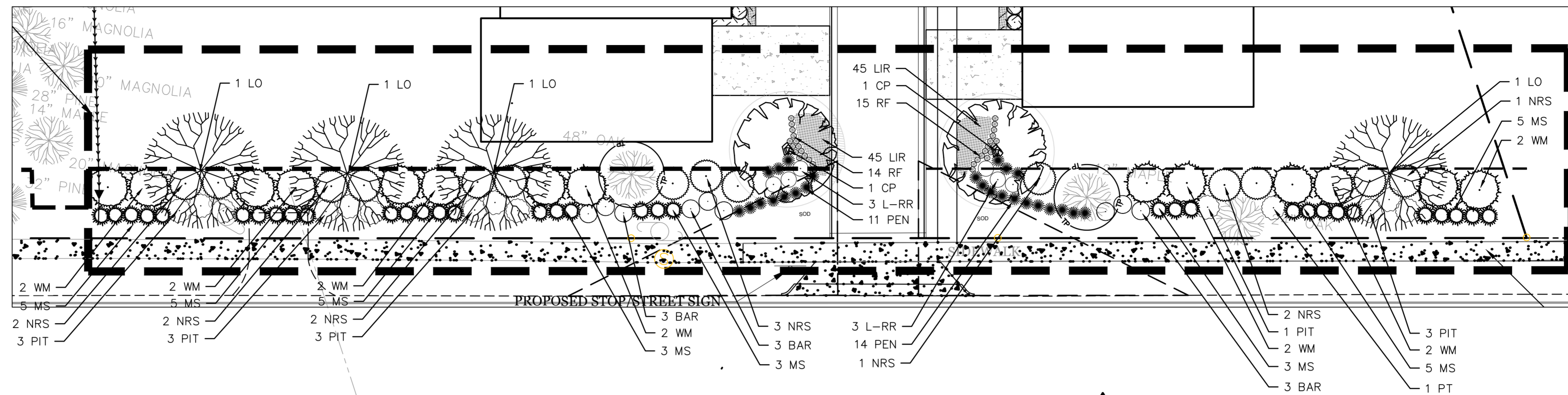
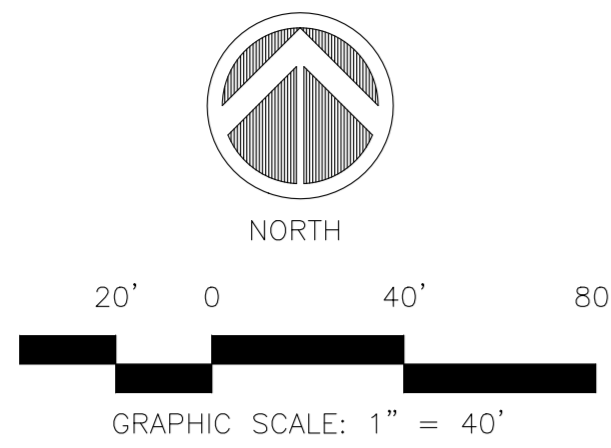


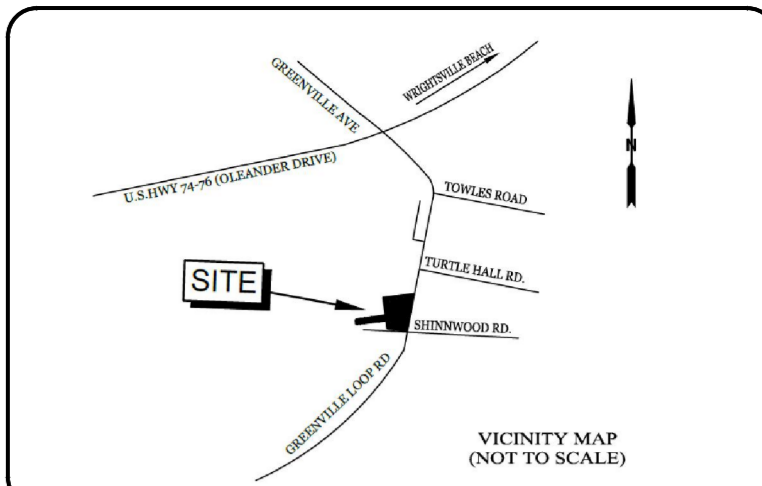
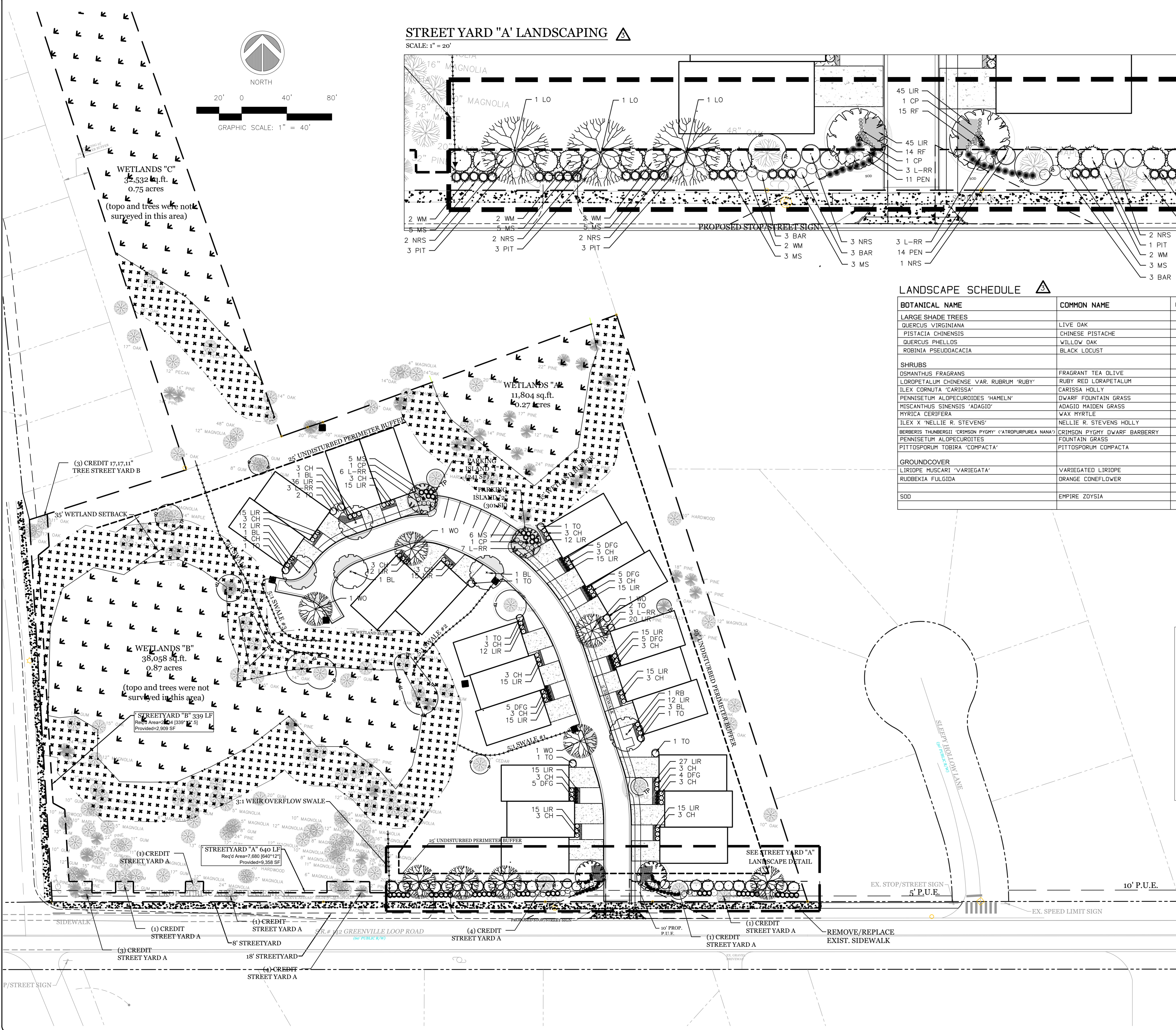
STREET YARD "A" LANDSCAPING

SCALE: 1" = 20'



LANDSCAPE SCHEDULE

BOTANICAL NAME	COMMON NAME	CAL.	HT.	REMARKS	QUAN.	SYMBOL
LARGE SHADE TREES						
QUERCUS VIRGINIANA	LIVE OAK	2.5"		B&B	4	LO
PISTACIA CHINENSIS	CHINESE PISTACHE	2.5"		B&B	4	CP
QUERCUS PHELLOS	WILLOW OAK	2.5"		B&B	4	WO
ROBINIA PSEUDOACACIA	BLACK LOCUST	2.5"		B&B	5	BL
SHRUBS						
OSMANTHUS FRAGRANS	FRAGRANT TEA OLIVE		7 GAL.		11	TO
LOROPETALUM CHINENSE VAR. RUBRUM 'RUBY'	RUBY RED LOROPETALUM		3 GAL.		25	L-RR
ILEX CORNUTA 'CARISSA'	CARISSA HOLLY		3 GAL.		63	CH
PENNISETUM ALOPECUROIDES 'HAMELN'	DWARF FOUNTAIN GRASS		1 GAL.		29	DFG
MISCANTHUS SINENSIS 'ADAGIO'	ADAGIO MAIDEN GRASS		3 GAL.		45	MS
MYRICA CERIFERA	WAX MYRTLE		7 GAL.		14	WM
ILEX X 'NELLIE R. STEVENS'	NELLIE R. STEVENS HOLLY		15 GAL.		14	NRS
BERBERIS THUNBERGII 'CRIMSON PYGMY' ('ATROPURPUREA NANA')	CRIMSON PYGMY DWARF BARBERRY		3 GAL.		9	BAR
PENNISETUM ALOPECUROIDES	FOUNTAIN GRASS		3 GAL.		25	PEN
PITTIOSPORUM TOBIRA 'COMPACTA'	PITTIOSPORUM COMPACTA		7 GAL.		14	PIT
GROUNDCOVER						
LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LIRIOPE		1 QT.	18" O.C.	498	LIR
RUBBEKIA FULGIDA	ORANGE CONEFLOWER		1 QT.	24" O.C.	29	RF
SOD	EMPIRE ZOYSIA					



LEGEND:

ENGINEER:

INTRACOASTAL ENGINEERING, PLLC
 5725 Olander Dr. Unit E-7
 Wilmington, North Carolina 28403
 Phone: 910.859.8983
 Email: Charlie@intracoastalengineering.com
 License Number: P-6662

REV. #	DESCRIPTION	REV. BY	DATE
1	UPDATED SITE PLAN-REVISED TREE REMOVAL & L/S PLAN	SL	6/18/18
2	TRC COMMENTS- PARKING LOT LA PARKING LOT TREES	NA	9/1/17
3	STREETYARD A	NA	8/25/17
4	DESCRIPTION	REV. BY	DATE

CLIENT INFO:
 SKF ILM, LLC
 5929 MARKET ST.
 WILMINGTON, NC 28405
 (910)-619-6858

FOR LANDSCAPE PAGES L-1 AND L-2 ONLY.
 L.A. NOT RESPONSIBLE FOR CONTENT FOUND ON REMAINING PAGES OF PLAN SET.

WILMINGTON
 Approved Construction Plan
 Name: _____ Date: _____

Planning: _____
 Traffic: _____
 Fire: _____

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

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

LANDSCAPE ARCHITECT:

Coastal Land Design, PLLC
 Civil Engineering / Landscape Architecture
 Land Planning / Construction Management
 NCBELS Firm License No: P-0369
 P.O. Box 1172
 Wilmington, NC 28402 www.cldeng.com Phone: 910-254-9333
 Fax: 910-254-0502

DRAWN : N ALLEN PROJECT
 DESIGN : S LLOYD NUMBER :
 CHECK : F BRAXTON SCALE : 1"=40'
 APPROVED : F BRAXTON DATE : 18 JUNE 2018
 FILE NAME :

SHINNWOOD COTTAGES

LANDSCAPE PLAN

JOB NUMBER SHEET NUMBER
L-1

STREET YARD CALCULATIONS

STREET YARD (A) GREENVILLE LOOP RD. = 670 LF - 30 LF (DRIVEWAY) = 640 LF

STREET YARD (A): REQUIRED S.Y. AREA = **7,680** [640 LF x 12 (MULTIPLIER)]
 PROVIDED S.Y. AREA = **8,548**

REQUIRED TREES @ 1/600 SF = 15 TREES
 PROPOSED TREES = 4 NEW TREES + (CREDIT 12 EX. CANOPY TREES)

REQUIRED SHRUBS @ 6/600 SF = 86 SHRUBS
 PROPOSED SHRUBS = 91

STREET YARD (B): REQUIRED S.Y. AREA = **2,034** [339 LF x 12 x .5]
 PROVIDED S.Y. AREA = **2,160 SF**

REQUIRED TREES @ 1/600 SF = 3 TREES
 PROPOSED TREES = CREDIT 3 EXISTING TREES IN S.Y.

REQUIRED SHRUBS @ 6/600 SF = 20 SHRUBS
 PROPOSED SHRUBS = CREDIT EXISTING SHRUBS

ALL PROPOSED VEGETATION WITHIN SITE TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' - 10' [SEC.18-566 CDW]

PARKING AREA SCREENING

PARKING WITHIN 50' OF A R.O.W. REQUIRES A LOW SCREEN MIN. 3' HIGH AND 5' WIDE

* SCREENING INCLUDED IN STREETYARD PLANTING

PARKING AREA SHADING

20% SHADE REQ'D AT MATURITY
 PARKING AREA = 14,785 SF
 SHADING AREA REQ'D = 2,957 SF
 SHADING AREA PROVIDED = 3,203 SF (SEE PARKING ISLAND TABLE)

FOUNDATION PLANTING AREAS

REQUIREMENT: FACADE AREA X 12%
 BUILDING HEIGHT = 25 FT
 BUILDING WIDTH (LF) = 672 LF
 REQ'D FOUNDATION LANDSCAPING = 2,016 SF
 PROVIDED = 2,637 SF

LANDSCAPING PARKING ISLANDS

ISLAND	AREA (SF)	REQUIRED TREES	PROVIDED	SHADE PROVIDED
1	241	1 canopy	1 canopy	707 SF
2	301	1 canopy	1 canopy	707 SF

PARKING LOT LANDSCAPE NOTES:

Section 18-481 (a) All single planting islands measuring twelve (12) feet by eighteen (18) feet or 216 SF shall have at least one (1) tree. All double planting islands measuring twelve (12) feet by thirty-six (36) feet or 432 SF shall have at least two (2) small mature shade trees or one canopy tree.

LANDSCAPE NOTES

- ALL LANDSCAPE MATERIAL MUST BE INSTALLED PRIOR TO FINAL BUILDING INSPECTION
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF EXISTING UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY AGENCY OR COMPANY.
- CONTRACTOR SHALL NOT SUBSTITUTE FOR ANY OF THE PLANT MATERIAL THAT IS SPECIFIED WITHOUT PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.
- VERIFICATION OF TOTAL QUANTITIES AS SHOWN IN THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- MULCH UNDER ALL PROPOSED TREES AND SHRUBS WITH PINE NEEDLES AT A 3"-4" DEPTH OR APPROVED EQUAL.
- PLANT SIZES INDICATED SPECIFY MINIMUM ALLOWABLE SIZES AT PLANTING, WHERE CONTAINER AND HT. SIZES ARE INDICATED FOR A SINGLE SPECIES, BOTH SIZE REQUIREMENTS MUST BE MET.
- THERE SHALL BE AT LEAST A 3 FT. SEPARATION BETWEEN LANDSCAPED AREAS AND PARKING AREAS TO ALLOW VEHICLE OVERHANG WHEN PARKING STOPS ARE NOT REQUIRED.
- ALL PLANTINGS USED TO SCREEN THE DRIVES AND PARKING AREAS FROM ADJOINING ROADWAYS WILL NEED TO BE A MINIMUM OF 24" HIGH AT TIME OF PLANTING.
- ALL OTHER AREAS NOT BEING MULCHED TO BE SEEDED PER SEEDING SCHEDULE INCLUDED AS PART OF THE S&E PLANS.
- THE OWNERS OF THE PROPERTY AND THEIR AGENTS, HEIRS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, PRESERVATION AND MAINTENANCE OF ALL PLANTING AND PHYSICAL FEATURES SHOWN ON THIS PLAN. THE OWNERS SHALL BE RESPONSIBLE FOR ANNUAL MAINTENANCE OF THE VEGETATION TO INCLUDE BUT NOT BE LIMITED TO:
 - A. **FERTILIZATION**
TREES SHRUBS AND GRASSED AREAS BROADCAST A SLOW RELEASE FERTILIZER OVER THE MULCHED BEDS AT THE RECOMMENDED RATES AS SHOWN ON THE BACK, ONCE MID-FEBRUARY AND ONCE MID-SEPTEMBER. THOROUGH WATERING IS REQUIRED UPON COMPLETION.
 - B. **PRUNING WITHIN LIMITS**
PRUNING WHEN NECESSARY, WILL BE DONE TO MAINTAIN THEIR NORMAL GROWTH PATTERN AND TO REMOVE DEAD OR DISEASED PLANT MATERIAL. THERE SHALL BE NO TOPPING OF TREES.
 - C. **PEST CONTROL (OPTIONAL)**
WEED CONTROL TO BE PROVIDED EARLY FEBRUARY, APRIL, JUNE, AUGUST AND OCTOBER IN THE SHRUB/TREE BEDS AND IN THE LAWN AREAS. INSECT DAMAGE SHALL BE TREATED WHEN NECESSARY TO PREVENT DAMAGE TO VEGETATION.
 - D. **MULCHING**
ALL AREAS AROUND THE BUILDING FOUNDATION AND SHRUB/TREE BEDS SHALL BE RE-MULCHED SO THAT THEY CONTAIN A MIN. DEPTH OF TWO INCHES AND A MAXIMUM DEPTH OF THREE INCHES OF HARDWOOD SHREDDED MULCH. MULCH USED SHALL EQUAL WHICH WAS SUPPLIED DURING THE INSTALLATION OF THE PLANTS.
 - E. **MOWING**
MOWING SHALL BE DONE AS NECESSARY TO KEEP GRASS AT THE APPROPRIATE HEIGHT TO INSURE A HEALTHY GROWTH PATTERN.
 - F. **PROTECTION OF ROOT ZONES**
TREE/SHRUB ROOT ZONES SHOULD BE PROTECTED FROM FUTURE CONSTRUCTION AND EQUIPMENT AS MUCH AS POSSIBLE TO AVOID DAMAGE OR COMPACTION TO THE ROOT AREAS.
 - G. **WATERING SCHEDULE FOR IRRIGATION SYSTEM**
MAINTENANCE SHALL INCLUDE A THOROUGH INITIAL WATERING WITH WEEKLY WATERINGS THEREAFTER FOR THE FIRST 30 DAYS. WATERINGS THEREAFTER BE ON AN AS NEEDED SCHEDULE PER LOCAL CONDITIONS.
 - H. **STAKE AT WIRE REMOVAL**
AT THE END OF THE FIRST YEAR ALL PLANT STAKING AND GUYING SYSTEMS SHALL BE REMOVED.
 - I. **PROTECTED TREE REGULATION**
PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.

TREE MITIGATION CALCULATIONS

Proposed Significant Trees to be Removed				
Tree Name	# of Trees	DBH	% Mitigation	Total DBH
Magnolia	1	8	100	16
Magnolia	1	10	100	20
Magnolia	1	11	100	22
Magnolia	1	12	100	24
Loblolly Pine	1	33	50	33
Total DBH of Removed Significant Trees			=	115"
Total Trees Req. for Mitigation			=	3
			Total DBH X 2X mitigation %	= 38

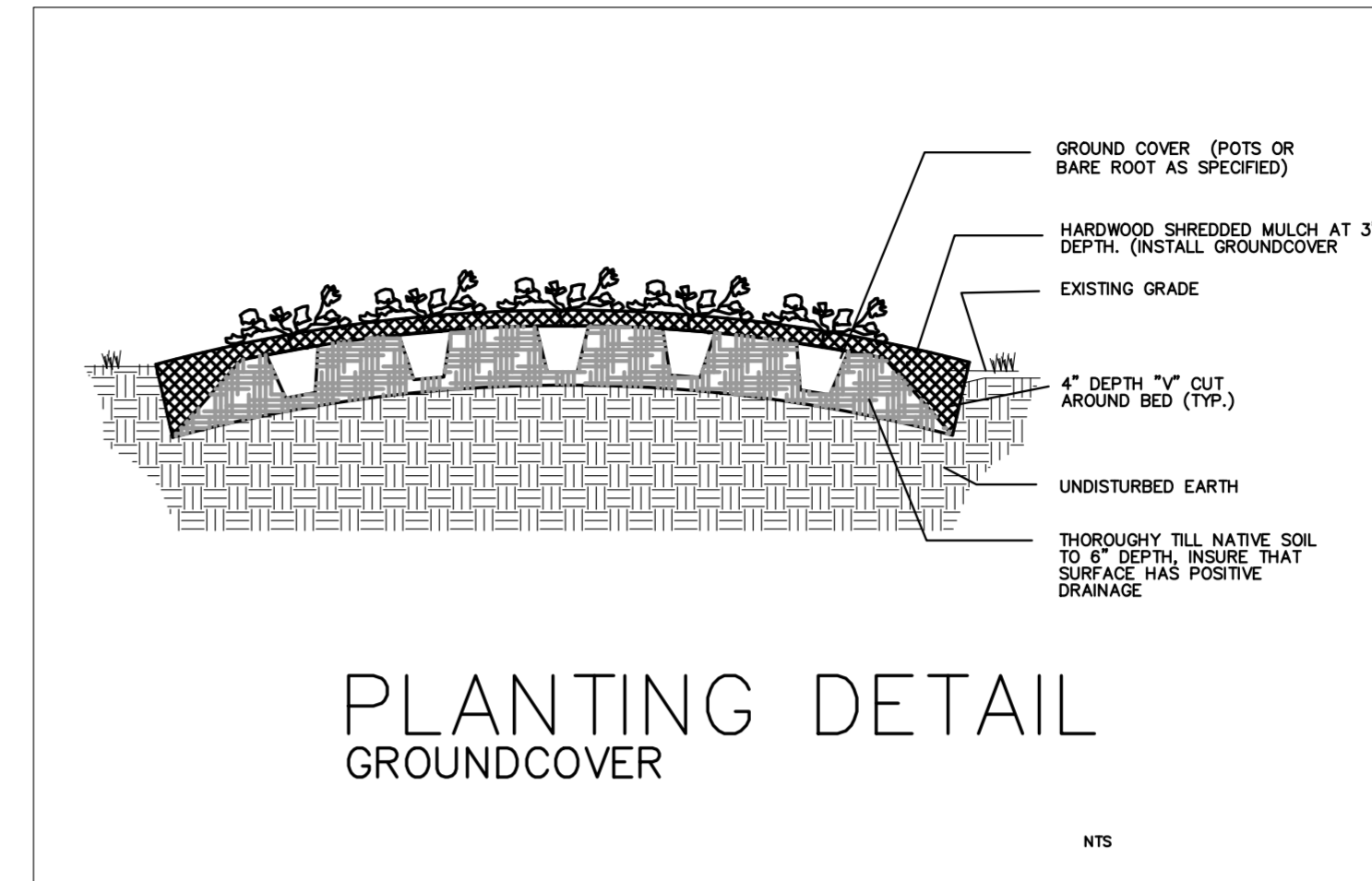
Sec. 18-460 Mitigation: Significant trees. The total number of replacement trees shall be determined by multiplying the total DBH of the removed significant trees by two (2) times the percentage for the type of tree in Table IV and dividing by three

Proposed Regulated Trees to be Removed				
Tree Name	# of Trees	DBH	% Mitigation	Total DBH
Willow	1	12	25	3
Bay	1	12	100	12
Bay	1	16	100	16
Oak	2	8	100	16
Oak	7	10	100	70
Oak	2	12	100	24
Oak	1	14	100	14
Oak	1	15	100	15
Magnolia	1	5	100	5
Magnolia	3	6	100	18
Magnolia	1	7	100	7
Loblolly Pine	1	24	50	12
Loblolly Pine	1	28	50	14
Gum	1	8	75	6
Gum	3	10	75	22.5
Gum	2	11	75	16.5
Gum	1	14	75	10.5
Pine	14	12	100	168
Pine	2	13	100	26
Pine	8	14	100	112
Pine	4	15	100	60
Pine	3	16	100	48
Pine	2	17	100	34
Pine	5	18	100	90
Pine	4	19	100	76
Pine	4	20	100	80
Total DBH of Removed Regulated Trees			=	975.5
Total Trees Req. for Mitigation			=	3
			Total DBH X mitigation %	= 326

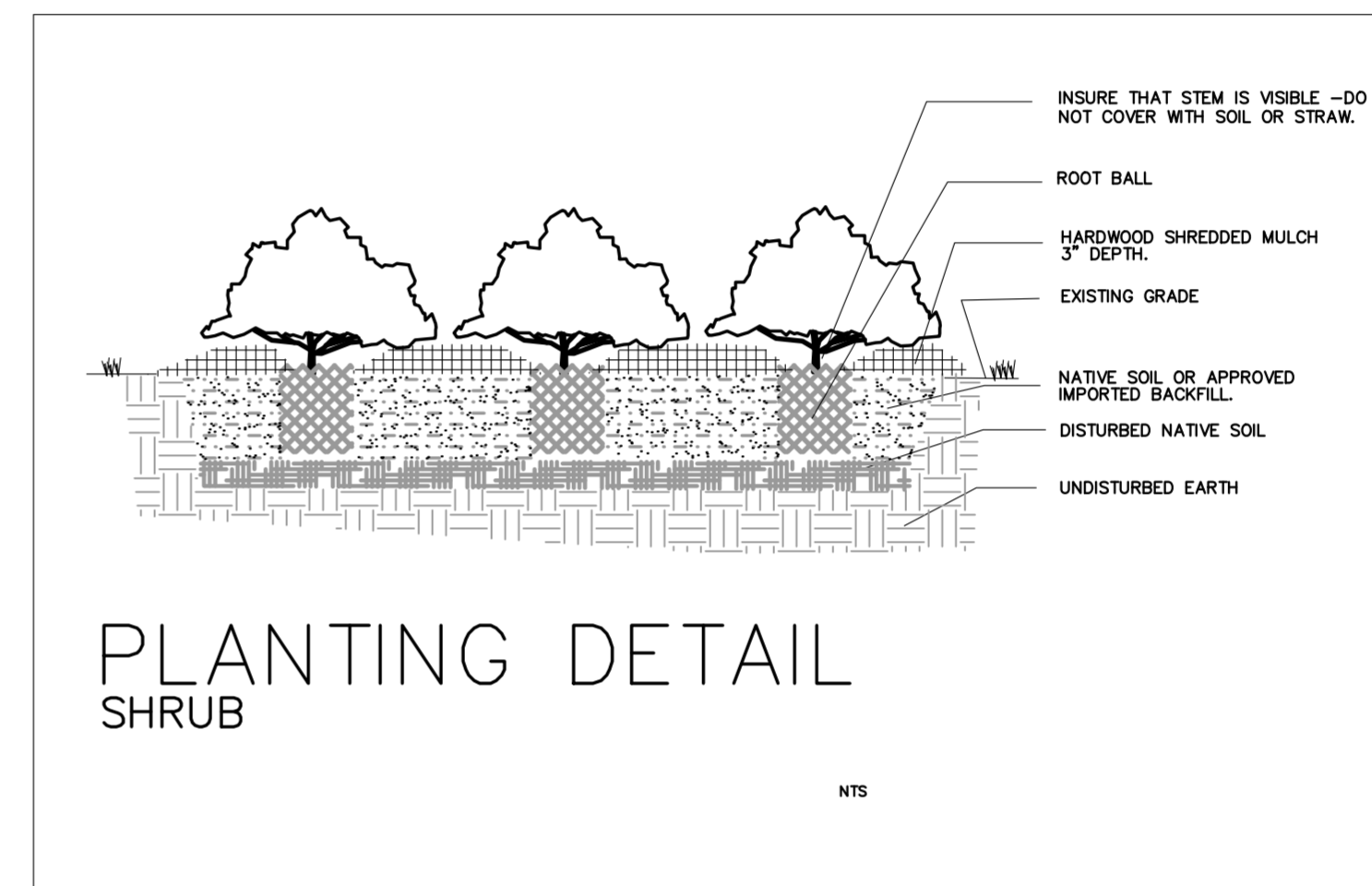
Sec. 18-460 Mitigation: Regulated trees. The total number of replacement trees shall be determined for regulated trees removed by multiplying the total DBH of the removed regulated tree(s) by the percentage for the type of tree in Table IV and dividing by three (3).

Section 18-461 Exceptions to Mitigation: (b) Regulated trees removed within the area of disturbance necessary for essential site improvements are exempt from mitigation, provided the applicant has designed around trees in order to retain as many trees as practicable.

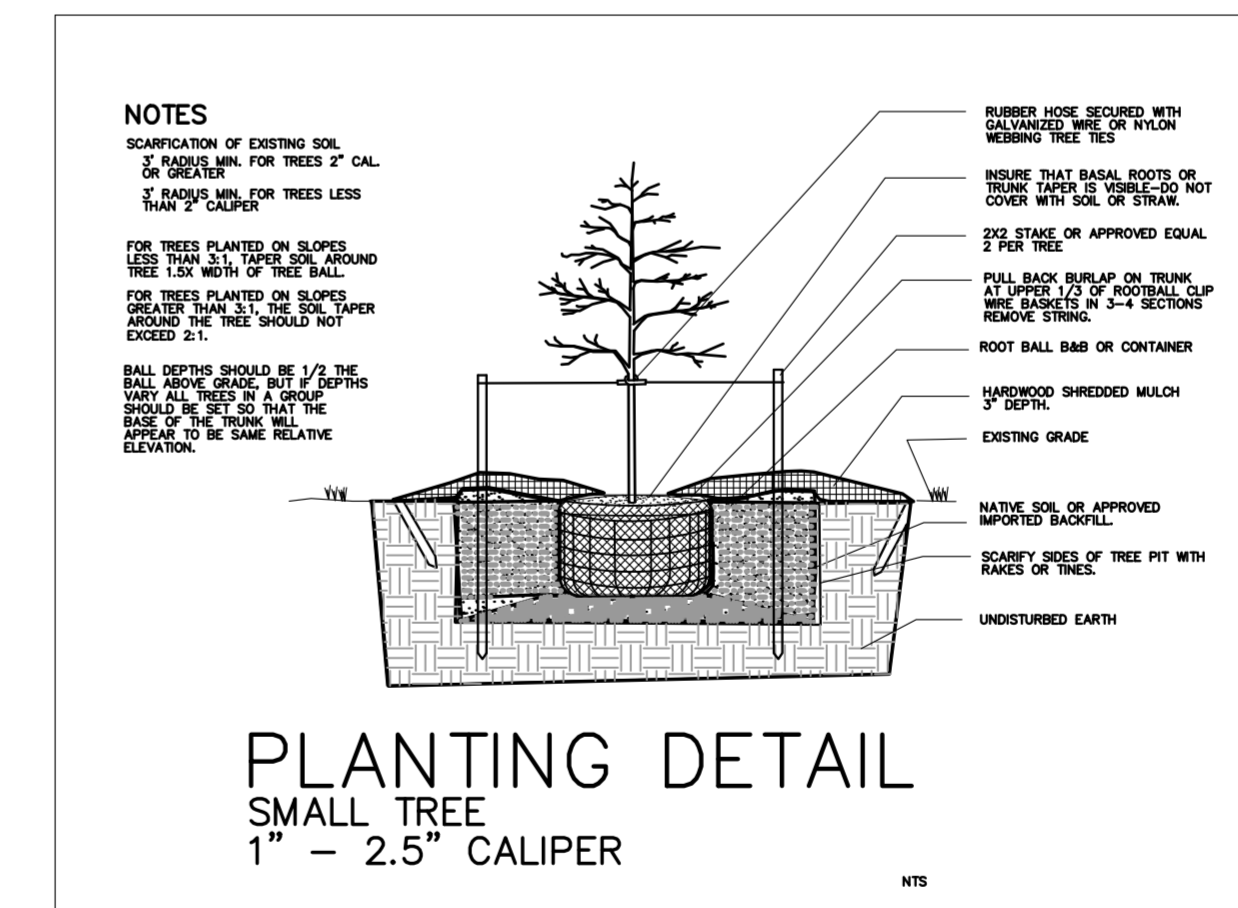
Credit for Preserved Trees (Sec. 18-448 Table 1)			
# of Preserved Trees	Size (DBH)	Credit Given	Resulting Credit
5	2-5"	1	5
52	6-11"	2	104
72	12-17"	3	216
14	18-23"	4	56
22	>24"	= (DBH/6)	102.5
Total resulting Credit for 165 Preserved Trees			= 483.5



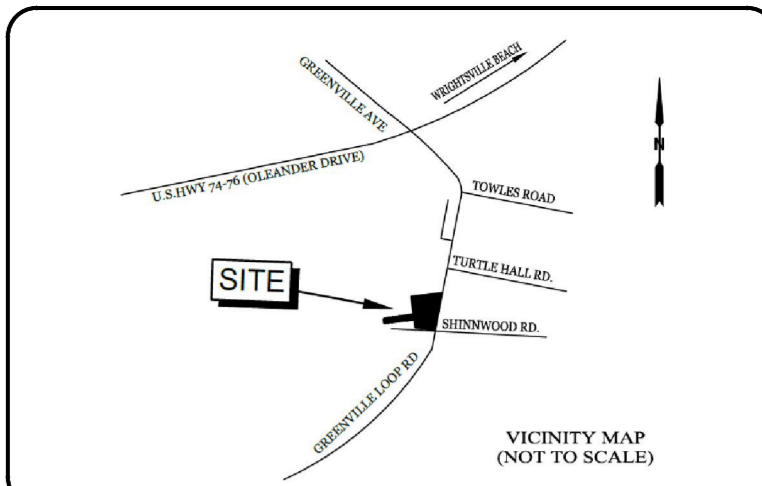
PLANTING DETAIL GROUNDCOVER



PLANTING DETAIL SHRUB



PLANTING DETAIL SMALL TREE 1" - 2.5" CALIPER



LEGEND:

ENGINEER:

INTRACOASTAL ENGINEERING, PLLC
 5725 Oleander Dr. Unit E-7
 Wilmington, North Carolina 28403
 Phone: 910.859.8983
 Email: charlie@intracoastalengineering.com
 License Number: P-6662

REV. #	DESCRIPTION	REVISIONS	DATE
3	UPDATED SITE PLAN-REVISED TREE REMOVAL & L/S PLAN	SL	6/18/18
2	TRC COMMENTS- PARKING LOT LA PARKING LOT TREES	NA	9/1/17
1	STREETYARD A	NA	8/25/17

CLIENT INFO:
 SKF ILM, LLC
 5929 MARKET ST.
 WILMINGTON, NC 28405
 (910)-619-6858

Professional Engineer Seal for Frank Braxton, License No. 390, dated 6/18/18.

* FOR LANDSCAPE PAGES L-1 AND L-2 ONLY. L.A. NOT RESPONSIBLE FOR CONTENT FOUND ON REMAINING PAGES OF PLAN SET.

LANDSCAPE ARCHITECT:

Coastal Land Design, PLLC
 Civil Engineering / Landscape Architecture
 Land Planning / Construction Management
 NCBELS Firm License No: P-6369
 P.O. Box 1172 Wilmington, NC 28402 Phone: 910-254-9333 Fax: 910-254-0502

DRAWN : N ALLEN	PROJECT
DESIGN : S LLOYD	NUMBER :
CHECK : F BRAXTON	SCALE : -
APPROVED : F BRAXTON	DATE : 18 JUNE 2018
FILE NAME :	

SHINNWOOD COTTAGES

LANDSCAPE DETAILS

JOB NUMBER SHEET NUMBER
L-2

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Approved Construction Plan

Name _____ Date _____

Planning _____
 Traffic _____
 Fire _____

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
 Signed: _____