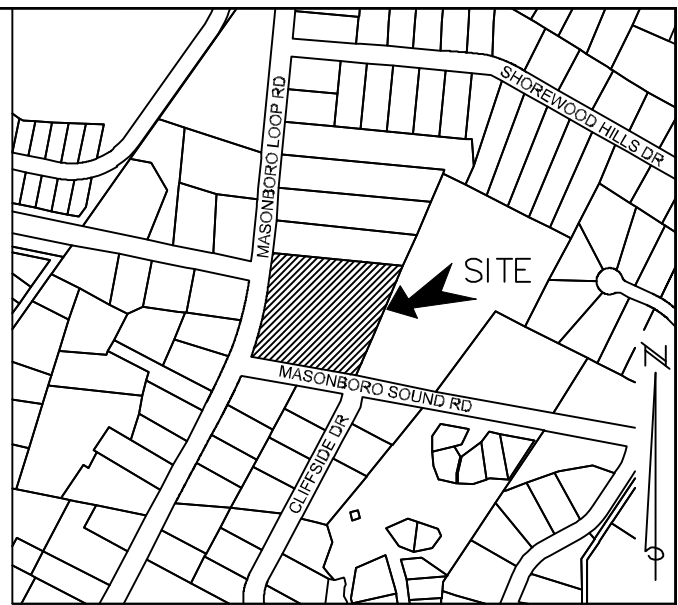


Masonboro Station Expansion

4039 MASONBORO LOOP RD.
LOCATED IN THE CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
DESCRIPTION OF WORK: GRADING, PAVING, DRAINAGE, AND UTILITIES
OWNER: ACADIA SERVICES, LLC
222 BEECH STREET
WILMINGTON, N.C. 28405



LOCATION MAP
NOT TO SCALE

LEGEND

W/V = WATER VALVE
W/M = WATER METER
C/O = SANITARY SEWER CLEAN OUT
INV. = INVERT
B/O = BLOW OFF ASSEMBLY
BFP = BACK FLOW PREVENTOR
G/W = GUY WIRE
SWMH = STORM MANHOLE
GT. = GREASE TRAP
F/H = FIRE HYDRANT ASSEMBLY
I.S. = IRON SET
S = SANITARY SEWER MH
C = CURB INLET
T = TREE
C = CURB RAMP
W = WATER SERVICE
S = SEWER CLEANOUT
W = WATER VALVE
L = SIGN LOCATION
LP = LIGHT POLE

PROPERTY LINE

BUILDING SETBACK

CENTERLINE

EASEMENT

COMPUTED PROPERTY LINE

LIMITS OF DISTURBANCE/PROJECT LIMITS

PROPOSED STORM DRAIN

PROPOSED SANITARY SEWER

WETLAND

PROPOSED SIDEWALK

STABILIZATION TIME FRAMES:

SITE AREA DESCRIPTION	STABILIZATION
Perimeter dikes, swales, ditches and slopes	7 DAYS
High Quality Water (HQW) Zones	7 DAYS
Slopes steeper than 3:1	7 DAYS
Slopes 3:1 or flatter	14 DAYS
All other areas with slopes flatter than 4:1	14 DAYS

NOTE WELL:

ANY AREAS ON SITE WITHOUT ACTIVITY SHALL BE STABILIZED WITHIN 15 WORKING DAYS OR 21 CALENDAR DAYS AND AS ABOVE, ALL SLOPES MUST BE STABILIZED WITHIN 21 CALENDAR DAYS OF CEASE OF ANY ACTIVITY.

DETAILS SHOWN ARE TYPICAL OF INSTALLATIONS REQUIRED BY THE TOWN AND COUNTY. THIS SHEET DOES NOT PURPORT TO SHOW ALL REQUIRED CONSTRUCTION DETAILS, BUT RATHER SERVES AS A GUIDE. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL CITY, COUNTY AND STATE CODES AND CONSTRUCTION STANDARDS.

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.

INDEX TO DRAWINGS		
SHEET No.	DESCRIPTION	
1 OF 7	COVER SHEET	
2 OF 7	GENERAL NOTES & DETAILS	
3 OF 7	GENERAL NOTES & DETAILS	
3 OF 7	GENERAL NOTES & DETAILS	
4 OF 7	EXISTING CONDITIONS	
5 OF 7	SITE PLAN	
7 OF 7	TREE SURVEY	
P1-P1	POND PLAN	
EC-1	EROSION AND DRAINAGE	
EC-2	EROSION CONTROL AND DRAINAGE	
EC-3	EROSION CONTROL AND DRAINAGE	
EC-4	EROSION CONTROL AND DRAINAGE	
LP	LANDSCAPE SUPPLEMENT	

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



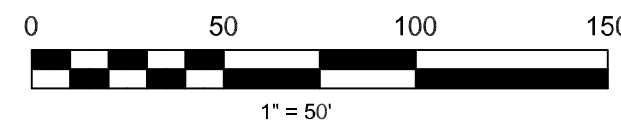
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

	Name	Date
Planning		
Traffic		
Fire		



REV. NO.	REVISIONS	DATE

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GENERAL NOTES:

1. 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.
2. NO CONSTRUCTION IS TO BEGIN BEFORE LOCATION OF EXISTING UTILITIES HAS BEEN DETERMINED. CALL "NO ONE-CALL" AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.
3. ALL TREES WHICH ARE NOT REQUIRED TO BE CLEARED FOR CONSTRUCTION SHALL BE PRESERVED WHEREVER POSSIBLE UNLESS OTHERWISE DIRECTED.
4. CONTRACTOR SHALL ADJUST ALL MANHOLES, VALVE AND CURB BOXES TO THE 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.
5. 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.
6. 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.
7. EXTREME CARE SHALL BE TAKEN TO ENSURE MINIMUM SEPARATIONS AT ALL UTILITY CROSSINGS.
8. CONTRACTOR TO ENSURE THAT STREET PAVEMENT IS PLACED SO AS TO DRAIN POSITIVELY TO THE ROADWAY INLETS AND CATCH BASINS.
9. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS.
10. THIS PLAN IS FOR SITE UTILITIES, GRADING, ROADWORK, AND DRAINAGE ONLY.
11. AFFECTED NON-MUNICIPAL UTILITIES SHALL BE CONTACTED AND PROVIDED WITH PLANS AND OTHER PERTINENT INFORMATION, WHEN FEASIBLE, TO COORDINATE APPROPRIATE SCHEDULING AND PLACEMENT. AT THE MINIMUM THIS SHOULD INCLUDE AT&T AND DUKE (PROGRESS) ENERGY.
12. ALL CONSTRUCTION TO CONFORM TO CITY STANDARDS AND ALL APPLICABLE STATE & LOCAL CODES.
13. CONTRACTOR TO COORDINATE ANY REQUIRED TRAFFIC CONTROL WITH THE STATE AND CITY. CONTRACTOR RESPONSIBLE FOR ANY ADDITIONAL REQUIRED PERMITS.
14. CARE SHALL BE TAKEN DURING FINAL GRADING TO ENSURE POSITIVE DRAINAGE TO RECEIVING STRUCTURES. ALL STORM WATER RUNOFF FROM BUILT UPON AREAS (i.e. IMPERVIOUS SURFACES AND ROOF DRAINAGE) TO BE DIRECTED TO STORM SEWER COLLECTION SYSTEM (i.e. STORM INLETS OR PONDS) BY SWALES, OVERLAND FLOW, ADDITIONAL GRADING, OR LANDSCAPING INLETS.
16. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ANY RELOCATIONS, REALIGNMENTS, DISCONNECTIONS OR CONNECTIONS OF EXISTING UTILITIES WITH APPLICABLE AUTHORITIES.
17. CLEARING AND GRUBBING OF SITE TO INCLUDE REMOVAL OF EXISTING CURBS, 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.
18. ALL SIGNS AND PAVEMENT MARKINGS SHALL MEET NCDOT AND MUTCD STANDARDS.
19. SANITARY SERVICES SMALLER THAN 8" SHALL HAVE CLEANOUTS AT INTERVALS OF NOT MORE THAN 100'. CLEANOUTS SHALL BE PROVIDED FOR SERVICE LINES AND BUILDING DRAINS THAT HAVE HORIZONTAL DIRECTION CHANGES GREATER THAN 45 DEGREES.
20. SEE 2018 IPC FOR FURTHER GUIDANCE ON UTILITY SERVICE REQUIREMENTS.

1. This map is not for conveyance, recordation, or sales.
2. A portion of this property is located within in the 0.2% SFHA according to Flood Insurance Rate Map Community ID# 3720314500 suffix K effective date 8/28/2018
3. This property is zoned CB-COMMUNITY BUSINESS, City of Wilmington.
4. Water service to be CFPWA (public).
5. Sewer service to be CFPWA (public).
6. Topographic data furnished by Bateman Civil Survey Company.

RECEIVED

By Patrick O'Mahony at 11:57 am, Nov 30, 2020

SITE PLAN

Masonboro Station Parking and Building Expansion

City of Wilmington

NEW HANOVER COUNTY, NORTH CAROLINA

PRELIMINARY PLAN

OWNER: ACADIA SERVICES, LLC
222 BEECH STREET
WILMINGTON, N.C. 28405

HANOVER DESIGN SERVICES, P.A.
LAND SURVEYORS, ENGINEERS & LAND PLANNERS

103 RURAL PARKWAY
WILMINGTON, N.C. 28403
PHONE: (910) 343-8002
LICENSE # 1-0097



Date: MARCH-2020

Scale: HORZ.: 1" = 50'

Drawn: MJL

Checked: AHG

Project No: 15040

Sheet No:

C-1

C-7

CITY STANDARD NOTES:

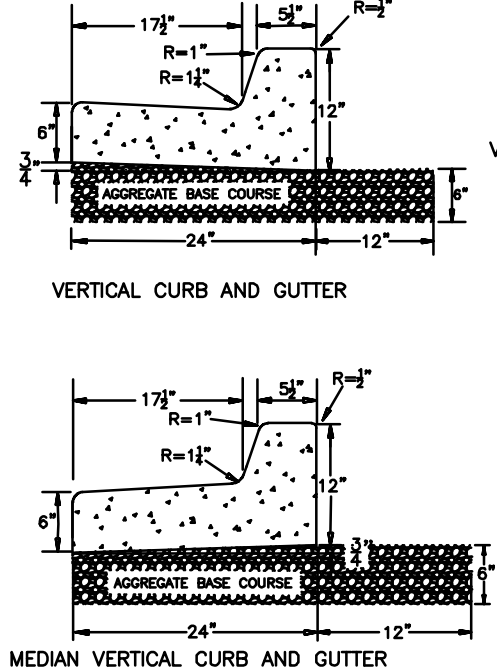
1. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
2. ANY TREES AND / OR AREAS DESIGNATED TO BE PROTECTED 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.
3. 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 INSTRUCTION ON TREE PROTECTION METHODS.
4. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY, MUTCD, AND/OR NCDOT STANDARDS.
5. ONCE STREETS ARE OPEN TO TRAFFIC, CONTACT TRAFFIC ENGINEERING TO REQUEST INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
6. 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.
7. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
8. CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
9. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
10. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
11. STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
12. TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
13. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. IN CERTAIN CASES ENTIRE RESURFACING OF THE OPEN CUT AREA MAY BE REQUIRED.
14. ANY BROKEN OR MISSING SIDEWALK, DRIVEWAY PANELS OR CURBING SHALL BE REPLACED WHETHER DAMAGED DURING CONSTRUCTION OR DAMAGE WAS EXISTING.
15. PRIOR TO ENTERING ANY AGREEMENT REGARDING THE SALE OF A HOUSE OR LOT IN A SUBDIVISION, THE BUYER MUST RECEIVE A STREET DISCLOSURE STATEMENT.
16. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SITE LINES FROM 30' TO 10'.
17. CONTACT THE CITY AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS. PROPOSED APPROXIMATE LOCATIONS SHOWN ON PLANS.
18. STREET LIGHTS SHALL BE DEP ENCLOSED CUTOFF (COBRA TYPE), HIGH PRESSURE SODIUM VAPOR (HPSV) OR DESIGNATED LED STRINGS BEING INSTALLED WITHIN THE RECOMMENDED RANGE OF MOUNTING HEIGHT FOR THE SPECIFIC FIXTURE. THE STANDARD STREET LIGHT SHALL BE INSTALLED ON A FIBERGLASS POLE. SEE CITY TECHNICAL STANDARDS FOR FURTHER DETAIL.

GENERAL UTILITY NOTES

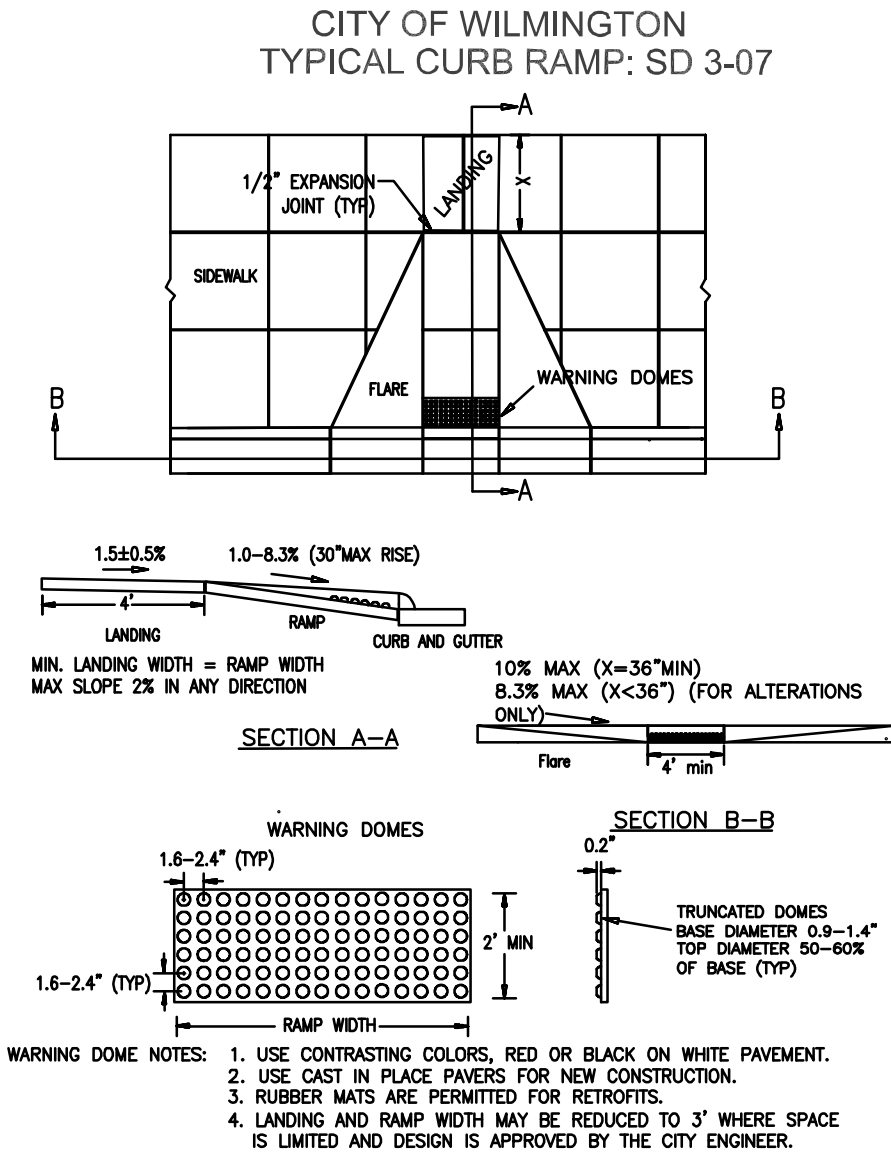
19. WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CPFA) DETAILS AND SPECIFICATIONS.
20. PROJECT SHALL COMPLY WITH CAPE FEAR PUBLIC UTILITY AUTHORITY CROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 343-3810 FOR INFORMATION.
21. IF THE CONTRACTOR DESIRES CPFA 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.
22. ANY IRRIGATION SYSTEM SUPPLIED BY CPFA WATER SHALL COMPLY WITH CPFA CROSS CONNECTION CONTROL REGULATIONS. CALL 343-3810 FOR INFORMATION.
23. ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
24. ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CPFA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFOCCOIR OR ASSE.
25. CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.
26. CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
27. UNDERGROUND FIRE LINES 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 910-341-0866.
28. CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4349 PRIOR TO ANY DIGGING, CLEARING OR GRADING.
29. ANY PVC MAINS ARE TO BE MARKED WITH NO.10 INSULATED COPPER WIRE INSTALLED THE ENTIRE LENGTH AND ATTACHED TO THE PIPE AND STRIPPED TO BARE WIRE AND SECURED TO ALL VALVES AND FITTINGS, ACCESSIBLE IN ALL VALVE AND METER BOXES. ALL WATER MAINS SHALL MAINTAIN A MINIMUM OF 3' OF COVER.

ADDITIONAL NOTES:

1. THIS MAP IS PRELIMINARY, NOT INTENDED FOR RECORDATION, SALES, OR CONVEYANCE.
2. ALL DISTANCES AS SHOWN ARE HORIZONTAL.
3. SEWER PROVIDED BY CPFA.
4. WATER PROVIDED BY CPFA.
5. SITE WILL MEET ALL ZONING REQUIREMENTS.
6. REGULATED TREES ON SITE TO BE PRESERVED AS SHOWN.
7. STRIPING AND LANES TO CITY STANDARDS (THERMOPLASTIC).
8. NO VEHICULAR ACCESS TO SITE EXCEPT AS SHOWN.
9. ALL UTILITIES UNDERGROUND.
10. LANDSCAPING AND LIGHTING PLAN BY OTHERS.
11. CONTRACTOR TO COORDINATE STAGING OF CONSTRUCTION ACTIVITIES WITH THE OWNER AND ARCHITECT TO FACILITATE ONGOING ADJOINING BUSINESS ACTIVITIES.
12. CONTRACTOR TO COORDINATE REMOVAL AND RELOCATION OF LIGHTING AND OTHER MUNICIPAL UTILITIES SUCH AS ELECTRICAL AND TELEPHONE CONNECTIONS WITH THE AFFECTED AGENCIES AND THE OWNER AND ARCHITECT.
13. ALL SERVICES TO BE INSTALLED IN ACCORDANCE WITH CITY AND CPFA TECHNICAL STANDARDS.



- NOTES:
1. EXPANSION JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS
 2. 50' MAX EXPANSION JOINT SPACING, 10' MAX CONTRACTION JOINT SPACING
 3. MINIMUM INSTALLATION LENGTH IS 5' FT.
 4. CONCRETE TO BE 3000 PSI MIN
 5. VERTICAL CURB AND GUTTER BASE CAN BE SLOPED 3/4" OR USE A FLAT BASE



- WARNING DOME NOTES:
1. USE CONTRASTING COLORS, RED OR BLACK ON WHITE PAVEMENT.
 2. USE CAST IN PLACE PAVERS FOR NEW CONSTRUCTION.
 3. RUBBER MATS ARE PERMITTED FOR RETROFITS.
 4. LANDING AND RAMP WIDTH MAY BE REDUCED TO 3' WHERE SPACE IS LIMITED AND DESIGN IS APPROVED BY THE CITY ENGINEER.

ADDITIONAL NOTES CONT.:

14. This property is not located within a special flood hazard area according to Flood Insurance Rate Map Community Panel #3703126A, effective date April 3, 2006.
15. Handicap Ramps shall be provided at all intersections.
16. 15 suitable trees per acre are to be preserved or planted in accordance with City of Wilmington standards.
17. Refuse collection by dumpster and private hauler.
18. Reflectors shall be installed As Per City And NCDOT Standards.
19. Per the requirements of the stormwater permit, the following shall occur prior to issuance of a certificate of occupancy or operation of the permitted facility:
 - * As-built drawings for all stormwater management facilities shall be submitted to the city of Wilmington engineering division.
 - * An engineer's certification shall also be submitted, along with all supporting documentation that specifies, under seal that the as-built stormwater measures, controls and devices are in compliance with the approved stormwater management plans.
 - * A final inspection by city of Wilmington engineering personnel.
20. All required easement maps shall be reviewed by city staff and recorded prior to issuance of a certificate of occupancy.

UTILITY NOTES

SEWER AND WATER TO BE PUBLIC AND PROVIDED BY CPFA. SPECIFIC LOCATION, SIZING, AND DETAILS WILL BE PROVIDED ON THE CONSTRUCTION PLANS AND ARE TO BE APPROVED BY CPFA AND CITY ENGINEERS.

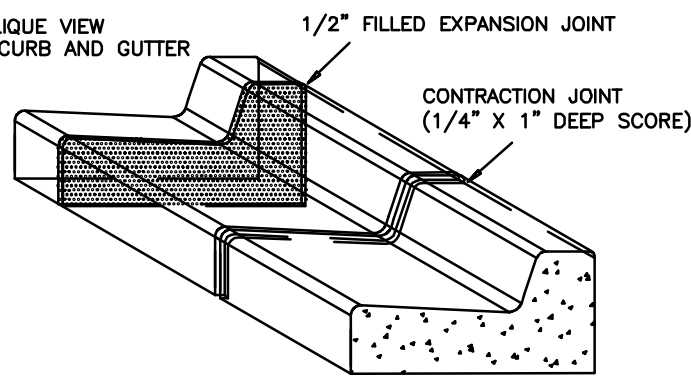
1. CPFA STANDARD DETAIL SHEETS FOR SEWER AND WATER TAPS TO BE INCLUDED AS A PART OF THIS PLAN, ATTACHED.
2. 48-HOUR NOTICE AND 3 COMPLETE SETS OF PLANS REQUIRED FOR PRE-CONSTRUCTION MEETING BY CONTRACTOR.
3. NCDOT ENCROACHMENT REQUIRED FOR ANY WORK IN PUBLIC R/W.
4. ALL FEES TO BE PAID PRIOR TO PRE-CONSTRUCTION MEETING.

CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

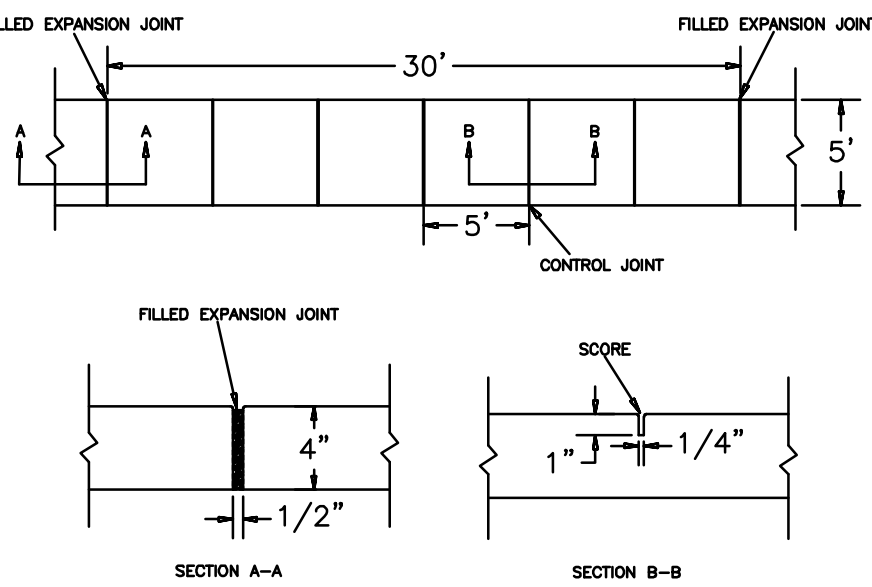
1. SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
2. WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT RIGHT-OF-WAY LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE AT THE END OF LINE MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
3. ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CERAMIC EPOXY LINING.
4. MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
5. NO FLEXIBLE COUPLINGS SHALL BE USED.
6. ALL STAINLESS STEEL FASTENERS SHALL BE 316.
7. CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM
8. ALL PROPERTY CORNERS. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.

ADDITIONAL NOTES:
CPFA PERMIT REQUIRED FOR ANY UTILITY SERVICES WORK.
CONTRACTOR RESPONSIBLE FOR PERMIT AND COORDINATION WITH CPFA.
ALL SERVICES TO BE INSTALLED IN ACCORDANCE WITH CITY AND CPFA TECHNICAL STANDARDS.

CITY OF WILMINGTON CURB DETAIL: SD 3-11



CITY OF WILMINGTON TYPICAL SIDEWALK SD 3-10 NTS



- NOTES:
1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
 2. SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
 3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.
 4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAIN WITH A DRIVEWAY APPROX) SHALL BE CLASS "A" - 3000 PSI.
 5. MINIMUM REPLACEMENT FOR REPAIRS IS A 5' X 5' PANEL.
 6. 4" STONE BASE MAY BE REQUIRED FOR POOR SOIL CONDITIONS
 7. MINIMUM DEPTH FOR TUNNELING BELOW SIDEWALK IS 12"
 8. MAX ADJACENT GROUND SLOPE WITHOUT RAILING IS 2:1
 9. MIN GRADE FOR PROPER DRAINAGE IS 1/8" IN AT LEAST 1' DIRECTION. MAX CROSS SLOPE IS 2%. MAX LONGITUDINAL SLOPE IS 8.3%, 10% IF LIMITED BY EXISTING THE SLOPE OF THE EXISTING ADJACENT ROAD.

ADDITIONAL UTILITY/GRADING NOTES

1. CARE SHALL BE TAKEN DURING FINAL GRADING TO ENSURE POSITIVE DRAINAGE TO RECEIVING STRUCTURES. ALL STORM WATER RUNOFF FROM BUILT UPON AREAS (I.E. IMPERVIOUS SURFACES AND ROOF DRAINAGE) TO BE DIRECTED TO STORM SEWER COLLECTION SYSTEM (I.E. STORM INLETS OR PONDS) BY SWALES, OVERLAND FLOW, ADDITIONAL GRADING, OR LANDSCAPING INLETS.
2. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ANY RELOCATIONS, REALIGNMENTS, DISCONNECTIONS OR CONNECTIONS OF EXISTING UTILITIES WITH APPLICABLE AUTHORITIES.
3. 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.
4. MINIMUM SEPARATION SHALL BE MAINTAINED AS FOLLOWS:
 - a. HORIZONTAL CLEARANCE OF 10 FEET BETWEEN SANITARY SEWER AND WATER MAINS.
 - b. HORIZONTAL CLEARANCE OF 10 FEET BETWEEN STORM SEWER AND WATER MAINS.
 - c. WHERE VERTICAL CLEARANCE IS LESS THAN 18" 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.
 - d. 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' EITHER SIDE OF CROSSING.
 - e. WHERE VERTICAL CLEARANCE IS LESS THAN 18" BETWEEN WATER MAIN AND STORM DRAIN, WATER MAIN SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING.
4. SEE DETAIL SHEETS FOR TYPICAL UTILITIES HOOKUPS.
5. ALL STREETS ARE PROPOSED TO BE PUBLIC (BUILT TO CITY OF WILMINGTON STANDARDS/ N.C.D.O.T. PAVEMENT AND SUBGRADE STANDARDS).
6. ALL SANITARY SEWER MAINS TO BE 8" UNLESS OTHERWISE INDICATED.
7. ALL WATER MAINS TO BE 8" UNLESS OTHERWISE INDICATED.
8. TWO VALVES ARE REQUIRED AT "T" INTERSECTIONS AND ONE VALVE ON THE WATER LINE TO FIRE HYDRANTS.
9. A BLOW-OFF VALVE IS REQUIRED AT THE TERMINUS OF ALL "DEAD END" WATER LINES.
10. SANITARY SEWER, STORM, WATER, AND OTHER PERTINENT DETAILS/SPECIFICATIONS TO BE PROVIDED WITH CONSTRUCTION PLANS AND SHALL MEET OR EXCEED CITY AND CPFA DESIGN STANDARDS

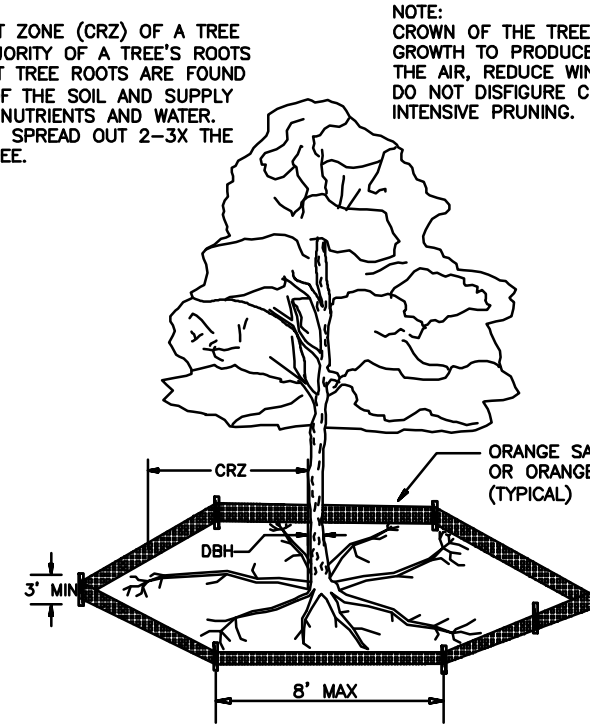
ADDITIONAL FIRE DEPARTMENT NOTES:

- HYDRANTS MUST BE WITHIN 150' OF THE FDC
- THE FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT
- LANDSCAPING MAY NOT BLOCK ANY FDC OR HYDRANT WITH A 3' CLEAR SPACE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC
- CONTRACTOR TO MAINTAIN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES DURING CONSTRUCTION
- HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB
- NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO BUILDING CONSTRUCTION
- ADDITIONAL FIRE PROTECTION AND/OR ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- 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.
- ALL ISOLATION VALVES WITHIN THE "HOT BOX" AND BETWEEN THE "HOT BOX" AND THE RISER ROOM, MUST BE ELECTRICALLY SUPERVISED. (IF SPRINKLER SYSTEM PRESENT

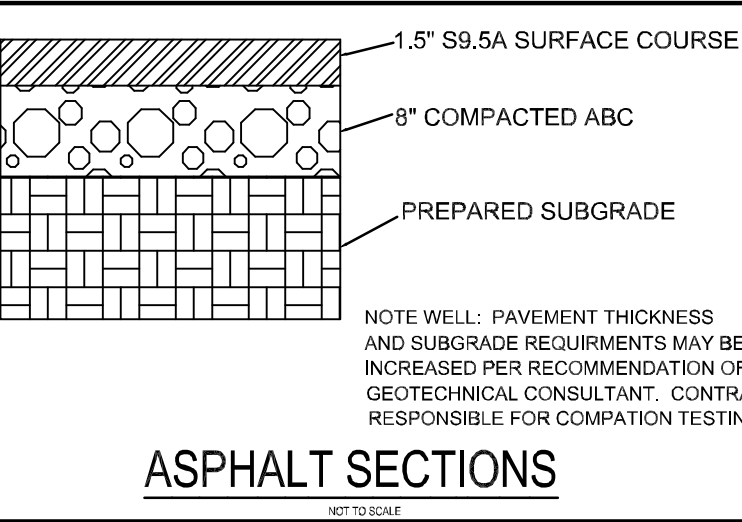
ADA NOTES

- I. LOCATION OF WHEELCHAIR RAMPS:
 - 1. IN ACCORDANCE WITH THE RATIFIED HOUSE BILL 1296, ALL STREET CURBS IN NORTH CAROLINA BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIRS, CORRECTION OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1973 SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY HANDICAPPED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTER AND SIDEWALKS ARE PROVIDED AND AT OTHER MAJOR PORTS OF PEDESTRIAN FLOW.
 - 2. WHEELCHAIR RAMPS SHOULD BE LOCATED AS INDICATED IN DETAIL DRAWINGS, HOWEVER EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. MAY AFFECT PLACEMENT.
- II. CONSTRUCTION NOTES:
 - 1. NO SLOPE SHALL EXCEED 1"=1" (12:1) ON THE RAMP OR SIDEWALK.
 - 2. IN NO CASE SHALL THE WIDTH OF WHEELCHAIR RAMPS BE LESS THAN 40" (3'-4"). WIDTHS MAY EXCEED 40" IF NECESSARY.
 - 3. USE CLASS "A" CONCRETE WITH THE SURFACE HAVING A ROUGH, NON-SKID TYPE FINISH.
 - 4. 12" EXPANSION JOINT WILL BE REQUIRED WHERE THE CONCRETE WHEELCHAIR RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE.
 - 5. CONSTRUCTION METHODS SHALL CONFORM WITH THOSE OF THE GOVERNING BODY WHICH HAS JURISDICTION OF THE PARTICULAR STREET.
 - 6. THE INSIDE PEDESTRIAN CROSSWALK LINES SHALL BE ESTABLISHED BY BISECTING THE INTERSECTION RADI WHERE MARKED (SEE NOTE 6).
 - 7. THE WHEELCHAIR RAMP SHALL BE LOCATED SO THAT THE BEGINNING OF THE WHEEL CHAIR RAMP WILL BE TWO FEET FROM THE INSIDE PEDESTRIAN CROSSWALK LINE.
 - 8. THE WIDTH OF THE PEDESTRIAN CROSSWALK SHALL BE 10 FEET UNLESS A GREATER WIDTH IS REQUIRED TO ACCOMMODATE THE PEDESTRIAN.
 - 9. STOP BARS SHALL BE USED WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN, OR OTHER LEGAL REQUIREMENTS.
 - 10. PARKING SHALL BE ELIMINATED A MINIMUM OF 20 FEET BACK OF PEDESTRIAN CROSSWALK.
 - 11. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THIS IS AVAILABLE FROM THE SUPERINTENDENT OF DOCUMENTS, U.S GOVERNMENT

NOTE:
THE CRITICAL ROOT ZONE (CRZ) OF A TREE IS WHERE THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. GENERALLY, ROOTS SPREAD OUT 2-3X THE HEIGHT OF THE TREE.



- NOTES:
1. 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.
 2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
 3. 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.
 4. 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.
 5. FOR ALL TREES, OUTGROWING 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. THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED.
 6. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
 7. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
 8. 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.



NOTE WELL: PAVEMENT THICKNESS AND SUBGRADE REQUIREMENTS MAY BE INCREASED PER RECOMMENDATION OF GEOTECHNICAL CONSULTANT. CONTRACTOR RESPONSIBLE FOR COMPACTION TESTING

ASPHALT SECTIONS

Approved Construction Plan	
Name	Date
Planning	
Traffic	
Fire	

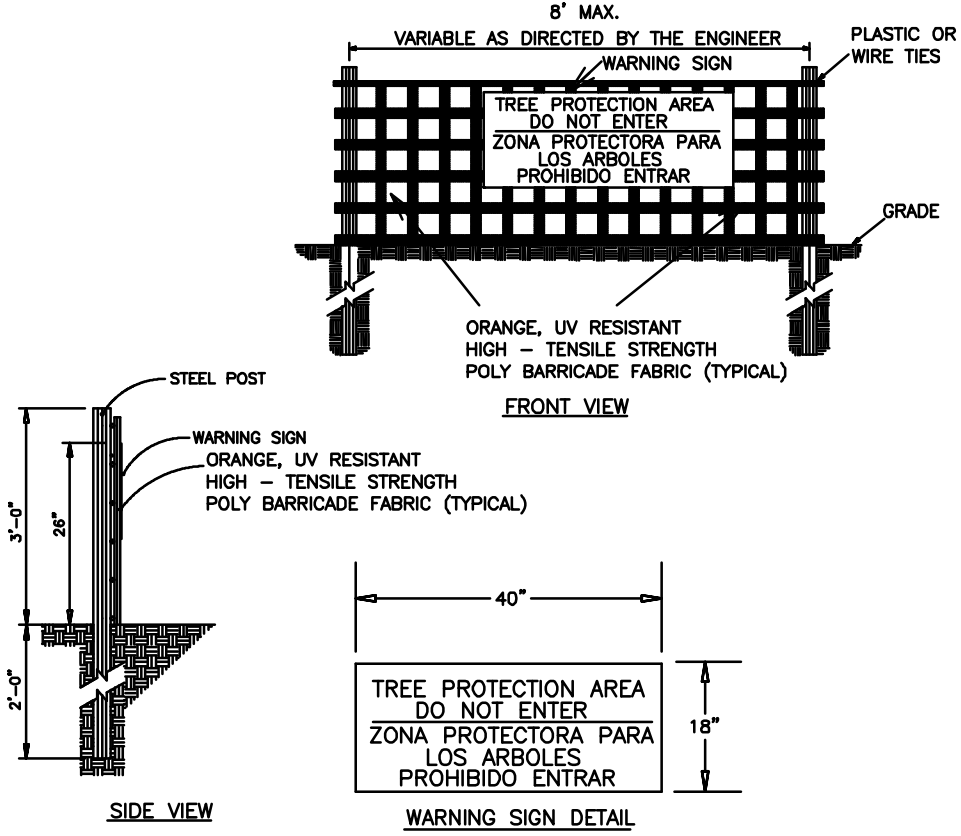
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON NORTH CAROLINA	
Public Services • Engineering Division	
APPROVED STORMWATER MANAGEMENT PLAN	
Date:	Permit #
Signed: _____	

ADDITIONAL STORM WATER NOTES:

1. ALL STORM WATER RUNOFF FROM BUILT UPON AREAS (I.E. IMPERVIOUS SURFACES AND ROOF DRAINAGE) TO BE DIRECTED TO THE STORM SEWER COLLECTION SYSTEM (I.E. STORM INLETS OR PONDS) BY SWALES, OVERLAND FLOW, ADDITIONAL GRADING OR LANDSCAPE INLETS.
2. CONTRACTOR TO ENSURE THAT STREET PAVEMENT AND CURBING IS PLACED TO DRAIN POSITIVELY TO CURB INLETS AND DRAINAGE STRUCTURES.
3. FOR STORM PIPE MATERIAL AND INSTALLATION SEE DETAILS AND NCDOT STANDARD DRAWINGS 300.1 SHEETS 1-3
4. ROOF DRAINS SHALL BE SIZED ACCORDING TO THE 2018 INTERNATIONAL PLUMBING CODE AND ALL AND SHALL CONFORM TO ANY LOCAL REQUIREMENTS
5. ANY ROOF DRAIN LOCATIONS SHOWN HERE ARE APPROXIMATE AND MAY BE FIELD ADJUSTED AS LONG AS THE MINIMUM REQUIRED SLOPE IS MAINTAINED.

CITY OF WILMINGTON TREE PROTECTION STD DETAIL: SD 15-09



- NOTES:
1. THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
 2. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAIL.
 3. 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.
 4. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE AND SIGNS THROUGHOUT DURATION OF PROJECT.
 5. TREE PROTECTION FENCING AND SIGNAGE SHALL BE REMOVED AFTER CONSTRUCTION.
 6. ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

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NOTES AND DETAILS

Masonboro Station Parking and Building Expansion

City of Wilmington

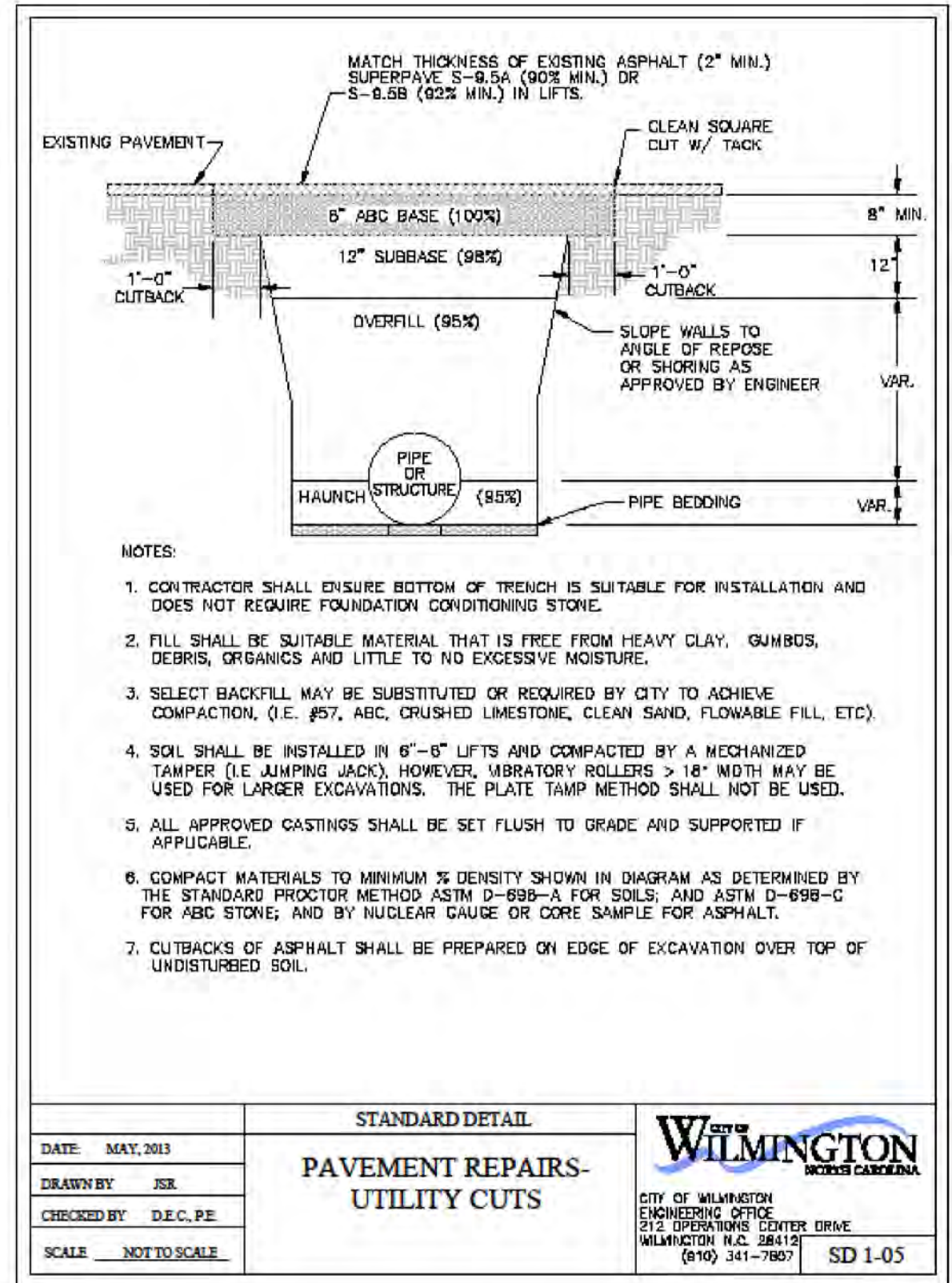
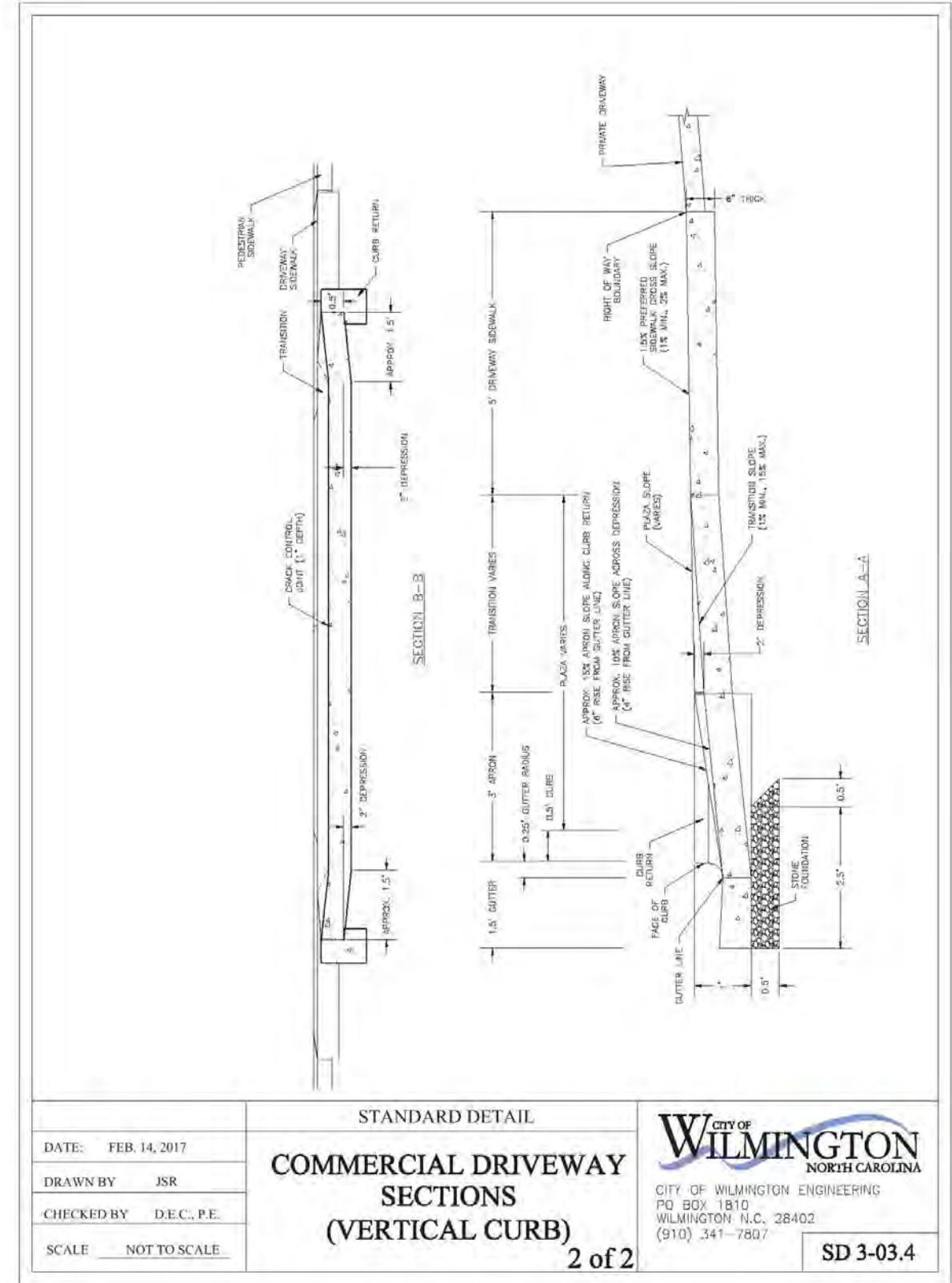
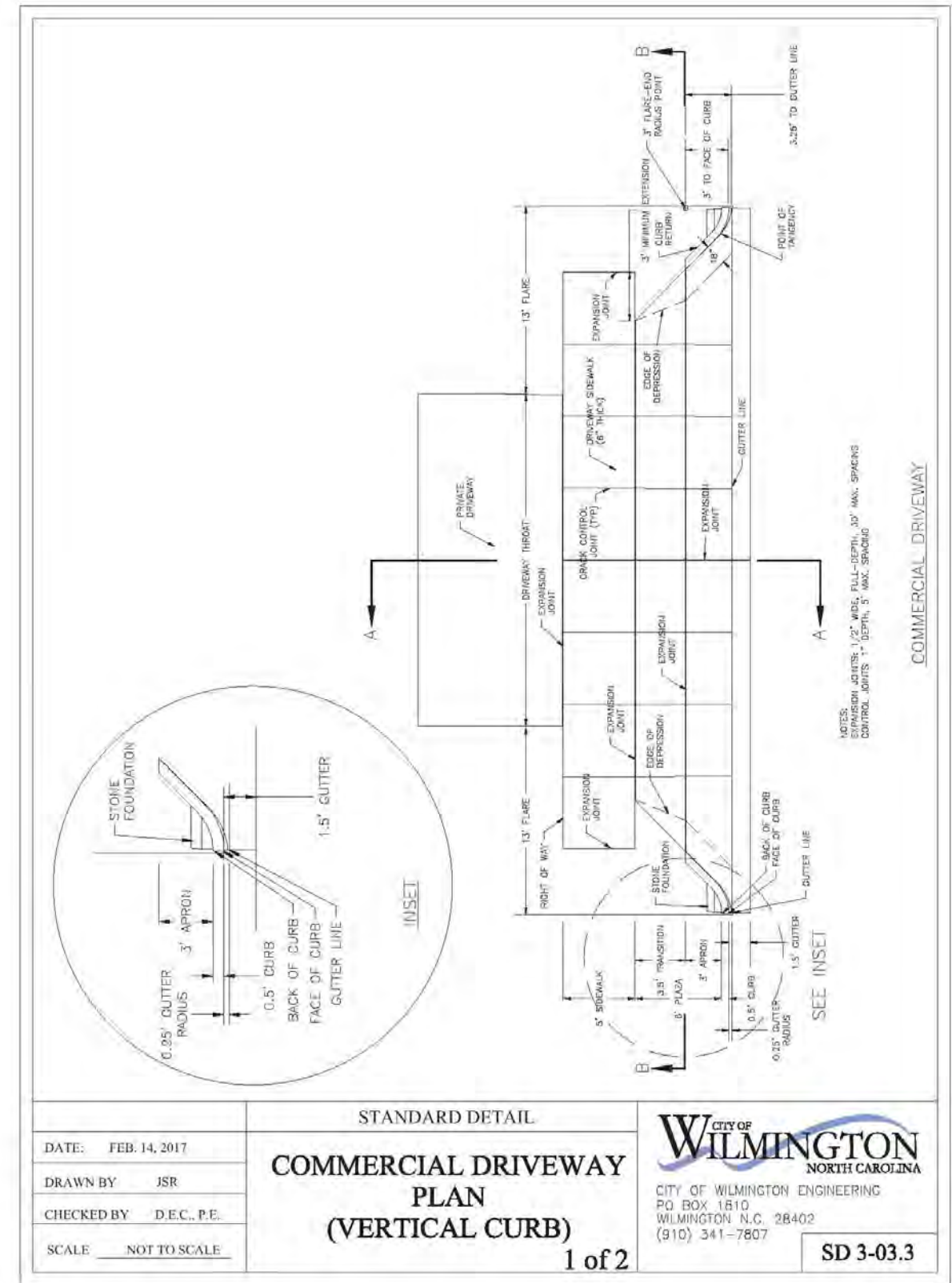
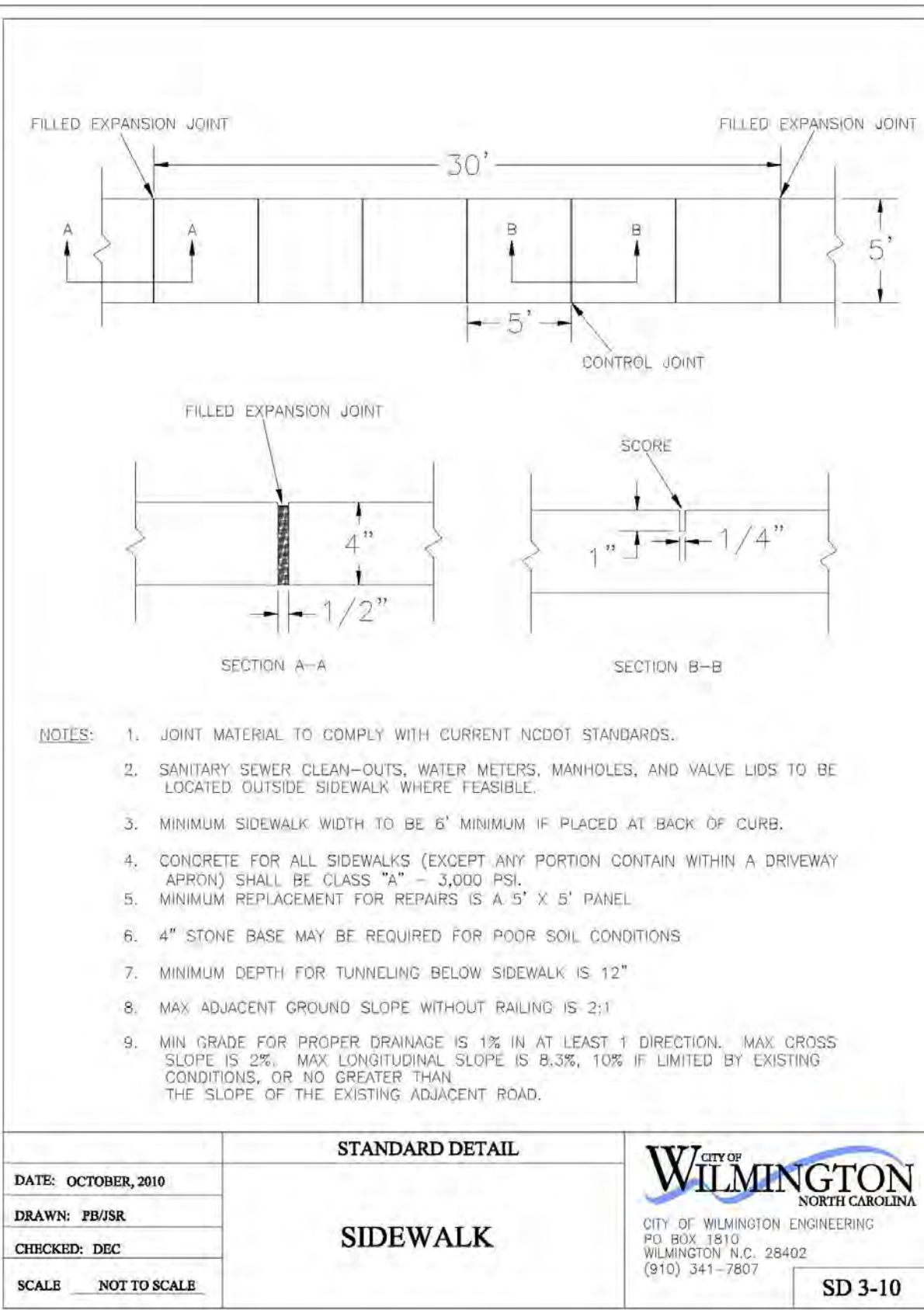
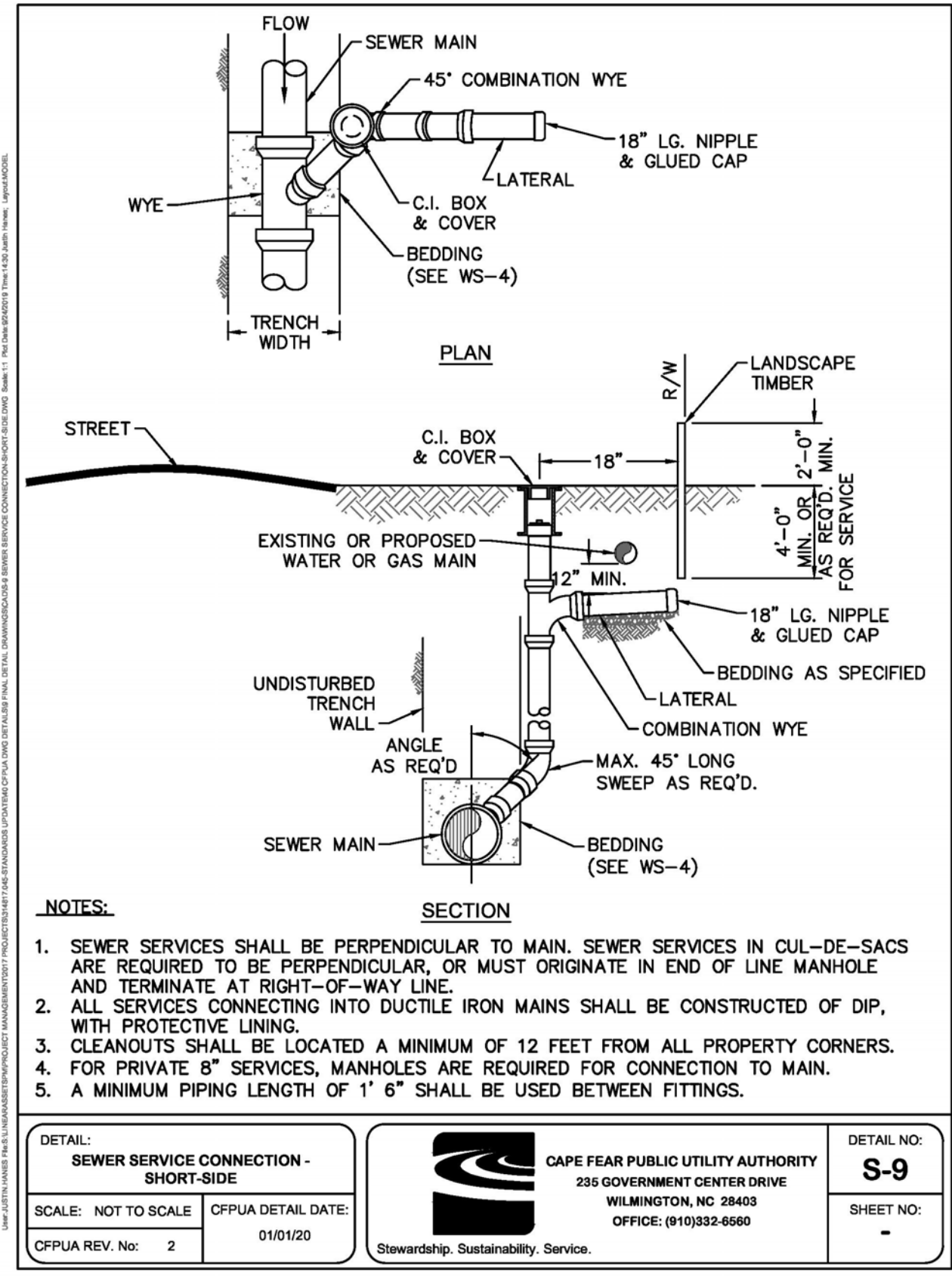
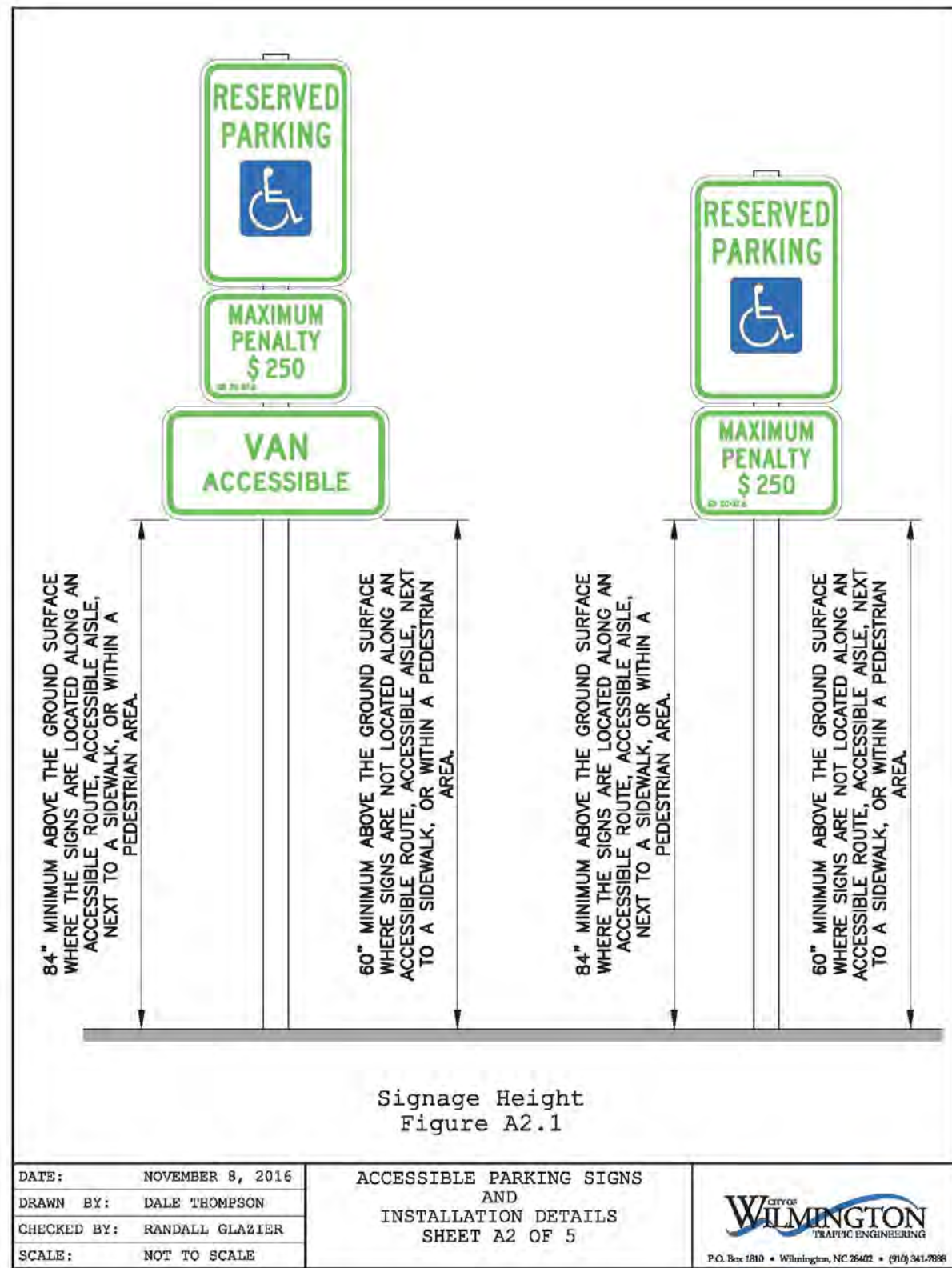
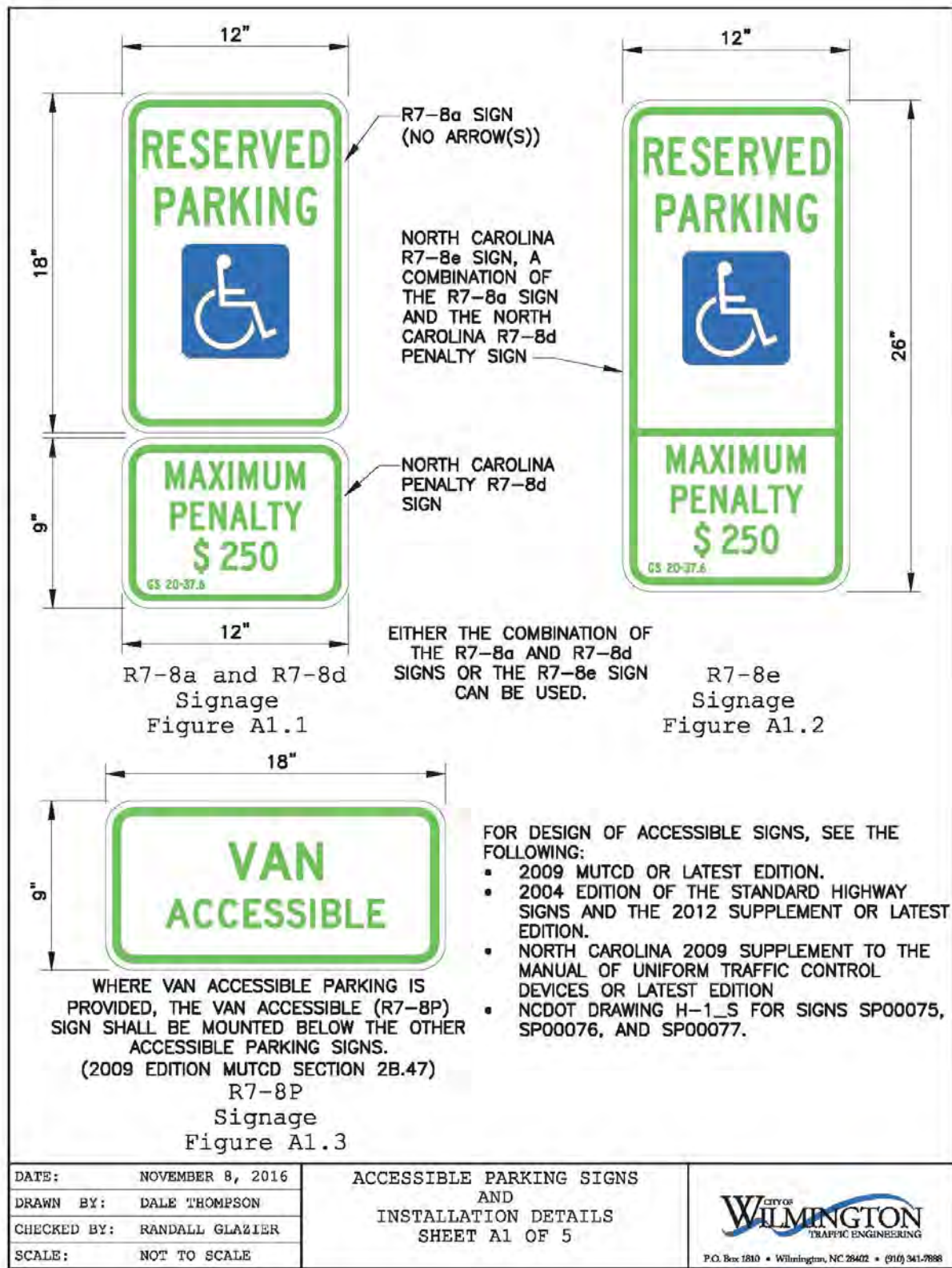
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER: ACADIA SERVICES, LLC
222 BEECH STREET
WILMINGTON, N.C. 28405

PRELIMINARY PLAN

HANOVER DESIGN SERVICES, P.A.
LAND SURVEYORS, ENGINEERS & LAND PLANNERS
1123 FLORAL PARKWAY
WILMINGTON, N.C. 28403
PHONE: (910) 354-6002
LICENSE # C-0587

Date: **MARCH-2020**
Scale: **HORIZ.: 1"= 20'**
Drawn: **MUL**
Checked: **AHG**
Project No: **15040**
Sheet No: **C-2**
C-7



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WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

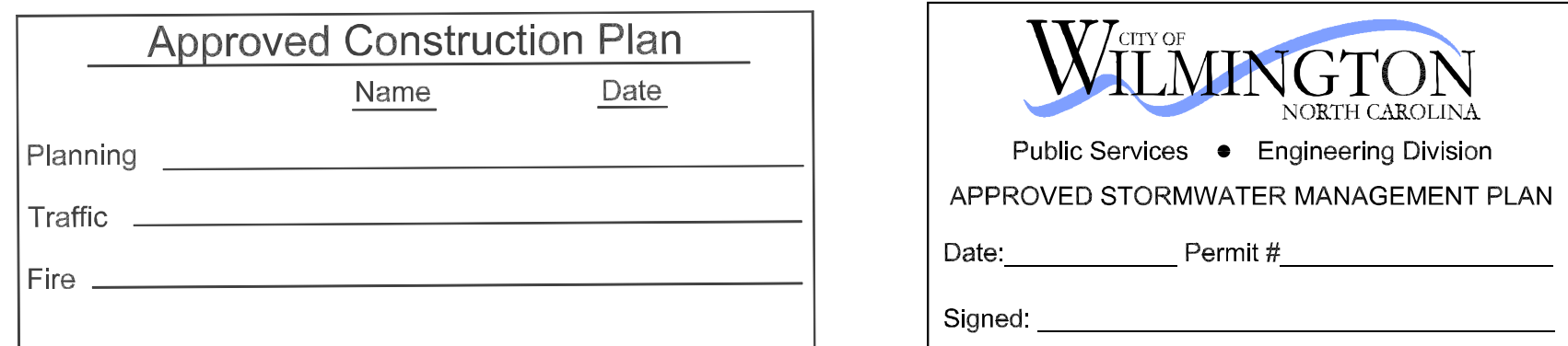
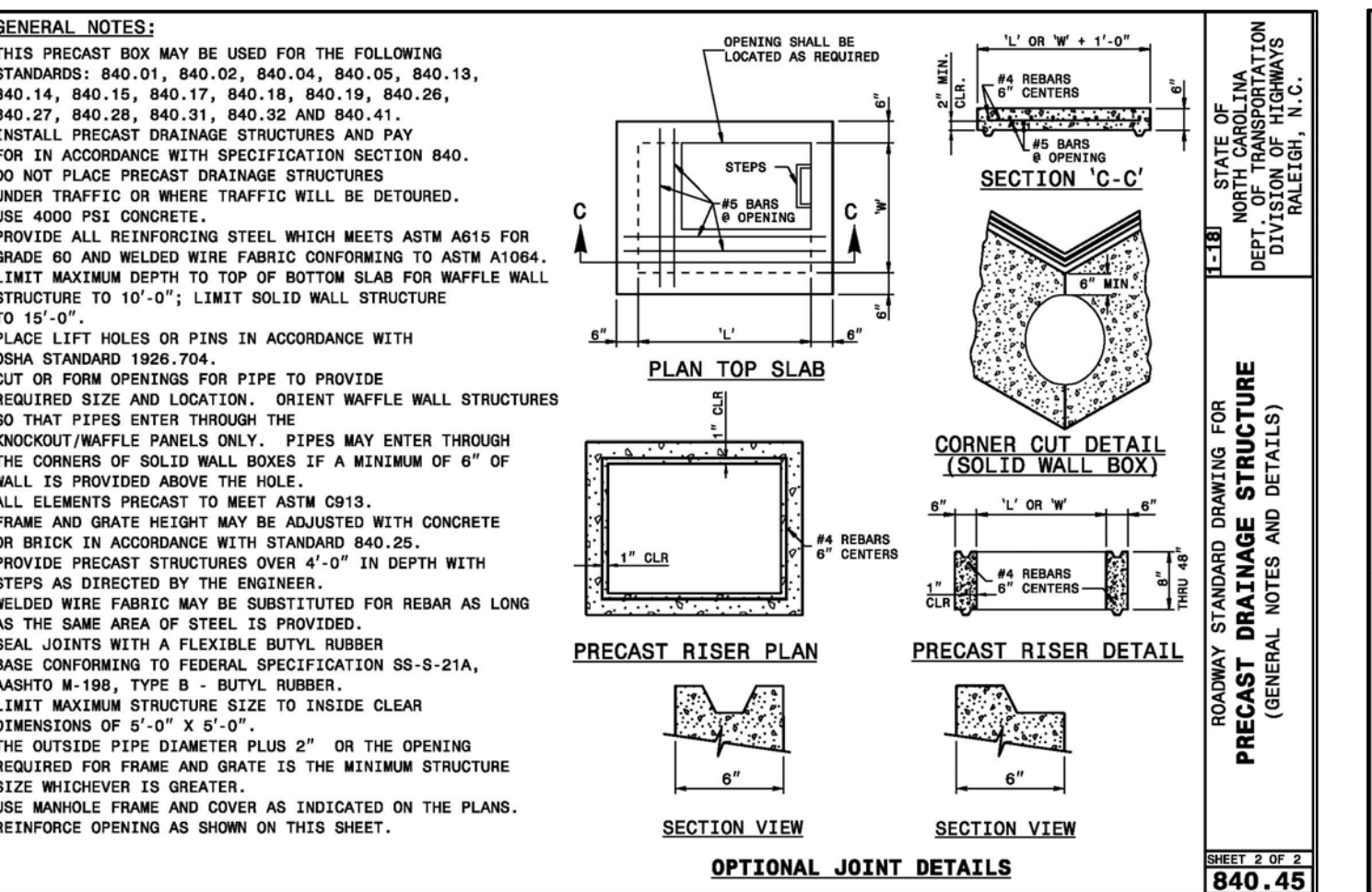
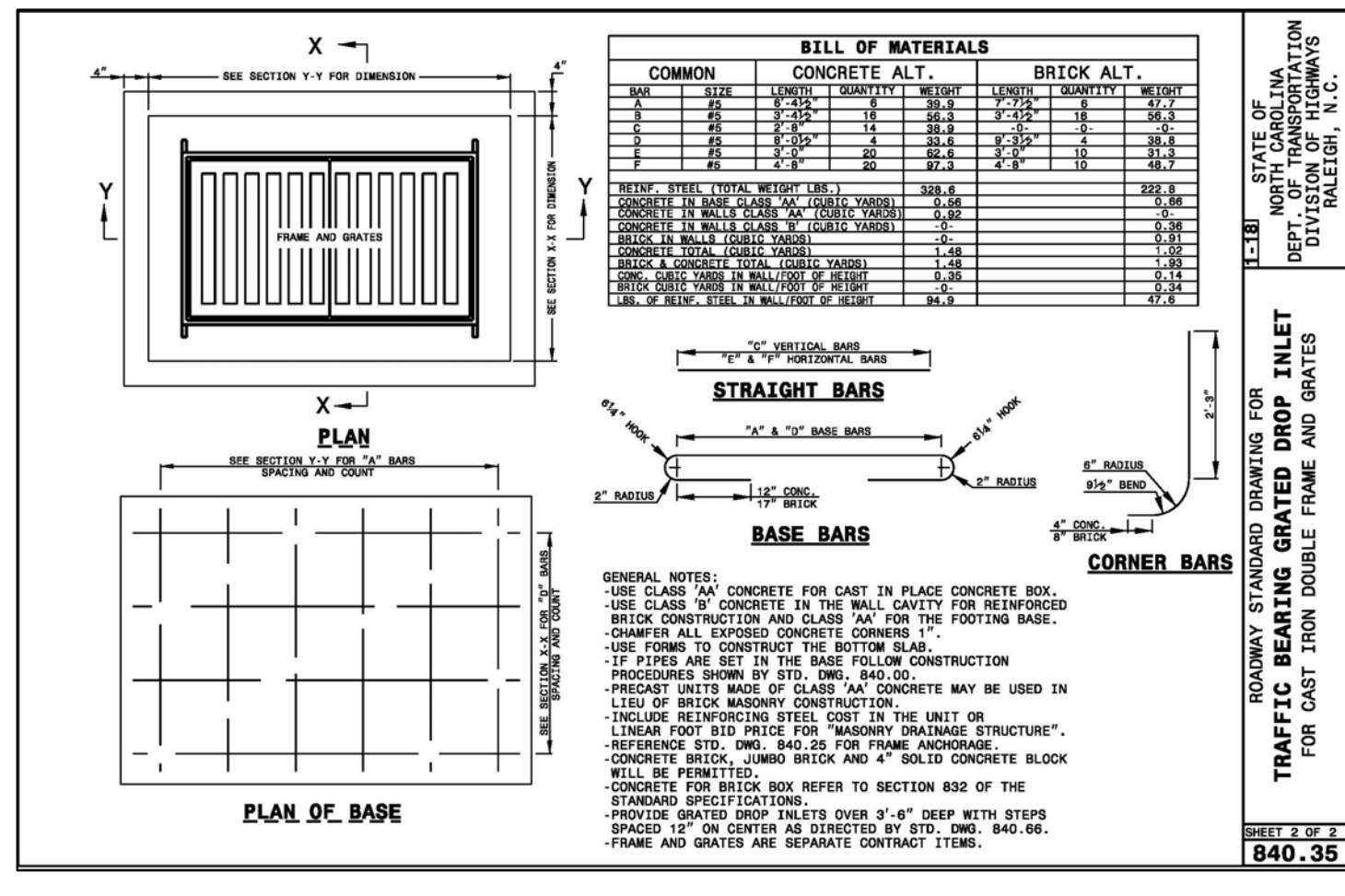
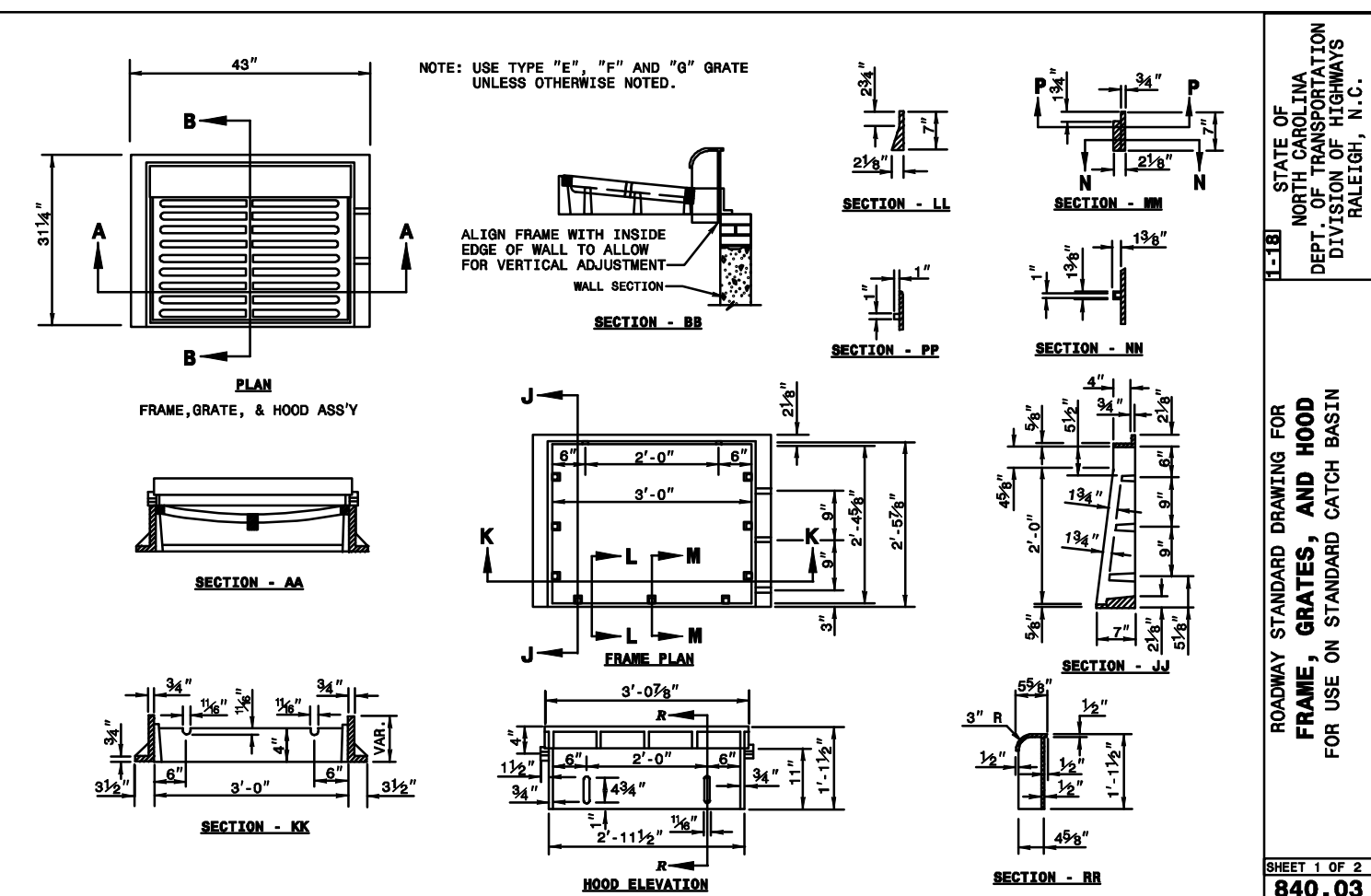
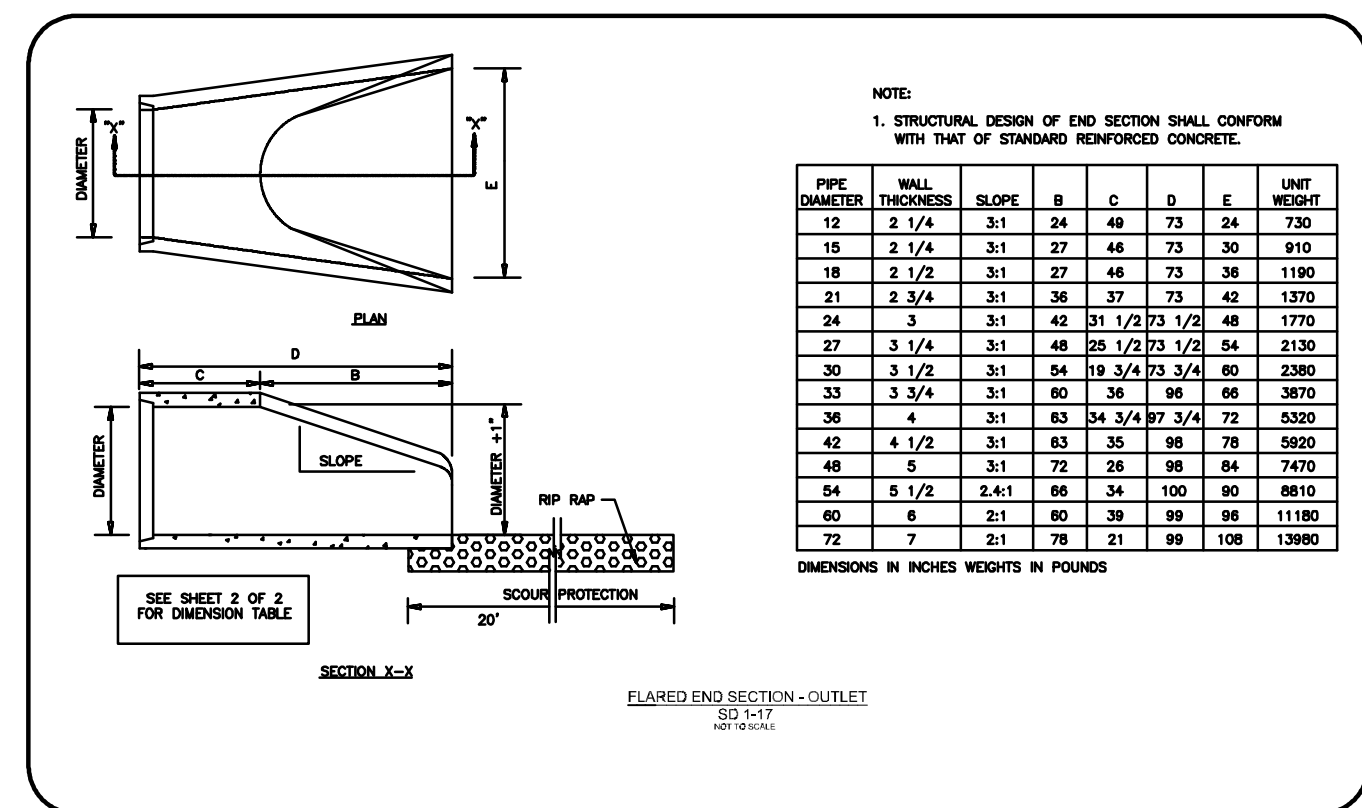
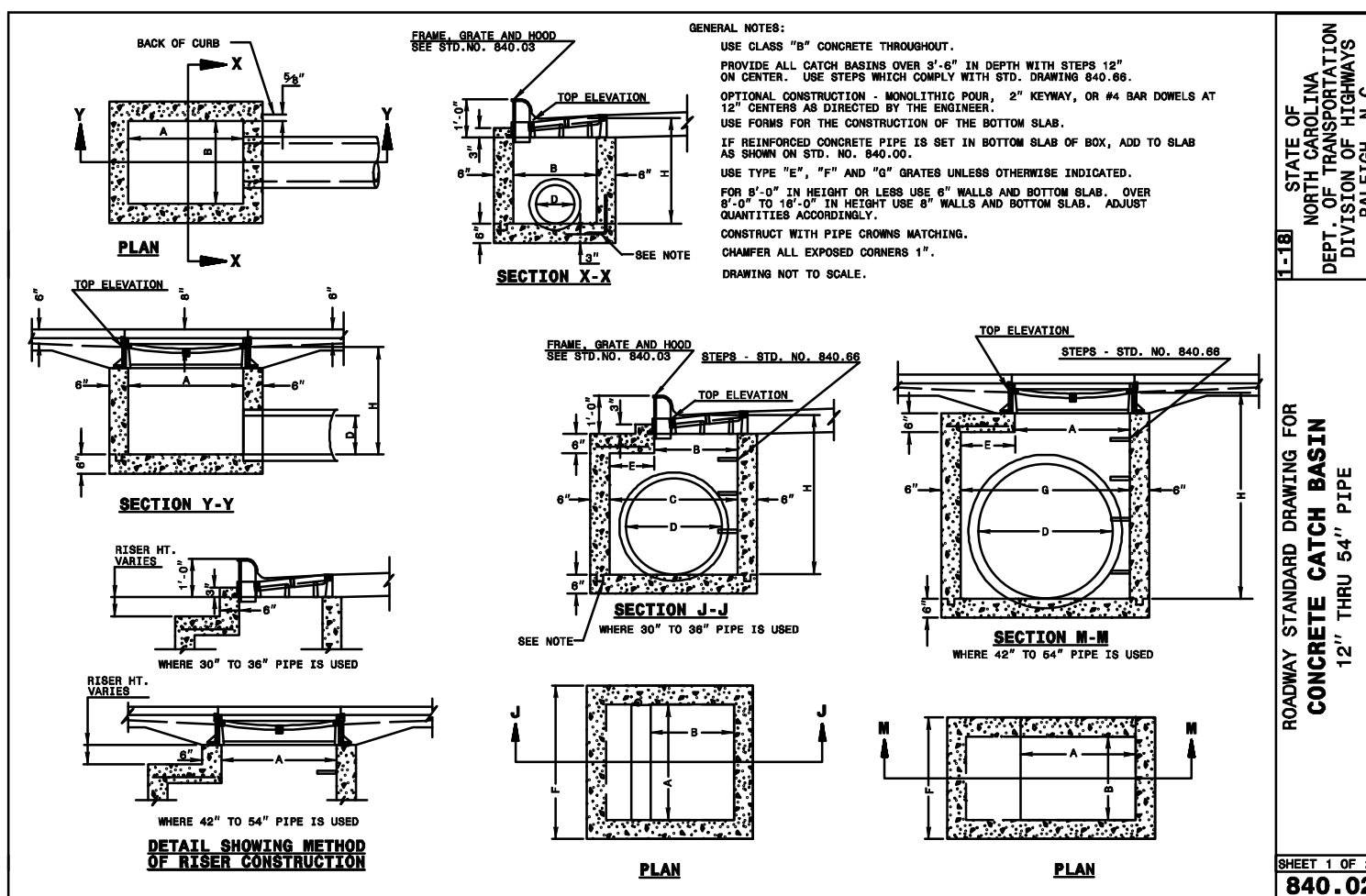
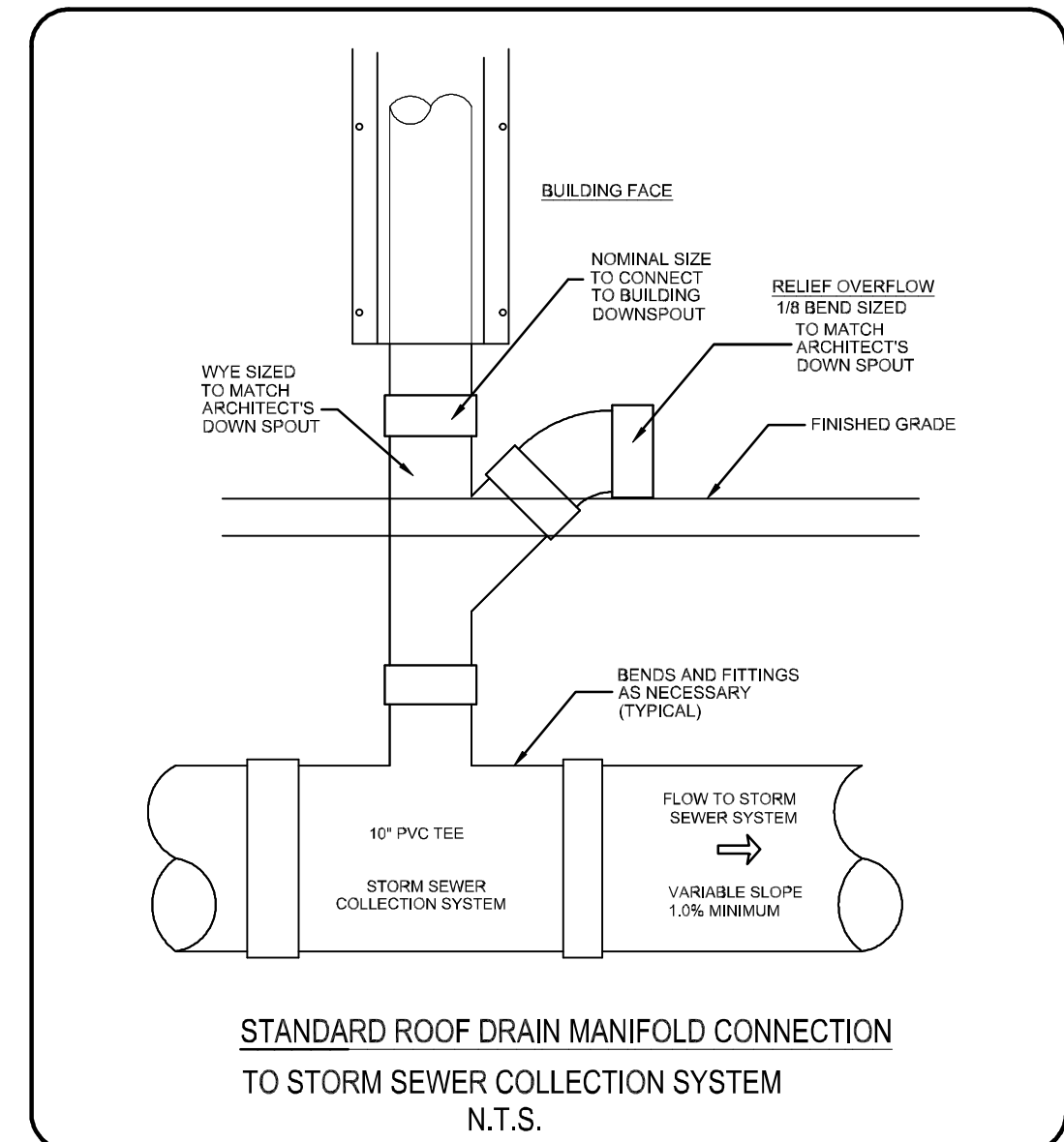
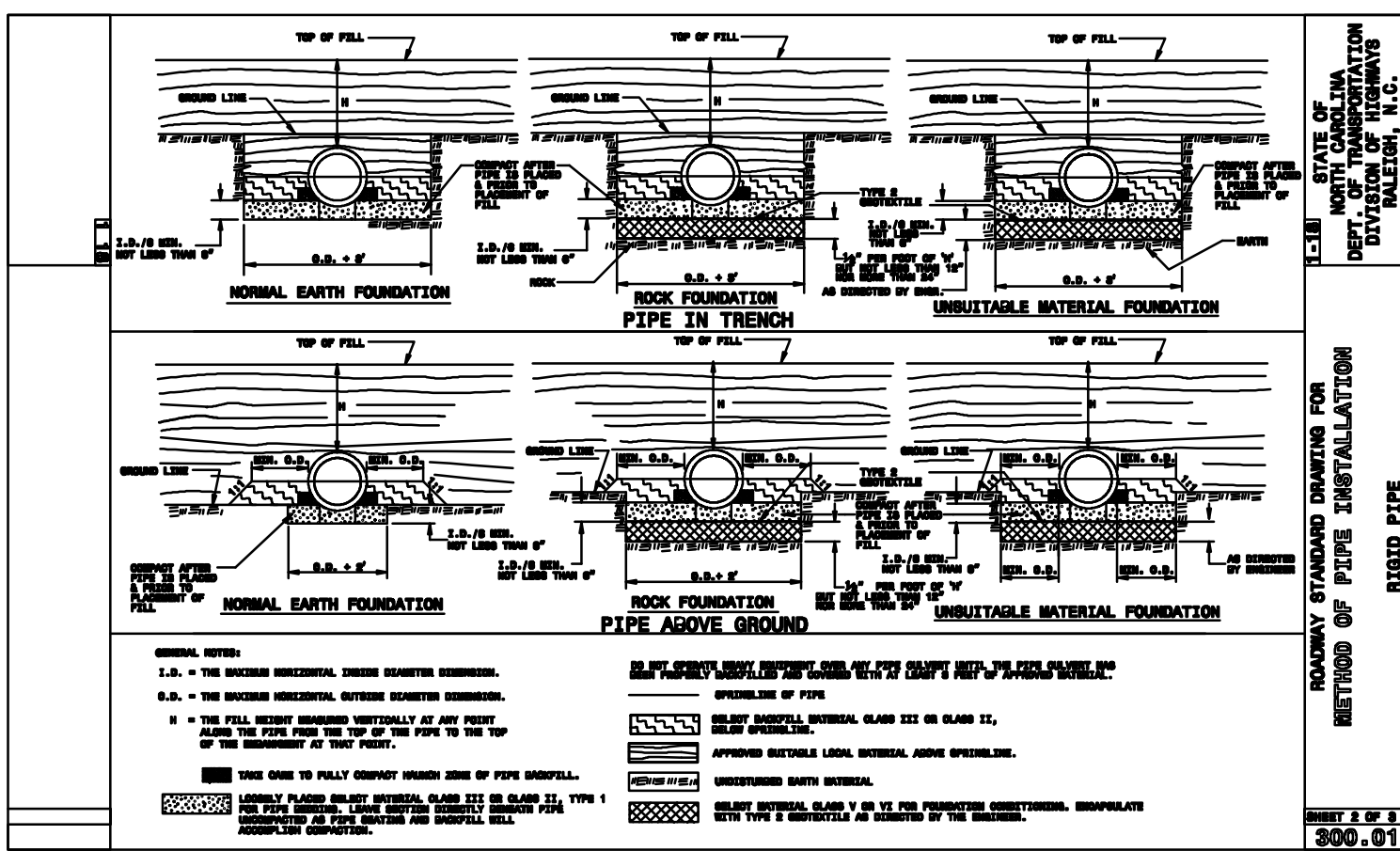
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

NOTES AND DETAILS
Masonboro Station
Parking and Building Expansion
City of Wilmington
NEW HANOVER COUNTY, NORTH CAROLINA

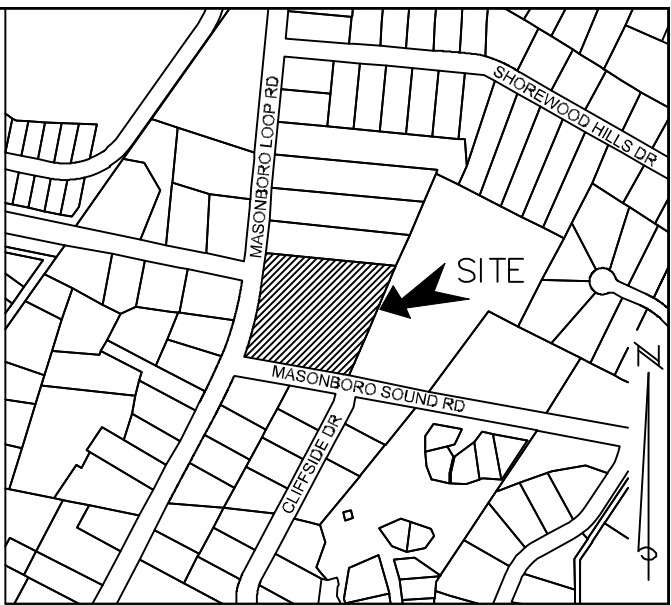
OWNER: ACADIA SERVICES, LLC
222 BEECH STREET
WILMINGTON, N.C. 28405

HANOVER DESIGN SERVICES, P.A.
LAND SURVEYORS, ENGINEERS & LAND PLANNERS
1123 FLORAL PARKWAY
WILMINGTON, N.C. 28403
PHONE: (910) 343-6502
LICENSE # C-0587

DATE: MARCH-2020
SCALE: HORIZ. 1"= 50'
DRAWN BY: MUL
CHECKED BY: AHG
PROJECT NO.: 15040
SHEET NO.: C-3
C-7



PRELIMINARY PLAN



LOCATION MAP
NOT TO SCALE



NOTE: SURVEY OF EXISTING CONDITIONS PERFORMED BY BATEMAN CIVIL SURVEY COMPANY AND PROVIDED BY ACADIA SERVICES, LLC.

Approved Construction Plan	
Name	Date
Planning	
Traffic	
Fire	

CITY OF WILMINGTON NORTH CAROLINA	
Public Services • Engineering Division	
APPROVED STORMWATER MANAGEMENT PLAN	
Date	Permit #
Signed: _____	

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Preliminary Plan

REV. NO.	REVISIONS	DATE

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EXISTING CONDITIONS

Masonboro Station
Parking and Building Expansion

City of Wilmington

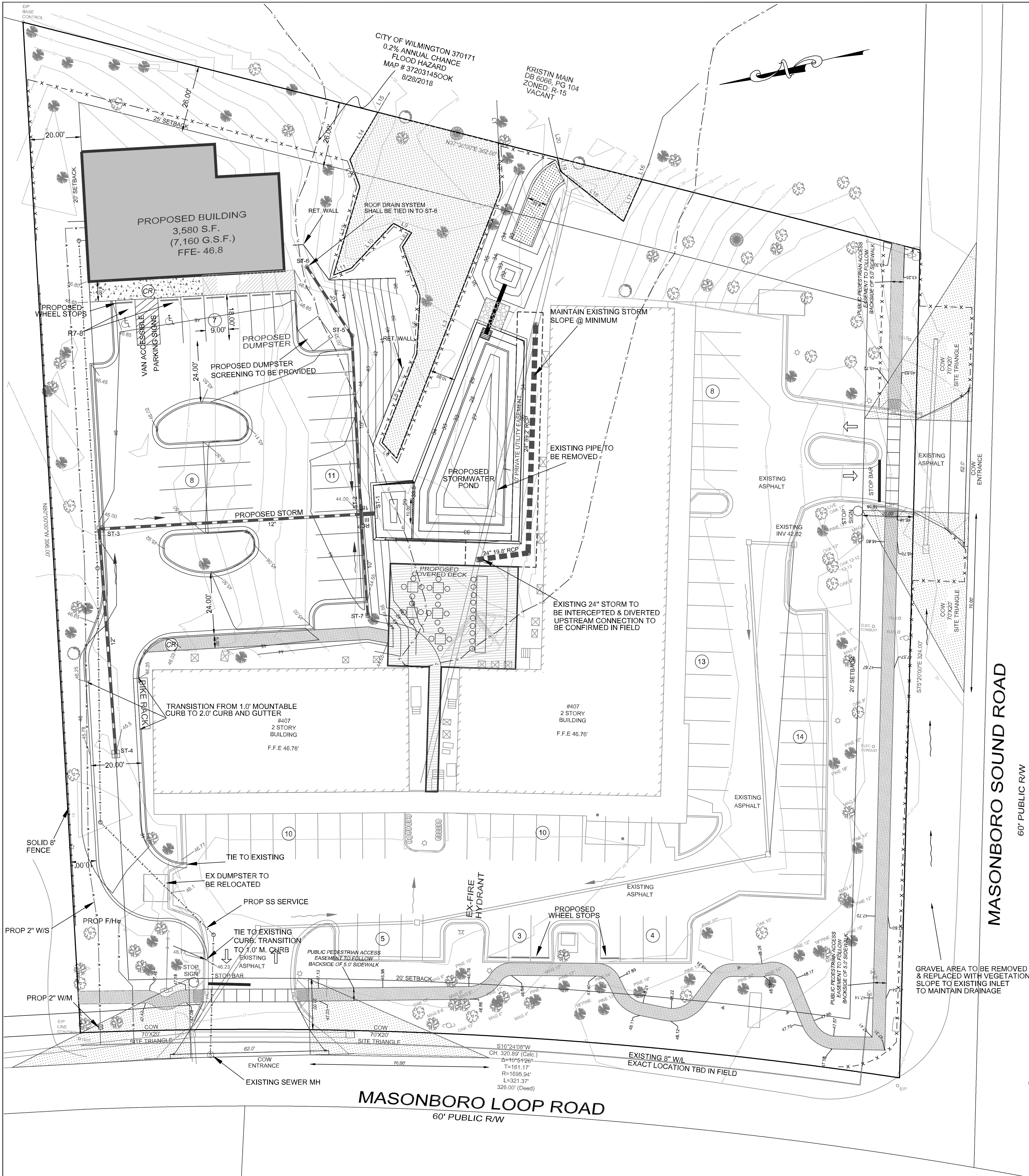
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER: ACADIA SERVICES, LLC
222 BEECH STREET
WILMINGTON, N.C. 28405

HANOVER DESIGN SERVICES, P.A.
LAND SURVEYORS, ENGINEERS & LAND PLANNERS
1123 FLORAL PARKWAY
WILMINGTON, N.C. 28403
PHONE: (910) 343-8002
LICENSE # C-557

Date: MARCH-2020
Scale: HORIZ: 1"= 30'
Drawn: MJL
Checked: AHG
Project No: 15040
Sheet No: C-5
C-7





SITE INVENTORY TABLE:

PROJECT NAME: MASONBORO STATION EXPANSION

STREET ADDRESS: 4039 MASONBORO LOOP RD.
WILMINGTON, NC 28405

TAX PARCEL IDENTIFICATION NUMBERS:
R07200-002-002-000
CB 6084 PG 2184
ADDRESS: 4039 MASONBORO LOOP RD.

ZONING: CB-COMMUNITY BUSINESS

CAMA LAND CLASSIFICATION: URBAN
HISTORICAL AND ARCHAEOLOGICAL SITES: NONE EXIST
WETLANDS: AS SHOWN
LAND COVER PARTIALLY DEVELOPED.

DIMENSIONAL STANDARDS

- MINIMUM LOT AREA: 0.5 ACRE
- MAXIMUM LOT COVERAGE: 30%
- MINIMUM LOT WIDTH: 80'
- MINIMUM FRONT SETBACK: 20'
- MINIMUM REAR SETBACK: 25'
- MINIMUM INTERIOR SIDE SETBACK: 20'
- MINIMUM CORNER LOT SETBACK: 20'
- HEIGHT: 45'

PROPOSED USE: OFFICE, RETAIL, PERSONAL SERVICE

TOTAL ACREAGE = 2.72 ACRES

EXISTING BUILDINGS: BUILDING 1 (4 UNITS): 4,841 GFA
BUILDING 2 (5 UNITS): 11,609 GFA

PROPOSED BUILDINGS: BUILDING 3: 7,160 GFA
OF FLOORS: 2 @ 3,580 GFA

PROPOSED BUILDING HEIGHT < 20'

PROPOSED STRUCTURAL LOT COVERAGE: 18.7 %

PARKING REQUIREMENTS: 1 SPACE/400 SF=18 SPACES
30 SEAT FOR RESTAURANT: 1 SPACE PER 4 SEATS=8 SPACES
28 SPACES REQUIRED 26 SPACES PROVIDED
1 HANDICAPPED PER 25 SPACES 2 SPACES PROVIDED
5 BICYCLE PARKING REQUIRED 5 SPOTS PROPOSED

SOILS DATA:

- USCS: SM
- SHWT IS BETWEEN 4" AND 16"

DISTURBED AREA: 1.4 ACRES


SEWER DEMAND

- AVERAGE DAILY DEMAND 1050 GPD

IMPERVIOUS SURFACE AREAS	
EXISTING	AREA (SF)
TOTAL LOT AREA	
118690	
BUILDING 1	4841
BUILDING 2	10769
PARKING AND DRIVES	24139
SIDEWALK	3481
DUMPSTER PADS	275
TOTAL EXISTING	
43505	
EXISTING % IMPERVIOUS	
37%	
PROPOSED	
BUILDING	3580
PARKING AND DRIVES	14686
SIDEWALKS	1218
COVERED DECK	2230
FUTURE	3050
TOTAL PROPOSED	
24764	
EXISTING & PROPOSED TOTAL	
68269	

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	Date
Planning	
Traffic	
Fire	

 Public Services • Engineering Division	
APPROVED STORMWATER MANAGEMENT PLAN	
Date:	Permit #
Signed:	

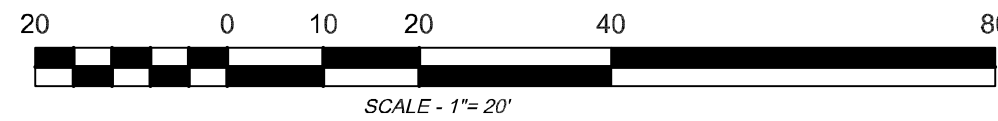
SITE PLAN Masonboro Station Parking and Building Expansion City of Wilmington	
NEW HANOVER COUNTY, NORTH CAROLINA	
OWNER: ACADIA SERVICES, LLC 222 BEECH STREET WILMINGTON, N.C. 28405	
PRELIMINARY PLAN	
HANOVER DESIGN SERVICES, P.A. LAND SURVEYORS, ENGINEERS & LAND PLANNERS 1123 FLORAL PARKWAY WILMINGTON, N.C. 28403 PHONE: (910) 345-8802 LICENSE # C-5097	
Date: MARCH-2020	Scale: HORZ. 1"= 20'
Drawn: MJL	Checked: AHG
Project No: 15040	Sheet No: C-6 C-7



LOCATION MAP
NOT TO SCALE

STORM NETWORK SUMMARY							
Upstream Node	Downstream Node	Diameter (in)	Pipe Length (ft)	Pipe Material	Slope (%)	Upstream Pipe Invert (ft)	Downstream Pipe Invert (ft)
ST-2	ST-1	18.00	5.49	RCP III	1.83	33.10	33.00
ST-7	ST-2	10.00	39.62	PVC	2.00	40.29	39.50
ST-5	ST-2	10.00	69.89	PVC	2.00	41.40	40.00
ST-6	ST-5	10.00	32.22	PVC	3.00	42.37	41.40
ST-3	ST-2	12.00	102.50	RCP III	2.00	38.95	36.90
ST-4	ST-3	12.00	88.24	PVC	1.98	40.70	38.95

STORM NETWORK SUMMARY	
Structure Name	Inlet ID
ST-2	COMBO (CURB INLET)
ST-7	YARD INLET
ST-5	ROOF DRAIN C/O
ST-6	ROOF DRAIN C/O
ST-3	COMBO (CURB INLET)
ST-4	Grate-Sag



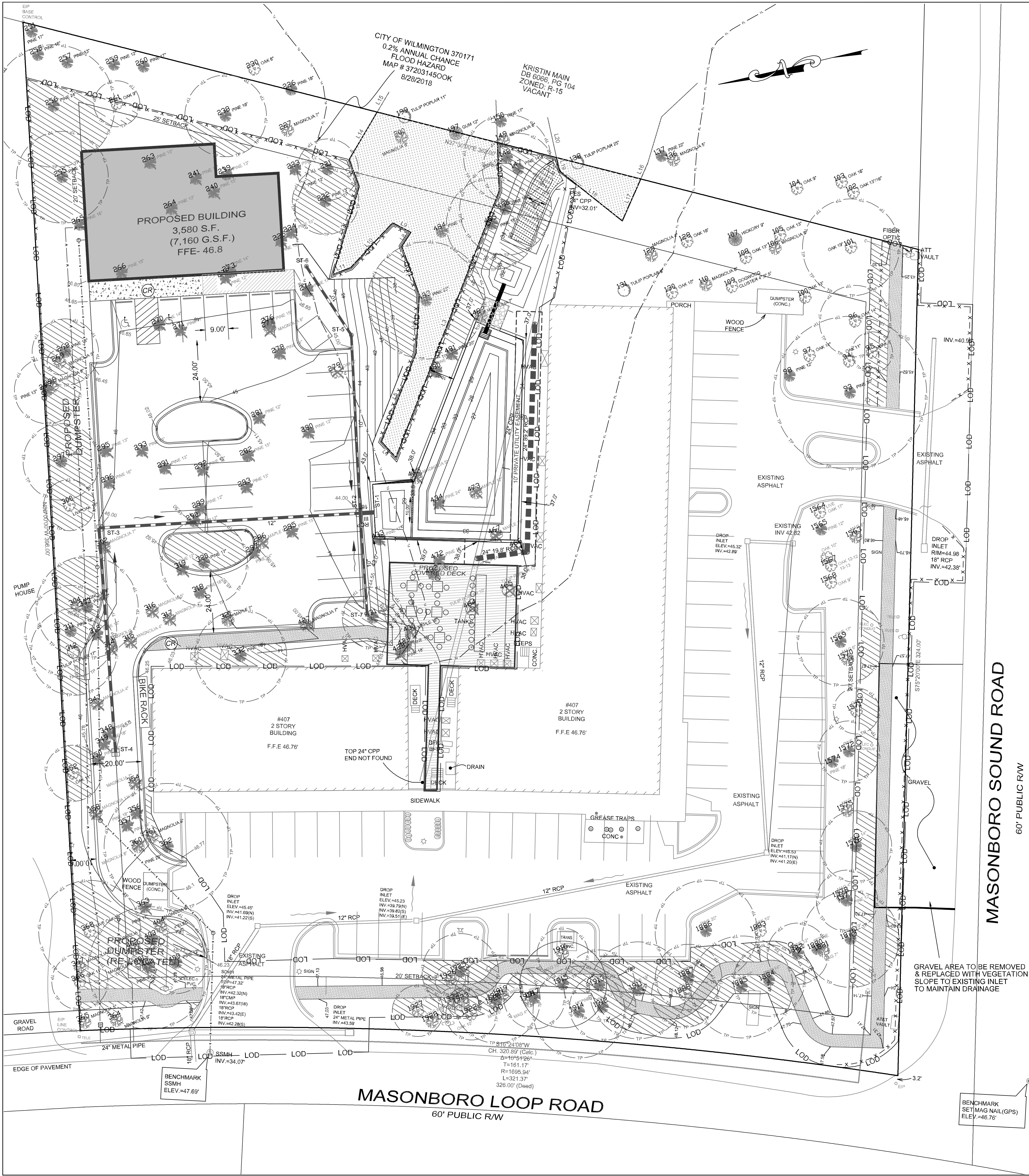
- ADDITIONAL ADA NOTES:**
1. REFER TO 2018 NCDOT ROADWAY STANDARD DRAWINGS NUMBER 848.05 - 848.06 FOR RAMP DESIGN AND DETAILS.
 2. ALL RAMPS RAMPS, HANDICAP PARKING, AND ACCESSIBLE ROUTES SHALL COMPLY WITH THE LATEST ADA GUIDELINES
 3. RUNNING SLOPES ALONG AN ACCESSIBLE ROUTE EXCEEDING 1/4" SHALL BE CONSIDERED A RAMP
 4. 8.33% (12:1) MAX RAMP SLOPE
 5. MAXIMUM CROSS SLOPE ALLOWED ALONG ACCESSIBLE ROUTES: 2.00%
 6. ALL CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.
 7. CONTRACTOR TO ENSURE SLOPES IN HANDICAP PARKING STALLS AND ACCESS ISLES DO NOT TO EXCEED 2% IN ANY DIRECTION.

- ADDITIONAL STORM WATER NOTES:**
1. ALL STORM WATER RUNOFF FROM BUILT UP AREAS (I.E. IMPERVIOUS SURFACES AND ROOF DRAINAGE) TO BE DIRECTED TO THE STORM SEWER COLLECTION SYSTEM (I.E. STORM INLETS OR PONDS) BY SWALES, OVERLAND FLOW, ADDITIONAL GRADING OR LANDSCAPE INLETS.
 2. CONTRACTOR TO ENSURE THAT STREET PAVEMENT AND CURBING IS PLACED TO DRAIN POSITIVELY TO CURB INLETS AND DRAINAGE STRUCTURES.
 3. FOR STORM PIPE MATERIAL AND INSTALLATION SEE DETAILS AND NCDOT STANDARD DRAWINGS 300.1 SHEETS 1-3
 4. ROOF DRAINS SHALL BE SIZED ACCORDING TO THE 2018 INTERNATIONAL PLUMBING CODE AND ALL SHALL CONFORM TO ANY LOCAL REQUIREMENTS
 5. ANY ROOF DRAIN LOCATIONS SHOWN HERE ARE APPROXIMATE AND MAY BE FIELD ADJUSTED AS LONG AS THE MINIMUM REQUIRED SLOPE IS MAINTAINED.

Preliminary Plan

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TREE INVENTORY					
POINT NO.	DESCRIPTION	POINT NO.	DESCRIPTION	POINT NO.	DESCRIPTION
93	30PINE	223	14PINE	296	16PINE
94	11OAK	224	15PINE	297	15PINE
95	8OAK	225	13PINE	298	8MAG
96	14OAK	227	7MAG	299	13PINE
97	14OAK	228	15PINE	300	10LIVE OAK
98	12PINE	229	10OAK	302	7MAG
100	13OAK	235	14MAPLE	303	20PINE
101	19OAK	238	16PINE	304	8MAG
239	13PINE	311	18PINE	472	16PINE
240	15PINE	312	17TULIP POPLAR	473	10MAPLE
241	13PINE	313	15PINE	480	18PINE
105	13OAK	251	17PINE W/CHOPS	314	4MAG
106	5MAG	255	18PINE	315	4MAG
107	9HICKORY	256	24PINE	316	5MAG
108	13OAK	257	13PINE	317	7MAG
109	4VSDOOG	258	16PINE	318	16PINE
110	6MAG	259	12PINE	319	12PINE
128	16OAK	260	17PINE	320	17PINE
129	4MAG	261	9OAK	321	7MAPLE
130	10OAK	263	13PINE	332	18PINE
131	9TULIP POPLAR	264	13PINE	347	4MAG
132	10OAK	265	16PINE	348	17PINE
133	11OAK	266	15PINE	349	18PINE
134	11OAK	268	13PINE	350	16PINE
135	5MAG	269	5MAG	352	11OAK
138	25TULIP POPLAR	270	14PINE	354	7MAG
147	14PINE	271	17PINE	356	18PINE
148	17PINE	272	12PINE	357	14PINE
151	19PINE	273	14PINE	358	11L2MAG
167	28TULIP POPLAR	274	17PINE	360	8MAG
168	7MAG	276	15PINE	361	9MAG
169	10MAG	277	6MAG	362	25PINE
170	12OAK	278	14PINE	363	17PINE
172	10MAPLE	279	9OAK	364	6MAG
173	11GUM	280	12PINE	365	5MAG
174	13MAPLE	281	12PINE	366	11OAK
187	8TULIP POPLAR	282	15PINE	367	5MAG
190	18TULIP POPLAR	283	13PINE	368	20LIVE OAK
191	5MAG	285	15PINE	400	24PINE
192	26TULIP POPLAR	286	9MAPLE	401	9MAG
197	12GUM	287	14PINE	402	7MAG
200	6MAG	289	12PINE	403	17PINE
221	12PINE	290	12PINE	404	9MAG
222	13PINE	291	13PINE	409	12PINE
		292	12PINE	427	7MAG
		293	13PINE	428	18PINE
		295	13PINE	429	16PINE
				430	13MAPLE
				431	12PINE

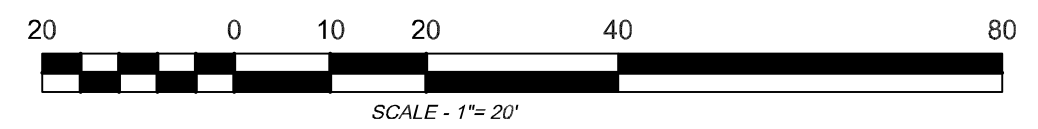
TOTAL REGULATED TREES: 186
TOTAL SIGNIFICANT TREES: 1
TREES TO BE REMOVED: 71
SIGNIFICANT TREES TO BE REMOVED: 1
TREES TO BE RETAINED: 115

NOTES:
1. THIS TRACT IS LOCATED IN ZONE 'X1' ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NUMBER 3720314500, DATED 4/3/06.
2. TOTAL SITE AREA = 2.72 AC.±

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WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____



Preliminary Plan

REV. NO.	REVISIONS	DATE

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TREE REMOVAL PLAN
**Masonboro Station
Parking and Building Expansion**
City of Wilmington

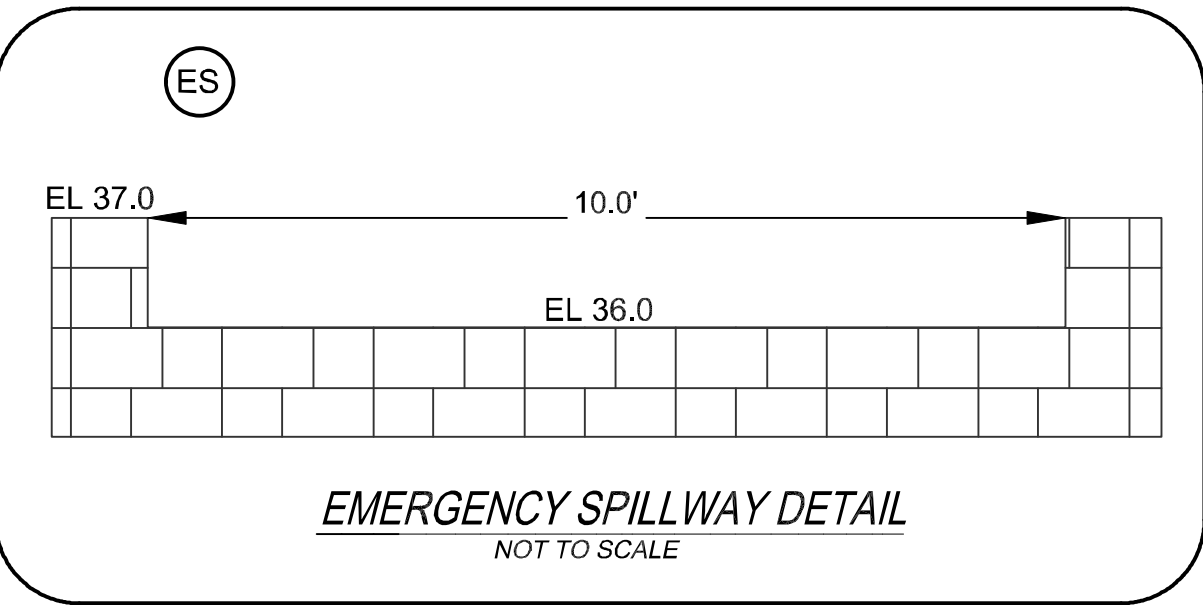
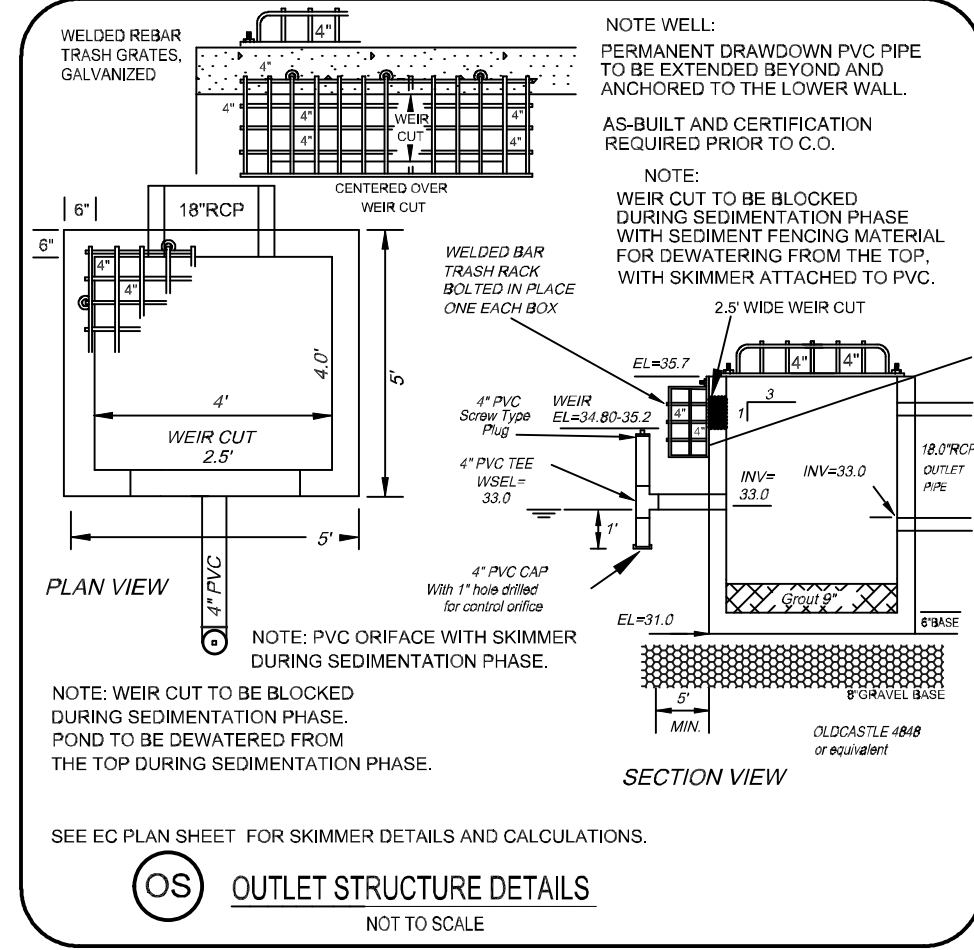
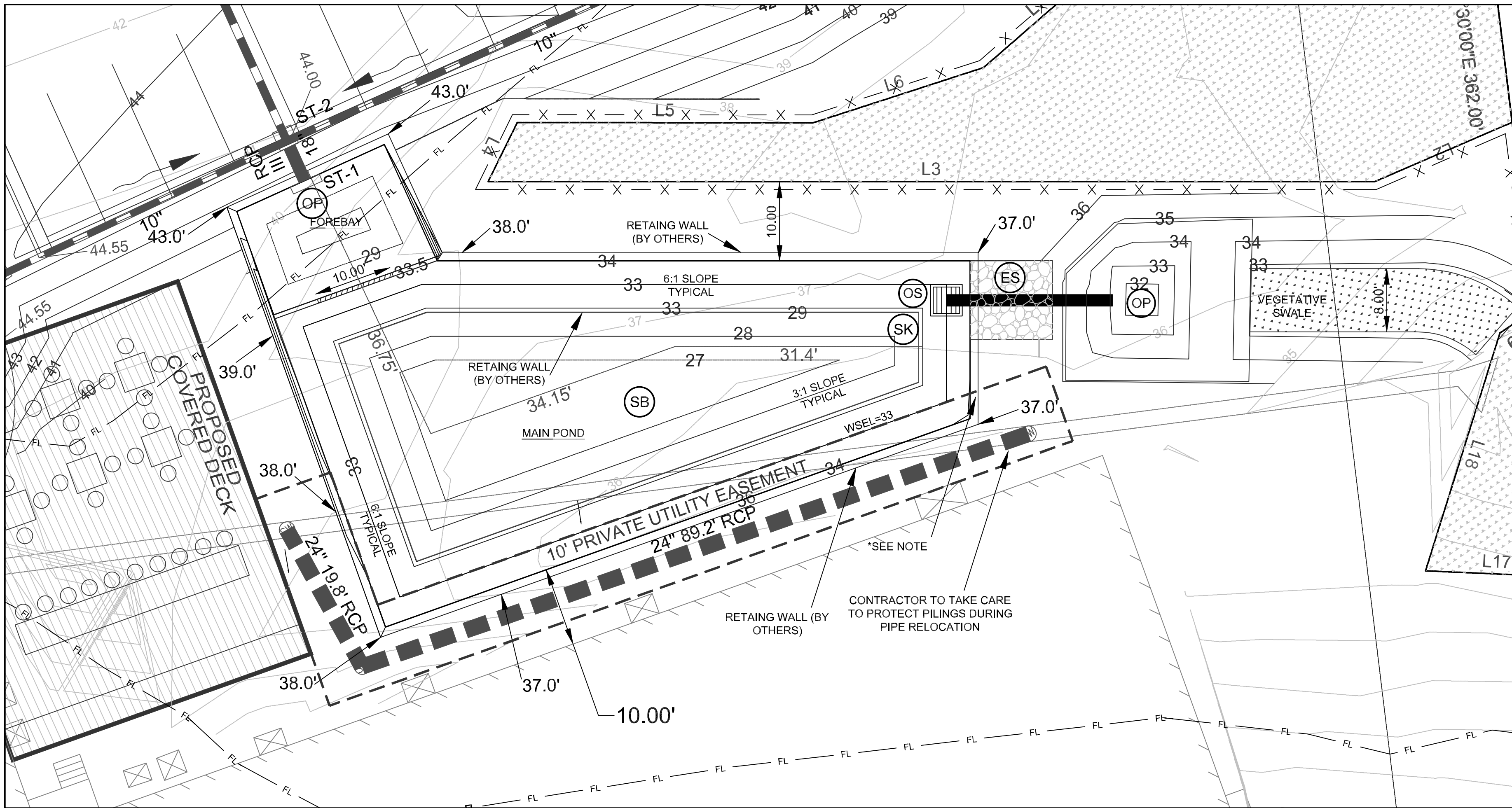
OWNER: ACADIA SERVICES, LLC
222 BEECH STREET
WILMINGTON, N.C. 28405

HANOVER DESIGN SERVICES, P.A.
LAND SURVEYORS, ENGINEERS & LAND PLANNERS
1123 FLORAL PARKWAY
WILMINGTON, N.C. 28403
PHONE: (910) 345-8802
LICENSE # C-2097

Date: MARCH-2020
Scale: HORIZ.: 1"= 20'
Drawn: MJL
Checked: AHG
Project No: 15040
Sheet No: C-7
C-7



LOCATION MAP
NOT TO SCALE

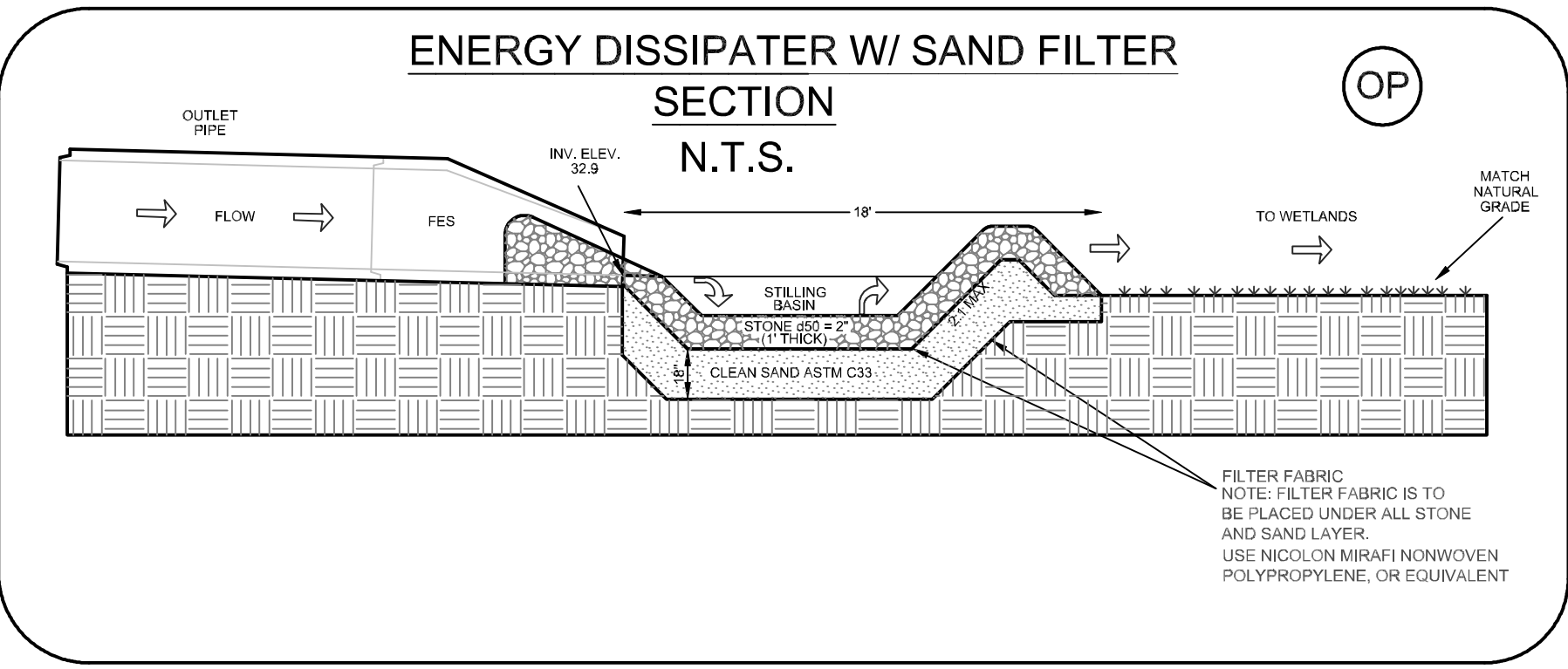
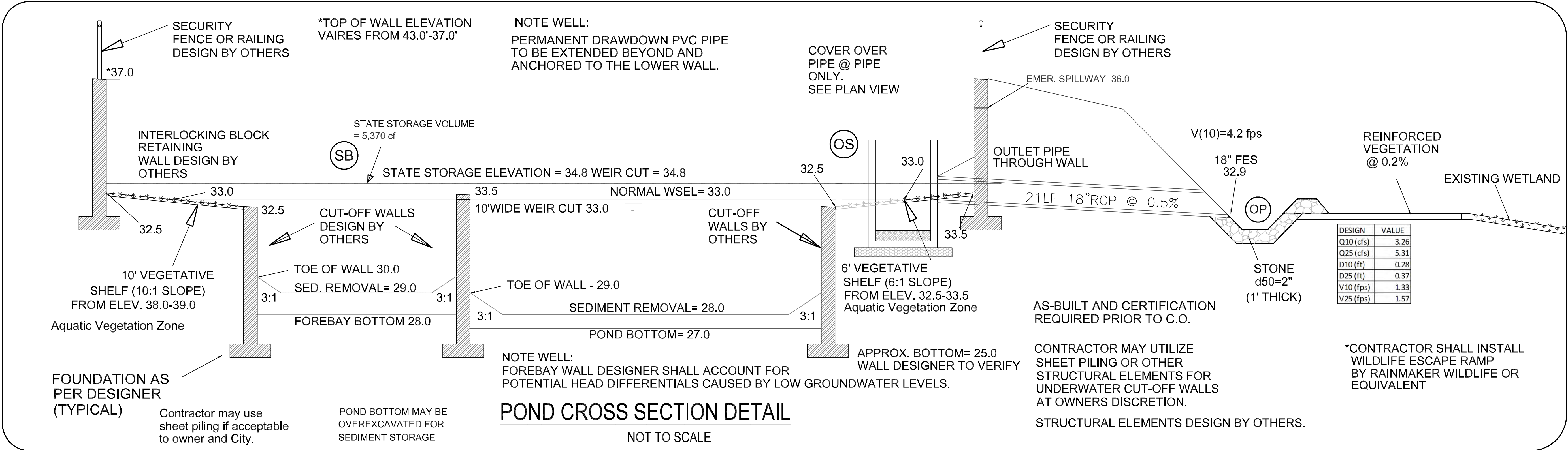


AREA REQUIREMENTS		
TYPE	AREA (SF)	AREA (AC)
PARKING/ROADS	14,686	0.337
BUILDINGS	3,580	0.082
SIDEWALK	1,218	0.028
OTHER	2,230	0.051
FUTURE	3,050	0.070
TOTAL IMPERVIOUS (NOW AND FUTURE):	24,764	0.569
DRAINAGE AREA	37,435	0.859
GREEN AREA	12,671	
PERCENT BUA	66.2%	
SA/DA FROM TABLE @ 3.0'	5.22%	
SA REQUIRED FOR TSS REMOVAL	1,954	0.045
MAIN POOL SURFACE AREA PROVIDED	2,113	0.049

VOLUME REQUIRED:		
V=3630*(R(D)*R(V)*A		
R(V)	0.645367971	
R(D)	1.5	IN
A	0.859389	AC
VOLUME REQUIRED SIMPLE METHOD:	3,020	CF
RUNOFF 1 YEAR 24HR STORM PRE-DEVELOPED	4,487	CF
RUNOFF 1 YEAR 24HR STORM POST DEVELOPED	9,016	CF
1-YEAR DIFFERENCE	4,529	CF
VOLUME PROVIDED AT EL 34.8:	5,370	CF

WSEL SUMMARY			
	FOREBAY	MAIN	TOTAL
VOLUME	1,143	7068	8211
AREA	310	2,113	2423
AVERAGE DEPTH OF MAIN POND V/A (FT):			3.35
FOREBAY PERCENT VOLUME			16.2%

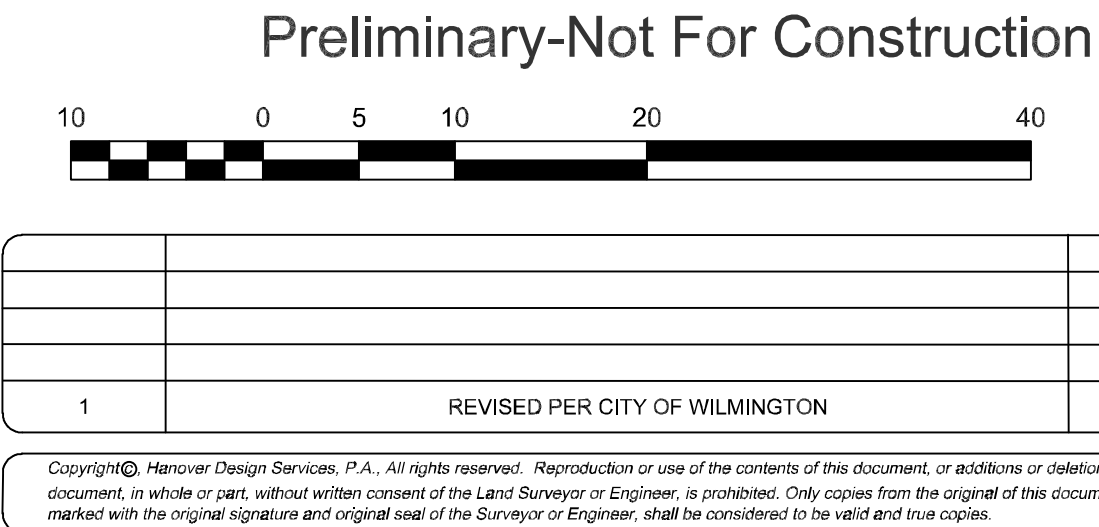
DRAWDOWN	
TEMPORARY POOL ELEVATION (FT)	34.8
PERMANENT POOL EL.	33
ORIFICE DIAMETER (IN)	0.8
COEFFICIENT	0.6
AREA OF ORIFICE	0.003490659 SQ. FT
GRAVITY	32.2 FT/SEC2
HEAD	0.6 FT
DISCHARGE	0.013018986 CFS
TIME	4.77 DAYS



POND STORAGE ABOVE WSEL				
Elev(Ft)	Storage(CF)	Storage(Acre-Ft)	Area(SF)	Area(Acre)
33.000	0.0	0.000	2422.000	0.056
33.500	1374.0	0.032	3074.000	0.071
34.800	5370.2	0.123	3074.000	0.071
37.000	12133.0	0.279	3074.000	0.071

POND STORAGE BELOW WSEL				
Elev(Ft)	Storage(CF)	Storage(Acre-Ft)	Area(SF)	Area(Acre)
28.000	0.0	0.000	925.226	0.021
29.000	1170.8	0.027	1428.076	0.033
32.500	6184.8	0.142	1437.048	0.033
33.000	7068.4	0.162	2113.282	0.049

NOTE WELL:
1) CONTRACTOR TO ENSURE THAT STREET PAVEMENT & CURBING IS PLACED SO AS TO DRAIN POSITIVELY TO CURB INLETS AND DRAINAGE STRUCTURES.
A PORTABLE PUMP TO BE USED TO DRAIN POND IN AN EMERGENCY.



Water Quality Pond Plans

Masonboro Station
Parking and Building Expansion

CITY OF WILMINGTON

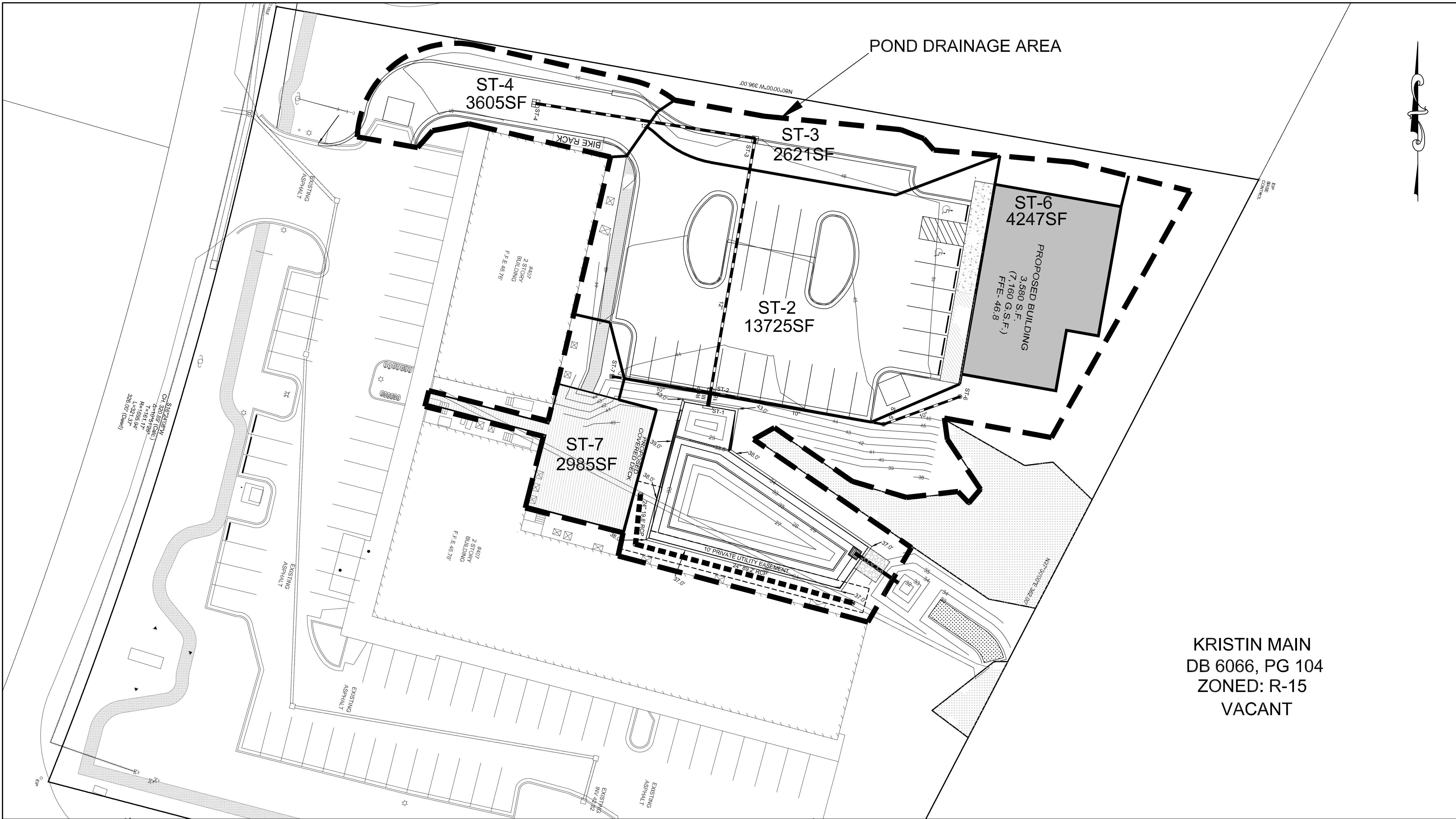
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PHONE: (910) 343-8952
LICENSE # C-0597

Date: 8-25-17
Scale: 1"=10'
Drawn: AHG
Checked: AHG
Project No: 145207
Sheet No: P1
P1

POND DRAINAGE AREA



KRISTIN MAIN
DB 6066, PG 104
ZONED: R-15
VACANT



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**Masonboro Station
Parking and Building Expansion**

LOCATED IN CITY OF WILMINGTON

NEW HANOVER COUNTY, NORTH CAROLINA

OWNER: ACADIA SERVICES, LLC
222 BEECH STREET
WILMINGTON, N.C. 28405

HANOVER DESIGN SERVICES, P.A.
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PHONE: (910) 343-8002
LICENSE # C-0597

PRELIMINARY PLAN

agrady @ hdsilm.com

-13-20

9:

AHG

AHG

1499

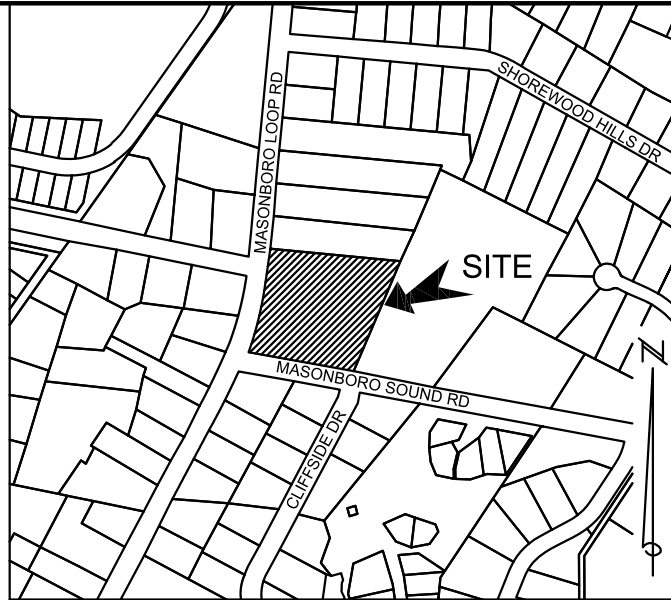
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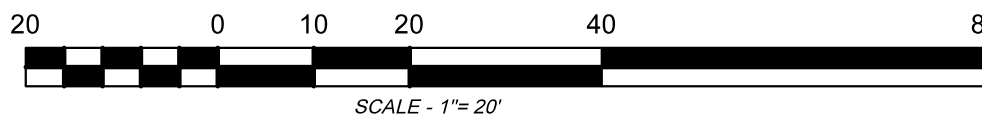
TREE INVENTORY									
POINT NO.	DESCRIPTION	POINT NO.	DESCRIPTION	POINT NO.	DESCRIPTION	POINT NO.	DESCRIPTION	POINT NO.	DESCRIPTION
93	30PINE	223	14PINE	296	16PINE	432	14PINE	1917	12PINE
94	11OAK	224	15PINE	297	15PINE	433	17PINE	1918	5MAG
95	8OAK	225	13PINE	298	8MAG	434	24PINE	1919	6MAG
96	14OAK	227	7MAG	299	13PINE	435	5MAG	1920	5MAG
97	14OAK	228	15PINE	300	10LIVE OAK	464	10TULIP POPLAR	1921	17PINE
98	12PINE	229	10OAK	302	7MAG	465	12TULIP POPLAR	1922	10OAK
100	13OAK	235	14MAPLE	303	20PINE	466	10TULIP POPLAR	1923	6MAG
101	19OAK	238	16PINE	304	8MAG	467	15MAPLE	1924	6MAG
239	13PINE	311	18PINE	472	16PINE	481	20PINE	1925	15PINE
240	15PINE	312	17TULIP POPLAR	473	10MAPLE	482	7MAG	1926	6MAG
241	13PINE	313	15PINE	480	18PINE	483	23PINE	1927	10OAK
105	13OAK	251	17PINE W/CHOPS	314	4MAG	484	17PINE	1928	6MAG
106	5MAG	255	18PINE	315	4MAG	485	18PINE		
107	9HICKORY	256	24PINE	316	5MAG	486	18PINE		
108	13OAK	257	13PINE	317	7MAG	1563	6MAG		
109	4V5/5DOG	258	16PINE	318	16PINE	1564	17LIVE OAK		
110	6MAG	259	12PINE	319	12PINE	1565	12PINE		
128	16OAK	260	17PINE	320	17PINE	1566	10OAK		
129	4MAG	261	9OAK	321	7MAPLE	1567	9OAK		
130	10OAK	263	13PINE	332	18PINE	1568	12L12L13L13OAK		
131	9TULIP POPLAR	264	13PINE	347	4MAG	1569	17PINE		
132	10OAK	265	16PINE	348	17PINE	1570	6MAG		
133	11OAK	266	15PINE	349	18PINE	1571	9OAK		
134	11OAK	268	13PINE	350	16PINE	1572	12PINE		
135	5MAG	269	5MAG	352	11OAK	1573	LP		
138	25TULIP POPLAR	270	14PINE	354	7MAG	1574	18PINE		
147	14PINE	271	17PINE	356	18PINE	1575	6MAG		
148	17PINE	272	12PINE	357	14PINE	1576	14PINE		
151	19PINE	273	14PINE	358	11L12MAG	1577	12PINE		
167	28TULIP POPLAR	274	17PINE	360	8MAG	1578	4MAG		
168	7MAG	276	15PINE	361	9MAG	1879	19PINE		
169	10MAG	277	6MAG	362	25PINE	1880	18PINE		
170	12OAK	278	14PINE	363	17PINE	1881	7MAG		
172	10MAPLE	279	9OAK	364	6MAG	1882	12PINE		
173	11GUM	280	12PINE	365	5MAG	1883	10OAK		
174	13MAPLE	281	12PINE	366	11OAK	1884	14PINE		
187	8TULIP POPLAR	282	15PINE	367	5MAG	1885	20PINE		
190	18TULIP POPLAR	283	13PINE	368	20LIVE OAK	1886	20PINE		
191	5MAG	285	15PINE	400	24PINE	1887	13PINE		
192	26TULIP POPLAR	286	9MAPLE	401	9MAG	1888	13OAK		
197	12GUM	287	14PINE	402	7MAG	1911	19PINE		
200	6MAG	289	12PINE	403	17PINE	1912	13PINE		
221	12PINE	290	12PINE	404	9MAG	1913	14PINE		
222	13PINE	291	13PINE	409	12PINE	1914	18PINE		
		292	12PINE	427	7MAG	1915	17PINE		
		293	13PINE	428	18PINE	1916	10MAG		
		295	13PINE	429	16PINE				
				430	12MAPLE				
				431	12PINE				

TOTAL REGULATED TREES: 186
TOTAL SIGNIFICANT TREES: 2
TREES TO BE REMOVED: 71
SIGNIFICANT TREES TO BE REMOVED: 2



LOCATION MAP
NOT TO SCALE

NOTES:
1. THIS TRACT IS LOCATED IN ZONE "X" ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP. COMMUNITY-PANEL NUMBER 3720314500 K DATED 8/28/2018.
2. TOTAL SITE AREA = 2.72 AC.±



TREE PROTECTION
DURING CONSTRUCTION

Preliminary Plan

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

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____
PERMIT # _____
SIGNED _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____

LANDSCAPING PLAN
Masonboro Station
Parking and Building Expansion
City of Wilmington NEW HANOVER COUNTY, NORTH CAROLINA

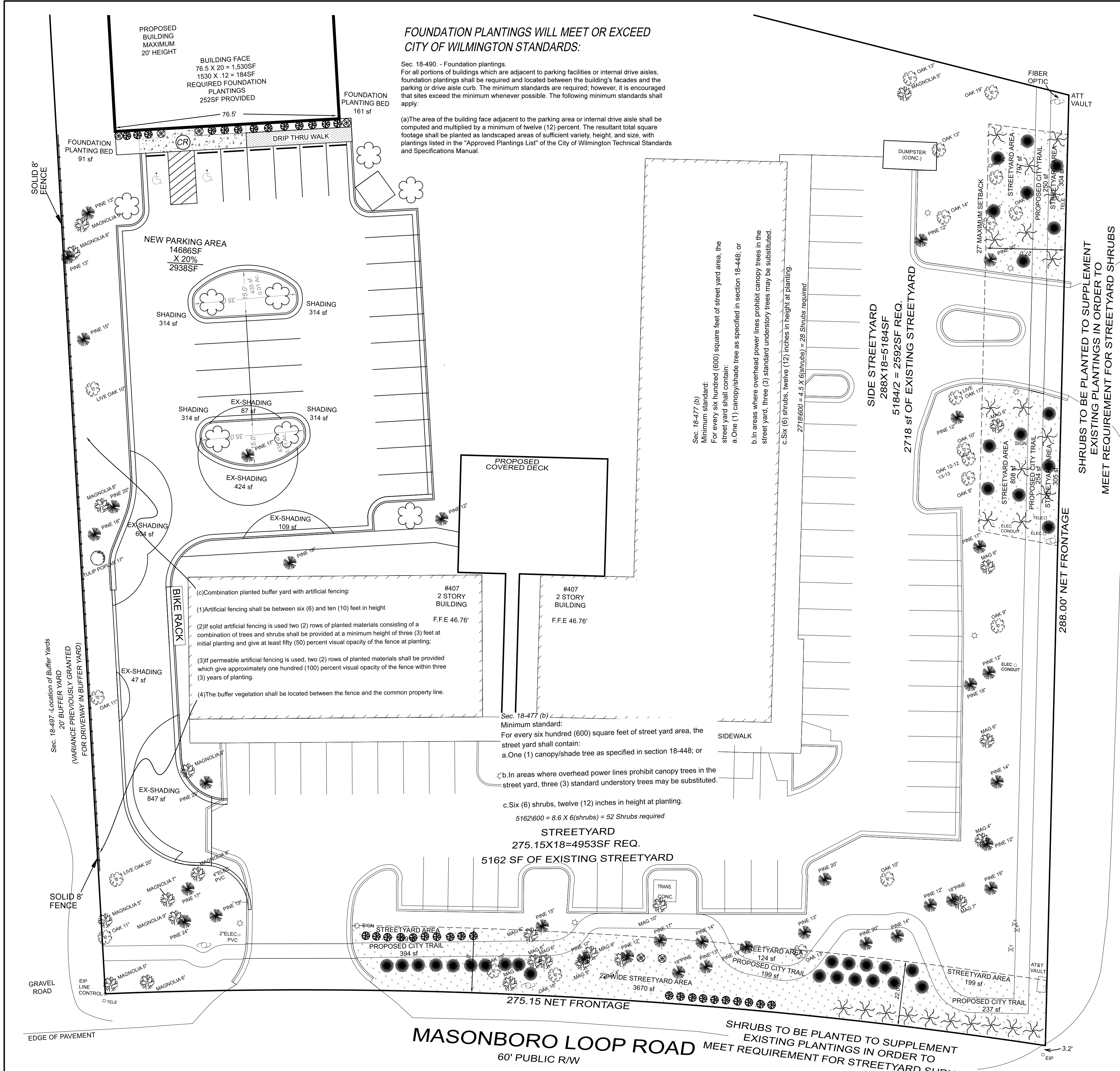
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Sheet No: 1
LP-2



FOUNDATION PLANTINGS WILL MEET OR EXCEED CITY OF WILMINGTON STANDARDS:

Sec. 18-490. - Foundation plantings.
For all portions of buildings which are adjacent to parking facilities or internal drive aisles, foundation plantings shall be required and located between the building's facades and the parking or drive aisle curb. The minimum standards are required; however, it is encouraged that sites exceed the minimum whenever possible. The following minimum standards shall apply:
(a) The area of the building face adjacent to the parking area or internal drive aisle shall be computed and multiplied by a minimum of twelve (12) percent. The resultant total square footage shall be planted as landscaped areas of sufficient variety, height, and size, with plantings listed in the "Approved Plantings List" of the City of Wilmington Technical Standards and Specifications Manual.

Sec. 18-477 (b)
Minimum standard:
For every six hundred (600) square feet of street yard area, the street yard shall contain:
a. One (1) canopy/shade tree as specified in section 18-448, or
b. In areas where overhead power lines prohibit canopy trees in the street yard, three (3) standard understory trees may be substituted.
c. Six (6) shrubs, twelve (12) inches in height at planting.
2718(600) = 4.5 X 6(shrubs) = 28 Shrubs required

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SHRUBS TO BE PLANTED TO SUPPLEMENT EXISTING PLANTINGS IN ORDER TO MEET REQUIREMENT FOR STREET YARD SHRUBS

MASONBORO SOUND ROAD

60' PUBLIC RW

FOUNDATION PLANTINGS
BUILDING FACE 76.5 X 20 = 1,530SF
1530 X .12 = 184SF REQUIRED FOUNDATION PLANTINGS
184SF PROVIDED
PARKING LOT LANDSCAPING PLANTINGS SIZE, TYPE AND NUMBER TO BE DETERMINED WILL MEET OR EXCEED CITY OF WILMINGTON STANDARDS
INTERIOR AREA LANDSCAPING
NEW PARKING AREA
14686SF
X 20%
2938SF
REQUIRED INTERIOR SHADING 20% = 2,938
SMALLER SHADE TREE = 314 SQUARE FEET OF SHADE
EXISTING TREE = ACTUAL CANOPY OVERHANGING PARKING FACILITY
EXISTING TREE OVERHANGING = 2203SF
PROPOSED SMALL SHADE TREES 4 X 314 = 1256SF
3459SF PARKING LOT SHADE COVERAGE PROVIDED

PERIMETER LANDSCAPING PLANTINGS SIZE, TYPE AND NUMBER TO BE DETERMINED WILL MEET OR EXCEED CITY OF WILMINGTON STANDARDS

TREE PRESERVATION				
NO. OF TREES	CALIPER (INCHES)	TYPE	TOTAL (INCHES)	Credit
1	8	OAK	8	2
3	9	OAK	27	6
8	10	OAK	80	16
5	11	OAK	55	10
3	12	OAK	36	9
6	13	OAK	78	18
2	14	OAK	28	6
1	16	OAK	16	3
1	17	OAK	17	3
1	19	OAK	19	4
1	20	OAK	20	4
2	4	MAGNOLIA	8	2
8	5	MAGNOLIA	40	8
12	6	MAGNOLIA	72	24
4	7	MAGNOLIA	28	8
2	8	MAGNOLIA	16	4
3	9	MAGNOLIA	27	6
2	10	MAGNOLIA	20	4
1	8	POPLAR	8	2
1	9	POPLAR	9	2
1	17	POPLAR	17	3
1	18	POPLAR	18	3
1	25	POPLAR	25	4
1	26	POPLAR	26	4
1	28	POPLAR	28	4
1	10	MAPLE	10	2
1	13	MAPLE	13	3
1	14	MAPLE	14	3
1	11	GUM	11	2
1	12	GUM	12	3
1	4	DOGWOOD	4	1
2	5	DOGWOOD	10	2
1	9	HICKORY	9	2
9	12	PINE	108	27
5	13	PINE	65	15
4	14	PINE	56	12
3	15	PINE	45	9
2	16	PINE	32	6
10	17	PINE	170	30
8	18	PINE	144	32
3	19	PINE	57	12
3	20	PINE	60	12
1	23	PINE	23	4
2	24	PINE	48	8
1	25	PINE	25	4
1	30	PINE	30	5
TOTAL RETAINED = 133			1672	
TOTAL CREDITS				353

TREE REMOVAL							
NO. OF TREES	CALIPER (INCHES)	TYPE	CLASSIFICATION	TOTAL (INCHES)	MITIGATION (%)	SIGNIFICANT	MITIGATION NO. REQ.
1	9	OAK	HARDWOOD	9	100	NO	3
3	4	MAGNOLIA	FLOWERING	12	100	NO	4
2	5	MAGNOLIA	FLOWERING	10	100	NO	4
1	6	MAGNOLIA	FLOWERING	6	100	NO	2
5	7	MAGNOLIA	FLOWERING	35	100	NO	12
1	8	MAGNOLIA	FLOWERING	8	100	NO	3
1	11	MAGNOLIA	FLOWERING	11	100	YES	8
1	12	MAGNOLIA	FLOWERING	12	100	YES	8
8	12	PINE	CONIFER	96	100	NO	32
10	13	PINE	CONIFER	130	100	NO	44
7	14	PINE	CONIFER	98	100	NO	33
7	15	PINE	CONIFER	105	100	NO	35
6	16	PINE	CONIFER	96	100	NO	32
4	17	PINE	CONIFER	68	100	NO	23
4	18	PINE	CONIFER	72	100	NO	24
1	20	PINE	CONIFER	20	100	NO	7
1	24	PINE	CONIFER	24	100	NO	8
1	7	MAPLE	HARDWOOD	7	100	NO	3
1	9	MAPLE	HARDWOOD	9	100	NO	3
1	10	MAPLE	HARDWOOD	10	100	NO	4
1	12	MAPLE	HARDWOOD	12	100	NO	4
1	15	MAPLE	HARDWOOD	15	100	NO	5
2	10	POPLAR	HARDWOOD	20	100	NO	7
1	12	POPLAR	HARDWOOD	12	100	NO	4
TOTAL SIGNIFICANT TREE TO BE REMOVED							2
LATED TREES TO BE REMOVED WITH ESSENTIAL SITE IMPROVEMENTS							69
TOTAL NO. OF SIGNIFICANT TREE MITIGATION REQ.							16
TOTAL NO. TREE MITIGATION REQ.							312
TOTAL TREE CREDITS (TREE PRESERVATION)							353
TOTAL NO. OF MITIGATION TREES REQ. ON SITE							0

Preliminary Plan

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LANDSCAPING PLAN

Masonboro Station

Parking and Building Expansion

City of Wilmington

NEW HANOVER COUNTY, NORTH CAROLINA

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Sheet No: **2**
LP-2

LANDSCAPE NOTE:

General standards for landscaping.
The following general standards shall be used in the process of designing all landscaping plans:

(1) Selection of plant materials. All plant materials and their spacing requirements, which are to be planted to meet the opacity and height requirements of this Article, shall be selected from the city's Technical Standards and Specifications Manual. The city manager may approve the use of trees not listed in the Technical Standards and Specifications Manual.

(2) Unless otherwise noted, all trees planted as a function of fulfilling the requirements of this Article shall be a minimum of two (2) to two and one-half (2½) inch caliper for shade canopy trees, eight (8) to ten (10) feet in height for understory and multi-trunk trees, and shrubs shall be a minimum of twelve (12) inches in height.

Sec. 18-448 - General Standards for landscaping

15 TREES PER DISTURBED ACRE, 2 INCH DBH OR GREATER, MUST BE RETAINED OR PLANTED ON THE DISTURBED PORTION OF THE SITE.

1.4 Acre X 15 Trees = 21 Required Trees 48 Trees Retained (no new plantings required)

LANDSCAPE PLANT SCHEDULE					
COMMON NAME	QTY	QTY REQ'D	HT	SIZE/CALIPER	
TREE, DECIDUOUS					
EAGLESTON HOLLY	8	3	8'	2" -2.5" min.	UNDERSTORY
SHRUB, EVERGREEN BROADLEAF					
NANDINA GULFSTREAM	33	33	12"	3 GAL	MIN. HEIGHT 12"
DRIFT ROSE	6	6	N/A	3 GAL	MIN. HEIGHT 12"
AZALEA ENCORE	34	34	N/A	3 GAL	MIN. HEIGHT 12"
WINTERGREEN BOXWOOD	24	24	12"	3 GAL	MIN. HEIGHT 12"

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STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____
PERMIT # _____
SIGNED _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____

