

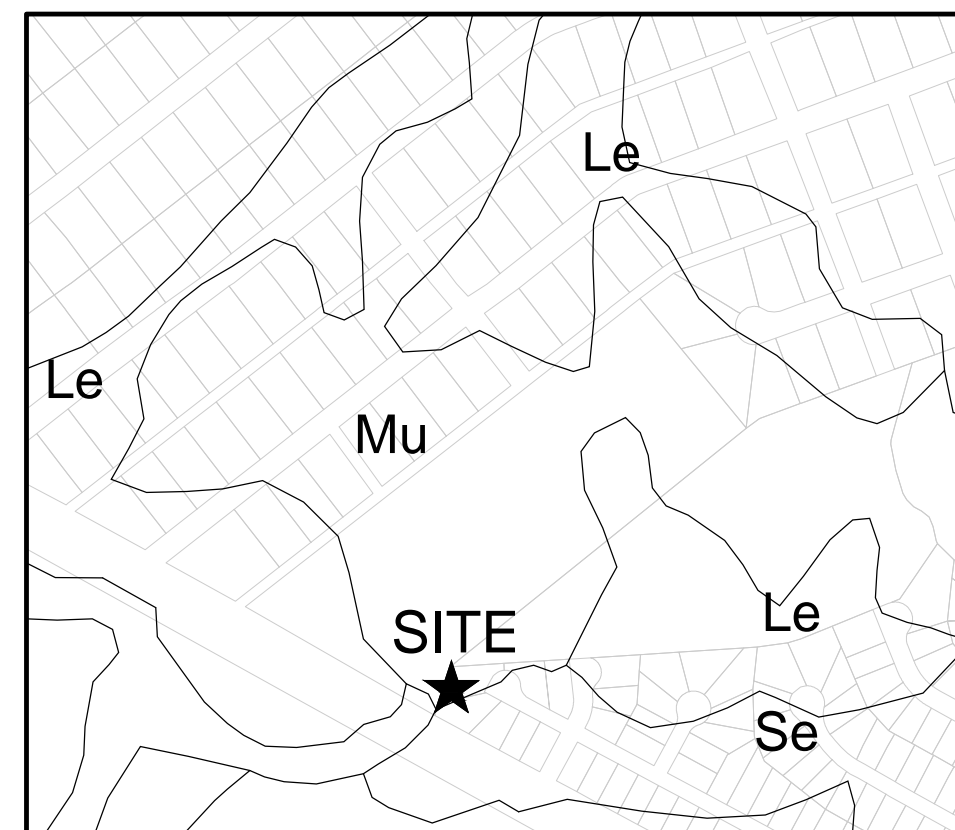
ST. MARK CATHOLIC CHURCH & MAYFAIRE II PROPOSED ROADWAY

DESIGN DOCUMENTS MARCH 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

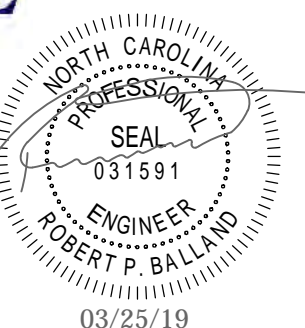
SURVEYOR, ENGINEER (CIVIL), LANDSCAPE ARCHITECT:
PARAMOUNTE ENGINEERING, INC.
122 CINEMA DRIVE
WILMINGTON, NORTH CAROLINA 28403
ATTN: ROB BALLAND, P.E. (910) 791-6707

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
C-0.0	COVER SHEET
C-1.0	GENERAL NOTES
C-2.0	SITE INVENTORY MAP
C-2.1	DEMOLITION PLAN
C-2.2	SITE & PLANTING PLAN
C-3.0	PH-I EROSION CONTROL PLAN
C-3.1	GRADNG-DRAINAGE-PH-II EC PLAN
C-4.0	UTILITY PLAN
C-5.0 - C-5.2	ROADWAY PLANS
C-6.0 - C-6.2	DETAILS

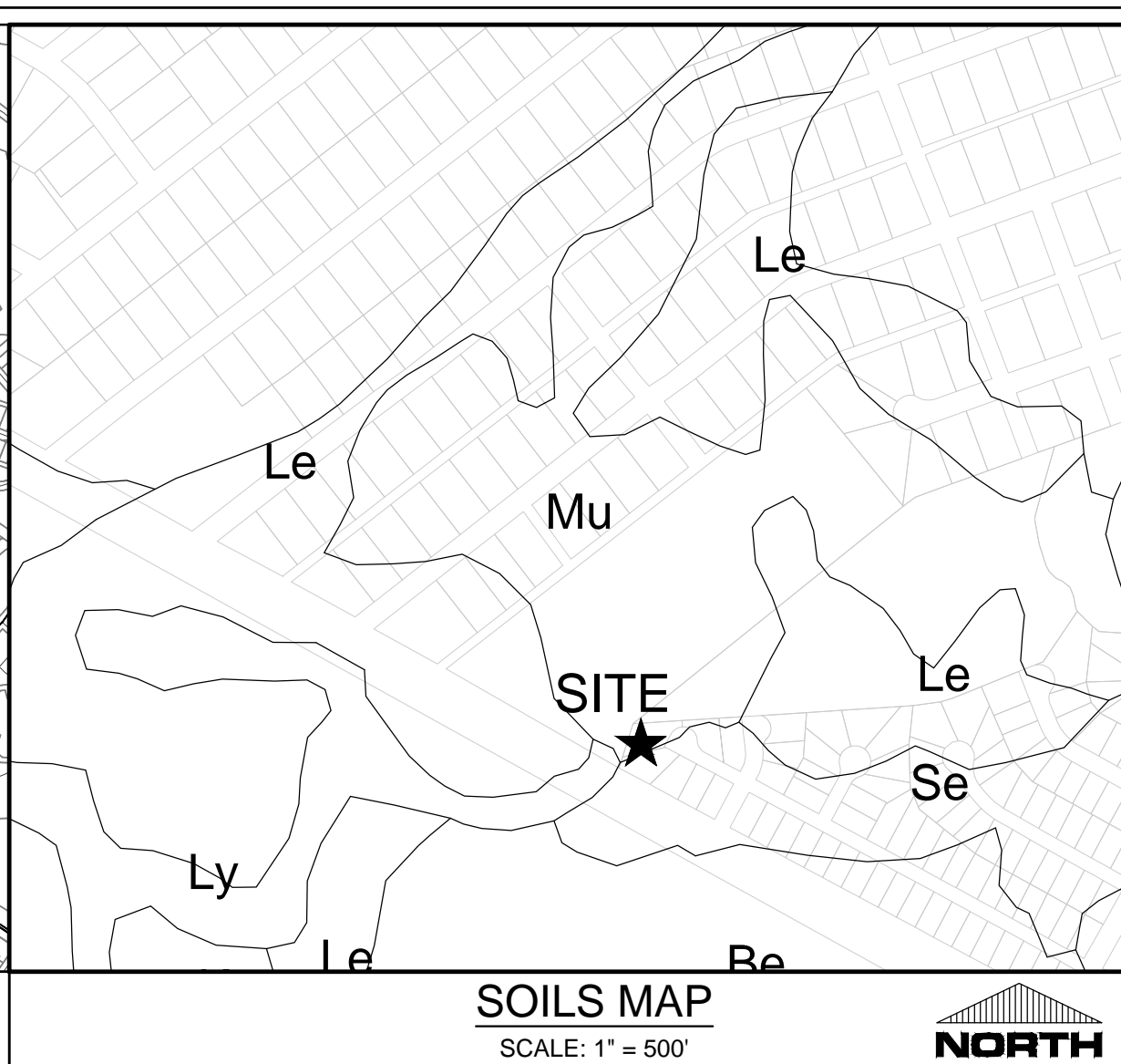
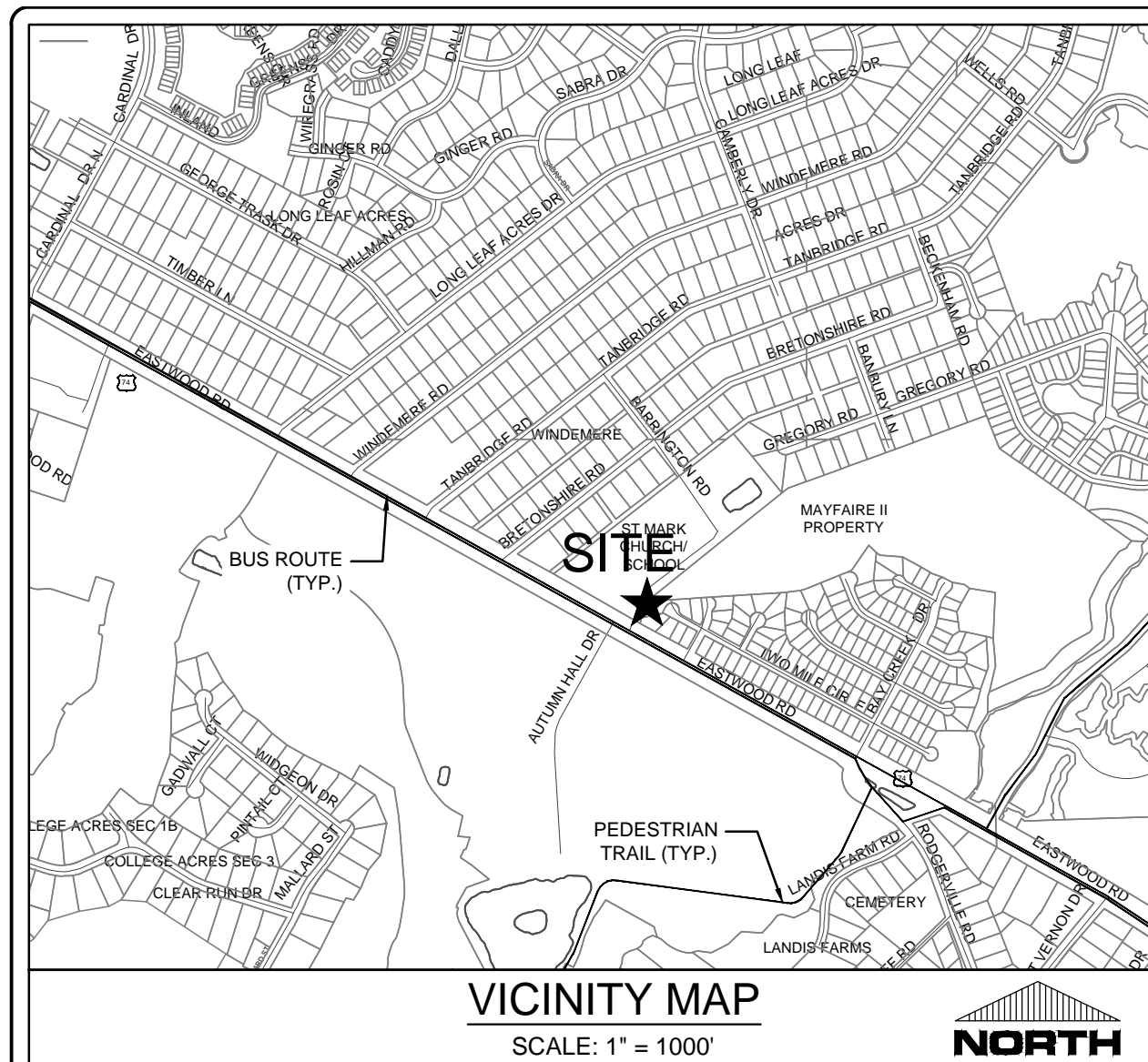
PREPARED BY:

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



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



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 #: _____

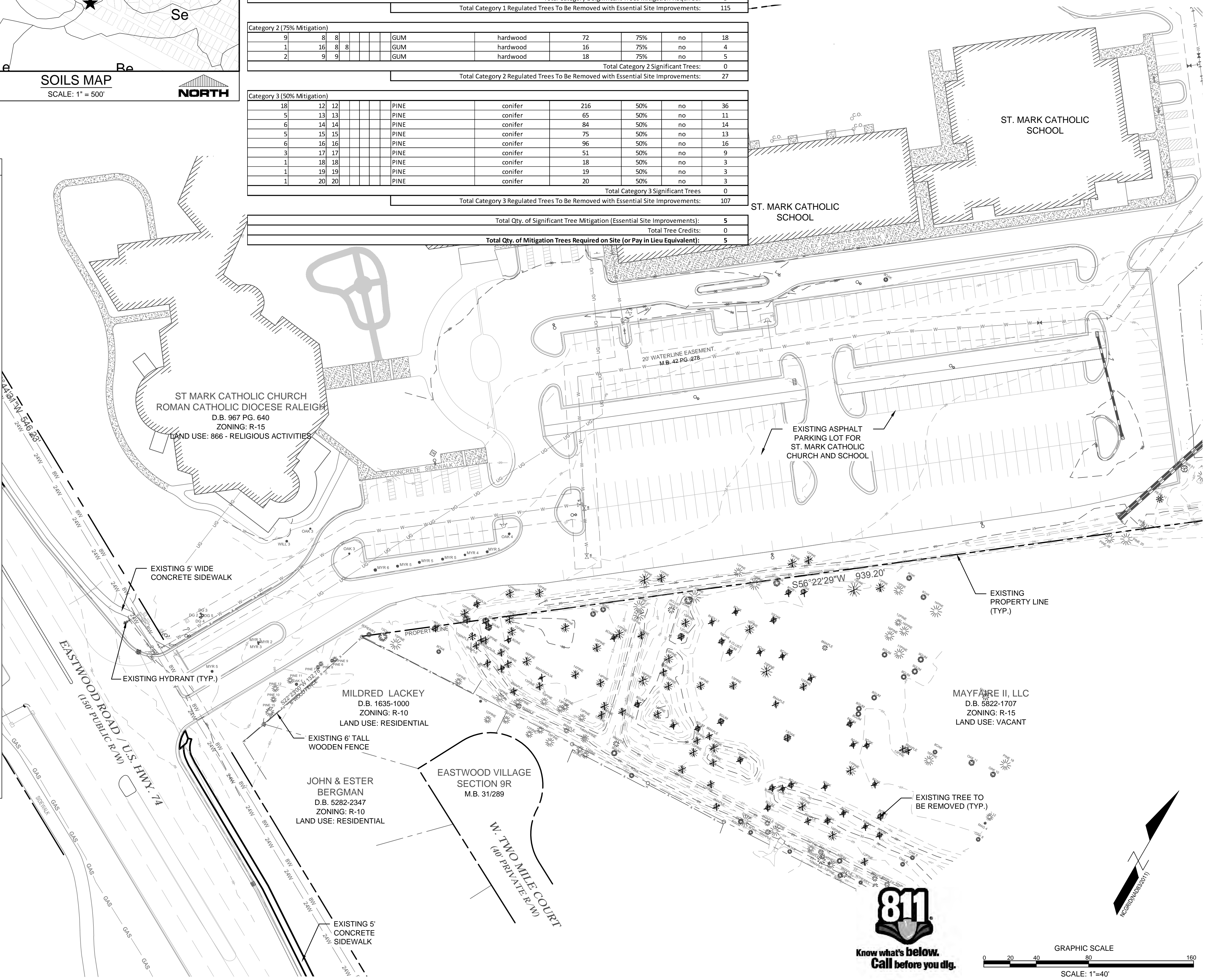
SEWER CAPACITY: _____ GPD

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



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.

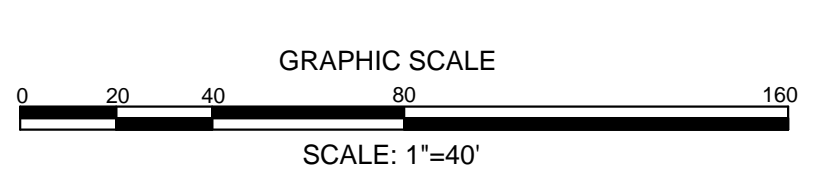
DRAWING INFORMATION:
DATE: 03/25/19
1" = 8' AEC
DESIGNED: RPB
DRAWN: RPB
CHECKED: RPB

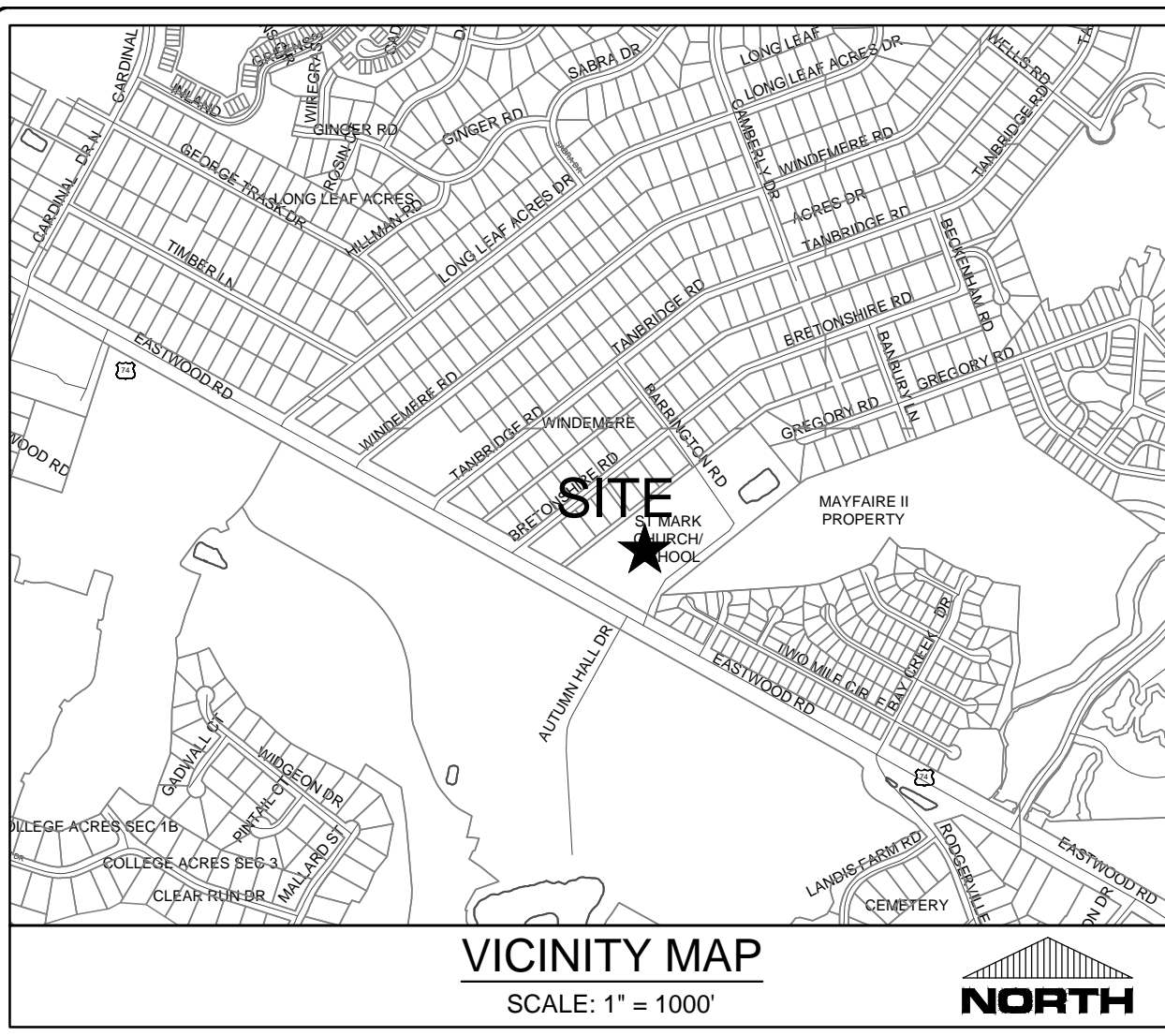
SEAL:
NORTH CAROLINA
PROFESSIONAL
ENGINEER
ROBERT P. BALLANTINE
031591
03/25/19

C-2.0

PEI JOB#: 16247.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION





VICINITY MAP
SCALE: 1" = 100'

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)
R-15 (BOTH PARCELS)

CURRENT ZONING: 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	MAYFAIRE II	0 SF
TO REMAIN =	0 SF		
TOTAL EXISTING =	16,423 SF		0 SF

PROPOSED IMPERVIOUS

ASPHALT ROADWAY/PARKING/C&G	16,308 SF	21,796 SF
SIDEWALK/MULTI-USE PATH	5,738 SF	5,494 SF
TOTAL PROPOSED =	22,046 SF	27,290 SF

NET IMPERVIOUS = TOTAL PROPOSED IMPERVIOUS - EXISTING IMPERVIOUS TO BE REMOVED
NET IMPERVIOUS = 22,046 SF - 16,423 SF = 5,623 SF

EX. IMPERVIOUS UNDISTURBED + PROPOSED % IMPERVIOUS	295,956 SF	27,333 SF
	55.24%	1.59%

- 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:**
- | | |
|---|--|
| 1 CONCRETE PAVING: REFER TO DETAIL C-6.0 | 8 PAVEMENT MARKINGS: REFER TO DETAIL C-6.0. |
| 2 ASPHALT PAVING: REFER TO DETAIL C-6.0 | 9 C.O.W. 24" MEDIAN VERTICAL CURB & GUTTER: REFER TO DETAIL C-6.0. |
| 3 STANDARD 24" CURB & GUTTER: REFER TO DETAIL C-6.0 | 10 TACTILE WARNING MAT: REFER TO DETAIL C-6.0 |
| 4 NCDOT 1'-6" CURB & GUTTER: REFER TO DETAIL C-6.0 | 11 LIGHT POLE: REFER TO STREET LIGHTING NOTES ON SHEET C-2.2 |
| 5 CONCRETE SIDEWALK: REFER TO DETAIL C-6.0 | 12 TREE PROTECTION FENCING: REFER TO DETAIL C-6.1 |
| 6 CURB RAMP: REFER TO DETAIL C-6.0 | 13 DRAINAGE FLUME: REFER TO DETAIL C-6.2 |
| 7 STRIPING: PROVIDE 4" WIDE PARKING LOT STRIPING AS SHOWN. USE HIGHWAY MARKING PAINT - WHITE (2 COATS). | |

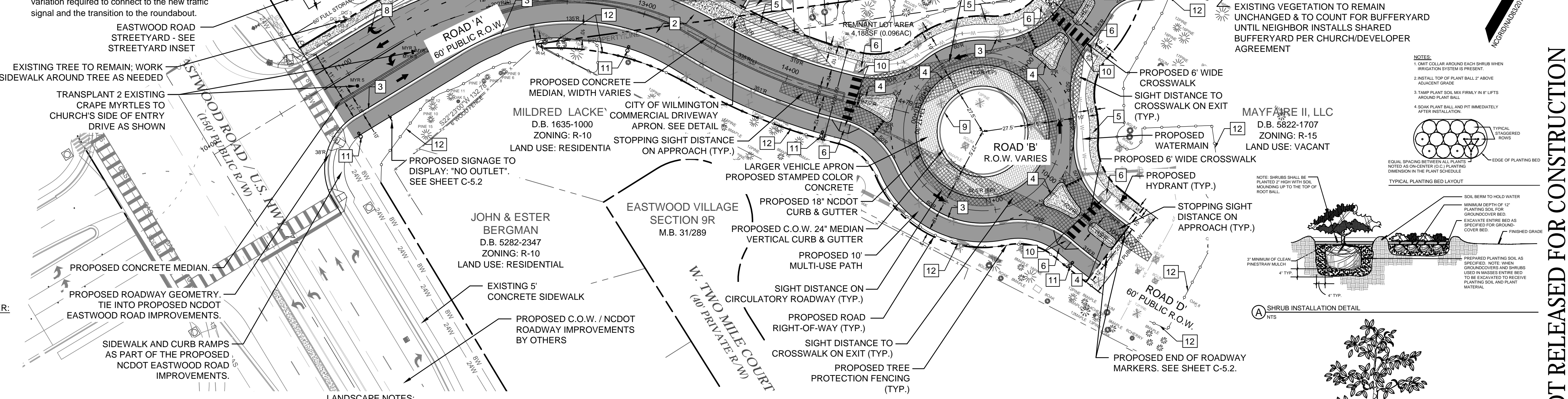
- GENERAL NOTES**
- ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.
 - PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE, AND NEW HANOVER COUNTY REGULATIONS.
 - PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION WILL BE INSTALLED AROUND PROTECTED 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 PLAN.
 - CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
 - TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT	QTY
	ILEX X ATTENUATA / FOSTER NO. 2 / FOSTER HOLLY	8' HT. MIN; MATCH EXISTING	10
	QUERCUS MARILANDICA / BLACKJACK OAK	2"-2.5" CAL	5
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT	QTY
	ILEX VOMITORIA / BORDEAUX / DWARF YAUPON HOLLY	3 GAL / 12" H. (MIN.)	61
	ILEX VOMITORIA / SCHILLINGS DWARF / DWARF SCHILLINGS HOLLY	3 HT. AT INSTALL	32

ALL PROPOSED PLANTS ARE XERISCAPE PLANTS USED FOR DROUGHT TOLERANCE

- 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.



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 SOD 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 MATERIAL, INCLUDING TURF AREAS SHALL BE HAND WATERED ONCE WEEKLY OR AS NEEDED TO ENSURE HEALTHY, 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 18-256 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.

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.

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

- 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 STREET LIGHTS, 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
PROPOSED STREET (SECONDARY STREETYARD): 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 x 12 = 3360 / 2 = 1680 / 600=2.8):

REQUIRED:
1 CANOPY (3 UNDERSTORY TREES = 1 CANOPY TREE) X 2.8 = 3 CANOPY TREES REQ'D
6 SHRUBS X 2.8 = 17 SHRUBS

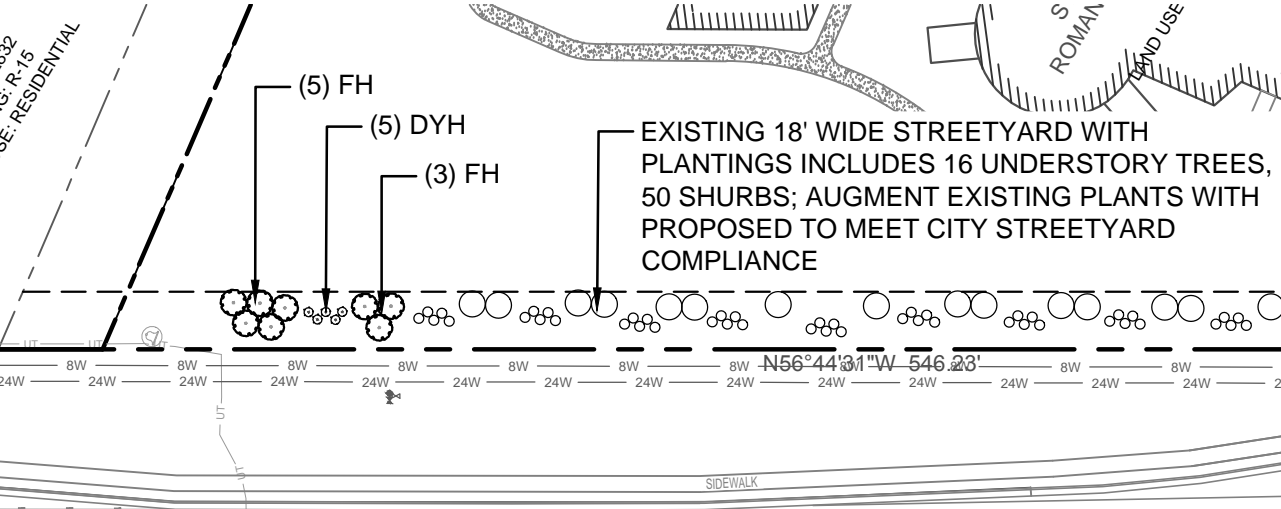
PROVIDED:
EQUIVALENT OF 3 CANOPY TREES; 6 EXISTING UNDERSTORY TREES TO BE TRANSPLANTED TO STREETYARD, 1 ADDITIONAL CANOPY TREE ADDED; 17 SHRUBS

EXISTING EASTWOOD RD STREETYARD ADDED: 18' WIDE UNDER POWERLINES; CONTAINS 16 UNDERSTORY TREES, 50 SHRUBS; (485 LF TO PROPOSED NEW STREET'S ROW X 12 = 10, 10x3 UNDERSTORY TREES = 30 TREES, 10 x 6 = 60 SHRUBS REQUIRED TOTAL)

TO COMPLY WITH CODE, 14 ADDITIONAL UNDERSTORY TREES AND 10 SHRUBS PROVIDED

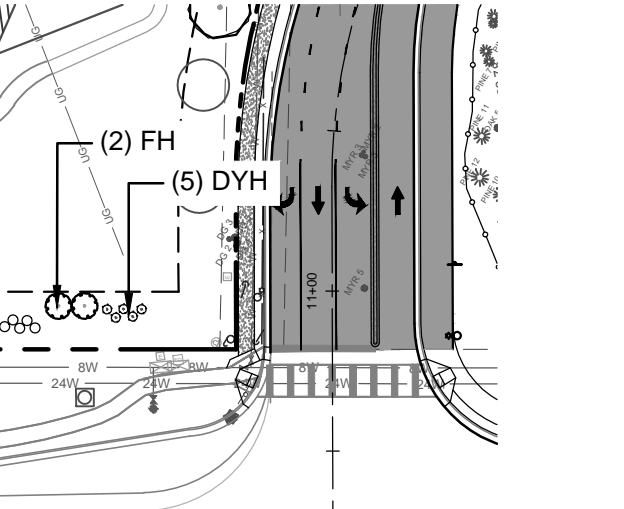
- 1011 EASTWOOD ROAD - SRB CONDITIONS**
- The use and development of the subject property shall comply with all regulations and requirements imposed by the Land Development Code, City of Wilmington Technical Standards and Specifications Manual, and any other applicable federal, state, or local law, ordinance 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.

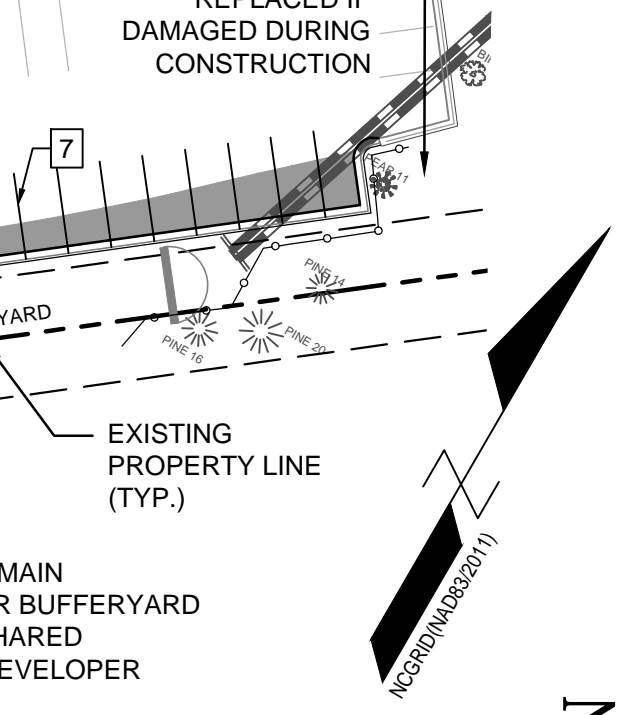


STREETYARD INSET - EASTWOOD ROAD STREETYARD
SCALE: 1" = 60'

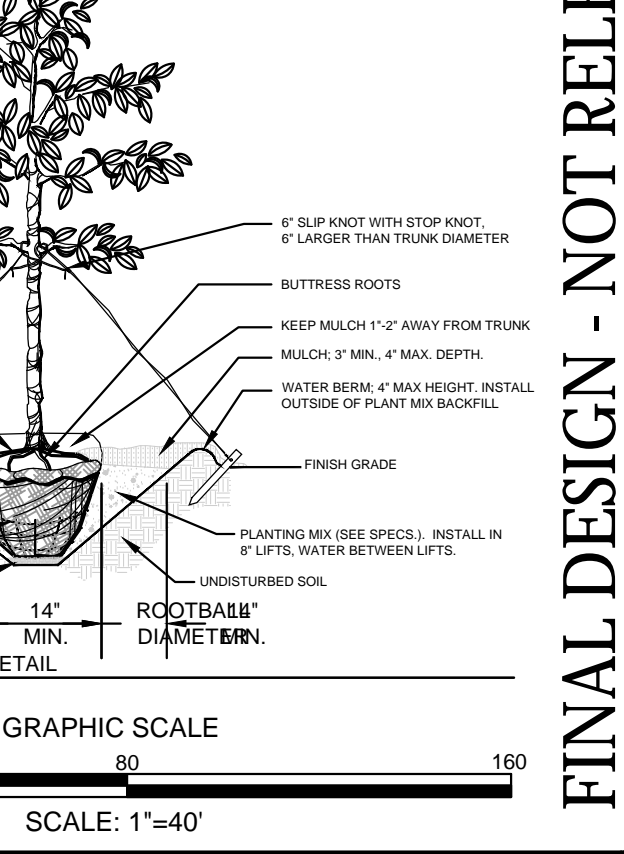
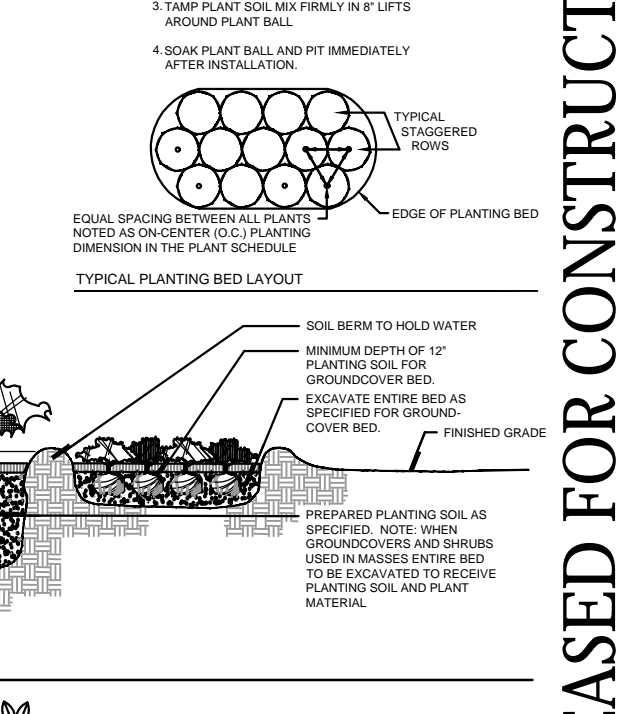
- No more than 440 parking spaces shall be permitted on the site.
- A minimum of 59 pervious parking shall be maintained on the site.
- The Barrington Road connection shall remain open subject to all previous special use permit conditions.
- All applicable previous Subdivision Review Board conditions and conditions of the previously issued Special Use Permits and previous modifications shall still apply.
- A 25-foot wide shared buffer 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.



EXISTING VEGETATION TO REMAIN UNCHANGED & TO COUNT FOR BUFFERYARD UNTIL NEIGHBOR INSTALLS SHARED BUFFERYARD PER CHURCH/DEVELOPER AGREEMENT



TYPICAL PLANTING BED LAYOUT



GRAPHIC SCALE
SCALE: 1" = 40'

REVISIONS:

1) REVISIONS PER TRC REVIEW COMMENTS	REVIEW #1	12/16/18
2) REVISIONS PER TRC REVIEW COMMENTS	REVIEW #2	02/14/19
3) REVISIONS PER TRC REVIEW COMMENTS	REVIEW #3	02/14/19
4) REVISIONS PER TRC REVIEW COMMENTS	REVIEW #4	03/12/19
5) REVISIONS PER TRC REVIEW COMMENTS	REVIEW #5	03/21/19

CLIENT INFORMATION:
PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) / (910) 791-6700 (F)
N.C. License #: C-2846

PROJECT STATUS:
CONCEPTUAL LAYOUT: _____
FINAL DESIGN: _____
DRAWING INFORMATION:
DATE: 03/25/19
SCALE: 1" = 40'
DRAWN: AEC
CHECKED: RPB

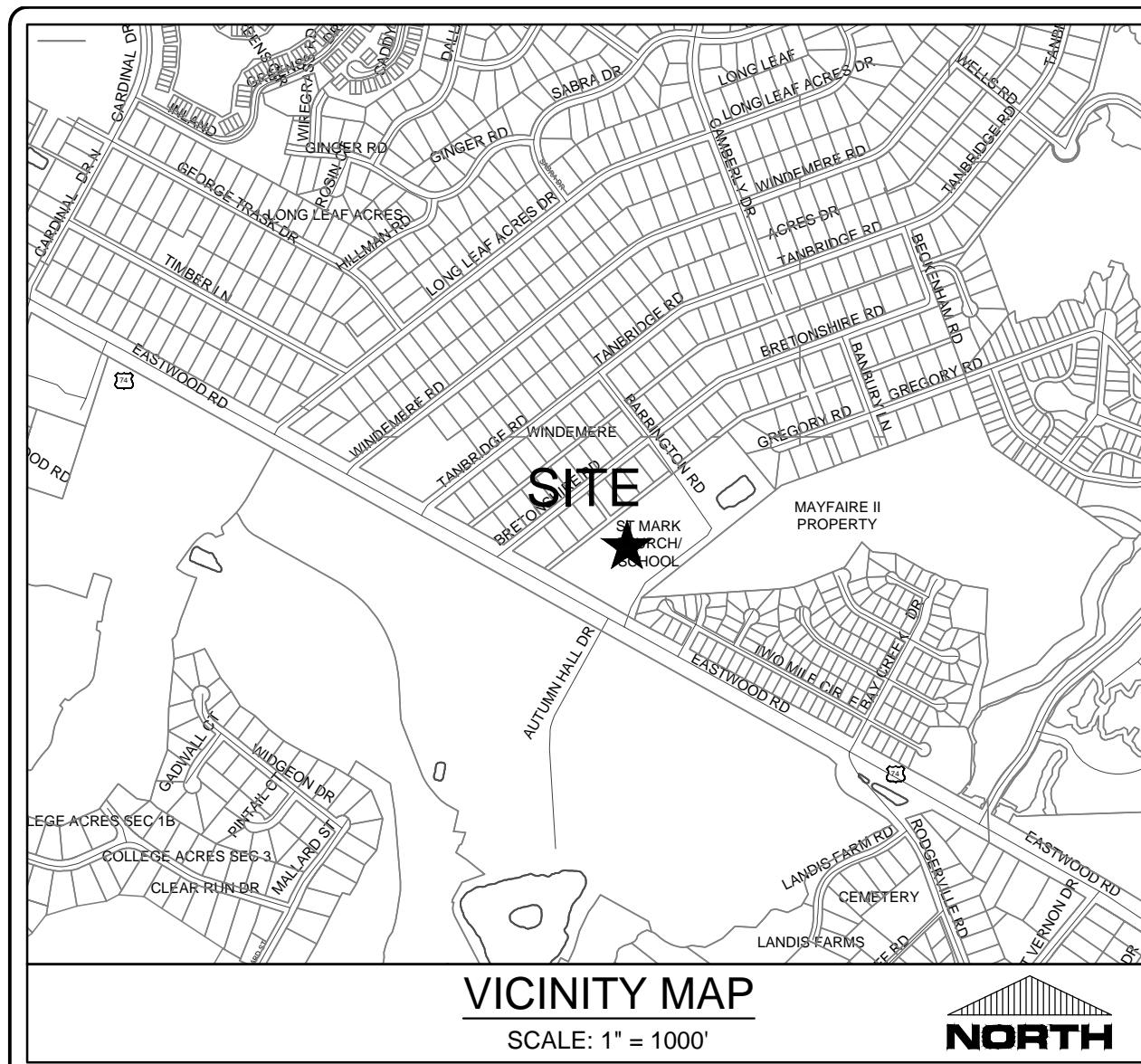
SITE & PLANTING PLAN
ST. MARK CATHOLIC CHURCH & MAYFAIRE II ENTRANCE
1011 EASTWOOD ROAD
WILMINGTON, NC 28403

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
ROBERT P. BALLING
031551
03/25/19

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 Pipe Invert (ft)	Downstream Pipe 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.

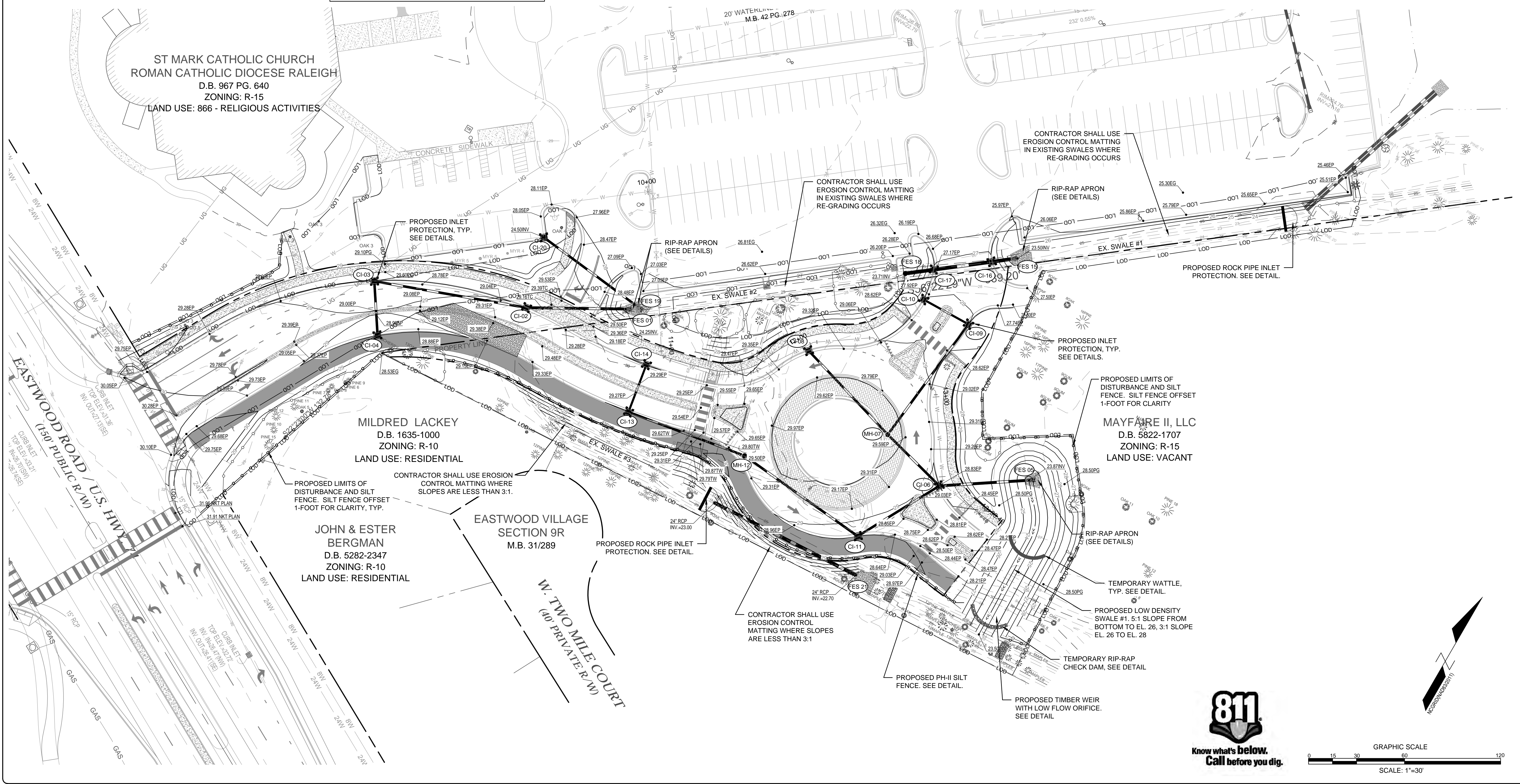
WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

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:

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

GRADING-DRAINAGE-EC PLAN

ST. MARK CATHOLIC CHURCH
 1011 EASTWOOD ROAD
 WILMINGTON, NC 28403

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

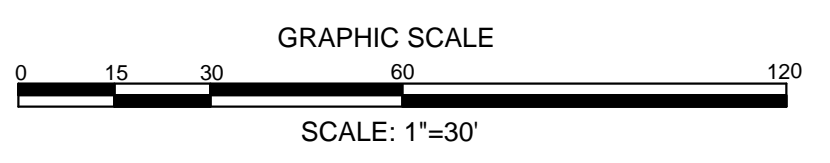
DRAWING INFORMATION:
 DATE: 03/25/19
 DESIGNED: RPB
 DRAWN: RPB
 CHECKED: RPB

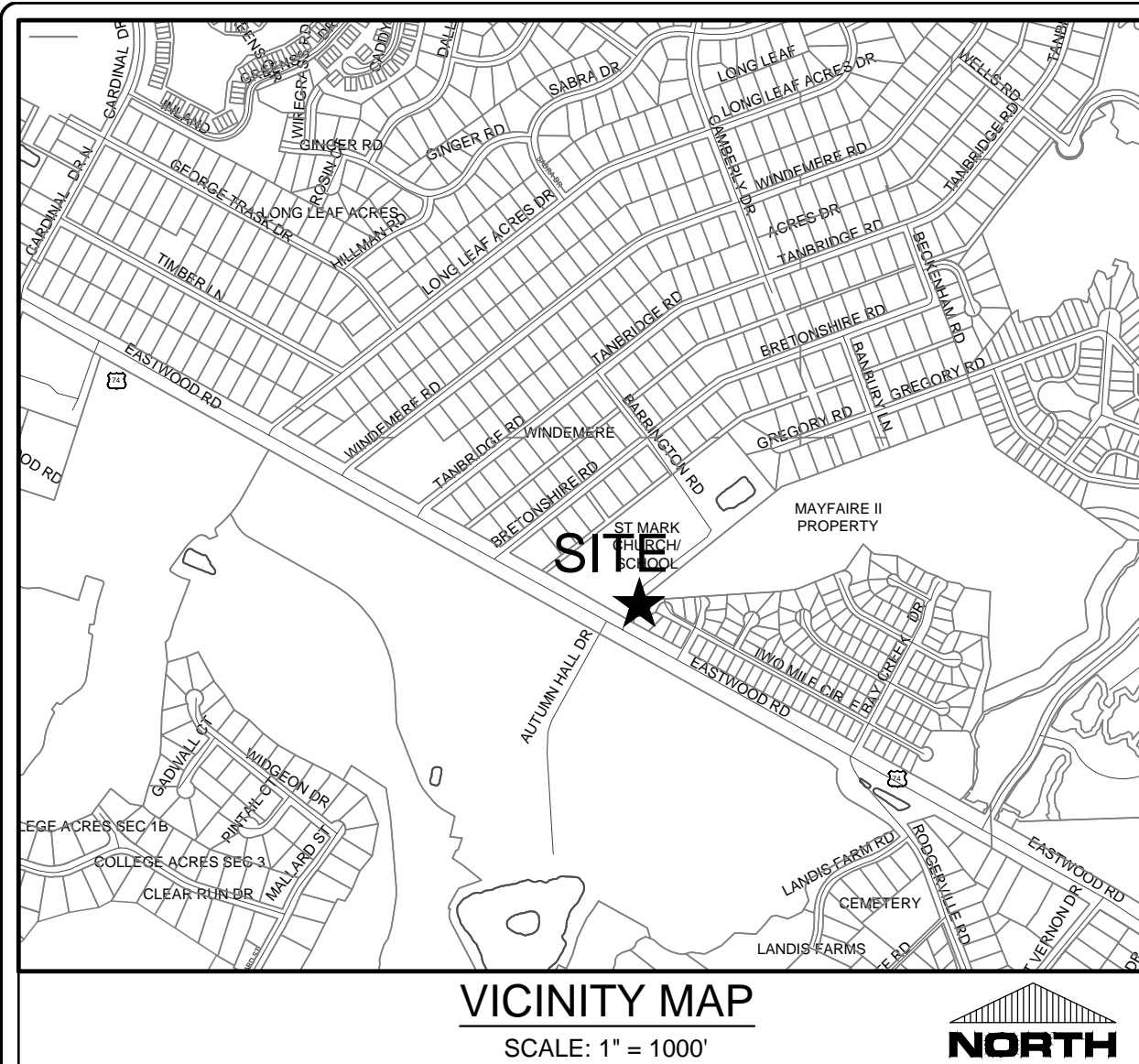
SEAL:
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL NO. 031591
 ROBERT P. BALLING
 03/25/19

C-3.1

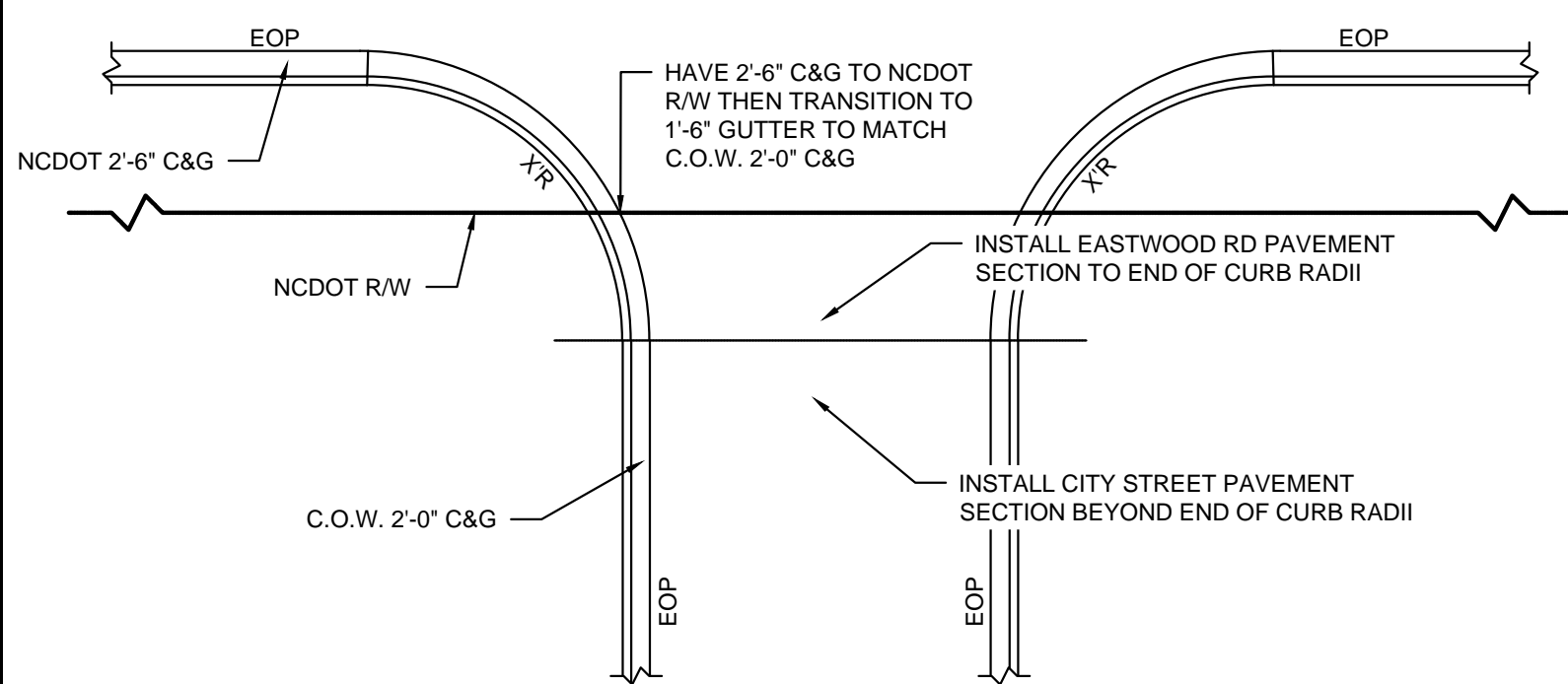
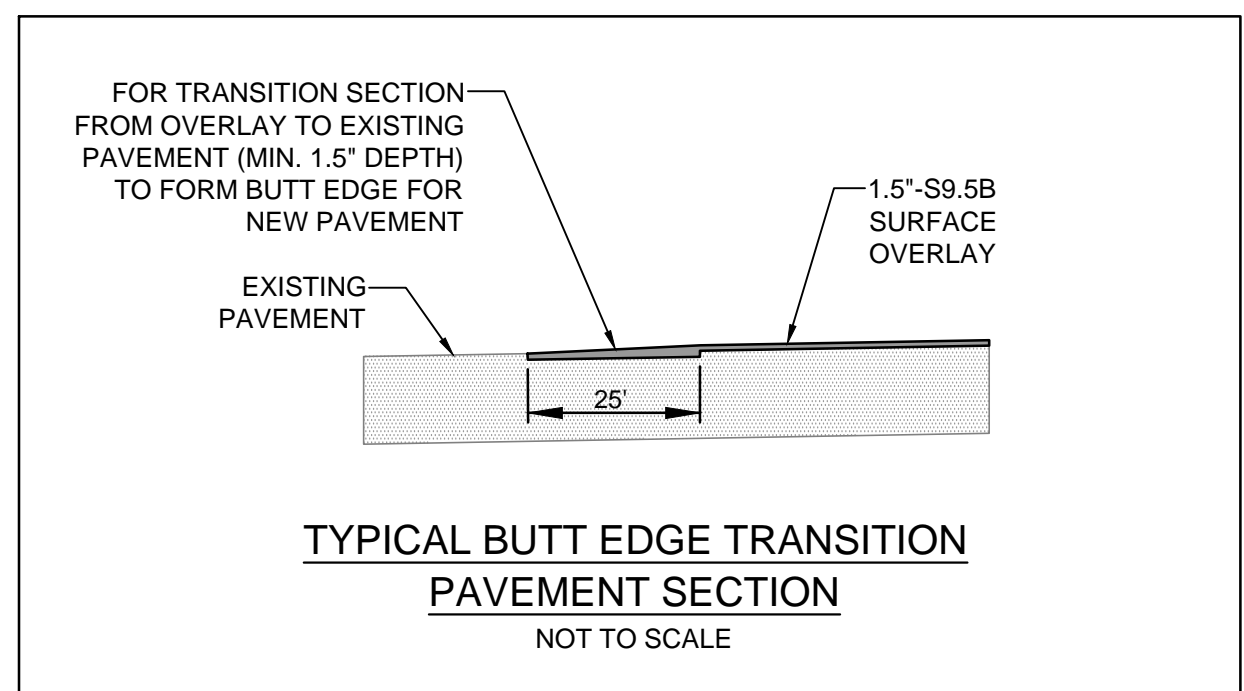
PEI JOB#: 16247.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



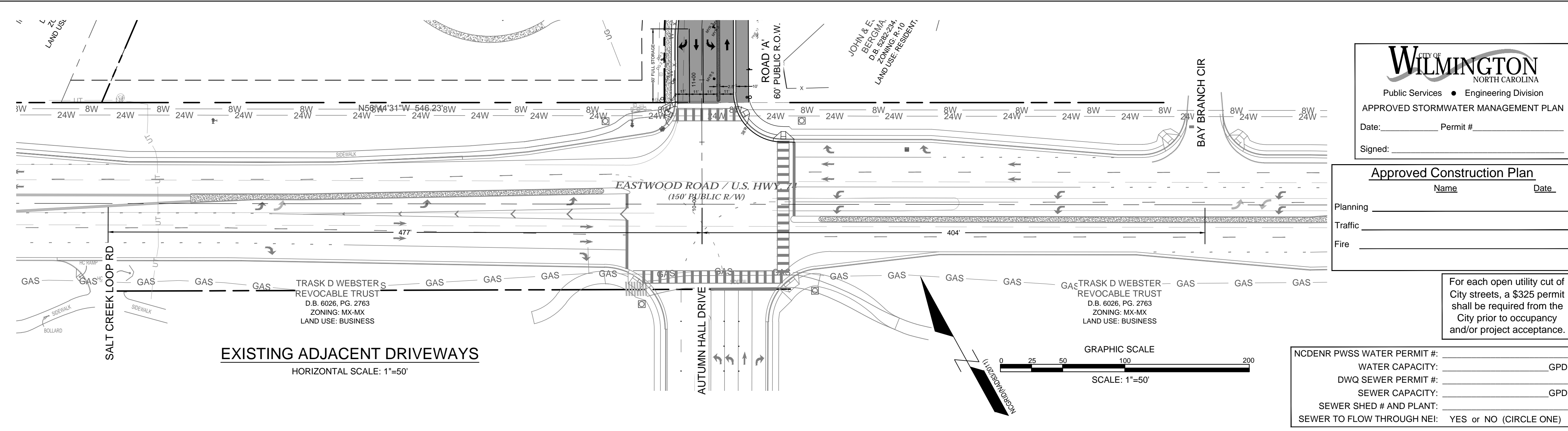


- NOTES:**
- SEE SHEET C-5.1 FOR PROPOSED ROADWAY PROFILES
 - SEE SHEET C-5.1 FOR TYPICAL ROAD SECTIONS
 - SEE SHEET C-5.2 FOR PAVEMENT MARKING
 - NEW ASPHALT AREA = 24,740 SY
 - NEW CURB & GUTTER = 2,220 LF
 - SEE SHEETS C-6.0 FOR TYPICAL DETAILS



Roadway	Design Vehicle	Design Speeds (mph)			Measurements (ft)		Sight Distances (ft)		
		Entry	Circulating	Exit	Central Island, Dia.	Inscribed Circle, Dia.	Stopping on 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



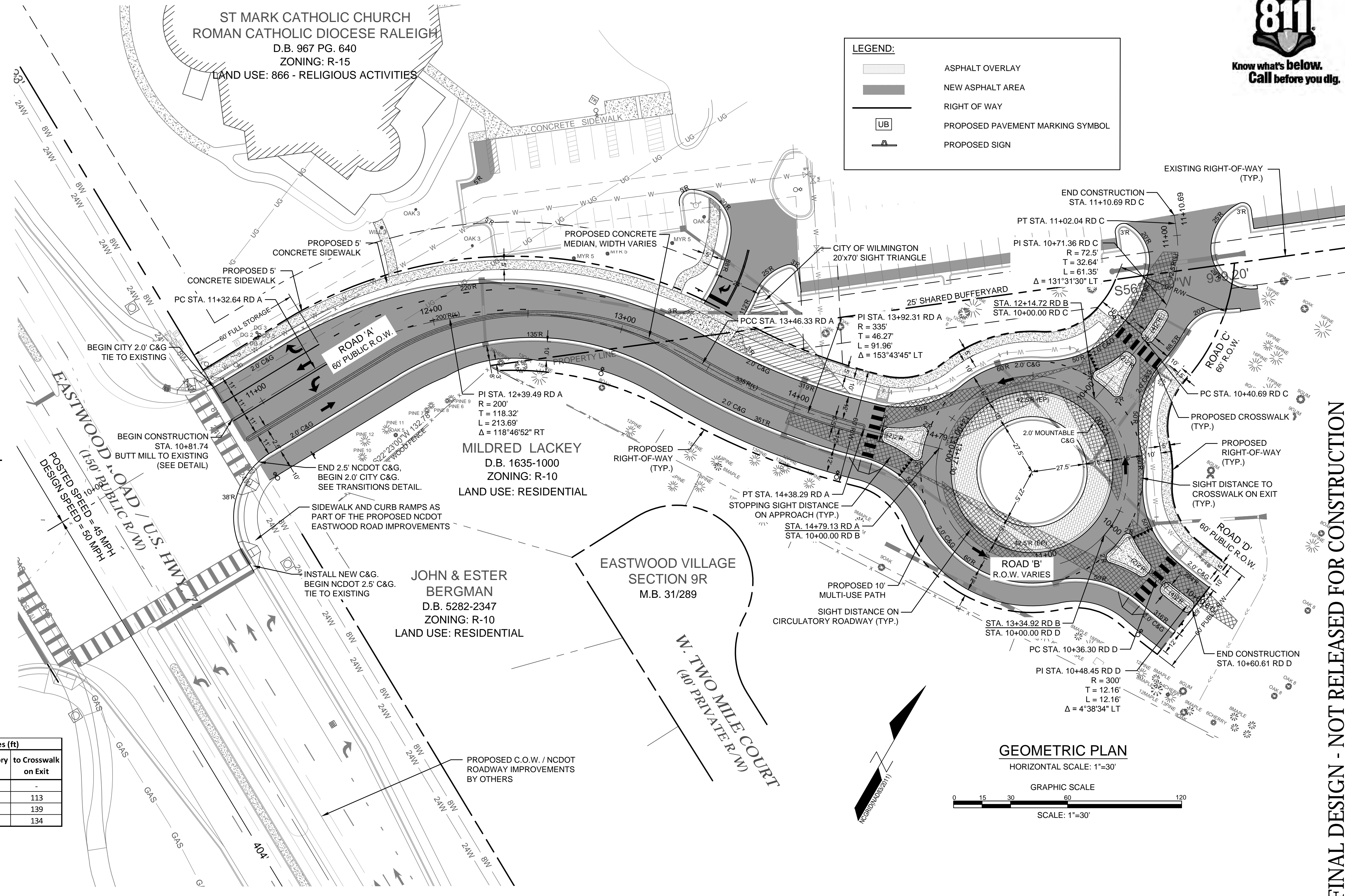
CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

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

GEOMETRIC PLAN
HORIZONTAL SCALE: 1"=30'
GRAPHIC SCALE
SCALE: 1"=30'

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:

NO.	DATE	DESCRIPTION
1	12/14/18	CONCEPTUAL LAYOUT
2	02/04/19	FINAL DESIGN
3	03/12/19	AS NOTED

CLIENT INFORMATION:
ROMAN CATHOLIC DIOCESE OF RALEIGH
7200 STONEHEDGE 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:
SCALE: AS NOTED
DATE: 03/25/19

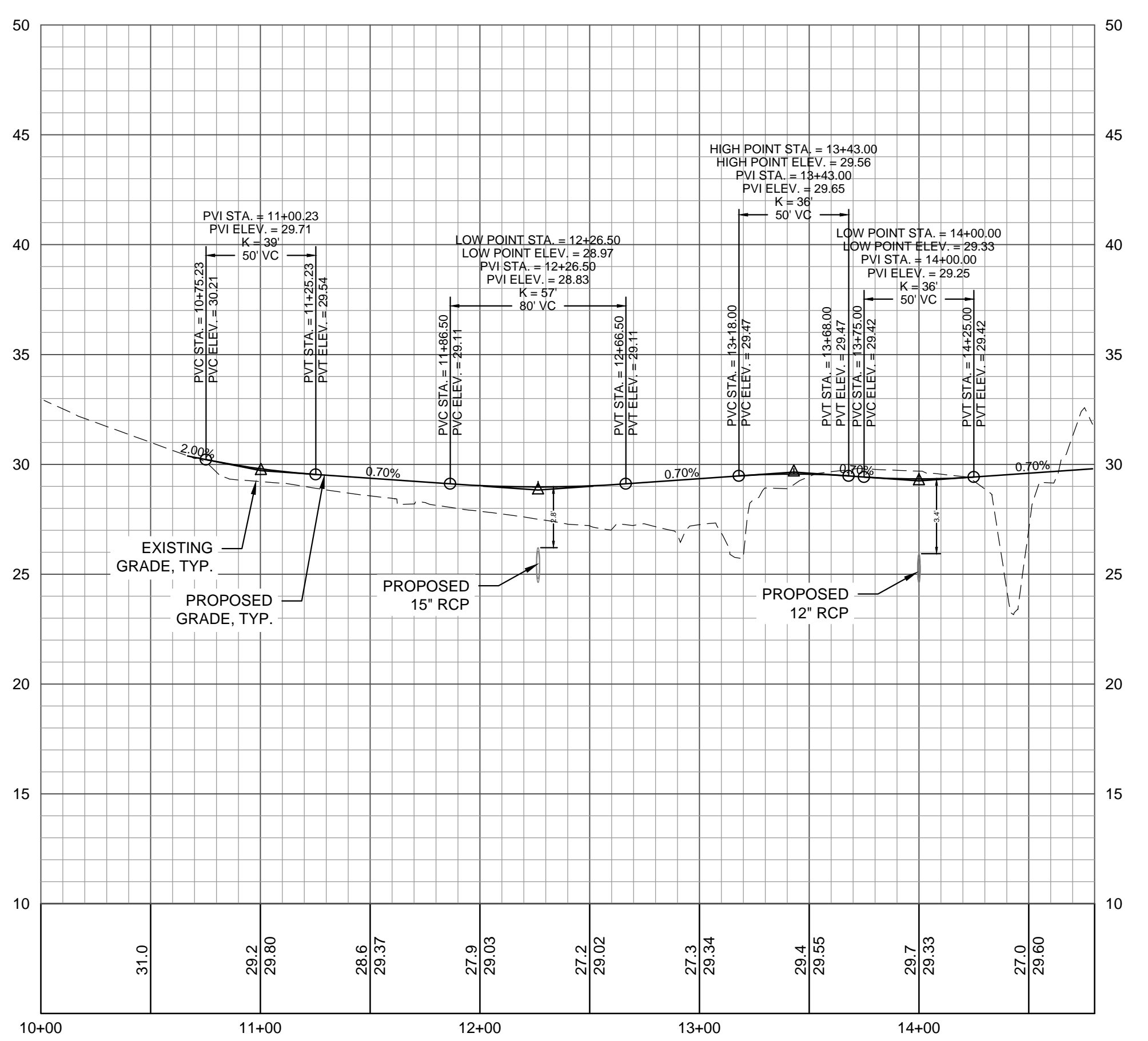
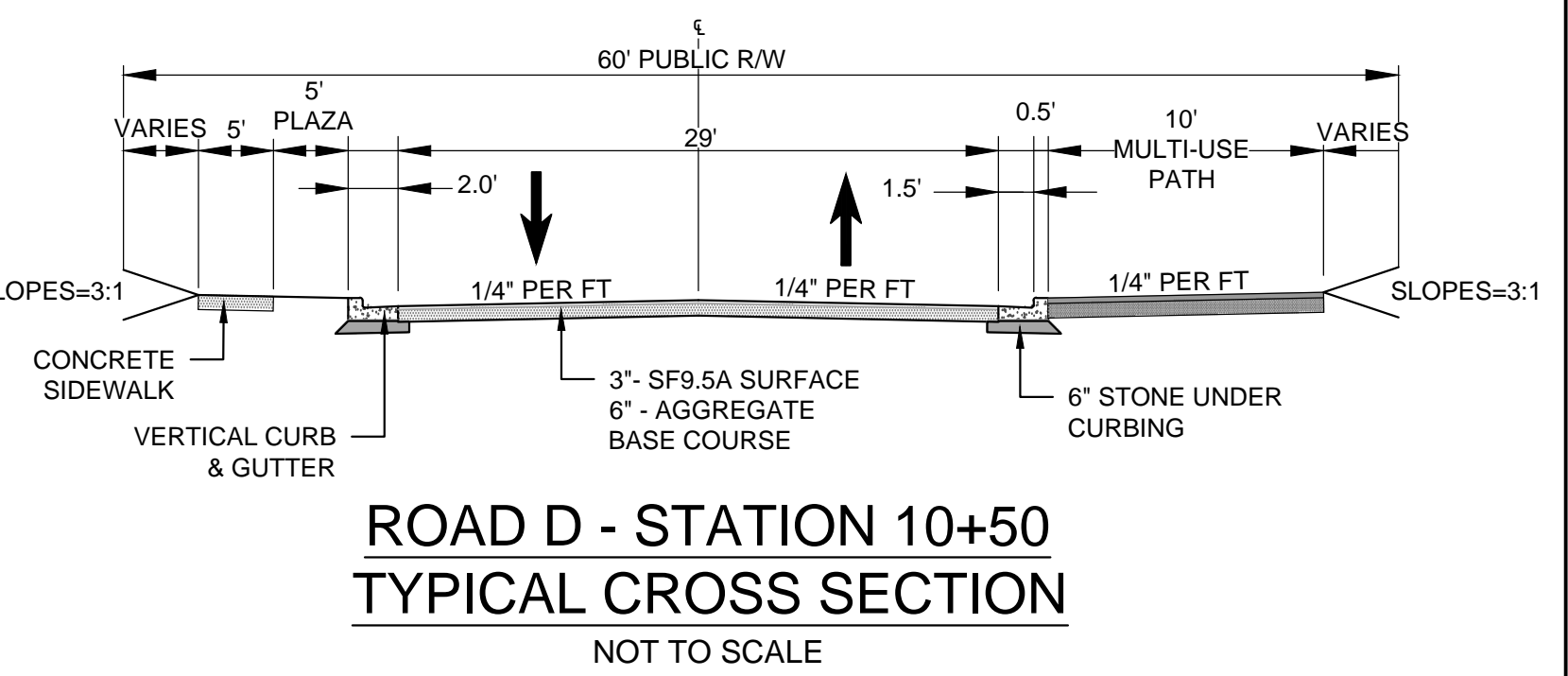
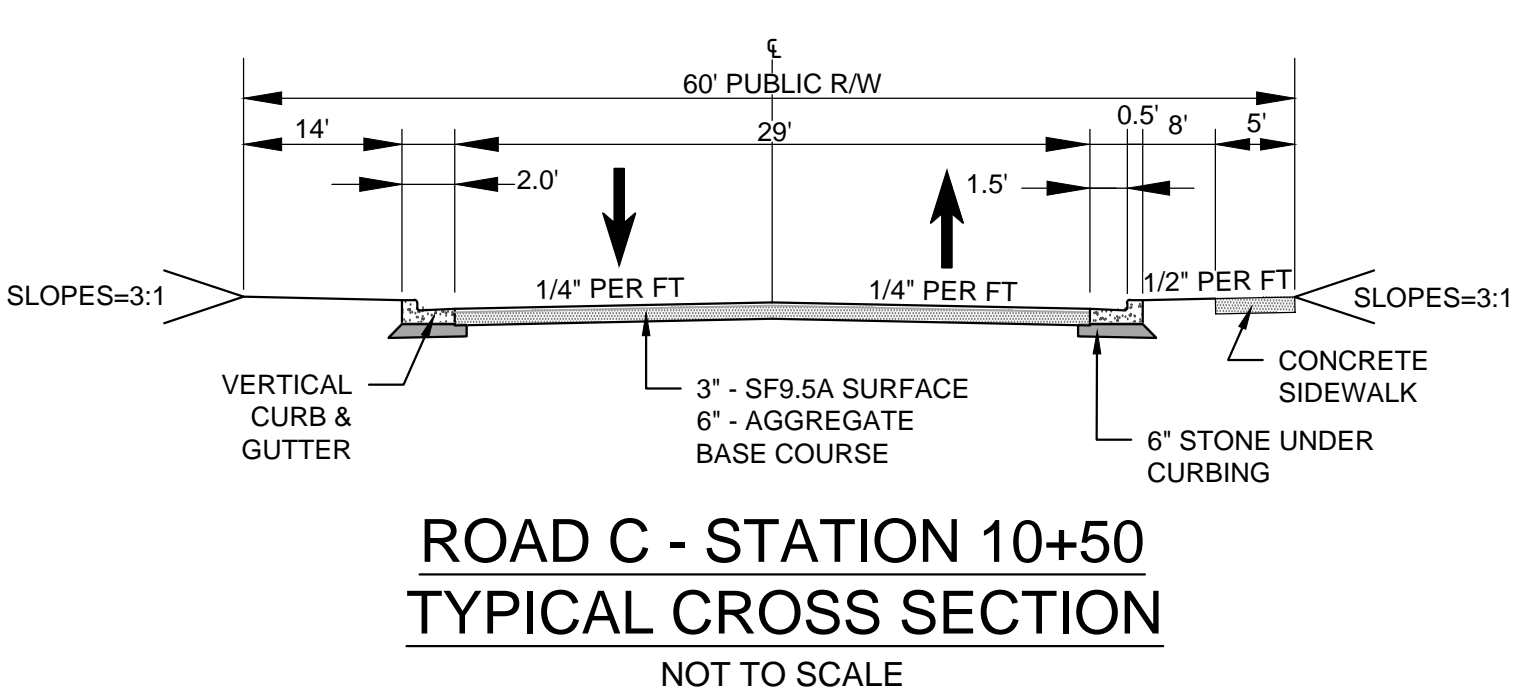
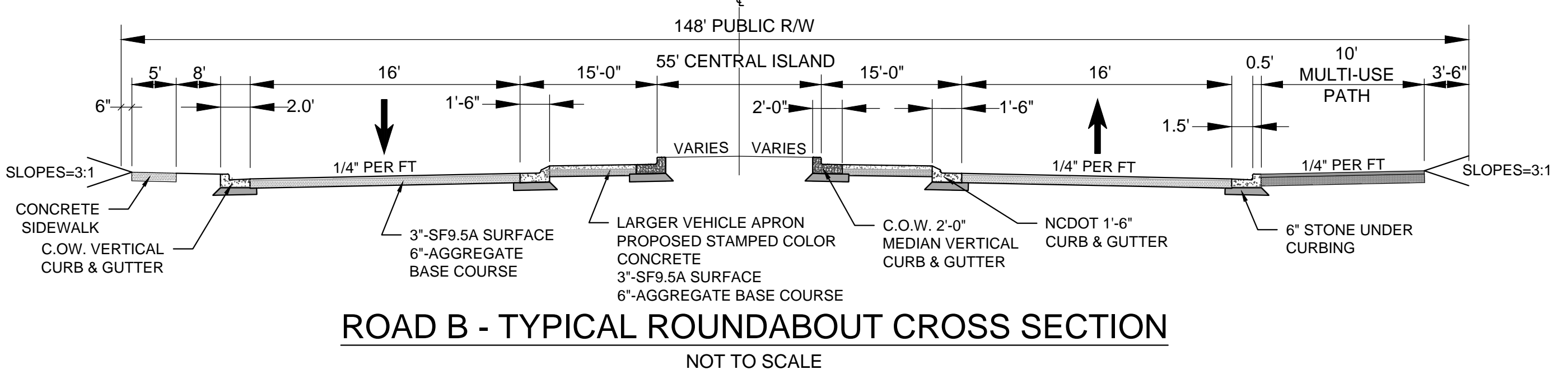
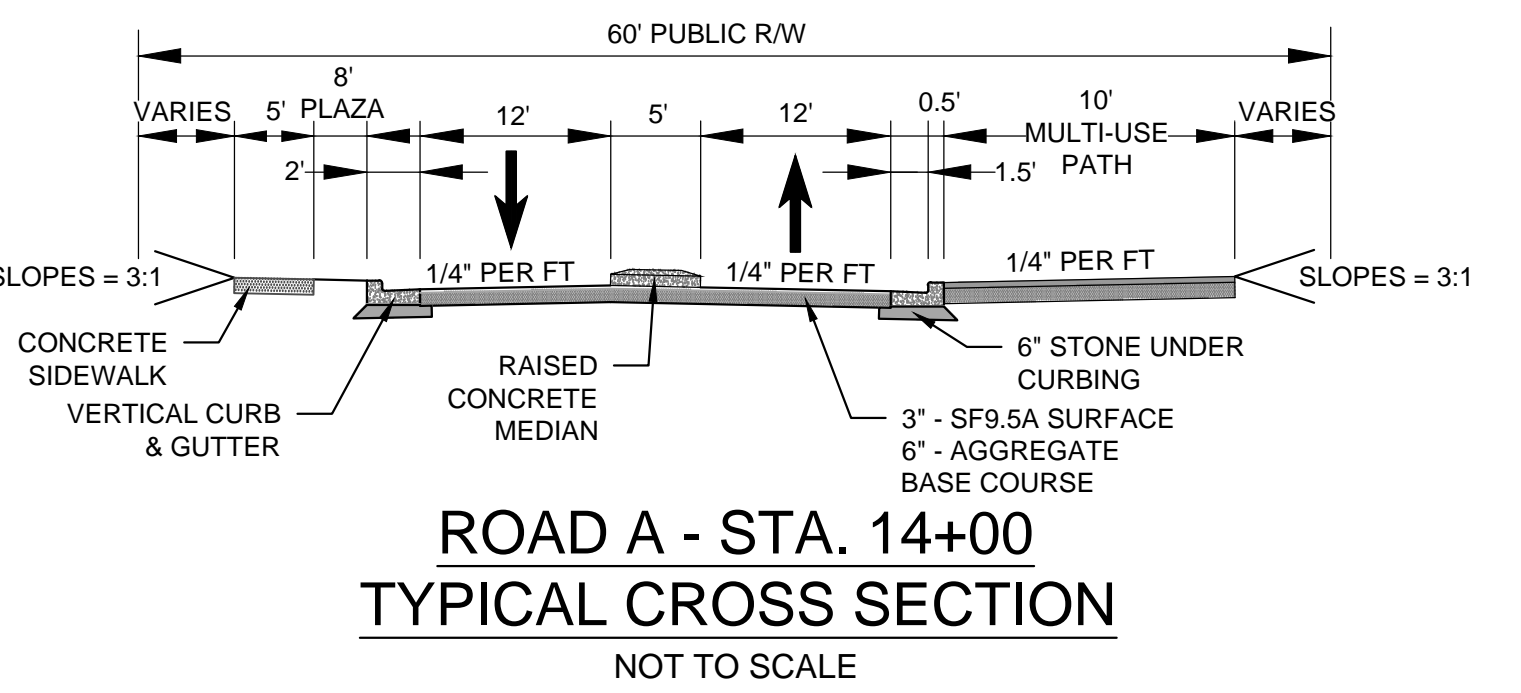
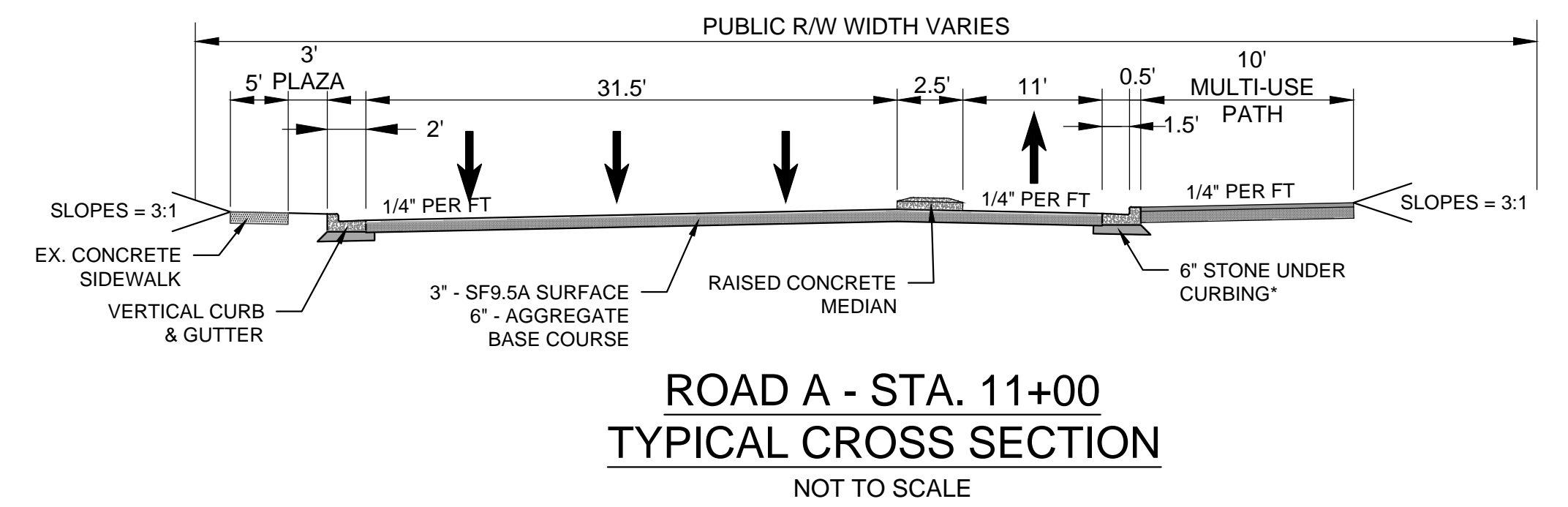
SEAL:
ROBERT P. BAILLY
ENGINEER
031591
03/25/19

C-5.0
PEI JOB#: 16247.PE

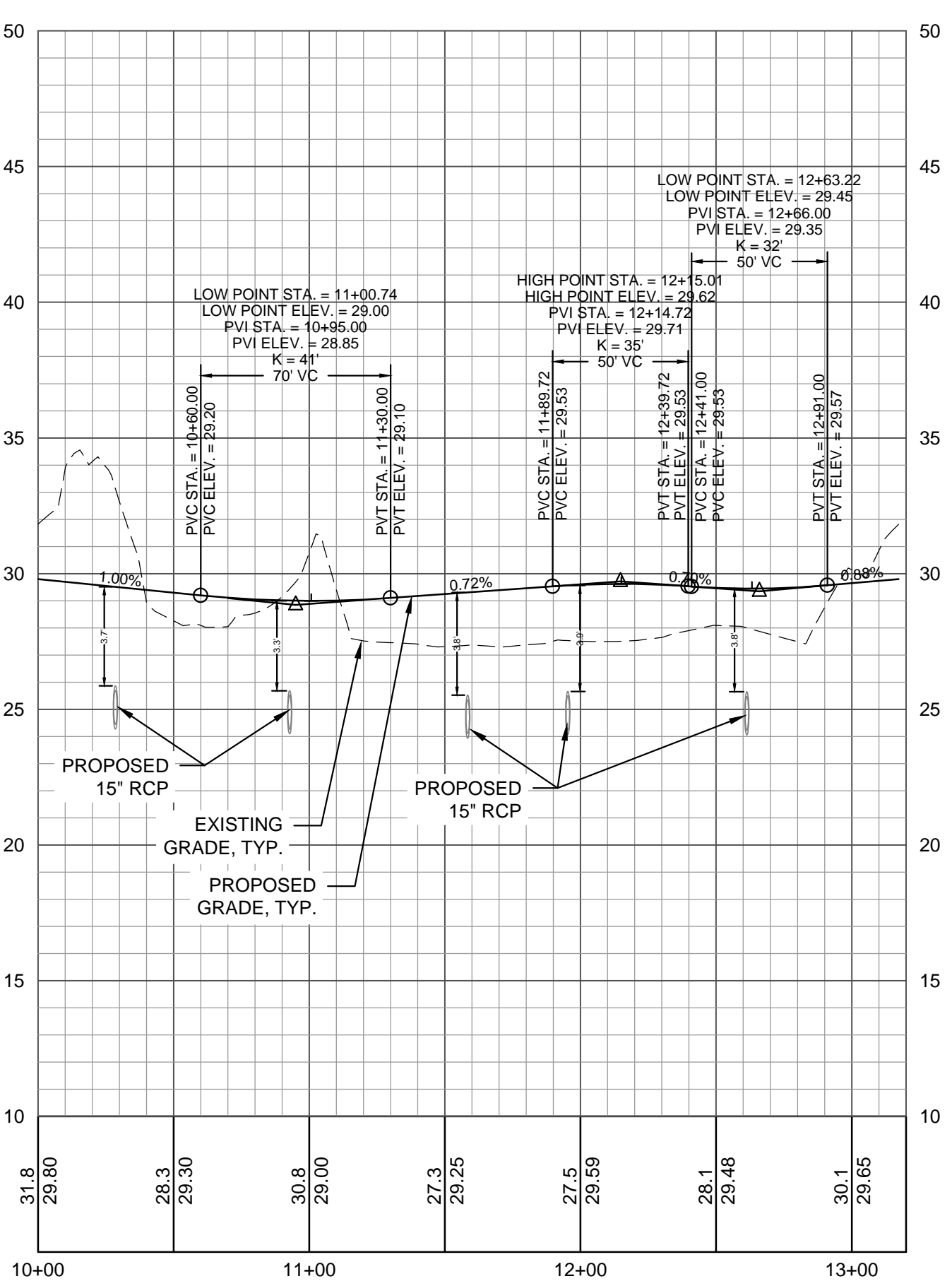
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



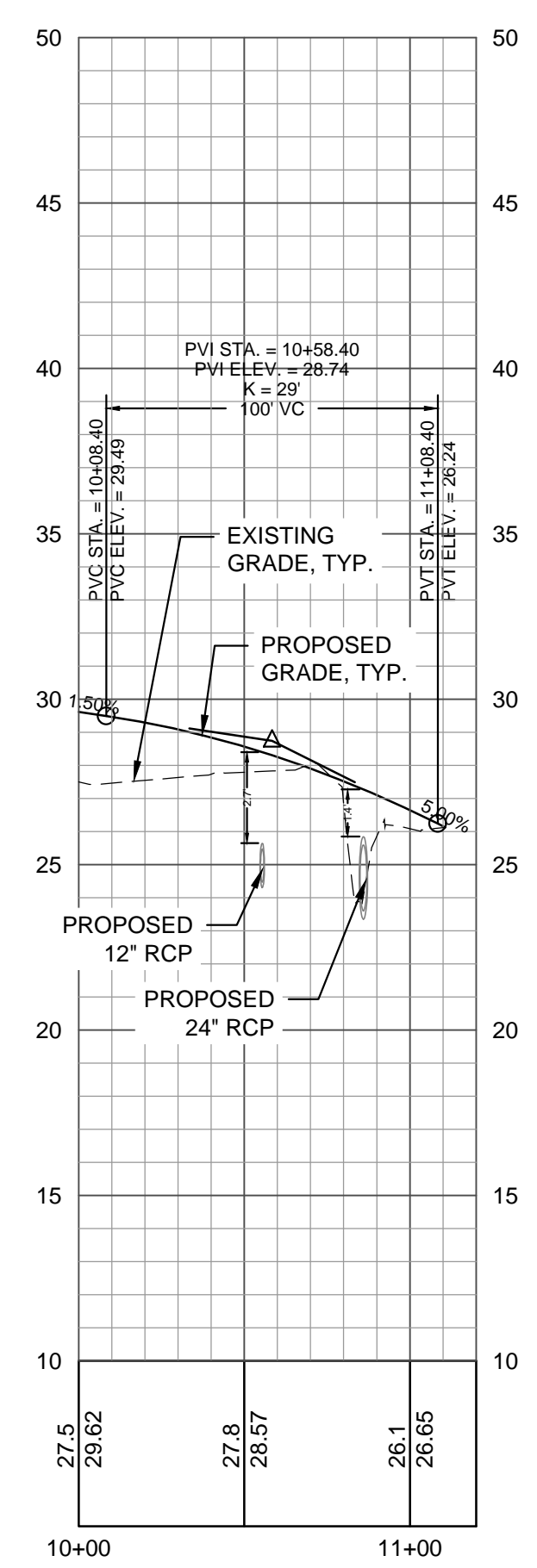
Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____



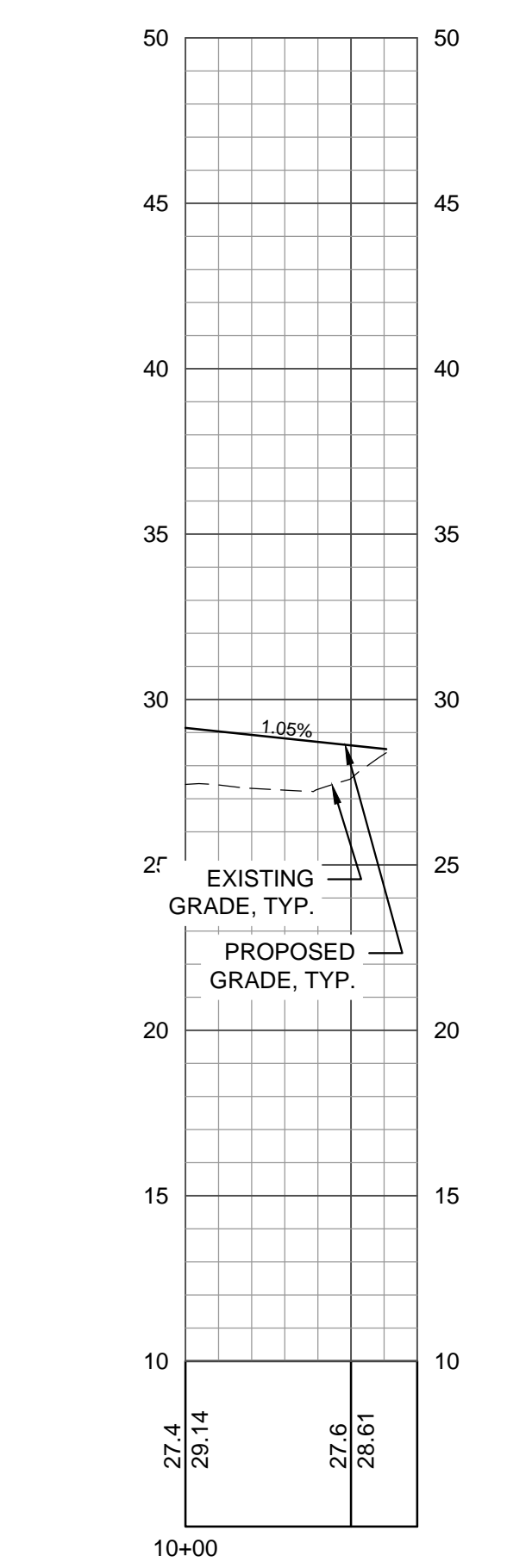
ROAD A (STA. 10+00 - 14+80)
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



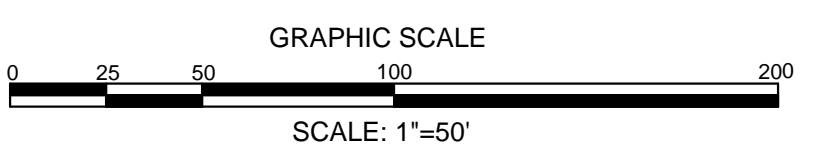
ROAD B - ROUNDABOUT (STA. 10+00 - 13+17)
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



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'



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:

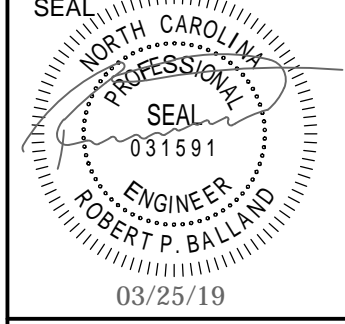
12/14/19	1) REVISIONS PER TRC COMMENTS, REVIEW #1
02/04/20	2) REVISIONS PER TRC COMMENTS, REVIEW #2
03/25/19	3) REVISIONS PER TRC COMMENTS

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

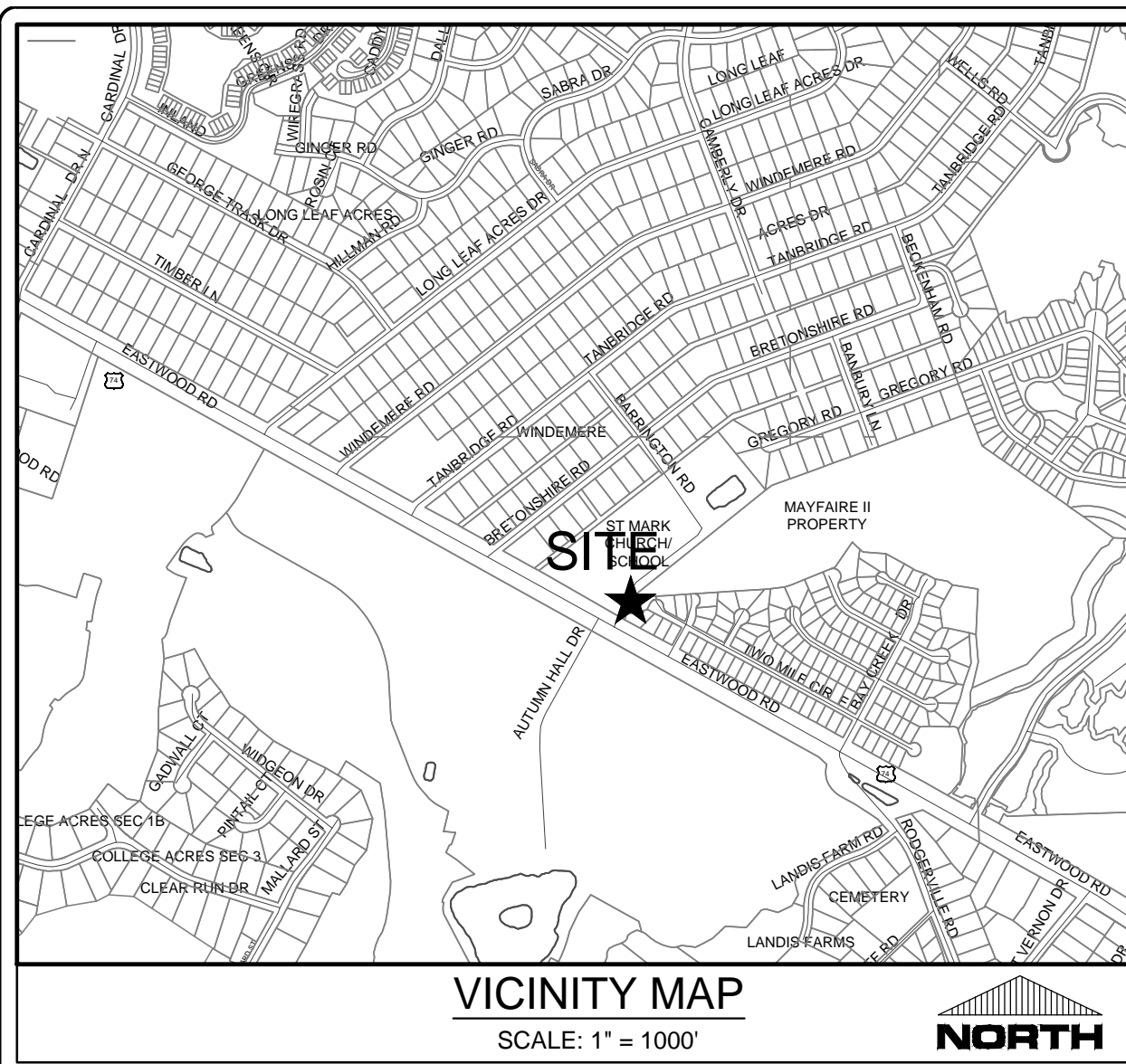
PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

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:
DATE: 03/25/19
SCALE: AS SHOWN
DESIGNED: RPB
CHECKED: RPB



C-5.1
PEI JOB#: 16247.PE



LEGEND:

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

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	MEASUREMENT
THERMOPLASTIC, 4", 120 MIL		
T17	2 FT. - 4 FT./SP WHITE MINISKIP	48 LF
TD	3 FT. - 9 FT./SP WHITE MINISKIP	66 LF
TE	WHITE SOLID LANE LINE	181 LF
TOTAL		295 LF
THERMOPLASTIC, 24", 120 MIL		
T2	WHITE STOPBAR	11 LF
T3	WHITE CROSSWALK LINE	72 LF
TOTAL		83 LF
THERMOPLASTIC SYMBOLS, 90 MIL		
UA	LEFT TURN ARROW	1 EA
UB	RIGHT TURN ARROW	2 EA
UC	STRAIGHT ARROW	5 EA
UM	12" YIELD LINE TRIANGLE	18 EA
TOTAL		26 EA

- NOTES:**
- ALL PAVEMENT MARKINGS WITHIN NCDOT RIGHT-OF-WAY SHALL BE TO NCDOT STANDARDS. ALL PAVEMENT MARKINGS WITHIN THE CITY OF WILMINGTON RIGHT-OF-WAY SHALL BE TO THE CITY OF WILMINGTON STANDARDS.
 - REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS WITHIN THE CONSTRUCTION AREA.
 - ERADICATE EXISTING PAVEMENT MARKINGS WHEN IN CONFLICT WITH MARKING PLANS WITHIN PROJECT LIMITS.
 - CONSULT WITH CITY OF WILMINGTON FOR SIGN TYPE FOR MULTI-USE PATH.
 - REMOVE PAVEMENT MARKERS FROM ALL ROADS IN CONSTRUCTION AREA AND REPLACE TO CORRESPOND TO FINAL PAVEMENT MARKINGS. ALL PAVEMENT MARKERS ON EASTWOOD ROAD SHALL BE SNOWPLOWABLE (SEE NCDOT STD. DWG. 1253.01)

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)

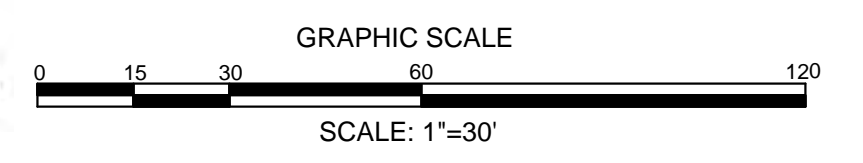
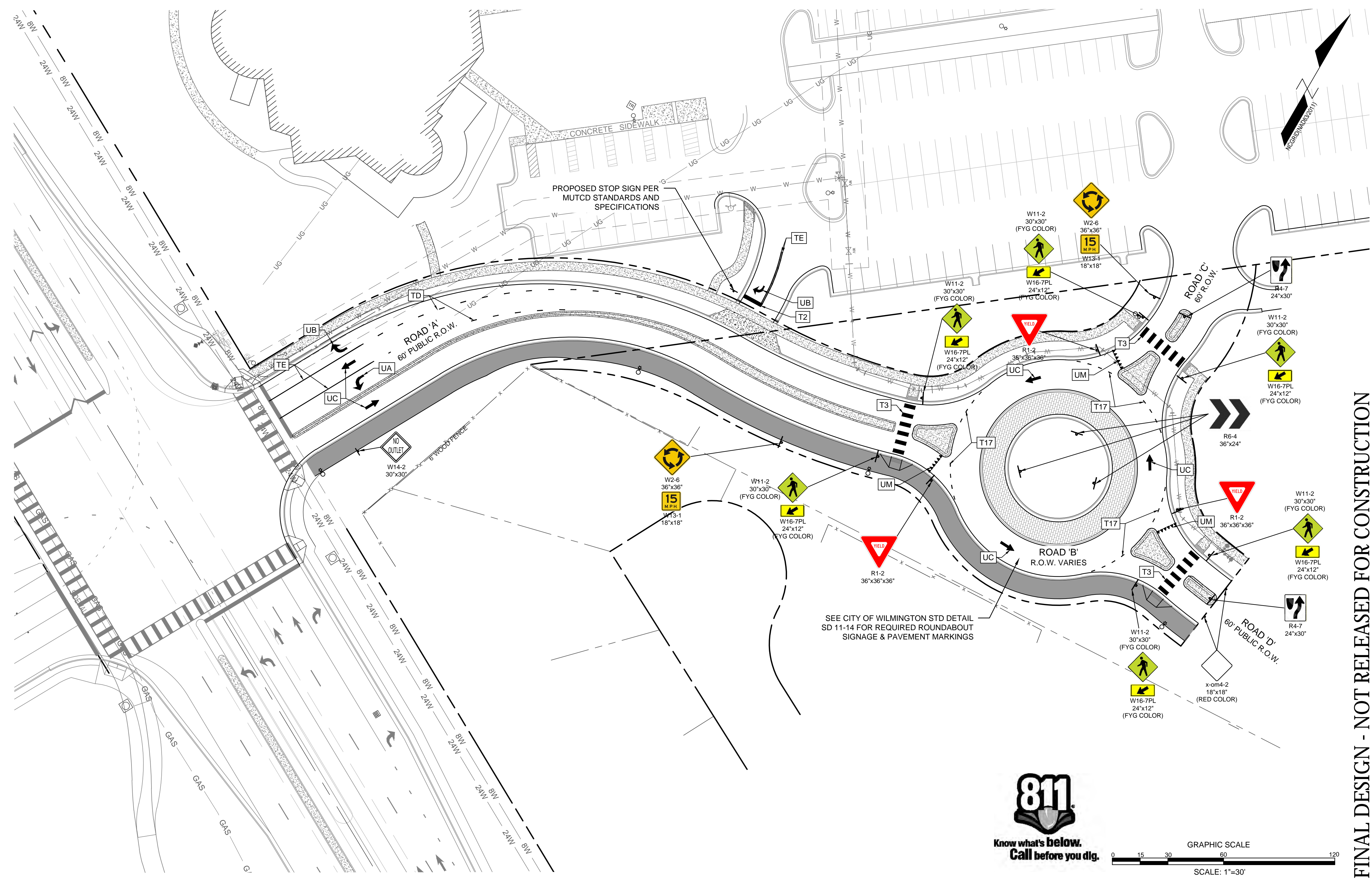
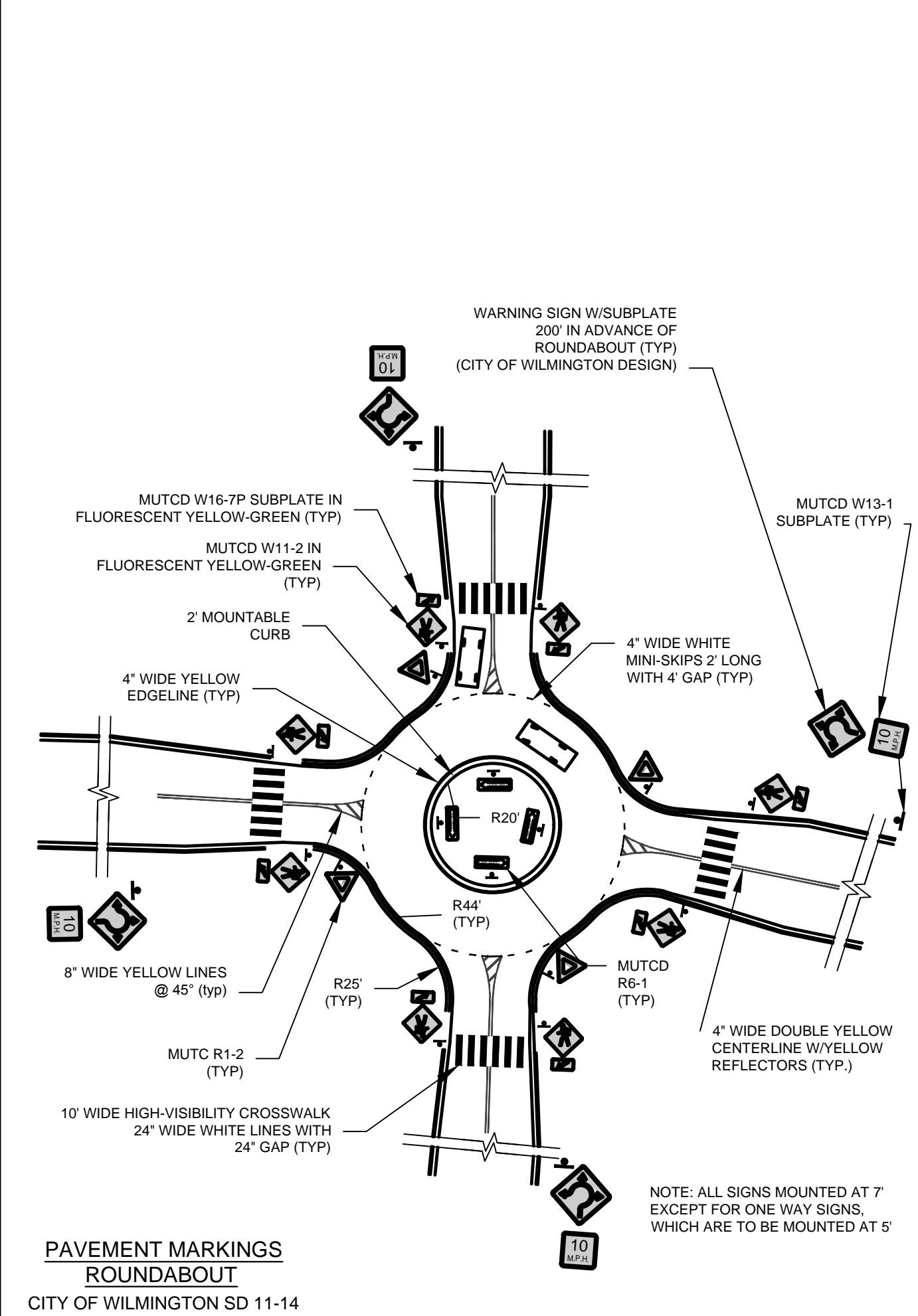
WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit #: _____
 Signed: _____

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.



REVISIONS:

12/14/18	J1 REVISIONS PER TRC COMMENTS, REVIEW #1
02/01/19	J2 REVISIONS PER TRC COMMENTS, REVIEW #2
03/12/19	J3 REVISIONS PER TRC COMMENTS
03/21/19	J4 REVISIONS PER TRC COMMENTS

CLIENT INFORMATION:

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

PARAMOUNT ENGINEERING, INC.
 122 Cixema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-28946

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

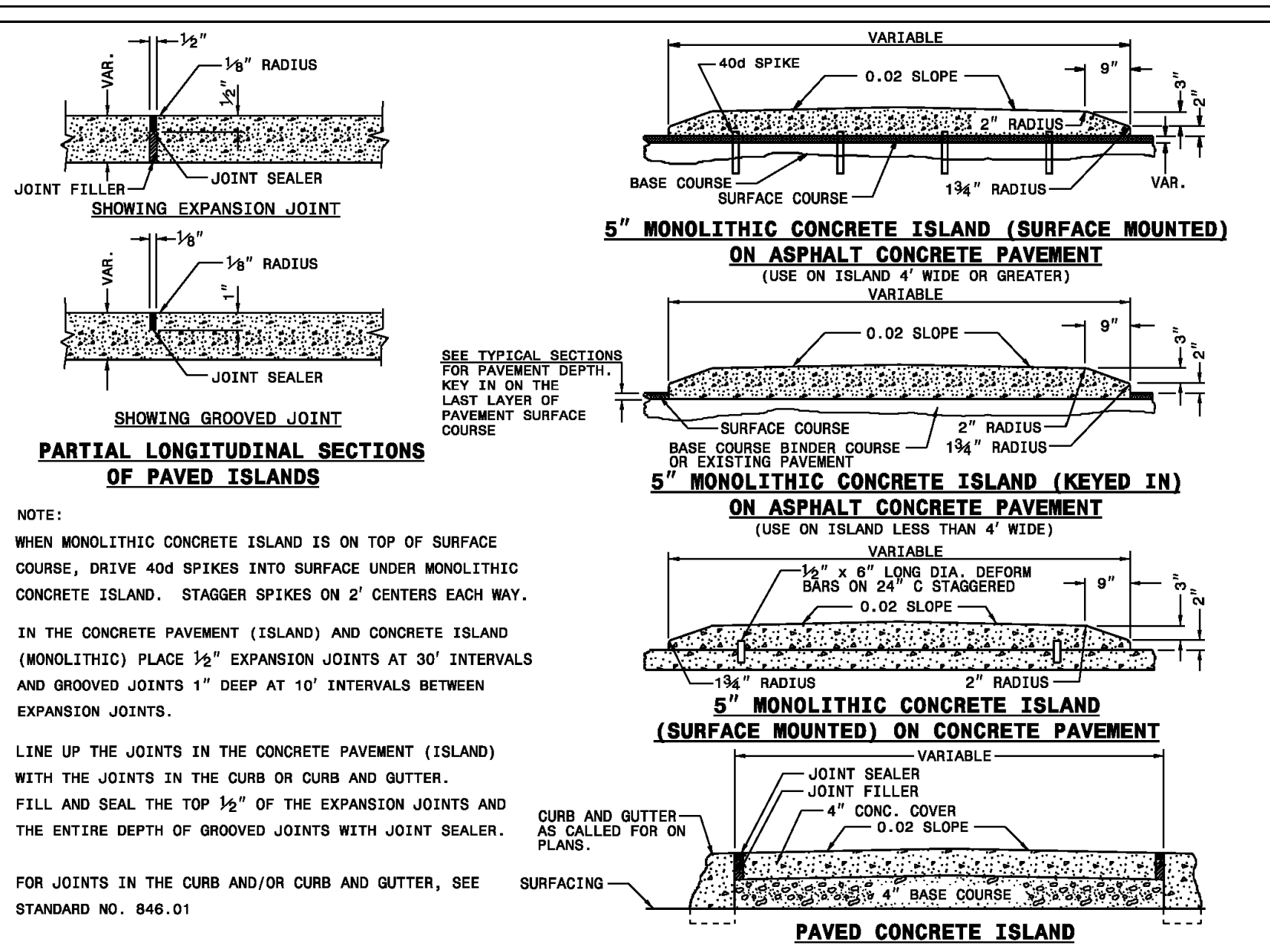
PROJECT STATUS:
 CONCEPTUAL LAYOUT: _____
 FINAL DESIGN: _____
 RELEASED FOR CONST: _____

DRAWING INFORMATION:
 DATE: 03/25/19
 SCALE: _____
 DESIGNED: _____
 CHECKED: _____

SEAL:
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 031591
 ROBERT P. BALLING
 03/25/19

C-5.2
 PEI JOB#: 16247.PE

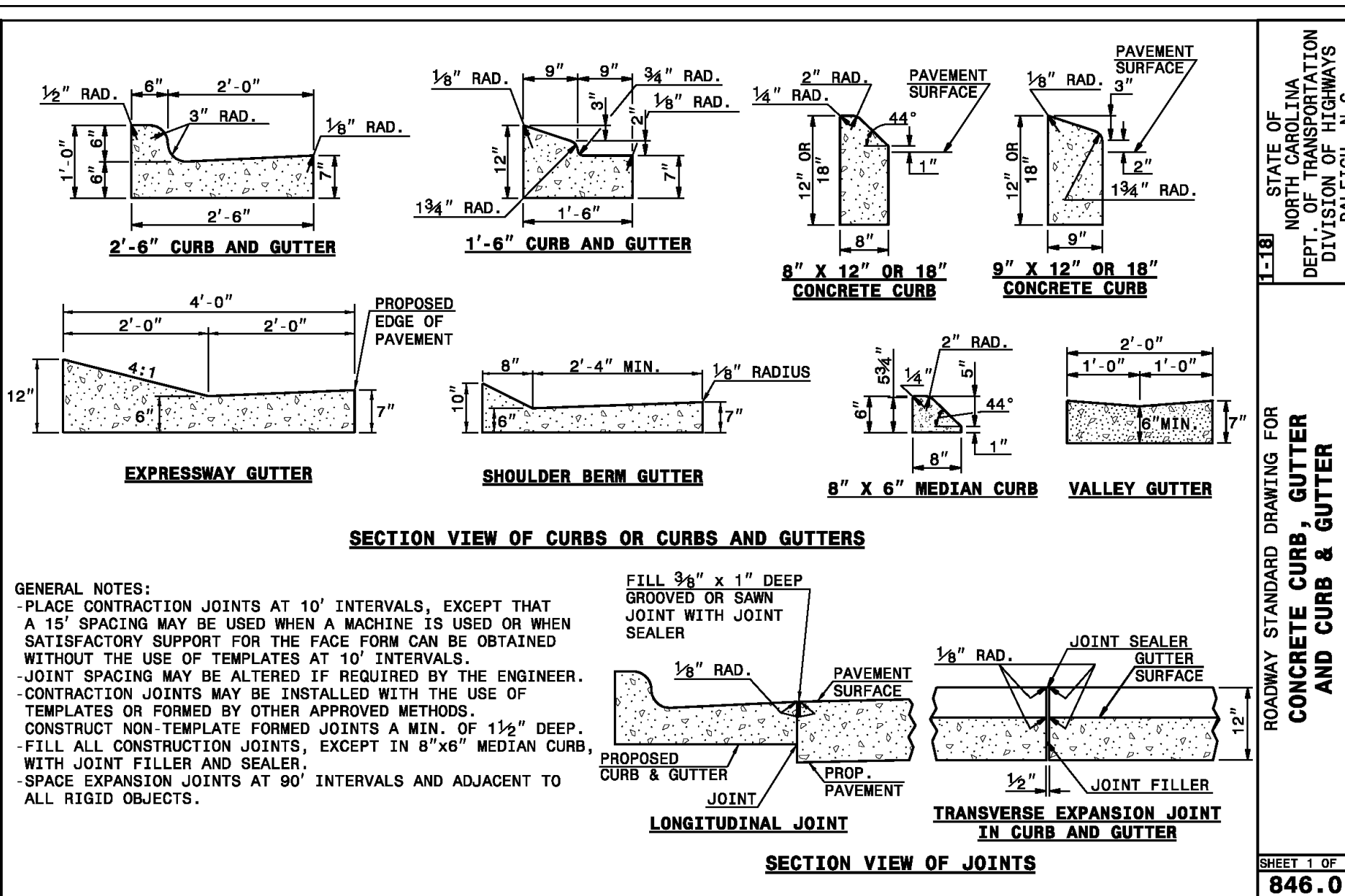
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



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

ROADWAY STANDARD DRAWING FOR
CONCRETE ISLANDS

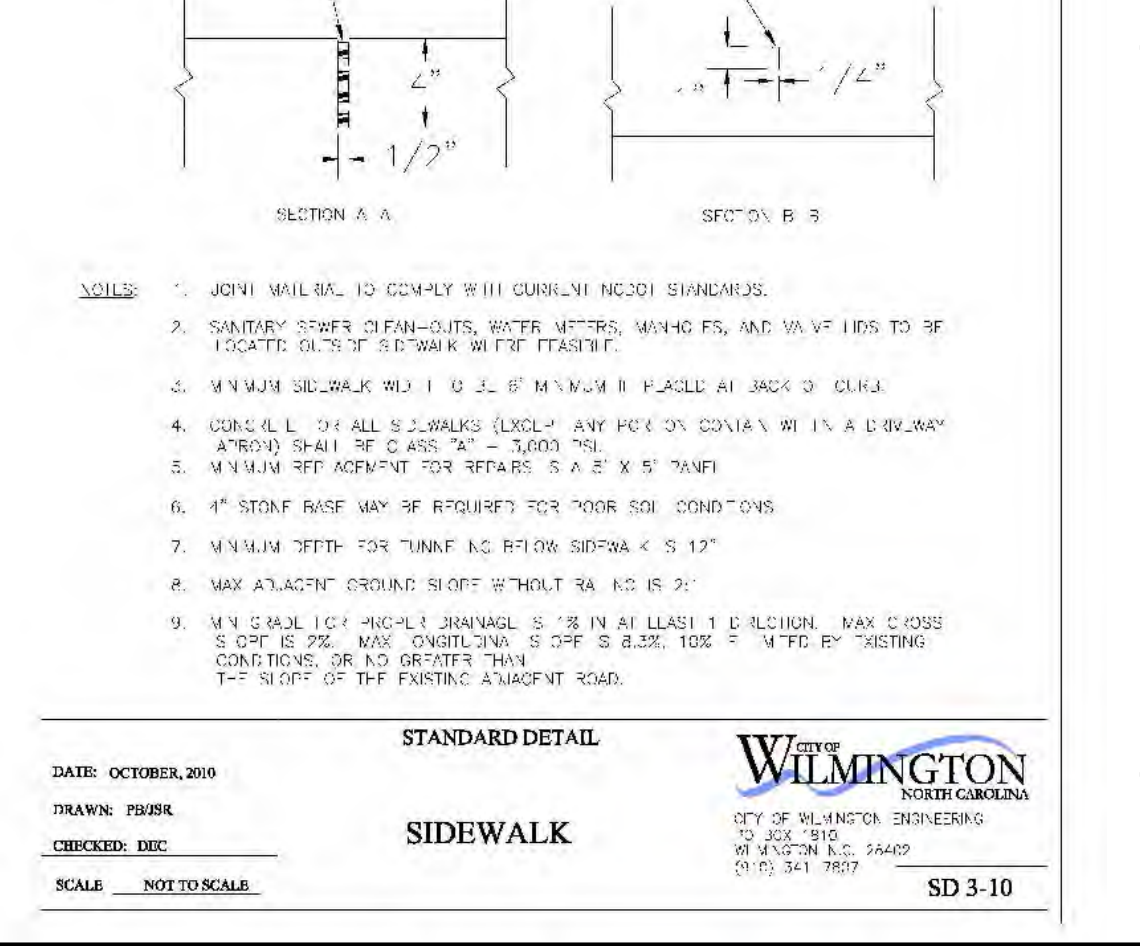
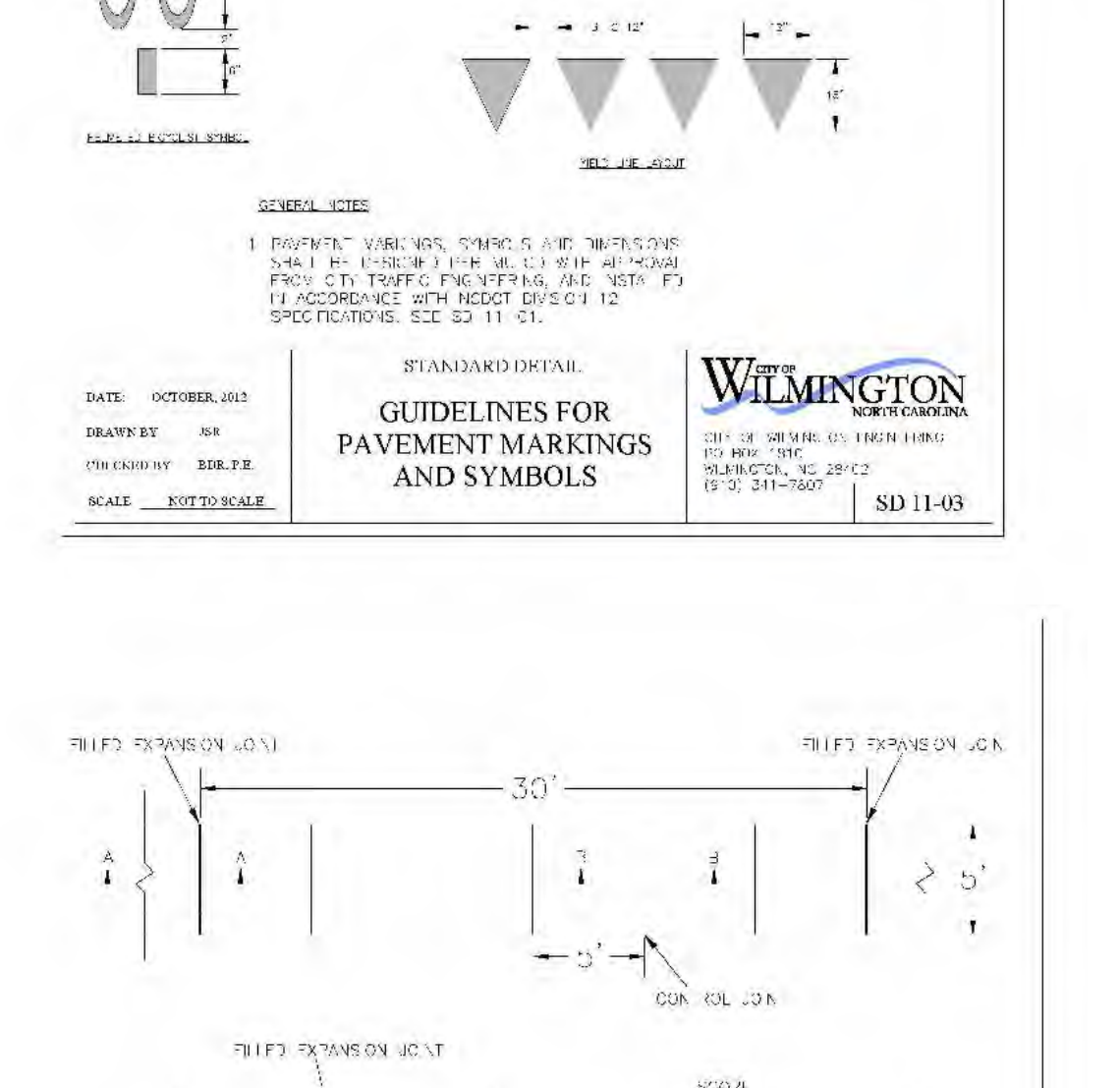
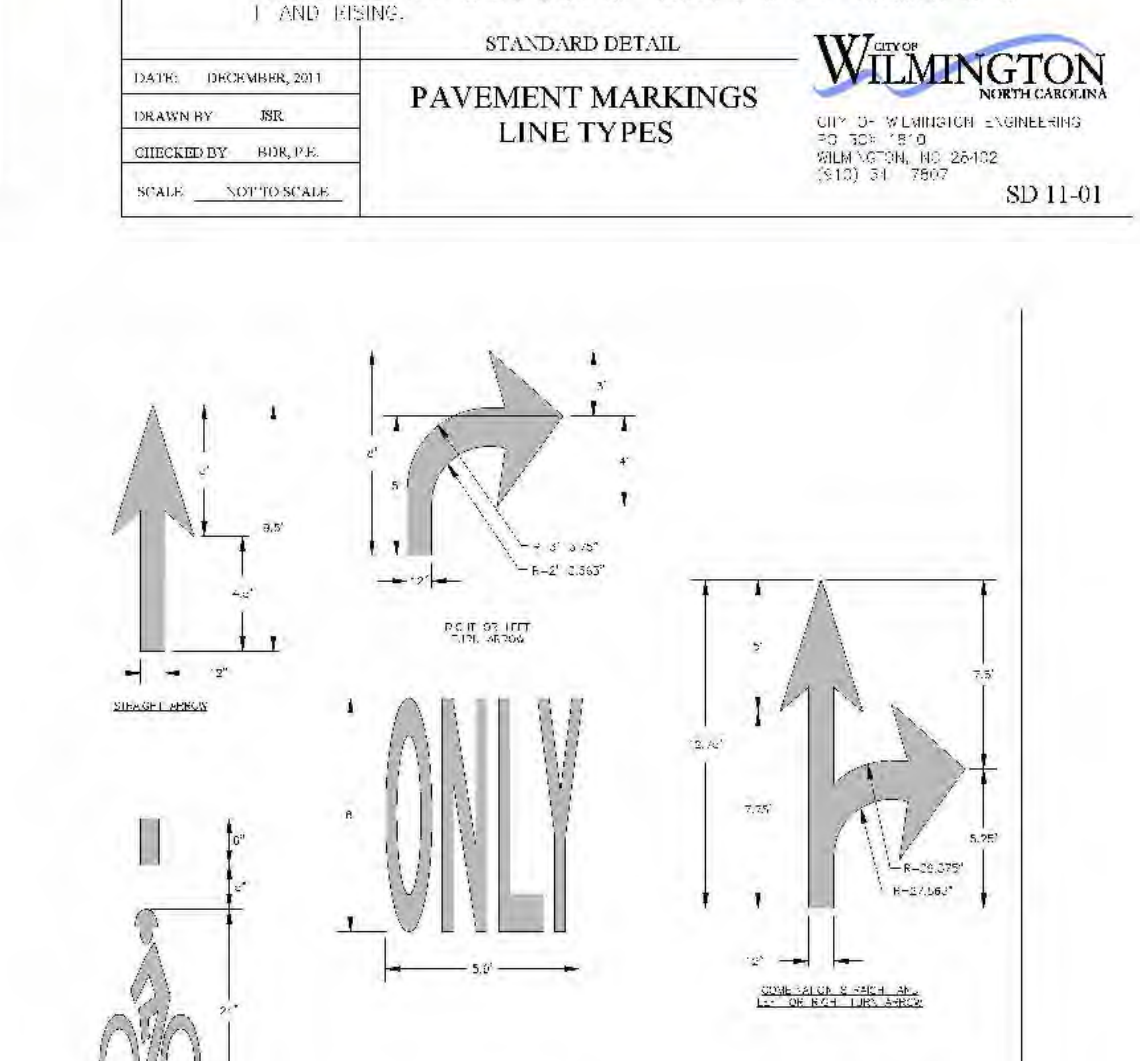
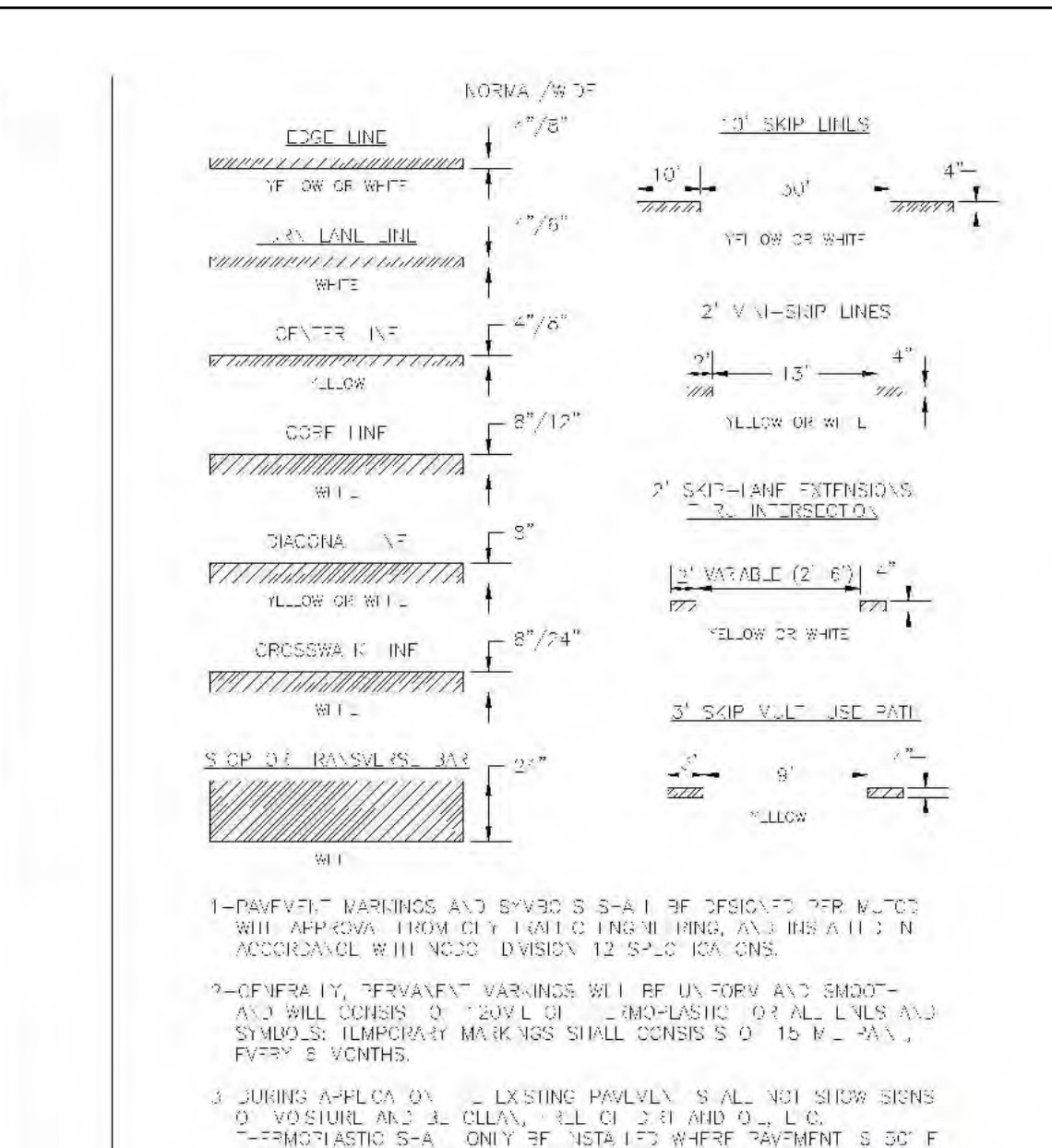
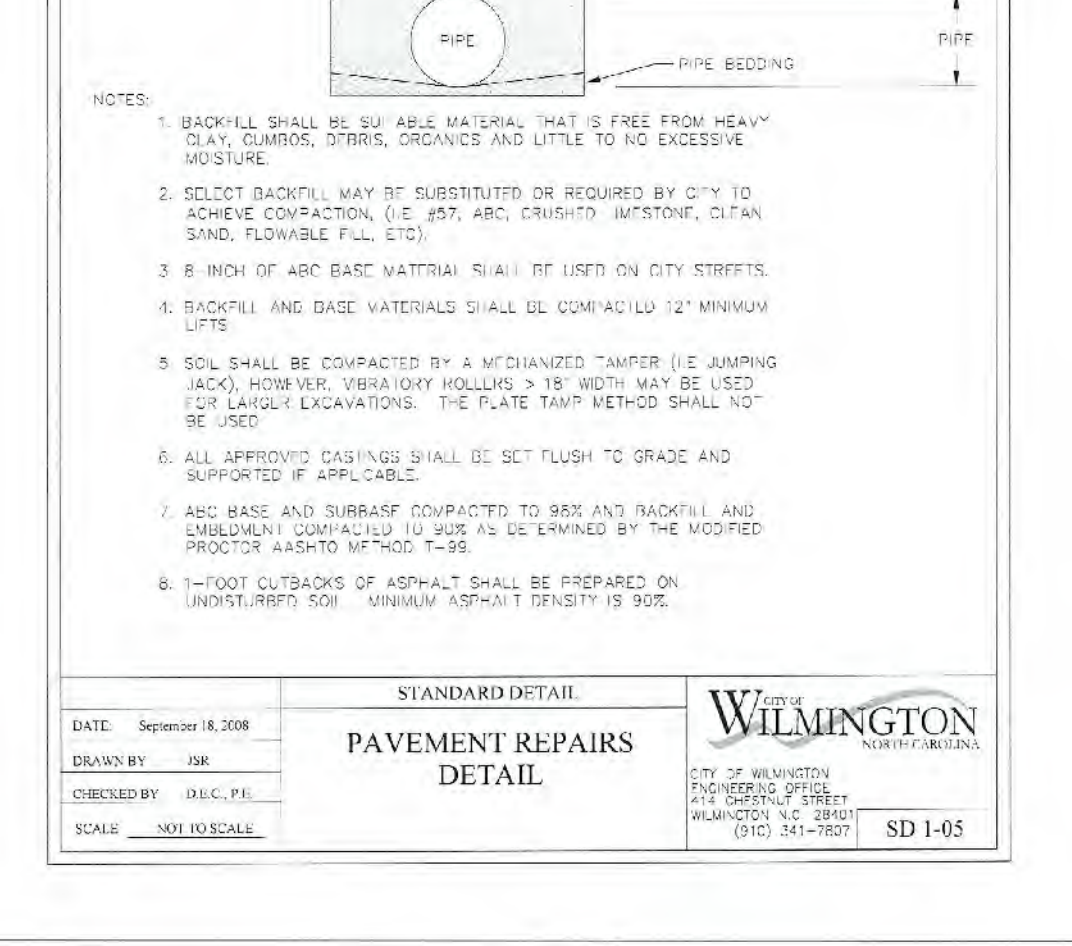
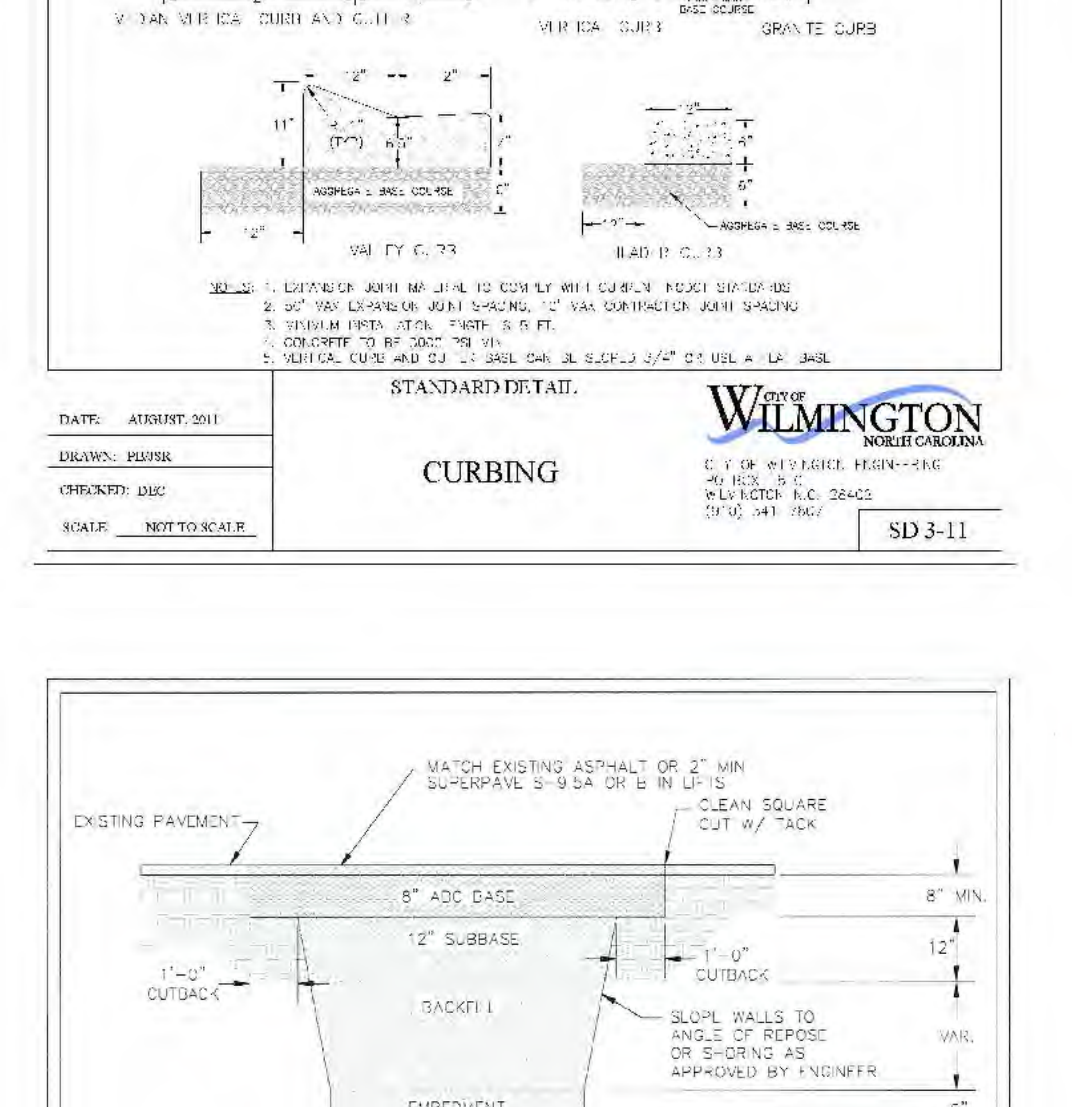
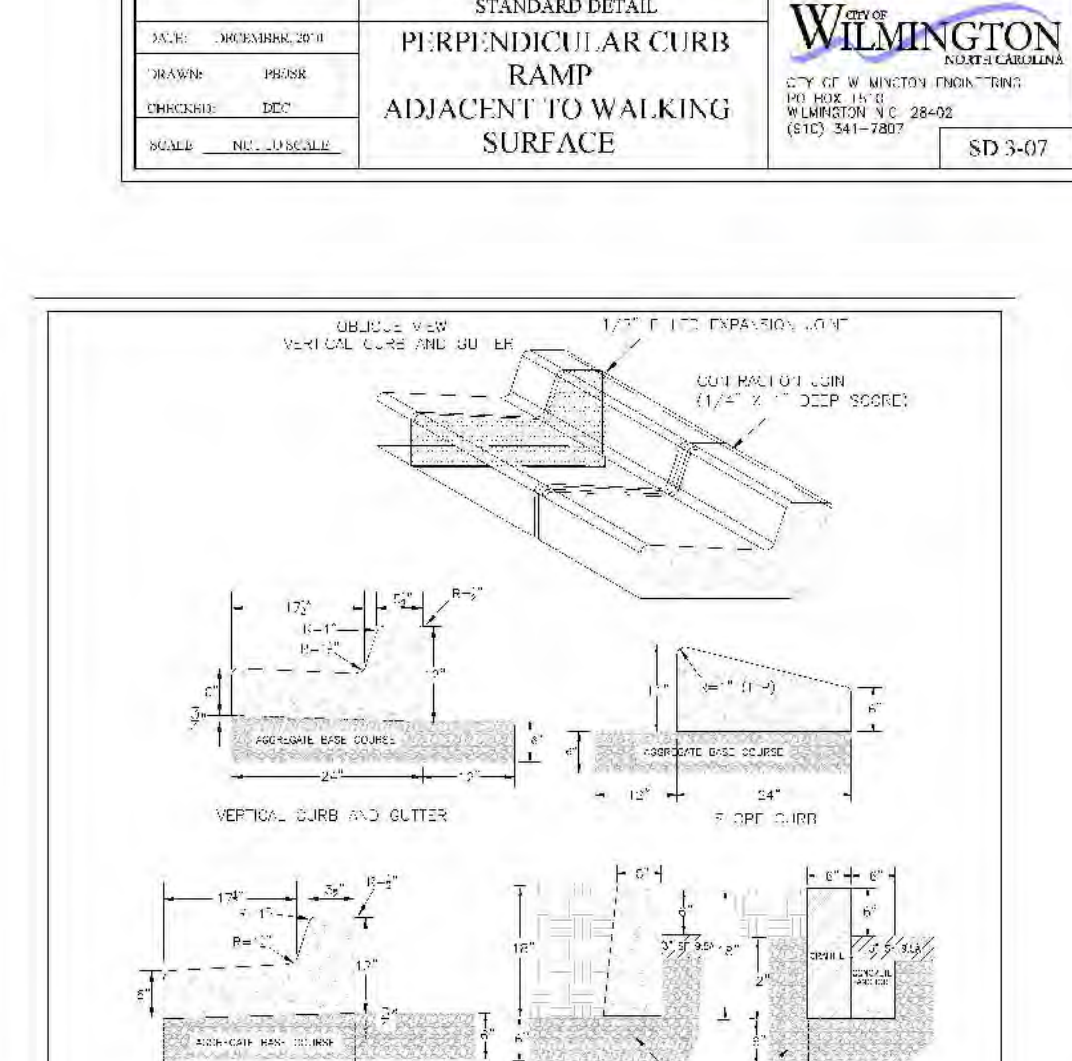
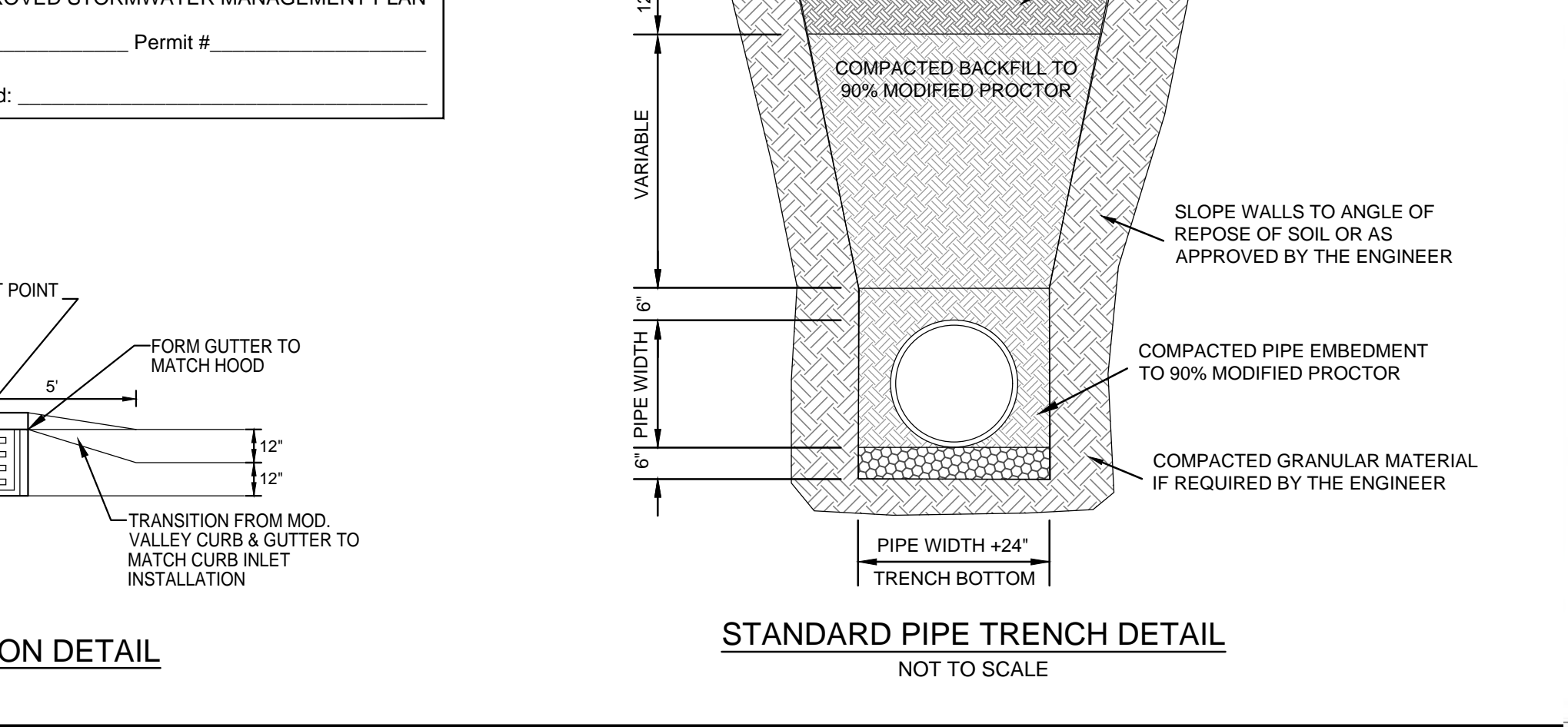
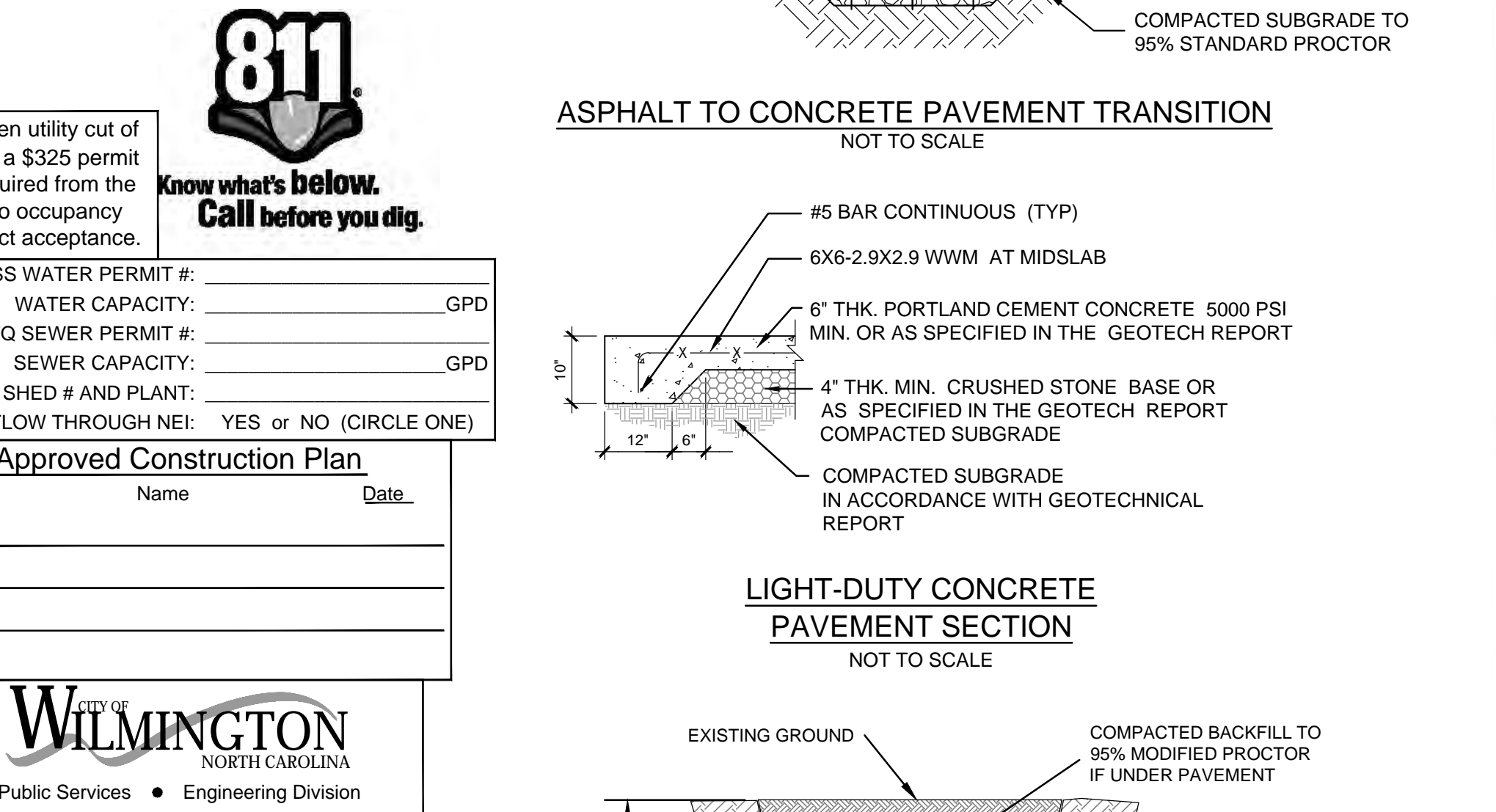
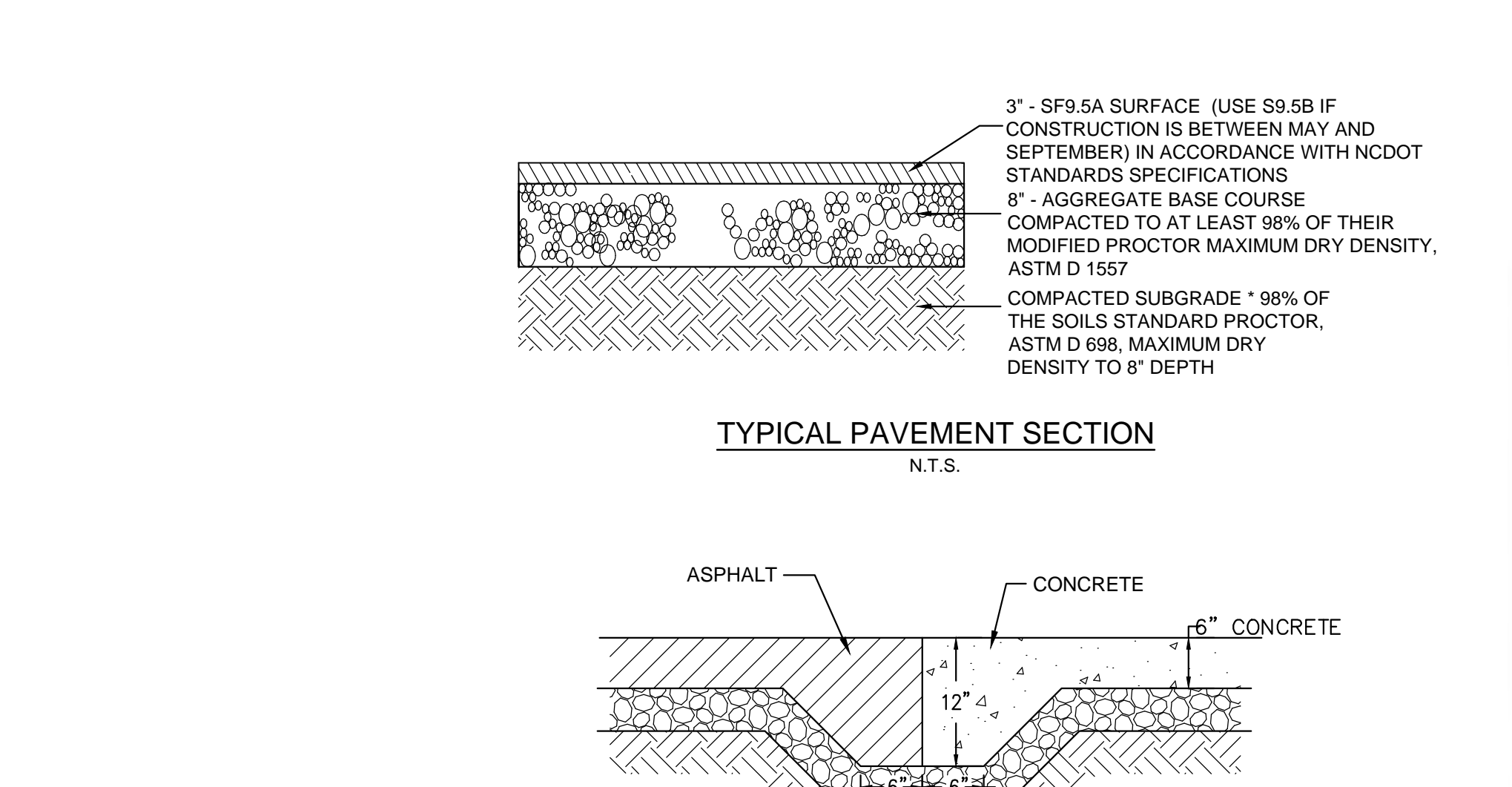
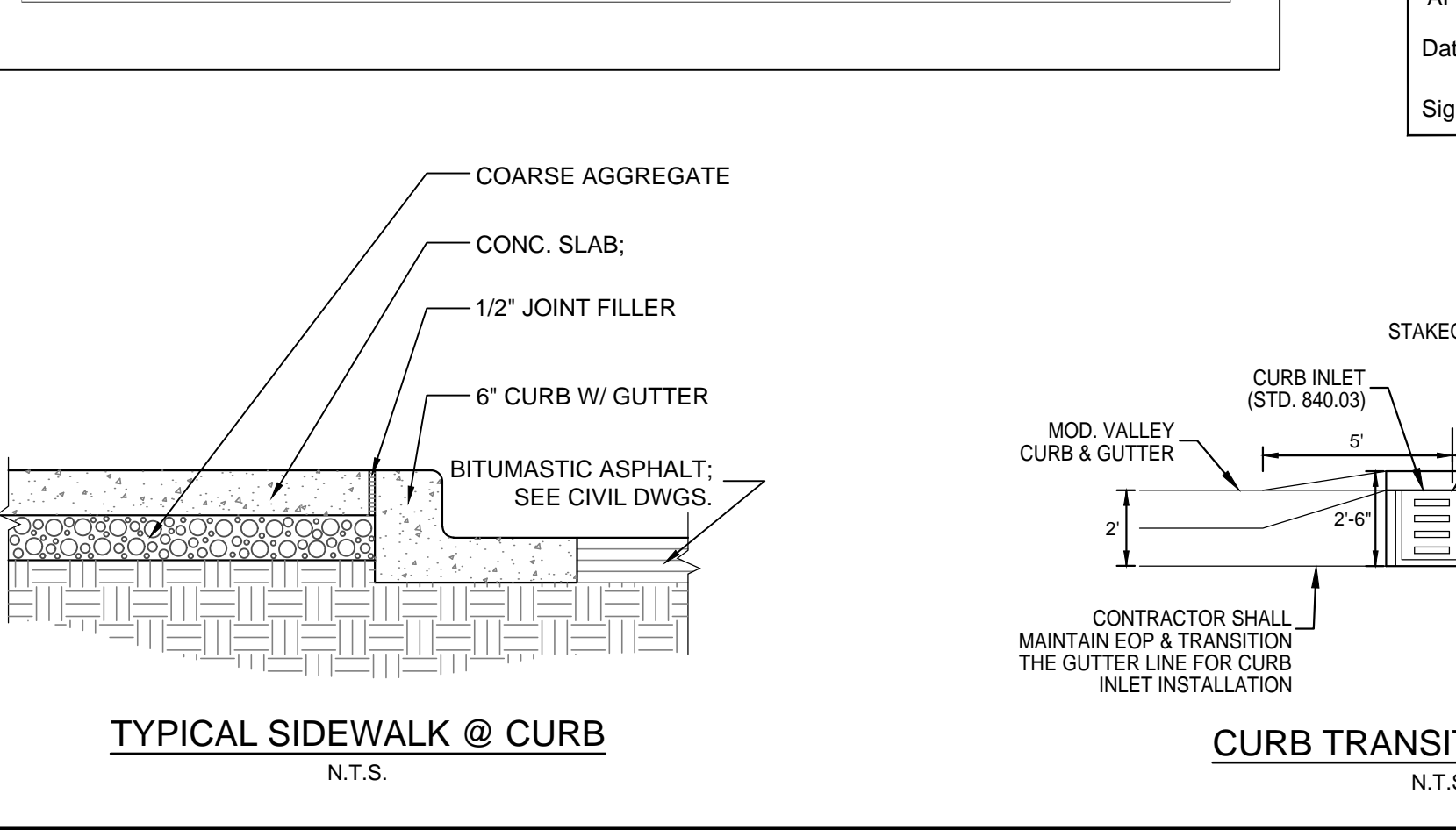
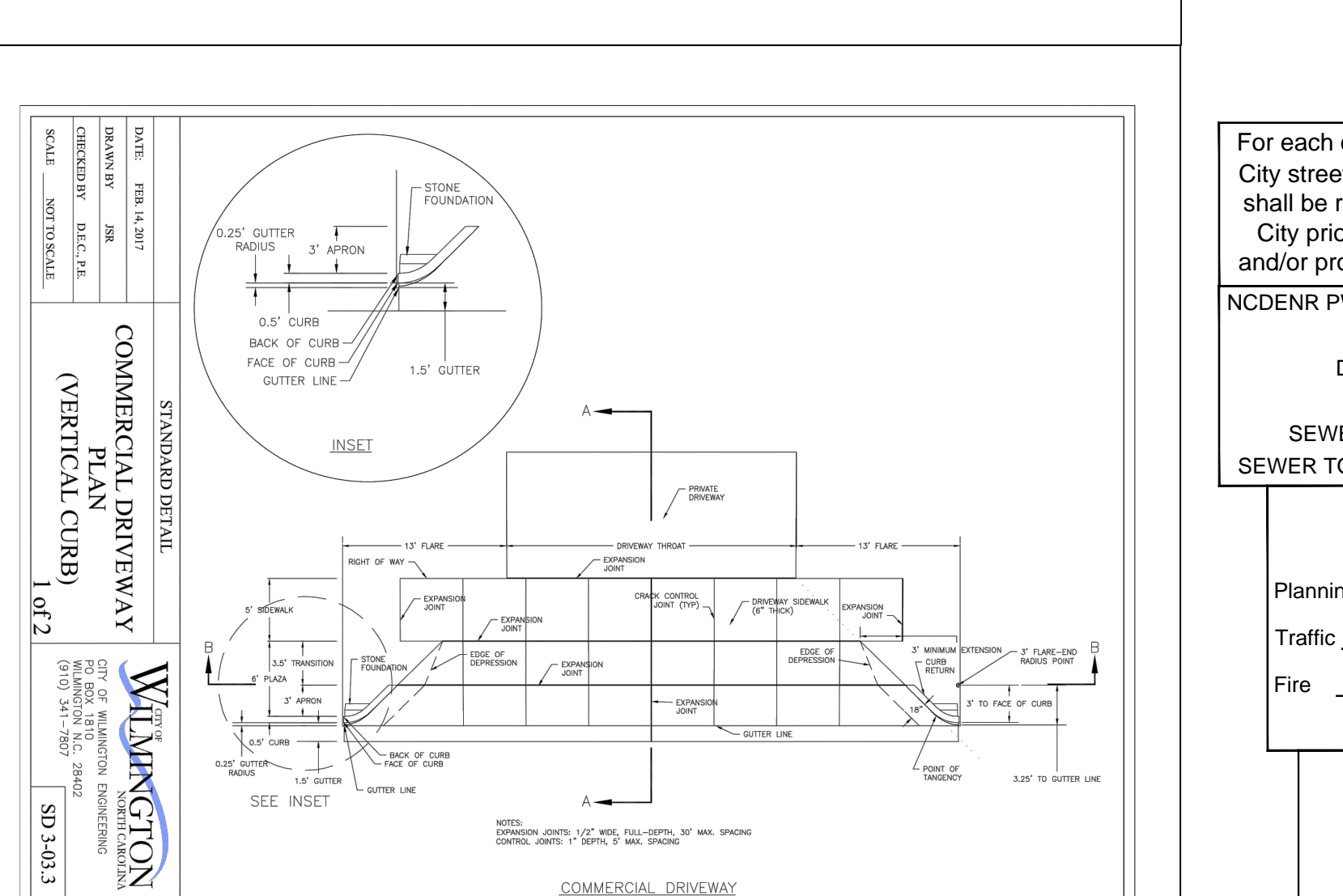
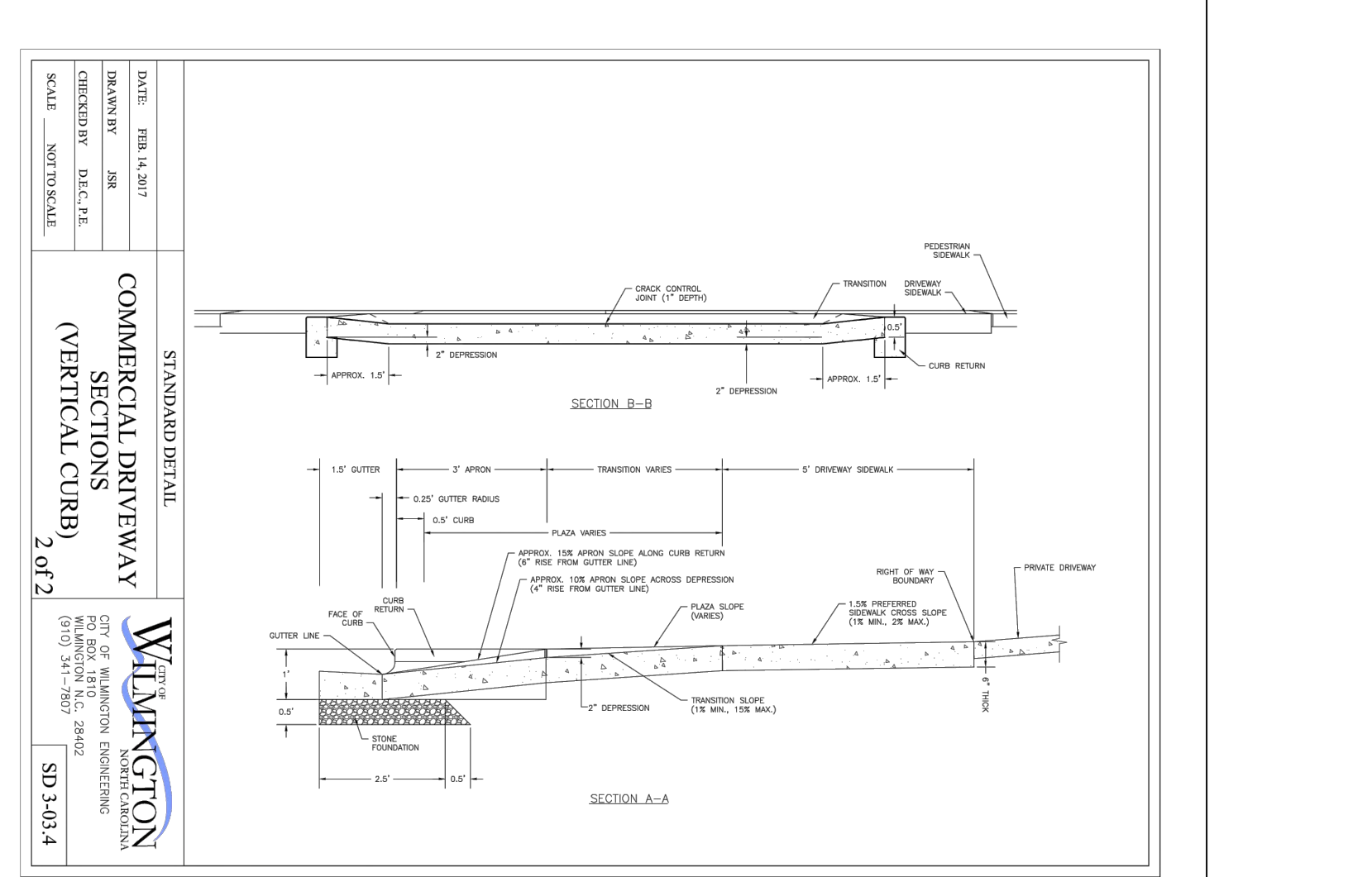
SHEET 1 OF 1
852.01



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.

NCDENR 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: _____

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

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

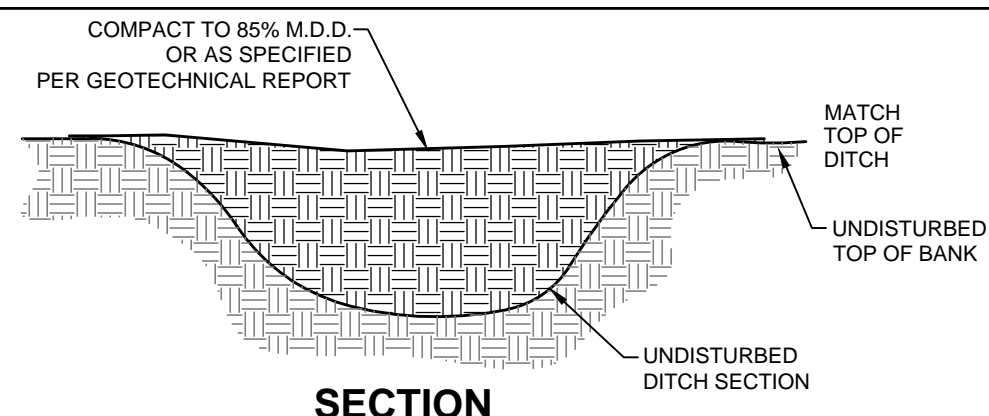
PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
RELEASED FOR CONST.

DRAWING INFORMATION:
DATE: 03/25/19
DESIGNED: RPB
DRAWN: RPB
CHECKED: RPB

SEAL:
NORTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
ROBERT P. BALLING
031581
03/25/19

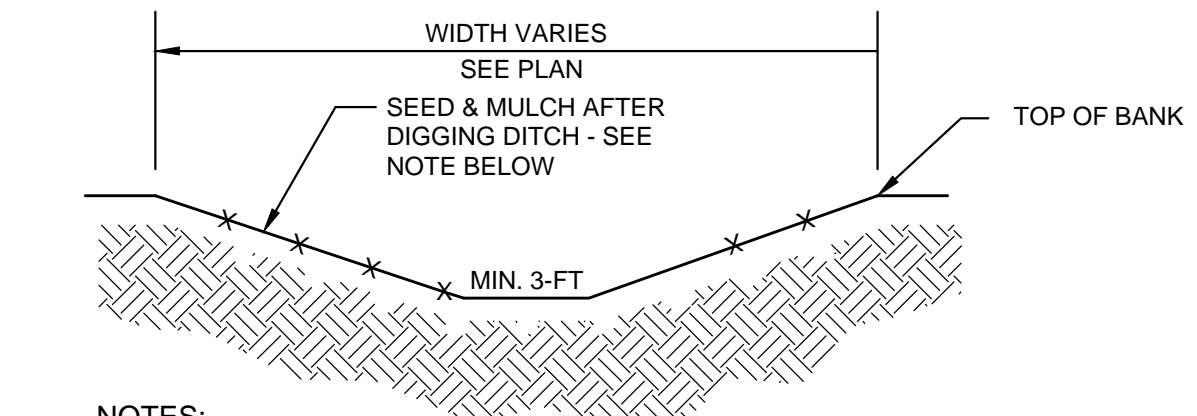
C-6.0

PEI JOB#: 16247.PE



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

PERMANENT DITCH PLUG
NOT TO SCALE

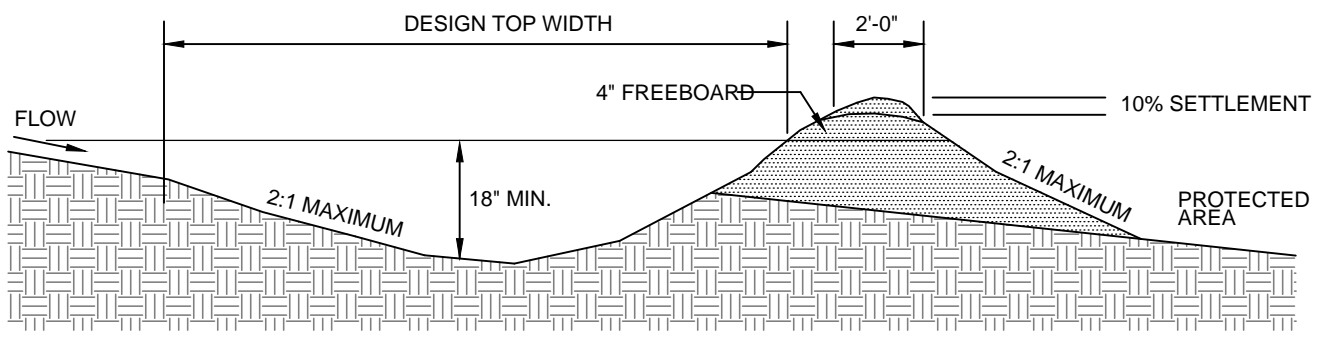


- NOTES:**
1. 5:1 SIDE SLOPES.
 2. DITCH TO BE FULLY LINED WITH EROSION CONTROL BLANKETS PRIOR TO SEEDING & MULCHING FROM TOP OF BANK TO TOP OF BANK, AS REQUIRED BY LAND QUALITY.
 3. PROPOSED SWALES WILL HAVE A BOTTOM WIDTH OF MIN. 3-FOOT.
 4. SEE PLAN FOR HORIZONTAL LOCATION OF SWALES.
 5. SWALES TO 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	2.95	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

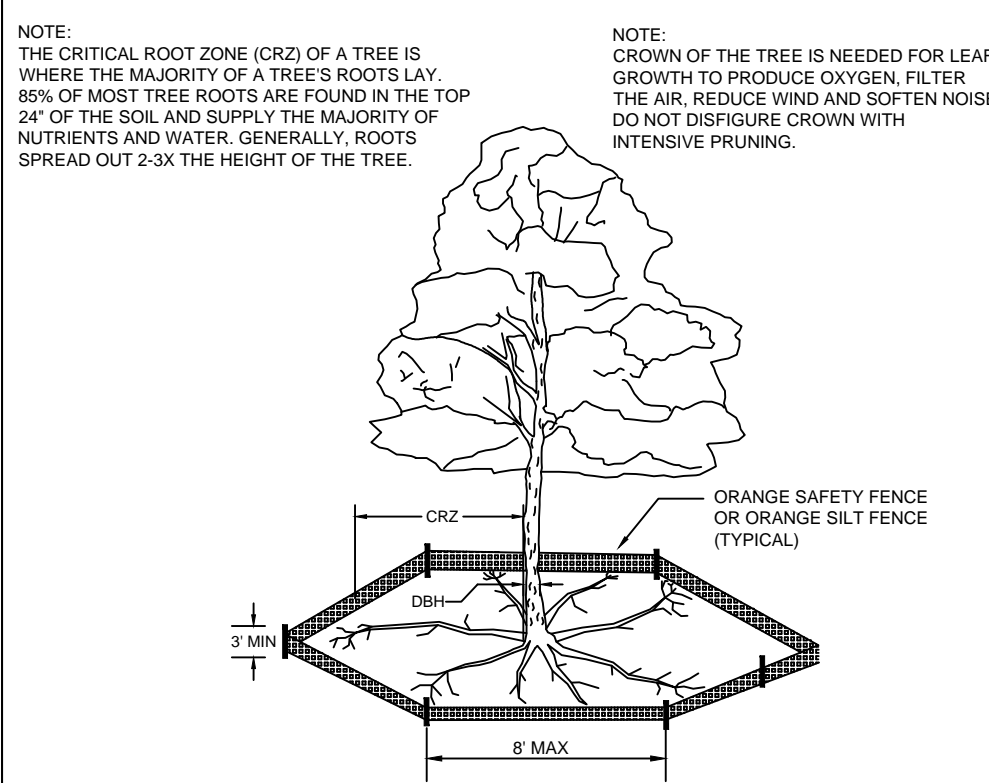
SWALE #	RUNOFF			CHANNEL												Adequate Capacity?	Lining Required?
	A _d	C	Q _{design}	Q ₁₀₀	Q _{total}	Length	Inv In	Inv Out	S	d	A _c	P	R	V _{actual}	Q _{actual}		
1	0.32	0.48	1.11	0.00	1.11	105	23.87	23.50	0.0035	0.31	1.41	6.16	0.23	0.83	1.17	Y	N



- 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	172	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	150	26.50	25.50	0.0087	0.33	0.33	2.08	0.18	1.77	0.58	Y	N



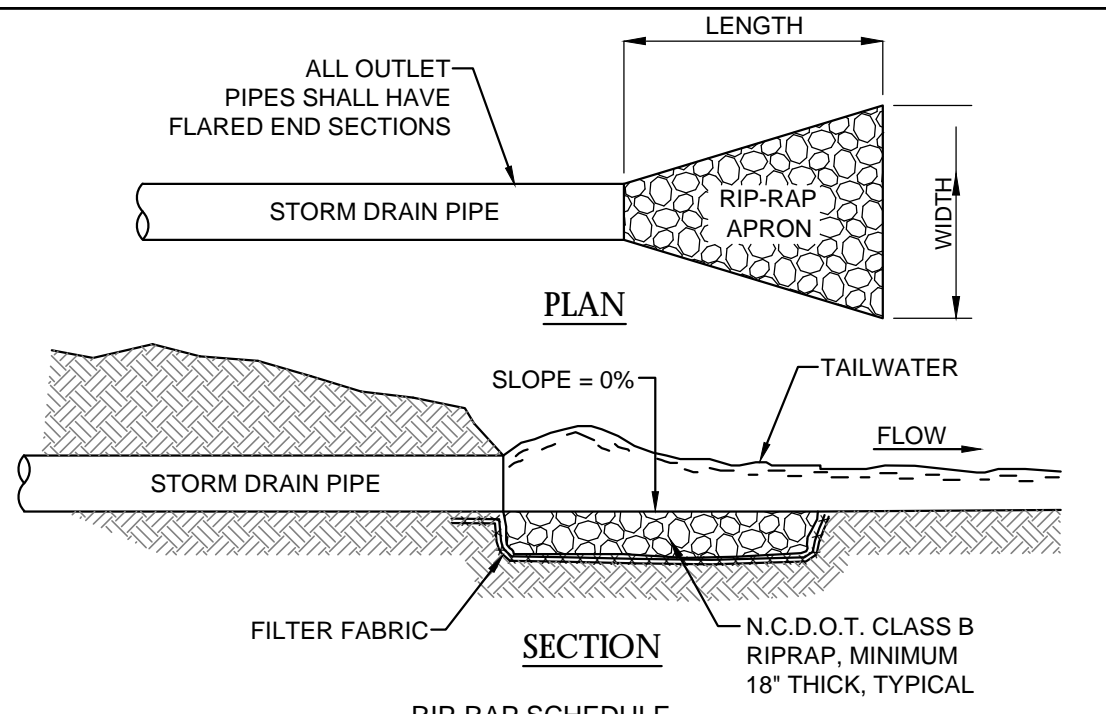
- NOTES:**
1. PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ BARRIER. SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
 2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH). AS A REINFORCED SIDEWALK SHALL BE IMPLEMENTED AS NECESSARY.
 3. 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.
 4. WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.
 5. FOR ALL TREES, 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.
 6. 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

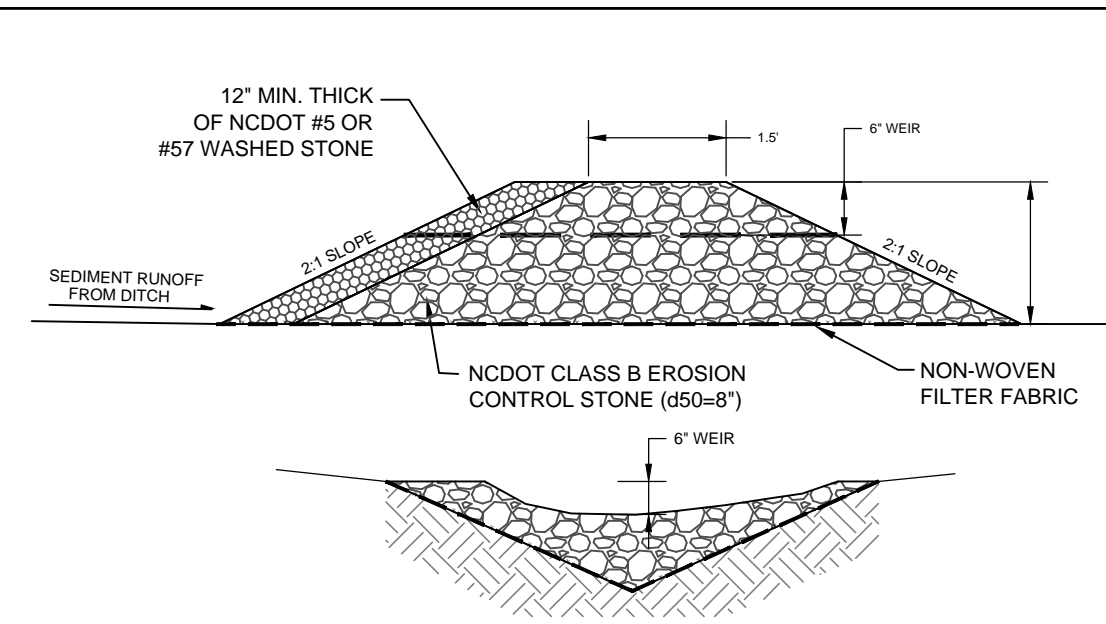
SD 15-09
SHEET 1 of 2



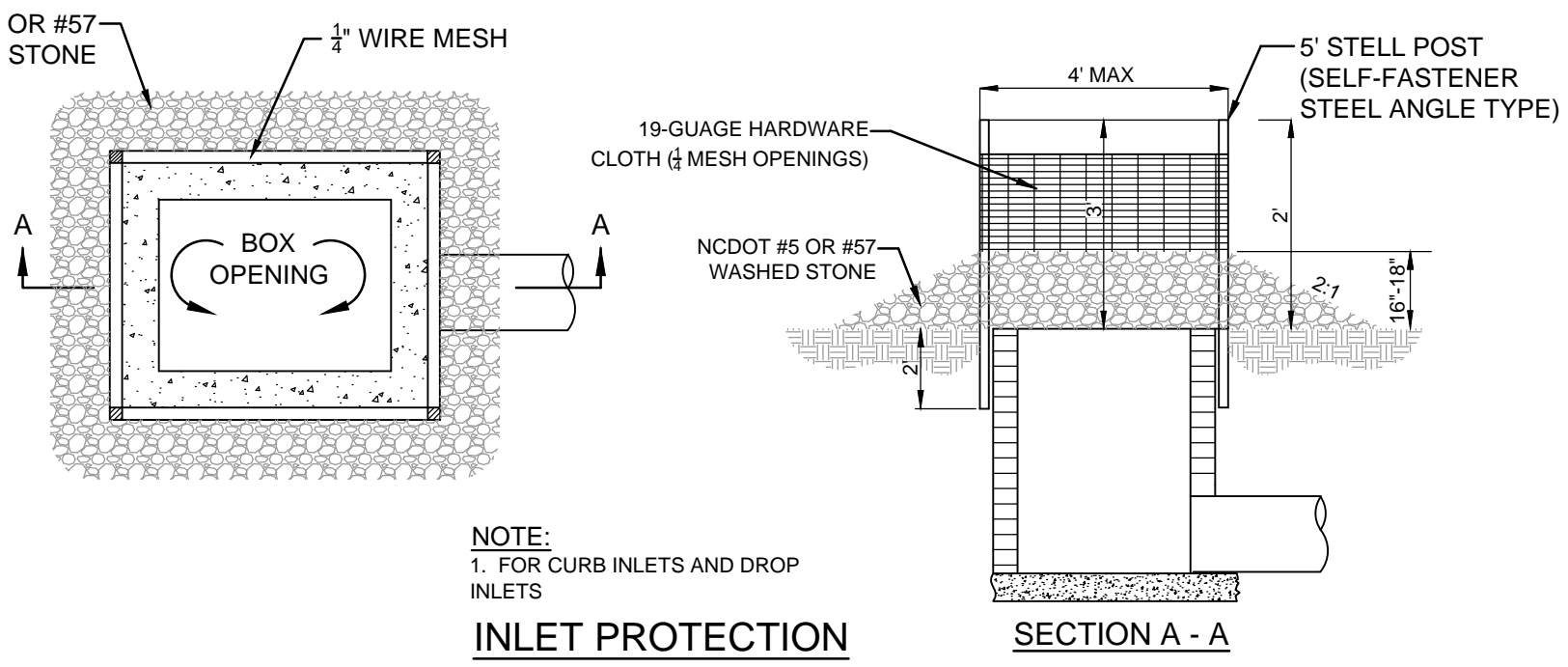
RIP-RAP SCHEDULE

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

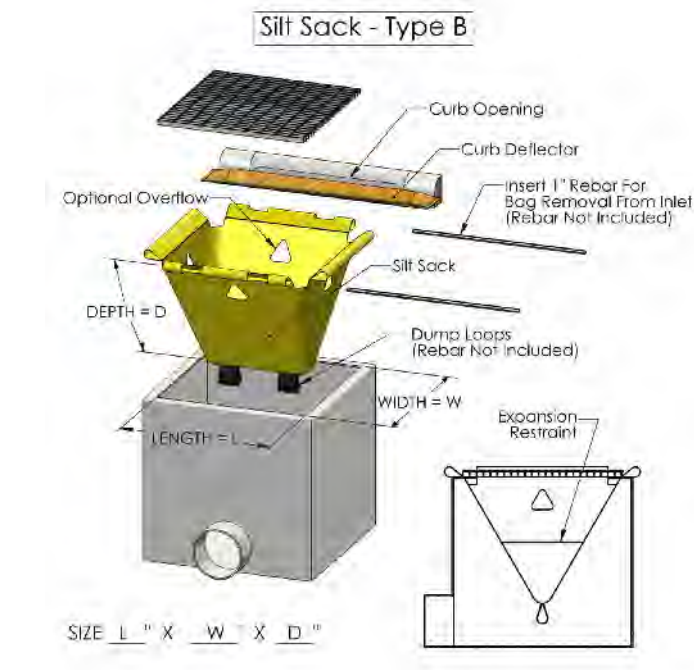


STONE SECTION WITH A WEIR
TEMPORARY CHECK DAM DETAIL
NOT TO SCALE

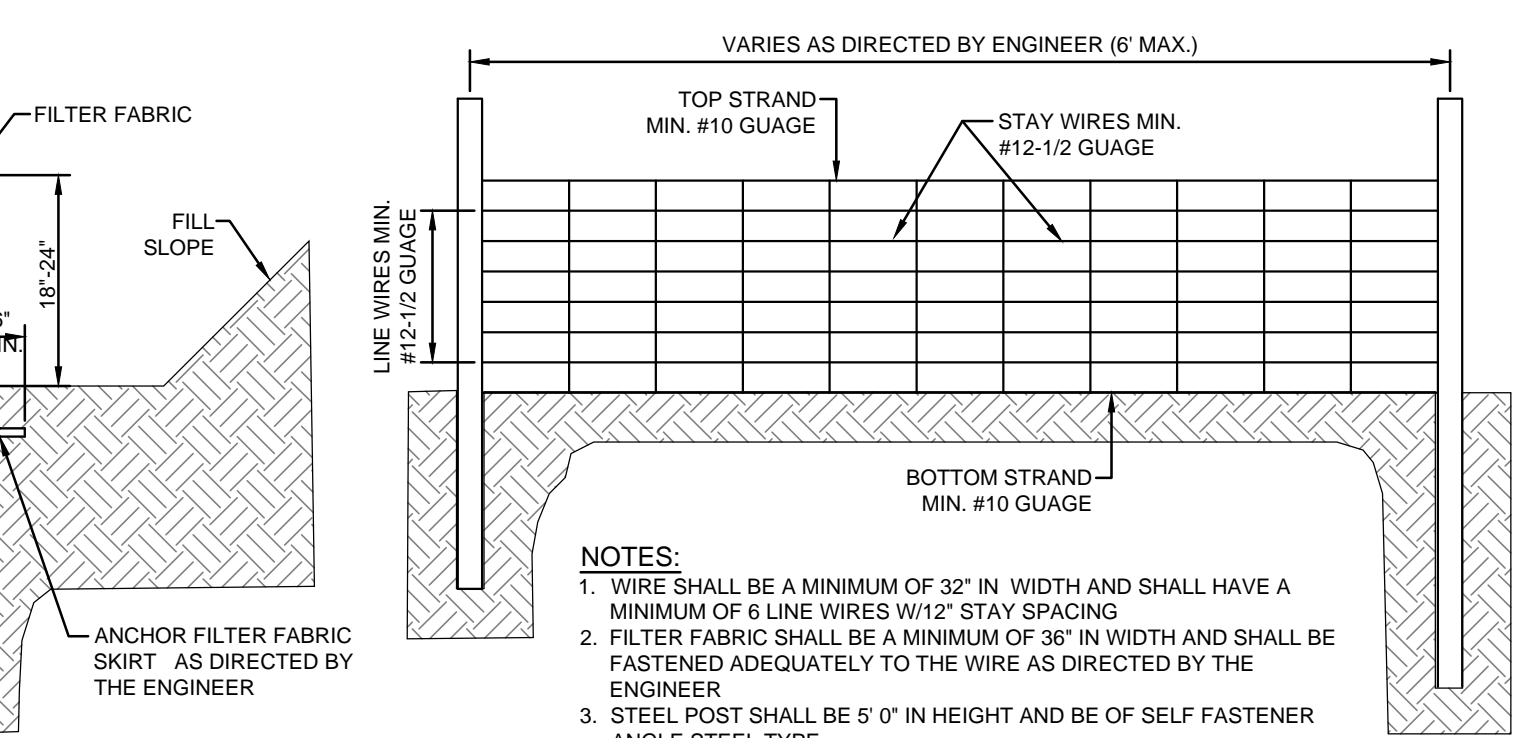


- NOTE:** 1. FOR CURB INLETS AND DROP INLETS

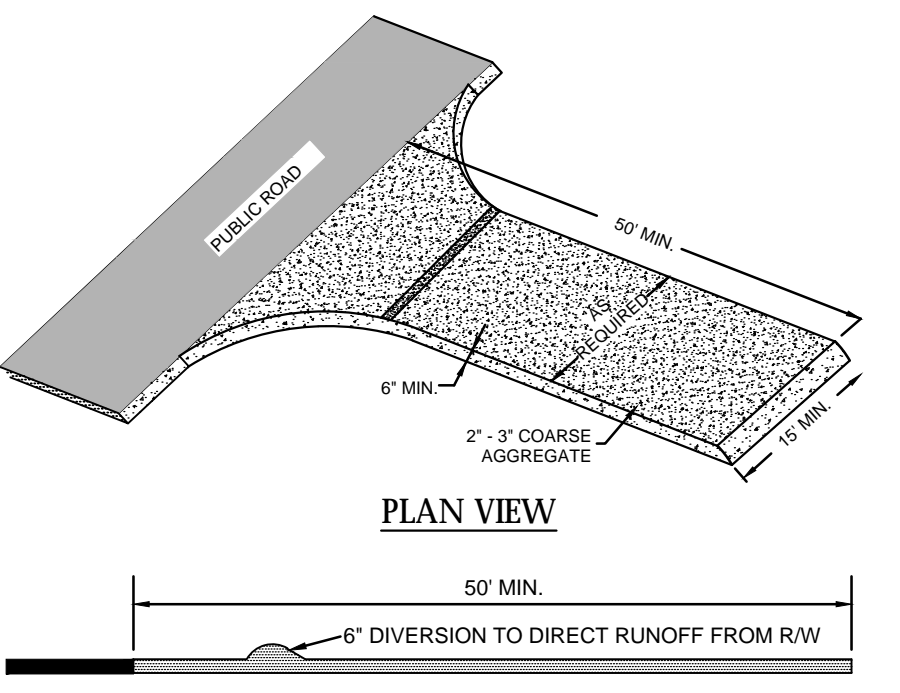
INLET PROTECTION
NOT TO SCALE



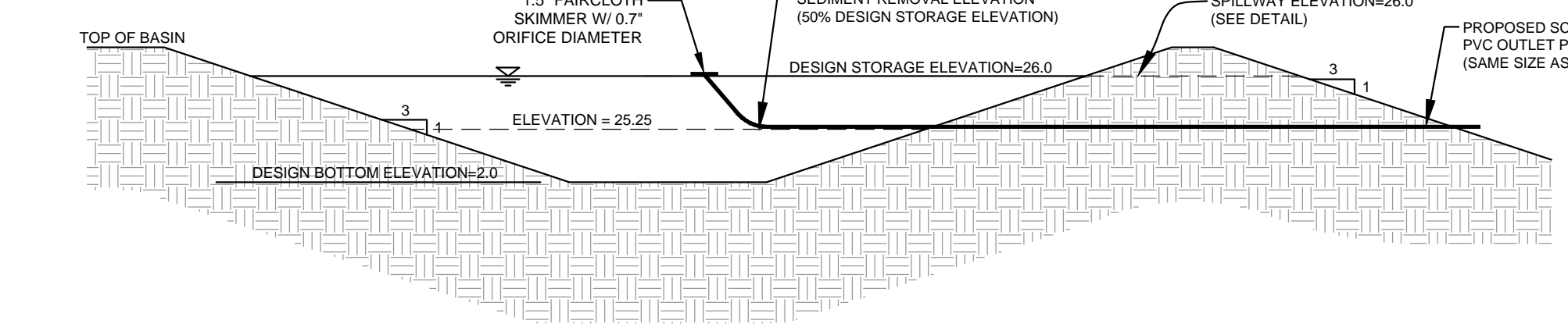
INLET PROTECTION DETAIL
NOT TO SCALE



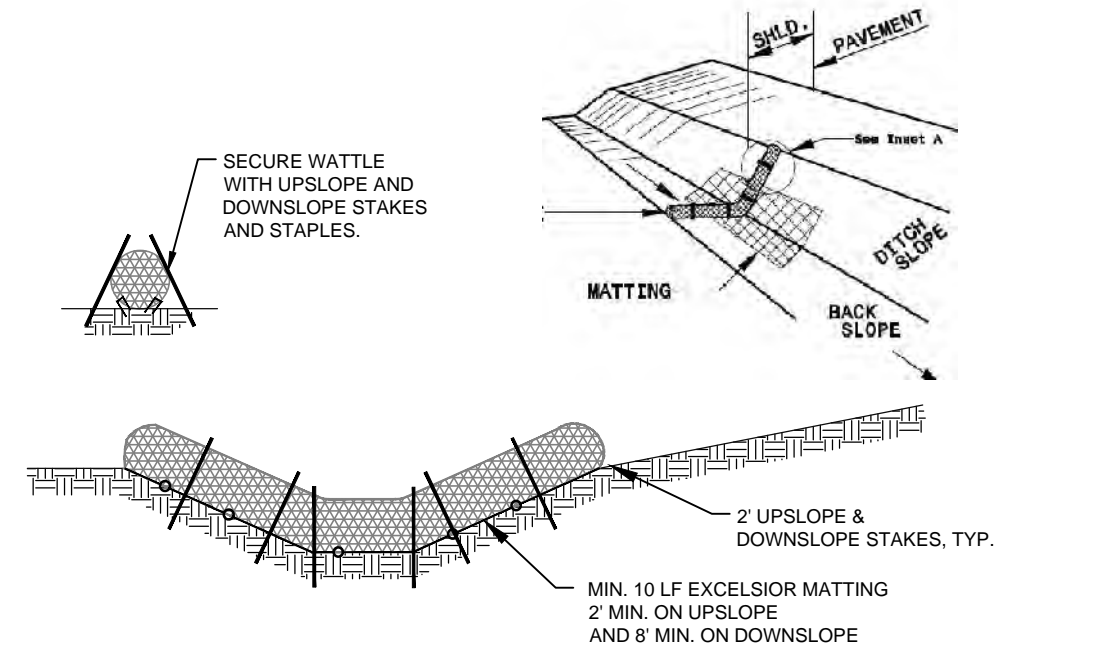
GUIDELINES FOR TEMPORARY SILT FENCE DETAIL
NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE

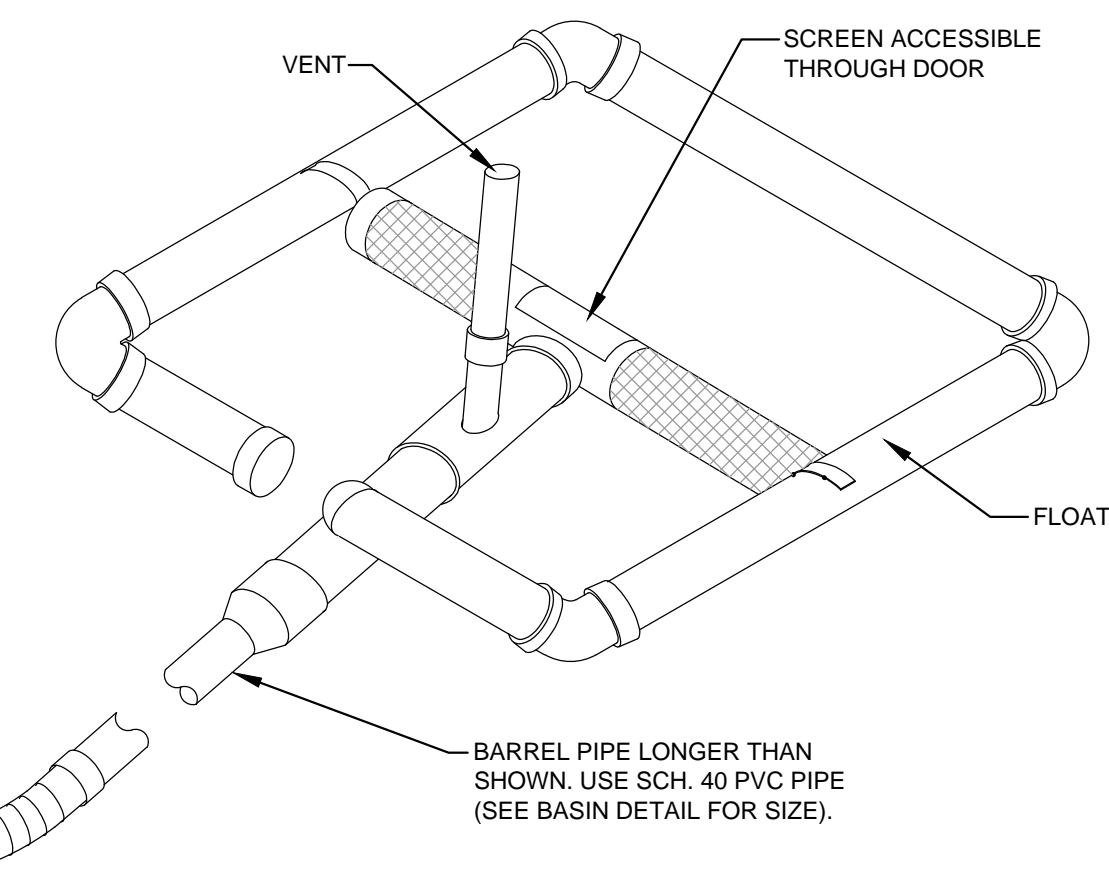


TEMPORARY SKIMMER SEDIMENT BASIN DETAIL
NOT TO SCALE



- NOTES:**
1. USE MINIMUM 12" DIA. EXCELSIOR WATTLE.
 2. USE 2"x2" WOODEN STAKES 2-FT IN LENGTH ON THE UPSLOPE AND DOWNSLOPE AT AN ANGLE TO WEDGE THE WATTLE TO THE BOTTOM OF THE SWALE.
 3. STAPLE EVERY 1 LF ON BOTH SIDES OF THE WATTLE TO SECURE IT TO THE BOTTOM OF THE SWALE.

TEMPORARY WATTLE 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)

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.

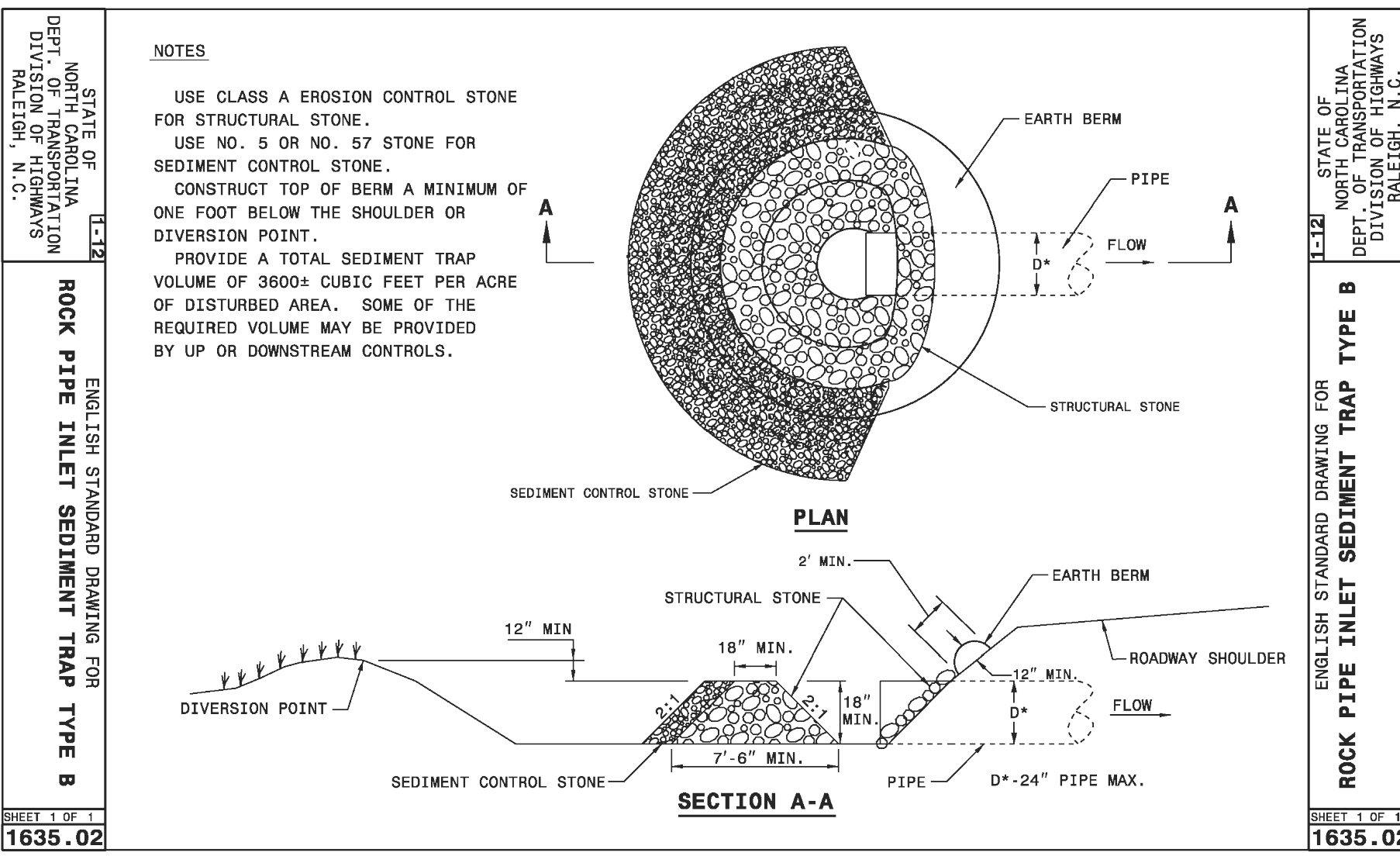
DRAWING INFORMATION:
DATE: 03/25/19
DESIGNED: RDK, P.E.
DRAWN: JSR
CHECKED: RDK, P.E.
CREATED:

SEAL
NORTH CAROLINA PROFESSIONAL SEAL
031591
ENGINEER
ROBERT P. BALLANTINE
03/25/19

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

ROCK PIPE INLET PROTECTION
NOT TO SCALE

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.

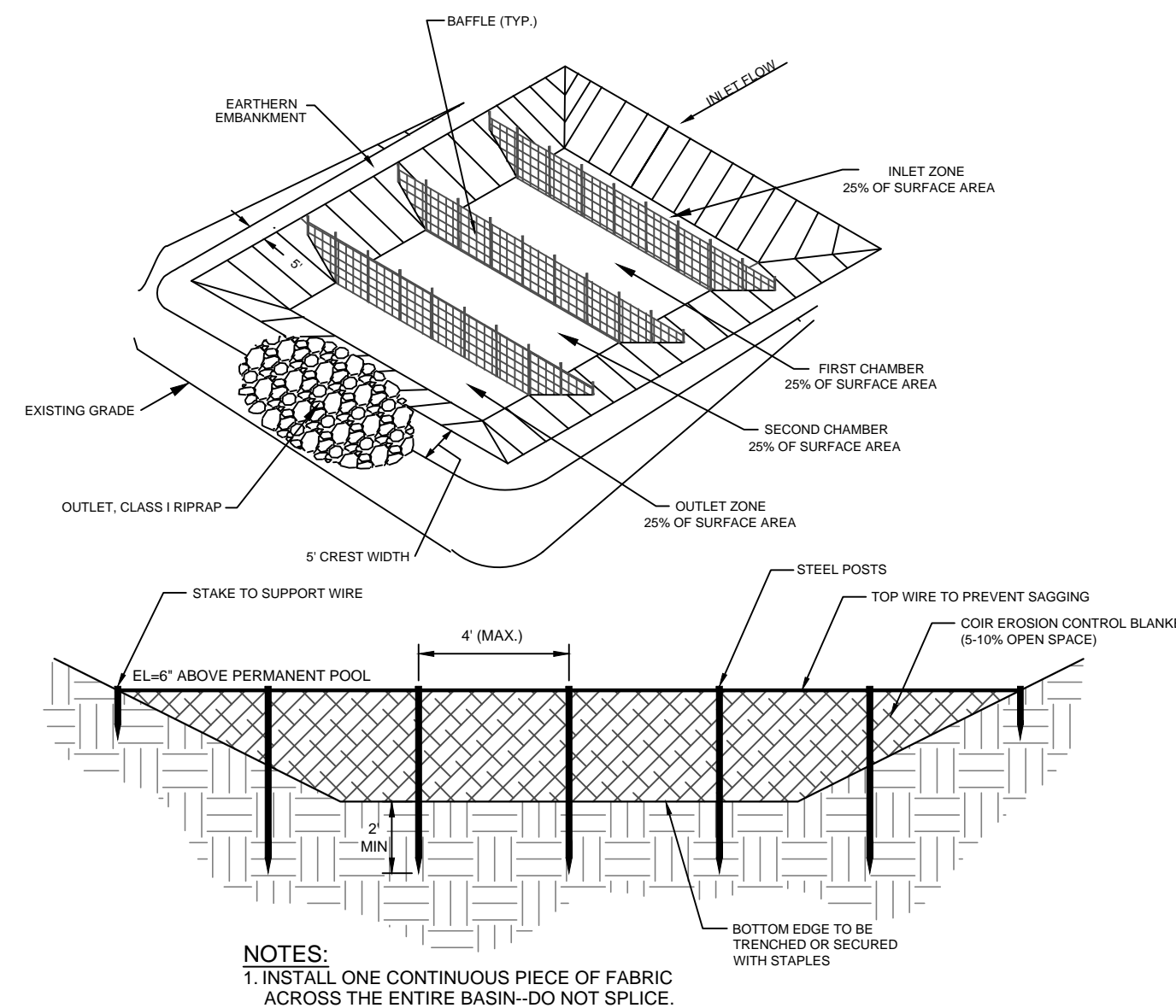
Be sure to maintain access to the baffles. Should the fabric of a baffle collapse, tear, decompose, or become ineffective, replace it promptly.

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.

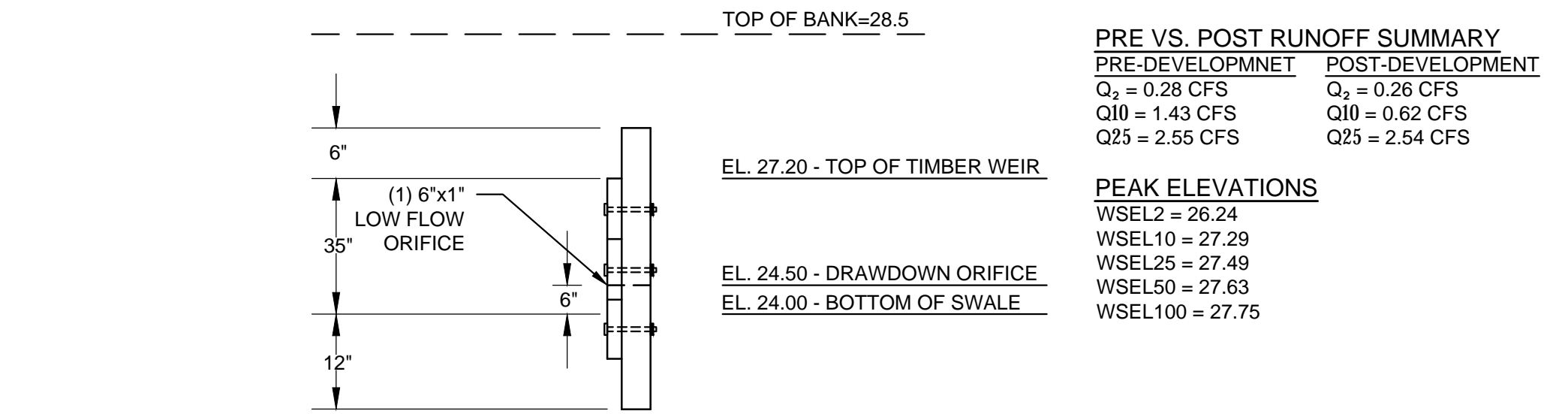
NOTE:

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.

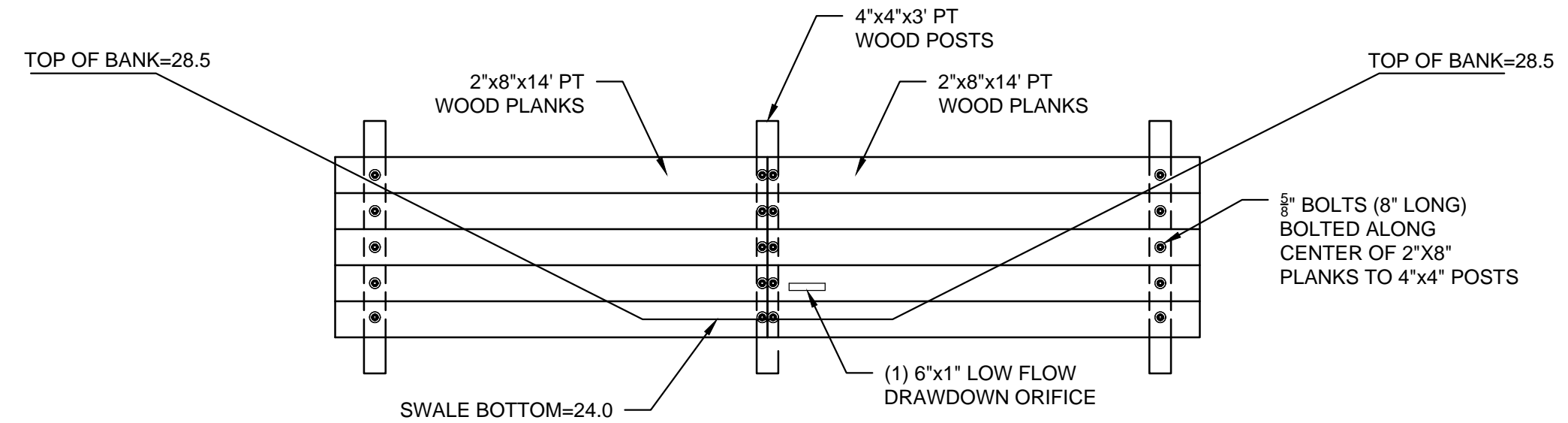


Surface Area (sf)	Length (ft)	Inlet Area (sf)	Chamber 1 Area (sf)	Chamber 2 Area (sf)	Outlet Area (sf)	Baffle #1 (Distance from End) (ft)	Baffle #2 (Distance from End) (ft)	Baffle #3 (Distance from End) (ft)
1,417	50	354	354	354	354	13	25	38

BAFFLE DETAIL
NOT TO SCALE

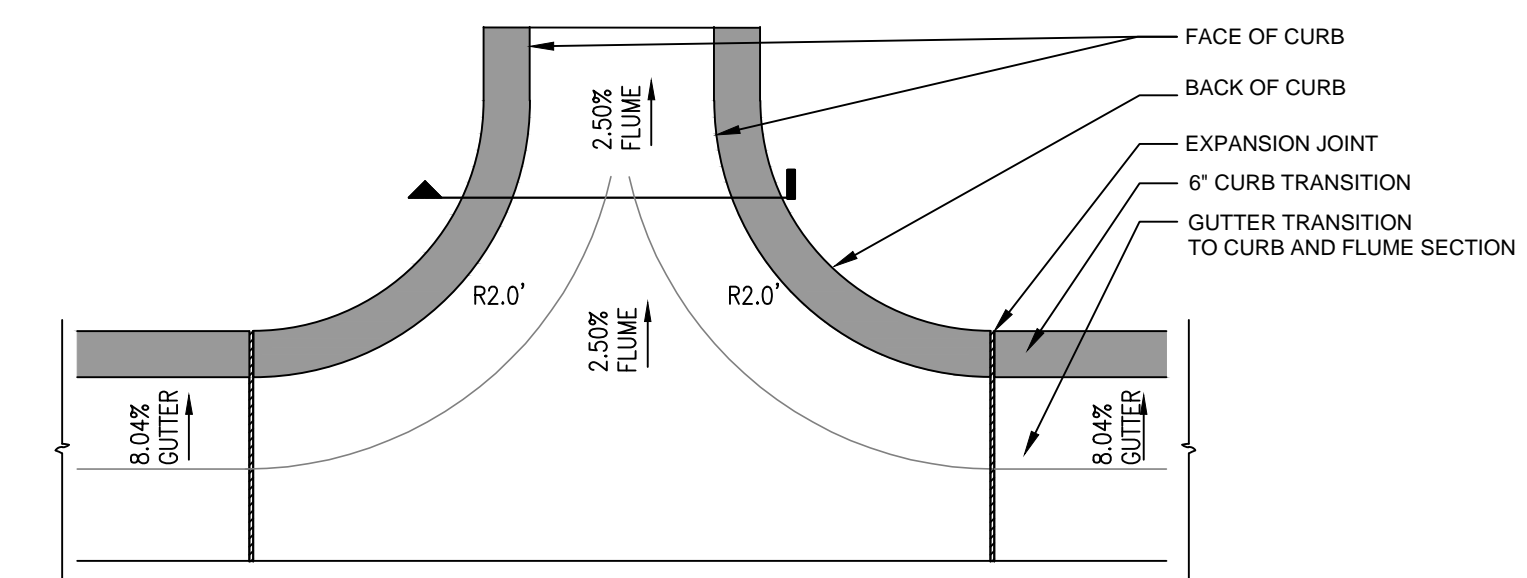
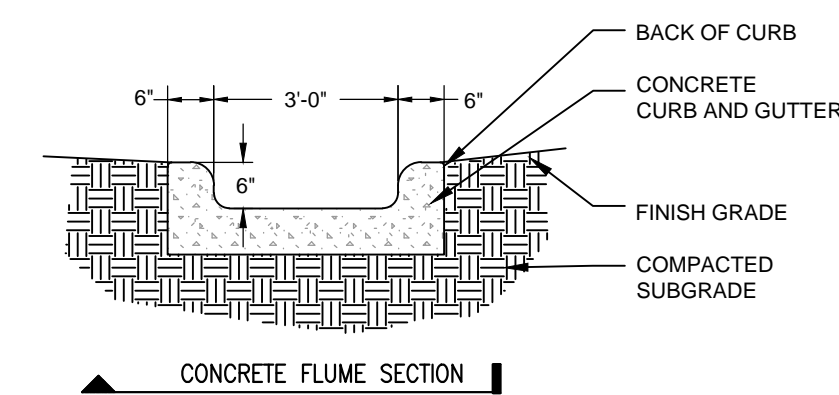
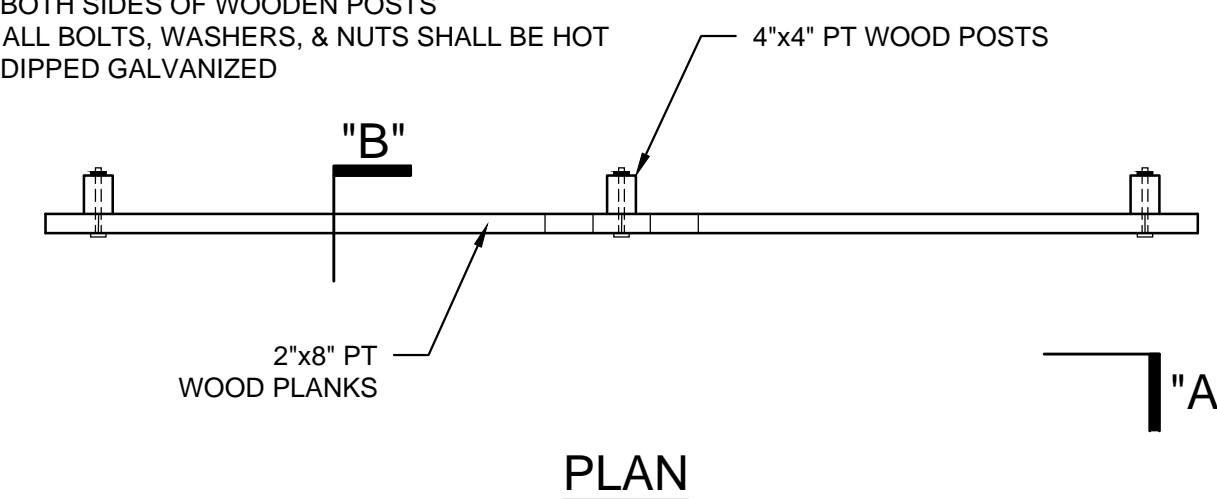


SECTION "B"
NOT TO SCALE



NOTE:

- ALL LUMBER SHALL BE PRESSURE TREATED (PT).
- THE CONTRACTOR SHALL USE 2" WASHERS ON BOTH SIDES OF WOODEN POSTS
- ALL BOLTS, WASHERS, & NUTS SHALL BE HOT DIPPED GALVANIZED



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:
PRIMARY LAYOUT:
RELEASED FOR CONST.

DRAWING INFORMATION:
DATE: 03/25/19
DESIGNED: RPB
DRAWN: AEC
CHECKED: RPB

SEAL
ROBERT P. BALLANTINE
ENGINEER
031591
03/25/19

C-6.2

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.

NCDENR PWSS WATER PERMIT #: _____

WATER CAPACITY: _____ GPD

DWQ SEWER PERMIT #: _____

SEWER CAPACITY: _____ GPD

SEWER SHED # AND PLANT: _____

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

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

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____