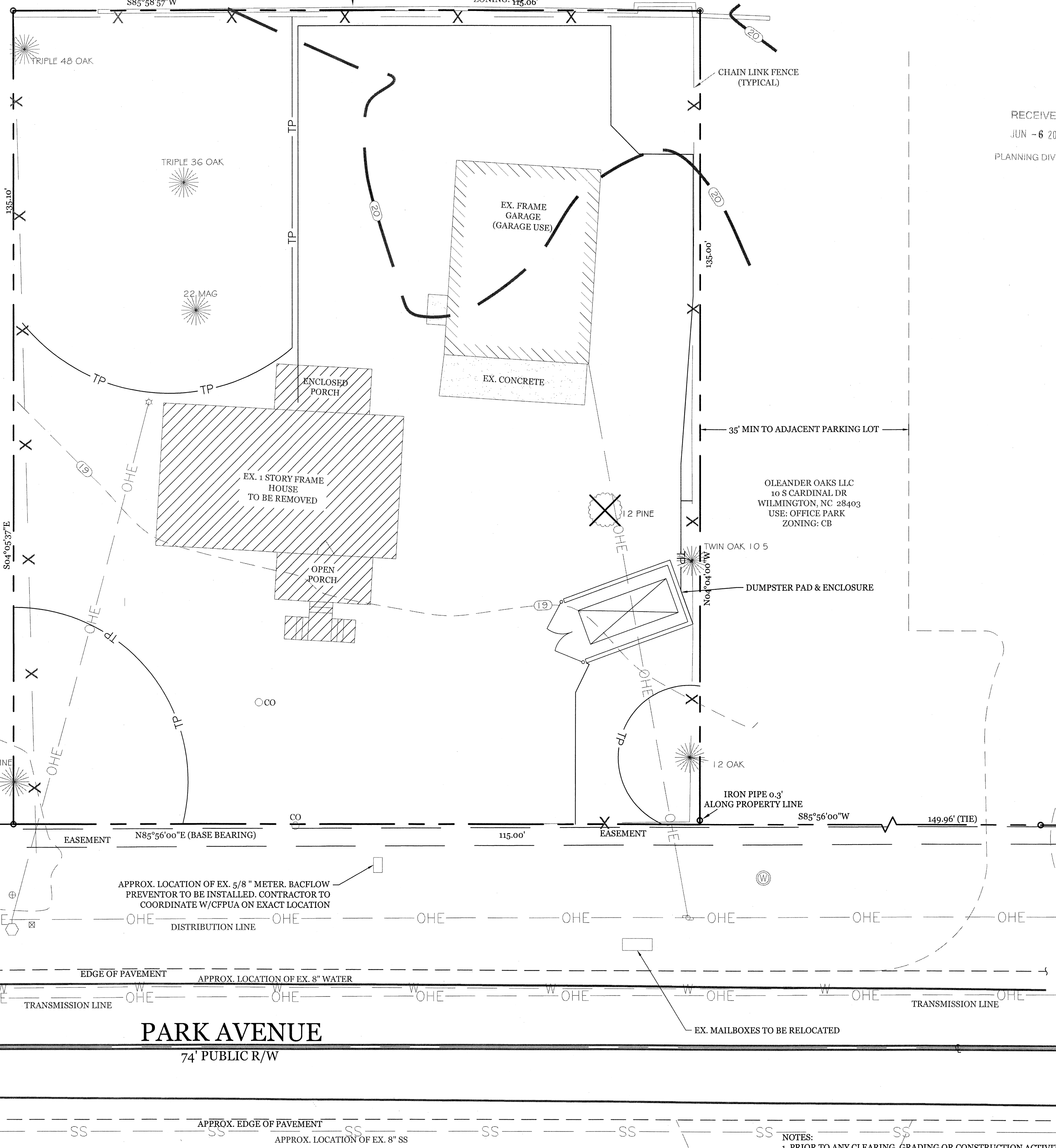




OLEANDER OAKS LLC
10 S CARDINAL DR
WILMINGTON, NC 28403
USE: OFFICE PARK
ZONING: CB

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10 S CARDINAL DR
WILMINGTON, NC 28403
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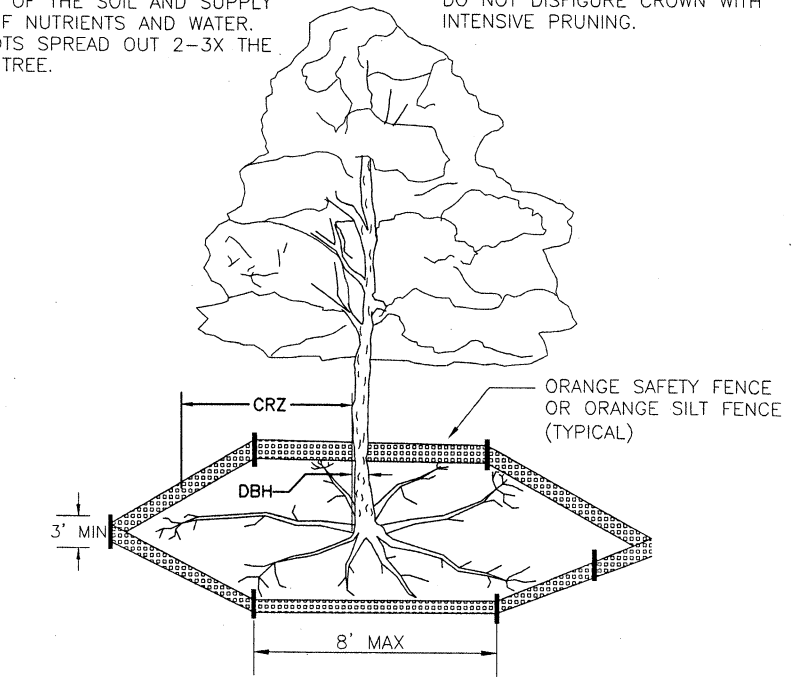


SITE DATA

PARCEL ID: R06207-003-006-000
CURRENT ZONING: CB-COMMUNITY BUSINESS
WATERSHED RESOURCE PROTECTION
CAMA LAND USE CLASSIFICATION:
PROJECT ADDRESS: 5712 PARK AVE.
WILMINGTON, NC 28403
CURRENT OWNER: BROTHERS THREE OF PALM COUNTY, INC.
1601 LIMPIN CT
WILMINGTON, NC 28403
TOTAL ACREAGE IN PROJECT BOUNDARY: ± 0.36 ac. (15,535 S.F.)
EXISTING ONSITE IMPERVIOUS AREAS:
BUILDING: 1,988 S.F.
CONCRETE: 182 S.F.
TOTAL: 2,170 S.F. (14.0%)
EXISTING ONSITE IMPERVIOUS AREAS TO BE REMOVED:
EXISTING HOUSE & PORCHES: 1,258 S.F.

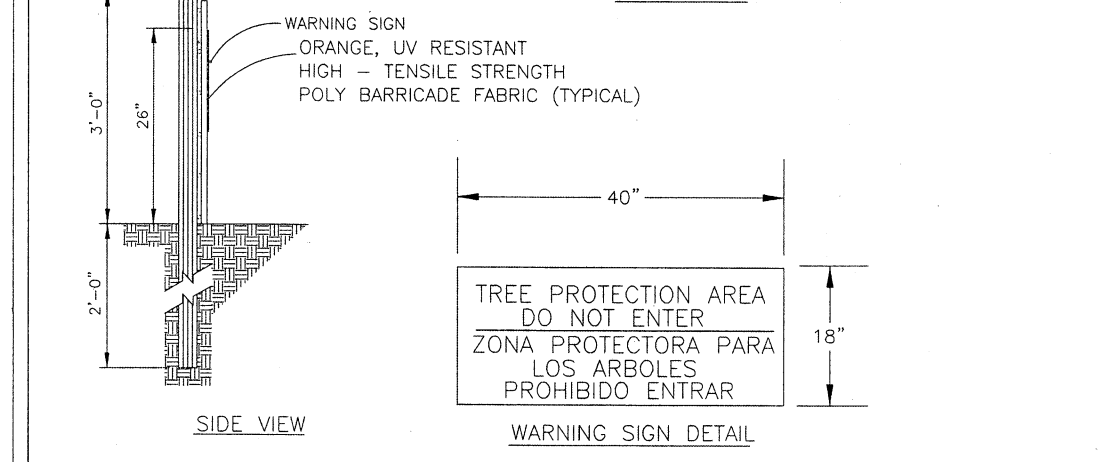
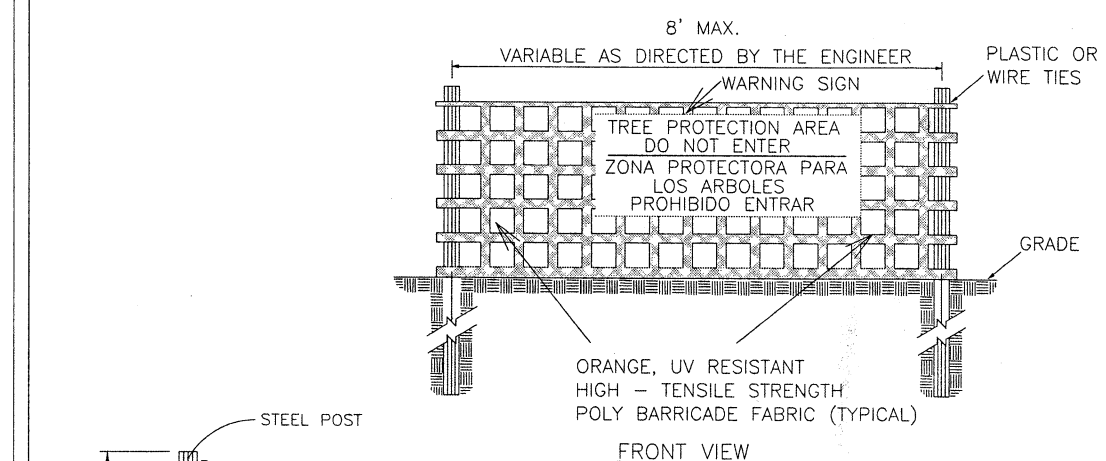
RECEIVED
JUN - 6 2018
PLANNING DIVISION

NOTE: THE CRITICAL ROOT ZONE (CRZ) OF A TREE IS WHERE THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. GENERALLY, ROOTS SPREAD OUT 2-3X THE HEIGHT OF THE TREE.
NOTE: CROWN OF THE TREE IS NEEDED FOR LEAF GROWTH TO PRODUCE OXYGEN. FILTER THE AIR, REDUCE WIND AND SOFTEN NOISE. DO NOT DISTURBE CROWN WITH INTENSIVE PRUNING.



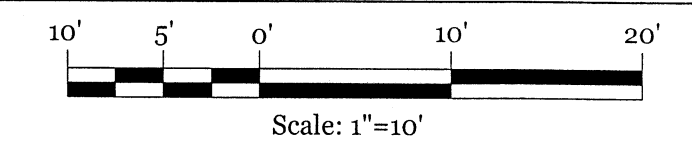
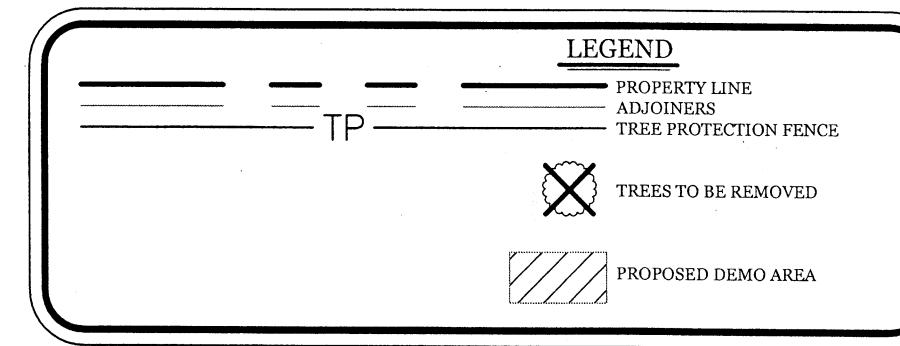
- NOTES:
- PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
 - CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
 - IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 12" OF MULCH AND/OR LOGGING MATS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
 - WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.
 - FOR ALL TREES, CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK IS PROHIBITED. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO MATERIALS OR EQUIPMENT SHALL BE STORED BENEATH TREES, DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
 - FAILING TO INSTALL OR MAINTAIN PROTECTION MEASURES SHALL RESULT IN A STOP WORK ORDER AND FINE OF \$500/DAY. DISTURBANCE OTHER THAN THAT ALLOWED ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LETTER OF CREDIT FOR 3 YRS FOR TREE MITIGATION.

STANDARD DETAIL		CITY OF WILMINGTON NORTH CAROLINA	
DATE: JAN, 2015	TREE PROTECTION DURING CONSTRUCTION	PO BOX 1810	WILMINGTON, NC 28402
DRAWN BY: JSR	SHEET 1 of 2	(910) 341-7807	SD 15-09
CHECKED BY: RDG, P.E.			
SCALE: NOT TO SCALE			



- NOTES:
- THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
 - WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
 - SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER. FOR TREE PROTECTION AREAS LESS THAN 100' IN PERIMETER, PROVIDE NO LESS THAN TWO SIGNS PER PROTECTION AREA.
 - ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE AND SIGNS THROUGHOUT DURATION OF PROJECT.
 - TREE PROTECTION FENCING AND SIGNAGE SHALL BE REMOVED AFTER CONSTRUCTION.
 - ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

STANDARD DETAIL		CITY OF WILMINGTON NORTH CAROLINA	
DATE: JAN, 2015	TREE PROTECTION DURING CONSTRUCTION	PO BOX 1810	WILMINGTON, NC 28402
DRAWN BY: JSR	SHEET 2 of 2	(910) 341-7807	SD 15-09
CHECKED BY: RDG, P.E.			
SCALE: NOT TO SCALE			



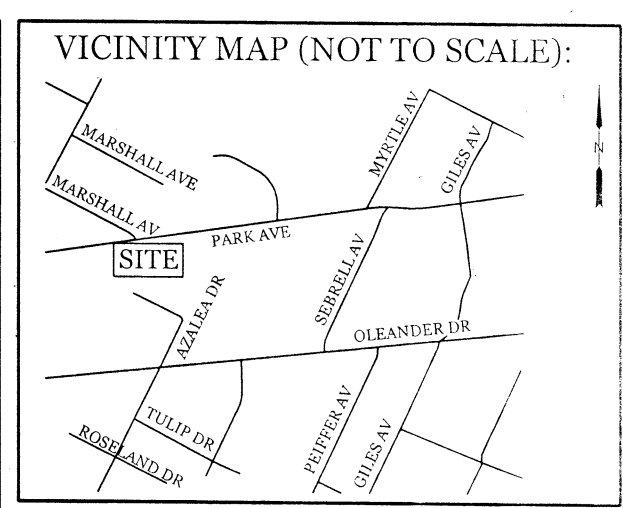
- NOTES:
- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES.
 - NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.

Approved Construction Plan		
Name	Date	
Planning: EXF	6.6.18	
Public Utilities: [Signature]	6-7-18	
Traffic: [Signature]	6/7/18	
Fire: [Signature]	6/7/18	

CITY OF WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED PLAN - NO PERMIT REQUIRED
Signed: [Signature] for RAC

SYKES WILLIAM M CAROLYN J
2315 NC 96N HWY
SELMA, NC 27576
USE: TOWNHOMES
ZONING: R-15

THOMPSON DANIEL K MARIA S
207 CYPRESS AVE
WRIGHTSVILLE BEACH, NC 28480
USE: TOWNHOMES
ZONING: R-15



REVISIONS	

INTRACOASTAL ENGINEERING, PLLC
5725 Oleander Dr. Unit E-7
Wilmington, North Carolina, 28403
Phone: 910.859.8983
Email: charlie@intracoastalengineering.com
License Number: P-0662

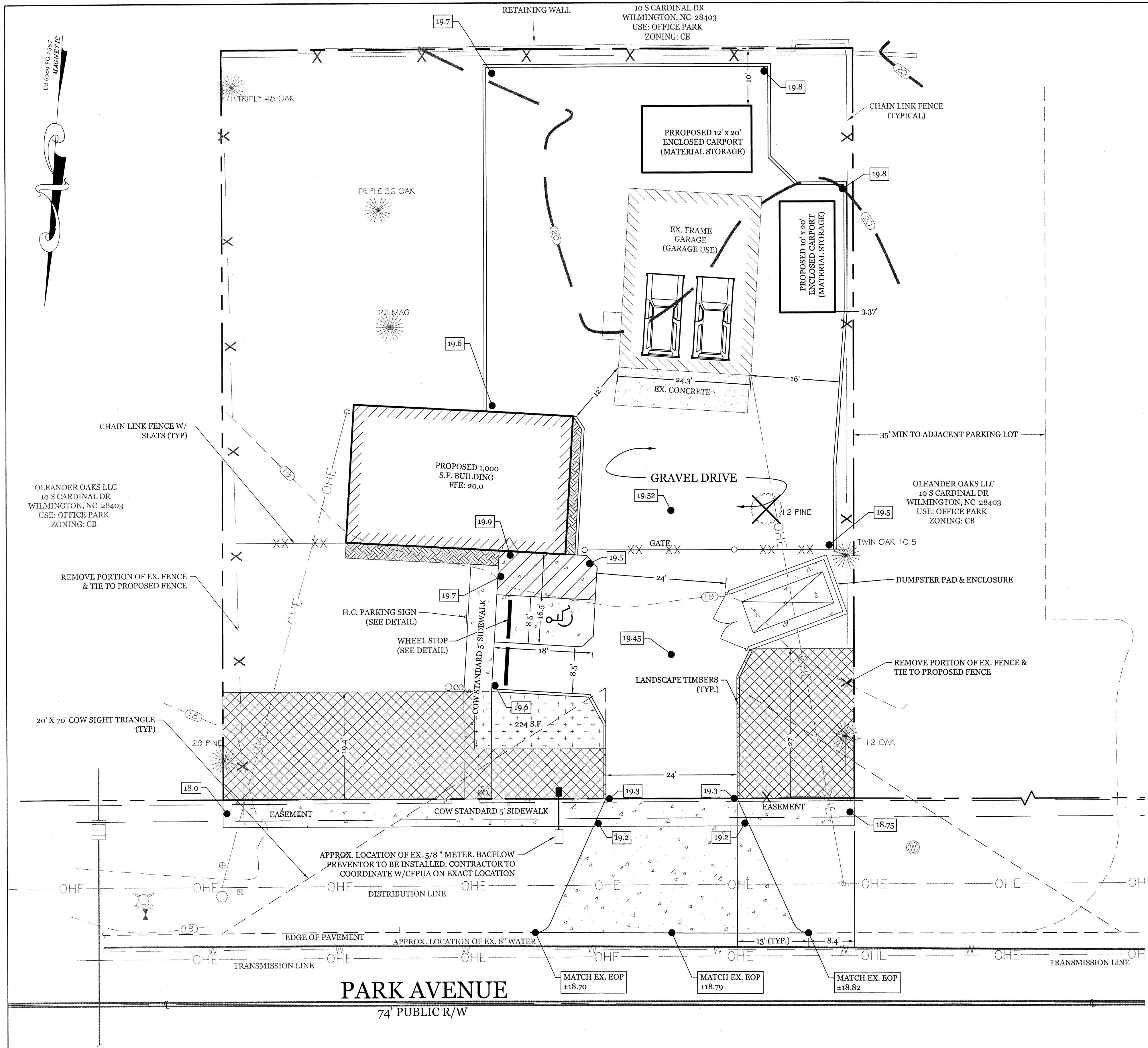
EXISTING CONDITIONS, DEMOLITION, & TREE REMOVAL/PROTECTION PLAN FOR CAMPBELL LANDSCAPE MANAGEMENT CITY OF WILMINGTON NEW HANOVER COUNTY, NC

CHARLES D. CARTER
ENGINEER
032555
4.20.18

CLIENT INFORMATION:
Brothers Three Of Palm County Inc.
Steve Campbell
1601 Limpkin Ct.
Wilmington, NC 28403
910-471-2613
scampbell@bluecoastrealstate.com

DRAWN: JAE	SHEET SIZE: 24x36
CHECKED: CDC	DATE: 4/20/2018
APPROVED: CDC	SCALE: 1" = 10'
PROJECT NUMBER: 2018-008	

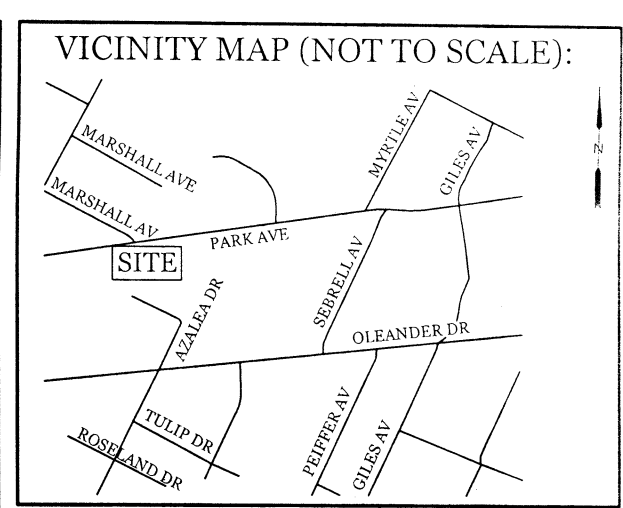
DRAWING NUMBER: C-0
1 OF 3



SITE DATA

PARCEL ID:	R06207-003-006-000
CURRENT ZONING:	CB-COMMUNITY BUSINESS
CAMA LAND USE CLASSIFICATION:	WATERSHED RESOURCE PROTECTION
PROJECT ADDRESS:	5712 PARK AVE. WILMINGTON, NC 28403
CURRENT OWNER:	BROTHERS THREE OF PALM COUNTY, INC. 1601 LIMPKN CT WILMINGTON, NC 28403
TOTAL ACREAGE IN PROJECT BOUNDARY:	±0.36 ac. (15,535 S.F.)
BUILDING SIZE:	±895 SF GFA (1,000 SF ROOF)
STORAGE:	±440 SF GFA
BUILDING HEIGHT:	±16' (1 STORY)
BUILDING SETBACKS:	
FRONT:	REQUIRED= 20' EXISTING= 36.4'
SIDE:	REQUIRED= 0' EXISTING= 23.6'L/16.6'R
REAR:	REQUIRED= 10' EXISTING= 24.8'
CALCULATION FOR BUILDING COVERAGE:	
PROPOSED COVERAGE (All Buildings):	2,225 S.F. ÷ 15,535 S.F. = 14.3%
PROPOSED ONSITE IMPERVIOUS AREAS:	
BUILDING:	1,000 S.F.
ENCLOSED CARPORTS:	440 S.F.
CONCRETE (Sidewalk, Parking, Dumpster):	679 S.F.
TOTAL:	2,119 S.F.
TOTAL ONSITE IMPERVIOUS AREA:	2,119 S.F.
PROPOSED ONSITE IMPERVIOUS AREA:	912 S.F.
EX. ONSITE IMP. AREA TO REMAIN:	3,031 S.F. (19.5%)
PROPOSED ONSITE PERVIOUS AREAS:	
GRAVEL DRIVE AREA:	7,301 S.F. (100% PERVIOUS)
PROPOSED OFFSITE IMPERVIOUS AREAS:	
CONCRETE SIDEWALK/DRIVE APRON:	1,296 S.F.
PARKING REQUIRED: (1,335 SF GFA)	
MIN:	1 SPACE/ 300 S.F. = 4 SPACES (1 H.C.)
MAX:	1 SPACE/ 200 S.F. = 7 SPACES (1 H.C.)
PARKING PROVIDED:	4 SPACES (1 H.C.)
FOUNDATION PLANTINGS: (65 LF X 12" FACADE X 12%)	
REQUIRED:	94 S.F.
PROVIDED:	114 S.F.
STREETYARD REQUIREMENT: (9' MIN & 27' MAX WIDTH)	
REQUIRED: 91 LF X 18" =	1,638 S.F.
PROVIDED:	1,673 S.F.
EXISTING SEWER AND WATER DEMAND=	240 GPD
PROPOSED SEWER AND WATER DEMAND:	
@ 25 GAL/PERSON =	125 GPD

- SITE & SURVEY NOTES:**
- THIS LOT IS LOCATED IN ZONE X AS PER FIRM COMMUNITY # 370171, MAP # 3720314600 - J, DATED: APRIL 3, 2006.
 - EXISTING SURVEYING PERFORMED BY PATRICK C. BRISTOW, NC PL# L-4148
- DEVELOPMENT NOTES:**
- ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.
 - PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE & NEW HANOVER COUNTY REGULATIONS.
- UTILITY NOTES:**
- EXISTING WATER AND SANITARY SEWER SERVICES ARE CURRENTLY AVAILABLE TO THE SITE FROM CAPE FEAR PUBLIC UTILITY AUTHORITY PUBLIC MAINS.
 - ALL PROPOSED UTILITY SERVICES, SUCH AS ELECTRIC POWER, CATV, GAS & TELEPHONE SHALL BE INSTALLED UNDERGROUND.
 - ALL WATER & SEWER UTILITIES TO BE INSTALLED PER CFPWA TECHNICAL SPECIFICATIONS & STANDARDS.
 - PROJECT SHALL COMPLY WITH CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND N.C.D.E.N.R. HAS ISSUED THEIR "FINAL APPROVAL". CALL 343-3910 FOR INFORMATION.
 - ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CFPWA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USPCOCHR OR ASSE.
 - WATER & SEWER SERVICES CAN NOT BE ACTIVATED ON NEW MAINS UNTIL THE ENGINEER'S CERTIFICATION AND AS-BUILTS ARE RECEIVED AND "FINAL APPROVAL" ISSUED BY THE PUBLIC WATER SUPPLY SECTION OF NCDENR, AND "FINAL ENGINEERING CERTIFICATION" ISSUED BY DIVISION OF WATER QUALITY SECTION OF NCDENR.
 - IF CONTRACTOR DESIRES CFPWA 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.
 - WHEN PVC WATER MAINS AND SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED, SINGLE-STRAND COPPER WIRE INSTALLED & STRAPPED TO THE PIPES WITH DUCT TAPE. THIS IS TO BE ACCESSIBLE IN ALL VALVES AND METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. CALL U-LOCO AT 1-800-632-4949. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY UTILITIES, CURB & GUTTER, PAVEMENT, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OR WORKMANSHIP FOUND IN THE ORIGINAL ITEM.
 - THE BELLSOUTH CONTACT IS STEVE DAYVAULT, BUILDING INDUSTRY CONSULTANT, AT 910-392-8712. CONTACT HIM PRIOR TO STARTING THE PROJECT IN ORDER TO FACILITATE GOOD COMMUNICATION AND MAXIMUM FLEXIBILITY.
 - THE PROCESS FOR TELEPHONE CABLE PLACEMENT: * FINAL GRADE WILL NEED TO BE ESTABLISHED. * POWER WILL PLACE THEIR CABLE FIRST - APPROXIMATELY 3' DEEP. * BELLSOUTH & CABLE TV WILL THEN PLACE THEIR CABLE AT APPROXIMATELY 2' DEEP.
 - SOLID WASTE DISPOSAL BY COW CURBSIDE SERVICE.
 - SITE TO UTILIZE EXISTING WATER AND SEWER SERVICES.
- GENERAL TRAFFIC NOTES:**
- ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS OFF THE R/W TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
 - ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. (DETAIL SD 15-13 & SD 11-3 COW TECH STDS)
 - ALL SIGNS AND PAVEMENT MARKINGS OFF RIGHT OF WAY ARE TO MEET/BE MAINTAINED TO MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. (DETAIL SD 15-13 & SD 11-3 COW TECH STDS)
 - A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. NOTE THIS ON THE PLAN AND CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
 - ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
 - CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
 - ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30" TO 10'.
- FIRE & SAFETY NOTES:**
- BUILDING WILL NOT BE SPRINKLED
 - PARKING AND LANDSCAPING CANNOT BLOCK FIRE HYDRANTS.
 - ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.
 - HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMMODATE BASE FLOW REQUIREMENTS OF STRUCTURE.
 - IN ADDITION TO THE STANDARD COMMENTS, ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.



REVISIONS

NO.	DESCRIPTION

INTRACOASTAL ENGINEERING, PLLC
 5725 Oleander Dr. Unit E-7
 Wilmington, North Carolina 28403
 Phone: 910.859.8983
 Email: Charlie@intracoastalengineering.com
 License Number: P-0662

SITE, GRADING, AND UTILITIES PLAN
 FOR
CAMPBELL LANDSCAPE MANAGEMENT
 CITY OF WILMINGTON
 NEW HANOVER COUNTY, NC

CHARLES D. CAIPIER
 PROFESSIONAL ENGINEER
 032555
 SEAL
 4-20-18

CLIENT INFORMATION:
 Brothers Three Of Palm County Inc.
 Steve Campbell
 1601 Limpkin Ct.
 Wilmington, NC 28403
 910-471-2613
 scampbell@bluecoastrealstate.com

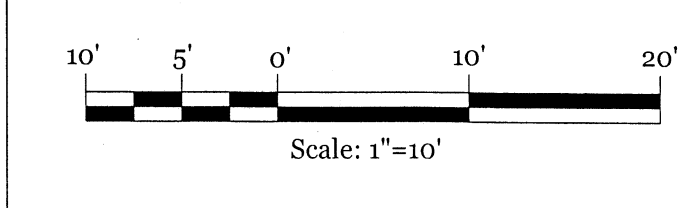
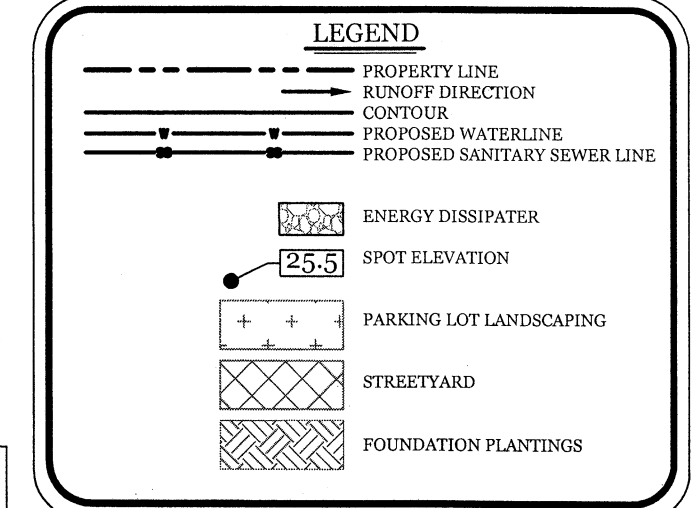
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CHECKED:	CDC	DATE:	4/20/2018
APPROVED:	CDC	SCALE:	1" = 10'
PROJECT NUMBER:	2018-008		

DRAWING NUMBER: **C-1**
 2 OF 3

Approved Construction Plan

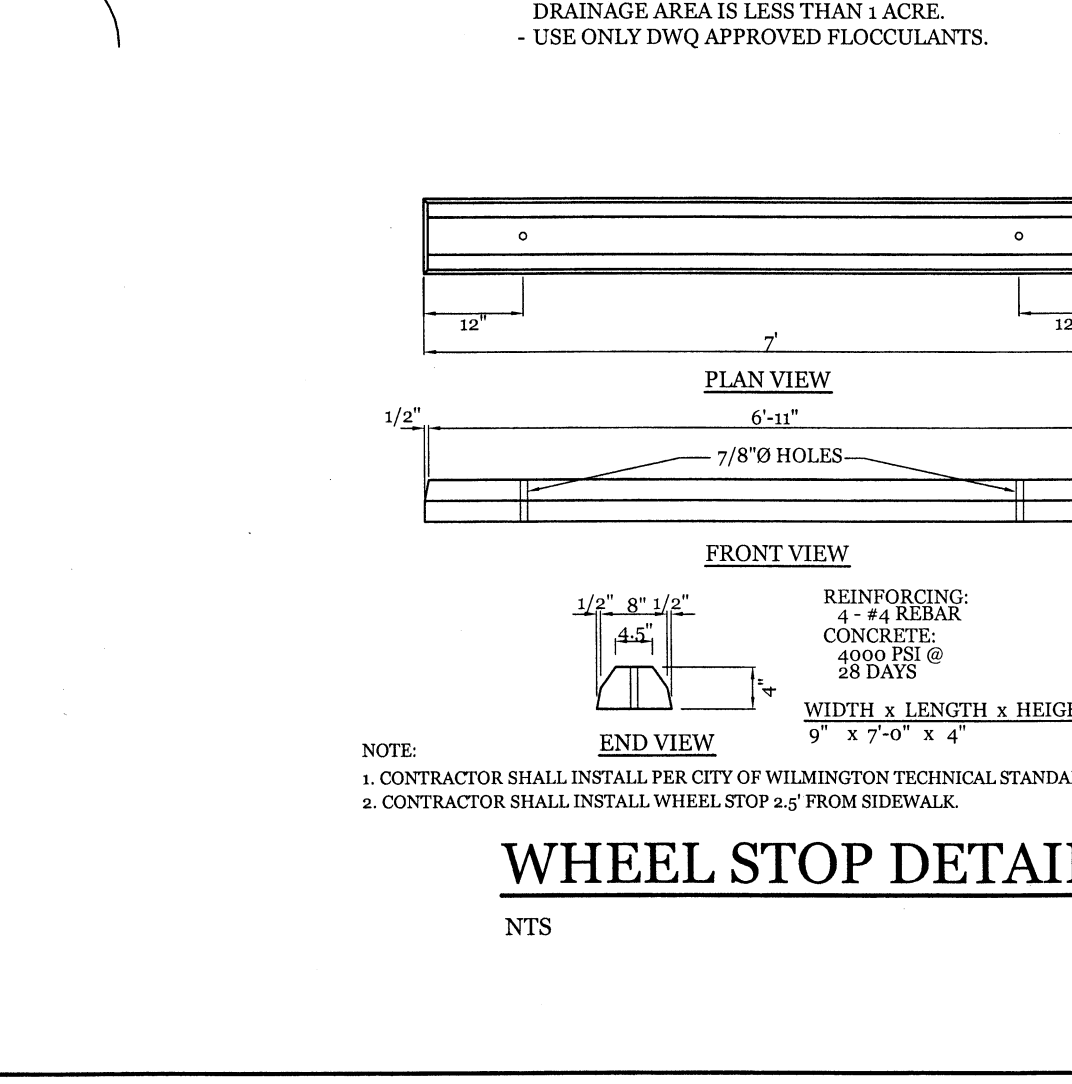
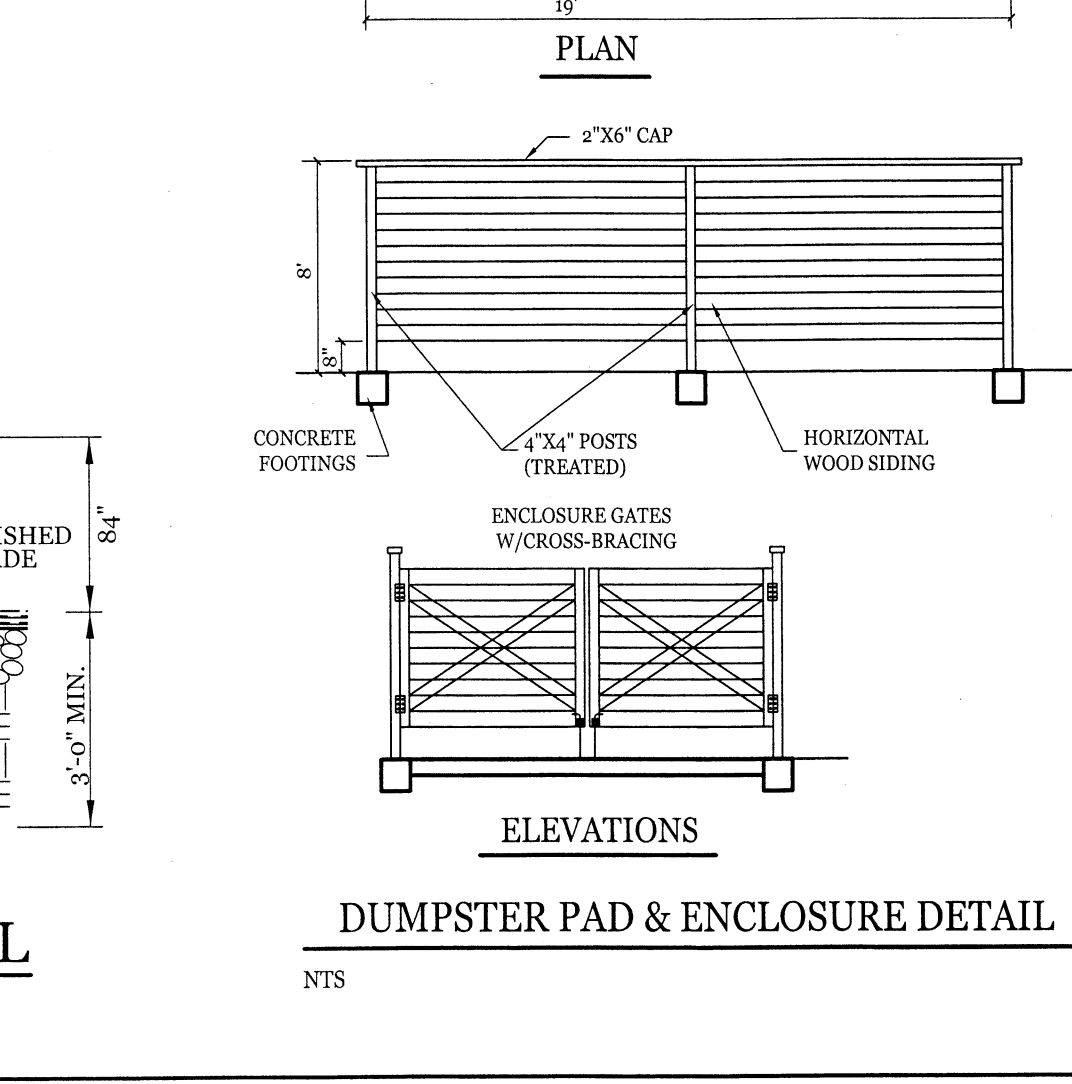
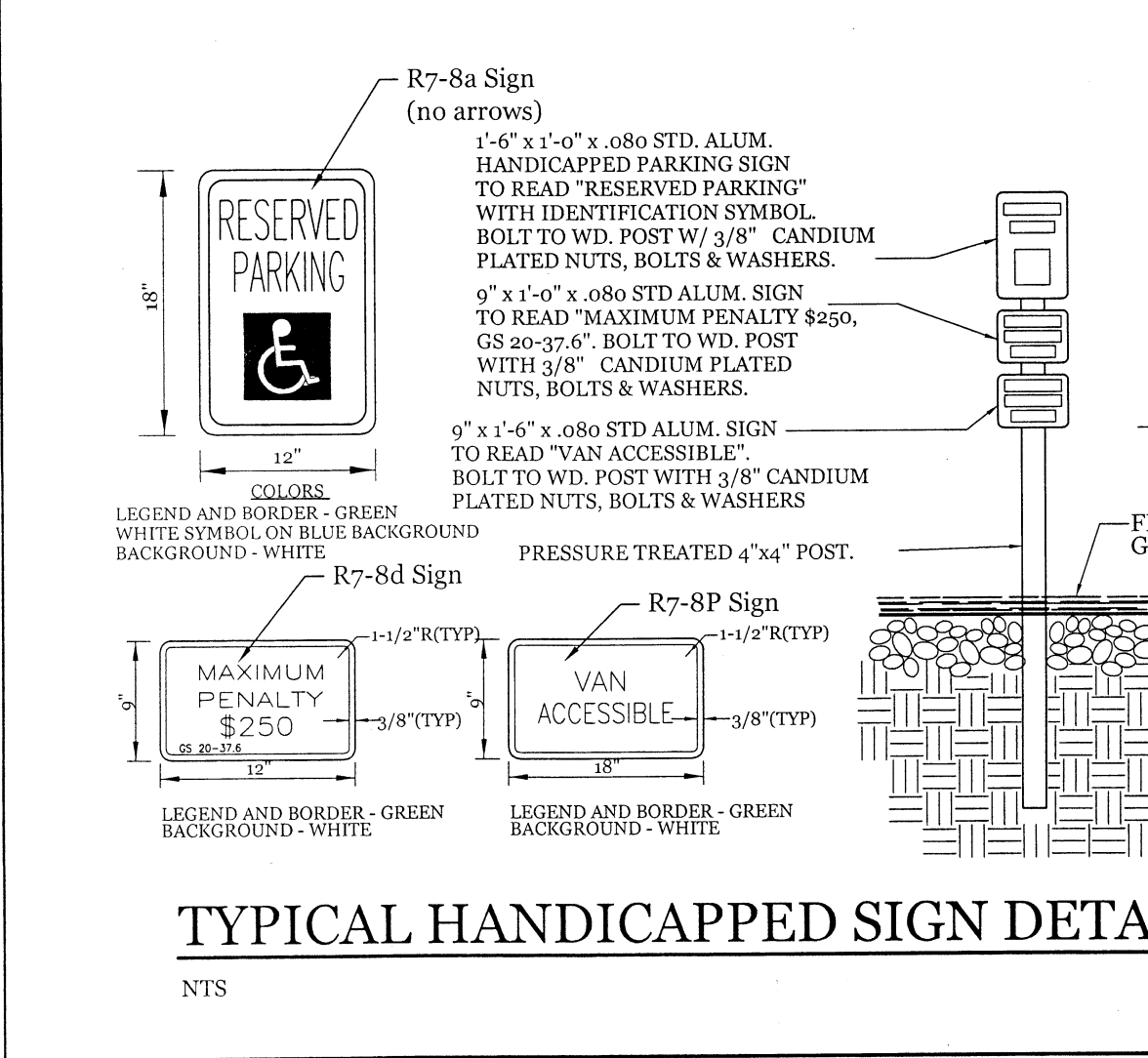
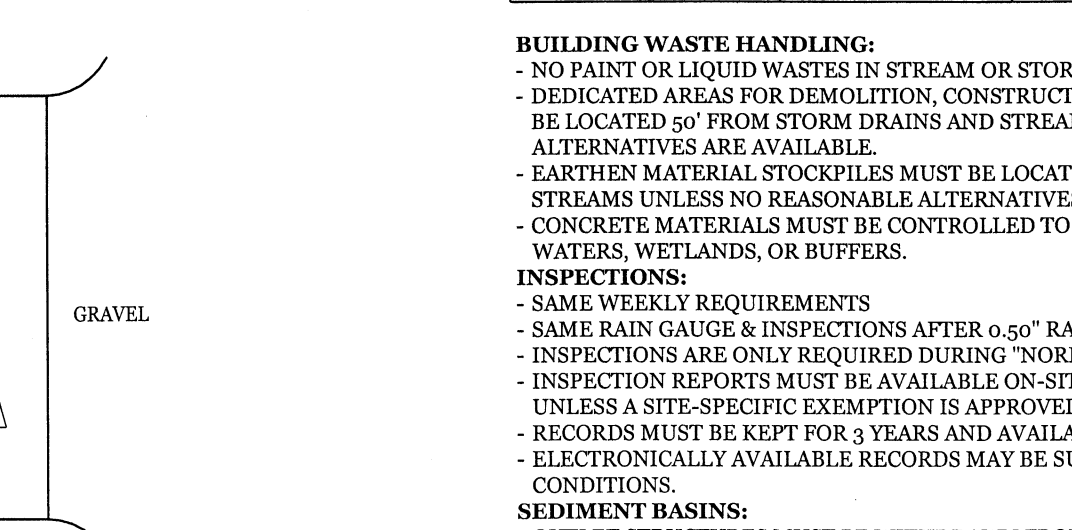
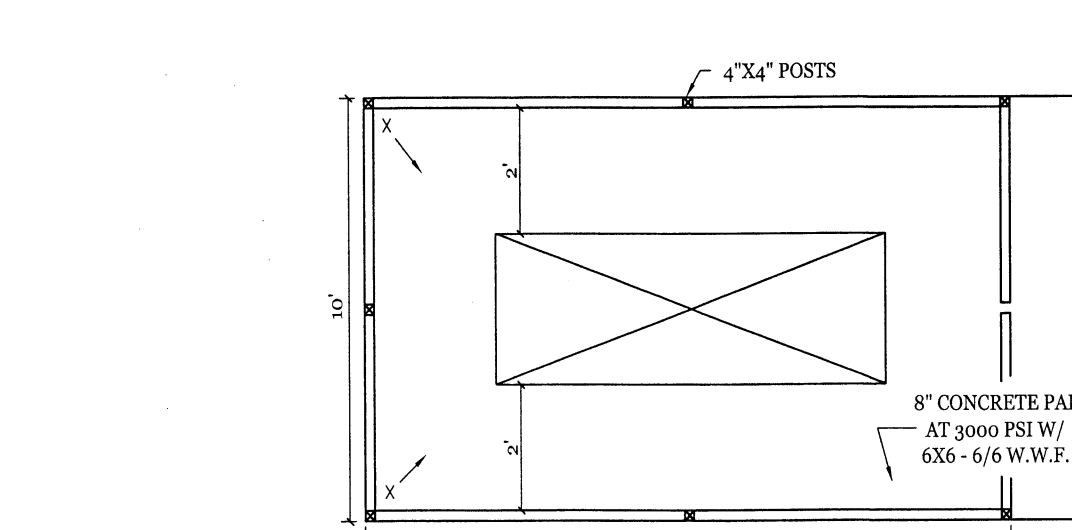
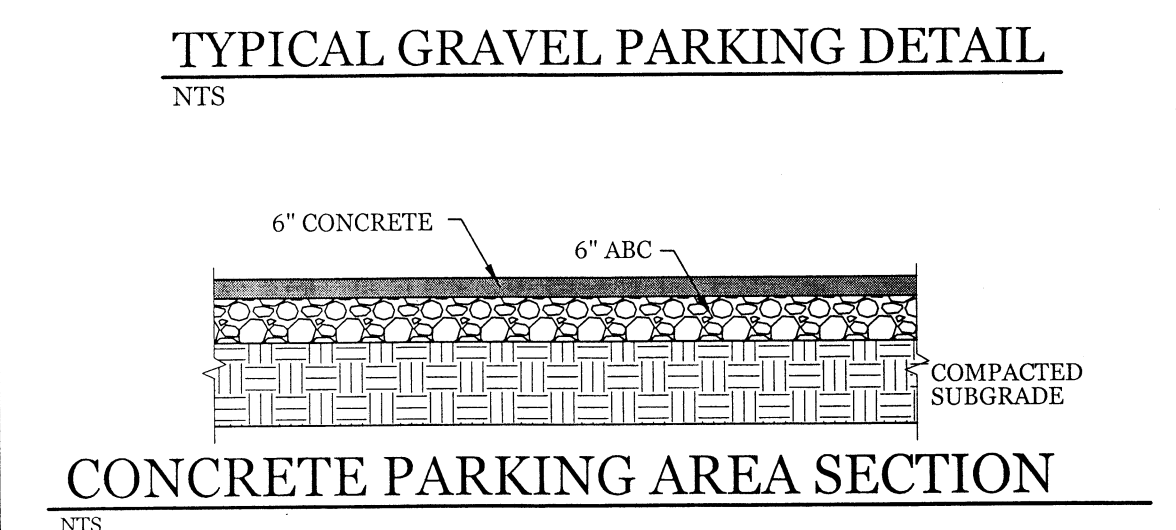
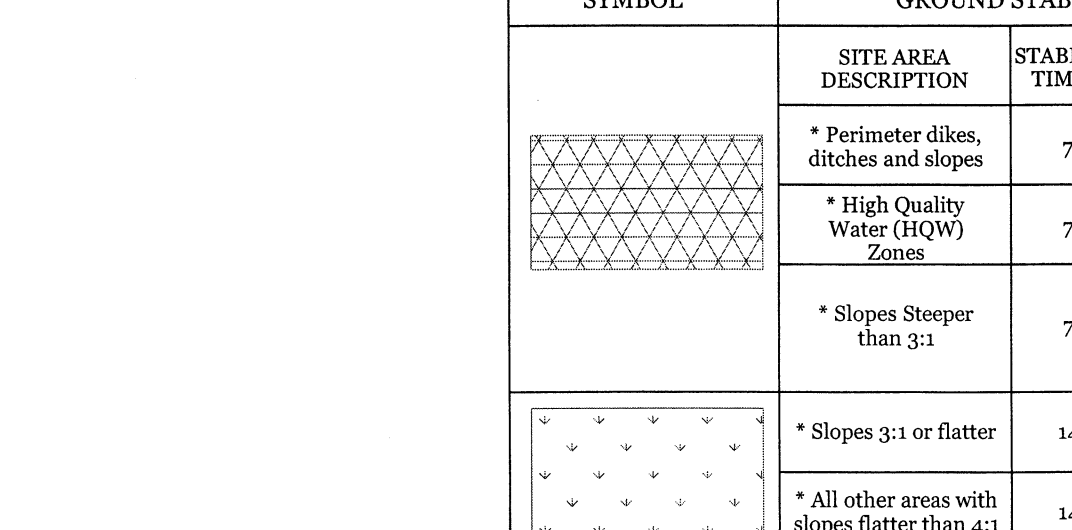
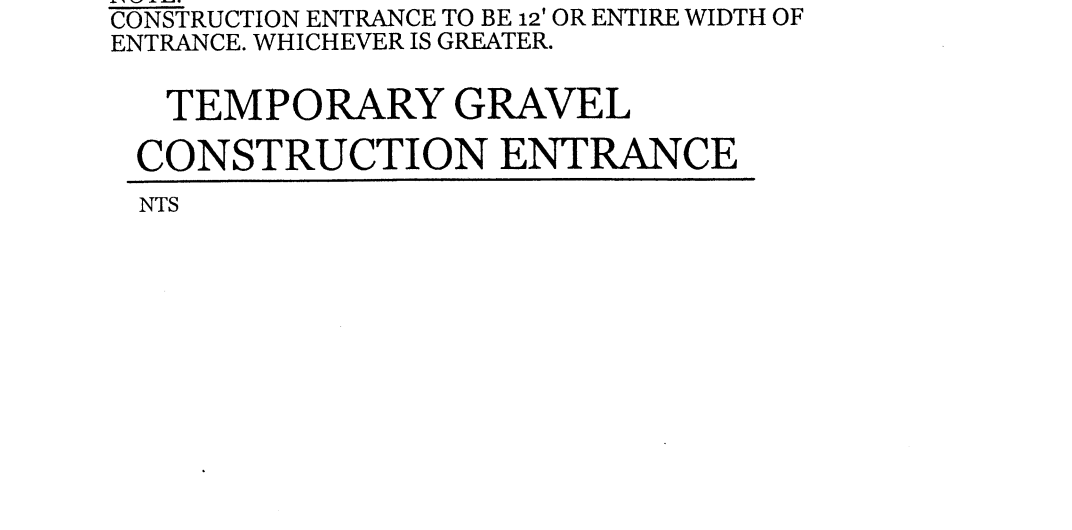
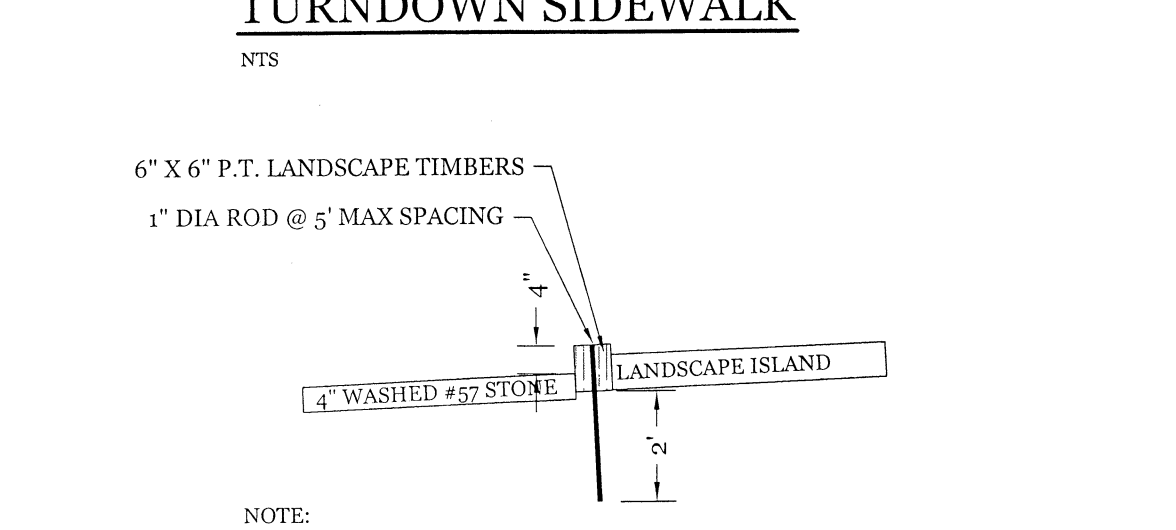
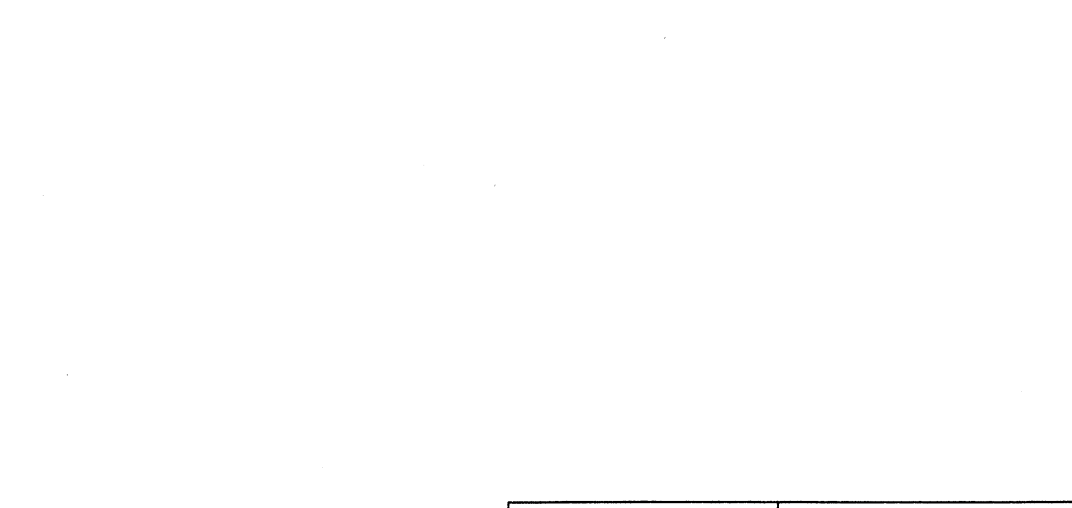
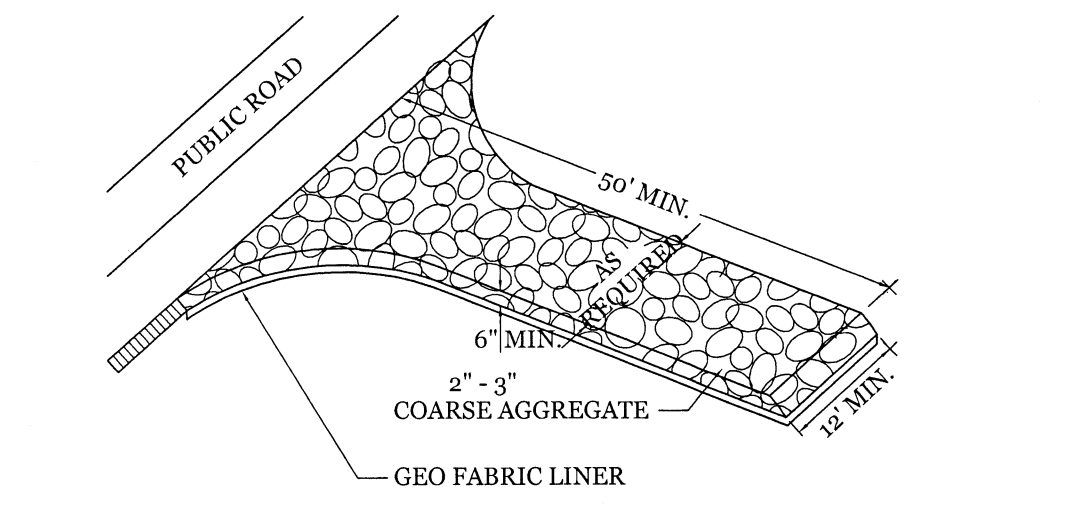
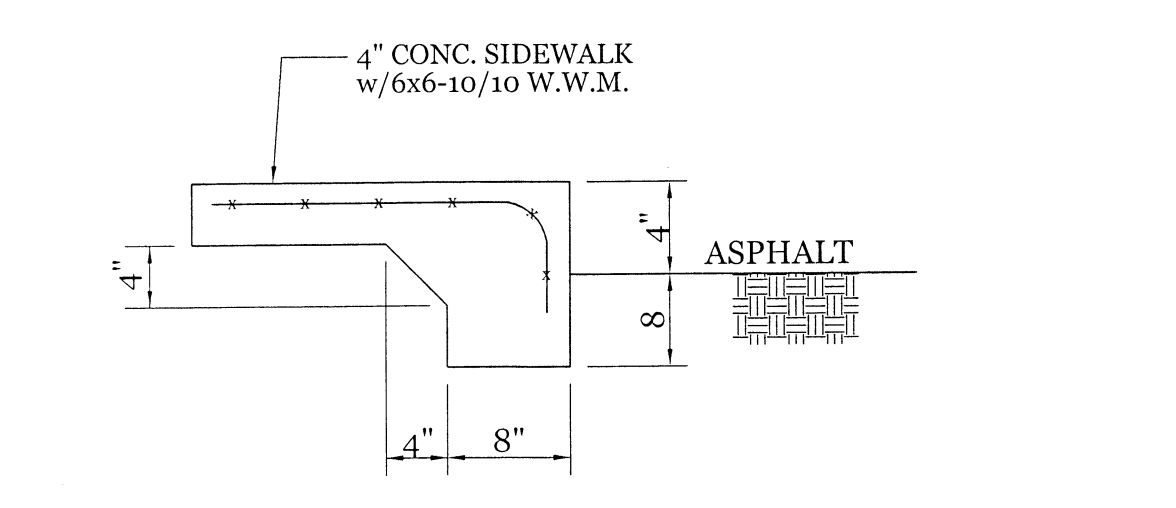
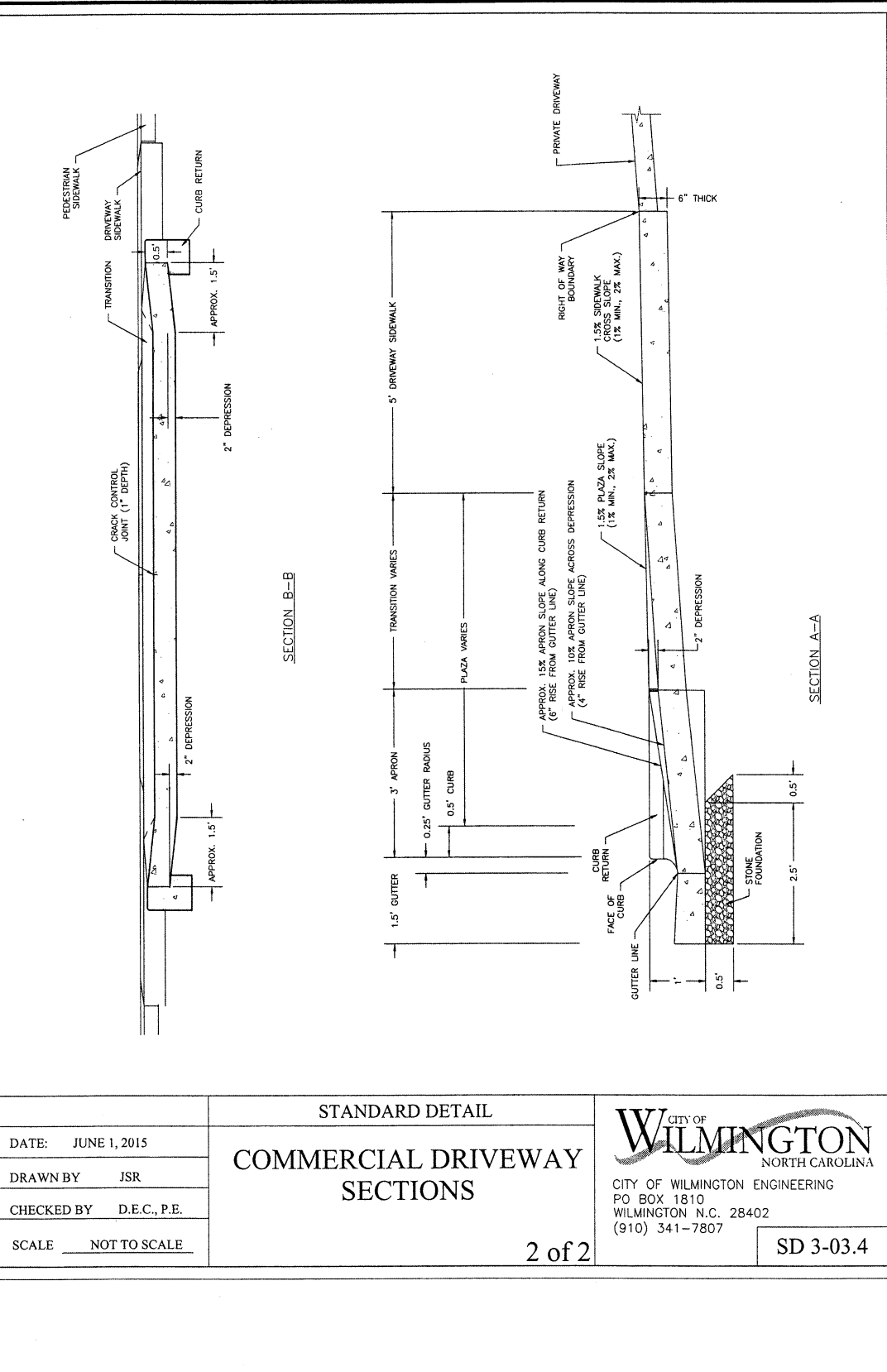
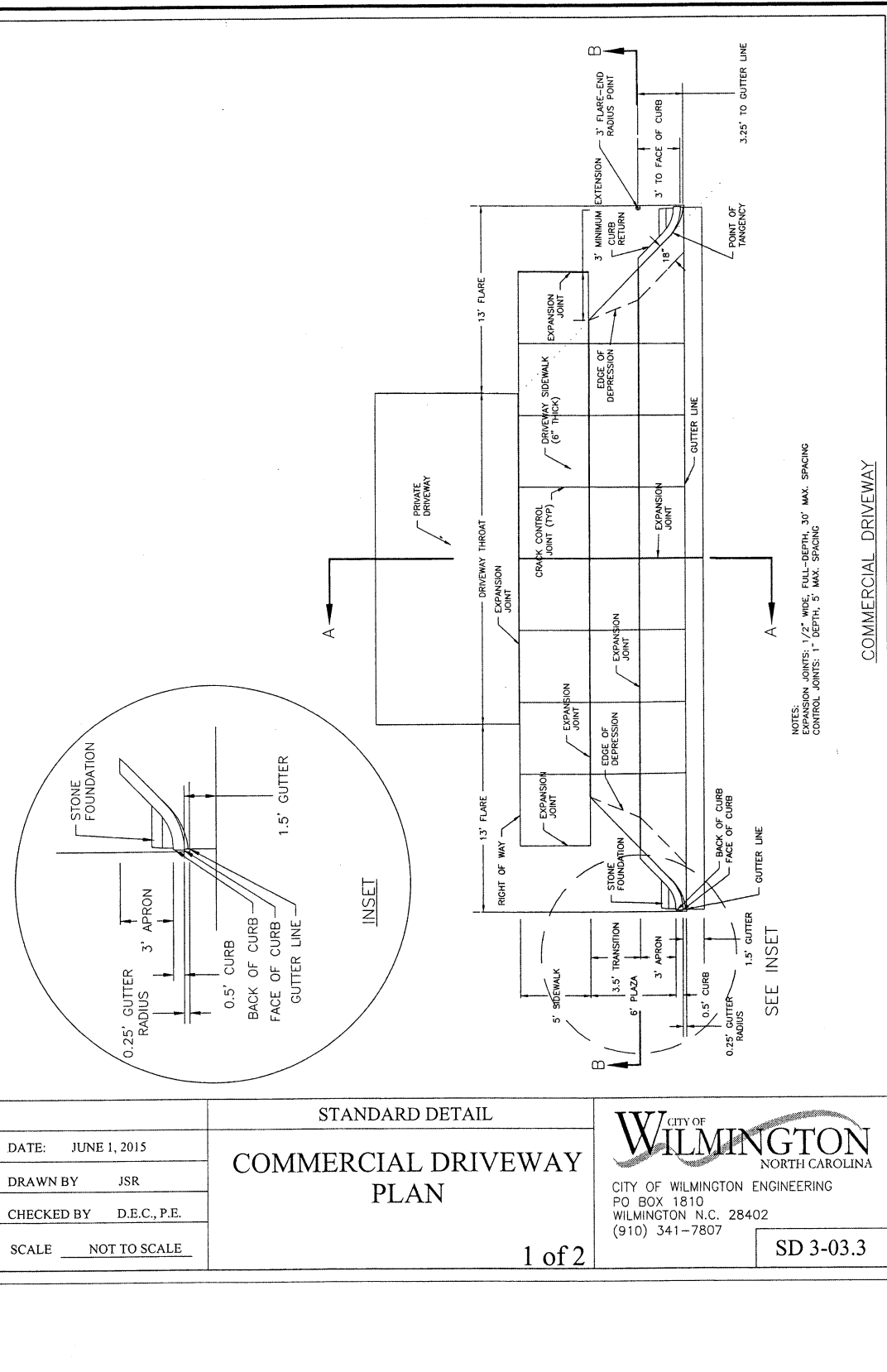
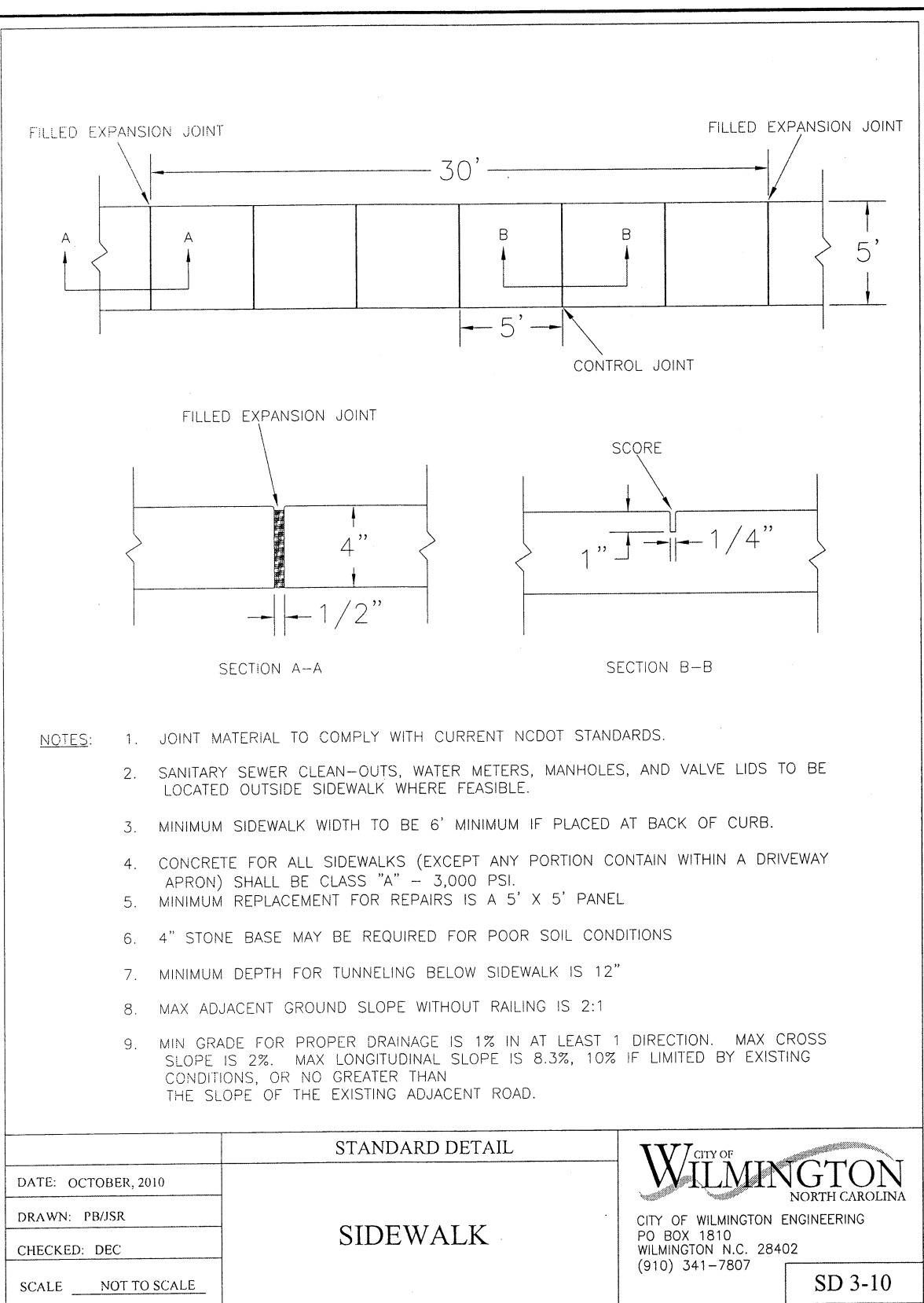
Name	Date
Planning: <u>EXF</u>	<u>6.6.18</u>
Public Utilities	
Traffic: <u>W. [Signature]</u>	<u>6-7-18</u>
Fire: <u>C. [Signature]</u>	<u>6/7/18</u>

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED PLAN - NO PERMIT REQUIRED
 Signed: [Signature] for RAC



SYKES WILLIAM M CAROLYN J
 2315 NC 96N HWY
 SELMA, NC 27576
 USE: TOWN HOMES
 ZONING: R-15

THOMPSON DANIEL K MARIA S
 207 CYPRESS AVE
 WRIGHTSVILLE BEACH, NC 28480
 USE: TOWNHOMES
 ZONING: R-15



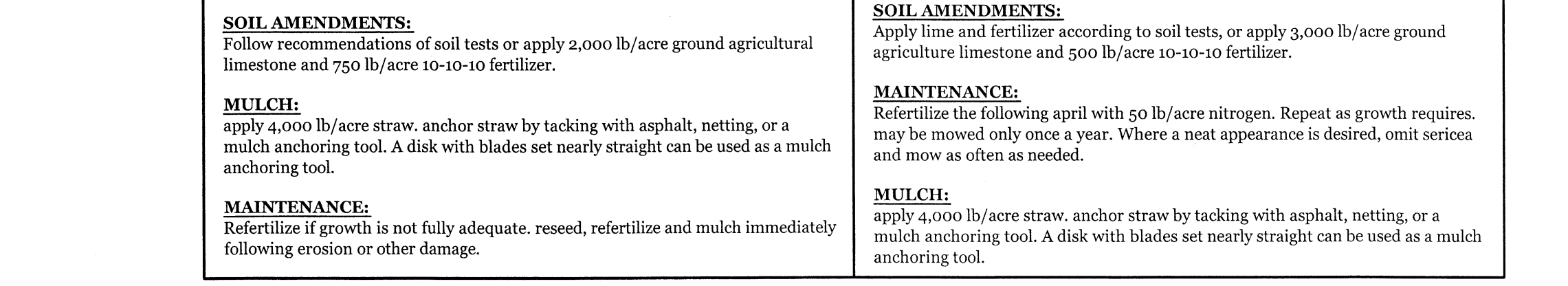
- SITE WORK NOTES:**
- THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS BOTH ON AND ADJACENT TO THE SITE.
 - CLEARING: CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION WITHIN LIMITS OF CONSTRUCTION UNLESS OTHERWISE DESIGNATED TO REMAIN.
 - GRUBBING AND STRIPPING: CONTRACTOR SHALL RAKE AND REMOVE ROOTS, STUMPS, VEGETATION, DEBRIS, EXISTING STRUCTURES ABOVE AND BELOW GRADE, ORGANIC MATERIAL OR ANY OTHER UNSUITABLE MATERIAL WITHIN LIMITS OF CONSTRUCTION.
 - MUCKING: CONTRACTOR SHALL COORDINATE WITH OWNER AND THEIR GEOTECHNICAL REPRESENTATIVE TO COORDINATE REMOVAL OF ANY SOFT AREAS.
 - DISPOSAL: CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A PROPERLY PERMITTED FACILITY.
 - FILL AND COMPACTION SHOULD COMPLY WITH GEOTECHNICAL RECOMMENDATIONS.
 - THE CONTRACTOR SHALL NOTE THAT THE GRADING PLAN MAY NOT REPRESENT A BALANCED EARTHWORK CONDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUT AND FILL QUANTITIES AND COMPLETE INSTALLATION TO SPECIFIED GRADES.
 - THE CONTRACTOR SHALL FURNISH SUITABLE BORROW MATERIAL FROM AN OFF-SITE PROPERLY PERMITTED FACILITY AS REQUIRED.
 - INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES AT ALL CROSSINGS PRIOR TO COMMENCING TRENCH EXCAVATION. IF ACTUAL CLEARANCES ARE LESS THAN INDICATED ON PLAN, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. ANY CONDITION DISCOVERED OR EXISTING THAT WOULD NECESSITATE A MODIFICATION OF THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
 - NO CONSTRUCTION IS TO BEGIN BEFORE LOCATION OF EXISTING UTILITIES HAS BEEN DETERMINED. CALL "NO ONE-CALL" AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. BEFORE COMMENCING ANY EXCAVATIONS OR IN OR ALONG ROADWAYS OR RIGHT-OF-WAYS, PUBLIC AREAS OR IN PRIVATE EASEMENTS, THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE PERSONNEL OF THEIR INTENT TO EXCAVATE, IN WRITING, NOT LESS THAN 10 DAYS PRIOR TO EXCAVATING.
 - THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE DISCONNECTION/ RECONNECTION AND/OR THE RELOCATION OF ALL EXISTING UTILITIES WITH APPROPRIATE PERSONNEL.
 - CONTRACTOR SHALL ADJUST ALL MANHOLES, VALVE & CURB BOXES TO FINAL GRADE UPON COMPLETION OF ALL CONSTRUCTION. ANY BOXES DAMAGED OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
 - EXISTING SURVEYING PERFORMED BY PATRICK C. BRISTOW, NC PLS# 1-4148
 - THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AT THE SITE. FURTHERMORE THE CONTRACTOR SHALL REPORT ALL DISCREPANCIES OR QUESTIONS TO THE ENGINEER PRIOR TO INSTALLATION.
 - THE CONTRACTOR SHALL PROVIDE ANY AND ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK UNLESS OTHERWISE DIRECTED BY OWNER.
 - ALL SERVICE CONNECTIONS SHALL BE INSTALLED TO MEET ALL LOCAL, STATE, AND CPWA CODES. METERS, TAPS, MATERIALS, WORKMANSHIP AND ALL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL REQUIREMENTS.
 - ALL BACKFILL FROM UTILITY INSTALLATION MUST BE COMPACTED OR AMENDED TO PROVIDE TRAFFIC BEARING CAPACITY. GEOTECHNICAL ENGINEER TO BE CONSULTED AT CONTRACTORS COST AS NECESSARY.
 - ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO INSTALLATION. ALL AREAS SHALL BE SLOPED TO DRAIN AWAY FROM BUILDINGS AT ALL TIMES.
 - CONCRETE FOR WALKS, CURBS AND DRIVES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS - AIR ENTRAINED.
 - FIELD TESTING SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY PAID FOR BY THE OWNER. FURTHER TESTING REQUIRED DUE TO A FAILED TEST WILL BE PAID FOR BY THE CONTRACTOR.
 - ALL SIDEWALKS SHALL BE FREE OF CRACKS, BREAKS, OR ANY OTHER DEFECT PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.

- MAINTENANCE PLAN:**
- 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 AND WITHIN 24 HOURS OF EVERY HALF INCH RAINFALL.
 - ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED WITH AN ADDITIONAL 2 INCHES OF 2-3 INCH STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED, WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.
 - SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION. ROCK DOUGHNUT INLET PROTECTION, SEDIMENT TRAP BAFFLES, AND ROCK PIPE INLET PROTECTION WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS AS DESIGNED. DEBRIS WILL BE REMOVED FROM THE ROCK AND HARDWARE CLOTH TO ALLOW PROPER DRAINAGE. SILT SACKS WILL BE EMPTIED ONCE A WEEK AND AFTER EVERY RAIN EVENT. SEDIMENT WILL BE REMOVED FROM AROUND HEAVY DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER EVERY RAIN EVENT.
 - DIVERSION DITCHES WILL BE CLEANED OUT IMMEDIATELY TO REMOVE SEDIMENT OR OBSTRUCTIONS FROM THE FLOW AREA. THE DIVERSION RIDGES WILL ALSO BE REPAIRED.
 - FIELD TESTING SHALL BE TEMPORARILY STABILIZED WITHIN 21 CALENDAR DAYS OF CEASE OF ANY PHASE OF ACTIVITY ASSOCIATED WITH A SWALE.
 - SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6 FEET MAX. WITH THE USE OF EXTRA STRENGTH FABRIC, WITHOUT WIRE BACKING. STAKE SPACING WILL BE 8 FEET MAX WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE INLET SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.

- CONSTRUCTION SEQUENCE:**
- CONSTRUCTION OF SITE TO START WITH INSTALLATION OF CONSTRUCTION ENTRANCE AND SILT FENCE ALONG ALL LOCATIONS PER PLANS. UPON INSTALLATION OF SILT FENCE, TREES SHOULD BE REMOVED IN LOCATIONS AS NECESSARY. ALL SLOPED AREAS SHOULD BE SEDED IN ACCORDANCE TO SPECIFICATIONS. SLOPE STABILIZATION IS WITHIN 21 CALENDAR DAYS OF ANY PHASE OF CONSTRUCTION. ALL OTHER AREAS MUST BE STABILIZED WITHIN 15 WORKING DAYS. CONTRACTOR TO FOLLOW NPDES STABILIZATION REQUIREMENTS PER TABLE ON THIS SHEET AS WELL. MOST STRINGENT REQUIREMENT TO BE MET.
- GENERAL CLEARING AND GRADING OF THIS SITE WILL NOT BE DONE UNTIL THE TEMPORARY SILT FENCE & CONSTRUCTION ENTRANCE HAS BEEN INSTALLED.
 - NO CUT SLOPE OR FILL SLOPE SHALL EXCEED A RISE OR FALL OF ONE FOOT FOR EVERY RUN OF 3 FEET (1 VERTICAL TO 3 HORIZONTAL).
 - NO SEDIMENT WILL BE ALLOWED TO EXIT THE SITE. ALL EROSION SHALL BE CONTROLLED INCLUDING SIDE SLOPES DURING AND AFTER CONSTRUCTION.
 - INSTALL PERMANENT STABILIZATION MEASURES BEFORE BEGINNING CONSTRUCTION INCLUDING CONSTRUCTION ENTRANCE, SILT FENCE, TREE PROTECTION FENCE & SEDIMENT BASINS. CONTRACTOR TO BE FAMILIAR WITH USACE GENERAL PERMIT CONDITIONS FOR ROAD CROSSINGS. SPECIFIC CONSTRUCTION METHODS MAY BE REQUIRED ABOVE AND BEYOND WHAT IS SPECIFIED IN THIS PLAN. INSTALL ALL SECONDARY EROSION CONTROL MEASURES, SUCH AS INLET PROTECTION AS SOON AS POSSIBLE AFTER BEGINNING CONSTRUCTION.
 - ALL EROSION CONTROL MEASURES TO BE INSPECTED AFTER EACH RAIN. SILT FENCE AND INLET PROTECTION TO BE CLEANED WHEN HALF FULL.
 - A 1" LAYER OF TOPSOIL SHALL BE APPLIED TO ALL NEW AREAS TO BE GRASSED.
 - MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PROJECT IS COMPLETE.
 - MORE STRINGENT MEASURES MAY BE REQUIRED TO HALT EROSION IF THOSE ON THIS PLAN PROVE TO BE LESS EFFECTIVE.
 - REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF CONSTRUCTION. ALL PERMANENT MEASURES SHALL BE WELL ESTABLISHED PRIOR TO PROJECT COMPLETION.

NORTH CAROLINA TEMPORARY GRASSING DETAIL				NORTH CAROLINA PERMANENT GRASSING DETAIL			
SYMBOL	GROUND STABILIZATION CRITERIA	STABILIZATION TIMEFRAME	STABILIZATION TIMEFRAME EXCEPTIONS	SEEDING MIXTURE SPECIES	APPLICATION RATE	SEEDING MIXTURE SPECIES	APPLICATION RATE
[Symbol]	* Perimeter dikes, ditches and slopes	7 Days	None	LATE WINTER & EARLY SPRING: Rye (grain)	100 (lb/acre)	FALL & WINTER: Tall Fescue (blend of two or three improved varieties)	200 (lb/acre)
[Symbol]	* High Quality Water (HQW) Zones	7 Days	None	Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains) Omit annual lespedeza when duration of temporary cover is not to extend beyond June	50 (lb/acre)	Rye (grain)	25 (lb/acre)
[Symbol]	* 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.	SUMMER: German Millet In the Piedmont and Mountains, a small-stemmed sundangrass may be substituted at a rate of 50 (lb/acre)	40 (lb/acre)	SPRING & SUMMER: Pensacola Bahiagrass Sericea lespedeza Common Bermudagrass German Millet Tall Fescue	50 (lb/acre) 30 (lb/acre) 10 (lb/acre) 10 (lb/acre) 50 (lb/acre)
[Symbol]	* Slopes 3:1 or flatter	14 Days	7-days for slopes greater than 50 ft. in length	FALL: Rye (grain)	120 (lb/acre)	SEEDING DATES	
[Symbol]	* All other areas with slopes flatter than 4:1	14 Days	None (except for perimeter HQW Zones)			FALL & WINTER: January - April August - December	

- BUILDING WASTE HANDLING:**
- NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS
 - DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES ARE AVAILABLE.
 - EARTHEN MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES ARE AVAILABLE.
 - CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.
- INSPECTIONS:**
- SAME WEEKLY REQUIREMENTS
 - SAME RAIN GAUGE & INSPECTIONS AFTER 0.50" RAIN EVENT.
 - INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS"
 - INSPECTION REPORTS MUST BE AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED.
 - RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST
 - ELECTRONICALLY AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS.
- SEDIMENT BASINS:**
- OUTLET STRUCTURES MUST BE WITHDRAWN FROM BASIN SURFACES UNLESS DRAINAGE AREA IS LESS THAN 1 ACRE.
 - USE ONLY DWQ APPROVED FLOCCULANTS.



Approved Construction Plan

Name: ELF Date: 6.6.18

Planning: ELF

Public Utilities: W. M. D. 6-7-18

Traffic: C. Val 6/9/18

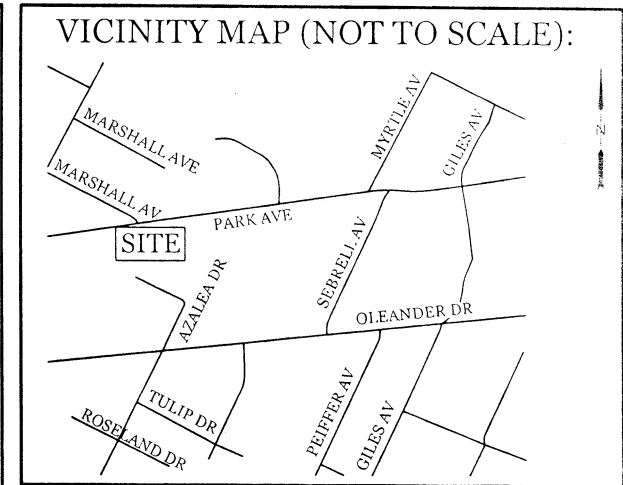
Fire: C. Val 6/9/18

REINFORCING:
4" #4 REBAR
CONCRETE:
4000 PSI @ 28 DAYS
WIDTH x LENGTH x HEIGHT
9' x 7'-0" x 4"

NOTE:
1. CONTRACTOR SHALL INSTALL PER CITY OF WILMINGTON TECHNICAL STANDARD PER SD 15-13
2. CONTRACTOR SHALL INSTALL WHEEL STOP 2.0' FROM SIDEWALK

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED PLAN - NO PERMIT REQUIRED

Signature: Todd B. [unclear] for RAC



REVISIONS

NO.	DATE	DESCRIPTION

INTRACOASTAL ENGINEERING, PLLC

5725 Oleander Dr. Unit E-7
Wilmington, North Carolina 28403
Phone: 910.859.8983
Email: charlie@intracoastal-engineering.com
License Number: P-0662

DETAILS FOR CAMPBELL LANDSCAPE MANAGEMENT

CITY OF WILMINGTON
NEW HANOVER COUNTY, NC

Professional Engineer Seal

CHARLES D. CALDER
ENGINEER
032555
April 1 - July 15
4.20.18

CLIENT INFORMATION:

Brothers Three Of Palm County Inc.
Steve Campbell
1601 Limpin Ct.
Wilmington, NC 28403
910-471-2613
scampbell@bluecoastrealestate.com

DRAWN: JAE SHEET SIZE: 24x36
CHECKED: CDC DATE: 4/20/2018
APPROVED: CDC SCALE: NTS
PROJECT NUMBER: 2018-008

DRAWING NUMBER: **C-2**

3 OF 3

SITE DATA

PARCEL ID: R06207-003-006-000
 CURRENT ZONING: CB-COMMUNITY BUSINESS
 CAMA LAND USE CLASSIFICATION: WATERSHED RESOURCE PROTECTION
 PROJECT ADDRESS: 5712 PARK AVE WILMINGTON, NC 28403
 CURRENT OWNER: BROTHERS THREE OF PALM COUNTY, INC. 1601 LIMPIN CT WILMINGTON, NC 28403 ±0.36 ac. (15,535 S.F.)

TOTAL ACRES IN PROJECT BOUNDARY: .36 x 15 Trees Req'd./Ac = 5 Trees 2" Cal. Req'd., 5 Existing, 2 New Ones

Calculation for bldg. Coverage:
 Proposed coverage for all buildings: 2,225sf / 15,535sf = 14.3%

Proposed onsite impervious areas:
 Building: 1,000sf
 Enclosed carports: 440sf
 Concrete (sidewalk, dumpster, parking): 679sf
 Total: 2,119sf

Total onsite impervious area:
 Proposed onsite impervious area: 2,119sf
 Ex. onsite impervious area to remain: 912sf
 Total: 3,031sf

Proposed onsite pervious areas:
 Gravel drive area: 7,301sf

Proposed offsite pervious areas:
 Concrete sidewalk/drive apron: 1,296sf

PARKING REQUIRED: (1,332 SF GFA)
 MIN: 1 SPACE/ 200 S.F. = 7 SPACES (1 H.C.)
 MAX: 4 SPACES (1 H.C.)

PARKING PROVIDED:
 Gravel and parking: 7301sf x .20 (Shading Requirement) = 1460sf
 1,649sf Shading Prov'd.

FOUNDATION PLANTINGS: (65 LF X 12" FACADE X 12%)
 REQUIRED: 94 S.F.
 PROVIDED: 114 S.F.

STREETYARD REQUIREMENT: (9' MIN & 27' MAX WIDTH)
 REQUIRED: 91 LF X 18" = 1,638 S.F.
 PROVIDED: 1,673 S.F.

Streetyard:
 Req'd.: 91lf x 18" = 1638sf
 Prov'd.: 1673sf / 600 = 3 Trees 2" Cal. Req'd. & Prov'd., 2 Existing, 1 New
 17 Shrubs 12" Ht. Req'd. & Prov'd.

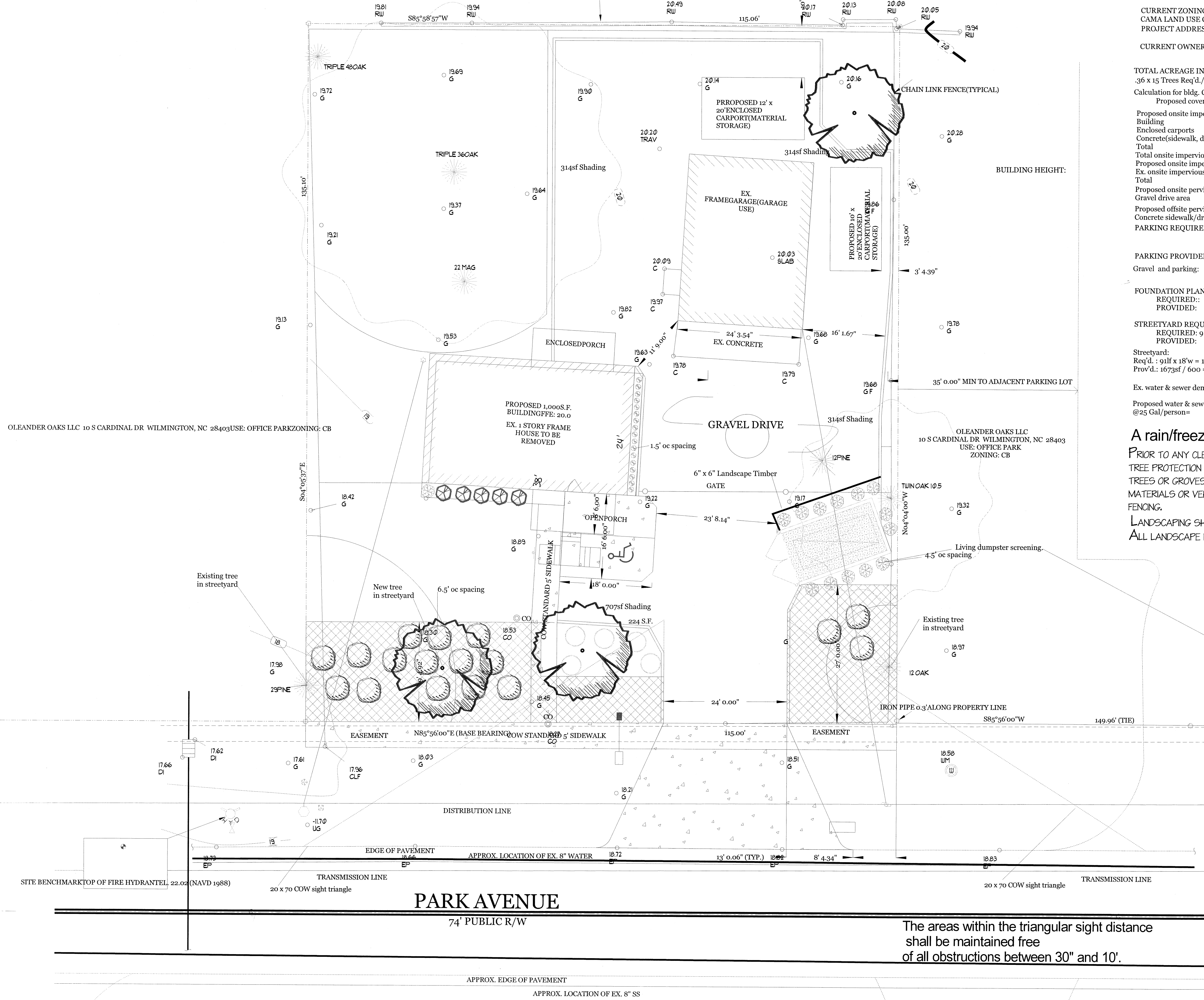
Ex. water & sewer demand: 240 GPD

Proposed water & sewer demand:
 @25 Gal/person = 125 GPD

A rain/freeze sensor shall be used if there is an irrigation system.

PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.

LANDSCAPING SHALL BE COMPLETE BEFORE ISSUANCE OF A C.O.
 ALL LANDSCAPE BEDS ARE TO BE MULCHED WITH 3" OF PINE STRAW



LEGEND

COMMON NAME	QTY	SIZE
FLOWER, PERENNIAL		
LIRIOPE, EMERALD GODDESS	17	1 GAL.
SHRUB, EVERGREEN BROADLEAF		
AZALEA, FORMOSA	17	3 GAL.
HOLLY, YAUPON, DWARF	6	3 GAL.
EX. OAK	1	Ø
YEW, UPRIGHT JAPANESE	14	3 GAL.
PITTIOSPORUM COMPACTA	5	3 GAL.
TREE, LARGE		
ALLEE ELM	3	2" CAL.



CITY OF WILMINGTON NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED PLAN - NO PERMIT REQUIRED
 Signed: *Todd E. [Signature]* for RAC

Approved Construction Plan

Name: EXE Date: 6.6.18

Planning: EXE

Public Utilities: _____

Traffic: W Anderson 6-7-18

Fire: C. [Signature] 6/9/18

SYKES WILLIAM M CAROLYN J
 2315 NC 96N HWY
 SELMA, NC 27576
 USE: TOWNHOMES
 ZONING: R-15

THOMPSON DANIEL K MARIA
 S 207 CYPRESS AVE WRIGHTSVILLE BEACH, NC 28480
 USE: TOWNHOMES
 ZONING: R-15

The areas within the triangular sight distance shall be maintained free of all obstructions between 30" and 10'.

Landscape Design by: James Freeman - NCLC# 71
 Freeman Landscape, Inc.

Landscape Plan:
 Campbell Landscape Mngmt.

Scale:
 1" = 10'

Revision #: 3
 Date: 5/31/2018