 CREDITS
TREE MITIGATION CALCULATIONS (TOTAL)			
REQUIRED MITIGATION:			87 TREES
TOTAL CREDIT FOR RETAINED TREES AND TREES TO BE PLANTED:			238 CREDITS



SITE DATA

ADDRESS: 4317, 4319, 4321& 4329 Lake Avenue
4310 Spirea Drive

OWNER: Center 206 LLC
6258 Ingleside Dr., Wilmington, NC 28409

PARCEL ID: R06106-006-042-000, R06106-006-005-001, R06106-006-005-000, R06106-006-043-000, R06106-006-006-000

TOTAL PROJECT AREA: 112,171 SF (2.57 AC.)

LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
BUFFER YARD (ABUTTING RESIDENTIAL)	20'	10' (with Fence)
TREES @ 15 PER ACRE DISTURBED	39	115

Approved Construction Plan

Name: *Dawn M. Brothman* Date: *7/30/13*

Planning: *Dawn M. Brothman*

Traffic: *Ergy Kallit*

Fire: *Ergy Kallit*

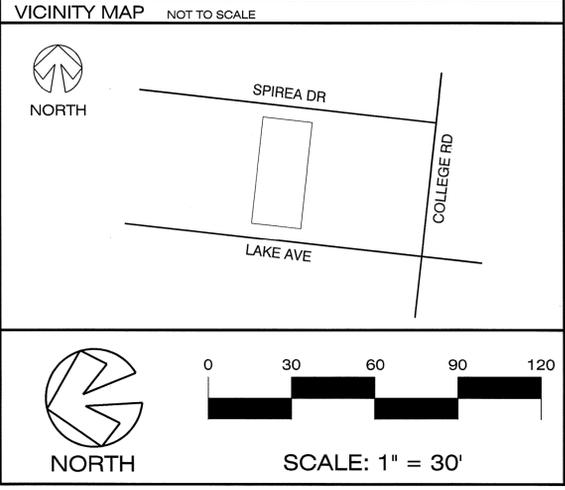
- GENERAL NOTES**
- SITE BOUNDARY, TREES, AND WETLAND INFORMATION TAKEN FROM SURVEY PROVIDED BY GARY W. KEYS LAND SURVEYING, DATED 07/04/12.
 - ADJACENT PROPERTY LINES ARE BASED ON NEW HANOVER COUNTY G.I.S. DATA AND ARE APPROXIMATE.
 - EXISTING WATER AND SEWER LINES ARE OWNED BY CAPE FEAR PUBLIC UTILITY AUTHORITY. EXISTING STORM DRAINAGE INFORMATION PROVIDED BY CITY OF WILMINGTON STORMWATER SERVICES.
 - ALL PROTECTED TREES WILL BE PRESERVED OR MITIGATED.
 - SITE IS NOT LOCATED WITHIN A 100-YEAR FLOOD ZONE.
 - SITE IS NOT LOCATED WITHIN A CONSERVATION OVERLAY DISTRICT.
 - SITE CONTAINS NO 404 WETLANDS.
 - ALL UTILITIES SHALL BE UNDERGROUND.
 - ALL SIGNS WILL BE LOCATED AND APPROVED BY THE CITY OF WILMINGTON PLANNING DEPARTMENT.
 - TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
 - NO EXISTING DRIVEWAYS ARE TO BE CLOSED.
 - CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
 - NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT, AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION METHODS.
 - STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
 - ANY SIGNS TO BE MONUMENT STYLE AND/OR WALL SIGNS.
 - WATER AND SEWER SERVICE SHALL MEET CFPWA DETAILS AND SPECIFICATIONS.
 - PROPOSED WATER SERVICE WILL REQUIRE A STATE WATER PERMIT.
 - PROTECTIVE FENCING IS TO BE PROPERLY MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
 - LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION REQUIREMENTS AND METHODS.
 - ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING AND GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
 - NO EQUIPMENT IS ALLOWED ON THE SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED.
 - REGULATED AND SIGNIFICANT TREES IN THE STREET YARD AND ANY TREES IN ANY REQUIRED BUFFERS ARE REQUIRED TO BE RETAINED.
 - ANY GROUND LEVEL MECHANICAL EQUIPMENT TO BE SCREENED AS NECESSARY.
 - THIS PLAN IS PRELIMINARY AND NOT FOR CONSTRUCTION AND IS SUBJECT TO CHANGE IN ACCORDANCE WITH PROVISIONS OF THE WILMINGTON LAND DEVELOPMENT CODE.

SYMBOL LEGEND

	EXISTING TREE TO REMAIN
	EXISTING TREE TO BE REMOVED
	EXISTING SIGNIFICANT TREE TO BE REMOVED
	TREE PROTECTION FENCE

EXISTING TREE LEGEND (AS SURVEYED BY GARY W. KEYS LAND SURVEYING, DATED 07/04/12):

o	OAK OR OTHER HARDWOOD
m	MAGNOLIA OR OTHER FLOWERING
p	PINE OR OTHER CONIFER



Revisions

CLIENT

Center 206 LLC
6258 Ingleside Drive
Wilmington, NC 28409
PHONE: 910.297.8414
CONTACT: Brooke Richardson

PROJECT

Lake Park Village
4317, 4319, 4321 & 4329 Lake Avenue
& 4312 Spirea Drive, Wilmington, NC
Multi-Family Townhomes

Date: 07.23.2013
Phase: 000
Job Number: 100-440
Designed by: MLD
Drawn by: MWL
Checked by: JWM

Sheet Title:
TREE PROTECTION & REMOVAL PLAN

Sheet Number
L1.2
of 4 sheets