# LOCATION MAP NOT TO SCALE

CONSTRUCTION DRAWINGS for

# STUDIO 17 APARTMENTS

LOCATED IN CITY OF WILMINGTON NEW HANOVER COUNTY, NORTH CAROLINA

# CASTLE ST

	WATER (PUBLIC)							
SIZE	6"	4"	3"					
TYPE	C-900	C-900	SDR-21					
LF	8	5	3					
	WA .	TER (PRIVA	TE)					
SIZE	6"	3"	2"					
TYPE	C-900	SDR-21	SDR-21					
LF	135	132	235					
SEWER (PRIVATE)								
SIZE	6"	6"						
TYPE	C-900	DIP						
LF	154	20						

SCALE IN FEET: 1"= 200'

	INDEX TO DRAWINGS	
SHEET No.	DESCRIPTION	DRAWING No.
1 OF 12	COVER SHEET	CD_COVER
2 OF 12	EXISTING BOUNDARY AND TOPOGRAPHY, ADJACENT TRAFFIC	CD_EX-COND
3 OF 12	SITE PLAN	SITE_PLAN
4 OF 12	CITY OF WILMINGTON CONSTRUCTION DETAILS	SP_DET-1
5 OF 12	CITY OF WILMINGTON CONSTRUCTION DETAILS	SP_DET-2
6 OF 12	UTILITY PLAN	UP
7 OF 12	GRADING PLAN	GRADING
8 OF 12	CFPUA INSTALLATION DETAILS	CFPUA_WAT_SEW_1
9 OF 12	CFPUA INSTALLATION DETAILS	CFPUA_WAT_SEW_2
10 OF 12	CFPUA WATER DETAILS	CFPUA_WATER
11 OF 12	CFPUA SEWER DETAILS	CFPUA_SEWER_1
12 OF 12	CFPUA SEWER DETAILS	CFPUA_SEWER_2
LP1 OF LP1	LANDSCAPING PLAN	LP
1 OF 3	NCDOT ENCROACHMENT PLAN	DOT_ENCR
2 OF 3	NCDOT TRAFFIC CONTROL PLAN	DOT_TCP
3 OF 3	NCDOT STANDARD DETAILS	DOT_DET

### **WATER & SEWER USAGE NOTES:**

**GENERAL NOTES:** 

5. THIS SITE IS LOCATED WITHIN ZONE "X" ACCORDING TO FEMA

8. ASBUILT, BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED

AND PROVIDED TO CSD ENGINEERING BY CAPE FEAR SURVEYING;

9. STORMWATER DRAINS TO BURNT MILL CREEK, C; SW 18-74-63-2

FIRM COMMUNITY PANEL NUMBER 3720312700J, EFFECTIVE

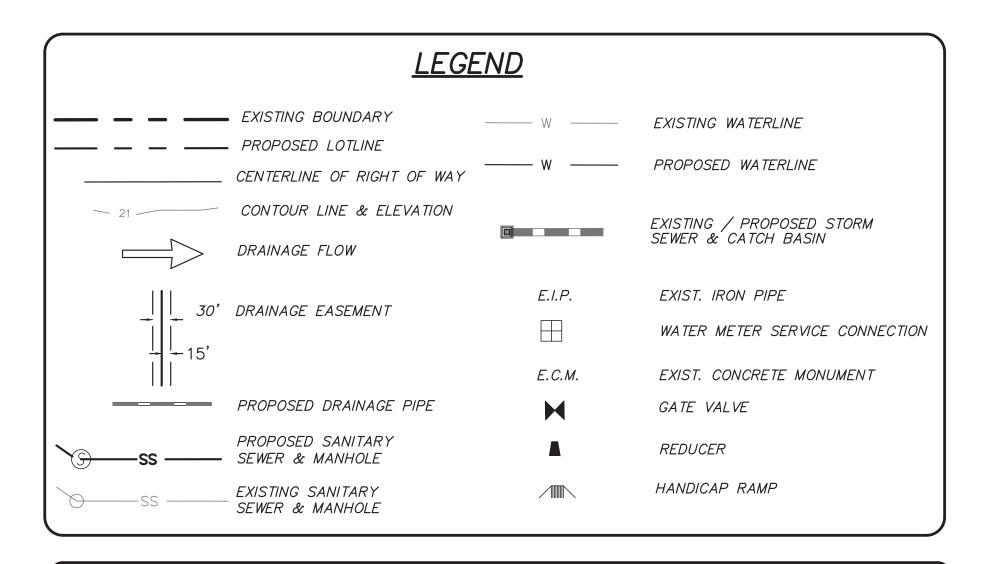
1. NEW HANOVER COUNTY PARCEL NUMBERS.: PID = R05407-029-012-000

2. TOTAL PROJECT AREA: 28,125 SF (0.65 AC.)
3. EXISTING ZONING DISTRICT: UMX

7. EXISTING IMPERVIOUS ONSITE = 11,180 SF

6. SITE ADDRESS: 514 S. 17TH STREET

CURRENT WATER USAGE 50 GPD PROPOSED WATER USAGE 7,730 GPD CURRENT SEWER USAGE 50 GPD PROPOSED SEWER USAGE 7,730 GPD WATER - (32) - 1 BEDROOM X 240 GPD = 7.680 GPD RETAIL - 2 EMPLOYEES = 50 GPDSEWER - (32) - 1 BEDROOM X 240 GPD = 7,680 GPDRETAIL - 2 EMPLOYEES = 50 GPD



OWNER: MOSLEY PARK, LLC 1319 MILITARY CUTOFF SUITE CC PMB 172 WILMINGTON, NC 28405 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	ı	CITY OF
Approved Construction Flan		WALV
me Date		Public Services
nning		APPROVED
ffic		Date:
9		Signed:

### WIGTON es Engineering Division DRAINAGE PLAN

\_Permit #\_\_\_\_

- 1. ASBUILT, BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED AND PROVIDED TO CSD ENGINEERING BY CAPE FEAR SURVEYING: 1 NORTH 6TH STREET WILMINGTON, NC 28401, 910-762-9496 FIRM #C-3199
- 2. THIS MAP IS NOT FOR CONVEYANCE, RECORDATION, OR SALES. 3. THIS PROPERTY IS LOCATED WITHIN ZONE "X"
- ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP, 3720312700J, EFFECTIVE DATE 4/3/06
- 4. THIS PROPERTY IS ZONED UMX
- 5. CFPUA WATER
- 7. ALL CONSTRUCTION TO CONFORM TO NEW HANOVER COUNTY STANDARDS AND APPLICABLE STATE & LOCAL CODES.
- 8. CONTRACTOR TO COORDINATE ANY REQUIRED TRAFFIC CONTROL WITH
- CITY OF WILMINGTON AND OR NCDOT.
- 9. CARE SHALL BE TAKEN DURING FINAL GRADING TO ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND TO RECEIVING STRUCTURES. ROOF DRAIN DOWNSPOUTS TO BE CONNECTED TO STORM DRAINAGE STUBOUTS OR DIRECTED TO STREET/PARKING AREAS.
- 10. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ANY RELOCATIONS, RE-ALIGNMENTS, DISCONNECTIONS OR CONNECTIONS OF EXISTING UTILITIES WITH APPLICABLE AUTHORITIES.
- 11. CLEARING AND GRUBBING OF SITE TO INCLUDE REMOVAL OF EXISTING CURB, ASPHALT, INLETS, AND ANY OTHER STRUCTURES INCLUDING TREES, STUMPS AND DEBRIS EXISTING ON SITE. TREES NOT REQUIRED TO BE CLEARED FOR CONSTRUCTION SHALL REMAIN UNLESS OTHERWISE DIRECTED
- 12. 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
- 13. NO CONSTRUCTION IS TO BEGIN BEFORE LOCATION OF EXISTING UTILITIES HAS BEEN DETERMINED. CALL "NC ONE—CALL" AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.
- 14. 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.
- 15. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST AND EROSION DURING CONSTRUCTION AT HIS EXPENSE. PARKING AREAS SHALL BE WATERED TO CONTROL DUST WHEN ORDERED BY THE ENGINEER.
- 16. NO GEOTECHNICAL TESTING HAS BEEN PERFORMED ON SITE. NO WARRANTY IS MADE FOR SUITABILITY OF SUBGRADE, AND UNDERCUT AND ANY REQUIRED REPLACEMENT WITH SUITABLE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 17. CONTRACTOR TO ENSURE THAT PAVEMENT IS PLACED SO AS TO DRAIN POSITIVELY TO THE STREET INLETS AND CATCH BASINS. ALL FUTURE ROOF DRAIN DOWNSPOUTS TO BE DIRECTED TO THE STORM DRAINAGE STUBOUTS.
- 18. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS. 19. THIS PLAN IS FOR SITE GRADING, UTILITIES, SITING, AND DRAINAGE ONLY.
- SEE BUILDING PLANS FOR DETAILED HOOKUPS TO BUILDINGS, ETC. 20. CONTRACTOR AND BUILDER ARE RESPONSIBLE FOR COORDINATING FINISHED FLOOR ELEVATION OF ALL BUILDINGS WITH THE OWNER. ELEVATIONS GIVEN ARE MINIMUM GROUND ELEVATIONS AT THE BUILDING SITE AND DO NOT PURPORT TO BE FINISHED FLOOR. MINIMUM RECOMMENDED FF ELEVATIONS SHOWN ON PLANS.
- 21. AFFECTED NON-MUNICIPAL UTILITIES SHALL BE CONTACTED AND PROVIDED WITH PLANS AND OTHER PERTINENT INFORMATION, WHEN FEASIBLE, TO COORDINATE APPROPRIATE SCHEDULING AND PLACEMENT.
- 22. EXTREME CARE SHALL BE TAKEN TO ENSURE MINIMUM SEPARATIONS AT ALL UTILITY CROSSINGS.
- 23. MINIMUM SEPARATION SHALL BE MAINTAINED AS FOLLOWS: a. HORIZONTAL SEPARATION OF 10 FEET BETWEEN SANITARY SEWER AND WATER MAINS AND STORM SEWER.
  - b. WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND WATER OR WHERE SEWER LINE CROSSES ABOVE WATER MAIN, BOTH PIPES SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING.
  - c. WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10 FEET EITHER SIDE OF CROSSING.
  - d. WHERE VERTICAL CLEARANCE IS LESS THAN 12" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING. AND BRIDGING SHALL BE INSTALLED PER APPLICABLE UTILITY AUTHORITY'S DETAILS.
  - e. IN NO CASE SHALL THERE BE LESS THAN 18" OF SEPARATION BETWEEN OUTSIDE OF WATER MAIN AND OUTSIDE OF SEWER OR STORM DRAINAGE.
  - f. MINIMUM COVER OF 36" SHALL BE PROVIDED FOR ALL BURIED WATER MAINS AND SANITARY SEWER MAINS.
- 24. SEE DETAIL SHEETS FOR TYPICAL UTILITIES HOOKUPS.
- 25. ALL SANITARY SEWER MAINS TO BE 8" UNLESS OTHERWISE INDICATED.
- 26. ALL WATER MAINS TO BE 8" UNLESS OTHERWISE INDICATED.
- 27. TWO VALVES ARE REQUIRED AT "T" INTERSECTIONS AND ONE VALVE ON THE WATER LINE TO FIRE HYDRANTS.
- 28. A BLOW-OFF VALVE IS REQUIRED AT THE TERMINUS OF ALL "DEAD END" WATER LINES.



LICENSE # C-2710 **ENGINEERING** LAND PLANNING

COMMERCIAL / RESIDENTIAL P.O. BOX 4041

WILMINGTON, NC 28406

(910) 791–4441

**NAL DESIGN** NOT RELEASED FOR CONSTRUCTION

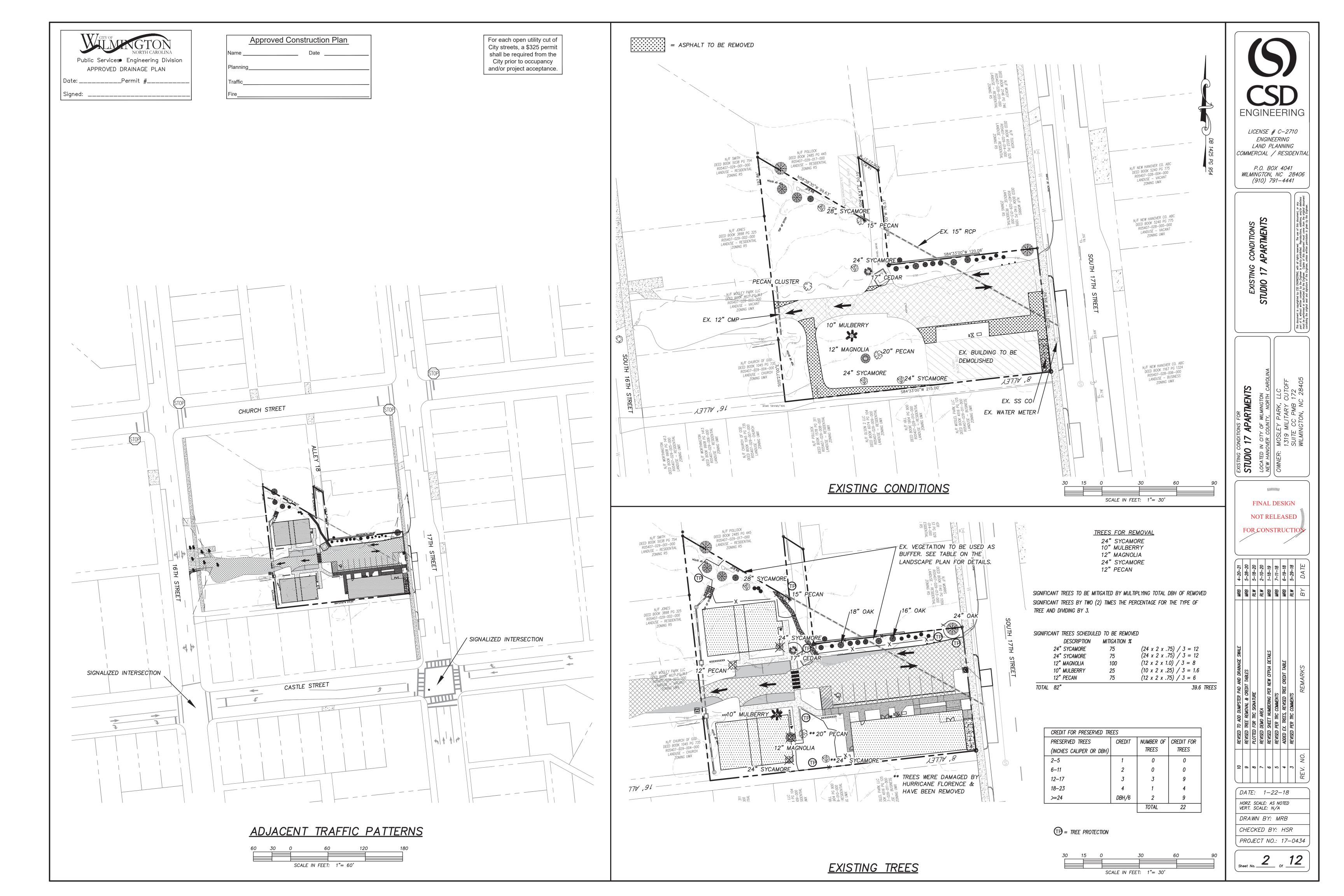
6	REVISED TO ADD DUMPSTER PAD AND DRAINAGE SWALE	MRB	4-20-21
8	PLOTTED FOR TRC SIGNATURE	RLW	5-18-20
7	REVISED BUILDING 3 AND SIDEWALK	RLW	2-10-20
9	REVISED WATER/FIRE MAIN LOCATION & WATER MAIN SIZE	MRB	2-26-19
5	REVISED SHEET NUMBERING PER NEW CFPUA DETAILS	MRB	1–18–19
4	REVISED SEWER MAIN TABLES	MRB	7-11-18
3	REVISED WATER MAIN TABLES	MRB	5-29-18
2	REVISED PER TRC COMMENTS	RLW	5-7-18
V. NO.	REMARKS	ВУ	BY DATE

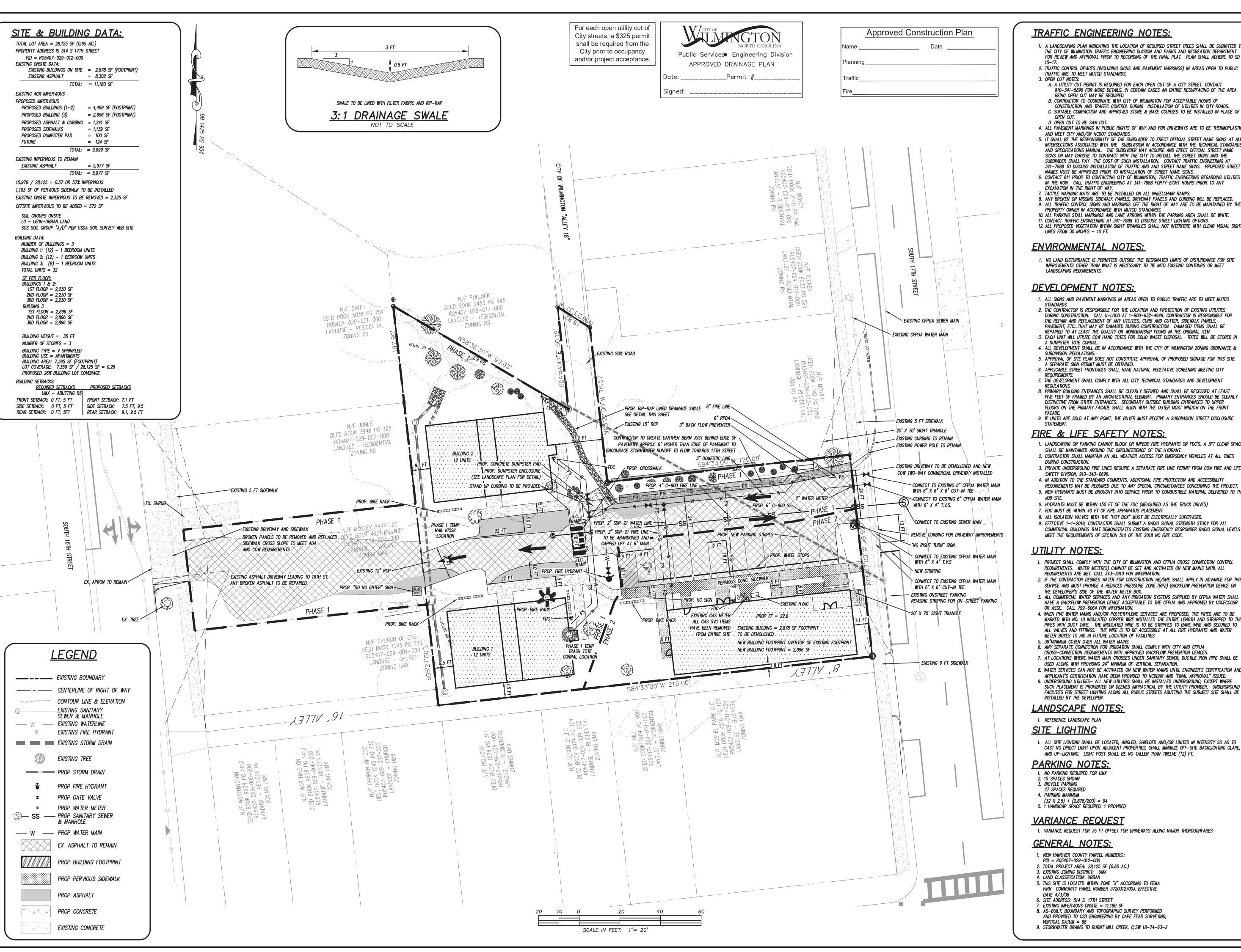
( DATE: 1-22-18

HORZ. SCALE: 1" = 200'

VERT. SCALE: N/A DRAWN BY: MRB

CHECKED BY: HSR PROJECT NO.: 17-0434





- 1. A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO RECORDING OF THE FINAL PLAT. PLAN SHALL ADHERE TO SD
- 2. TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC
- A. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 910-341-5899 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA
- B. CONTRACTOR TO COORDINATE WITH CITY OF WILMINGTON FOR ACCEPTABLE HOURS OF CONSTRUCTION AND TRAFFIC CONTROL DURING INSTALLATION OF UTILITIES IN CITY ROADS. C. SUITABLE COMPACTION AND APPROVED STONE & BASE COURSES TO BE INSTALLED IN PLACE OF
- 4. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS OF WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC
- 5. 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
- NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS. 6. CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING UTILITIES IN THE ROW. CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY
- 7. TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
- 8. ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED. 9. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT OF WAY ARE TO BE MAINTAINED BY THE
- 10. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREA SHALL BE WHITE.
- 11. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS. 12. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT

I. NO LAND DISTURBANCE IS PERMITTED OUTSIDE THE DESIGNATED LIMITS OF DISTURBANCE FOR SITE IMPROVEMENTS OTHER THAN WHAT IS NECESSARY TO TIE INTO EXISTING CONTOURS OR MEET

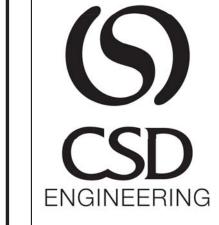
- 1. ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCO 2. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. CALL U-LOCO AT 1-800-632-4949. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY UTILITIES. CURB AND GUTTER. SIDEWALK PANELS. 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. 3. EACH UNIT WILL UTILIZE COW HAND TOTES FOR SOLID WASTE DISPOSAL. TOTES WILL BE STORED IN
- 4. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON ZONING ORDINANCE & 5. APPROVAL OF SITE PLAN DOES NOT CONSTITUTE APPROVAL OF PROPOSED SIGNAGE FOR THIS SITE.
- 7. THE DEVELOPMENT SHALL COMPLY WITH ALL CITY TECHNICAL STANDARDS AND DEVELOPMENT
- 8. PRIMARY BUILDING ENTRANCES SHALL BE CLEARLY DEFINED AND SHALL BE RECESSED AT LEAST FIVE FEET OF FRAMED BY AN ARCHITECTURAL ELEMENT. PRIMARY ENTRANCES SHOULD BE CLEARLY DISTINCTIVE FROM OTHER ENTRANCES. SECONDARY OUTSIDE BUILDING ENTRANCES TO UPPER FLOORS ON THE PRIMARY FACADE SHALL ALIGN WITH THE OUTER MOST WINDOW ON THE FRONT
- 9. IF UNITS ARE SOLD AT ANY POINT, THE BUYER MUST RECEIVE A SUBDIVISION STREET DISCLOSURE

- 1. LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE FIRE HYDRANTS OR FDC'S. A 3FT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT. 2. CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES
- 3. PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE FIRE LINE PERMIT FROM COW FIRE AND LIFE
- 4. IN ADDITION TO THE STANDARD COMMENTS, ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT. 5. NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIAL DELIVERED TO THE
- 6. HYDRANTS MUST BE WITHIN 150 FT OF THE FDC (MEASURED AS THE TRUCK DRIVES)
- 7. FDC MUST BE WITHIN 40 FT OF FIRE APPARATUS PLACEMENT.
- 8. ALL ISOLATION VALVES WITH THE "HOT BOX" MUST BE ELECTRICALLY SUPERVISED. 9. EFFECTIVE 1-1-2019, CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY FOR ALL COMMERCIAL BUILDINGS THAT DEMONSTRATES EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS
- 1. PROJECT SHALL COMPLY WITH THE CITY OF WILMINGTON AND CFPUA CROSS CONNECTION CONTROL
- REQUIREMENTS. WATER METER(S) CANNOT BE SET AND ACTIVATED ON NEW MAINS UNTIL ALL
- 2. IF THE CONTRACTOR DESIRES WATER FOR CONSTRUCTION HE/SHE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON
- 3. ALL COMMERCIAL WATER SERVICES AND ANY IRRIGATION SYSTEMS SUPPLIED BY CFPUA WATER SHALL HAVE A BACKFLOW PREVENTION DEVICE ACCEPTABLE TO THE CFPUA AND APPROVED BY USCFCCCHR
- 4. 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. THE WIRE IS TO BE ACCESSIBLE AT ALL FIRE HYDRANTS AND WATER METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
- 6. ANY SEPARATE CONNECTION FOR IRRIGATION SHALL COMPLY WITH CITY AND CFPUA
- 7. AT LOCATIONS WHERE WATER MAIN CROSSES UNDER SANITARY SEWER, DUCTILE IRON PIPE SHALL BE
- 8. WATER SERVICES CAN NOT BE ACTIVATED ON NEW WATER MAINS UNTIL ENGINEER'S CERTIFICATION AND
- APPLICANT'S CERTIFICATION HAVE BEEN PROVIDED TO NCDENR AND "FINAL APPROVAL" ISSUED. 9. UNDERGROUND UTILITIES— ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND, EXCEPT WHERE SUCH PLACEMENT IS PROHIBITED OR DEEMED IMPRACTICAL BY THE UTILITY PROVIDER. UNDERGROUND FACILITIES FOR STREET LIGHTING ALONG ALL PUBLIC STREETS ABUTTING THE SUBJECT SITE SHALL BE

1. ALL SITE LIGHTING SHALL BE LOCATED, ANGLED, SHIELDED AND/OR LIMITED IN INTENSITY SO AS TO CAST NO DIRECT LIGHT UPON ADJACENT PROPERTIES, SHALL MINIMIZE OFF-SITE BACKLIGHTING GLARE, AND UP-LIGHTING. LIGHT POST SHALL BE NO TALLER THAN TWELVE (12) FT.

1. VARIANCE REQUEST FOR 75 FT OFFSET FOR DRIVEWAYS ALONG MAJOR THOROUGHFARES

- 5. THIS SITE IS LOCATED WITHIN ZONE "X" ACCORDING TO FEMA
- 8. AS-BUILT, BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED
- 9. STORMWATER DRAINS TO BURNT MILL CREEK, C; SW 18-74-63-2

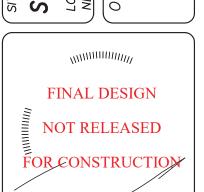


LICENSE # C-2710 **ENGINEERING** LAND PLANNING COMMERCIAL / RESIDENTIAL

P.O. BOX 4041 WILMINGTON, NC 28406

(910) 791–4441

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14	REVISED TO ADD DUMPSTER PAD AND DRAINAGE SWALE	MRB	4-20-21
13	rewsed fire service for bldg 3	MRB	11-12-20
12	PLOTTED FOR TRC SIGNATURE, ADDED PHASE LINES	RLW	5-18-20
11	REVISED TO SHOW PHASING	MRB	4-20-20
10	ADDED PERMOUS SIDEWAKK, REVISED IMPERMOUS NUMBERS	RLW	3-9-20
9	REVISED SIDEWALK, BUILDING AND NOTES	RLW	2-10-20
8	REWSED UTILITIES	RLW	5-13-19
7	REVISED SHEET NUMBERING PER NEW CFPUA DETAILS	MRB	1-18-19
REV. NO.	REMARKS	ВУ	DATE

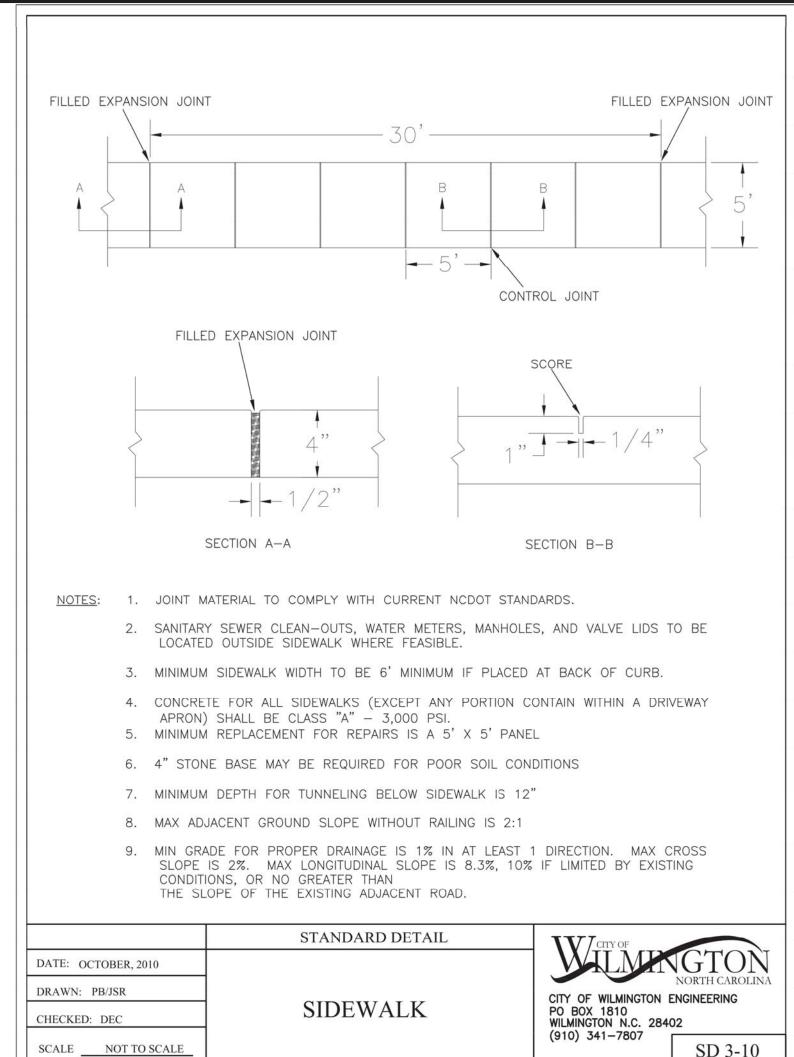
( DATE: 1-22-18

HORZ. SCALE: 1" = 20'VERT. SCALE: N/A DRAWN BY: RLW

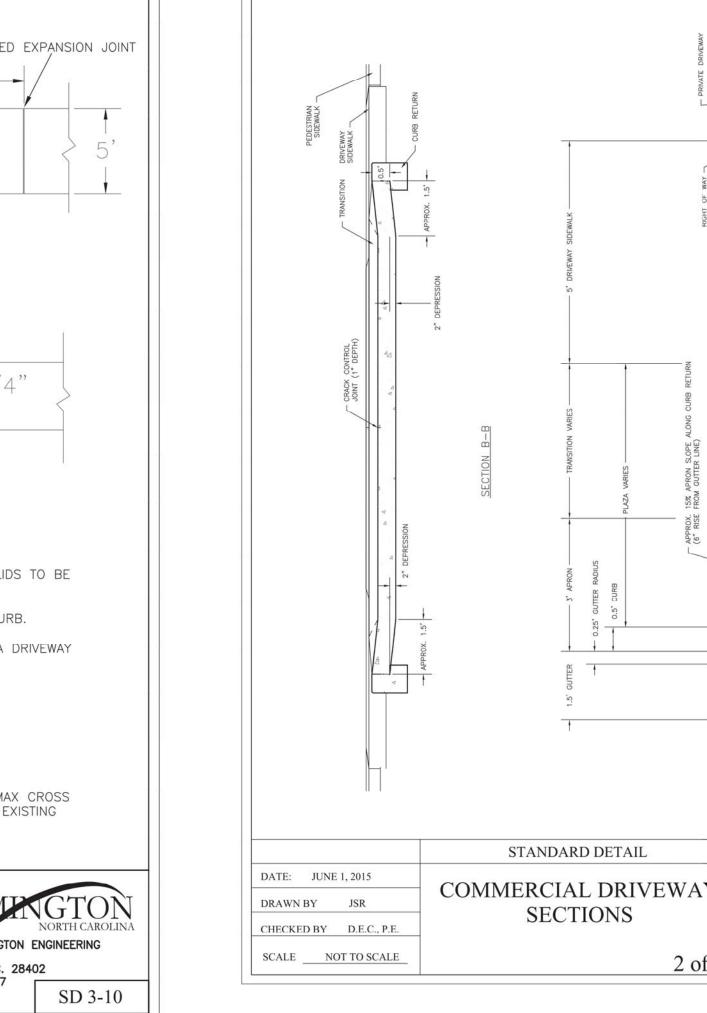
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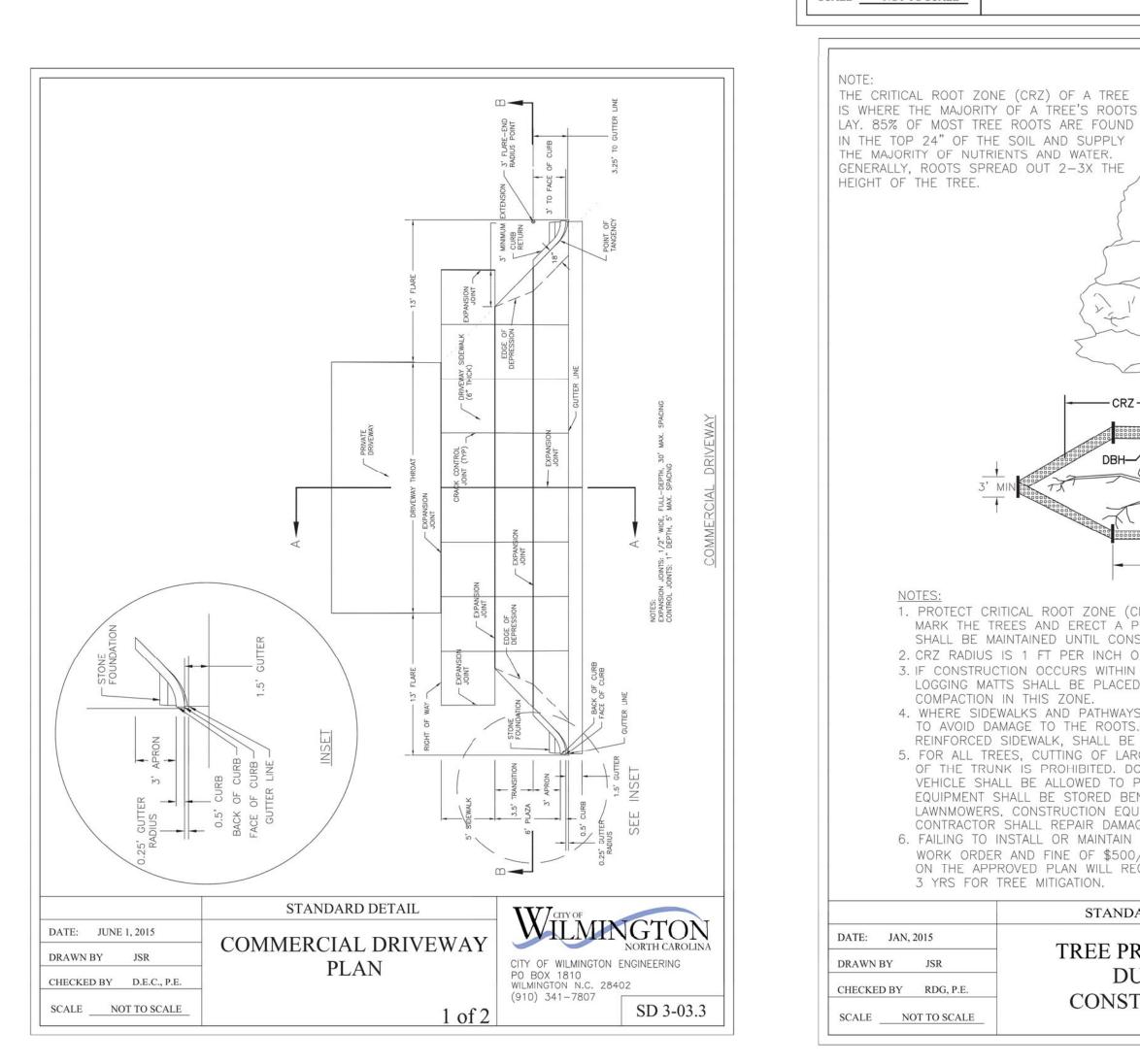
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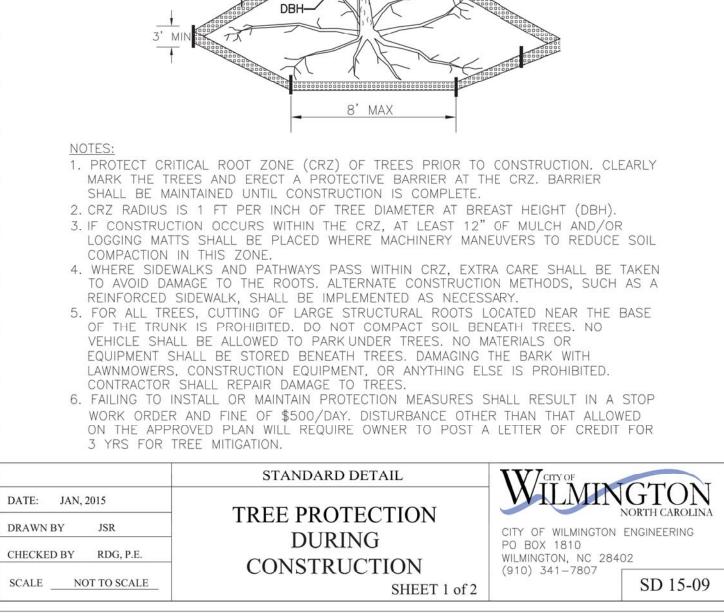
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THE CRITICAL ROOT ZONE (CRZ) OF A TREE







CROWN OF THE TREE IS NEEDED FOR LEAF

- ORANGE SAFETY FENCE

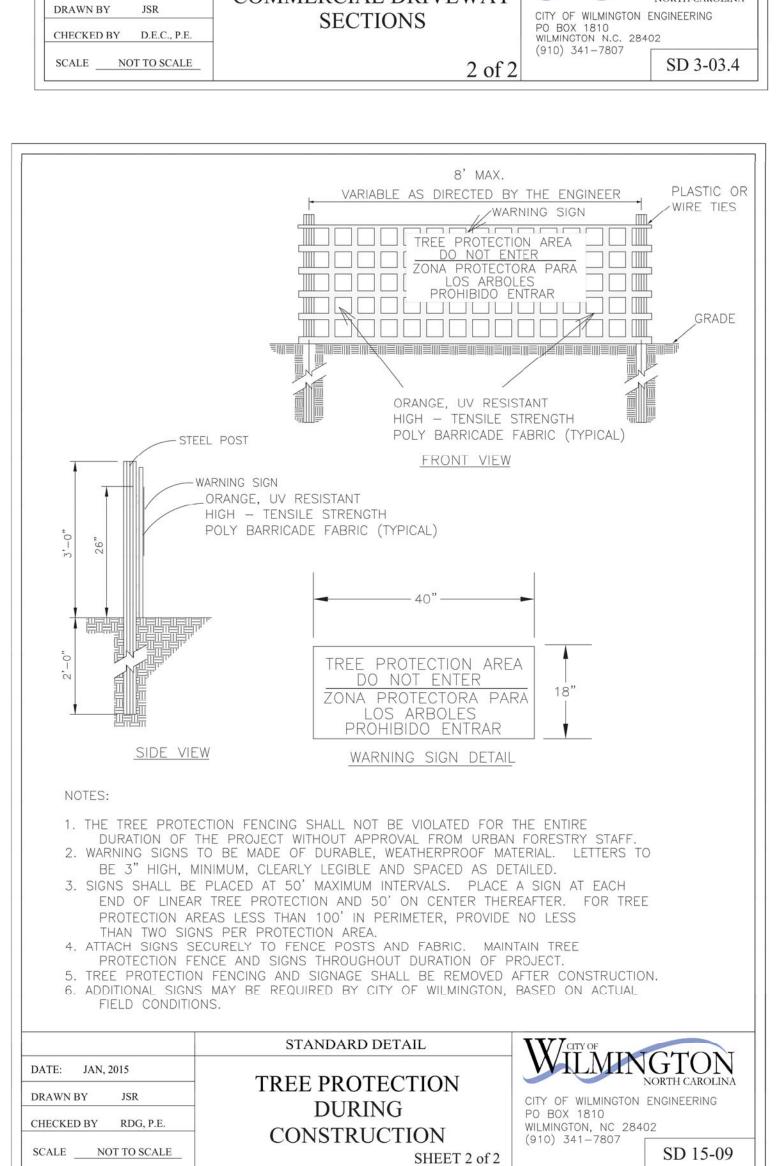
(TYPICAL)

OR ORANGE SILT FENCE

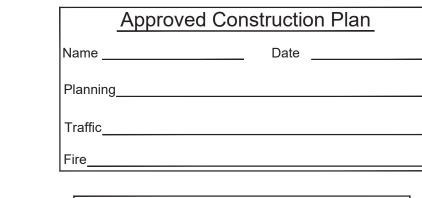
GROWTH TO PRODUCE OXYGEN, FILTER THE AIR, REDUCE WIND AND SOFTEN NOISE.

DO NOT DISFIGURE CROWN WITH

INTENSIVE PRUNING.



WILMINGTON





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



*LICENSE # C-2710* ENGINEERING LAND PLANNING | COMMERCIAL / RESIDENTIAL

P.O. BOX 4041 WILMINGTON, NC 28406 (910) 791–4441

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NOT RELEASED FOR CONSTRUCTION

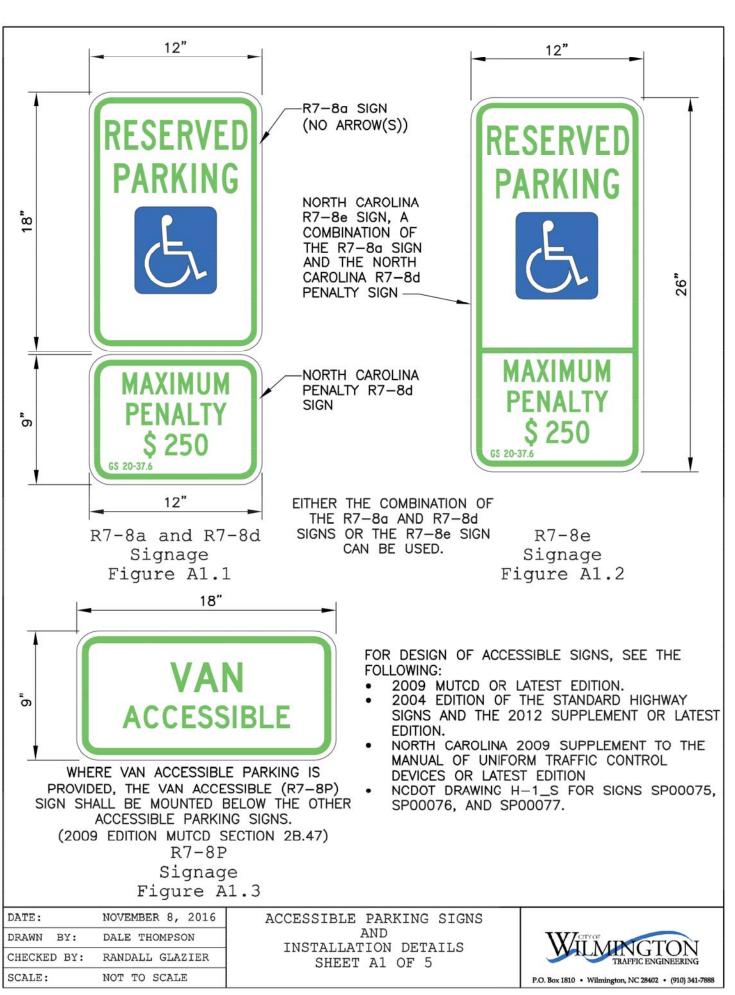
			TIED FOR TRC SIGNATURE 5-18-20	REVISED SHEET NUMBERING PER NEW CFPUA DETAILS 1-18-19	ISED PER TRC COMMENTS   RLW   3-21-18	REMARKS BY DATE	
			PLOTTED FOR TRC SIGNATURE	REVISED SHEET NUMBERING	REVISED PER TRC COMMENTS		
			3	2	1	REV. NO.	

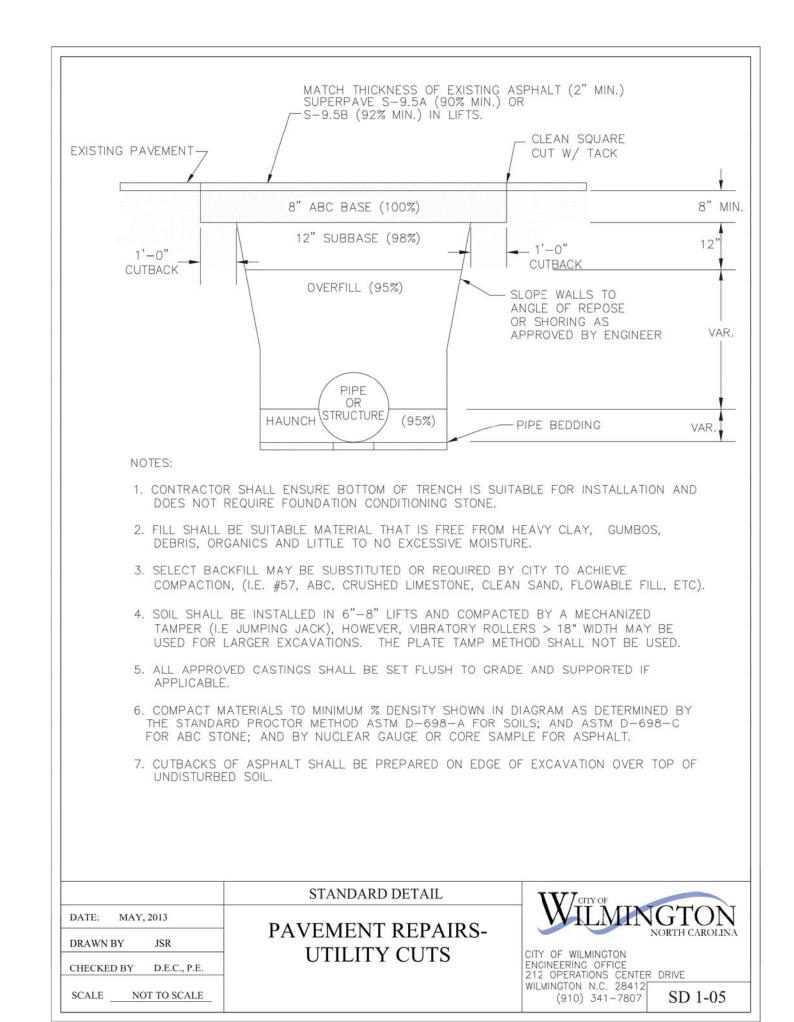
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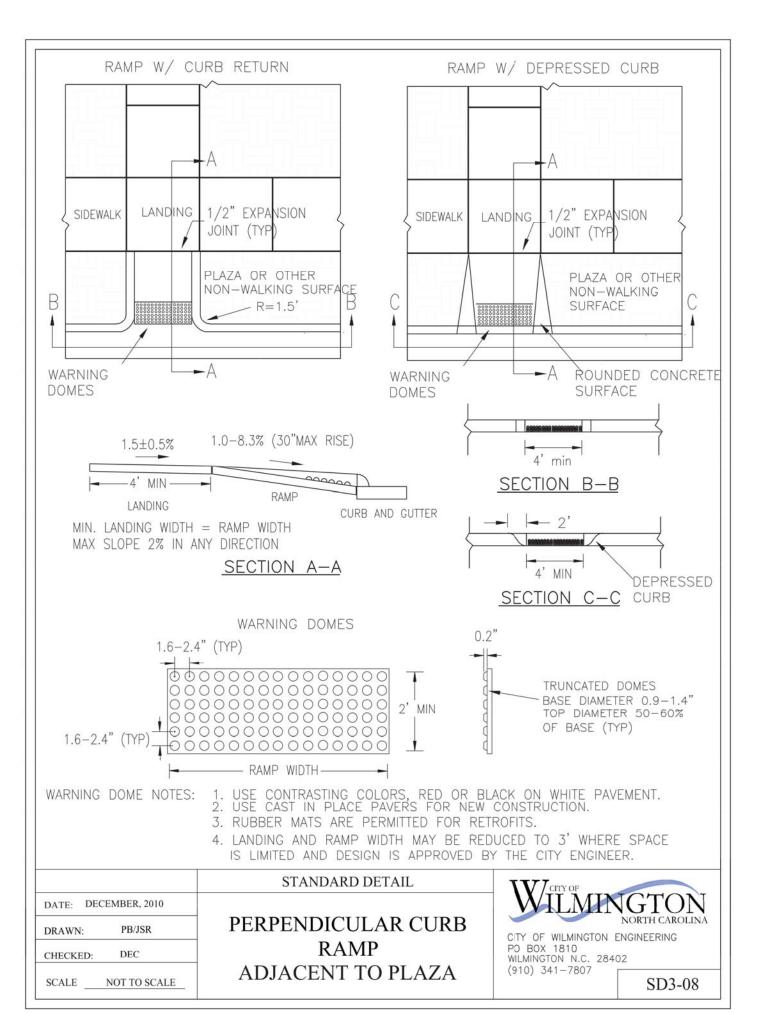
( DATE: 1-22-18

HORZ. SCALE: AS NOTED

PROJECT NO.: 17-0434

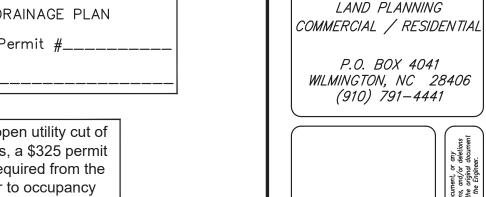








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PL 17

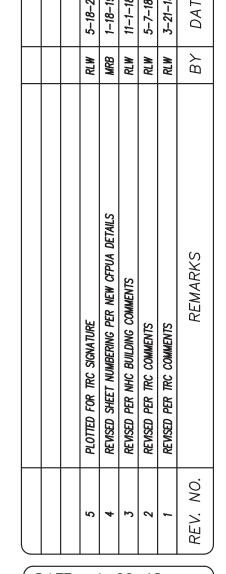
**ENGINEERING** 

*LICENSE # C-2710* 

**ENGINEERING** 

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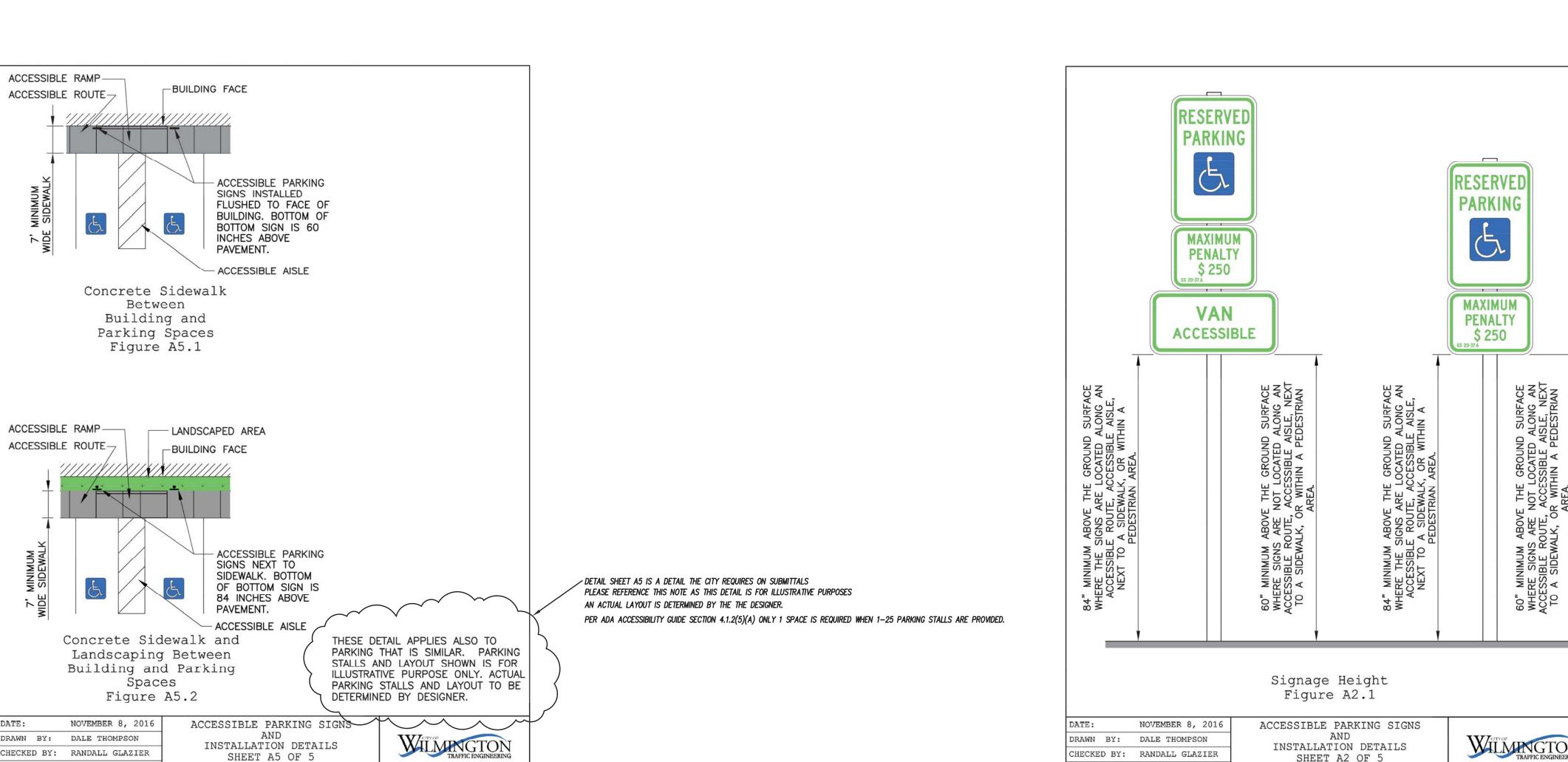
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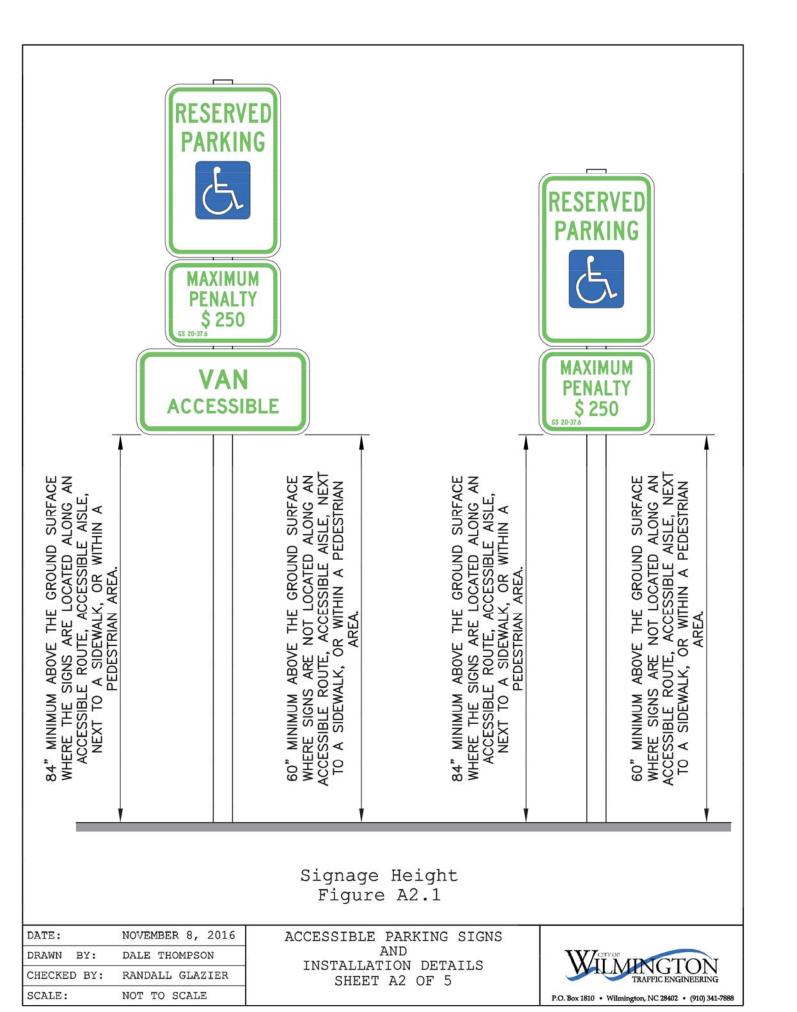


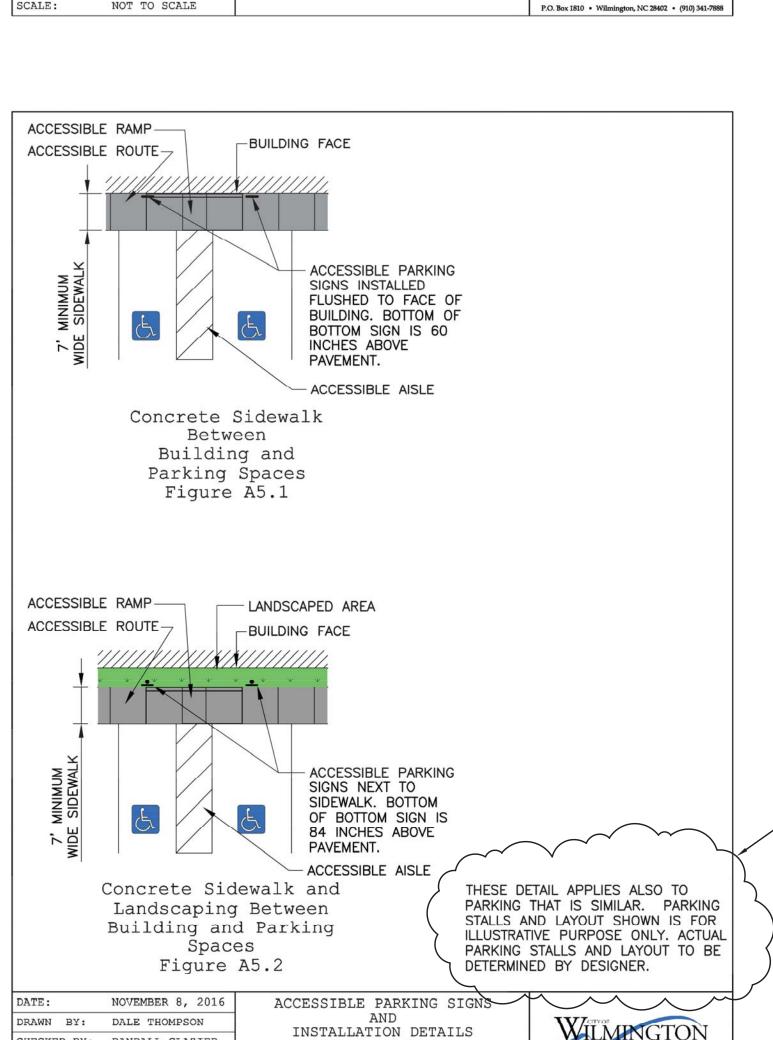
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PROJECT NO.: 17-0434



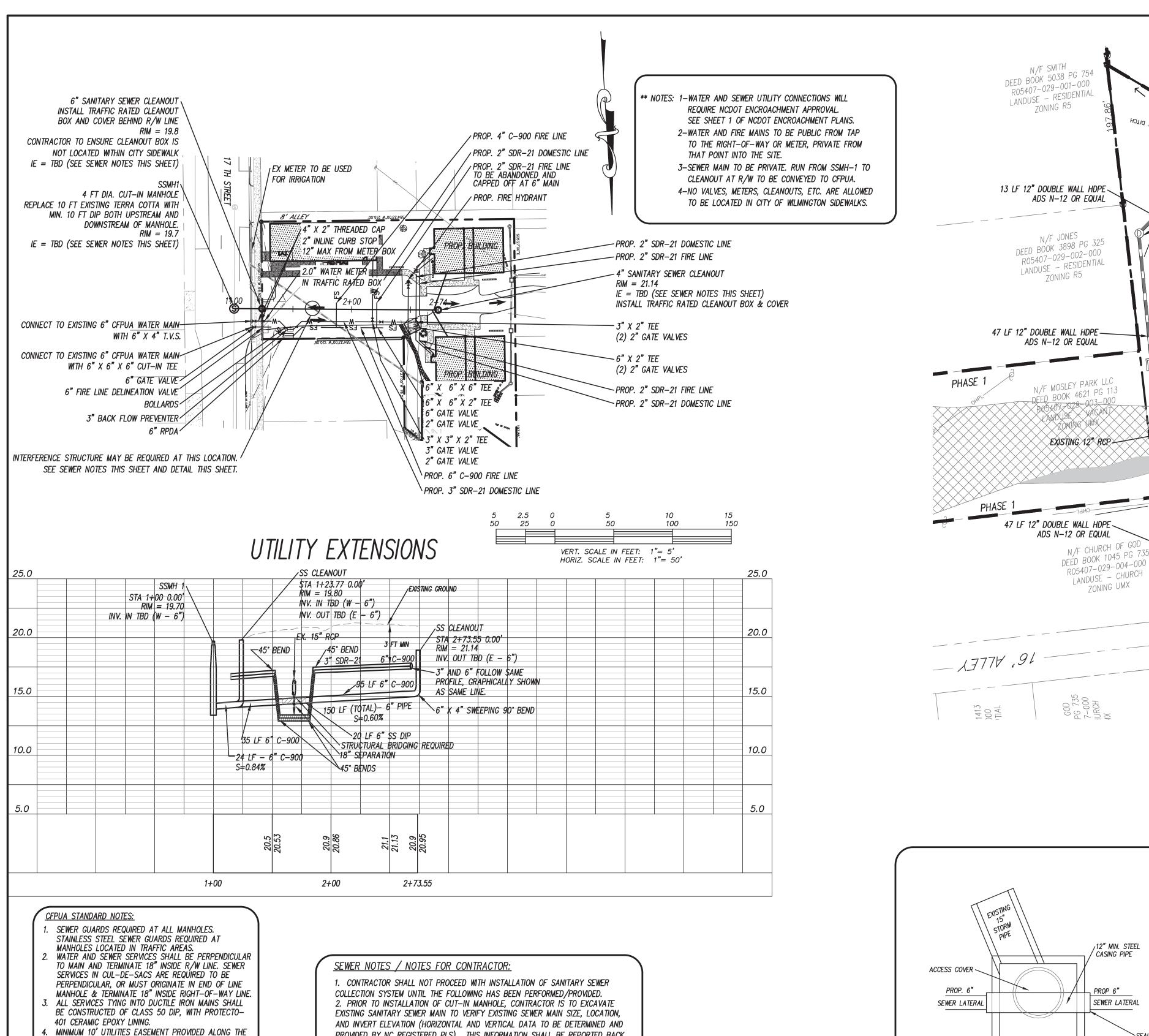




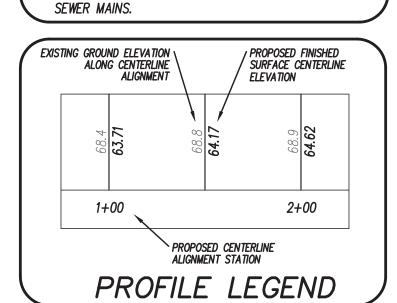
P.O. Box 1810 • Wilmington, NC 28402 • (910) 341-7888

SCALE:

NOT TO SCALE



PROVIDED BY NC REGISTERED PLS). THIS INFORMATION SHALL BE REPORTED BACK TO THE DESIGN ENGINEER. SEWER INSTALLATION SHALL NOT PROCEED UNTIL ENGINEER CONFIRMS EXISTING SEWER MAIN IS ADEQUATE TO SERVE SITE AND SPECIFIC RIM AND INVERT DESIGN INFORMATION IS PROVIDED BY THE DESIGN ENGINEER. ADDITIONAL COORDINATION WITH THE CFPUA MAY ALSO BE NECESSARY. 3. INFORMATION OBTAINED PER ITEM 1 ABOVE WILL ALSO BE UTILIZED TO DETERMINE IF PROPOSED 6" SEWER MAIN WILL BE IN CONFLICT WITH THE EXISTING 15" STORM DRAIN CROSSING THE SITE. IF A CONFLICT EXISTS, AN INTERFERENCE STRUCTURE WILL BE REQUIRED AND THE DESIGN ENGINEER WILL PROVIDE PRECISE INVERT AND SEPARATION INFORMATION FOR THE INSTALLATION. 4. ALL NEW 6" SEWER MAIN TO HAVE A MINIMUM OF 0.6% SLOPE.



FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW

6. ALL STAINLESS STEEL FITTINGS SHALL BE TYPE 316.

. CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET

. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET

. UNUSED SERVICES SHALL BE ABANDONED. ABANDONED

WATER SERVICES SHALL BE DISCONNECTED FROM MAIN.

10. A MINIMUM OF 10 FT OF MAIN LINE SHALL BE REPLACED FOR NEW CONNECTIONS TO EXISTING CLAY GRAVITY

5. NO FLEXIBLE COUPLINGS SHALL BE USED.

FROM ALL PROPERTY CORNERS.

FROM THE PROPERTY CORNER.

DEVELOPMENTS.

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

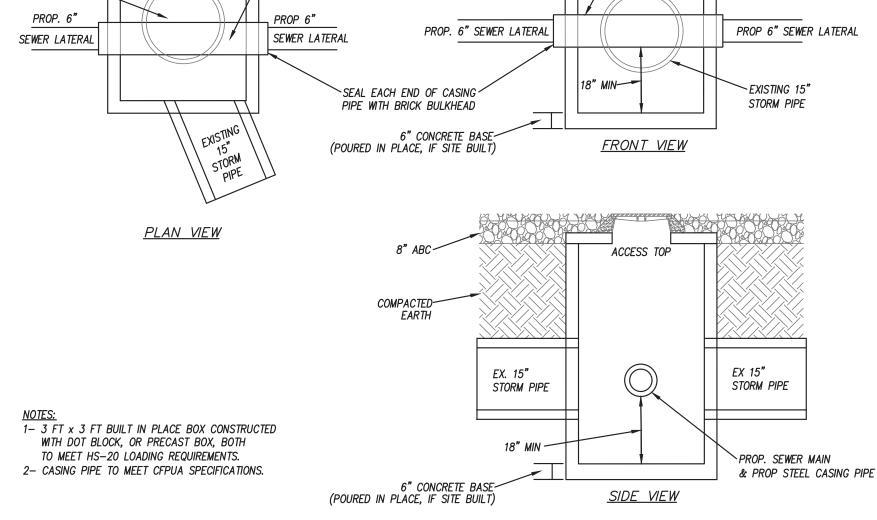
Public Services Engineering Division  APPROVED DRAINAGE PLAN	Approved Construction Plan  Name Date  Planning
Date:Permit #	Traffic
Signed:	Fire

### PROP 6" SEWER LATERAL

12" MIN. STEEL

CASING PIPE

COMPACTED-



INTERFERENCE STRUCTURE DETAIL

NOT TO SCALE

N/F POLLOCK DEED BOOK 2485 PG 445

R05407-029-017-000

LANDUSE - RESIDENTIAL

INV. = 16.1 2 CY CL B RIP RAP

JB-1 NCDOT STD. 840.54 RIM = 18.1

TG = 19.1

NCDOT STD. 840.16

TG = 20.4 INV. = 17.81

`JB−4

NCDOT\_STD: 840.54 RIM = 22.1 INV: = 18.2

EX. IE 15" = 14.10

PROP. RIP-RAP LINED DRAINAGE SWALE

CONTRACTOR TO CREATE EARTHEN BERM JUST BEHIND EDGE OF \

PAVEMENT APPROX. 6" HIGHER THAN EDGE OF PAVEMENT TO

ENCOURAGE STORMWATER RUNOFF TO FLOW TOWARDS 17TH STREET

S84°33'00"W 12C

PHASE

SEE DETAIL SHEET 3 OF 12

### STORMWATER DRAINAGE STRUCTURE NOTES

- 1. CONTRACTOR AND PRECASTER TO DETERMINE STORM STRUCTURE SIZES.
- 2. FRAME AND GRATES TO BE NCDOT 840.16
- 3. RING AND COVERS TO BE NCDOT STD. 840.54 3. STORM STRUCTURES TO BE NCDOT STD. 840.14
- 4. PRECAST STORM STRUCTURES TO MEET HS-20-44 5. CONTRACTOR TO INSTALL ACCESS COVERS SO THEY

ARE NOT LOCATED WITHIN THE CURB AND GUTTER

REFERENCE EROSION CONTROL CALCULATIONS FOR SPECIFIC DIMENSIONS.

d50 = REFERENCE EROSION CONTROL CALCULATIONS dmax = reference erosion control calculations La = REFERENCE EROSION CONTROL CALCULATIONS MIN. APRON THICKNESS = 4.5"

NOTE: GEOTEX NONWOVEN FILTER FABRIC (TERRATEX NO4 OR EQUAL) TO BE PLACED UNDER ALL STONE

> RIP RAP DIMENSIONS STRUCTURE LXWXD CLASS QUANTITY OUTFALL FROM JB1 9' X 6' X 1' B 2 CY

**OP OUTLET PROTECTION DETAIL** 

NOT TO SCALE

**ENGINEERING** 

*LICENSE # C-2710* **ENGINEERING** LAND PLANNING COMMERCIAL / RESIDENTIAL

P.O. BOX 4041 WILMINGTON, NC 28406 (910) 791–4441

THITY PLAN

引 3 6 H ≥



4-20-21 11-12-20 5-28-20 5-18-20 4-22-20 2-10-20 4-19-19 2-26-19

15 COW

	MKB	MRB	MRB	M7W	MRB	RLW	MRB	MRB	ВУ
Time Johnson and Checking day of Checking	KENSED 10 ADD DUMPSIER PAD AND DRAINAGE SWALE	rewsed fire service for blog 3	REVISED TO CALL OUT USE OF EX WATER METER FOR IRRIGATION	PLOTTED FOR TRC SIGNATURE	REVISED TO SHOW PHASING	REVISED BUILDING 3 AND SIDEWALK	REVISED PER CFPUA COMMENTS	REVISED WATER/FIRE MAIN LOCATION & WATER MAIN SIZE	REMARKS
!	61	14	13	12	11	10	6	8	REV. NO.

( DATE: 3-1-18 HORZ. SCALE: 1" = 10' VERT. SCALE: N/A

DRAWN BY: RLW CHECKED BY: HSR

PROJECT NO.: 17-0434 Sheet No. 6 of 12

OUTLET PIPE DIAMETER OUTLET PROTECTION.

ACCESS TOP

12" MIN. STEEL

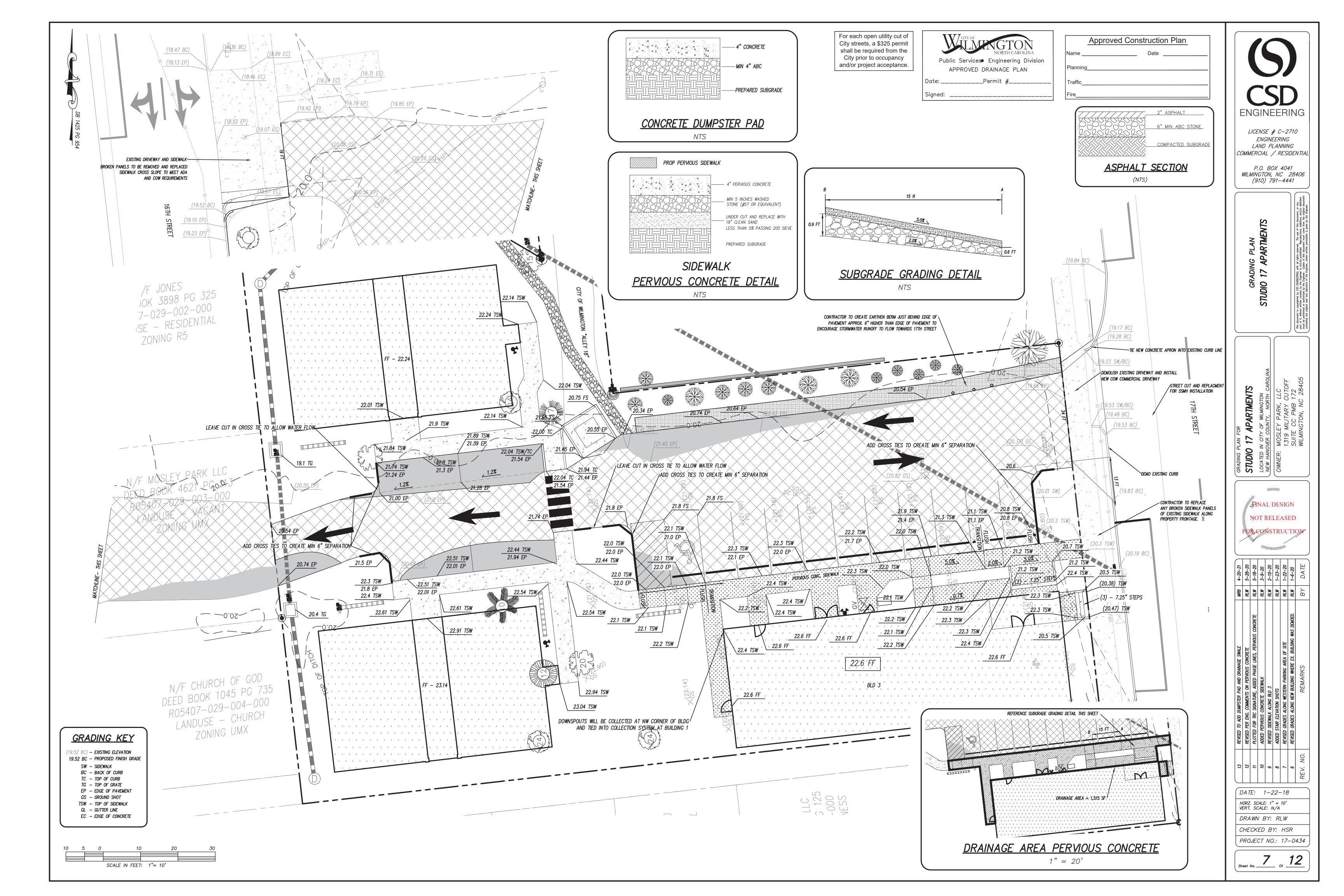
CASING PIPE

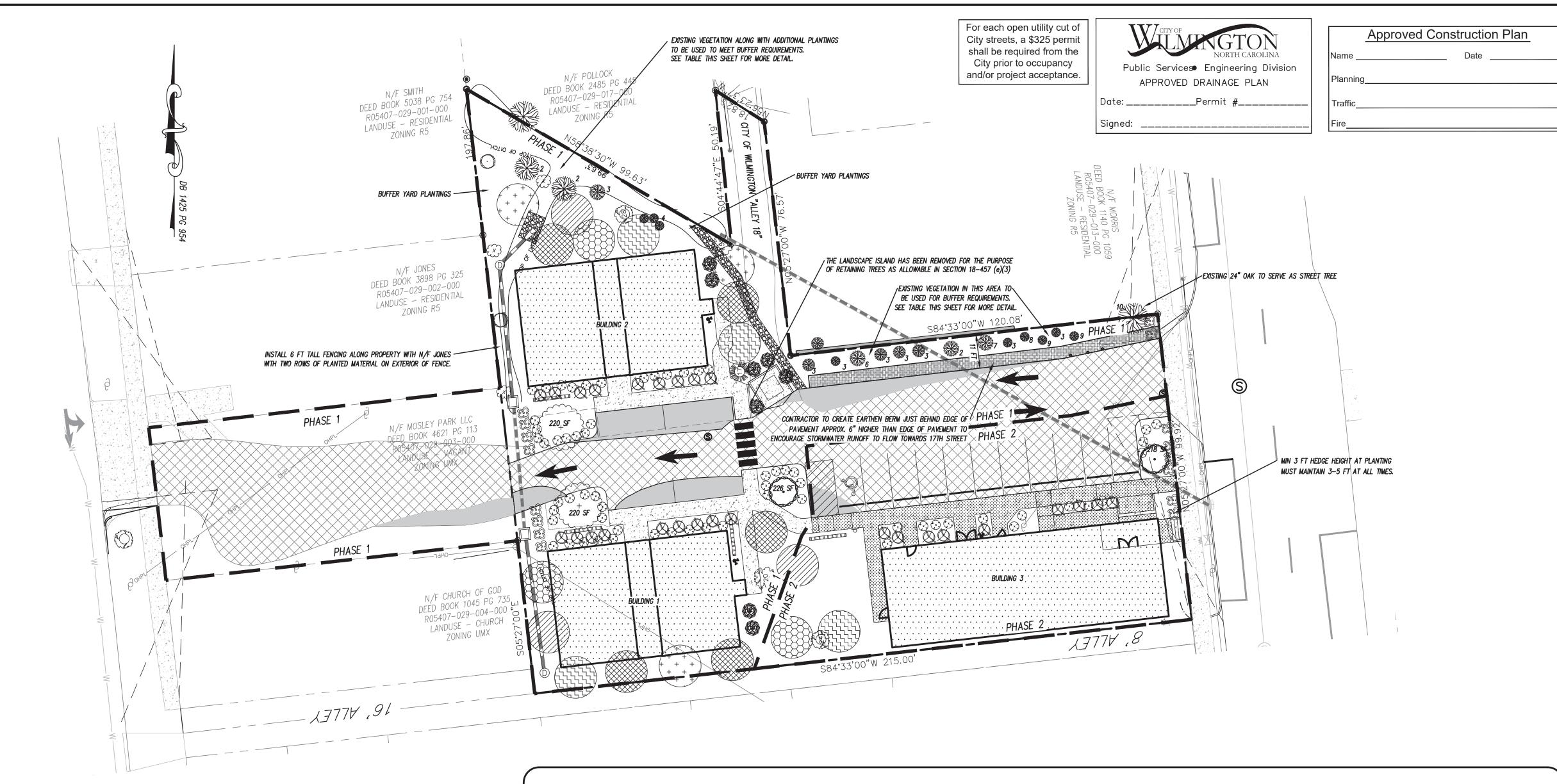
-CONNECT GUTTER DRAINS

| 국경기교의 |

STORM DRAINAGE IMPROVEMENTS

& PROP STEEL CASING PIPE





### LANDSCAPING NOTES:

### FOUNDATION PLANTINGS

NORTH SIDE BUILDING 1
BUILDING FACE = 1,800 SF

1,800 X 0.12 = 216 SF REQ'D, 216 SF PROVIDED.

SOUTH SIDE BUILDING 1

BUILDING FACE = 1,800 SF

 $1,800 \times 0.12 = 216 \text{ SF REQ'D, } 216 \text{ SF PROVIDED.}$ NORTH SIDE BUILDING 3

BUILDING FACE = 2,715 SF 2,715 X 0.12 = 326 SF REQ'D, 336 SF PROVIDED.

### STREET TREES

100 - 24 = 76 FT

76 / 30 = 2.5 STREET TREES REQUIRED

REQUESTING PAYMENT IN LIEU FOR STREET TREES DUE TO SITE

CONSTRAINTS. LESS THAN 3 FT FROM BACK OF CURB TO EXISTING

## PARKING LOT SHADING 20% SHADING REQ'D FOR PARKING AREAS. 7,218 PARKING AREA X 20%; 7,218 X .2 = 1,444 SF REQ'D CANOPY

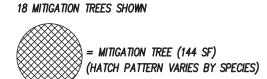
- 707 SF FOR CANOPY TREE

1,444 / 707 = 2.0 OR 2 CANOPY TREES; 2 CANOPY TREES PROVIDED.

### 1,444 / /0/ = 2.0 OK

SEE EXISTING CONDITIONS SHEET

39.6 - 22 = 18 MITIGATION TREES REQUIRED.



# <u>NOTES:</u> 1. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT

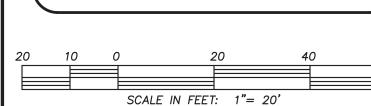
TREES OR GROVES OF TREES.

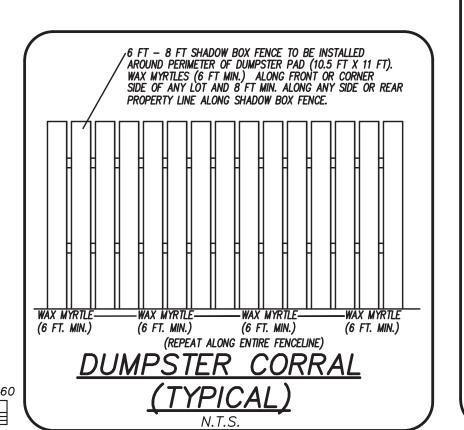
STREET YARD SHRUBS SHALL BE AT LEAST 3 FEET IN HEIGHT
AT TIME OF PLANTING.
 UNDERSTORY STREET YARD TREES MUST BE 8 – 10 FEET IN HEIGHT

INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30 INCHES - 10 FT

- AT TIME OF PLANTING.

  4. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED
- 5. ALL LANDSCAPE ISLANDS TO INCLUDE GROUND COVER PLANTINGS.





# EXISTING BUFFER VEGETATION

ID #	DESCRIPTION	
2	OLEANDER	
3	LIGUSTRUM	
4	POPLAR SHRUBS	
6	18" OAK	
7	16" OAK	
8	CRAPE MYRTLE	
9	PALM	
10	24" LIVE OAK	
i		

NOTE: APPROXIMATE LOCATION AND DESCRIPTION OF EXISTING VEGETATION PROVIDED TO CSD ENGINEERING BY OWNERS.

# Proposed Plant Table

SHRUBS					
Quantity	Symbol	Scientific Name	Common Name	Planting Size	Planting Remarks
PH1 10	@Q			MIN. 3 FT	PARKING AREA
PH2 6		llex crenata	STEEDS HOLLY	IN HEIGHT	SCREENING
PH1 25				7.04	PARKING AREA
PH2 4	$\odot$	Muhlenbergia capillaris	PINK MUHLY	3 GAL.	GROUND COVER

### INTERIOR PARKING TREE

Quantity	Symbol	Scientific Name	Common Name	Planting Size	Planting Remarks
PH1 1				7" DDU	INTERIOR TREE
PH2 1		Ulmus parvifolia	ALLEE ELM	3" DBH	INTERIOR TREE

### FOUNDATION PLANTING

Quantity	Symbol	Scientific Name	Common Name	Planting Size	Planting Remarks
PH1 18	- Q	llex vomitoria	DWARF YAUPON	3 GAL.	FOUNDATION
PH2 9	<b>X</b>	nex vointend	DWANT TAOLON	o one.	TOUNDATION
PH1 23	€	Muhlophorgia ognillario	DIAIZ AJULI V	3 GAL.	FOUNDATION
PH2 11		Muhlenbergia capillaris	PINK MUHLY	J GAL.	TOUNDATION

### SHADE TREES

Quantity	Symbol	Scientific Name	Common Name	Planting Size	Planting Remarks
PH1 2	ر	Quercus virginiana	SOUTHERN LIVE OAK	7" DDU	PARKING SHADING
PH2 -	{ + }	Quercus Virgilliana	SOUTHERN LIVE VAN	3" DBH	TARRING SHADING

### DUMPSTER CORRAL & HVAC SCREENING

Quantity	Symbol	Scientific Name	Common Name	Planting Size	Planting Remarks
PH1 4		Myrica cerifera	WAX MYRTLE	7 Gal.	SCREENING
PH2 7		myrica cernera	WAX MINIEL	7 Gai.	CONLENTIO

### MITIGATION TREES

	Quantity	Symbol	bol Scientific Name Common Name		Planting Size	Planting Remarks	
	PH1 5		Lagerstroemia indica	CRAPE MYRTLE	3" DBH	MITIGATION	
	PH2 -		Lagersa verma maica	CHAPL MINILE	Э ОВП		
	PH1 2		Carpinus caroliniana	AMERICAN HORNBEAM	3" DBH	MITIGATION	
	PH2 1		Carpinas caroninana	AMERICAN HORNBEAM	Э ОВП	MITIGATION	
	PH1 3	+ + + + + + + + + + + + + + + + + + + +	Ulmus americana 'Princeton'	PRINCETON ELM	3" DBH	MITIGATION	
	PH2 -			PRINCETON ELM	Э ИВП		
	PH1 3		Illmuo propingua	EMERALD SUNSHINE ELM	3" DBH	MITICATION	
	PH2 1		Ulmus propinqua	EMERIALD SUNSTIINE ELM	חסט כ	MITIGATION	
	PH1 2			CINICO	7" 004	AUTIOATION	
ľ	PH2 1		Ginkgo biloba (male only)	GINKGO	3" DBH	MITIGATION	

### BUFFER YARD

	Quantity	Symbol Scientific Name		Common Name	Planting Size	Planting Remarks	
	PH1 2	0	Quercus virginiana	SOUTHERN LIVE OAK	3" DBH	BUFFER YARD	
	PH2 -			OOO MENIVERY EVE ONIX	0 0011		
	PH1 3	<b>-</b>	Myrica cerifera		3" DBH	BUFFER YARD	
	PH2 -			RED MAPLE	3 DRH		
	PH1 8	-	Myrica cerifera		7.01	BUFFER YARD	
	PH2 -			WAX MYRTLE	7 Gal.		

O.C. — "ON CENTER" CAL. — "CALIPER AT 6" ABOVE GRADE" GAL. — "GALLON CONTAINER" STREET YARD SHRUBS SHALL BE AT LEAST 12" HEIGHT AT PLANTING.

(S) CSD ENGINEERING

LICENSE # C-2710
ENGINEERING
LAND PLANNING
COMMERCIAL / RESIDENTIAL

P.O. BOX 4041 WILMINGTON, NC 28406 (910) 791-4441

STUDIO 17 APARTMENTS

STUDIO 17 APARTMENTS

LOCATED IN CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA
OWNER: MOSLEY PARK, LLC
1319 MILITARY CUTOFF
SUITE CC PMB 172

FINAL DESIGN
NOT RELEASED
FOR CONSTRUCTION

	$\overline{}$								
	4-20-21	5-28-20	5-18-20	4-22-20	2-10-20	8-2-18	7-23-18	7-11-18	DATE
	MRB	MRB	RLW	MRB	RLW	MRB	MRB	RLW	ВУ
	REVISED BUFFER YARD TREES PER CITY ARBORIST COMMENTS	REVISED TREE MITIGATION CALCS PER TRC COMMENTS	PLOTTED FOR TRC SIGNATURE	REVISED TO SHOW PHASING	REVISED PER SIDEWALK AND BUILDING CHANGES AROUND BLD 3	REVISED PER CITY ARBORIST COMMENTS	REVISED PER TRC COMMENTS	REVISED TREE MITIGATION CALCS & ADDED TABLE	REMARKS
	11	10	6	8	7	9	5	4	REV. NO.

DATE: 3-1-18

HORZ. SCALE: 1" = 20'
VERT. SCALE: N/A

DRAWN BY: RLW

CHECKED BY: HSR

PROJECT NO.: 17-0434

Sheet No. LP of LP

For each open utility cut of Approved Construction Plan City streets, a \$325 permit shall be required from the City prior to occupancy Public Services Engineering Division and/or project acceptance. APPROVED DRAINAGE PLAN **ENGINEERING** LICENSE # C-2710 ENGINEERING LAND PLANNING COMMERCIAL / RESIDENTIAL P.O. BOX 4041 WILMINGTON, NC 28406 (910) 791—4441 PHASING PLAN STUDIO 17 APARTMENTS N/F POLLOCK
DEED BOOK 2485 PG 445
R05407-029-017-000
LANDUSE - RESIDENTIAL N/F SMITH
DEED BOOK 5038 PG 754
R05407-029-001-000
LANDUSE - RESIDENTIAL
ZONING R5 N/F NEW HANO DEED BOOK 5 R05407-028 LANDUSE -ZONIN N/F NEW HAI DEED BOOK R05407-C LANDUSE N/F JONES
DEED BOOK 3898 PG 325
R05407-029-002-000
LANDUSE - RESIDENTIAL
ZONING R5 STUDIO 17 APARTMENTS

LOCATED IN CITY OF WILMINGTON

NEW HANOVER COUNTY, NORTH CARC

OWNER: MOSLEY PARK, LLC PROP 4 FT PEDESTRIAN ACCESS PHASE 1 -PROP PARKING STOPS TO PROVIDE BARRIER BETWEEN PEDESTRIAN PATH AND DRIVE AISLE PROP 14 FT VEHICULAR ACCESS
ONE WAY TRAFFIC ONLY DURING PHASE 1 PHASE 1 TEMP MAIL KIOSK LOCATION FOR CONSTRUCTION · BUILDING 3 · . 8 UNITS / 2500 SF RETAIL. PROP FF = 22.6. N/F CHURCH OF GOD DEED BOOK 1045 PG 735 R05407-029-004-000 LANDUSE - CHURCH ZONING UMX EXISTING BUILDING = 2,878 SF FOOTPRINT TO BE DEMOLISHED. N/F NE DEED RO5 NEW BUILDING FOOTPRINT OVERTOP OF EXISTING FOOTPRINT <u>LEGEND</u> EXISTING BOUNDARY PHASE BOUNDARY EXISTING SANITARY SEWER & MANHOLE — W — EXISTING WATERLINE EXISTING FIRE HYDRANT EXISTING STORM DRAIN EXISTING TREE PROP STORM DRAIN PROP FIRE HYDRANT PROP GATE VALVE PROP WATER METER S— SS — PROP SANITARY SEWER & MANHOLE DATE: 3-19-20 --- W ---- PROP WATER MAIN HORZ. SCALE: 1" = 20' VERT. SCALE: N/A -----FS------ PROP FIRE MAIN PROP BUILDING FOOTPRINT DRAWN BY: MRB CHECKED BY: HSR PROP PERVIOUS SIDEWALK PROJECT NO.: 17-0434 PROP CONCRETE Sheet No. \_\_\_\_\_ Of \_\_\_ EXISTING CONCRETE SCALE IN FEET: 1"= 20'