



TOWN OF HAYMARKET PLANNING COMMISSION

REGULAR MEETING ~ AGENDA ~

Shelley M. Kozlowski, Clerk of Council
<http://www.townofhaymarket.org/>

15000 Washington Street, Suite 100
Haymarket, VA 20169

Monday, July 16, 2018

7:00 PM

Council Chambers

I. Call to Order

II. Pledge of Allegiance

III. Minutes Approval

1. Planning Commission - Regular Meeting - Jun 6, 2018 7:00 PM
2. Planning Commission - Work Session - Jun 18, 2018 7:30 PM

IV. Citizen's Time

V. Action Items

1. Verizon Wireless 6736 Madison Street
2. SP#2018-001 Fayette Street Single Family Homes Site Plan

VI. Appointments

1. Liaison to the Architectural Review Board
2. Planning Commission Chairman

VII. Old Business

VIII. Town Planner Update

1. Schedule Work Session for Comprehensive Plan

IX. Town Council Update

X. Architectural Review Board

XI. Adjournment



TOWN OF HAYMARKET PLANNING COMMISSION

REGULAR MEETING ~ MINUTES ~

Shelley M. Kozlowski, Clerk of Council
<http://www.townofhaymarket.org/>

15000 Washington Street, Suite 100
Haymarket, VA 20169

Wednesday, June 6, 2018

7:00 PM

Council Chambers

A Regular Meeting of the Planning Commission of the Town of Haymarket, VA, was held this evening in the Board Room, commencing at 7:00 PM.

Chairman Matt Caudle called the meeting to order.

I. Call to Order

Chairman Matt Caudle: Present, Commissioner James Carroll: Present, Commissioner Maureen Carroll: Present, Commissioner Cathy Pasanello: Present, Commissioner Madhusudan Panthi: Absent, Councilman Steve Shannon: Present.

II. Pledge of Allegiance

III. Minutes Approval

- 1. Planning Commission - Regular Meeting - May 17, 2018 7:00 PM

| | |
|------------------|--|
| RESULT: | ACCEPTED [UNANIMOUS] |
| MOVER: | Cathy Pasanello, Commissioner |
| SECONDER: | James Carroll, Commissioner |
| AYES: | Caudle, Carroll, Carroll, Pasanello, Shannon |
| ABSENT: | Madhusudan Panthi |

IV. Citizens' Time

Jim Payne, 15073 Vahalla Court and 6680 Fayette Street (A Dog's Day Out), addresses the Commission. He feels that this development would bring a lot to the Town. He shares that it is already zoned B-2 and many of the requests from the developer are by-right uses.

Jeremiah Sahlberg, 6917 Jockey Club Lane, shares concerns with the Crossroads Village project coming into town. He states that he is not opposed to development in the town but is concerned with possibly having 3 drive through restaurants.

Marchant Schneider, 14811 Rising Sun Lane, referencing the new development, Mr. Schneider shares concerns with clarifications in the proffers, phasing, transportation improvements, buffering and screening and crosswalks and sidewalks.

With no one else, Chairman Caudle closed Citizens' Time.

V. Public Hearing - SUP#2018-008, St. Michael's Academy, 6735 Fayette Street

The Town Planner, Emily Lockhart, states that the intent of this application is to remove the temporary trailer and house all of the students inside the existing structure, the old parish hall. She continues stating originally the Special Use Permit was done for the temporary trailer as well as the use of the building as an educational facility. She adds that the SUP will expire in August of 2018 and the applicant is looking to do some interior modifications to the hall. She further adds that she recommended that they get their new SUP approved for moving all of the children into the existing building. She also recommended to put two conditions on it, one that limits the number of children that can safely occupy the existing structure so that in the future they are not coming back for another trailer and the second one is to set a firm date that the Town expects the trailer to be removed within a reasonable amount of time for them to get their building permits as well as for them to sell their trailer and get it removed off of the property. She states that the applicant submitted a clarification letter. She concludes that it basically reiterates what she just stated with a date that they will have the modular unit removed no later than December 31, 2018.

Minutes Acceptance: Minutes of Jun 6, 2018 7:00 PM (Minutes Approval)

The applicant, Lorrie Crockett, Principal of St. Michael's Academy, addresses the Commission. She states that she would like to set a firm number and plan for the school and keep it that way for ever. She states that they are working with an architect and builder to make the modifications in the school.

Chairman Caudle asks is there are any citizens that would like to speak concerning this Special Use Permit? With no citizens present to speak, Chairman Caudle closes the public hearing.

1. SUP#2018-008, St. Michael's Academy Public Notice

VI. Agenda Item

1. SUP#2018-008, St. Michael's Academy

Commission James Carroll makes a motion to refer SUP#2018-008 for Saint Michael's Academy to the Town Council with a recommendation for approval with the following conditions; staff recommending the applicant to limit student attendance to Prince William County's occupancy limits and the applicant maintain the current traffic and parking plans. In addition, we recommend that they return for the SUP if traffic or parking were to become an issue. The trailer be removed no later than December 31, 2018. Commissioner Maureen Carroll seconds the motion.

| | |
|------------------|--|
| RESULT: | ADOPTED [UNANIMOUS] |
| MOVER: | James Carroll, Commissioner |
| SECONDER: | Maureen Carroll, Commissioner |
| AYES: | Caudle, Carroll, Carroll, Pasanello, Shannon |
| ABSENT: | Madhusudan Panthi |

2. St. Michael's Academy Staff Report

3. Crossroads Village Center

Ms Lockhart states that since the joint public hearing two weeks prior, the applicant has worked to revise the proffer statement, the development narrative, the GDP and they are continuing to work with VDOT. She explains that all of the information is in the Commission packet. She updates the Commission stating that yesterday she received VDOT's next round of comments. Ms. Lockhart adds that the applicant met with VDOT this morning and VDOT is content with the recommendations and all of the changes that they will be making. She concludes that the applicant is now going to submit an updated TIA to VDOT and she will keep the Commission posted.

Questions and concerns the Commissioners share with the applicant include drive through versus sit down restaurants, tot lot screening, sidewalks, guaranteed proffers, school impact, green space, by-right uses, as well as phasing.

Ms. Lockhart states that she has been working with the schools on a report to submit to the Commission prior to the meeting on the 18th.

Gifford Hampshire, from Blankenship and Keith, a representative for the applicant, addresses the Commission to answer concerns and questions. Also present at the meeting are Chad Baird, Gorove/Slade, Mike Massey, Ross-France Engineering and Don Wooden, of the Meladon Development Group.

Discussion ensues concerning the Special Use Permits for drive-thru restaurants and the traffic impact it could possibly have on the Town.

Traffic Engineer, Chad Baird, addresses the Commission. He states that they have conducted many studies comparing the traffic volume with restaurants that have a drive-thru and those that do not. He adds that the volume is very similar. Mr. Baird states that he can have a copy of the study available to the Commission.

Commissioner Pasanello expresses concern about the exit and entrance of two of the proposed drive-thru restaurants. Mike Massey addresses this question and states that what is presented tonight is just a concept and he that he will look at that.

VII. New Business

Ms. Lockhart states that we will be expecting in the July/August time frame, several site plans for the Commission's review. She adds that the Commission will be receiving a site plan for 3 single family homes on Fayette Street, for McDonald's, and possibly an SUP for the funeral home.

VIII. Old Business

Ms. Lockhart states that we might be seeing plans for our blighted properties in Town.

Chairman Caudle asks if the old firehouse is on the blighted properties list? Ms. Lockhart states yes.

Councilman Shannon asks about a timeline for the blighted properties on Payne Lane? Ms. Lockhart states that their timeline to get back to her is June 21st.

IX. Town Planner Update

X. Town Council Update

Councilman Shannon states that the Town Council voted on the tax rate. Town Treasurer, Roberto Gonzalez, who is present at the meeting, states that everything remained the same. He further adds that the increase only comes because of the County assessments, however the tax rate remains the same as last year.

Commissioner Pasanello asks the Town Planner whose idea was it to be a 30 day requirement on their decision concerning the Crossroads Village Center project?

Ms. Lockhart states that she does not know and will have to back to Commissioner Pasanello with the answer.

Commissioner Shannon interjects that it was originally 30 but was changed to 60 days.

Members of the Commission share their concerns with the time limit that was placed on them to make a decision on the project.

XI. Architectural Review Board Update

Ms. Lockhart states that on June 20th the ARB will have a work session with the Crossroads Village Center's developer to start discussion on the design guideline book as well as the new single family homes.

XII. Adjournment

1. Motion to Adjourn

| | |
|------------------|--|
| RESULT: | ADOPTED [UNANIMOUS] |
| MOVER: | James Carroll, Commissioner |
| SECONDER: | Steve Shannon, Councilman |
| AYES: | Caudle, Carroll, Carroll, Pasanello, Shannon |
| ABSENT: | Madhusudan Panthi |

Submitted:

Approved:

Shelley M. Kozlowski, Clerk of the Council

Matt Caudle, Chairman



TOWN OF HAYMARKET PLANNING COMMISSION

WORK SESSION ~ MINUTES ~

Shelley M. Kozlowski, Clerk of Council
<http://www.townofhaymarket.org/>

15000 Washington Street, Suite 100
Haymarket, VA 20169

Monday, June 18, 2018

7:30 PM

Council Chambers

A Work Session of the Planning Commission of the Town of Haymarket, VA, was held this evening in the Board Room, commencing at 7:30 PM.

Chairman Matt Caudle called the meeting to order.

I. Call to Order

II. Roll Call

Chairman Matt Caudle: Present, Commissioner James Carroll: Present, Commissioner Maureen Carroll: Present, Commissioner Cathy Pasanello: Present, Commissioner Madhusudan Panthi: Absent, Councilman Steve Shannon: Absent.

III. Comprehensive Plan

The Planning Director and Commission share ideas for beginning the Comprehensive Plan process for the new Planning Commission that will take office in July. Ideas and suggestions include citizen survey's, planning Charrettes and other citizen gatherings. Suggested topics include effective communication and more Town events. The meeting concludes with discussion on the Town park and it's future plans.

Ms. Lockhart shares with the Commission what updates she would like to see in the Comprehensive Plan including statistics, the Town's historic overlay, future businesses and the Town's mission statement.

Chairman Caudle thanks Mr. and Mrs. Carroll for their service as members of the Haymarket Planning Commission. Mr. and Mrs. Carroll share with the Commission that they will not seek re-appointments after their terms expire on June 30, 2018.

IV. Adjournment

1. Motion to Adjourn

| | |
|------------------|--|
| RESULT: | ADOPTED [UNANIMOUS] |
| MOVER: | James Carroll, Commissioner |
| SECONDER: | Maureen Carroll, Commissioner |
| AYES: | Matt Caudle, James Carroll, Maureen Carroll, Cathy Pasanello |
| ABSENT: | Madhusudan Panthi, Steve Shannon |

Submitted:

Approved:

Shelley M. Kozlowski, Clerk of the Council

Matt Caudle, Chairman

Minutes Acceptance: Minutes of Jun 18, 2018 7:30 PM (Minutes Approval)



Town of Haymarket
15000 Washington Street, #100
Haymarket, VA 20169
703-753-2600

Emily K. Lockhart
TOWN PLANNER
ZONING ADMINISTRATOR

MEMORANDUM

TO: Planning Commission
FROM: Emily K. Lockhart, Town Planner
DATE: July 11, 2018
SUBJECT: Zoning Permit #2018-034, 6736 Madison Street, Verizon Wireless – Equipment Shelter

APPLICATION SUMMARY:

Applicant, Verizon Wireless is applying for zoning approval to construct an equipment shelter at 6736 Madison Street. The shelter will be unmanned and sit on the existing paved surface, thus removing 4 parking spaces from use. The current building has minimal staff working on site and thus the removal of the parking spaces will not affect the business. If at any time the parking becomes an issue, the Planner requests that the applicant return to the Town to remedy the situation. The shelter meets the Zoning Ordinance requirements.

Upon approval the applicant must obtain a Certificate of Appropriateness from the Architectural Review Board for the exterior of the facility.

STAFF RECOMMENDATION:

Staff recommends approving the zoning permit for 6736 Madison Street, for Verizon Wireless to construct an equipment shelter on site.

DRAFT MOTION:

"I make a motion to approve Zoning Permit ZP#2018-034 for Verizon Wireless to construct an unmanned equipment shelter on site."

Or An alternate motion.

Attachment: ZP2018-034 Verizon Wireless (3680 : Verizon Wireless Equipment Shelter 6736 Madison Street)



June 6, 2018

Town of Haymarket
15000 Washington Street
Suite 100
Haymarket, VA 20169

RE: Zoning Permit Application
Proposed 12' x 30' Shelter
Verizon Property – 6736 Madison Street, Haymarket, VA

To whom it may concern;

Enclosed with this letter is the Zoning Permit Application for the above-referenced site. Verizon is proposing to place an unmanned utility shelter on property owned by Verizon and currently used for telecommunication services. The property is currently zoned B-1 Commercial and minor utility services such as equipment shelters are permitted. The proposal meets the requirement of the Haymarket Zoning Ordinance for setbacks, height and lot coverage Sections 58-10.6, 58-10.7 and 58-10.8.

The shelter will be constructed of a precast assembled structure with a crushed stone facing painted a light brown. The shelter will be placed on pillars requiring limited disturbance. There will be bollards located to protect the shelter from vehicular traffic. The proposed shelter will generate no additional traffic to the property. Visits by Verizon personnel will be approximately one per month. Therefore, there will be no need for additional parking.

Contact me if you should have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Andrew Martin'.

Andrew Martin | Real Estate Specialist
Smartlink o/b/o
(m) 410.474.9081
1362 Mellon Road, Suite 140
Hanover, MD 21076

Attachment: Haymarket OHut Zoning Application (3680 : Verizon Wireless Equipment Shelter 6736 Madison Street)

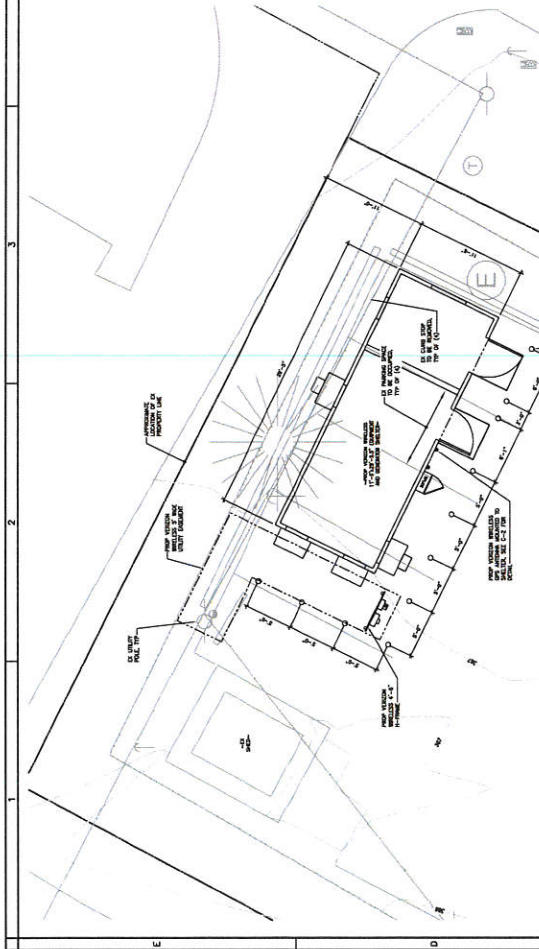
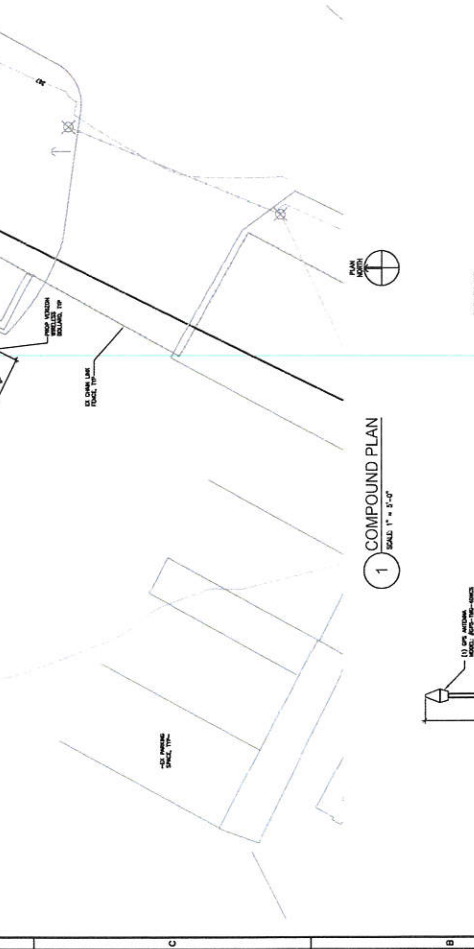
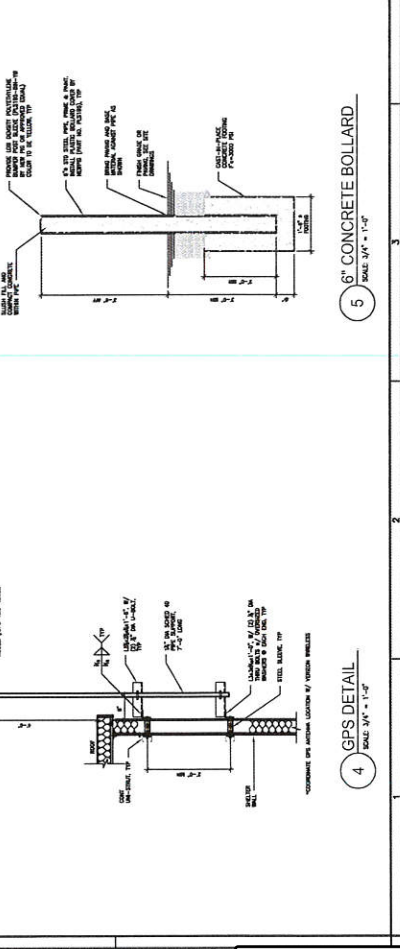
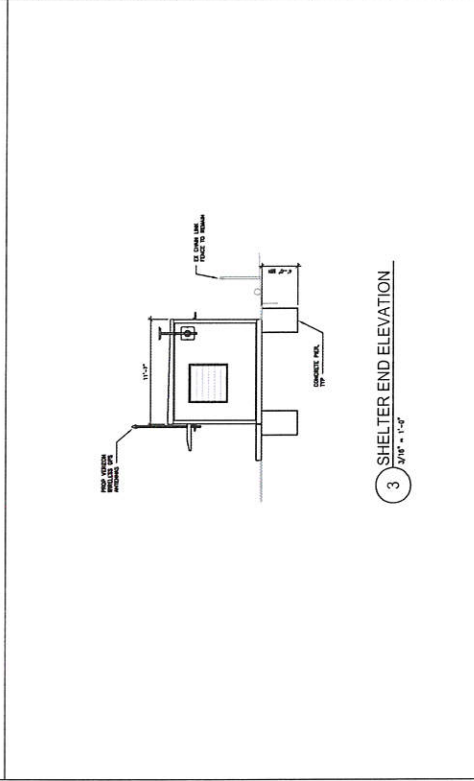
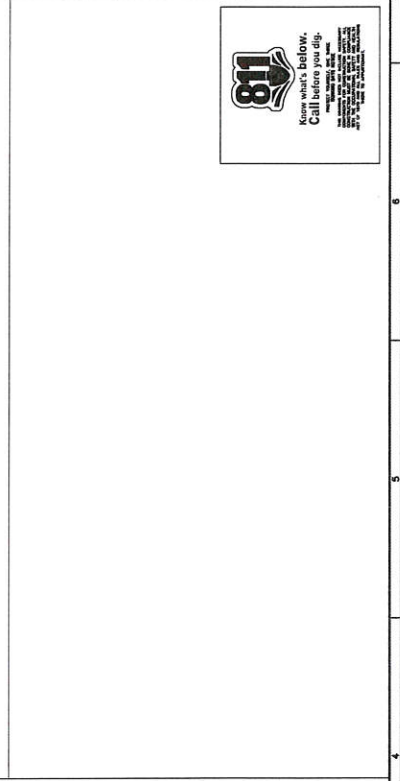


| | |
|-----------|--|
| DATE: | |
| PROJECT: | |
| OWNER: | |
| DESIGNER: | |
| SCALE: | |
| DATE: | |

verizon
OHUT HAYMARKET
CRAN HUT
6720 MADISON STREET
HAYMARKET, VIRGINIA 20169 (PRINCE WILLIAM COUNTY)

MRA
MORRIS & RITCHIE ASSOCIATES, INC.
10000 WOODBURN AVENUE, SUITE 100
FARMERS BRANCH, VIRGINIA 20109

verizon
This drawing is the property of Verizon Wireless and shall not be used for any other project without the written consent of Verizon Wireless. The user of this drawing is hereby notified that the user assumes all liability for any errors or omissions in this drawing. No warranty is made by Verizon Wireless for any use of this drawing as intended.





ZONING PERMIT APPLICATION

ZONING PERMIT #: _____

NOTE: This application must be filled out completely and all components of submission requirements must be met before the application can be accepted and scheduled for review/hearing.

ZONING ACTIVITY: New Construction Alteration/Repair Addition Sign (See Spec sheet)
(Check all that apply) New Tenant/Use Change of Use Relocation

NAME OF BUSINESS/APPLICANT: Verizon Wireless (Tenant)

PROPOSED USE: Equipment Shelter Size (Sq. Ft./Length) of Construction: _____

SITE ADDRESS: 6736 Madison Street Parcel ID #: 7297-99-1439

Subdivision Name: Haymarket Town Plat Lot Size: 0.4033 acres

ZONING DISTRICT: R-1 R-2 B-1 B-2 I-1 C-1 Site Plan Required: Yes No

Special Use Permit Required: Yes No Homeowners Association (HOA) Approval: Yes No

Off-street Parking: Spaces Required: _____ Spaces Provided: TBD

BRIEF DESCRIPTION OF ACTIVITY: *(i.e. previous use, height/length of fencing, deck specs, etc.)*
To install an unmanned equipment shelter for storage and operation of telecommunication equipment.

Supporting Documentation *(attached)*: Narrative Plan/Plat Specification Sheet

FEE: \$25.00 Residential \$50.00 Commercial

CERTIFICATE OF APPROPRIATENESS

ADDITIONAL DESCRIPTION: *(i.e. color, type of material, font style, etc. See Sign Spec Sheet for Signage detail)*

Supporting Documentation *(attached)*: Specification Sheet Photograph(s)

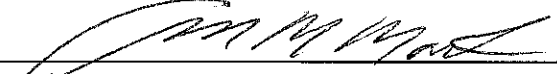
| PERMIT HOLDER INFORMATION | | | PROPERTY OWNER INFORMATION | | |
|------------------------------------|--------------|-------|----------------------------|--------------------------------|-------|
| Verizon Wireless c/o Smartlink LLC | | | Verizon South Inc. | | |
| Name | | | Name | | |
| Andrew Martin | | | | | |
| Address | | | Address | | |
| 1362 Mellon Road, Suite 140 | | | PO Box 152206 | | |
| City | State | Zip | City | State | Zip |
| Hanover | MD | 21076 | Irving | TX | 75015 |
| Phone# | 410-474-9081 | | Email | andrew.martin@smartlinkllc.com | |
| Phone# | | | Email | | |

Attachment: Haymarket OHut Zoning Application (3680) : Verizon Wireless Equipment Shelter 6736 Madison Street

APPLICANT / PROPERTY OWNER SIGNATURE

*******REQUIRED*******

I, as owner or authorized agent for the above-referenced parcel, do hereby certify that I have the authority to make the foregoing application and that the information provided herein is correct. Construction of improvements described herein and as shown on the attached plat, plan and/or specifications will comply with the ordinances of the Town of Haymarket and any additional restrictions and/or conditions prescribed by the Architectural Review Board (ARB), Planning Commission, or the Town Council and all other applicable laws.


Applicant Signature

Property Owner Signature

*****OFFICE USE ONLY*****

Date Filed: _____ Fee Amount: _____ Date Paid: _____

DATE TO ZONING ADMINISTRATOR: _____

APPROVED DISAPPROVED TABLED UNTIL: _____ DEFERRED UNTIL: _____

SIGNATURE

PRINT

CONDITIONS:

DATE TO ARCHITECTURAL REVIEW BOARD (ARB): _____

APPROVED DISAPPROVED TABLED UNTIL: _____ DEFERRED UNTIL: _____

SIGNATURE

PRINT

CONDITIONS:

DATE TO TOWN COUNCIL (IF APPLICABLE): _____

APPROVED DISAPPROVED TABLED UNTIL: _____ DEFERRED UNTIL: _____

TOWN COUNCIL (where required):

SIGNATURE

PRINT

CONDITIONS:

Attachment: Haymarket O Hut Zoning Application (3680 : Verizon Wireless Equipment Shelter 6736 Madison Street)

In addition to applying for a Certificate of Appropriateness, the applicant is responsible for obtaining any other required permits and approvals applicable to the project.

1. Provide name, phone number, and email address of business or individual requesting approval for proposed work. If different from property owner, please provide contact information for property owner as well.
2. Indicate site address
3. Indicate mailing address of applicant and owner (if different).
4. Describe in detail work proposed and then attach all required and any additional documentation or material that will describe the project in detail to the reviewing authority. Adequate documentation must be provided. Applicant should provide any necessary item(s), in addition to the items listed on the checklist below.

Check List

Signs/Fences/New Building/Additions/Remodel

The Completed application must be submitted to the Town Clerk’s office no later than 4:30pm one week prior to the meeting date.

- 1) One copy of the Plat-showing location of sign/fence/addition on the façade or grounds
- 2) Photograph of the existing structure and closest neighboring structures
- 3) Photograph/drawings, including measurements, of the proposed change
- 4) Material specifications
- 5) Color/material samples
- 6) Description of method of mounting and description of hardware to be used
- 7) Landlord/HOA approval letter where indicated
- 8) Copy of business or occupational license if contractor has designed or will install
- 9) Narrative, if special requests or exceptions to the ARB Guidelines are being requested.
- 10) Applicant or a representative **must** be present at the ARB meeting, on the scheduled Wednesday of every month at 7:00pm. If a representative is not present at the meeting to answer any questions that may arise, your application may be deferred or denied until the next regularly scheduled meeting. Please check the Town’s website for a list of the Town’s scheduled meetings. It is the applicant’s responsibility to keep apprised of the Town’s meeting schedule.
- 11) If an interpreter is required, the applicant needs to bring one with them.

Please mail application and all applicable information and materials to:

**Town of Haymarket
15000 Washington Street, Suite 100
Haymarket, VA 20169**

Attachment: Haymarket OHut Zoning Application (3680 : Verizon Wireless Equipment Shelter 6736 Madison Street)

SIGN SPECIFICATION SHEET

SIGN 1:

Type of Sign: Wall Hanging Freestanding Menu Individual Letter Window
 Other _____

Height above Ground at Signs: Lower Edge: _____ Upper Edge: _____

Height of Sign Structure: _____ Sign Width: _____ Length: _____ Area in Sq Ft: _____

Number of Faces: _____ Sign Material/Color/Font: _____

Location of Sign (Include photo): _____

Lighting Type/Fixture (No internal illumination is allowed): _____

SIGN 2:

Type of Sign: Wall Hanging Freestanding Menu Individual Letter Window
 Other _____

Height above Ground at Signs: Lower Edge: _____ Upper Edge: _____

Height of Sign Structure: _____ Sign Width: _____ Length: _____ Area in Sq Ft: _____

Number of Faces: _____ Sign Material/Color/Font: _____

Location of Sign (Include photo): _____

Lighting Type/Fixture (No internal illumination is allowed): _____

SIGN 3:

Type of Sign: Wall Hanging Freestanding Menu Individual Letter Window
 Other _____

Height above Ground at Signs: Lower Edge: _____ Upper Edge: _____

Height of Sign Structure: _____ Sign Width: _____ Length: _____ Area in Sq Ft: _____

Number of Faces: _____ Sign Material/Color/Font: _____

Location of Sign (Include photo): _____

Lighting Type/Fixture (No internal illumination is allowed): _____

SIGN 4:

Type of Sign: Wall Hanging Freestanding Menu Individual Letter Window
 Other _____

Height above Ground at Signs: Lower Edge: _____ Upper Edge: _____

Height of Sign Structure: _____ Sign Width: _____ Length: _____ Area in Sq Ft: _____

Number of Faces: _____ Sign Material/Color/Font: _____

Location of Sign (Include photo): _____

Lighting Type/Fixture (No internal illumination is allowed): _____

1. *What projects require architectural review?*
Any project involving alterations to the exterior of an existing building, visible from public view (e.g. fences, signs, awnings, mechanical equipment, landscaping, façade changes) and the construction of new buildings, all require an architectural review.
2. *How long does the architectural review process take?*
The time required to process an application will vary with the size of the project. Once the application has been deemed complete, the architectural review process can take between four to eight weeks, to complete, if no changes/revisions are required by any of the reviewing body throughout the process. Vague or incomplete description of the project or failure to provide any pertinent information regarding the project will delay the review process.
3. *What does the ARB look for in a project?*
Refer to the Town of Haymarket Architectural Review Design Guidelines.
4. *What happens after I submit my application?*
After an application is submitted, a town clerk will review it for its completeness (not for the accuracy or content of the submission). If the application is incomplete, the missing materials will be required BEFORE the application can be forwarded for review. If complete, the application (and all required supporting documentation) will continue with the review process.
5. *What is the review process?*
For any submission, there are two reviewing bodies in the Town. The Zoning Administrator, and the Architectural Review Board (If applicable). All reviewing bodies in the Town meet once a month. (A schedule of all the meetings is available on our website at www.townofhaymarket.org).
6. *Is there a submission deadline?*
An application must be submitted to and verified complete by a Town Clerk one week prior to the meeting date, so that the application can be properly reviewed for completion.
7. *What happens at the ARB meeting?*
The ARB reviews any development project(s) to promote and maintain the historic architectural flavor of the Town consistent with the Town's Comprehensive Plan. The ARB reviews any proposal/project which currently or in the future could be visible from any public view.
8. *What should I present at my review?*
To facilitate a more streamlined review of an application, it is required that an applicant (or representative) be present at the meeting(s) during the review of their proposed project. A brief overview of the project, site, and the architecture should be presented. Speak briefly to the design and landscaping features, parking and circulation, delivery routes/access, drainage, lighting, signage, and trash enclosures. Provide sample(s) of colors, and materials. For larger development projects, be able to discuss traffic impacts.
9. *When can I submit my plans for a building permit?*
If the project is approved by all applicable Boards, the applicant can then receive their building permit (if a permit is required for the project).

VERIZON PROPOSED SHELTER – 6736 MADISON STREET – SITE PHOTOS



VERIZON PROPERTY



VERIZON SITE ENTRANCE

Attachment: Haymarket O Hut Zoning Application (3680 : Verizon Wireless Equipment Shelter 6736 Madison Street)

VERIZON PROPOSED SHELTER – 6736 MADISON STREET – SITE PHOTOS



SHELTER LOCATION



SHELTER LOCATION

Attachment: Haymarket O Hut Zoning Application (3680 : Verizon Wireless Equipment Shelter 6736 Madison Street)

VERIZON PROPOSED SHELTER – 6736 MADISON STREET – SITE PHOTOS



CLOSEST NEIGHBORING STRUCTURE

VERIZON PROPOSED SHELTER – 6736 MADISON STREET –PHOTOS OF PROPOSED SHELTER



Attachment: Haymarket O Hut Zoning Application (3680 : Verizon Wireless Equipment Shelter 6736 Madison Street)

STATE INFORMATION

Virginia

- 2012 Virginia Uniform Statewide Building Codes (USBC)
- 2012 International Building Code w/VA Amendments
- 2012 International Plumbing Code w/VA Amendments
- 2012 International Mechanical Code w/VA Amendments
- 2012 International Fuel Gas Code w/VA Amendments
- 2012 International Electrical Code w/VA Amendments
- 2012 International Fire Code (IFC) w/VA Amendments
- 2011 National Electrical Code w/VA Amendments

OVERALL AREA OF THIS BUILDING = 339 SQ. FT.
 OVERALL HEIGHT OF THIS BUILDING = 123 IN.
 THIS BUILDING IS NOT SPRINKLED.
 ALL GLAZING TO MEET ANSI 97.1 WITH
 CPSC 16 CFR PART 1201 REQUIREMENTS.
 ALL DOORS MINIMUM 90 MINUTE FIRE RATING.

| Code Classification | Occy | Constr |
|------------------------------------|------|--------|
| SBC - SBCCI | SZ | V (u) |
| NEC - BOCA | SZ | V-B |
| IEBC - IBCD | SZ | V (u) |
| IEBC - INTERNATIONAL BUILDING CODE | SZ | V-B |

| Allowable Stresses | 120psf |
|--|-------------|
| uniform floor load (white filling) | 120psf |
| uniform floor load (on foundation) | 150psf |
| uniform roof live load | 10psf |
| wind load (including sliding and overturning moments) | 150mph |
| seismic | CAT. 'B' |
| fire rated wall | 2 hour |
| estimated shipping weight (does not include CTE equipment) | 82,000 LBS. |

FIELD NOTES:

- ALLOWABLE STRESSES CALCULATED USING THE RECOMMENDED FOUNDATION WHILE ANCHORED WITH VFP-DESIGNED HARDWARE.
- ACTUAL FOUNDATION CONCRETE AND STEEL DESIGN BY OTHERS BASED ON LOCAL SOIL CONDITIONS, SUBJECT TO LOCAL CODES.

VFP, INCORPORATED

SHELTER MODEL VC1220-4

VERIZON NUMBER Vz12.20

11'6" X 29'5-1/2" X 9'0"

CONCRETE W/GENERATOR ROOM

2015 IBC CODE SECTION 1603 DESIGN LOADS.

- FLOOR LIVE LOAD = 150 PSF
- ROOF LIVE LOAD = 105 PSF
- ROOF SNOW LOAD WITH A GROUND SNOW LOAD OF CONSERVATIVE
 - FLAT-ROOF SNOW LOAD = 84 PSF
 - SNOW EXPOSURE FACTOR = 1.0
 - SNOW IMPORTANCE FACTOR = 1.2
 - THERMAL FACTOR = 1.0
- WIND LOAD
 - BASIC WIND SPEED = 130 MPH
 - FOR WIND RISK CATEGORY, SEE SITE SPECIFIC MAPS OF ASCE 7-10.
 - WIND EXPOSURE = 'C'
 - COMPONENTS AND CLADDING = -61.7 PSF, +38.6 PSF (USF)
- EARTHQUAKE DESIGN DATA FOR LIGHTWEIGHT SHELTERS
 - SEISMIC IMPORTANCE FACTOR = 1.0 & RISK CATEGORY IV
 - MAPPED SPECTRAL RESPONSE ACCELERATIONS, SS = 1.85
 - SITE CLASS = 'I'
 - SPECTRAL RESPONSE COEFFICIENTS SDS = 1.24
 - SEISMIC DESIGN CATEGORY = 0
 - BASIC SEISMIC-FORCE RESISTING SYSTEM = (BEARING WALL SYSTEM W/ INTERMEDIATE PRECAST CONCRETE SHEAR WALLS)
 - SEISMIC RESPONSE COEFFICIENT, CS = 4.65 FOR Ie = 1.5
 - RESPONSE MODIFICATION FACTOR, R = 4.0
 - ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

| REV | DATE | BY | APP'D | CHK'D |
|-----|----------|-----|-------|-------|
| Y | 03/25/15 | WEC | | US |
| Z | 06/06/15 | TKL | | US |
| AA | 10/28/15 | WEC | | US |

SEE SPECIFIC SHEETS FOR CHANGES

SEE SPECIFIC SHEETS FOR CHANGES

WILLIAM J. BLANKENSHIP, PE
 3531 HICKORY HILL DRIVE
 ROCKY MOUNTAIN, VA 24156
 PE LICENSE STATE OF
VA-1033598

VFP, INC.

CORPORATE OFFICE
 1701 Midland Road
 Salem, Virginia 24153-6424
 (540)977-5555 fax

MANUFACTURING FACILITY
 402 Iron Works Road
 Duffield, Virginia 24244
 (276)431-4000 (276)431-1756 fax

Based on drawings provided by applicant. VFP, Inc. does not warrant, represent or guarantee the accuracy of the information provided. VFP, Inc. may be liable in some instances for errors or omissions in drawings or specifications prepared by VFP, Inc. or its affiliates.

| DATE | BY | CHK'D | APP'D |
|----------|----|-------|-------|
| 07/29/11 | | | |
| 02/12/13 | | | |
| 02/12/13 | | | |
| 02/12/13 | | | |
| 02/12/13 | | | |

| NO. | DATE | BY | APP'D |
|-----|----------|-----|-------|
| 1 | 03/25/15 | WEC | |
| 2 | 06/06/15 | TKL | |
| 3 | 10/28/15 | WEC | |

1 of 23

VFP, INCORPORATED
 SHELTER MODEL Vz1220-4
 VERIZON NUMBER 12.20-4MC
 11'6" x 29'5-1/2" x 9'0" MODEL
 CONCRETE W/GENERATOR ROOM
 MIRRORED OPTION

NOTES

- 13-1. REFER TO DWG. 10116 FOR GENERAL NOTES.
- 13-2. STAIR HALL FLOORING AS SHOWN ON SHEET 26 & 27.
- 13-3. NON-STRUCTURAL ITEMS AS MAY BE SPECIFIED BY THE ARCHITECT SHALL BE SHOWN ON THE DRAWINGS AND WATER FASH COORDINATED WITH THE ARCHITECT. DOOR SWINGS AND WINDOW HANDS WILL BE SPECIFIED ON THE PRODUCTION CONTRACT DOCUMENTS. REFER TO EACH JOB FOR EACH JOB.
- 13-4. REFER TO SPECIFIC PARTS FOR ARCHITECTURAL NOTES.
- 13-5. STATE SUBMITTAL INFORMATION TO BE COMPLETED AS REQD FOR APPROVAL.
- 13-6. SEE PRODUCTION CONFIGURATION SHEET 1 OR 2 FOR PARTS AND SPECIAL INSTRUCTIONS.

BASE MODEL MIRRORED OPTION-002

INDEX OF DRAWINGS

| DESCRIPTION | DESCRIPTION |
|--|--|
| 20-500-002 SHEET 13 INDEX | 20-500-002 SHEET 13 INDEX |
| 20-500-002 SHEET 14 PANEL SCHEDULE/DOOR-LINE | 20-500-002 SHEET 14 PANEL SCHEDULE/DOOR-LINE |
| 20-500-002 SHEET 15 EXTERIOR ELEVATIONS | 20-500-002 SHEET 15 EXTERIOR ELEVATIONS |
| 20-500-002 SHEET 16 BILL OF MATERIAL | 20-500-002 SHEET 16 BILL OF MATERIAL |
| 20-500-002 SHEET 17 FLOOR PLAN | 20-500-002 SHEET 17 FLOOR PLAN |
| 20-500-002 SHEET 18 INTERIOR LAYOUT | 20-500-002 SHEET 18 INTERIOR LAYOUT |
| 20-500-002 SHEET 19 INTERIOR WALL LAYOUT | 20-500-002 SHEET 19 INTERIOR WALL LAYOUT |
| 20-500-002 SHEET 20 REFLECTED CEILING LEGEND | 20-500-002 SHEET 20 REFLECTED CEILING LEGEND |
| 20-500-002 SHEET 21 INTERIOR CEILING LEGEND | 20-500-002 SHEET 21 INTERIOR CEILING LEGEND |
| 20-500-002 SHEET 22 CONSTRUCTION DETAILS | 20-500-002 SHEET 22 CONSTRUCTION DETAILS |
| 20-500-002 SHEET 23 FLOOR & ROOF CASTINGS | 20-500-002 SHEET 23 FLOOR & ROOF CASTINGS |
| 20-500-002 SHEET 24 LONG WALL CASTINGS | 20-500-002 SHEET 24 LONG WALL CASTINGS |
| 20-500-002 SHEET 25 SHORT WALL CASTINGS | 20-500-002 SHEET 25 SHORT WALL CASTINGS |
| 20-500-002 SHEET 26 ZONE PLANNING STANDING SEAM ROOF | 20-500-002 SHEET 26 ZONE PLANNING STANDING SEAM ROOF |
| 20-500-002 SHEET 27 GENERAL NOTES | 20-500-002 SHEET 27 GENERAL NOTES |
| 1011:6 | |

| | | |
|---------|----------|-----|
| CHR. BY | DATE | KEY |
| TJS | 02/09/13 | C |
| TJS | 03/03/13 | 0 |
| TJS | 04/11/13 | G |
| TJS | 07/27/13 | J |
| TJS | 12/27/13 | S |

UPDATE ENTIRE PK. IT
 UPDATE ENTIRE PRINT
 UPDATE PRINT
 CHANGE DESCRIPTION OF ST
 CHANGE LEGEND OF SHEETER

4/19/16
 WILLIAM J. BLANKENSHIP
 PROFESSIONAL ENGINEER
 Lic. No. 023598

WILLIAM J. BLANKENSHIP
 PROFESSIONAL ENGINEER
 Lic. No. 023598

WILLIAM J. BLANKENSHIP, PE
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 VA 023598

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MANUFACTURING FACILITY
 1701 N. MARKET BLVD
 FARMERSVILLE, VA 24049
 (540) 777-6500 (540) 777-6555 fax

DATE: 04/12/16
 DRAWN BY: TJS
 CHECKED BY: TJS
 SCALE: AS SHOWN
 SHEET NO.: 204508
 PROJECT NO.: 12.20-4
 SHEET TITLE: CONCRETE SHELTER INDEX SHEET

REVISIONS

| CHK | APPR | DATE | REV |
|--------------------------------|------|----------|-----|
| AS | TKL | 12/31/13 | S |
| CHANGED LENGTH OF SHELTER | | | |
| TW | TKL | 05/07/14 | T |
| ADD GEN OIL TREAT OPT & WIRING | | | |
| REMOVE ALARM PUNCH BLOCK LIST | | | |
| US | TKL | 02/25/15 | Y |
| UPDATE ILC CRT BREAKERS | | | |

VFP, INC.

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MANUFACTURING FACILITY
 402 Industrial Park Road
 Duffield, Virginia 24244
 (276)431-0000 (276)431-1756 fax

DATE: 01/29/12
 DRAWN BY: MSTRAP
 CHECKED BY: MSTRAP
 SCALE: 1/4"=1'-0"
 SHEET: 204508
 PROJECT: CONCRETE SHELTER
 PANEL SCHEDULE ONE LINE

NOTES:

14-1 120/208VAC OR 120/240VAC VOLTAGE OPTIONS FOR ILC
 OHIO REGION = 1/0 GROUND

14-2 FOR GENERATOR ALARM WIRING REFER TO DRAWINGS:
 473251 - GENERAC GAS
 473250 - MTU GAS GENERATOR
 473252 - GENERAC DIESEL
 473253 - MTU DIESEL

14-3 GEN REFERENCE ONLY - REFER TO SUPPORT DRAWING
 473252 FOR BARBER STRIP WIRING
 INSTALL PUNCH BLOCKS BUT DO NOT WIRE

14-4 BUS BREAKERS ARE TO BE LEFT IN THE ON POSITION
 FOR GENERAL ILC

14-5 REMOVE SHIPPING COVERS PRIOR TO
 ENERGIZING PHASES

EXTERIOR LITG. CKT.

OPTIONAL ONE-LINE WIRING DIAGRAMS

| LOAD | VOLT AMPERES WIRE (WATS) | | BREAKER | WIRE (WATS) | | LOAD |
|--------------|--------------------------|------|-----------|-------------|-----------------------------|------|
| | A | B | | A | B | |
| RECIPER #1 | 1400 | 1400 | 2 (R) 1 | 2 (R) 1 | ACH1 | |
| RECIPER #2 | 1400 | 1400 | 2 (R) 2 | 2 (R) 2 | ACH2 | |
| RECIPER #3 | 1400 | 1400 | 2 (R) 3 | 2 (R) 3 | ACH3 | |
| RECIPER #4 | 1400 | 1400 | 2 (R) 4 | 2 (R) 4 | ACH4 or RECIPER #10** | |
| RECIPER #5 | 1400 | 1400 | 2 (R) 5 | 2 (R) 5 | FUTURE | |
| RECIPER #6 | 1400 | 1400 | 2 (R) 6 | 2 (R) 6 | INTERIOR LIGHTS/24 | |
| RECIPER #7 | 1400 | 1400 | 2 (R) 7 | 2 (R) 7 | EXTERIOR LIGHTS | |
| RECIPER #8 | 1400 | 1400 | 2 (R) 8 | 2 (R) 8 | GEN ROOM LIGHTS | |
| RECIPER #9 | 1400 | 1400 | 2 (R) 9 | 2 (R) 9 | HYDROGEN DETECTOR/PM OPTION | |
| RECIPER #10 | 1400 | 1400 | 2 (R) 10 | 2 (R) 10 | CORD REEL (OPTIONAL) | |
| RECIPER #11 | 1400 | 1400 | 2 (R) 11 | 2 (R) 11 | BLANK | |
| RECIPER #12 | 1400 | 1400 | 2 (R) 12 | 2 (R) 12 | GEN. OIL HEATER OPTION | |
| RECIPER #13 | 1400 | 1400 | 2 (R) 13 | 2 (R) 13 | INTERIOR RECEPTACLES | |
| RECIPER #14 | 1400 | 1400 | 2 (R) 14 | 2 (R) 14 | GEN. RM LIGHTS/24 OPTION | |
| RECIPER #15 | 1400 | 1400 | 2 (R) 15 | 2 (R) 15 | VESDA SYS. OPTION | |
| RECIPER #16 | 1400 | 1400 | 2 (R) 16 | 2 (R) 16 | GEN. BLOCK HEATER OPTION | |
| RECIPER #17 | 1400 | 1400 | 2 (R) 17 | 2 (R) 17 | GEN. BATT. CHARGER OPTION | |
| RECIPER #18 | 1400 | 1400 | 2 (R) 18 | 2 (R) 18 | SMOKE DETECTOR | |
| RECIPER #19 | 1400 | 1400 | 2 (R) 19 | 2 (R) 19 | SMOKE DETECTOR | |
| RECIPER #20 | 1400 | 1400 | 2 (R) 20 | 2 (R) 20 | SMOKE DETECTOR | |
| RECIPER #21 | 1400 | 1400 | 2 (R) 21 | 2 (R) 21 | SMOKE DETECTOR | |
| RECIPER #22 | 1400 | 1400 | 2 (R) 22 | 2 (R) 22 | SMOKE DETECTOR | |
| RECIPER #23 | 1400 | 1400 | 2 (R) 23 | 2 (R) 23 | SMOKE DETECTOR | |
| RECIPER #24 | 1400 | 1400 | 2 (R) 24 | 2 (R) 24 | SMOKE DETECTOR | |
| RECIPER #25 | 1400 | 1400 | 2 (R) 25 | 2 (R) 25 | SMOKE DETECTOR | |
| RECIPER #26 | 1400 | 1400 | 2 (R) 26 | 2 (R) 26 | SMOKE DETECTOR | |
| RECIPER #27 | 1400 | 1400 | 2 (R) 27 | 2 (R) 27 | SMOKE DETECTOR | |
| RECIPER #28 | 1400 | 1400 | 2 (R) 28 | 2 (R) 28 | SMOKE DETECTOR | |
| RECIPER #29 | 1400 | 1400 | 2 (R) 29 | 2 (R) 29 | SMOKE DETECTOR | |
| RECIPER #30 | 1400 | 1400 | 2 (R) 30 | 2 (R) 30 | SMOKE DETECTOR | |
| RECIPER #31 | 1400 | 1400 | 2 (R) 31 | 2 (R) 31 | SMOKE DETECTOR | |
| RECIPER #32 | 1400 | 1400 | 2 (R) 32 | 2 (R) 32 | SMOKE DETECTOR | |
| RECIPER #33 | 1400 | 1400 | 2 (R) 33 | 2 (R) 33 | SMOKE DETECTOR | |
| RECIPER #34 | 1400 | 1400 | 2 (R) 34 | 2 (R) 34 | SMOKE DETECTOR | |
| RECIPER #35 | 1400 | 1400 | 2 (R) 35 | 2 (R) 35 | SMOKE DETECTOR | |
| RECIPER #36 | 1400 | 1400 | 2 (R) 36 | 2 (R) 36 | SMOKE DETECTOR | |
| RECIPER #37 | 1400 | 1400 | 2 (R) 37 | 2 (R) 37 | SMOKE DETECTOR | |
| RECIPER #38 | 1400 | 1400 | 2 (R) 38 | 2 (R) 38 | SMOKE DETECTOR | |
| RECIPER #39 | 1400 | 1400 | 2 (R) 39 | 2 (R) 39 | SMOKE DETECTOR | |
| RECIPER #40 | 1400 | 1400 | 2 (R) 40 | 2 (R) 40 | SMOKE DETECTOR | |
| RECIPER #41 | 1400 | 1400 | 2 (R) 41 | 2 (R) 41 | SMOKE DETECTOR | |
| RECIPER #42 | 1400 | 1400 | 2 (R) 42 | 2 (R) 42 | SMOKE DETECTOR | |
| RECIPER #43 | 1400 | 1400 | 2 (R) 43 | 2 (R) 43 | SMOKE DETECTOR | |
| RECIPER #44 | 1400 | 1400 | 2 (R) 44 | 2 (R) 44 | SMOKE DETECTOR | |
| RECIPER #45 | 1400 | 1400 | 2 (R) 45 | 2 (R) 45 | SMOKE DETECTOR | |
| RECIPER #46 | 1400 | 1400 | 2 (R) 46 | 2 (R) 46 | SMOKE DETECTOR | |
| RECIPER #47 | 1400 | 1400 | 2 (R) 47 | 2 (R) 47 | SMOKE DETECTOR | |
| RECIPER #48 | 1400 | 1400 | 2 (R) 48 | 2 (R) 48 | SMOKE DETECTOR | |
| RECIPER #49 | 1400 | 1400 | 2 (R) 49 | 2 (R) 49 | SMOKE DETECTOR | |
| RECIPER #50 | 1400 | 1400 | 2 (R) 50 | 2 (R) 50 | SMOKE DETECTOR | |
| RECIPER #51 | 1400 | 1400 | 2 (R) 51 | 2 (R) 51 | SMOKE DETECTOR | |
| RECIPER #52 | 1400 | 1400 | 2 (R) 52 | 2 (R) 52 | SMOKE DETECTOR | |
| RECIPER #53 | 1400 | 1400 | 2 (R) 53 | 2 (R) 53 | SMOKE DETECTOR | |
| RECIPER #54 | 1400 | 1400 | 2 (R) 54 | 2 (R) 54 | SMOKE DETECTOR | |
| RECIPER #55 | 1400 | 1400 | 2 (R) 55 | 2 (R) 55 | SMOKE DETECTOR | |
| RECIPER #56 | 1400 | 1400 | 2 (R) 56 | 2 (R) 56 | SMOKE DETECTOR | |
| RECIPER #57 | 1400 | 1400 | 2 (R) 57 | 2 (R) 57 | SMOKE DETECTOR | |
| RECIPER #58 | 1400 | 1400 | 2 (R) 58 | 2 (R) 58 | SMOKE DETECTOR | |
| RECIPER #59 | 1400 | 1400 | 2 (R) 59 | 2 (R) 59 | SMOKE DETECTOR | |
| RECIPER #60 | 1400 | 1400 | 2 (R) 60 | 2 (R) 60 | SMOKE DETECTOR | |
| RECIPER #61 | 1400 | 1400 | 2 (R) 61 | 2 (R) 61 | SMOKE DETECTOR | |
| RECIPER #62 | 1400 | 1400 | 2 (R) 62 | 2 (R) 62 | SMOKE DETECTOR | |
| RECIPER #63 | 1400 | 1400 | 2 (R) 63 | 2 (R) 63 | SMOKE DETECTOR | |
| RECIPER #64 | 1400 | 1400 | 2 (R) 64 | 2 (R) 64 | SMOKE DETECTOR | |
| RECIPER #65 | 1400 | 1400 | 2 (R) 65 | 2 (R) 65 | SMOKE DETECTOR | |
| RECIPER #66 | 1400 | 1400 | 2 (R) 66 | 2 (R) 66 | SMOKE DETECTOR | |
| RECIPER #67 | 1400 | 1400 | 2 (R) 67 | 2 (R) 67 | SMOKE DETECTOR | |
| RECIPER #68 | 1400 | 1400 | 2 (R) 68 | 2 (R) 68 | SMOKE DETECTOR | |
| RECIPER #69 | 1400 | 1400 | 2 (R) 69 | 2 (R) 69 | SMOKE DETECTOR | |
| RECIPER #70 | 1400 | 1400 | 2 (R) 70 | 2 (R) 70 | SMOKE DETECTOR | |
| RECIPER #71 | 1400 | 1400 | 2 (R) 71 | 2 (R) 71 | SMOKE DETECTOR | |
| RECIPER #72 | 1400 | 1400 | 2 (R) 72 | 2 (R) 72 | SMOKE DETECTOR | |
| RECIPER #73 | 1400 | 1400 | 2 (R) 73 | 2 (R) 73 | SMOKE DETECTOR | |
| RECIPER #74 | 1400 | 1400 | 2 (R) 74 | 2 (R) 74 | SMOKE DETECTOR | |
| RECIPER #75 | 1400 | 1400 | 2 (R) 75 | 2 (R) 75 | SMOKE DETECTOR | |
| RECIPER #76 | 1400 | 1400 | 2 (R) 76 | 2 (R) 76 | SMOKE DETECTOR | |
| RECIPER #77 | 1400 | 1400 | 2 (R) 77 | 2 (R) 77 | SMOKE DETECTOR | |
| RECIPER #78 | 1400 | 1400 | 2 (R) 78 | 2 (R) 78 | SMOKE DETECTOR | |
| RECIPER #79 | 1400 | 1400 | 2 (R) 79 | 2 (R) 79 | SMOKE DETECTOR | |
| RECIPER #80 | 1400 | 1400 | 2 (R) 80 | 2 (R) 80 | SMOKE DETECTOR | |
| RECIPER #81 | 1400 | 1400 | 2 (R) 81 | 2 (R) 81 | SMOKE DETECTOR | |
| RECIPER #82 | 1400 | 1400 | 2 (R) 82 | 2 (R) 82 | SMOKE DETECTOR | |
| RECIPER #83 | 1400 | 1400 | 2 (R) 83 | 2 (R) 83 | SMOKE DETECTOR | |
| RECIPER #84 | 1400 | 1400 | 2 (R) 84 | 2 (R) 84 | SMOKE DETECTOR | |
| RECIPER #85 | 1400 | 1400 | 2 (R) 85 | 2 (R) 85 | SMOKE DETECTOR | |
| RECIPER #86 | 1400 | 1400 | 2 (R) 86 | 2 (R) 86 | SMOKE DETECTOR | |
| RECIPER #87 | 1400 | 1400 | 2 (R) 87 | 2 (R) 87 | SMOKE DETECTOR | |
| RECIPER #88 | 1400 | 1400 | 2 (R) 88 | 2 (R) 88 | SMOKE DETECTOR | |
| RECIPER #89 | 1400 | 1400 | 2 (R) 89 | 2 (R) 89 | SMOKE DETECTOR | |
| RECIPER #90 | 1400 | 1400 | 2 (R) 90 | 2 (R) 90 | SMOKE DETECTOR | |
| RECIPER #91 | 1400 | 1400 | 2 (R) 91 | 2 (R) 91 | SMOKE DETECTOR | |
| RECIPER #92 | 1400 | 1400 | 2 (R) 92 | 2 (R) 92 | SMOKE DETECTOR | |
| RECIPER #93 | 1400 | 1400 | 2 (R) 93 | 2 (R) 93 | SMOKE DETECTOR | |
| RECIPER #94 | 1400 | 1400 | 2 (R) 94 | 2 (R) 94 | SMOKE DETECTOR | |
| RECIPER #95 | 1400 | 1400 | 2 (R) 95 | 2 (R) 95 | SMOKE DETECTOR | |
| RECIPER #96 | 1400 | 1400 | 2 (R) 96 | 2 (R) 96 | SMOKE DETECTOR | |
| RECIPER #97 | 1400 | 1400 | 2 (R) 97 | 2 (R) 97 | SMOKE DETECTOR | |
| RECIPER #98 | 1400 | 1400 | 2 (R) 98 | 2 (R) 98 | SMOKE DETECTOR | |
| RECIPER #99 | 1400 | 1400 | 2 (R) 99 | 2 (R) 99 | SMOKE DETECTOR | |
| RECIPER #100 | 1400 | 1400 | 2 (R) 100 | 2 (R) 100 | SMOKE DETECTOR | |



Town of Haymarket
15000 Washington Street, #100
Haymarket, VA 20169
703-753-2600

Emily K. Lockhart
TOWN PLANNER
ZONING ADMINISTRATOR

MEMORANDUM

TO: Planning Commission
FROM: Emily K. Lockhart, Town Planner
DATE: July 11, 2018
SUBJECT: Site Plans for Fayette Street

APPLICATION SUMMARY:

The applicant is proposing to build three single family homes located at 6675 Fayette Street. The lot will be subdivided into three lots, according to the site plans. The applicant is currently working with the Town Planner and Town Engineer to address all comments on the site plan. The Town Planner is presenting the site plan tonight for the Commission's review and discussion. The applicant is requesting a landscape buffer waiver for the rear buffer. The properties abut a B-1 zoned property behind them. At this time there are no buildings located on the B-1 property, however future development could change that. The applicant has requested a waiver to install a 6-foot-tall fence along the rear and side perimeter of the lots and 4 deciduous canopy trees in a 10' rear buffer yard in each lot, in lieu of the 25' transparent buffer required. The waiver is up for discussion with the Planning Commission. The Town Planner and Engineer suggest to the Planning Commission that the proposed modified buffer is a sufficient buffer to the B-1 zoning district and is in keeping with the other buffer waivers issued by the Planning Commission.

Upon approval the applicant must obtain a Certificate of Appropriateness from the Architectural Review Board for the exterior of the homes and any other exterior features.

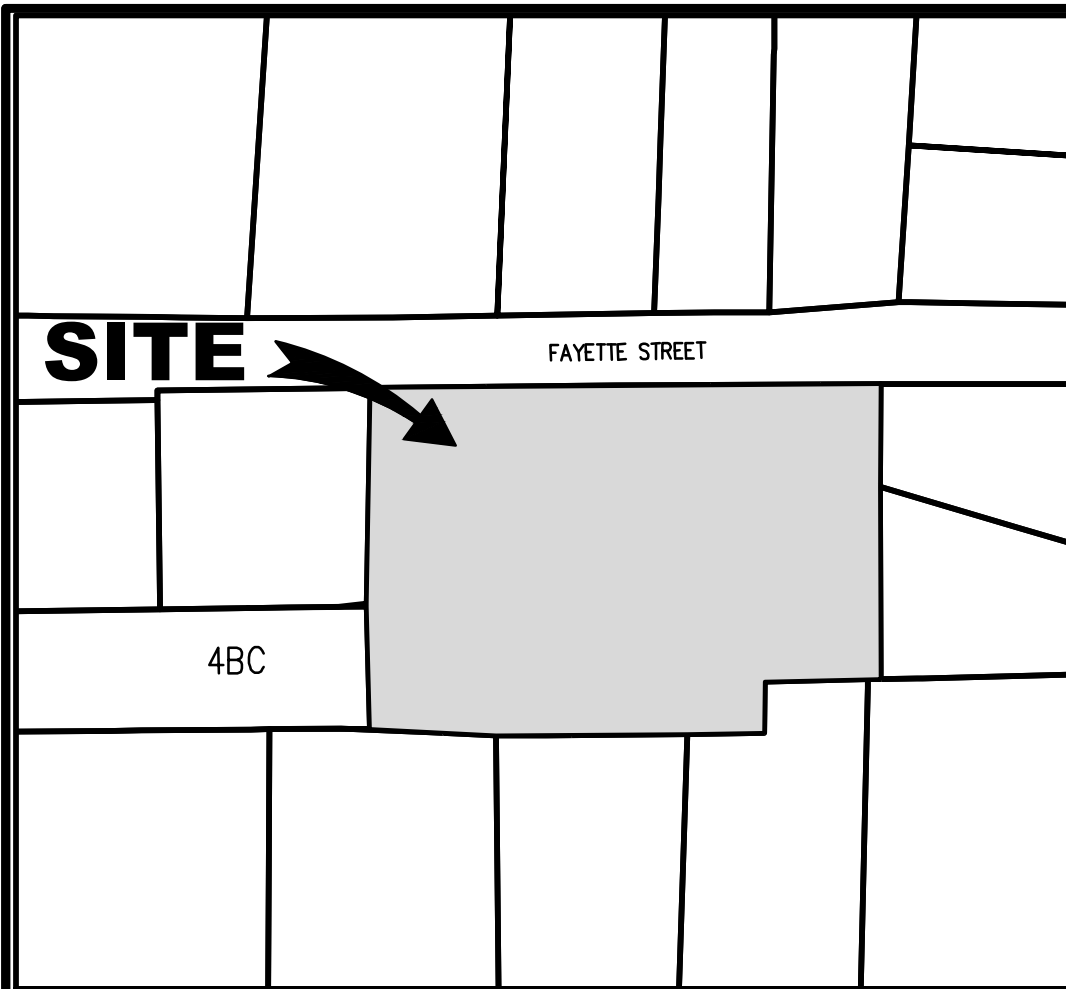
STAFF RECOMMENDATION:

Staff recommends approving the landscape buffer waiver for the 6675 Fayette Street, 3 Single Family Homes Site Plan. Staff further recommends the Commission review the site plans and provide any comments to the Town Planner so that they may be shared with the applicant.

DRAFT MOTION:

"I make a motion to approve the Landscape Buffer Waiver requested by Bowman Consulting on behalf of the applicant to reduce the required 25' Transparent buffer to a 10' landscaped buffer with 4 deciduous canopy trees and a 6-foot-tall fence."

Or An alternate motion.



SOILS MAP

SCALE: 1"=100'

SOIL DATA TABLE (PER USGS SOILS MAP)

| SOIL ID NUMBERS | SOIL SERIES NAME | SOIL CATAGORY | ERODABILITY | SUBSURFACE DRAINAGE | HYDROLOGIC SOIL GROUP | PROBLEM CLASS |
|-----------------|------------------|---------------|-------------|---------------------|-----------------------|---------------|
| 4BC | ARCOLA SILT LOAM | II | SEVERE | MODERATE | C | - |

SITE DATA:

ZONE: R-1
 GPIN: 7298-80-9749
 DEED BOOK: 1205 PAGE: 398
 LOT AREA: 49,060 SF (1.12626 AC)
 PROPERTY OWNER: BAILEY SHIRLEY A
 6675 FAYETTE ST
 HAYMARKET, VA 20169
 PROPERTY DEVELOPER: PIEDMONT GROUP CUSTOM HOMES, Inc
 P.O. BOX 228
 MIDDLEBURG, VA 20118
 ENGINEER INFORMATION: BOWMAN CONSULTING
 BRAD GLATFELTER
 bglatfelter@bowmanconsulting.com
 OFF STREET PARKING REQUIRED: 2
 OFF STREET PARKING PROVIDED: 2
 FRONT YARD SETBACK: 35'
 SIDE YARD SETBACK: 10'
 REAR YARD SETBACK: 25'
 MAX. BUILDING HEIGHT: 35'

ZONING TABULATIONS

| | REQUIRED | LOT A | LOT B | LOT C |
|-----------------|----------------|-----------|-----------|-----------|
| FRONTAGE LENGTH | MIN. 75' | 96.78' | 96.79' | 96.79' |
| LOT AREA | MIN. 10,000 SF | 15,206 SF | 17,000 SF | 16,854 SF |
| LOT COVERAGE | MAX. 30% | 15.7% | 14.0% | 14.2% |
| FRONT YARD | MIN. 35' | 38' | 38' | 38' |
| SIDE YARD | MIN. 10' | 30.17' | 30.5' | 29.5' |
| REAR YARD | MIN. 25' | 66.38' | 87.32' | 87.90' |
| HEIGHT | MAX. 35' | 34.74' | 34.74' | 34.74' |
| DENSITY | R-1 | R-1 | R-1 | R-1 |

PROJECT SOURCE NOTES:

- TOPOGRAPHY AND EXISTING FEATURE INFORMATION OBTAINED FROM A FIELD SURVEY BY BOWMAN CONSULTING GROUP, LTD, DATED: MARCH 20, 2017., BY MEANS OF CONVENTIONAL SURVEY METHODS. SUPPLEMENTED BY PRINCE WILLIAM COUNTY GIS AND SHERWOOD FOREST AS-BUILT BY ROSS, FRANCE, & RATLIFF, LTD. DATED 03/16/16.
- BOUNDARY INFORMATION WAS OBTAINED FROM DEED OF RECORD, EXISTING LAND RECORDS, AND FIELD RUN SURVEY PERFORMED BY BOWMAN CONSULTING GROUP, LTD, DATED: APRIL, 2018.
- THE HORIZONTAL AND VERTICAL DATUM AS REFERENCED HEREON WAS ESTABLISHED BY STATIC GPS CONTROL METHODS. THE HORIZONTAL DATUM IS REFERENCED TO VIRGINIA COORDINATE SYSTEM OF 1983 (VCS83) AND THE VERTICAL DATUM IS REFERENCED TO NAVD 1988.
- PROPOSED HOUSE DIMENSIONS WERE OBTAINED FROM ARCHITECTURAL PLANS PREPARED BY: CLAUDE C. LAPP ARCHITECTS, DATED MAY 25, 2017.
- PROJECT SITE IS LOCATED WITHIN THE BULL RUN WATERSHED.
- NO RPA EXISTS ON SITE PER PRINCE WILLIAM COUNTY CHEASPEAKE BAY PRESERVATION MAP.

WATER AND SANITARY SEWER SOURCE NOTES:

- WATER SERVICE IS PROVIDED VIA PROPOSED CONNECTION TO EXISTING WATER MAIN WITHIN FAYETTE STREET, OWNED AND OPERATED BY PRINCE WILLIAM COUNTY SERVICE AUTHORITY (PWCSA)
- SANITARY SEWER SERVICE IS PROVIDED VIA PROPOSED CONNECTION TO MAIN WITHIN FAYETTE STREET, OWNED AND OPERATED BY PRINCE WILLIAM COUNTY SERVICE AUTHORITY (PWCSA)

GENERAL NOTES:

- THE PROPERTY AS SHOWN HEREON IS SUBJECT TO ALL COVENANTS AND RESTRICTIONS OF RECORD AND THOSE RECORDED HERewith. BOWMAN CONSULTING GROUP, LTD. HAS NOT BEEN PROVIDED A TITLE REPORT AND THEREFORE THIS PLAT DOES NOT NECESSARILY INDICATE THE EXISTENCE OF ANY COVENANTS AND RESTRICTIONS ON THE PROPERTY.
- THE PROPERTY SHOWN HEREON LIES WITHIN ZONE "X" (UN-SHADED) AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP FOR PRINCE WILLIAM COUNTY, VIRGINIA, COMMUNITY-PANEL NUMBER 51153 C0059 D, DATED JANUARY 5, 1995.

SITE PLAN

6675 FAYETTE STREET.

GPIN: 7298-80-9749

TOWN OF HAYMARKET

PRINCE WILLIAM COUNTY, VIRGINIA

SITE PLAN: 2018-001

SP2018-001



VICINITY MAP

SCALE: 1"=500'

SHEET INDEX

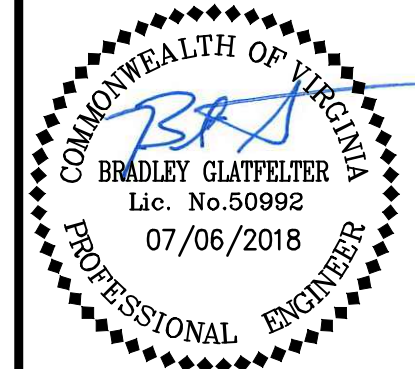
| Sheet Number | Sheet Title |
|--------------|--|
| 1 | COVER SHEET |
| 2 | GENERAL NOTES |
| 3 | EXISTING CONDITIONS AND DEMOLITION PLAN |
| 4 | GRADING PLAN |
| 5 | GRADING NOTES AND DETAILS |
| 6 | EROSION AND SEDIMENT CONTROL PLAN PHASE 1 |
| 7 | EROSION AND SEDIMENT CONTROL PLAN PHASE 2 |
| 8 | EROSION AND SEDIMENT CONTROL NARRATIVE AND DETAILS |
| 9 | EROSION AND SEDIMENT CONTROL CHECKLIST |
| 10 | LANDSCAPE PLAN |
| 11 | LANDSCAPE SCHEDULE, NOTES AND DETAILS |
| 12 | PWCSA INSPECTOR LOG SHEET |
| 13 | PWCSA DETAILS |
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COVER SHEET
 RESIDENTIAL SITE PLAN
 6675 FAYETTE STREET
 PRINCE WILLIAM COUNTY, VIRGINIA
 TOWN OF HAYMARKET

SP2018-001
 COUNTY PROJECT NUMBER



PLAN STATUS
 06/06/18 1ST SUBMISSION
 07/10/18 2ND SUBMISSION

| DATE | DESCRIPTION |
|--------|------------------|
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: N/A V: N/A |

JOB No. 00396-01-001
 DATE : JUNE 2018
 FILE No. 003096-D-CP-001

SHEET 1 OF 20

Revised: 8/2017

VDOT GENERAL NOTES

- VDOT Approved Exceptions/Waivers (must be incorporated in the plan):**
 - Access Management - Date of Approval: _____
 - SSAR- Date of Approval: _____
 - Design Waiver – Date of Approval: _____
 - Other _____ Date of Approval: _____
- SSAR Connectivity Summary (provide a check mark ✓ where applicable or write N/A):**
 - Connections in multiple directions (first connection must be to a VDOT maintained road, the second connection may either be to a VDOT road or to a stub out) N/A
 - Stub out connection (the prop. right of way terminates at parcel abutting the development and consists of a short segment that is intended to serve current and future development; the applicant must verify that connection with a future street is feasible) N/A
- All work on this project shall conform to the current editions of and latest revisions to the Virginia Department of Transportation (VDOT) Road and Bridge Specifications and Standards, the Virginia Erosion and Sediment Control Regulations, and any other applicable state, federal or local regulations. In case of a discrepancy or conflict between the Standards or Specifications and Regulations, the most stringent shall govern.
- Methods and materials used shall conform to current county/town and VDOT standards and specifications.
- All utilities, including all poles, are to be relocated at the developer's expense, prior to construction.
- Open cutting of paved or surface treated roads is not permitted. All utilities which will be placed under existing streets are to be bored or jacked. Any exceptions, due to extenuating circumstances, are to be addressed at the permit stage.
- Any type of reverse curb (spill curb, CG-6R, etc.) and transition to these curbs shall not be used within the public right of way.
- The developer is responsible for any damage to existing roads and utilities which occur as a result of project construction within or contiguous to existing right of way.
- A smooth grade shall be maintained from the centerline of the existing road to the proposed edge of pavement to preclude the forming of false gutters and/or the ponding of any water in the roadway.
- Standard guardrails and/or handrails shall be installed at hazardous locations as designated during field review by the county/town inspector or VDOT.
- The developer is responsible for all traffic control. The developer shall submit a signing, striping and/or signalization plan to the VDOT Land Development Section prior to permit application. The developer shall not commence construction of any pavement course without an approved striping plan.
- Pavement design shall be provided in accordance with the Pavement Design Guide for Subdivision and Secondary Roads in Virginia. For primary roads and interstate highways where truck traffic exceeds 5%, pavement design shall be provided in accordance with AASHTO guidelines. Typical pavement sections shall depict the top 6" of the subgrade immediately under the pavement structure compacted to 100% of the theoretical maximum dry density.
- Asphalt pavement widening shall conform to VDOT Standard WP-2.
- All right of way dedicated to public use shall be clear and unencumbered.
- Flowers, shrubs, trees, and irrigation shall not be placed within State maintained right of way limits without an approved set of plans and an approved planting agreement. No irrigation (sprinkler) systems, brick columns, end walls, and/or brick mailboxes will be constructed or installed within State maintained right of way limits without a permit. Any of the above items found in the right of way without a permit will be removed, and all costs of the removal will be borne by the owner and/or developer.
- The county/town shall obtain a permit for all sidewalks/crosswalks within the right of way that do not qualify for VDOT maintenance.
- Traffic control devices or advisory signs, such as multiway stops, speed limits, Watch for Children, Pedestrian Traffic etc., shall not be installed unless specifically shown on these plans or a VDOT approved plan revision. Speed study certified by professional engineer shall be submitted for VDOT approval prior to the street acceptance for any road to be posted other than the statutory speed limit. Should unapproved signs be noted at the time of VDOT inspection, the road acceptance process shall be terminated immediately and not recommenced until a determination is made regarding the approval of any additional signs. Immediate removal of such signs shall not negate the need for the submission of a revision.
- During construction, the maintenance of traffic shall conform to the requirements in the most recent version of the Virginia Work Area Protection Manual and the MUTCD.

GENERAL NOTES AND SPECIFICATIONS

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE MOST CURRENT APPROVED ARCHITECTURAL PLANS AND COORDINATE SAME WITH THE SITE PLAN, PRIOR TO BEGINNING CONSTRUCTION OPERATIONS.
- WHEN DURING THE COURSE OF CONSTRUCTION, ANY OBJECT OF AN UNUSUAL NATURE IS ENCOUNTERED, THE CONTRACTOR SHALL CEASE WORK AT THAT AREA AND IMMEDIATELY NOTIFY THE PROPER AUTHORITY, PRINCE WILLIAM COUNTY, AND/OR THE ARCHITECT/ENGINEER.
- THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
- ALL STEPS WITH THREE OR MORE RISERS SHALL HAVE HAND RAILS.
- STANDARD GUARD RAIL AND HAND RAILS SHALL BE INSTALLED AT HAZARDOUS LOCATIONS AS DESIGNATED DURING THE FINAL INSPECTION BY PRINCE WILLIAM COUNTY AND/OR VDOT.
- CONTROLLED FILLS MUST BE COMPACTED TO 95% AS DETERMINED PER STANDARD PROCTOR AASHTO T-99 OR ASTM D 698, AS SHOWN IN THE GEOTECHNICAL REQUIREMENTS. DENSITY MUST BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER AND THE RESULTS SUBMITTED TO PRINCE WILLIAM COUNTY PRIOR TO FOOTING CONSTRUCTION.
- COMPACTION OF BACKFILL IN UTILITY TRENCHES SHALL BE IN ACCORDANCE WITH PRINCE WILLIAM COUNTY AND/OR VDOT STANDARDS & SPECIFICATIONS.
- ALL FILL SOILS UNDER EXPANDED PAVED AREAS SHALL BE COMPACTED TO 95% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM SPECIFICATION D-698 STANDARD PROCTOR METHOD, WITHIN + OR - 2% OF OPTIMUM MOISTURE FOR THE FULL WIDTH OF ANY DEDICATED RIGHT-OF-WAY AND ALL PARKING LOTS, PRIVATE STREETS, PARKING BAYS, CURB AND GUTTER, AND SIDEWALKS ADJACENT TO STREETS AND PARKING LOTS (NOT INTENDED TO INCLUDE LEAD WALKS), WITH UPPER 1.0 FT. COMPACTED TO 100% OF THE MAXIMUM DRY DENSITY PER ASTM D-698.
- ADDITIONAL DITCH LININGS OR SEDIMENT AND EROSION CONTROL MEASURES SHALL BE PROVIDED, AT THE DEVELOPER'S EXPENSE, AS DETERMINED NECESSARY BY VDOT AND/OR PRINCE WILLIAM COUNTY DURING FIELD REVIEW. ALL COSTS SHALL BE ASSUMED BY THE DEVELOPER.
- A SMOOTH GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF EXISTING ROAD TO PROPOSED CURB AND GUTTER AND/OR PROPOSED EDGE OF PAVEMENT TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR THE PONDING OF ANY WATER IN THE ROADWAY. REMOVE AND RECONSTRUCT EXISTING PAVEMENT AND/OR CURB AS DICTATED BY FIELD CONDITIONS TO PROVIDE POSITIVE DRAINAGE AT THE-IN-POINTS.
- PRIOR TO CONSTRUCTION OF STREET WIDENING, CONTRACTOR SHALL OBTAIN 25-FOOT FIELD SURVEYED CROSS SECTIONS OF EXISTING STREET. BASED ON INFORMATION OBTAINED AND CONTRACTOR'S COORDINATION WITH VDOT AND COUNTY INSPECTOR(S), MILLING AND/OR OVERLAY OF EXISTING ROADWAY MAY BE REQUIRED TO AVOID FALSE GUTTERS, MAINTAIN POSITIVE DRAINAGE, AND TO GAIN ACCEPTANCE OF THE CONSTRUCTED IMPROVEMENTS. ADDITIONAL OVERLAY AND/OR MILLING MAY NECESSITATE ADJUSTMENTS TO THE EDGE OF PAVEMENT AND/OR CURB ELEVATIONS SHOWN ON THIS PLAN.
- THE DESIGN OF PAVEMENT PLACED WITHIN THE RIGHT-OF-WAY SHOULD EQUAL OR EXCEED THE THICKNESS OF THE EXISTING PAVEMENT.
- OVERLAY OF EXISTING PAVEMENT SHALL BE MINIMUM OF 1 1/2 INCH DEPTH; ANY COST ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE DEVELOPER.
- THE PAVEMENT DESIGN AND DEPTH OF STREETS SHOWN HEREON IS BASED ON AN ASSUMED CBR VALUE. PRIOR TO CONSTRUCTION, SOIL TESTS OF SUBGRADE MUST BE PERFORMED BY A GEOTECHNICAL ENGINEER OF RECORD AND MUST BE SUBMITTED TO ENGINEER FOR ACTUAL DETERMINATION AND CALCULATION OF THE REQUIRED PAVEMENT DESIGN AND SUBBASE THICKNESS. NO PAVEMENT CONSTRUCTION MAY COMMENCE WITHOUT THE FINAL PAVEMENT DESIGN APPROVAL BY PRINCE WILLIAM COUNTY AND/OR VDOT.
- ALL STREET CUT AND PATCH WORK IN PUBLIC RIGHT-OF-WAY REQUIRED FOR UTILITIES INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH COUNTY AND/OR VDOT STANDARDS AND SPECIFICATIONS.
- ALL RIGHT-OF-WAY DEDICATED FOR PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.
- EROSION AND SEDIMENT CONTROL WILL BE INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE REGULATIONS OF PRINCE WILLIAM COUNTY.
- AN AIR QUALITY PERMIT WILL BE OBTAINED, IF REQUIRED.
- ANY LIGHTING SHOWN HEREON IS AS SPECIFIED BY THE CLIENT AND IS INCLUDED FOR INFORMATION PURPOSES ONLY, AS DIRECTED BY THE OWNER AND/OR PUBLIC AGENCY REQUIREMENTS. BOWMAN CONSULTING GROUP, LTD. HAS NOT PERFORMED THE LIGHTING DESIGN, AND THEREFORE DOES NOT WARRANT AND IS NOT RESPONSIBLE FOR THE DEGREE AND/OR ADEQUACY OF ILLUMINATION ON THE PROJECT.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER GRAVESITES OR BURIAL PLOTS ON THIS PROPERTY, OTHER THAN THOSE SHOWN ON THESE PLANS.
- ALL ELEVATIONS SHALL BE BASED ON USGS OR USC&GS MEAN SEA LEVEL DATUM.
- ALL EXISTING OVERHEAD UTILITIES SHALL BE PLACED UNDERGROUND UNLESS OTHERWISE NOTED.
- ALL CLEAN-OUTS IN PAVED AREAS SHALL BE TRAFFIC RATED.
- PRESSURE REDUCER VALVES ARE REQUIRED FOR ALL UNITS.

LAND CONSERVATION NOTES

- PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED. THAT, IN THE OPINION OF THE LOCAL PROGRAM ADMINISTRATOR OR HIS DESIGNATED AGENT, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
- SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE SEDIMENT BASIN SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE ANTICIPATED SEDIMENT LOADING FROM THE LAND-DISTURBING ACTIVITY. THE OUTFALL DEVICE OR SYSTEM DESIGN SHALL TAKE INTO ACCOUNT THE TOTAL DRAINAGE AREA FLOWING THROUGH THE DISTURBED AREA TO BE SERVED BY THE BASIN.
- CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- BEFORE NEWLY CONSTRUCTED STORM WATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
- WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
- ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE ADHERED TO.
- THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN A WATERCOURSE IS COMPLETED.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
 - NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
 - RE-STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
 - APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM ADMINISTRATOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- REFER TO SHEET 8 FOR THE EROSION & SEDIMENT CONTROL NARRATIVE.

GENERAL CONSTRUCTION NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT TOWN OF HAYMARKET STANDARDS AND SPECIFICATIONS.
- NOTIFY THE TOWN OF HAYMARKET BUILDING OFFICIAL AT 703-753-2600 MINIMUM 48 HOURS PRIOR TO WHEN WORK IS TO BE STARTED.
- ALL PROPOSED GRADING SHALL RESULT IN SLOPES NO STEEPER THAN 3:1.
- ENGINEERED FILL AND BACKFILL SHALL BE PLACED WITH APPROVED SELECT MATERIALS IN 8-INCH LIFTS. EACH LAYER OF FILL SHALL BE COMPACTED AT OPTIMUM MOISTURE PLUS OR MINUS 2% TO AT LEAST 95% OF THE MAXIMUM FRY DENSITY AS OBTAINED IN ACCORDANCE WITH AASHTO T-99 OR ASTM D-698.
- SUITABLE MATERIALS FOR FILL SHALL INCLUDED CLEAN SOIL OR BANKRUN SAND AND GRAVEL (GW, GM, AND SM), CL, ML, GC, AND SC MATERIALS MAY BE USED IF THE LIQUID LIMIT AND PLASTICITY INDEX ARE LESS THAN 40 AND 20, RESPECTIVELY. MH AND CH SOILS SHALL NOT BE USED FOR FILL MATERIALS. THE FILL MATERIALS SHALL ALSO BE FREE FROM ORGANIC, TOPSOIL, AND ROCK FRAGMENTS LARGER THAN 3 INCHES IN DIAMETER.
- ALL EXISTING IMPROVEMENTS WITHIN LIMIT OF DISTURBANCE SHALL BE REMOVED, UNLESS OTHERWISE NOTED. ALL DEMOLISHED MATERIAL SHALL BE DISPOSED OF AT AN APPROVED OFF-SITE FACILITY.
- ALL CONSTRUCTION GENERATED DEBRIS MUST BE HAULED AWAY BY THE CONTRACTOR OR OWNER.
- TREE PROTECTION FOR ANY TOWN TREE, AS SHOWN ON PLAN, MUST BE INSTALLED PRIOR TO ANY SITE WORK.
- IT IS UNLAWFUL TO PERFORM ANY CONSTRUCTION ABOVE FOUNDATION CORNERS PRIOR TO APPROVAL OF SETBACKS. WORK COMPLETED IN VIOLATION OF THIS REQUIREMENTS IS SUBJECT TO DEMOLITION.
- ALL DUMPSTERS ARE TO BE PLACED ON PRIVATE PROPERTY.
- FRONT ELEVATION CHECKS ARE REQUIRED.
- WALL CHECK SURVEYS ARE REQUIRED AND MUST BE SUBMITTED PRIOR TO CONSTRUCTION ABOVE FOUNDATION CORNERS.
- A CERTIFICATE OF OCCUPANCY IS REQUIRED PRIOR TO OCCUPANCY. ALL REQUIRED DOCUMENTATION AND INSPECTIONS MUST BE SUBMITTED/COMPLETED BEFORE THE TOWN OF HAYMARKET WILL ISSUE A CERTIFICATE OF OCCUPANCY.



July 6, 2018

Mr. David Leake
Mayor
Town of Haymarket
P.O. Box 1230
Haymarket, VA 20168

Re: 6675 Fayette Street
Request for Waiver from Landscaping Buffer Yard Requirement

Dear Mayor Leake:

The Applicant formally requests reprieve from Section 58-17.11 of the Town Code and propose an alternative buffer yard design in accordance to Section 58-17.8 (c) of the Town Code. Per Section 58-17.11 of the Town Code, a Developer is required to provide a 25' Transparent Screening (TS) buffer yard between R-1 and B-1 uses. Instead, the Applicant proposes a board-on-board fence six feet in height along the rear and side perimeter of the lots, in addition to, four deciduous canopy trees per lot located in a 10' rear buffer yard. The proposed alternative buffer yard would, in fact, match the more stringent character and intent of an Opaque Screening (OS).

We trust you will find these changes to the landscape buffer sufficient. If you have any comments or questions, please feel free to contact me at 703-464-1000.

Very truly yours,



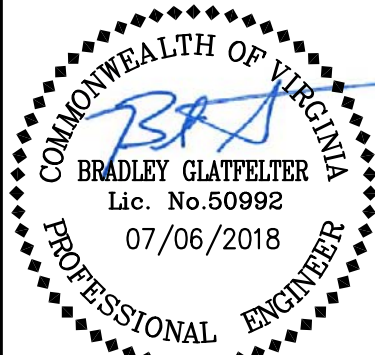
Brad Glatfelter, P.E.
Principal

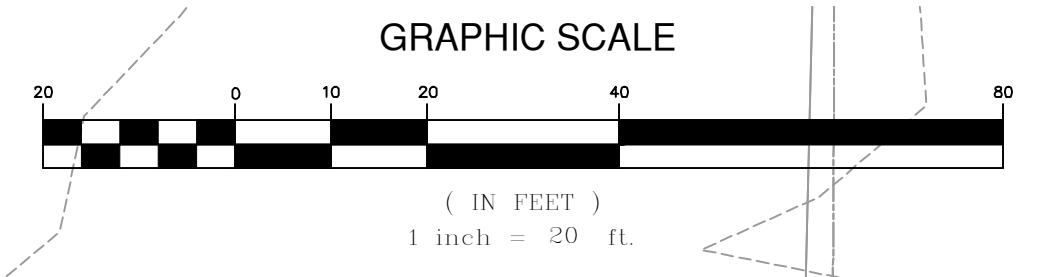
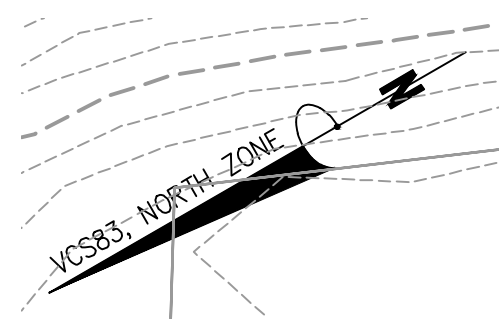
14020 Thunderbolt Place, Suite 300, Chantilly, Virginia 20151
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GENERAL NOTES
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
PRINCE WILLIAM COUNTY, VIRGINIA
TOWN OF HAYMARKET

| | |
|---|------------------|
| SP2018-001 COUNTY PROJECT NUMBER | |
|  | |
| PLAN STATUS | |
| 06/06/18 | 1ST SUBMISSION |
| 07/10/18 | 2ND SUBMISSION |
| DATE | DESCRIPTION |
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: N/A V: N/A |
| JOB No. | 00396-01-001 |
| DATE : | JUNE 2018 |
| FILE No. | 003096-D-CP-001 |
| SHEET | 2 OF 20 |



STORM SEWER TABLE

- EX 1097 END PIPE
OUT = 368.25 (12"RCP FR 1098)
- EX 1098 END PIPE
IN = 368.35 (12"RCP TO 1097)
- EX 1075 END PIPE
OUT = 369.53 (12"DIP FR 1074)
- EX 1074 END PIPE
IN = 370.09 (12"DIP TO 1075)
- EX 1071 END PIPE
OUT = 372.04 (12"CMP FR 1066)
- EX 1069 END PIPE
IN = 372.40 (12"CMP TO 1071)
- EX 1065 END PIPE
OUT = 372.93 (8"CMP FR 1064)
- EX 1064 END PIPE
IN = 372.95 (8"CMP TO 1065)

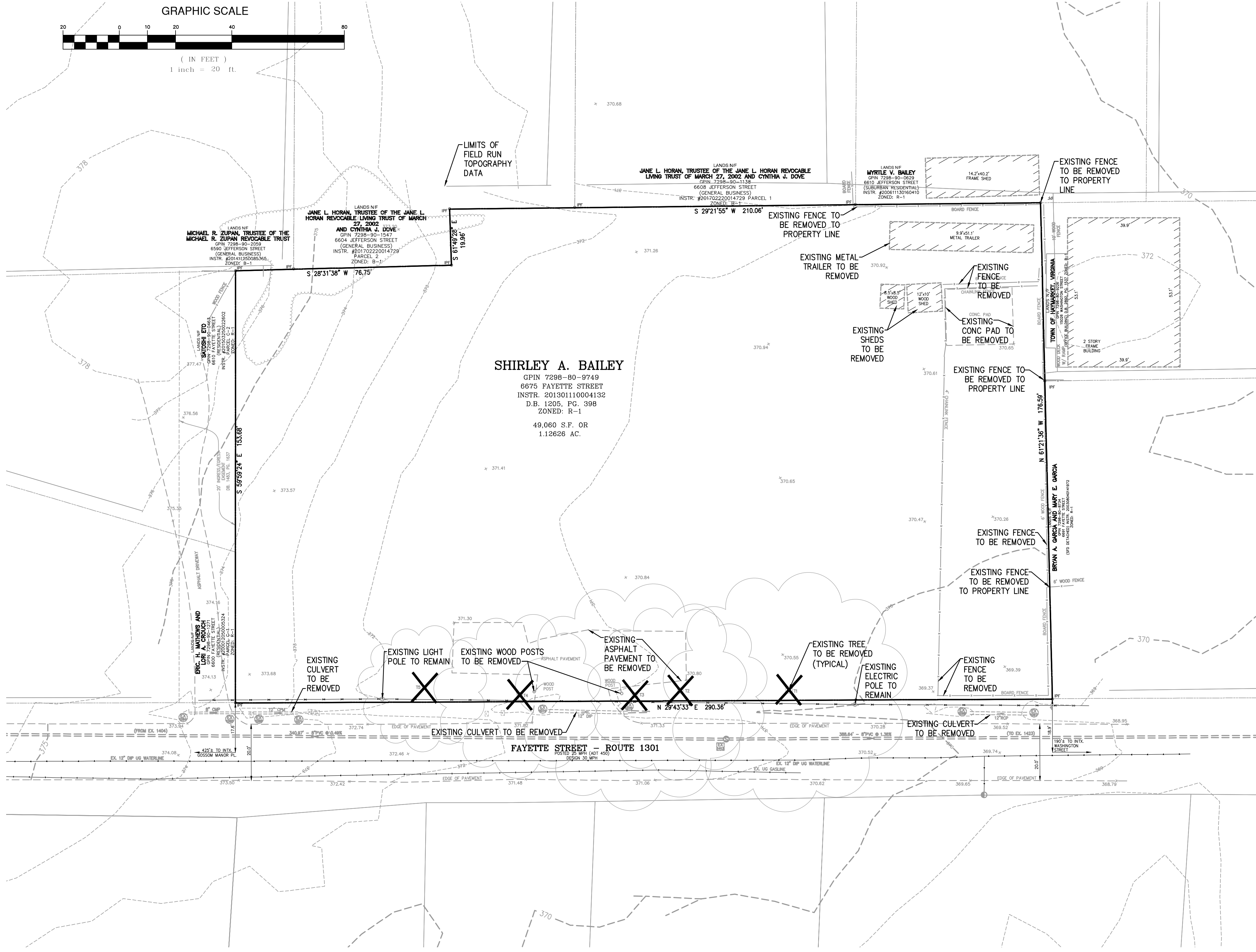
SANITARY SEWER TABLE

- EX 1404 MANHOLE TOP = 375.10
OUT = 362.50 (8"PVC TO 1413)
- EX 1413 MANHOLE TOP = 371.21
IN = 360.83 (8"PVC FR 1404)
OUT = 360.63 (8"PVC TO 1423)
- EX 1423 MANHOLE TOP = 365.90
IN = 355.33 (8"PVC FR 1413)

LEGEND

- TREE
- SIGN
- ⊙ WATER METER
- ⊙ WATER VALVE
- ⊙ MAILBOX
- ⊙ SANITARY MANHOLE
- ⊙ LIGHT POLE
- ⊙ DUCTILE IRON PIPE
- ⊙ RCP REINFORCE CONCRETE PIPE
- ⊙ CMP CORRUGATED METAL PIPE
- ⊙ PVC POLYVINYL CHLORIDE PIPE
- ⊙ IPF IRON PIPE FOUND
- FENCE
- OHE OVERHEAD ELECTRIC
- G UNDERGROUND GAS
- W UNDERGROUND WATER LINE
- TREELINE

NOTE: CONTRACTOR TO RELOCATE EXISTING MAILBOXES ON PROJECT SITE ACROSS THE STREET TO THE APPROPRIATE CORRESPONDING PROPERTIES. CONTRACTOR TO COORDINATE WITH USPS POST MASTER.

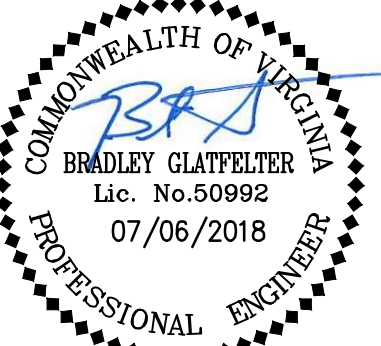


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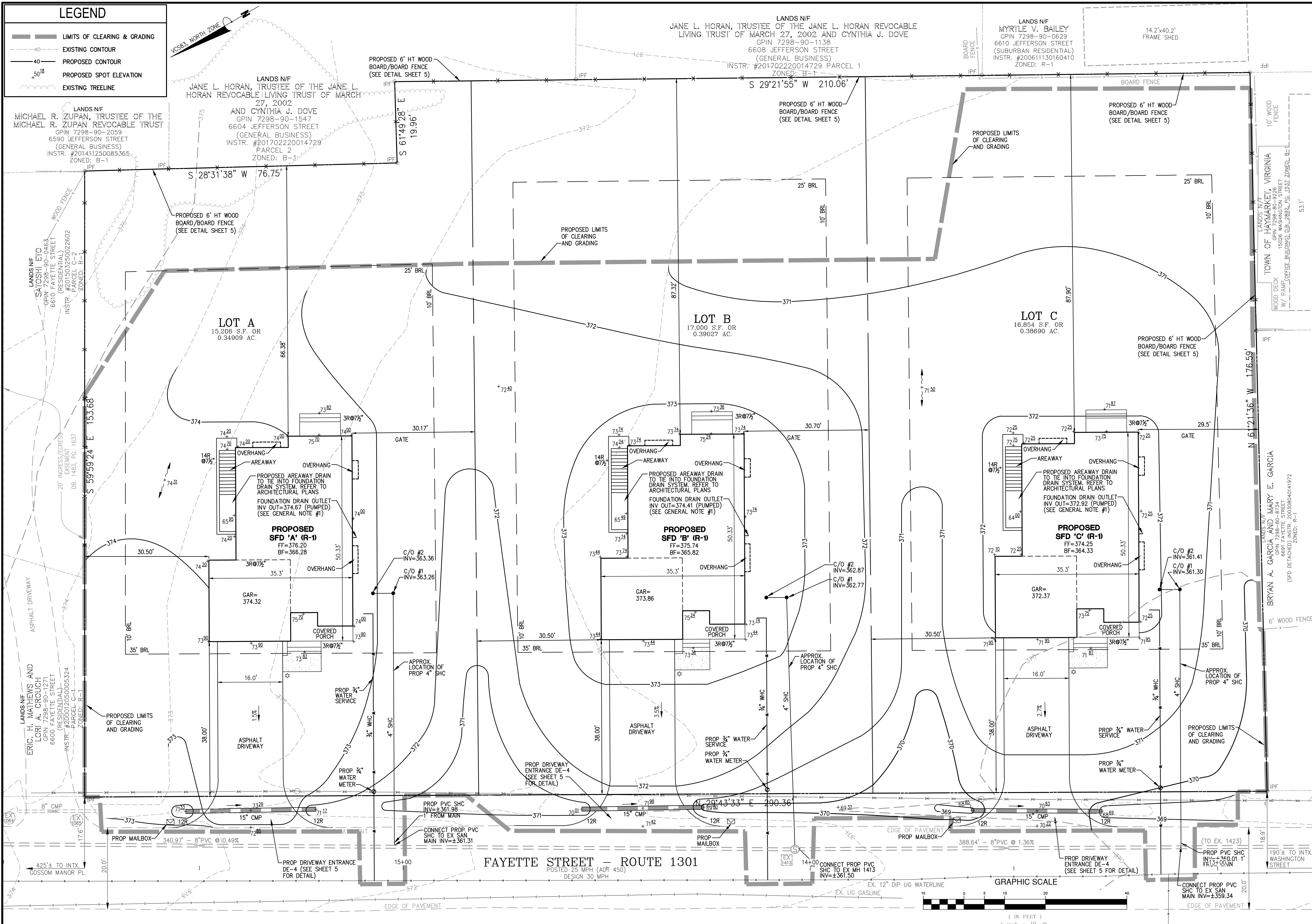
EXISTING CONDITIONS AND DEMOLITION PLAN
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
PRINCE WILLIAM COUNTY, VIRGINIA
TOWN OF HAYMARKET

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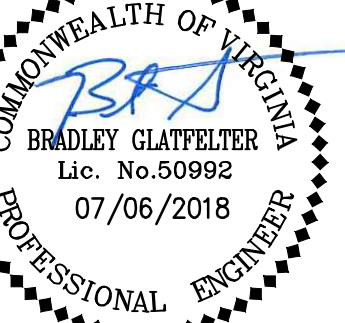


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GRADING PLAN
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
 PRINCE WILLIAM COUNTY, VIRGINIA

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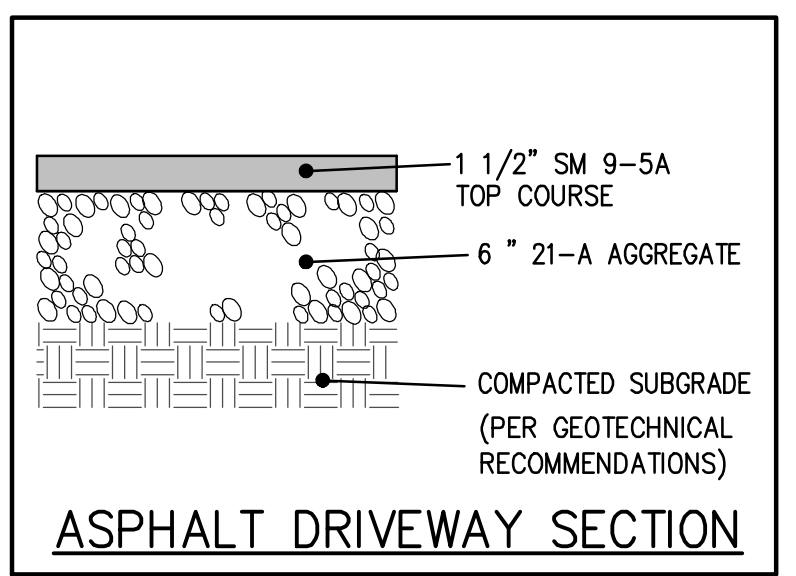
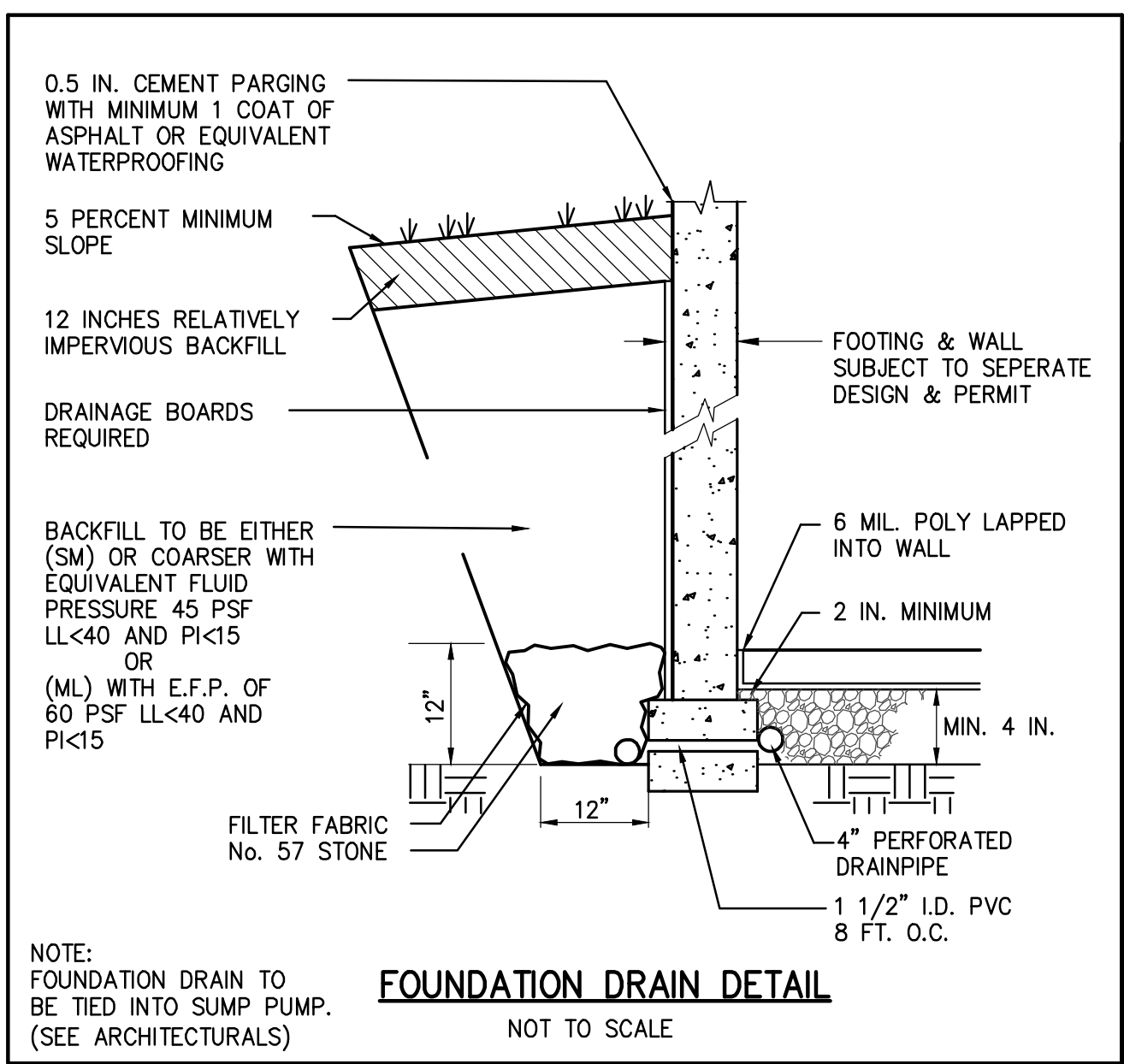


PLAN STATUS
 06/06/18 1ST SUBMISSION
 07/10/18 2ND SUBMISSION

| DATE | DESCRIPTION |
|----------|----------------|
| 06/06/18 | 1ST SUBMISSION |
| 07/10/18 | 2ND SUBMISSION |

| JOB No. | DESCRIPTION |
|--------------|-----------------------|
| 00396-01-001 | RESIDENTIAL SITE PLAN |

| DATE | DESCRIPTION |
|----------------|-------------|
| JUNE 2018 | DATE |
| 00396-D-CP-001 | FILE No. |

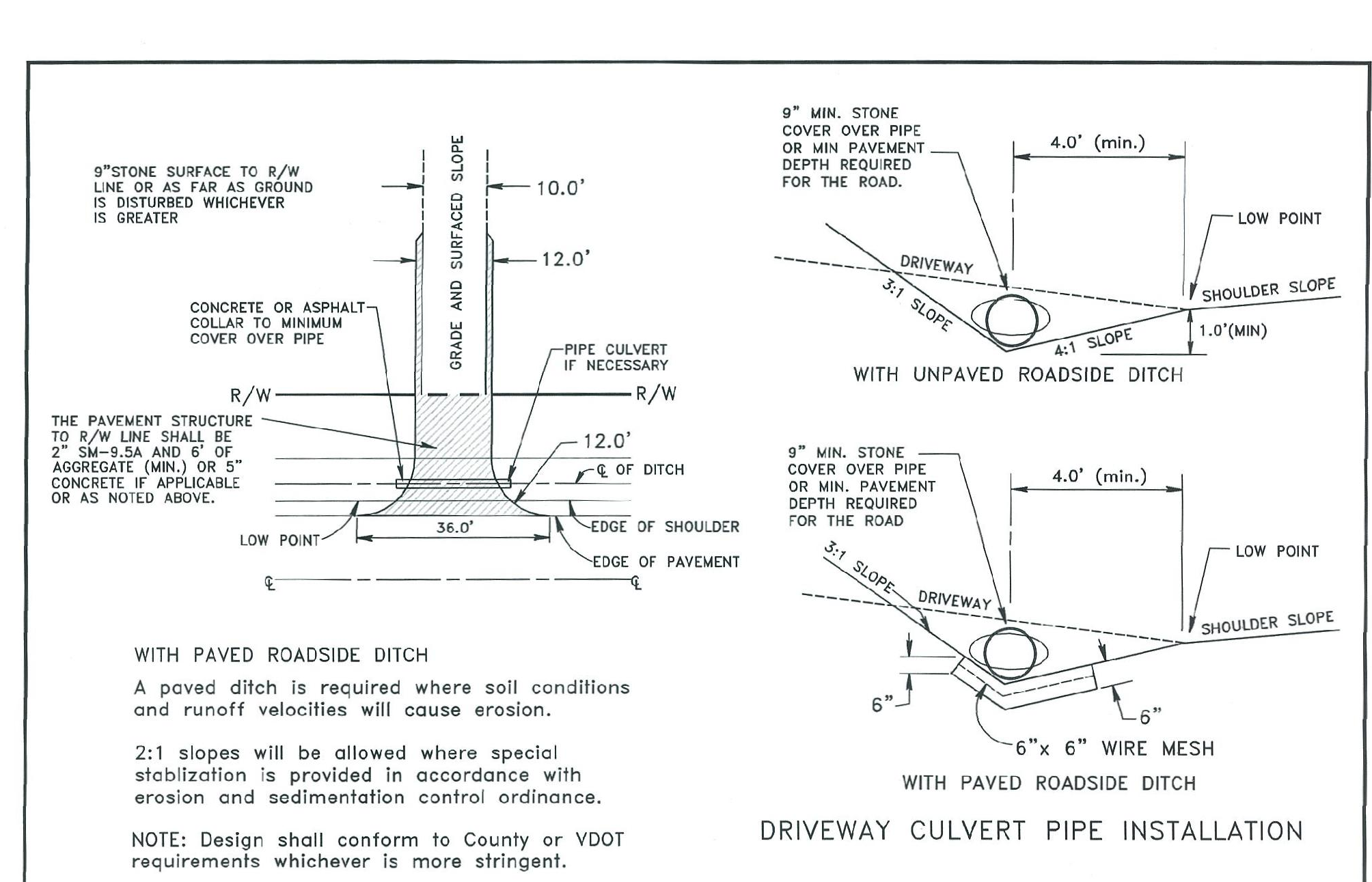
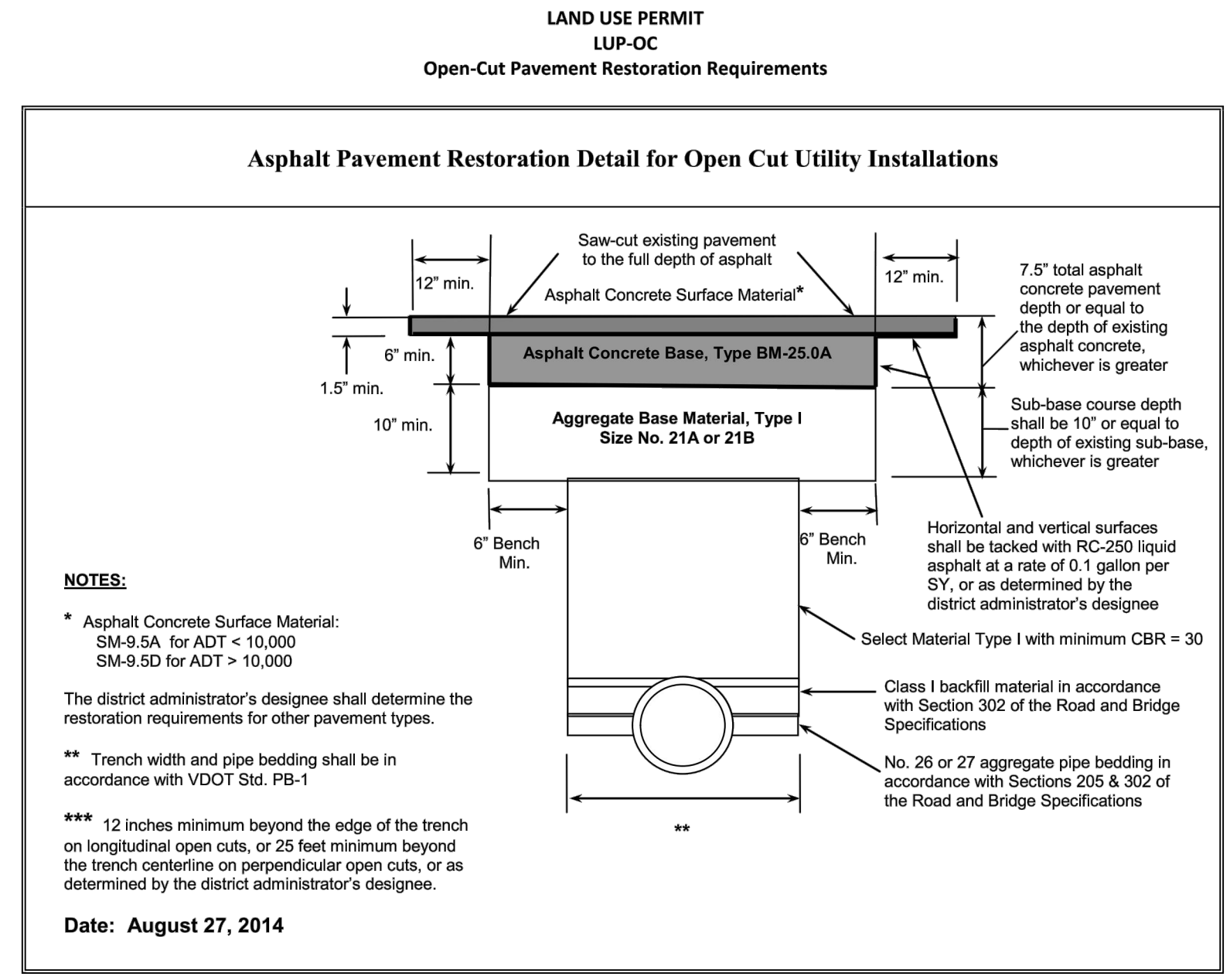


WATER SERVICE NOTES:

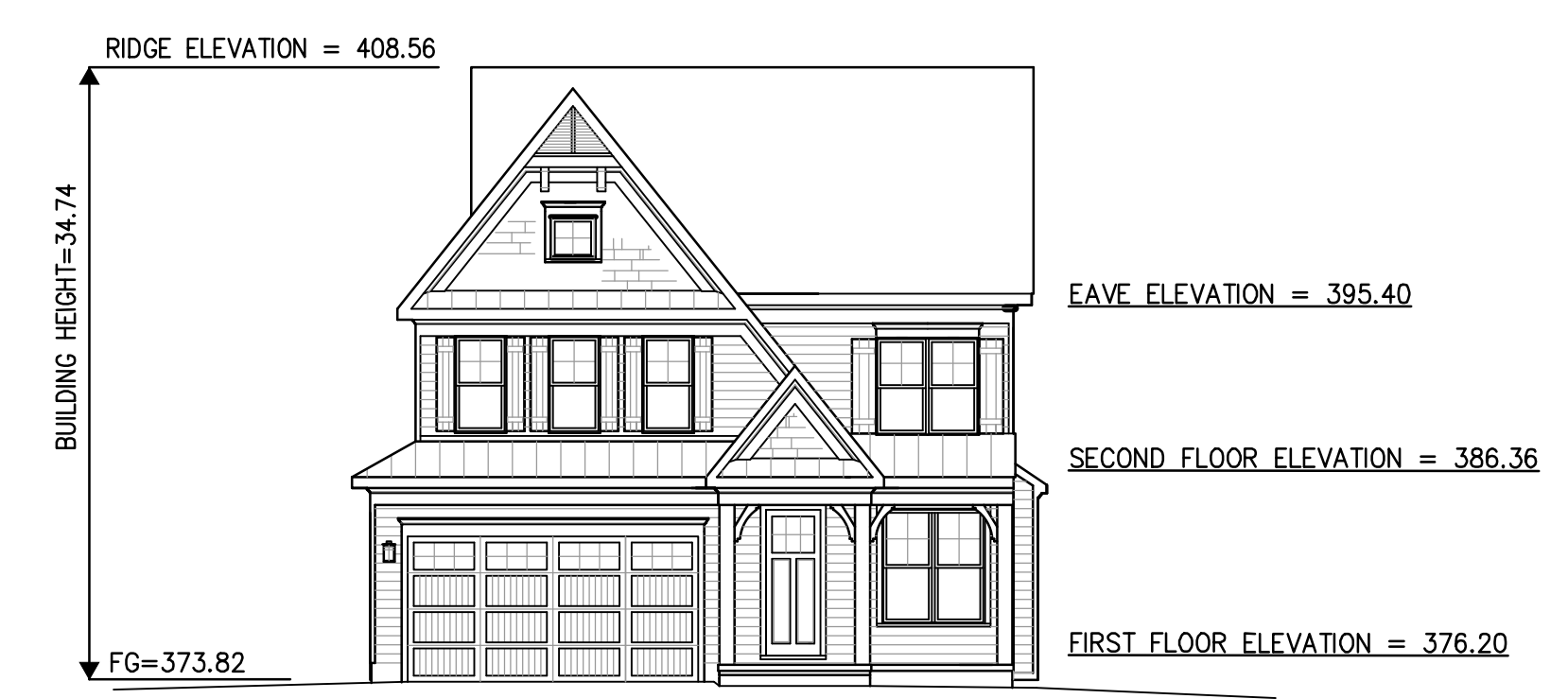
- ALL NEW WATER LATERALS SHALL CONSIST OF METHODS AND MATERIALS IN ACCORDANCE WITH THE PRINCE WILLIAM COUNTY SERVICE AUTHORITY CONSTRUCTION SPECIFICATIONS AND DETAILS, LATEST EDITION.

SANITARY LATERAL NOTES:

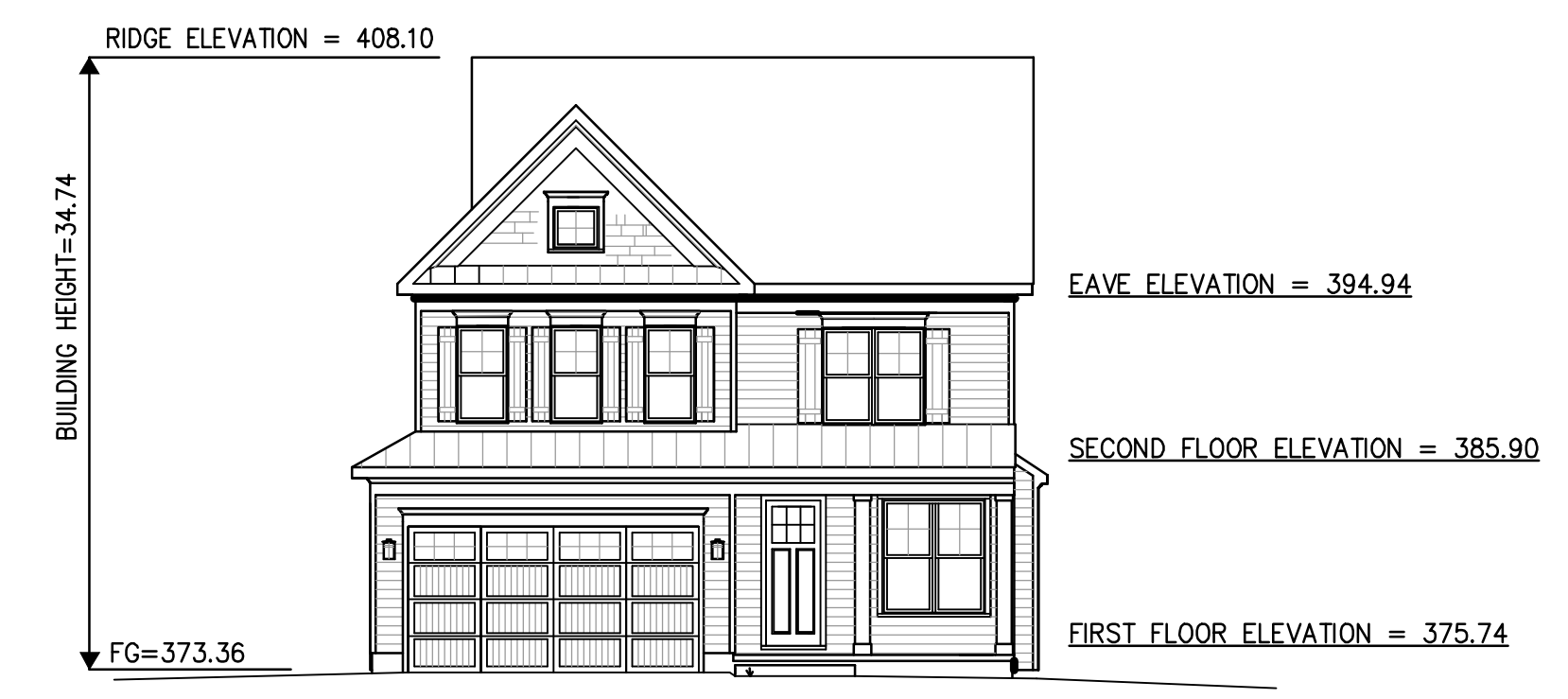
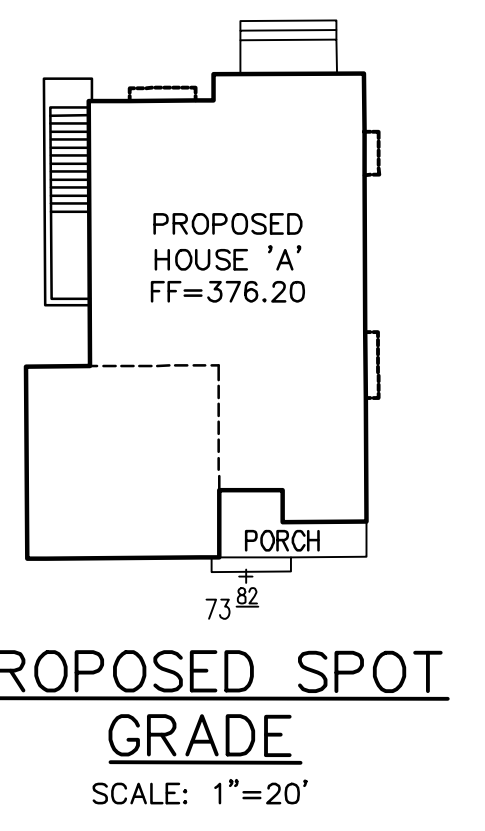
- CONTRACTOR TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATION OF EXISTING SANITARY MAIN AND ENSURE EXISTING LOCATION AND MATERIAL CONDITION WILL BE ACCEPTABLE FOR USE WITH NEW BUILDING CONSTRUCTION AND PROPOSED SANITARY CONNECTION, PRIOR TO CONSTRUCTION.
- ALL NEW SANITARY LATERALS SHALL CONSIST OF METHODS AND MATERIALS IN ACCORDANCE WITH THE PRINCE WILLIAM COUNTY SERVICE AUTHORITY CONSTRUCTION SPECIFICATIONS AND DETAILS, LATEST EDITION.



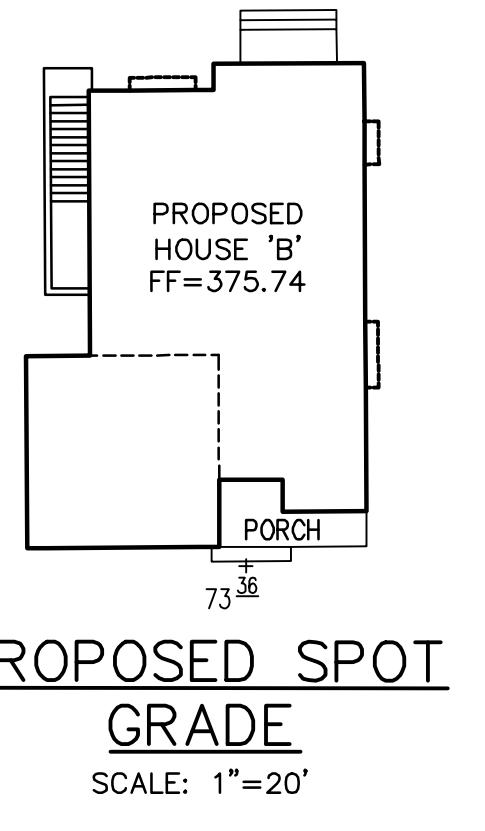
| | | | | |
|------------|------|-----------------------------------|---|--------------|
| Detail No. | DE-4 | COUNTY OF PRINCE WILLIAM VIRGINIA | DRIVEWAY ENTRANCE WITH DITCH SECTION SHEET 1 OF 2 | Date 7/15/14 |
| 650.45 | | | | |



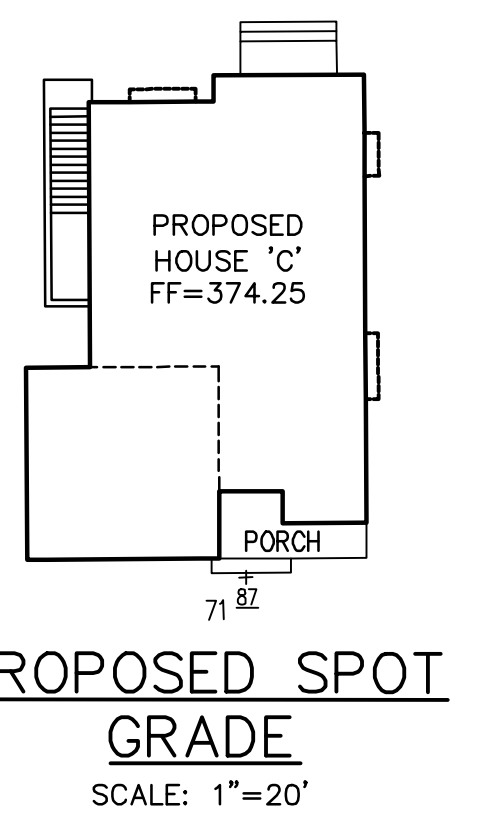
| First Floor Elevation | Finished Grade Elevation | Peak Roof (Highest Ridge) Elevation | Proposed Dwelling Height |
|--------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 376.20 | 373.82 | 408.56 | 34.74 |
| Dwelling Height Permitted = 35.00 ft | | | Dwelling Height Proposed = 34.74 ft |



| First Floor Elevation | Finished Grade Elevation | Peak Roof (Highest Ridge) Elevation | Proposed Dwelling Height |
|--------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 375.74 | 373.36 | 408.10 | 34.74 |
| Dwelling Height Permitted = 35.00 ft | | | Dwelling Height Proposed = 34.74 ft |



| First Floor Elevation | Finished Grade Elevation | Peak Roof (Highest Ridge) Elevation | Proposed Dwelling Height |
|--------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 374.25 | 371.87 | 406.61 | 34.74 |
| Dwelling Height Permitted = 35.00 ft | | | Dwelling Height Proposed = 34.74 ft |



NOTE: LOT C TO HAVE FRONT PORCH RAILING PER ARB MEETING ON 06/20/2018

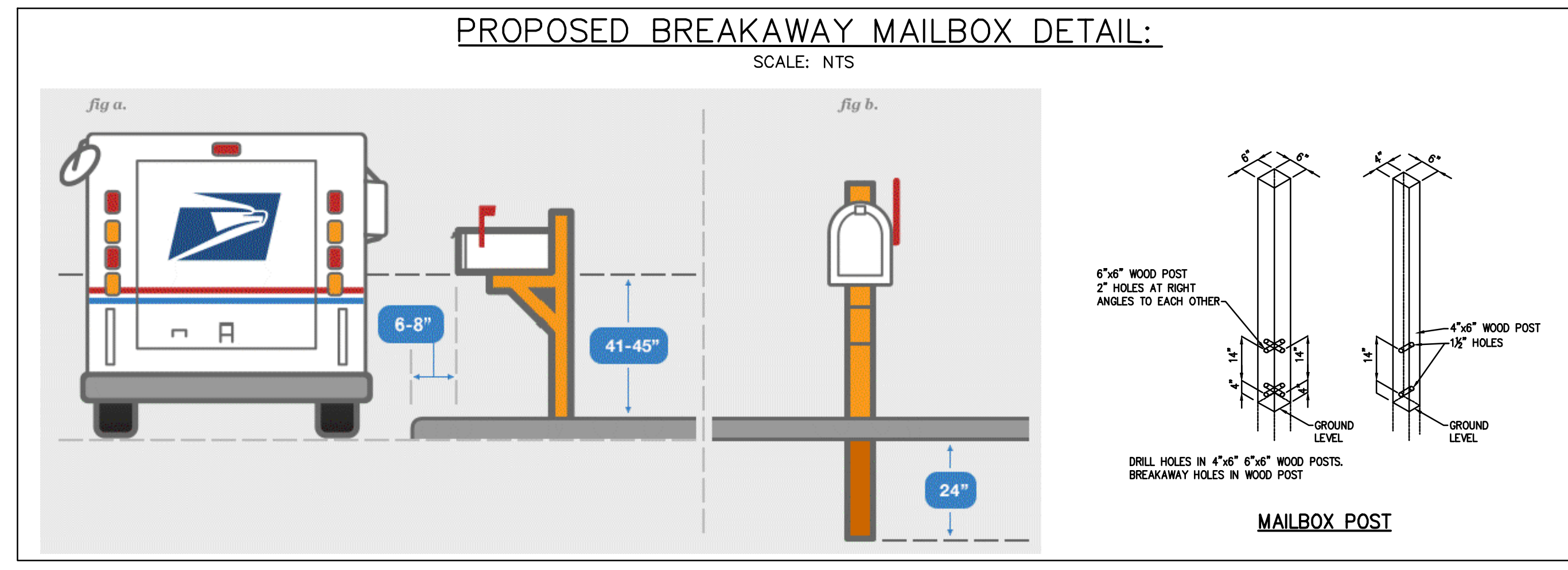
GENERAL NOTES:

- All construction methods and materials shall conform to current VDOT standards
- Concrete pipe or corrugated metal pipe may be used. The type and size shall be indicated on the plans.
- Driveways shall be surfaced from edge of pavement to property line with the same type of surfacing used on the street.
- All driveway grades shall slant back of the shoulder line.
- In cut sections, the sides of the driveway shall be graded to a maximum 3:1 slope.
- Lengths of culverts shall be a minimum of twenty feet (20 ft.), if not shown on plans.
- For dimension of S, see Standard RL - 1, and RM - 1.
- Ditch line may be moved back to provide required cover. The transition of the ditch line should be smooth with a minimum length of ten feet (10 ft.).
- This detail shall only be used for entrances on local streets with projected traffic counts not exceeding 1000 vpd. Driveway entrance PE-1 of VDOT Road and Bridge Standard Manual shall be used on streets with projected traffic counts exceeding 1000 vpd but not more than 4000 vpd.
- This driveway entrance shall be required on rural residential developments with ditch section paved roadways and where the minimum lot size is one (1) acre or more. Paving of driveway entrance shall be per Detail 650.01 of the DCSM and as shown.

DRIVEWAY CLEARANCES:

- Grading plans must provide for adequate vehicular clearance for driveway approach, departure and breakover transitions. Driveway profiles are required where steep grades prevail. Driveways shall be graded to ensure positive drainage away from the house.
- Final pavement grades of driveways must be constructed on both ends flush, level, smooth and even with the garage approach and the driveway entrance aprons. The jointing of concrete and asphalt pavement and/or of concrete shall be done in a manner that will result in a smooth connection without a noticeable grade differential or lift. The grading must also provide positive drainage away from the garage.

| | | | | |
|------------|------|-----------------------------------|---|--------------|
| Detail No. | DE-4 | COUNTY OF PRINCE WILLIAM VIRGINIA | DRIVEWAY ENTRANCE WITH DITCH SECTION SHEET 2 OF 2 | Date 7/15/14 |
| 650.45 | | | | |



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Fax: (703) 481-9720
www.bowmanconsulting.com

GRADING NOTES AND DETAILS
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
PRINCE WILLIAM COUNTY, VIRGINIA

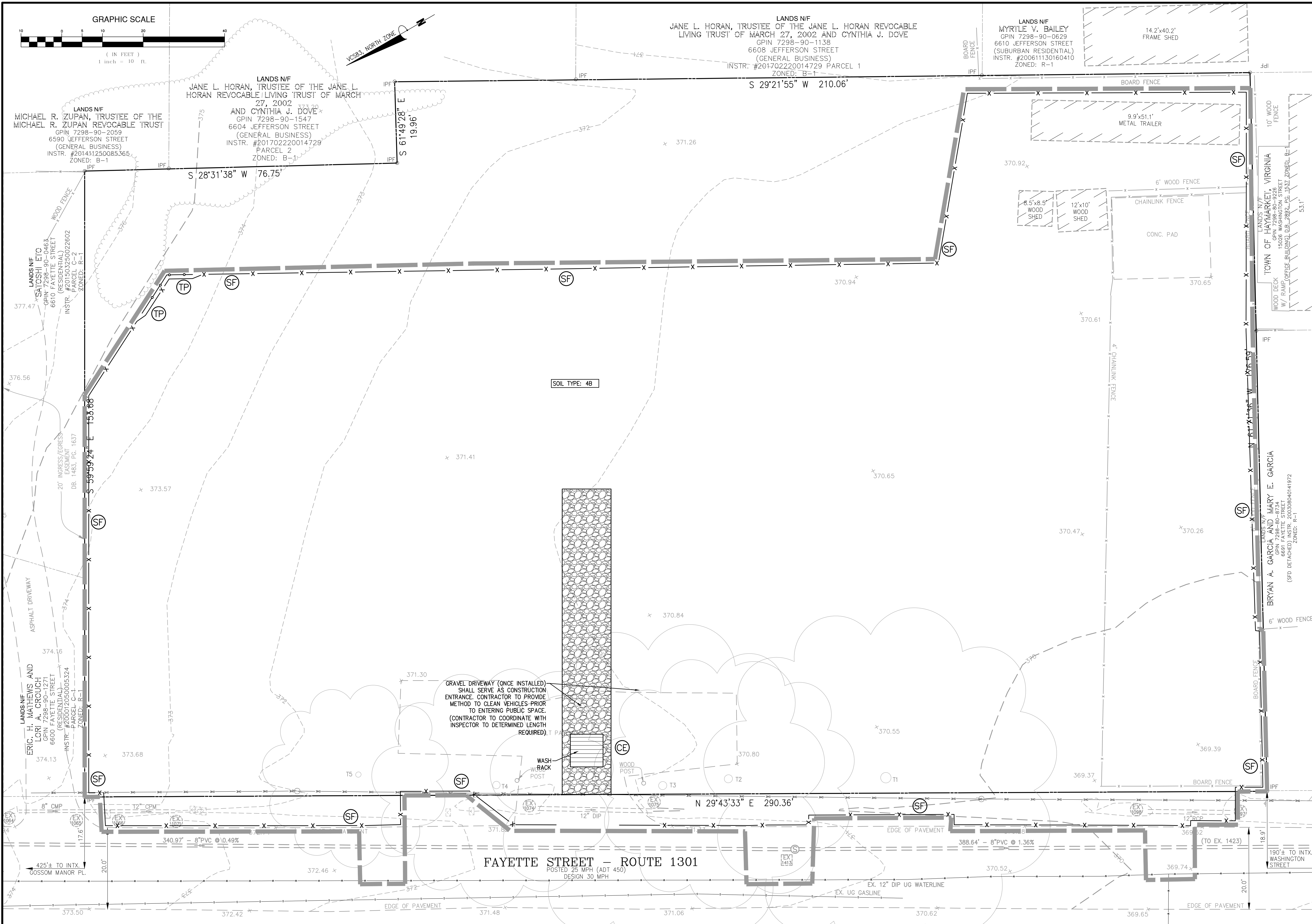
SP2018-001
COUNTY PROJECT NUMBER

COMMONWEALTH OF VIRGINIA
BRADLEY CLATFELTER
Lic. No. 50992
07/06/2018
PROFESSIONAL ENGINEER

PLAN STATUS
06/06/18 1ST SUBMISSION
07/10/18 2ND SUBMISSION

| DATE | DESCRIPTION |
|----------|------------------|
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: 1"=10' V: N/A |
| JOB No. | 00396-01-001 |
| DATE | JUNE 2018 |
| FILE No. | 003096-D-CP-001 |

5 OF 20
SHEET



Bowman

C O N S U L T I N G

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 14200 Thunderbolt Place
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 Phone: (703) 464-1000
 Fax: (703) 481-9720
 www.bowmanconsulting.com
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EROSION AND SEDIMENT CONTROL PLAN PHASE 1
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
 PRINCE WILLIAM COUNTY, VIRGINIA

SP2018-001
 COUNTY PROJECT NUMBER

COMMONWEALTH OF VIRGINIA

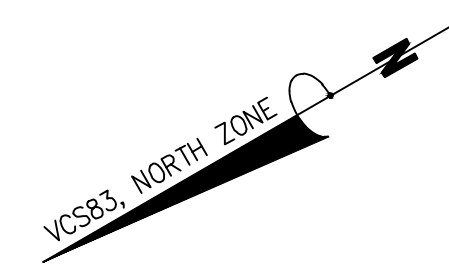
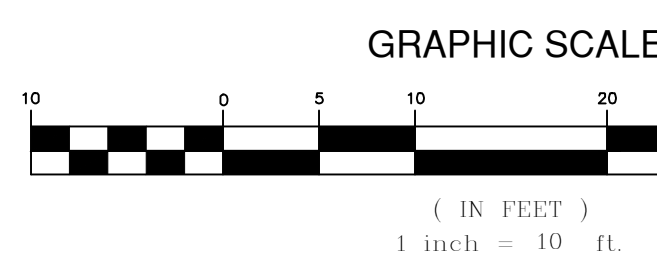
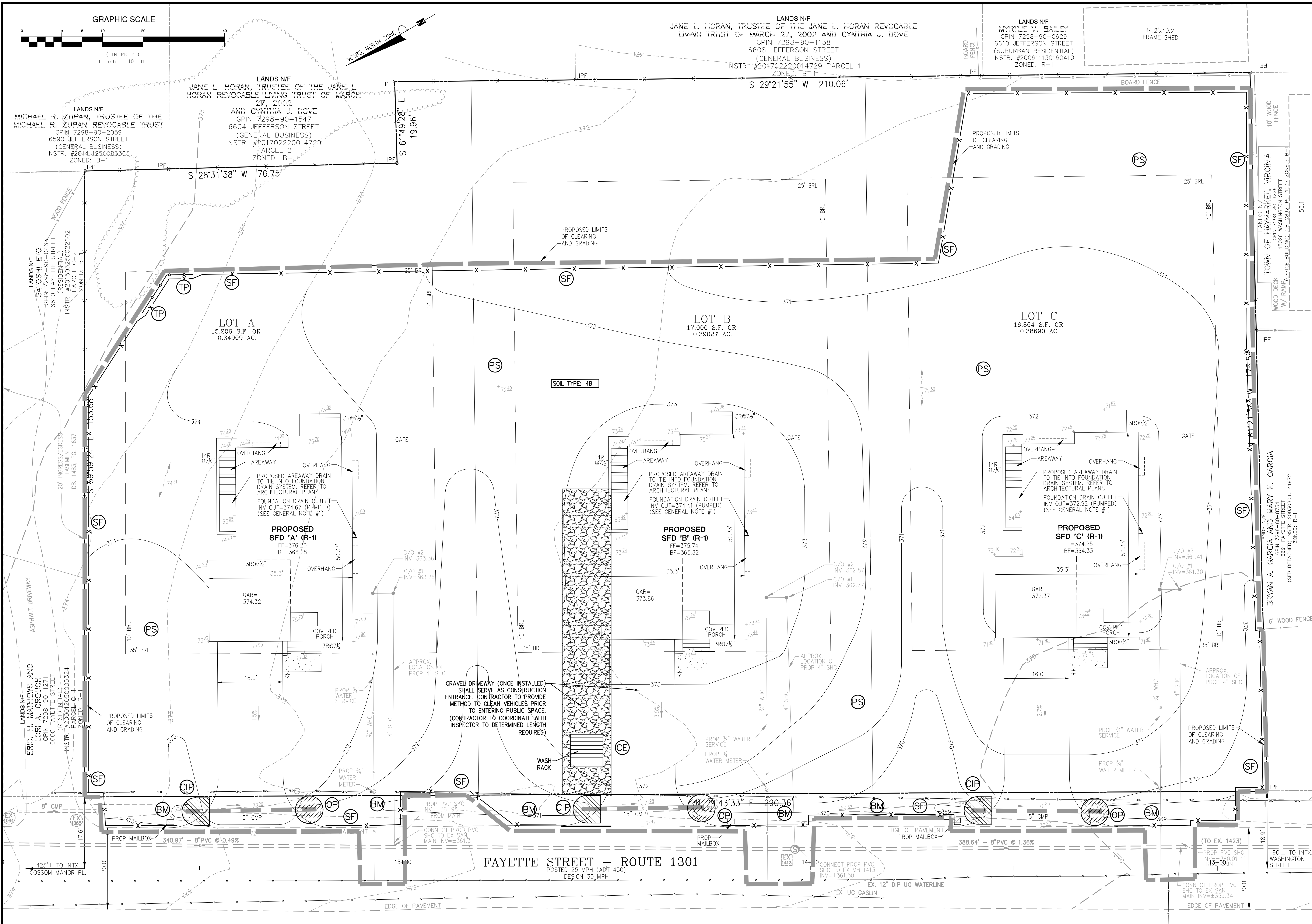
BRADLEY CLATFELTER
 Lic. No. 50992
 07/06/2018

PROFESSIONAL ENGINEER

PLAN STATUS
 06/06/18 1ST SUBMISSION
 07/10/18 2ND SUBMISSION

| DATE | DESCRIPTION |
|--------------|---------------------|
| SH/KF DESIGN | KF DRAWN |
| SCALE | H: 1"=10' V: N/A |
| JOB No. | 00396-01-001 |
| DATE | JUNE 2018 |
| FILE No. | 003096-D-CP-001 |

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SHEET



LANDS N/F
JANE L. HORAN, TRUSTEE OF THE JANE L. HORAN REVOCABLE LIVING TRUST OF MARCH 27, 2002 AND CYNTHIA J. DOVE
GPIN 7298-90-1138
6608 JEFFERSON STREET
(GENERAL BUSINESS)
INSTR. #201702220014729 PARCEL 1
ZONED: B-1

LANDS N/F
MYRTLE V. BAILEY
GPIN 7298-90-0629
6610 JEFFERSON STREET
(SUBURBAN RESIDENTIAL)
INSTR. #200611130160410
ZONED: R-1

LANDS N/F
JANE L. HORAN, TRUSTEE OF THE JANE L. HORAN REVOCABLE LIVING TRUST OF MARCH 27, 2002 AND CYNTHIA J. DOVE
GPIN 7298-90-1547
6604 JEFFERSON STREET
(GENERAL BUSINESS)
INSTR. #201702220014729 PARCEL 2
ZONED: B-1

LANDS N/F
MICHAEL R. ZUPAN, TRUSTEE OF THE MICHAEL R. ZUPAN REVOCABLE TRUST
GPIN 7298-90-2059
6590 JEFFERSON STREET
(GENERAL BUSINESS)
INSTR. #201411250085365
ZONED: B-1

LOT A
15,206 S.F. OR
0.34909 AC.

LOT B
17,000 S.F. OR
0.39027 AC.

LOT C
16,854 S.F. OR
0.38690 AC.

SOIL TYPE: 4B

Bowman

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EROSION AND SEDIMENT CONTROL PLAN PHASE 2
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
TOWN OF HAYMARKET
PRINCE WILLIAM COUNTY, VIRGINIA

SP2018-001
COUNTY PROJECT NUMBER

BRADLEY CLATFELTER
Lic. No. 50992
07/06/2018
PROFESSIONAL ENGINEER

| PLAN STATUS | | |
|-------------|----------------|--|
| 06/06/18 | 1ST SUBMISSION | |
| 07/10/18 | 2ND SUBMISSION | |

| DATE | DESCRIPTION |
|----------|---------------------|
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: 1"=10' V: N/A |
| JOB No. | 00396-01-001 |
| DATE | JUNE 2018 |
| FILE No. | 003096-D-CP-001 |

7 OF 20
SHEET

SILTATION AND EROSION CONTROL NARRATIVE

DESCRIPTION
THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT A (3) SINGLE DETACHED FAMILY DWELLINGS, A DRIVEWAY AND A GRADED GRASSY LAWN AND ASSOCIATED LAND DISTURBANCE ACTIVITIES. THE TOTAL SITE AREA IS 1.1263 ACRES. THE DISTURBED AREA IS APPROXIMATELY 0.99 ACRES.

EXISTING SITE CONDITIONS
THE EXISTING GROUND SLOPES FROM THE WEST SIDE OF THE SITE TOWARD THE EAST SIDE. IN THE EXISTING CONDITION, SHEET FLOWS ACROSS THE LOT FROM THE WEST TO THE EAST WHERE IT OUTFALLS ONTO EASTERN BOUNDARY OF THE LOT.

EROSION AND SILTATION CONTROL MEASURES
BECAUSE OF THE SIZE OF THE SITE, SILTATION MEASURES WILL BE THE USE OF SILT FENCE AND A TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON THE PLAN.

- STRUCTURAL PRACTICES
1. TEMPORARY CONSTRUCTION ENTRANCE - 3.02
A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED IN THE PROPOSED DRIVEWAY. DURING MUDDY CONDITIONS, CONSTRUCTION VEHICLES SHALL WASH THEIR WHEELS BEFORE LEAVING THE SITE.
2. SILT FENCE - 3.05
SYNTHETIC FILTER FABRIC SHALL BE PLACED AT THE LIMITS OF CLEARING AND GRADING WHERE INDICATED ON DRAWINGS.
3. TREE PROTECTION - SPEC 3.38 AS REVISED (SEE DETAIL ON SHEET 11)
TREE PROTECTION SHALL BE PLACED WHERE INDICATED ON DRAWINGS TO PROTECT TREES TO BE SAVED.
4. TEMPORARY SEEDING - 3.31
ALL DENUDED AREAS WHICH ARE PLANNED TO BE LEFT DORMANT FOR MORE THAN 7 DAYS SHALL BE SEED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. THE SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF THE YEAR WHEN TEMPORARY SEEDING IS APPLIED. ALL TEMPORARY SEEDING SHALL BE DONE IN ACCORDANCE WITH SECTION 3.31 OF THE VESCH.
5. PERMANENT SEEDING - 3.32
ALL DENUDED AREAS SHALL BE SEED WITH PERMANENT VEGETATION IN ACCORDANCE WITH THE LANDSCAPE PLAN MADE PART OF THE CONSTRUCTION SITE PLAN. THE PERMANENT SEEDING SHALL BE APPLIED AT THE EARLIEST OPPORTUNITY TO PERMANENTLY STABILIZE DISTURBED AREAS AND TO REDUCE EROSION AND DECREASE SEDIMENT YIELD FROM THE DISTURBED AREAS. ALL PERMANENT SEEDING SHALL BE DONE IN ACCORDANCE WITH SECTION 3.32 OF THE VESCH.

PERMANENT STABILIZATION
ALL AREAS DISTURBED BY CONSTRUCTION OPERATIONS AND NEWLY GRADED AREAS SHALL BE SODDED ON 3:1 SLOPES AND SEEDED ON ALL OTHER AREAS. IF SEEDING AND SODDING CANNOT BE ACCOMPLISHED DURING SCHEDULED TIME, PROTECT DISTURBED AREAS WITH MULCH OR JUTE MESH. RECOMMENDED SEEDING AND SODDING TIME SHALL BE IN SPRING BETWEEN FEBRUARY 1 AND APRIL 30 OR IN FALL BETWEEN SEPTEMBER 1 AND OCTOBER 15. NO SEDIMENT CONTROL DEVICES SHALL BE REMOVED WITHOUT APPROVAL OF THE TOWN OF HAYMARKET SITE INSPECTOR. SILT FENCES SHALL BE KEPT AS CLOSE AS POSSIBLE TO THE LIMITS OF CLEARING AND GRADING. SILT FENCES WILL BE CLEANED WHEN THE SILT REACHES HALF THE HEIGHT OF THE FENCE.

- LAND CONSERVATION NOTES
1. NO DISTURBED AREA SHALL BE DENUDED FOR MORE THAN 7 CALENDAR DAYS UNLESS IT IS CONTINUOUSLY WORKED ON.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STOP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS.
3. ALL STORM AND SANITARY SEWER LINES NOT IN STREET ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET ARE TO BE OPEN AT ONE TIME. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHED IS TO BE COMPACTED, SEEDED AND MULCHED WITHIN 5 DAYS AFTER BACKFILL.
4. ALL TEMPORARY EARTH BERMS, DIVERSIONS, AND SEDIMENT CONTROL DAMS ARE TO BE MULCHED AND SEEDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW AND HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL SOIL STOCKPILES. DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION DEVICE, MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION.
5. ANY DISTURBED AREA NOT COVERED BY NOTE #1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOVEMBER 1ST, OR DISTURBED AFTER THAT DATE, IS TO BE MULCHED WITH HAY OR STRAW MULCH AT THE RATE OF TWO TONS PER ACRE AND OVER-SEEDED NO LATER THAN MARCH 15.
6. AT THE COMPLETION OF THE CONSTRUCTION PROJECT AND PRIOR TO THE RELEASE OF THE BOND, ALL TEMPORARY SEDIMENT AND EROSION CONTROLS SHALL BE REMOVED AND ALL DISTURBED AREAS SHALL BE STABILIZED. THE E&S MEASURES CANNOT BE REMOVED WITHOUT THE INSPECTOR'S APPROVAL.
7. PERMANENT SEEDING: PREPARATION, SEEDING, FERTILIZING AND MULCHING IS TO BE IN ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" 1992 EDITION.

STOCKPILE MEASURES

- 1. ALL SPOILS WILL BE IMMEDIATELY HAULED OFFSITE.
2. THE GRADING/EXCAVATION CONTRACTOR FOR THE SUBJECT SITE IS REQUIRED TO NOTIFY, IN WRITING, THE ASSIGNED SITE INSPECTOR REGARDING ANY EXCESS MATERIAL PROPOSED TO BE HAULED OFFSITE PRIOR TO HAULING. THE NOTIFICATION MUST INDICATE THE QUANTITY OF MATERIAL TO BE MOVED OFFSITE, IDENTIFICATION OF THE RECEIVING SITE WHERE THE EXCESS WILL BE TAKEN, AND ALL INFORMATION NECESSARY TO SHOW THAT SUCH RECEIVING SITE HAS BEEN PROPERLY PERMITTED AND HAS E&S CONTROLS INSTALLED.

STORM WATER RUNOFF CONSIDERATIONS
RUNOFF DURING CONSTRUCTION SHALL BE MANAGED BY THE USE OF SILT FENCES. RUNOFF AFTER CONSTRUCTION WILL SHEET FLOW AND FOLLOW THE EXISTING DRAINAGE PATTERNS. THE RUNOFF LEAVING THE SITE WILL NOT HAVE AN ADVERSE IMPACT ON THE DOWNSTREAM ADJACENT PROPERTIES.

CALCULATIONS
SEE THIS SHEET FOR RELEVANT CALCULATIONS.

ADJACENT AREAS
THE SITE WILL DISCHARGE ALONG THE EXISTING NATURAL DRAINAGE PATTERS AND EXITS THE SITE ALONG THE SOUTHWEST SIDE PROPERTY LINE.

SOILS
THE SITES SOIL CONSISTS OF ARCOLA SILT LOAM, PER USGS SOILS MAP SOIL ID #4B (DESCRIBED BELOW).

(4B) ARCOLA SILT LOAM - THIS MODERATELY DEEP AND WELL DRAINED. THEY FORMED IN MATERIAL WEATHERED FROM TRIASSIC AND JURASSIC INTERBEDDED SILTSTONE, SHALE AND FINE GRAINED SANDSTONE. THE ARCOLA SOILS ARE ON UPLAND RIDGE CRESTS AND SIDE SLOPES IN THE CULPEPER BASIN. SLOPES RANGE FROM 2 TO 7 PERCENT. HYDROLOGIC SOIL GROUP 'C'.

CRITICAL AREAS
THERE ARE NO "CRITICAL AREAS" ON THIS SITE.

MAINTENANCE
SILT FENCE PERIMETER SHALL BE CHECKED DAILY AND AFTER ALL SIGNIFICANT STORM EVENTS FOR BREAKS OR NEED FOR CLEAN OUT. CLEAN OUT SHALL BE DONE WHEN THE SILT FENCE IS 50% FULL OR LESS IF NECESSARY TO PROTECT ADJOINING PROPERTIES. THE CERTIFIED LAND DISTURBER, AS SHOWN ON THIS PLAN, SHALL BE IN CHARGE OF ALL E&S CONTROLS AND IN GETTING THE PROPER INSPECTIONS.

SW-10
WATER IMPOUNDMENT IS NOT LOCATED WITHIN THE POTENTIAL INFLUENCE AREA OF THE PROPOSED LAND DISTURBING ACTIVITY.

TABLE 6.1 GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS.
ES-2: THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
ES-5: 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), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
ES-6: THE CONTRACTOR'S RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATIONS AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
ES-7: 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.
ES-8: DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT, AND NECESSARY REPAIRS, OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

LAND DISTURBING ACTIVITY NOTE:

IN ACCORDANCE WITH AN AMENDMENT TO VIRGINIA SEDIMENT AND EROSION CONTROL LAW, EFFECTIVE JULY 1, 2001, AS A PREREQUISITE TO THE APPROVAL OF AN EROSION AND SEDIMENT CONTROL PLAN, THAT THE PERSON RESPONSIBLE FOR CARRYING OUT THE PLAN (OWNER/DEVELOPER/PERMITEE) SHALL PROVIDE TO THE PLAN APPROVING AUTHORITY THE NAME OF AN INDIVIDUAL HOLDING A CERTIFICATE OF COMPETENCE ISSUED BY THE DEPARTMENT OF CONSERVATION AND RECREATION (DCR) WHO WILL BE RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY. THIS INFORMATION MUST BE KEPT CURRENT FOR THE LIFE OF THE PLAN. PLANS APPROVED PRIOR TO JULY 1, 2001, ARE NOT SUBJECT TO THESE REQUIREMENTS.

4VAC50-30-40. MINIMUM STANDARDS

AN EROSION AND SEDIMENT CONTROL PROGRAM ADOPTED BY A DISTRICT OR LOCALITY MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS:

- 1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. APPLICABLE
2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE. APPLICABLE
3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. APPLICABLE
4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. APPLICABLE
5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION. N/A
6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN. N/A

A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.

B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.

7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED. APPLICABLE
8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE. APPLICABLE

9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED. N/A
10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT. APPLICABLE

11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL. N/A
12. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS. N/A

13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED. N/A
14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET. N/A
15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED. N/A

16. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA: APPLICABLE
A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES. APPLICABLE
18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION. APPLICABLE

19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA: APPLICABLE

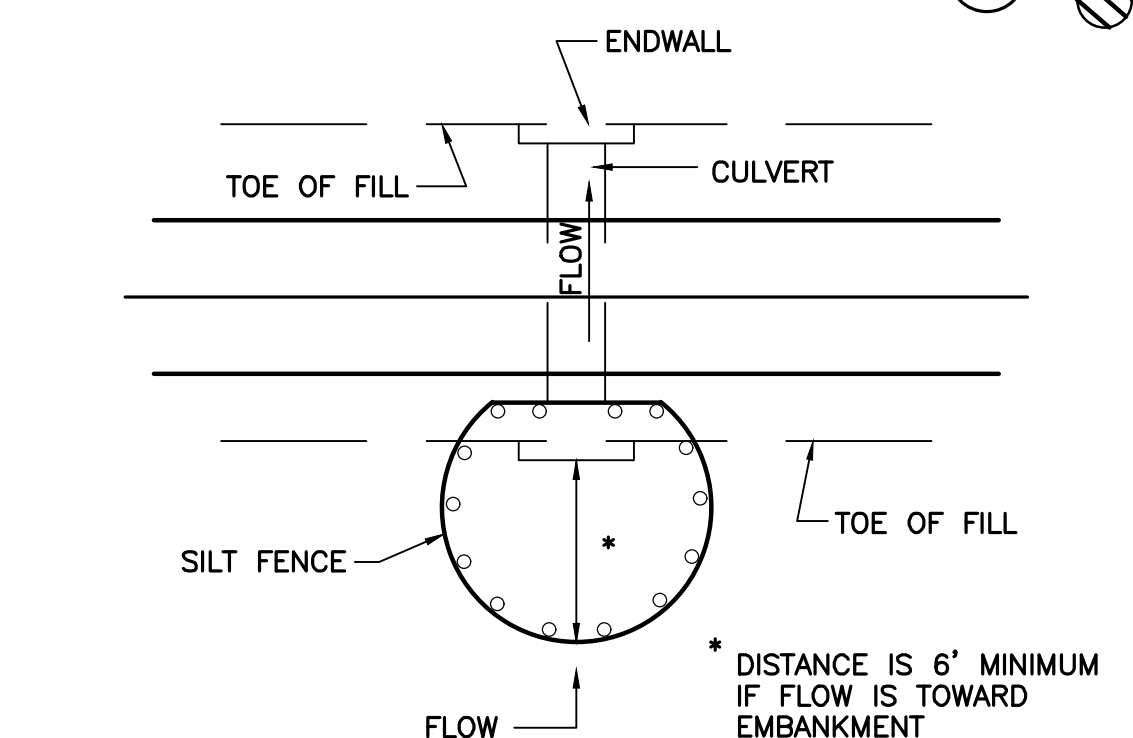
GENERAL EROSION & SEDIMENT CONTROL NOTES:

- 1. UNLESS OTHERWISE NOTED, ALL VEGETATIVE AND EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE 1992 VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
2. FOR ADDITIONAL DETAILS AND SPECIFICATIONS NOT SHOWN HEREON, REFER TO THE 1992 VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
3. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ONSITE AT ALL TIMES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN HEREON THAT ARE DEEMED NECESSARY BY THE APPROVING AUTHORITY AND/OR THE SITE INSPECTOR. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES DAILY. ANY DAMAGED CONTROLS SHALL BE REPAIRED OR REPLACED BY THE CLOSE OF EACH WORKING DAY.

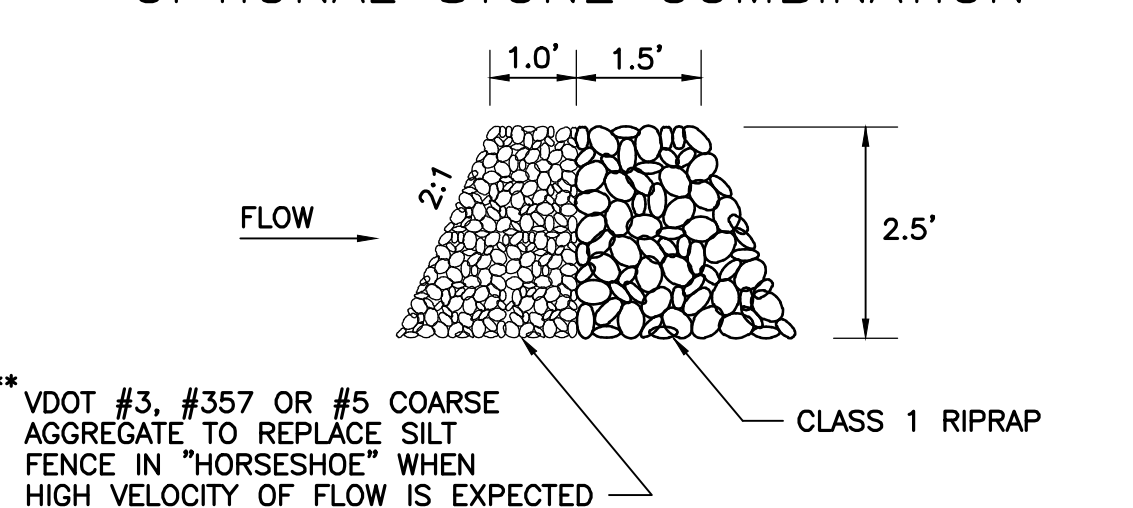
EROSION AND SEDIMENT CONTROL LEGEND

Table with 4 columns: NO., TITLE, KEY, SYMBOL. Rows include: 3.02 TEMPORARY STONE CONSTRUCTION ENTRANCE, 3.05 SILT FENCE, 3.38 TREE PROTECTION, 3.08-1 CULVERT INLET PROTECTION, 3.18 OUTLET PROTECTION, PERMANENT STABILIZATION, VDOT 113.02 BLANKET MATTING/ DITCH LINING (EC-2) SEE DETAIL ON 17A.

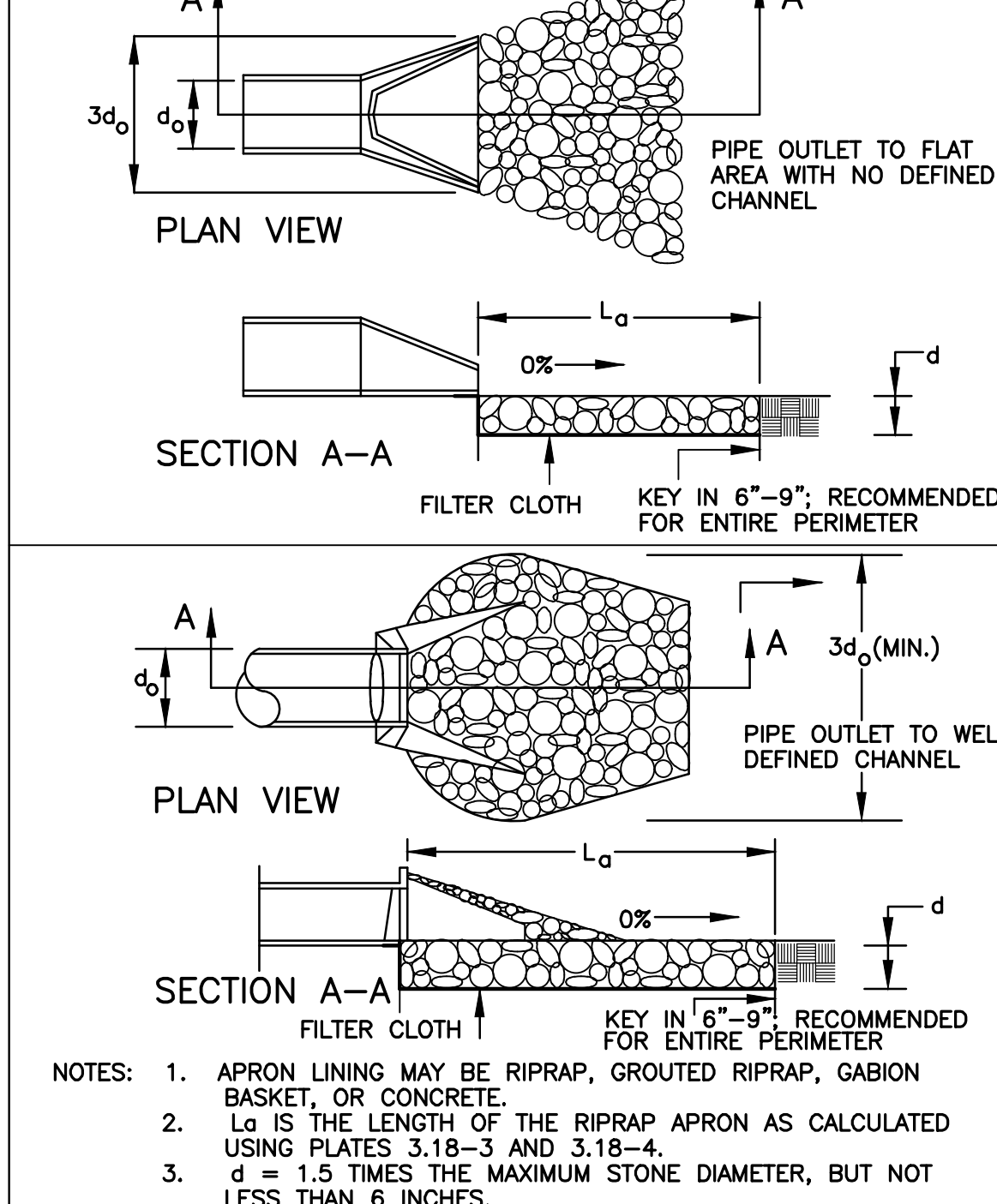
SILT FENCE CULVERT INLET PROTECTION 3.08-1



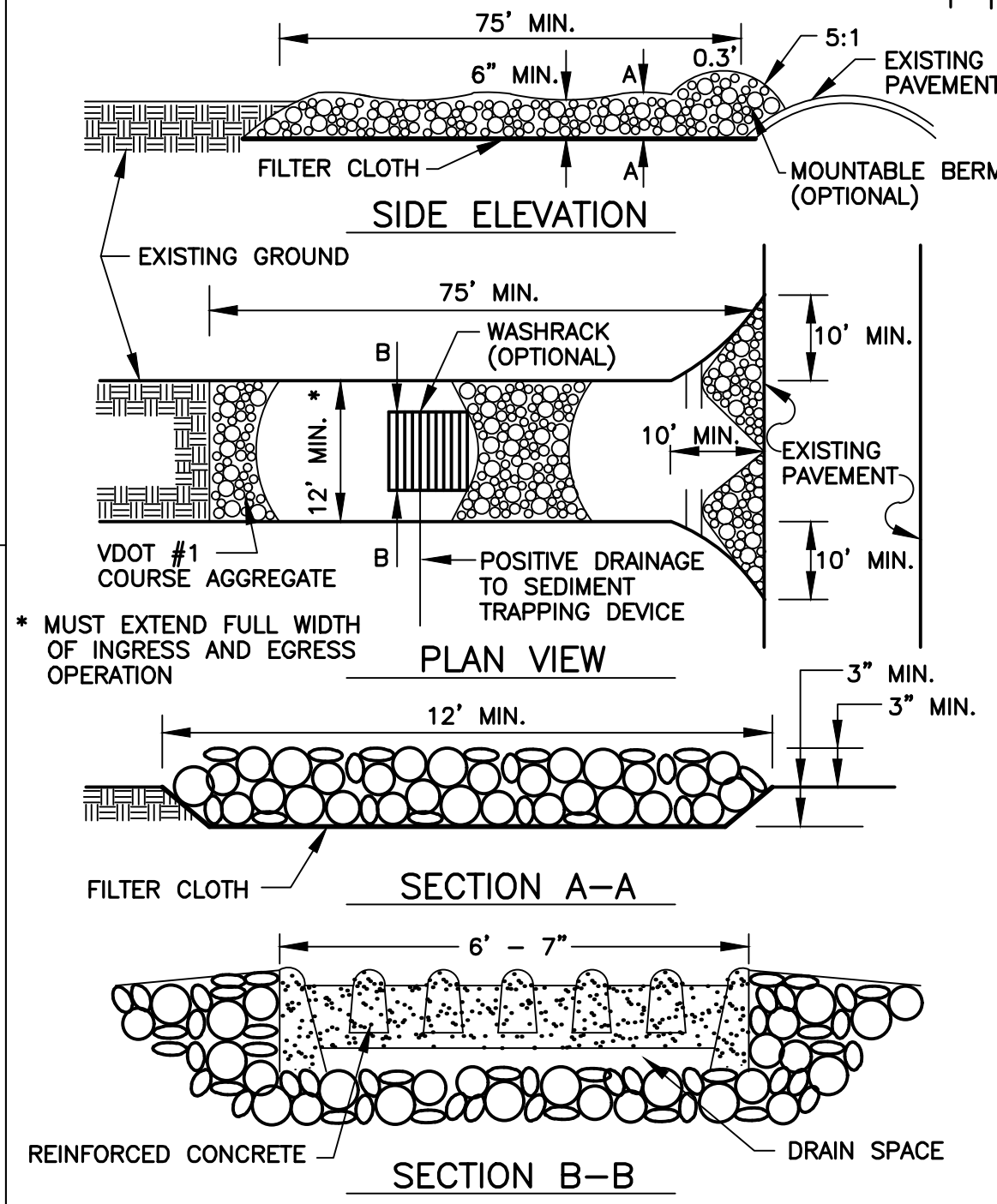
OPTIONAL STONE COMBINATION



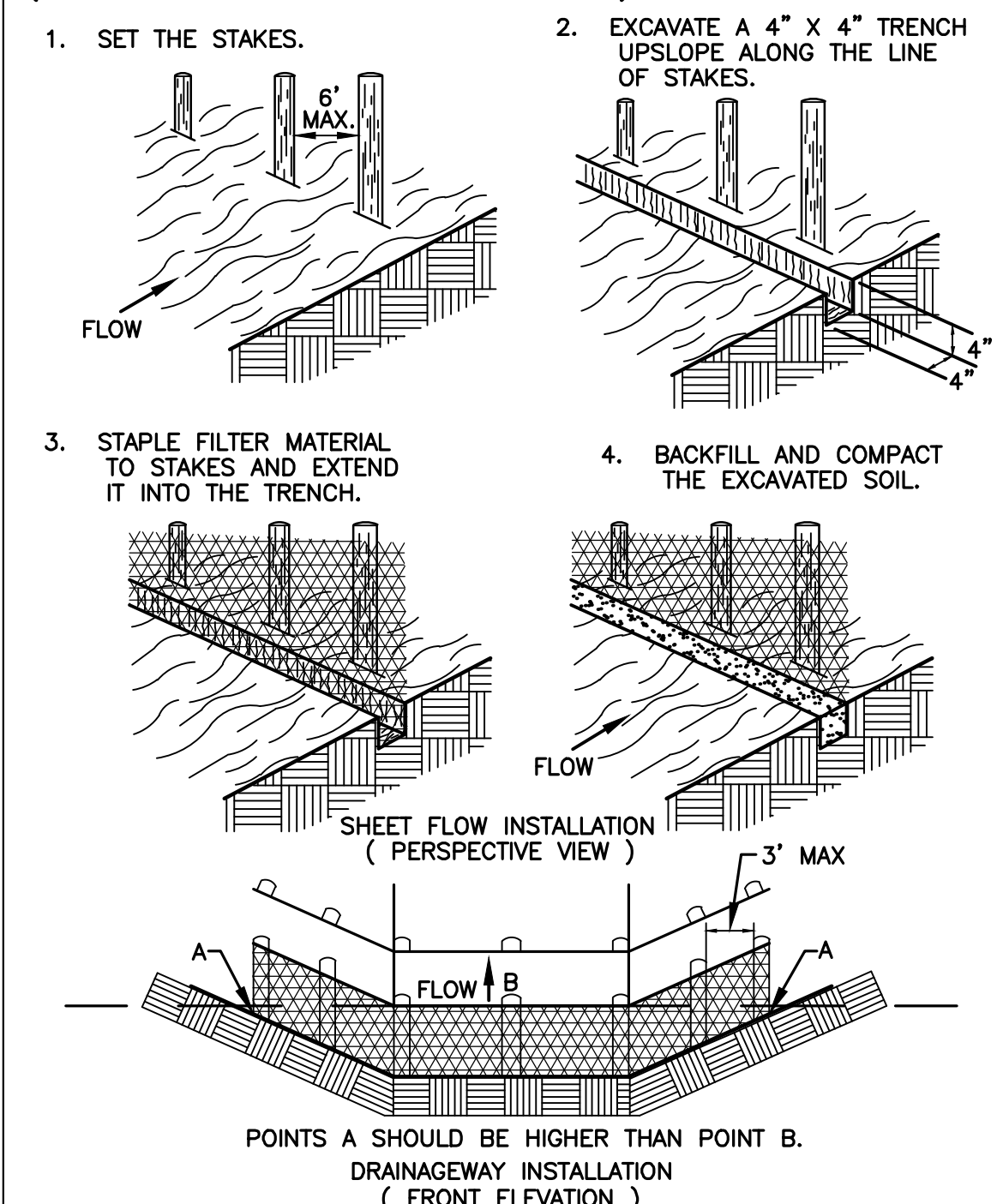
OUTLET PROTECTION 3.18-1



TEMPORARY STONE CONSTRUCTION ENTRANCE 3.02-1



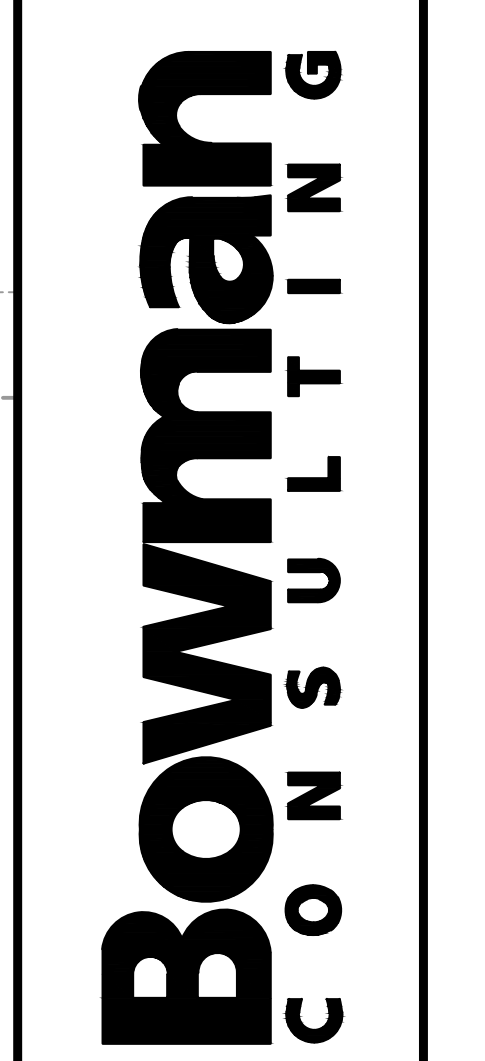
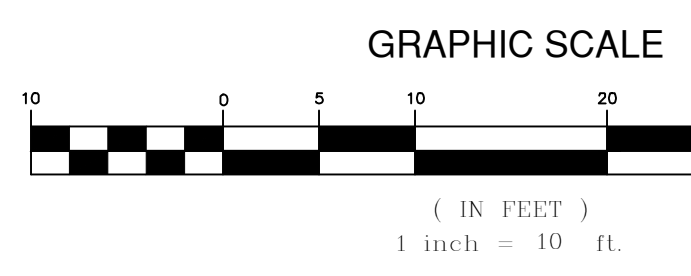
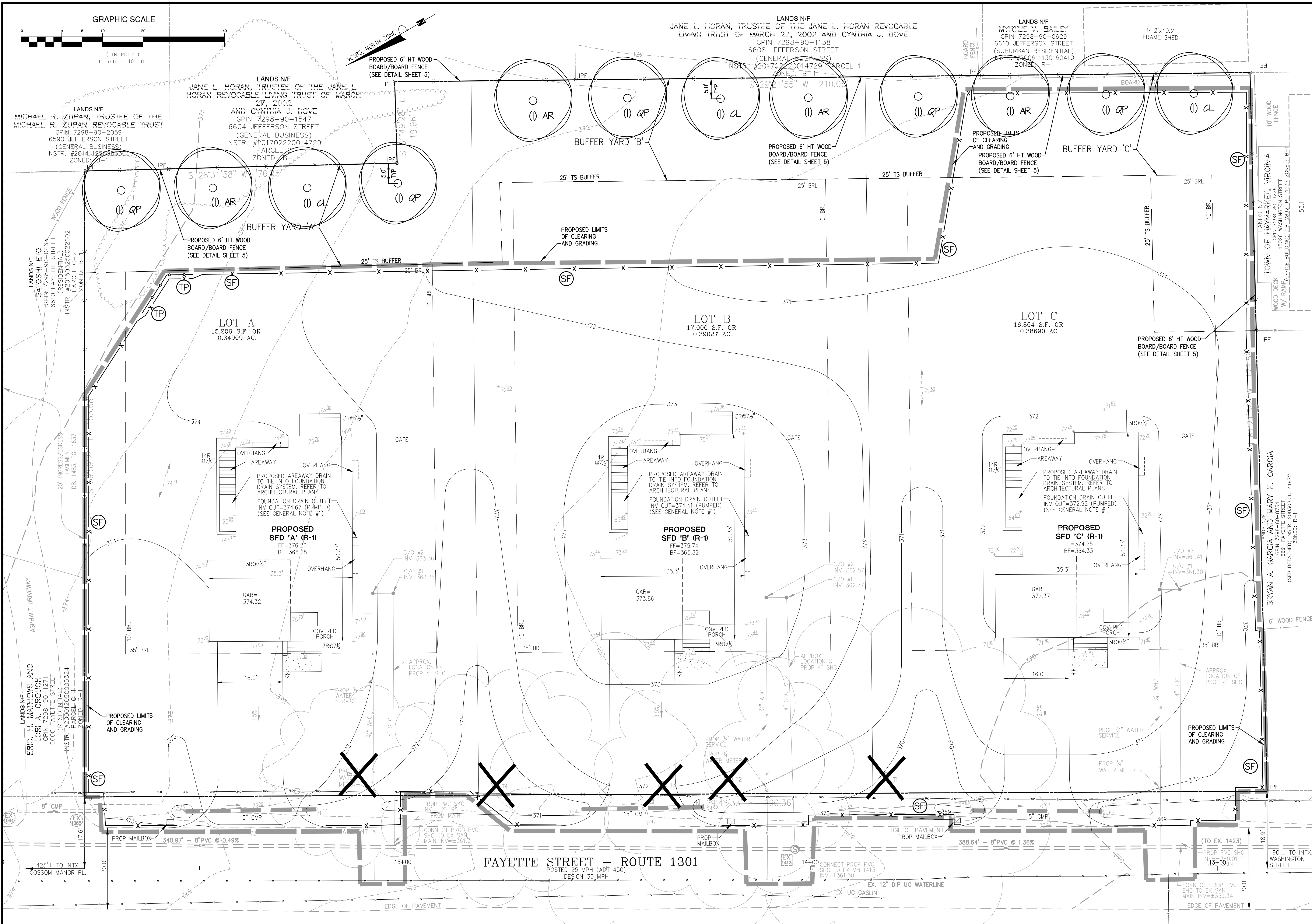
SILT FENCE (WITHOUT WIRE SUPPORT) 3.05-2



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EROSION AND SEDIMENT CONTROL NARRATIVE AND DETAILS. RESIDENTIAL SITE PLAN. 6675 FAYETTE STREET. PRINCE WILLIAM COUNTY, VIRGINIA. TOWN OF HAYMARKET. SP2018-001 Site Plan (6682 - SP2018-001 Fayette Street Single Family Homes Site Plan)

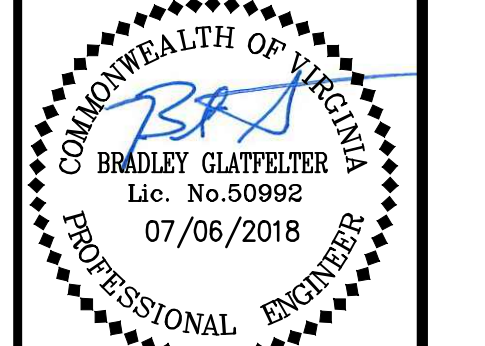
SP2018-001 COUNTY PROJECT NUMBER. BRADLEY CLATFELTER Lic. No. 50992 07/06/2018 PROFESSIONAL ENGINEER. PLAN STATUS: 06/06/18 1ST SUBMISSION, 07/10/18 2ND SUBMISSION. DATE: JUNE 2018. FILE No. 003096-D-CP-001. 8 OF 20 SHEET



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LANDSCAPE PLAN
 RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
 PRINCE WILLIAM COUNTY, VIRGINIA

SP2018-001
 COUNTY PROJECT NUMBER



PLAN STATUS
 06/06/18 1ST SUBMISSION
 07/10/18 2ND SUBMISSION

| DATE | DESCRIPTION |
|----------|----------------|
| 06/06/18 | 1ST SUBMISSION |
| 07/10/18 | 2ND SUBMISSION |

| JOB No. | DESCRIPTION |
|--------------|--------------|
| 00396-01-001 | SH/KF DESIGN |
| | KF DRAWN |
| | BG CHKD |

| JOB No. | DESCRIPTION |
|--------------|--------------------------|
| 00396-01-001 | DATE : JUNE 2018 |
| | FILE No. 003096-D-CP-001 |

PROP. POST-TOP LAMP SPECIFICATIONS

D623 LED LUMINAIRE (OR APPROVED EQUAL)

DESCRIPTION: The D623 Luminaire is a versatile six sided post top lantern that is best suited for poles under 10' in height.

LED LUMINAIRE: Multiple LED systems available with convection cooled driver, options for intensity, distribution and color. They operate with over voltage and short circuit protection and automatic voltage sensing for 120 to 277v input. (See next page for LED availability)

- 50,000+ hours of operational life
- Warm 3000K, neutral 4000K or cool white 5000K color
- Dimmable (contactor by others)
- Suitable for wet locations

ETL listed, suitable for wet locations.

INSTALLATION: The luminaire will mount to a 3" OD post or tenon with 5/16" black oxide coated stainless steel set screws to ensure a solid connection.

LENSES: Clear Acrylic (CA), Prismatic Acrylic (PA), Textured Acrylic (TA), White Acrylic (WA)

EPA: 1.81

FINISH: Premium quality thermoseal polyester powdercoat for a durable finish in the following:

BLK - Satin Black, CLB - Classic Bronze, GBZ - Gloss Textured Bronze, GRN - Green, GTB - Gloss Textured Black, TBK - Textured Black, TGR - Gloss Textured Green



PROJECT: _____
TYPE: _____



Ordering Information:

| Model | Lens | LED System | Light Distribution | Order Code | Finish | Option |
|-------|----------------------|------------|--------------------|----------------------|--------------------------------------|----------------------------|
| D623 | CA PA TA WA | AVI VLE | AS SY | 3H,4H,5H 3L,4L,5L | BLK, CLB, GRZ, GRN, TBK, TGR, Custom | PCL, CHM, (30K & HLE only) |

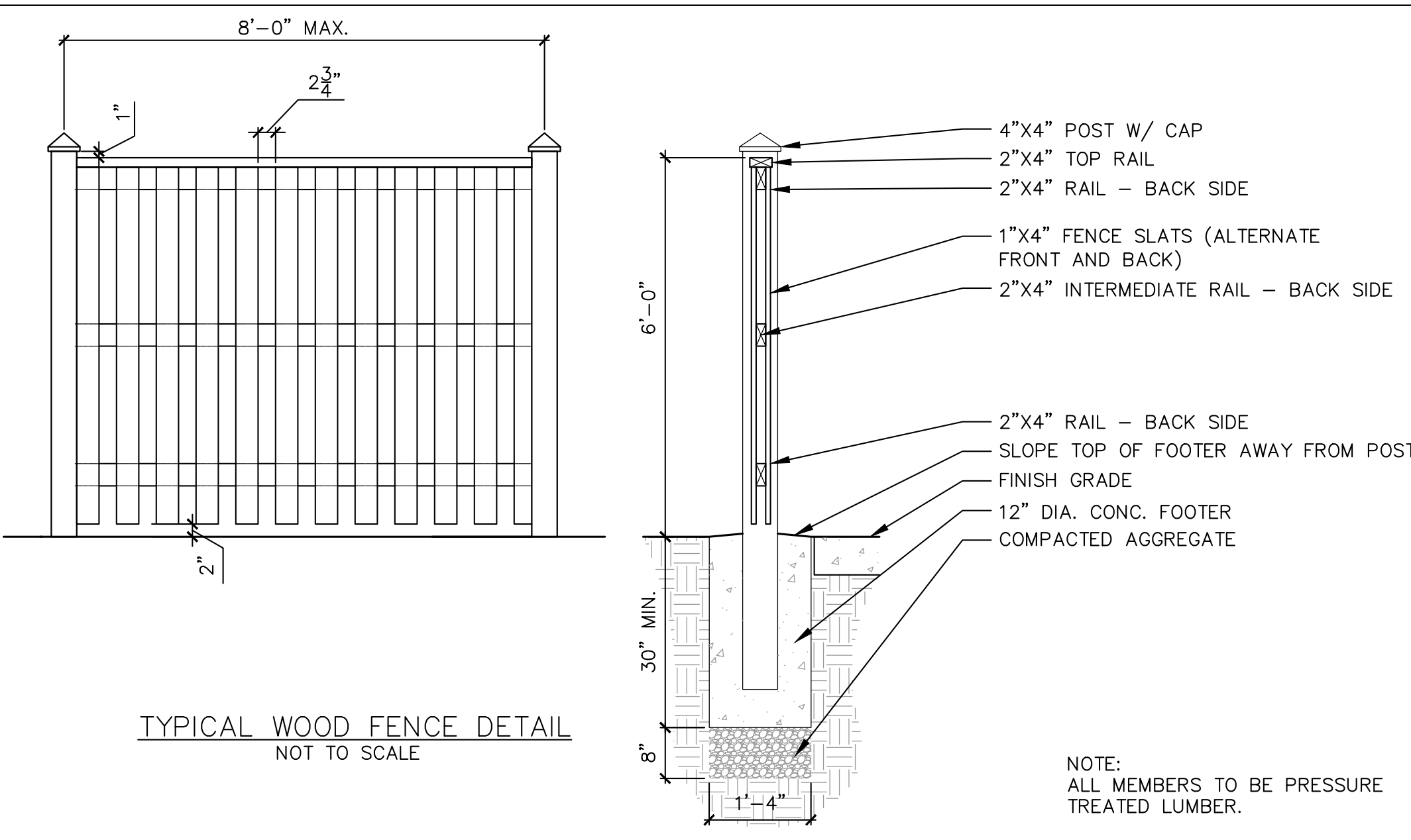
See next page for more complete ordering options.
800.364.0098 • Fax: 281.997.5411 • www.amerlux.com
Amerlux reserves the right to change details that do not affect overall function and performance.



LED Options (bold indicates ordering code)

| LED System | Light Distribution | Code | CCT | CRI | Light Engine Lumens | Normal Input Power |
|------------|--------------------|-----------|--------|-----|---------------------|--------------------|
| AVI | SY (Symmetric) | 3H | 3,000K | 80 | 4,450 lm | 60W |
| | | 4H | 4,000K | 80 | 5,100 lm | |
| | | 5H | 5,000K | 70 | 5,870 lm | |
| | AS (Asymmetric) | 3H | 3,000K | 80 | 4,410 lm | |
| | | 4H | 4,000K | 80 | 5,050 lm | |
| | | 5H | 5,000K | 70 | 5,810 lm | |
| VLE | SY (Symmetric) | 3L | 3,000K | 80 | 2,940 lm | 41W |
| | | 4L | 4,000K | 80 | 3,460 lm | |
| | | 5L | 5,000K | 70 | 4,070 lm | |
| | AS (Asymmetric) | 3L | 3,000K | 80 | 2,910 lm | |
| | | 4L | 4,000K | 80 | 3,420 lm | |
| | | 5L | 5,000K | 70 | 4,030 lm | |

| LED System | Light Distribution | Order Code | CCT | CRI | Light Engine Lumens | Normal Input Power | Dimmable |
|----------------|--------------------|------------|--------|-----|---------------------|--------------------|----------|
| SY (Symmetric) | SY | 3H | 3,000K | 80 | 5,650 lm | 80W | 0-10V |
| | | 4H | 4,000K | 80 | 5,700 lm | | |
| | | 5H | 5,000K | 70 | 6,000 lm | | |
| | AS (Asymmetric) | 3H | 3,000K | 80 | 4,200 lm | | |
| | | 4H | 4,000K | 80 | 4,300 lm | | |
| | | 5H | 5,000K | 70 | 4,500 lm | | |
| SY (Symmetric) | SY | 3L | 3,000K | 80 | 3,000 lm | 40W | 0-10V |
| | | 4L | 4,000K | 80 | 3,300 lm | | |
| | | 5L | 5,000K | 70 | 3,600 lm | | |
| | AS (Asymmetric) | 3L | 3,000K | 80 | 2,200 lm | | |
| | | 4L | 4,000K | 80 | 2,500 lm | | |
| | | 5L | 5,000K | 70 | 2,800 lm | | |



PLANTING TABULATIONS

BUFFER YARD (PER Z.O. SECTION 58-17)

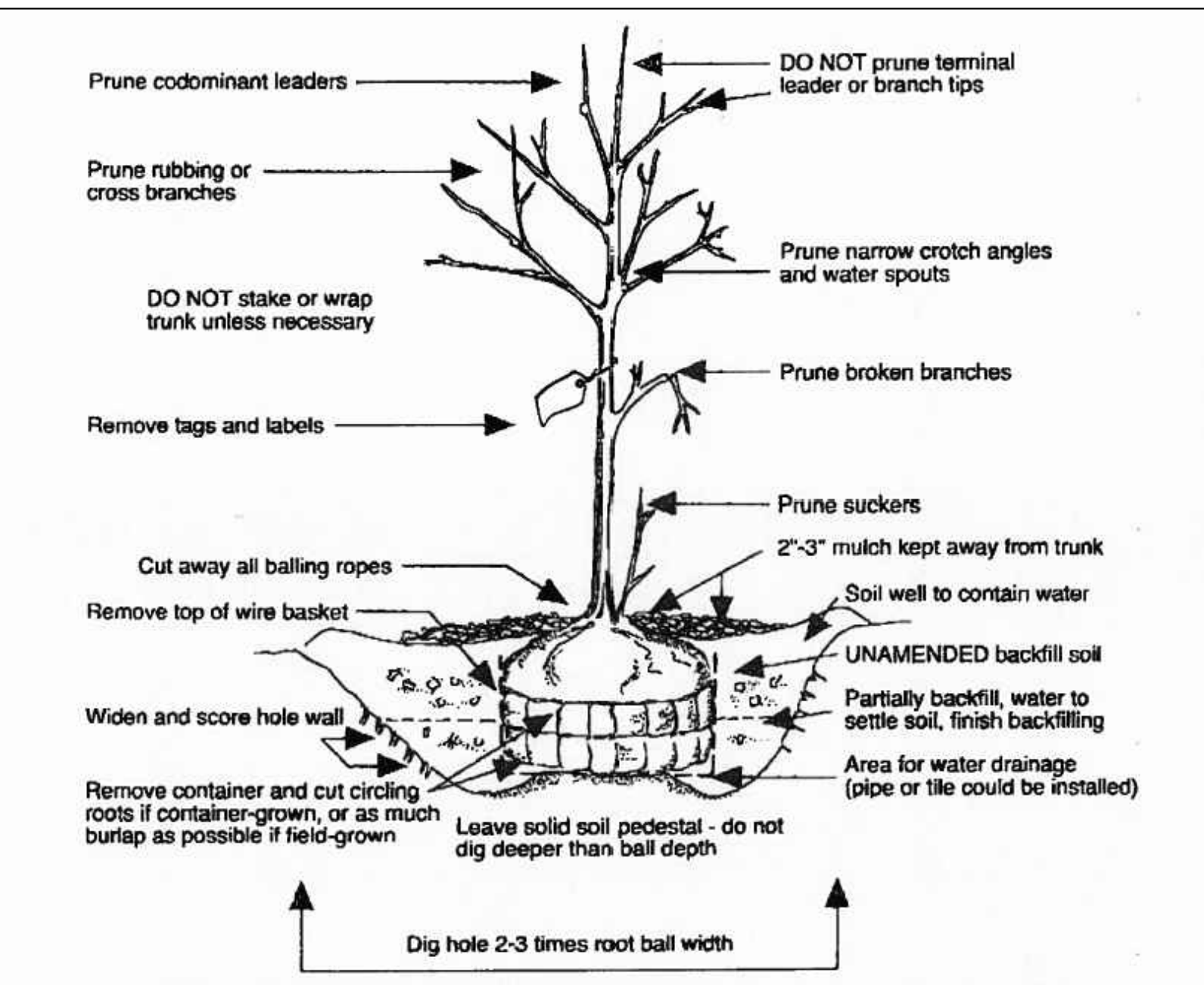
| BUFFER YARD 'A' TO B-1 ZONING DISTRICT | LOT A | LOT B | LOT C |
|--|------------------------------|------------------------------|------------------------------|
| SQUARE FEET OF BUFFER YARD: | 2,774 SF | 2,565 SF | 3,300 SF |
| TYPE OF BUFFER YARD REQUIRED: | TYPE TS-ALTERNATE #2 | TYPE TS-ALTERNATE #2 | TYPE TS-ALTERNATE #2 |
| * BUFFER YARD PROVIDED: | MODIFIED TS | MODIFIED TS | MODIFIED TS |
| CANOPY TREES REQUIRED: | 6 TREES (1 PER 500 SF) | 5 TREES (1 PER 500 SF) | 7 TREES (1 PER 500 SF) |
| CANOPY TREES PROVIDED: | 4 TREES | 4 TREES | 4 TREES |
| SHRUBS REQUIRED: | 28 SHRUBS (1 PER 100 SF) | 26 SHRUBS (1 PER 100 SF) | 33 SHRUBS (1 PER 100 SF) |
| SHRUBS PROVIDED: | 0 SHRUBS | 0 SHRUBS | 0 SHRUBS |
| * ALTERNATIVE SCREENING ELEMENT: | 6 FOOT HIGH SOLID WOOD FENCE | 6 FOOT HIGH SOLID WOOD FENCE | 6 FOOT HIGH SOLID WOOD FENCE |

*NOTE: APPLICANT REQUEST MODIFICATION OF BUFFER YARD PLANT UNIT REQUIREMENTS BASED ON PROVISION OF 6 FT WOOD FENCE PER Z.O. SECTION 58-17.8(C). SEE WAIVER REQUEST LETTER ON SHEET 2.

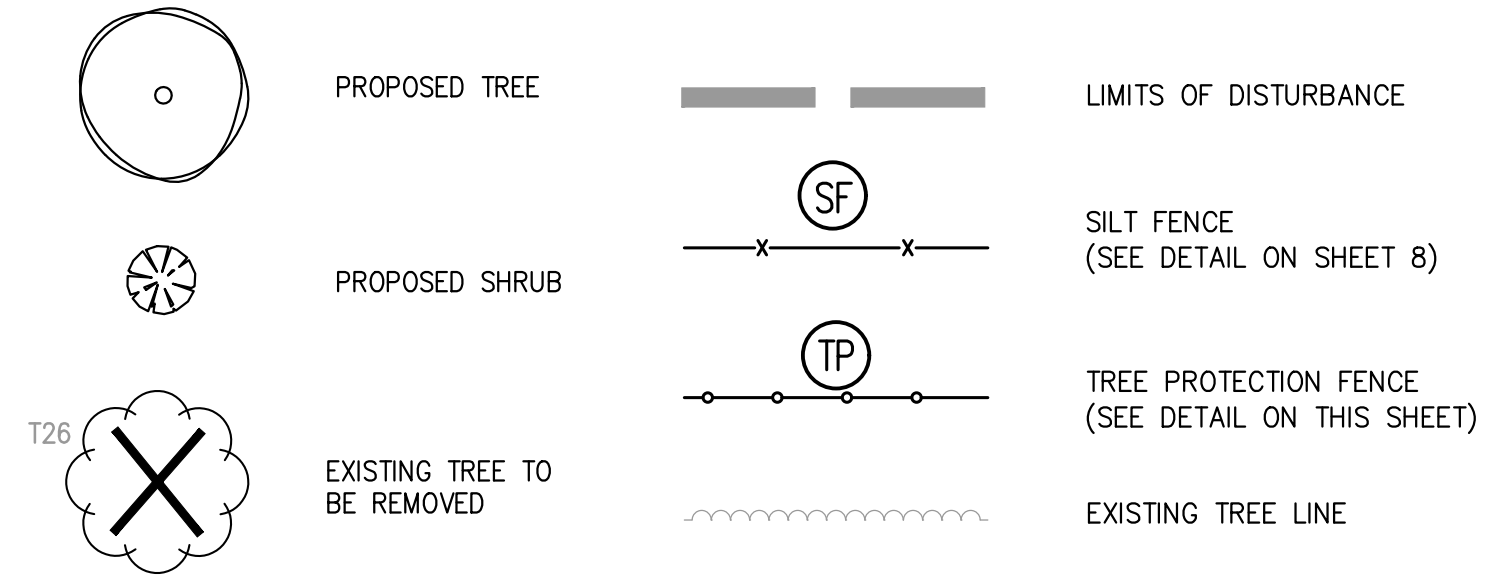
BUFFER YARD PLANT LIST

| KEY | QTY. | BOTANICAL NAME | COMMON NAME | HEIGHT | CALIFER | CONDITION |
|---------------------------|------|---------------------------|-------------|--------|------------|-----------|
| LARGE CANOPY TREES | | | | | | |
| AR | 4 | ACER RUBRUM OCTOBER GLORY | RED MAPLE | - | 2 1/2" CAL | D & D |
| CL | 3 | CLADRASTIS LUTEA | YELLOWWOOD | - | 2 1/2" CAL | D & D |
| QP | 5 | QUERCUS PHELLOS | WILLOW OAK | - | 2 1/2" CAL | D & D |

TREE PLANTING



LEGEND



GENERAL LANDSCAPE NOTES

MATERIALS: 1. THE TREES AND SHRUBS THAT ARE PLANTED SHALL BE OF THE SPECIES AND SIZE SPECIFIED ON THE APPROVED PLANS UNLESS SUBSTITUTIONS ARE APPROVED BY THE CITY.

2. ALL TREE AND SHRUB SIZES SHALL MEET THE STANDARDS SPECIFIED IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD FOR NURSERY STOCK, (ANSI Z60.1).

DELIVERY AND TEMPORARY STORAGE

1. PLANTS SHALL BE PROTECTED DURING DELIVERY TO PREVENT DESICCATION OF LEAVES.

2. TREES AND SHRUBS SHOULD BE PLANTED ON DAY OF DELIVERY. IF THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT UNPLANTED PLANTS BY KEEPING THEM IN SHADE, WATERED AND PROTECTED WITH SOIL, MULCH OR OTHER ACCEPTABLE MATERIAL.

3. TREES AND SHRUBS SHALL NOT REMAIN UNPLANTED FOR MORE THAN TWO WEEKS.

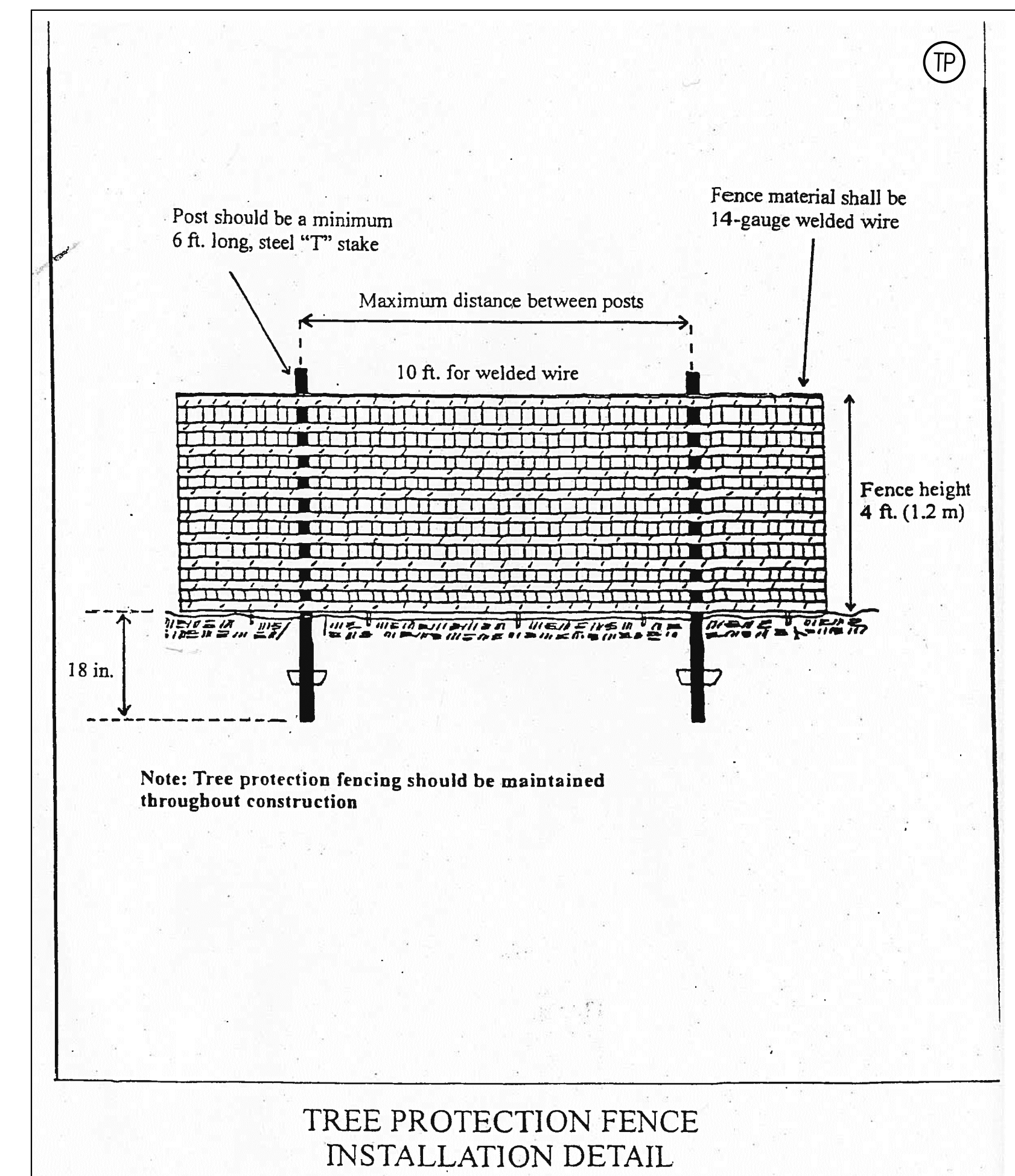
PLANTING OF NURSERY STOCK

1. ALL TREES AND SHRUBS SHALL BE PLANTED AS SPECIFIED IN THE LATEST EDITION OF THE "TREE AND SHRUB PLANTING GUIDELINES" PREPARED BY THE VIRGINIA COOPERATIVE EXTENSION, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY.

2. IF PLANTING IN AREAS THAT HAVE BEEN PREVIOUSLY COMPACTED, THE SOIL SHALL BE PROPERLY PREPARED (TILLED AND AMENDED AS NEEDED BASED ON SOIL SAMPLES) TO A DEPTH OF 1 FOOT (0.3 METERS), PRIOR TO INSTALLATION OF LANDSCAPE MATERIAL. SOIL WITHIN INDIVIDUAL PLANTING HOLES SHALL NOT BE AMENDED.

3. THE STAKING AND GUYING OF TREES IS NOT REQUIRED EXCEPT WHERE SITE CONDITIONS WARRANT THEIR USE. EXAMPLES OF CONDITIONS WHERE THESE METHODS MAY BE NECESSARY INCLUDE: PLANTING IN WINDY LOCATIONS, ON STEEP SLOPES, OR WHERE VANDALISM MAY BE A CONCERN. ALL STAKES AND GUY'S MUST BE REMOVED WITHIN ONE YEAR OF PLANT INSTALLATION.

4. ALL TREES AND SHRUBS SHALL BE MULCHED AFTER PLANTING, TO A MINIMUM DEPTH OF 2 INCHES (5.1 CENTIMETERS), BUT NO MORE THAN 3 INCHES (7.6 CENTIMETERS), WITH AN APPROPRIATE MULCH MATERIAL SUCH AS PINE BARK, PINE NEEDLES, WOOD CHIPS OR SHREDDED BARK. MULCH SHALL COVER THE ENTIRE ROOT AREA AND SAUCER; HOWEVER, MULCH SHALL NOT BE PLACED WITHIN 6 INCHES (15.3 CENTIMETERS) OF THE TRUNK.

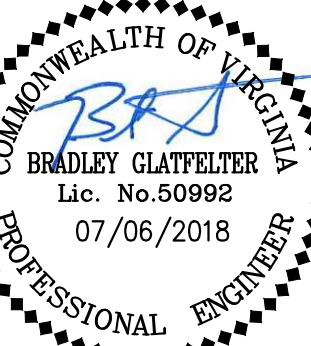


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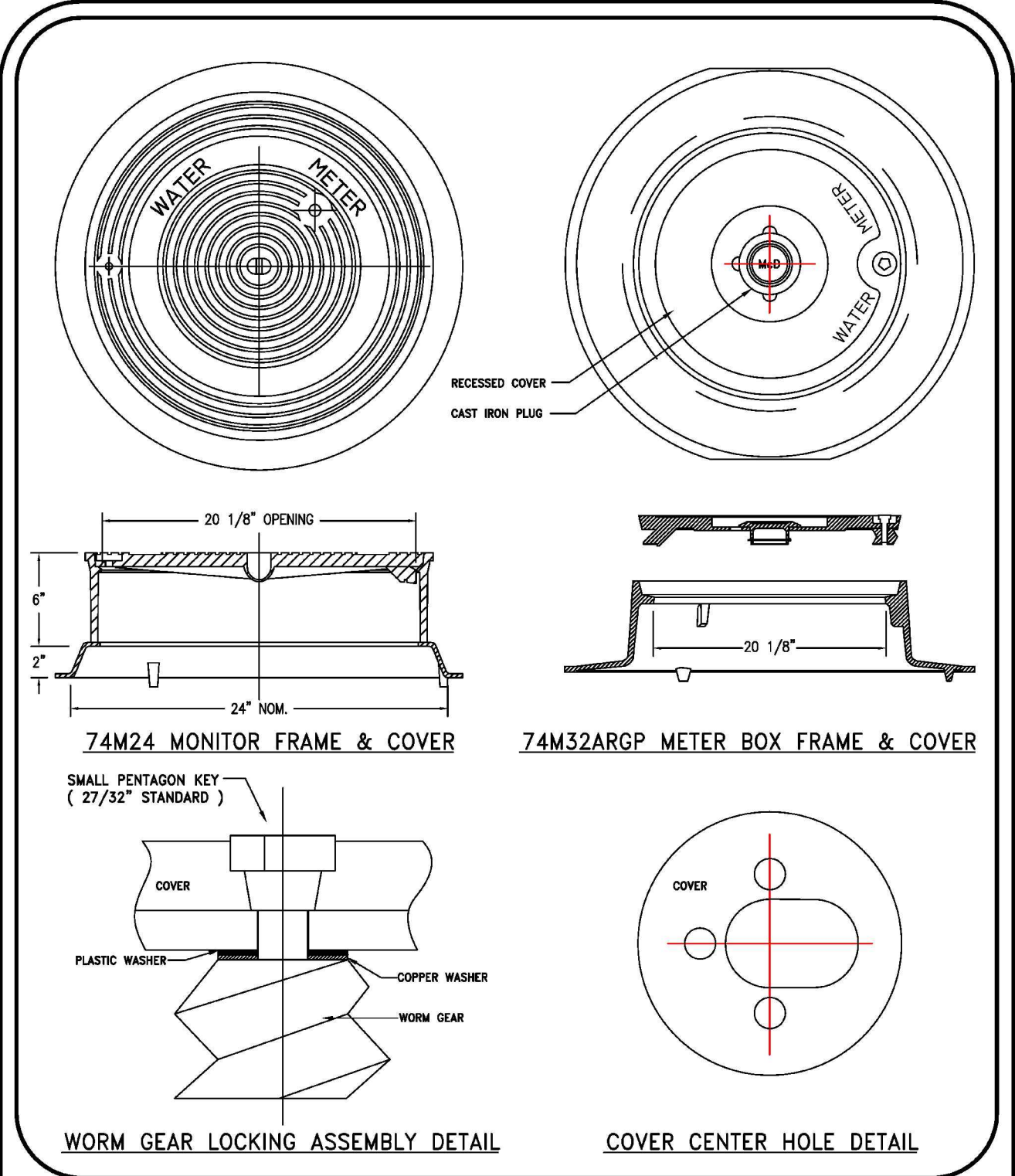
LANDSCAPE SCHEDULE, NOTES AND DETAILS
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
TOWN OF HAYMARKET
PRINCE WILLIAM COUNTY, VIRGINIA

SP2018-001
COUNTY PROJECT NUMBER

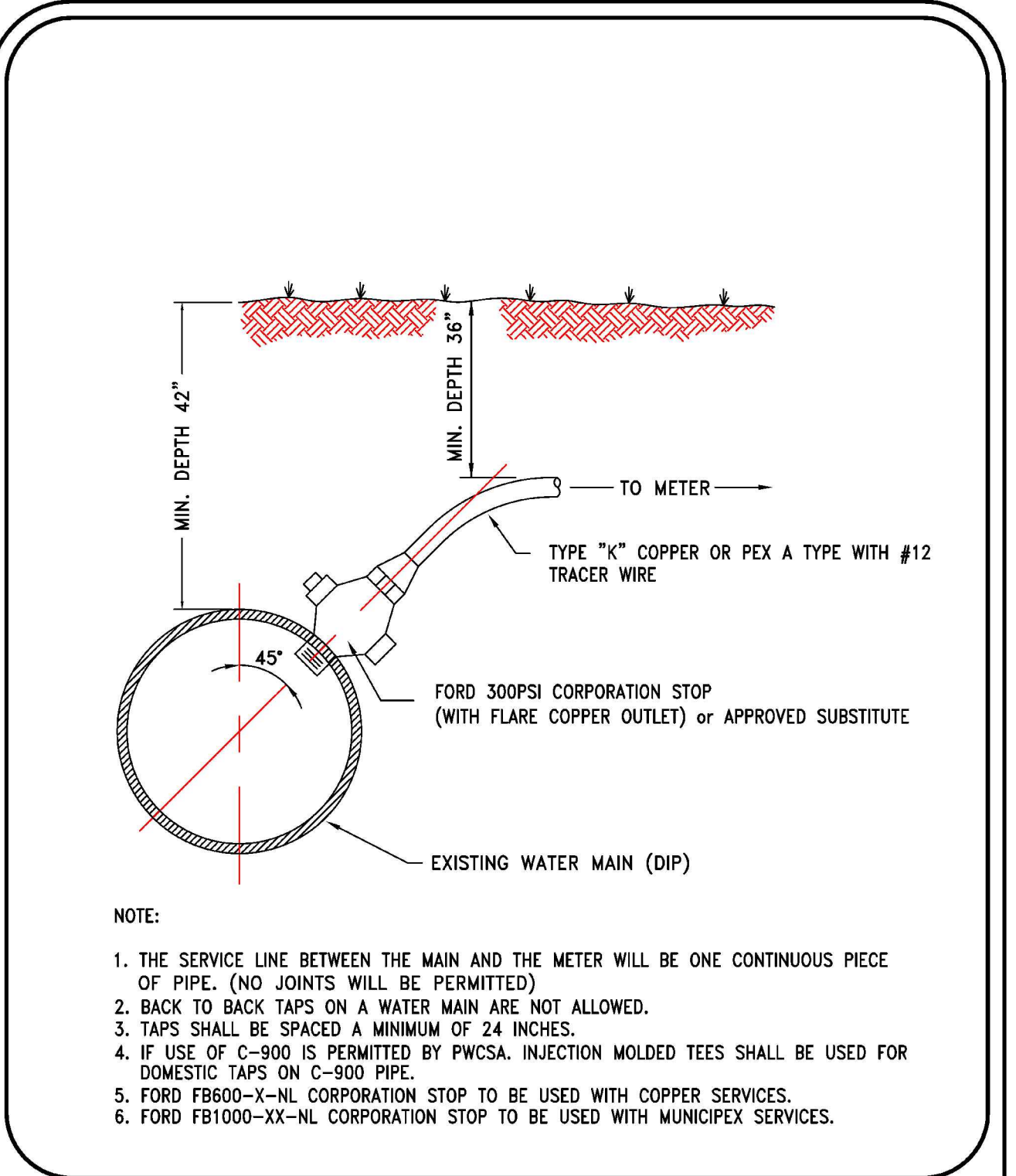


PLAN STATUS
06/06/18 1ST SUBMISSION
07/10/18 2ND SUBMISSION

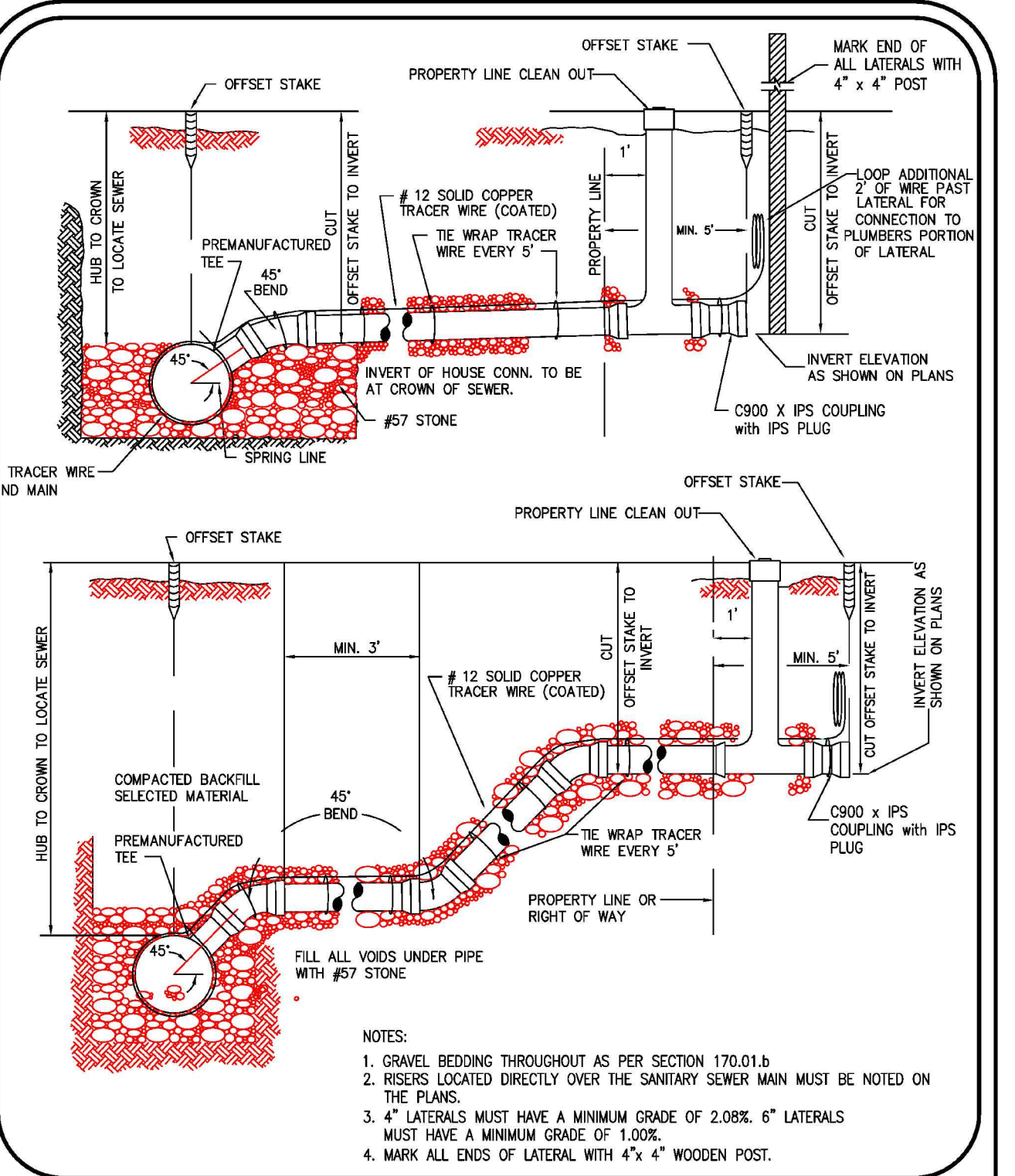
| DATE | DESCRIPTION |
|----------|------------------|
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: N/A V: N/A |
| JOB No. | 00396-01-001 |
| DATE | JUNE 2018 |
| FILE No. | 003096-D-CP-001 |



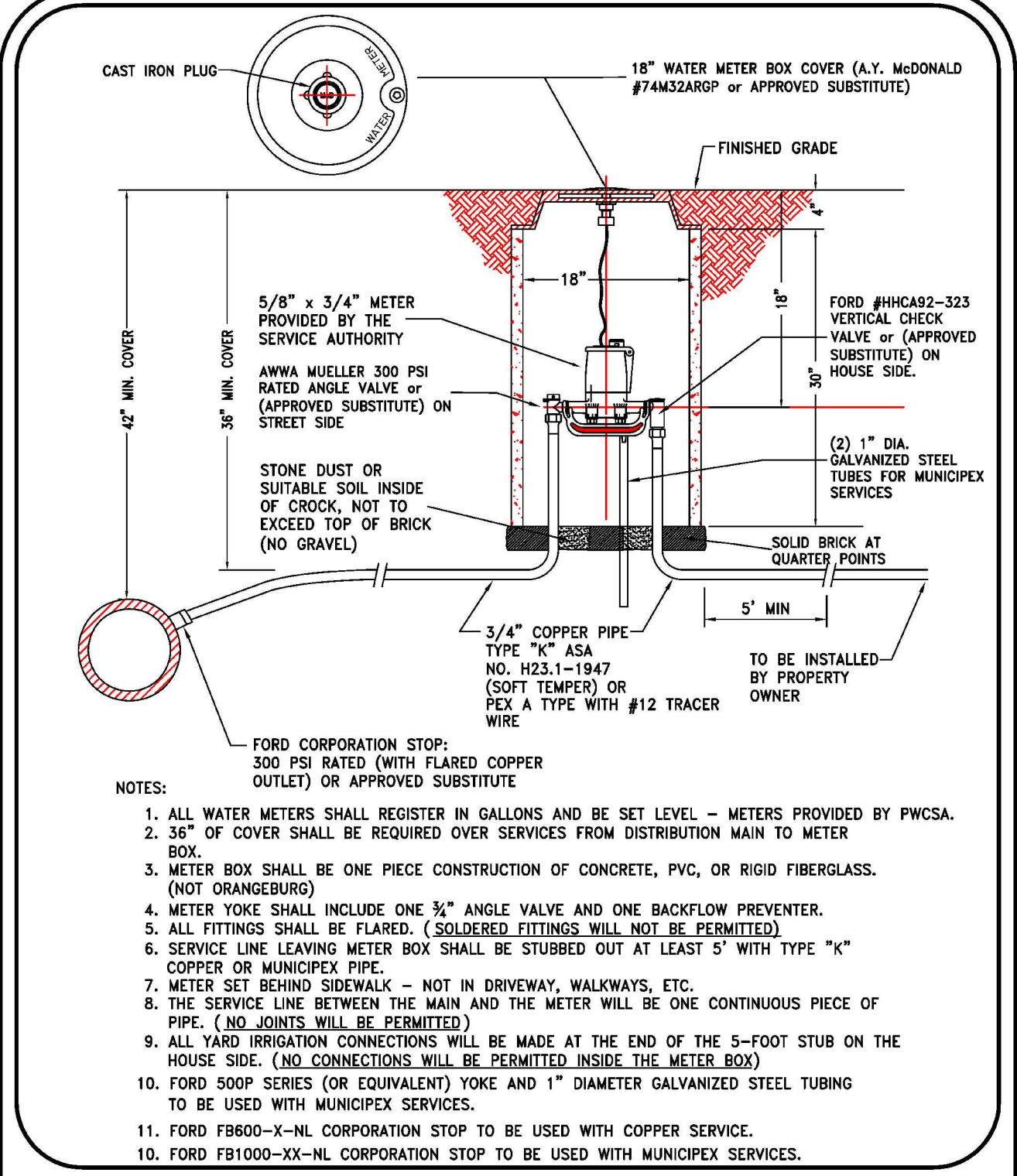
5/8" x 3/4" AND 1" WATER METER AND MONITOR FRAME & COVER DETAIL
 N.T.S. **W10.07.01 REV-2017**



3/4" WATER SERVICE CONNECTION DETAIL
 N.T.S. **W11.07.01 REV-2017**



SEWER SERVICE CONNECTION/REPLACEMENT PROFILE VIEW FOR PUBLIC RIGHT-OF-WAY
 N.T.S. **S02.17.00 REV-2017**



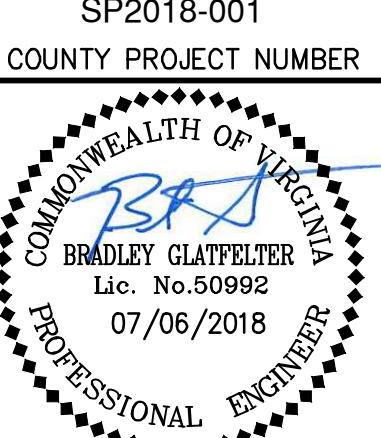
5/8" X 3/4" RESIDENTIAL METER
 N.T.S. **W01.07.01 REV-2017**

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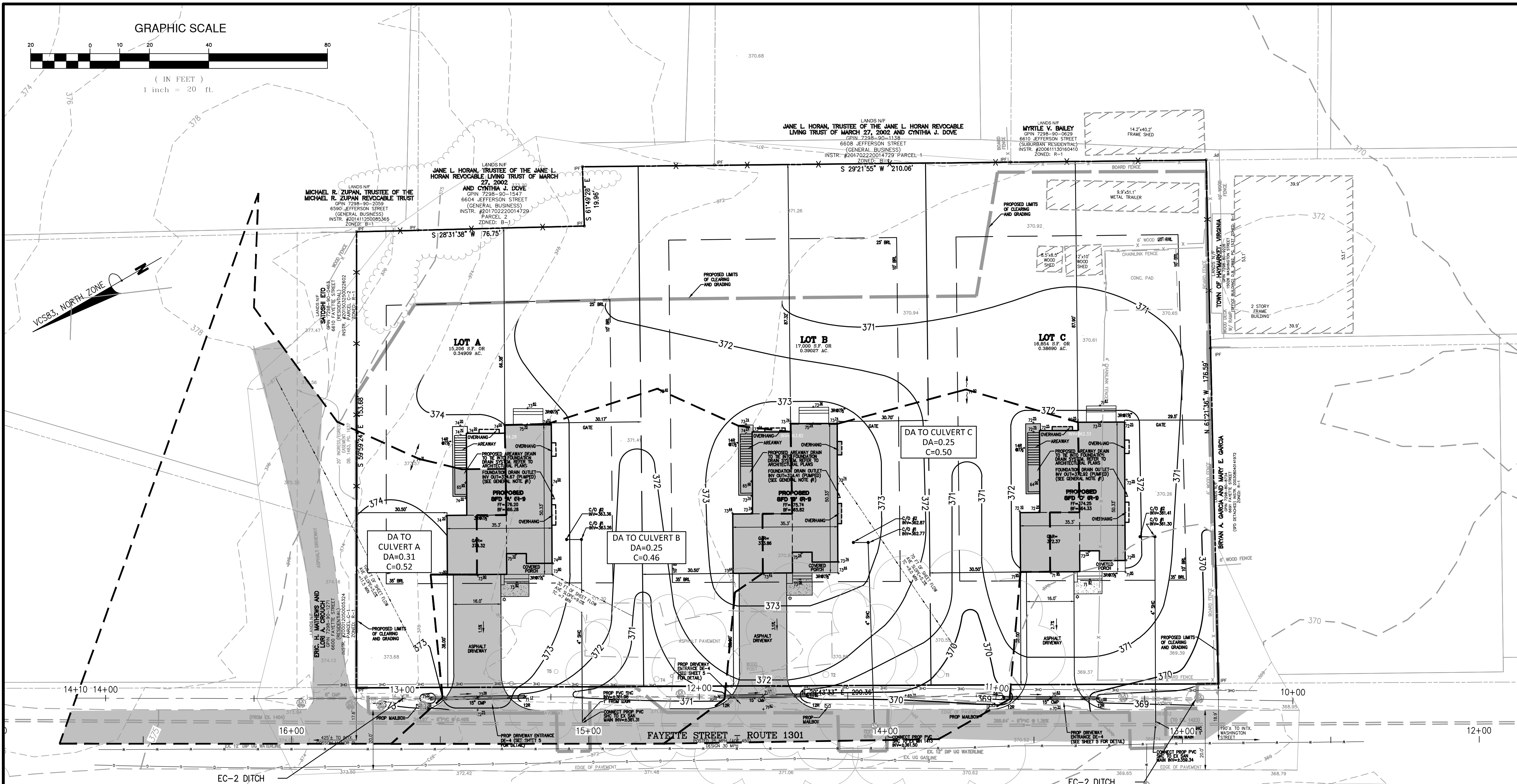
PWCSA DETAILS
 RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
 PRINCE WILLIAM COUNTY, VIRGINIA
 TOWN OF HAYMARKET

SP2018-001
 COUNTY PROJECT NUMBER



| PLAN STATUS | |
|-------------|----------------|
| 06/06/18 | 1ST SUBMISSION |
| 07/10/18 | 2ND SUBMISSION |

| DATE | DESCRIPTION |
|----------|------------------|
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: N/A V: N/A |
| JOB No. | 00396-01-001 |
| DATE | : JUNE 2018 |
| FILE No. | 003096-D-CP-001 |



LEGEND

- LIMITS OF CLEARING & GRADING
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED DRAINAGE DIVIDE
- PROPOSED CULVERT
- IMPERVIOUS AREA
- DA TO XX
DA=XX
C=XX
- DRAINAGE AREA LABEL
- TIME OF CONCENTRATION PATH

| | DA (sf) | Incremental DA (ac) | Cum. DA (ac) | Pervious Area | Impervious Area | Gravel | C factor | Q ₂ | Q ₁₀ | Q ₁₀₀ | TC (MIN) | i ₂ | i ₁₀ | i ₁₀₀ |
|---|---------|---------------------|--------------|---------------|-----------------|--------|----------|----------------|-----------------|------------------|----------|----------------|-----------------|------------------|
| A | 13,504 | 0.31 | 0.31 | 0.31 | 0.0784 | 0.000 | 0.52 | 0.59 | 0.79 | 1.07 | 11.5 | 3.66 | 4.91 | 6.60 |
| B | 10,745 | 0.25 | 0.56 | 0.18 | 0.066 | 0.000 | 0.46 | 0.50 | 1.50 | 0.89 | 7 | 4.41 | 5.84 | 7.84 |
| C | 10,710 | 0.25 | 0.80 | 0.17 | 0.08 | 0.000 | 0.50 | 0.49 | 2.14 | 0.88 | 9 | 4.04 | 5.38 | 7.21 |

**Culvert Calculator Report
Fayette Street - Culvert A**

Solve For: Headwater Elevation

| | | | |
|----------------------------------|------------------|------------------------|---------------------|
| Culvert Summary | | | |
| Allowable HW Elevation | 373.29 ft | Headwater Depth/Height | 0.45 |
| Computed Headwater Elevation | 371.90 ft | Discharge | 0.79 cfs |
| Inlet Control HW Elev. | 371.82 ft | Tailwater Elevation | 0.00 ft |
| Outlet Control HW Elev. | 371.90 ft | Control Type | Outlet Control |
| Grades | | | |
| Upstream Invert | 371.33 ft | Downstream Invert | 371.17 ft |
| Length | 32.00 ft | Constructed Slope | 0.005000 ft/ft |
| Hydraulic Profile | | | |
| Profile | M2 | Depth, Downstream | 0.35 ft |
| Slope Type | Mid | Normal Depth | 0.48 ft |
| Flow Regime | Subcritical | Critical Depth | 0.35 ft |
| Velocity Downstream | 2.83 ft/s | Critical Slope | 0.017785 ft/ft |
| Section | | | |
| Section Shape | Circular | Mannings Coefficient | 0.024 |
| Section Material | CMP | Span | 1.25 ft |
| Section Size | 15 inch | Rise | 1.25 ft |
| Number Sections | 1 | | |
| Outlet Control Properties | | | |
| Outlet Control HW Elev. | 371.90 ft | Upstream Velocity Head | 0.05 ft |
| Ke | 0.70 | Entrance Loss | 0.04 ft |
| Inlet Control Properties | | | |
| Inlet Control HW Elev. | 371.82 ft | Flow Control | Unsubmerged |
| Inlet Type | Mitered to slope | Area Full | 1.2 ft ² |
| K | 0.02100 | HDS S Chart | 2 |
| M | 1.33000 | HDS S Scale | 2 |
| C | 0.04630 | Equation Form | 1 |
| Y | 0.75000 | | |

**Culvert Calculator Report
Fayette Street - Culvert B**

Solve For: Headwater Elevation

| | | | |
|----------------------------------|------------------|------------------------|---------------------|
| Culvert Summary | | | |
| Allowable HW Elevation | 371.98 ft | Headwater Depth/Height | 0.63 |
| Computed Headwater Elevation | 370.79 ft | Discharge | 1.50 cfs |
| Inlet Control HW Elev. | 370.71 ft | Tailwater Elevation | 0.00 ft |
| Outlet Control HW Elev. | 370.79 ft | Control Type | Outlet Control |
| Grades | | | |
| Upstream Invert | 370.01 ft | Downstream Invert | 369.80 ft |
| Length | 30.00 ft | Constructed Slope | 0.007000 ft/ft |
| Hydraulic Profile | | | |
| Profile | M2 | Depth, Downstream | 0.48 ft |
| Slope Type | Mid | Normal Depth | 0.63 ft |
| Flow Regime | Subcritical | Critical Depth | 0.48 ft |
| Velocity Downstream | 3.41 ft/s | Critical Slope | 0.018106 ft/ft |
| Section | | | |
| Section Shape | Circular | Mannings Coefficient | 0.024 |
| Section Material | CMP | Span | 1.25 ft |
| Section Size | 15 inch | Rise | 1.25 ft |
| Number Sections | 1 | | |
| Outlet Control Properties | | | |
| Outlet Control HW Elev. | 370.79 ft | Upstream Velocity Head | 0.09 ft |
| Ke | 0.70 | Entrance Loss | 0.06 ft |
| Inlet Control Properties | | | |
| Inlet Control HW Elev. | 370.71 ft | Flow Control | Unsubmerged |
| Inlet Type | Mitered to slope | Area Full | 1.2 ft ² |
| K | 0.02100 | HDS S Chart | 2 |
| M | 1.33000 | HDS S Scale | 2 |
| C | 0.04630 | Equation Form | 1 |
| Y | 0.75000 | | |

**Culvert Calculator Report
Fayette Street - Culvert C**

Solve For: Headwater Elevation

| | | | |
|----------------------------------|------------------|------------------------|---------------------|
| Culvert Summary | | | |
| Allowable HW Elevation | 370.83 ft | Headwater Depth/Height | 0.89 |
| Computed Headwater Elevation | 369.97 ft | Discharge | 2.62 cfs |
| Inlet Control HW Elev. | 369.82 ft | Tailwater Elevation | 0.00 ft |
| Outlet Control HW Elev. | 369.97 ft | Control Type | Outlet Control |
| Grades | | | |
| Upstream Invert | 368.85 ft | Downstream Invert | 368.69 ft |
| Length | 32.00 ft | Constructed Slope | 0.005000 ft/ft |
| Hydraulic Profile | | | |
| Profile | M2 | Depth, Downstream | 0.65 ft |
| Slope Type | Mid | Normal Depth | 1.11 ft |
| Flow Regime | Subcritical | Critical Depth | 0.65 ft |
| Velocity Downstream | 4.07 ft/s | Critical Slope | 0.019763 ft/ft |
| Section | | | |
| Section Shape | Circular | Mannings Coefficient | 0.024 |
| Section Material | CMP | Span | 1.25 ft |
| Section Size | 15 inch | Rise | 1.25 ft |
| Number Sections | 1 | | |
| Outlet Control Properties | | | |
| Outlet Control HW Elev. | 369.97 ft | Upstream Velocity Head | 0.11 ft |
| Ke | 0.70 | Entrance Loss | 0.08 ft |
| Inlet Control Properties | | | |
| Inlet Control HW Elev. | 369.82 ft | Flow Control | Unsubmerged |
| Inlet Type | Mitered to slope | Area Full | 1.2 ft ² |
| K | 0.02100 | HDS S Chart | 2 |
| M | 1.33000 | HDS S Scale | 2 |
| C | 0.04630 | Equation Form | 1 |
| Y | 0.75000 | | |

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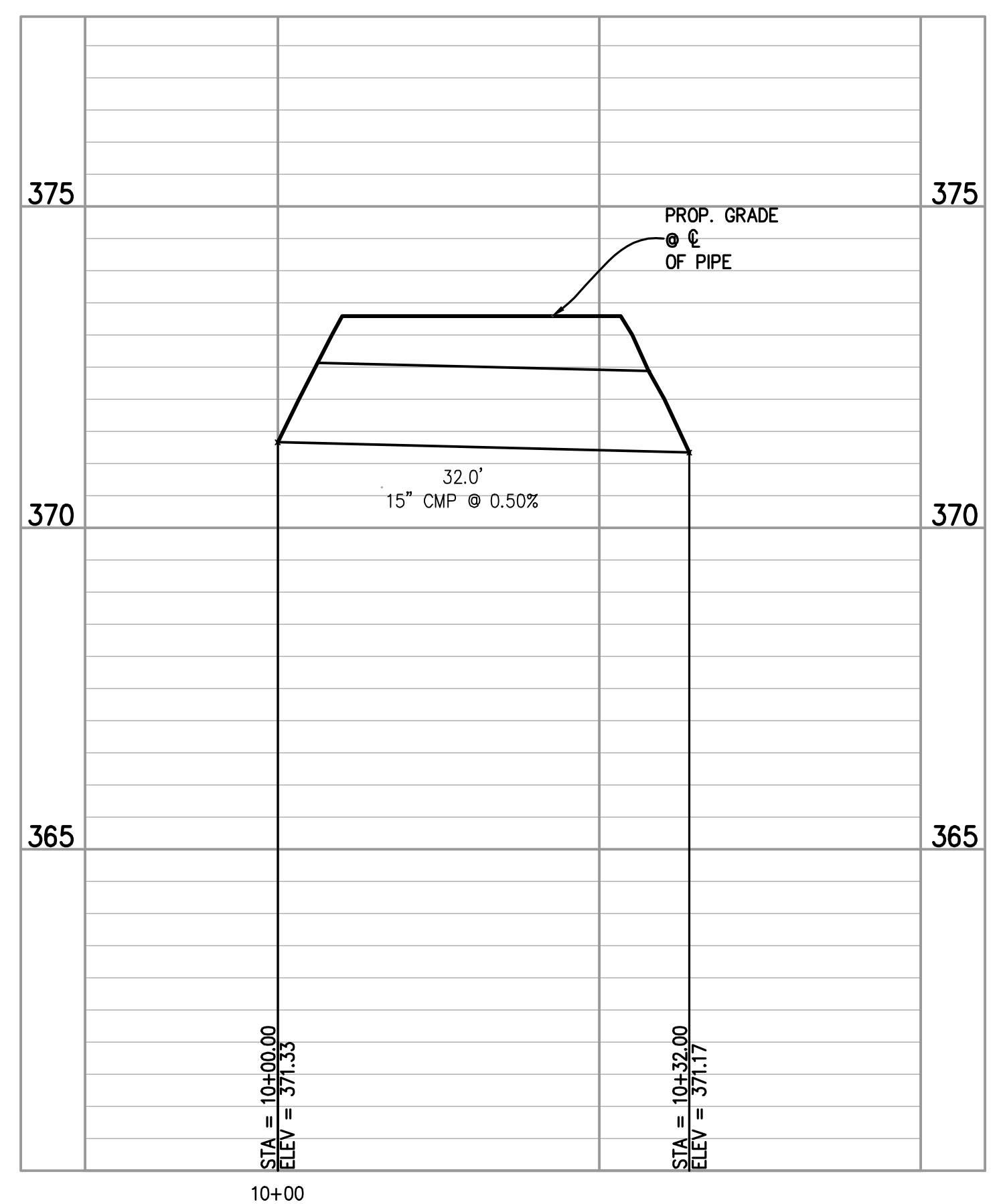
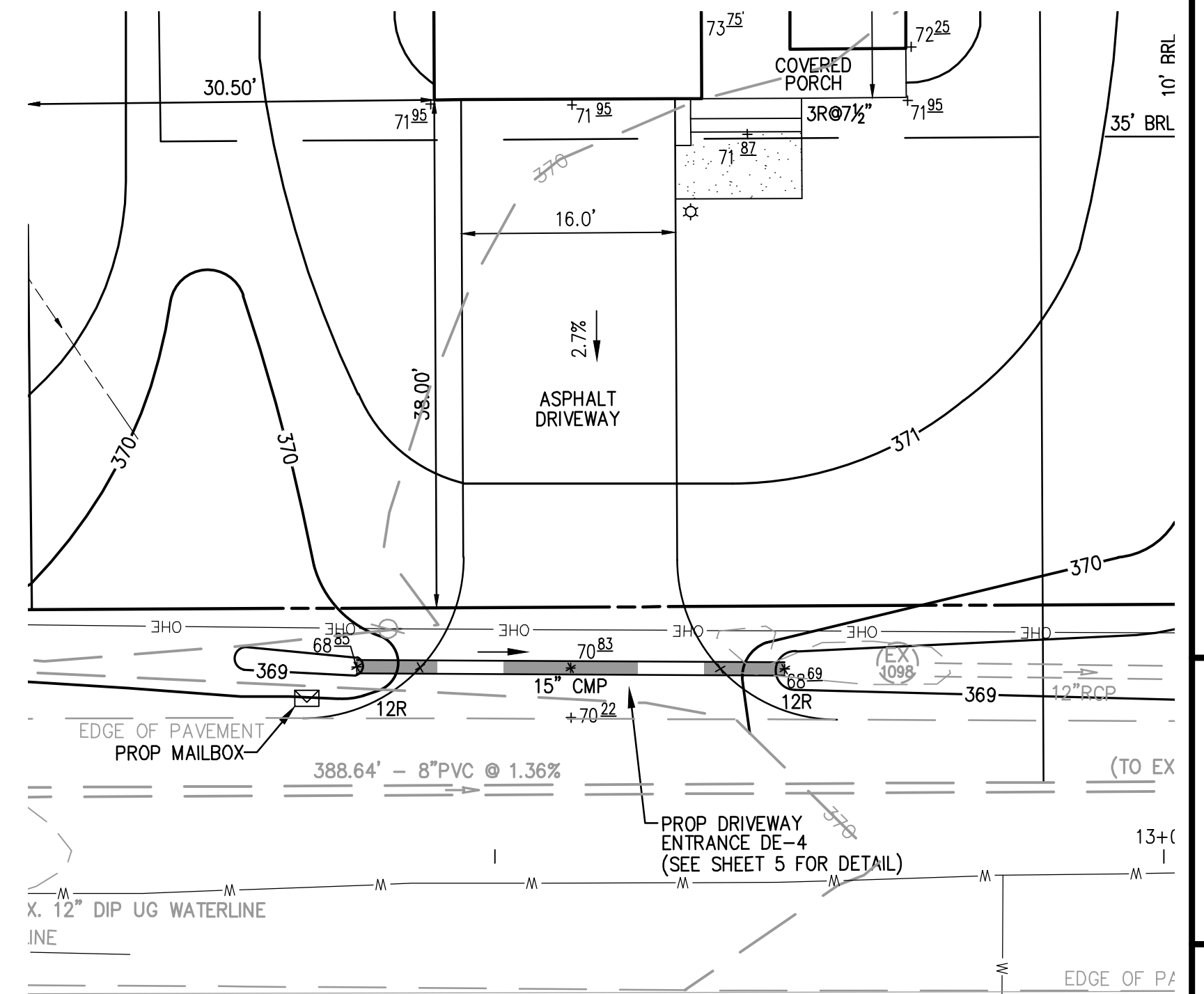
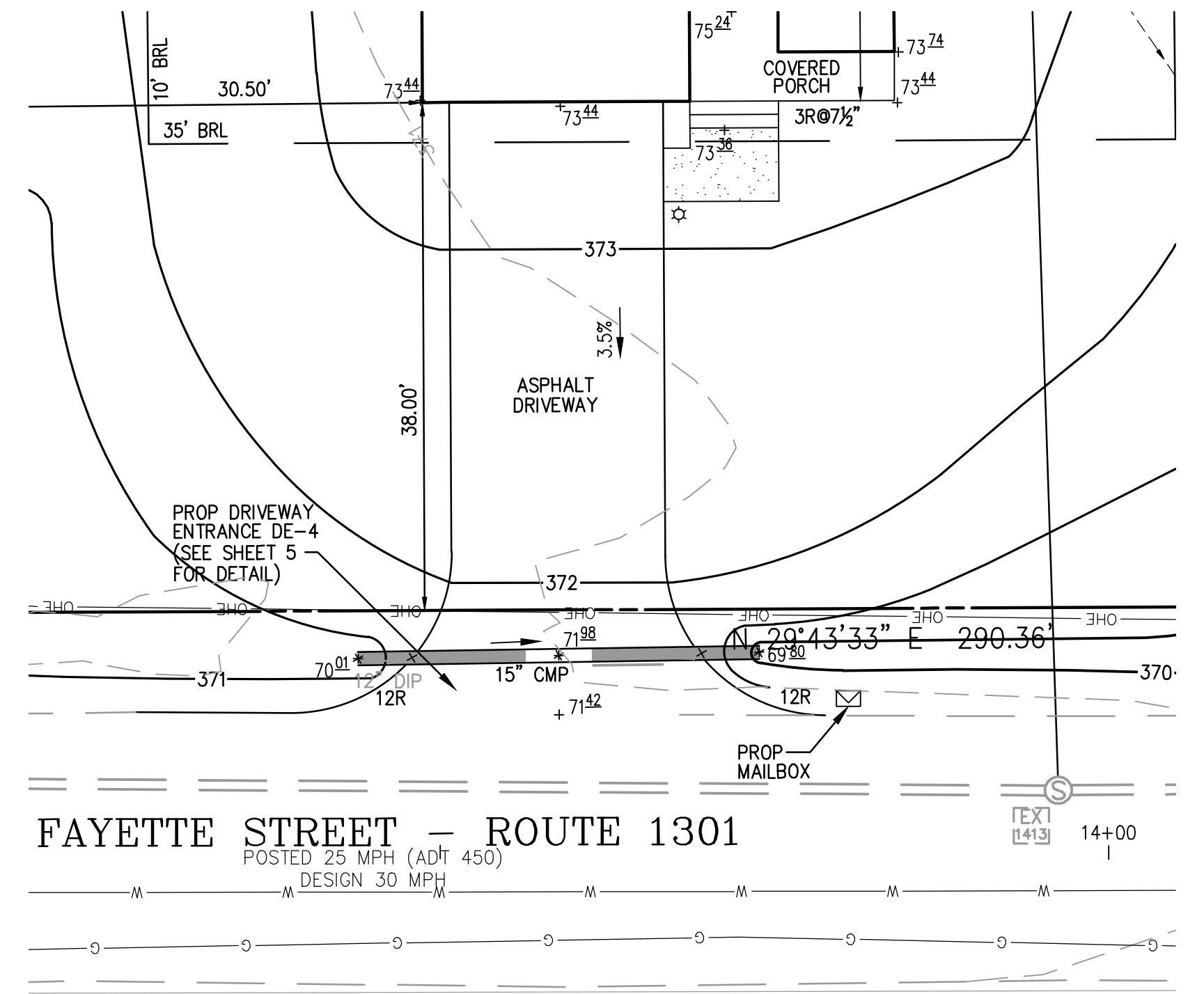
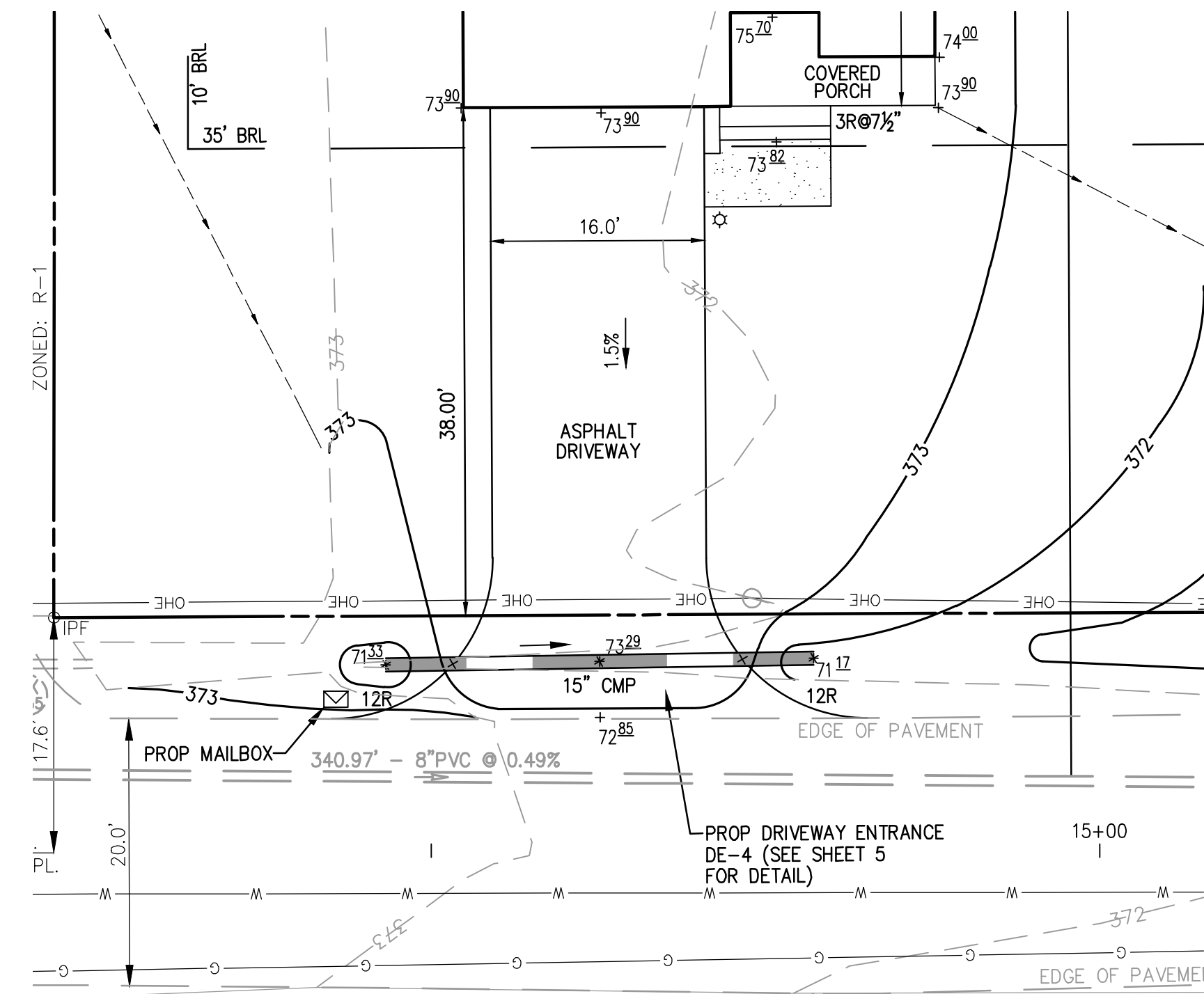
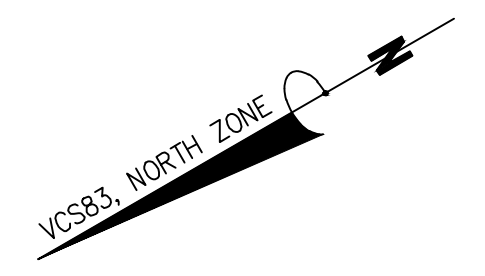
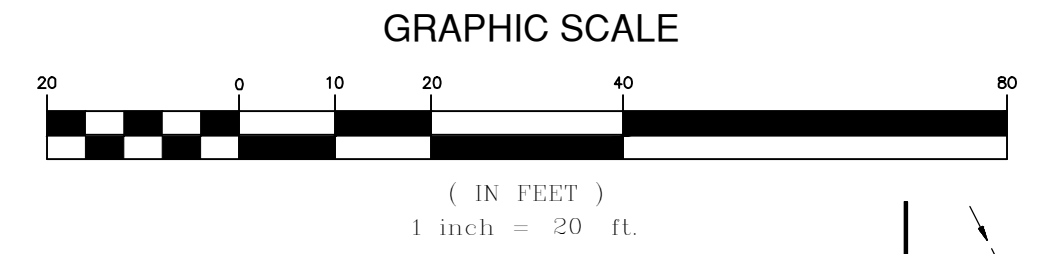
CULVERT COMPUTATIONS
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
PRINCE WILLIAM COUNTY, VIRGINIA
TOWN OF HAYMARKET

SP2018-001
COUNTY PROJECT NUMBER

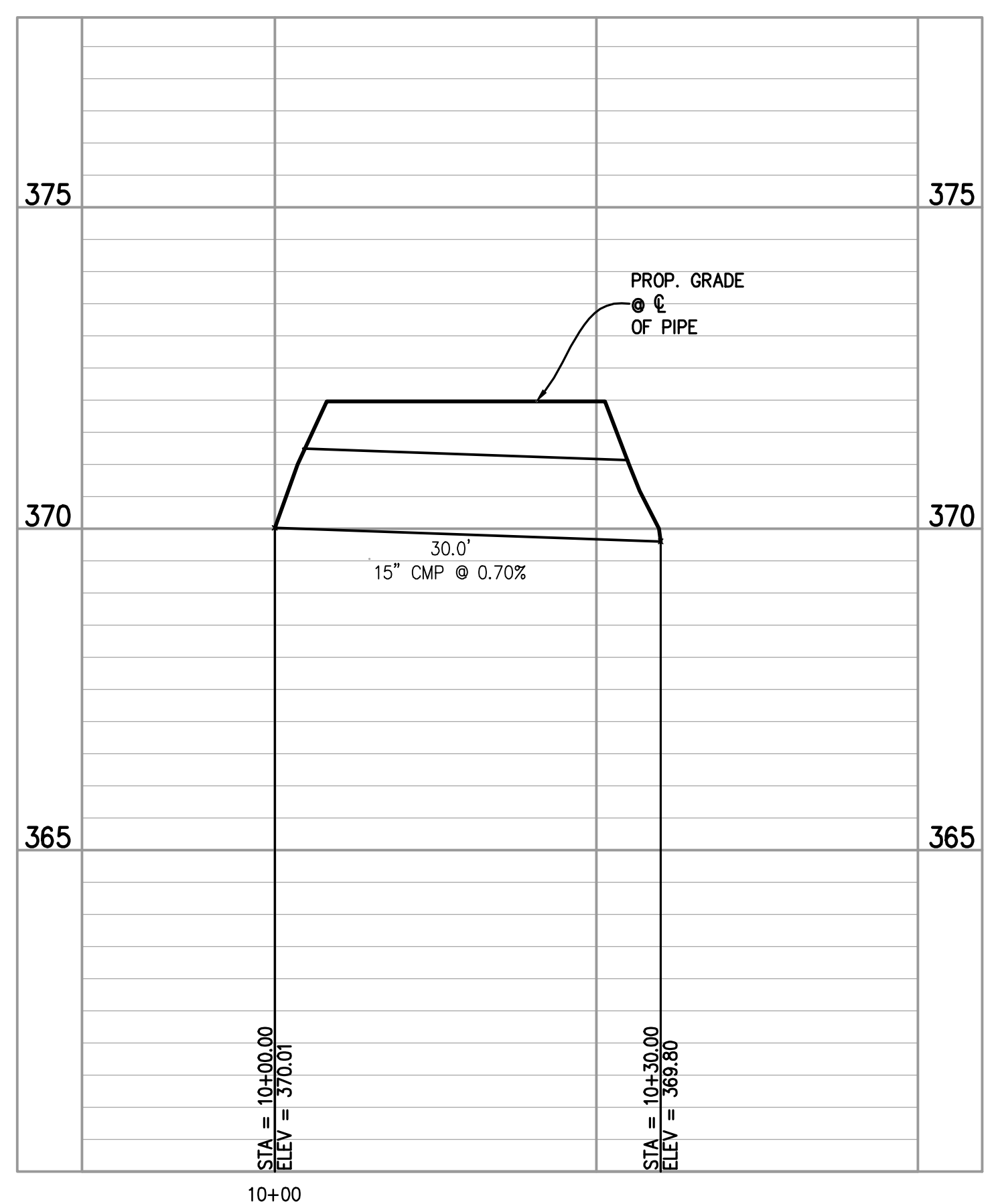


PLAN STATUS
06/06/18 1ST SUBMISSION
07/10/18 2ND SUBMISSION

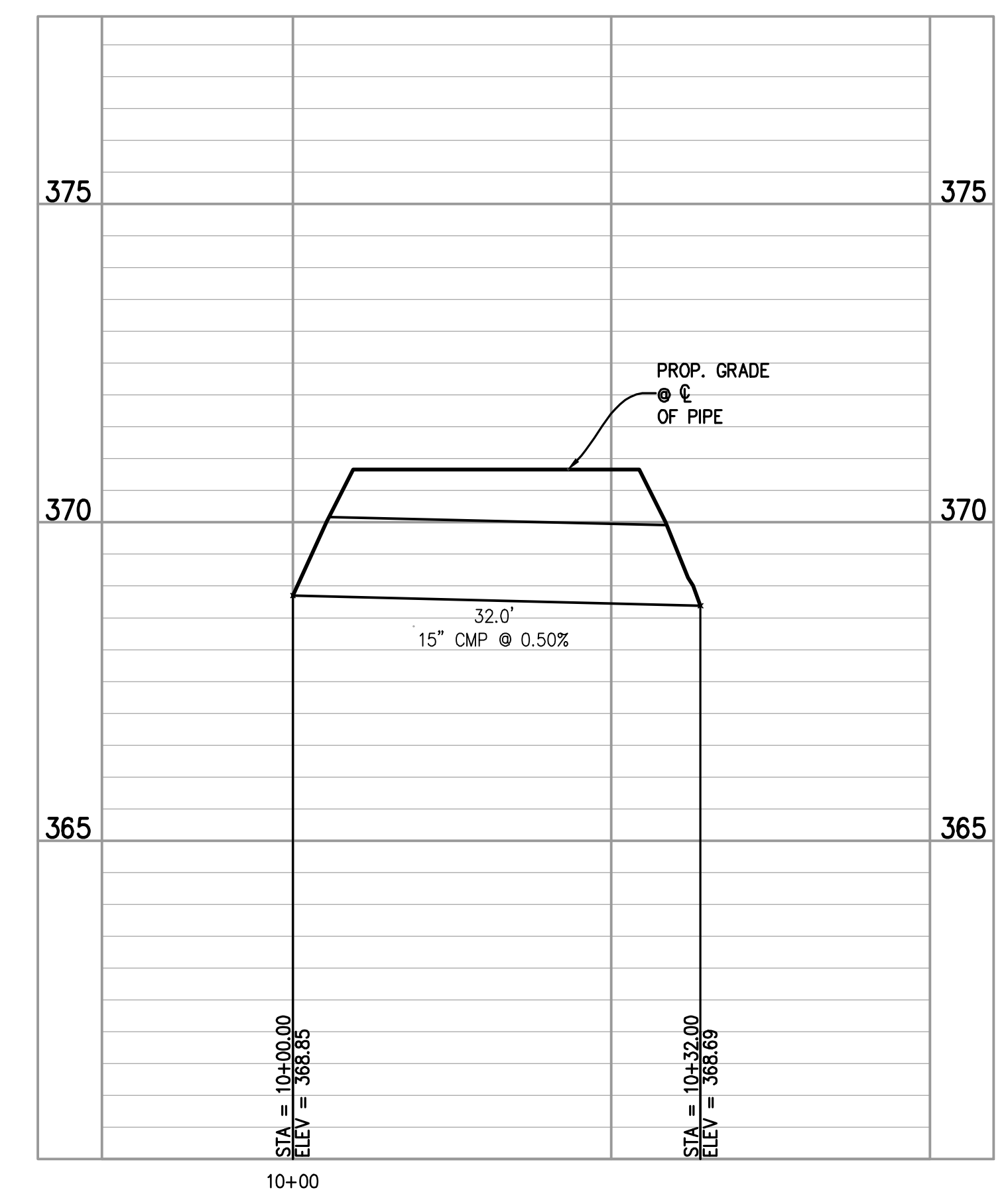
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|----------|---------------------|
| DATE | DESCRIPTION |
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: 1"=20' V: N/A |
| JOB No. | 00396-01-001 |
| DATE | JUNE 2018 |
| FILE No. | 003096-D-CP-001 |
| SHEET | 14 OF 20 |



CULVERT 'A' PROFILE VIEW
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=2'



CULVERT 'B' PROFILE VIEW
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=2'



CULVERT 'C' PROFILE VIEW
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=2'

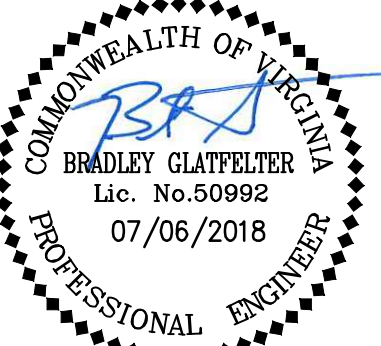
NOTE: CULVERT ENTRANCES AND
OUTLETS TO BE MITERED TO SLOPE.

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CULVERT PROFILES
RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
PRINCE WILLIAM COUNTY, VIRGINIA
TOWN OF HAYMARKET

SP2018-001
COUNTY PROJECT NUMBER



PLAN STATUS
06/06/18 1ST SUBMISSION
07/10/18 2ND SUBMISSION

| DATE | DESCRIPTION |
|--------|---------------------|
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: 1"=20' V: N/A |

JOB No. 00396-01-001
DATE : JUNE 2018
FILE No. 003096-D-CP-001

SHEET 15 OF 20

WATER QUALITY COMPUTATIONS:

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - Version 3.0

BMP Design Specifications List: 2013 Draft Std & Specs

Site Summary

Project Title: 6675 Fayette Street
Date: 4/25/21

| | |
|-----------------------|------|
| Total Rainfall (in) | 4.8 |
| Total Disturbed Area: | 0.99 |

Site Land Cover Summary

| Pre-Development Land Cover (acres) | | | | | |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|
| | A Soils | B Soils | C Soils | D Soils | % of Total |
| Forest/Open | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Managed Turf | 0.00 | 0.00 | 0.02 | 0.00 | 0.52 |
| Impervious Cover | 0.00 | 0.00 | 0.07 | 0.00 | 0.67 |
| Totals | 0.00 | 0.00 | 0.09 | 0.00 | 0.99 |

| Post-Development Land Cover (acres) | | | | | |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|
| | A Soils | B Soils | C Soils | D Soils | % of Total |
| Forest/Open | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Managed Turf | 0.00 | 0.00 | 0.81 | 0.00 | 0.81 |
| Impervious Cover | 0.00 | 0.00 | 0.18 | 0.00 | 0.18 |
| Totals | 0.00 | 0.00 | 0.99 | 0.00 | 0.99 |

Site Tn and Land Cover Nutrient Loads

| | Final Post-Development (Post-Development & New Impervious) | Post-Development (New Impervious) | Post-Development (New Impervious) | Adjusted Pre-Development |
|-------------------------------------|--|-----------------------------------|-----------------------------------|--------------------------|
| Site Tn | 0.35 | 0.28 | 0.95 | 0.28 |
| Treatment Volume (ft ³) | 1,259 | 893 | 366 | 893 |
| TP Load (lb/yr) | 0.79 | 0.56 | 0.23 | 0.56 |

| | Pre-Development TP Load per acre (lb/acre/yr) | Final Post-Development TP Load per acre (lb/acre/yr) | Post-Development TP Load per acre (lb/acre/yr) |
|--|---|--|--|
| | 0.93 | 0.80 | 0.63 |

| | | | |
|--|------|------|------|
| Total TP Load Reduction Required (lb/yr) | 0.24 | 0.06 | 0.19 |
|--|------|------|------|

| | Final Post-Development Load (Post-Development & New Impervious) | Pre-Development |
|-----------------|---|-----------------|
| TP Load (lb/yr) | 0.56 | 0.93 |

Site Compliance Summary

| | |
|---|-----|
| Maximum % Reduction Required Below Pre-Development Load | 20% |
|---|-----|

| | 543 |
|--|------|
| Total Runoff Volume Reduction (ft ³) | 543 |
| Total TP Load Reduction Achieved (lb/yr) | 0.34 |
| Total TN Load Reduction Achieved (lb/yr) | 2.44 |
| Remaining Post-Development TP Load (lb/yr) | 0.45 |
| Remaining Post-Development TN Load (lb/yr) | 0.00 |

** TARGET TP REDUCTION EXCEEDED BY 0.1 LB/YEAR **

Drainage Area Summary

| | D.A. A | D.A. B | D.A. C | D.A. D | D.A. E | Total |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Forest/Open | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Managed Turf | 0.24 | 0.26 | 0.32 | 0.00 | 0.00 | 0.81 |
| Impervious Cover | 0.06 | 0.06 | 0.06 | 0.00 | 0.00 | 0.18 |
| Total Area | 0.30 | 0.31 | 0.38 | 0.00 | 0.00 | 0.99 |

Drainage Area Compliance Summary

| | D.A. A | D.A. B | D.A. C | D.A. D | D.A. E | Total |
|-------------------------|--------|--------|--------|--------|--------|-------|
| TP Load Reduced (lb/yr) | 0.11 | 0.11 | 0.13 | 0.00 | 0.00 | 0.34 |
| TN Load Reduced (lb/yr) | 0.75 | 0.79 | 0.90 | 0.00 | 0.00 | 2.44 |

Drainage Area A Summary

| Land Cover Summary | | | | | |
|--------------------|-------------|-------------|-------------|-------------|-------------|
| | A Soils | B Soils | C Soils | D Soils | % of Total |
| Forest/Open | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Managed Turf | 0.00 | 0.00 | 0.24 | 0.00 | 0.80 |
| Impervious Cover | 0.00 | 0.00 | 0.06 | 0.00 | 0.20 |
| Totals | 0.00 | 0.00 | 0.30 | 0.00 | 0.30 |

BMP Selections

| Practice | Managed Turf Credit Area (acres) | Impervious Cover Credit Area (acres) | BMP Treatment Volume (ft ³) | TP Load from Upstream Practices (lb) | Untreated TP Load to Practice (lb) | TP Removed (lb/yr) | TP Remaining (lb/yr) | Downstream Treatment to be Employed |
|---|----------------------------------|--------------------------------------|---|--------------------------------------|------------------------------------|--------------------|----------------------|--|
| 2.b. Simple Disconnection to C/D Soils (Spec #1) | | 0.040748393 | 140.52 | 0.00 | 0.09 | 0.02 | 0.07 | 9.c. Shearflow to Vegetated Filter Strip |
| 9.c. Shearflow to Vegetated Filter Strip, A Soils or Compost Amended R/C/D Soils (Spec #2 & #4) | 0.2 | | 265.11 | 0.07 | 0.10 | 0.08 | 0.08 | |

| | |
|--|------|
| Total Impervious Cover Treated (acres) | 0.04 |
| Total Turf Area Treated (acres) | 0.20 |
| Total TP Load Reduction Achieved in D.A. (lb/yr) | 0.11 |
| Total TN Load Reduction Achieved in D.A. (lb/yr) | 0.75 |

Drainage Area B Summary

| Land Cover Summary | | | | | |
|--------------------|-------------|-------------|-------------|-------------|-------------|
| | A Soils | B Soils | C Soils | D Soils | % of Total |
| Forest/Open | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Managed Turf | 0.00 | 0.00 | 0.26 | 0.00 | 0.81 |
| Impervious Cover | 0.00 | 0.00 | 0.06 | 0.00 | 0.20 |
| Totals | 0.00 | 0.00 | 0.31 | 0.00 | 0.31 |

BMP Selections

| Practice | Managed Turf Credit Area (acres) | Impervious Cover Credit Area (acres) | BMP Treatment Volume (ft ³) | TP Load from Upstream Practices (lb) | Untreated TP Load to Practice (lb) | TP Removed (lb/yr) | TP Remaining (lb/yr) | Downstream Treatment to be Employed |
|---|----------------------------------|--------------------------------------|---|--------------------------------------|------------------------------------|--------------------|----------------------|--|
| 2.b. Simple Disconnection to C/D Soils (Spec #1) | | 0.040616952 | 140.05 | 0.00 | 0.09 | 0.02 | 0.07 | 9.c. Shearflow to Vegetated Filter Strip |
| 9.c. Shearflow to Vegetated Filter Strip, A Soils or Compost Amended R/C/D Soils (Spec #2 & #4) | 0.22 | | 280.73 | 0.07 | 0.11 | 0.09 | 0.09 | |

| | |
|--|------|
| Total Impervious Cover Treated (acres) | 0.04 |
| Total Turf Area Treated (acres) | 0.22 |
| Total TP Load Reduction Achieved in D.A. (lb/yr) | 0.11 |
| Total TN Load Reduction Achieved in D.A. (lb/yr) | 0.79 |

Drainage Area C Summary

| Land Cover Summary | | | | | |
|--------------------|-------------|-------------|-------------|-------------|-------------|
| | A Soils | B Soils | C Soils | D Soils | % of Total |
| Forest/Open | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Managed Turf | 0.00 | 0.00 | 0.32 | 0.00 | 0.84 |
| Impervious Cover | 0.00 | 0.00 | 0.06 | 0.00 | 0.16 |
| Totals | 0.00 | 0.00 | 0.38 | 0.00 | 0.38 |

BMP Selections

| Practice | Managed Turf Credit Area (acres) | Impervious Cover Credit Area (acres) | BMP Treatment Volume (ft ³) | TP Load from Upstream Practices (lb) | Untreated TP Load to Practice (lb) | TP Removed (lb/yr) | TP Remaining (lb/yr) | Downstream Treatment to be Employed |
|---|----------------------------------|--------------------------------------|---|--------------------------------------|------------------------------------|--------------------|----------------------|--|
| 2.b. Simple Disconnection to C/D Soils (Spec #1) | | 0.040748393 | 140.52 | 0.00 | 0.09 | 0.02 | 0.07 | 9.c. Shearflow to Vegetated Filter Strip |
| 9.c. Shearflow to Vegetated Filter Strip, A Soils or Compost Amended R/C/D Soils (Spec #2 & #4) | 0.28 | | 329.00 | 0.07 | 0.14 | 0.10 | 0.10 | |

| | |
|--|------|
| Total Impervious Cover Treated (acres) | 0.04 |
| Total Turf Area Treated (acres) | 0.28 |
| Total TP Load Reduction Achieved in D.A. (lb/yr) | 0.13 |
| Total TN Load Reduction Achieved in D.A. (lb/yr) | 0.90 |

WATER QUANTITY COMPUTATIONS:

Runoff Volume and CN Calculations

| Target Rainfall Event (in) | 1-year storm | 2-year storm | 10-year storm |
|----------------------------|--------------|--------------|---------------|
| Target Rainfall Event (in) | 2.52 | 3.04 | 4.64 |

| Drainage Areas | RV & CN | Drainage Area A | Drainage Area B | Drainage Area C | Drainage Area D | Drainage Area E |
|-----------------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|
| CN | 76 | 76 | 76 | 76 | 76 | 76 |
| RV (ft ³) | 158 | 175 | 200 | 0 | 0 | 0 |
| RV w/ R (acres) | 0.85 | 0.80 | 0.80 | 0.00 | 0.00 | 0.00 |
| RV w/ R (in) | 0.70 | 0.65 | 0.66 | 0.00 | 0.00 | 0.00 |
| CN adjusted | 76 | 75 | 75 | 0 | 0 | 0 |
| RV w/ R (acres) | 1.32 | 1.16 | 1.16 | 0.00 | 0.00 | 0.00 |
| RV w/ R (in) | 1.06 | 1.00 | 1.01 | 0.00 | 0.00 | 0.00 |
| CN adjusted | 76 | 75 | 75 | 0 | 0 | 0 |
| RV w/ R (acres) | 2.49 | 2.41 | 2.41 | 0.00 | 0.00 | 0.00 |
| RV w/ R (in) | 2.34 | 2.26 | 2.26 | 0.00 | 0.00 | 0.00 |
| CN adjusted | 77 | 76 | 76 | 0 | 0 | 0 |

SITE CURVE NUMBERS

| | 1 - YEAR | 2 - YEAR | 10-YEAR |
|--------------------------------|----------|----------|---------|
| EXISTING CONDITIONS | 76 | 76 | 76 |
| PROPOSED CONDITIONS (ADJUSTED) | 75 | 75 | 76 |

Rainfall Depth (P)

| | |
|---------|------|
| 1 Year | 2.52 |
| 2 Year | 3.04 |
| 10 Year | 4.64 |

Pre-Development Site Conditions:

DA (acres) = 0.990
 DA (mi²) = 0.001547
 CN = 76
 Tc = 0.083333
 S = 1000/CN - 10 = 3.157895
 la = 0.25 = 0.631579

Q (1 year) = [(P-0.2S)²] / (P+0.8S) = 0.707 in
 Q (2 year) = [(P-0.2S)²] / (P+0.8S) = 1.042 in
 Q (10 year) = [(P-0.2S)²] / (P+0.8S) = 2.242 in

Pre-Development Peak Discharge:

q (1 year) = qu*Am*Q*Fp = 1.093 cfs
 q (2 year) = qu*Am*Q*Fp = 1.612 cfs
 q (10 year) = qu*Am*Q*Fp = 3.469 cfs

Post-Development Site Conditions (1-year):

DA (acres) = 0.990
 DA (mi²) = 0.001547
 Adjusted CN (1 year) = 75
 Tc = 0.083333
 S = 1000/CN - 10 = 3.333333
 la = 0.25 = 0.666667

Q (1 year) = [(P-0.2S)²] / (P+0.8S) = 0.662 in

Post-Development Peak Discharge:

q (1 year) = qu*Am*Q*Fp = 1.024 cfs

Post-Development Site Conditions (2-year):

DA (acres) = 0.990083
 DA (mi²) = 0.001547
 Adjusted CN (2 year) = 75
 Tc = 0.083333
 S = 1000/CN - 10 = 3.333333
 la = 0.25 = 0.666667

Q (2 year) = [(P-0.2S)²] / (P+0.8S) = 0.987 in

Post-Development Peak Discharge:

q (2 year) = qu*Am*Q*Fp = 1.527 cfs

Post-Development Site Conditions (10-year):

DA (acres) = 0.990083
 DA (mi²) = 0.001547
 Adjusted CN (10 year) = 76
 Tc = 0.083333
 S = 1000/CN - 10 = 3.157895
 la = 0.25 = 0.631579

Q (10 year) = [(P-0.2S)²] / (P+0.8S) = 2.242 in

Post-Development Peak Discharge:

q (10 year) = qu*Am*Q*Fp = 3.469 cfs

STORMWATER MANAGEMENT NARRATIVE:

FLOOD PROTECTION

WITH THE USE OF ROOFTOP DISCONNECTIONS AND COMPOST SOIL AMENDMENTS, THE POST-DEVELOPMENT STORMWATER PEAK FLOW DISCHARGE IS EQUAL TO THE PRE-DEVELOPMENT DISCHARGE. THE PRE-DEVELOPMENT PEAK FLOW AND THE POST-DEVELOPMENT PEAK FLOW IS 3.469 CFS FOR THE 10-YEAR 24-HOUR STORM, SEE THE WATER QUANTITY COMPUTATIONS ON THIS SHEET.

CHANNEL PROTECTION:

PURSUANT TO 9VAC25-870-66 SECTION B.1.b., THE MAXIMUM PEAK FLOW RATE FROM THE 1-YEAR 24-HOUR STORM SHALL BE CALCULATED IN ACCORDANCE WITH THE FOLLOWING METHODOLOGY:

Q DEVELOPED ≤ I.F. * (Q PRE-DEVELOPED * RV PRE-DEVELOPED) / RV DEVELOPED
 WHERE I.F. = 0.9 FOR SITES < 1 ACRE.

Q PRE DEVELOPED (1 YEAR) = 1.093 CFS
 Q DEVELOPED (1 YEAR) = 1.024 CFS
 RV PRE-DEVELOPED = (0.707 IN/12 IN) * (43,128 SF) = 2541 CF
 RV DEVELOPED = (0.662 IN/12 IN) * (43,128 SF) = 2379 CF

Q DEVELOPED ≤ 0.9*(1.093 CFS * 2541 CF)/(2379 CF) = 1.051 CFS
 Q DEVELOPED = 1.024 CFS ≤ 1.051 CFS

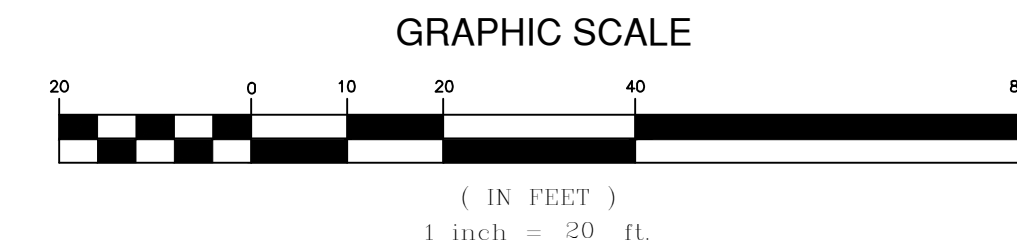
WATER QUALITY / BMP NARRATIVE:

THE PROPOSED DEVELOPMENT IS SUBJECT TO THE RE-DEVELOPMENT CRITERIA OF THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM). AS SUCH, THE SUBJECT SITE IS REQUIRED TO REMOVE 0.24 LB/YR OF TOTAL PHOSPHORUS (TP). THE PROPOSED DESIGN, AS SHOWN IN THE VRRM SUMMARY ON THIS SHEET, REMOVES 0.34 LB/YR OF TP.

THE APPLICANT PROPOSES TO DISCONNECT THE ROOF DRAINS AND ALLOW THE RUNOFF TO RETURN TO A SHEET FLOW CONDITION OVER STABILIZED COMPOST AMENDED SOILS TO IMPROVE THE HYDROLOGY OF THE EXISTING ONSITE SOILS. IN ACCORDANCE WITH TABLE 4.3 IN DEQ SPECIFICATION NO.4 - SOIL COMPOST AMENDMENT, THE APPLICANT WILL INCORPORATE 6" OF APPROVED COMPOST WITH A TILLER TO A DEPTH OF 12".

THE EXISTING CONDITION CURRENTLY HAS A CURVE NUMBER OF 76 FOR THE 1-, 2-, AND 10-YEAR STORMS. IN THE PROPOSED CONDITIONS THE ADJUSTED SITE CURVE NUMBERS FOR THE 1-, 2-, AND 10-YEAR STORM ARE 74, 75, AND 76, RESPECTIVELY. THEREFORE, THE PROPOSED COMPOST AMENDED SOILS IMPROVE THE HYDROLOGY OF THE EXISTING ONSITE SOILS FOR THE 1- AND 2-YEAR STORMS AND MAINTAINS THE EXISTING HYDROLOGY IN THE 10-YEAR STORM. REFER TO THE SITE CURVE NUMBER TABLE ON THIS SHEET.

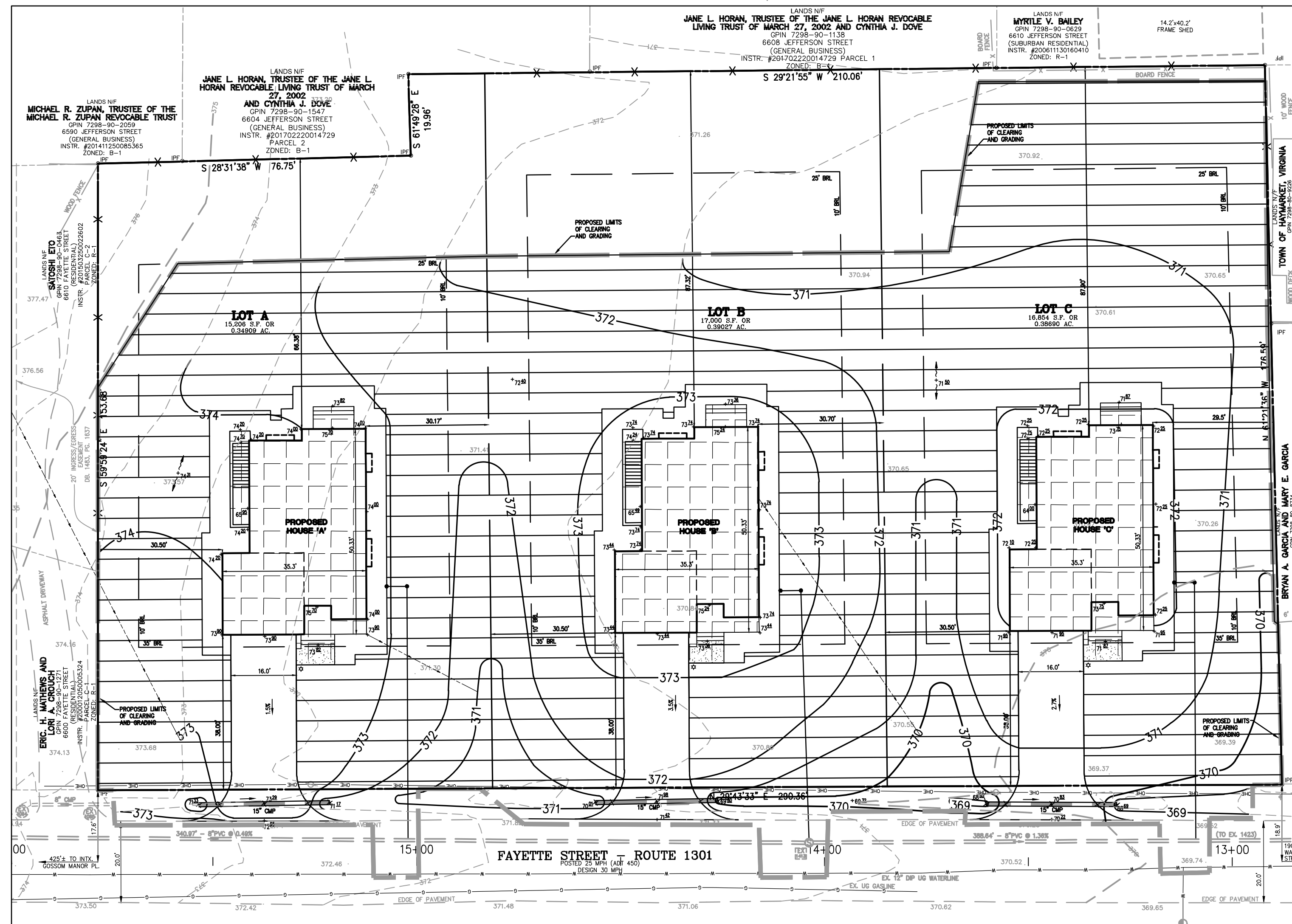
IN PROPOSING THE ABOVE, THE APPLICANT ACHIEVES THE REQUIRED REDUCTION OF POLLUTANTS AND POST-DEVELOPMENT RUNOFF AND THEREFORE MEETS THE TOWN OF HAYMARKET'S STORMWATER REGULATIONS AND THE COMMONWEALTH OF VIRGINIA STORMWATER ACT.



LEGEND

- Solid line: LIMITS OF CLEARING & GRADING
- Dashed line: EXISTING CONTOUR
- Line with elevation: PROPOSED CONTOUR
- Circle with elevation: PROPOSED SPOT ELEVATION
- Wavy line: EXISTING TREELINE
- Grid pattern: IMPERVIOUS ROOF AREA TO SOIL COMPOST AMENDMENT - C SOIL
- Stippled pattern: SOIL COMPOST AMENDMENT SURFACE AREA - C SOIL

TOTAL = 5,319 SF (0.12 AC)
 TOTAL = 30,405 SF (0.70 AC)



STORMWATER MANAGEMENT MAP



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STORMWATER MANAGEMENT PLAN
 RESIDENTIAL SITE PLAN
6675 FAYETTE STREET
 PRINCE WILLIAM COUNTY, VIRGINIA
 TOWN OF HAYMARKET

SP2018-001
 COUNTY PROJECT NUMBER

PLAN STATUS
 06/06/18 1ST SUBMISSION
 07/10/18 2ND SUBMISSION

| DATE | DESCRIPTION |
|----------|---------------------|
| SH/KF | KG BG |
| DESIGN | DRAWN CHKD |
| SCALE | H: 1"=20' V: N/A |
| JOB No. | 00396-01-001 |
| DATE | JUNE 2018 |
| FILE No. | 003096-D-CP-001 |

ROOFTOP DISCONNECTION (SPEC #1) SPECIFICATIONS:

Table 1.2: Simple Rooftop Disconnection Design Criteria¹

| DESIGN FACTOR | SIMPLE DISCONNECTION |
|---|---|
| Maximum impervious (Rooftop) Area Treated | 1,000 sq. ft. per disconnection |
| Longest flow path (roof/gutter) | 75 feet |
| Disconnection Length | Equal to longest flow path, but no less than 40 feet ² |
| Disconnection slope | < 2%, or < 5% with turf reinforcement ³ |
| Distance from buildings or foundations | Extend downspouts 5 ft. ⁴ (15 ft. in karst areas) away from building if grade is less than 1%. |
| Type of Pretreatment | External (leaf screens, etc) |

¹ For alternative runoff reduction practices, see the applicable specification for design criteria. See Table 1 in this specification for eligible practices and associated specification numbers.
² An alternative runoff reduction practice must be used when the disconnection length is less than 40 feet.
³ Turf reinforcement may include EC-2, EC-3, or other appropriate reinforcing materials that are confirmed by the designer to be non-erosive for the specific characteristics and flow rates anticipated at each individual application, and acceptable to the plan approving authority.
⁴ Note that the downspout extension of 5 feet is intended for simple foundations. The use of a dry well or french drain adjacent to an in-ground basement or finished floor area should be carefully designed and coordinated with the design of the structure's water-proofing system (foundation drains, etc.), or avoided altogether.

NOTES:
 1. EACH GUTTER SYSTEM IS TO HAVE LEAF SCREENS.
 2. NO MORE THAN 1000 SF OF ROOF SHALL BE SERVED PER DOWNSPOUT (MINIMUM OF 2 DOWNSPOUTS PER DWELLING).

SOIL COMPOST AMENDMENT (SPEC #4) SPECIFICATIONS:

VA DCR-DEQ STORMWATER DESIGN SPECIFICATION NO. 4 SOIL COMPOST AMENDMENT

6.4. Determining Depth of Compost Incorporation

The depth of compost amendment is based on the relationship of the surface area of the soil amendment to the contributing area of impervious cover that it receives. Table 4.3 presents some general guidance derived from soil modeling by Holman-Dodds (2004) that evaluates the required depth to which compost must be incorporated. Some adjustments to the recommended incorporation depth were made to reflect alternative recommendations of Roa Espinosa (2006), Balousek (2003), Chollak and Rosenfeld (1998) and others.

Table 4.3. Short-Cut Method to Determine Compost and Incorporation Depths

| | Contributing Impervious Cover to Soil Amendment Area Ratio ¹ | | | |
|---------------------------|---|----------------------|-----------------------|--------------------------|
| | IC/SA = 0 ² | IC/SA = 0.5 | IC/SA = 0.75 | IC/SA = 1.0 ³ |
| Compost (in) ⁴ | 2 to 4 ⁵ | 3 to 6 ⁵ | 4 to 8 ⁵ | 6 to 10 ⁵ |
| Incorporation Depth (in) | 6 to 10 ⁵ | 8 to 12 ⁵ | 15 to 18 ⁵ | 18 to 24 ⁵ |
| Incorporation Method | Rototiller | Tiller | Subsoiler | Subsoiler |

¹ IC = contrib. impervious cover (sq. ft.) and SA = surface area of compost amendment (sq. ft.)
² For amendment of compacted lawns that do not receive off-site runoff
³ In general, IC/SA ratios greater than 1 should be avoided, unless applied to a simple rooftop disconnection
⁴ Average depth of compost added
⁵ Lower end for B soils, higher end for C/D soils

Once the area and depth of the compost amendments are known, the designer can estimate the total amount of compost needed, using an estimator developed by TCC, (1997):

$$C = A * D * 0.0031$$

Where: C = compost needed (cu. yds.)
 A = area of soil amended (sq. ft.)
 D = depth of compost added (in.)

6.5. Compost Specifications

- Compost shall be derived from plant material and meet the general criteria set forth by the U.S. Composting Seal of Testing Assurance (STA) program. See www.compostingcouncil.org for a list of local providers.
- The compost shall be the result of the biological degradation and transformation of plant-derived materials under conditions that promote anaerobic decomposition. The material shall be well composted, free of viable weed seeds, and stable with regard to oxygen consumption and carbon dioxide generation. The compost shall have a moisture content that has no visible free water or dust produced when handling the material. It shall meet the following criteria, as reported by the U.S. Composting Council STA Compost Technical Data Sheet provided by the vendor.

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- a. 100% of the material must pass through a half inch screen
- b. The pH of the material shall be between 5.5 and 8.5.
- c. Manufactured inert material (plastic, concrete, ceramics, metal, etc.) shall be less than 1.0% by weight
- d. The organic matter content shall be >35%
- e. Soluble salt content shall be less than 6.0 mmhos/cm
- f. Must be mature and stable per the appropriate test(s) as specified by STA
- g. Carbon/nitrogen ratio shall be less than 25:1
- h. Must meet USEPA part 503 levels for heavy metals
- i. The compost should have an optimum dry bulk density ranging from 40 to 50 lbs/ft³. However, certain fully mature coarse textured composts may be lower.

In general, fresh manure should not be used for compost because of high bacteria and nutrient levels. If manure is used, it must be aged (composted) and meet the criteria listed above.

COMPOST COMPUTATIONS:

CONTRIBUTING IMPERVIOUS COVER TO SOIL AMENDMENT AREA RATIO:
 IC (IMPERVIOUS COVER) = 5,319 SF
 SA (COMPOST AMENDMENT) = 30,405 SF
 IC/SA=0.17

COMPOST NEEDED:
 C = A*D*0.0031
 A = 30,405 SF
 D = 6 IN
 C = 566 CY

MAINTENANCE SPECIFICATIONS:

9.1. MAINTENANCE AGREEMENTS

WHEN SOIL COMPOST AMENDMENTS ARE APPLIED ON PRIVATE RESIDENTIAL LOTS, HOMEOWNERS WILL NEED TO BE EDUCATED ON THEIR ROUTINE MAINTENANCE NEEDS, UNDERSTAND THE LONG-TERM MAINTENANCE PLAN, AND BE SUBJECT TO A DEED RESTRICTION OR OTHER MECHANISM ENFORCEABLE BY THE QUALIFYING LOCAL PROGRAM TO ENSURE THAT INFILTRATING AREAS ARE NOT CONVERTED OR DISTURBED. THE MECHANISM SHOULD, IDEALLY, GRANT AUTHORITY FOR LOCAL AGENCIES TO ACCESS THE PROPERTY FOR INSPECTION OR CORRECTIVE ACTION. IN ADDITION, THE GPS COORDINATES FOR ALL AMENDED AREAS SHOULD BE PROVIDED UPON FACILITY ACCEPTANCE TO ENSURE LONG TERM TRACKING.

A SIMPLE MAINTENANCE AGREEMENT SHOULD BE PROVIDED IF SOIL RESTORATION IS ASSOCIATED WITH MORE THAN 10,000 SQUARE FEET OF REFORESTATION, A CONSERVATION EASEMENT OR DEED RESTRICTION, WHICH ALSO IDENTIFIES A RESPONSIBLE PARTY, MAY BE REQUIRED TO MAKE SURE THE NEWLY DEVELOPING FOREST CANNOT BE CLEARED OR DEVELOPED MANAGEMENT IS ACCOMPLISHED (I.E., THINNING, INVASIVE PLANT REMOVAL, ETC.). SOIL COMPOST AMENDMENTS WITHIN A FILTER STRIP OR GRASS CHANNEL SHOULD BE LOCATED IN A PUBLIC RIGHT-OF-WAY, OR WITHIN A DEDICATED STORMWATER OR DRAINAGE EASEMENT.

9.2. FIRST YEAR MAINTENANCE OPERATIONS

IN ORDER TO ENSURE THE SUCCESS OF SOIL COMPOST AMENDMENTS, THE FOLLOWING TASKS MUST BE UNDERTAKEN IN THE FIRST YEAR FOLLOWING SOIL RESTORATION:

INITIAL INSPECTIONS: FOR THE FIRST SIX MONTHS FOLLOWING THE INCORPORATION OF SOIL AMENDMENTS, THE SITE SHOULD BE INSPECTED AT LEAST ONCE AFTER EACH STORM EVENT THAT EXCEEDS 1/2-INCH OF RAINFALL.

SPOT RESEEDING: INSPECTORS SHOULD LOOK FOR BARE OR ERODING AREAS IN THE CONTRIBUTING DRAINAGE AREA OR AROUND THE SOIL RESTORATION AREA AND MAKE SURE THEY ARE IMMEDIATELY STABILIZED WITH GRASS COVER.

FERTILIZATION: DEPENDING ON THE AMENDED SOILS TEST, A ONE-TIME, SPOT FERTILIZATION MAY BE NEEDED IN THE FALL AFTER THE FIRST GROWING SEASON TO INCREASE PLANT VIGOR.

WATERING: WATER ONCE EVERY THREE DAYS FOR THE FIRST MONTH, AND THEN WEEKLY DURING THE FIRST YEAR (APRIL-OCTOBER), DEPENDING ON RAINFALL.

9.3. ONGOING MAINTENANCE

CORE AERATION TO BE COMPLETED ONCE EVERY YEAR TO PREVENT SOIL COMPACTION. EXTENSIVE CORE AERATION SHALL BE COMPLETED BETWEEN SEPTEMBER 1 AND OCTOBER 15 AS THIS PROVIDES THE OPTIMUM RECUPERATIVE POTENTIAL. CORE AERATION CAN BE VERY DISRUPTIVE TO SURFACE SMOOTHNESS, BUT IT IS THE BEST WAY TO RELIEVE THE PHYSICAL EFFECTS OF SOIL COMPACTION AND INCREASE SOIL OXYGEN LEVELS. OWNERS SHALL DE-THATCH THE TURF AS NEEDED TO INCREASE PERMEABILITY.

IN ADDITION, IN ACCORDANCE WITH VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION (DCR) PROCEDURES AND REGULATIONS, A NUTRIENT MANAGEMENT PLAN SHALL BE COMPLETED EVERY TWO YEARS BY A CERTIFIED NUTRIENT MANAGEMENT PLANNER. A LIST OF CERTIFIED NUTRIENT PLANNERS CAN BE FOUND HERE: [HTTP://WWW.DCR.VIRGINIA.GOV/SOIL-AND-WATER/DOCUMENT/NMDIR.PDF](http://www.dcr.virginia.gov/soil-and-water/document/nmdir.pdf). FERTILIZERS AND AMENDMENTS SHALL BE APPLIED IN ACCORDANCE WITH THE NUTRIENT MANAGEMENT PLAN.

OVERSEEDING MAY BE REQUIRED TO ENSURE UNIFORM VEGETATIVE COVERAGE. REFER TO VIRGINIA TURFGRASS VARIETY RECOMMENDATIONS [HTTP://PUBS.EXT.VT.EDU/CSES/CSES-17/CSES-17_PDF.PDF](http://pubs.ext.vt.edu/CSES/CSES-17/CSES-17_PDF.PDF) WHEN SELECTING SEED MIX FOR OVER-SEEDING. THE TYPE SHOULD BE SUITABLE TO ENVIRONMENTAL CONDITIONS OF THE NORTHERN VIRGINIA TRANSITION ZONE. OVERSEEDING SHALL BE COMPLETED DURING THE SPRING OR FALL.

OWNER SHALL KEEP RECORD OF ALL MAINTENANCE INSPECTIONS AND ACTIVITIES TO PROVIDE TO THE TOWN OF VIENNA AS REQUESTED. AN EXAMPLE MAINTENANCE INSPECTION CHECKLIST FOR AN AREA OF SOIL COMPOST AMENDMENTS CAN BE ACCESSED IN APPENDIX C OF CHAPTER 9 OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK (2010).



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STORMWATER MANAGEMENT NOTES AND DETAILS
 RESIDENTIAL SITE PLAN
 6675 FAYETTE STREET
 PRINCE WILLIAM COUNTY, VIRGINIA
 TOWN OF HAYMARKET

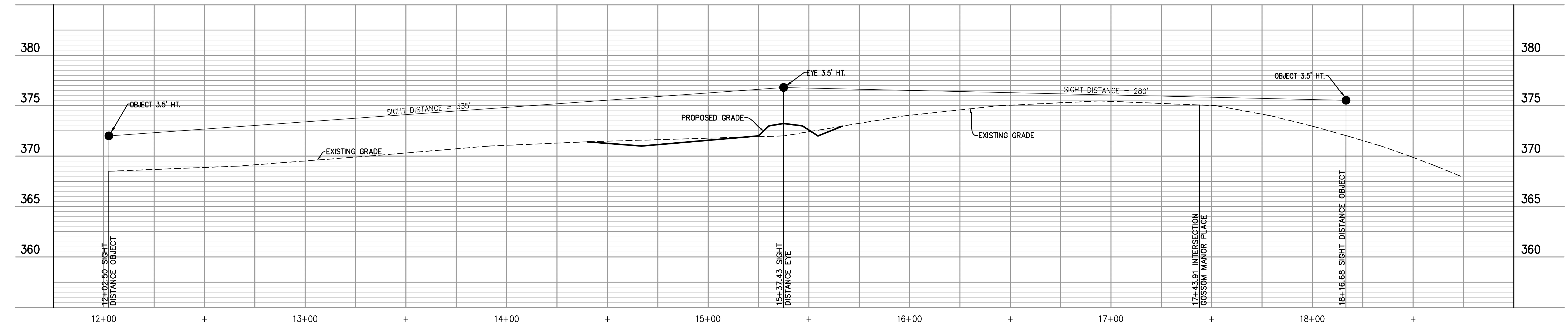
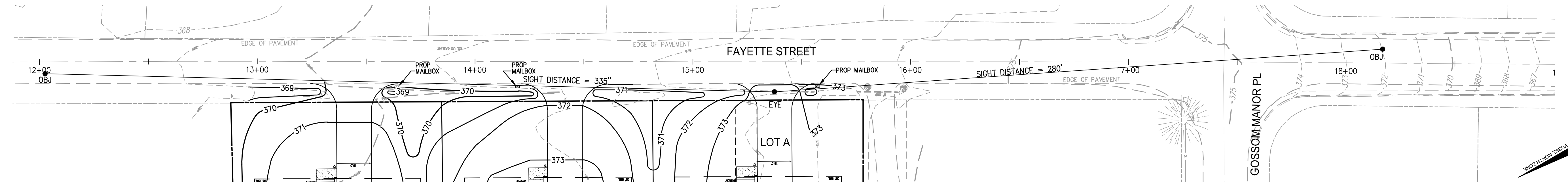
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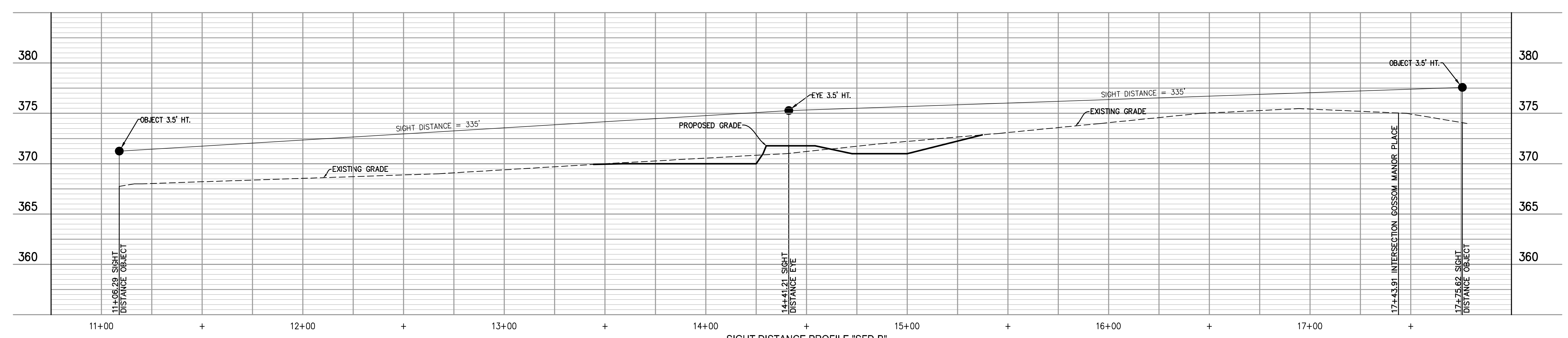
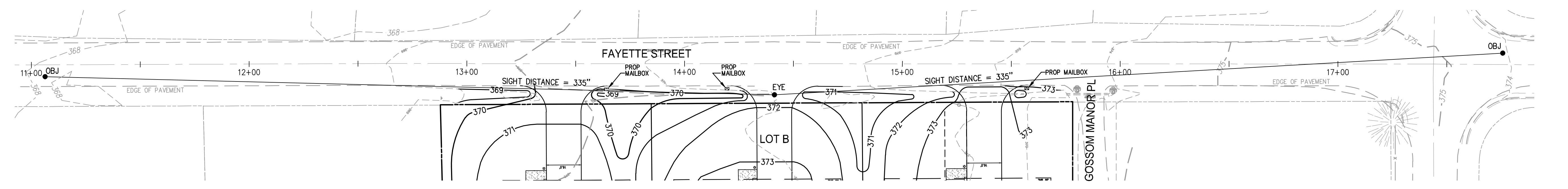
PLAN STATUS
 06/06/18 1ST SUBMISSION
 07/10/18 2ND SUBMISSION

| DATE | DESCRIPTION |
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| DESIGN | DRAWN CHKD |
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| DATE : | JUNE 2018 |
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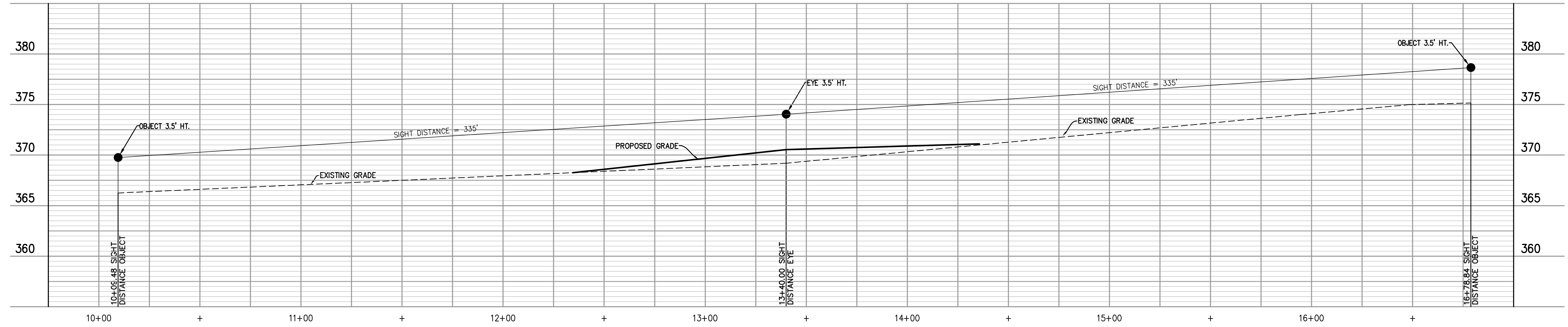
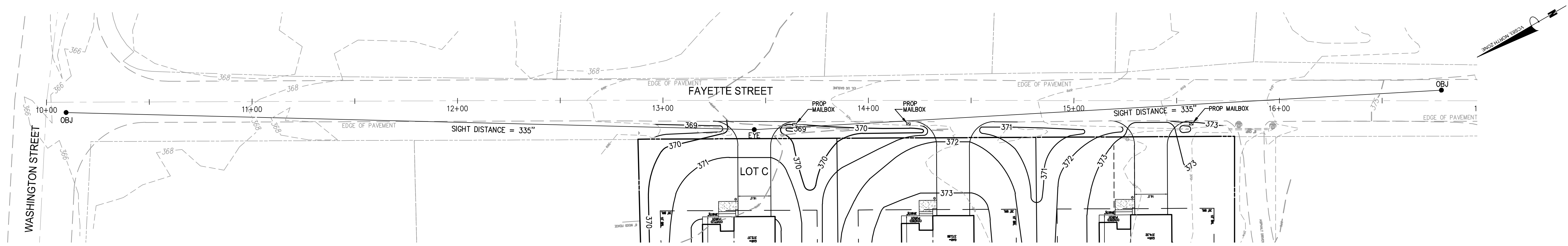
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 (VPD=450)



SIGHT DISTANCE PROFILE "SFD-B"
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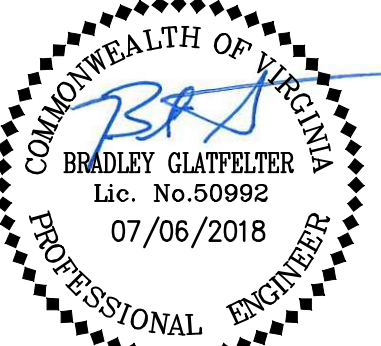
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SIGHT DISTANCE LOT C
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|--------|-------------|
| SH/KF | KF BG |
| DESIGN | DRAWN CHKD |

SCALE H: 1"=25'
 V: 1"=5'

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SHEET 20 OF 20