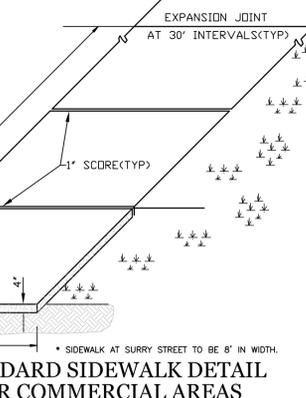




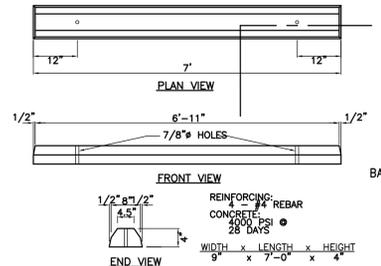
RIVERMAN LLC  
PID R05312-005-000  
ZONE U - USE VACANT

WILLIAM L. SEALE II  
PID R05312-005-002-000  
ZONE UMX - USE WHOLESALE

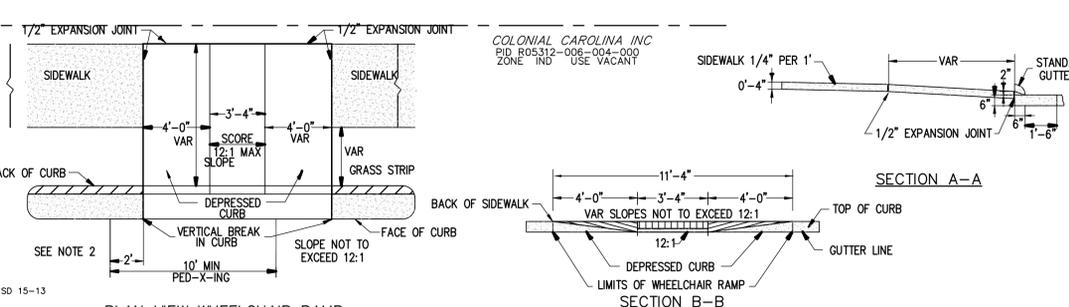
- EXISTING WATER AND SEWER SERVICE TO BE ABANDONED
- SAWCUT AND RESTORE EXISTING ASPHALT AND CURB (TYP)
- PROPOSED 6" SS SERVICE @ 1.0% MINIMUM
- PROPOSED 6" FIRE SERVICE W/BACKFLOW PREVENTION LOCATED INSIDE BUILDING 8"x6" TAPPING SLEEVE 6" TAPPING VALVE
- PROPOSED 1 1/2" WATER SERVICE W/BACKFLOW PREVENTION
- PROPOSED CITY APPROVED SHADE TREE
- 20'x70' SITE TRIANGLE (TYP)



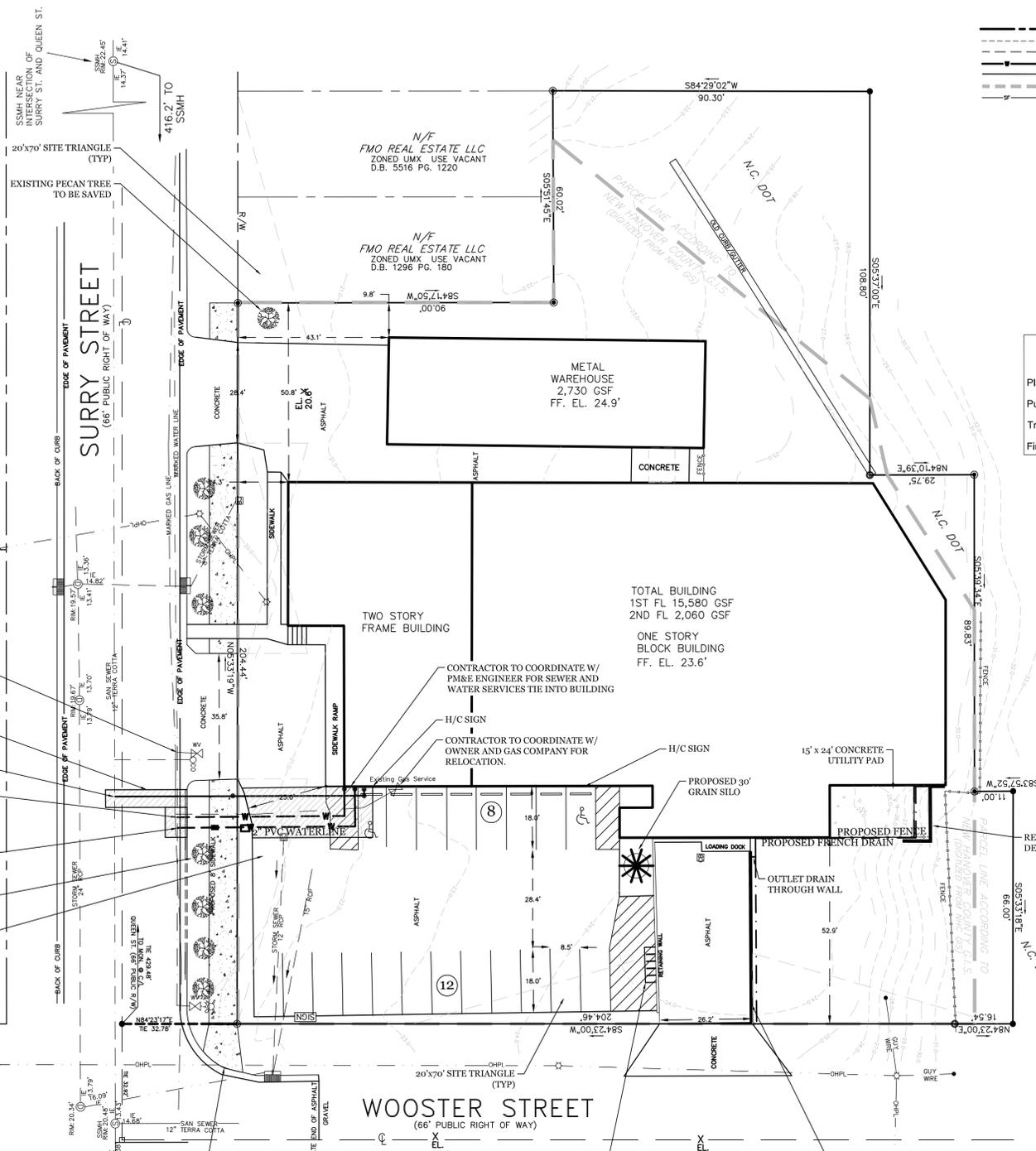
**STANDARD SIDEWALK DETAIL FOR COMMERCIAL AREAS**  
SD 8-15  
NOT TO SCALE



**WHEEL STOP DETAIL**  
NTS



**PLAN VIEW WHEELCHAIR RAMP GUIDELINES FOR WHEELCHAIR RAMPS & DEPRESSED CURBS SD 8-10**



**LEGEND**

- PROPERTY LINE
- EXISTING PAVEMENT
- EASEMENT
- PROPOSED WATER
- PROPOSED SEWER
- LIMITS OF DISTURBANCE
- TEMPORARY SILT FENCE
- RUNOFF DIRECTION
- SPOT ELEVATION
- INLET PROTECTION
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PROPOSED CONCRETE SIDEWALK
- SAW CUT AND REMOVE EXIST. DRIVE / WALK
- LANDSCAPED PLANTING AREA (SF.)

**Approved Construction Plan**

Name	Date
Planning	
Public Utilities	
Traffic	
Fire	

**SITE DATA TABLE:**

ADDRESS:	721 SURRY ST.
TOTAL PROJECT AREA:	R05312-006-003-000
EXISTING ZONING:	47,615 SF (1.09 AC.)
CAMA LAND CLASSIFICATION:	UMX
PROPOSED USE:	URBAN
BUILDING HEIGHT:	BREWERY/ARTIST STUDIO
NUMBER OF BUILDINGS:	2 (1 AND 2-Story)
BUILDING AREA (GROSS SF):	25'
EXISTING PROPOSED:	20,640 SF
BUILDING LOT COVERAGE:	EXISTING 43.35% PROPOSED 43.35%

**SETBACK REQUIRED - PROVIDED**

FRONT - 0'	14.3'
REAR - 0'	2.3'
SIDE - 0'	9.8'

**EXISTING IMPERVIOUS AREAS**

EXISTING BUILDINGS	18,626 SF
EXISTING ASPHALT PARKING	12,083 SF
EXISTING CONCRETE AREA	530 SF
TOTAL	31,239 SF (65.61%)

**PROPOSED IMPERVIOUS AREA**

BUILDING (PROPOSED)	18,626 SF
PROPOSED PARKING	12,083 SF
CONCRETE AREA	890 SF
TOTAL	31,599 SF (66.36%)

**OFF-STREET PARKING REQUIREMENTS**

BREWERY USAGE	REQUIRED 0 Spaces	PROVIDED 12 Spaces
ARTIST STUDIO	0 Spaces	8 Spaces

**WATER/SEWER USAGE**

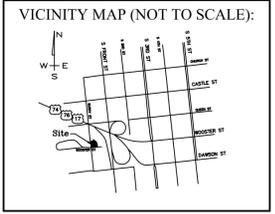
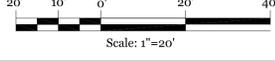
	CURRENT	PROPOSED
SEWER	2,064 GPD (110GPD/1000SF)	2,244 GPD (100GPD/1000SF @14.640) (130GPD/1000SF @6.000)
WATER	2,270 GPD (110GPD/1000SF)	2,480 GPD (110GPD/1000SF @14.640) (145GPD/1000SF @6.000)

- 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.
  - PROPERTY IS LOCATED IN ZONE "X" ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP. COMMUNITY-PANEL NUMBER 372931700 K, DATED 06/02/06
  - TOPO SHOWN PROVIDED BY "NAVD 88" BENCH MARK

- 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 USPCCHCR 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 OR 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 BELL SOUTH 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. \* BELL SOUTH & CABLE TV WILL THEN PLACE THEIR CABLE AT APPROXIMATELY 2' DEEP.
  - SOLID WASTE DISPOSAL IS DUMPSTER PICKUP BY PRIVATE CONTRACT AND TO BE LOCATED INSIDE LOADING DOCK ENCLOSURE.

- TRAFFIC NOTES:**
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY & FOR DRIVEWAY ARE TO BE THERMOPLASTIC & MEET CITY AND/OR NCDOT STANDARDS.
  - TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
  - CONTACT TRAFFIC ENGINEERING, AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN. ADD A NOTE TO CALL TRAFFIC ENGINEERING A MIN. OF FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE R/W.
  - ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
  - CONTACT KAREN DIXON AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS. THE LANDSCAPING PLAN WILL BE NEEDED TO DETERMINE STREET LIGHT LOCATIONS.
  - TACTILE WARNING MATS TO BE INSTALLED AT ALL WHEELCHAIR RAMPS.
  - A LANDSCAPING PLAN, INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE TRAFFIC ENGINEERING DIVISION AND PARKS & RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT. PLAN SHALL ADHERE TO SD 15-17.
  - ALL PARKING STALL MARKINGS AND LANE ARROWS WITH PARKING AREAS SHALL BE WHITE. WEATHERED PAVEMENT MARKINGS WILL BE REQUIRED TO BE RE-PAINTED.
  - A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 341-5888 FOR DETAILS.

- LANDSCAPE NOTES:**
- STREET YARD LANDSCAPING TO PROVIDE 1 STREET TREE PER 30' OF FRONTAGE
  - SURFACE PARKING LOT IF VISIBLE FROM ROW TO BE PROVIDED A MIN 3' HIGH PLANTED SCREEN.
  - HVAC LOCATION MAY REQUIRE SCREENING.
  - PROPOSED VEGETATION WITHIN THE SITE TRIANGLE SHALL NOT INTERFERE WITH CLEAR VISUAL SITE LINES FROM 30'-10'.



**REVISIONS**

NO.	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**  
91 Pelican Point Road  
Wilmington, North Carolina 28409  
Phone: 910.409.3567  
Email: Charlie@intracoastalengineering.com  
License Number P-0662

**SITE, & UTILITY PLAN FOR WATERLINE BREWING CO.**  
721 SURRY STREET  
WILMINGTON, NORTH CAROLINA

**PROFESSIONAL SEAL**  
NORTH CAROLINA PROFESSIONAL ENGINEER  
CHARLES D. GAZIER  
032555

**CLIENT INFORMATION:**  
WATERLINE BREWING CO.  
PO BOX 195  
WILMINGTON, NC 28402  
MR. ROB ROBINSON  
(757)269-3811

DRAWN:	CDC	SHEET SIZE:	24 x 36
CHECKED:	CDC	DATE:	12/10/2014
APPROVED:	CDC	SCALE:	1" = 20'
PROJECT NUMBER:	2014-005		

DRAWING NUMBER: **C-1**  
1 OF 4