

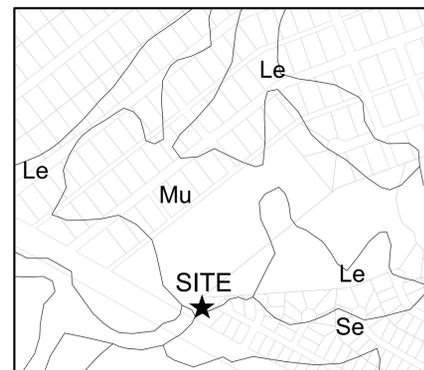
ST. MARK CATHOLIC CHURCH & MAYFAIRE II PROPOSED ROADWAY

DESIGN DOCUMENTS FEBRUARY 2019

PROJECT ADDRESS:
1011 EASTWOOD ROAD
WILMINGTON, NC 28403



VICINITY MAP
SCALE: 1"=1000'



SOILS MAP
SCALE: 1"=500'

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION.

CONTRACTORS SHALL CONTACT OVERHEAD ELECTRIC PROVIDER TO COMPLY WITH FEDERAL OSHA 1910.333 MINIMUM APPROACH DISTANCE TO ENERGIZED POWERLINES AND OSH 29 CFR 1926.1407-1411 MUST BE FOLLOWED.

CONTRACTOR SHALL CONTACT AT&T PRIOR TO ANY DEMOLITION TO ALLOW FOR AT&T TO DISCONNECT COMMUNICATIONS CABLES COMING INTO THE SITE.

CONTACT THESE UTILITIES

CITY OF WILMINGTON PLANNING & DEVELOPMENT
ATTN: BRIAN CHAMBERS, PLANNER
PH: 910-342-2782

ATTN: ZONING INSPECTIONS
PH: 910-254-0900

PIEDMONT NATURAL GAS
ATTN: CATHY PLEASANT
PH: 910-251-2827

EMERGENCY DIAL 911
POLICE - FIRE - RESCUE
ATTN: CITY OF WILMINGTON FIRE & LIFE SAFETY
PH: 910-343-0696

CAPE FEAR PUBLIC UTILITY AUTHORITY (WATER & SEWER)
ENGINEERING/INSPECTIONS
PH: 910-332-6560

OPERATIONS/MAINTENANCE
PH: 910-322-6550

DUKE ENERGY
DISTRIBUTION CONSTRUCTION SERVICE
DEP CSC PH: 1-800-452-2777

TRANSMISSION AGENT
BILL WILDER
PH: 910-772-4903

AT&T/BELL SOUTH
ATTN: STEVE DAYVAULT (BUILDING ENGINEERING)
PH: 910-341-0741

ATTN: JAMES BATSON, ENGINEERING
PH: 910-341-1621

SPECTRUM
GENERAL PH: 800-892-4357

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.	NCDENR PWSS WATER PERMIT #:	_____
	WATER CAPACITY:	_____ GPD
	DWQ SEWER PERMIT #:	_____
	SEWER CAPACITY:	_____ GPD
	SEWER SHED # AND PLANT:	_____
	SEWER TO FLOW THROUGH NEI:	YES or NO (CIRCLE ONE)
Approved Construction Plan		
Name _____		Date _____
Planning _____		
Traffic _____		
Fire _____		
Date: _____		Permit # _____
Signed: _____		

OWNER / DEVELOPER:
MAYFAIRE II LLC
530 SE GREENVILLE BLVD, STE 200
GREENVILLE, NORTH CAROLINA 27858
ATTN: H.J. BRODY, (252) 353-2141

ROMAN CATHOLIC DIOCESE OF RALEIGH
7200 STONEHENGE DRIVE
RALEIGH, NORTH CAROLINA 27613
ATTN: BISHOP LUIS RAFAEL ZARAMA, (919) 821-9700

SURVEYOR, ENGINEER (CIVIL), LANDSCAPE ARCHITECT:
PARAMOUNTE ENGINEERING, INC.
122 CINEMA DRIVE
WILMINGTON, NORTH CAROLINA 28403
ATTN: ROB BALLAND, P.E. (910) 791-6707

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C-2.1	DEMOLITION PLAN
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C-6.0 - C-6.2	DETAILS

PREPARED BY:

PARAMOUNTE
ENGINEERING, INC.

122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)

NC License #: C-2846
PROJECT # 16247.PE



02/22/19

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

COORDINATION NOTES:

- 1. THE CONTRACTOR IS REQUIRED TO OBTAIN ANY/ALL PERMITS REQUIRED FOR CONSTRUCTION OF THESE PLANS.
- 2. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND WITH THE CITY OF WILMINGTON, NEW HANOVER COUNTY, CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA), AND THE STATE OF NORTH CAROLINA.
- 3. THE CONTRACTOR IS TO ESTABLISH AND CHECK ALL HORIZONTAL AND VERTICAL CONTROLS TO BE USED WITH THE PROJECT. IN ADDITION, THE CONTRACTOR IS TO COMPUTE THE LAYOUT OF THE ENTIRE SITE PLAN IN ADVANCE OF BEGINNING ANY WORK ASSOCIATED WITH THE SUBJECT PLANS. CONTRACTOR SHALL EMPLOY A PROFESSIONAL SURVEYOR TO PERFORM SITE IMPROVEMENT STAKEOUT(S).
- 4. ANYTIME WORK IS PERFORMED OFF-SITE OR WITHIN AN EXISTING EASEMENT, THE CONTRACTOR IS TO NOTIFY THE HOLDER OF SAID EASEMENT AS TO THE NATURE OF PROPOSED WORK, AND TO FOLLOW ANY GUIDELINES OR STANDARDS WHICH ARE ASSOCIATED WITH OR REFERENCED IN THE RECORDED EASEMENT.
- 5. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS BY OTHERS FOR ANY BUILDING DIMENSIONS AND DETAILS.

GENERAL NOTES:

- 1. TREE INVENTORY AND TOPOGRAPHIC SURVEY COMPLETED BY PARAMOUNT ENGINEERING, INC. THE SURVEY SHALL BE FIELD VERIFIED BY CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE OWNER AND ENGINEER.
- 2. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF ALL EXISTING UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF DITCHING OPERATIONS BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES. IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF TRENCHING OPERATIONS SO AS TO ELIMINATE OR MINIMIZE DAMAGE TO EXISTING UTILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING LOSS OF UTILITY REVENUES. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC.
- 3. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.
- 4. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAGMEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE USDOT.
- 5. ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.
- 6. ALL WORK BY THE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR AFTER THE OWNER ACCEPTS THE WORK.
- 7. CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL CENTER AT 811 AN ALLOW THE CENTER TO LOCATE EXISTING UTILITIES BEFORE DIGGING.
- 8. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO START OF CONSTRUCTION. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
- 9. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- 10. ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH THE RESPECTIVE UTILITY.
- 11. DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
- 12. THE GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
- 13. THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
- 14. ALL STREET SURFACES, DRIVEWAYS, CULVERTS, CURB AND GUTTERS, ROADSIDE DRAINAGE DITCHES AND OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
- 15. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING AND CONDUITS. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
- 16. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, THE CONTRACTOR SHALL BE GIVEN TO THE OWNER PRIOR TO THE COMMENCEMENT OF THE WORK. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE PERMISSION OF THE OWNER, THE CITY OF WILMINGTON, NEW HANOVER COUNTY, OR CFPUA, RESPECTIVELY.
- 17. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COST HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE OR OTHER OBSTRUCTIONS OR FROM DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. CONTACT NORTH CAROLINA ONE CALL TOLL FREE 1-800-652-4949 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NONSUBSCRIBING UTILITIES.
- 18. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED.
- 19. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- 20. ALL LOT STRIPING AND DIRECTIONAL ARROWS TO BE REFLECTIVE MARKINGS AND SHALL CONFORM TO MUTCD. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- 21. LANDSCAPE PLANTINGS AT ENTRANCE/ EXITS WILL BE INSTALLED AND MAINTAINED SO AS NOT TO INTERFERE WITH SIGHT DISTANCE NEEDS OF DRIVERS IN THE PARKING AREA AND AT ENTRANCE/EXIT LOCATIONS PER LOCAL STANDARDS.
- 22. ALL DIMENSIONS AND RADI ARE TO OUTSIDE FACE OF BUILDING OR TO FACE OF CURB UNLESS OTHERWISE NOTED.

NEW HANOVER COUNTY LAND QUALITY STABILIZATION TIME FRAME NOTE:
DENuded AREAS MUST BE STABILIZED WITH FIFTEEN (15) WORKING DAYS OF CEASE OF ANY PHASE OF ACTIVITY. ALL SLOPES MUST BE STABILIZED WITHIN TWENTY-ONE (21) CALENDAR DAYS OF CEASE OF ANY PHASE OF ACTIVITY. THIS INCLUDES SLOPES, SWALES, CHANNELS AND STOCKPILES.

NPDES BUILDING WASTES HANDLING:
1. NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS.
2. DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
3. EARTHEN-MATERIALS STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
4. CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.

NPDES INSPECTIONS:
1. SAME WEEKLY INSPECTION REQUIREMENTS.
2. SAME RAIN GAUGE & INSPECTIONS AFTER 0.5" RAIN EVENT.
3. INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS".
4. INSPECTION REPORTS MUST BE AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED.
5. RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST.
6. ELECTRONICALLY AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS.

NPDES SEDIMENT BASINS:
1. OUTLET STRUCTURES MUST WITHDRAW FROM BASIN SURFACE UNLESS DRAINAGE AREA IS LESS THAN 1 ACRE.
2. USE ONLY DWQ-APPROVED FLOCCULANTS.

NPDES - SPECIFIC PLAN SHEETS NOTES:
1. THIS PAGE IS SUBMITTED TO COMPLY WITH NPDES GENERAL STORMWATER PERMIT NCG010000.
2. THIS PAGE CAN BE APPROVED BY THE COUNTY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
3. THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
4. THE COUNTY IS NOT AUTHORIZED TO ENFORCE THE NPDES PORTION OF THIS PAGE OF THE PLANS AND THEY ARE NOT A PART OF THE APPROVED PLANS FOR THE PURPOSES OF ENFORCEMENT ACTION UNDER THE COUNTY CODE.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

- 1. THE EROSION CONTROL PLAN SHALL INCLUDE PROVISIONS FOR GROUND COVER ON ALL EXPOSED PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1 WITHIN 7 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY. GROUND COVER SHALL BE PROVIDED ON ALL OTHER DISTURBED AREAS WITHIN 14 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY.
- 2. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL HANDBOOK. (NO SEPARATE PAYMENT).
- 3. THE CONTRACTOR SHALL NOTIFY PLAN APPROVING AUTHORITY ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO FINAL INSPECTION.
- 4. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND DISTURBANCE.
- 5. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 6. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-SITE BORROW OR WASTE AREAS STAGING OR STORAGE AREAS), THE CONTRACTOR SHALL PREPARE AND SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND TO NEW HANOVER COUNTY FOR APPROVAL. CONTRACTOR SHALL PAY ALL FEES REQUIRED AND SHALL INSTALL NECESSARY MEASURES AT NO SEPARATE PAYMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE ENGINEER A COPY OF THE AMENDED PERMIT.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY EITHER THE REVIEWING AGENCY OR THE ENGINEER. (NO SEPARATE PAYMENT).
- 8. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- 9. ALL AREAS DISTURBED BY CONSTRUCTION UNLESS OTHERWISE IMPROVED SHALL BE SODED OR SEEDED AS INDICATED AND STABILIZED.
- 10. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.
- 11. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
- 12. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY CONTRACTOR ONCE STABILIZATION OR A SUFFICIENT GROUND COVER HAS BEEN ESTABLISHED OR AS DIRECTED BY THE ENGINEER. (NO SEPARATE PAYMENT). NCDNR'S FINAL APPROVAL IS REQUIRED.
- 13. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES AND ALL CONSTRUCTION ACCESS LOCATIONS INTO NON-PAVED AREA. (NO SEPARATE PAYMENT).
- 14. WHEN CROSSING CREEK OR DRAINAGE-WAY, THE DIVISION OF WATER QUALITY SHALL BE CONTACTED PRIOR TO STARTING A CREEK. THE CONTRACTOR SHALL PROVIDE A T-SHAPED TURNING SPACE, PROTECT DISTURBED BANKS AND CHANNEL AND RESTORE SLOPES TO ORIGINAL CONDITIONS, BUT NOT STEEPER THAN 2:1 MAXIMUM. DISTURBED CREEK AREA SHALL BE STABILIZED IMMEDIATELY.

DEMOLITION NOTES:

- 1. CONTRACTOR TO COORDINATE WITH THE OWNER TO PROPERLY MAINTAIN OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY.
- 2. CONTRACTOR IS TO WALK THE SITE AND BECOME FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIRED. ALL DEMOLITION WORK REQUIRED TO CONSTRUCT NEW SITE IMPROVEMENTS WILL BE PERFORMED BY THE CONTRACTOR AND WILL BE CONSIDERED UNCLASSIFIED EXCAVATION.
- 3. DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND OFFSITE DISPOSAL OF CONCRETE PADS, CONCRETE DITCHES, FOUNDATIONS, SLABS, STEPS, AND STRUCTURES, ABANDONED UTILITIES, BUILDINGS, PAVEMENTS AND ALL MATERIALS CLEARED AND STRIPPED TO THE EXTENT NECESSARY AS DIRECTED BY THE GEOTECHNICAL ENGINEER FOR THE INSTALLATION OF THE NEW IMPROVEMENTS AND WITHIN THE LIMITS OF CLEARING AND GRADING AND AS SHOWN ON THESE PLANS.
- 4. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED. DAMAGE TO PROPERTIES OF OTHERS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO COST TO OWNER.
- 5. ELECTRIC, TELEPHONE, SANITARY SEWER, WATER AND STORM SEWER UTILITIES THAT SERVICE OFF-SITE PROPERTIES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS BY THE CONTRACTOR.
- 6. THE CONTRACTOR SHALL PRODUCE A PHOTOGRAPHIC RECORD (DIGITAL) OF DEVELOPMENT COMMENCING WITH A RECORD OF THE SITE AS IT APPEARS BEFORE DEMOLITION HAS BEGUN. FOLLOWINGWARDS, A PHOTOGRAPHIC RECORD SHALL BE MAINTAINED WEEKLY DURING CONSTRUCTION AND ENDING WITH A PHOTOGRAPHIC RECORD OF THE DEVELOPMENT AS IT APPEARS AFTER DEMOLITION. THIS RECORD SHALL BE DELIVERED TO THE OWNER.
- 7. EXISTING CURB AND GUTTER, LIGHTS, SIDEWALK, AND UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING DEMOLITION.
- 8. ALL EXISTING IMPROVEMENTS INDICATED OR REQUIRED TO BE DEMOLISHED SHALL INCLUDE REMOVAL FROM THE PROPERTY AND PROPER DISPOSAL.
- 9. CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES INCLUDING CABLE, GAS, TELEPHONE AND ELECTRIC AND ANY OTHER UTILITIES THROUGH THE SITE WITH THE RESPECTIVE COMPANIES.
- 10. CONTRACTOR SHALL MAINTAIN REQUIRED DISTANCES FROM HIGH VOLTAGE OVERHEAD LINES AND REMOVE TREES SO THEY DO NOT FALL TOWARDS OVERHEAD ELECTRICITY.
- 11. PROVIDE SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTERS AND SIDEWALKS TO BE DEMOLISHED.
- 12. ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS OSHA REGULATIONS.
- 13. EXISTING FIRE HYDRANTS ON OR NEAR THE SITE AREA TO REMAIN IN SERVICE.
- 14. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS.

TRAFFIC NOTES:

- 1. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY & FOR DRIVEWAY(S) ARE TO BE THERMOPLASTIC & MEET CITY OF WILMINGTON AND/OR NCDOT STANDARDS.
- 2. 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.
- 3. ALL TRAFFIC CONTROL SIGNS AND MARKINGS NOT WITHIN THE PUBLIC RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- 4. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- 5. ANY OPEN CUTTING OF A CITY STREET REQUIRES A UTILITY CUT PERMIT. CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES, AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- 6. CONTACT TRAFFIC ENGINEERING, AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN. CALL TRAFFIC ENGINEERING FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
- 7. ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND/OR CURBING SHALL BE REPLACED.
- 8. TACTILE WARNING MATS TO BE INSTALLED AT ALL WHEELCHAIR RAMPS.

NEW HANOVER COUNTY LAND QUALITY STABILIZATION TIME FRAME NOTE:
DENuded AREAS MUST BE STABILIZED WITH FIFTEEN (15) WORKING DAYS OF CEASE OF ANY PHASE OF ACTIVITY. ALL SLOPES MUST BE STABILIZED WITHIN TWENTY-ONE (21) CALENDAR DAYS OF CEASE OF ANY PHASE OF ACTIVITY. THIS INCLUDES SLOPES, SWALES, CHANNELS AND STOCKPILES.

STABILIZATION TIME FRAME:
*IN THE EVENT THAT THE GOVERNING AGENCIES TIMEFRAME FOR STABILIZATION VARY, CONTRACTOR SHALL MEET THE MORE STRINGENT REQUIREMENT.

NPDES WATER QUALITY STABILIZATION TIME FRAMES			
SITE AREA DESCRIPTION	STABILIZATION	7 DAYS	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE	
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE	
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.	
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH	
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES	

EROSION CONTROL AND SEQUENCE OF CONSTRUCTION NOTES:

- NOTE: THESE EROSION CONTROL AND SEQUENCE OF CONSTRUCTION NOTES ARE INTENDED FOR EACH "PHASE" OF CONSTRUCTION. THE ORDER AND STEPS TAKEN MUST BE IMPLEMENTED AS EACH PART OF THE PROJECT IS DEVELOPED; WHETHER AS A WHOLE OR IN PHASES. ANY EROSION CONTROL DEVICES/METHODS MUST REMAIN IN PLACE UNTIL THE ENTIRE DISTURBANCE IS STABILIZED AND ALL IMPROVEMENTS WITHIN THE DISTURBANCE LIMITS ARE COMPLETE.
- 1. CONSTRUCT TEMPORARY GRAVEL CONSTRUCTION ENTRANCE(S); ESTABLISH THE LIMITS OF DISTURBANCE, TREE PROTECTION FENCING, AND TEMPORARY SILT FENCE.
- 2. CLEAR AND REMOVE FROM SITE TREES AS DESIGNATED, ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN THE DESIGNATED CLEARING LIMITS.
- 3. INSTALL REMAINING EROSION CONTROL MEASURES AS SHOWN ON THE PLANS WITHIN THE AREA DISTURBED. ALL EROSION CONTROL MEASURES MUST BE INSTALLED BEFORE COMMENCING CONSTRUCTION.
- 4. PLANT GRASS OVER ALL GRADED AREAS WITHIN 14 WORKING DAYS OF CEASE OF ANY GRADING ACTIVITY.
- 5. IMMEDIATELY UPON THE INSTALLATION OF ANY STORM DRAINAGE CATCH BASIN, DROP INLET, ETC., THE CONTRACTOR SHALL INSTALL INLET PROTECTION TO PREVENT SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUCTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION CONTROL MEASURES.
- 7. DURING GRADING AND AFTER GRADING HAS BEEN COMPLETE, THE CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION CONTROL MEASURES UNTIL FINAL APPROVAL BY ENGINEER OR EROSION CONTROL INSPECTOR.
- 8. UPON RECEIVING FINAL APPROVAL, THE CONTRACTOR CAN REMOVE TEMPORARY EROSION CONTROL MEASURES.
- 9. THE CONTRACTOR SHALL CONTINUE TO WATER, FERTILIZE, MOW AND MAINTAIN GRASS & PLANTED AREAS UNTIL ALL CONSTRUCTION IS COMPLETE.

EROSION CONTROL MAINTENANCE PLAN:

- 1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF- PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
- 2. ALL CONSTRUCTION ENTRANCES WILL BE PERIODICALLY TOP DRESSED WITH AN ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. ANY SEDIMENT THAT IS TRACKED INTO THE STREET WILL BE IMMEDIATELY REMOVED.
- 3. SEDIMENT WILL BE REMOVED BEHIND THE SEDIMENT FENCE WHEN IT BECOMES 0.5 FEET DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. SILT FENCE SPACINGS WILL BE SPACED 6 FEET APART UNLESS A WIRE BACKING IS USED WITH 8' FOOT STAKE SPACING.
- 4. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
- 5. STORM SEWER INLET PROTECTION - INSPECT SILT SACK (OR SIMILAR APPROVED PRODUCT) INLET PROTECTION AT LEAST ONCE A WEEK AND AFTER EACH SIGNIFICANT (1/4 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE SILT SACK IF REQUIRED.
- 6. SEDIMENT BASIN/SEDIMENT TRAPS - REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO WITHIN ONE HALF OF THE DESIGN DEPTH. PLACE SEDIMENT IN AREA WITH SEDIMENT CONTROLS. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION, DAMAGE, PIPING, AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.
- 7. SEDIMENT BASIN Baffles - REPLACE ANY BROKEN, COLLAPSED, TORN, OR DECOMPOSED Baffle AND FOLLOW SEDIMENT REMOVAL DEPTH OF THE SEDIMENT BASIN AND SEDIMENT ATTACHED TO THE Baffles.
- 8. SKIMMER - INSPECT SKIMMER AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL TO MAKE SURE THAT THE INTAKE MECHANISM, ORIFICE, OR DISCHARGE PIPE IS NOT CLOGGED WITH TRASH OR SEDIMENT. IF THE BASIN IS DRY, MAKE SURE THAT ANY VEGETATION GROWING ON THE BOTTOM IS NOT HOLDING THE SKIMMER DOWN. TAKE SPECIAL PRECAUTION IN WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.
- 9. OUTLET PROTECTION - INSPECT RIP RAP OUTLET STRUCTURES WEEKLY AND AFTER SIGNIFICANT (1/4 INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIP RAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.
- 10. ROCK PIPE INLET PROTECTION - INSPECT AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/4 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING CHECK THE STRUCTURE FOR DAMAGE. ANY RIP RAP DISPLACED FROM THE STONE HORSESHOUD MUST BE REPLACED IMMEDIATELY. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL UNSTABLE SEDIMENT AND SMOOTH TO BLEND WITH THE NATURAL ADJOINING AREAS AND APPROPRIATELY STABILIZE.
- 11. EMERGENCY SPILLWAY / FOREBAY PROTECTION - AFTER EVERY HIGH-WATER EVENT INSPECT THE INTEGRITY OF THE LINED SPILLWAY AND THE ADJACENT EARTHEN BANKS. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE. REPAIR ANY VOIDS IN THE RIP RAP LINED APPROX. RE-ESTABLISH ANY LOOSE STONES, AND FIX GAPS IN THE ADJACENT VEGETATIVE COVER.
- 12. TEMPORARY DIVERSION DITCH - INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE.
- 13. GRASS SWALES - INSPECT SWALES WEEKLY AND AFTER EVERY RAINFALL EVENT. AFTER GRASS HAS BEEN ESTABLISHED - INSPECT THE SWALES PERIODICALLY AND AFTER EVERY HEAVY (1/4 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. INSPECT THE CHANNEL OUTLET AND ALL ROAD CROSSINGS FOR BANK STABILITY AND EVIDENCE OF PIPING OR SCOUR HOLES. REMOVE ALL SIGNIFICANT SEDIMENT ACCUMULATIONS TO MAINTAIN THE DESIGNED CARRYING CAPACITY. KEEP THE GRASS IN A HEALTHY, VIGOROUS CONDITION AT ALL TIMES, SINCE IT IS THE PRIMARY EROSION PROTECTION FOR THE CHANNEL.
- 14. INSPECT CHECK DAMS AND MAINTAIN DESIGN DIMENSION AS NECESSARY. REMOVE SEDIMENT ACCUMULATION OR DEBRIS BEHIND CHECK DAMS AND REGRADE DITCHES IF WATER WASHES OUT AROUND CHECK DAMS. REPLACE SEDIMENT CLOGGED FILTER GRASS ON CHECK DAMS.
- 15. TEMPORARY WATTLES - INSPECT AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/4 INCH OR GREATER) RAIN FALL EVENT AND REPAIR IMMEDIATELY IF REQUIRED. MAINTAIN GOOD CONTACT WITH THE GROUND AND ENSURE NO EROSION OCCURS UNDERNEATH. MONITOR AND REPAIR AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.

PERMANENT SEEDING

GRASS TYPE	LBS/ ACRE	TIME OF SEEDING	FERTILIZER LIMESTONE
BERMUDA, HULLED BERMUDA, UNHULLED	10-30	MARCH - AUGUST SEPT. - FEB.	BY SOIL TEST
CENTPEDE	10	MARCH - AUGUST	BY SOIL TEST (NO HIGH PH)
TALL FESCUE (COASTAL CULTIVAR RECOMMENDED)	50	MARCH - AUGUST	300 LBS/AC 10-20-20 OR BY SOIL TEST
SLOPES >= 2:1 CENTPEDE SERICEA LESPEDEZA	5	JAN - DEC	BY SOIL TEST

TEMPORARY SEEDING

GRASS TYPE	LBS/ ACRE	TIME OF SEEDING	FERTILIZER LIMESTONE
RYE GRAIN	50	OCT. - APR.	400 LBS/AC. 10-20-20
SWEET SUDAN GRASS	50	JUNE - AUGUST	400 LBS/AC. 10-20-20
GERMAN OR BROWN OF MILLET	50	JUNE - AUGUST	400 LBS/AC. 10-20-20
STRAW MULCH AS NEEDED	4,000		

NC ACCESSIBILITY NOTES:

- GENERAL NOTES:
1. SPECIAL ATTENTION SHALL BE GIVEN TO COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT (2010 ADA STANDARDS), THE NORTH CAROLINA BUILDING CODE/ANSI A117.1, AND APPLICABLE LOCAL LAWS & REGULATIONS.
2. IT IS ESSENTIAL THAT CONTRACTORS ARE AWARE OF THE SITE ACCESSIBILITY REQUIREMENTS. PARAMOUNT ENGINEERING HAS DEVELOPED THESE NOTES AND DETAILS TO ASSURE THAT CONTRACTORS ARE AWARE OF THE REQUIREMENTS AT THE POINT IN TIME WHEN THEY ARE BIDDING THE PROJECT. IN ADDITION, PARAMOUNT ENGINEERING HAS MADE A POINT IN THESE NOTES AND DETAILS, AS WELL AS IN OUR DRAWINGS, TO PROVIDE SLOPES / GRADES AND DIMENSIONS THAT COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (2010 ADA STANDARDS), THE NORTH CAROLINA BUILDING CODE/ANSI A117.1 AND APPLICABLE LOCAL LAWS & REGULATIONS. IF THESE SLOPES / GRADES AND DIMENSIONS ARE NOT ACHIEVABLE, THE CONTRACTOR IS REQUIRED TO CONTACT THE OWNER IMMEDIATELY AND BEFORE MOVING FORWARD WITH THE WORK.
3. THE CONTRACTOR SHALL NOTIFY PARAMOUNT ENGINEERING IMMEDIATELY OF ANY CONFLICT BETWEEN THESE NOTES AND DETAILS AND OTHER PROJECT DRAWINGS, WHETHER BY PARAMOUNT ENGINEERING OR OTHERS. THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK FOR WHICH THE ALLEGED CONFLICT HAS BEEN DISCOVERED UNTIL SUCH ALLEGED CONFLICT HAS BEEN RESOLVED. NO CLAIM SHALL BE MADE BY THE CONTRACTOR FOR DELAY OR DAMAGES AS A RESULT OF RESOLUTION OF ANY SUCH CONFLICT(S).
4. THESE ACCESSIBILITY NOTES AND DETAILS ARE INTENDED TO DEPICT SLOPE AND DIMENSIONAL REQUIREMENTS ONLY. REFER TO SIDEWALK, CURBING, AND PAVEMENT DETAILS FOR ADDITIONAL INFORMATION.
ACCESSIBLE ROUTE NOTES:
1. AT LEAST ONE ACCESSIBLE ROUTE SHALL BE PROVIDED WITHIN THE SITE FROM ACCESSIBLE PARKING SPACES AND ACCESSIBLE PASSENGER LOADING ZONES, PUBLIC STREETS OR SIDEWALKS, AND PUBLIC TRANSPORTATION STOPS TO THE ACCESSIBLE BUILDING OR FACILITY ENTRANCE THEY SERVE.
2. AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS, ACCESSIBLE FACILITIES, ACCESSIBLE ELEMENTS, AND ACCESSIBLE SPACES THAT ARE ON THE SAME SITE.
3. WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL HAVE A MAXIMUM RUNNING SLOPE OF 5.0% AND A MAXIMUM CROSS SLOPE OF 2.0%.
4. ANY WALKING SURFACE THAT IS PART OF AN ACCESSIBLE ROUTE WITH A RUNNING SLOPE GREATER THAN 5.0% IS A RAMP AND SHALL COMPLY WITH THE GUIDELINES FOR RAMPS OR CURB RAMPS.
5. TRANSITIONS BETWEEN RAMPS, WALKS, LANDINGS, GUTTERS OR STREETS SHALL BE FLUSHAND FREE OF ABRUPT VERTICAL CHANGES (1/4 INCH MAXIMUM VERTICAL CHANGE IN LEVEL PERMITTED).
6. FLOOR SURFACES SHALL BE STABLE, FIRM AND SLIP RESISTANT.
7. THE MINIMUM CLEAR WIDTH OF EXTERIOR ACCESSIBLE ROUTES SHALL BE FORTY-EIGHT (48) INCHES MINIMUM MEASURED BETWEEN HANDRAILS WHERE HANDRAILS ARE PROVIDED (NC BUILDING CODE 1104.1 & 1104.2).
8. WHERE AN ACCESSIBLE ROUTE MAKES A 180 DEGREE TURN AROUND AN OBJECT THAT IS LESS THAN FORTY-EIGHT (48) INCHES IN WIDTH, CLEAR WIDTH SHALL BE FORTY-TWO (42) INCHES MINIMUM APPROACHING THE TURN, FORTY-EIGHT (48) INCHES MINIMUM DURING THE TURN, AND FORTY-TWO (42) INCHES MINIMUM LEAVING THE TURN. THE CLEAR WIDTH APPROACHING AND LEAVING THE TURN MAY BE THIRTY-SIX (36) INCHES MINIMUM WHEN THE CLEAR WIDTH AT THE TURN IS SIXTY (60) INCHES MINIMUM. * SEE NOTE 7 ABOVE FOR NC CLEAR WIDTH OF EXTERIOR ACCESSIBLE ROUTES.
9. AN ACCESSIBLE ROUTE WITH A CLEAR WIDTH FEWER THAN SIXTY (60) INCHES SHALL PROVIDE PASSING SPACES AT INTERVALS OF TWO HUNDRED (200) FEET MAXIMUM. PASSING SPACES SHALL BE EITHER A SIXTY (60) INCH MINIMUM BY SIXTY (60) INCH MINIMUM SPACE, OR AN INTERSECTION OF TWO (2) ACCESSIBLE SURFACES. THE TURNING SPACE SHALL BE A MINIMUM OF TWO (2) FEET FROM THE BASE AND ARMS OF THE T-SHAPED SPACE EXTEND FORTY-EIGHT (48) INCHES MINIMUM BEYOND THE INTERSECTION.
10. DOORS, DOORWAYS AND GATES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (2010 ADA STANDARDS), THE NORTH CAROLINA BUILDING CODE/ ANSI A117.1, AND APPLICABLE LOCAL LAWS & REGULATIONS.
11. DIRECTIONAL SIGNAGE INDICATING THE ROUTE TO THE NEAREST ACCESSIBLE BUILDING ENTRANCE SHALL BE PROVIDED AT INACCESSIBLE BUILDING ENTRANCES.
12. WHERE POSSIBLE, DRAINAGE INLETS SHALL NOT BE LOCATED ON AN ACCESSIBLE ROUTE. IN THE EVENT THAT A DRAINAGE INLET MUST BE LOCATED ON AN ACCESSIBLE ROUTE, THE GRATE SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (2010 ADA STANDARDS), A117.1, THE NC BUILDING CODE, AND APPLICABLE LOCAL LAWS & REGULATIONS.
RAMP NOTES:
1. ANY PART OF AN ACCESSIBLE ROUTE WITH A RUNNING SLOPE GREATER THAN 5% SHALL BE CONSIDERED A RAMP.
2. THE MAXIMUM RUNNING SLOPE FOR A RAMP SHALL BE 8.33% AND THE MAXIMUM CROSS SLOPE SHALL BE 2.0%.
3. THE CLEAR WIDTH OF AN EXTERIOR RAMP RUN SHALL BE FORTY EIGHT INCHES (NC BUILDING CODE 1104.1) AND APPLICABLE LOCAL LAWS & REGULATIONS. THE CLEAR WIDTH SHALL BE MEASURED BETWEEN THE HANDRAILS.
4. THE RISE FOR ANY RAMP RUN SHALL BE THIRTY (30) INCHES MAXIMUM.
5. LANDINGS SHALL BE PROVIDED AT THE TOP AND BOTTOM OF RAMPS. LANDINGS SHALL HAVE A SLOPE NOT STEEPER THAN 2.0% IN ANY DIRECTION. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING. THE LANDING CLEAR LENGTH SHALL BE SIXTY (60) INCHES MINIMUM. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING OF SIXTY (60) INCHES BY SIXTY (60) INCHES MINIMUM.
6. RAMP RUNS WITH A RISE GREATER THAN SIX (6) INCHES SHALL HAVE HANDRAILS ON BOTH SIDES COMPLYING WITH THE AMERICANS WITH DISABILITIES ACT (2010 ADA STANDARDS), THE NC BUILDING CODE/ANSI A117.1, AND APPLICABLE LOCAL LAWS & REGULATIONS.
7. FLOOR SURFACES OF RAMPS AND LANDINGS SHALL BE STABLE, FIRM AND SLIP RESISTANT.
8. EDGE PROTECTION COMPLYING WITH AMERICANS WITH DISABILITIES ACT (2010 ADA STANDARDS), THE NC BUILDING CODE/ANSI A117.1, AND APPLICABLE LOCAL LAWS & REGULATIONS SHALL BE PROVIDED ON EACH SIDE OF RAMP RUNS AND ON EACH SIDE OF RAMP LANDINGS.
9. WHERE DOORWAYS ARE LOCATED ADJACENT TO A RAMP LANDING, MANEUVERING CLEARANCES REQUIRED BY THE AMERICANS WITH DISABILITIES ACT (2010 ADA STANDARDS), THE NC BUILDING CODE/ANSI A117.1 SHALL BE PERMITTED TO OVERLAP THE REQUIRED LANDING AREA, WHERE DOORS THAT ARE SUBJECT TO LOCKING ARE ADJACENT TO A RAMP LANDING, LANDINGS SHALL BE SIZED TO PROVIDE A COMPLIANT TURNING SPACE.

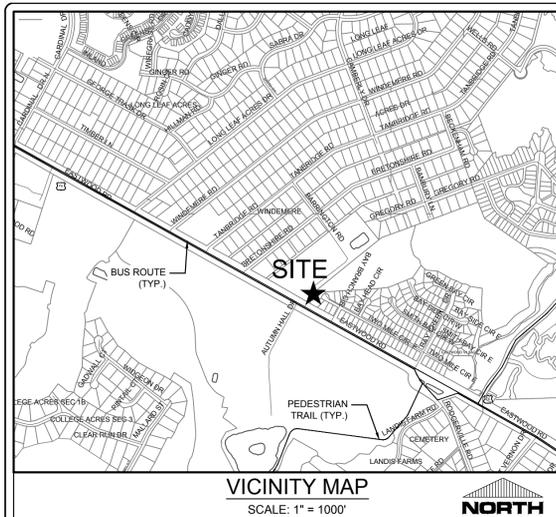
CURB RAMP NOTES:

- 1. THE MAXIMUM RUNNING SLOPE OF A CURB RAMP SHALL BE 8.33% AND THE MAXIMUM CROSS SLOPE SHALL BE 2.0%.
- 2. COUNTER SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 5%. THE ADJACENT SURFACES AT TRANSITIONS AT CURB RAMPS TO WALKS, GUTTERS AND STREETS SHALL BE AT THE SAME LEVEL.
- 3. THE CLEAR WIDTH OF A CURB RAMP SHALL BE 36 INCHES (36) MINIMUM. EXCLUSIVE OF FLARED SIDES, IF PROVIDED. *NOTE NC BUILDING CODE REQUIRES EXTERIOR ACCESSIBLE ROUTES TO BE 48 INCHES MINIMUM WIDE (1104.1 & 1104.2).
4. LANDINGS SHALL BE PROVIDED AT THE TOP OF CURB RAMPS. THE CLEAR LENGTH OF THE LANDING SHALL BE THIRTY-SIX (36) INCHES MINIMUM. THE CLEAR WIDTH OF THE LANDING SHALL BE AT LEAST AS WIDE AS THE CURB RAMP, EXCLUDING FLARED SIDES. LEADING TO THE LANDING. LANDINGS SHALL HAVE A SLOPE NOT STEEPER THAN 2% IN ANY DIRECTION.
5. IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP, OR WHERE IT IS NOT PROTECTED BY HANDRAILS OR GUARDRAILS, IT SHALL HAVE FLARED SIDES.
6. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT EXCEED 10%.
7. CURB RAMPS AND THE FLARED SIDES OF CURB RAMPS SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES, PARKING SPACES OR PARKING ACCESS AISLES. CURBS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
8. CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES.
9. IT IS RECOMMENDED TO PROVIDE CURB RAMPS WITH A TWENTY-FOUR (24) INCH DEEP DETECTABLE WARNING COMPLYING WITH 406.12 A117.1, EXTENDING THE FULL WIDTH OF THE RAMP. REFERTO DETECTABLE WARNING DETAILS AND NOTES FOR PLACEMENT, ORIENTATION AND NOTES. THE NC BUILDING CODE DOES NOT CURRENTLY REQUIRE DETECTABLE WARNINGS AT CURB RAMPS, NOR DO THE 2010 ADA STANDARDS - HOWEVER US DOT ADA REGULATIONS DO REQUIRE THESE.
10. FLOOR SURFACES OF CURB RAMPS SHALL BE DEEP GROOVED, 1/2 INCH WIDE BY 1/2 INCH DEEP, ONE (1) INCH CENTERS TRANSVERSE TO THE RAMP.
11. WHERE PROVIDED, STOP LINES SHALL BE LOCATED IN ADVANCE OF CURB RAMP.
12. WHERE PROVIDED, PEDESTRIAN ACTIVATED SIGNALS SHALL BE LOCATED ADJACENT TO THE SIDEWALK AND NOT ON THE SIDEWALK.
13. WHERE PROVIDED, DRAINAGE INLETS SHALL BE LOCATED UPSTREAM OF CURB RAMPS AND NOT IN THE RAMP AREA.
14. CURB RAMP TYPE AND LOCATION ARE PER PLAN.

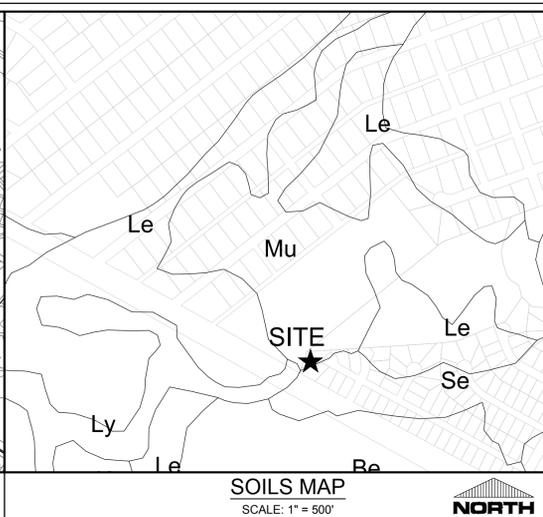
NC ACCESSIBILITY NOTES CONTD.

PARKING SPACE NOTES:

- 1. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTES OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE BUILDING ENTRANCE.
- 2. ACCESSIBLE PARKING SPACES SHALL BE AT LEAST NINETY-SIX (96) INCHES WIDE. ACCESS AISLES SHALL BE 60 INCHES WIDE. ONE OF SIX ACCESSIBLE SPACES SHOULD PROVIDE A VAN ACCESSIBLE AISLE. THE AISLE SHOULD BE 96 INCHES WIDE (OR ACCESSIBLE SPACE IS 11 FEET AND ACCESS AISLE IS FIVE FEET). WHERE PARKING SPACES AND ACCESS AISLES ARE MARKED WITH LINES, THE WIDTH MEASUREMENTS SHALL BE MADE FROM CENTERLINE OF THE MARKINGS. WHERE PARKING SPACES OR ACCESS AISLES ARE NOT ADJACENT TO ANOTHER PARKING SPACE OR ACCESS AISLES, MEASUREMENTS SHALL BE PERMITTED TO INCLUDE THE FULL WIDTH OF THE LINE DEFINING THE PARKING SPACE OR ACCESS AISLE.
- 3. PARKING ACCESS AISLES SHALL BE PART OF AN ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE AND SHALL COMPLY WITH PROVISIONS FOR ACCESSIBLE ROUTES. MARKED CROSSINGS SHALL BE PROVIDED WHERE THE ACCESSIBLE ROUTE MUST CROSS VEHICULAR TRAFFIC LANES. WHERE POSSIBLE, IT IS PREFERABLE THAT THE ACCESSIBLE ROUTE NOT PASS BEHIND PARKED VEHICLES.
- 4. TWO (2) ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE.
- 5. ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE PARKING SPACE THEY SERVE.
- 6. ACCESS AISLES SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM.
- 7. ACCESS AISLES SHALL NOT OVERLAP THE VEHICULAR WAY. ACCESS AISLES SHALL BE PERMITTED TO BE PLACED ON EITHER SIDE OF THE PARKING SPACE EXCEPT FOR ANGLED VAN PARKING SPACES WHICH SHALL HAVE ACCESS AISLES LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACES.
- 8. FLOOR SURFACES OF PARKING SPACES AND ACCESS AISLES SERVING THEM SHALL BE STABLE, FIRM AND SLIP RESISTANT. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE. CHANGES IN LEVEL ARE NOT PERMITTED.
- 9. PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 2.0% IN ALL DIRECTIONS.
- 10. PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE REQUIRED CLEAR WIDTH OF AN ACCESSIBLE ROUTE.
- 11. PARKING SPACES FOR VANS AND ACCESS AISLES AND VEHICULAR ROUTES SERVING THEM SHALL PROVIDE A VERTICAL CLEARANCE OF NINETY-EIGHT (98) INCHES MINIMUM. SIGNS SHALL BE PROVIDED AT ENTRANCES TO PARKING FACILITIES INFORMING DRIVERS OF CLEARANCES AND THE LOCATION OF VAN ACCESSIBLE PARKING SPACES.
- 12. EACH ACCESSIBLE PARKING SPACE SHALL BE PROVIDED WITH SIGNAGE DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS SHALL BE INSTALLED AT A MINIMUM CLEAR HEIGHT OF SIXTY (60) INCHES ABOVE GRADE AND SHALL NOT INTERFERE WITH AN ACCESSIBLE ROUTE FROM AN ACCESSIBLE AIS



VICINITY MAP
SCALE: 1" = 1000'



SOILS MAP
SCALE: 1" = 500'

St. Mark Catholic Church/Mayfaire II Entrance - Tree Removal & Required Mitigation									
Qty of Trees	Caliper Inches*	Individual Trunk Calipers AND Individual Cluster	Tree Common Name	City Tree Type Classification	Total Cal. Inches to be Removed	% Mitigation	Significant	Total Qty. of Mitigation Trees Required	
Note: * All listed as total caliper inches for entire tree cluster or single tree trunk caliper in compliance with City of Wilmington Land Development Code definition for diameter at breast height"									
Essential Site Improvements: It is anticipated that all trees will be removed for essential site improvements, so only significant trees require mitigation									
REGULATED & SIGNIFICANT TREES									
Category 1 (100% Mitigation)									
16	8	8	OAK	hardwood	128	100%	no	43	
2	9	9	OAK	hardwood	18	100%	no	6	
4	10	10	OAK	hardwood	40	100%	no	13	
1	12	12	OAK	hardwood	12	100%	no	4	
1	13	13	OAK	hardwood	13	100%	no	4	
1	8	8	HOLLY	ornamental flowering	8	100%	yes	5	
1	4	4	MAG	ornamental flowering	4	100%	no	3	
2	5	5	MAG	ornamental flowering	10	100%	no	7	
1	6	6	MAG	ornamental flowering	6	100%	no	4	
6	8	8	MAP (RED MAPLE)	hardwood	48	100%	no	16	
2	9	9	MAP (RED MAPLE)	hardwood	18	100%	no	6	
1	11	11	MAP (RED MAPLE)	hardwood	11	100%	no	4	
								Total Category 1 Significant Trees Mitigation Required:	5
								Total Category 1 Regulated Trees To Be Removed with Essential Site Improvements:	115
Category 2 (75% Mitigation)									
9	8	8	GUM	hardwood	72	75%	no	18	
1	16	8	GUM	hardwood	16	75%	no	4	
2	9	9	GUM	hardwood	18	75%	no	5	
								Total Category 2 Significant Trees:	0
								Total Category 2 Regulated Trees To Be Removed with Essential Site Improvements:	27
Category 3 (50% Mitigation)									
18	12	12	PINE	conifer	216	50%	no	36	
5	13	13	PINE	conifer	65	50%	no	11	
6	14	14	PINE	conifer	84	50%	no	14	
5	15	15	PINE	conifer	75	50%	no	13	
6	16	16	PINE	conifer	96	50%	no	16	
3	17	17	PINE	conifer	51	50%	no	9	
1	18	18	PINE	conifer	18	50%	no	3	
1	19	19	PINE	conifer	19	50%	no	3	
1	20	20	PINE	conifer	20	50%	no	3	
								Total Category 3 Significant Trees:	0
								Total Category 3 Regulated Trees To Be Removed with Essential Site Improvements:	107
								Total Qty. of Significant Tree Mitigation (Essential Site Improvements):	5
								Total Tree Credits:	0
								Total Qty. of Mitigation Trees Required on Site (or Pay in Lieu Equivalent):	5

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit #: _____

Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

NC DENR PWSS WATER PERMIT #: _____

WATER CAPACITY: _____ GPD

DWQ SEWER PERMIT #: _____

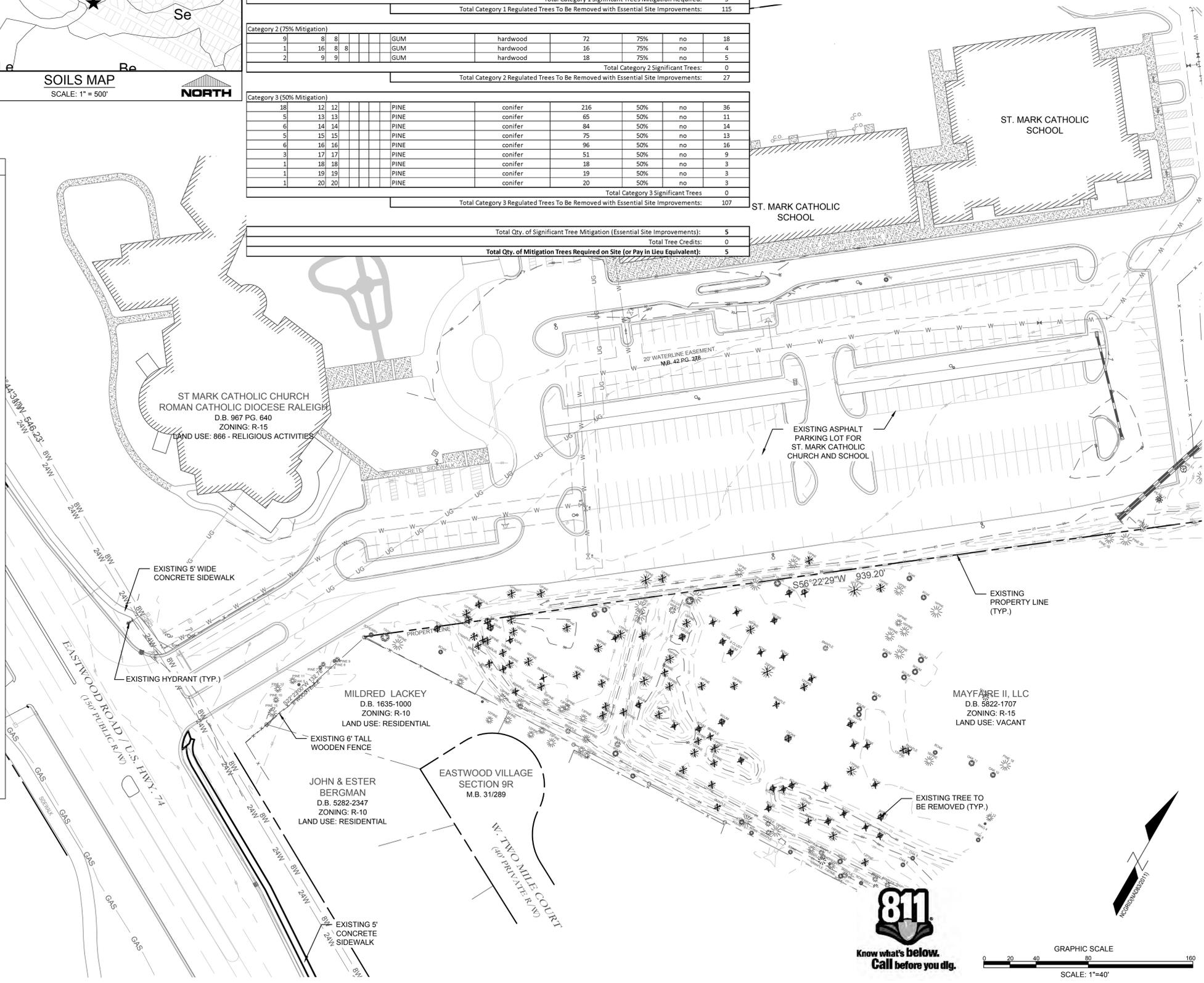
SEWER CAPACITY: _____ GPD

SEWER SHED # AND PLANT: _____

SEWER TO FLOW THROUGH NEI: YES OR NO (CIRCLE ONE)

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

SITE INVENTORY DATA	
1. PREPARER OF THE PLAN:	PARAMOUNT ENGINEERING, INC. 122 CINEMA DRIVE WILMINGTON, NC 28403
2. APPLICANT NAME:	MAYFAIRE II LLC 530 SE GREENVILLE BLVD, STE 200 GREENVILLE, NC 27858
3. SITE ADDRESS:	1011 EASTWOOD ROAD WILMINGTON, NC 28403
4. PROPERTY OWNER:	MAYFAIRE II LLC 530 SE GREENVILLE BLVD, STE 200 GREENVILLE, NC 27858
5. DEVELOPER:	SAME AS PROPERTY OWNER
6. PROPERTY BOUNDARY:	SEE PLAN
7. ZONING:	R-15 (BOTH PARCELS)
8. ADJACENT PROPERTY INFORMATION (OWNER AND ZONING):	SEE PLAN
9. VICINITY MAP:	SEE MAP ABOVE
10. TOPOGRAPHY:	SEE PLAN
11. 100 YEAR FLOOD PLAIN BOUNDARY:	SUBJECT PARCEL DOES NOT LIE WITHIN A 100-YEAR FLOOD ZONE AS INDICATED BY FEMA FLOOD ZONE PANEL 3720314700K BEARING AN EFFECTIVE DATE OF AUG. 28, 2018
12. LOCATION OF EXISTING DITCHES, CREEKS, AND STREAMS:	SEE PLAN
13. SOILS:	MURVILLE FINE SAND (Mu) LYNN HAVEN FINE SAND (Ly) LEON SAND (Le)
14. CAMA AEC & ASSOCIATED SETBACKS:	N/A
15. CAMA LAND CLASSIFICATION:	WATERSHED RESOURCE PROTECTION
16. CONSERVATION RESOURCES:	N/A
17. LOCAL, STATE, OR FEDERAL HISTORIC OR ARCHAEOLOGICAL SITE:	N/A
18. LOCATION OF CEMETERIES, BURIAL SITES, OR BURIAL GROUNDS:	N/A
19. SQUARE FOOTAGE OF FORESTED AREA, HABITAT, AND DOMINANT SPECIES:	N/A
20. SECTION 404 WETLANDS AND SECTION 10 WATERS:	N/A
21. PROTECTED SPECIES OR HABITAT:	N/A
22. THOROUGHFARES, BIKE ROUTES, SIDEWALKS, TRANSIT FACILITIES (EXISTING):	SEE PLAN & VICINITY MAP



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:

CLIENT INFORMATION:

ROMAN CATHOLIC DIOCESE OF RALEIGH
7200 STONEHENGE DRIVE
RALEIGH, NC 27613

PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

SITE INVENTORY PLAN
ST. MARK CATHOLIC CHURCH &
MAYFAIRE II ENTRANCE
1011 EASTWOOD ROAD
WILMINGTON, NC 28403

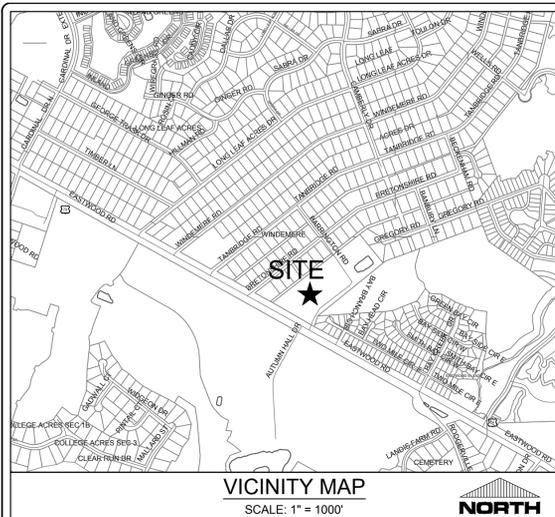
PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
RELEASED FOR CONST.

DRAWING INFORMATION:
DATE: 02/22/19
DESIGNED: RPB
DRAWN: RPB
CHECKED: RPB

SEAL:
NORTH CAROLINA
PROFESSIONAL
ENGINEER
ROBERT P. BALLANTYNE
031591
02/22/19

C-2.0

PEI JOB#: 16247.PE



SITE DATA TABULATION

OWNER:
 1) MAYFAIRE II LLC
 530 S.E. GREENVILLE BLVD, STE 200
 GREENVILLE, NC 27858

2) ROMAN CATHOLIC DIOCESE OF RALEIGH
 7200 STONEHENGE DRIVE
 RALEIGH, NC 27613

PROJECT ADDRESS: 1011 EASTWOOD ROAD
 WILMINGTON, NC 28403

TAX PARCEL IDENTIFICATION #:
 1) R05000-003-012-000
 2) R05000-003-006-001

RECORDED DEED BOOK:
 1) BK 5843, PG 1291
 2) BK 967, PG 640

TOTAL SITE AREA:
 1) 39.49 ACRES (1,720,180 SF)
 2) 12.28 ACRES (534,917 SF)

CURRENT ZONING: R-15 (BOTH PARCELS)
CAMA LAND USE CLASSIFICATION: WATERSHED RESOURCE PROTECTION
EXISTING LAND USE: ROADWAY & CHURCH
PROPOSED LAND USE: ROADWAY & CHURCH

IMPERVIOUS INFORMATION
EXISTING IMPERVIOUS
 TO BE REMOVED = 16,423 SF
 TO REMAIN = 0 SF
 TOTAL EXISTING = 16,423 SF

PROPOSED IMPERVIOUS
 ASPHALT ROADWAY/PARKING/C&G 39,103 SF
 SIDEWALK/MULTI-USE PATH 9,187 SF
 TOTAL PROPOSED = 48,290 SF

NET IMPERVIOUS = TOTAL PROPOSED IMPERVIOUS - EXISTING IMPERVIOUS TO BE REMOVED
 NET IMPERVIOUS = 48,290 SF - 16,423 SF = 31,868 SF

GENERAL NOTES

- ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.
- PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE, AND NEW HANOVER COUNTY REGULATIONS.
- PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION 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.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- 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.
- 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.
- ANY BROKEN OR MISSING SIDEWALK PANELS WILL BE REPLACED.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT OF WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. IN CERTAIN CASES, AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS.
- A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE PLAT.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
- EXISTING ASPHALT THAT IS NOT DESIGNATED TO BE DEMOLISHED SHALL BE MILLED 1-INCH TO ALLOW FOR OVERLAY.
- TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT	QTY
	QUERCUS VIRGINIANA 'HIGH RISE' / HIGH RISE LIVE OAK	2" CAL., 8' HT. MIN.	7
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT	QTY
	ILEX CRENATA 'HOOGENDORN' / HOOGENDORN HOLLY	3 GAL	76

LIST OF WAIVERS

- Approval of waiver from the minimum tangent length due to the constraints created by the signal alignment and roundabout approach.
- Approval of waiver from the minimum horizontal curve radius due to the constraints created by the necessary connection of the St. Mark parking lot to the roundabout.
- Approval of waiver from the minimum median width due to the need to connect to the existing right-of-way, maintain the sidewalk and multi-use path, and restrict left turns.
- Approval of waiver from the standard cross-section for a collector street due to variation required to connect to the new traffic signal and the transition to the roundabout.

STREET LIGHTING NOTES:

- THE STANDARD STREETLIGHT SHALL BE A DEP ENCLOSED CUTOFF (COBRA TYPE), HIGH PRESSURE SODIUM VAPOR (HPSV) OR DEP DESIGNATED LED EQUIVALENT FIXTURE INSTALLED WITHIN THE RECOMMENDED RANGE OF MOUNTING HEIGHTS FOR THE SPECIFIC FIXTURE. THE STANDARD STREETLIGHT SHALL BE INSTALLED ON A WOODEN POLE IN AREAS SERVED FROM OVERHEAD FACILITIES AND ON A FIBERGLASS POLE IN AREAS SERVED FROM UNDERGROUND FACILITIES.
- A LAYOUT FOR THE STANDARD STREET LIGHTING HAS BEEN PROVIDED WITH THE REVIEW. MINIMUM OF FIVE (5) STREET LIGHTS ARE REQUIRED FOR THIS SUB-DIVISION. ALTHOUGH, DEVELOPERS MAY CHOOSE TO PROVIDE ANY EXTRA LIGHTS OR ORNAMENTAL. ANY INSTALLATIONS ABOVE THE CRITERIA OF STANDARD STREET LIGHTING, WILL BE CONSIDERED AS NONSTANDARD AND HAS TO CONFORM TO THE CITY'S NON-STANDARD STREET LIGHTING PROCEDURE AS PER THE POLICY.
- DEVELOPERS SHALL BEAR ANY INSTALLATION COSTS ASSOCIATED WITH STREETLIGHTS, IF APPLICABLE. IN AREAS SERVED FROM UNDERGROUND FACILITIES, THE DEVELOPERS SHALL PAY THE ONE-TIME UNDERGROUND CONTRIBUTION CHARGE, IF APPLICABLE.
- THE PLANNING, DEVELOPMENT AND TRANSPORTATION DIRECTOR OR DESIGNEE AND THE CITY LANDSCAPE DESIGNER WILL COORDINATE PLAZA PLANTINGS AND STREETLIGHT LOCATIONS TO MINIMIZE THE OBSTRUCTION OF LIGHT BY VEGETATION.
- ALL STREET LIGHTS SHALL BE INSTALLED WITHIN THE PUBLIC ROW.

FLOOD NOTE

THE SUBJECT PARCEL IS NOT LOCATED WITHIN A 100-YEAR FLOOD ZONE AS INDICATED BY FEMA FLOOD ZONE PANEL 3720314700K BEARING AN EFFECTIVE DATE OF AUGUST 28, 2018.

UTILITIES

WATER AND SEWER UTILITIES WILL BE PROVIDED BY CFPWA.

STREETYARD NOTES

25 NEW SPACES ARE PROVIDED; UDO SEC 18-510 REQUIRES FULL OR 1/2 STREETYARD REQUIRED PLANTING IN STREETYARD (280 LF STREET FRONTAGE/ 100 LF = 2.8 MULTIPLIER);
REQUIRED:
 1 CANOPY (3 UNDERSTORY TREES = 1 CANOPY TREE) X 2.8 = 3 CANOPY TREES REQ'D
 6 SHRUBS X 2.8 = 17 SHRUBS
PROVIDED:
 EQUIVALENT OF 3 CANOPY TREES; 6 EXISTING UNDERSTORY TREES TO BE TRANSPLANTED TO STREETYARD, 1 ADDITIONAL CANOPY TREE ADDED
 17 SHRUBS

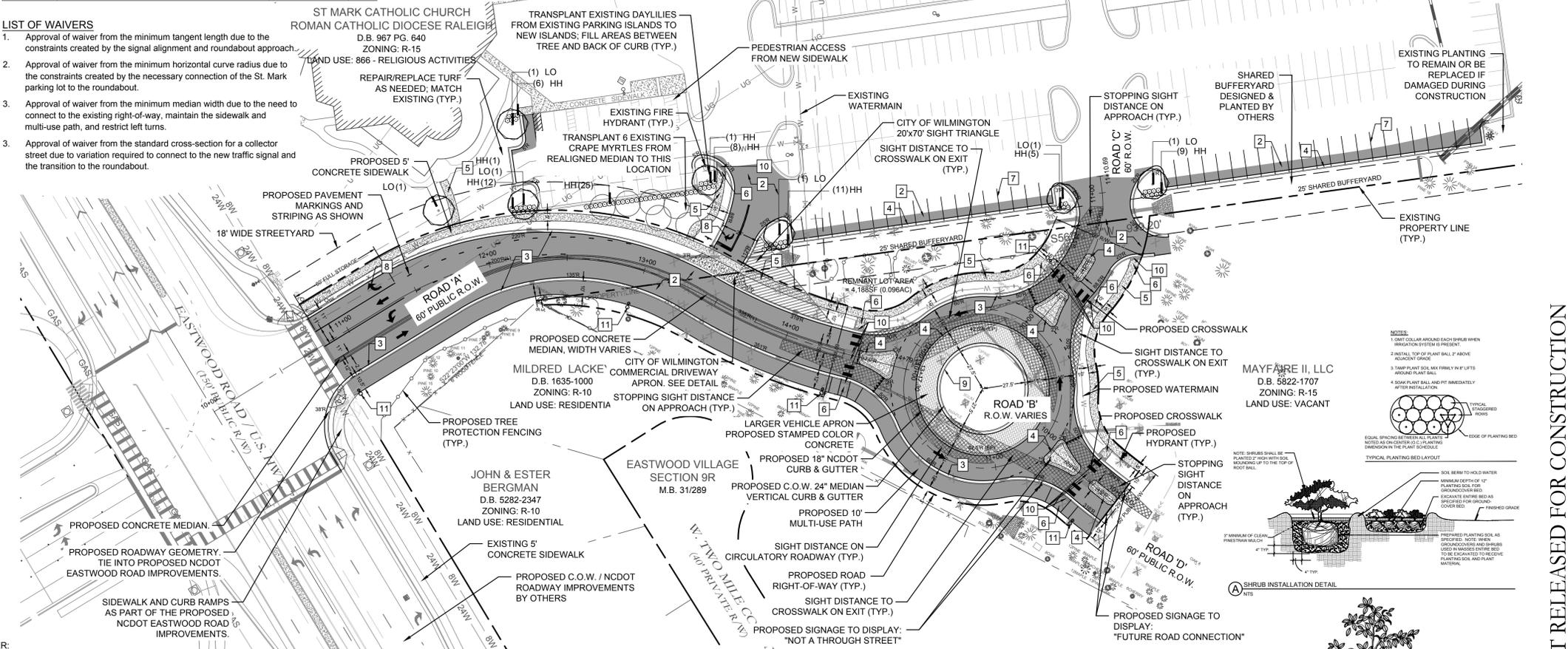
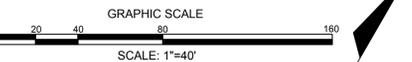
1011 EASTWOOD ROAD - SRB CONDITIONS

- The use and development of the subject property shall comply with all regulations and requirements imposed by the Land Development Code, City of Wilmington Technical Standards and Specifications Manual, and any other applicable federal, state, or local law, ordinance or regulation, as well as any condition stated below. In the event of a conflict, the more stringent requirement or higher standard shall apply.
- Approval of this preliminary plan does not constitute technical approval of a site plan. Final approval by the Technical Review Committee and the issuance of all required permits must occur prior to release of the project for construction.
- If, for any reason, any condition for approval is found to be illegal or invalid or if the applicant should fail to accept any condition following approval, the approval of the preliminary plan shall be null and void.

1011 EASTWOOD ROAD - SPECIAL USE PERMIT CONDITIONS

- The property shall be subject to all of the specific requirements stated in the Land Development Code for the proposed use as well as any additional conditions stated below.
- The use and development of the subject property shall comply with other supplemental regulations and requirements imposed by the Land Development Code or any other applicable federal, state or local law, ordinance or regulation. In the event of a conflict, the more stringent requirement or higher standard shall apply.
- If, for any reason, any condition for approval is found to be illegal or invalid or if the applicant should fail to accept any condition following approval, the approval of the site plan for the district shall be null and void and no effect and proceedings shall be instituted to rezone the property to its previous zoning classification.
- The use and development of the property shall be in accordance with the plan and elevations as submitted and approved.
- Approval of this special use permit does not constitute technical approval of the site plan. All Technical Review Committee comments shall be followed prior to issuance of a construction release or final zoning approval.

- The use and development of the property shall be in accordance with the preliminary plan as submitted and approved.
- A multi-use path shall be provided along the southeastern side of the right-of-way.
- A sign shall be provided at the end of the stub road indicating a future connection.
- All City, State, and Federal regulations shall be met.
- Traffic control devices must be installed to keep drivers in roundabout.
- A sign indicating road is not a through street until such time that the road is extended into Mayfaire.
- No more than 440 parking spaces shall be permitted on the site.
- A minimum of 59 pervious parking shall be maintained on the site.
- The Barrington Road connection shall remain open subject to all previous special use permit conditions.
- All applicable previous Subdivision Review Board conditions and conditions of the previously issued Special Use Permits and previous modifications shall still apply.
- A 25-foot wide shared bufferyard shall be located along the southern property boundary with a portion to be located on the St. Mark site and a portion to be located on the adjacent site (Mayfaire II) within a landscape easement.
- Freestanding signage shall be limited to monument style with a maximum of 6-foot height and landscaping shall be installed along the base of the sign.
- The creative standard shall not be used to satisfy streetyard landscaping requirements.
- All City, State, and Federal regulations shall be met.



GENERAL NOTES

- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT OF WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
- ALL RADIUS DIMENSIONS ARE MEASURED AT FACE OF CURB UNLESS OTHERWISE NOTED.

TREE REMOVAL

- TREES TO BE REMOVED ARE SHOWN ON SITE INVENTORY PLAN (C-2.0). REFER TO C-2.0 FOR TREE REMOVAL AND MITIGATION CHART.

KEY NOTES:

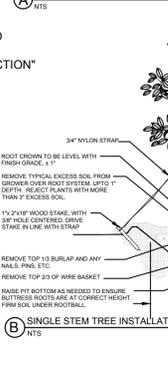
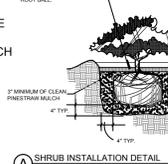
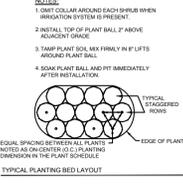
- CONCRETE PAVING:** REFER TO DETAIL C-6.0
- ASPHALT PAVING:** REFER TO DETAIL C-6.0
- STANDARD 24" CURB & GUTTER:** REFER TO DETAIL C-6.0
- NCDOT 1'-6" CURB & GUTTER:** REFER TO DETAIL C-6.0
- CONCRETE SIDEWALK:** REFER TO DETAIL C-6.0
- CURB RAMP:** REFER TO DETAIL C-6.0
- STRIPING:** PROVIDE 4" WIDE PARKING LOT STRIPING AS SHOWN. USE HIGHWAY MARKING PAINT - WHITE (2 COATS).
- PAVEMENT MARKINGS:** REFER TO DETAIL C-6.0.
- C.O.W. 24" MEDIAN VERTICAL CURB & GUTTER:** REFER TO DETAIL C-6.0.
- TACTILE WARNING MAT:** REFER TO DETAIL C-6.0
- LIGHT POLE:** REFER TO STREET LIGHTING NOTES ON SHEET C-2.2

LANDSCAPE NOTES:

- CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS OR AS OTHERWISE DICTATED BY LOCAL REGULATIONS. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC OR PRIVATE UTILITIES.
- STAKE ALL TREES AS SHOWN IN DETAIL OR AS OTHERWISE DIRECTED BY OWNER OR OWNER'S REPRESENTATIVE.
- ALL PLANT MATERIAL SHALL MEET THE CURRENT VERSION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARDS.
- NO EXISTING TREES SHALL BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT, OWNER'S REPRESENTATIVE, OR AS APPROVED BY CITY OF WILMINGTON REPRESENTATIVES DURING TREE PROTECTION FENCING SITE REVIEW.
- SET ALL TREES IN 5" MINIMUM DIAMETER PINE STRAW MULCH BED.
- ALL SHRUB BEDS AND/OR PLANTING AREAS EXCLUDING SEEDING AREAS SHALL BE MULCHED WITH 3 INCH MINIMUM AND 4 INCH MAXIMUM DEPTH PINE STRAW MULCH UNLESS OTHERWISE NOTED.
- PLANTING SOIL MIX: MIX EXISTING SOIL WITH THE SOIL AMENDMENTS AND FERTILIZERS IN THE QUANTITIES RECOMMENDED BY THE SOIL TESTING LABORATORY, THIRD PARTY RECOGNIZED BY THE STATE DEPARTMENT OF AGRICULTURE OR AS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- ANY AND ALL SUBSTITUTIONS OF PLANT MATERIAL SHALL BE APPROVED BY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE. FAILURE IN OBTAINING APPROVAL MAY RESULT IN LIABILITY TO THE CONTRACTOR.
- THE CONTRACTOR SHALL REPLACE DEAD AND/OR UNHEALTHY PLANT MATERIAL WITHIN 12 MONTHS OF ACCEPTANCE OF THE INSTALLED MATERIAL FROM THE OWNER OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL PREPARE ALL TURF AREAS TO HAVE A SMOOTH, EVEN TURF COVERAGE AND SURFACE THAT IS FREE OF DIVOTS, HOLES, AND DEBRIS WITH NO BARE SPOTS. ROLL ALL SOE AREAS IN DRY CONDITIONS AND AFTER SOIL SETTLING OCCURS TO ASSURE SMOOTH, EVEN SURFACE.
- CONTRACTOR SHALL REVIEW WITH AND INSTALL IRRIGATION AS REQUIRED BY OWNER. IF A SYSTEM IS NEEDED, A 2

- WIRE AUTOMATED IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED BY A LICENSED IRRIGATION CONTRACTOR IN THE STATE OF NORTH CAROLINA. THE CONTRACTOR SHALL USE WELL WATER AND ASSESS CURRENT WELLS TO BE SURE THEY CAN HANDLE THE NEW PROJECT. IF NOT, THE CONTRACTOR SHALL COORDINATE WITH OWNER TO SECURE WATER SOURCE.
- ALL IRRIGATION NEAR WALKS AND BUILDINGS SHOULD MINIMIZE OVERSPRAY OF WATER TO THE GREATEST EXTENT POSSIBLE.
- THE CONTRACTOR IS RESPONSIBLE FOR HAND WATERING THE INSTALLED PLANT MATERIAL FOR A PERIOD OF 1 YEAR FROM THE OWNER'S SITE ACCEPTANCE IF IRRIGATION HAS NOT BEEN INSTALLED OR IS NOT OPERATIONAL. ALL ORNAMENTAL GRASSES LESS THAN 30" IN HEIGHT, THRIVING PLANTS.
- CONTRACTOR SHALL PLANT STREET TREES AS CLOSE TO CITY REGULATIONS AS POSSIBLE. HOWEVER, SITE CONDITIONS INCLUDING THE LOCATIONS OF DRIVEWAYS, SIGNS, ETC. MAY REQUIRE ADJUSTMENT FROM PROPOSED PLAN.
- ALL LANDSCAPE PLANTINGS WILL BE COMPLIANT WITH ARTICLE 8 OF THE CITY OF WILMINGTON LDC. IF OWNER REQUESTS ADDITIONAL PLANTINGS WITHIN SIGHT TRIANGLES, ALL PLANTINGS WILL BE LIMITED TO SHRUBS AND/OR ORNAMENTAL GRASSES LESS THAN 30" IN HEIGHT.
- ALL PROPOSED VEGETATION WITHIN SIGHT DISTANCE TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30" - 10' IN ACCORDANCE WITH SECTION 18-556 OF THE CITY OF WILMINGTON LAND DEVELOPMENT CODE IN CASES WHERE SIGHT DISTANCE TRIANGLES INTERFERE WITH OTHER REQUIRED BUFFER OR PLANTING AREAS. THE SIGHT DISTANCE TRIANGLE WAS MAINTAINED AND PLANTINGS WERE ADJUSTED TO ALLOW FOR PROPER SIGHT LINES. CONTRACTOR IS RESPONSIBLE FOR REMOVING TRASH, DEBRIS AND EXCESS MATERIALS FROM THE JOB SITE ONCE THE PROJECT IS COMPLETE. SECURING ANY MATERIALS LEFT ON SITE DURING THE COURSE OF THE PROJECT IS THE CONTRACTOR'S RESPONSIBILITY.

MAYFAIRE II, LLC
 D.B. 5822-1707
 ZONING: R-15
 LAND USE: VACANT



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

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

811
 Know what's below.
 Call before you dig.

NC DENR PWSS WATER PERMIT #:
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT #:
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT:
 SEWER TO FLOW THROUGH NEI: YES OR NO (CIRCLE ONE)

REVISIONS:

NO.	DATE	DESCRIPTION
1	12/16/18	1) REVISIONS PER TRC REVIEW COMMENTS, REVIEW #1
2	02/14/19	2) REVISIONS PER TRC REVIEW COMMENTS, REVIEW #2
3	02/14/19	3) REVISIONS PER TRC REVIEW COMMENTS, REVIEW #3

CLIENT INFORMATION:
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 122 Cinema Drive
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 (910) 791-6707 (O) (910) 791-6760 (F)
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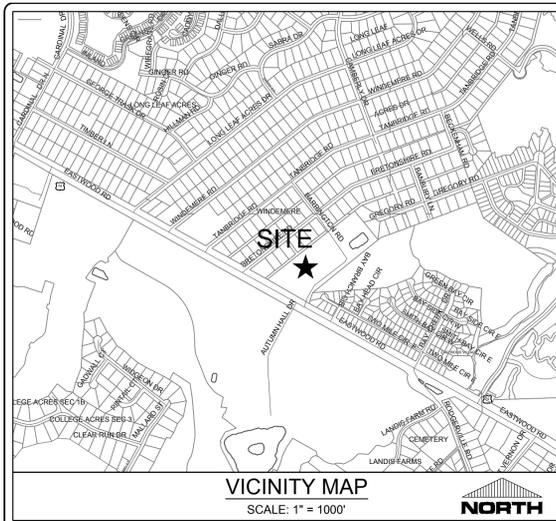
SITE & PLANTING PLAN
ST. MARK CATHOLIC CHURCH & MAYFAIRE II ENTRANCE
 1011 EASTWOOD ROAD
 WILMINGTON, NC 28403

PROJECT STATUS
 CONCEPTUAL LAYOUT: _____
 FINAL DESIGN: _____
 RELEASED FOR CONSTRUCTION: _____

DRAWING INFORMATION
 DATE: 02/22/19
 SCALE: 1" = 40'
 ASIC
 DRAWN: _____
 CHECKED: _____

SEAL
ROBERT P. BALLING
 ENGINEER
 02/22/19
C-2.2
 PEI JOB#: 16247.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



LEGEND:

--- 16 ---	EXISTING CONTOUR
--- 29 ---	PROPOSED CONTOUR
EG+25.05	EXISTING GRADE SPOT ELEVATION
EP+25.05	PROPOSED EDGE OF PAVEMENT
TW+25.05	PROPOSED SIDEWALK ELEVATION
GL+25.05	PROPOSED GUTTER FLOW LINE
TC+25.05	PROPOSED TOP OF CURB ELEVATION
[Symbol]	INLET PROTECTION
[Symbol]	LIMITS OF DISTURBANCE
[Symbol]	SILT FENCE
[Symbol]	TREE PROTECTION FENCING
[Symbol]	DRAINAGE FLOW PATH
[Symbol]	DRAINAGE INLET LABEL
[Symbol]	SPILL GUTTER
[Symbol]	ROCK PIPE INLET PROTECTION
[Symbol]	GEOTECH BORING LOCATION
[Symbol]	DRAINAGE FLOW PATH & SLOPE
[Symbol]	TREE TO BE REMOVED

ASPHALT AREA NOTE:
 SITE CONTRACTOR SHALL STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL AND PROVIDE CUT/FILL OPERATIONS TO PROVIDE A COMPACTED CONTROLLED SUBGRADE, IN ACCORDANCE WITH ANY SUBSURFACE GEOTECHNICAL EXPLORATION AND TECHNICAL SPECIFICATIONS.

GENERAL NOTES:

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL STATE OF NC, CITY OF WILMINGTON, AND NEW HANOVER COUNTY STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL PLACE INLET PROTECTION AROUND ALL STORM DRAIN INLETS TO PROTECT THE SYSTEM FROM COLLECTING SEDIMENTATION DURING CONSTRUCTION. INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE PARKING LOT IS PAVED.
- CONTRACTOR SHALL ADJUST ALL FRAMES OF EX. UTILITY INFRASTRUCTURE WITHIN ASPHALT OVERLAY AND NEW ASPHALT AREAS TO MATCH PROPOSED GRADES.
- ALL PROPOSED SPOT ELEVATIONS SHOWN IN THE PARKING LOT ARE PROPOSED EDGE OF PAVEMENT OR FACE OF CURB @ GUTTER FOR CURB SECTIONS, UNLESS NOTED OTHERWISE.
- ALL SIDEWALK CROSS SLOPES HAVE BEEN GRADED TO MEET ADA REGULATIONS. CONTRACTOR SHALL CONFIRM GRADES BEFORE PLACING PAVEMENT OR SIDEWALKS AND REPORT ANY DISCREPANCIES TO OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL STAKE SILT FENCE ALONG LIMITS OF DISTURBANCE LINE. THE SILT FENCE LINETYPE IS OFFSET ON THE DRAWING FOR CLARITY.

STORM SEWER SCHEDULE:

Upstream Node	Downstream Node	Diameter (in)	Upstream Invert (ft)	Downstream Invert (ft)	Pipe Length (ft)	Slope (%)	Upstream Rim Elev (ft)	Downstream Rim Elev (ft)	Pipe Material
CI-04	CI-03	15.00	24.83	24.73	33.86	0.30	28.65	28.55	RCP III
CI-03	CI-02	15.00	24.73	24.44	96.50	0.30	28.55	29.05	RCP III
CI-02	FES 01	18.00	24.44	24.25	61.85	0.30	29.05	25.75	RCP III
CI-08	MH-07	15.00	24.39	24.17	72.06	0.30	29.22	30.22	RCP III
MH-07	CI-06	15.00	24.17	24.04	45.41	0.30	30.22	28.75	RCP III
CI-06	FES 05	18.00	24.04	23.87	56.02	0.30	28.75	25.52	RCP III
CI-10	CI-09	12.00	24.53	24.43	32.00	0.30	28.03	28.04	RCP III
CI-09	MH-07	15.00	24.43	24.17	85.39	0.30	28.04	30.22	RCP III
CI-14	CI-13	12.00	24.81	24.71	31.61	0.30	28.96	28.97	RCP III
CI-13	MH-12	15.00	24.71	24.48	77.52	0.30	28.97	29.48	RCP III
MH-12	CI-11	15.00	24.48	24.22	86.73	0.30	29.48	28.75	RCP III
CI-11	CI-06	15.00	24.22	24.04	59.91	0.30	28.75	28.75	RCP III
CI-20	FES-19	15.00	24.47	24.25	72.65	0.30	28.04	26.00	RCP III
FES-18	CI-17	24.00	23.71	23.66	17.96	0.32	25.70	27.10	RCP III
CI-17	CI-16	24.00	23.66	23.54	36.52	0.32	27.10	27.28	RCP IV
CI-16	FES-15	24.00	23.54	23.50	12.16	0.32	27.28	24.49	RCP IV

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

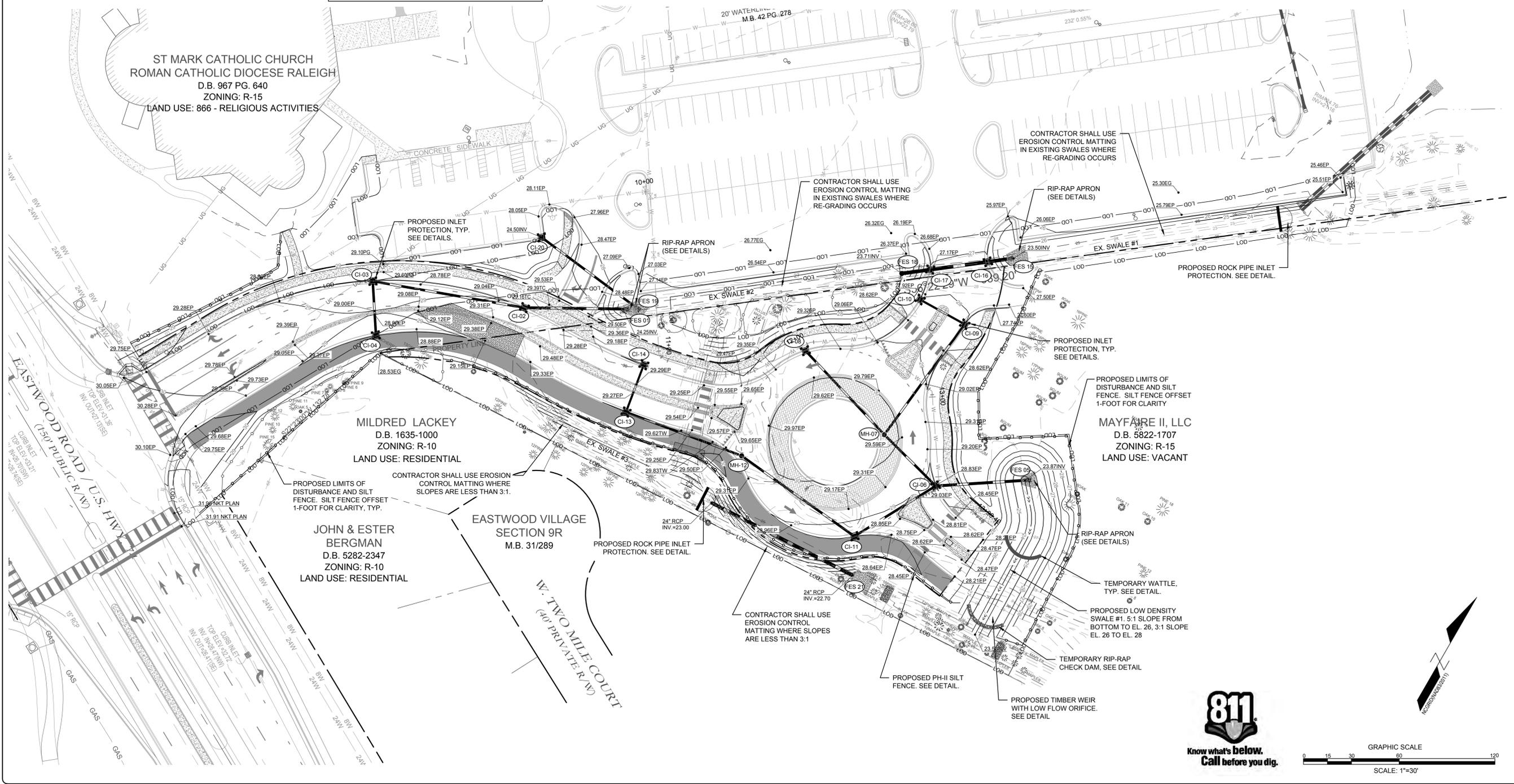
WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

Name	Date

Planning _____
 Traffic _____
 Fire _____

NC DENR PWSS WATER PERMIT #: _____ GPD
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT #: _____ GPD
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)



REVISIONS:

No.	Description	Date

CLIENT INFORMATION:
 ROMAN CATHOLIC DIOCESE OF RALEIGH
 7200 STONEHENGE DRIVE
 RALEIGH, NC 27613

PARAMOUNT ENGINEERING
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 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-2846

GRADING-DRAINAGE-EC PLAN
 ST. MARK CATHOLIC CHURCH
 1011 EASTWOOD ROAD
 WILMINGTON, NC 28403

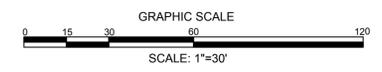
PROJECT STATUS:
 CONCEPTUAL LAYOUT: _____
 PRELIMINARY LAYOUT: _____
 RELEASED FOR CONST: _____

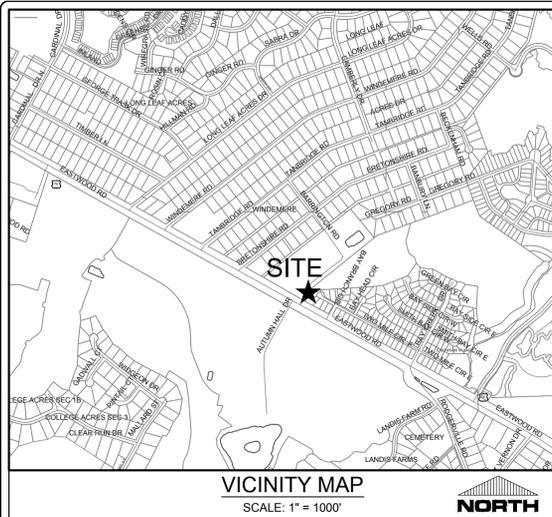
DRAWING INFORMATION:
 DATE: 02/22/19
 DESIGNED: _____
 DRAWN: _____
 CHECKED: _____

SEAL:
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL NO. 031591
 ENGINEER ROBERT P. BALLANTINE
 02/22/19

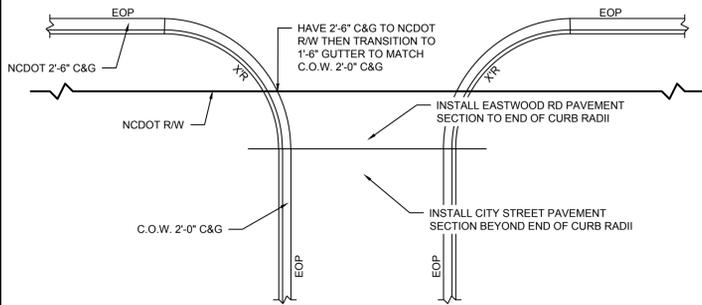
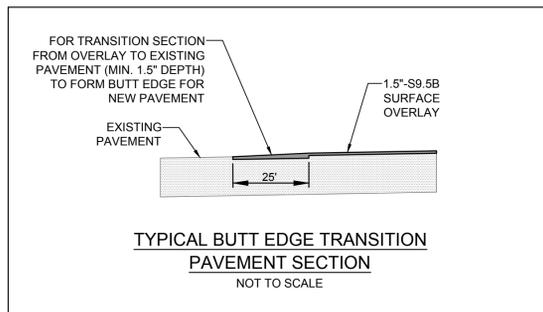
C-3.1
 PEI JOB#: 16247.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION





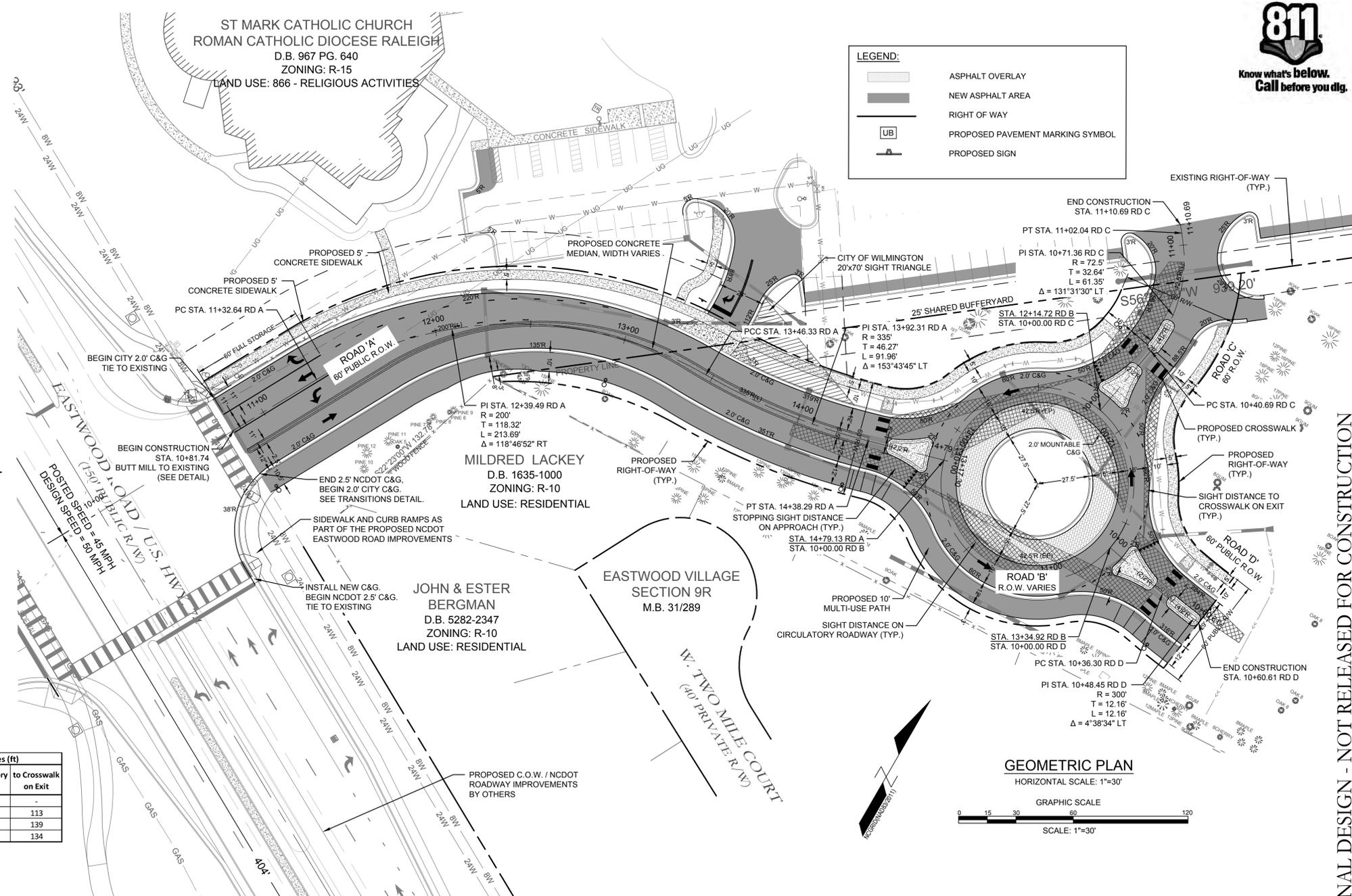
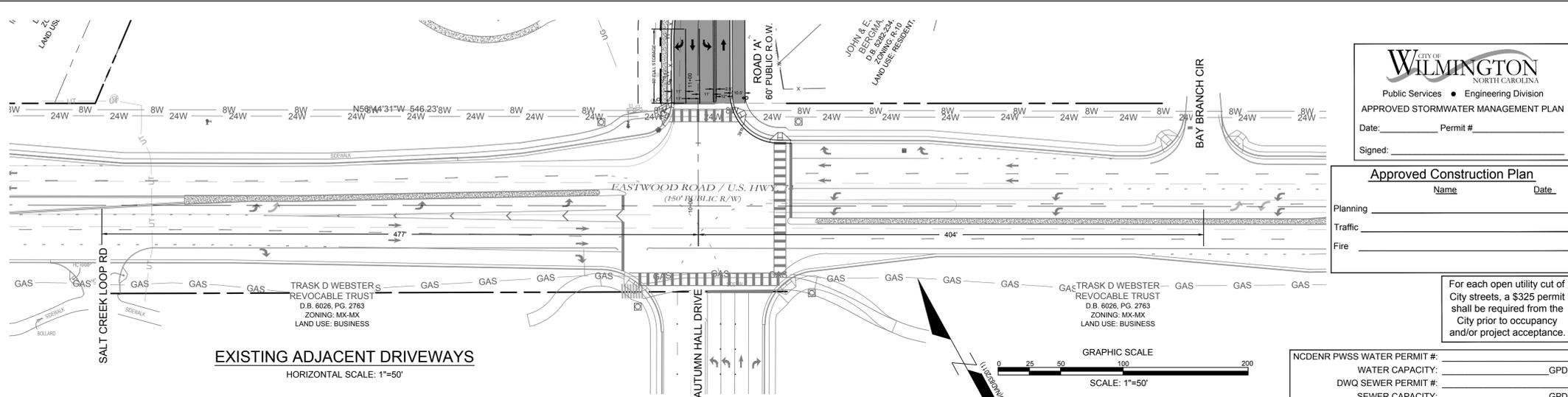
- NOTES:**
- SEE SHEET C-5.1 FOR PROPOSED ROADWAY PROFILES
 - SEE SHEET C-5.1 FOR TYPICAL ROAD SECTIONS
 - SEE SHEET C-5.2 FOR PAVEMENT MARKING
 - NEW ASPHALT AREA = 24,740 SY
 - NEW CURB & GUTTER = 2,220 LF
 - SEE SHEETS C-6.0 FOR TYPICAL DETAILS



NCDOT TO CITY OF WILMINGTON TRANSITIONS DETAIL
NOT TO SCALE

Roadway	Design Vehicle	Design Speeds (mph)			Measurements (ft)		Sight Distances (ft)		
		Entry	Circulating	Exit	Central Island, Dia.	Inscribed Circle, Dia.	Stopping Approach	on Circulatory Roadway	to Crosswalk on Exit
Road "B" - Roundabout	WB-50	25	15	15	55	117	77	69	-
Road "C" to Road "A"									113
Road "A" to Road "D"									139
Road "D" to Road "C"									134

SUMMARY OF ROUNDABOUT DESIGN CRITERIA
NOT TO SCALE



CITY OF 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.

NCDENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES OR NO (CIRCLE ONE)



LEGEND:

- ASPHALT OVERLAY
- NEW ASPHALT AREA
- RIGHT OF WAY
- PROPOSED PAVEMENT MARKING SYMBOL
- PROPOSED SIGN

REVISIONS:

12/14/18	1. REVISIONS PER ITR COMMENTS, REVIEW #1
02/04/19	2. REVISIONS PER ITR COMMENTS, REVIEW #2

CLIENT INFORMATION:
ROMAN CATHOLIC DIOCESE OF RALEIGH
7200 STONEHENGE DRIVE
RALEIGH, NC 27613

PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

GEOMETRIC PLAN
ST. MARK CATHOLIC CHURCH & MAYFAIRE II ENTRANCE
1011 EASTWOOD ROAD
WILMINGTON, NC 28403

PROJECT STATUS:
CONCEPTUAL LAYOUT: _____
FINAL DESIGN: _____
RELEASED FOR CONSTRUCTION: _____

DRAWING INFORMATION:
DESIGNED BY: _____
SCALE: _____
AS NOTED: _____
CHECKED: _____

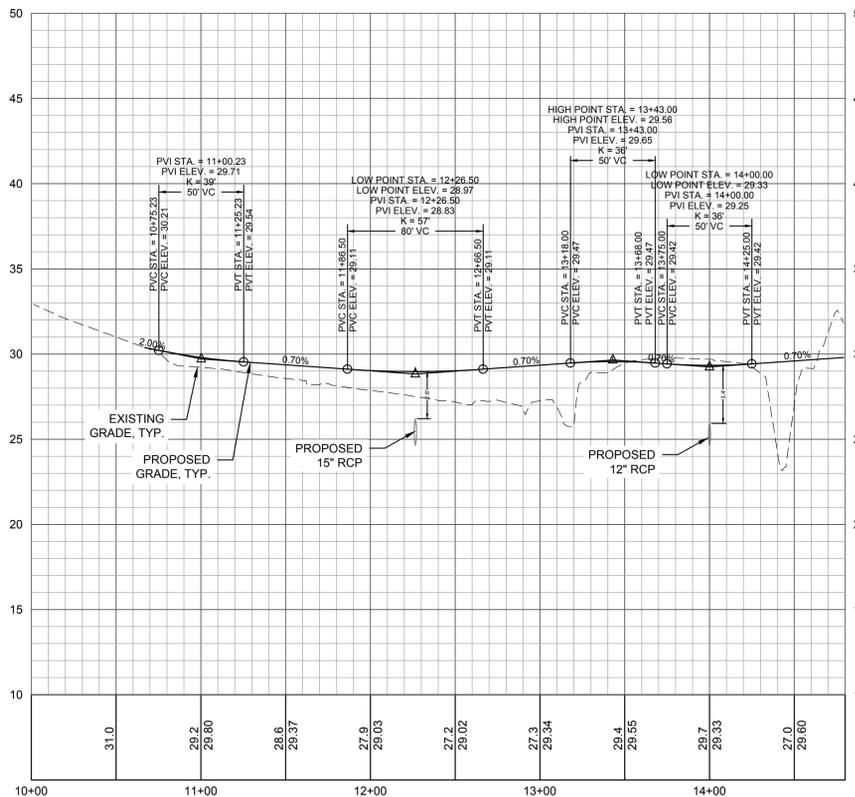
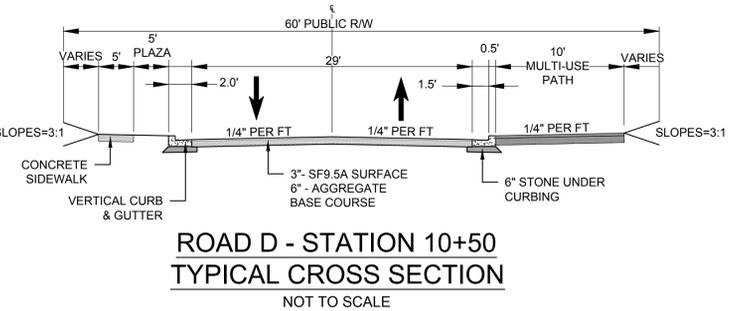
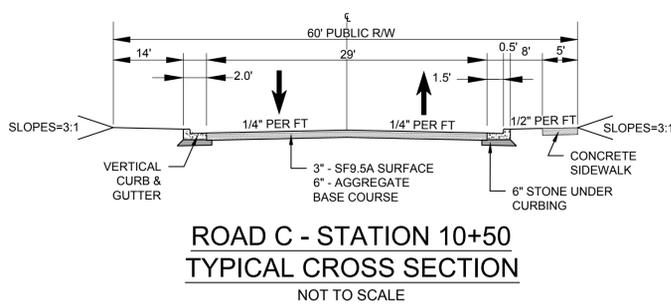
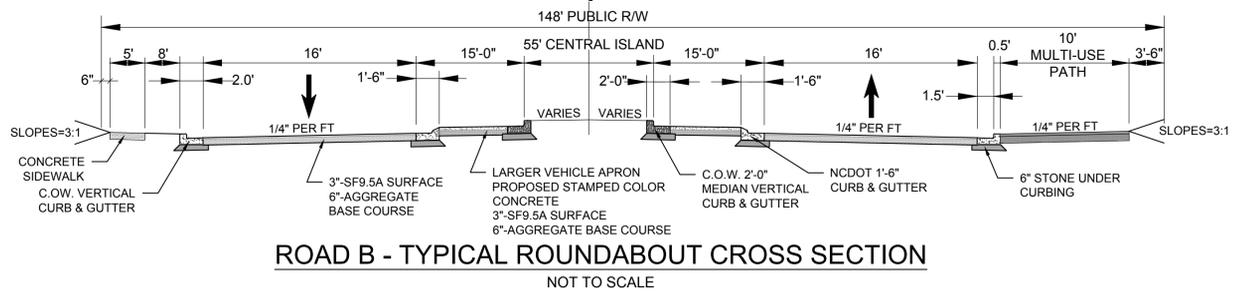
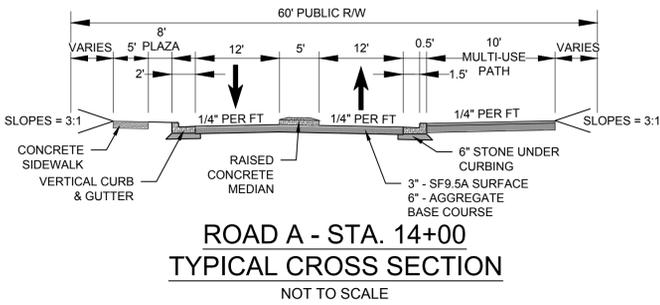
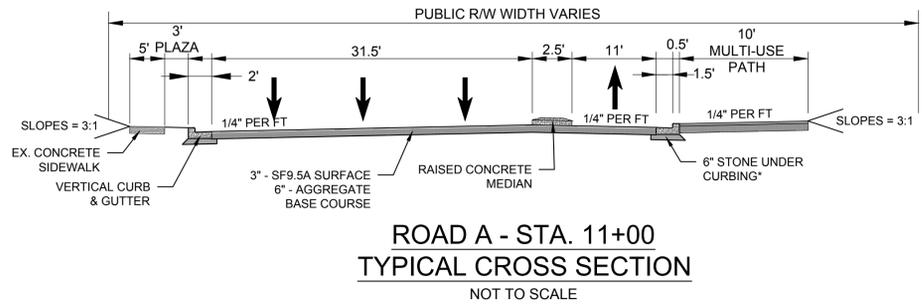
SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL NO. 031591
ROBERT P. BAILLIE
02/22/19

C-5.0
PEI JOB#: 16247.PE

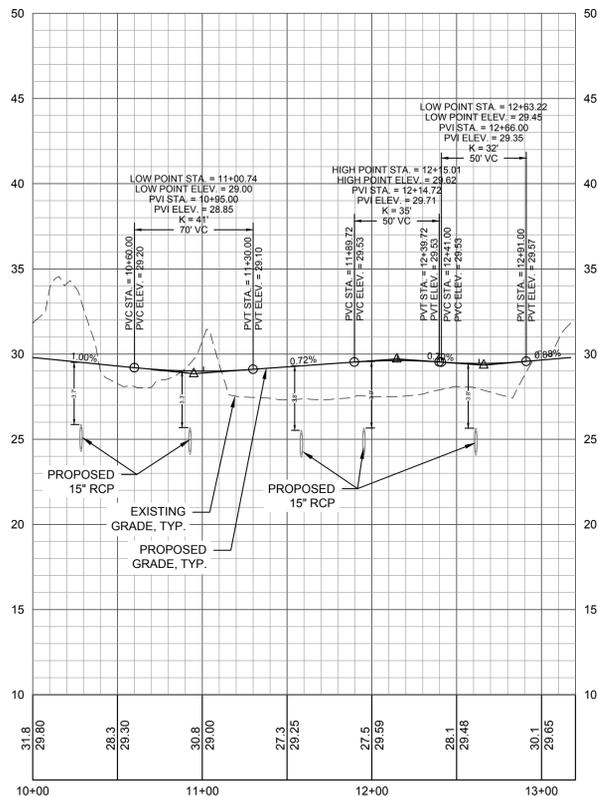
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

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

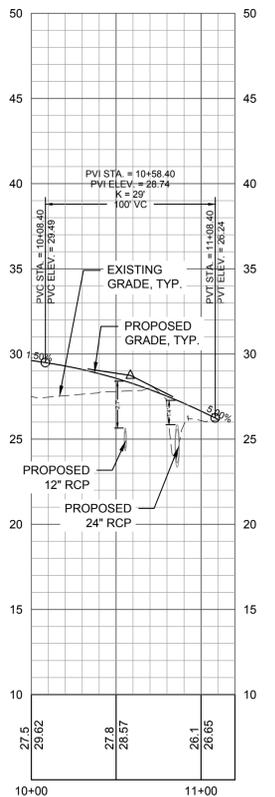
Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____



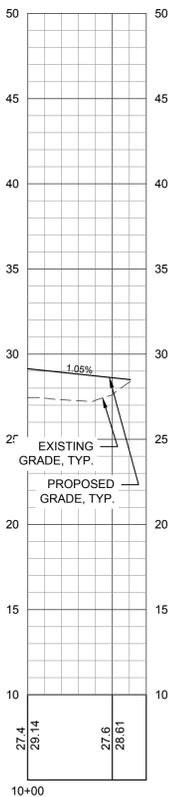
ROAD A (STA. 10+00 - 14+80)
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



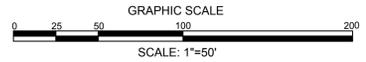
ROAD B - ROUNDABOUT (STA. 10+00 - 13+17)
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



ROAD C (STA. 10+00 - 11+11)
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



ROAD D (STA. 10+00 - 10+61)
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



REVISIONS:

12/14/19	1	REVISIONS PER TRC COMMENTS, REVIEW #1
02/24/20	2	REVISIONS PER TRC COMMENTS, REVIEW #2

CLIENT INFORMATION:
ROMAN CATHOLIC DIOCESE OF RALEIGH
7200 STONEHENGE DRIVE
RALEIGH, NC 27613

PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

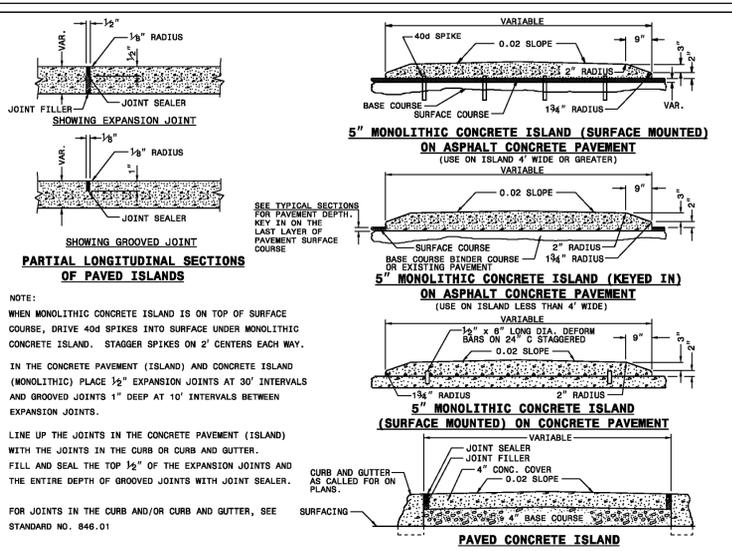
ROAD PROFILES & TYPICAL SECTIONS
ST. MARK CATHOLIC CHURCH &
MAYFAIRE II ENTRANCE
1011 EASTWOOD ROAD
WILMINGTON, NC 28403

PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
RELEASED FOR CONST.
DRAWING INFORMATION:
DESIGNED:
SCALE:
CHECKED:
DATE:



C-5.1
PEI JOB#: 16247.PE

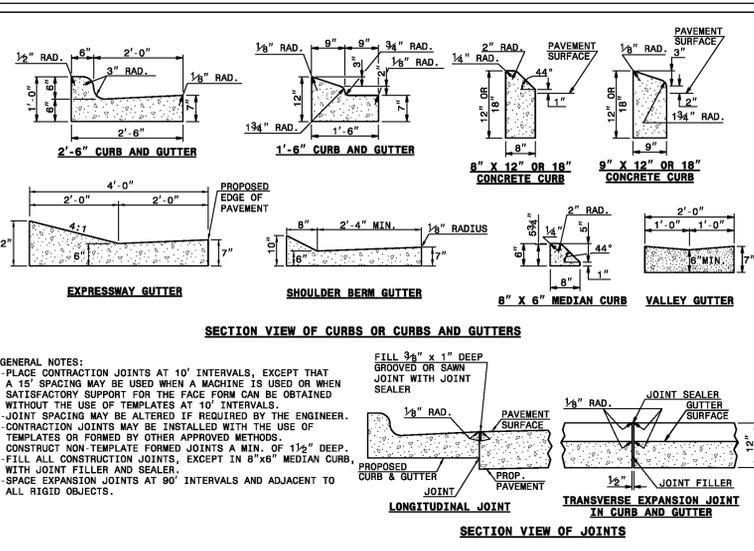
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N. C.

ROADWAY STANDARD DRAWING FOR
CONCRETE ISLANDS

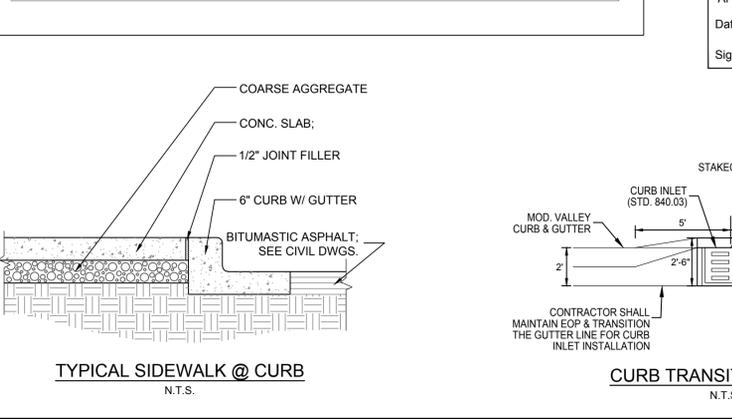
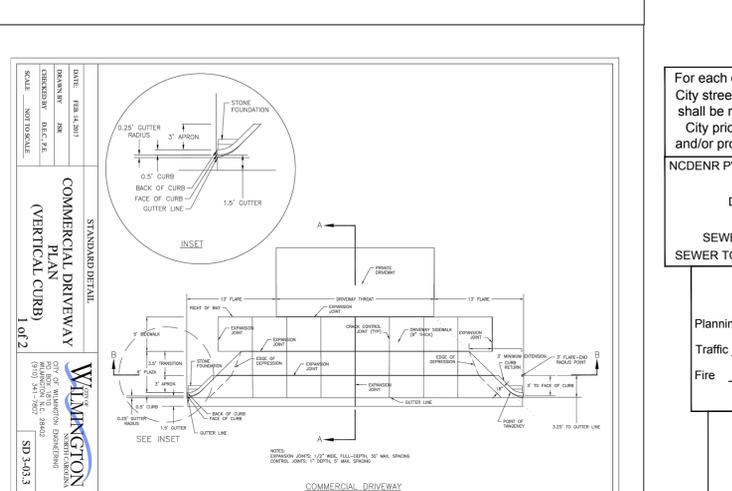
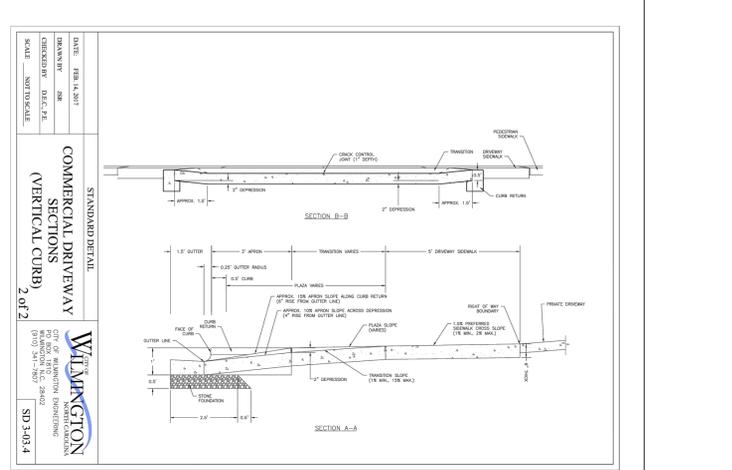
SHEET 1 OF 1
852.01



STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N. C.

ROADWAY STANDARD DRAWING FOR
CONCRETE CURB, GUTTER AND CURB & GUTTER

SHEET 1 OF 1
846.01



811
Know what's below.
Call before you dig.

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

NCDCNR PWSS WATER PERMIT #: _____ GPD
WATER CAPACITY: _____
DWQ SEWER PERMIT #: _____ GPD
SEWER CAPACITY: _____
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

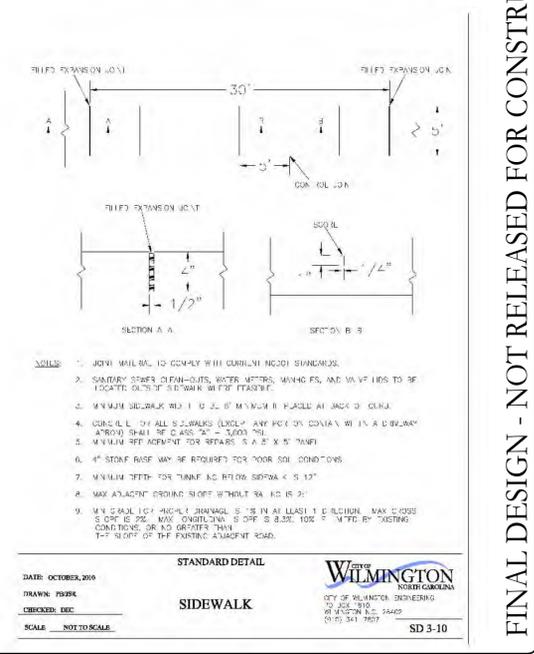
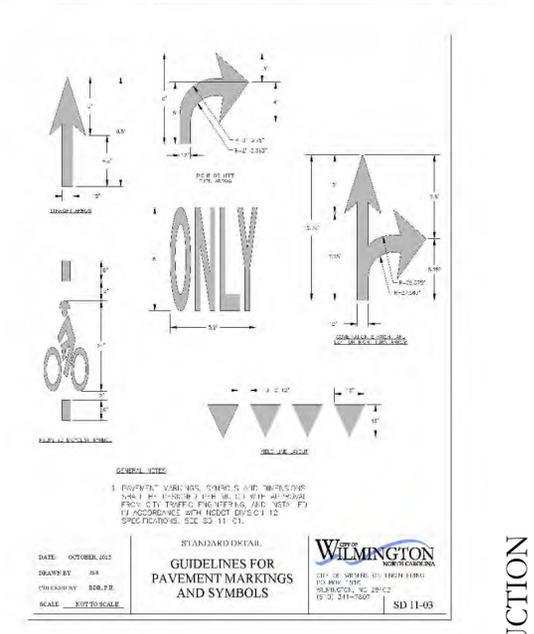
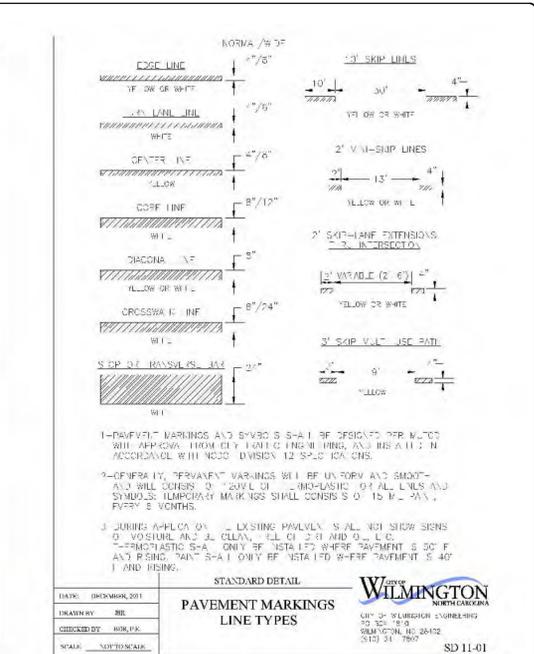
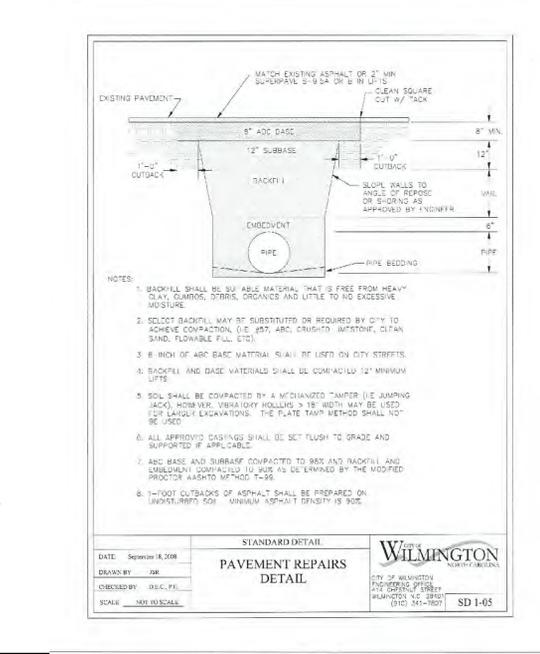
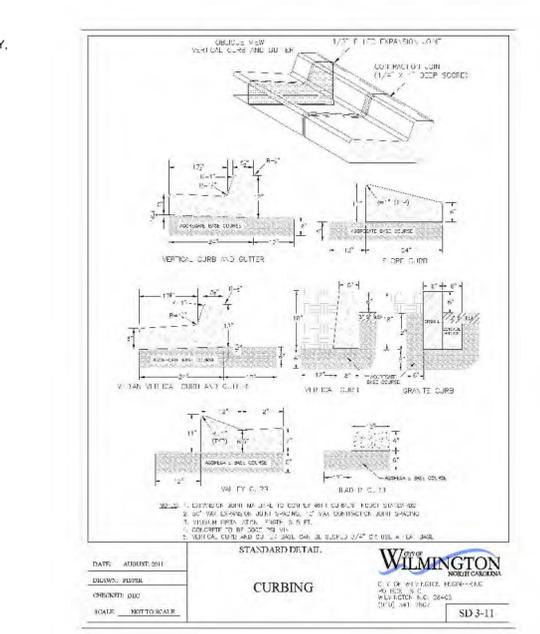
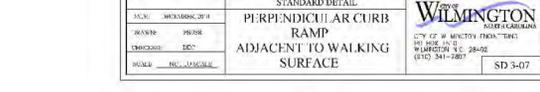
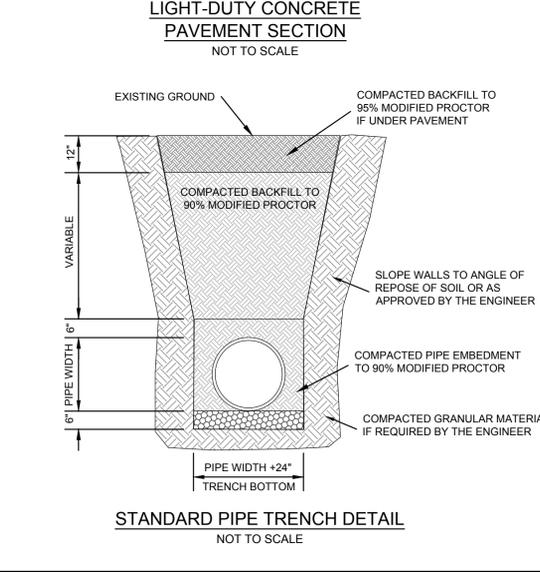
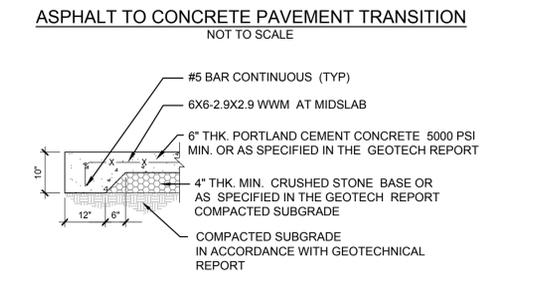
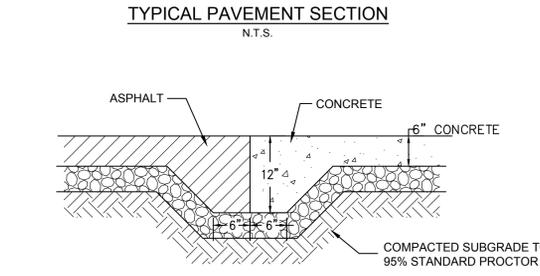
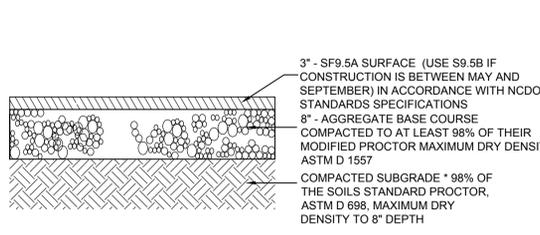
Approved Construction Plan

Name _____ Date _____

Planning _____
Traffic _____
Fire _____

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

Date: _____ Permit # _____
Signed: _____



REVISIONS:

CLIENT INFORMATION:
ROMAN CATHOLIC DIOCESE OF RALEIGH
7200 STONEHENGE DRIVE
RALEIGH, NC 27613

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License # C-2846

DETAILS
ST. MARK CATHOLIC CHURCH &
MAYFAIRE II ENTRANCE
EASTWOOD ROAD
WILMINGTON, NC 28403

PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
RELEASED FOR CONST.

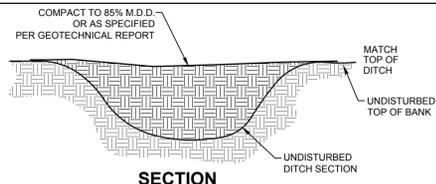
DRAWING INFORMATION:
DATE: 02/22/19
DESIGNED: RPB
DRAWN: RPB
CHECKED: RPB

SEAL
NORTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
031581
ROBERT P. BALLING
02/22/19

C-6.0

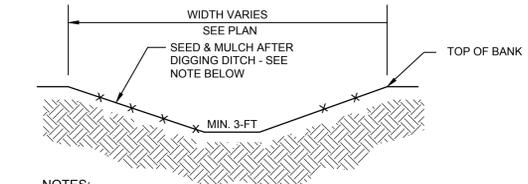
PEI JOB#: 16247.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



- NOTES:**
- REMOVE ALL BRANCHES AND DEBRIS FROM LOCATION OF DITCH PLUG.
 - DO NOT EXCAVATE THE EXISTING CHANNEL OR BANKS.
 - BACKFILL ON TOP OF THE BOTTOM IN 6-INCH LIFTS.
 - INSPECT PLUG DURING CONSTRUCTION FOR DAMAGE OR BREACH.
 - REPLANT PLUG PER STREAMBANK STABILIZATION DETAILS.

PERMANENT DITCH PLUG
NOT TO SCALE

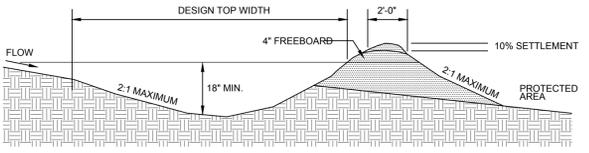


- NOTES:**
- 5:1 SIDE SLOPES.
 - DITCH TO BE FULLY LINED WITH EROSION CONTROL BLANKETS PRIOR TO SEEDING & MULCHING FROM TOP OF BANK TO TOP OF BANK, AS REQUIRED BY LAND QUALITY.
 - PROPOSED SWALES WILL HAVE A BOTTOM WIDTH OF MIN. 3-FOOT.
 - SEE PLAN FOR HORIZONTAL LOCATION OF SWALES.
 - SWALES TO BE CONSTRUCTED WITH 6" OF DEPTH ADDED TO CALCULATED DEPTH ABOVE.

TYPICAL SWALE
NOT TO SCALE

SWALE #	RUNOFF			CHANNEL											Adequate Capacity?	Lining Required?	
	A _d	C	Q _{design}	Q ₁₀₀	Q _{total}	Length	Inv In	Inv Out	S	d	A _c	P	R	V _{actual}			Q _{actual}
EX SWALE #1	0.57	0.70	3.26	0.26	3.52	180	23.50	22.90	0.0033	0.61	2.05	6.86	0.43	1.22	3.61	Y	N
EX SWALE #2	0.94	0.80	5.44	1.47	6.91	175	24.25	23.71	0.0031	0.87	4.88	8.50	0.57	1.43	6.97	Y	N
EX SWALE #3	1.26	0.65	5.92		5.92	312	24.00	22.50	0.0048	0.75	3.94	7.74	0.51	1.85	8.48	Y	N

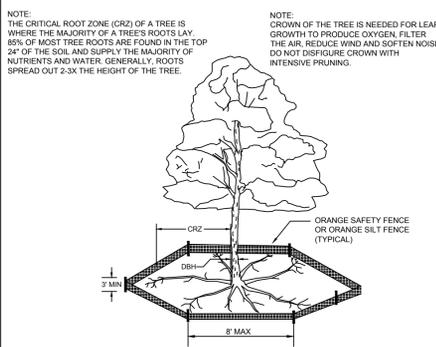
SWALE #	RUNOFF			CHANNEL											Adequate Capacity?	Lining Required?	
	A _d	C	Q _{design}	Q ₁₀₀	Q _{total}	Length	Inv In	Inv Out	S	d	A _c	P	R	V _{actual}			Q _{actual}
1	0.32	0.48	1.11	0.00	1.11	105	23.87	23.50	0.0035	0.31	1.41	6.16	0.23	0.83	1.17	Y	N



- NOTE:** BUILD RIDGE HIGHER THAN DESIGN AND COMPACT WITH WHEELS OF CONSTRUCTION EQUIPMENT. COMPACTED RIDGE MUST AT OR ABOVE DESIGN GRADE AT ALL POINTS. CHANNEL MUST BE CONSTRUCTED ON DESIGN GRADE. LEAVE SUFFICIENT AREA ALONG DIVERSION TO PERMIT CLEANOUT AND REGRADING.

GUIDELINES FOR TEMPORARY DIVERSION DITCH
NOT TO SCALE

TDD #	RUNOFF			CHANNEL											Adequate Capacity?	Lining Required?	
	A _d	C	Q _{design}	Q ₁₀₀	Q _{total}	Length	Inv Up	Inv Down	S	d	A _c	P	R	V _{actual}			Q _{actual}
1	0.19	0.35	0.47	0.12	0.59	25.50	26.25	25.50	0.0044	0.35	0.37	2.21	0.17	1.49	0.55	Y	N
2	0.23	0.35	0.57	0.15	0.72	26.50	27.50	26.50	0.0087	0.33	0.33	2.08	0.18	1.77	0.58	Y	N



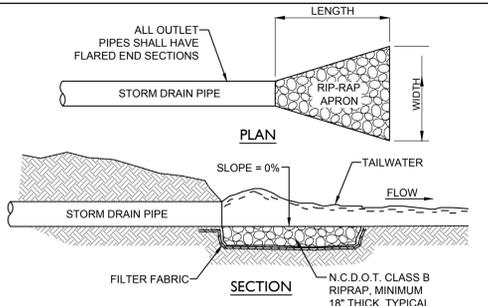
- NOTES:**
- PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ BARRIER. SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
 - CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
 - IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 12" OF MULCH AND/OR MATS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
 - WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.
 - FOR ALL TREES, CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK IS PROHIBITED. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO MATERIALS OR EQUIPMENT SHALL BE STORED BENEATH TREES. DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
 - FAILING TO INSTALL OR MAINTAIN PROTECTION MEASURES SHALL RESULT IN A STOP WORK ORDER AND FINE OF \$500/DAY. DISTURBANCE OTHER THAN THAT ALLOWED ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LETTER OF CREDIT FOR 3 YRS FOR TREE MITIGATION.

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

TREE PROTECTION DURING CONSTRUCTION

WILMINGTON NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 810
WILMINGTON, NC 28402
(910) 341-7807

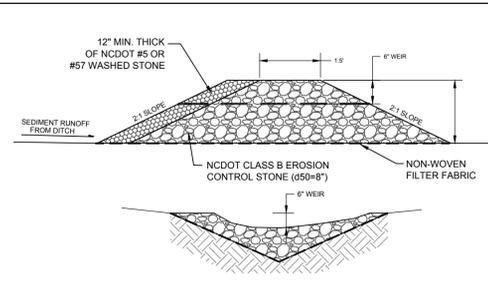
SD 15-09
SHEET 1 of 2



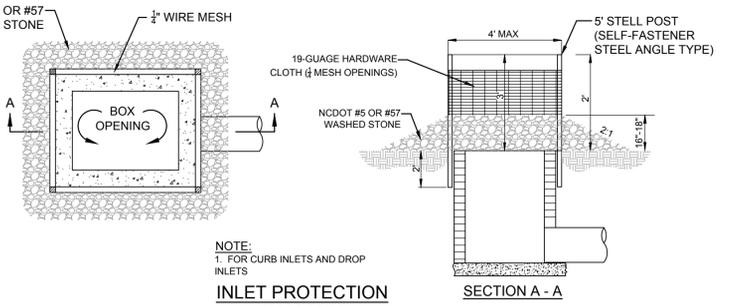
RIP-RAP SCHEDULE

PIPE DIA. (IN.)	LENGTH (FT.)	UPSTREAM WIDTH (FT.)	DOWNSTREAM WIDTH (FT.)
FES-1	18	9	4.5
FES-5	18	9	4.5
FES-15	24	13	6.0
FES-19	15	8	3.75
FES-21	24	13	6.0

RIP-RAP APRON
NOT TO SCALE

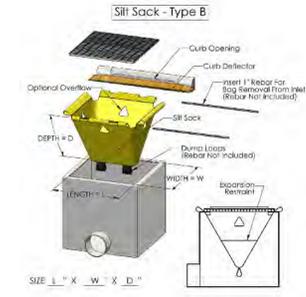


STONE SECTION WITH A WEIR
TEMPORARY CHECK DAM DETAIL
NOT TO SCALE

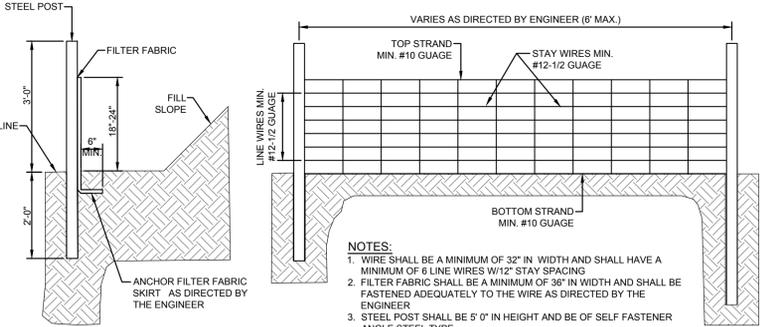


- NOTE:** 1. FOR CURB INLETS AND DROP INLETS

INLET PROTECTION
NOT TO SCALE

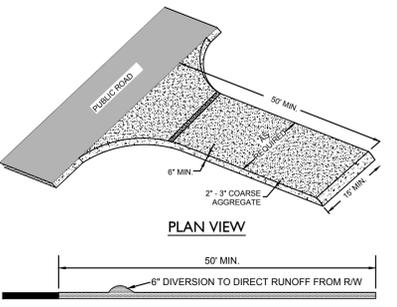


INLET PROTECTION DETAIL
NOT TO SCALE

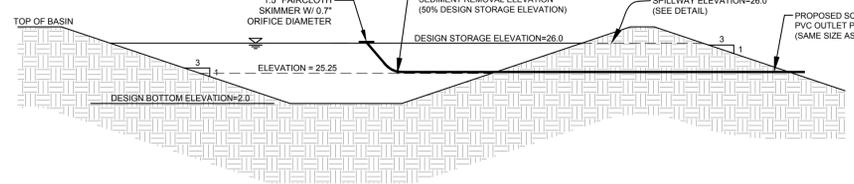


- NOTES:**
- WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 4 LINE WIRES W/12" STAY SPACING
 - FILTER FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER
 - STEEL POST SHALL BE 5" IN HEIGHT AND BE OF SELF FASTENER ANGLE STEEL TYPE

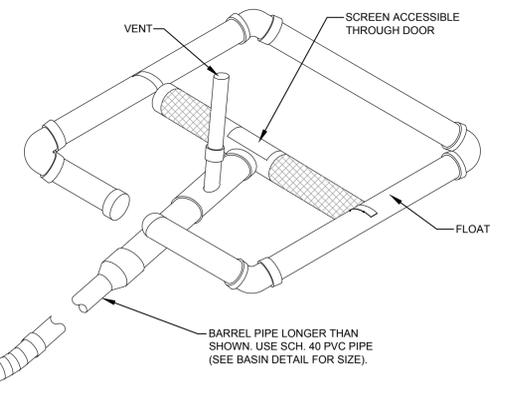
GUIDELINES FOR TEMPORARY SILT FENCE DETAIL
NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE



TEMPORARY SKIMMER SEDIMENT BASIN DETAIL
NOT TO SCALE



FAIRCLOTH SKIMMER DETAIL
NOT TO SCALE



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

NCDENR PWSS WATER PERMIT #: _____ GPD
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT #: _____ GPD
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

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

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

REVISIONS:

CLIENT INFORMATION:
ROMAN CATHOLIC DIOCESE OF RALEIGH
7200 STONEHENGE DRIVE
RALEIGH, NC 27613

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

DETAILS
ST. MARK CATHOLIC CHURCH & MAYFAIRE II ENTRANCE
EASTWOOD ROAD
WILMINGTON, NC 28403

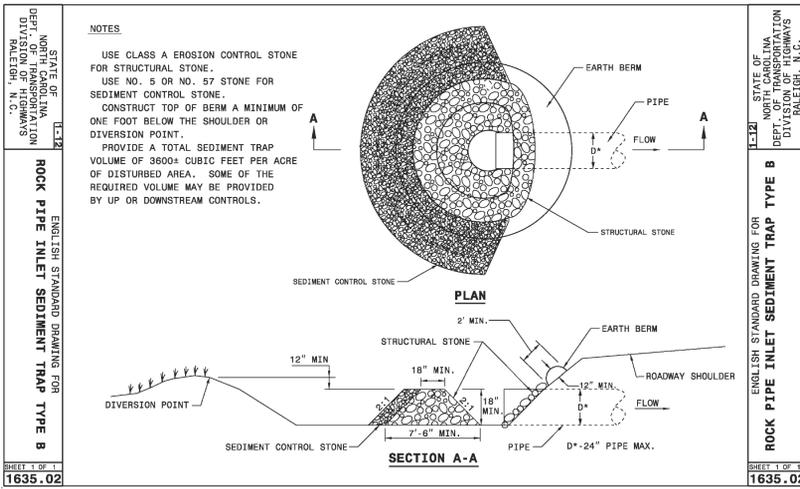
PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
RELEASED FOR CONST.

DRAWING INFORMATION:
DATE: 02/22/19
DESIGNED: RDK, P.E.
DRAWN: JSR
CHECKED: RDK, P.E.
CREATED: 02/22/19

SEAL:
NORTH CAROLINA
PROFESSIONAL ENGINEER
031591
ROBERT P. BALLAL
02/22/19

C-6.1
PEI JOB#: 16247.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



Rock Pipe Inlet Protection #1

Drainage Area (5 Ac. Max.) = 0.27 Ac.

Requirements:
Min. Volume (3,600 cf/Ac.) = 972 cf

Provided:

Contour	Contour Area (SF)	Incremental Volume (CF)	Cumulative Volume (CF)
24.0	588	0	0
25.0	1,055	822	822
26.0	1,563	1,309	2,131

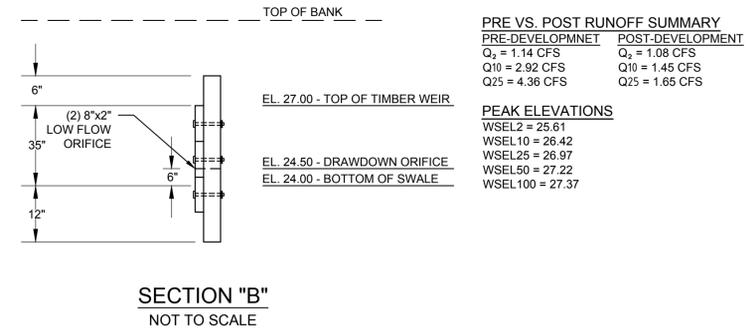
Rock Pipe Inlet Protection #2

Drainage Area (5 Ac. Max.) = 0.58 Ac.

Requirements:
Min. Volume (3,600 cf/Ac.) = 2,088 cf

Provided:

Contour	Contour Area (SF)	Incremental Volume (CF)	Cumulative Volume (CF)
23.0	184	0	0
24.0	1,367	776	776
25.0	2,953	2,160	2,936



BAFFLES
CONSTRUCTION SPECIFICATION

- Grade the basin so that the bottom is level front to back and side to side.
- Install posts or saw horses across the width of the sediment trap (Practice 6.62, Sediment Fence).
- Steel posts should be driven to a depth of 24 inches, spaced a maximum of 4 feet apart, and installed up the side of the basin as well. 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 berms.
- 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.
- When using posts, add a support wire or rope across the top of the measure to prevent sagging.
- Wrap joints, backed by coir material, over a sawhorse or the top wire. Hammer rebar into the sawhorse legs for anchoring. The fabric should have five to ten percent openings in the weave. Attach fabric to a rope and a support structure with zip ties, wire or staples.
- The bottom and sides of the fabric should be anchored in a trench or pinned with 8-inch erosion control matting staples.
- Do not splice the fabric, but use a continuous piece across the basin.

MAINTENANCE

Inspect baffles at least once a week and after each rainfall. Make any required repairs immediately.

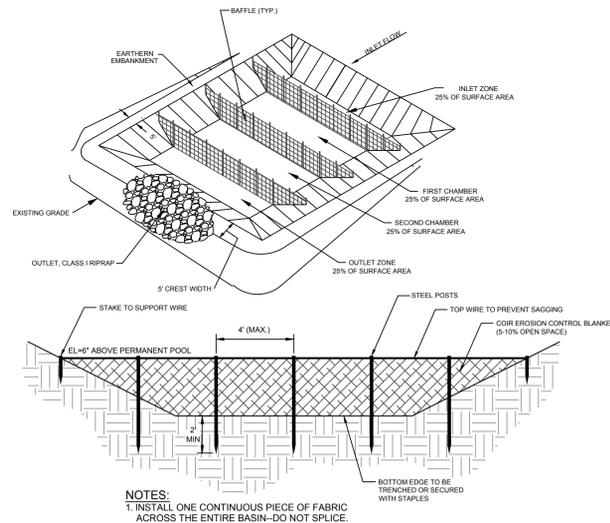
Be sure to maintain access to the baffles. Should the fabric of a baffle collapse, tear, decompose, or become ineffective, replace it promptly.

Remove sediment deposits when it reaches half full to provide adequate storage volume for the next rain and to reduce pressure on the baffles. Take care to avoid damaging the baffles during cleanout. Sediment depth should never exceed half the designed storage depth.

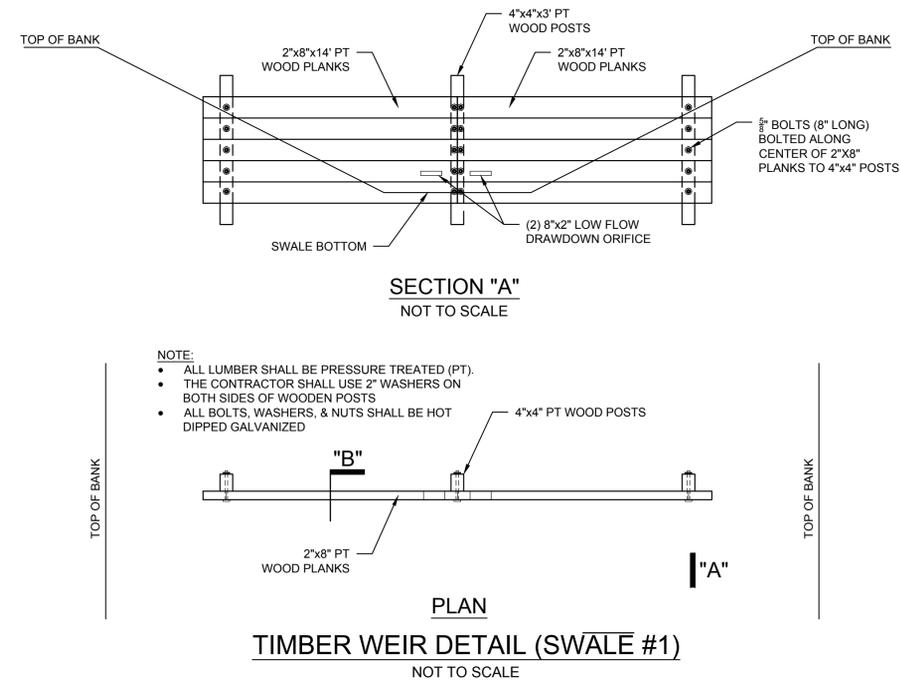
After the contributing drainage area has been properly stabilized, remove all baffle materials and unstable sediment deposits, bring the area to grade, and stabilize it.

NOTE:

Porous baffles shall be installed inside all temporary sediment traps, rock dams, skimmer basin or sediment basins to reduce the velocity and turbulence of the water flowing through the measure, and facilitate the settling of sediment from the water before discharge.



Surface Area (sf)	Length (ft)	Inlet Area (sf)	Chamber 1 Area (sf)	Chamber 2 Area (sf)	Outlet Area (sf)	Baffle #1 (Distance from End) (ft)	Baffle #2 (Distance from End) (ft)	Baffle #3 (Distance from End) (ft)
1,417	50	354	354	354	354	13	25	38



REVISIONS:

CLIENT INFORMATION:

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ROBERT P. BALLANTINE
02/22/19

C-6.2

PEI JOB#: 16247.PE

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Know what's below.
Call before you dig.

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

NC DENR PWSS WATER PERMIT #: _____

WATER CAPACITY: _____ GPD

DWQ SEWER PERMIT #: _____

SEWER CAPACITY: _____ GPD

SEWER SHED # AND PLANT: _____

SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____