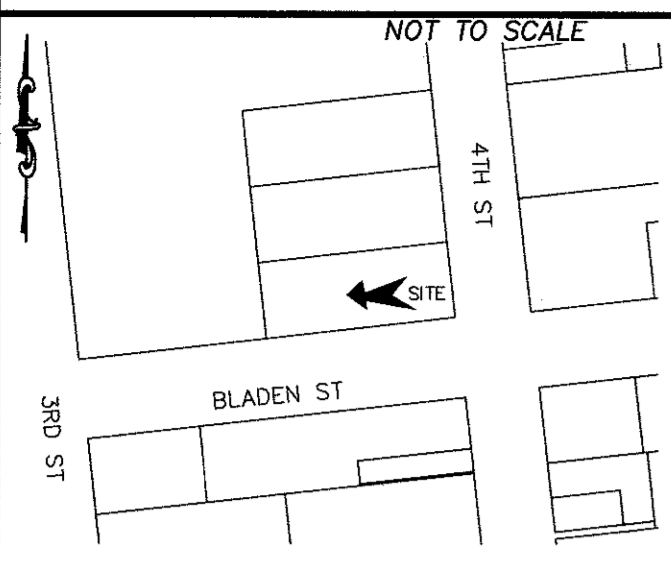


**LOCATION MAP**



CONSTRUCTION DRAWINGS for

**TRUSTHOUSE**

LOCATED IN CITY OF WILMINGTON  
NEW HANOVER COUNTY, NORTH CAROLINA

RECEIVED

APR 5 2019

PLANNING DIVISION

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: W. Wade Date: 4-8-19  
 Planning: \_\_\_\_\_  
 Traffic: W. Wade 4-8-19  
 Fire: C. Wade 4/9/19

**CITY OF WILMINGTON**  
 NORTH CAROLINA  
 Public Services Engineering Division  
 APPROVED DRAINAGE PLAN  
 Date: 4-8-19 Permit # 2019021  
 Signed: E. S. S.



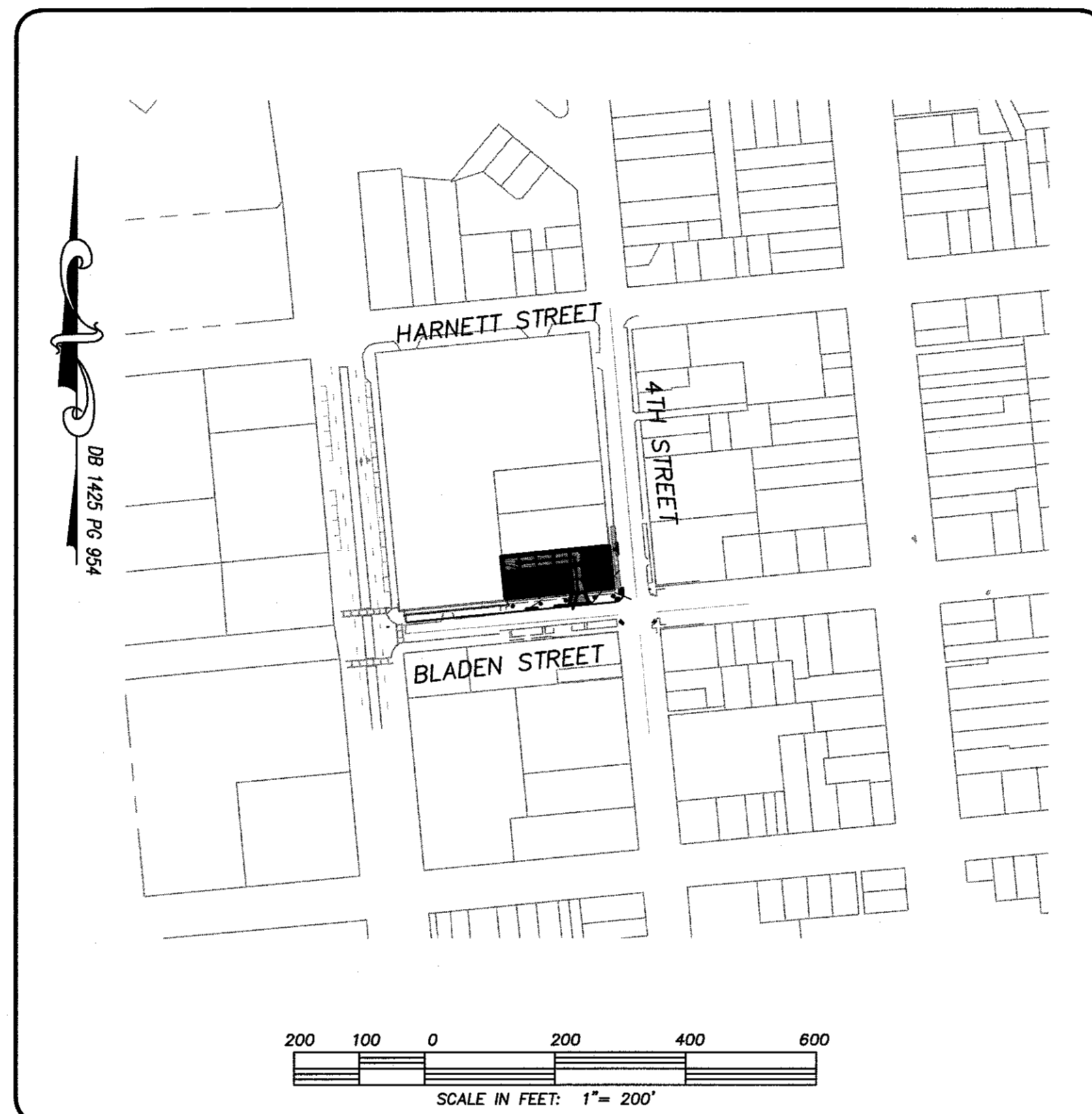
LICENSE # C-2710  
 ENGINEERING  
 LAND PLANNING  
 COMMERCIAL / RESIDENTIAL  
 P.O. BOX 4041  
 WILMINGTON, NC 28406  
 (910) 791-4441

**GENERAL NOTES:**

- NEW HANOVER COUNTY PARCEL NUMBERS: PD = 104909-037-01-000
- TOTAL PROJECT AREA: 10,880 SF (0.25 AC.)
- EXISTING ZONING DISTRICT: CBD
- LAND CLASSIFICATION: RESIDENTIAL
- THIS SITE IS LOCATED WITHIN ZONE "X" ACCORDING TO FEMA FIRM COMMUNITY PANEL NUMBER 3720311800L, EFFECTIVE DATE 8/28/18
- SITE ADDRESS: 311 BLADEN STREET
- EXISTING IMPERVIOUS ONSITE = 0.0 SF
- AS-BUILT, BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED AND PROVIDED TO CSD ENGINEERING BY BATEMAN CIVIL SURVEY COMPANY; VERTICAL DATUM = 88
- STORMWATER DRAINS TO CAPE FEAR RIVER, SC 18-(71)
- LAND OWNER - TRUSTHOUSE INVESTMENTS INC. 401 S. TRYON ST STE. 3000 CHARLOTTE, NC 28202

**WATER & SEWER USAGE NOTES:**

CURRENT WATER USAGE 0 GPD PROPOSED WATER USAGE 1,680 GPD  
 CURRENT SEWER USAGE 0 GPD PROPOSED SEWER USAGE 1,680 GPD  
 WATER - 14 BEDROOMS X 120 GPD = 1,680 GPD  
 SEWER - 14 BEDROOMS X 120 GPD = 1,680 GPD

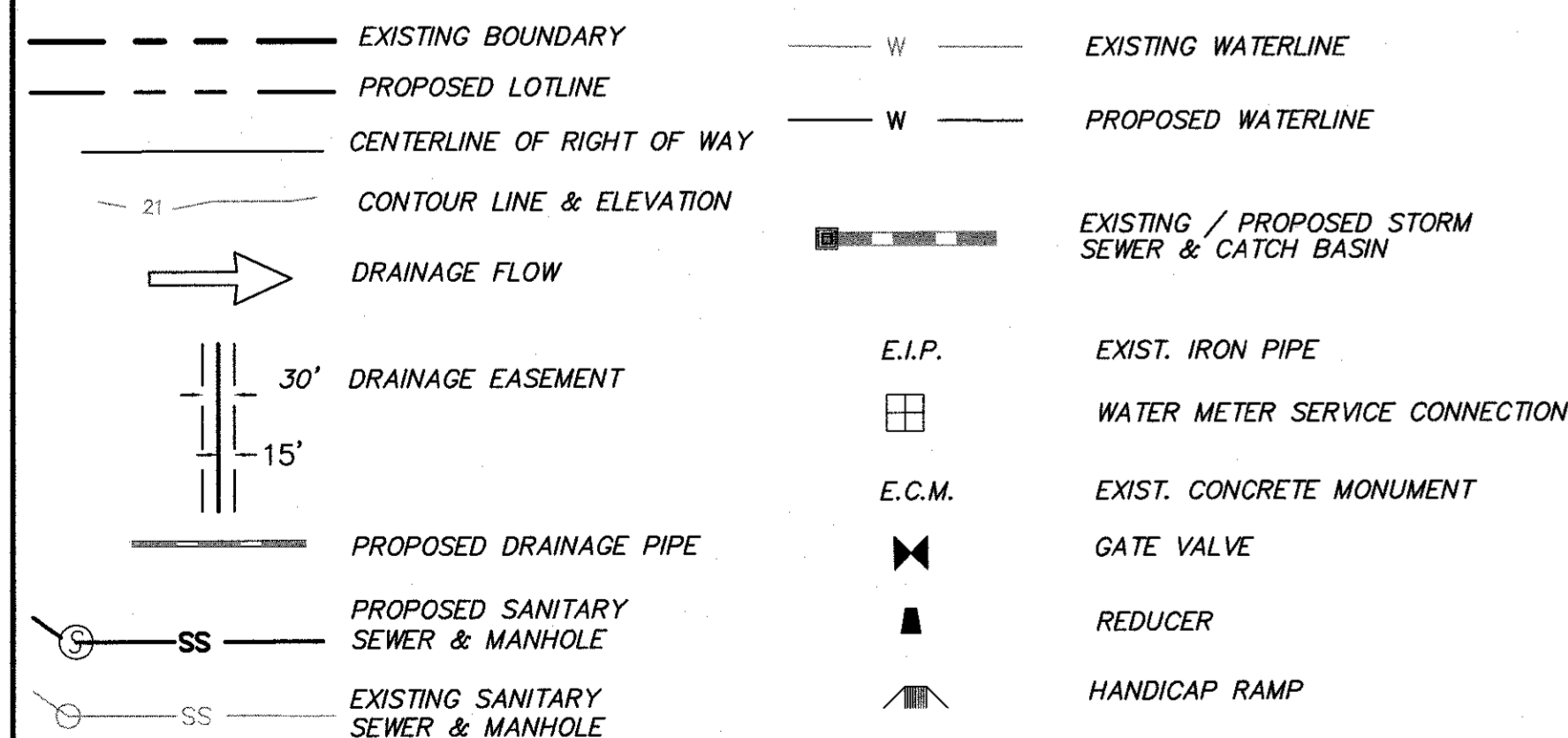


SEWER (PRIVATE)	
SIZE	6"
TYPE	C-900
LF	170

**INDEX TO DRAWINGS**

SHEET No.	DESCRIPTION	DRAWING No.
1 OF 7	COVER SHEET	CD_COVER
2 OF 7	EXISTING BOUNDARY AND TOPOGRAPHY, ADJACENT TRAFFIC	CD_EX-COND
3 OF 7	SITE PLAN	SITE_PLAN
4 OF 7	CITY OF WILMINGTON CONSTRUCTION DETAILS	SP_DET-1
5 OF 7	CITY OF WILMINGTON CONSTRUCTION DETAILS	SP_DET-2
6 OF 7	GRADING AND UTILITY PLAN	GP
7 OF 7	CFPUA STANDARD DETAILS	CFPUA_DET

**LEGEND**



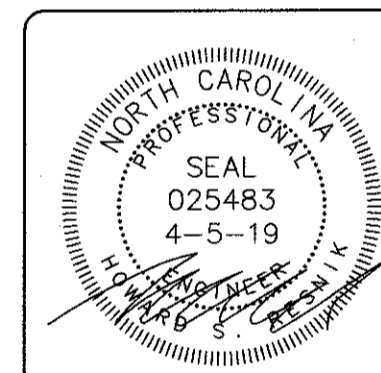
**OWNER:**  
 TRUSTHOUSE INVESTMENTS INC.  
 401 S. TRYON ST SUITE 3000  
 CHARLOTTE, NC 28202

**NOTES:**

- AS-BUILT, BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED AND PROVIDED TO CSD ENGINEERING BY BATEMAN CIVIL SURVEY COMPANY; 406 N 3RD STREET WILMINGTON, NC 28401, 910-792-9113 FIRM #C-2378
- THIS MAP IS NOT FOR CONVEYANCE, RECORDATION, OR SALES.
- THIS PROPERTY IS LOCATED WITHIN ZONE "X" ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP, 3720311800L, EFFECTIVE DATE 8/28/18
- THIS PROPERTY IS ZONED CBD
- CFPUA WATER
- CFPUA SEWER
- ALL CONSTRUCTION TO CONFORM TO NEW HANOVER COUNTY STANDARDS AND APPLICABLE STATE & LOCAL CODES.
- CONTRACTOR TO COORDINATE ANY REQUIRED TRAFFIC CONTROL WITH CITY OF WILMINGTON AND OR NCDOT.
- 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.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ANY RELOCATIONS, RE-ALIGNMENTS, DISCONNECTIONS OR CONNECTIONS OF EXISTING UTILITIES WITH APPLICABLE AUTHORITIES.
- 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.
- 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 "NC ONE-CALL" AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.
- 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.
- 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.
- 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.
- 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.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS.
- THIS PLAN IS FOR SITE GRADING, UTILITIES, SITING, AND DRAINAGE ONLY. SEE BUILDING PLANS FOR DETAILED HOOKUPS TO BUILDINGS, ETC.
- 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.
- AFFECTED NON-MUNICIPAL UTILITIES SHALL BE CONTACTED AND PROVIDED WITH PLANS AND OTHER PERTINENT INFORMATION, WHEN FEASIBLE, TO COORDINATE APPROPRIATE SCHEDULING AND PLACEMENT.
- EXTREME CARE SHALL BE TAKEN TO ENSURE MINIMUM SEPARATIONS AT ALL UTILITY CROSSINGS.
- MINIMUM SEPARATION SHALL BE MAINTAINED AS FOLLOWS:
  - HORIZONTAL SEPARATION OF 10 FEET BETWEEN SANITARY SEWER AND WATER MAINS AND STORM SEWER.
  - 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.
  - 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.
  - 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.
  - IN NO CASE SHALL THERE BE LESS THAN 18" OF SEPARATION BETWEEN OUTSIDE OF WATER MAIN AND OUTSIDE OF SEWER OR STORM DRAINAGE.
  - MINIMUM COVER OF 36" SHALL BE PROVIDED FOR ALL BURIED WATER MAINS AND SANITARY SEWER MAINS.
- SEE DETAIL SHEETS FOR TYPICAL UTILITIES HOOKUPS.
- ALL SANITARY SEWER MAINS TO BE 8" UNLESS OTHERWISE INDICATED.
- ALL WATER MAINS TO BE 8" UNLESS OTHERWISE INDICATED.
- TWO VALVES ARE REQUIRED AT "T" INTERSECTIONS AND ONE VALVE ON THE WATER LINE TO FIRE HYDRANTS.
- A BLOW-OFF VALVE IS REQUIRED AT THE TERMINUS OF ALL "DEAD END" WATER LINES.

COVER SHEET FOR  
**TRUSTHOUSE**

COVER SHEET FOR  
**TRUSTHOUSE**  
 LOCATED IN CITY OF WILMINGTON  
 NEW HANOVER COUNTY, NORTH CAROLINA  
 OWNER: TRUSTHOUSE INVESTMENTS INC  
 401 S. TRYON ST SUITE 3000  
 CHARLOTTE, NC 28202



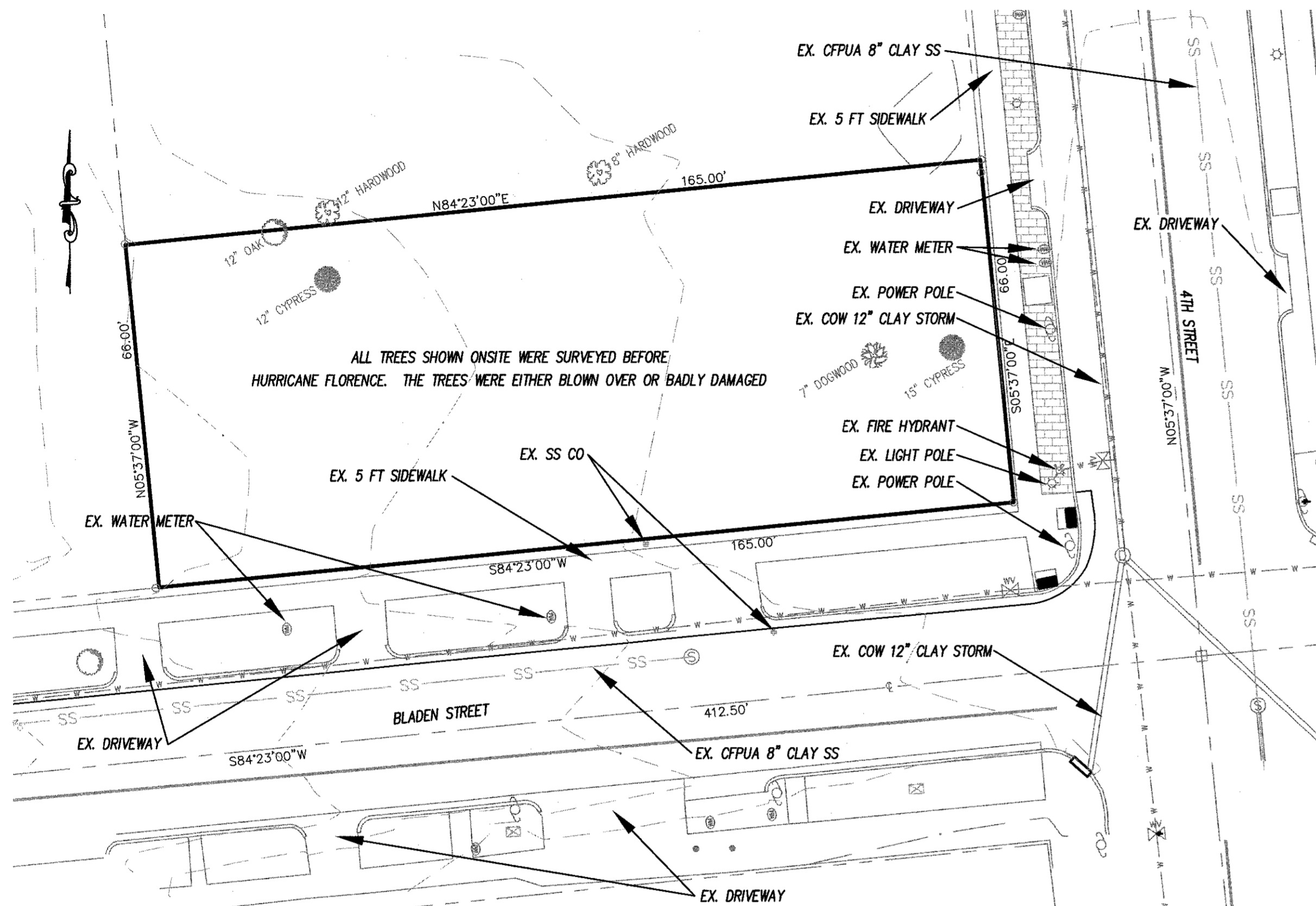
REV. NO.	DATE	BY	REMARKS
1	4-5-19	MRB	
2	1-14-19	MRB	
3	12-19-18	MRB	

DATE: 10-22-18  
 HORZ. SCALE: 1" = 200'  
 VERT. SCALE: N/A  
 DRAWN BY: MRB  
 CHECKED BY: HSR  
 PROJECT NO.: 18-0456

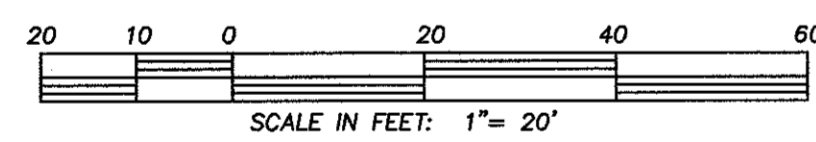
**Approved Construction Plan**

Name: \_\_\_\_\_ Date: 4-8-19  
Planning: *Mr. [Signature]* 4-8-19  
Traffic: *W. [Signature]* 4-8-19  
Fire: *C. [Signature]* 4/9/19

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

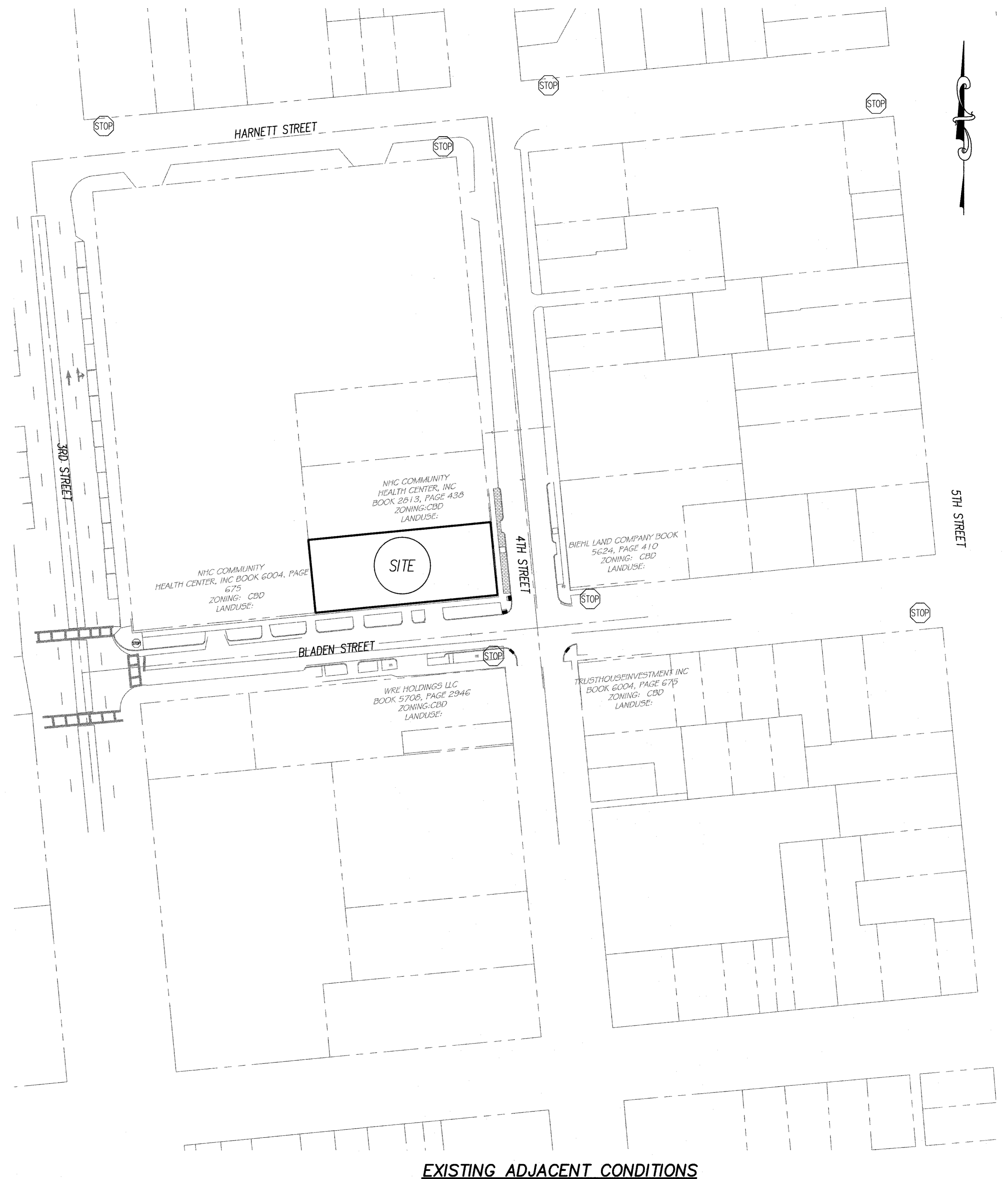


**EXISTING CONDITIONS**



**LEGEND**

---	EXISTING BOUNDARY
-W-	EXISTING WATER
-SS-	EXISTING SEWER
⊙	EXISTING FIRE HYDRANT
-○-	EXISTING CONTOUR
⊙	EXISTING TREE
---	EXISTING STORM DRAIN



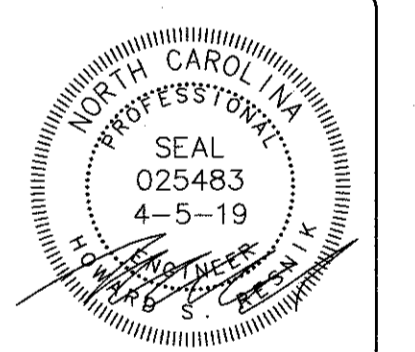
**EXISTING ADJACENT CONDITIONS**



**CSD ENGINEERING**  
LICENSE # C-2710  
ENGINEERING  
LAND PLANNING  
COMMERCIAL / RESIDENTIAL  
P.O. BOX 4041  
WILMINGTON, NC 28406  
(910) 791-4441

EXISTING CONDITIONS  
**TRUSTHOUSE**

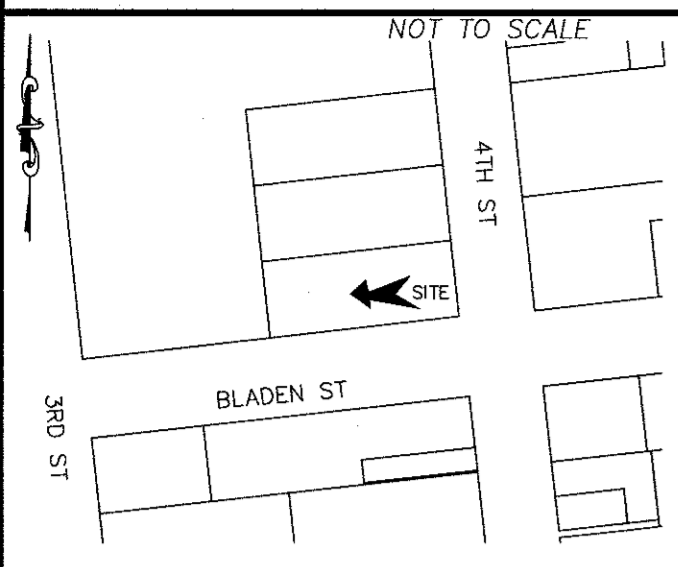
EXISTING CONDITIONS for  
**TRUSTHOUSE**  
LOCATED IN CITY OF WILMINGTON  
NEW HANOVER COUNTY, NORTH CAROLINA  
OWNER: TRUSTHOUSE INVESTMENTS INC  
100 CLAYTON STREET, SUITE 3000  
CHARLOTTE, NC 28202



REV. NO.	DATE	BY	REMARKS
3	4-5-19	RLV	CITY OF WILMINGTON CONSTRUCTION RELEASE
2	1-14-19	MRB	REVISED PER TRC COMMENTS, CHANGED SHEET NUMBERS
1	12-18-18	RLV	REVISED PER TRC COMMENTS

DATE: 10-22-18  
HORZ SCALE: AS NOTED  
VERT. SCALE: N/A  
DRAWN BY: MRB  
CHECKED BY: HSR  
PROJECT NO.: 18-0456

# LOCATION MAP



## SITE & BUILDING DATA:

TOTAL LOT AREA = 10,890 SF (0.25 AC.)  
 PROPERTY ADDRESS IS 311 BLADEN STREET  
 PID = R04809-037-011-000

**EXISTING ON-SITE DATA:**  
 EXISTING BUILDINGS ON SITE = 0 SF  
 EXISTING ASPHALT = 0 SF  
 TOTAL = 0 SF

**EXISTING ON IMPERVIOUS:**  
 PROPOSED IMPERVIOUS = 6,468 SF  
 PROPOSED BUILDINGS = 3,438 SF  
 PROPOSED CONCRETE = 9,926 SF  
 TOTAL = 9,926 SF

9,926 / 10,890 = 0.911 or 91% IMPERVIOUS

WHOLE SITE IS WITHIN 1/4" SOIL TYPE  
 SCS SOIL GROUP "A" PER USDA SOIL SURVEY WEBSITE

**PROPOSED IMPERVIOUS OFFSITE:**  
 SIDEWALK CONNECTION = 351 SF

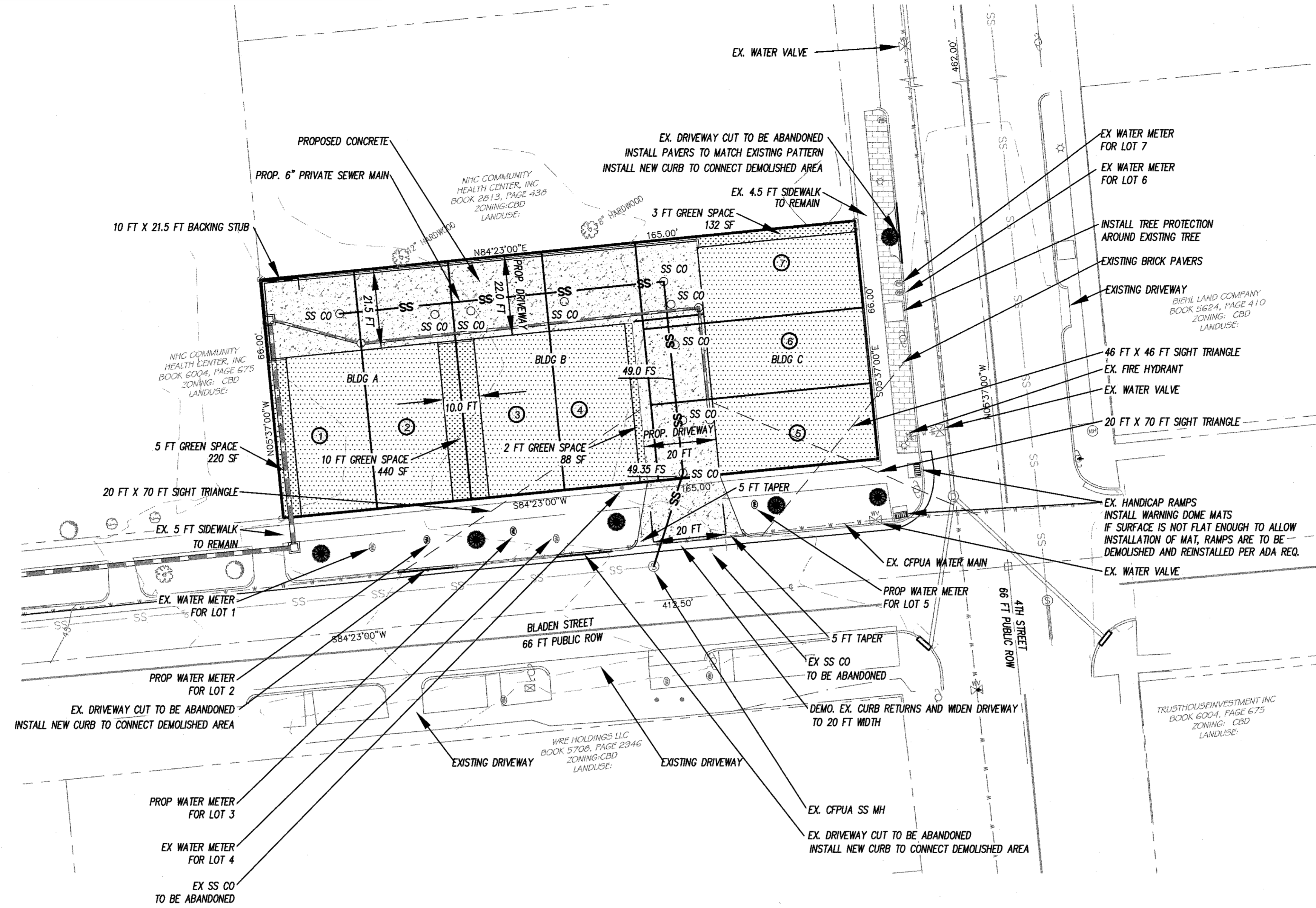
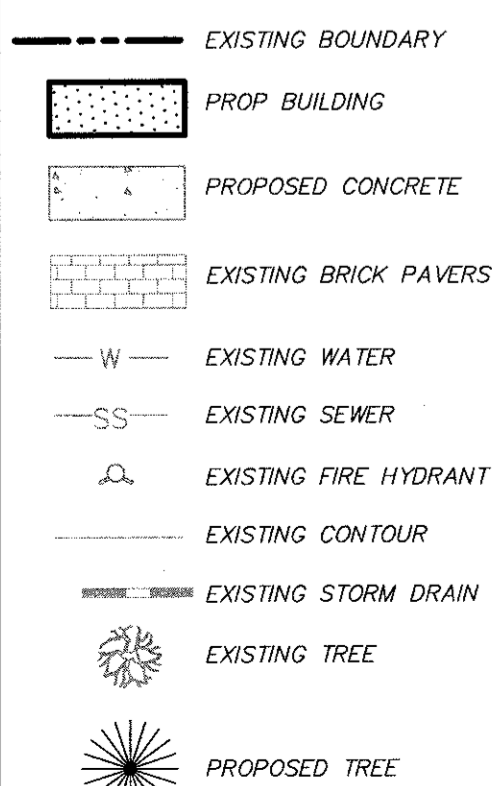
**BUILDING DATA:**  
 NUMBER OF BUILDINGS = 3  
 7 - 2 BEDROOM UNITS  
 BUILDING HEIGHT = +/- 40 FT  
 NUMBER OF STORES = 3.5  
 SQUARE FOOTAGE PER FLOOR

BLD	1ST FLOOR	2ND FLOOR	TOTAL
A	1,848	1,848	3,696
B	1,848	1,848	3,696
C	2,772	2,772	5,544
TOTAL			12,936

BUILDING TYPE = V  
 BUILDING AREA: 6,468 SF  
 LOT COVERAGE: 6,468 SF / 10,890 SF = 0.593  
 PROPOSED 55% BUILDING LOT COVERAGE

EX. BUILDING	REQUIRED SETBACKS	PROPOSED SETBACKS
FRONT	0 FT	0 FT
SIDE	0 FT	5 & 0 FT
REAR	0 FT	22 & 3 FT

## LEGEND

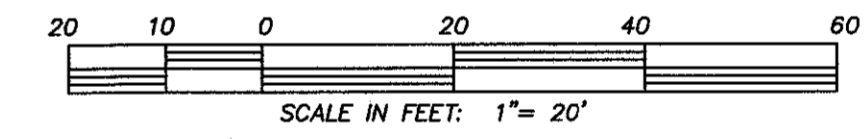


**Approved Construction Plan**

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Planning: *J. White* 4-8-19  
 Traffic: *W. Amador* 4-8-19  
 Fire: *C. Wall* 4/9/19

**CITY OF WILMINGTON**  
 NORTH CAROLINA  
 Public Services Engineering Division  
 APPROVED DRAINAGE PLAN  
 Date: 4-8-19 Permit # 2019021  
 Signed: *E. S. Lee*

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



## TRAFFIC ENGINEERING NOTES:

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 15-17.
2. TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
3. OPEN CUT NOTES:
  - A. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 910-341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
  - 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 OPEN CUT.
  - D. OPEN CUT TO BE SAW CUT.
4. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS OF WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
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 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
6. CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
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 PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
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 LINES FROM 30 INCHES - 10 FT.

## LANDSCAPE NOTES:

1. 1 STREET TREE PER 30 LF OF FRONTAGE.
  - 1.1. BLADEN STREET FRONTAGE = (165 - 20) / 30 = 4.8 TREES. 5 TREES PROVIDED
  - 1.2. 4TH STREET FRONTAGE = 66 / 30 = 2.2. 1 EX STREET TREE AND 1 TO BE TO BE PLANTED ALONG 4TH STREET.

## DEVELOPMENT NOTES:

1. ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
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. SOLID WASTE DISPOSAL WILL BE HAND TOTES.
4. HAND TOTES TO BE STORED IN GARAGES.
5. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON ZONING ORDINANCE & SUBDIVISION REGULATIONS.
6. APPROVAL OF SITE PLAN DOES NOT CONSTITUTE APPROVAL OF PROPOSED SIGNAGE FOR THIS SITE. A SEPARATE SIGN PERMIT MUST BE OBTAINED.
7. APPLICABLE STREET FRONTAGES SHALL HAVE NATURAL VEGETATIVE SCREENING MEETING CITY REQUIREMENTS.
8. THE DEVELOPMENT SHALL COMPLY WITH ALL CITY TECHNICAL STANDARDS AND DEVELOPMENT REGULATIONS.
9. 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 FACADE.

## GENERAL NOTES:

1. NEW HANOVER COUNTY PARCEL NUMBERS: PID = R04809-037-011-000
2. TOTAL PROJECT AREA: 10,889 (0.25 AC.)
3. EXISTING ZONING DISTRICT: CBD
4. LAND CLASSIFICATION: RESIDENTIAL
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6. SITE ADDRESS: 311 BLADEN STREET
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9. STORMWATER DRAINS TO CAPE FEAR RIVER, SC 18-(71) LAND OWNER - TRUSTHOUSE INVESTMENTS INC. 401 S. TRYON ST SUITE 3000 CHARLOTTE, NC 28202

## UTILITY NOTES:

1. PROJECT SHALL COMPLY WITH THE CITY OF WILMINGTON AND CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE SET AND ACTIVATED ON NEW MAINS UNTIL ALL REQUIREMENTS ARE MET. CALL 343-3910 FOR INFORMATION.
2. IF THE CONTRACTOR DESIRES WATER FOR CONSTRUCTION HE/SHE SHALL 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.
3. ALL COMMERCIAL WATER SERVICES AND ANY IRRIGATION SYSTEMS SUPPLIED BY CFPWA WATER SHALL HAVE A BACKFLOW PREVENTION DEVICE ACCEPTABLE TO THE CFPWA AND APPROVED BY USPC/COCHR OR ASSE. CALL 789-6064 FOR INFORMATION.
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.
5. 3/8" MINIMUM COVER OVER ALL WATER MAINS.
6. ANY SEPARATE CONNECTION FOR IRRIGATION SHALL COMPLY WITH CITY AND CFPWA CROSS-CONNECTION REQUIREMENTS WITH APPROVED BACKFLOW PREVENTION DEVICES.
7. AT LOCATIONS WHERE WATER MAIN CROSSES UNDER SANITARY SEWER, DUCTILE IRON PIPE SHALL BE USED ALONG WITH PROVIDING 24" MINIMUM OF VERTICAL SEPARATION.
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 ADJUTING THE SUBJECT SITE SHALL BE INSTALLED BY THE DEVELOPER.

## ENVIRONMENTAL NOTES:

1. 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 LANDSCAPING REQUIREMENTS.

## Proposed Plant Table

Quantity	Symbol	Scientific Name	Common Name	Planting Size	Planting Remarks
6		<i>Quercus nuttallii</i>	Nuttall Oak	2.5" CAL.	STREET TREE

O.C. - "ON CENTER" CAL - "CALIPER AT 6" ABOVE GRADE" GAL - "GALLON CONTAINER"

## PARKING NOTES:

1. NONE REQUIRED IN CBD

## WATER & SEWER USAGE NOTES:

CURRENT WATER USAGE 0 GPD PROPOSED WATER USAGE 1,680 GPD  
 CURRENT SEWER USAGE 0 GPD PROPOSED SEWER USAGE 1,680 GPD  
 WATER - 14 BEDROOMS X 120 GPD = 1,680 GPD  
 SEWER - 14 BEDROOMS X 120 GPD = 1,680 GPD

## FIRE & LIFE SAFETY NOTES:

1. LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE FIRE HYDRANTS OR FDC'S. A 3 FT 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 DURING CONSTRUCTION.
3. PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE FIRE LINE PERMIT FROM COW FIRE AND LIFE SAFETY DIVISION, 910-343-0696.
4. ALL FDC LOCATION TO BE SHOWN ON FINAL PLAN.
5. FDC MUST BE ON THE FRONT OF THE BUILDING(S) UNLESS OTHERWISE APPROVED.
6. SHOW ALL HYDRANTS WITHIN 500 FT OF THE BUILDING(S) BY ROAD.
7. FIRE HYDRANTS TO BE INSTALLED PER CITY OF WILMINGTON ORDINANCE AND CFPWA STANDARDS.
8. WATER FLOW ANALYSIS WILL BE REQUIRED TO DETERMINE THE CORRECT MAIN SIZE TO MEET FIRE FLOW DEMAND.
9. NEW HYDRANTS TO BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.
10. HYDRANT MUST BE WITHIN 150 FT OF THE FDC (MEASURED AS THE TRUCK DRIVES).
11. FDC MUST BE WITHIN 40 FT OF DIRE APPARATUS PLACEMENT.
12. IN ADDITION TO THE STANDARD COMMENTS, ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.

## VARIANCES REQUESTED

1. WIDTH OF DRIVEWAY TO BE 20 FT INSTEAD OF 23 FT MINIMUM.
2. ACCESS EASEMENT WIDTH TO BE 22 FT INSTEAD OF 34 FT.

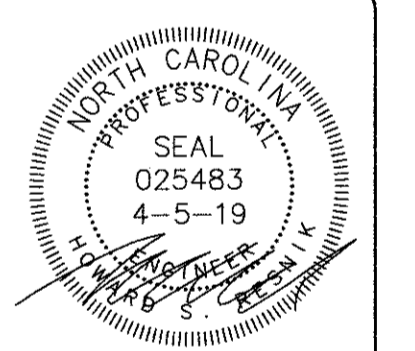


LICENSE # C-2710  
 ENGINEERING  
 LAND PLANNING  
 COMMERCIAL / RESIDENTIAL

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

SITE PLAN FOR  
**TRUSTHOUSE**

LOCATED IN CITY OF WILMINGTON  
 NEW HANOVER COUNTY, NORTH CAROLINA  
 OWNER: TRUSTHOUSE INVESTMENTS INC  
 401 S. TRYON ST SUITE 3000  
 CHARLOTTE, NC 28202



REV.	NO.	DATE	REMARKS
1	1	12-18-18	
2	1	1-14-19	
3	1	3-11-19	
4	1	4-5-19	

DATE: 10-22-18  
 HORZ. SCALE: 1" = 20'  
 VERT. SCALE: N/A  
 DRAWN BY: RLW  
 CHECKED BY: HSR  
 PROJECT NO.: 18-0456

**Approved Construction Plan**

Name \_\_\_\_\_ Date \_\_\_\_\_

Planning *J. Walter 4-8-19*

Traffic *W. P. Do 4-8-19*

Fire *C. V. 4/19/19*

**CITY OF WILMINGTON**  
NORTH CAROLINA  
Public Services Engineering Division  
APPROVED DRAINAGE PLAN

Date: *4-8-19* Permit # *2019021*

Signed: *E-S-20*

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

**CSD ENGINEERING**

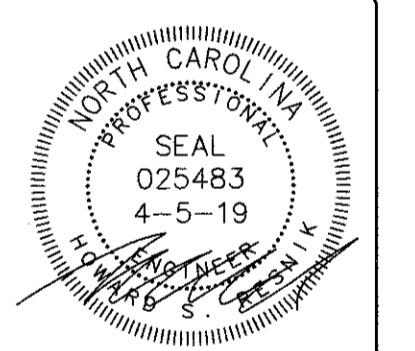
LICENSE # C-2710  
ENGINEERING  
LAND PLANNING  
COMMERCIAL / RESIDENTIAL

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

SITE PLAN DETAILS  
**TRUSTHOUSE**

SITE PLAN DETAILS for  
**TRUSTHOUSE**  
LOCATED IN CITY OF WILMINGTON  
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER: TRUSTHOUSE INVESTMENTS INC  
401 S. TRYON ST. STE. 3000  
CHARLOTTE, NC 28202



REV. NO.	DATE	BY	REMARKS
1	4-5-19	RLW	CITY OF WILMINGTON CONSTRUCTION RELEASE
2	1-14-19	ARB	REVISED PER TRC COMMENTS, CHANGED SHEET NUMBERS
3	12-18-18	RLW	REVISED PER CON COMMENTS

DATE: 10-22-18  
HORZ. SCALE: AS NOTED  
VERT. SCALE: N/A  
DRAWN BY: RLW  
CHECKED BY: HSR  
PROJECT NO.: 18-0456

**STANDARD DETAIL**  
**COMMERCIAL DRIVEWAY PLAN**

DATE: JUNE 1, 2015  
DRAWN BY: JSR  
CHECKED BY: D.E.C., P.E.  
SCALE: NOT TO SCALE

**CITY OF WILMINGTON**  
NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, N.C. 28402  
(910) 341-7807

SD 3-03.3  
1 of 2

**STANDARD DETAIL**  
**COMMERCIAL DRIVEWAY SECTIONS**

DATE: JUNE 1, 2015  
DRAWN BY: JSR  
CHECKED BY: D.E.C., P.E.  
SCALE: NOT TO SCALE

**CITY OF WILMINGTON**  
NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, N.C. 28402  
(910) 341-7807

SD 3-03.4  
2 of 2

**STANDARD DETAIL**  
**SIDEWALK**

DATE: OCTOBER, 2010  
DRAWN BY: PB/JSR  
CHECKED BY: DEC  
SCALE: NOT TO SCALE

**CITY OF WILMINGTON**  
NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, N.C. 28402  
(910) 341-7807

SD 3-10

**NOTES:**

- JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
- SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
- MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.
- CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAIN WITHIN A DRIVEWAY APRON) SHALL BE CLASS "A" - 3,000 PSI.
- MINIMUM REPLACEMENT FOR REPAIRS IS A 5' X 5' PANEL.
- 4" STONE BASE MAY BE REQUIRED FOR POOR SOIL CONDITIONS
- MINIMUM DEPTH FOR TUNNELING BELOW SIDEWALK IS 12"
- MAX ADJACENT GROUND SLOPE WITHOUT RAILING IS 2:1
- MIN GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1 DIRECTION. MAX CROSS SLOPE IS 2%. MAX LONGITUDINAL SLOPE IS 8.3%, 10% IF LIMITED BY EXISTING CONDITIONS, OR NO GREATER THAN THE SLOPE OF THE EXISTING ADJACENT ROAD.

**STANDARD DETAIL**  
**TREE PROTECTION DURING CONSTRUCTION**

DATE: JAN, 2015  
DRAWN BY: JSR  
CHECKED BY: RDG, P.E.  
SCALE: NOT TO SCALE

**CITY OF WILMINGTON**  
NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, NC 28402  
(910) 341-7807

SD 15-09  
SHEET 1 of 2

**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**  
**TREE PROTECTION DURING CONSTRUCTION**

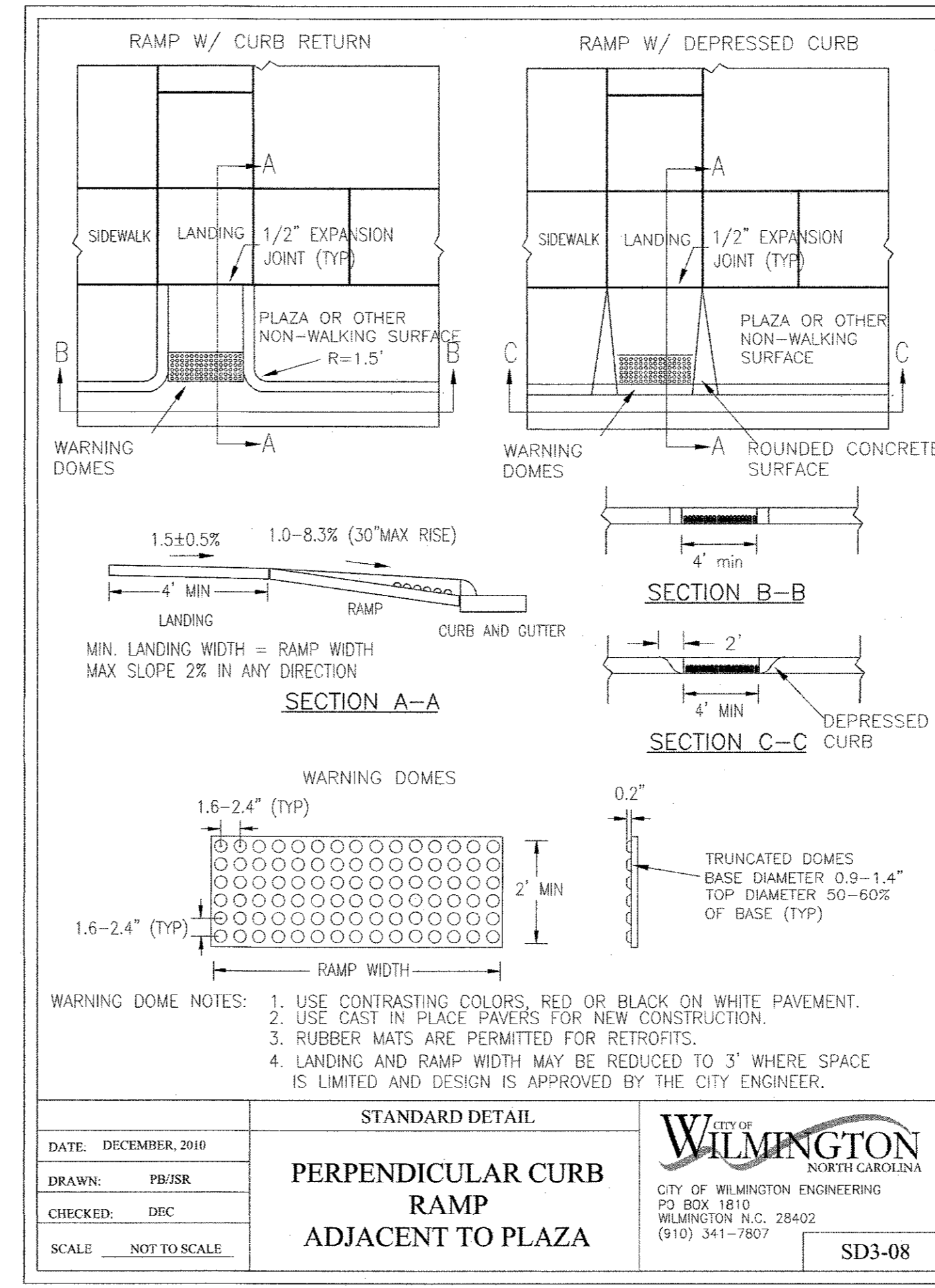
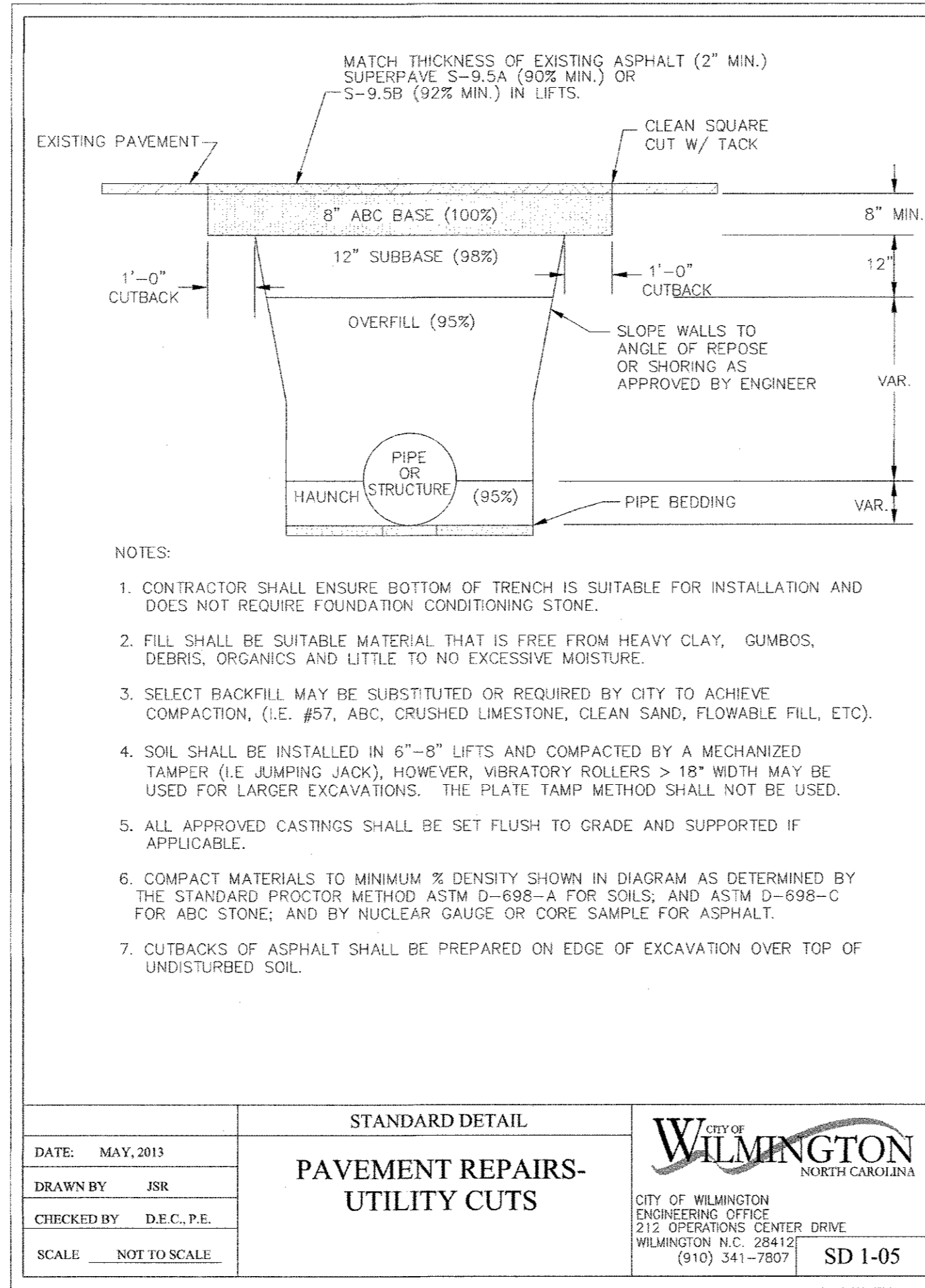
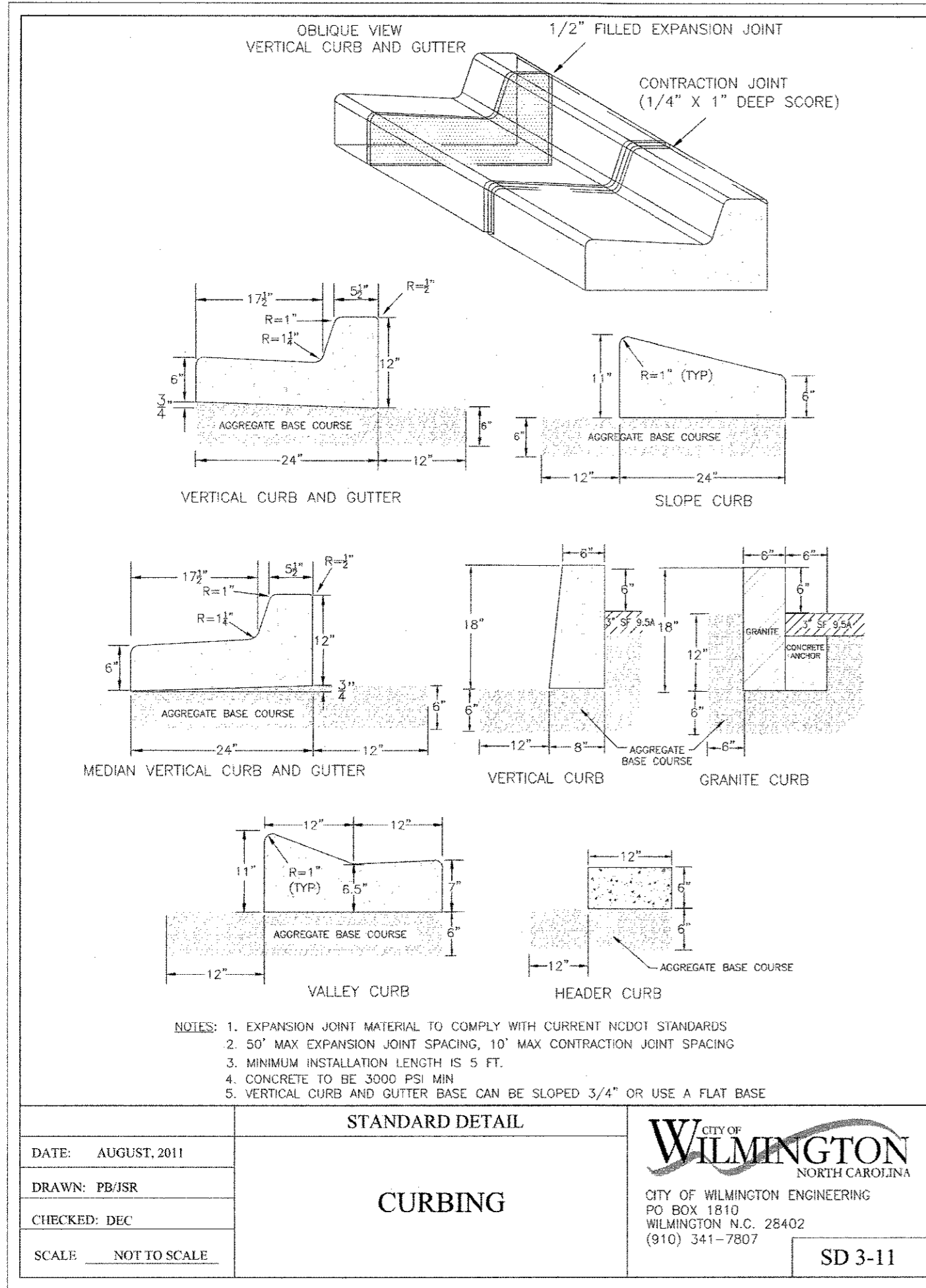
DATE: JAN, 2015  
DRAWN BY: JSR  
CHECKED BY: RDG, P.E.  
SCALE: NOT TO SCALE

**CITY OF WILMINGTON**  
NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, NC 28402  
(910) 341-7807

SD 15-09  
SHEET 2 of 2

**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.



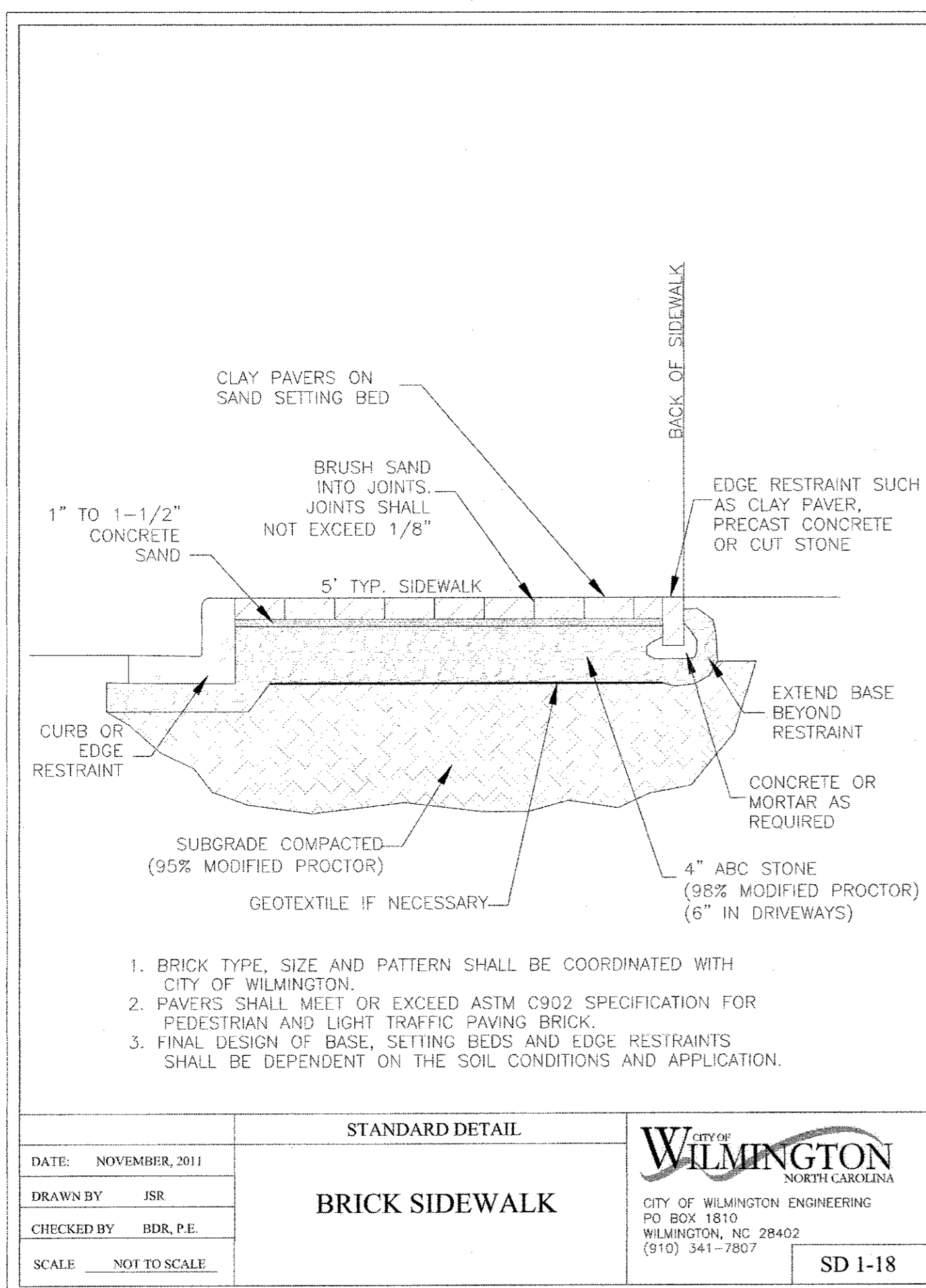
**Approved Construction Plan**

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Planning: Jell Walter 4-8-19  
 Traffic: W-FMD 4-8-19  
 Fire: C. Wal 4/9/19

**WILMINGTON**  
NORTH CAROLINA  
Public Services Engineering Division  
LAND PLANNING  
COMMERCIAL / RESIDENTIAL  
APPROVED DRAINAGE PLAN

Date: 4-8-19 Permit # 2019021  
 Signed: E-JER

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



**CSD ENGINEERING**

LICENSE # C-2710  
ENGINEERING  
LAND PLANNING  
COMMERCIAL / RESIDENTIAL

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

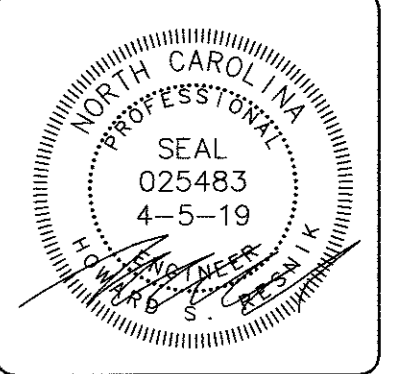
**SITE PLAN DETAILS**  
**TRUSTHOUSE**

**TRUSTHOUSE INVESTMENTS INC**  
401 S. TRYON ST. STE. 3000  
CHARLOTTE, NC 28202

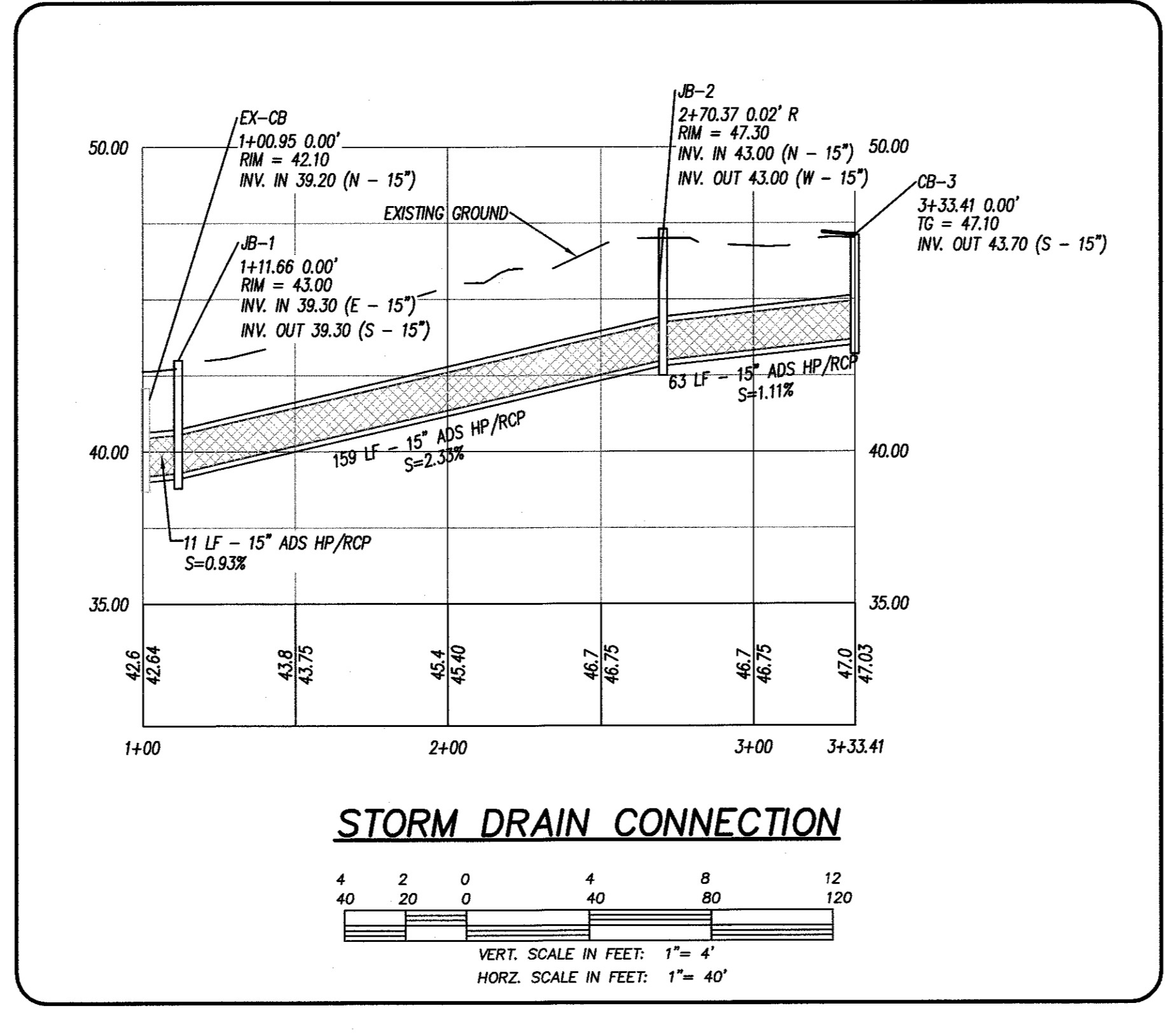
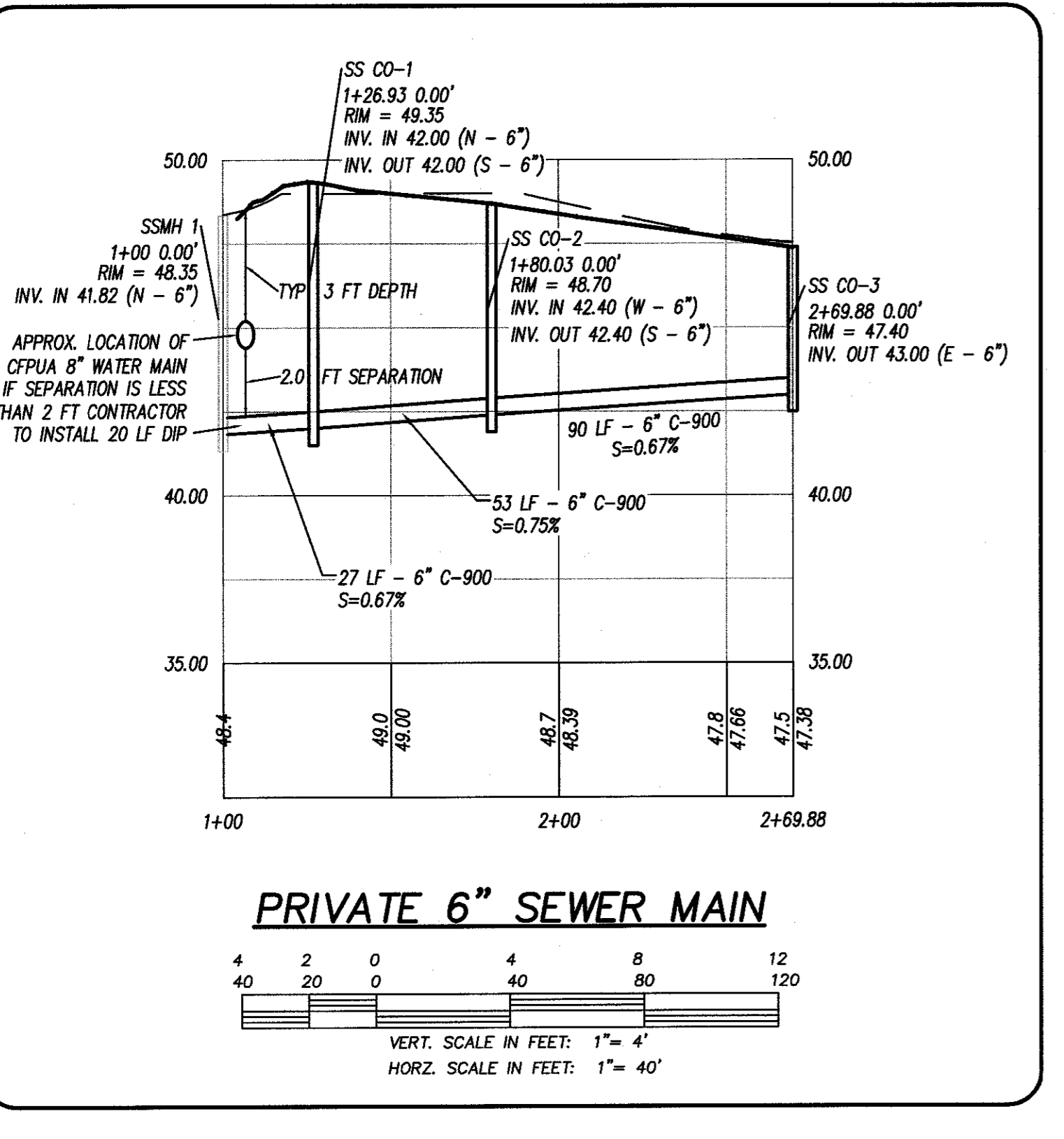
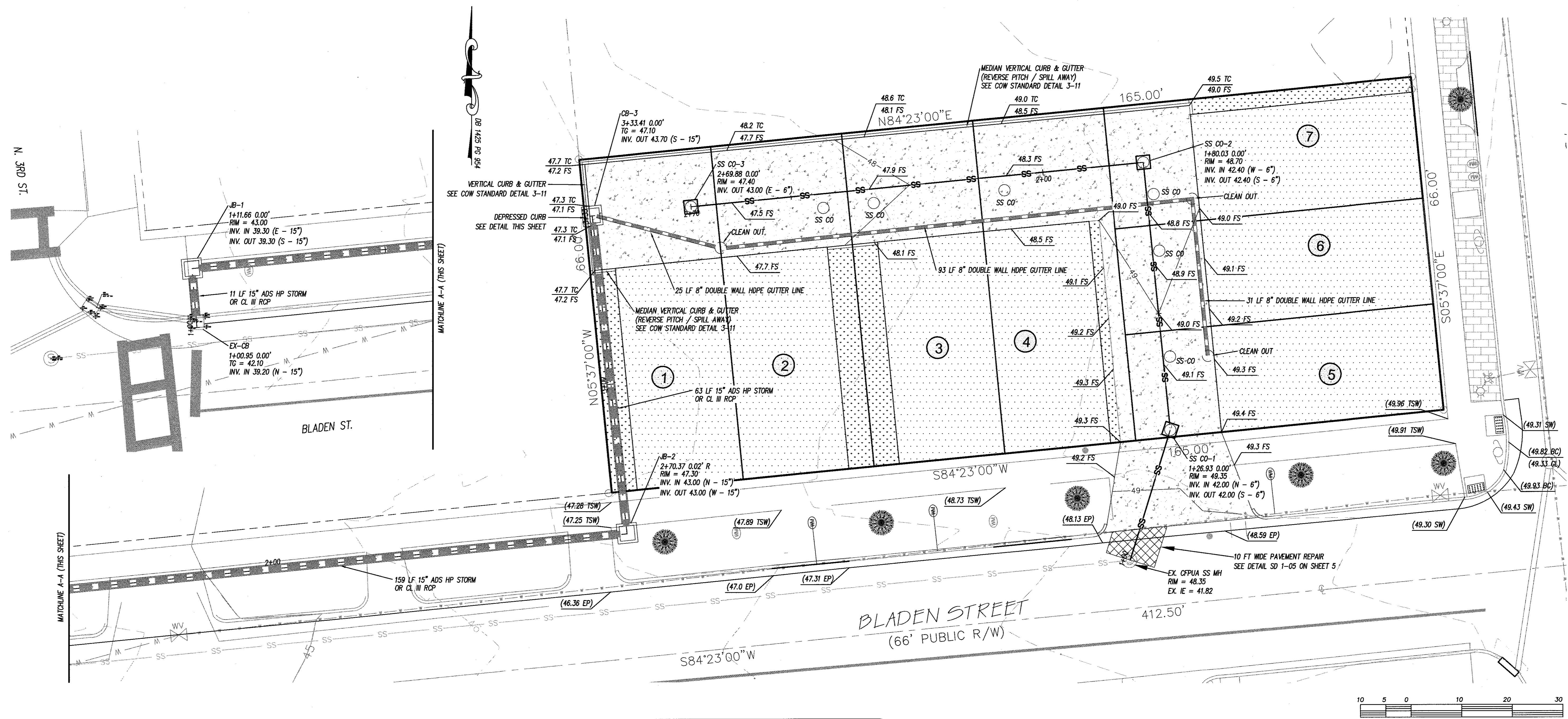
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025483  
4-5-19

REV. NO.	DATE	BY	REMARKS
1	12-18-18	RLW	CITY OF WILMINGTON CONSTRUCTION RELEASE
2	1-14-19	MRB	REVISED PER TRC COMMENTS, CHANGED SHEET NUMBERS
3	4-5-19	RLW	REVISED PER COW TRC COMMENTS

DATE: 10-22-18  
 HORZ. SCALE: AS NOTED  
 VERT. SCALE: N/A  
 DRAWN BY: RLW  
 CHECKED BY: HSR  
 PROJECT NO.: 18-0456



REV.	NO.	DATE	REMARKS
1	1-14-19		REVISED PER TRC COMMENTS, CHANGED SHEET NUMBERS
2	1-16-19		REVISED PER TRC COMMENTS, CHANGED SHEET NUMBERS
3	3-11-19		REVISED STORMWATER SYSTEM PER CIVIL ENGINEERING COMMENTS
4	4-5-19		CITY OF WILMINGTON CONSTRUCTION RELEASE



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 DRAINAGE PLAN  
Date: 4-8-19 Permit #2019021  
Signed: E. S. Lee

**Approved Construction Plan**

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Planning: *[Signature]* 4-8-19  
Traffic: *[Signature]* 4-8-19  
Fire: *[Signature]* 4/9/19

**TYPICAL CURB CUT**  
N.T.S.

**GRADING KEY**

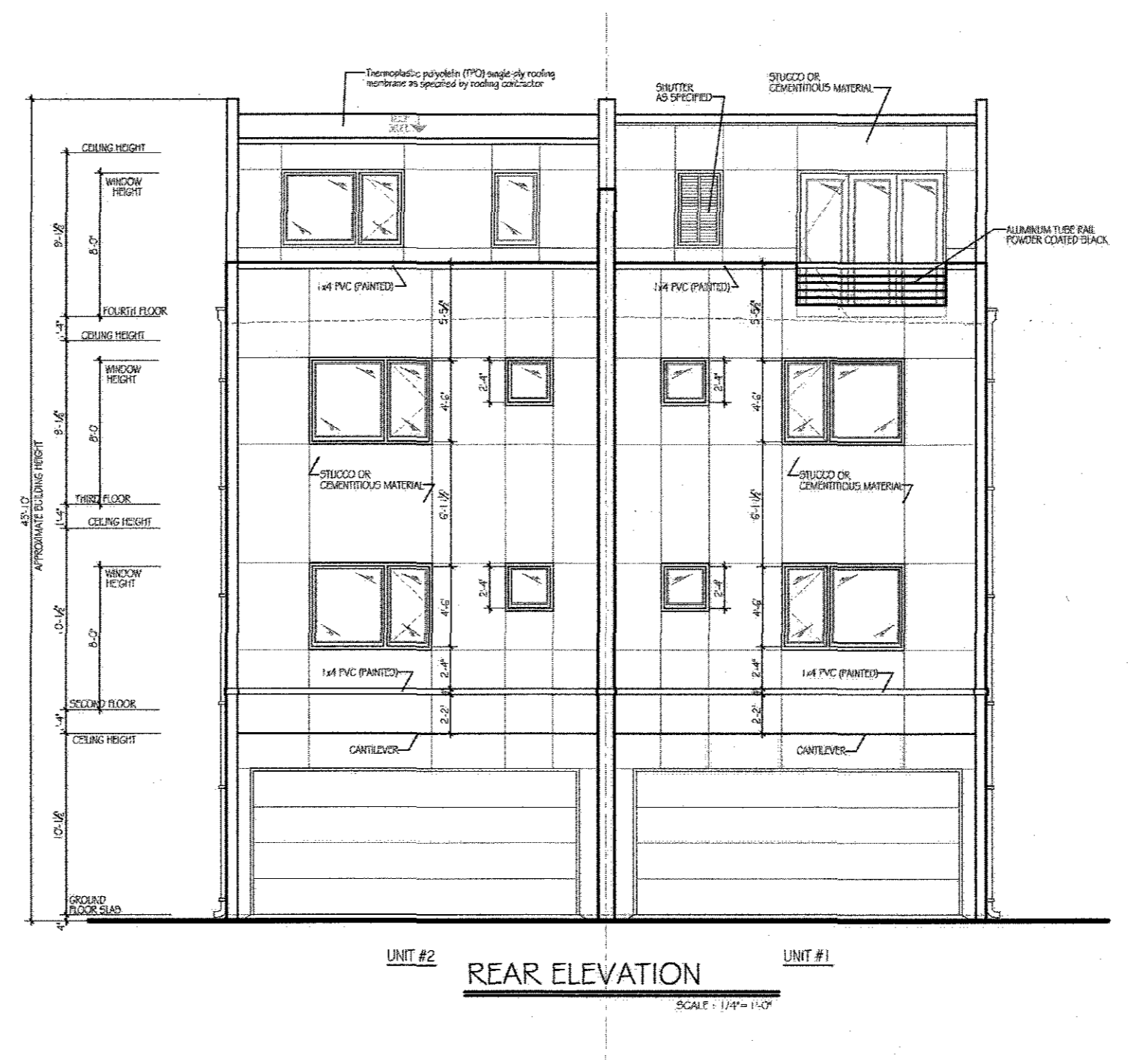
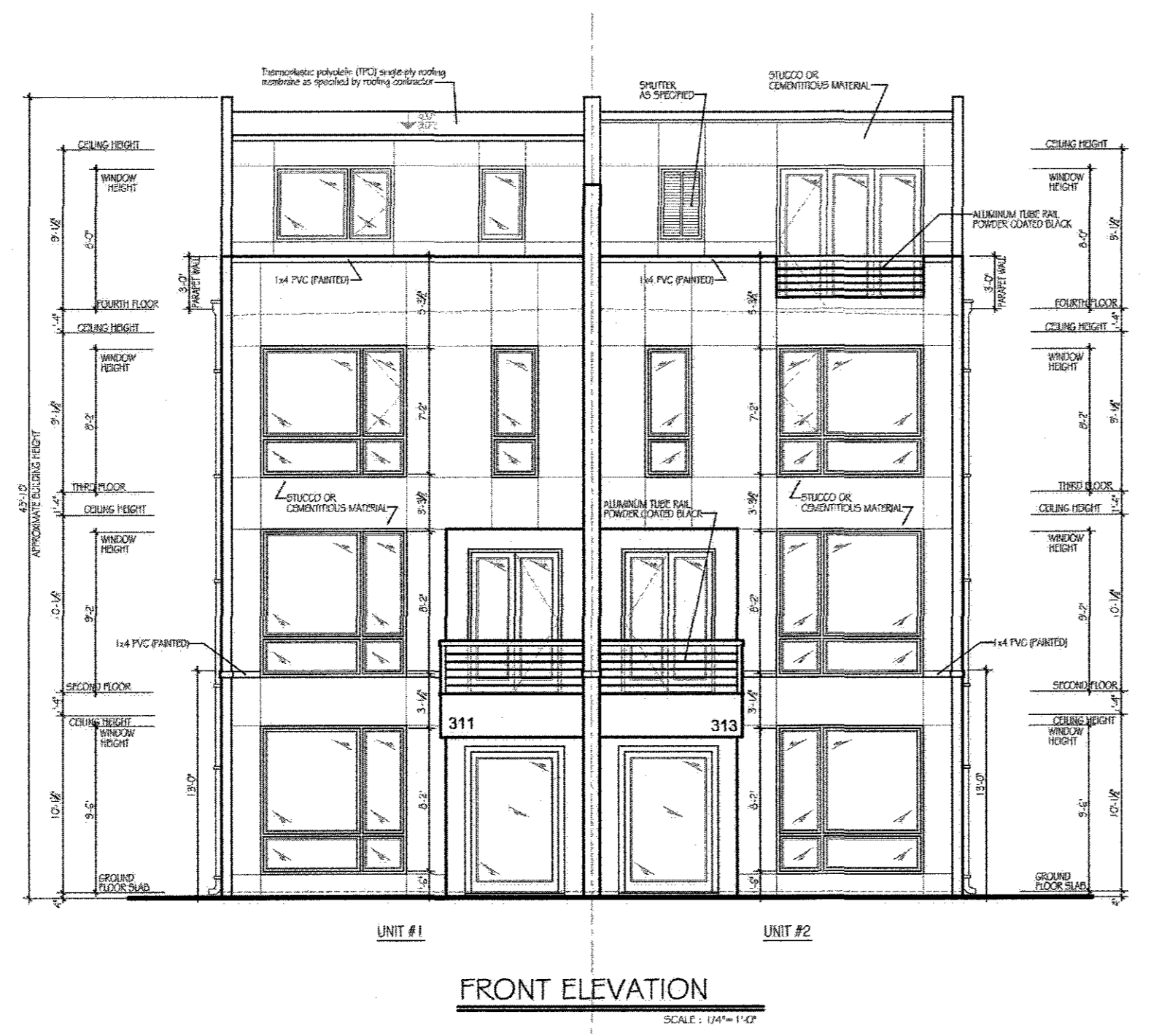
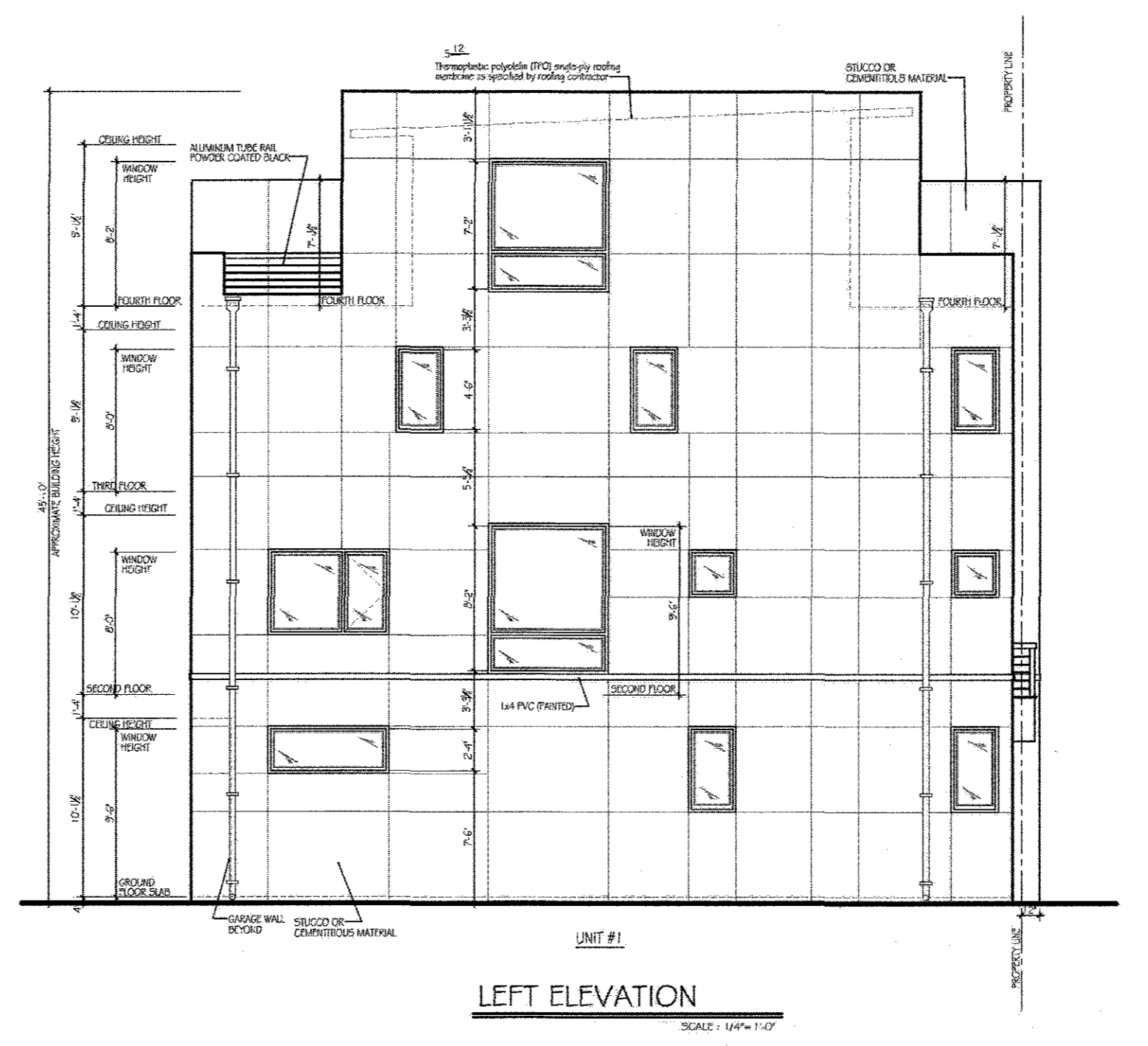
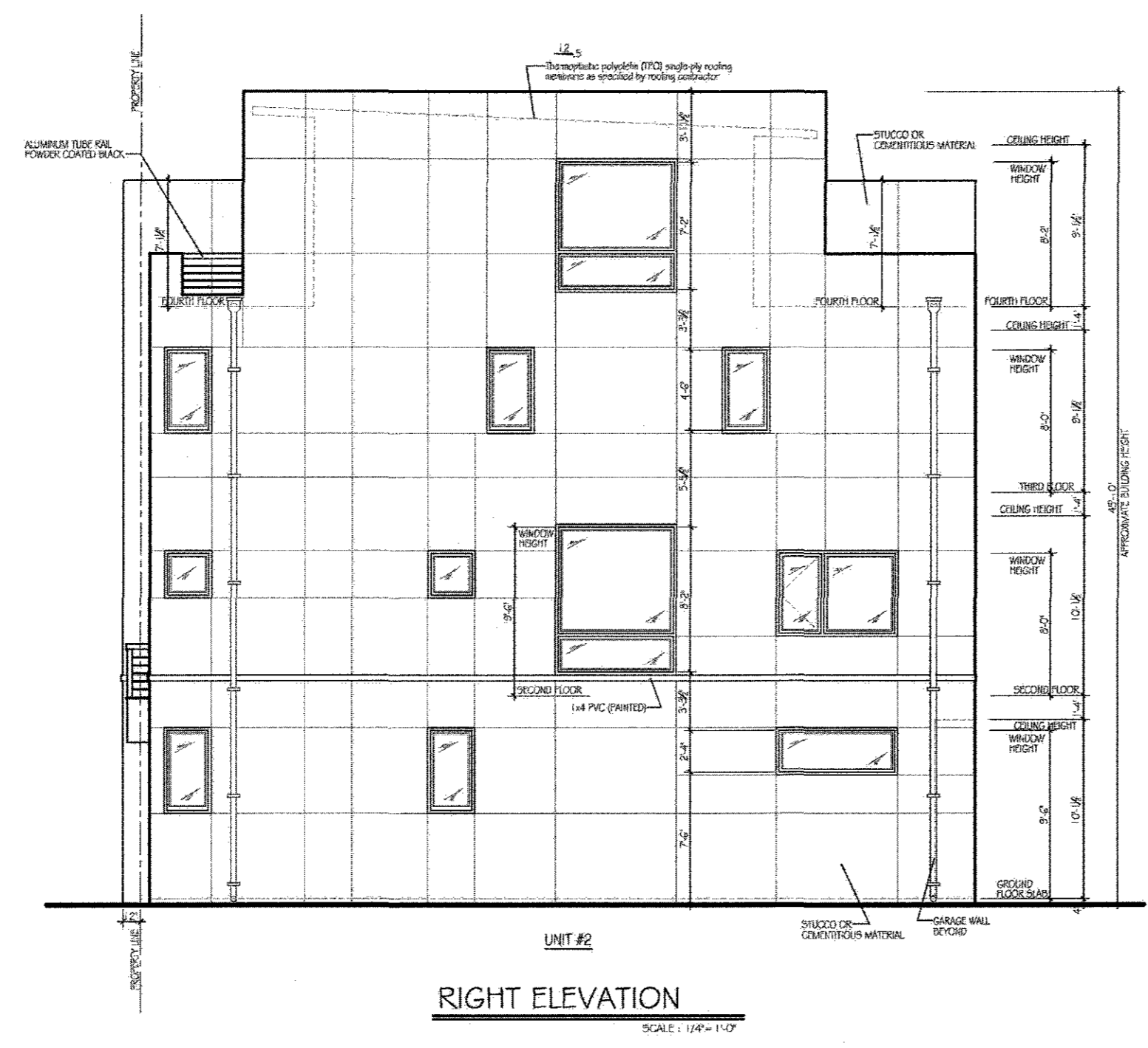
- TC - TOP OF CURB
- EP - EDGE OF PAVEMENT
- CC - CURB CUT
- GL - GUTTER LINE
- FS - FINISHED SURFACE
- TSW - TOP OF SIDEWALK (PROPOSED)
- (TSW) - TOP OF SIDEWALK (EXISTING)
- BSW - BOTTOM OF SIDEWALK
- HP - HIGH POINT
- TG - TOP OF GRATE
- TB - TOP OF BOX (ACCESS COVER)
- FL - FLOW LINE
- SS CO - EXISTING / PROPOSED STORM SEWER & CATCH BASIN

**PRIVATE SEWER CLEANOUT NOTE:**

- ALL SANITARY SEWER CLEANOUT BOXES AND LIDS WITHIN THE SITE ARE TO BE CAST IRON, H-20 TRAFFIC RATED.

**CFVIA STANDARD NOTES:**

- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
- WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE 18" INSIDE R/W LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE & TERMINATE 16" INSIDE RIGHT-OF-WAY LINE.
- ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF CLASS 50 DIP, WITH PROTECTO-401 CERAMIC EPOXY LINING.
- MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
- NO FLEXIBLE COUPLINGS SHALL BE USED.
- ALL STAINLESS STEEL FITTINGS SHALL BE TYPE 316.
- CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.
- WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.
- UNUSED SERVICES SHALL BE ABANDONED. ABANDONED WATER SERVICES SHALL BE DISCONNECTED FROM MAIN.
- A MINIMUM OF 10 FT OF MAIN LINE SHALL BE REPLACED FOR NEW CONNECTIONS TO EXISTING CLAY GRAVITY SEWER MAINS.



**DRAINAGE PLAN**  
**APPROVED**  
 CITY OF WILMINGTON  
 STORMWATER DISCHARGE  
 PERMIT ~~NOT~~ REQUIRED  
*S.S.O.R.* 4-8-19  
 SIGNATURE DATE  
 SWP2019021

*Approval for Building A + B  
 Only*

**Approved Construction Plan**  
 Name \_\_\_\_\_ Date \_\_\_\_\_  
 Planning *W. Walter* 4-8-19  
 Traffic *W. Walter* 4-8-19  
 Fire *C. Wal* 4/9/19

**FRONT ELEVATION  
 GLAZING PERCENTAGE CALCULATION**  
 TOTAL AREA: 13'-0" (HEIGHT) X 42'-0" (WIDTH)  
 = 546 SF  
 50% OF 546 SF = 273 SF  
 AREA OF GLAZING PROVIDED: 289 SF

\*NOTE:  
 ALL GROUND LEVEL FLOORS ADJACENT TO  
 THE STREET ARE SEE THROUGH.

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