

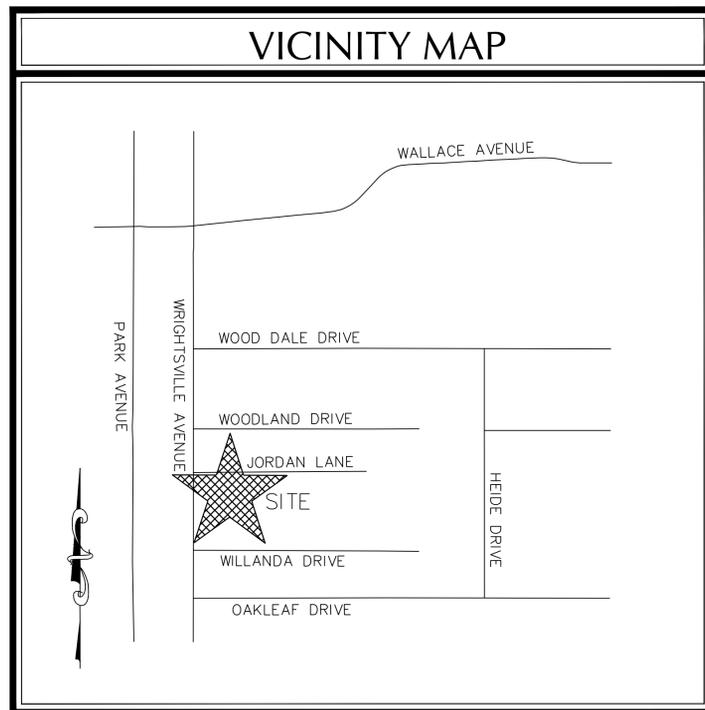
SITE DEVELOPMENT PLAN

FOR

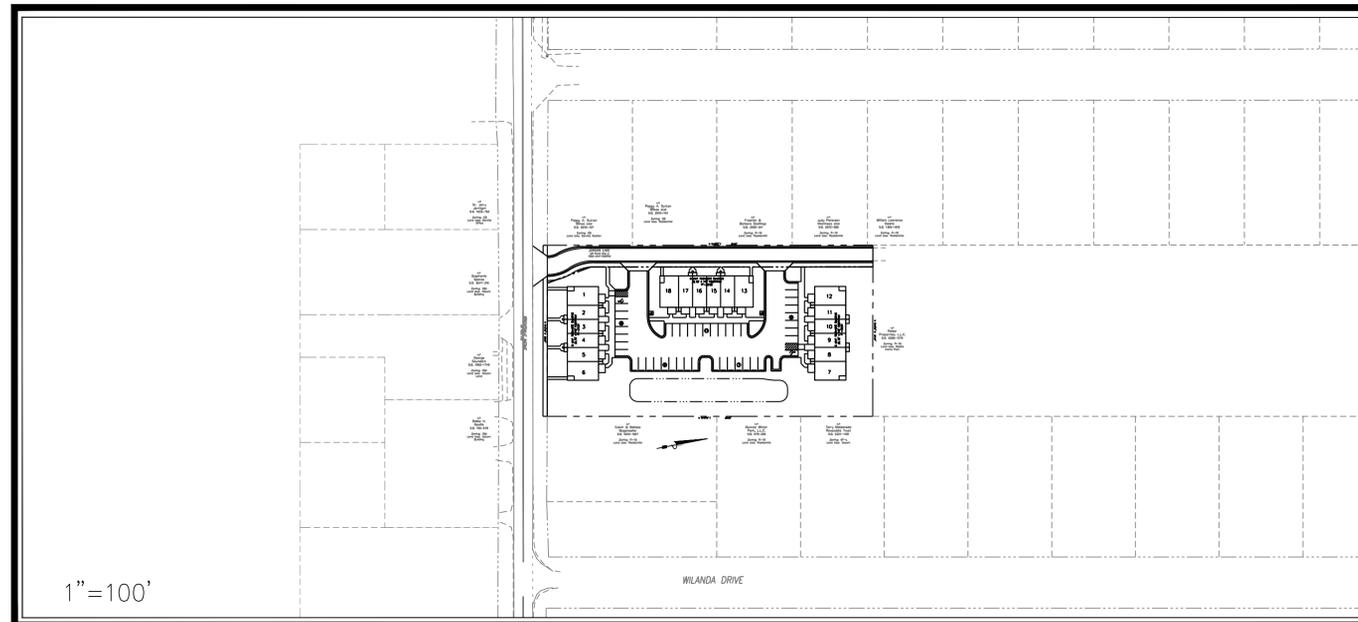
JORDAN LANE TOWNHOMES

WILMINGTON, NORTH CAROLINA

MARCH 2013



VICINITY MAP
(NTS)



DESCRIPTION	EXISTING	PROPOSED
1' CONTOUR INTERVAL	---	---
5' CONTOUR INTERVAL	----	----
PROPERTY LINE	----	----
ROADWAY CENTERLINE	----	----
RIGHT OF WAY LIMITS	----	----
EASEMENT LINE	----	----
CURB & GUTTER	----	----
SANITARY SEWER FACILITIES	---	---
STORM SEWER FACILITIES	---	---
WATERLINE	---	---
FIRE HYDRANT ASSEMBLY	⊕	⊕
WATERWAYS	---	N/A
PROPOSED LOT AND S.F.	X	X
OPEN SPACE LABEL	(A)	(A)
OPEN SPACE	▨	▨
BUILDING SET BACKS	---	---
PRIVATE SANITARY SET BACKS	---	---
	STREET SIGN	STREET SIGN
	404 WETLANDS	404 WETLANDS
	FLOW DIRECTION	FLOW DIRECTION

DEVELOPER/OWNER

Jordan Lane Town Homes, LLC.
6626 GORDON ROAD, UNIT C
WILMINGTON, NC 28411
PHONE: (910) 799-3006

PREPARED BY:

GSP CONSULTING, PLLC
ENGINEERING

6626 Gordon Road, Unit C, Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659 License # P-0718

INDEX OF SHEETS

SHT C-0	COVER SHEET
SHT C-1	GENERAL NOTES
SHT C-2	EXISTING CONDITIONS PLAN
SHT C-2.1	SITE INVENTORY PLAN
SHT C-3	SITE PLAN
SHT C-4	UTILITY PLAN
SHT C-5	GRADING, DRAINAGE & EROSION & SEDIMENT CONTROL PLAN
SHT C-6	INFILTRATION BASIN/SWALE DETAILS
SHT C-7	STANDARD DETAILS
SHT C-8	STANDARD DETAILS

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

SITE DATA TABLE

GENERAL NOTES:

- NEW HANOVER COUNTY PARCEL NOS.:
PIN 314717.10.4469 / PID 5520-008-038-000
PIN 314717.10.5442 / PID 5520-008-041-000
SITE ADDRESS: 5045 & 5047 WRIGHTSVILLE AVENUE
- TOTAL TRACT AREA: 1.77 AC.± (77,144 S.F.)
- ZONING DISTRICT: MF-L (CD)
[W/ WRIGHTSVILLE AVE. CORRIDOR OVERLAY]
REQ'D. PROVD.
SETBACKS - 20' FRONT SETBACKS - 23.6' FRONT
20' CORNER (N/A) CORNER
25' REAR 31.7' REAR
20' INTERIOR SIDE 48.4' WEST INTERIOR SIDE
42.4' EAST INTERIOR SIDE
- CAMA LAND CLASSIFICATION: URBAN
- THERE ARE NO WETLANDS LOCATED ON THIS PROPERTY.
- THIS PROPERTY IS NOT WITHIN A SPECIAL FLOOD HAZARD ZONE PER FEMA FLOOD INSURANCE RATE MAP #3720314700J, EFFECTIVE DATE APRIL 3, 2006

DEVELOPMENT DATA:

TOTAL TRACT AREA = 1.77 AC.
DEVELOPMENT AREA - 1.77 AC.
PERMITTED DENSITY (10 UNITS/AC.) = 18 UNITS
PROPOSED DENSITY 18 UNITS

BUILDING COVERAGE - 12,510 S.F. (16.2%)

TOTAL HEATED GROSS FLOOR AREA - 23,760 S.F. GFA
12 X 2 BR = 1188 S.F.±
6 X 3 BR = 1584 S.F.±

TOTAL BEDROOMS - 42
12 X 2 BR = 24 BR
6 X 3 BR = 18 BR

MAX. BLDG. HGT. - 2-STORY / 28' MEAN ROOF

PARKING -
12 - 2 BR UNITS X 2.00 MIN. SP./UNIT = 24
6 - 3 BR UNITS X 2.25 MIN. SP./UNIT = 14
MINIMUM TOTAL SPACES REQ'D. = 38
18 UNITS X 2.5 MAX. SP./UNIT = 45
MAXIMUM TOTAL SPACES PERMIT'D. = 45
25% INCREASE WITH PVIOUS PARKING = 56
** 44 TOTAL SPACES PROVD. (2 H/C) **
BIKE PARKING REQ'D = 5 MIN.
BIKE PARKING PROVD = 10

IMPERVIOUS SURFACES -

ROOFTOP -	12,638 S.F.
ASPHALT PAVEMENT -	19,930 S.F.
POROUS PAV'T (3,540 S.F. @ 25%) -	885 S.F.
CONC. WALKS -	4,648 S.F.
CONC. PATIOS -	1,440 S.F.
TOTAL -	39,541 S.F. (51.3%)

OPEN SPACE - (MIN. 35% REQ'D.)
1.77 AC. X 35% = 26,985 S.F.
** 27,576 S.F. (35.8%) OPEN SPACE PROVD. **

[AREA PROVD. IS TOTAL TRACT AREA MINUS COVERED SURFACES (42,127 S.F.), INTERIOR PLANTING ISLANDS (1,156 S.F.), FOUNDATION PLANTING AREAS (792 S.F.) & FENCED BUFFERS (5,450 S.F.)]

RECREATION AREA - (MIN. 50% OPEN SPACE)
0.31 AC. / 13,500 S.F. REQ'D.

ACTIVE REC REQ'D. = 6,750 S.F.
ACTIVE REC PROVD. = 10,078 S.F.
PASSIVE REC REQ'D. = 6,750 S.F.
PASSIVE REC PROVD. = 7,440 S.F.

** TOTAL REC AREA PROVD. = 17,518 S.F. **

UTILITY CAPACITY REQUESTS:
EXISTING SEWER USE - 0 GPD
PROPOSED SEWER CAPACITY -
42 BR @ 120 GPD/BR = 5,040 GPD
EXISTING WATER USE - 0 GPD
PROPOSED WATER CAPACITY -
18 UNITS @ 400 GPD/UNIT = 7,200 GPD

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

NOTE:
ALL DESIGN AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE, TECHNICAL STANDARDS MANUAL & THE STATE OF NORTH CAROLINA

CITY OF WILMINGTON CASE #S:
CD-3-604 / M1205 / M406
SU-1-704 / E905 / M1205 / M406
SRB-13-0606

PROJECT NAME: JORDAN LANE TOWNHOMES
GSP CONSULTING PROJECT #: 2013-0001

COORDINATION NOTES

1. THE CONTRACTOR IS REQUIRED TO OBTAIN ANY/ALL PERMITS REQUIRED FOR CONSTRUCTION OF THESE PLANS.
2. ALL WORK IS TO BE IN ACCORDANCE WITH CITY OF WILMINGTON, NEW HANOVER COUNTY, THE CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) AND THE STATE OF NORTH CAROLINA.
3. THE CONTRACTOR IS TO ESTABLISH AND CHECK ALL HORIZONTAL AND VERTICAL CONTROLS TO BE USED WITH THE PROJECT. IN ADDITION, THE CONTRACTOR IS TO COMPUTE THE LAYOUT OF THE ENTIRE SITE PLAN IN ADVANCE OF BEGINNING ANY WORK ASSOCIATED WITH THE SUBJECT PLANS. CONTRACTOR SHALL EMPLOY A PROFESSIONAL SURVEYOR TO PERFORM SITE IMPROVEMENT STAKEOUT(S).
4. ANYTIME WORK IS PERFORMED OFF-SITE OR WITHIN AN EXISTING EASEMENT, THE CONTRACTOR IS TO NOTIFY THE HOLDER OF SAID EASEMENT AS TO THE NATURE OF PROPOSED WORK, AND TO FOLLOW ANY GUIDELINES OR STANDARDS WHICH ARE ASSOCIATED WITH OR REFERENCED IN THE RECORDED EASEMENT.

GENERAL NOTES:

1. EXISTING TOPOGRAPHY, BOUNDARY AND UTILITIES, HAVE BEEN PREPARED BY FIELD SURVEYS BY ATLANTIC COAST SURVEY, PLLC., APPROVED PLANS BY WITHERS & RAVENEL, INC. AND OTHER AVAILABLE INFORMATION.
2. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF ALL EXISTING UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF DITCHING OPERATIONS BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES. IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF TRENCHING OPERATIONS SO AS TO ELIMINATE OR MINIMIZE DAMAGE TO EXISTING UTILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING LOSS OF UTILITY FEES/CHARGES. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC...
3. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
4. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAGMEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE DOT.
5. ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.
6. ALL WORK BY THE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR AFTER THE OWNER ACCEPTS THE WORK.
7. CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL CENTER AT 1 (800) 632-4949 AND ALLOW THE CENTER TO LOCATE EXISTING UTILITIES BEFORE DIGGING.
8. CONTRACTOR SHALL REMOVE ASPHALT, AGGREGATE BASE COURSE, AND CONCRETE CURB & GUTTER WITHIN LIMITS OF DEMOLITION AS SHOWN ON PLAN.

DEMOLITION NOTES

1. CONTRACTOR TO COORDINATE WITH THE OWNER TO PROPERLY MAINTAIN OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY.
2. CONTRACTOR IS TO WALK THE SITE AND BECOME FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIRED. ALL DEMOLITION WORK REQUIRED TO CONSTRUCT NEW SITE IMPROVEMENTS WILL BE PERFORMED BY THE CONTRACTOR AND WILL BE UNCLASSIFIED EXCAVATION.
3. DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND OFFSITE DISPOSAL OF CONCRETE PADS, CONCRETE DITCHES, FOUNDATIONS, SLABS, STEPS, AND STRUCTURES; ABANDONED UTILITIES, BUILDINGS, PAVEMENTS AND ALL MATERIALS CLEARED AND STRIPPED TO THE EXTENT NECESSARY AS DIRECTED BY THE SOILS ENGINEER FOR THE INSTALLATION OF THE NEW IMPROVEMENTS AND WITHIN THE LIMITS OF CLEARING AND GRADING AND AS SHOWN ON THESE PLANS.
4. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED. DAMAGE TO PROPERTIES OF OTHERS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO COST TO OWNER.
5. ELECTRIC, TELEPHONE, SANITARY SEWER, WATER AND STORM SEWER UTILITIES THAT SERVICE OFF-SITE PROPERTIES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS BY THE CONTRACTOR.
6. EXISTING UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING DEMOLITION.
7. ALL EXISTING IMPROVEMENTS INDICATED OR REQUIRED TO BE DEMOLISHED SHALL INCLUDE REMOVAL FROM THE PROPERTY AND PROPER DISPOSAL.
8. CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING OVER HEAD AND UNDERGROUND UTILITIES INCLUDING CABLE, GAS, TELEPHONE AND ELECTRIC AND ANY OTHER UTILITIES THROUGH THE SITE WITH THE RESPECTIVE COMPANIES.
9. PROVIDE SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTERS AND SIDEWALKS TO BE DEMOLISHED.
10. ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS OSHA REGULATIONS.
11. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS BY HAND.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL NOTES:

1. CLEAR AND REMOVE FROM SITE ALL TREES, ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN DESIGNATED CLEARING LIMITS.
2. PLANT GRASS OVER ALL GRADED AREAS AS SHOWN IN THE TABLE ON THIS SHEET OF CEASE OF ANY GRADING ACTIVITY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUCTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION MEASURES.
4. DURING GRADING AND AFTER GRADING HAS BEEN COMPLETED, CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION CONTROL MEASURES UNTIL FINAL INSPECTION AND APPROVAL BY THE NCDENR DIVISION OF LAND QUALITY.
5. WATER, FERTILIZE, MOW AND MAINTAIN SPRIGGED, SOODED AND PLANTED AREAS UNTIL FINAL APPROVAL BY THE NCDENR DIVISION OF LAND QUALITY.
6. ANY BORROW MATERIAL BROUGHT ONTO SITE MUST BE FROM A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.
7. ANY EXCESS MATERIAL REMOVED FROM SITE MUST BE HAULED TO A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.

MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. ALL CONSTRUCTION ENTRANCES WILL BE PERIODICALLY TOP DRESSED WITH AN ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. ANY SEDIMENT THAT IS TRACKED INTO THE STREET WILL BE IMMEDIATELY REMOVED.
3. SEDIMENT WILL BE REMOVED BEHIND THE SEDIMENT FENCE WHEN IT BECOMES 0.5 FEET DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. Silt fence stakes will be spaced 6 feet apart unless a wire backing is used with 8 foot stake spacing.
4. INSPECT INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAIN. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.
5. ALL SEEDED AREAS WILL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
6. INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER.

IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS.

IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE SKIMMER AND POOL AREAS.

FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.
7. INSPECT EXCELSIOR MATTING AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT REPAIR IMMEDIATELY. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE MATTING. ANY AREAS OF THE MATTING THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED. MONITOR AND REPAIR THE MATTING AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.
8. INSPECT ROCK PIPE INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING. CHECK THE STRUCTURE FOR DAMAGE. ANY RIPRAP DISPLACED FROM THE STONE HORSESHOE MUST BE REPLACED IMMEDIATELY. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND PROVIDE PERMANENT GROUND COVER (SURFACE STABILIZATION).

STABILIZATION NOTES

1. ALL DISTURBED AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS OF CEASE OF ANY PHASE OF ACTIVITY AND SLOPES WITHIN 21 CALENDAR DAYS.

PERMANENT SEEDING SCHEDULE – MIXTURE 5CP

SPECIES	RATE (LB/ACRE)
CENTPEDE GRASS	10-20

Seeding Dates
March – June

Soil Amendments
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 300 LB/ACRE 10-10-10 FERTILIZER.

Mulch
DO NOT MULCH.

Maintenance
FERTILIZE VERY SPARINGLY LB/ACRE NITROGEN IN SPRING WITH NO PHOSPHORUS. CENTPEDE GRASS CANNOT TOLERATE HIGH PH OR EXCESS FERTILIZER.

TEMPORARY SEEDING-LATE WINTER/EARLY SPRING

WINTER AND EARLY SPRING

SPECIES	RATE (LB/ACRE)
Rye (GRAIN)	120
*ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50

*OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SUMMER

SPECIES	RATE (LB/ACRE)
GERMAN MILLET	40

FALL

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120

Seeding dates

COASTAL PLAIN – DEC.1-APR. 15 – LATE WINTER AND EARLY SPRING
APRIL 15 – JUNE 15 – SUMMER
AUG. 15 – DEC. 30 – FALL

Soil omendments

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

Mulch

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

Maintenance

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

GENERAL GRADING NOTES

1. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF SUCH UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF THE DITCHING OPERATION BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF THE TRENCHING OPERATIONS SO AS TO AVOID AND PREVENT DAMAGE TO THE EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING BUT NOT LIMITED TO REPAIRS AND LOSS SERVICE REVENUE. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC...
2. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
3. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAG MEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE NCDOT.
4. ALL MATERIAL CLEARED AND GRUBBED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK, SUCH AS TREES, VEGETATION, FENCING, ETC., SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE OR BURNED IF PROPER PERMITS ARE RECEIVED.

SITE NOTES

1. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO START OF CONSTRUCTION. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
2. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND R.O.W.'S PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
3. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
4. ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH THE RESPECTIVE UTILITY.
5. DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
6. THE GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
7. THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
8. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
9. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE GIVEN TO THE OWNER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENT SHALL BE MADE WITHOUT THE PERMISSION OF THE OWNER.
10. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COST HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS OR FROM DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. CONTACT NORTH CAROLINA ONE CALL TOLL FREE 1-800-632-4949 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NONSUBSCRIBING UTILITIES.
11. ALL PERMITS RELATIVE TO PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION
12. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY, AND LOCAL CODES.
13. FOR BUILDING DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
14. ALL DIMENSIONS AND RADII ARE TO OUTSIDE FACE OF BUILDING OR TO FACE OF CURB UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED.
16. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.

GENERAL STORM SEWER NOTES

1. ALL STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WILMINGTON AND THE STATE OF NORTH CAROLINA REQUIREMENTS AS SPECIFIED ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS.
2. BEDDING FOR ALL STORM SEWER PIPE SHALL BE AS SPECIFIED ON THE DRAWINGS, PROJECT SPECIFICATIONS, AND MANUFACTURER SPECIFICATIONS.
3. ALL STORM SEWER PIPES TO BE HDPE ADS N-12 OR EQUIVALENT, UNLESS OTHERWISE SPECIFIED.
4. ALL STORM SEWER PIPES SHOWN AS RCP ON THE PLANS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, UNLESS INDICATED OTHERWISE ON PLANS.

SITE AREA DESCRIPTION	GROUND STABILIZATION	
	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)

EXISTING UTILITY NOTES

1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.
2. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.

UTILITY CONTACTS:

1. CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING AND DIGGING. 1-800-632-4949

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED BY CONTRACTOR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO ANY EXCAVATION OR DEMOLITION.

CONTACT "CAROLINA ONE CALL" AT 1-800-632-4949
EMERGENCY DIAL 911 POLICE - FIRE - RESCUE

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

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

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

Date: _____ Permit # _____

Signed: _____



No.	Revision	Date	By

Designer	GSP	Scale	
Drawn By	GSP	Date	MARCH 2013
License #	P-0718	Job No.	2013--0001

JORDAN LANE TOWNHOMES
Wilmington North Carolina
New Hanover County

GENERAL NOTES

PREPARED FOR:
JORDAN LANE TOWN HOMES, LLC
6626 GORDON ROAD, UNIT C
WILMINGTON, NC 28411
910-799-3006

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-1

TREE INVENTORY

TREES TO BE REMOVED-			
TREE TYPE	SIZE	REASON FOR REMOVAL	# OF TREES
CEDAR	8"	ESSENTIAL SITE IMPROVEMENTS	2
CEDAR	10"	ESSENTIAL SITE IMPROVEMENTS	2
CEDAR	12"	ESSENTIAL SITE IMPROVEMENTS	1
CEDAR	24"	ESSENTIAL SITE IMPROVEMENTS	1
DOGWOOD	6"	ESSENTIAL SITE IMPROVEMENTS 3 (1 DEAD)	3
DOGWOOD	8"	ESSENTIAL SITE IMPROVEMENTS	1
OAK	8"	ESSENTIAL SITE IMPROVEMENTS	2
OAK	10"	ESSENTIAL SITE IMPROVEMENTS	2
SYCAMORE	16"	ESSENTIAL SITE IMPROVEMENTS	1
MAPLE	14"	ESSENTIAL SITE IMPROVEMENTS	1
TREES TO BE PRESERVED-			
TREE TYPE	SIZE	# OF TREES	
PECAN	30"	1	
MAGNOLIA	30"	1	
MAGNOLIA	40"	1	
OAK	8"	1	
OAK	10"	3	
OAK	12"	1	
OAK	18"	1	
OAK	20"	2	
OAK	24"	1	
CEDAR	24"	1	

n/i
Dr. Jerry
Jernigan
D.B. 1033-792
Zoning: CB
Land Use: Dentist
Office

n/i
Peggy A. Sutton
Wilkes et al
D.B. 2045-107
Zoning: CB
Land Use: Service Station

n/i
Peggy A. Sutton
Wilkes et al
D.B. 2045-104
Zoning: CB
Land Use: Residential

n/i
Fredrick &
Barbara Stallings
D.B. 2099-341
Zoning: R-10
Land Use: Residential

n/i
Judy Peterson
Matthews et al
D.B. 2072-088
Zoning: R-10
Land Use: Residential

n/i
William Lawrence
Owens
D.B. 1365-1818
Zoning: R-10
Land Use: Residential

Site Inventory Notes:

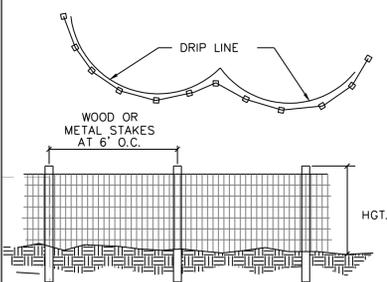
- Soils Type: Bh (Baymeade Urban land complex)
- This property is not impacted by any AEC.
- There are no Conservation Overlay boundaries affecting this property.
- This site is not impacted by any recognized historic or archeological significance.
- No cemeteries were evidenced on the site.
- Existing vegetation has been located and is labeled.
- There is no evidence of jurisdictional wetlands on the site.
- There is no evidence of endangered species or habitat issues on the site.
- This property is not within any flood hazard area as evidenced on N.C. Flood Map 3720314700J.
- The site drainage flows into the Bradley Creek drainage basin, SC classified waters.

n/i
Stephanie
Speros
D.B. 3547-316
Zoning: O&I
Land Use: Vacant
Building

n/i
George
Sounders
D.B. 4892-1749
Zoning: O&I
Land Use: Vacant
Land

n/i
Melba H.
Neville
D.B. 155-678
Zoning: O&I
Land Use: Vacant
Building

n/i
Reiser
Properties, L.L.C.
D.B. 5288-1270
Zoning: R-10
Land Use: Mobile
Home Park

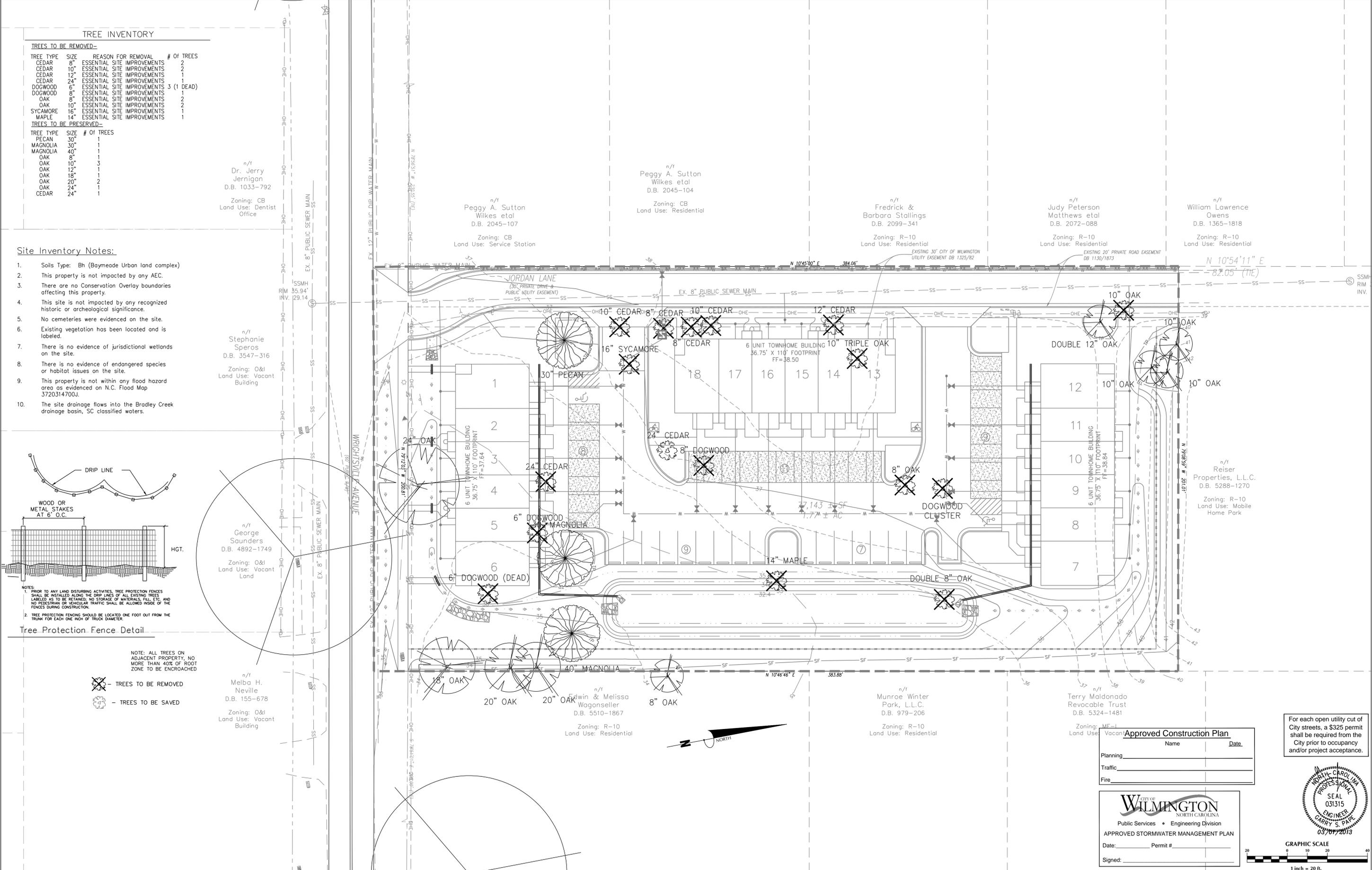


- NOTES:**
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, TREE PROTECTION FENCES SHALL BE INSTALLED ALONG THE DRIP LINES OF ALL EXISTING TREES LABELED AS TO BE RETAINED; NO STORAGE OF MATERIALS, FILL, ETC. AND NO PEDESTRIAN OR VEHICULAR TRAFFIC SHALL BE ALLOWED INSIDE OF THE FENCES DURING CONSTRUCTION.
 - TREE PROTECTION FENCING SHOULD BE LOCATED ONE FOOT OUT FROM THE TRUNK FOR EACH ONE INCH OF TRUNK DIAMETER.

Tree Protection Fence Detail

NOTE: ALL TREES ON ADJACENT PROPERTY, NO MORE THAN 40% OF ROOT ZONE TO BE ENCRoACHED

- TREES TO BE REMOVED
- TREES TO BE SAVED



Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

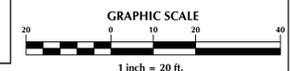
Fire _____

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

Date: _____ Permit # _____

Signed: _____

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Designer	GSP	Scale	1" = 20'
Drawn By	GSP	Date	MARCH 2013
License #	P-0718	Job No.	2013-0001

JORDAN LANE TOWNHOMES
Wilmington New Hanover County North Carolina

SITE INVENTORY PLAN

PREPARED FOR:
JORDAN LANE TOWN HOMES, LLC
6626 GORDON ROAD, UNIT C
WILMINGTON, NC 28411
910-799-3006

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-2.1

TRANSPORTATION NOTES:

- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY & FOR DRIVEWAY ARE TO BE THERMOPLASTIC & MEET CITY AND/OR NCDOT STANDARDS.
- TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
- CONTACT TRAFFIC ENGINEERING, AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN. ADD A NOTE TO CALL TRAFFIC ENGINEERING FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE R/W.
- ANY BROKEN OR MISSING SIDEWALK PANELS AND/OR CURBING SHALL BE REPLACED.
- CONTACT KAREN DIXON AT 341-7888 TO DISCUSS SITE LIGHTING OPTIONS. THE LANDSCAPING PLAN WILL BE NEEDED TO DETERMINE SITE LIGHT LOCATIONS.
- TACTILE WARNING MATS TO BE INSTALLED AT ALL WHEELCHAIR RAMPS.
- IT SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBDIVIDER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBDIVIDER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CALL 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
- A LANDSCAPING PLAN SHALL BE SUBMITTED TO THE TRAFFIC ENGINEERING DIVISION FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAN.
- IF UNITS ARE SOLD BUYER MUST RECEIVE A SUBDIVISION STREET DISCLOSURE STATEMENT.

n/i
Dr. Jerry
Jernigan
D.B. 1033-792
Zoning: CB
Land Use: Dentist
Office

n/i
Stephanie
Speros
D.B. 3547-316
Zoning: O&I
Land Use: Vacant
Building

n/i
George
Sounders
D.B. 4892-1749
Zoning: O&I
Land Use: Vacant
Land

n/i
Melba H.
Neville
D.B. 155-678
Zoning: O&I
Land Use: Vacant
Building

n/i
Peggy A. Sutton
Wilkes et al
D.B. 2045-107
Zoning: CB
Land Use: Service Station

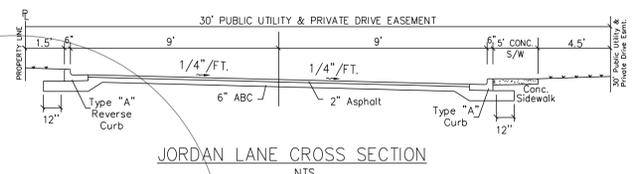
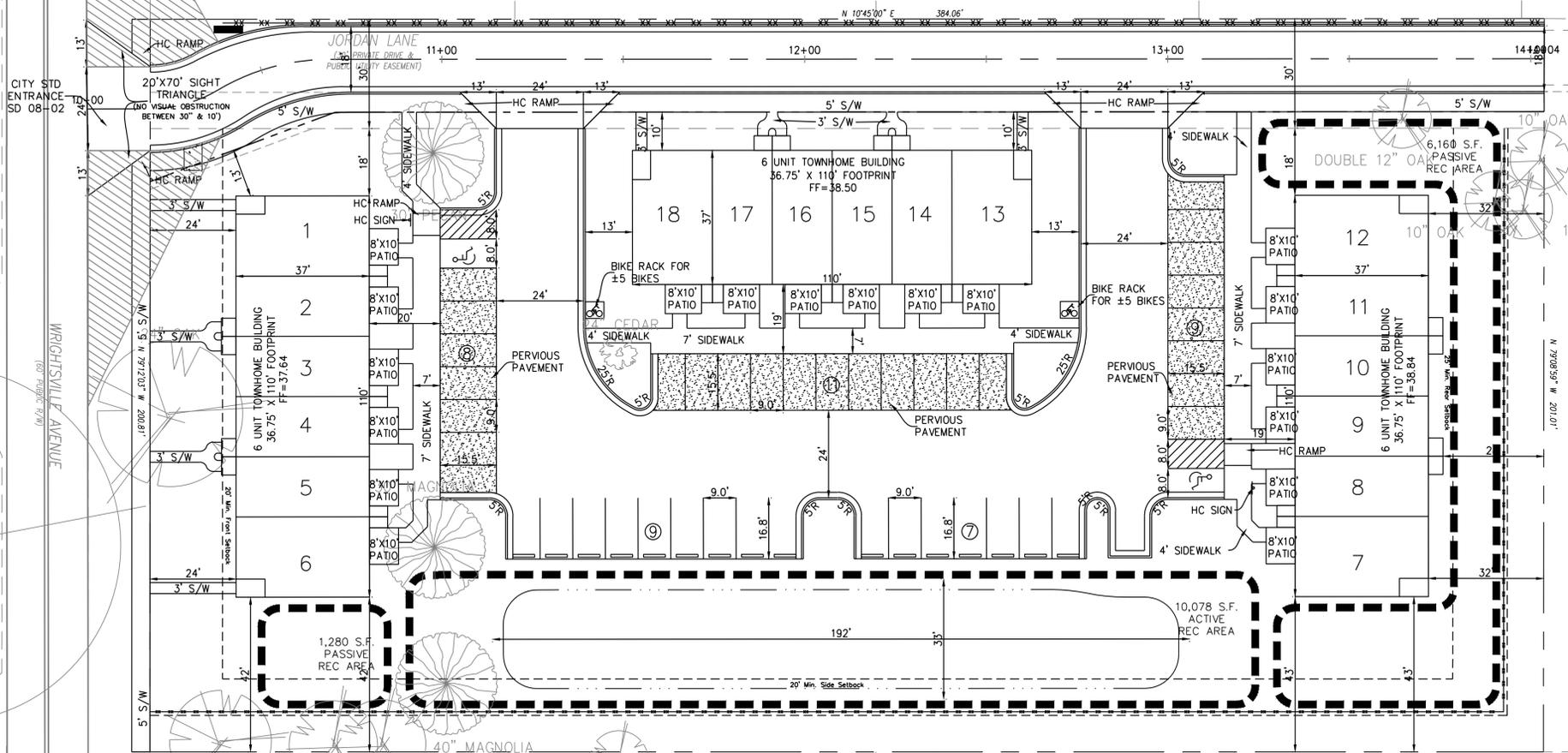
n/i
Peggy A. Sutton
Wilkes et al
D.B. 2045-104
Zoning: CB
Land Use: Residential

n/i
Fredrick &
Barbara Stallings
D.B. 2099-341
Zoning: R-10
Land Use: Residential

n/i
Judy Peterson
Matthews et al
D.B. 2072-088
Zoning: R-10
Land Use: Residential

n/i
William Lawrence
Owens
D.B. 1365-1818
Zoning: R-10
Land Use: Residential

n/i
Reiser
Properties, L.L.C.
D.B. 5288-1270
Zoning: R-10
Land Use: Mobile
Home Park



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

Approved Construction Plan

Name _____ Date _____

Planning _____

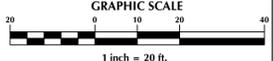
Traffic _____

Fire _____

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

Date: _____ Permit # _____

Signed: _____



No.	Revision	Date	By

Designer	GSP	Scale	1" = 20'
Drawn By	GSP	Date	MARCH 2013
License #	P-0718	Job No.	2013-0001

JORDAN LANE TOWNHOMES
Wilmington New Hanover County North Carolina

SITE PLAN

PREPARED FOR:
JORDAN LANE TOWN HOMES, LLC
6626 GORDON ROAD, UNIT C
WILMINGTON, NC 28411
910-799-3006

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-3

GENERAL UTILITY NOTES:

- PROJECT SHALL COMPLY WITH CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) CROSS CONNECTION REQUIREMENTS. WATER METER(S) CANNOT BE SET AND ACTIVATED ON NEW MAINS UNTIL ALL REQUIREMENTS ARE MET AND NCDENR HAS ISSUED THEIR "FINAL APPROVAL". CALL 332-6558 FOR INFORMATION.
- IF THE CONTRACTOR DESIRES CFPUA WATER FOR CONSTRUCTION HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
- TO USE CFPUA WATER FOR IRRIGATION IT MUST BE METERED SEPARATELY.
- WHEN PVC WATER MAINS AND/OR POLYETHYLENE SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED COPPER WIRE INSTALLED THE ENTIRE LENGTH AND STRAPPED TO THE PIPES WITH DUCT TAPE. THE INSULATED WIRE IS TO BE STRIPPED TO BARE WIRE AND SECURED TO ALL VALVES AND FITTINGS. THIS WIRE IS TO BE ACCESSIBLE AT ALL VALVES, FIRE HYDRANTS, AND WATER METER BOXES TO AID IN FUTURE LOCATIONS OF FACILITIES.
- TREES ARE NOT TO BE PLANTED OVER WATER MAINS OR WITHIN UTILITY EASEMENTS.
- STATE WATER AND SEWER PERMITS SHALL BE OBTAINED PRIOR TO RELEASE OF THE PROJECT FOR CONSTRUCTION.
- ALL WATERMAIN WITHIN PUBLIC RIGHT OF WAY TO BE PUBLIC. WATERMANS LOCATED ON PRIVATE PROPERTY TO BE PRIVATE.

n/i
Dr. Jerry
Jernigan
D.B. 1033-792
Zoning: CB
Land Use: Dentist
Office

n/i
Stephanie
Speros
D.B. 3547-316
Zoning: O&I
Land Use: Vacant
Building

SITE DATA:

18 TOTAL UNITS - 42 TOTAL BEDROOMS
(3) 2 UNIT-3 BEDROOM TOWNHOME & 4 UNIT-2 BEDROOM TOWNHOME BUILDINGS
PROPOSED - 12-2 BEDROOM & 6-3 BEDROOM
12 2-BEDROOM * 240 GPD + 3-BEDROOM * 360 GPD
= 5,040 GPD

PUBLIC
2" WATER = 29 LF
6" SEWER = 49 LF

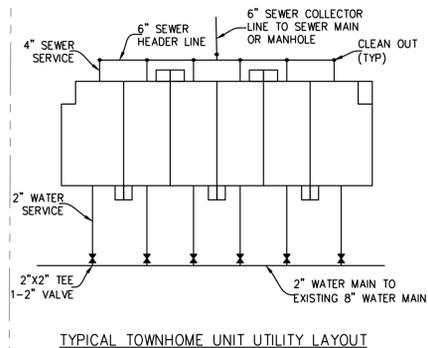
PRIVATE
2" WATER = 333 LF (MAIN)
2" WATER = 911 LF (SERVICES)
1-1/2" WATER METER
6" SEWER = 312 LF & 24 CLEANOUTS
4" SEWER = 135 LF

n/i
George
Sounders
D.B. 4892-1749
Zoning: O&I
Land Use: Vacant
Land

n/i
Melba H.
Neville
D.B. 155-678
Zoning: O&I
Land Use: Vacant
Building

NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT CFPUA STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.



TYPICAL TOWNHOME UNIT UTILITY LAYOUT

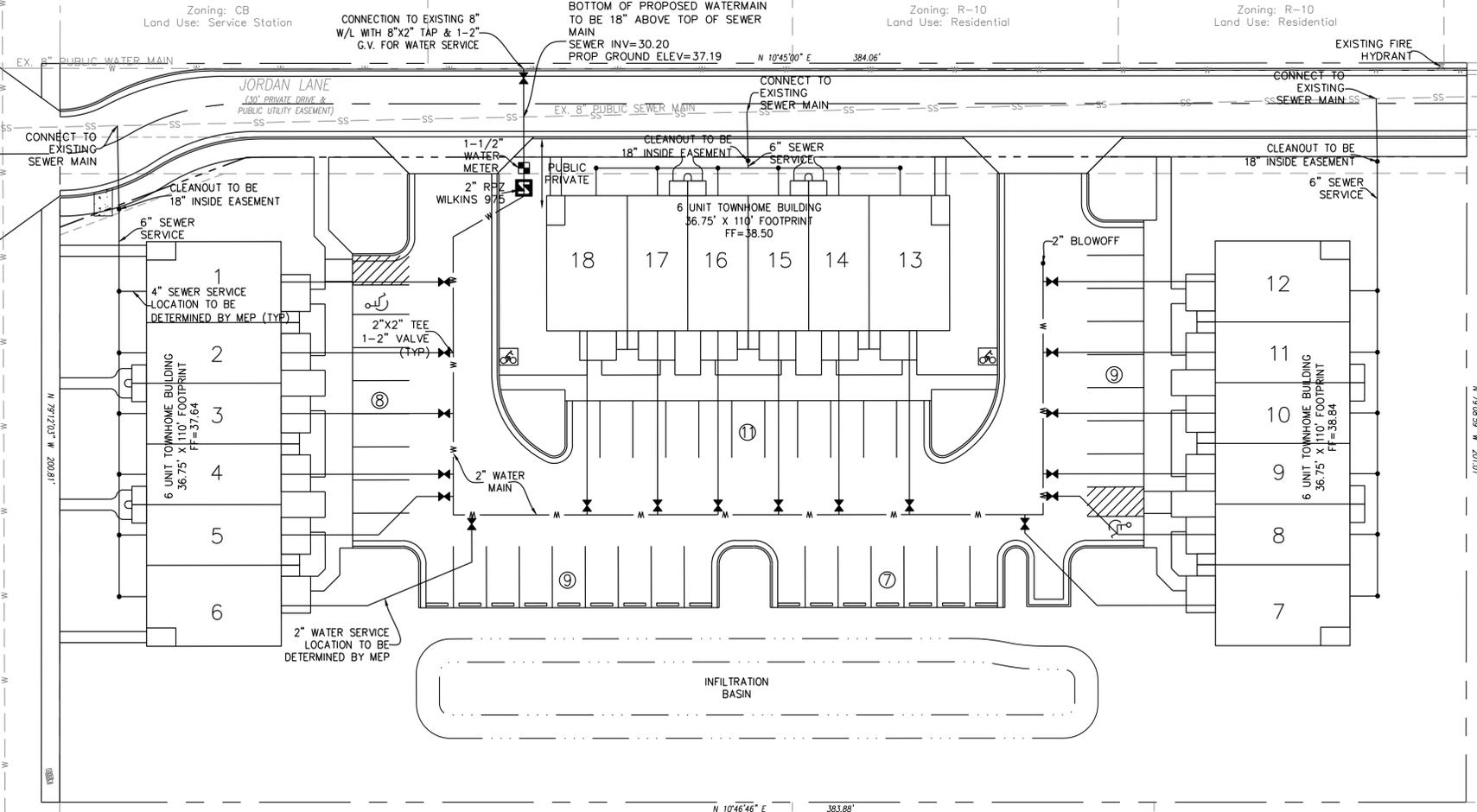
n/i
Peggy A. Sutton
Wilkes et al
D.B. 2045-107
Zoning: CB
Land Use: Service Station

n/i
Peggy A. Sutton
Wilkes et al
D.B. 2045-104
Zoning: CB
Land Use: Residential

n/i
Fredrick &
Barbara Stallings
D.B. 2099-341
Zoning: R-10
Land Use: Residential

n/i
Judy Peterson
Matthews et al
D.B. 2072-088
Zoning: R-10
Land Use: Residential

n/i
William Lawrence
Owens
D.B. 1365-1818
Zoning: R-10
Land Use: Residential



CFPUA STANDARD SEWER NOTES

- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
- SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT R/W LINE. SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
- ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF CLASS 50, DIP, WITH PROTECTO 401 CERAMIC EPOXY LINING.
- 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN.
- NO FLEXIBLE COUPLINGS SHALL BE USED.
- ALL CLEANOUTS TO BE LOCATED IN THE CENTER OF THE LOT.

n/i
Edwin & Melisso
Wagonseller
D.B. 5510-1867
Zoning: R-10
Land Use: Residential



n/i
Munroe Winter
Park, L.L.C.
D.B. 979-206
Zoning: R-10
Land Use: Residential

n/i
Terry Maldonado
Revocable Trust
D.B. 5324-1481
Zoning: MF-1
Land Use: Vacant

NOTES:

- HYDRANT MUST BE WITHIN 150' OF THE FDC.
- THE FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
- HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
- NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDING(S).
- CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- UNDERGROUND FIRE LINE AND PRIVATE WATER MAINS MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PRIVATE RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.

Approved Construction Plan

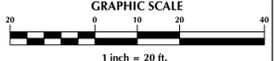
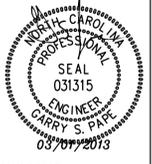
Name	Date
Planning	
Traffic	
Fire	

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

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No.	Revision	Date	By

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Drawn By	GSP	Date	MARCH 2013
License #	P-0718	Job No.	2013-0001

JORDAN LANE TOWNHOMES
Wilmington New Hanover County North Carolina

UTILITY PLAN

PREPARED FOR:
JORDAN LANE TOWN HOMES, LLC
6626 GORDON ROAD, UNIT C
WILMINGTON, NC 28411
910-799-3006

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-4

NOTES:

1. ALL IMPERVIOUS SITE AREA TO BE DRAINED TO PROPOSED STORM SEWER SYSTEM AND DISCHARGED TO INFILTRATION BASIN.
2. INFILTRATION BASIN WILL BE PUMPED DOWN BY MECHANICAL MEANS IN CASE OF EMERGENCY.
3. PRIOR TO USE AS AN INFILTRATION BASIN, ALL ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF, THEN THE APPROPRIATE MODIFICATIONS TO THE BASIN CAN BE INCORPORATED.
4. THE SWALES DIRECTING THE RUNOFF TO THE INFILTRATION BASIN MUST BE REGULARLY MAINTAINED TO ENSURE THAT THE STORMWATER SYSTEM FUNCTIONS AS DESIGNED.
5. ALL DITCH WORK WITHIN ROW TO BE COMPLETED AND EXCELSIOR MAT TO BE INSTALLED PRIOR TO ANY RAIN EVENT.
6. PRIOR TO THE CREATION OF ANY IMPERVIOUS SURFACES THE FINAL DESIGN SHOULD BE BUILT. SEE SHEET C-6 FOR BASIN DETAILS.
7. ALL EXISTING/PROPOSED STORM INLETS WITHIN THE DISTURBANCE AREA TO HAVE EITHER INLET PROTECTION OR A SILT SACK INSTALLED, SEE DETAILS ON SHEET C-8.
8. SEDIMENT BASIN WILL BE PUMPED DOWN BY MECHANICAL MEANS WHEN SEDIMENT REACHES 50% STORAGE ELEVATION AND MUCKED OUT.

Dr. Jerry Jernigan
D.B. 1033-792

Zoning: CB
Land Use: Dentist Office

Stephanie Speros
D.B. 3547-316

Zoning: O&I
Land Use: Vacant Building

George Saunders
D.B. 4892-1749

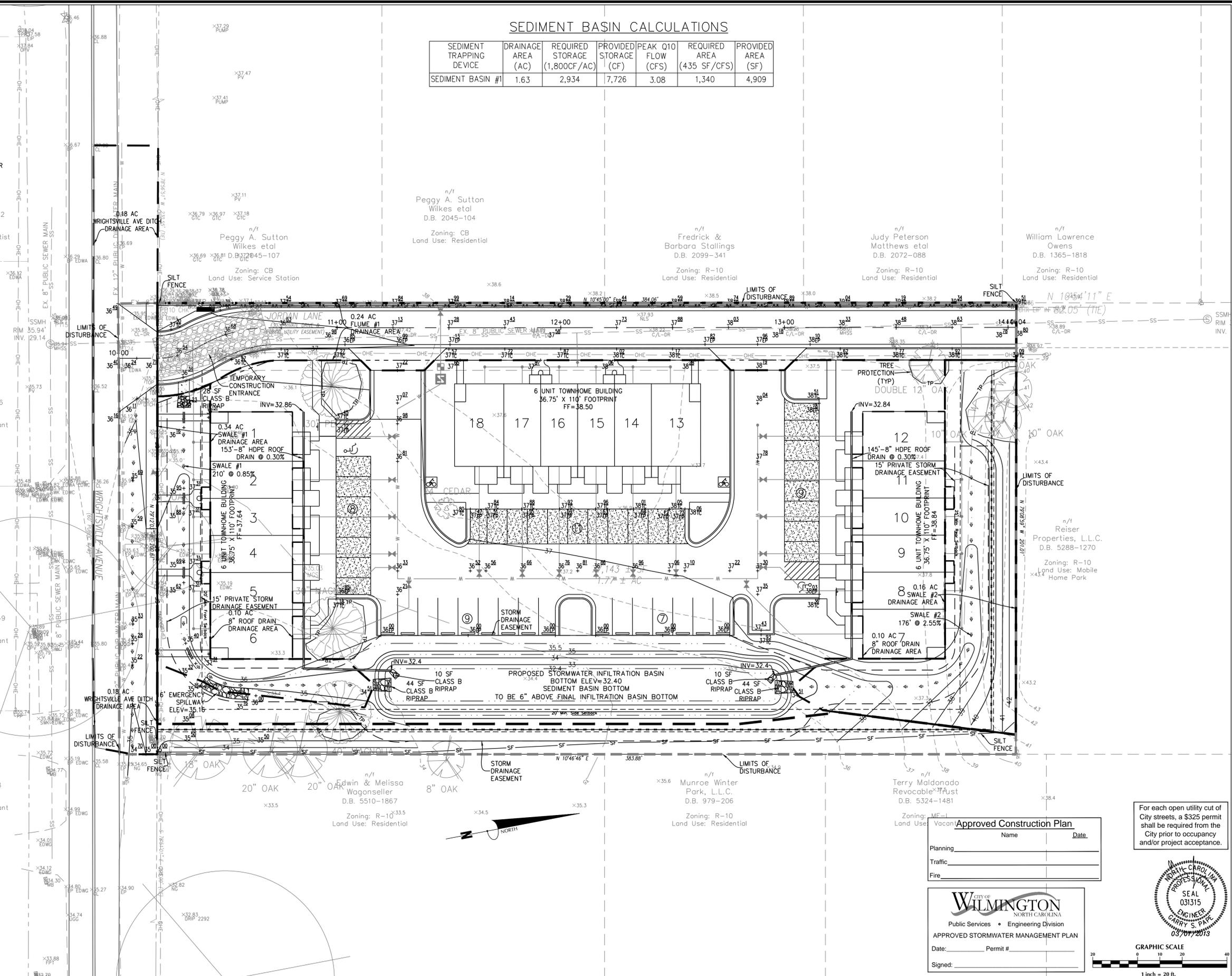
Zoning: O&I
Land Use: Vacant Land

Melba H. Neville
D.B. 155-678

Zoning: O&I
Land Use: Vacant Building

SEDIMENT BASIN CALCULATIONS

SEDIMENT TRAPPING DEVICE	DRAINAGE AREA (AC)	REQUIRED STORAGE (1,800CF/AC)	PROVIDED STORAGE (CF)	PEAK Q10 FLOW (CFS)	REQUIRED AREA (435 SF/CFS)	PROVIDED AREA (SF)
SEDIMENT BASIN #1	1.63	2,934	7,726	3.08	1,340	4,909



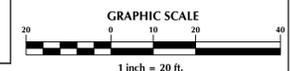
Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

City of Wilmington
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____

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No.	Revision	Date	By

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Drawn By	GSP	Date	MARCH 2013
License #	P-0718	Job No.	2013-0001

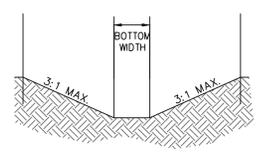
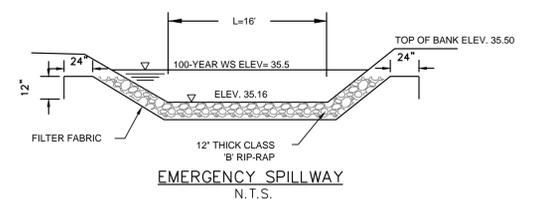
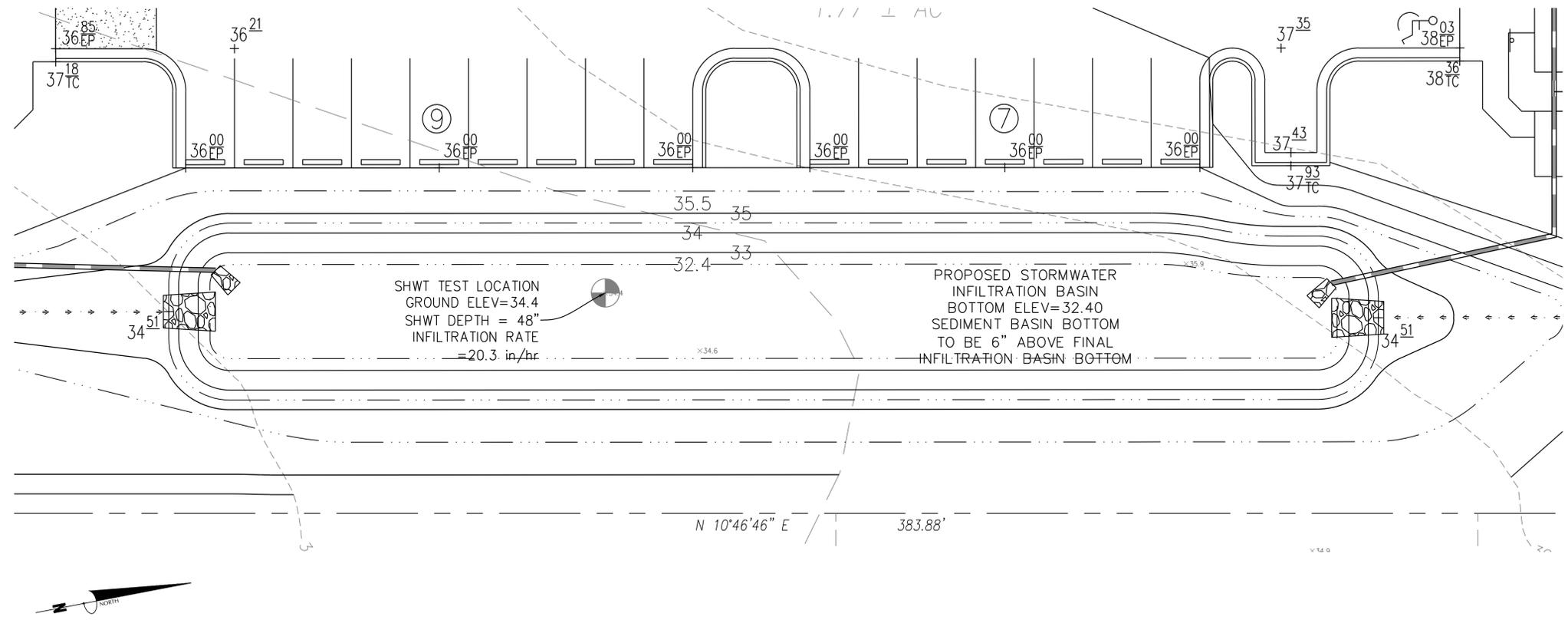
JORDAN LANE TOWNHOMES
Wilmington New Hanover County North Carolina

GRADING, DRAINAGE & EROSION & SEDIMENT CONTROL PLAN

PREPARED FOR:
JORDAN LANE TOWN HOMES, LLC
6626 GORDON ROAD, UNIT C
WILMINGTON, NC 28411
910-799-3006

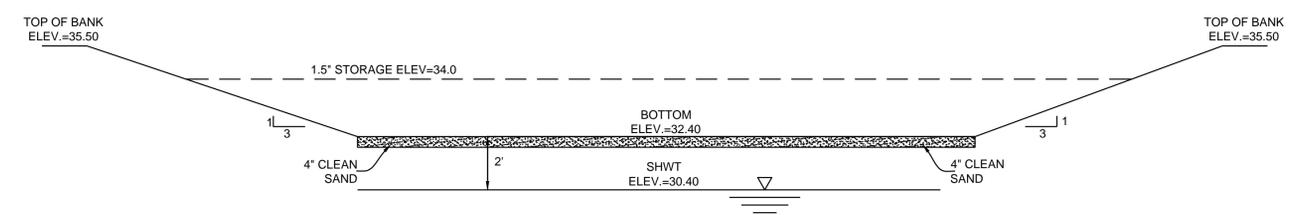
GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-5



SWALE COMPUTATIONS					
SWALE	TYPE	AVERAGE SLOPE	SIDE SLOPE	BOTTOM WIDTH	DITCH TYPE
SWALE #1	GRASS	0.85%	3:1	5- FEET	TRAPEZOIDAL
SWALE #2	GRASS	2.55%	3:1	5- FEET	TRAPEZOIDAL

SWALE CROSS SECTION DETAIL



TEST LOCATION	GROUND ELEVATION	SHWT DEPTH	SHWT ELEVATION	BASIN BOTTOM ELEVATION	BASIN DEPTH (FT)	1.5\"/>		
ECS TEST #1	34.4	48"	30.4	32.4	3.10	34.0	5,184	5,360

INFILTRATION BASIN CROSS-SECTION
N.T.S.

- NOTES:
- SEASONAL HIGH WATER TABLE & INFILTRATION RATES WERE TAKEN AT A GROUND ELEVATION OF 34.4 AND ESTIMATED TO BE 48 INCHES FOR A SHWT ELEVATION OF 30.4. THE INFILTRATION RATE WAS DETERMINED TO BE 20.3 in/hr.
 - ALL IMPERVIOUS SITE AREA TO BE DRAINED TO PROPOSED STORM SEWER SYSTEM AND DISCHARGED TO INFILTRATION BASIN.
 - BASIN WILL BE PUMPED DOWN BY MECHANICAL MEANS IN CASE OF EMERGENCY.
 - PRIOR TO USE AS AN INFILTRATION BASIN, ALL ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF, THEN THE APPROPRIATE MODIFICATIONS TO THE BASIN CAN BE INCORPORATED.
 - THE REQUIREMENTS FOR A BYPASS SYSTEM, VEGETATED FILTER STRIP AND ADDITIONAL STORAGE VOLUME ARE BEING REQUESTED TO BE WAIVED BASED ON THE CALCULATIONS SHOWING THAT THE INFILTRATION BASIN WILL INFILTRATE THE 10-YEAR, 24 HOUR STORM EVENT USING AN INFILTRATION RATE OF ONE-HALF THE INFILTRATION RATE REPORTED IN THE SOILS REPORT. CALCULATIONS ARE PROVIDED TO SUPPORT THIS.

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

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

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

Date: _____ Permit # _____

Signed: _____



No.	Revision	Date	By

Designer	GSP	Scale	1" = 10'
Drawn By	GSP	Date	MARCH 2013
License #	P-0718	Job No.	2013-0001

JORDAN LANE TOWNHOMES
Wilmington New Hanover County North Carolina

INFILTRATION BASIN/SWALE DETAILS

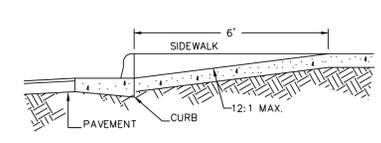
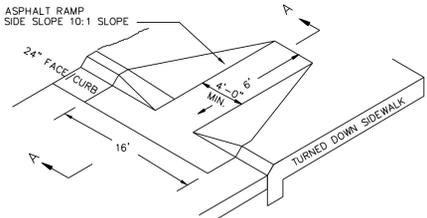
PREPARED FOR:
JORDAN LANE TOWN HOMES, LLC
6626 GORDON ROAD, UNIT C
WILMINGTON, NC 28411
910-799-3006

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

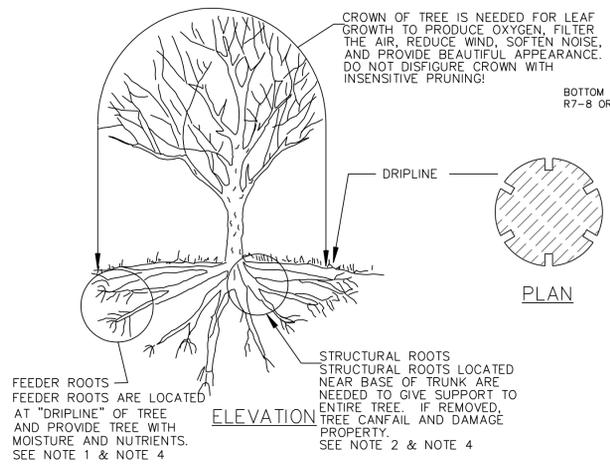
Sheet No.
C-6

GENERAL NOTES

- I. LOCATION OF WHEELCHAIR RAMPS:**
1. IN ACCORDANCE WITH THE RATIFIED HOUSE BILL 1296, ALL STREET CURBS IN NORTH CAROLINA BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIRS, CORRECTION OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1, 1973 SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY HANDICAPPED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTERS AND SIDEWALKS ARE PROVIDED AND AT OTHER MAJOR POINTS OF PEDESTRIAN FLOW.
 2. WHEELCHAIR RAMPS SHOULD BE LOCATED AS INDICATED IN DETAIL DRAWINGS, HOWEVER EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. MAY AFFECT PLACEMENT.
- II. CONSTRUCTION NOTES:**
1. NO SLOPE SHALL EXCEED 1"-1" (12:1) ON THE RAMP OR SIDEWALK.
 2. IN NO CASE SHALL THE WIDTH OF WHEELCHAIR RAMPS BE LESS THAN 40" (3'-4"). WIDTHS MAY EXCEED 40" IF NECESSARY.
 3. USE CLASS "A" CONCRETE WITH THE SURFACE HAVING A ROUGH, NON-SKID TYPE FINISH.
 4. 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE CONCRETE WHEELCHAIR RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE.
 5. CONSTRUCTION METHODS SHALL CONFORM WITH THOSE OF THE GOVERNING BODY WHICH HAS JURISDICTION OF THE PARTICULAR STREET.
- III. ADDITIONAL NOTES:**
1. THE INSIDE PEDESTRIAN CROSSWALK LINES SHALL BE ESTABLISHED BY BISECTING THE INTERSECTION RADII WHERE MARKED (SEE NOTE 6).
 2. THE WHEELCHAIR RAMP SHALL BE LOCATED SO THAT THE BEGINNING OF THE WHEEL CHAIR RAMP WILL BE TWO FEET FROM THE INSIDE PEDESTRIAN CROSSWALK LINE.
 3. THE WIDTH OF THE PEDESTRIAN CROSSWALK SHALL BE 10 FEET UNLESS A GREATER WIDTH IS REQUIRED TO ACCOMMODATE THE PEDESTRIAN TRAFFIC.
 4. STOP BARS SHALL BE USED WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN, OR OTHER LEGAL REQUIREMENTS.
 5. PARKING SHALL BE ELIMINATED A MINIMUM OF 20 FEET BACK OF PEDESTRIAN CROSSWALK.
 6. ALL PAVED MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THIS IS AVAILABLE FROM THE SUPERINTENDENT OF DOCUMENTS, U.S GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402.

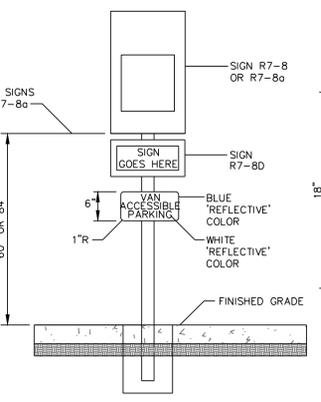


**SECTION A-A
WHEELCHAIR RAMP (DROP CURB)
WHEELCHAIR RAMP
N.T.S.**

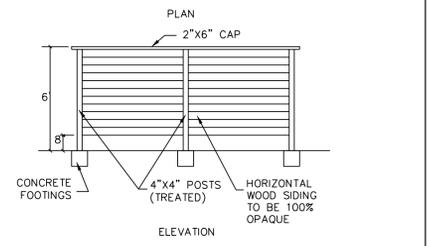
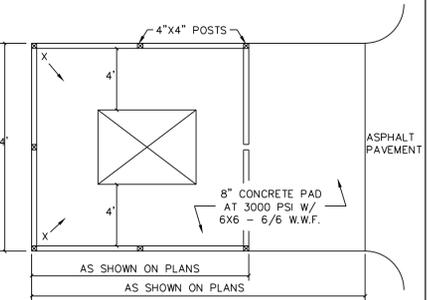


- TREE PROTECTION DURING CONSTRUCTION**
1. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO HEAVY MATERIALS SHALL BE STORED BENEATH TREES. RESULTS OF COMPACTING CAUSE WATER AND AIR NOT TO REACH THE ROOTS AND THE TREE WILL DIE. THESE "FEEDING ROOTS" OCCUR WELL AWAY FROM THE BASE OF THE TREE TO THE EDGE OF THE OVERHEAD BRANCH CANOPY. DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. A PROTECTIVE BARRIER SHOULD PREVENT DAMAGE FROM OCCURRING DURING CONSTRUCTION.
 2. NO CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK. THESE ARE ESSENTIAL IN SUPPORTING THE TREE AND HOLDING IT UPRIGHT IN HIGH WINDS. REMOVAL OF THESE ROOTS ALONG ONE SIDE IS OFTEN DONE BECAUSE OF A WALK, PAVING OR BUILDING WHICH IS BEING CONSTRUCTED.
 3. AVOID CUT AND FILL WITHIN DIAMETER OF TREE CROWN DURING EXCAVATION.

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

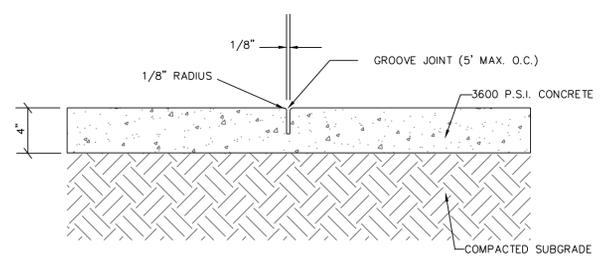


**HANDICAP PARKING SIGNAGE
N.T.S.**

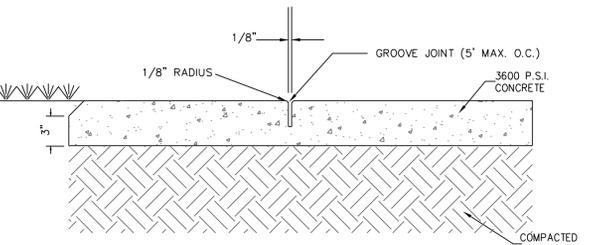


**DUMPSTER PAD & ENCLOSURE DETAIL
N.T.S.**

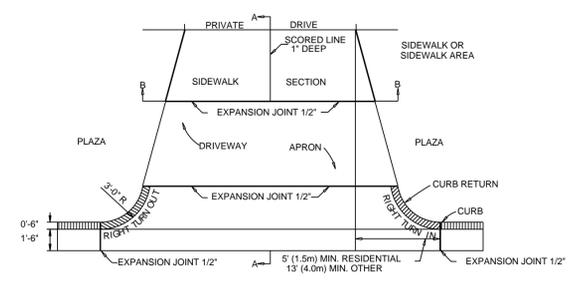
GUIDELINES FOR WHEELCHAIR RAMPS



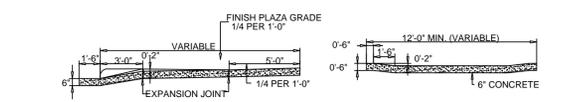
CONCRETE SIDEWALK DETAIL



SIDEWALK ADJACENT TO GRASSED AREAS AND PLANTERS



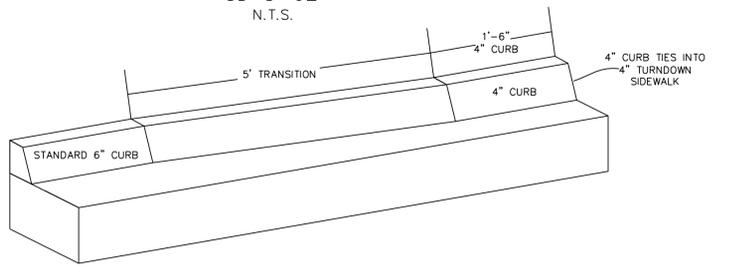
PAVEMENT PLAN



SECTION A-A SECTION B-B

STANDARD DRIVEWAY DETAIL

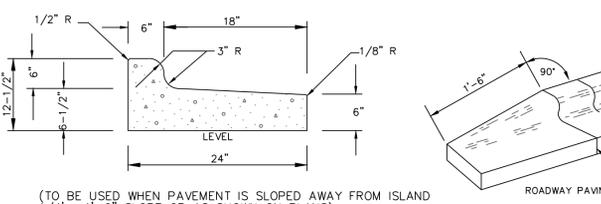
**SD 8-02
N.T.S.**



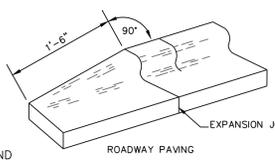
**6" CURB TRANSITION TO 4" TURNDOWN SIDEWALK
N.T.S.**

**CONCRETE SIDEWALK
N.T.S.**

GENERAL NOTES:
A GROOVE JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK ABUTS ANY CURB & GUTTER AND ANY RIGID STRUCTURES. IN SIDEWALKS & PLAZA AREAS EXPANSION JOINTS ARE REQUIRED AT NO GREATER THAN 30' INTERVALS CONCRETE SHALL BE 3600 PSI. IN 28 DAYS.



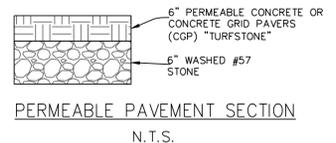
24" CURB AND GUTTER (REVERSE SLOPE)



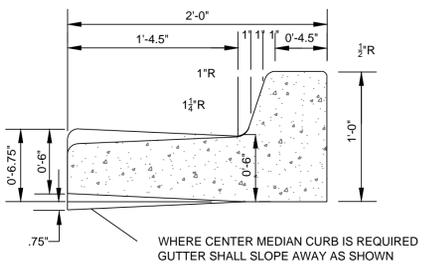
24" CURB & GUTTER TERMINATION DETAIL

**CURB AND GUTTER
N.T.S.**

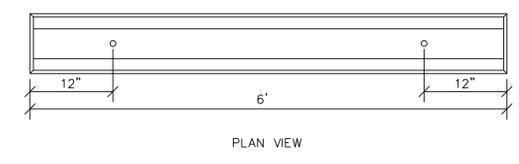
GENERAL NOTES:
CONTRACTION JOINTS SHALL BE SPACED AT MAX. 10' INTERVALS, EXCEPT THAT A 15 FOOT SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10 FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS, WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-1/2" SHALL BE OBTAINED. ALL CONTRACTION JOINTS EXCEPT IN 8" X 6" MEDIAN CURB SHALL BE FILLED WITH JOINT SEALER. EXPANSION JOINTS SHALL BE SPACED AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.



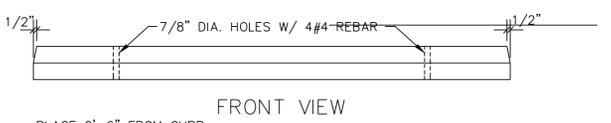
**PERMEABLE PAVEMENT SECTION
N.T.S.**



**STANDARD CURB SECTION TYPE "A"
SD 7-01
NOT TO SCALE**



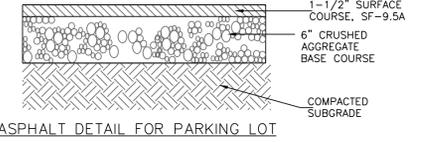
PLAN VIEW



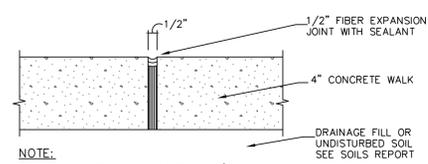
FRONT VIEW



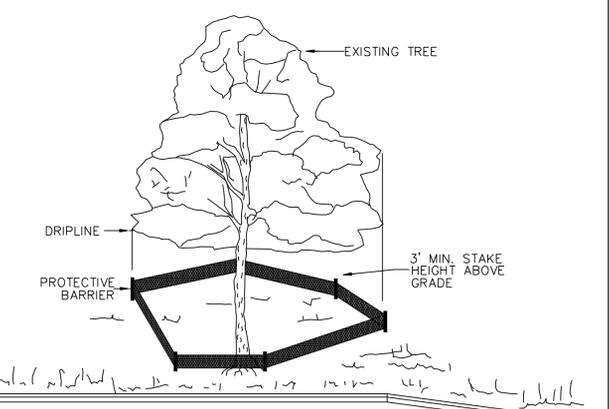
END VIEW TYPICAL WHEEL STOP DETAIL



**ASPHALT DETAIL FOR PARKING LOT
PAVEMENT DETAIL
N.T.S.**



**CONSTRUCTION JOINT
N.T.S.**



NOTE:
TREES TO BE SAVED WILL BE CLEARLY MARKED PRIOR TO CONSTRUCTION AND A PROTECTIVE BARRIER IS TO BE INSTALLED AT THE DRIPLINE.
DRIPLINE - THE AREA OF SOIL DIRECTLY BENEATH THE TREE EXTENDING OUT TO THE TIPS OF THE OUTERMOST BRANCHES.

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

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

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

WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____



No.	Revision	Date	By

Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	MARCH 2013
License #	P-0718	Job No.	2013-0001

JORDAN LANE TOWNHOMES

Wilmington New Hanover County North Carolina

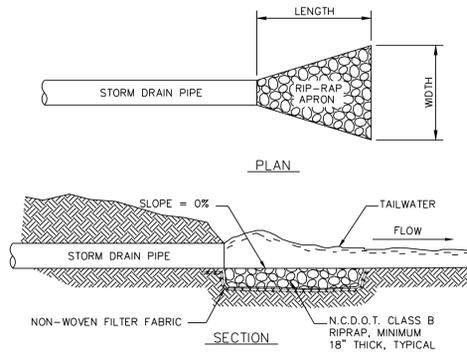
STANDARD DETAILS

PREPARED FOR:
JORDAN LANE TOWN HOMES, LLC
6626 GORDON ROAD, UNIT C
WILMINGTON, NC 28411
910-799-3006

**GSP CONSULTING, PLLC
ENGINEERING**

6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-7

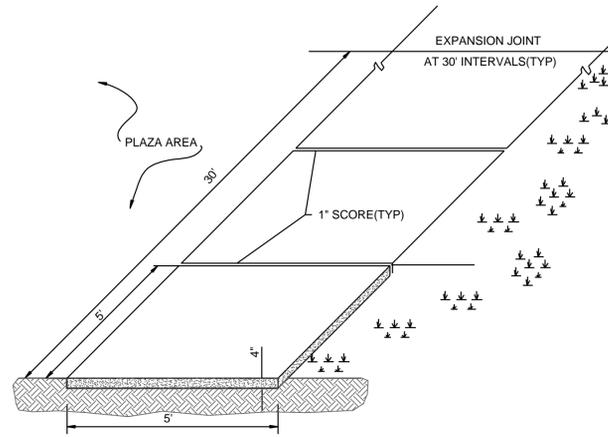


RIPRAP LOCATIONS	LENGTH (FT.)	UPSTREAM WIDTH (FT.)	DOWNSTREAM WIDTH (FT.)
CONC FLUME	5	5	6
SWALE #1	8	5	6
SWALE #2	8	5	6
8\"/>			

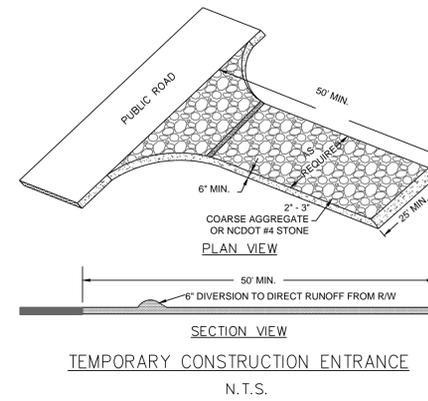
RIP-RAP OUTLET PROTECTION
N.T.S.

SEQUENCE OF CONSTRUCTION

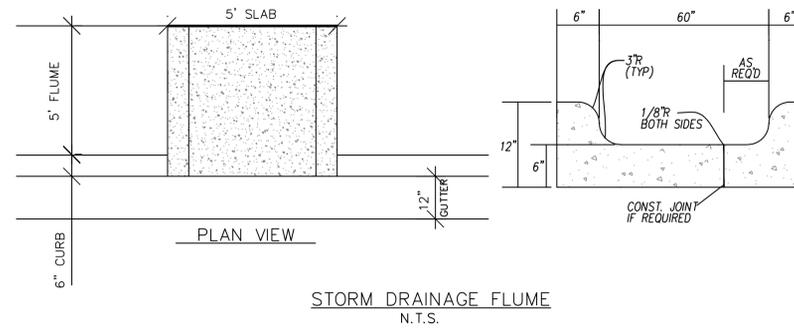
- LIMITS OF CONSTRUCTION = 1.85 ACRES
1. INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON EROSION & SEDIMENT CONTROL PLAN.
 2. INSTALL PERIMETER CONTROLS (TEMPORARY SILT FENCE, TREE PROTECTION FENCING, SEDIMENT BASIN) AS SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN. THIS STEP NEEDS TO BE COMPLETED PRIOR TO UPSLOPE LAND DISTURBING ACTIVITIES.
 3. THE PROPOSED INFILTRATION BASIN WILL ACT AS A SEDIMENT BASIN DURING CONSTRUCTION ACTIVITIES.
 4. ONCE PERIMETER CONTROLS AND SEDIMENT TRAPPING MEASURES ARE INSTALLED CLEAR AND GRUB SITE WITHIN LIMITS OF DISTURBANCE. THE SEDIMENT BASIN WILL BE PUMPED DOWN BY MECHANICAL MEANS AS NEEDED TO MUCK OUT SEDIMENT WHEN THE SEDIMENT REACHES 50% CAPACITY.
 5. UPON BRINGING THE SITE TO ROUGH GRADE, STABILIZE ALL AREAS WITH TEMPORARY VEGETATION IF LEFT UNDISTURBED FOR 15 WORKING DAYS AND ALL SLOPES WITHIN 21 CALENDAR DAYS.
 6. ONCE THE PARKING AREAS, SANITARY SEWERS, WATERLINES AND STORM SEWERS ARE IN PLACE, INSTALL INLET PROTECTION AS SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN.
 7. UPON BRINGING THE PARKING AREA TO SUBGRADE ELEVATIONS, STABILIZE THE AREAS BY PLACING STONE BASE AS EARLY AS POSSIBLE.
 8. FOR TEMPORARY VEGETATIVE STABILIZATION OF ALL DENUDED AREAS SEE NOTE REFERENCING THE EROSION CONTROL PROGRAM AND SPECIFICATIONS ON SHEET C-1.
 9. AFTER CONSTRUCTION OPERATIONS HAVE ENDED AND ALL DISTURBED AREAS HAVE BEEN STABILIZED, MECHANICAL SEDIMENT CONTROLS SHALL BE REMOVED. SEDIMENT FROM TEMPORARY SEDIMENT TRAPPING DEVICES SHALL BE DISPOSED OF BY SPREADING ON THE SITE OR HAULING AWAY IF NOT SUITABLE FOR FILL. ALL DENUDED AREAS ARE TO BE PERMANENTLY STABILIZED WITH PERMANENT VEGETATION.



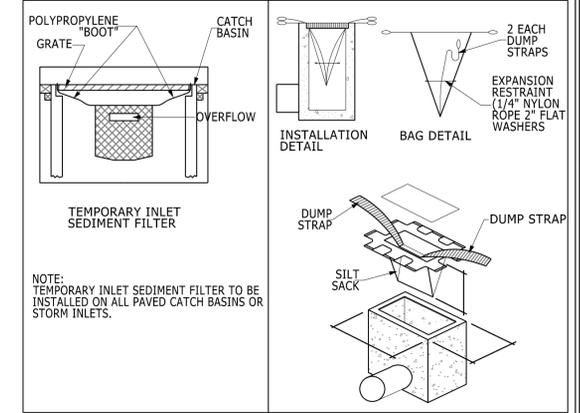
STANDARD SIDEWALK DETAIL
SD 8-15
NOT TO SCALE



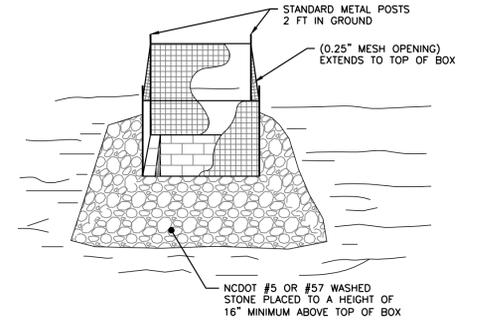
TEMPORARY CONSTRUCTION ENTRANCE
N.T.S.



STORM DRAINAGE FLUME
N.T.S.

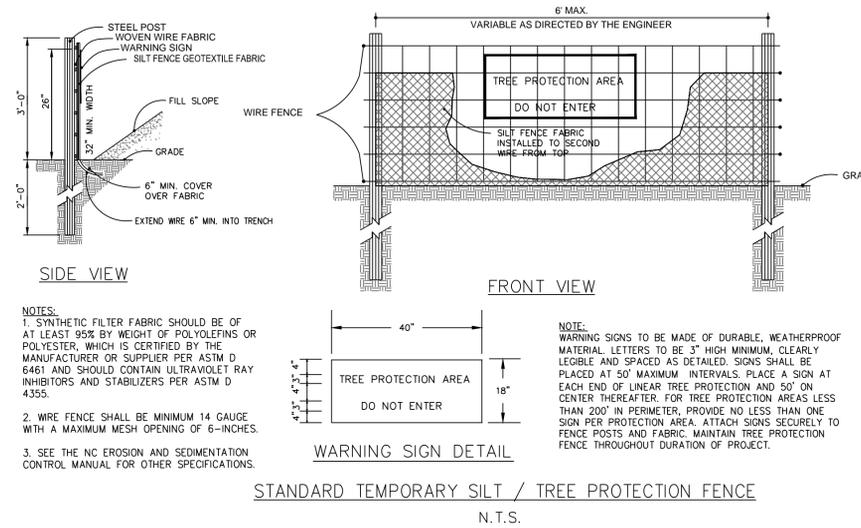


SILT SACK DETAIL
NOT TO SCALE



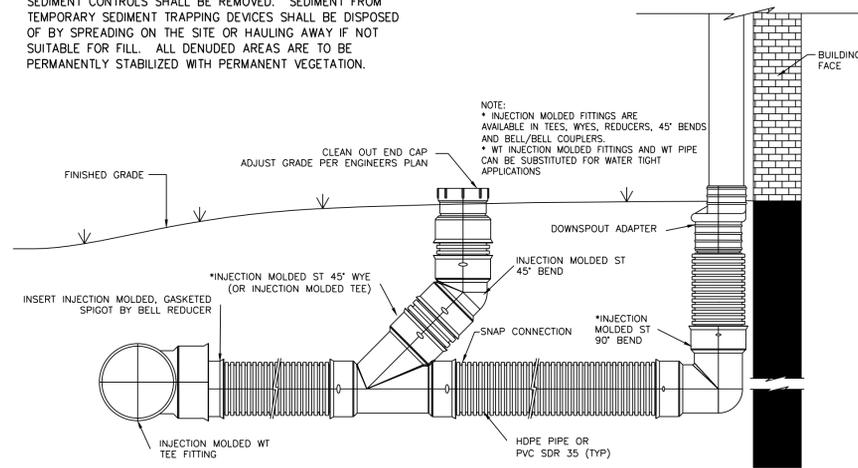
- NOTES:**
1. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
 2. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 1-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
 3. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A MIN HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.

STANDARD INLET PROTECTION
NOT TO SCALE



- NOTES:**
1. SYNTHETIC FILTER FABRIC SHOULD BE OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER PER ASTM D 6461 AND SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS PER ASTM D 4355.
 2. WIRE FENCE SHALL BE MINIMUM 14 GAUGE WITH A MAXIMUM MESH OPENING OF 6-INCHES.
 3. SEE THE NC EROSION AND SEDIMENTATION CONTROL MANUAL FOR OTHER SPECIFICATIONS.

STANDARD TEMPORARY SILT / TREE PROTECTION FENCE
N.T.S.



ROOF DRAIN DETAIL WITH CLEANOUT
N.T.S.

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

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

SEAL
031315
ENGINEER
CARY S. PIER
03/07/2013

No.	Revision	Date	By

Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	MARCH 2013
License #	P-0718	Job No.	2013-0001

JORDAN LANE TOWNHOMES
New Hanover County
North Carolina

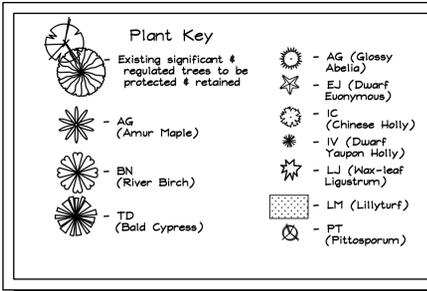
STANDARD DETAILS

PREPARED FOR:
JORDAN LANE TOWN HOMES, LLC
6626 GORDON ROAD, UNIT C
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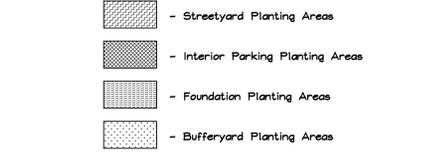
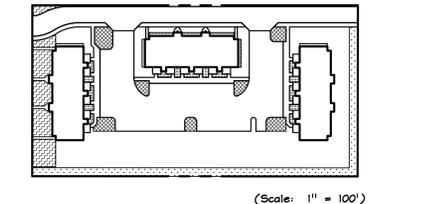
Sheet No.
C-8

KEY NO.	BOTANICAL NAME	COMMON NAME	MIN. SIZE	PLANTING REMARKS
AG 5	ACER GINNALA	MAPLE	2" - 2.5" CAL.	LG. CANOPY TREE
BN 5	BETULA NIGRA 'HERITAGE'	RIVER BIRCH	2" - 2.5" CAL.	LG. CANOPY TREE
TD 5	TAXODIUM DISTICHUM	BALD CYPRESS	2.5" CAL.	LG. SHADE TREE
AG 24	ABELIA GRANDIFLORA 'LITTLE RICHARD'	GLOSSY ABELIA	18"-24" HGT.	FOUNDATION SHRUB
EJ 48	BUXTOS JAPONICUS 'MICROPHYLLA'	DWARF CHINESE HOLLY	12"-18" HGT.	FOUNDATION SHRUB
IC 100	LEX CORNUTA 'NEEDLEPOINT'	HOLLY	36" HGT.	BUFFER SHRUB
IV 34	ILEX VOPITORIA 'NANA'	DWARF YAUPON HOLLY	12"-18" HGT.	SMALL SHRUB
LJ 50	LIGUSTRUM JAPONICUM 'VARIEGATUM'	MAX-LEAF LIGUSTRUM	36" HGT.	LG. BUFFER SHRUB
PT 60	PITTIOSPORUM TOBIIRA 'VARIEGATA'	VAREGATED PITTIOSPORUM	24"-30" HGT.	PIED BUFFER SHRUB
LM 206	LIRIOPE MUSCARI 'BIG BLUE'	LILYTURF		GRNDCLR / 18" O.C.



Landscape Calculations: (Ref. "Tree Inventory & Preservation Plan" Sheet C-2.1 for trees to be preserved, relocated or removed.)

Wrightsville Ave. Primary Streetyard	Req'd.	Prov'd.
201 l.f. frontage - 24 l.f. driveway @ 10' Buffer = 167 l.f. X 18 (MF Dist. Factor) @ 1 tree / 600 s.f. @ 6 shrubs / 600 s.f.	3006 s.f.	3599 s.f.
Parking Area Interior - 23,473 s.f. x 20% Shading Min. 75% Lg. Shade/Canopy @ 707 s.f. Max. 25% Sm. Shade/Canopy at 314 s.f.	4695 s.f.	4949 s.f.
Parking Area Perimeter - N/A		
Foundation Plantings (each bldg.) - Rear walls @ 110 l.f. X 20' facade hgt. X 12% End walls @ 30 l.f. X 24' facade hgt. X 12%	264 s.f.	396 s.f.
Bufferyard - 514 l.f. along Residential districts @ 3 Min. 20' high Trees/100 l.f. 1 Row Evergreen Shrubs @ 12' O.C. 1 Row Evergreen Shrubs @ 6' O.C.	5 43 86	5 44 88
Pond Plantings - N/A		
Overall Site - 1.8 ac± development area x 15 trees/ac.	27	15 New & 13 Ex. Trees=28
Mitigation - N/A		



- Landscape Notes:
- All plants shall meet or exceed the minimum standards set forth in the 'American Standard for Nursery Stock' by the American Association of Nurserymen.
 - All planting beds shall receive a min. of 4" pine bark mulch.
 - All areas disturbed and not specified as mulched planting beds will be grassed. Lawn areas may be seeded or sodded.
 - Contractor shall use whatever method of tree staking he deems fit. However, he will be held liable for any damages caused to trees by improper staking methods, or absence of staking, and is responsible for uprighting and replanting trees which are blown over.
 - Contractor shall warranty all trees and shrubs for a period of one (1) year from the date of final acceptance for the work of the Landscape Plan.
 - If discrepancies or availabilities are found in the plant species and/or sizes req'd., contractor shall notify Landscape Architect. Substitutions may be made, with authorization, as long as the plants follow the intended form & function of the requirement.

- Additional City Requirements -
- All plantings shall be curbed or otherwise physically protected from vehicular traffic.
 - All LDC requirements for tree protection & negligence shall be observed.
 - The owner is responsible for maintaining all required plant material and planting areas in good health and appearance. Any dead, unhealthy or missing plants must be replaced within sixty (60) days with vegetation which conforms to the initial planting rates & standards.

Development Data:

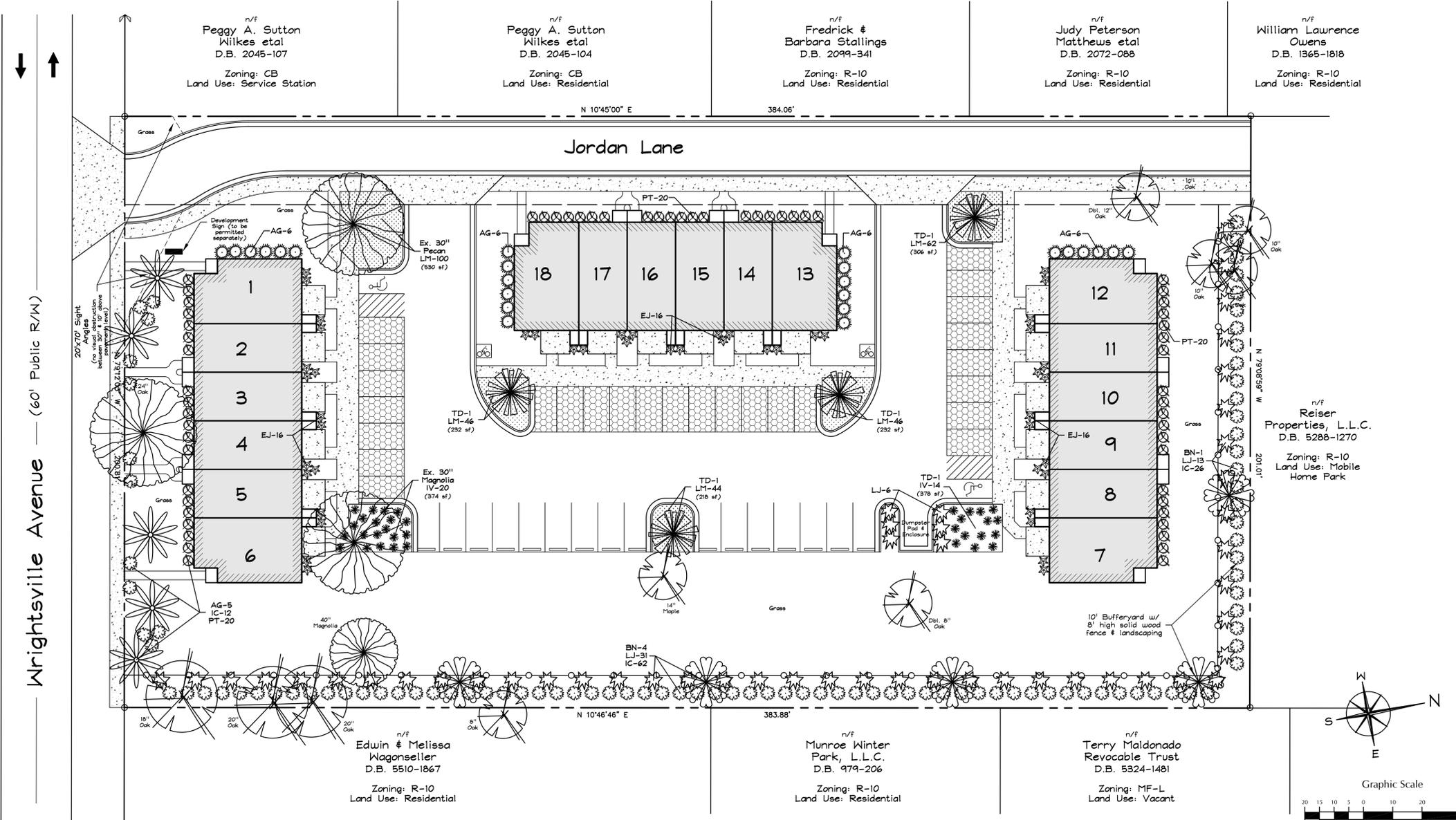
Total Tract Area = 1.77 ac.	Parking -
Development Area = 1.77 ac.	12 - 2 BR units x 2.00 min. sp./unit = 24
Permitted Density (@ 10 units/ac.) = 18 units	6 - 3 BR units x 2.25 min. sp./unit = 14
Proposed Density 18 units	Minimum Total Spaces req'd. = 38
Building Coverage = 12,510 s.f. (16.2%)	18 units x 2.5 max. sp./unit = 45
Total Heated Gross Floor Area = 23,760 s.f. GFA	Maximum Total Spaces permit'd. = 45
12 X 2 BR = 188 s.f.±	25% increase with pervious parking = 56
6 X 3 BR = 1584 s.f.±	** 44 Total Spaces prov'd. (2 H/C) **
Total Bedrooms = 42	Bike Parking req'd = 5 min.
12 X 2 BR = 24 BR	Bike Parking prov'd = 10
6 X 3 BR = 18 BR	
Max. Bldg. Hgt. = 2-story / 28' Mean Roof	
	Impervious Surfaces -
	RoofTop: 12,510 s.f.
	Asphalt Pavement: 19,432 s.f.
	Porous Pymt. (3541 s.f. @ 40%): 1,416 s.f.
	Conc. Walks: 4,646 s.f.
	Conc. Patios: 1,440 s.f.
	Total: 40,002 s.f. (51.9%)

n/f
Dr. Jerry Jernigan
D.B. 1033-792
Zoning: CB
Land Use: Dentist Office

n/f
Stephanie Speros
D.B. 3547-316
Zoning: O#1
Land Use: Vacant Building

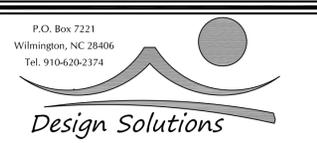
n/f
George Saunders
D.B. 4892-1749
Zoning: O#1
Land Use: Vacant

n/f
Melba H. Neville
D.B. 155-678
Zoning: O#1
Land Use: Vacant Building



- General Notes:
- New Hanover County Parcel Nos.: PIN 314717.10.4469 / PID 5520-008-038-000 PIN 314717.10.5442 / PID 5520-008-041-000
 - Total Tract Area: 1.77 ac.± (77,144 s.f.)
 - Zoning District: MF-L (CD) [w/ Wrightsville Ave. Corridor Overlay]
 - CAMA Land Classification: Urban

City of Wilmington Case #'s:
CD-3-604 / M1205 / M406
SU-1-704 / E905 / M1205 / M406 / SU-2-213 / SRB-13-0606



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

Project No.: 2012-19

Scale: 1"=20'

Date: 02/04/13

Revised: _____

Owner:
Gordon Road Development Partners, L.L.C.
6626 Gordon Road, Unit C
Wilmington, NC 28411

Landscape Plan

Property Address: 5045 & 5047 Wrightsville Avenue

Jordan Lane Townhomes

Wilmington Township / New Hanover County / North Carolina