

**NOTES:**

**ZONING:**  
 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY MICHAEL UNDERWOOD AND ASSOCIATES, P.A.  
 2) CONTRACTOR SHALL FIELD VERIFY SIZE, MATERIAL, INVERTS AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED CONNECTIONS.  
 3) EXISTING EASEMENTS AS SHOWN  
 4) CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.  
 5) ADDITIONAL FIRE PROTECTION AND/OR ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.  
 6) UNDERGROUND FIRE LINE(S) MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-341-0686.

**SOLID WASTE:**  
 1) SITE TO USE ROLL-OUT TYPE CARTS.

**TRAFFIC:**  
 1) PLEASE COORDINATE WITH CITY TRAFFIC SIGNS AND MARKINGS MANAGER PRIOR TO INSTALLATION OF ANY TRAFFIC SIGNS.  
 2) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.  
 3) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.  
 4) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.  
 5) ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.  
 6) IT SHALL BE THE RESPONSIBILITY OF THE SUBMITTER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBMITTER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBMITTER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT 910-341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.  
 7) CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN ROW.  
 8) CONTACT TRAFFIC ENGINEERS AT (910) 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.  
 9) NO PARKING SPACES, FENCES, WALLS, POSTS, LIGHT, SHRUBS, TREES, OR OTHER TYPE OF OBSTRUCTIONS NOT SPECIFICALLY EXEMPTED SHALL BE PERMITTED IN THE SPACE BETWEEN 30 INCHES AND ABOVE GROUND AND 10 FEET ABOVE GROUND LEVEL WITHIN A TRIANGULAR SIGHT TRIANGLE.

**LANDSCAPING:**  
 1) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND THE PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT.  
 2) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT FROM 30'-10'.  
 3) 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.  
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 6) ALL CURBING AROUND LANDSCAPE ISLAND TO BE MINIMUM 6" IN HEIGHT.  
 7) TREE PRESERVATION/REMOVAL PERMIT IS REQUIRED PRIOR TO CLEARING AND LAND DISTURBANCE.  
 8) LABEL PROTECTIVE FENCING WITH SIGNS TO BE PLACED EVERY 50 LINEAR FEET, OR AT LEAST TWO (2) PER AREA, IN BOTH ENGLISH AND SPANISH ("TREE PROTECTION AREA: DO NOT ENTER").

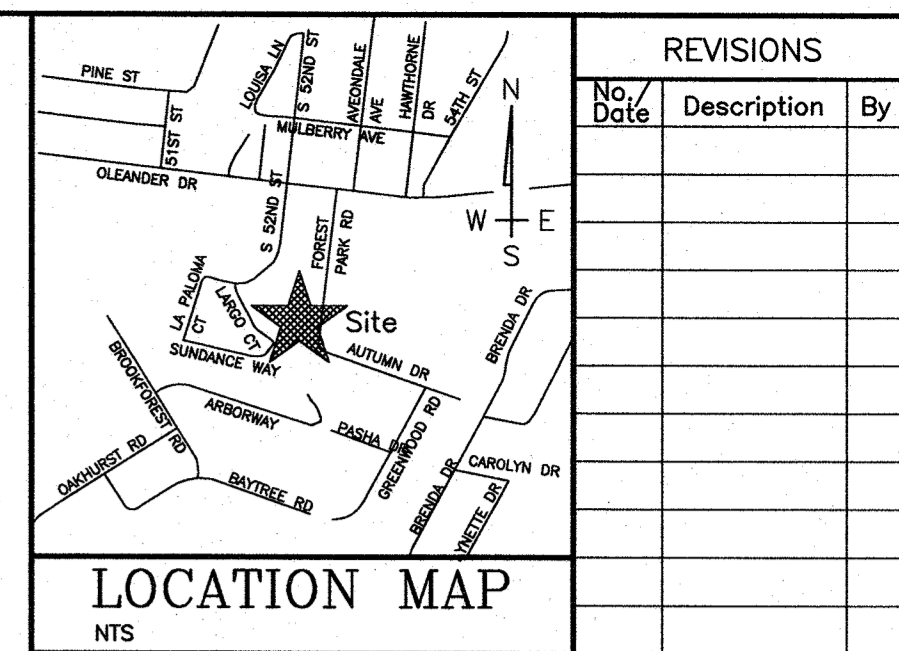
**CEPWA:**  
 1) WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.  
 2) PROJECT SHALL COMPLY WITH THE CFPUA CROSS CONNECTION UNTIL CORD REQUIREMENTS. WATER METERS CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.  
 3) IF THE CONTRACTOR DESIRES CFPUA WATER FOR CONSTRUCTION, HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.  
 4) ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA'S CONNECTION CONTROL REGULATION. CALL 332-6419 FOR INFORMATION.  
 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USFCOCHR OR ASSE.  
 6) PUBLIC WATER AND SEWER EXIST WITHIN WRIGHTSVILLE AVE. R/W. NO RECORDS OF INDIVIDUAL EASEMENTS EXIST.  
 7) CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING OR GRADING.  
 8) ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.  
 9) CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.

**DRAINAGE:**  
 1) STORMWATER PROVIDED BY INFILTRATION BASIN.

**FIRE AND LIFE SAFETY NOTES:**  
 1) FIRE HYDRANT MUST BE WITHIN 150' OF THE FDC MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE.  
 2) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.  
 3) LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPAN SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.  
 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) ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO RUNNING WIRE FOR TAMPER SWITCH.  
 6) CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.  
 7) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.  
 8) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-343-0686.  
 9) CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY FOR ALL COMMERCIAL BUILDINGS THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 NC FIRE CODE.

**SITE LIGHTING:**  
 1) SITE LIGHTING PLAN TO BE PROVIDED BY OTHERS.  
 2) ANY EXTERIOR LIGHTING SHALL BE LIMITED TO CUT-OFF OR SHIELDED TYPE LUMINAIRES AND SHALL BE DIRECTED TOWARD THE CENTER OF THE PROPERTY. IN NO CASE SHALL SITE LIGHTING BE LOCATED OR INSTALLED SO AS TO SHINE DIRECTLY ONTO NEIGHBORING PROPERTIES OR THE PUBLIC RIGHT-OF-WAY. THE HEIGHT OF ANY EXTERIOR LIGHTING SHALL NOT EXCEED TEN (10) FEET IN HEIGHT AND SHALL MAINTAIN A CLEARANCE OF AT LEAST EIGHT (8) FEET ABOVE ANY PEDESTRIAN AREA.

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



REVISIONS		
No.	Date	Description

- SITE INVENTORY NOTES:**
- PREPARED BY: TRIPP ENGINEERING, P.C.
  - APPLICANT NAME: FOREST PARK ILM, LLC
  - SITE ADDRESS OF THE DEVELOPMENT: 430 FOREST PARK ROAD
  - PROPERTY OWNER: FOREST PARK ILM, LLC
  - DEVELOPER: FOREST PARK ILM, LLC
  - PROPERTY BOUNDARY: SEE PLAN
  - TAX PARCEL INFORMATION: R06209-002-021-000
  - PROPERTY ZONING: R-5
  - ADJACENT PROPERTY OWNER INFORMATION: SEE PLAN
  - VICINITY MAP: SEE PLAN
  - TOPOGRAPHY: SEE PLAN
  - 100-YEAR FLOOD BOUNDARY: N/A
  - EXISTING DITCHES, CREEKS AND STREAMS: SEE PLAN
  - SOIL: BE: BAYMEADE FINE SAND, SE: SEAGATE FINE SAND
  - CAMA AEC: N/A
  - CAMA LAND CLASSIFICATION: URBAN WATERSHED RESOURCE PROTECTION
  - CONSERVATION RESOURCES: NONE ASSOCIATED SETBACKS: N/A
  - HISTORIC OR ARCHAEOLOGICAL SITE: N/A
  - CEMETERIES, BURIAL SITES/GROUNDS: N/A
  - FORESTED AREAS, HABITAT AND DOMINANT SPECIES: N/A
  - WETLANDS: NONE
  - PROTECTED SPECIES OR HABITAT: N/A
  - EXISTING OR PROPOSED THROUGHFARES, BIKE ROUTES, PEDESTRIAN SIDEWALKS OR TRAILS AND TRANSIT FACILITIES: SEE SITE PLAN

**Legend:**

**Notes:**

- All Pines are Loblolly. No Long-leaf Pines were identified.
- Oak trees of species "Live-Oak" are labeled as such.
- No Specimen trees were found within the development area.

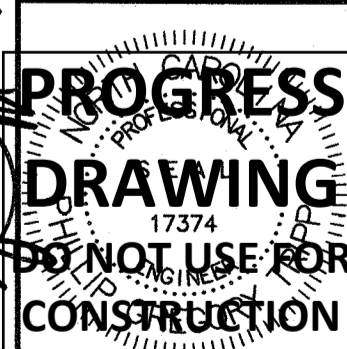
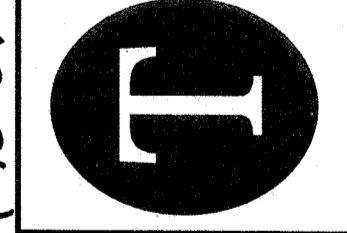
- Ex. Regulated & Significant Trees to be Protected & Retained  
 (1 Flowering / 11 Hardwoods / 3 Pines)  
 (1) 24" MAGNOLIA (1) 19" OAK (1) 18" LOBLOLLY PINE  
 (1) 11" SYCAMORE (1) 20" OAK (2) 20" LOBLOLLY PINE  
 (1) 14" SYCAMORE (1) 6"/9" TWIN LIVE OAK  
 (1) 14" GUM (1) 20" LIVE OAK  
 (1) 14" OAK (1) 21" LIVE OAK  
 (1) 15" OAK (1) 19" LOBLOLLY PINE  
 (1) 17" OAK (2) 21" LOBLOLLY PINE
- Ex. Regulated Trees to be Removed for Essential Site Improvements  
 (3 Flowering / 19 Hardwoods / 15 Pines)  
 (1) 6" MAGNOLIA (1) 13" OAK (1) 18" LOBLOLLY PINE  
 (1) 8" MAGNOLIA (1) 16" OAK (2) 20" LOBLOLLY PINE  
 (1) 5"/10" TWIN OAK (1) 6"/8" TWIN LIVE OAK (1) 22" LOBLOLLY PINE  
 (1) 7"/8" TWIN OAK (1) 15" LIVE OAK (1) 23" LOBLOLLY PINE  
 (1) 15"/18" TWIN OAK (2) 12" LOBLOLLY PINE  
 (3) 8" OAK (1) 13" LOBLOLLY PINE  
 (3) 9" OAK (1) 14" LOBLOLLY PINE  
 (1) 10" OAK (1) 15" LOBLOLLY PINE  
 (1) 11" OAK (1) 16" LOBLOLLY PINE  
 (3) 12" OAK (3) 17" LOBLOLLY PINE
- Ex. Significant Trees to be Removed for Essential Site Improvements & Mitigated

TREE TYPE	TREE SIZE	QUANTITY	TOTAL DBH	MITIGATION INCHES
MAGNOLIA	12"	1	12	24
LAUREL OAK	20"	1	20	40
LOBLOLLY PINE	26"	1	26	52

TOTAL INCHES: 116"  
 TOTAL MITIGATION REQUIRED\*: 232"  
 \*SEE LANDSCAPE PLAN

**SITE INVENTORY AND TREE DEMOLITION PLAN**  
**FOREST PARK TOWNHOMES**  
 430 FOREST PARK ROAD  
 WILMINGTON, NORTH CAROLINA

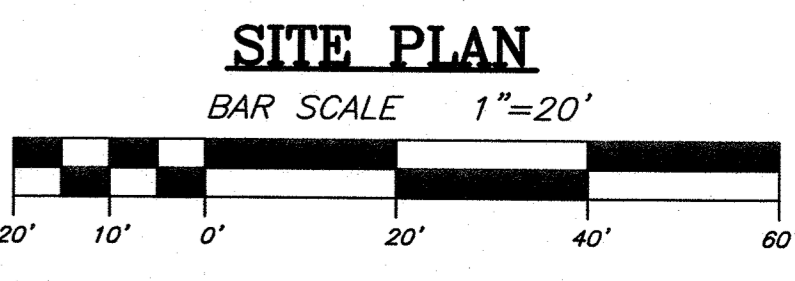
**TRIPP ENGINEERING, P.C.**  
 419 Chestnut Street  
 Wilmington, North Carolina 28401  
 Phone 910-763-5100  
 Fax 910-763-5631  
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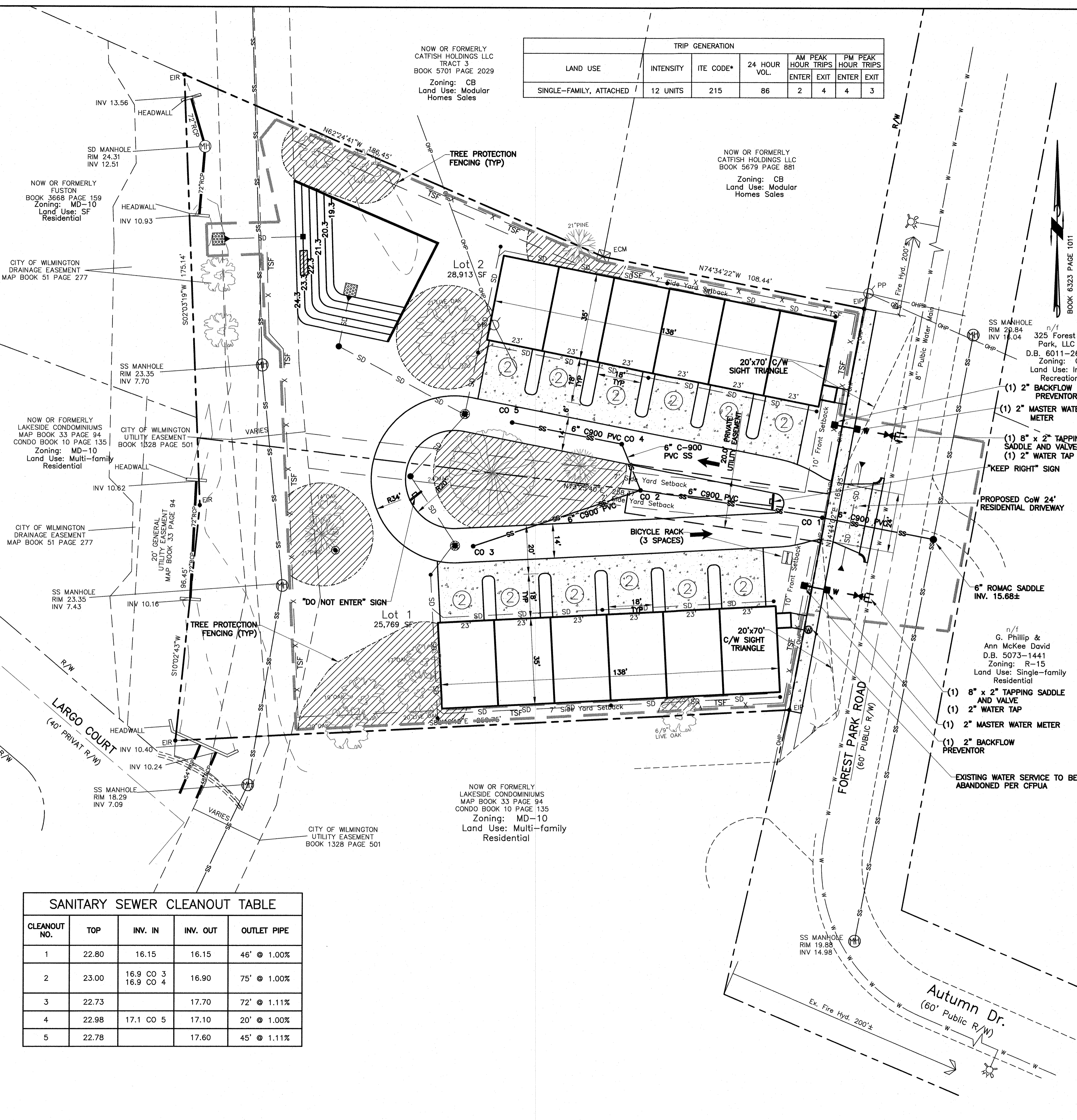
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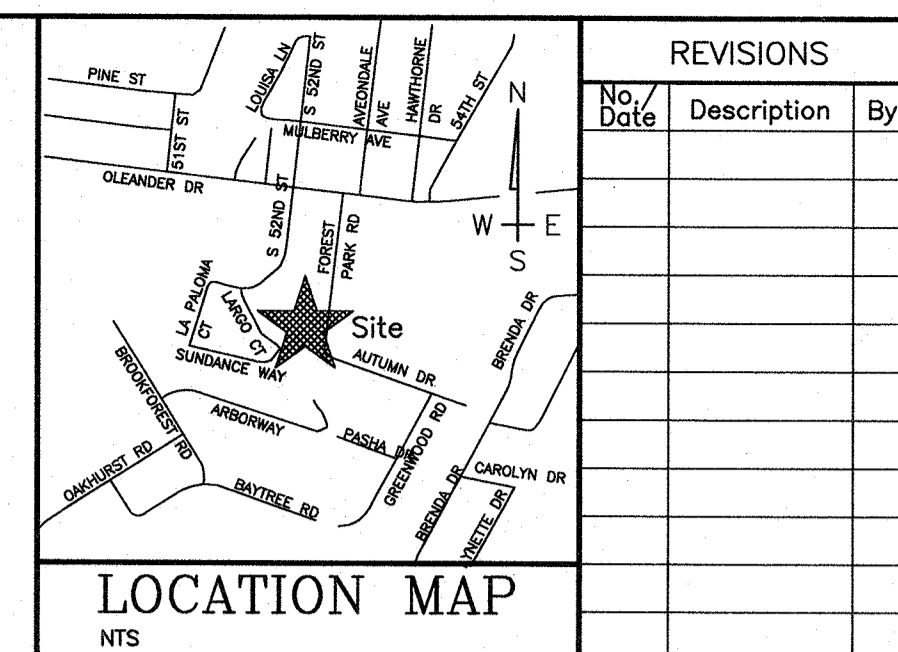






TRIP GENERATION							
LAND USE	INTENSITY	ITE CODE*	24 HOUR VOL.	AM PEAK HOUR TRIPS		PM PEAK HOUR TRIPS	
				ENTER	EXIT	ENTER	EXIT
SINGLE-FAMILY, ATTACHED	12 UNITS	215	86	2	4	4	3

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REVISIONS			
No./Date	Description	By	

**SITE DATA:**

PROPERTY OWNER: FOREST PARK ILM, LLC  
 PROJECT ADDRESS: 430 FOREST PARK ROAD  
 PIN NUMBER: R06209-002-021-000

AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.  
 ZONING DISTRICT: R-5  
 DISTURBED AREA: 1.1 AC

SETBACKS REQUIRED: FRONT: 10', REAR: 15', SIDE: 7'

PROPOSED SETBACKS: LOT1/LOT2 FRONT: 5.15' (10.5'), REAR: 101.5' (119.5'), SIDE: 7.5'

TRACT AREA: 54,682 SF (1.25 AC)  
 BUILDING USE: RESIDENTIAL  
 BUILDING CONSTRUCTION TYPE: 5B  
 EXISTING BUILDING AREA: 0 SF  
 TOTAL PROPOSED BUILDING AREA (GROSS): 9,732 SF  
 BUILDING LOT COVERAGE (9,732/54,682): 17.8%  
 NUMBER OF BUILDINGS: 2  
 NUMBER OF UNITS: 12  
 NUMBER OF BEDROOMS/UNIT: 3  
 MAXIMUM BUILDING HEIGHT: 35'  
 NUMBER OF STORIES: 3  
 SF PER FLOOR (GROSS): 3,278 SF

EXISTING IMPERVIOUS AREAS:  
 EXISTING BUILDING: 0 SF  
 EXISTING ASPHALT: 0 SF  
 EXISTING CONCRETE: 0 SF  
 EXISTING IMPERVIOUS AREA: 0 SF (0%)

PROPOSED ONSITE IMPERVIOUS AREA:  
 PROPOSED BUILDING FOOTPRINT: 9,732 SF  
 PROPOSED ASPHALT ACCESS: 5,523 SF  
 PROPOSED CONCRETE PARKING: 5,505 SF  
 FUTURE IMPERVIOUS AREA: 3,720 SF  
 TOTAL IMPERVIOUS AREA: 24,480 SF (44.8%)

PROPOSED OFFSITE IMPERVIOUS AREA:  
 ONSITE + OFFSITE: 25,745 SF

TOTAL PROPOSED IMPERVIOUS AREA:  
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PARKING REQUIRED: (12) 3-BEDROOM UNITS  
 MINIMUM: (2.25/UNIT)  
 MAXIMUM: (2.75/UNIT)  
 PARKING PROVIDED: 33 SPACES

BICYCLE SPACES REQUIRED (1 SPACE/5 DWELLING UNITS)  
 BICYCLE SPACES PROVIDED: 3 BICYCLE SPACES  
 1 SPACE/5 DWELLING UNITS=12 UNITS 3 BICYCLE SPACES

PUBLIC WATER AND SEWER BY CFPWA  
 EXISTING WATER FLOW: 0 GPD  
 EXISTING SEWER FLOW: 0 GPD  
 PROPOSED WATER FLOW: (400 GPD/UNIT x 12 UNITS) 4,800 GPD  
 PROPOSED SEWER FLOW: (360 GPD/UNIT x 12 UNITS) 4,320 GPD  
 CAMA LAND USE: URBAN WATERSHED RESOURCE PROTECTION  
 SOLID WASTE HANDLING: ROLL-OUT CARTS

**SITE AND UTILITY PLAN**  
**FOREST PARK TOWNHOMES**  
 430 FOREST PARK ROAD  
 WILMINGTON, NORTH CAROLINA

**TRIPP ENGINEERING, P.C.**  
 419 Chestnut Street  
 Wilmington, North Carolina 28401  
 Phone 910-763-5100  
 Fax 910-763-5631  
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**LEGEND**

- SS SEWER
- W WATER
- SD PROPOSED STORM WATER
- LIMITS OF DISTURBANCE
- X TSF TEMPORARY SILT FENCE
- PROPOSED CONCRETE
- TREE PROTECTION

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**SANITARY SEWER CLEANOUT TABLE**

CLEANOUT NO.	TOP	INV. IN	INV. OUT	OUTLET PIPE
1	22.80	16.15	16.15	46" @ 1.00%
2	23.00	16.9 CO 3 16.9 CO 4	16.90	75" @ 1.00%
3	22.73	17.70	17.70	72" @ 1.11%
4	22.98	17.1 CO 5	17.10	20" @ 1.00%
5	22.78	17.60	17.60	45" @ 1.11%

**WILMINGTON**  
 NORTH CAROLINA

**PROGRESS DRAWING**

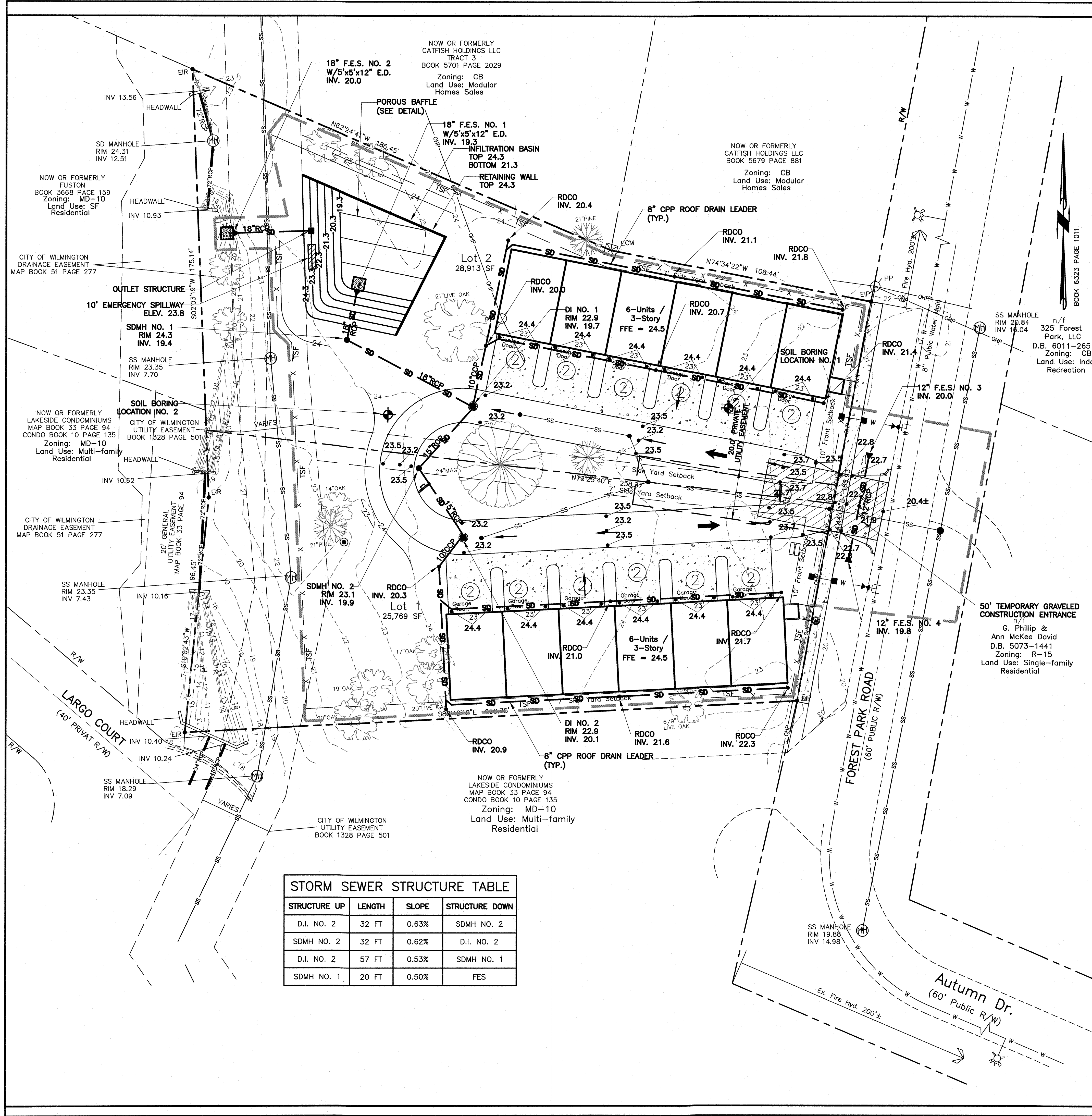
DATE 04-18-23  
 DESIGN PGT  
 DRAWN EJW

**SITE PLAN**  
 BAR SCALE 1"=20'

**TRIPP ENGINEERING, P.C.**  
 419 Chestnut Street  
 Wilmington, North Carolina 28401  
 Phone 910-763-5100  
 Fax 910-763-5631  
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22011





STRUCTURE UP	LENGTH	SLOPE	STRUCTURE DOWN
D.I. NO. 2	32 FT	0.63%	SDMH NO. 2
SDMH NO. 2	32 FT	0.62%	D.I. NO. 2
D.I. NO. 2	57 FT	0.53%	SDMH NO. 1
SDMH NO. 1	20 FT	0.50%	FES

**NOTES:**

**ZONING:**  
 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY MICHAEL UNDERWOOD AND ASSOCIATES, P.A.  
 2) CONTRACTOR SHALL FIELD VERIFY SIZE, MATERIAL, INVERTS AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED CONNECTIONS.  
 3) EXISTING EASEMENTS AS SHOWN  
 4) CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION. ADDITIONAL REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.  
 5) ADDITIONAL FIRE PROTECTION AND/OR ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.  
 6) UNDERGROUND FIRE LINE(S) MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-341-0686.

**SOLID WASTE:**  
 1) SITE TO USE ROLL-OUT TYPE CARTS.

**TRAFFIC:**  
 1) PLEASE COORDINATE WITH CITY TRAFFIC SIGNS AND MARKINGS MANAGER PRIOR TO INSTALLATION OF ANY TRAFFIC SIGNS.  
 2) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.  
 3) ALL SIGNAGE AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.  
 4) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.  
 5) ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.  
 6) 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 910-341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.  
 7) CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN ROW.  
 8) CONTACT TRAFFIC ENGINEERING AT (910) 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.  
 9) NO PARKING SPACES, FENCES, WALLS, POSTS, LIGHT, SHRUBS, TREES, OR OBSTRUCTIONS NOT SPECIFICALLY EXEMPTED SHALL BE PERMITTED IN THE SPACE BETWEEN 30 INCHES AND ABOVE GROUND AND 10 FEET ABOVE GROUND LEVEL WITHIN A TRIANGULAR SIGHT DISTANCE.

**LANDSCAPING:**  
 1) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND THE PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT.  
 2) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISION FROM 30'-10'.  
 3) 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.  
 4) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.  
 5) NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTIONS ON TREE PROTECTION METHODS.  
 6) ALL CURBING AROUND LANDSCAPE ISLAND TO BE MINIMUM 6" IN HEIGHT.  
 7) TREE PRESERVATION/REMOVAL PERMIT IS REQUIRED PRIOR TO CLEARING AND LAND DISTURBANCE.  
 8) LABEL PROTECTIVE FENCING WITH SIGNS TO BE PLACED EVERY 50 LINEAR FEET, OR AT LEAST TWO (2) PER AREA, IN BOTH ENGLISH AND SPANISH "TREE PROTECTION AREA: DO NOT ENTER".

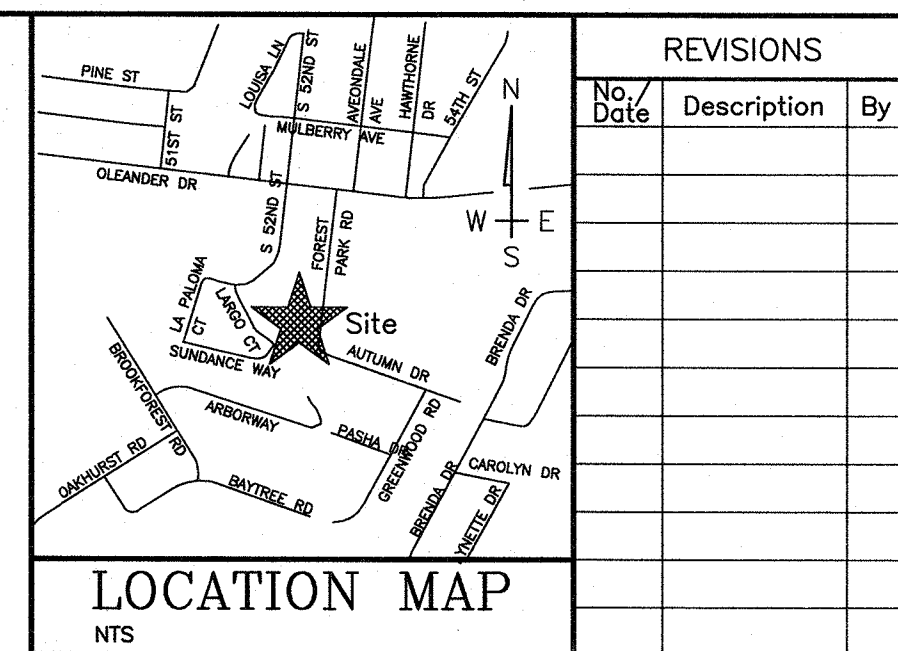
**CEPIA:**  
 1) WATER AND SEWER SERVICE SHALL MEET CEPA FEAR PUBLIC UTILITY AUTHORITY (CPUA) DETAILS AND SPECIFICATIONS.  
 2) PROJECT SHALL COMPLY WITH THE CPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.  
 3) IF THE CONTRACTOR DESIRES CPUIA WATER FOR CONSTRUCTION, HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE REDUCED SIZE OF THE WATER METER BOX.  
 4) ANY IRRIGATION SYSTEM SUPPLIED BY CPUIA WATER SHALL COMPLY WITH THE CPUIA'S CONNECTION CONTROL REGULATION. CALL 332-6419 FOR INFORMATION.  
 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CPUIA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USCFCOOR OR ASSE.  
 6) PUBLIC WATER AND SEWER EXIST WITHIN WRIGHTSVILLE AVE. R/W. NO RECORD OF INDIVIDUAL EASEMENTS.  
 7) CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING OR GRADING.  
 8) ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.  
 9) CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.

**DRAINAGE:**  
 1) STORMWATER PROVIDED BY INFILTRATION BASIN.

**FIRE AND LIFE SAFETY NOTES:**  
 1) FIRE HYDRANT MUST BE WITHIN 150' OF THE FDC MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE.  
 2) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.  
 3) LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPAN SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.  
 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) ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO RUNNING WIRE FOR TAMPER SWITCH.  
 6) CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.  
 7) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.  
 8) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-341-0686.  
 9) CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY FOR ALL COMMERCIAL BUILDINGS THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 NC FIRE CODE.

**SITE LIGHTING:**  
 1) SITE LIGHTING PLAN TO BE PROVIDED BY OTHERS.  
 2) ANY EXTERIOR LIGHTING SHALL BE LIMITED TO CUT-OFF OR SHIELDED TYPE LUMINAIRES AND SHALL BE DIRECTED TOWARDS THE CENTER OF THE PROPERTY. IN NO CASE SHALL SITE LIGHTING BE LOCATED OR INSTALLED SO AS TO SHINE DIRECTLY ONTO NEIGHBORING PROPERTIES OR THE PUBLIC RIGHT-OF-WAY. THE HEIGHT OF ANY EXTERIOR LIGHTING SHALL NOT EXCEED TEN (10) FEET IN HEIGHT AND SHALL MAINTAIN A CLEARANCE OF AT LEAST EIGHT (8) FEET ABOVE ANY PEDESTRIAN AREA.

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**SITE DATA:**

PROPERTY OWNER	FOREST PARK ILM, LLC
PROJECT ADDRESS	430 FOREST PARK ROAD
PIN NUMBER	R06209-002-021-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	R-5
ZONING DISTRICT	R-5
DISTURBED AREA	1.1 AC
SETBACKS REQUIRED	FRONT: 10' REAR: 15' SIDE: 7'
PROPOSED SETBACKS: LOT1/LOT2	FRONT: 5.15'/10.5' REAR: 101.5'/119.5' SIDE: 7.5'
TRACT AREA	54,682 SF (1.25 AC)
BUILDING USE	RESIDENTIAL
BUILDING CONSTRUCTION TYPE	5B
EXISTING BUILDING AREA	0 SF
TOTAL PROPOSED BUILDING AREA (GROSS)	9,732 SF
BUILDING LOT COVERAGE (9,732/54,682)	17.8%
NUMBER OF BUILDINGS	2
NUMBER OF UNITS	12
NUMBER OF BEDROOMS/UNIT	3
MAXIMUM BUILDING HEIGHT	35'
NUMBER OF STORIES	3
SF PER FLOOR (GROSS)	
LOT 1 BUILDING	
1ST FLOOR	4,830 SF
2ND FLOOR	4,830 SF
3RD FLOOR	4,830 SF
LOT 2 BUILDING	
1ST FLOOR	4,830 SF
2ND FLOOR	4,830 SF
3RD FLOOR	4,830 SF
EXISTING IMPERVIOUS AREAS:	
EXISTING BUILDING	0 SF
EXISTING ASPHALT	0 SF
EXISTING CONCRETE	0 SF
EXISTING IMPERVIOUS AREA	0 SF (0%)
PROPOSED ONSITE IMPERVIOUS AREA:	
PROPOSED BUILDING FOOTPRINT	9,732 SF
PROPOSED ASPHALT ACCESS	5,523 SF
PROPOSED CONCRETE PARKING	5,505 SF
FUTURE IMPERVIOUS AREA	3,720 SF
TOTAL IMPERVIOUS AREA	24,480 SF (44.8%)
PROPOSED OFFSITE IMPERVIOUS AREA:	
ONSITE + OFFSITE	1,265 SF
TOTAL PROPOSED IMPERVIOUS AREA:	
ONSITE + OFFSITE	25,745 SF
PARKING REQUIRED: (12) 3-BEDROOM UNITS	
MINIMUM: (2.25/UNIT)	27 SPACES
MAXIMUM: (2.75/UNIT)	33 SPACES
PARKING PROVIDED:	33 SPACES
BICYCLE SPACES REQUIRED (1 SPACE/5 DWELLING UNITS)	
BICYCLE SPACES PROVIDED	3 BICYCLE SPACES
1 SPACE/5 DWELLING UNITS=12 UNITS	3 BICYCLE SPACES
PUBLIC WATER AND SEWER BY CPUIA	
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	0 GPD
PROPOSED WATER FLOW:	
(400 GPD/UNIT x 12 UNITS)	4,800 GPD
PROPOSED SEWER FLOW:	
(360 GPD/UNIT x 12 UNITS)	4,320 GPD
CAMA LAND USE: URBAN WATERSHED RESOURCE PROTECTION	
SOLID WASTE HANDLING:	ROLL-OUT CARTS

**LEGEND**

SS	SEWER
W	WATER
SD	PROPOSED STORM WATER
---	LIMITS OF DISTURBANCE
X	TEMPORARY SILT FENCE
□	PROPOSED CONCRETE
●	PROPOSED SPOT ELEVATION

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 Fax 910-763-5631  
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**WILMINGTON**  
 NORTH CAROLINA

**PROGRESS DRAWING**  
 17374  
 DO NOT USE FOR CONSTRUCTION

DATE 04-18-23  
 DESIGN PGT  
 DRAWN EJW

**C3**

22011

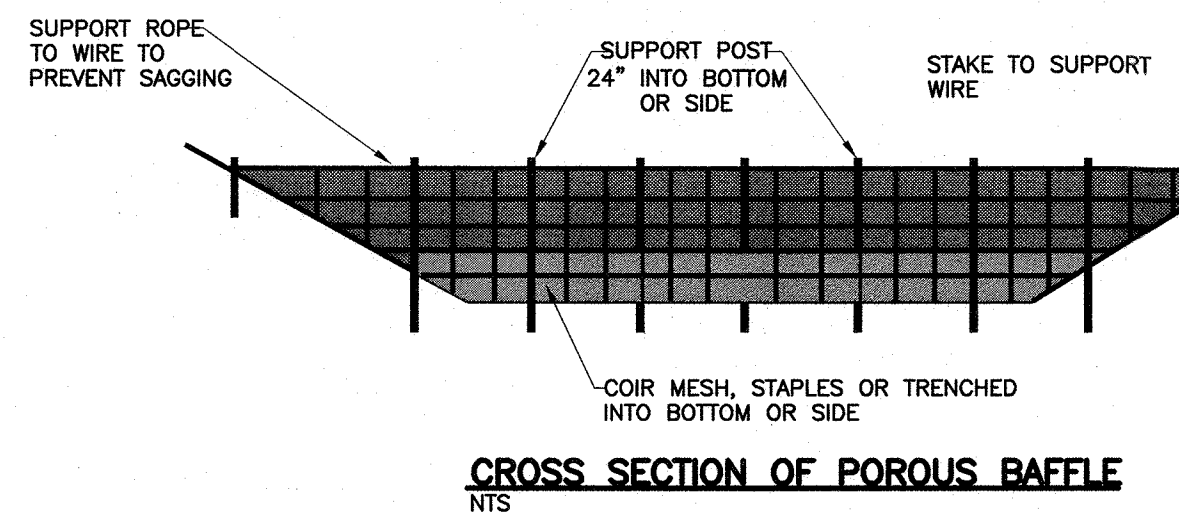
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No.	Date	Description	By

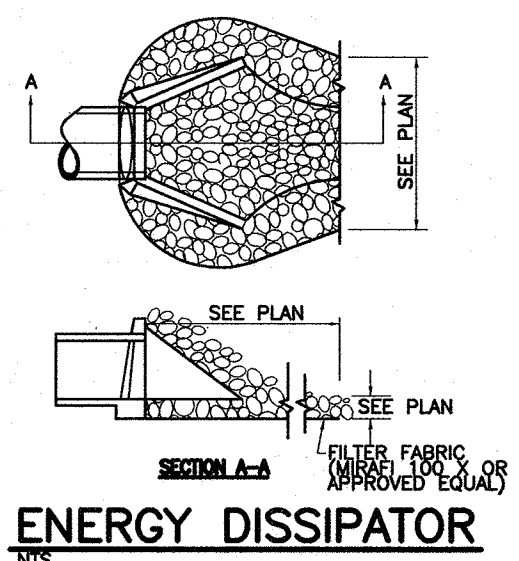




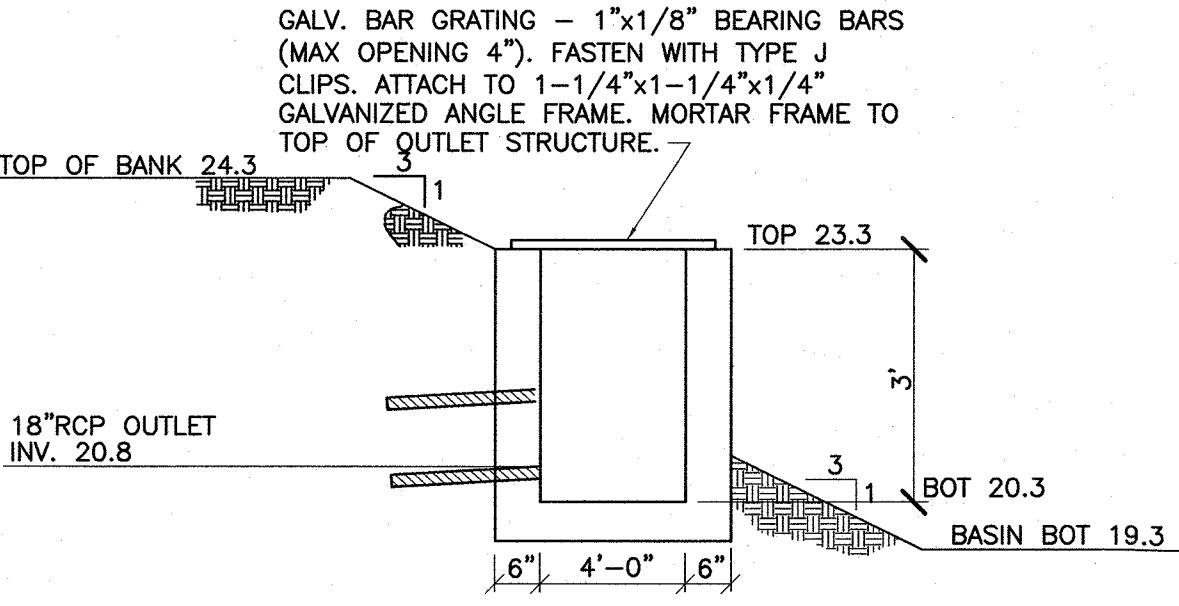
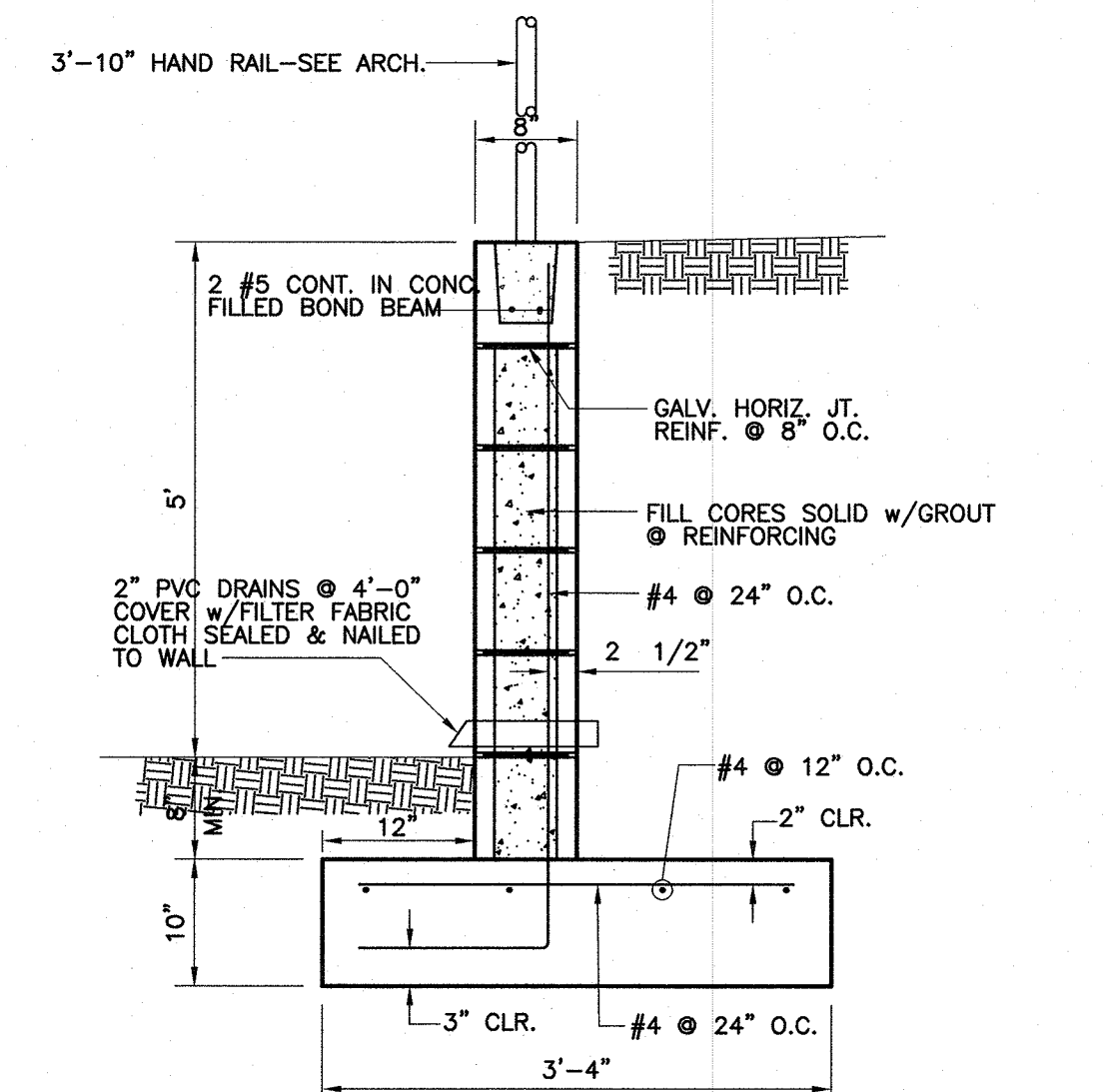
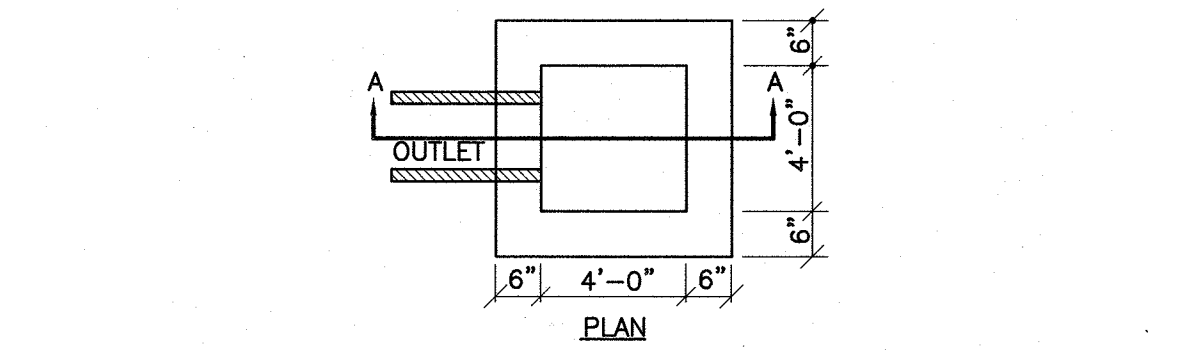
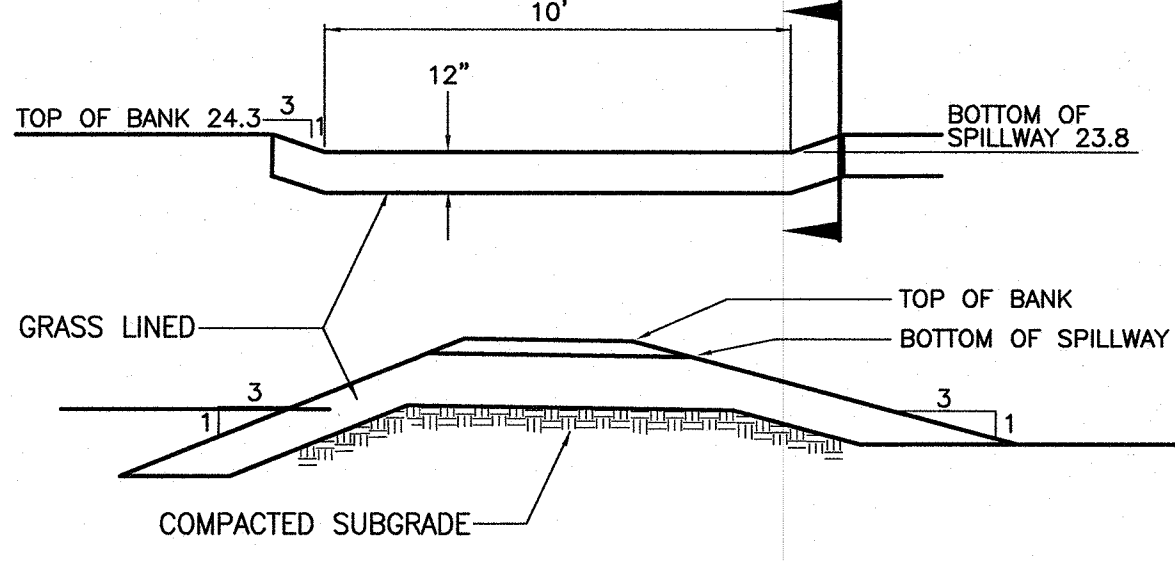
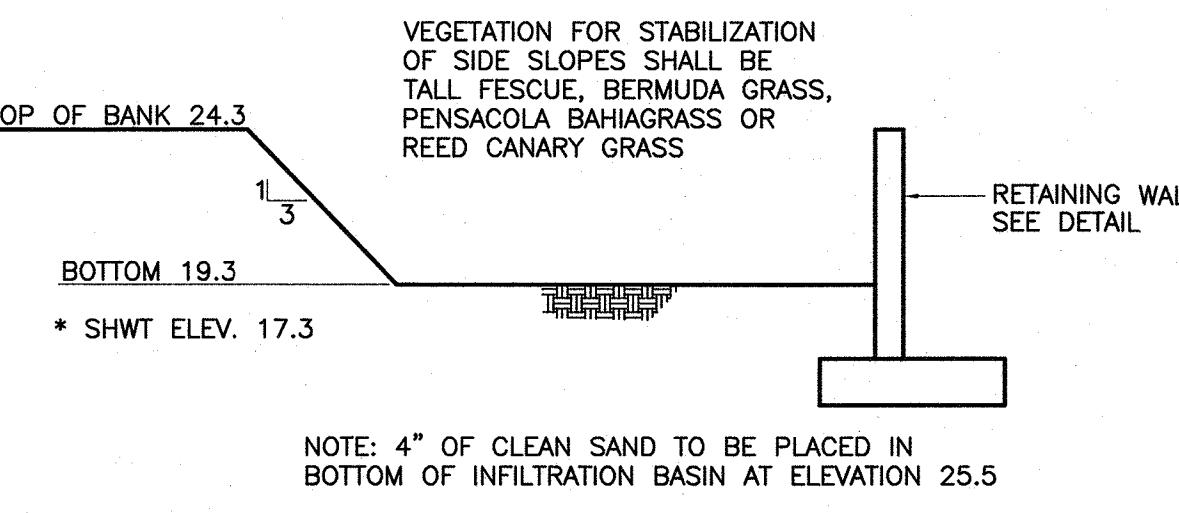




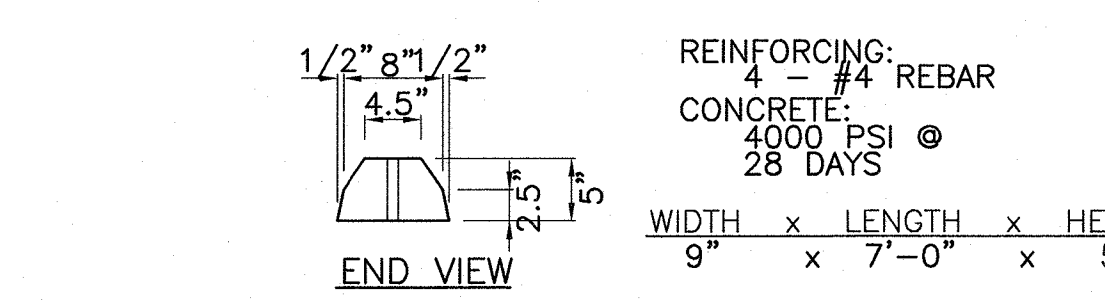
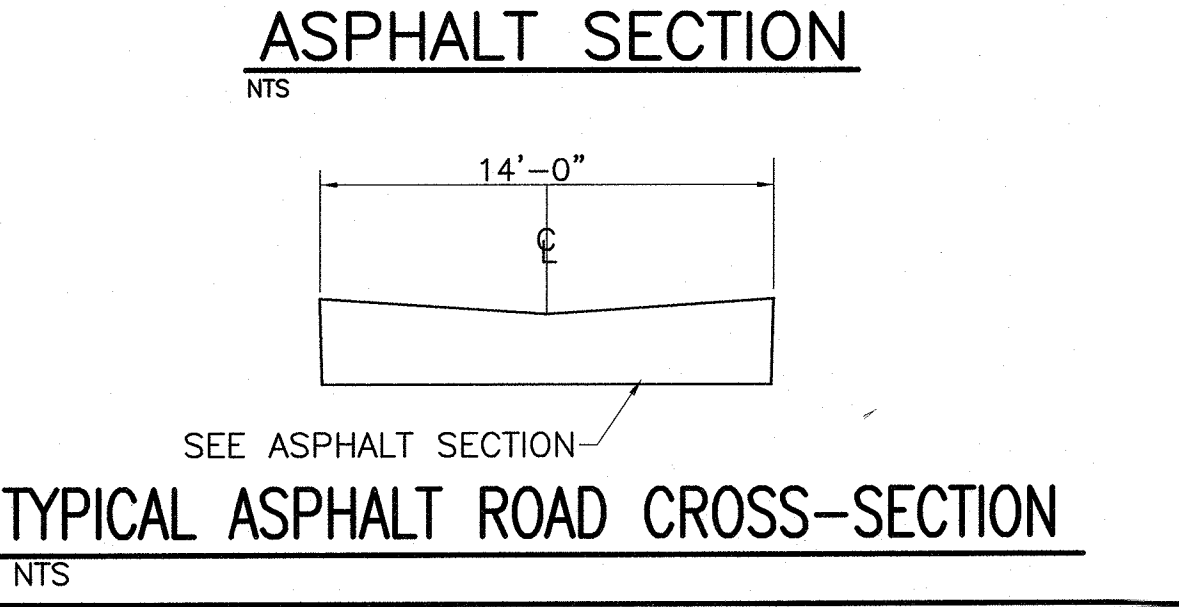
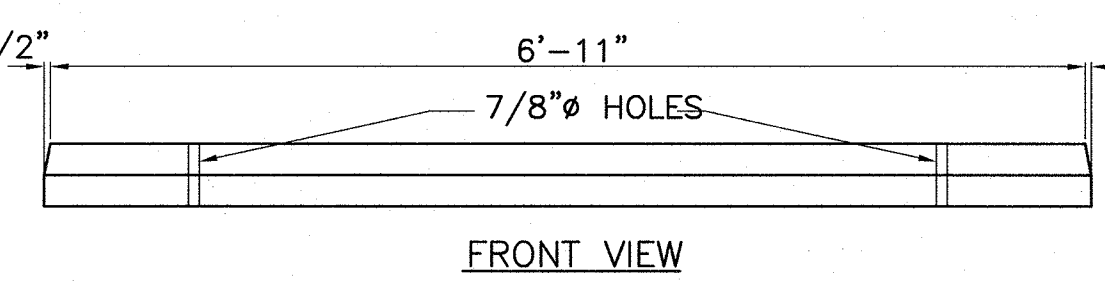
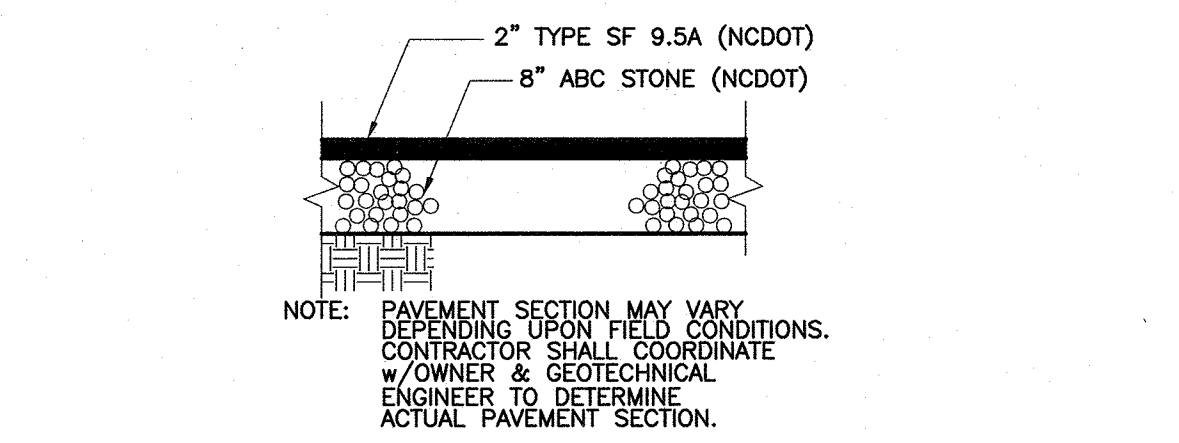
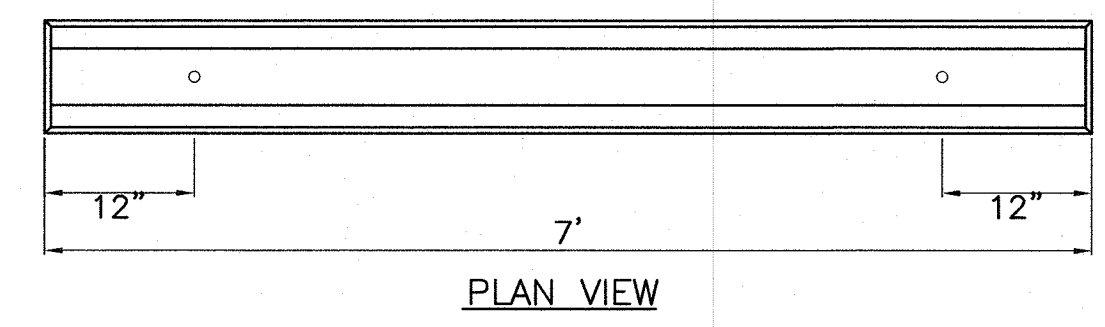
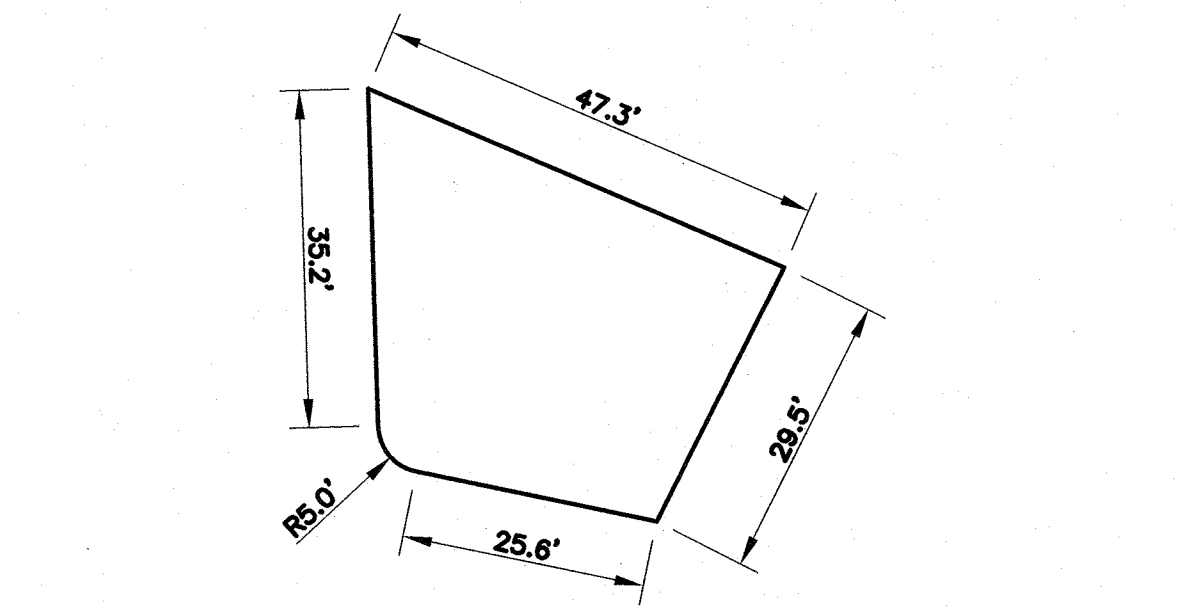
- BAFFLE CONSTRUCTION SPECIFICATION:**
1. GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL FRONT TO BACK AND SIDE TO SIDE.
  2. INSTALL THE COIR FIBER BAFFLES IMMEDIATELY UPON EXCAVATION OF THE BASIN.
  3. INSTALL POSTS ACROSS THE WIDTH OF THE SEDIMENT TRAP. STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24 INCHES AND SPACED A MAXIMUM OF 4 FEET APART. THE TOP OF THE FABRIC SHOULD BE 6 INCHES HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE EARTHEN EMBANKMENT.
  4. INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT. BASINS LESS THAN 20 FEET IN LENGTH MAY USE 2 BAFFLES.
  5. ATTACH A 9 GAUGE HIGH TENSION WIRE STRAND TO THE STEEL POSTS AT A HEIGHT OF 6 INCHES ABOVE THE SPILLWAY ELEVATION WITH PLASTIC TIES OR WIRE FASTENERS TO PREVENT SAGGING. IF THE TEMPORARY SEDIMENT BASIN WILL BE CONVERTED TO A PERMANENT STORMWATER BASIN OF A GREATER DEPTH, THE BAFFLE HEIGHT SHOULD BE BASED ON THE POOL DEPTH DURING USE AS A TEMPORARY SEDIMENT BASIN.
  6. EXTEND 9 GAUGE MINIMUM HIGH TENSION WIRE STRAND TO SIDE OF BASIN OR INSTALL STEEL T-POSTS TO ANCHOR BAFFLE TO SIDE OF BASIN AND SECURE TO VERTICAL END POSTS.
  7. DRAPE THE COIR FIBER MAT OVER THE WIRE STRAND MOUNTED AT A HEIGHT OF 6 INCHES ABOVE THE SPILLWAY ELEVATION. SECURE THE COIR FIBER MAT TO THE WIRE STRAND WITH PLASTIC TIES OR WIRE FASTENERS. ANCHOR THE MATTING TO THE SIDES AND FLOOR OF THE BASIN WITH 12 INCH WIRE STAPLES, APPROXIMATELY 1 FT APART, ALONG THE BOTTOM AND SIDE SLOPES OF THE BASIN.
  8. DO NO SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.
  9. ADJUSTMENTS MAY BE REQUIRED IN THE STAPLING REQUIREMENTS TO FIT INDIVIDUAL SITE CONDITIONS.



ENERGY DISSIPATOR DATA								
STR. #	Q10 (FPS)	V (FPS)	PIPE SIZE (inch)	L (ft)	W (ft)	D (ft)	LENGTH	WIDTH
1	3.36	2.7	18"	5'	5'	12"	3xD	6xD
2	4.12	3.9	18"	5'	5'	12"	3xD	4xD
3	0.31	0.4	12"	-	-	-	3xD	6xD
4	0.35	0.5	12"	-	-	-	3xD	4xD



CONTRACTOR TO SUBMIT SHOP DRAWINGS TO NEW HANOVER COUNTY FOR THE RETAINING WALL PRIOR TO CONSTRUCTION.



REINFORCING:  
4 - #4 REBAR  
CONCRETE  
4000 PSI  
28 DAYS  
WIDTH x LENGTH x HEIGHT  
9" x 7'-0" x 5"

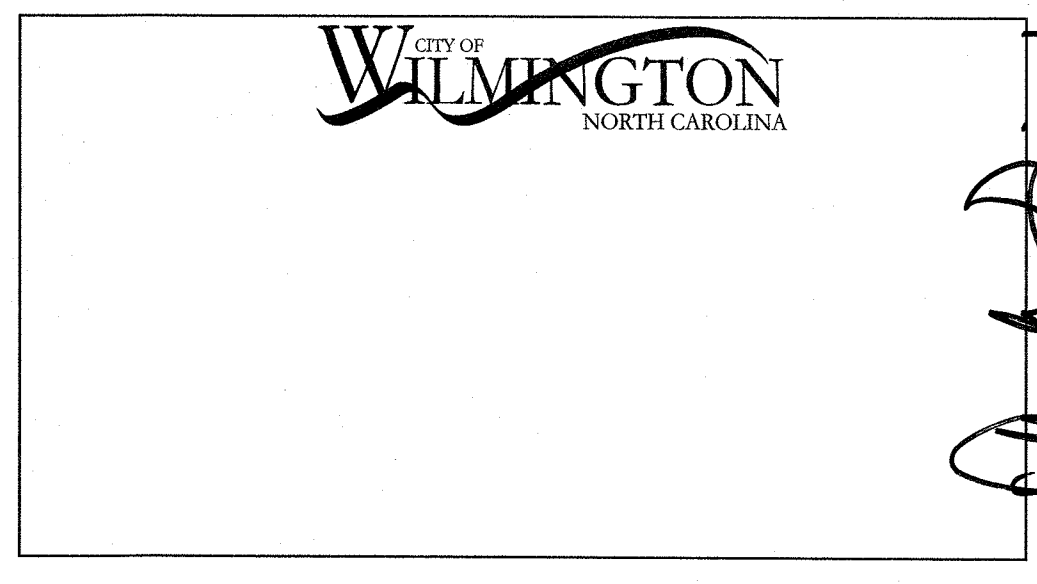
REVISIONS

No./Date	Description	By
1/1/03	CSW TRENCH DETAIL	EWJ

DETAILS AND NOTES

**TRIPP ENGINEERING, P.C.**  
419 Chestnut Street  
Wilmington, North Carolina 28401  
Phone 910-763-5100  
Fax 910-763-5631  
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**FOREST PARK TOWNHOMES**  
430 FOREST PARK ROAD  
WILMINGTON, NORTH CAROLINA



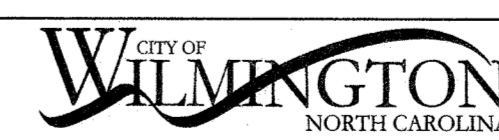
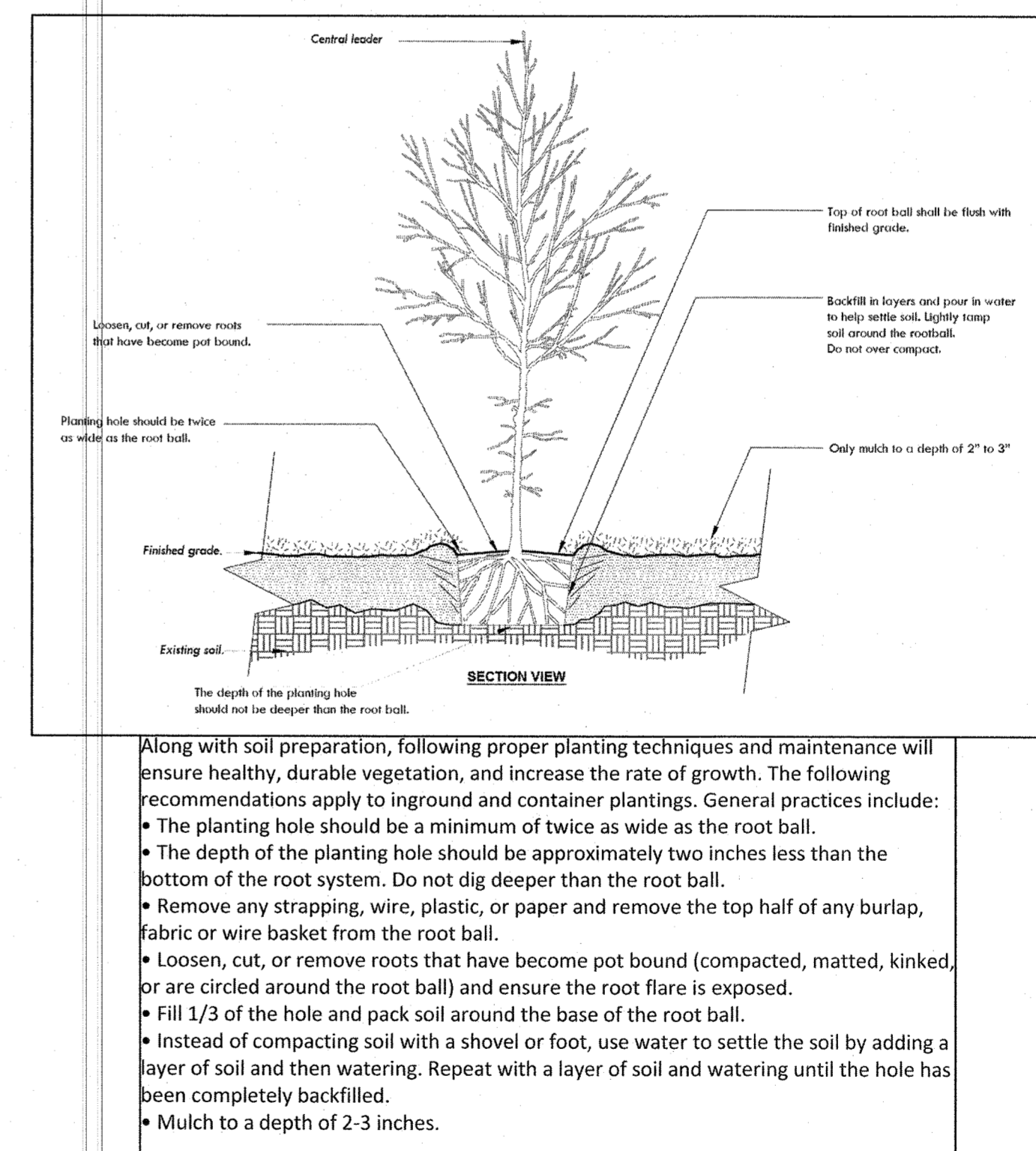
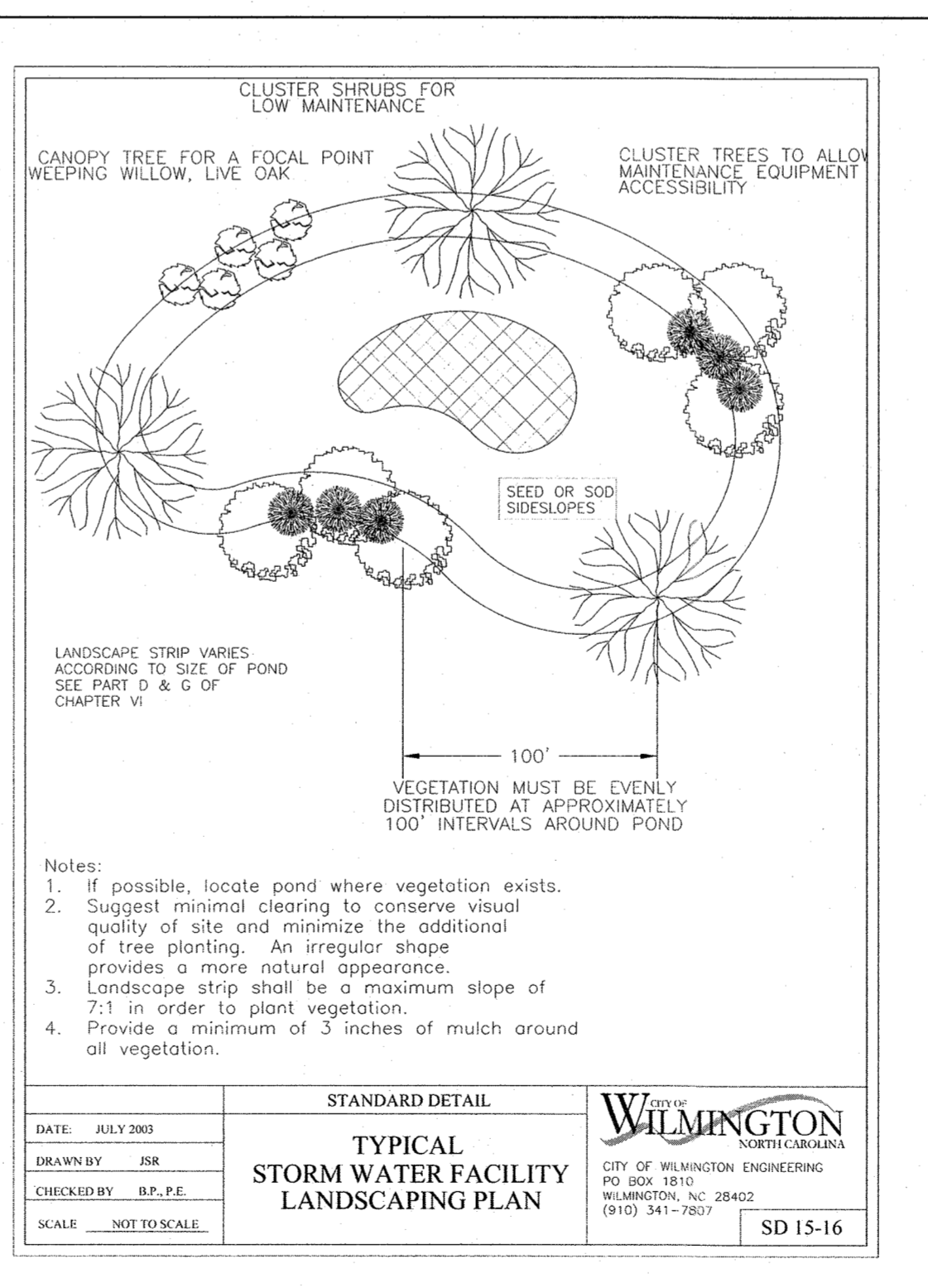
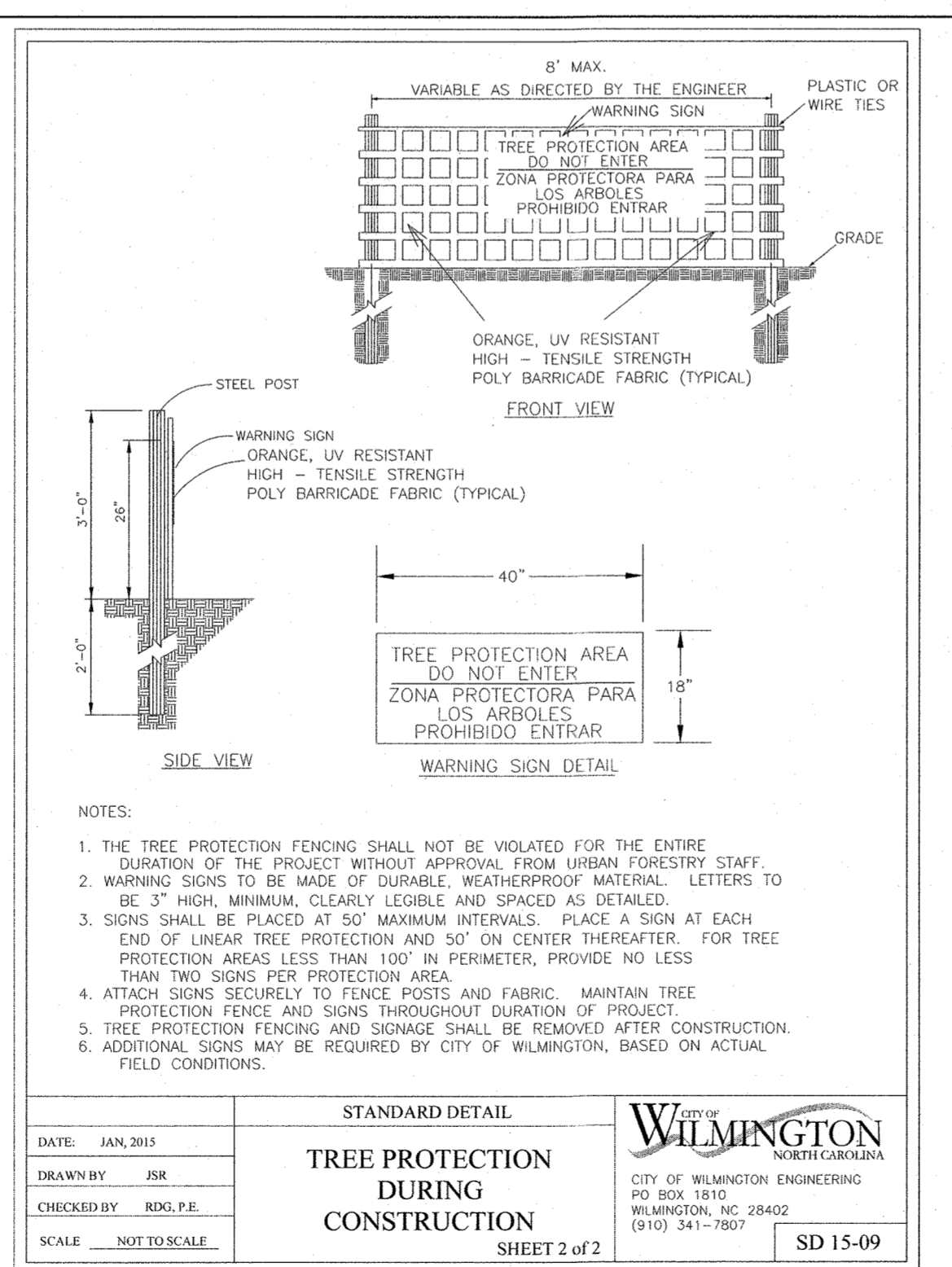
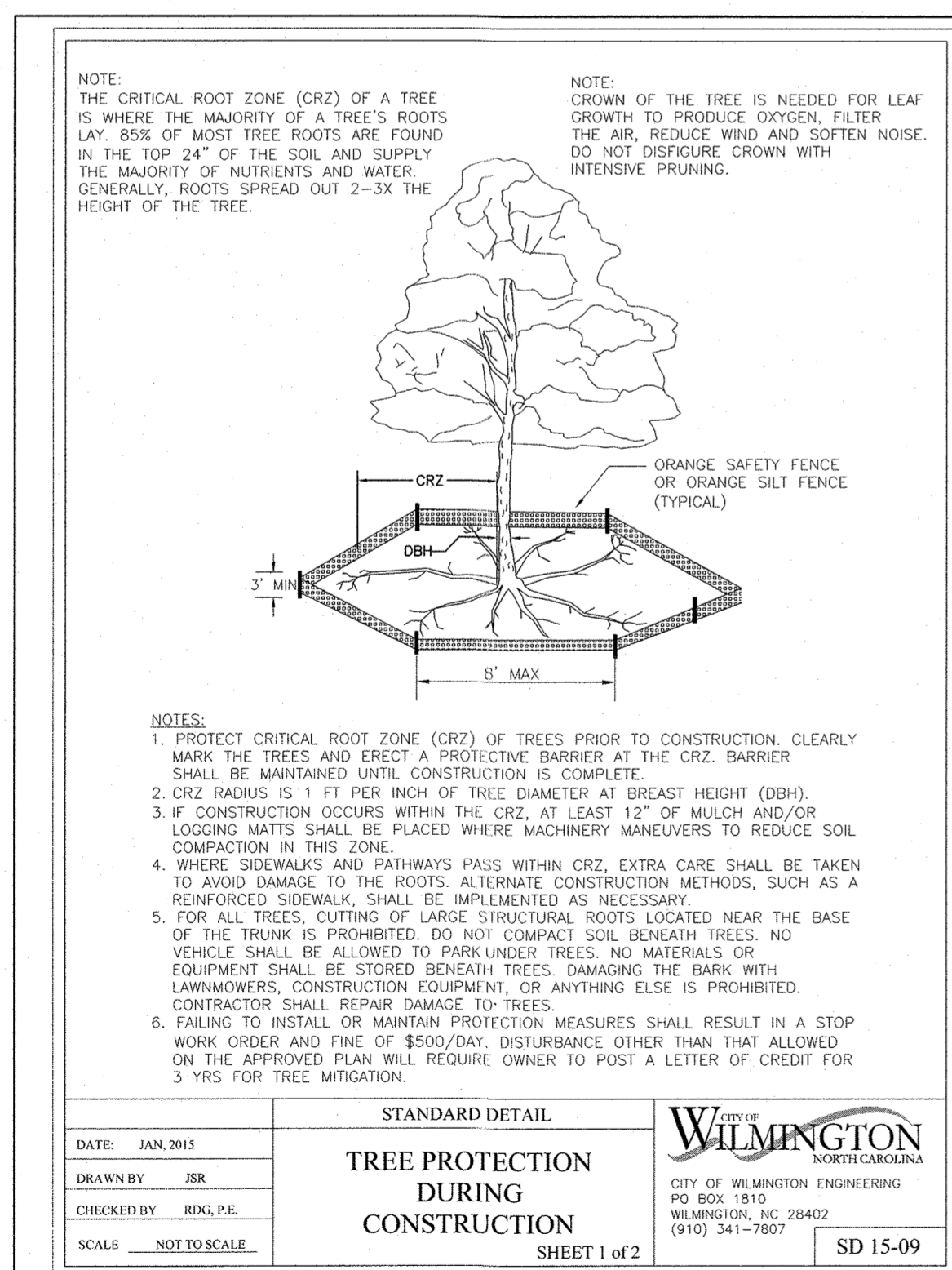
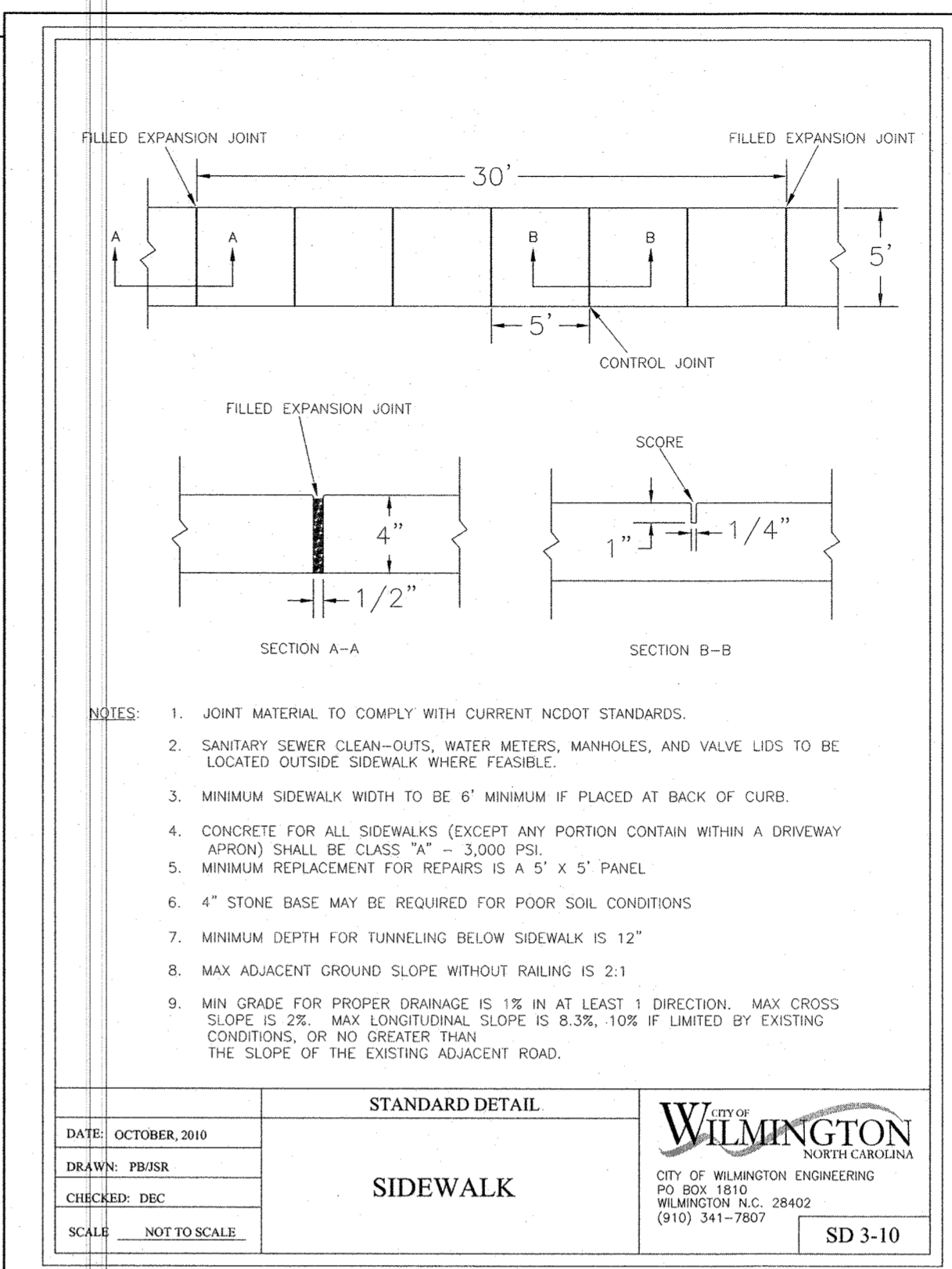
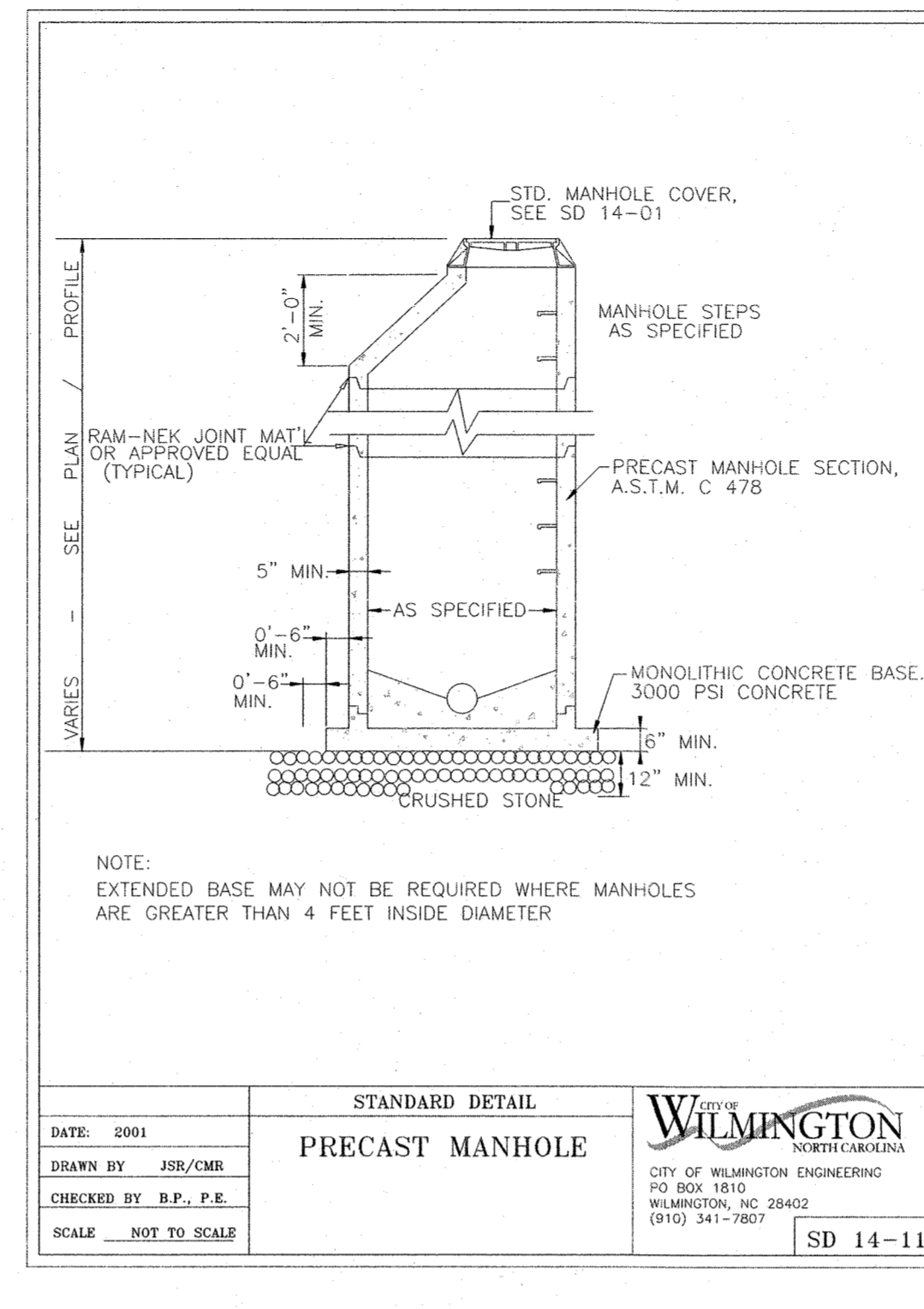
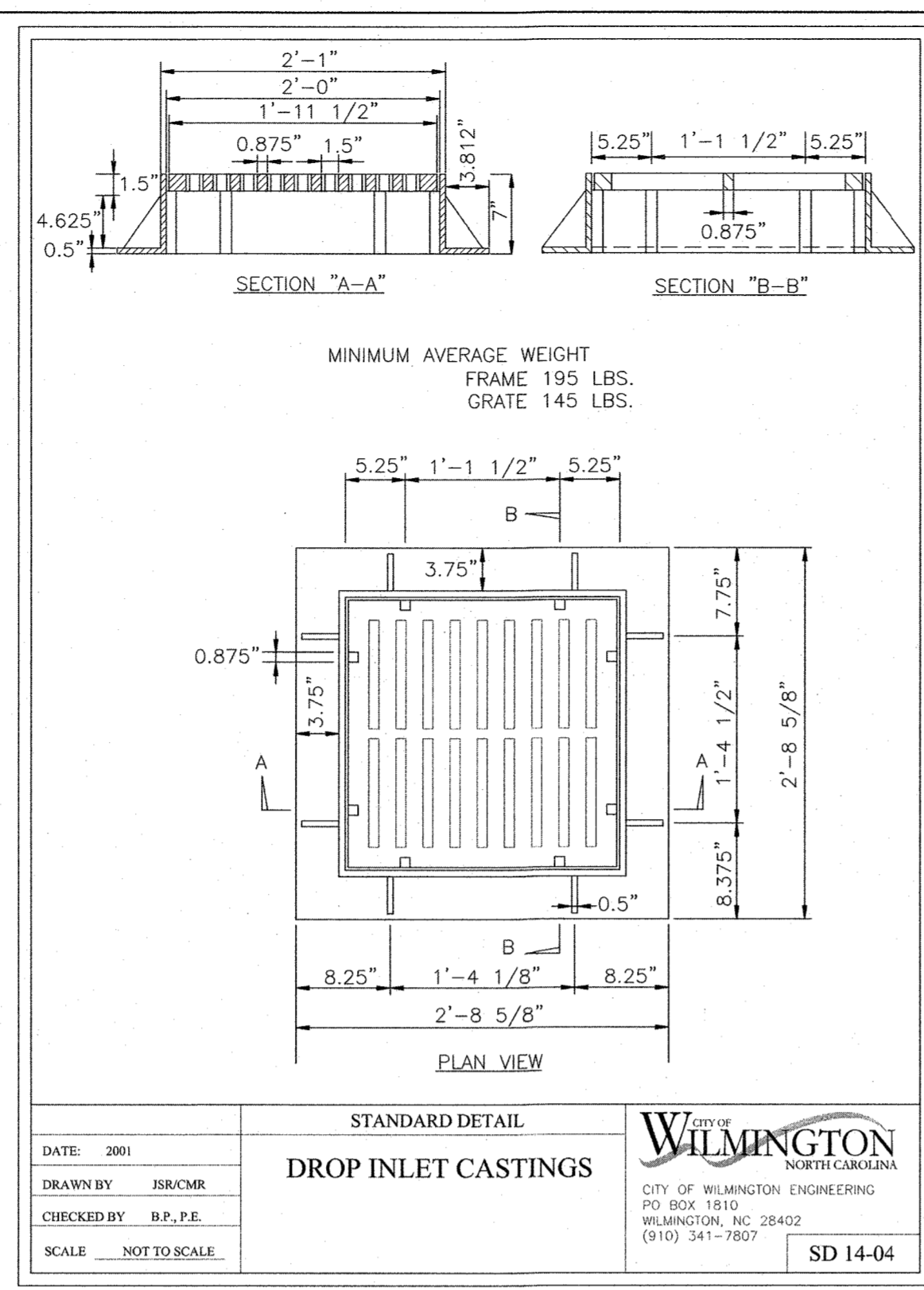
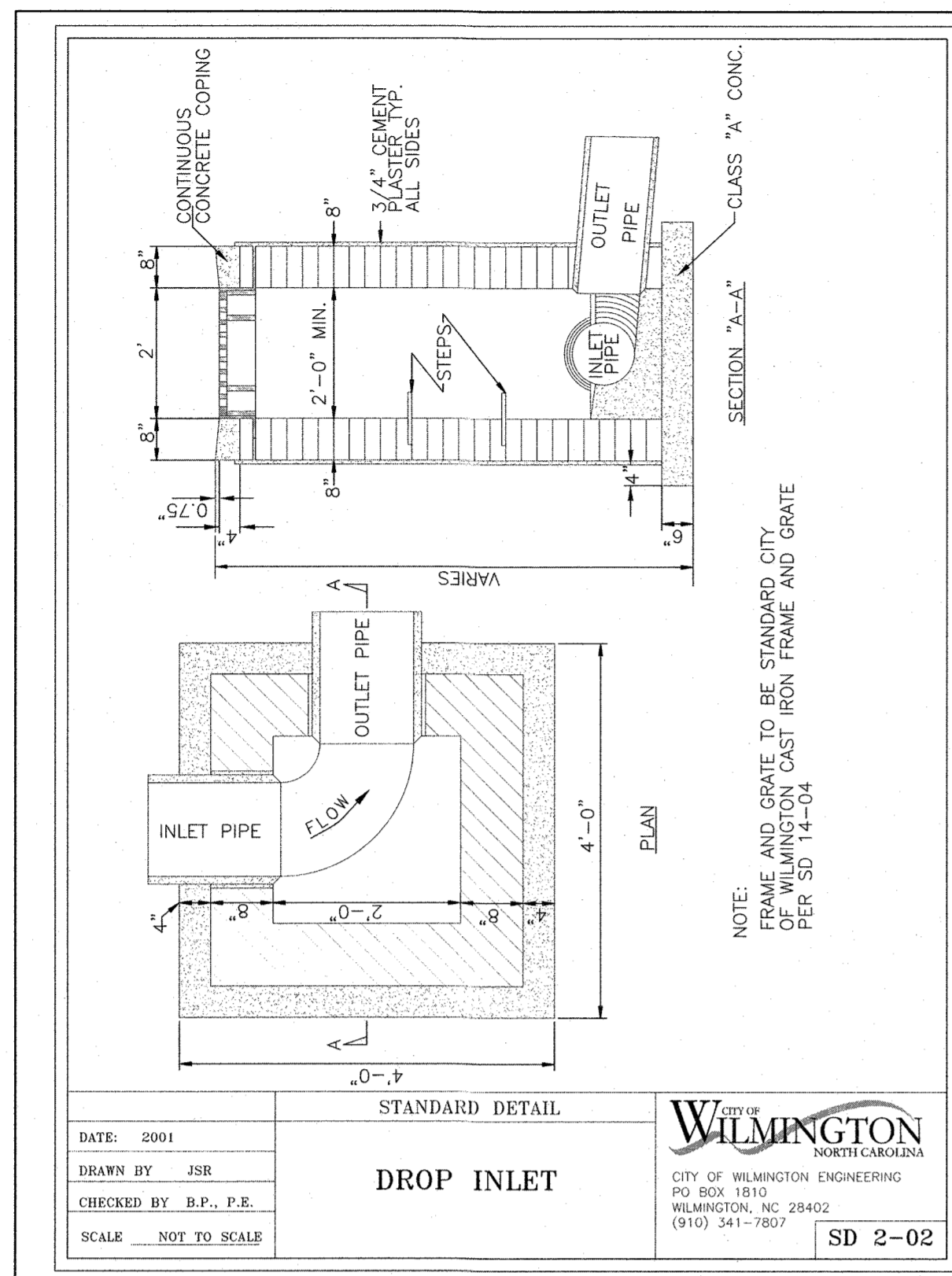
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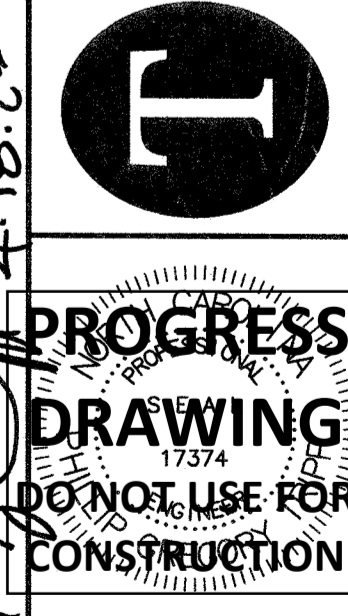


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REVISIONS		
No./Date	Description	By
01	CONCRETE DETAIL	EJW
02	CONCRETE DETAIL	EJW
03	CONCRETE DETAIL	EJW
04	CONCRETE DETAIL	EJW
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DETAILS AND NOTES  
FOREST PARK TOWNHOMES  
430 FOREST PARK ROAD  
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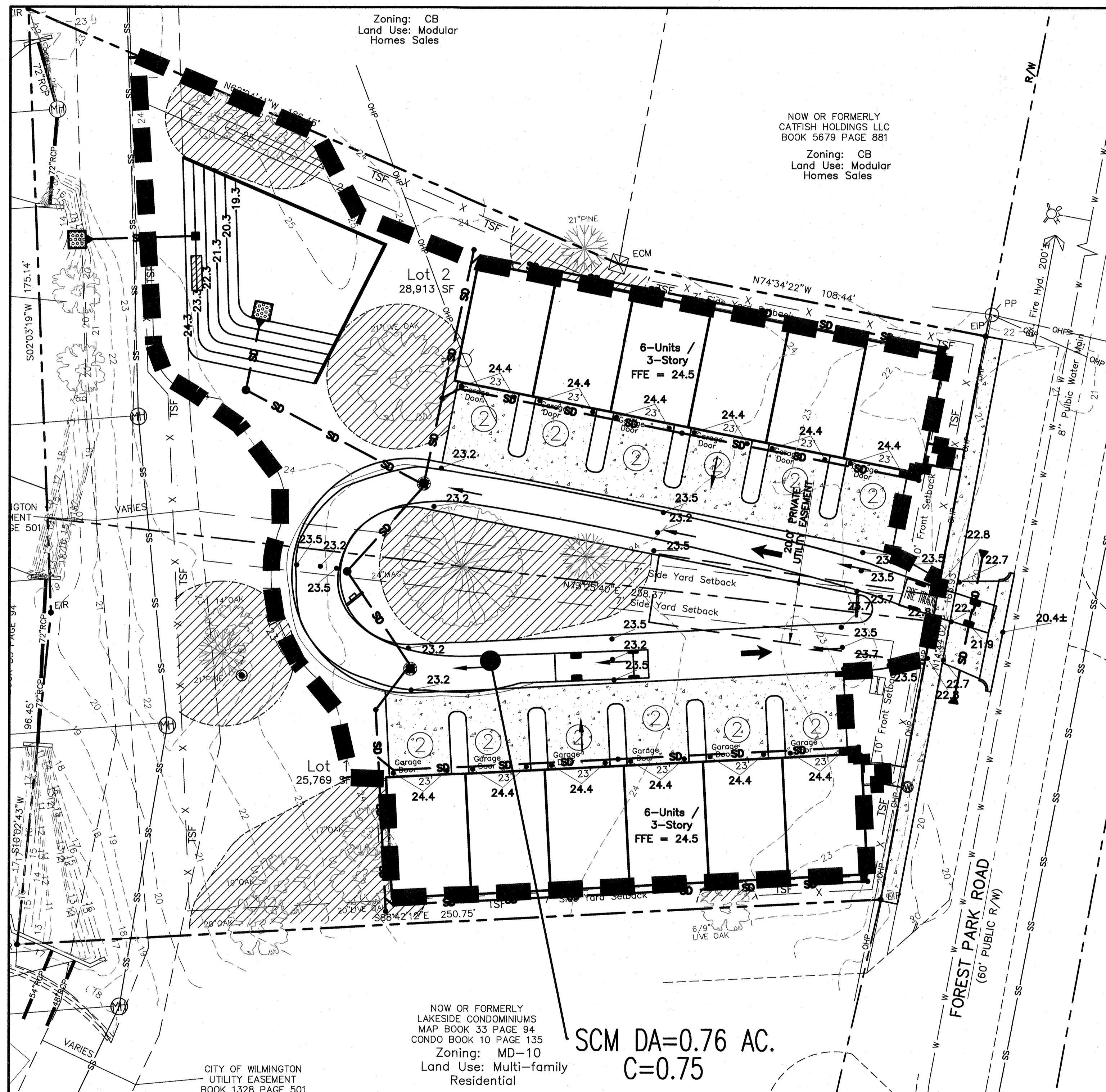
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DESIGN: PGT  
DRAWN: EJW  
C7



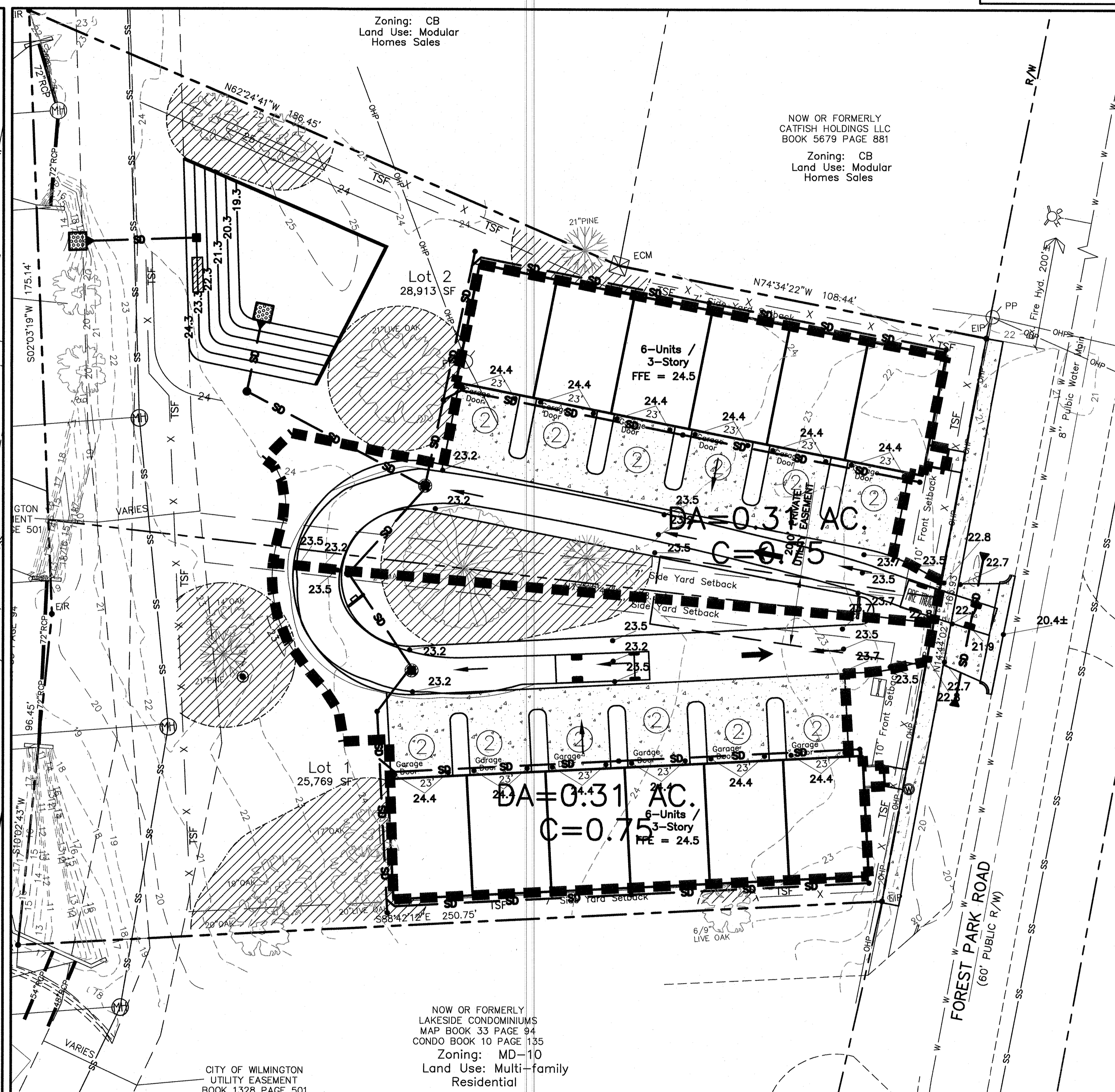
REVISIONS

No.	Date	Description	By

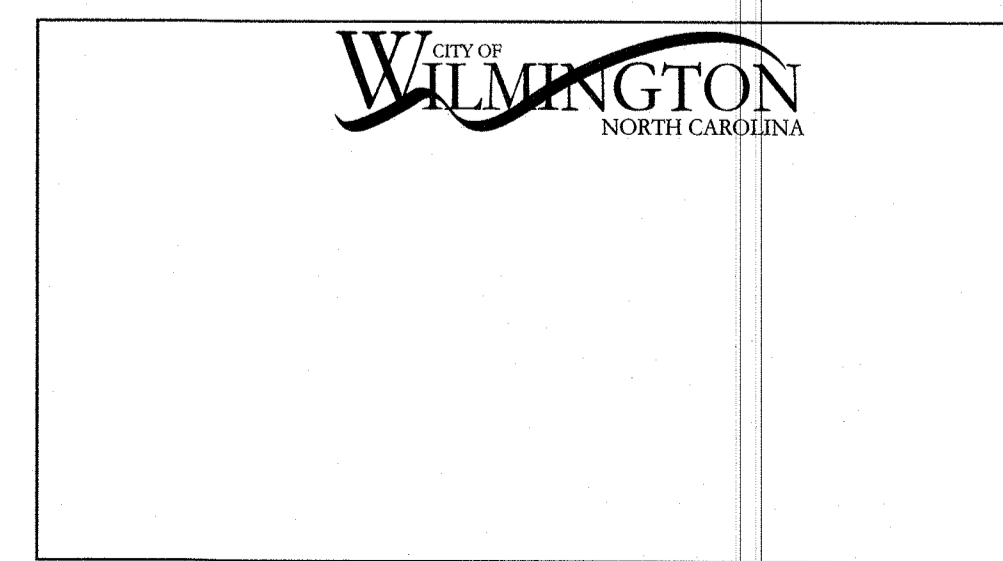
LOCATION MAP  
NTS



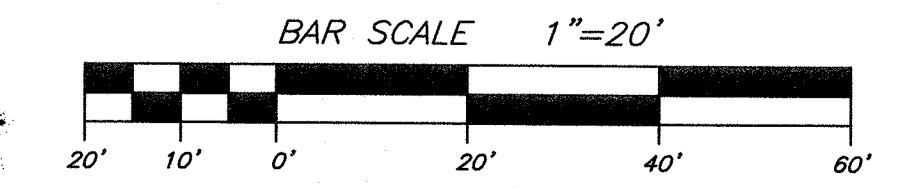
**STORMWATER CONTROL MEASURE DRAINAGE AREA MAP**



**INLET DRAINAGE AREA MAP**

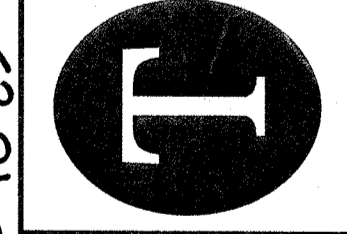


For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



DRAINAGE AREA MAP  
**FOREST PARK TOWNHOMES**  
430 FOREST PARK ROAD  
WILMINGTON, NORTH CAROLINA

TRIPP ENGINEERING, P.C.  
419 Chestnut Street  
Wilmington, North Carolina 28401  
Phone 910-763-5100  
Fax 910-763-5631  
© 2021 TRIPP ENGINEERING, P.C.



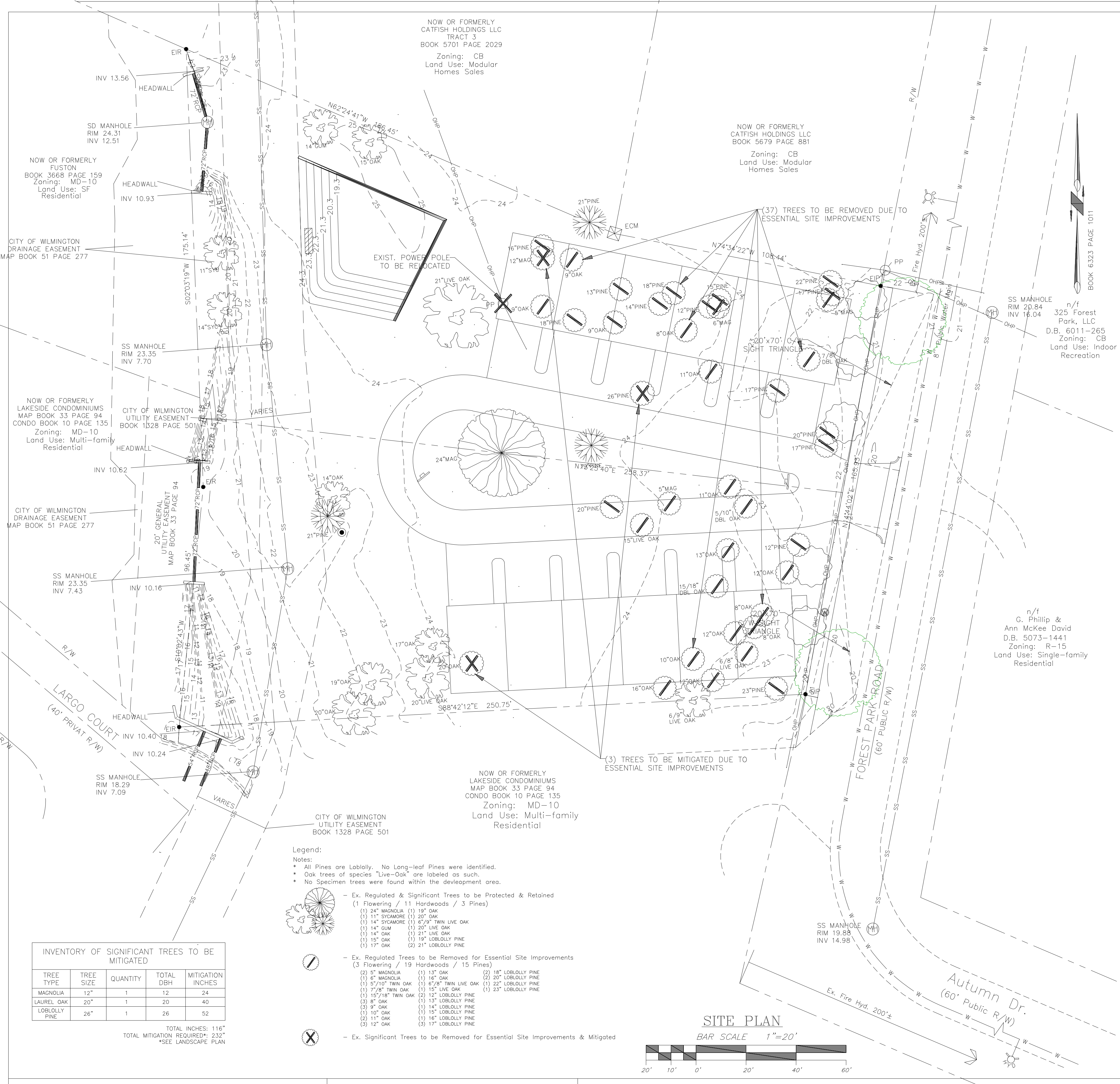
PROGRESS  
DRAWING  
DO NOT USE FOR  
CONSTRUCTION

DATE 04-18-23  
DESIGN PGT  
DRAWN EJW

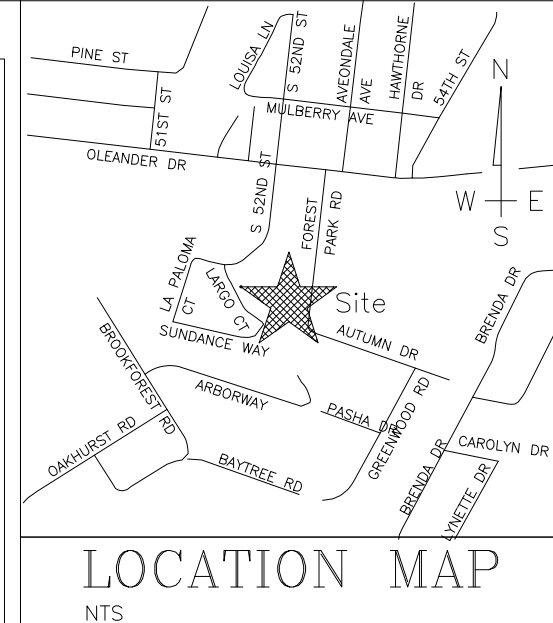
DA1

22011





**LANDSCAPING**  
 1) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND THE PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT.  
 2) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10'.  
 3) 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.  
 4) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.  
 5) NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTIONS ON TREE PROTECTION METHODS.  
 6) ALL CURBING AROUND LANDSCAPE ISLAND TO BE MINIMUM 6" IN HEIGHT.  
 7) TREE PRESERVATION/REMOVAL PERMIT IS REQUIRED PRIOR TO CLEARING AND LAND DISTURBANCE.  
 8) LABEL PROTECTIVE FENCING WITH SIGNS TO BE PLACED EVERY 50 LINEAR FEET, OR AT LEAST TWO (2) PER AREA, IN BOTH ENGLISH AND SPANISH "TREE PROTECTION AREA: DO NOT ENTER".



### LEGEND

COMMON NAME	QTY	SIZE	HEIGHT
<b>TREE, DECIDUOUS</b>			
MAPLE, TRIDENT	5	3" CAL	10'
CATHEDRAL LIVE OAK	2	2" CAL	10'

15' CAL. TOWARDS MITIGATION

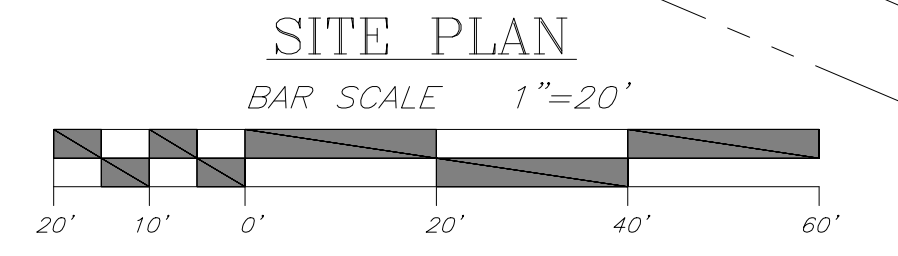
232' REQ'D. MITIGATION  
 15' CAL. TOWARDS MITIGATION  
 217' REQ'D. MITIGATION REMAINING TO BE PAID IN LIEU

INVENTORY OF SIGNIFICANT TREES TO BE MITIGATED

TREE TYPE	TREE SIZE	QUANTITY	TOTAL DBH	MITIGATION INCHES
MAGNOLIA	12"	1	12	24
LAUREL OAK	20"	1	20	40
LOBLOLLY PINE	26"	1	26	52

TOTAL INCHES: 116"  
 TOTAL MITIGATION REQUIRED: 232"  
 \*SEE LANDSCAPE PLAN

- Legend:**  
 Notes:  
 • All Pines are Loblolly. No Long-leaf Pines were identified.  
 • Oak trees of species "Live-Oak" are labeled as such.  
 • No Specimen trees were found within the development area.
- Ex. Regulated & Significant Trees to be Protected & Retained  
 (1 Flowering / 11 Hardwoods / 3 Pines)  
 (1) 24" MAGNOLIA (1) 19" OAK  
 (1) 11" SYCAMORE (1) 28" OAK  
 (1) 14" SYCAMORE (1) 87/8" TWIN LIVE OAK  
 (1) 14" GUM (1) 20" LIVE OAK  
 (1) 14" OAK (1) 21" LIVE OAK  
 (1) 15" OAK (1) 18" LOBLOLLY PINE  
 (1) 17" OAK (2) 21" LOBLOLLY PINE
  - Ex. Regulated Trees to be Removed for Essential Site Improvements  
 (3 Flowering / 19 Hardwoods / 15 Pines)  
 (2) 5" MAGNOLIA (1) 13" OAK (2) 18" LOBLOLLY PINE  
 (1) 6" MAGNOLIA (1) 16" OAK (3) 20" LOBLOLLY PINE  
 (1) 5/10" TWIN OAK (1) 67/8" TWIN LIVE OAK (1) 22" LOBLOLLY PINE  
 (1) 7/8" TWIN OAK (1) 15" LIVE OAK (1) 23" LOBLOLLY PINE  
 (1) 15/18" TWIN OAK (2) 15" LOBLOLLY PINE  
 (3) 8" OAK (1) 13" LOBLOLLY PINE  
 (3) 9" OAK (1) 14" LOBLOLLY PINE  
 (1) 10" OAK (1) 15" LOBLOLLY PINE  
 (2) 11" OAK (1) 16" LOBLOLLY PINE  
 (3) 12" OAK (1) 17" LOBLOLLY PINE
  - Ex. Significant Trees to be Removed for Essential Site Improvements & Mitigated



Revision #:  
 Date: 4/20/2023

Scale:  
 1" = 20'

Landscape Plan:  
**Forest Park Townhomes**

Landscape Design by: Jim Freeman - NCLC# 0071  
**Freeman Landscape, Inc.**