

# TOWN OF HAYMARKET PLANNING COMMISSION

# PUBLIC HEARING/REGULAR MEETING ~ AGENDA ~

Emily Lockhart, Town Planner http://www.townofhaymarket.org/

15000 Washington Street, Suite 100 Haymarket, VA 20169

Monday, September 21, 2020

7:00 PM

Council Chambers

### I. Call To Order

1. Zoom Invite - Https://Us02web.Zoom.Us/J/84205609560?Pwd=AEpLOEhvUWIDdFVEM3IzenpGYUtuUT09

## II. Pledge of Allegiance

## **III. Public Hearing Notice and Public Comment**

- 1. Public Hearing Notice 1 SUP 6611 Jefferson Street
- 2. Public Hearing Notice 2 Proffer Amendment 14600 Washington Street

# IV. Public Hearing Adjournment

### V. Citizens Time

## VI. Minute Approval

1. Planning Commission - Regular Meeting - Aug 17, 2020 7:00 PM

### VII. Agenda Items

- 1. Consideration of SUP: 6611 Jefferson Street
- 2. Consideration of Proffer Amendment: 14600 Washington Street
- 3. QBE SUP Application 30 Condos: 14600 Washington Street
- 4. Van Metre Site Plan: 14850, 14860 Washington St, 6701 Hunting Path Rd

### VIII. New Business

- IX. Old Business
- X. ARB Updates
- XI. Town Council Updates
- XII. Adjournment

# NOTICE TOWN OF HAYMARKET PLANNING COMMISSION PUBLIC HEARING TOWN OF HAYMARKET- TOWN HALL COUNCIL CHAMBERS, FIRST FLOOR 15000 WASHINGTON STREET, STE. 100 September 21, 2020 at 7:00 pm

Notice is hereby given that the Town of Haymarket Planning Commission will conduct a public hearing on the following Special Use Permit Request. All interested parties are encouraged to present their views at these hearings.

Special Use Permit for Religious Assembly at 6611 Jefferson Street.

To consider allowing by special use religious assembly at 6611 Jefferson Street, Haymarket VA 20169. The existing zoning for 6611 Jefferson Street is B-1, Town Center. Full text of the Town Zoning Code can be found at http://www.townofhaymarket.org/index.php/government/ordinance.

This meeting is being held at 15000 Washington Street, St. 100, in a public facility believed to be accessible to persons with disabilities. Any person with questions on the accessibility of the facility should contact the Clerk of the Council at the above address or by telephone at 703/753-2600. Persons needing interpreter services for the deaf must notify the Clerk of the Council no later than September 14, 2020.

For additional information, contact the Town Planner, Emily Lockhart at 703/753-2600 or ELockhart@townofhaymarket.org.

# NOTICE TOWN OF HAYMARKET PLANNING COMMISSION PUBLIC HEARING TOWN OF HAYMARKET- TOWN HALL COUNCIL CHAMBERS, FIRST FLOOR 15000 WASHINGTON STREET, STE. 100 September 21, 2020 at 7:00 pm

Notice is hereby given that the Town of Haymarket Planning Commission will conduct a public hearing on the following Proffer Amendment Statement. All interested parties are encouraged to present their views at these hearings.

Proffer Amendment Statement for 14600 Washington Street

To consider amending the proffer statement in correlation with rezoning 2013-0528 from 2013; this proffer amendment would reduce the overall size of the recreational field use proffered from 4.51 acres to 0 acres. The existing zoning for 14600 Washington Street, GPIN 7397-19-1734 is B-1, Town Center. Full text of the Town Zoning Code can be found at http://www.townofhaymarket.org/index.php/government/ordinance.

This meeting is being held at 15000 Washington Street, St. 100, in a public facility believed to be accessible to persons with disabilities. Any person with questions on the accessibility of the facility should contact the Clerk of the Council at the above address or by telephone at 703/753-2600. Persons needing interpreter services for the deaf must notify the Clerk of the Council no later than September 14, 2020.

For additional information, contact the Town Planner, Emily Lockhart at 703/753-2600 or ELockhart@townofhaymarket.org.



# TOWN OF HAYMARKET PLANNING COMMISSION

# REGULAR MEETING ~ MINUTES ~

Emily Lockhart, Town Planner http://www.townofhaymarket.org/

15000 Washington Street, Suite 100 Haymarket, VA 20169

Monday, August 17, 2020

7:00 PM

Council Chambers

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

Chairman Matt Caudle called the meeting to order.

### I. Call To Order

Due to the COV-ID 19 pandemic and Governor Northam's executive order on social distancing, Commissioner Aayush Kharel attended the evenings meeting from his home via Zoom meeting. Chairman Matt Caudle: Present, Commissioner Aayush Kharel: Present, Councilman Bob Weir: Present, Commissioner Robert Hallet: Present, Commissioner Jackie Walker: Present, Commissioner Alexander Beyene: Present, Commissioner Thomas Utz: Absent.

## II. Pledge of Allegiance

Chairman Matt Caudle invited everyone to stand for the Pledge of Allegiance followed by a moment of silence.

### III. Citizen's Time

There were no citizens present wishing to address the Planning Commission at this evening's meeting.

# IV. Minute Approval

1. Planning Commission - Regular Meeting - Jul 20, 2020 7:00 PM

Councilman Weir moved to accept the minutes from the regular meeting on July 20, 2020. The motion was seconded by Commissioner Hallet. The motion carried.

RESULT: ACCEPTED [UNANIMOUS]

MOVER: Bob Weir, Councilman

**SECONDER:** Robert Hallet, Commissioner

**AYES:** Caudle, Kharel, Weir, Hallet, Walker, Beyene

**ABSENT:** Thomas Utz

# V. Agenda Items

1. Information Only - Van Metre/Robinson's Village Project: 14850 & 14860 Washington St. and 6701 Hunting Path Rd.

Town Planner Emily Lockhart shared that she has a second site plan for the Planning Commission to review. She stated she has the first site plans to discuss under the Old Business section of the meeting. She stated that she and the Town Engineer has prepared the first set of comments to present to Van Metre. Ms. Lockhart stated that the Commission will receive those comments as well.

### 2. PWC One Mile Review -- Gaines Technology Park

Town Planner Emily Lockhart read into the record an email regarding the proposed data center from the executive director of the Coalition to Protect Prince William County.

Ms. Lockhart informed that Prince William County recently submitted an additional one mile review packet to the Town. Ms. Lockhart stated that although it was too late to add that review to the agenda packet, she would like the Commission to also review it for comments. The additional one mile review was a rezoning and a special use permit for a data center. Also, Ms. Lockhart shared that there was an additional one mile review at Gainesville Technology Park. She stated that in total there were 3 one-mile reviews for the Planning Commission to discuss. Ms. Lockhart showed the map of the area of the data centers. She stated that they are near the fire department and Pace West school. The three locations were 1.) across the street from the

school; 2.) up against the fire house; and 3.) the last would be to the east of Catharpin that would butt up to Davies Store Lane.

At this time, Ms. Lockhart asked Councilman Weir to share information on the one mile review since he is familiar with the projects. Mr. Weir shared his knowledge on the data center that was approved by the Board of Supervisors last fall that would be located near University Blvd, the square footage of each building in each application and the megawatts each building would draw and what Dominion would have to do in order to supply transmission coverage for each. He stated that even though the lines may or may not go through the Town of Haymarket, there would be a potential impact on the surrounding areas. With the potential load generation of the 3 data centers being reviewed and the Amazon site that was approved. Dominion would need to construct at least 3 transmission lines from what's already being built. Because of legislation passed last year, Mr. Weir stated that Dominion would not be able to put the transmission lines under the road along Interstate 66 which would mean that the Town of Haymarket and surrounding areas would have an abundance of criss cross transmission lines for these data centers. Mr. Weir stated that during the time that Amazon was approved, Prince William County adopted zoning text amendment that would not allow data centers in an area without infrastructure. He continued to state that as a result a data center overlay district was created and a change was made in the county's zoning ordinance to designate an area where data centers were a by right use. Mr. Weir stated that none of the 3 applications before the commission lies within the data center overlay district and would require an SUP. Mr. Weir shared that the task of the Planning Commission is to review the plans and to determine the impacts this could have on Haymarket and the surrounding communities. Ms. Lockhart shared that the Planning Commission's comments would be sent to Prince William County, Ms. Lockhart stated that the Planning Commission should consider the visual impacts, the impacts of the property value on homes, the future impacts on expansion, and how it would affect the Town of Haymarket residents and businesses. Chairman Caudle shared that this is a huge undertaking and also shared some history in the original fight to get the lines underground along I-66. He stated that this is a long endeavor tasked to the Planning Commission. Ms. Lockhart shared the process of review and a timeline of when comments are due to the County from the Town. A discussion followed on the subject. Some of the Planning Commissions concerns were: although one of the plans showed the mega watt draw from the building the other two plans did not; the bigger plan is proffering out other by right uses on the property in question; each application is asking for a max building height of 70 feet - no mention of masking the noise from the buildings that would be adjacent to a town home development; both Tyler Elementary and Pace West would be surrounded by data centers; question the applicant on where they would drawn their power from since underground is not an option; question the applicant what their water consumption is going to be and where would they be drawing it from; question the location and route of any power lines and substations. Mr. Weir suggested that, given the lack of infrastructure, the lack of water, and the lack of right of ways available to construct new transmission lines routes, the Planning Commission recommend to the County Planning Office to recommend a denial of all 3 SUP's. Chairman Caudle stated his concern of safety particularly with the helicopter route to the hospital. Commissioner Hallet expressed his concerns about the safety of the schools and the close proximity to the schools. Mr. Hallet also expressed his concerns on road safety with the road only being 2 lanes. Town Planner Emily Lockhart stated that she compiled all the comments discussed and will

send them to the County.

### VI. New Business

Town Planner Emily Lockhart stated that she did not have any New Business to bring to the Planning Commission other than to inform them to obtain the Robinson's Village site plan.

### VII. Old Business

#### 1. QBE 14600 Washington Street SUP and Proffer Amendment Update

Town Planner Emily Lockhart shared that QBE submitted their new Generalized Development Plan earlier in the afternoon. She stated that she has not been able to review the plan prior to the meeting. She stated that she will touch base with the Town Engineer to address the previous concerns and requests from the June 29th Joint Public Hearing. She stated that she will be in contact with the Planning Commission on the next steps going forward.

Ms. Lockhart also updated the Planning Commission on the progress of the old BB&T bank building. She stated that the new owner has pulled building permits and that the work on the building should start soon.

Ms. Lockhart also updated the Planning Commission on the progress of the Haymaket Hotel project and the potential start date of September 15th.

Ms. Lockhart continued on reporting about the Jefferson Street pedestrian project. She stated that the project has been delayed due to a gas line needing to be relocated. She shared the estimated finish date on the project is mid September.

Lastly, Ms. Lockhart shared that Crossroads Village will be in attendance at the next ARB meeting with a potential tenant for one of their pad sites. She stated that a grocer is looking at the site and will be sharing their design ideas with the ARB.

There was a discussion on the QBE project. Ms. Lockhart stated that there would be a new public hearing on the proffer amendment. A discussion followed on the deadline of the SUP. Ms. Lockhart stated that a decision will need to be made at the September meeting on the SUP but the time starts over on the consideration of the proffer amendment since there was a change. There was a discussion on holding a work session prior to the public hearing. There was a directive for Ms. Lockhart to ask the applicant to consider giving the Planning Commission an extension on the SUP so that it can be considered at the same time as the proffer amendment. Ms. Lockhart shared that she would get back to the Planning Commission with the comments on the updated proffer that was requested to be addressed, a snapshot of the staff comments on the amended application and the response from the applicant on the September timeline. A question was asked if Ms. Lockhart met with Prince William County Parks and Rec. Ms. Lockhart shared that she spoke them. She shared that Parks and Rec stated that the fields were still being utilized and that they saw their future still in Haymarket. She also stated that Parks and Rec shared that they lease the property for public Park and Rec use and also shared the requirements for a permit.

# VIII. ARB Updates

Town Planner Emily Lockhart did not have any additional updates.

# IX. Town Council Updates

Councilman Weir stated that the Planning Commission should start updating the Comp Plan by October. Mr. Weir also shared that there are some inconsistencies in the Zoning Ordinance that he and staff will be addressing.

Town Planner Emily Lockhart shared that Haymarket Coffee Company entered into a private/public partnership to open the museum on weekends and will be serving the local coffee. Ms. Lockhart also shared that the Town is partnering with Keep Prince William beautiful in a Town clean-up day on August 29th.

# X. Adjournment

With no further business before the Planning Commission, Councilman Weir moved to adjourn with a second by Commissioner Hallet. The motion carried.

### 1. Motion to Adjourn

RESULT: ADOPTED [UNANIMOUS]

MOVER: Bob Weir, Councilman

SECONDER: Robert Hallet, Commissioner

AYES: Caudle, Kharel, Weir, Hallet, Walker, Beyene

**ABSENT:** Thomas Utz

Submitted:	Approved
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### Emily K. Lockhart

Town Planner and Zoning Administrator

### **MEMORANDUM**

TO: Planning Commission FROM: Emily K. Lockhart DATE: September 15, 2020

SUBJECT: SUP#2020-003, Iglesia Cristiana, 6611 Jefferson Street, Church Use in

B-1

### **Application Summary:**

Applicant, Gerry Kennedy, with Kennedy Haymarket Properties, has applied for a Special Use Permit for Iglesia Cristiana Church to operate at 6611 Jefferson Street.

### Background for Special Use Permit:

- Request for a special use permit for a church use in the Town Center District, B-1
- Applicant is requesting use permit for up to 100 parishioners
- Zoning Ordinance Parking Requirement for Religious Assembly uses 1 space per 4 seats

The applicant has provided the SUP application and a brief narrative.

The Zoning Ordinance requires the following standards are considered and met prior to approval.

- (1) The proposed use at the stipulated location shall be in accordance with the official policies of an adopted comprehensive plan, and with any specific element of such plan.
- (2) The proposed use shall be in accordance with the general purpose and intent of the applicable zoning district requirements.
- (3) The proposed use shall not adversely affect the use or values of surrounding properties and structures.
- (4) The proposed use shall not adversely affect the health, safety or general welfare of persons residing or working in the neighborhood.
- (5) Pedestrian and vehicular traffic generated by the proposed use shall not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.
- (6) Utility, drainage, parking, loading and other necessary facilities provided to serve the proposed use shall be adequate.

### Comprehensive Plan Excerpts

### Historical Walking Central Portion of Town

This portion of Haymarket houses the old Town Hall, now the Haymarket museum, and the historic old post office. Development here should be carefully considered and should reflect the architecture that lines Washington Street and defines historic Haymarket. Architectural styles and building sizes should include Colonial, Federalist, and Folk Victorian with Greek revival and Italianate architectural details. Visual interest should be encouraged through the use of height variations ranging from one to three stories. Retail and professional buildings should be arranged in a "walk-around" manner, with parking off-site. In essence, development in this area should create a town center with a historical feel in which residents and visitors can walk, shop, eat, conduct business and relax. Restoration of the old post office will be required as part of any development plan. Consideration must be made to the utility of maintaining town hall in this portion of town or moving it to another location. From this point in town, all other structures should begin to look "newer".

### Town Planner Analysis of Impacts

(1) The proposed use at the stipulated location shall be in accordance with the official policies of an adopted comprehensive plan, and with any specific element of such plan.

Response: The Comprehensive Plan provides the following statement for the purpose and the intent of the Neighborhood Town Center as proposed in the 2008 Comprehensive Plan:

Neighborhood/Town Center – Development of a center within the Town is proposed to provide a convenient focus for community activities and services such as neighborhood stores, offices and restaurants. A cluster of dwellings, stores, and local institutions has grown at the intersection of Washington Street and Jefferson Street as a result of convenient location, traffic flow, and nearby residential development. In addition, some portions of Washington Street west from the intersection of Washington Street and Hunting Path are proposed as Neighborhood/Town Center commercial areas with a visual connection of brick sidewalks and period street furniture.

Features of community development needed to strengthen Haymarket's Town Center include:

- 1. Provisions for expansion of retail stores and offices serving Town residents in a manner consistent with an appropriate village character for the Center;
- 2. Provision of additional off-street parking and loading facilities to serve commercial development, including a public parking lot to limit parking needs at individual sites;
- 3. Preservation of architecturally significant structures including older residential and commercial structures as well as the Old Town Hall and Old Post Office buildings;
- 4. Beautification activities including additional landscaping, new street furniture (lights, benches, trashcans) and brick sidewalks;

- 5. The elimination of distracting signs;
- 6. Repair and improve maintenance of sidewalks serving the residents adjacent to the Town Center;
- 7. The construction of new structures that are carefully integrated with older, existing buildings and do not overpower the existing Streetscape or pose a threat to the center's character.

With the above intent in mind, it is the Town Planner's understanding that the religious assembly use would fit with the village character of the town center, allowing for an active use on the weekends for residents and the greater community.

(2) The proposed use shall be in accordance with the general purpose and intent of the applicable zoning district requirements.

Response: The Zoning Ordinance provides the following statement for the purpose and the intent of the Town Center Business District;

# ARTICLE X. - TOWN CENTER DISTRICT B-1

Sec. 58-10.1. - Intent.

The Town Center District, B-1, provides primarily for retail shopping and personal services to be developed either as a unit or in individual parcels oriented to attracting pedestrian shoppers, tourism and local convenience. Recognizing the economic value of the existing historical area, it shall further be the intent of the district to encourage the retention and rehabilitation of structures and uses in the district that have historic and/or architectural significance. The range, size, hours of operation, lighting, signs and other developmental aspects of permitted uses may be limited in order to enhance the general character and historic nature of the district.

It is the Town Planner's understanding that the religious assembly will meet the criteria for the developmental aspects of the B-1 District. The religious assembly provides a historic village use.

(3) The proposed use shall not adversely affect the use or values of surrounding properties and structures.

The proposed use is in the structure located at 6611 Jefferson Street. The entry into the space is located on the eastern most façade, the rear of the structure, on the ground level. The entry does not front Jefferson Street.

There is no indication the proposed-mixed-use structure will decrease the values of the surrounding properties, however for the most accurate information an additional study on the economic value would need to be performed. There is an indication that the residential property located at 6610 Jefferson Street could be affected by the church's traffic flow before and after services. The service and use hours are outside of the typical 9-5 business day, M-F. The hours of operation will be Wednesday evenings, Saturday afternoon and evenings and Sunday evenings.

The proposed use shall not adversely affect the health, safety or general welfare of persons residing or working in the neighborhood.

There is no indication of any adverse effects on the health, safety, or general welfare of the persons residing or working in the neighborhood based on the SUP Package submitted for the religious assembly.

(4) Pedestrian and vehicular traffic generated by the proposed use shall not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.

The applicant has stated that the congregation is currently small in size however, hopes to grow to 100 parishioners. This would require 25 parking spaces minimum.

The vehicular traffic along Jefferson Street may be impacted during certain times of the day when the parishioners are awaiting traffic to turn into and out of the parking lot. Furthermore, the surrounding residential properties, 6610 Jefferson St and the apartments at 6601 Jefferson Street, may possibly be impacted by the vehicles leaving the property after the evening services, due to headlights in windows, or a higher volume of vehicles.

(5) Utility, drainage, parking, loading and other necessary facilities provided to serve the proposed use shall be adequate.

Town Planner has requested a parking layout map for the property to demonstrate the proper parking requirements have been met and will be provided. Other utilities have already been installed and in use by previous tenants.

#### **Planner Recommendation:**

Th applicant has provided updated information for the Special Use Permit, to include updated hours of operation. The Pastor has confirmed the following hours;

 $\begin{array}{ll} Wednesday & 7PM-Prayer\ 1\ Hour \\ Saturday & 7PM-Service\ 2\ Hours \\ Sunday & 4PM-Service\ 2\ Hours \end{array}$ 

The applicant, originally, stated hours of operation were Sundays from 9:00 am to 1:00 pm.

Town Planner has requested the applicant provide proof of occupancy for the space so that the maximum allowed participants per the Fire Marshal can be determined.

Other areas for concern and or discussion with the Planning Commission is the provided parking (is the parking adequate with the religious assembly as well as other tenants?) and the hours of operation. Is there a need to restrict the hours of operation to end at a certain time to allow flexibility for the church and protect the surrounding residents from disturbance? Example; if Saturday night service extends beyond 9:00 pm and the

congregation does not leave the property until 10:00 pm or later will this ultimately disturb the surrounding residences?

In general, the Town Planner is in support of the Special Use Permit and would condition two items;

- 1) The applicant must provide a Certificate of Occupancy for the space to determine the maximum allowable parishioners in the space. This shall be provided by the applicant prior to the religious assembly operating.
- 2) The hours of operation shall not extend beyond 10:00 pm any day of the week.

If the Planning Commission is ready to vote on the application following the public hearing and discussion, please see the below draft motion.

### **Draft Motion:**

"I move the Planning Commission to forward SUP#2020-003 to the Town Council for Public Hearing with the following recommended conditions;

- 1) The applicant must provide a Certificate of Occupancy for the space to determine the maximum allowable parishioners in the space. This shall be provided by the applicant prior to the religious assembly operating.
- 2) The hours of operation shall not extend beyond 10:00 pm any day of the week.

Or Alternate Motion.



SUP#\_

# SPECIAL USE PERMIT APPLICATION

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

A STATE OF THE PARTY OF THE PAR	
NAME OF BUSINESS/APPLICANT: KHP, LLC.	
SITE ADDRESS: 6611 JEFFERSON ST, HAYMAI	RKET VA 20169
ZONING DISTRICT: □ R-1 □ R-2 🎞 B-1 □ B-2	2 □ I-1 □ C-1 SITE PLAN PROPOSED: □ Yes 🏖 No
PROPOSED USE(S): OFFICE & RELIGIOUS AS	
activity including size and type of proposed/existing structure	elow or in an attached narrative, please describe in detail the proposed es, hours of operation, type of clientele, number of vehicles anticipated nges that will affect the nature or appearance of the structure(s) or site.
Supporting Documentation (attached):   Narrative	(58-1-77-11)
ADDITIONAL INFORMATION FOR HOME OCCUP	PATIONS (SUBJECT TO SECTION 58-16):
TYPE OF STRUCTURE: 🔲 SFD 🔲 TH 🗡 TOTAL FLOOR	R AREA OF MAIN STRUCTURE: 14,200 (sq. ft.)
FLOOR AREA DEVOTED TO HOME OCCUPATION:	
NUMBER / TYPE OF VEHICLES:17 for Sunday Relig	gious Assembly - 1 per 4 seats - 68 total seats
NUMBER / TYPE OF EQUIPMENT AND METHOD OF S N/A	STORAGE (i.e. garage, accessory storage, etc.):
OFF-STREET PARKING SPACES PROVIDED: 47	NO. OF EMPLOYEES WORKING FROM SITE:
<b>FEE:</b> □ \$500 Residential □ □ \$350 Commercial (no land disturban	\$200 Residential In-Home Business nce)  \$1,500 Commercial (land disturbance)
APPLICANT/PERMIT HOLDER INFORMATION KENNEDY HAYMARKET PROPERTIES, LLC	PROPERTY OWNER INFORMATION KENNEDY HAYMARKET PROPERTIES, LLC
Name PO BOX 795	Name PO BOX 795
Address HAYMARKET VA 20168	Address HAYMARKET VA 20168
City State Zip 703 929 2121	City State Zip 703 929 2121
Phone#(s) sheehanwp@gmail.com	Phone#(s) SHEEHANWP@GMAIL.COM
Email Address	Email Address



SUP#	
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APPLICANT / PROPERTY OWNER CONSENT	******REQUIRED*****
foregoing application and that the information provided I activity and method of operation described. Construction of	ed parcel, do hereby certify that I have the authority to make the herein or attached hereto is correct and a true representation of the of any improvements described herein and as shown on the attached nances of the Town of Haymarket, any additional restrictions and/or own Council, and all other applicable laws.
Patrick Sheehan dotloop verified 07/28/20 4:57 PM EDT YSRH-P2G1-H3IY-XEO5	Patrick Sheehan dottoop verified 07728/20 4:57 PM EDT AM1L-CDXQ-E1QB-FHSV
Applicant Signature	Property Owner Signature
Date	Date
***OFFIC	E USE ONLY***
DATE FILED: FEE AMOUNT:	DATE PAID:
DATE TO ZONING ADMINISTRATOR:	STAFF REVIEW COMPLETE:
APPLICABLE ZONING ORDINANCE SECTION(S) / RECON	
ZONING ADMINISTRATOR	DATE
DATE TO PLANNING COMMISSION:	PUBLIC HEARING DATE:
☐ RECOMMEND APPROVAL ☐ RECOMMEND	DENIAL   NO RECOMMENDATION
RECOMMENDED CONDITIONS:	
CHAIRMAN	DATE
DATE TO TOWN COUNCIL:	PUBLIC HEARING DATE:
□ APPROVED □ DENIED	
CONDITIONS:	
CONDITIONS.	



# Narrative Regarding Application for Special Use Permit for Religious Assembly 6611 Jefferson St., Haymarket, VA 20169

This brief is submitted in connection with Special Use Permit application for Religious Assembly for tenant use in leased space at 6611 Jefferson St., Haymarket VA 20169

The following items are noted in support of this application in compliance with criteria of Section 58-1.7(d):

- 6611 Jefferson is a commercial building in the Town Center B-1 Zoning District providing General Business and Office Space to its tenants. This building has a history of religious assembly usage almost from its construction. In the past the building was owned and occupied by Shepherd of The Hills Church, who sold the property to Kennedy Haymarket Properties in 2006 and remained in the facility for several years after the sale. Space was also occupied for several years by St. Katherine Drexel Catholic Church. The building accommodates small religious gatherings very nicely, without disturbing other tenants or occupants of the surrounding area.
- Off street parking is more than adequate for the Religious Assembly usage which will occur
  primarily on Sundays when other tenants are not in the building. Calculated at 1 parking space per
  4 seats of design capacity (Sec. 58-6.1) total Special Use parking requirements for Religious
  Assembly is 17 parking spaces with maximum capacity of 68 seats.
- Religious Assembly Special Use Permit is requested for space in the building which will occur primarily on Sunday, a day of the week when other tenants are not present.
- Religious Assembly is believed to be in concert with the general intent of zoning district requirements. Sec. 58-10.3 Special Uses of the Haymarket Virginia Code of Ordinances identifies Religious Assembly as an acceptable use for Town Center B-1 via Special Use Permit.
- The proposed use of Religious Assembly is not believed to adversely affect the use or values of surrounding properties and structures. Additionally, Religious Assembly usage has no adverse effect on the health, safety or general welfare of persons residing or working in the neighborhood.
- Pedestrian and vehicular traffic generated by the proposed Religious Assembly use will occur primarily on Sunday and is not deemed hazardous or in conflict with the existing and anticipated traffic in the neighborhood.

### **Emily Lockhart**

**From:** gerry@uteamkennedy.com

Sent: Wednesday, September 2, 2020 11:16 AM

To: Emily Lockhart

**Cc:** gerry Kennedy - TEAM KENNEDY

**Subject:** RE: SUP Religious Assembly 6611 Jefferson St

Hi Emily:

Thank you for your email. Please see response in body of email below. Please feel free to call with any questions. Thank you. Best regards, gerry

### **Gerry Kennedy**

**TEAM KENNEDY** 

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Mobile business card: text gerry to 21000



From: Emily Lockhart <elockhart@townofhaymarket.org>

Sent: Monday, August 31, 2020 3:29 PM

To: 'gerry@uteamkennedy.com' <gerry@uteamkennedy.com>

Subject: RE: SUP Religious Assembly 6611 Jefferson St

Good Afternoon Gerry,

I am currently working on the report for the Special Use Permit application and I have follow up information I need, please see below.

- Proposed hours of use for the religious assembly Sundays from 9:00am thru Noon/1:pm
- 2) Proposed days of use for the religious assembly **Sundays**
- 3) Proposed number of seats for the facility *currently 25 members; ultimate seating capacity of 100 chairs which were recently donated.*
- 4) Exact location of the facility within the multi-tenant building Basement south side
- 5) Other business/office uses on site and in operation during the religious assembly operational times None during the same time. In fact other long term tenants such as Youth For Tomorrow have moved largely to Telemedicine client interfaces and have expressed that they plan to continue to do so post COVID. Telemedicine expands their client reach significantly. Other than religious gathering, very little inperson demand is anticipated on the property over the next several years.
- 6) Will the facility be limited to only Sunday service? Will week night services/meetings occur? Will holiday services occur on site? *Religious services are anticipated on Sundays only. Night services are not anticipated. The*

tenant may utilize the small basement office for occasional administrative meetings. Religious holidays will be observed and sercices will be planned on days such as Christmas and Easter.

7) Outdoor storage of trailers or other sheds for church equipment/band equip/etc. A small Lowes-style trailer will be used and occasionally stored in the rear of the building.

I may have a few more follow up questions based on the answers to these above questions. **Thank you Emily. Please** feel free to contact me for any clarifications or questions. Best regards, gerry

Thanks! Emily

From: gerry@uteamkennedy.com <gerry@uteamkennedy.com>

Sent: Wednesday, July 29, 2020 4:11 PM

To: Emily Lockhart < elockhart@townofhaymarket.org>

Cc: gerry Kennedy - TEAM KENNEDY < gerry@uteamkennedy.com>

Subject: FW: SUP Religious Assembly 6611 Jefferson St

Hi Emily:

Enclosed please find application for Special Use Permit for Religious Assembly for 6611 Jefferson St. Haymarket VA 20169. Any suggestions are welcomed. Thank you for your assistance in this matter. Best regards, gerry

### **Gerry Kennedy**

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From: gerry@uteamkennedy.com <gerry@uteamkennedy.com>

Sent: Tuesday, July 28, 2020 5:31 PM

To: 'elockhart@townofhaymarket.org' < elockhart@townofhaymarket.org >

Cc: gerry Kennedy - TEAM KENNEDY (gerry@uteamkennedy.com) <gerry@uteamkennedy.com>

Subject: SUP Religious Assembly 6611 Jefferson St

Hi Emily:

It was good to see you today. Thank you for your assistance. Enclosed please find the Special Use Permit Application as referenced above. Also enclosed is the associated Narrative. Thanks in Advance for your guidance in this matter. All suggestions are welcome. I will stop by tomorrow with a check for the Application Fee.

Thank you. Best regards, gerry

Gerry Kennedy

**TEAM KENNEDY** 

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### Emily K. Lockhart

Town Planner and Zoning Administrator

### **MEMORANDUM**

TO: Planning Commission

FROM: Emily K. Lockhart DATE: September 15, 2020

SUBJECT: Proffer Amendment Application

### **Background:**

The applicant has previously rezoned the subject property, 14600 Washington Street and provided Proffers along with the original rezoning. Please see the attached original proffer and the proposed amended proffer.

In June 2020, the applicant originally submitted a Proffer Amendment to change the proffered acreage from 4.51 to 2.06. The Proffer was then amended at the end of June 2020 to change the acreage from 4.51 acres to 0 acres. This was discovered at the July Planning Commission Meeting and subsequently readvertised for a new public hearing on September 21<sup>st</sup>.

#### Comprehensive Plan Excerpts:

COMPREHENSIVE PLAN – PUBLIC / SEMI PUBLIC LAND USE

The property is designated by the Comprehensive Plan as Public / Semi Public. The Comprehensive Plan's quidance regarding the development of these planned areas is as follows:

"the land adjacent to the school should be protected and maintained in the event that the school facility becomes available for rehabilitation for public use. Adjacent areas should be well planned to insure compatibility with the school site as a public use facility...close coordination must be maintained with the Prince William County School Board and the Board of County Supervisors so that the full potential of this site may be explored as a social, business and recreational center for the Town and adjoining area residents."

#### **B-1 ZONING DISTRICT – PURPOSE AND INTENT**

Section 58-10.1 of the Zoning Ordinance states the intent of the B-1 zoning district as follows:

Sec. 58-10.1 - Intent. The Town Center District, B-1, provides primarily for retail shopping and personal services to be developed either as a unit or in individual parcels oriented to attracting pedestrian shoppers, tourism and local convenience. Recognizing the economic value of the existing historical area, it shall further be the intent of the district to encourage the retention and rehabilitation of structures and uses in the district that have historic and/or architectural significance. The range, size, hours of operation, lighting, signs and other developmental aspects of permitted uses may be limited in order to enhance the general character and historic nature of the district.

#### **Planner Recommendation:**

The Town Planner has made contact with Prince William County Parks and Recreation the current user of the proffered acreage. The Planner and County discussed how the property is currently being used, the need for the space, the public's ability to use the park space, the long term need for the space, the interest in the space as its current use and the parking for the current use.

The County explicitly stated the fields are in use and they hope to continue use of the space for time to come. The County further stated that the western end of Prince William County lacks park space and there is always a desire to further expand and grow the PWC Park space as possible. Lastly, there was a discussion regarding the number of parking spaces needed for the park use and the expected need for parking.

Town Planner recommends the denial of the Proffer Amendment as presented, which would remove the entirety of the proffer. The denial is based on the discussion with the PWC Parks and Rec Dept, the citizens concerns and the expressed interest in maintaining the open field space as previously proffered.

#### Draft Motion:

"I move the Planning Commission recommend denial of the Proffer Amendment for 14600 Washington Street, due to the following reasons; ------ will insert reasoning following discussion at the Planning Commission Meeting------."

"I move the Planning Commission recommend approval of the Proffer Amendment for 14600 Washington Street, due to the following reasons; ------ will insert reasoning following discussion at the Planning Commission Meeting------."

Or an alternate motion.

# TOWN OF HAYMARKET, VIRGINIA ORDINANCE 20130805- 1

# TO AMEND THE ZONING MAP, REZ#20130528 QBE Global, LLC / Haymarket Properties Group, LLC 14550 John Marshall Highway, GPIN 7397-19-1734 (Former PACE West School)

WHEREAS, a zoning map amendment petition has been submitted by QBE Global, LLC / Haymarket Properties Group, LLC for consideration by the Town Council pursuant to the provisions § 15.2-2286(A)(7) of the Code of Virginia and § Sec. 58-422 of the Haymarket Town Code; and

WHEREAS, the Town Council may consider such petitions in furtherance of the purposes of zoning as set out in § 15.2-2283 of the Code of Virginia and to further implement the Town's Comprehensive Plan; and

WHEREAS, approximately 6.7570 acres of the Property are presently within the Town limits and a the Town and Prince William County intend to file a joint petition with the Prince William Circuit Court to adjust the boundary so that the remaining approximately 2.0783 acres will be incorporated into the Town; and

WHEREAS, the Applicant has petitioned the Town Council to rezone +/- 8.8353 acres, identified as GPIN 7397-19-1734 and as described on the Rezoning Plat attached hereto dated May 2013 and revised through July 19, 2013 ("the Property"), from the Town's Residential R-1 District and the County's Agricultural A-1 District to the Town Center B-1 District; and

WHEREAS, the Applicant has proffered certain provisions regarding recreation field use on the Property and improvements to the Property as described in the Proffer Statement attached hereto dated August 1, 2013; and

WHEREAS, the Planning Commission and Town Council, pursuant to § 58-424 of the Haymarket Town Code, held a joint public hearing on June 27, 2013 as well as separate hearings on July 8 and August 5, 2013, respectively, and interested citizens were heard; and

WHEREAS, the Planning Commission, pursuant to § 58-425 of the Haymarket Town Code, reviewed and recommended approval of the petition on July 8, 2013 having found that the elements of the zoning map amendment petition are consistent with the Town Comprehensive Plan; and

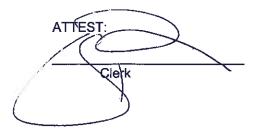
WHEREAS, the public necessity, convenience, general welfare and good zoning practice are served by the approval of the petition;

NOW, THEREFORE, BE IT ORDAINED that the Town of Haymarket, pursuant Article XI of Chapter 58 of the Haymarket Town Code, does hereby amend the Zoning Map to rezone GPIN 7397-19-1734, 14550 John Marshall Highway, from Residential District R-1 to Town Center District B-1 subject to the proffer statement referenced above. This rezoning will become effective upon the execution of an order by the Circuit Court approving a Boundary Line Adjustment Agreement bringing the entirety of the Property within the Town corporate boundary. If that order is not entered within one year of the date of Town Council approval of this ordinance, then this rezoning shall be void and of no effect. As to this Property only, this Ordinance supersedes § 58-12 of the Town Code dealing with temporary zoning of parcels added to the Town both as to the zoning of the portion of the Property currently zoned County A-1, which shall be zoned Town B-1 upon entry into the Town, and as to planning commission preparation of a zoning plan, which shall be dispensed with as unnecessary.

Done this 5<sup>th</sup> day of August, 2013.

### TOWN OF HAYMARKET; VIRGINIA

BY \_\_\_\_\_\_ David Leake, Mayor



Voting Aye: Aitken, Harnest, Scarbrough, Leake

Voting Nay: Bare, Kenworthy, Tobias

Abstaining: 0

Absent: 0

### PROFFER STATEMENT

TO:

Town of Haymarket

APPLICANT: QBE Global, LLC / Haymarket Properties Group, LLC ("Applicant")

RE:

Zoning Map Amendment Application to rezone property located at 14550 John Marshall Highway, Haymarket, VA 20169, Parcel ID#: GPIN 7397-19-1734 ("Property"), +/- 8.8353 acres, from Residential District R-1 and Prince William County's Agricultural A-1 District to Town Center District B-1 (PACE West School

Property)

DATE:

August 1, 2013

Pursuant to Sections 15.2-2297 and 15.2-2303 of the Code of Virginia, the undersigned hereby proffers that in the event the Application for rezoning the subject Property from Residential District R-1 and Prince William County's Agricultural A-1 District to the Town Center District B-1 is granted by the Haymarket Town Council, Haymarket, Virginia, as requested, the use and development of the Property shall be in conformance with the below provisions. In the event the above referenced rezoning is not granted as applied for by the Applicant, or an order by the Circuit Court approving the Boundary Line Adjustment Agreement bringing the entirety of the Property within the Town corporate boundary is not entered within one year after the date of Town Council approval of the rezoning, this Proffer Statement and these proffers shall be automatically withdrawn and be null and void. The term "Applicant" as referenced herein shall include with its meaning all future owners and successors in interest.

Subject to the condition precedent above, the Applicant commits to the following provisions:

1. Recreational Field Use: Applicant will maintain and make available for recreational field use approximately 4.51 acres adjacent to the existing school building as illustrated on the attached Exhibit A. The recreation fields will be maintained for recreational field use by the Applicant from the date of approval of this proffer by the Haymarket Town Council so long as a public or private partner is willing to enter into a commercially reasonable form of lease agreement at a fair market price. Fair market price will be determined utilizing comparables for similar property within the Haymarket leasing market and not necessarily property within the Haymarket corporate boundary and in no event shall anydiscounted price being paid by the Board of County Supervisors of Prince William County, Virginia to the Applicant for the lease of the recreation fields by the Prince William County Department of Parks and Recreation be deemed fair market price. However, if for a period of one year following the termination of any lease agreement for use of the recreation fields, the Applicant does not enter into a commercially reasonable form of lease agreement at a fair market value with another party, public or private, , the Applicant may thereafter either continue to maintain and make available for recreational field use or develop the Property consistent with the B-1 zoning regulations. The one year period shall begin on the date written notice from the Applicant is received by the Town of Haymarket stating no lease agreement for the recreation fields exists

In the event the Applicant decides to offer the Property for sale, the Town of Haymarket shall have the choice to exercise one or neither of the following options:

Proffer Statement 14550 John Marshall Highway August 1 2013 Page 2 of 3

- a. Have the right of first offer to purchase the entire Property at a price not to exceed fair market value. Notwithstanding the foregoing, Applicant hereby discloses that during the first five (5) years after Applicant acquires fee simple title to the Property, the Prince William County School Board has a right of first offer on the Property, and accordingly, during such five (5) year period the Town of Haymarket shall actually have a right of second offer with respect to the Property and the rights of Prince William County School Board shall remain superior. Applicant shall notify the Town of Haymarket at 15 and Washington St. Haymarket of its intent to offer the Property for sale along with the amount of the asking price (the "ROFO Notice"). The Town of Haymarket shall have forty-five (45)days after delivery of the ROFO Notice within which to notify Applicant of its intent to purchase the Property and a failure to provide a written response to Applicant shall be deemed a rejection by the Town of Haymarket to purchase the Property under this option a. The Town of Haymarket's rejection shall entitle Applicant to thereafter sell the property to any third party, provided that the purchase price at such sale is not less than the asking price set forth in Applicant's ROFO Notice.
- b. Have the option to enter into a commercially reasonable form of lease agreement with Applicant for continued use of the fields for recreational purposes for a period of not less than 5 years that will convey with the Property if a sale is consummated at a rent that is the lower of (i) fair market rental or (ii) \$5,000/month plus Common Area Maintenance (CAM), insurance and real estate taxes / Triple Net Lease (NNN). The Town of Haymarket shall have forty-five (45) days after delivery of the ROFO Notice within which to exercise this option b. and failure to timely respond to Applicant by written notice shall be deemed a rejection of exercise of this option b. Notwithstanding the foregoing, the Town of Haymarket shall only have this right pursuant to this subsection b. so long as the lease of the area set forth on Exhibit A between Applicant and the Board of County Supervisors of Prince William County, Virginia is not then in force and effect.

The options in a. and b. shall expire and be of no further force and effect in the event that (1) Prince William County School Board purchases the Property, or (2) the Town of Haymarket does not purchase the Property under option a. and the Property is thereafter sold to a third party, or (3) the Town of Haymarket exercises option b.

- 2. Site Plan Improvements: Applicant will submit a Final Site Plan for the Property by December 31, 2013 and thereafter diligently pursue approval of the Final Site Plan. Applicant will submit a work schedule for implementation of the Final Site Plan improvements within thirty days of the final site plan approval. Final Site Plan work will begin within six months of Final Site Plan approval and will be completed to the satisfaction of the Town within five years of Final Site Plan approval.
- 3. **Effective Date:** The effective date of the rezoning will coincide with the execution of an order by the Circuit Court approving the Boundary Line Adjustment Agreement bringing the entirety of the Property within the Town corporate boundary. If that order is not entered within one year after the date of Town Council approval of the rezoning, then this rezoning shall be void and of no effect. This provision supersedes § 58-12 of the Town Code dealing with temporary zoning of parcels added to the Town both as to the zoning of the parcel (which shall be B-1 upon entry into the Town) and as to planning commission preparation of a zoning plan, which shall be dispensed with as unnecessary.

Proffer Statement 14550 John Marshall Highway August 1 2013 Page 3 of 3

4. Sunset Clause for existing uses: Applicant agrees that if at any time the lease agreement for use of the school building by Living Hope Church and/or Saint Paul's School is terminated or not renewed, any replacement tenant will comply with the then current zoning regulations.

I hereby proffer on behalf of QBE Global, LLC / Haymarket Properties Group, LLC,that the development and/or use of the subject Property of this application shall be in strict accordance with the conditions set forth in this submission, unless an amendment thereto is mutually agreed upon by the Town Council and the Applicant.

Michael J. Marsden
COO, QBE Global, LLC

Managing Partner, Haymarket Properties Group, LLC

APPROVED:		
Mayor, Town of Haymarket		
Date		

# **EXHIBIT A – Recreation Fields Detail**



	Appropriate Item(s): endment to Zoning Map ning Text Amendment ecial Use iance beal of Administrative Decision	Office Use Only:  Date Received: Application Number: Fees Received:	
<u>Part</u>	1 - to be completed by ALL applicants		
1-A	<b>Identification of Property</b> — For zoning text amendments, this is the property in which the applicant has an interest, which will be affected by the text change. For all other applications, it is the land, which is covered by the application.		
1) 2) 4)	Number and Street: 14600 Washington Street (GPIN 7397-19-1734)  Present Zoning: B-1 3) Acres: 8.8353  Legal Description of Property (Omit for zoning text amendment) – Attach if necessary. See attached Prince William County Tax Assessment Print Out		
1-B	Property – (Omit for zoning text amendments)		
1)	The deed restrictions, covenants, trust indentures, etc. on said property are as follows (or copy attached); if NONE, so state:  4.51 Acres proffered for recreational field use		
2)	a) Has this property or any part thereof ever been Appeal of Administrative Decision or Amendment YES    NO b) Date: Jan 31, 2017	ation No. BZA 2017-005 and then applicant	
1-C	<b>Identification of Applicant</b> — All applicant property that will be directly affected by requested	nts must have standing (an interest in d action)	
1)	Applicant Information: Name: Haymarket Properties Group, LLC Address: 14600 Washington Street Phone Number: 703-498-8650		
2)	Agent Information (if any): Name: Address: Phone Number:		
3)	Owners of all property included in this application Name: Haymarket Properties Group, LLC  Address: 14600 Washinton Street Phone Number: 703-498-8650  Name: Address: Phone Number:		

	Name			
	Address:			
	Phone Number:			
	Name:			
	Address:			
	Phone Number:			
4)	If applicant is a Land Trust or Partnership or if the subject property is owned or controlled			
ā	by a Land Trust or Partnership, List name and interest of <b>ALL</b> Land Trust Beneficiaries or			
	Partners and attach evidence that the person submitting the application on behalf of the			
	Land Trust or Partnership is authorized to do so.			
	Trustee/Partner Name			
	Address:			
	Phone Number: Interest:			
	Beneficiary/Partner Name.			
	Address:			
	Address: Interest:			
	Beneficiary/Partner Name.			
	Address:			
	Phone Number: Interest:			
5)	Does the applicant have a proprietary interest in the land or land improvements?   NO (In the case of a zoning text amendment, this means at least one parcel of land is subject to the text change)  If YES, state interest and attach documentation:			
	If NO, state what interest otherwise qualifies the applicant to apply:			
6)	Names of the owners of improvement(s) on the property in this application if different			
	from above: (Omit for zoning text amendment)  Name:			
	Address:			
	Phone Number:			
	<i>Name</i> :			
	Address:			
	Phone Number:			
	Name:			
	Address:			
	Phone Number:			
7)	If the applicant is a corporation, attach the evidence that the person submitting the application on behalf of the corporation is authorized to do so.			
	See Authorization letter dated			

# Part 2 — Complete ONLY portion(s) of Pages 3, 4 & 5 pertaining to your case. (as checked at top of Page 1)

**2-A Rezoning** – (Amendment to the zoning district map) – Applications for Amendments to the Zoning District Map are heard by the Planning Commission which makes a positive or negative recommendation to the Town Council. Only the Town Council has authority to grant or deny amendments to the Zoning District Map.

1)	a) Existing Zoning: B-1 b) Proposed Zoning: B-1 c) Existing Use: 4.51 Acres of recreational field use d) Proposed Use: Uses outlined within the B-1 district a) The following are submitted with this application:
Daniel Strangerous 20	□ Preliminary Site Plan □ Rendering or Perspective ☒ Other (GDP) b) Are there any land use intensity (LUI) requirements? □ YES ☒ NO c) Attach brief justifying this request. This brief should include an analysis of how the rezoning application is supportive or not supportive of relevant goals, objectives, policies o programs in the Comprehensive Plan. (Staff will assist.)
2-В	<b>Zoning Text Amendment</b> – Applications for amendments to the zoning text are heard by the Planning Commission, which makes a recommendation to the Town Council. Only the Town Council has the authority to change the zoning text, which is done by passing an amendment to the Town Code.
1)	What section(s) of the Town Code is proposed to be amended?
2)	What is the nature of the proposed change?
3)	Attach the exact language suggested by the application to be added, deleted, or changed in the Town Code.
4)	Attach a written statement, which justifies the proposed change. The statement should also identify potential positive and negative impacts (if any) of the proposed change to the applicant's property, nearby properties, and the entire community if the application is approved or if it is denied.
2-C	<b>Special Use Request</b> — Special Use requests are heard by the Planning Commission, which makes a positive or negative recommendation to the Town Council. Only the Town Council has the authority to grant or deny a Special Use.
1)	Are development plans submitted with this application? (Staff member will explain.) $\ \square$ YES $\ \square$ NO
2)	Parking Requirements: a) Proposed number of parking spaces to be provided: b) Number of parking spaces required by Town Code: c) Attach tabulation of total land area and percentage thereof designated for various uses d) Are there any land use intensity (LUI) requirements?   Parking Requirements:  Discrepance:  Parking Requirements:  Discrepance:  Parking Requirements:  Parking Requirements:  Parking Requirements:  Discrepance:  Discrepance:  Parking Requirements:  Discrepance:  Discrepan
3)	If YES, attach data. Estimated cost of proposed Special Use project: a) Land: \$ Improvements: \$
4)	b) Estimated completion date:  Submit a brief justifying the reasons for this request. This brief should include an analysis of how the rezoning application is supportive or not supportive of relevant goals, objectives, policies or programs in the Comprehensive Plan. (Staff will assist.)
2-D	Variance Request – Variances are granted or denied by the Zoning Board of Appeals (ZBA). Reversal of ZBA decisions may be secured only through the judicial system.
1)	<ul> <li>a) All information required may be shown on one sheet if appropriate.</li> <li>b) Check characteristic(s) of the property preventing it from being used in accordance with the terms of the Town Code (Zoning Ordinance):</li> <li>□ Too Narrow</li> <li>□ Elevation</li> <li>□ Soil</li> </ul>

2) 3) 4)	appropriate. Attach requirements for described in the Town of Attach a brief explanation use of the land under the another created by an action article or applicable par	r the appropriate zonion Code.  on how the above site the terms of the Town knowledge, can you at an of anyone having protest thereof became lawing he hardship should no	□ Subsurface □ Other (Attach specifics) e item(s) checked, giving dimensions were ng district from which relief is sought as e zoning conditions prevent any reasonable Code (Zoning Ordinance). firm that the hardship described above was oprietary interest in the land after the zoning e □ YES □ NO t be regarded as self-imposed (self-imposed	g
apply only to this property? If YES, attact  Which of the following modifications will a  Change in the setback requirements			© □ NO  e appropriate.  ship for which this request for variance is file  n explanation. □ YES □ NO  v a reasonable use of the land?	ec
6)	purpose and intent of the	mitted in the zoning di variance in the form he zoning article and o orhood or detrimental	requested be in harmony with the general district statement of intent and not be to the public welfare?   YES   NO	
2-Е	the Zoning Board of Ap	peals (ZBA). Such ad	<ul> <li>Administrative decisions are reviewed by ministrative decisions may be reversed or on may be secured only through the judicial</li> </ul>	
1) 2)	reasons given for the de	ecifically states the de ecision and specifically request, and why the	ecision the administrative official made, the what you are herewith appealing. Elaborat Zoning Board of Appeals in your opinion	te

# Part 3 - To be completed by ALL applicants

**AFFIDAVIT** – This part of the application must be notarized. Do not sign until in the presence of a Notary Public.

1)	To the best of my knowledge, I hereby affirm that all information in this application and any attached material and documents are true:
	a) Signature of <b>applicant</b> :
	b) Signature of <b>agent</b> (if any):
	c) Date: 7-27-20 Notary Seal
2)	a) Signed and sworn before me this: Mai K luy NOTARY PUBLIC
	b) Signature of <b>Notary</b> :  REG. #7818572 MY COMMISSION  EXPIRES 7/31/2023 MEALTH OF MEALTH OF

### Attachment of Brief for Amendment to Zoning Map Application

Haymarket Properties Group, LLC (HPG) is the owner of 14600 Washington Street Haymarket, Virginia 20169 (GPIN 7397-19-1734) a contiguous 8.8353-acre parcel zoned B-1 on the eastern side of the Town of Haymarket. HPG is requesting a proffer condition amendment that will terminate any further recreational use of the 4.51 acres adjacent to the existing school building, as provided in the Deed of Lease dated August 13, 2013, between Haymarket Properties Group, LLC, and Board of County Supervisors of Prince William County, Virginia (attached hereto as Exhibit B, "Deed of Lease"), on the earlier of the date of any early termination, as provided in the Deed of Lease, or August 13, 2023. Until the Applicant terminates the recreational use, it will maintain the recreation fields pursuant to the requirements of the Deed of Lease. Thereafter the Applicant may either continue to maintain and make the 4.51 acres available for use or develop the Property consistent with the B-1 zoning regulations. HPG would not be changing the zoning of the acreage, it has been and will continue to be zoned B-1.

Proffer Amendment Statement 14550 John Marshall Highway June 24, 2020

# PROFFER AMENDMENT STATEMENT

TO: Town of Haymarket

APPLICANT: Haymarket Properties Group, LLC ("Applicant")

RE: Proffer Amendment Statement to Proffer Dated August 1, 2013

DATE: June 24, 2020

The undersigned hereby proffers this amendment ("Amended Proffer") to the proffer statement dated August 1, 2013 ("Original Proffer") in connection with the rezoning of the subject property, 14600 Washington Street (GPIN 7397 – 19 – 1734) from Residential District R-1 and Prince William County's Agricultural A-1 District to the Town Center District B-1 granted by the Haymarket Town Council, Haymarket, Virginia on August 5, 2013. The use and development of the Property shall be in conformance with the below provisions. The term "Applicant" as referenced herein shall include with its meaning all future owners and successors in interest.

Subject to the condition precedent above, the Applicant amends the Original Proffer and commits to the following provisions:

### 1. Recreational Field Use:

- a. Applicant removes Paragraph 1 from the Original Proffer.
- b. Applicant will terminate any further recreational use of the 4.51 acres adjacent to the existing school building, as provided in the Deed of Lease dated August 13, 2013, between Haymarket Properties Group, LLC, and Board of County Supervisors of Prince William County, Virginia (attached hereto as Exhibit B, "Deed of Lease"), on the earlier of the date of any early termination, as provided in the Deed of Lease, or August 13, 2023.
- c. Until the Applicant terminates the recreational use, it will maintain the recreation fields pursuant to the requirements of the Deed of Lease. Thereafter the Applicant may either continue to maintain and make the 4.51 acres available for recreational field use or develop the Property consistent with the B-1 zoning regulations.
- 2. **Site Plan Improvements:** Applicant will submit a Final Site Plan for the Property by December 31, 2021 and thereafter diligently pursue approval of the Final Site Plan. Applicant will submit a work schedule for implementation of the Final Site Plan improvements within thirty days of the final site plan approval. Final Site Plan work will begin within six months of Final Site Plan approval and will be completed to the satisfaction of the Town within five years of Final Site Plan approval.

Proffer Amendment Statement 14550 John Marshall Highway June 24, 2020

I hereby proffer on behalf of Haymarket Properties Group, LLC, that the development and/or use of the subject Property of this application shall be in strict accordance with the conditions set forth in this submission, unless an amendment thereto is mutually agreed upon by the Town Council and the Applicant.

Managing Partner, Haymarket Properties Group, LLC

Keith Lowry

APPROVED:	
Mayor, Town of Haymarket	-

Date:

### DEED OF LEASE

**This Deed of Lease** (this "Lease") is made this 13<sup>th</sup> day of August, 2013 by and between (i) Haymarket Properties Group, LLC, a Virginia limited liability company ("Landlord"), and (ii) Board of County Supervisors of Prince William County, Virginia ("Tenant").

Landlord and Tenant hereby covenant and agree as follows.

### 1. Basic Lease Provisions.

The following terms shall have the meanings set forth below.

- A. Leased Premises. Recreational fields located at 14550 John Marshall Highway, Haymarket, VA 20169 (GPIN: 7397-19-1734) and the associated parking area, all as depicted on Exhibit A attached hereto.
- B. **Term.** Shall be for a base period of ten (10) years, for the time period that begins at 12:01 A.M. on the Commencement Date and ends at 11:59 P.M. on the Expiration Date.
- C. Commencement Date. Estimated to be on or about August 1, 2013, as the same may be extended pursuant to Section 3. In any event, the Commencement Date shall occur no later than the date that Tenant commences any use of or performance of any improvements to the Premises once Landlord-acquires title to the Leased Premises.
  - D. Expiration Date. Ten (10) full Lease Years after the Commencement Date.
- E. Lease Year. The first Lease Year shall commence on the Commencement Date and terminate on the last day of the 12<sup>th</sup> full calendar month after the Commencement Date. Each subsequent Lease Year shall commence on the date immediately following the last day of the preceding Lease Year and shall continue for a period of 12 full calendar months, except that the last Lease Year of the Term shall terminate on the date this Lease expires or is otherwise terminated.
- F. Rent Commencement Date. The Rent Commencement Date shall begin on the Commencement Date.
- G. Rent. As Rent, Tenant shall pay an amount equivalent to that portion of the real property tax assessed on an annual basis by the County upon the land comprising the Leased Premises. Landlord and Tenant acknowledge that the tax bill received by Landlord may not make a distinction between amounts attributable to the land that forms the Leased Premises and land that forms the remainder of the Project, accordingly, the parties acknowledge that as of the Commencement Date, the Lease Premises comprises approximately fifty percent (50%) of the land in the Project, and accordingly, Tenant shall pay as rent an amount that is fifty percent (50%) of the real property tax assessed on an annual basis upon the land that forms the Project. Rent shall be due on a monthly basis in the amount of one-twelfth of the annual real estate tax attributable the Leased Premises and, at the Tenant's election, may be paid in advance, provided, however, Landlord may require Tenant not to make rental payments more than thirty (30) days

before its monthly due date, if so required by Landlord's lender. As Rent will be recalculated on an annual basis, if it is determined that Tenant has not paid a sufficient amount of Rent for any prior month, the Tenant will pay an amount sufficient to correct the Rent payment on thirty (30) days' notice from the Landlord. If Tenant has paid more for any prior month than would be due as one-twelfth of the annual real estate tax, any overpayment shall count as a credit toward future Rent. "Project" is defined as the land, including the Leased Premises, and all improvements thereon, including the buildings having an address of 14550 John Marshall Highway, Haymarket, VA 20169.

# 2. Intentionally Deleted

### 3. Lease of the Premises; Term.

- A. Landlord does hereby lease to Tenant, and Tenant does hereby lease from Landlord the Premises for the Term.
- B. This Lease shall be in full force and effect from the date hereof. The Term of this Lease shall commence on the Commencement Date and shall end on the Expiration Date unless otherwise extended or terminated in accordance with the terms hereof. Subject to Section 3.C. hereof, the Commencement Date shall be the date that is the earlier to occur of (a) the delivery of Leased Premises to Tenant, and (b) the date that Tenant commences operations from the Leased Premises, including performance of any improvements, but in no event shall the Commencement Date occur prior to August 1, 2013. For purposes of clarification, if the Commencement Date does not occur on or before August 1, 2013, the actual Commencement Date shall be as defined in this Section 3.A.
- C. Tenant hereby acknowledges that Landlord is currently under contract to acquire the fee title to the Project; however, it is under no obligation to close such acquisition. In the event Landlord decides, for any reason whatsoever, which decision shall be in Landlord's sole and absolute discretion, to terminate the purchase contract, Landlord shall promptly thereafter notify the Tenant of such termination, and any obligations under this Lease agreement shall thereafter be deemed terminated. Landlord shall have no liability to Tenant whatsoever for any such termination. Tenant further acknowledges that closing of the acquisition of the Project is not guaranteed at any given time and is affected by many factors, including, but not limited to financing, due diligence review, zoning and other circumstances both within Landlord's sole discretion and outside of Landlord's control. Landlord shall not be liable to Tenant for any delay in the occurrence of the Commencement Date whatsoever and in the event that closing of the acquisition of the Project does not occur by the estimated Commencement Date set forth in Section 1.D hereof, this Lease shall remain in full force and effect (unless otherwise terminated as set forth herein).

# 4. Acceptance of Premises.

A. Tenant shall accept the Premises in their "AS IS" condition as of the date hereof and Landlord shall have no obligation to improve, construct or demolish any portion of the Premises. Except as expressly set forth herein, Tenant acknowledges that Landlord makes no

representations whatsoever with respect to the habitability, condition, or Tenant's ability to operate for its use in respect of the Premises, and any common areas thereof. Any and all work to the Premises which is necessary for Tenant to utilize the Premises for its use in accordance with the terms of this Lease (the "Tenant's Work") shall be Tenant's obligation to perform at Tenant's sole cost and expense in compliance with the Landlord's rules and regulations in after obtaining Landlord's consent as further set forth herein. Tenant's Work shall include repaving and restriping of the parking lot indicated on Attachment A depicting the Leased Premises. The acceptance of the Leased Premises by Tenant upon delivery by Landlord shall constitute an acknowledgment by Tenant that the Leased Premises are in the condition called for by this Lease and that Landlord has satisfactorily performed all of the obligations set forth herein with respect thereto.

### 5. Rent.

Tenant shall pay to Landlord, at the address provided in Section 26 herein, which Landlord may change from time to time in writing upon notice to Tenant, by such form of check or other good funds approved by Landlord from time to time, Rent in the amounts calculated as provided in Section 1.G. Rent shall be payable in Tenant's discretion, either on a monthly basis on the first day of each month following the Commencement Date or in advance, provided, however, that Landlord may require that payments only be made on a monthly basis. Tenant's obligation to pay Rent accrued during the Lease Term shall survive termination or expiration of the Lease.

# 6. Termination Right.

In the event Landlord enters into a contract to sell the Project (including the Leased Premises), Landlord shall have the option to terminate the Lease upon at least one hundred eighty (180) days notice to Tenant and upon the effective date of such termination the Tenant shall surrender the Leased Premises in the condition required by this Lease and thereafter both parties shall be released from their obligations hereunder, except those that survive termination. Such option shall include the right to exercise a termination that is contingent upon the actual occurrence of the closing on the sale of the Project.

Tenant may terminate this Lease at any time upon one hundred-eighty (180) days' written notice to the Landlord. Further, Tenant, as a local government of the Commonwealth of Virginia, has the right to terminate this Lease at any time that the Board of County Supervisors of Prince William County decides not to appropriate funds to pay Rent. In that event, Tenant will be responsible only for rent and other financial obligations due through the date of non-appropriation. Notwithstanding any such termination, accrued indemnification obligations shall survive.

### 7. Utilities and Services.

A. No interruptions, curtailments, stoppages or suspensions of services or systems shall render Landlord liable in any respect for damages to either person or property nor shall the same be the basis (i) for any abatement, reduction or rebate of Rent or any other sums payable by

Tenant hereunder, (ii) for relieving Tenant from any of Tenant's obligations hereunder, or (iii) for any claim by Tenant that Landlord has constructively evicted Tenant or disturbed or interfered with Tenant's use, possession or enjoyment of the Premises.

- B. Tenant shall be responsible for the removal of garbage or refuse from the Leased Premises.
- C. Landlord shall not be responsible for providing any security services with respect to the Leased Premises and shall be entitled to post notices of non-responsibility, if it so desires.

# 8. Intentionally Deleted

# 9. Use of Leased Premises and Common Areas.

- A. The Leased Premises shall be used by Tenant as recreational sports fields and related parking (upon the parking which forms a part of the Leased Premises only), and for no other purpose whatsoever. The Leased Premises shall not be used for any illegal purpose or in violation of the requirements of Landlord's insurance carriers, or in any manner that interferes with the quiet enjoyment of other tenants. Tenant's use of the Leased Premises shall be subject to any and all matters of record, and shall be in full compliance with all governmental rules, regulations and requirements including, without limitation, obtaining and maintaining any and all licenses, permits and approvals necessary for the operation of Tenant's activities at the Premises, which Tenant shall provide to Landlord upon request. The permitted use, as set forth in Section 9.A. hereof, setting forth the nature of the business to be conducted by Tenant in the Premises shall not be deemed or construed to constitute a representation or warranty by Landlord that such activities may be conducted in the Premises, or is lawful or is otherwise permitted by law. Tenant shall keep the Premises, and every part thereof, in a clean and wholesome condition, free from any objectionable noises, loud music, odors, or nuisances to Landlord or any tenant of the Project. In no event shall the Tenant use the Premises in such a manner as to increase the legal parking requirements for the Landlord's property.
- B. Tenant, at its cost, shall maintain its personal property, any property and improvements on the Leased Premises and any other improvements therein in good order, repair and condition during the Term, and, at the expiration or other termination of the Term, will surrender the the Leased Premises in good order, repair and condition, as the same be at the Commencement Date, except as repaired, rebuilt, restored, altered or added to pursuant to this Lease. Landlord shall have no obligation to make any repairs to the Leased Premises or to otherwise maintain the Premises in any manner whatsoever. Notwithstanding the foregoing, Landlord shall have the right to require that Tenant remove, it Tenant sole cost and expense, any improvements made by Tenant to the Leased Premises, other than the repaving and striping of the parking area, upon expiration of the Lease. Tenant shall be responsible for maintaining the entirety of the Leased Premises, including but not limited to, maintenance of the parking area (capital maintenance and repair work and otherwise), mowing, weeding, fertilizing, trimming of the bushes and trees, general upkeep of all fields and equipment thereon, including replacement if necessary. In the event Tenant installs any lighting on the fields, Tenant shall be solely responsible for maintenance and repair of the same, and any utility charges therefor.

- C. Tenant, at its cost, will comply promptly with all orders, requirements or conditions now or hereafter imposed upon it by all Laws, including the ADA, whether required of Landlord or otherwise, relating to the Leased Premises or the conduct of Tenant's business therein. In the event any improvements, alterations or changes are required to be performed in the Leased Premises, and any common areas applicable thereto as a result of Tenant's use thereof (by law or otherwise), Tenant shall be solely responsible for reimbursement to Landlord of any costs and expenses thereof, or Landlord may require Tenant to perform such work at Tenant's sole cost and expense, in its sole discretion.
- Tenant shall not cause or permit the escape, disposal or release of any Hazardous Materials anywhere on the-Project. Tenant shall not allow the storage or use of Hazardous Materials in any manner not sanctioned by law or by the highest standards prevailing in the industry or permit to be brought into the Leased Premises by Tenant, or any of its employees, agents, contractors, customers, guests, licensees or invitees, any Hazardous Materials, except to use in the ordinary course of Tenant's business, and then only after notice is given to Landlord and Tenant has received Landlord's consent. If any lender or governmental authority requires testing to ascertain whether a release of Hazardous Materials has occurred in the Premises, Tenant shall, at Landlord's option, perform such testing or reimburse Landlord for the reasonable costs thereof if Landlord chooses to perform the same, upon demand. In addition, Tenant shall execute affidavits and other statements requested by Landlord from time to time concerning Tenant's best knowledge regarding the presence of Hazardous Materials in the Leased Premises. Tenant shall defend, indemnify and hold Landlord harmless against any claims, actions, fines, penalties, liability, loss, cost or expense, including consultants' and attorneys' fees and costs (whether or not legal action has been instituted), incurred by reason of (i) Tenant's placement of petroleum or Hazardous Materials at, under or about the Leased Premises, (ii) any failure by Tenant, its employees, agents, licensees, contractors, invitees, and guests to comply with the terms hereof or with any environmental law, rule or regulation now or hereafter in effect (iii) the purchase, sale, use or storage of any goods, products, petroleum, equipment or other items at. under or about the Leased Premises, or the repair, maintenance or condition of the Leased Premises and all equipment and fixtures appurtenant thereto. For the purposes of this paragraph, the term Tenant shall be deemed to include Tenant, Tenant's agents, servants, employees, contractors, guests and invitees.
- E. Any damage to the Landlord's property at 14550 John Marshall Highway caused by Tenant, or by any employee, agent, contractor, assignee, subtenant, guest, or invitee of Tenant shall be promptly reported to Landlord and repaired by Tenant, at Tenant's cost; provided, however, that Landlord may repair any such damage, in which case Tenant shall reimburse Landlord for all costs thereof within 15 days after Tenant receives Landlord's notice of such costs.
- F. Use of Common Areas. Tenant shall have the non-exclusive use of all of the common roads of the Project for the sole purpose of accessing the Leased Premises. Tenant acknowledges that in no event shall Tenant, its employees, agents, contractors, or invitees park or congregate in any parking areas of the Project except the parking area that is a part of the Leased Premises without Landlord's consent. Tenant, and anyone claiming through Tenant, shall have no rights to otherwise utilize any common areas of the Landlord's property at 14550 John Marshall Highway that are outside of the Leased Premises boundaries.

- G. Tenant hereby acknowledges that the Building may be operated for the use of various educational institutions (including for small children) and that compliance with various Landlord rules and regulations will be necessary to permit the enjoyment of the Project by all tenants and occupants. Tenant shall be solely responsible for taking any steps necessary to protect other tenants, occupants, and invitees of the Landlord's property at 14550 John Marshall Highway from harm arising from activities on the Leased Premises. In the event any music or other noises emanating from the Leased Premises cause a disturbance to Landlord or tenants of the Property, Tenant shall remedy such disturbance after notice from Landlord, including reducing the volume of any loudspeakers and/or controlling the noise level of Tenant's invitees. Tenant hereby further agrees not to use the Leased Premises for sporting or other events on Sundays 9 a.m. through 12 p.m.
- H. Tenant hereby agrees to work in good faith with tenants of the Project in the event such tenants request access to the Leased Premises for the use of their invitees, provided that Tenant shall be permitted to condition such usage on customary and reasonable requirements, including but not limited to, requiring insurance and appropriate maintenance fees. In no event shall Landlord be liable for any occurrence on the Leased Premises when the same are used by other tenants of the Property and Tenant hereby waives against Landlord, its employees, agents, and officers, any claims, damages, losses or causes of action arising out of any such use.
- I. Tenant shall not charge fees for use of the Leased Premises, under a sublease, license, or any other arrangement to any third party that exceeds on an aggregate annual basis, the amount of Rent due on an annual basis hereunder plus Tenant's cost of operating, scheduling, maintaining and insuring the Leased Premises.

# 10. Alterations by Tenant.

- A. Tenant may not make any alterations or improvements to the Leased Premises ("Alterations") without the prior written consent of Landlord, which shall not be unreasonably withheld. If Landlord consents to any Alterations, Landlord may impose any reasonable conditions it deems appropriate, including approval of plans and specifications, approval of all contractors and subcontractors, supervision of the work by Landlord or its agents, and satisfactory evidence of Tenant's ability to pay for the Alterations, including the requirement for certain insurance or bonding. Landlord's approval of any plans and specifications for Alterations shall not be deemed a representation that the plans and specifications comply with any laws or other governmental requirements or are sufficient for Tenant's intended use. Tenant also acknowledges that Landlord has no liability to Tenant or any other person or entity as a result of Landlord's approval of said plans for any defects, omissions, inconsistencies or shortcomings contained in such plans or the work to be performed in accordance therewith. If an Alteration is made without Landlord's consent, Landlord may correct or remove the Alteration at Tenant's expense.
- B. Alterations shall be made at Tenant's expense. Tenant shall obtain any necessary permits and furnish copies thereof to Landlord before starting any such work. All Alterations shall be performed in a good and workmanlike manner, using materials of first class quality.

Tenant shall be responsible for ensuring that all Alterations comply with all Laws, including the ADA.

- C. If a mechanic's or materialman's lien is filed against the Project for any work done or materials furnished to Tenant, or claimed to have been done for or furnished to Tenant, Tenant, at its expense, shall release the lien within 15 days after notice thereof by paying off or bonding the lien. If Tenant fails to so release or bond off the lien, Landlord shall have the option to do the same and Tenant shall reimburse the Landlord for the cost thereof, together with an administrative fee of eight percent (8%). Nothing herein shall be deemed consent for the filing of any such liens.
- D. Upon the expiration or termination of the Term, all Alterations that Tenant has not removed or is not otherwise required to remove, shall be surrendered to Landlord with the Leased Premises and shall become Landlord's property automatically.
- E. All of Tenant's Work shall be performed diligently and in a manner as to minimize interference with the use of the common areas by other tenants of the Project.

# 11. Tenant's Personal Property.

A. Tenant shall be responsible for any taxes on Tenant's Personal Property, to the extent taxes are assessed against the same. Unless Landlord requests that property on the fields which is necessary for their proper operation (e.g., goal posts and spectator stands) remain and Tenant agrees, Tenant shall remove all of Tenant's personal property from the Leased Premises at the expiration or termination of this Lease and shall repair any damage caused by this removal. Any property belonging to Tenant or any other person that is left in the Premises after the date this Lease has expired or is terminated shall be deemed abandoned. In such event, Landlord may declare itself owner of such property or dispose of it in whatever manner Landlord considers appropriate and Tenant shall remain liable for the cost of the removal of such property.

# 12. Signs.

A. No sign, advertisement or notice shall be inscribed, painted, affixed or displayed on the Premises without Landlord's prior consent. Unless otherwise explicitly stated herein, any and all permitted signs shall be installed and maintained by Tenant, at Tenant's sole expense.

# 13. Assignment and Subletting.

A. Tenant shall not, without Landlord's consent, which may be withheld in its sole discretion, in each instance, (i) assign or otherwise transfer this Lease or any of its rights hereunder, (ii) sublet the Premises or any part thereof, or permit the use of the Premises by any persons other than Tenant or its employees, agents and invitees, (iii) permit the assignment or other transfer of this Lease or any of Tenant's rights hereunder by operation of law or (iv) license the use of the Premises to any other party. Tenant shall not collaterally assign, mortgage, pledge, hypothecate or otherwise encumber this Lease or any of Tenant's rights hereunder. Landlord's consent to any assignment, transfer, or subletting shall not constitute a waiver or release of

Tenant from any provision of this Lease, nor shall the acceptance of rent from any such assignee, subtenant, licensee, or occupant constitute a waiver or release of Tenant from any such provision, and Landlord's consent may be conditioned upon receiving additional security, in the form of a guaranty or otherwise. Any assignment or subletting in violation of this Section shall be void at Landlord's option.

- B. No transfer of this Lease, with our without Landlord's consent, shall operate to release Tenant from its obligations hereunder and Tenant shall at all times remain primarily liable under this Lease.
- C. Landlord acknowledges that Tenant enters into seasonal agreements with sports leagues in order to schedule fields for recreational use, subject to the general supervision and rules and regulations of Tenant. Under these agreements, fields are "assigned" or designated to leagues for the leagues to determine which teams use the fields and when, provided such that usage complies with the terms of this Lease. Further, Tenant also issues permits to individuals and groups wishing to use Tenant facilities for recreational purposes, subject to general supervision and rules and regulations of Tenant and subject to the terms of this Lease. These arrangements shall not be deemed included within the terms of "assignment" or "sublease" as those terms are used in this Lease. Tenant may continue these practices with respect to the Leased Premises, as it does for its other facilities, without the specific prior approval of the Landlord. For purposes of clarification, users of the Leased Premises pursuant to the arrangements described in this Section 13.C. shall be deemed Tenant's invitees.

# 14. Insurance.

A. Tenant shall keep in full force and effect from the date hereof and at all times during the Term broad-form commercial general liability insurance with limits as are reasonably required by Landlord from time to time, but initially in an amount of \$3,000,000 for each occurrence and \$5,000,000 in the aggregate. Such insurance coverage shall extend beyond the Premises to portions of the common area of the Building used by Tenant, its employees, agents, contractors, guests, customers and invitees and shall include contractual liability coverage insuring Tenant's indemnities under this Lease.

Tenant shall carry an all-risk insurance policy covering all improvements on Premises and all of Tenant's Personal Property and Tenant's Work and Alterations for not less than the full insurable value and replacement cost thereof. All proceeds of such insurance shall be used solely to restore, repair or replace Tenant's Personal Property, Tenant's Work and Alterations. Tenant shall also carry worker's compensation insurance in statutorily mandated amounts and plate glass breakage insurance for the Premises.

B. All liability, property damage and other insurance policies carried by Tenant shall (i) be issued by insurance companies reasonably satisfactory to Landlord; (ii) designate, as additional insured's, Landlord, Landlord's managing agent, any Mortgagee and any other parties designated by Landlord; (iii) be written as primary policy coverage and not contributing with or in excess of any coverage which Landlord may carry; and (iv) provide for 30 days' prior written notice to Landlord of any expiration or cancellation of such policy. In addition, all property damage insurance policies shall contain a waiver of any right of recovery (by subrogation or

otherwise) by the insurance company against Landlord. Tenant shall deliver to Landlord insurance certificates evidencing the coverage required hereunder prior to entering the Premises for the performance of any Leasehold Improvements, and shall provide renewal certificates within thirty (30) days prior to expiration on an annual basis. If Tenant fails to provide such evidence of insurance as set forth herein, Landlord, at its option, may purchase any such insurance on Tenant's behalf and Tenant shall reimburse Landlord for the cost of the same, plus an eight percent (8%) administrative fee. Landlord reserves the right to require Tenant to obtain any other commercially reasonable insurance.

- C. Each party hereby waives any right or cause of action for any loss of, or damage to, any of its property (whether or not such loss or damage is caused by the fault or negligence of the other party or anyone for whom said other party may be responsible), which loss or damage is covered by valid and collectible fire, extended coverage, "All Risk" or similar policies, to the extent that such loss or damage is recovered under said insurance policies. Written notice of the terms of said mutual waivers shall be given to each insurance carrier and said insurance policies shall be properly endorsed, if necessary, to prevent the invalidation of said insurance coverages by reason of said waivers.
- D. Tenant will not conduct or permit to be conducted any activity, or place any equipment in or about the Premises, which may cause the cancellation of or will in any way increase the rate of any insurance on the Project. If an increase in the rate of any insurance is stated by the insurance company to be due to activity or equipment in or about the Premises, such statement shall be conclusive evidence that the increase in such rate is due to such activity or equipment and, as a result thereof, Tenant shall be liable for such increase and shall reimburse Landlord promptly.
- E. As provided in § 29.1-509(E), VA Code Ann., and as otherwise permitted by law, Tenant will indemnify and defend Landlord, its employees, agents, officers, members and Mortgagee and hold the same harmless from and against any and all claims, suits, actions, damages, losses, risks, liabilities and expense (including attorney's fees and costs) in connection with claims of third parties, loss of life, personal injury and/or damage to property occurring after the Commencement Date and for the remainder of the Term (i) occurring in or about the Leased Premises, except to the extent arising from the willful misconduct of Landlord, its agents, contractors or employees, (ii) arising from or out of any act or omission of Tenant, its agents, contractors, employees or invitees, (iii) Tenant's failure to comply with any laws, governmental rules or regulations, (iv) any damages or occurrence on the common areas of the project caused by or related to Tenant, its employees, agents, contractors, guests, customers and invitees, and/or (v) any other liability which may be imposed against Landlord as a result of Tenant's, or its invitees' usage of the Leased Premises.

# 15. Liability of Landlord.

A. Notwithstanding anything to the contrary in this Lease, (i) Landlord shall not be liable to Tenant for any loss or damage to property which is either covered by insurance or which Tenant is required to insure under this Lease, and (ii) any liability of Landlord to Tenant under this Lease shall be limited to direct damages and shall not include indirect, consequential,

incidental, or punitive damages, including any liability to Tenant for lost profits or interruption of business. Tenant shall look to its property damage or business interruption insurance policies, and not to Landlord, its agents or employees for any loss incurred as a result of damage to its property or interruption of its business.

- B. Except for damages resulting from the gross negligence or willful misconduct of Landlord (unless Landlord is otherwise not liable in accordance with Section 15.A hereof), Landlord shall not be liable to Tenant, its employees, agents, contractors, customers, guests or invitees for any damage, compensation, claim or expense arising from (i) damage or loss to the property of Tenant or others located anywhere in the Project, or (ii) death, accident or injury to persons occurring anywhere in the Project, regardless of how caused. Landlord shall not be liable for any damage caused by other tenants of the Project, or persons on or about the Leased Premises or the Project, occupants of adjacent property, or the public, or caused from the construction of any private or public work.
- C. There shall be no personal liability on the part of Landlord, any officers, directors, members, or partners of Landlord, or any Mortgagee with respect to any terms of this Lease. Tenant shall look solely to the equity of Landlord in the Project for the satisfaction of Tenant's remedies for the collection of a judgment or other judicial process requiring the payment of money by Landlord in the event of any default by Landlord or fault of Landlord, and no other property or assets of Landlord shall be subject to levy, execution or other enforcement procedure for the satisfaction of Tenant's claims, or anyone claiming by or through Tenant. Upon the transfer of Landlord's interest in the Project, Landlord shall be released of all covenants and obligations of Landlord hereunder accruing after the transfer.

# 16. Damage or Destruction.

- A. If the Leased Premises or any part thereof shall be damaged by fire or any other cause, Tenant shall give prompt notice thereof to Landlord.
- B. Tenant shall promptly restore, repair or rebuild any portion of the Leased Premises destroyed by fire or any other casualty and in no event shall Landlord be responsible for any such rebuilding, repair or restoration or the cost thereof. Such restoration shall be to the condition of the Leased Premises prior to the casualty, unless expressly agreed to by Landlord in writing. If such restoration work cannot be or is not in fact completed within three (3) months after the destruction, Landlord shall have the option to terminate this Lease by giving Tenant notice thereof and thereafter the Lease shall be deemed terminated, but any of Tenant's insurance proceeds for the Leased Premises shall be paid to Landlord. In the event of such termination, Rent will be apportioned as of the effective termination date.

#### 17. Condemnation.

A. If the Leased Premises or any part thereof is taken or threatened to be taken by any governmental authority pursuant to the power of eminent domain, or by deed in lieu thereof, Tenant shall make no claim for compensation in the proceedings, and hereby assigns to Landlord any rights which Tenant may have to any portion of any condemnation award. This Lease shall terminate as to the portion of the Leased Premises actually taken by the condemning authority as

of the date title vests in such governmental authority. The foregoing notwithstanding, as long as Landlord's award is not thereby reduced, Tenant shall be entitled to claim, prove and receive in the condemnation proceedings such awards as may be allowed for its relocation expenses and for Tenant's Personal Property, but only if such awards are in addition to, and stated separately from, the award made for the Project or part thereof so taken. In no event shall Tenant be entitled to any award for the unexpired portion of the Term.

B. If the extent of any proposed condemnation affecting the Project is such that Landlord elects to demolish all or a portion of the Building, then Landlord may terminate this Lease by giving at least 60 days' notice of termination to Tenant at any time after such condemnation. This Lease shall terminate on the date specified in such notice, and Rent shall be adjusted to such date.

# 18. Default; Landlord's Remedies.

- A. Any of the following occurrences or acts shall constitute an event of default ("Event of Default") under this Lease:
- (i) Tenant fails to pay any Rent within ten (10) days after the date when the same becomes due and payable. Notwithstanding the foregoing, if Tenant fails on two (2) occasions during any Lease Year to make any payment of Rent before the expiration of the ten (10) day period provided herein, such ten (10) day period shall not be applicable to any subsequent payment of Rent during such Lease Year and Tenant's failure during such period to pay any Rent on the date the same becomes due shall be an Event of Default.
- (ii) Tenant fails to observe or perform any of the covenants, conditions and agreements of this Lease (except for payment of Rent) and such failure shall continue for ten (10) days after notice to Tenant of such failure; provided, however, that if such failure is not reasonably capable of being cured within such ten (10) day period, then the period in which Tenant may cure such failure shall be extended up to a total of thirty (30) days, provided Tenant promptly commences the cure and at all times is diligently pursuing the cure.
- (iii) Tenant assigns this Lease or sublets the Leased Premises or any part thereof without obtaining Landlord's consent in accordance with the terms of this Lease.
- B. If an Event of Default occurs, Landlord may terminate this Lease by notice to Tenant, whereupon this Lease shall end and all rights of Tenant hereunder shall expire and terminate and everything herein required on the part of Landlord to be done and performed shall cease, but Tenant shall remain liable for its rental obligations under this Lease for the six (6) months following such termination.
- C. Nothing herein shall be deemed a deprive Landlord of right to access or take possession of the Leased Premises and to perform such actions as Tenant has failed to perform under this Lease, and in no event shall the same be deemed a waiver of any Event of Default herein, be deemed an eviction, or subject Landlord to any claim for damages or liability.

- D. If Landlord terminates this Lease pursuant to this Section, Landlord may continue to bring suit to enforce collection of Deficiencies, and/or, at any time, in lieu of enforcing collection of future Deficiencies, recover from Tenant on demand, as liquidated final damages for Tenant's default, an amount equal to all Rent which would be payable under this Lease from the date of such demand for what would have been the unexpired Term but for such termination. Nothing herein shall limit Landlord's right to prove, and claim in full, unpaid Rent or any other amounts accrued before termination of this Lease.
- E. To the extent permitted by law, Tenant hereby waives any rights that Tenant has under any Laws (i) to redeem the Leased Premises, (ii) to re-enter or repossess the Leased Premises, so long as Landlord otherwise complies with process of law to evict Tenant, (iii) to restore the operation of this Lease following any dispossession of Tenant by any court or judge, or (iv) to the benefit of any Law which exempts property from liability for debt.
- F. Pursuit of any of the remedies set forth in this Lease shall not preclude Landlord from concurrently or separately pursuing any other remedies available herein or at law or in equity as often and in such order as Landlord determines, nor shall pursuit of any remedy by Landlord constitute a forfeiture or waiver of any Rent or of any damages by reason of Tenant's violation of this Lease. All rights and remedies available to Landlord herein and/or at law or in equity are cumulative.
- G. If Tenant fails to pay any Rent within five days after the same becomes due and payable, Tenant shall pay a late charge equal to 5% of the past due Rent. In addition, any Rent which is not paid by Tenant within five days after the same becomes due and payable shall bear interest at the higher of (i) a rate equal to 2% above the then applicable Wall Street Journal Prime Rate (U.S. money center commercial banks) or its successor (or in the absence thereof of such similar rate reasonably designated by Landlord), accruing from the date such Rent became due and payable to the date of payment thereof; (ii) any interest (or penalty) accruing as a result of untimely payment of Real Estate Taxes by Landlord which occurs due to Tenant's late payment. The late charge and interest provided herein shall be due and payable to Landlord with payment of the delinquent Rent.

# 19. Rules and Regulations.

A. Tenant shall at all times comply with the rules and regulations established by Landlord and with any reasonable additions thereto and modifications thereof adopted from time to time by Landlord. The rules and regulations shall not conflict with the rights granted herein to Tenant or materially and unreasonably affect Tenant's intended use of the Leased Premises.

# 20. Subordination.

A. This Lease is subject and subordinate to the lien of any mortgages and to any ground leases, as well as any renewals, extensions, modifications, or refinancing's thereof; provided, however, that if a mortgagee or ground lessor requires this Lease to be superior to such mortgage or ground lease, Tenant shall execute and deliver, as directed by Landlord, any instruments required for such purpose.

- B. This Section shall be self-operative and no further instruments of subordination need be required by any mortgagee or ground lessor. Nevertheless, if requested by Landlord or a mortgagee, Tenant shall, within ten (10) days after notice, execute and deliver any certificate or other document specified by Landlord or such mortgagee in confirmation of this subordination. If any proceedings are brought for the foreclosure of any such mortgage (or if a deed in lieu of foreclosure is delivered in connection therewith) or for the termination of any ground lease, Tenant, if requested by the purchaser at the foreclosure sale (or the grantee under the deed in lieu of foreclosure) or by the ground lessor, shall attorn to and recognize the purchaser (or grantee under the deed) or the ground lessor as Landlord under this Lease, and shall make all payments required hereunder to such new landlord without deduction or setoff. Tenant waives the provisions of any laws that may give Tenant a right to terminate or otherwise adversely affect this Lease if any such foreclosure, termination or other proceeding is prosecuted or a deed in lieu of foreclosure is delivered. Failure by Tenant to provide the requested confirmation of this subordination within the time period set forth above shall be deemed an Event of Default hereunder.
- C. Tenant shall give any mortgagee, by certified mail, return receipt requested, a copy of any notice of default served upon Landlord, provided that before such notice Tenant has been notified in writing of such mortgagee's address (including, by delivery of an assignment of leases and rents or similar instrument). Tenant shall afford such mortgagee a period of 30 days beyond any period afforded to Landlord for the curing of such default, or if such default cannot be cured within that time, then such additional time as may be necessary to cure such default (including commencement of foreclosure proceedings), before taking any action to terminate this Lease.
- D. No mortgagee or successor to a mortgagee shall be (i) bound by any payment of Rent for more than one month in advance, (ii) bound by any amendment or modification of this Lease made without the consent of such mortgagee or successor, (iii) liable for damages for any breach of any prior landlord, (iv) bound to effect or pay for any construction for Tenant's occupancy, (v) subject to any offsets or defenses that Tenant has against any prior landlord, or (vi) liable to Tenant for any Security Deposit unless Landlord has actually delivered it to such mortgagee or successor.
- E. If, in connection with obtaining any financing for the Project or in order to comply with any existing loan documents, any lender requests reasonable modifications of this Lease, Tenant shall not unreasonably withhold or delay the execution of an amendment to this Lease, provided such modifications do not increase Tenant's financial obligations hereunder or materially adversely affect Tenant's reasonable use and enjoyment of the Leased Premises.

# 21. Estoppel Certificates; Financial Statements.

A. Tenant shall, at any time within 10 days after Landlord's request, execute and deliver an estoppel certificate certifying the following: (i) whether this Lease is unmodified and in full force and effect (or if there has been a modification, that the Lease is in full force and effect as modified and setting forth such modifications); (ii) whether the Term has commenced; (iii) the amounts of Rent currently payable by Tenant; (iv) that no Rent (except the first installment thereof) has been paid more than 30 days in advance; (v) whether Tenant has

accepted possession of the Leased Premises; (vi) that Tenant has no knowledge of any then uncured defaults by Landlord under this Lease (or, if Tenant has such knowledge, specifying them in detail); and (vi-i) any other information reasonably requested by Landlord. Any present or future Mortgagee and/or purchaser of the Project may rely upon any such estoppel certificate. Failure to execute such estoppel certificate within the time period set forth above shall be deemed an Event of Default hereunder.

## 22. Hold-Over.

If Tenant shall not immediately surrender the Leased Premises on the last day of the Term, then Tenant shall, by virtue of this Lease, become a tenant at sufferance at a rental equal to twice the Rent (calculated on a monthly basis) due under this Lease, commencing said monthly tenancy with the first day after the end of the Term. Tenant, as a tenant at sufferance, shall be subject to all of the terms of this Lease as though the tenancy had originally been a monthly tenancy. During the holdover period, each party hereto shall give to the other at least 30 days' notice to quit the Leased Premises, except in the event of nonpayment of Rent when due, or the breach of any other covenant by Tenant, in which event Tenant shall not be entitled to any notice to quit. Notwithstanding the foregoing, if Landlord desires to regain possession of the Leased Premises promptly at the expiration of the Term, Landlord may re-enter and take possession of the Leased Premises by any legal action or process, and Landlord may recover direct or indirect, and/or consequential damages suffered as a result of Tenant's failure to vacate upon such expiration. For purposes of clarification, in the event Landlord and Tenant enter into an agreement upon the expiration of the Term for Tenant's continued occupancy of the Leased Premises after the Expiration Date, the terms of such agreement shall govern such occupancy and such occupancy shall not be considered a holdover tenancy.

# 23. Quiet Enjoyment.

A. Landlord warrants that it has the right to make this Lease for the Term. Landlord covenants that if Tenant pays the Rent, performs all of its obligations hereunder and observes all of the other provisions hereof, Tenant shall at all times during the Term peaceably and quietly have, hold and enjoy the Premises, without interruption or disturbance from Landlord, or anyone claiming through or under Landlord, subject to the terms of this Lease.

# 24. Parking.

- A. Tenant acknowledges that the only parking on the Landlord's property at 14550 John Marshall Highway available to Tenant is the lot on the Leased Premises.
- B. Tenant agrees that it and its employees, contractors, and invitees shall observe reasonable safety precautions while using the parking area, and shall abide by all rules and regulations set forth by Landlord with regard to its use. Landlord does not assume any responsibility for any damage or loss to any vehicles parked in the parking area or to any personal property located within such vehicles, or for any injury sustained by any person in the parking area.

# 25. Rights Reserved by Landlord.

A. Landlord may enter the Leased Premises at reasonable hours to show them to prospective purchasers, Mortgagees or tenants, to inspect the Leased Premises, to make repairs, alterations or improvements, to service any systems thereon, to perform maintenance services which Tenant has failed to perform (provided that nothing herein shall be deemed to obligate Landlord to perform such services), and to post such notices as Landlord may deem appropriate. Landlord shall be permitted to post signage on the Leased Premises advising that the Leased Premises are private land and any usage thereof should be scheduled with Tenant. Landlord and its representatives may take such materials and equipment into the Leased Premises as needed to accomplish the purposes set forth in this Section. In an emergency, Landlord shall have access to the Leased Premises at any time without notice. In the event Landlord desires access to the Leased Premises for the purpose of performing work that benefits not the Leased Premises but the remainder of the Project and which is not otherwise required by laws or regulations, Landlord and Tenant shall work together in good faith to permit such access and to minimize any interference with Tenant's usage of the Leased Premises. Except in respect of Landlord's default of the provisions set forth herein, in no event shall Landlord be liable for any damages arising from Landlord's, and/or its agent's, access to the Leased Premises.

# 26. Miscellaneous.

A. **Notices**. All notices given by either party to the other hereunder shall be in writing and shall be hand delivered or sent by recognized overnight courier or by certified mail, return receipt requested, postage prepaid. All such notices shall be addressed as follows:

If to Landlord:	Haymarket Properties Group, LLC P.O. Box 1202 Haymarket, VA 20168			
If to Tenant: Recreation	Prince William County Department	of	Parks	and
	Attn: Debbie Andrew14420 Bristow Road Manassas, VA 20112			-

Upon like written notice to the other party, either party may designate a new notice address. Notice shall be deemed given upon receipt or at the time delivery is refused.

All payments due from Tenant hereunder shall be made to the following address:

Haymarket Properties Group, LLC P.O. Box 1202 Haymarket, VA 20168

B. No Waiver. All rights and remedies given herein and/or by law or in equity to Landlord are separate, distinct and cumulative, and no one of them, whether exercised by Landlord or not, shall be exclusive of any others. No failure of Landlord or Tenant to exercise

any power given hereunder, and no custom or practice of the parties at variance with the terms hereof shall constitute a waiver of Landlord's or Tenant's right to demand compliance with the terms hereof. Landlord's receipt of any Rent with knowledge of a breach of this Lease, or Landlord's acceptance of partial payments or partial performance, shall not constitute a waiver of any such breach. No waiver by Landlord or Tenant of any provisions hereof shall be effective unless made in writing, and a waiver on one occasion shall not constitute a waiver on any other occasion.

C. Merger and Modification. This Lease is intended as the final expression of the parties' agreement and as a complete statement of the terms thereof, all negotiations, considerations and representations between the parties having been incorporated herein. No course of prior dealings between the parties shall be relevant or admissible to determine the meaning of this Lease. No representations, understandings or agreements have been made or relied upon in the making of this Lease other than those specifically set forth herein. This Lease can only be modified in writing.

# D. Intentionally Deleted

- E. **Force Majeure**. Except for Tenant's obligation to pay Rent, neither Tenant nor Landlord shall be required to perform any of its obligations under this Lease, nor be liable for loss or damage for failure to do so where such failure by the non-performing party arises from acts of God, strikes, lockouts, labor difficulties, explosions, sabotage, accidents, riots, civil commotion, acts of war, fire and casualty, legal requirements, shortages or inability to obtain materials or equipment, energy shortage, or other causes beyond the reasonable control of the non-performing party unless such loss or damage results from the willful misconduct or gross negligence of the non-performing party.
- F. Successors Bound. This Lease shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, legal representatives, successors and assigns, subject to the restrictions contained in Section 13.
- G. **Joint and Several Liability**. If this Lease is executed by more than one party as Tenant, the liability of such parties hereunder shall be joint and several.
- H. Severability. If any provision of this Lease is invalid or unenforceable to any extent, then that provision and the remainder of this Lease shall continue in effect and be enforceable to the fullest extent permitted by law.
  - I. Recordation. Neither this Lease nor a memorandum hereof shall be recorded.
- J. Applicable Law. This Lease shall be construed under the laws of the Commonwealth of Virginia.
- K. Captions. The captions in this Lease are for convenience only and shall not affect the interpretation of the provisions hereof.
- L. **No Construction Against Drafting Party**. This Lease has been freely negotiated by both parties and in any dispute over the interpretation or enforceability of this Lease, it shall be irrelevant which party drafted this Lease or any portion hereof.

- M. Interpretation. "Include," "includes," and "including" mean considered as part of a larger group, and not limited to the items recited. "Shall" means is obligated to. "May" means "is permitted to." The necessary grammatical changes required to make the provisions hereof apply either to corporations, partnerships, or individuals, men or women, as the case may be, shall in all cases be assumed as though in each case fully expressed. Except as otherwise provided in this Lease, "year" means a calendar year.
- N. Consents. Unless otherwise provided in this Lease, whenever a party's consent is required hereunder, such consent must be written and provided in advance. Whenever a party's consent shall not be unreasonably withheld, it also shall not be unreasonably conditioned or delayed.
- O. **No Partnership.** Landlord neither is nor shall, in any way or for any purpose, become a partner of Tenant in the conduct of its business or otherwise or joint venturer or a member of a joint enterprise with Tenant.
- P. Delivery of Lease. The submission by Landlord of this Lease shall not be construed as an offer to lease. Landlord shall be bound only upon the execution of this Lease by an authorized officer and the delivery of such executed Lease to Tenant. Tenant hereby waives and is estopped from asserting any rights with respect to the Leased Premises or against Landlord which may arise from any alleged oral agreement; oral lease; any acts or expenditures (including without limitation the return of this Lease to Landlord executed by Tenant and the payment of any sums on account hereof) or series of same taken or made by Tenant in reliance on the anticipated execution hereof by Landlord; or any letter from Landlord or its attorneys sent prior to the execution and delivery hereof by Landlord as aforesaid; it being expressly understood and agreed that Tenant shall under no circumstances have any such rights until said execution and delivery hereof by Landlord.
- Q. **Brokerage**. Each party warrants to the other that it has had no dealings with any broker or agent in connection with this Lease. Each party shall hold harmless the other party from all damages resulting from any claims that may be asserted against the other party by any broker, finder, or other person, with whom the other party has or purportedly has dealt.
- R. Survival. Any indemnification obligations of Tenant hereunder shall survive the expiration or earlier termination of this Lease.
- S. Lender Approval. This lease shall be subject to the approval of Landlord's lender, if any.
- T. Authority. The individual executing this Lease on behalf of Tenant represents and warrants to Landlord that he or she has full authority to execute this Lease and obligate the entity hereunder and that all approvals necessary to enter into this Lease required by statute, regulation and/or the documents governing the Tenant have been obtained and shall be provided to Landlord upon request.

(signatures begin on next page)

IN WITNESS WHEREOF, the parties hereto have executed this Lease under seal as of the date and year first above written.

## LANDLORD:

HAYMARKET PROPERTIES GROUP, LLC A Virginia limited liability company

WITNESS/ATTEST:

WITNESS/ATTEST:

By:	Mula Marula	_(Seal)
Name:	Michael J. Marsden	

Title: Member

TENANT:

BOARD OF COUNTY SUPERVISORS OF PRINCE WILLIAM COUNTY, VIRGINIA

By: Ale To (Seal)

Name: Cory A Stewart

Title: \_\_\_\_\_\_

[Corporate Seal]

DATE: ADDISCUS

Puthorized by Res 13-469

# EXHIBIT A

# **PREMISES**



MOTION:

CADDIGAN

August 6, 2013 Regular Meeting Res. No. 13-469

SECOND:

PRINCIPI

RE:

APPROVE A LEASE AGREEMENT BETWEEN PRINCE WILLIAM

COUNTY BOARD OF SUPERVISORS AND HAYMARKET

PROPERTIES GROUP, LLC FOR THE RECREATIONAL FIELDS LOCATED AT 14550 JOHN MARSHALL HIGHWAY, HAYMARKET,

VIRGINIA

ACTION:

APPROVED

WHEREAS, Prince William County Schools has surplused the real property at 14550 John Marshall Highway, Haymarket, Virginia formerly known as PACE West Alternative School; and

WHEREAS, Prince William County Department of Parks and Recreation has programmed the sports fields at PACE West for recreational purposes since 1989 under a Cooperative Agreement with Prince William County Schools; and

WHEREAS, Haymarket Properties Group, LLC is under contract to purchase said property at 14550 John Marshall Highway, Haymarket, Virginia; and

WHEREAS, the County and Haymarket Property Group, LLC both desire for the Department of Parks and Recreation to continue to program the sports fields at the former PACE West Alternative School location for recreational purposes; and

WHEREAS, a 10 year Lease Agreement has been prepared for the recreational fields and the associated parking area located at 14550 John Marshall Highway, Haymarket, Virginia; and

WHEREAS, the rent for the leased property is an amount equivalent to that portion of the real property tax assessed on an annual basis by the County which is attributable to the Leased Premises; and

WHEREAS, the Lease Agreement has been reviewed and approved by the County Attorney's Office;

NOW, THEREFORE, BE IT RESOLVED that Prince William Board of County Supervisors does hereby approve a lease agreement between Prince William County Board of Supervisors and Haymarket Properties Group, LLC for the recreational fields located at 14550 John Marshall Highway, Haymarket, Virginia in substantially the form attached hereto;

August 6, 2013 Regular Meeting Res. No. 13-469 Page Two

BE IT FURTHER RESOLVED that the Prince William Board of County Supervisors does hereby authorize its Chairman to sign the lease agreement.

ATTACHMENT: Lease Agreement

Votes:

Ayes: Caddigan, Candland, Covington, Jenkins, May, Nohe, Principi, Stewart

Nays: None

Absent from Vote: None Absent from Meeting: None

For Information:

Parks and Recreation Director

ATTEST

Clerk to the Board



## Emily K. Lockhart

Town Planner and Zoning Administrator

#### **MEMORANDUM**

TO: Planning Commission FROM: Emily K. Lockhart DATE: September 15, 2020

SUBJECT: SUP#2020-002 - 30 Residential Condominiums, Proffer Amendment, Development

Narrative and QBE Generalized Development Plan

# **UPDATED Application Summary:**

Applicant, Haymarket Properties Group has submitted an updated Generalized Development Plan for the SUP for 30 residential condominiums to be located at 14600 Washington Street, Haymarket. The applicant has a Proffer Amendment application before the Planning Commission for Public Hearing on September 21st to modify the approved 2013 Proffer on the property from 4.51 acres to 0 acres.

The applicant has provided a Development Narrative, Proposed General Development Site Plan, Conditions of Approval and a Proffer Amendment. The documents were modified and resubmitted June 25, 2020. The applicant previously provided responses to the first round of comments, these responses can be located in the July 2020 Planning Commission Agenda Packet.

## At the June Meeting the applicant pulled the SUP#2020-001 for the Drive Thru Use.

The Zoning Ordinance requires the following standards to be considered and met prior to approval.

- (1) The proposed use at the stipulated location shall be in accordance with the official policies of an adopted comprehensive plan, and with any specific element of such plan.
- (2) The proposed use shall be in accordance with the general purpose and intent of the applicable zoning district requirements.
- (3) The proposed use shall not adversely affect the use or values of surrounding properties and structures.
- (4) The proposed use shall not adversely affect the health, safety or general welfare of persons residing or working in the neighborhood.
- (5) Pedestrian and vehicular traffic generated by the proposed use shall not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.

(6) Utility, drainage, parking, loading and other necessary facilities provided to serve the proposed use shall be adequate.

The Town Planner's Original Comments from 6/9/2020 are below, the most recent comments sent to the applicant reflecting the feedback from the Planning Commission and Staff comments are attached in the document following, dated 8/31/2020.

## Original Comments 6/9/2020

The Development Package is <u>Incomplete</u> and needs to address the following comments:

## **General Development Plan:**

- Page 3 GDP: Existing conditions is not an accurate depiction of the current site and needs to be updated to show ALL existing conditions. See below items to name a few.
  - o Does not show Cookies and Cream Structure
  - O Does not show the removal of the playgrounds
  - o Does not show the recent site plan amendment for Zandra's
  - o Does not show the curb/gutter work and additional parking along the building
  - The eastern tree line has been significantly modified
  - o Does not show the storage sheds located in the north eastern corner
  - Does not depict the frontage changes
  - Adjoining and abutting property descriptions incomplete
  - Existing dumpster not depicted
- No Scale on the GDP
- No North Arrow on the GDP
- Page 4 GDP: Proposed conditions
  - o Parking Spaces are not delineated on the plan
  - No delineation of travelways on the plan
  - Points of Ingress/Egress are not clearly delineated with one- or two-way travel ways
  - Are the parallel parking spaces proposed on Bleight Drive for private use only?
     Cannot restrict parking on a public right of way. Provide additional information
  - Sidewalks/Pedestrian Walkways are not depicted along right of ways or within property
  - No dumpsters shown on the plan for retail, restaurant, commercial or residential uses
  - No handicap parking shown on plan

## Parking Tabulation

- Need to include restaurant parking requirements, as it differs from the Commercial parking.
- o Retail Store parking is 1 per 250 SF of GFA, not 1 per 300 SF of GFA
- Retail store parking requires the following for loading zones; None for the first 10,000 SF then 1/30,000 up to 70,000 SF **plus** 1/100,000 SF thereafter. Please include the proper loading zones and ensure adequate travelways for the loading zone
- Office parking is 1 per 300 SF of GFA

# • SUP#2020-001, Drive Thru Request

No stacking spaces shown on the plan, see above table for requirements

- o No delineation of travelways on parcel
- Vehicular Ingress/Egress not shown on plan
- Pedestrian Ingress/Egress not shown on plan
- o Dumpster location not shown on plan
- o No indication of the drive thru window location
- o No proposed signage for vehicular traffic or pedestrians
- 32 parking spaces required, please clarify the location of the required parking spaces
- o No information of the hours of operation
- No reference to the front of the structure or the main entry
- No elevations of the structure provided

#### • SUP#2020-002, 30 Residential Condominiums

- No square footage for the third and fourth floor provided
- Is residential parking reserved? If so, where?
- How many bedrooms per unit? Variety of unit types?
- Expected number of residents in the building?
- o Will residential amenities be provided?
- o No elevations of the 4-story structure provided
- Where is residential access on the building? Is residential access restricted and separate from the commercial access?
- o Will the structure have an elevator?
- Will the structure have trash dumpsters or a trash service? Dumpsters should be shown on the plan
- o Will dumpsters be shared with the retail/commercial tenants?
- Will the underground garage parking have public access?
- No green space for residents
- Will the property have a Condo Owner Association? Who maintains the common space?
- Show full building footprint on plan
- No information on the hours of operation for the commercial spaces on the first and second floors as well as the entire site
- Will visitor parking be provided for the residential condominiums?

## Development Narrative Comments

- o Provide the date of the current GDP in the first paragraph
- Special Use Proposal states that outdoor seating will be provided. Outdoor seating is not depicted on the GDP. Update GDP to depict the outdoor seating
- Development Narrative states the project will preserve 3 ballfields to the north of the property – only 2 ballfields are shown on the proposed plan. Update the GDP to depict the proper number of ballfields

#### • Proffer Amendment Statement

o Provide the approved 2013 Proffer Amendment for review

# • Conditions of Approval

 Transportation 5.1. – Sidewalks and other street enhancements are required per the Zoning Ordinance

#### • Other Comments

- No traffic impact analysis provided. The traffic will be significantly impacted by the proposed changes
- No elevations for the SUPs provided
- No environmental analysis or stormwater calculations
- No outside agencies comments received yet. VDOT, PWCSA, PWC
- No additional proffers provided or considered for Schools, Fire Department,
   Public Safety, Transportation
- Can Bleight Drive handle the increased traffic flow and the addition of the parallel parking?
- No turn lanes provided on Washington Street for the entry points
- o Provide clarification on the north eastern apartment, is the apartment on the first floor? If so, a SUP will be required for this residential space.

#### Planner Recommendation:

The application is incomplete and missing the above items. Please review the comments and provide responses or additional information for the application.

# Town Planner Review of SUP#2020-002, Proposed Residential Condominiums at 14600 Washington Street.

SUP Request Summary: "the applicant proposes to develop 53,250 square feet of the Property zoned B-1 via special use permit to allow thirty (30) residential condominium dwelling units. The proposed plan locates the residential condominiums on the 3rd and 4th floor of the new proposed multiuse building as shown on the GDP."

The Zoning Ordinance requires the following standards to be considered and met prior to approval.

(1) The proposed use at the stipulated location shall be in accordance with the official policies of an adopted comprehensive plan, and with any specific element of such plan.

The Comprehensive Plan calls for a mix of residential and commercial uses to facilitate long term economic potential and positive growth for the Town. The residential condominiums would be in accordance with the intent to blend the residential and commercial uses in the Town Center Zoning Districts.

(2) The proposed use shall be in accordance with the general purpose and intent of the applicable zoning district requirements.

## Zoning Ordinance, Sec. 58-10.1 - Intent.

"The Town Center District, B-1, provides primarily for retail shopping and personal services to be developed either as a unit or in individual parcels oriented to attracting pedestrian shoppers, tourism and local convenience. Recognizing the economic value of the existing historical area, it shall further be the intent of the district to encourage the retention and rehabilitation of structures and uses in the district that have historic and/or architectural significance. The range, size, hours of operation, lighting, signs and other developmental aspects of permitted uses may be limited in order to enhance the general character and historic nature of the district."

The proposed use of the 3<sup>rd</sup> and 4<sup>th</sup> floors of the multi-use building for residential condominiums is not clearly defined as the intent of the Town Center District, B-1, as stated above. However, the addition of the residential units may provide an opportunity to blend the Town Center district with the surrounding residential district to create a less intrusive blending of the districts.

(3) The proposed use shall not adversely affect the use or values of surrounding properties and structures.

The proposed uses for the structure are in keeping with the intent of the zoning district and will blend the residential units with surrounding residential districts. However, the significantly increased volume of vehicle trips per day on the site due to the structure may adversely affect the surrounding properties. Additional information regarding the traffic impacts would be necessary to appropriately determine the adverse effects on the surrounding uses and properties.

There is no indication the proposed-mixed-use structure will decrease the values of the surrounding properties, however for the most accurate information an additional study on the economic value would need to be performed. There is an indication that the adjacent and surrounding residential properties could be affected by the development's traffic flow and commercial uses during the pm hours. However, the proposed commercial development is a by-right use.

(4) The proposed use shall not adversely affect the health, safety or general welfare of persons residing or working in the neighborhood.

The proposed addition of residential condominiums shows no indication of adversely affecting the health, safety, or general welfare of the adjacent properties or surrounding residential communities. However, there is indication that the increased traffic volume due to vehicular trips per day from the site may impact the residential communities that currently utilize Bleight Drive.

(5) Pedestrian and vehicular traffic generated by the proposed use shall not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.

The vehicular traffic along Bleight Drive will be impacted with the new entry/exit and added vehicular trips per day. Proper traffic studies and impact analysis shall be prepared along with projected vehicle trips per day. Since Bleight Drive is currently a lower-volume route, primarily serving the residential communities of Villages of Haymarket, Alexandra's Keep and single family homes on Bleight, it will be pertinent to not impede traffic, rather the improvements shall enhance the movement and flow through the proposed site, existing roadway and intersection.

(6) Utility, drainage, parking, loading and other necessary facilities provided to serve the proposed use shall be adequate.

Utilities, drainage, loading zones and other necessary facilities will be addressed at the site plan phase, currently there is no indication that the General Development Plan addresses all of these utilities adequately. Parking has been clearly delineated on the General Development Plan, to include underground garage parking at the residential condominium structure.

## **Planner Recommendation:**

The Town Planner has sent comments to the applicant expressing concerns from the Planning Commission as well as Town Staff in regard to the SUP#2020-002 for the 30 Residential Condos. The comments were sent on August 31, 2020. The applicant has not responded nor acknowledged receipt of the comments.

At this time, the Town Planner recommends the Planning Commission not take further action on the SUP#2020-002 application until the comments and concerns are adequately addressed. At this time, the Town Planner does not recommend approval until further information is provided regarding the parking comments sent on 8/31/2020.

Draft Motion;

"I move the Planning Commission (Table / Deny / Approve) Special Use Permit SUP#2020-002 for the 30 Residential Condos for 14600 Washington Street."

Or an alternate motion.



## Emily K. Lockhart

Town Planner and Zoning Administrator

TO: Shawn Landry and Keith Lowry

CC: Planning Commission, Town Manager, Town Clerk

FROM: Emily K. Lockhart

DATE: August 31, 2020

SUBJECT:, SUP#2020-002 - 30 Residential Condominiums and QBE Generalized Development

Plan

## Dear Mr. Landry and Mr. Lowry,

Based on our previous public meetings and individual meetings with Town Staff, we all came to the agreement that the Town was looking for additional information on the following items;

- HPG to remove the drive thru Addressed
- Relabel the pad sites and show them broken up into free standing structures Addressed
- Review and change if necessary, the width of the entrance and throat of the ingress / egress on Washington and Bleight. Addressed, engineer reviewing proper distances
- Move Bleight drive parking onto the site Not provided
- Depict parking / dumpster for residential use Addressed, based on applicant response additional questions have arisen, see below.
- Move current dumpster out of the drive path *Addressed*
- If possible, provide elevations of the grading of the multi-use building in regard to the underground parking *Not provided*

#### Also,

- Be prepared to answer questions to loading zones / truck deliveries
- Contact Van Metre in reference to the inter parcel connector.
- Lighting will meet zoning ordinance requirements.

Following the review of the August 17th General Development Plan I have the below comments;

1. Underground Parking – need more detail on the underground parking garage

- a. No elevations of the parking garage provided. Applicant stated the parking garage will be partially underground and partially exposed above grade. Staff requested a demonstration of this concept
- b. Upon further review of the parking spaces in the underground garage, there is no clear demonstration of the elevation changes from the surface parking to the underground garage parking. Please demonstration the grade changes across the parking lot and the underground parking.
- c. Depending on the elevation changes across the surface level parking and/or the underground garage the parking spaces may be increased/decreased.
- d. Demonstrate the elevation changes, if any, will not conflict with the trash truck accessing the dumpsters, as well as other large vehicles.
- e. There is no clear demonstration of how the individuals will exit the garage once parked, ie. Are they walking up the ramp into the garage? Are they using an elevator or stairs? If so, where are the elevator and stairs located?
- f. Do you have a mitigation plan to reduce the noise levels in the underground parking garage?
- g. Do you have a lighting plan to demonstrate appropriate lighting levels are met in the underground garage and the surface level parking underneath the wings of the building?
- 2. No buffering or landscaping shown around the proposed mixed use/residential building
- 3. Residential parking spaces are not shown as restricted or permitted parking only
- 4. Elevations not provided for the mixed use/residential building what is the proposed clearance for the entry underneath the building into the surface parking lot? Demonstrate that the trash truck will make clearance to access the dumpster pad site.
- 5. Will residents have a private entry point to the building? Private elevator/private lobby? If so, please demonstrate location on the GDP
- 6. How do customers/residents access the offices and retail spaces? No entry/exit to the building is shown on the GDP. If the underground garage is partially above ground the entry/exit would need to be via stairs/ground level elevator/handicap accessible ramp, etc. Please demonstrate access point to the building for customers.
- 7. Bleight Drive Parallel Parking Spaces are still located within the VDOT Right of Way.
- 8. 6 parking spaces across the site are utilized for loading zones for 1/3 of the day or the entirety of a 9am-5pm business day, these spaces shall not be included in the parking totals as they are loading zones. Option to designate other permanent loading zones on site
- 9. Parking Tabulation -
  - Applicant provided 451 parking spaces
  - Applicant states 374.2 parking spaces are required for commercial uses at 1/300 GSF
  - Applicant states 45 parking spaces are required for residential use
  - The site already has a restaurant and is proposing to add additional restaurants.
     Restaurants require 1/100 GSF parking ratio.
  - Planner Analysis of the 451 spaces provided

- 451 parking spaces
- 6 parking spaces in the loading zones
- 31 parking spaces on Bleight Drive (located within the public right of way)
- 45 residential spaces (requested the residential spaces are restricted)
  - = 369 parking spaces for the site
- **10.** Zoning References on page 2 of 5 are not accurate to the current zoning ordinance

August 17, 2020

Emily Lockhart, Town Planner Town of Haymarket 15000 Washington Street #100 Haymarket, Virginia 20169

RE: REVISED QBE Business Park SUP 2020 - 0002

Dear Emily,

Enclosed herein please find the following documents in support of the Special Use Permit request for QBE Business Park located at 14600 Washington Street:

- 1. Executed Special Use Permit Application 2020 0002
- 2. Development Narrative (dated August 17, 2020)
- 3. Conditions of Approval SUP2020-002 (dated August 17, 2020)
- 4. General Development Plan (dated August 11, 2020)

Please let me know if you have any questions.

Sincerely,

Keith Lowry

Keith.Lowry@QBE.net

(703) 489 - 0821

August 17, 2020

Haymarket Properties Group, LLC GPIN: 7397-19-1734 Development Narrative

#### PROPERTY AND AREA OVERVIEW

Haymarket Properties Group, LLC (the "*Applicant*'"), has submitted a Special Use Permit application (the "*Application*'") on approximately 8.8 acres (the "*Property*'") that includes a portion of the Tax Parcel described as GPIN: 7397-19-1734. This Special Use Permit will be utilized in conjunction with a site plan amendment to the currently approved site plan dated June 7th, 2017. The new site plan will be amended as depicted in the General Development Plan (GDP) dated August 11, 2020. The applicant no longer wishes to add additional stories to the current building on site.

The Property currently has a 33,458 square feet multiuse building, known as the Old Pace West School and is located on the north side of Washington Street, the eastern most side of the Town of Haymarket. The proposed development will be accessed from Washington Street and Bleight Drive.

The land uses adjacent to the proposed development include single-family attached homes zoned R-1 located directly to the west and south, and townhomes zoned R-2 to the north.

## SPECIAL USE PROPOSAL

Under SUP 2020 – 0002 the applicant proposes to develop 53,250 square feet of the Property zoned B-1 via special use permit to allow thirty (30) residential condominium dwelling units. The proposed plan locates the residential condominiums on the 3<sup>rd</sup> and 4<sup>th</sup> floor of the new proposed multiuse building as shown on the GDP.

The maximum building height will be four stories not to exceed 50 feet as allowed by right under the Towns B-1 zoning ordinance.

#### COMPREHENSIVE PLAN COMPLIANCE

Under the Town of Haymarket Zoning Ordinance, Sec 58-1.7 Special Uses

- (D) A special use shall be approved if its design, location, construction, method of operation, special characteristics and other aspects satisfy the following standards:
  - 1. "The proposed use at the stipulated location shall be in accordance with the official policies of an adopted comprehensive plan, and with any specific element of such plan."

The Comprehensive Plan calls for a mix of residential and non-residential land uses that will provide an economically and fiscally balanced land use strategy. Uses that generate high fiscal costs, such as residential development, must be balanced by uses that generate a positive revenue stream, such as employment uses. (Page 5, 2008 Comprehensive Plan)

However, because the school is not the direct responsibility of the Town, close coordination must be maintained with the Prince William County School Board and the Board of County

Supervisors so that the full potential of this site may be explored as a social, business and recreational center for the Town and adjoining are a residents. (Page 104, 2008 Comprehensive Plan)

The 8.8-acre site was rezoned to B-1 in August of 2013 when a portion of the site was annexed from the county during a boundary line adjustment. The Property is ideal for a combination of commercial and residential development as shown on the GDP. The Property's frontage on Washington Street lends to a combination of residential and commercial development. Its location provides convenient access for residents to I-66, Rt-29, and Rt15 for commuting to points east and north, such as the Leesburg, Ashburn, Fairfax, Tysons Corner and Washington D.C. The Property's frontage on Washington Street makes it ideal for neighborhood commercial development that will be patronized by residents and others. The depth of the Property from Washington Street to I-66 renders it suitable the sort of mixed development proposed by the GDP.

2. "The proposed use shall be in accordance with the general purpose and intent of the applicable zoning district requirements."

Article X – Town Center District B-1 Sec 58-10.1 Intent

The Town Center District, B-1, provides primarily for retail shopping and personal services to be developed either as a unit or in individual parcels oriented to attracting pedestrian shoppers, tourism and local convenience. Recognizing the economic value of the existing historical area, it shall further be the intent of the district to encourage the retention and rehabilitation of structures and uses in the district that have historic and/or architectural significance.

3. "The proposed use shall not adversely affect the use or values of surrounding properties and structures."

The Proposed use is 30 residential condominiums, the layout of these residential condominiums is intended to complement and blend in with the existing neighboring uses. The new construction of these residential condominiums will be subject to review by the Architectural Review Board to insure it is in keeping with being value additive to the community, as seen throughout the Town with Mix Use development.

4. "The proposed use shall not adversely affect the health, safety or general welfare of persons residing or working in the neighborhood."

The proposed use of 30 residential condominiums for the Property blends in with the other residential uses surrounding the site. This use is less impactful than the other by right uses allowed within the B-1 district.

5. "Pedestrian and vehicular traffic generated by the proposed use shall not be hazardous or conflict with the existing and anticipated traffic in the neighborhood."

The project proposes connecting pedestrian street sidewalks to current sidewalks located on Bleight Drive and Washington Street. The project will also include internal sidewalks. Vehicular traffic generated by the proposed use will have two vehicular ingress / egress points on Washington Street and Bleight Drive as approved in the original site plan dated June 7, 2017.

6. "Utility, drainage, parking, loading, and other necessary facilities provided to serve the proposed use shall be adequate." "

The project will provide all required drainage, onsite infrastructure, storm water management, as well as parking. All design requirements will meet the Town of Haymarket's zoning ordinance.

## **Summary**

The proposed Special Use Permit and future site plan amendment honors the Comprehensive Plan goal of a balanced program for future land use to ensure the health, welfare, and safety of the Town and its residents by striking an appropriate balance between residential and commercial development that promotes the health, safety, and welfare of the new and existing residents. It does so by allowing healthy residential and commercial opportunities in a pedestrian friendly unified development.

The applicant respectfully requests favorable consideration of the applicant by the Staff, Planning Commission, and the Town Council.

# Conditions of Approval SUP 2020 – 0002 August 17, 2020

#### 1. LANDUSE

- 1.1 Development shall be in substantial accordance with the Generalized Development and Special Use Permit Plan entitled "QBE Business Park" prepared by The KDL Group and dated August 11, 2020 (the "GDP") with the size, construction details and locations of buildings, roadways and other features being approximate subject to final engineering at site plan and with the color, construction materials and appearance of structures being subject to the issuance of certificates of appropriateness by the Town of Haymarket ("Town") Architectural Review Board (ARB) at advertised public meetings.
- 1.2 Residential Condominium Development on the Property shall not exceed 30 condominium units in the location generally shown on the GDP.
- 1.3 Development of the Property shall be in general conformity with the GDP. Precise locations of roads, lot lines, lot widths and depths, utility lines, and other features generally depicted on the GDP will be determined at the time of site or subdivision plan approval.

# 2. ARCHITECTURAL DESIGN, SIGNAGE AND LANDSCAPING

2.1 Architectural details of the multiuse building housing the condominium units will be determined through the issuance of certificates of appropriateness issued by the ARB.

## 3. STORMWATER MANAGEMENT

- 3.1 Storm water management for the Property shall employ best management practices ("BMP").
- 3.2 Storm water retention shall be provided at site plan as approved by the Town.
- 3.3 Storm water management facilities shall be maintained by the appropriate owners' associations provided below.

#### 4. CREATION OF CONDO ASSOCIATION

4.1 The Property shall be made subject a condo association that shall be created and be made responsible for the maintenance and repair of common areas, including common open space that may be established in accordance with the requirements of the Town zoning ordinance. The COA shall be granted such other responsibilities, duties and powers as a customary for such associations, or as may be required to affect the purposes for which the COA is created. Such COA shall also be granted sufficient powers that may be necessary, by regular dues, special dues or assessments, to raise revenue sufficient to perform the duties assigned hereby, or by the documents creating the association.

# 5. TRANSPORTATION

5.1 The Applicant will construct a brick pedestrian street sidewalk along the southern edge of the property, on the northern side of Washington Street.

## 6. CONTINGENT

6.1 This Special Use Permit is contingent upon removal or amendment of the current proffer statement dated August 1, 2013 and a site plan amendment.

SIGNATURE ON FOLLOWING PAGE

# **APPLICANT**

HAYMARKET PROPERTIES GROUP, LLC a Virginia Limited Liability Company

Name: Keith Lour

Title: men ber

Date: 8-17-2020

# DATE: **MAY 2020** CHECKED:

OBE BUSINESS PARK GENERAL DEVELOPMENT PLAN

> TOWN OF HAYMARKET PRINCE WILLIAM COUNTY, VIRGINIA

## GENERAL NOTES:

1. THE PROPERTY SHOWN HEREON IS LOCATED ON GPIN 7397-19-1734 AND IS NOW IN THE NAME OF HAYMARKET PROPERTIES GROUP, LLC AS DOCUMENTED IN INSTRUMENT 201310110102175 AMONG THE LAND RECORDS OF PRINCE WILLIAM COUNTY, VIRGINIA.

2. THE BOUNDARY AND IMPROVEMENTS FOUND HEREON ARE TAKEN FROM THE ALTA/ACSM LAND TITLE SURVEY PREPARED BY RICE & ASSOCIATES DATED JUNE 2013 AND A CURRENT FIELD SURVEY BY BL SURVEY ARBORIST, LLC.

TOPOGRAPHIC INFORMATION DEPICTED HEREON IS TAKEN FROM THE FIELD SURVEY PERFORMED BY BL SURVEY ARBORIST, LLC AND DATED FEBRUARY 1, 2014. THE VERTICAL DATUM IS TAKEN FROM GPS COORDINATES.

3. THE SUBJECT PROPERTY CONSISTS OF APPROXIMATELY 8.84 ACRES AND IS CURRENTLY ZONED B-1 IN ACCORDANCE WITH THE TOWN OF HAYMARKET, VA ZONING ORDINANCE.

RESOURCES, RPA'S, OR 100-YEAR FLOOD AREAS IDENTIFIED ON THE PRINCE WILLIAM COUNTY, VA ONLINE MAPPING SYSTEM. 5. THE PROPERTY SHOWN HEREON LIES IN FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN PER FEMA FLOOD INSURANCE RATE MAP 51153C PANEL #0067D BEARING AN EFFECTIVE DATE OF JANUARY 5, 1995.

4. THERE ARE NO KNOWN CEMETERIES ON THE SUBJECT PROPERTY. FURTHER, THERE ARE NO KNOWN NATURAL, CULTURAL, OR HISTORIC

6. THE DEVELOPMENT OF THIS PROPERTY IS SUBJECT TO THE APPROVAL CONDITIONS OF THE 2013 REZONING APPLICATION WITH THE TOWN OF

7. ALL CONSTRUCTION SHALL CONFORM TO THE TOWN OF HAYMARKET, PWCSA USM, AND/OR VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

8. ALL NEW OR RELOCATED UTILITIES SHALL BE PLACED UNDERGROUND.

9. THE PROPOSED USES WITHIN THE EXISTING BUILDING SHALL BE SERVED BY THE EXISTING PUBLIC WATER AND SEWER FACILITIES OWNED BY PWCSA AT NO COST TO THE TOWN OR COUNTY. THE ANTICIPATED SEWAGE FLOWS GENERATED BY SUBJECT DEVELOPMENT IS XXXX GPD.

10. STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES MEASURES WILL BE IMPLEMENTED WITH THE FINAL SITE PLAN PER THE LATEST VIRGINIA STORMWATER MANAGEMENT HANDBOOK (VSMH).

11. EXISTING WELLS AND SEPTIC SYSTEMS THAT WILL NOT BE USED SHALL BE ABANDONED IN ACCORDANCE WITH CURRENT PRINCE WILLIAM COUNTY HEALTH DEPARTMENT STANDARDS.

12. SITE LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH THE TOWN OF HAYMARKET ZONING ORDINANCE (SECTION 58-719).

13. LANDSCAPING AND BUFFERING SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE XVI OF THE TOWN OF HAYMARKET ZONING ORDINANCE 14. STREET TREES LOCATED IN RESIDENTIAL ZONING DISTRICTS SHALL BE LOCATED GENERALLY WITHIN 20 FEET OF THE PUBLIC RIGHT-OF-WAY (SECTION 58-723(c)).

15. THE PROPOSED USE AT THE STIPULATED LOCATION SHALL BE IN ACCORDANCE WITH THE OFFICIAL POLICIES OF AN ADOPTED COMPREHENSIVE PLAN, AND WITH ANY SPECIFIC ELEMENT OF SUCH PLAN.

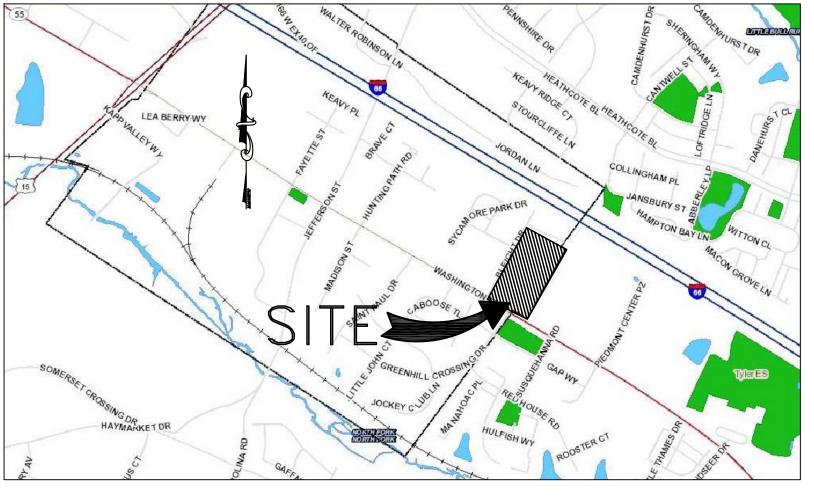
16. THE PROPOSED USE SHALL BE IN ACCORDANCE WITH THE GENERAL PURPOSE AND INTENT OF THE APPLICABLE ZONING DISTRICT

17. THE PROPOSED USE SHALL NOT ADVERSELY AFFECT THE USE OR VALUES OF SURROUNDING PROPERTIES AND STRUCTURES.

18. THE PROPOSED USE SHALL NOT ADVERSELY AFFECT THE HEALTH, SAFETY OR GENERAL WELFARE OF PERSONS RESIDING OR WORKING IN THE

19. PEDESTRIAN AND VEHICULAR TRAFFIC GENERATED BY THE PROPOSED USE SHALL NOT BE HAZARDOUS OR CONFLICT WITH THE EXISTING AND ANTICIPATED TRAFFIC IN THE NEIGHBORHOOD.

20. UTILITY, DRAINAGE, PARKING, LOADING AND OTHER NECESSARY FACILITIES PROVIDED TO SERVE THE PROPOSED USE SHALL BE ADEQUATE.



VICINITY MAP SCALE: 1" = 1000'

## SHEET INDEX

<u>NUMBER</u>	<u>DESCRIPTION</u>
1 2	COVER SHEET SITE TABULATIONS
3	EXISTING CONDITIONS GENERAL DEVELOPMENT PLAN
5	GEOMETRIC LAYOUT

## ENGINEER'S CERTIFICATE

I, JOHN H. DAVIS, A PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF VIRGINIA, DO HEREBY CERTIFY THAT THE LAND EMBRACED ON THIS SITE IS NOW IN THE NAME OF:

A.) HAYMARKET PROPERTIES GROUP LLC - GPIN 7397-19-1734.

AS RECORDED AS INSTRUMENT 201310110102175 AMONG THE

LAND RECORDS OF PRINCE WILLIAM COUNTY, VIRGINIA. GIVEN UNDER MY HAMDETHIS 11th DAY OF AUGUST

## OWNER/APPLICANT HAYMARKET PROPERTIES GROUP, LLC

14600 WASHINGTON STREET, SUITE 137 HAYMARKET, VA 20169 Phone: (703) 498-8650

	APPROVAL	BLOCK	
DIRECTO	R OF PLANNING		DATE

	REVISION BLOCK										
NO.	SHEET NUMBER AND REVISON DESCRIPTION	DATE									
1	REV. PER TOWN COMMENTS (JD)	06-12-20									
2	REV. PER TOWN COMMENTS (JD)	08-10-20									

<u>1</u> OF <u>5</u>

# SITE TABULATIONS

EXISTING ZONING: B-1 (TOWN CENTER DISTRICT)

PROPOSED USE: MIXED-USE COMMERCIAL (BY-RIGHT)

SITE AREA: 8.84 AC.

TAX MAP: GPIN 7397-19-1734

ZONING REQUIREMENTS (B-1 REQUIREMENTS PER CHAPTER 58 ARTICLE V)

<u>REQUIRED</u>

LOT SIZE:

NO MINIMUM

FLOOR AREA RATIO (F.A.R.):

NO MAXIMUM

MAXIMUM BUILDING LOT COVERAGE: 85% (PER SECTION 58-184)

MAXIMUM BUILDING HEIGHT: 4 STORIES BUT NOT OVER 50 FEET (PER SECTION 58-182)

YARD REQUIREMENTS: 10 FEET (FRONT)

(PER SECTION 58-181)

10 FEET (SIDE) ABUTTING A STREET RIGHT-OF-WAY
25 FEET (SIDE) ABUTTING A RESIDENTIAL DISTRICT
NONE ABUTTING SIMILAR COMMERCIAL USES

10 FEET (REAR) ABUTTING A STREET RIGHT-OF-WAY
25 FEET (REAR) ABUTTING A RESIDENTIAL DISTRICT
NONE ABUTTING SIMILAR COMMERCIAL USES

LANDSCAPE REQUIREMENTS: 25 FEET LANDSCAPE BUFFER ADJACENT TO RESIDENTIAL USES 10 FEET LANDSCAPE BUFFER ADJACENT TO COMMERCIAL USES

(PER SECTION 58-179(B))

LANDSCAPING, SCREENING, BUFFERING PER ARTICLE XVI

MINIMUM OFF-STREET PARKING: VARIES BY USE (PER SECTION 58-11)

	QBE BUSINESS PAR	K	1
	SITE TABULATIONS		
ZONING		B-1	
	PARCEL: GPIN 7397-19-1734		
GROSS SITE AREA	8.8353 AC (384,867 SF)		
	REQUIRED	PROVIDED	
BUILDABLE LOT COVERAGE	85% (MAX.)	74.30%	
33.23, (322.23 ) 33 (2.1 (32		1 110070	
BUILDING HEIGHT	4-STORIES (50' MAX.)	50' (MAX.)	
FLOOR AREA RATIO	NO MAXIMUM	N/A	
T EGGI ( / II E I I I I I I I I I I I I I I I I	THE WORKSING	14/1	
SETBACK/YARD REQUIREMENTS			
FRONT YARD	10'	10'	
SIDE YARD	25' ABUTTING A RESIDENTIAL DISTRICT	25'	
	0' ABUTTING SIMILAR COMMERCIAL USES	10'	
DE4 D.V.4 DD	OF A DUTTING DECIDENTIAL DIOTRICT	N/A (CODNED LOT	
REAR YARD	25' ABUTTING RESIDENTIAL DISTRICT 0' ABUTTING SIMILAR COMMERCIAL USES	N/A (CORNER LOT)	
BUFFER YARD REQUIREMENTS			
COMMERCIAL	10' BUFFER YARD (OS)	10' BUFFER YARD (OS)	
RESIDENTIAL	25' BUFFER YARD (TS)	25' BUFFER YARD (TS)	
	PARKING TABULATIONS	6	
PROPOSED USE	PARKING REQUIREMENTS	REQUIRED PARKING	PROPOSED PARKING
	4 004 05 050 00 5		
12,260 G.S.F. COMMERCIAL/RETAIL	1 SPA CE PER 300 S.F.	374.20	
30 RESIDENTIAL (CONDOMINIUM)	1.5 SPACES PER D.U.	45.00	
TOTAL		419.20	378 SPACES (SURFACE PARKIN
			31 SPACES (BLEIGHT DRIVE) 42 SPACES (GARAGE PARKING
			451 SPACES (TOTAL)
			(INCLUDES 16 H.C. SPACES)
	LOADING SPACE REQUIREMENTS	REQUIRED LOADING SPACES	PROPOSED LOADING SPACE
12,260 G.S.F. COMMERCIAL/RETAIL	1/30,000 UP TO 70,000 SF PLUS	2.00	3
	1/100,000 SF THEREAFTER		
30 RESIDENTIAL (CONDOMINIUM)	NONE	0.00	0
	INOINE	0.00	

	REVISION BLOCK	
NO.	SHEET NUMBER AND REVISON DESCRIPTION	DATE
1	REV. PER TOWN COMMENTS (JD)	06-12-20
2	REV. PER TOWN COMMENTS (JD)	08-10-20

THE KDL GROUP
P.O. BOX 609
HAYMARKET, VA 20168



JOHN H. DAVIS
Lic. No. D28930

SCALE: H) N/A

V) N/A

DATE: MAY 2020

CHECKED:

DRAWN: JHD

FILE NO: PRE-018-HAY

SHEET NO.

GEOGRAPHIC PARCEL IDENT. #

WITH

NSTR. No. INSTRUMENT NUMBER

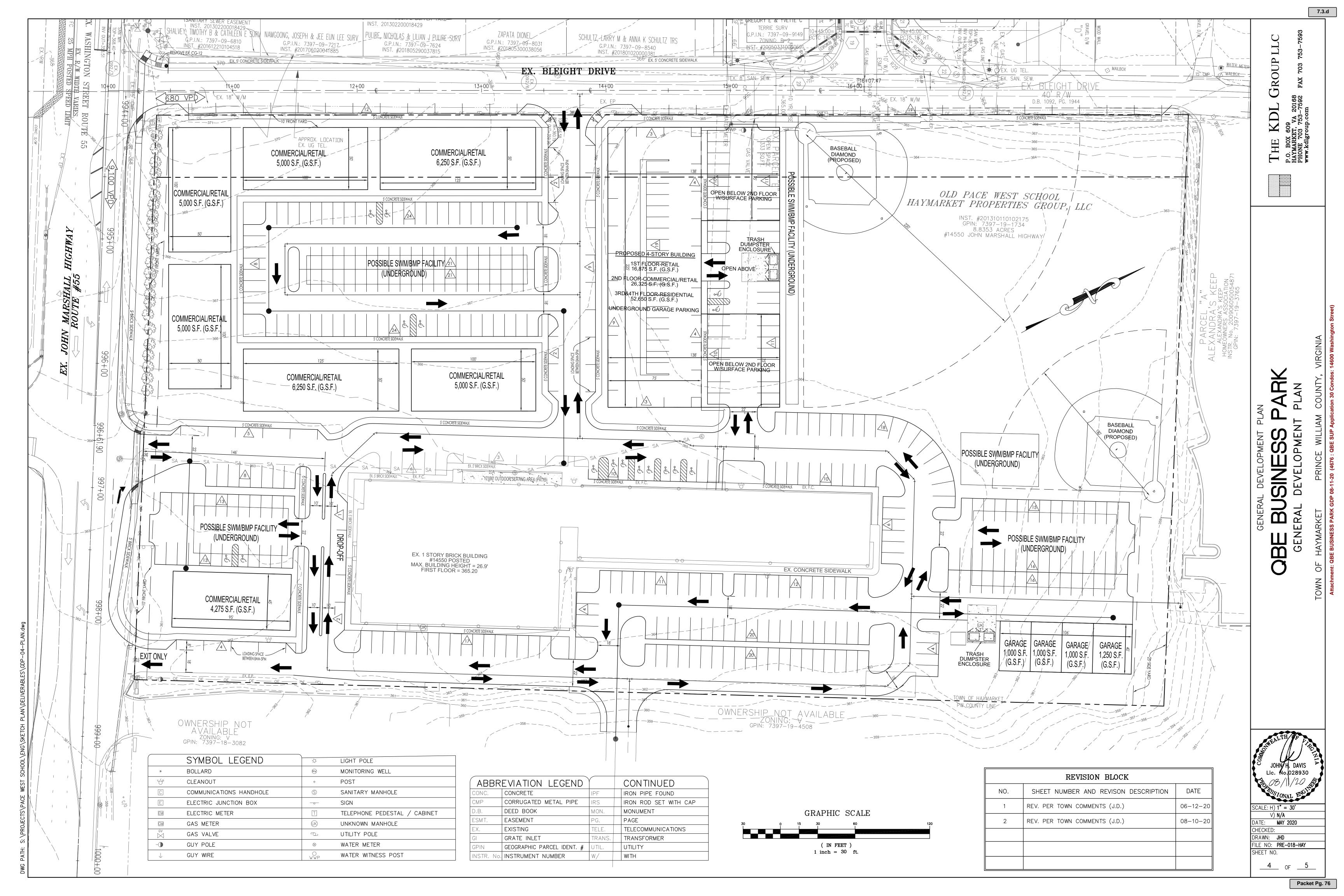
WATER WITNESS POST

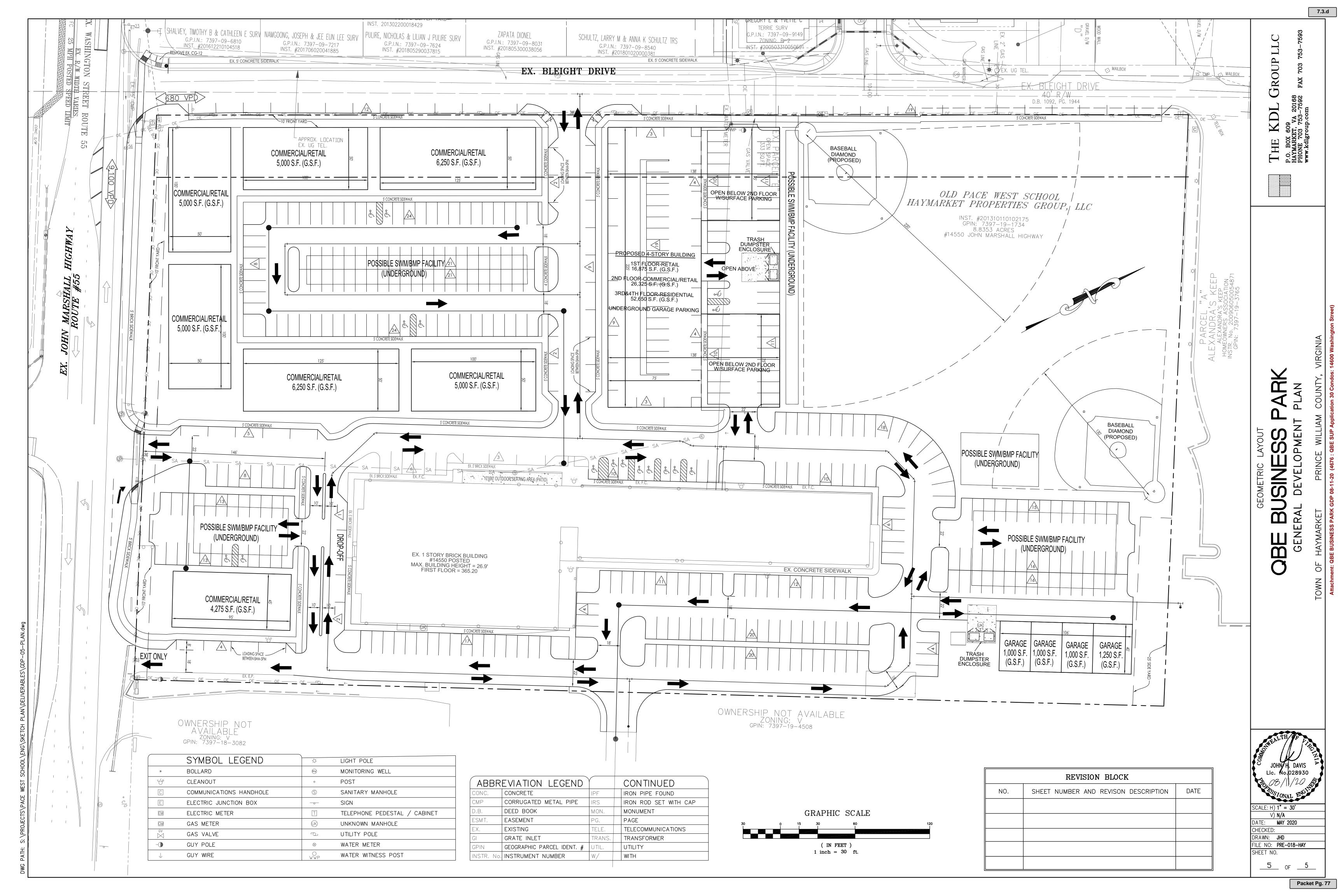
GUY WIRE



∨) **N/A** DATE: **MAY 2020** CHECKED: DRAWN: **JHD** 

FILE NO: PRE-018-HAY SHEET NO. 









#### Emily K. Lockhart

Town Planner and Zoning Administrator

#### **MEMORANDUM**

TO: Planning Commission

FROM: Emily K. Lockhart

DATE: September 15, 2020

SUBJECT: Robinson Village Site Plan

#### Planning Commission:

Van Metre has submitted the Site Plan for Robinson's Village, located at 14850 & 14860 Washington Street and 6701 Hunting Path Road. The site plan has received one round of comments back from the Town Planner and the Town Engineer. Town Staff also met with the applicant in August to discuss the first set of comments with Van Metre. A second submission was submitted September 4th, 2020. This set of plans is currently being reviewed by the Town Engineer and the Town Planner.

Please provide comments, concerns, and questions at the September Meeting. The applicant will be at the meeting to address questions.

			VICINITY MAP
GENERAL NOTES	LEGEND	SURVEY AND TOPOGRAPHIC INFORMATION	
1. This site has been addressed by the Prince William County Mapping Office as: 6701 HUNTING PATH RD., 14860 & 14850 WASHINGTON ST.	LLULINU	1. Horizontal and vertical control surveys were performed by	ı T
(addresses for subdivision lots shall appear on the approved plat for recordation).  2. Addresses assigned are for the layout of individual businesses or dwelling units and are for exterior doors as shown on this plan only.	EXISTING INTERMEDIATE CONTOUR ————————————————————————————————————	The ENGINEERING GROUPE, Inc. in 2019 (Year)	
Any deviation in design or layout will require that a revised plan be submitted to the Office of Mapping for re—addressing. It is the responsibility of the developer to inform the County Office of Mapping before a change in layout occurs and to submit complete and accurate information for re—addressing. Prince William County does not assume any responsibility where re—addressing is required even	EXISTING INDEX CONTOUR  PROPOSED CONTOUR	2. All elevations must be referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29).	115
though tenants have already occupied a portion of the building.  3. Methods and materials used in the construction of the improvements herein shall conform to the current County construction standards	EXISTING EDGE OF PAVEMENT  PROPOSED EDGE OF PAVEMENT  PROPOSED UTILITY POLE  EXISTING WATERLINE W/ TEE  PROPOSED UTILITY POLE  EXISTING WATERLINE W/ TEE	3. Source of topographic mapping is <u>THE ENGINEERING GROUPE</u> , dated <u>APRIL 2020</u> .	
and specifications and/or current VDOT standards and specifications.  4. The contractor or developer is required to notify the Town of Haymarket in writing three (3) days prior to the beginning of the	EXISTING CURB AND GUTTER  EX. C & G  PROPOSED WATERLINE W/ TEE  FYICTING FIRE LIXERANT		THEAR. SPIN
construction and specifically request inspection before beginning —— A. Installation of approved erosion control devices. B. Clearing and Grading	PROPOSED CURB AND GUTTER  PROPOSED FIRE HYDRANT  FRANCITION FROM CO. C. TO. CO. CR. CG-6 V. CG-6R  PROPOSED FIRE HYDRANT  FRANCITION FROM CO. C. TO. CO. CR. V. CG-6R	5. The application of the professional's seal and signature as required by Section 1.14 of the STATE BOARD OF ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS AND CERTIFIED LANDSCAPE ARCHITECTS RULES AND REGULATIONS	57 CH (66)
C. Subgrade excavation.  D. Installing storm sewers or culverts.  E. Setting curb and gutter forms.	EXISTING TELEPHONE LINE ————————————————————————————————————	shall be evidence that: the boundary data is correct to the best of the land surveyor's knowledge, and complies with the minimum standards and procedures of the said Board; the topographic information is accurate to	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
F. Placing curb and gutter. G. Placing other concrete. H. Placing gravel base.	PROPOSED TELEPHONE LINE  T  PROPOSED WATER VALVE  PROPOSED WATER METER  D  EX. 375 mm (15") RCP	within one—half of the contour interval, as shown. Application of the seal and signature indicates acceptance of responsibility for the work shown hereon.	Non the state of t
<ul> <li>I. Placing any bituminous surfacing.</li> <li>*J. Installing water mains outside the Service Authority's boundaries.</li> <li>*K. Installing sanitary sewer outside the Service Authority's boundaries.</li> </ul>	PROPOSED STORM SEWER PROPOSED REDUCER  PROPOSED REDUCER  W ➤ W W		CREENAMI, CROSSINGS
5. Measures to control erosion and siltation, including detention ponds serving as silt basins during construction, must be provided prior to issuance of the site development permit. The approval of these plans in no way relieves the developer or his agent of the responsibilities contained in the Virginia Frasion and Sediment Control Handbook	EXISTING SANITARY SEWER  HANDICAP RAMP (CG-12)	COILG MAD	SROAD RUN
responsibilities contained in the Virginia Erosion and Sediment Control Handbook.  6. A permit must be obtained from the Office of the Resident Engineer, Virginia Department of Transportation (VDOT), Town of Haymarket,	PROPOSED SANITARY SEWER  EXISTING ELECTRIC SERVICE  DENOTES LOCATION OF STD VDOT CG-12 AND/OR JURISDICTIONAL STANDARD RAMP CONSTRUCTION	SOILS MAP	
prior to construction in existing State right—of—way, (703) 366—1900.  7. Approval of this plan does not guarantee issuance of an entrance permit by VDOT when such permit is required under State law.	PROPOSED ELECTRIC SERVICE ————————————————————————————————————	Q:	SCALE: 1" = 2000'
8. The exact location of all guard rails will be determined by VDOT personnel. "A joint inspection will be held with the Developer, County Representatives, and Representatives, of the Virginia Department of Transportation (VDOT) to determine if and where guard rail and/or	EXISTING GAS LINE  PROPOSED GAS LINE  G  CRITICAL SLOPE	A MEA THOOTE ALL	
paved ditches will be needed. The developer will be responsible for providing guardrail and paved ditches as determined by this joint inspection." Refer to Virginia Department of Transportation (VDOT) Guard Rail and Paved Ditch Specifications.	PROPERTY LINE  CRITICAL SLOPE  SLOPES TO BE STABILIZED PURSUANT TO VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK		Sheet List Table
9. An approved set of plans and all applicable permits must be available at the construction site. Also, a representative of the developer must be available at all times.	EASEMENT LINE VEHICLES PER DAY COUNT 100 VPD  CENTERLINE PROPOSED BUILDING ENTRANCE	SITE	
10. Warning signs, markers, barricades or flagmen should be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).  11. All unsuitable material shall be removed from the construction limits of the roadway before placing embankment.	LIMITS OF CLEARING AND GRADING ————————————————————————————————————		Sheet Number Sheet Title  1 cover sheet
12. All pavement sections on the approved plans are based on a minimum CBR value of 10. CBR tests are to be performed by the engineer and submitted to the Town of Haymarket for review prior to placement of base material. CBR values less than 10 will require	EXISTING SPOT ELEVATION  PROPOSED STREET LIGHT  PROPOSED STREET LIGHT	35B	2 NOTES DETAILS AND TYPICAL SECTIONS
submittal of revised pavement section.  13. All roadside ditches at grades of more than 5% shall be paved with cement concrete to the limits indicated on the plans and as	EXISTING TREE DRIP LINE  PROPOSED SANITARY LATERAL CLEANOUT  PROPOSED SANITARY LATERAL CLEANOUT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3 NOTES DETAILS AND TYPICAL SECTIONS 4 SUP CONDITIONS AND ANALYSIS
required at the field inspection.  14. All springs shall be capped and piped to the nearest storm sewer manholes or curb inlet. The pipe shall be minimum 150 mm (6")	EXISTING TREE 375 mm (15") OAK SANITARY MANHOLE IDENTIFIER	The state of the s	5 OVERALL PLAN 6 EXISTING CONDITIONS & DEMOLITION PLAN
diameter and conform to VDOT standard SB-1.  15. All standard street name signs, traffic control devices, and street lights shall be installed by the developer when the first building unit is occupied.	PROPOSED TREE  STORM DRAIN STRUCTURE IDENTIFIER  18	CARTEN.	7 GRADING PLAN 8 GRADING PLAN
is occupied. 16. Construction debris shall be containerized in accordance with the Virginia Litter Control Act; no less than one litter receptacle shall be provided at the construction site	<u> </u>	BROAD CROSSING DR	8A GEOMETRIC PLAN  PLAN & PROFILE — WASHINGTON STREET STATE
' 17. The contractor shall provide adequate means of cleaning mud from trucks and/or other equipment prior to entering public streets, and it is the contractors responsibility to clean streets, allay dust, and to take whatever measures are necessary to insure that the streets		Ton the state of t	ROUTE 55  10 SIGHT DISTANCE PROFILE
are maintained in a clean, mud and dust free condition at all times.  18. * Notification shall be given to the appropriate utility Company (Service Authority, Virginia—American Water Company, or Dale Service		SCALE: 1" = 1000'	11 WATERLINE PROFILES  12 SANITARY SEWER PROFILES
Corporation) prior to construction of water and/or sanitary sewer lines. Information should also be obtained from the appropriate authority concerning permits, cut sheets, and connections to existing lines.	DDA ISAT ATATA	SOILS DATA	13 STORM SEWER PROFILES  14 STORM SEWER COMPUTATIONS
19. All sanitary sewers and water mains and appurtenances shall be constructed in accordance with the current standards and specifications of the Town of Haymarket and/or the Service Authority.	THIS PLAN COMPLIES WITH THE NEW PRINCE WILLIAM COUNTY SERVICE AUTHORITY UTILITY STANDARDS MANUAL, WHICH WENT INTO	SOILS SYMBOL     SOILS NAME     ERODIBILITY     SLOPE RANGE       ☑ 4B     ARCOLA SILT LOAM     SEVERE     2% - 7%       ☑ 5C     ARCOLA-NESTORIA COMPLEX     SEVERE     7% - 15%	15 PWCSA INFORMATION SHEET 16 SANITARY SEWER COMPUTATIONS
20. The developer and/or contractor shall be responsible to supply all utility companies with copies of plans that have been approved by Town of Haymarket and advising them that all grading shall conform to the approved plans, and further that the utility companies shall be responsible for honoring these plans and the finished grades in the installation of their utility lines.	EFFECT ON SEPTEMBER 3, 2019. ALL UTILITY PERMITS ISSUED AFTER THIS DATE MUST COMPLY WITH THE CONSTRUCTION CRITERIA	☑ 35B     MANASSAS SILT     MODERATE     2% to 7%       SOILS SYMBOL     PERMEABILITY     DEPTH     TEXTURE	17 EROSION & SEDIMENT CONTROL NOTES AND DETAILS 18 EROSION & SEDIMENT CONTROL NOTES AND DETAILS
21. Contractors shall notify operators who maintain underground utility lines in the area of proposed excavating or blasting at least two (2) working days, but not more than ten (10) working days, prior to commencement of excavation or demolition. Names and telephone	IN THE NEW MANUAL, INCLUDING ANY REVISIONS WHICH HAVE BEEN ISSUED.	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	19 EROSION & SEDIMENT CONTROL PLAN — PHASE 1 20 EROSION & SEDIMENT CONTROL PLAN — PHASE 2
numbers of the operators underground`utility lines in Prince William County appear below. These numbers shall also be used to serve in an emergency condition. * Washington Gas Light Co.	DATE ACTION	22-25 VERT GRAVELLT EDAM, VERT GRAVELLT SILT LOAM, EXTREMELT GRAVELLT SILT LOAM  28 WEATHERED BEDROCK  SILT LOAM	20 EROSION & SEDIMENT CONTROL PLAN — PHASE 2  21 BMP MAP  22 PRE DEVELOPMENT DRAINAGE DIVIDES
Virginia Power Co.  Service Authority (703) 335-7900  Northern Virginia Electric Co-op MISS UTILITY 811 (After hours-Emergency (703) 335-7990  Columbia Gas of Virginia Virginia Virginia American Water (703) 491-2136		9-22 SILT LOAM, GRAVELLY SILTY CLAY LOAM, GRAVELLY SILT LOAM 22-28 VERY GRAVELLY LOAM, VERY GRAVELLY SILT LOAM, EXTREMELY GRAVELLY SILT LOAM	23 POST DEVELOPMENT DRAINAGE DIVIDES
Continental Telephone of VA  Colonial Pipeline Co. Transcontinental Gas Pipe Line Corp.		☑ 35B   28   WEATHERED BEDROCK     MODERATE TO   0-10   SILT LOAM	24 POLLUTION PREVENTION PLAN 25 SWM COMPS & DETAILS
22. The location of existing utilities shown in these plans are taken from existing records. It shall be the contractors responsibility to verify the exact horizontal and vertical location of all existing utilities as needed prior to construction. The contractor shall inform the engineer of any conflicts arising from his existing utility verification and the proposed construction.		MODERATELY RAPID  10-43 SILT LOAM, SILTY CLAY LOAM  43-60 VERY SHALY SILT LOAM	26 SWM COMPS & DETAILS 27 SWM COMPS & DETAILS
23. The developer will be responsible for any damage to the existing streets and utilities which occurs as a result of his construction			28 SWM COMPS, DETAILS & NARRATIVE 29 VRRM COMPUTATIONS
project within or contiguous to the existing right—of—way.  24. All utilities placed under existing streets shall be bored or jacked.			30 SWM CHECKLIST 31 FIRE HYDRANT COVERAGE PLAN
25. When grading is proposed within easements of utilities, letters of permission from all involved companies must be provided to the Town of Haymarket prior to issuance of grading and/or site development permits.		<u> </u>	32 FIRE LANE PLAN
26. The developer will be responsible for the relocation of any utilities which is required as a result of his project. The relocation should be done prior to construction.		REVISIONS	33 LANDSCAPE PLAN  34 LANDSCAPE PLAN
27. Before burning, blasting, transportation or storage of explosives in the Town of Haymarket, a permit shall be obtained from the Fire Marshal's Office, (703) 792—6360.			35 LANDSCAPE NOTES & DETAILS 36 PHOTOMETRIC PLAN
28. Fire and Rescue Services must be notified immediately (792—6810) in the event that unusual items such as tanks, cylinders, unidentified containers, etc. which could contain potentially hazardous materials are discovered or observed. All activities must cease and not be resumed until authorization to proceed is given by the Fire Marshal's Office.			36A PHOTOMETRIC PLAN 37 UNIT PRICE LIST
29. All walkways outside of the right—of—way limits will be maintained by the homeowners association.			38 SPECIAL USE PERMIT PLAN 39 SPECIAL USE PERMIT PLAN
30. Maintenance of the Storm Drainage or Storm Water Management facilities located therein shall be privately maintained. 31. If units shown on this plan will be occupied in phases, a phasing plan must be approved by the engineering inspection branch prior to	REVIEWED BY: APPROVED BY:	DATE DESIGNER NO. DESCRIPTION	40 SPECIAL USE PERMIT PLAN 41 SPECIAL USE PERMIT PLAN 41 SPECIAL USE PERMIT PLAN
the issuance of any occupancy permits. (Detached single family subdivision exempt.)  32. Roof top mechanical equipment, if any, must be enclosed within a wall or similar screening barrier, designed in harmony with the			
building.  33. Individual sign permits will be required from the Town of Haymarket for all free standing and facade signs prior to erecting the signs.	THIS PLAN HAS BEEN REVIEWED AND HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE REQUIREMENTS OF THE TOWN OF HAYMARKET. THE DEVELOPER IS HEREBY AUTHORIZED TO OBTAIN ALL NECESSARY LAND DEVELOPMENT PERMITS. SUBJECT TO ALL DESIGNS. PROCEDURES. MATERIALS AND	TOWN OF	HAYMARKET
34. For SUP statement and proffers analysis, see sheet(s)4of41	WORKMANSHIP BEING IN COMPLIANCE WITH LAWFUL REQUIREMENTS. IF NOT BONDED OR PERMITTED (IF APPLICABLE) WITHIN FIVE (5) YEARS OF THE AUTHORIZED DATE OR LAWFULLY EXTENDED, THIS	COVER	SHEET
35. For waivers see sheet(s) N/A of N/A .  36. Anticipated sewage flows: 390 GPD/UNIT x 38 X 4 (PEAK FACTOR) = 59,280 GPD	AUTHORIZATION WILL EXPIRE. A VALID AGREEMENT AND BOND WITH THE TOWN OF HAYMARKET MUST BE MAINTAINED TO ASSURE PLAN AND PERMIT VALIDITY.	DENAR H. C. ANTELO Lic. No. 38680  Project Name:  ROBINSON VILLAGE	Project Number:
37. Anticipated fire flows: 2500 GPM © 20 PSI		9/4/2020 Subdivision or Site Plan Name: Market Na	ıme: Plan Number: — Plan Type: —
38. Distance to nearest existing school or proposed school site: 0.63 MILES TO TYLER ELEMENTARY SCHOOL  39. All utilities existing and proposed must be located underground in accordance with applicable town standards.	BOND ESTIMATE	ROBINSON VILLAGE  Magisterial District: Present Zoning  ROBINSON VILLAGE  Present Zoning  RATIONAL PROBLEM STATEMENT PRO	Revision Number: O  g & Use: Date of Plan: (Month, Day, Year)
i de la companya de La companya de la companya		TOWN OF HAYMARKET  Owner:  Address, Including Zip Co	·
i de la companya de La companya de la co	Bond Estimate  ITEM COUNTY BOND VDOT BOND	THESE PLANS ARE IN CONFORMANCE  Developer:  Address, Including Zip Co	MAIN ST., SUITE 500, FAIRFAX, VA 22031 (703)425-2614  ode & Telephone No.
<b>Y</b>	TOTAL CONSTRUCTION COST \$1,108,708.25 \$62,350.25 ADMINISTRATIVE COST \$50,000.00	STANDARDS AND ORDINANCES. ANY  STANDARDS AND ORDINANCES. ANY  Name Address & Telephone No. of Engineer.  THE ENGINEERING (	
i de la companya de La companya de la co	INFLATION COST (3%) \$33,261.25  TOTAL PERFORMANCE BOND AMOUNT \$1,191,969.50  EROSION AND SEDIMENT ESCROW \$76,216.80	DEVIATION OF CHANCE IN THESE Mains, Address & Telephone No. of Engineer The Electrical Action of Engineer	TE 101 WOODBRIDGE, VA 22192 (703) 670-0985
<b>Y</b>		DIRECTOR OF FEMALINA TO	5.85 Ac. Impervious Area: 2.92 Ac. BMP Storage/Acre: N/A cf/ac.
, and the second se		Related Plans Tracking Numbers (Including Rez. & S.U.P.):  SUP-2019-004	

Revised: June 1997 Sheet 1 of 41

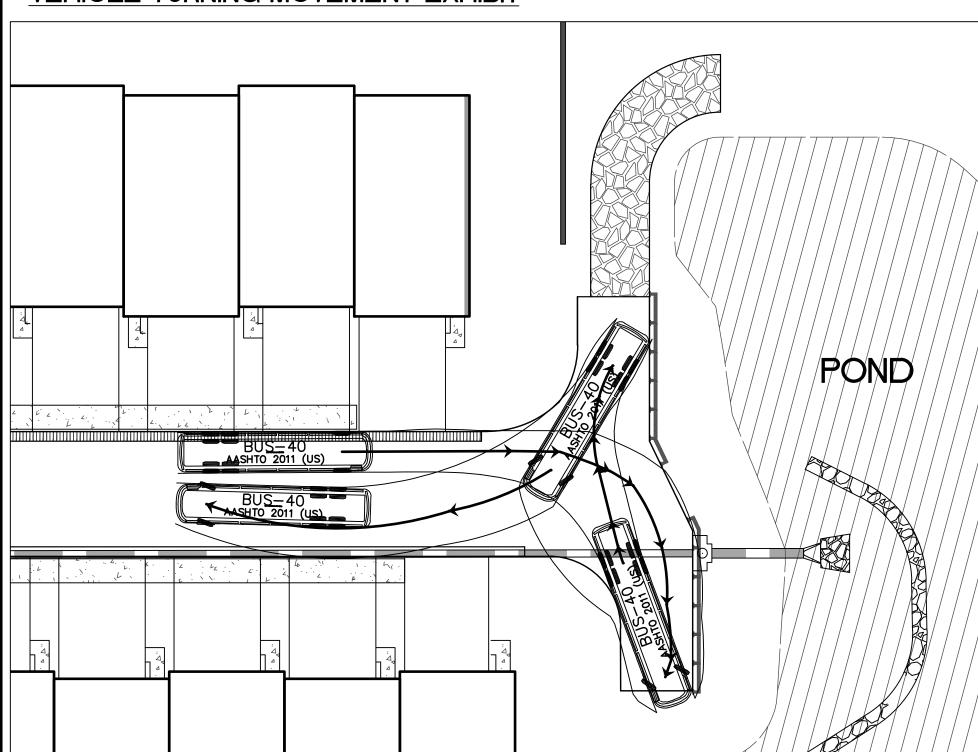
ACCESS MANAGEMENT - DATE OF APPROVAL: \_\_\_\_\_N/A\_\_\_\_ SSAR- DATE OF APPROVAL: \_\_\_\_

SSAR- DATE OF APPROVAL: \_\_\_\_\_N/A
 DESIGN WAIVER -DATE OF APPROVAL: \_\_\_\_\_N/A
 OTHER\_\_N/A \_\_\_\_ DATE OF APPROVAL: \_\_\_\_\_N/A

CONNECTION MAY EITHER BE TO A VDOT ROAD OR TO A STUB OUT)

- 2. SSAR CONNECTIVITY SUMMARY (PROVIDE A CHECK MARK X WHERE APPLICABLE OR WRITE N/A): CONNECTIONS IN MULTIPLE DIRECTIONS (FIRST CONNECTION MUST BE TO A VDOT MAINTAINED ROAD, THE SECOND
- 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)
- 3. 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.
- 4. METHODS AND MATERIALS USED SHALL CONFORM TO CURRENT COUNTY/TOWN AND VDOT STANDARDS AND SPECIFICATIONS.
- 5. ALL UTILITIES, INCLUDING ALL POLES, ARE TO BE RELOCATED AT THE DEVELOPER'S EXPENSE, PRIOR TO CONSTRUCTION.
- 6. 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.
- 9. 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.
- 10. STANDARD GUARDRAILS AND/OR HANDRAILS SHALL BE INSTALLED AT HAZARDOUS LOCATIONS AS DESIGNATED DURING FIELD REVIEW BY THE COUNTY/TOWN INSPECTOR OR VDOT.
- 11. 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.
- 12. 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.
- 13. ASPHALT PAVEMENT WIDENING SHALL CONFORM TO VDOT STANDARD WP-2.
- 14. ALL RIGHT OF WAY DEDICATED TO PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.
- 15. 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.
- 16. THE COUNTY/TOWN SHALL OBTAIN A PERMIT FOR ALL SIDEWALKS/CROSSWALKS WITHIN THE RIGHT OF WAY THAT DO NOT QUALIFY FOR VDOT MAINTENANCE.
- 17. 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.
- 18. 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.

## VEHICLE TURNING MOVEMENT EXHIBIT



## CONSTRUCTION NOTES:

SPECIFICATION REFERENCE

- DAMAGE TO ANY EXISTING ENTRANCES, CURB AND GUTTER, SIDEWALK OR PAVEMENT WITHIN STATE RIGHT-OF-WAY NOT PROPOSED TO BE DISTURBED WITH THIS DEVELOPMENT WILL BE THE RESPONSIBILITY OF THE DEVELOPER TO REPAIR TO THE SATISFACTION OF THE AFFECTED PARTIES.
- 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPORT ANY UNDERGROUND UTILITIES LOCATED BY MISS UTILITY, THAT ARE NOT REFLECTED ON THIS PLAN AT SUCH TIME AS THESE UTILITIES ARE MARKED IN THE
- 3. TEMPORARY CHEMICAL TOILETS MUST BE PROVIDED WITH A RATIO OF ONE TOILET PER THIRTY WORKERS.
- 4. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND/OR DIMENSIONS ON THE SITE.
- 5. THE ENGINEERING GROUPE DOES NOT CERTIFY AS TO THE LOCATION OR EXISTENCE OF ANY UNDERGROUND UTILITIES NOR AS TO SOIL OR GROUND CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR DEVELOPER TO HAVE ADEQUATE SOILS AND FOUNDATION TESTING PERFORMED TO DETERMINE THAT THE SUPPORT VALUES ARE ADEQUATE FOR THE STANDARDS SHOWN ON THIS PLAN.
- 6. IF PRECAST STRUCTURES ARE TO BE USED IN LIEU OF VDOT STANDARD STRUCTURES SPECIFIED ON THESE PLANS, WRITTEN APPROVAL OF THE SHOP DRAWINGS BY THE DESIGN ENGINEER SHOULD BE OBTAINED PRIOR TO ORDERING FROM MANUFACTURER AND INSTALLATION TO INSURE THERE ARE NO DESIGN CONFLICTS.
- 7. CONTRACTOR IS RESPONSIBLE FOR BEING AWARE OF AND CONFORMING TO OSHA RULES AND REGULATIONS AS THEY APPLY TO CONSTRUCTION PROCEDURES ON THIS SITE.
- 8. THERE ARE NO RESOURCE PROTECTION AREA OR FLOOD HAZARD AREAS ON THIS SITE PER PRINCE WILLIAM COUNTY GIS COUNTY MAPPER.
- 9. THE SOIL SURVEY OF PRINCE WILLIAM COUNTY WAS UTILIZED IN DETERMINING EXISTING SOILS CONDITIONS. NO SUBSURFACE INVESTIGATION HAS BEEN PERFORMED BY THE ENGINEERING GROUPE, INC. TO ATTEST TO THE SOIL CONDITIONS AND TO THE PRESENCE OF TOXIC AND CONTAMINATED WASTE.
- 10. ALL CONSTRUCTION INVOLVING PROBLEM SOILS MUST BE PERFORMED UNDER THE FULL-TIME INSPECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER.
- 11. ANY EXISTING CEMETERIES, GRAVESITES AND/OR HISTORIC SITES FOUND ON THIS SITE SHALL BE PRESERVED IN ACCORDANCE WITH COUNTY AND STATE REGULATIONS. THERE ARE NO KNOWN CEMETERIES ON THIS SITE.
- 12. PRIOR TO ANY CLEARING & GRADING ON SLOPES 25% OR GREATER, ALL SURFACE DRAINAGE WILL BE ROUTED AWAY FROM THE AREA TO BE GRADED.
- 13. ALL FILL MATERIALS AND THEIR SUBGRADE WILL BE APPROVED BY THE SOILS ENGINEER FOR THIS SITE.
- 14. STORM WATER MANAGEMENT, AND BEST MANAGEMENT PRACTICES FACILITIES AND SYSTEMS TO WILL BE PRIVATELY MAINTAINED. THE TOWN SHALL NOT BE RESPONSIBLE FOR REPAVING OR RESURFACING PAVED AREAS OR MAINTAINING LANDSCAPING WITHIN EASEMENTS. THE FEE TITLE OWNER SHALL BE RESPONSIBLE FOR GRASS MOWING WITH REASONABLE FREQUENCY, IF APPLICABLE, AND FOR THE REMOVAL OF DEBRIS AND OTHER MATTER THAT HAS IMPEDED OR THREATENS TO IMPEDE THE FREE FLOW OF STORM WATER.
- 15. THE FEE TITLE OWNER SHALL NOTIFY THE TOWN OF HAYMARKET OF ANY DEFECTS WITH THE STRUCTURES. PIPES AND FENCING WITHIN THE EASEMENT, OF ANY DEBRIS OR OTHER MATTER WHICH IS BEYOND THE ABILITY OF THE OWNER TO REMOVE, AND OF ANY EXCESSIVE FLOODING, SEDIMENTATION OR SOIL EROSION WITHIN THE AREA OF EASEMENT.
- 16. ALL EXISTING & PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND IN ACCORDANCE WITH APPLICABLE TOWN ORDINANCES.
- 17. A COPY OF THE MOST CURRENT APPROVED PLANS AND PLATS MUST BE LOCATED ONSITE, DURING CONSTRUCTION.
- 18. THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATES MAPS (MAP NUMBERS 51153C-0067D AND 51153C-0059D) SHOWS THE PROPERTIES ARE IN ZONE X, WHICH ARE OUTSIDE THE LIMITS OF THE 100-YEAR FLOODPLAIN.
- 19. WETLAND LOCATIONS PROVIDED BY WETLAND STUDIES AND SOLUTIONS, INC. PER JOINT PERMIT APPLICATION DATED JUNE 4, 2020. APPLICABLE PERMITS REQUIRED PRIOR TO LAND DISTURBANCE

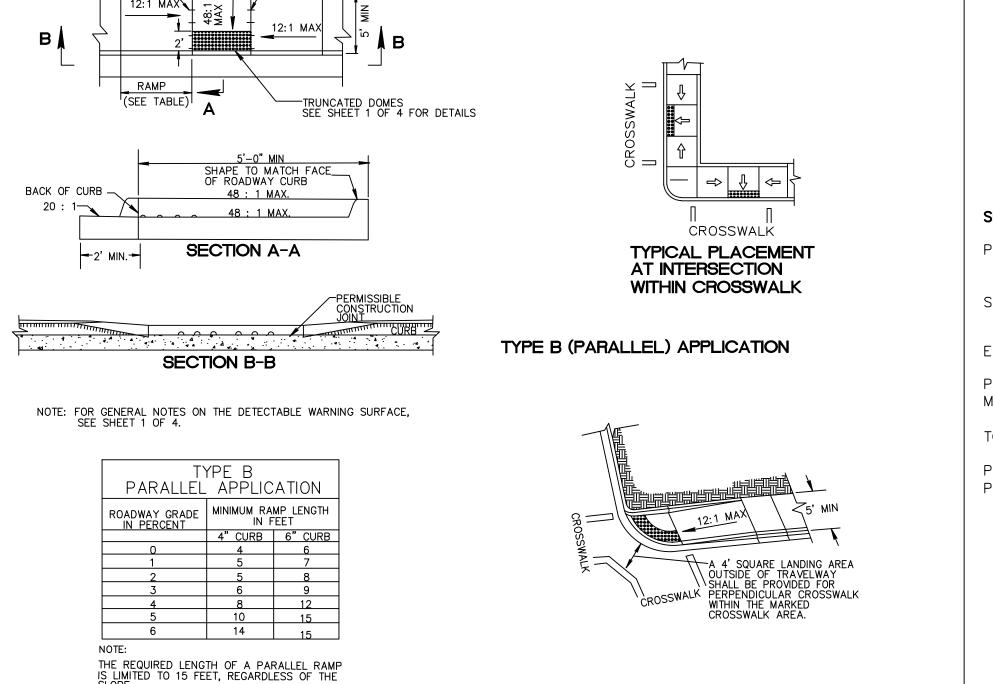
#### **INSERTABLE SHEET A59**

CG-12

SHEET 3 OF 4

REV. 7/05

203.06



CG-12 DETECTABLE WARNING SURFACE

TYPE B (PARALLEL) APPLICATION

VIRGINIA DEPARTMENT OF TRANSPORTATION

#### **GENERAL NOTES**

- 1. ALL CONSTRUCTION SHALL CONFORM TO EXISTING STATE AND TOWN CODES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF ALL APPLICABLE STANDARDS AND SPECIFICATIONS AS WELL AS REQUIRED METHODS OF CONSTRUCTION.
- 2. THE CONTRACTOR OR THEIR AGENT FOR CONTRACTOR SHALL BE RESPONSIBLE DETERMINING THE EXACT LOCATION OF ANY EXISTING UNDERGROUND UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. UTILITIES SHOWN HEREON ARE BASED ON AVAILABLE INFORMATION. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER ANY UTILITIES OTHER THAN THOSE SHOWN ON THESE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE CONTINUANCE OF SERVICES. ANY DAMAGES WHICH OCCUR BY FAILURE TO LOCATE OR PRESERVE THESE UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 3. A TITLE REPORT WAS FURNISHED FOR THIS PROPERTY AND USED IN PREPARATION AN ALTA FOR THE PROPERTY PREPARED BY THE ENGINEERING GROUPE, INC. DATED JANUARY 28, 2019.
- 4. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE 1992 VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND TOWN ORDINANCES.
- 5. CONSTRUCTION SHOULD BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE. SEDIMENT TRAPPING MEASURES, SUCH AS SILT FENCES, SHALL BE INSTALLED AND MADE FUNCTIONAL BEFORE ANY LAND DISTURBING ACTIVITY BEGINS.
- 6. ALL EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED IN GOOD WORKING CONDITION AT ALL TIMES DURING CONSTRUCTION. REMOVAL OF SAID CONTROLS SHALL BE AUTHORIZED BY A TOWN INSPECTOR BUT, AT THE LEAST, SHALL NOT BE REMOVED UNTIL PERMANENT VEGETATIVE COVER HAS BEEN ESTABLISHED ON ALL DENUDED AREAS.
- 7. PERMANENT AND TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 14 DAYS.
- 8. PRIOR TO DEVELOPMENT, THE LIMITS OF CLEARING SHALL BE CLEARLY MARKED WITH PROTECTIVE BARRIERS. IN PARTICULAR, BARRIERS SHALL BE INSTALLED FIVE (5) FEET OUTSIDE THE DRIPLINE OF ANY TREE OR STAND OF TREES TO BE PRESERVED. THE BARRIERS SHALL REMAIN IN PLACE THROUGH ALL PHASES OF CONSTRUCTION. THE STORAGE OF EQUIPMENT, MATERIALS, DEBRIS OR FILL SHALL NOT BE ALLOWED WITHIN THE AREA PROTECTED BY THE BARRIER.
- 9. ENGINEERED FILL AND BACKFILL SHALL BE APPROVED SELECT MATERIALS AND SHALL THROUGHOUT. EACH LAYER OF ENGINEERED FILL SHALL BE COMPACTED AT OPTIMUM MOISTURE, PLUS OR MINUS TWO PERCENT, TO A DENSITY OF NOT LESS THAN 95 PERCENT IN ACCORDANCE WITH A.S.T.M. D-698.

THE VPD COUNTS SHOWN ON THIS PLAN ARE BASED UPON THE RATES FOR SINGLE FAMILY ATTACHED UNITS PER THE PRINCE WILLIAM COUNTY DESIGN AND CONSTRUCTION STANDARDS MANUAL:

SINGLE FAMILY ATTACHED:

8.7 TRIPS PER DAY X 38 UNITS = 331 VPD

DAYCARE(AS PROVIDED BY ROSS-FRANCE DATED 9/2/20) PARCEL 3:

14.58 TRIPS PER 1000 SQ.FT. X 47.62 = 694 VPD RETAIL (PARCEL 1):

737.99 TRIPS PER 1000 SQ.FT. X 2500 SQ.FT = 1845 VPD

TOTAL TRIPS: 2870 VPD

## NOTICE TO CONTRACTORS AND OWNERS

IF THE CONTRACTOR/OWNER DETERMINES THAT AN ERROR, DISCREPANCY, OMISSION, ETC. EXISTS ON THE SITE PLAN, THE CONTRACTOR /OWNER SHALL NOTIFY THE ENGINEER PRIOR TO PRECASTING, STAKEOUT, INSTALLATION OR CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THE SITE PLAN. THE ENGINEER WILL REVIEW THE PLANS AND PROVIDE A CLARIFICATION OR AN ADDENDUM AS PROMPTLY AS POSSIBLE.

# STORMWATER CONSTRUCTION INSPECTION NOTE

INSPECTIONS ARE NEEDED DURING CONSTRUCTION TO ENSURE THAT THE FACILITIES ARE BUILT IN ACCORDANCE WITH THE APPROVED PLANS AND DESIGN SPECIFICATIONS. THE DEVELOPER/OWNER SHALL PROVIDE FOR PERIODIC INSPECTIONS OF THE FACILITY DURING CONSTRUCTION. DETAILED INSPECTION CHECKLISTS SHALL BE USED THAT INCLUDE SIGN-OFFS BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER REGISTERED IN VIRGINIA AT CRITICAL STAGES OF CONSTRUCTION, TO ENSURE THAT THE CONTRACTOR'S INTERPRETATION OF THE PLAN IS CONSISTENT WITH THE DESIGNER'S INTENT. THE ACTUAL INSPECTIONS MAY BE PERFORMED BY AN INDIVIDUAL UNDER THE DIRECT SUPERVISION OF THE LICENSED PROFESSIONAL

## STORMWATER AS-BUILT CERTIFICATION NOTE

AFTER THE FACILITY HAS BEEN CONSTRUCTED, THE DEVELOPER SHALL HAVE AN AS-BUILT CERTIFICATION CONDUCTED BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER REGISTERED IN VIRGINIA AND SUBMITTED TO THE TOWN ALONG WITH THE AS-BUILT CHECKLIST AND AS-BUILT PLAN. THE AS-BUILT CERTIFICATION VERIFIES THAT THE FACILITY WAS INSTALLED AS DESIGNED AND APPROVED.

#### SITE TABULATIONS:

PARCEL GPINS. ..7298-90-7006 (1.00 AC.) 7297-99-8684 (3.94 AC.) 7397-09-0978 (2.16 AC.) SUP AREA. ..±4.75 AC

EXISTING ZONE. ..B-1 (WITH SUP 2019-0004)

PROPOSED USE.. TOWNHOUSE MAXIMUM DENSITY. ..8 DU/AC, 38 LOTS (4.75 AC X 8 DU/AC=38 LOTS)

TOTAL LOTS SHOWN. .38 TOTAL (30 FRONT LOAD, 8 REAR LOAD-LOTS 27-34)

..86 SPACES (2.25 SP/DU) PARKING REQUIRED.

PARKING PROVIDED. ..97 SPACES (76 GARAGES/DRIVEWAYS, 21 SURFACE)

9/4/2020

ENGINEERING GROUPE PROJECT STATUS

09/02/20 REVISED PER TOWN COMMENTS

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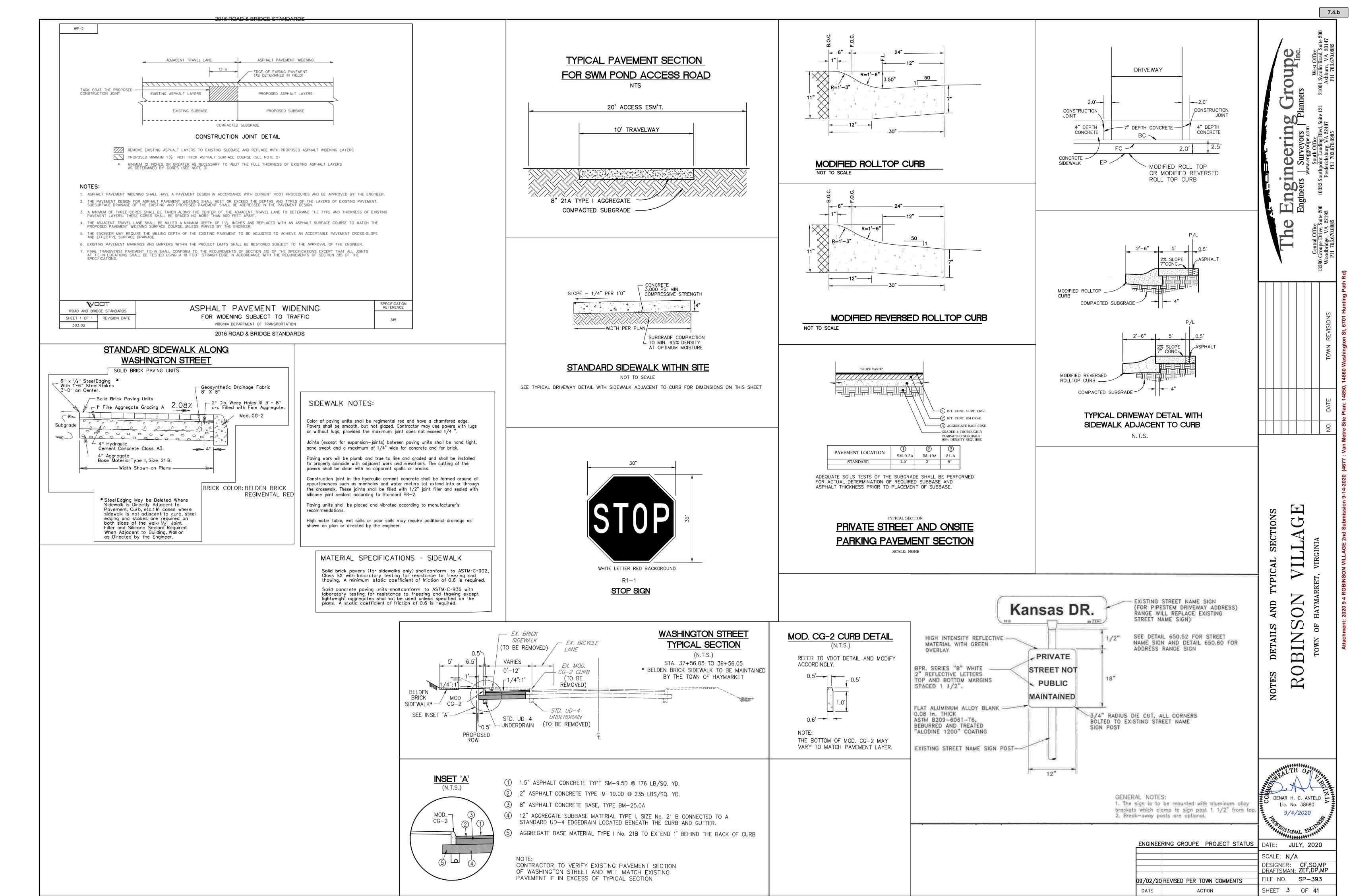
H

DATE: JULY, 2020

SCALE: N/A

DESIGNER: **CF,SO,MP** DRAFTSMAN: **ZEF,DP,MP** FILE NO. **SP-393** 

SHEET 2 OF 41



#### January 9, 2020

## 1.1 Development shall be in substantial accord with the Generalized Development and Special Use Permit Plan ("SUP") entitled "Smith Property at Haymarket" prepared by The Engineering Groupe and last revised January 2, 2020 (4 sheets) (the "GDP") with

the size, construction details and locations of buildings, roadways and other features being approximate subject to final engineering at site plan and with the color, construction materials and appearance of structures being subject to the issuance of certificates of appropriateness by the Town of Haymarket ("Town") Architectural Review Board (ARB) at advertised public meetings.

- 1.2 Residential Development on the Property under the SUP shall not exceed 38 townhouse units in the location generally shown on the GDP.
- 1.3 Townhouse dwellings shall be a combination of 20'-wide rear load units (8) and 24'-wide front load units (30), all with 2-car integral garages.
- 1.4 Development of the Property shall be in substantial conformity with the GDP. Precise locations of roads, lot lines, lot widths and depths, utility lines, and other features generally depicted on the GDP will be determined at the time of site or subdivision plan approval.
- 1.5 The Property shall be developed as a single-unified development to include a common architectural theme as specifically approved through certificates of appropriateness by the ARB and integrated vehicular and pedestrian access ways as depicted on the GDP and finalized through site plan approval.

#### 2. ARCHITECTURAL DESIGN, SIGNAGE AND LANDSCAPING

2.1 The Applicant will use best efforts to ensure that the height of townhouse units will not exceed 40-feet as measured from the finished grade. To the extent final grading results in height, as measured from the finished grade over 40 feet, then the applicable side yard setback shall be increased by .5 feet for every foot over 40 feet. Architectural details of the townhouse units will be determined through the issuance of certificates of appropriateness issued by the ARB.

#### 3. STORMWATER MANAGEMENT

1. LANDUSE

- 3.1 Storm water management for the Property shall employ best management practices
- 3.2 Storm water management shall be designed as part of the site plan for he proposed townhouses as approved by the Town.
- 3.3 Storm water management facilities shall be maintained by the appropriate owners' associations provided below.

#### 4. CREATION OF HOMEOWNERS' ASSOCIATION

- 4.1 The residential townhouses shall be made subject a homeowners' association ("HOA") that shall be created and be made responsible for the maintenance and repair of common areas, including common open space that may be established in accordance with the requirements of the Town zoning ordinance. The HOA shall be granted such other responsibilities, duties and powers as a customary for such associations, or as may be required to affect the purposes for which the HOA is created. Such HOA shall also be granted sufficient powers that may be necessary, by regular dues, special dues or assessments, to raise revenue sufficient to perform the duties assigned hereby, or by the documents creating the association.
- 4.2 The HOA documents shall prohibit the use or conversion of garages for living space, o for the primary purpose of storage of anything other than parked vehicles.
- 4.3 The covenants, conditions and restrictions of the HOA shall be subject to review and approval of the Zoning Administrator prior to recordation thereof, to ensure conformance of the requirements of these proffers.

#### 5. PARKS AND RECREATION

- 5.1 The Applicant shall make a contribution for park purposes in the amount of \$3,792 per residential townhouse unit, payable upon the issuance of an occupancy permit for each
- 5.2 The Applicant shall provide a "Tot Lot" equipped with playground equipment in the area shown on the GDP.

#### 6. PUBLIC SAFETY

- 6.1 The Applicant shall make a contribution for public safety purposes in the amount of \$280.00 per residential townhouse unit payable upon the issuance of an occupancy permi for each such unit.
- 6.2 The Applicant will install two streetlights to be located along Hunting Path Road.

#### 7. TRANSPORTATION

- 7.1 The Applicant will construct a 5-foot wide concrete sidewalk along the western edge of the property, on the east side of Hunting Path Road.
- 7.2 The Applicant will construct a 5-foot wide concrete sidewalk from Hunting Path Road east along the southern portion of the tot lot to connect to the interior sidewalk network.
- 7.3 The Applicant shall make a contribution for transportation purposes in the amount of \$3,799 per townhouse unit, payable upon issuance of an occupancy permit for each such townhouse unit.
- 7.4 The Applicant will construct a right turn lane and taper along the frontage of the site as shown on the GDP subject to review and approval by VDOT.
- 7.5 The Applicant will construct separate right and left turn exit lanes.

#### 8. FIRE AND RESCUE

8.1 The Applicant shall make a contribution for fire and rescue purposes in the amount of \$974 per townhouse unit, payable upon the issuance of an occupancy permit for each

#### 9. TOWN ADMINISTRATION

9.1 The Applicant shall make a contribution for Town administration in the amount of \$171 per townhouse unit, payable upon the issuance of an occupancy building permit for each

#### 10. SCHOOLS

10.1 The Applicant shall make a contribution for schools in the amount of \$10,300 per residential townhouse unit, payable upon the issuance of an occupancy permit for each

#### MODIFICATION REQUESTS

January 9, 2020

#### Modification Request:

Request an increase from 40 percent of the gross parcel area may be covered by townhouse structures to 44 percent.

#### Sec. 58-8.5 - Area regulations.

(d) For lots containing or intended to contain a permitted use, except townhouses and small lot detached single-family dwellings, not more than 30 percent of the gross lot area may be covered by buildings, including accessory structures. For lots designed as part of a townhouse development or of small lot detached single-family dwellings, not more than 40 percent of the gross parcel area may be covered by townhouse structures or small lot detached single-family dwellings and their accessory structures. In computing the total coverage on any lot or development, an area of 400 square feet per required parking areas and travel ways shall be included as part of such coverage unless private garage facilities are otherwise provided on such

#### Modification Request:

Request a decrease from the 25'Transparent Screen requirement as shown in the table below to a variable width to be determined at site plan.

#### Sec. 58-17.11 - Screening and buffer yard matrix.

Land Use	Adjacent District											
	R-1	R-2	B-1	B-2	I-1	C-1						
Industrial	40' OS	40' OS	40' OS	40' OS	25' SS	25' OS						
Commercial	30' SS	25' SS	10' OS	10' OS	30' OS	15' SS						
Residential	X	X	25'TS	20' TS	40" OS	30' TS						

#### PROFFER ANALYSIS **ROBINSON VILLAGE - HAYMARKET** SUP #2019-004 **April 15, 2020**

PROFFER	Proffer/SU P condition	Proffer/SUP condition	<u>Trigger</u>	<u>Analysis</u>	Plan & Sheet	<u>Under</u> Construction	<u>Receipt</u> Number	Deed Boo
ANALYSIS ROBINSON VILLAGE - HAYMARKET SUP#2019-004	number				Number	and/or completion date	<u>Number</u>	<u>&amp; page</u> number
and Use		Development shall be in substantial accord with the Generalized Development and Special Use Permit Plan ("SUP") entitled "Smith Property at Haymarket" prepared by The Engineering Groupe and last revised January 2, 2020 (4 sheets) (the "GDP") with the size, construction details and locations of buildings, roadways and other features being approximate subject to final engineering at site plan and with the color, construction materials and appearance of structures being subject to the issuance of certificates of appropriateness by the Town of Haymarket ("Town") Architectural Review Board (ARB) at advertised public meetings.		The Site Plan is in substantial conformation with the SUP.	7–8			
and Use	1.2	Residential Development on the Property under the SUP shall not exceed 38 townhouse units in the location generally shown on the GDP.		Thirty eight townhomes are being proposed with this Site Plan and are in general conformance with the layout shown on the SUP.	7–8			
and Use	1.3	Townhouse dwellings shall be a combination of 20'-wide rear load units (8) and 24'-wide front load units (30) all with 2-car integral garages.		Lots 27 through 34 are the rear load garage units which front on Hunting Path Road, the remaining 30 lots are 24 feet wide. All townhomes have 2 car garages.	7			
and Use	1.4	Development of the Property shall be in substantial conformity with the GDP Precise locations of roads, lot lines, lot widths and depths, utility lines, and other features generally depicted on the GDP will be determined at the time of site or subdivision plan approval.		This Site Plan is in substantial conformance with the SUP Plan.	7–8			
and Use		The Property shall be developed as a single-unified development to include a common architectural theme as specifically approved through certificates of appropriateness by the ARB and integrated vehicular and pedestrian access ways as depicted on the GDP and finalized through site plan approval.		This Site Plan is in substantial conformance with the SUP Plan.	7–8			
Architectural Design, Signage and andscaping	2.1	The applicant will use best efforts to ensure that the height of townhouse units will not exceed 40-feet as measured from the finished grade. To the extent final grading results in height, as measured from the finished grade over 40 feet, then the applicable side yard setback shall be increased by 5 feet for every foot over 40 feet. Architectural details of the townhouse units will be determined through the issuance of certificates of appropriateness issued by the ARB.		It is understood that the height of the proposed townhomes will not exceed 40 feet in height.				
Stormwater Management	3.1	Stormwater management for the Property shall employ best management practices ("BMP").		BMP's are being provided as part of the Stormwater Management (SWM) for this project.	25-28			
Stormwater Management		Stormwater management shall be designed as part of the site plan for the proposed townhouses as approved by the Town.		Stormwater Management design and computations are part of the Robinson Village Site Plan.	25–28			
Stormwater Management	3.3	Stormwater management facilities shall be maintained by the appropriate owners associations provided below.		The SWM facility is to be maintained by the HOA.				
Creation of Homeowners' Association		The residential townhouses shall be made subject to a homeowners' association ("HOA") that shall be created and be made responsible for the maintenance and repair of common areas, including common open space that may be established in accordance with the requirements of the Town zoning ordinance. The HOA shall be granted such other responsibilities, duties and powers as a customary for such associations, or as may be required to affect the purposes for which the HOA is created. Such HOA shall also be granted sufficient powers that may be necessary, by regular dues, special dues or assessments, to raise revenue sufficient to perform the duties assigned hereby, or by the documents creating the association.		An HOA is being created for the Townhomes shown on this Site Plan.				
Creation of Homeowners' Association	4.2	The HOA documents shall prohibit the use or conversion of garages for living space, or for the primary purpose of storage of anything other than parked vehicles.		The HOA documents will provide the restriction on conversion of garages for living space or a use primarily for storage other than for parked vehicles.				
Creation of Homeowners' Association	4.3	The covenants, conditions and restrictions of the HOA shall be subject to review and approval of the Zoning Administrator prior to recordation thereof, to ensure conformance of the requirements of these proffers.		This is understood.				
Parks and Recreation		The Applicant shall make a contribution for park purposes in the amount of \$3,792 per residential townhouse unit, payable upon the issuance of an occupancy permit for each such unit.		It is understood that the stated contribution amount for park purposes will be paid at time of issuance of an occupancy permit for each lot.				
Parks and Recreation	5.2	The Applicant shall provide a "Tot Lot" equipped with playground equipment in the area shown on the GDP.		A tot lot is being proposed with this Site Plan as generally shown on the SUP plan.	7			
Public Safety		The Applicant shall make a contribution for public safety purposes in the amount of \$280.00 per residential townhouse unit payable upon the issuance of an occupancy permit for each such unit.	Occupancy Permit Issuance	It is understood that the stated contribution amount for public safety purposes will be paid at time of issuance of an occupancy permit for each lot.				
Public Safety	6.2	The Applicant will install two streetlights to be located along Hunting Path Road.		Two streetlights along Hunting Path Road are being proposed with this Site Plan.				
Transportation	7.1	The Applicant will construct a 5-foot wide concrete sidewalk along the western edge of the property, on the east side of Hunting Path Road.		A five foot concrete sidewalk along Hunting Path Road and along the western edge of the property is being proposed with this Site Plan.	7			
Transportation	7.2	The Applicant will construct a 5-foot wide concrete sidewalk from Hunting Path Road east along the southern portion of the tot lot to connect to the interior sidewalk network.		A five foot concrete sidewalk as described in this condition is being proposed with this Site Plan.	7			
Transportation	7.3	The Applicant shall make a contribution for transportation purposes in the amount of \$3,799 per townhouse unit, payable upon issuance of an occupancy permit for each such townhouse unit.	Occupancy Permit Issuance	It is understood that the stated contribution amount for transportation purposes will be paid at time of issuance of an occupancy permit for each lot.				
Transportation	7.4	The Applicant will construct a right turn lane and taper along the frontage of the site as shown on the GDP subject to review and approval by VDOT.		A right turn lane and taper is being proposed on Washington Street for this site's entrance.	8-9			
Transportation Fire & Rescue	7.5 8.1	The Applicant will construct separate right and left turn exit lanes.  The Applicant shall make a contribution for fire and rescue purposes in the	Occupancy	Separate right and left turn lane exist lanes onto Washington Street are proposed with this Site Plan.  It is understood that the stated contribution amount for fire and rescue	8-9			
		amount of \$974 per townhouse unit, payable upon the issuance of an occupancy permit for each unit.	Permit Issuance	purposes will be paid at time of issuance of an occupancy permit for each lot.				
Town Administration Schools		The Applicant shall make a contribution for Town administration in the amount of \$171 per townhouse unit, payable upon the issuance of an occupancy building permit for each unit.  The Applicant shall make a contribution for schools in the amount of \$10,300	Issuance	It is understood that the stated contribution amount for Town administration will be paid at time of issuance of an occupancy permit for each lot.  It is understood that the stated contribution amount for schools will be paid				
3CHOUIS		per residential townhouse unit, payable upon the issuance of an occupancy		at time of issuance of an occupancy permit for each lot.		1		

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7.4.b

ENGINEERING GROUPE PROJECT STATUS DATE: JULY, 2020

SCALE: N/A 09/02/20 REVISED PER TOWN COMMENTS FILE NO. **SP-393** SHEET **4** OF **41** 

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#### CP NUTRIENT BANK

#### HUC: 02070011

Applicant: Robinson

c/o The Engineering Groupe, Inc.

**RE: Nutrient Offset Availability** 

Ronald Green, (Broker)

Date: July 30, 2020

Project Reference: Robinson, 6701 Hunting Path Road, Haymarket, VA – 14600 Washington Street, Haymarket, VA – 14850 Washington Street, Haymarket, VA

Attention: Chris Ferrara, L.S.B.

This letter is to confirm the availability of authorized nonpoint nutrient offsets at our CP Nutrient Bank project located in Westmoreland County. The CP Nutrient Bank project has received operational status through the Chesapeake Bay Watershed Nutrient Exchange Program (Virginia Code 62.1-44.19:14 et seq.) of the Virginia Department of Environmental Quality. CP Nutrient Bank currently has 40.88 pounds of phosphorus offsets and 640.17 pounds of nitrogen offsets available for transfer in the approved service area in the Potomac River watershed.

These offsets were certified pursuant to the Chesapeake Bay Nutrient Exchange Program by Virginia Department of Environmental Quality and the Virginia Department of Conservation and Recreation to be used as compensation for state or local permit water quality requirements. These offsets have been generated and are transferable according to 10.1-603.8:1 of the code of Virginia.

Per your request, the project would like to purchase <u>2.48</u> lbs/yr of phosphorus credits or <u>38.84</u> lbs,/yr. of nitrogen credits. CP Nutrient Bank upon execution of a credit purchase agreement and payment shall transfer those credits to the project owner. The <u>2.48</u> phosphorus credits or <u>38.84</u> nitrogen credits shall be available for a period of 45 days from the date of this letter.

If we can provide further assistance please do not hesitate to contact me at 804-908-4171

Ronald Green, (Broker)

#### CP NUTRIENT BANK

HUG: 020700H

Re: Credit Pricing Letter

Date: July 30, 2020

Applicant: Robinson

c/o The Engineering Groupe

Attention: Chris Ferrara, L.S.B.

Project Reference: Robinson, 6701 Hunting Path Road, Haymarket, VA – 14600 Washington Street, Haymarket, VA – 14850 Washington Street, Haymarket, VA

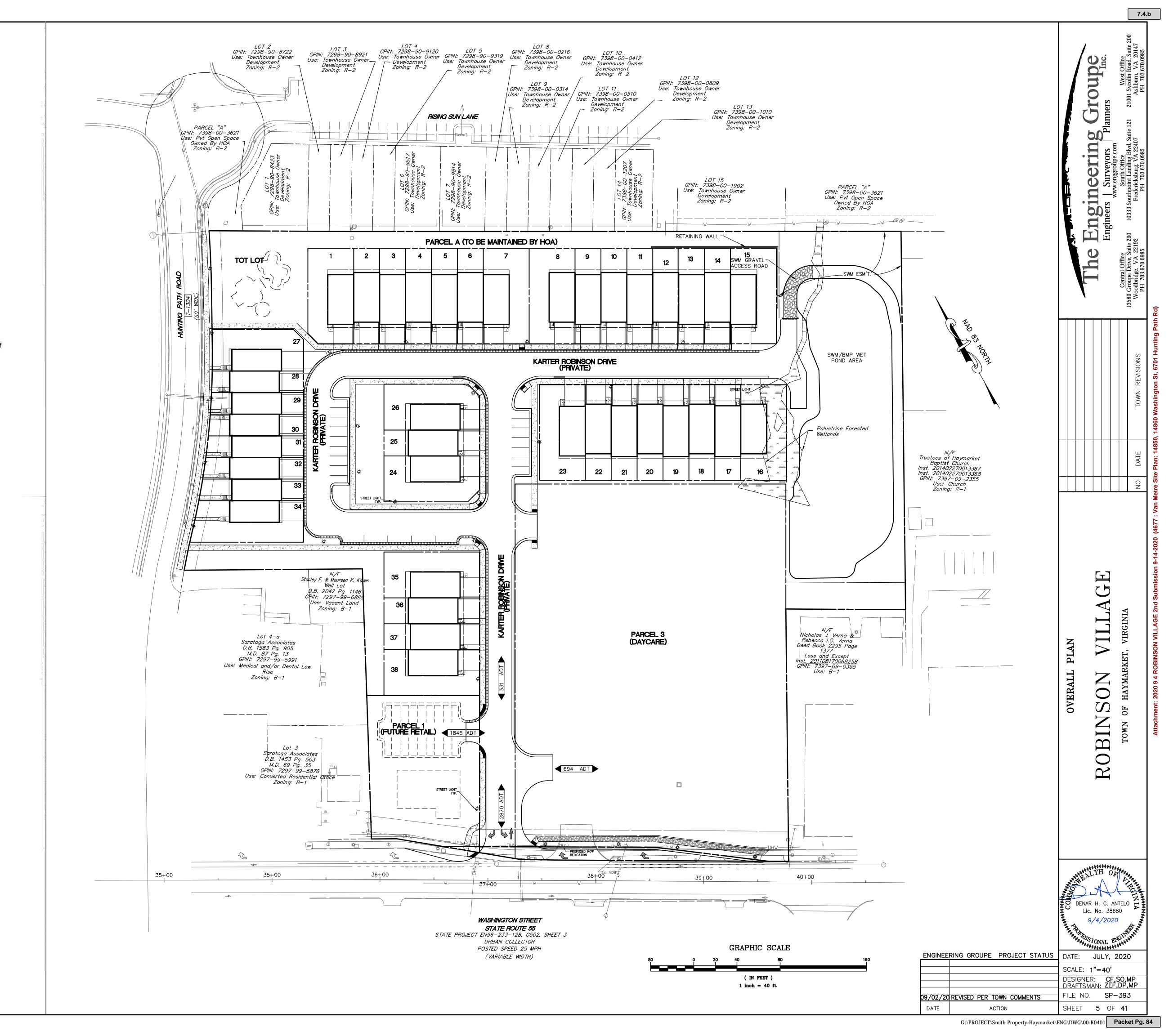
Mr. Ferrara,

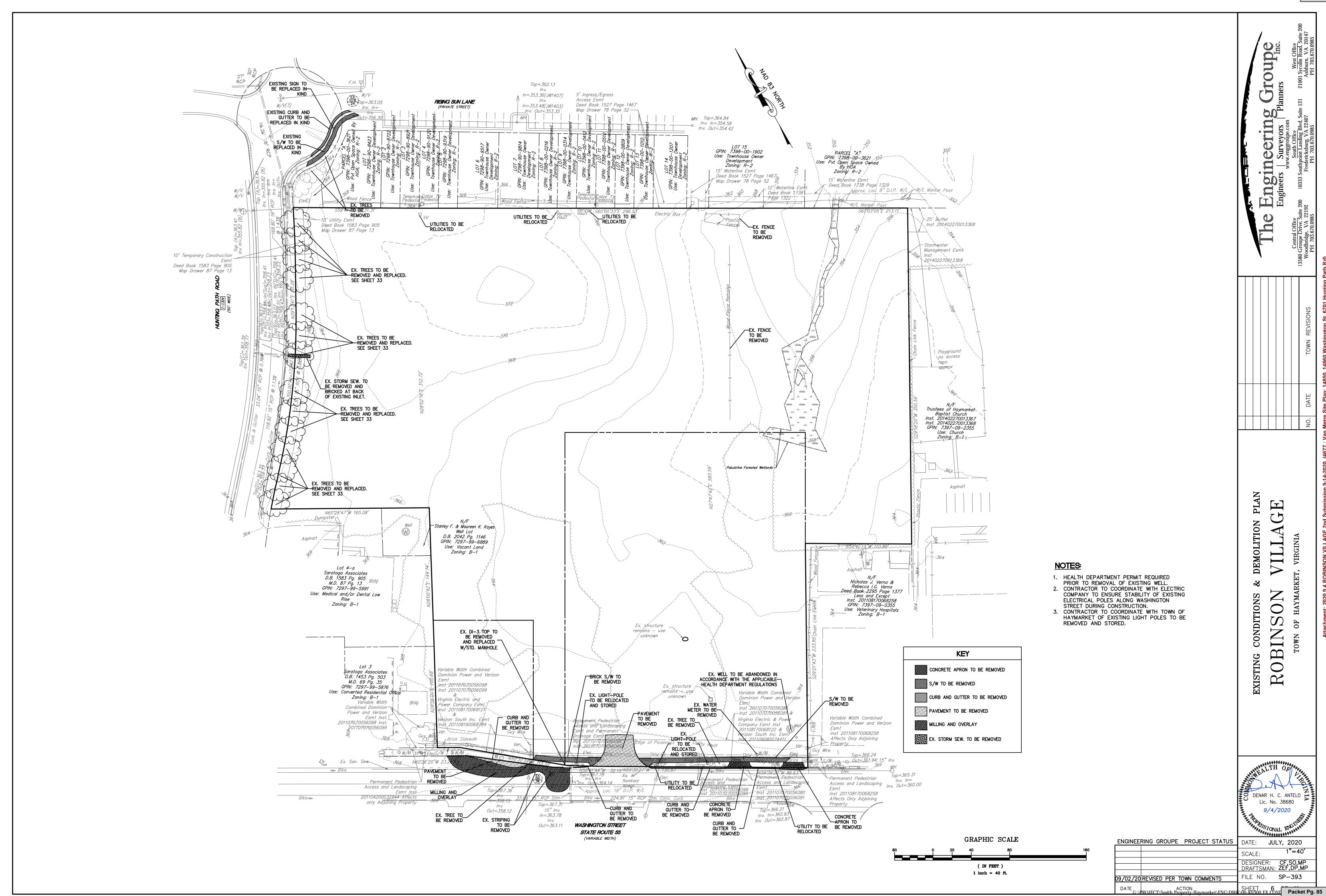
Pursuant to your request to obtain <u>2.48</u> phosphorus credits for the above referenced project, CP Nutrient Bank has the available credits necessary for this project. A price of \$13,750.00 per credit for a total of \$34,100.00 will be required to purchase the nutrient credits.

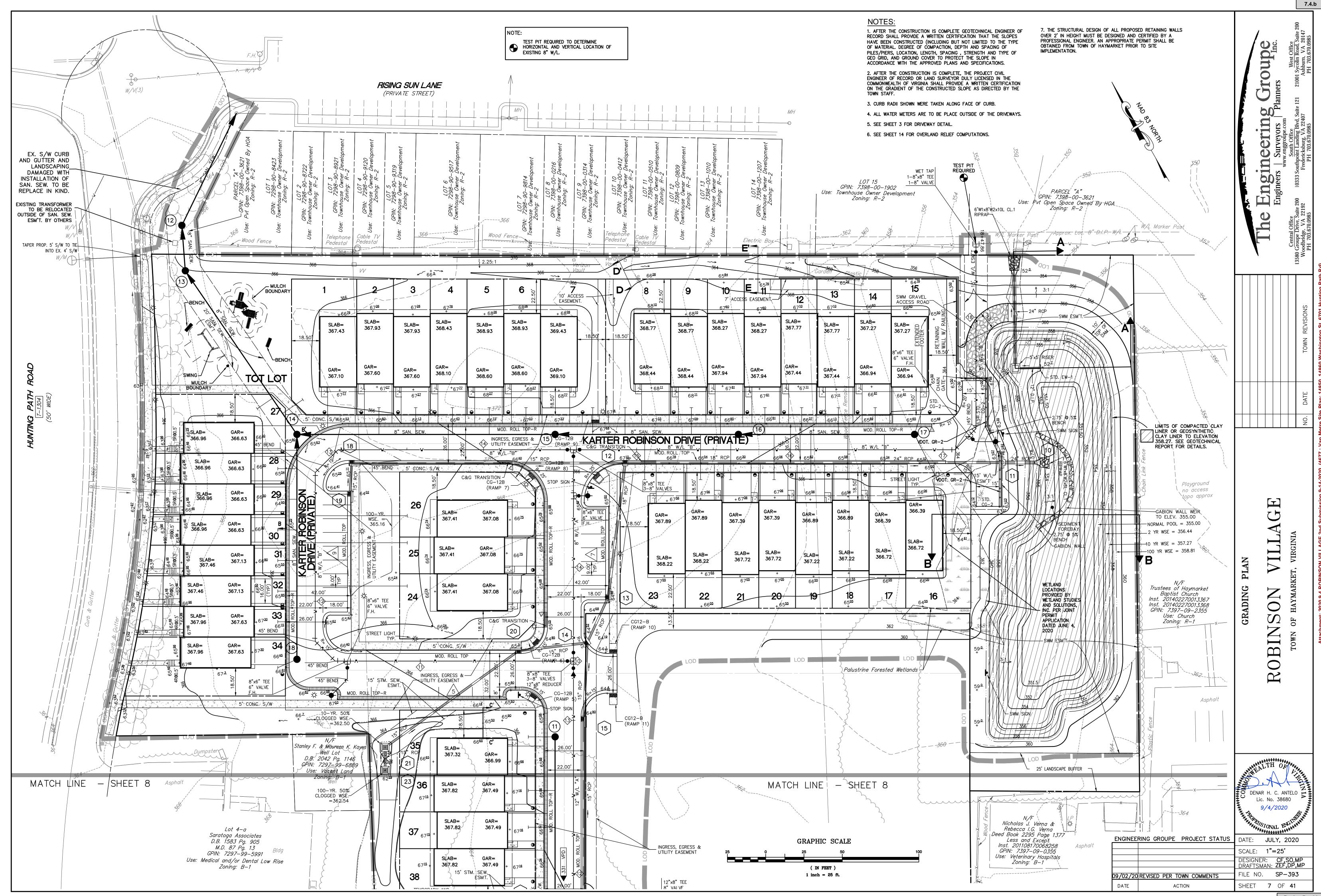
This price shall be available for a period of  $\underline{45}$  days from the date of this letter.

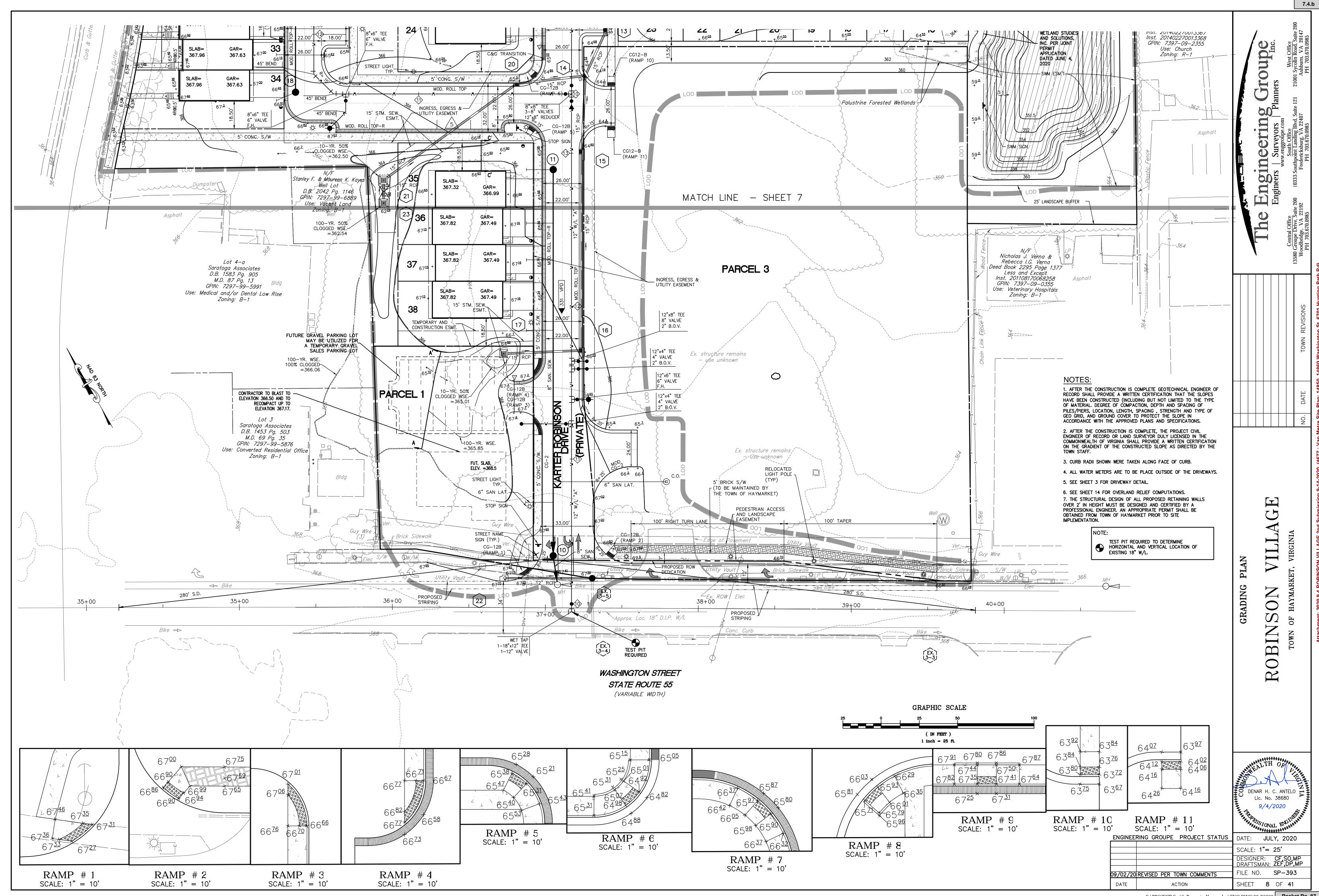
Let me know if this is acceptable and I will forward a credit purchase agreement for this transfer.

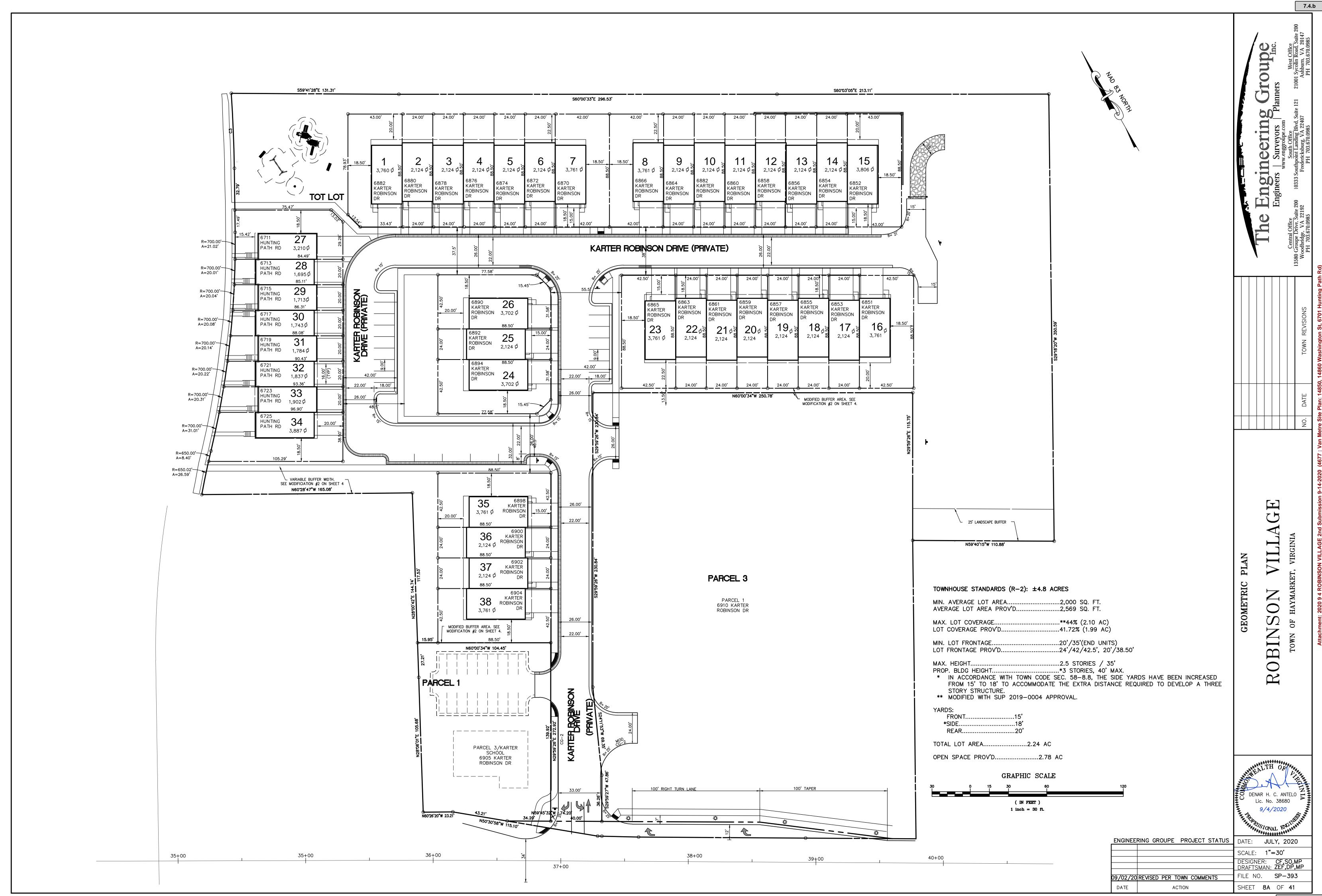


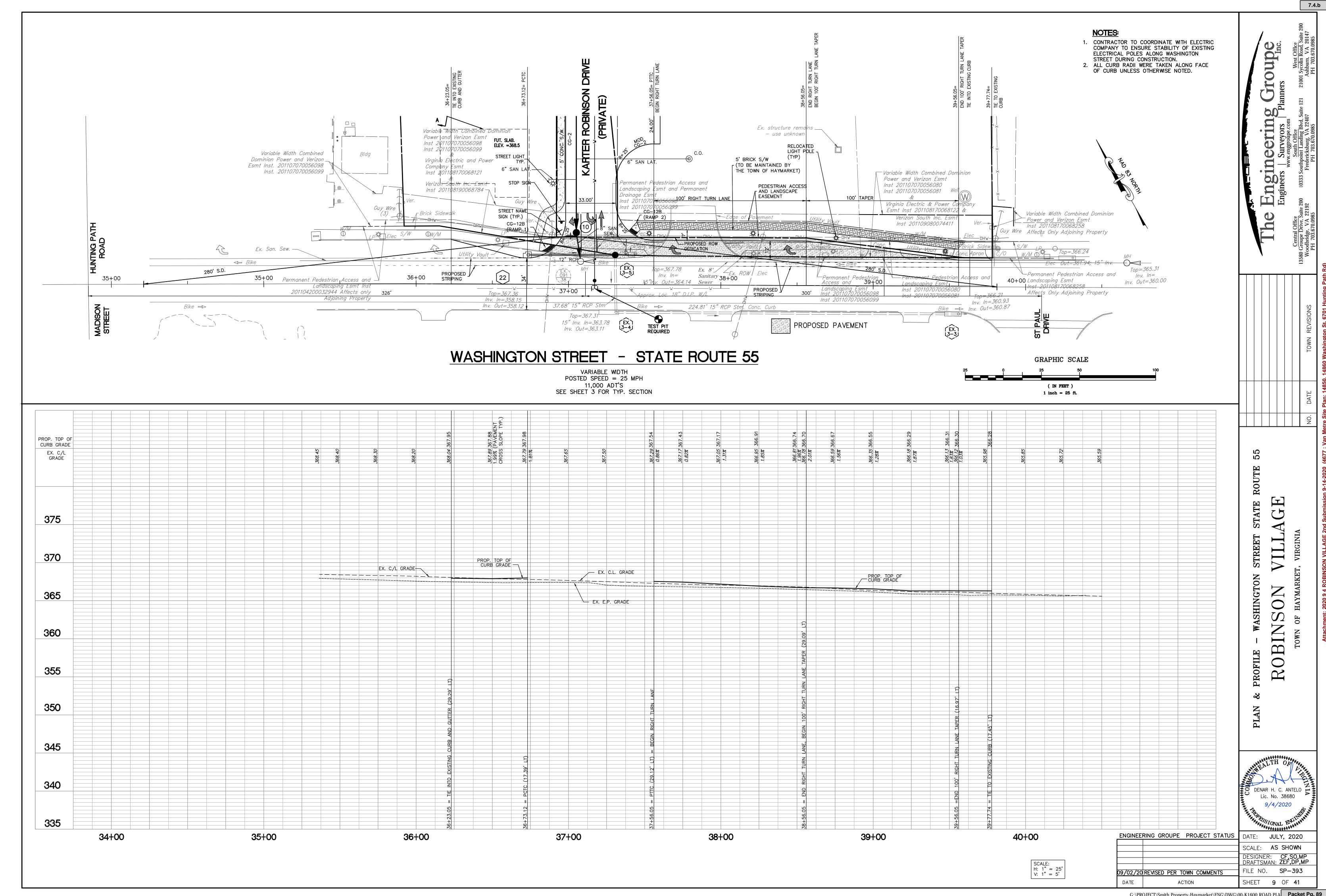












7.4.b

ROBINSON V

ENGINEERING GROUPE PROJECT STATUS DATE: JULY, 2020

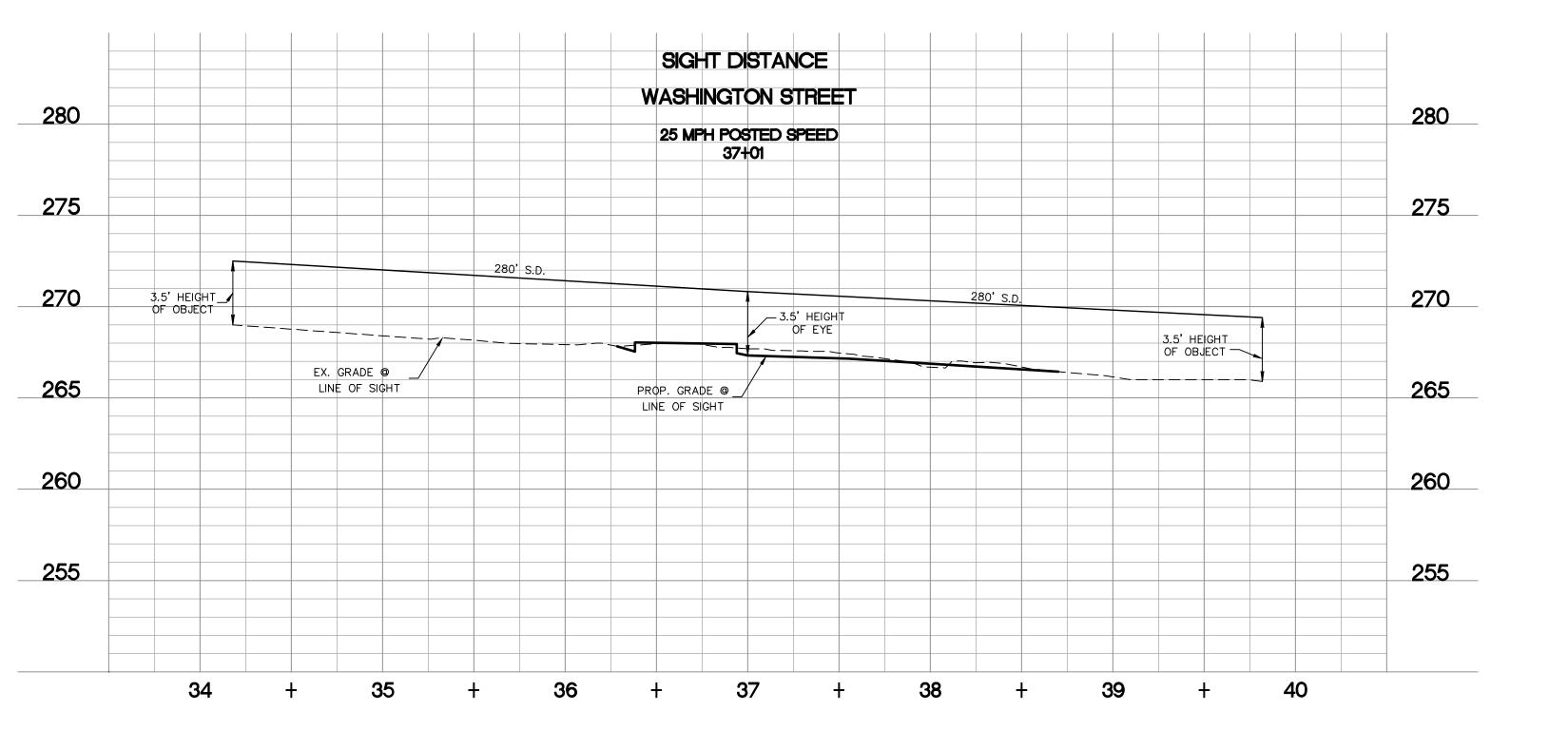
09/02/20 REVISED PER TOWN COMMENTS ACTION

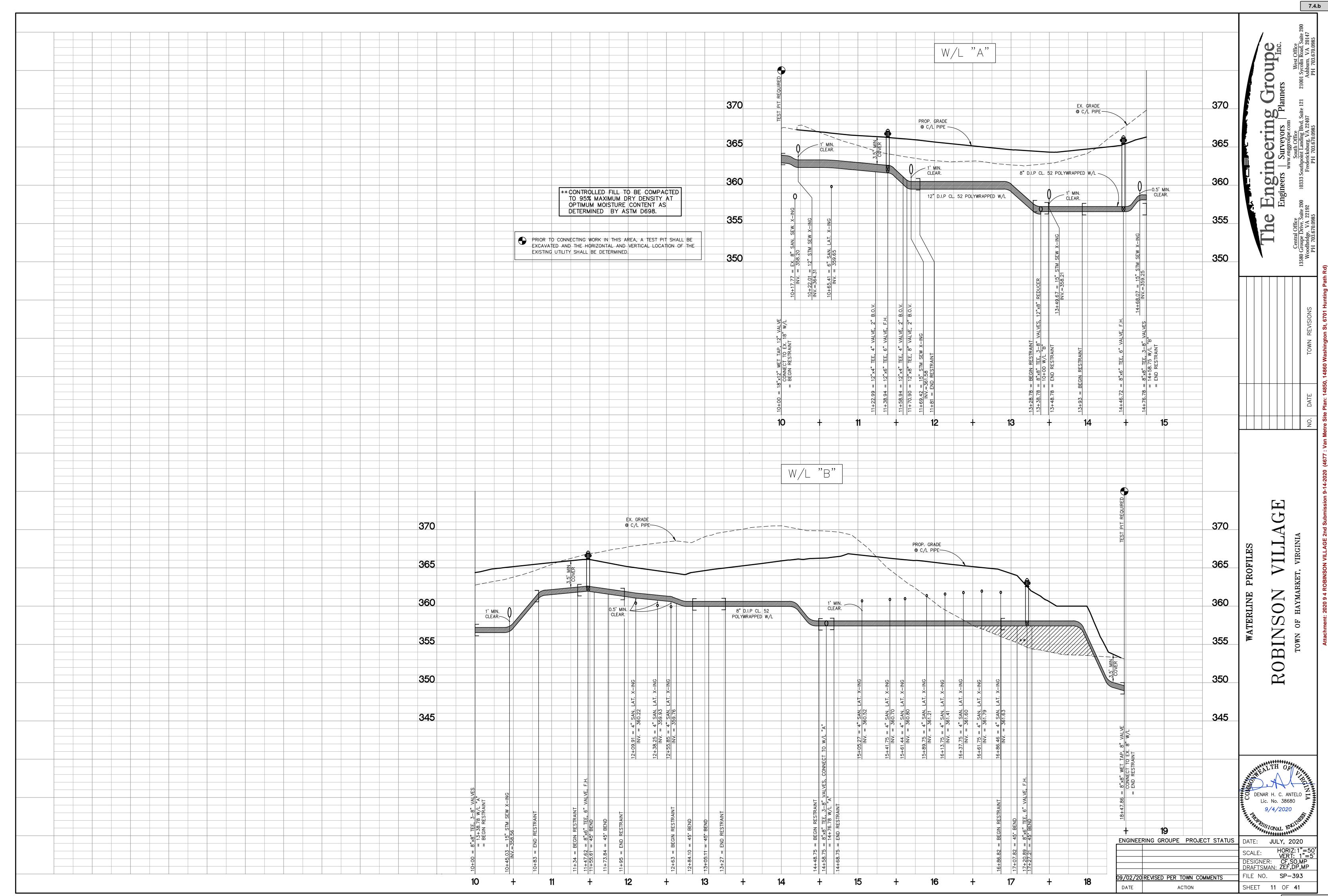
SHEET 10 OF 41

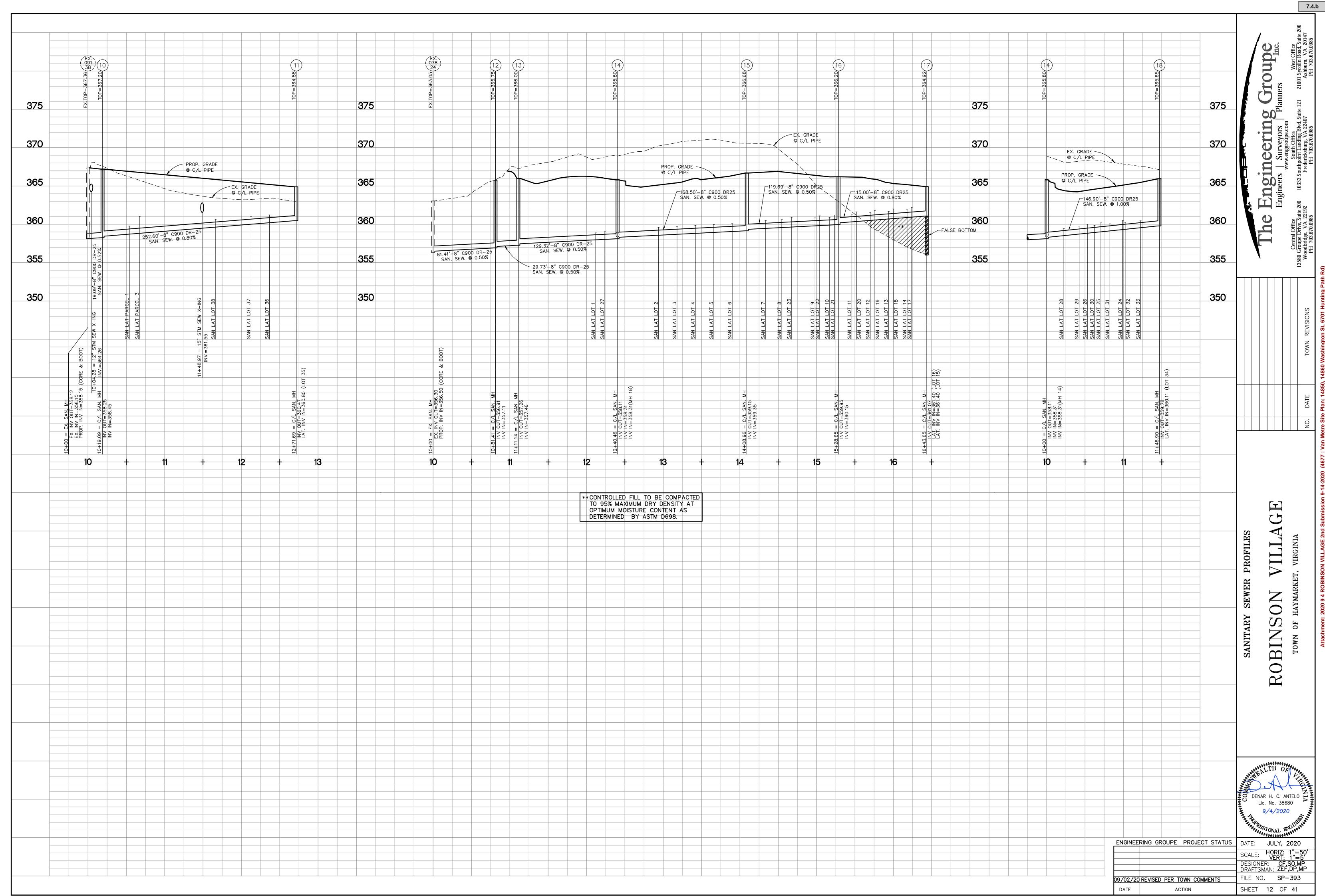
FILE NO. SP-393

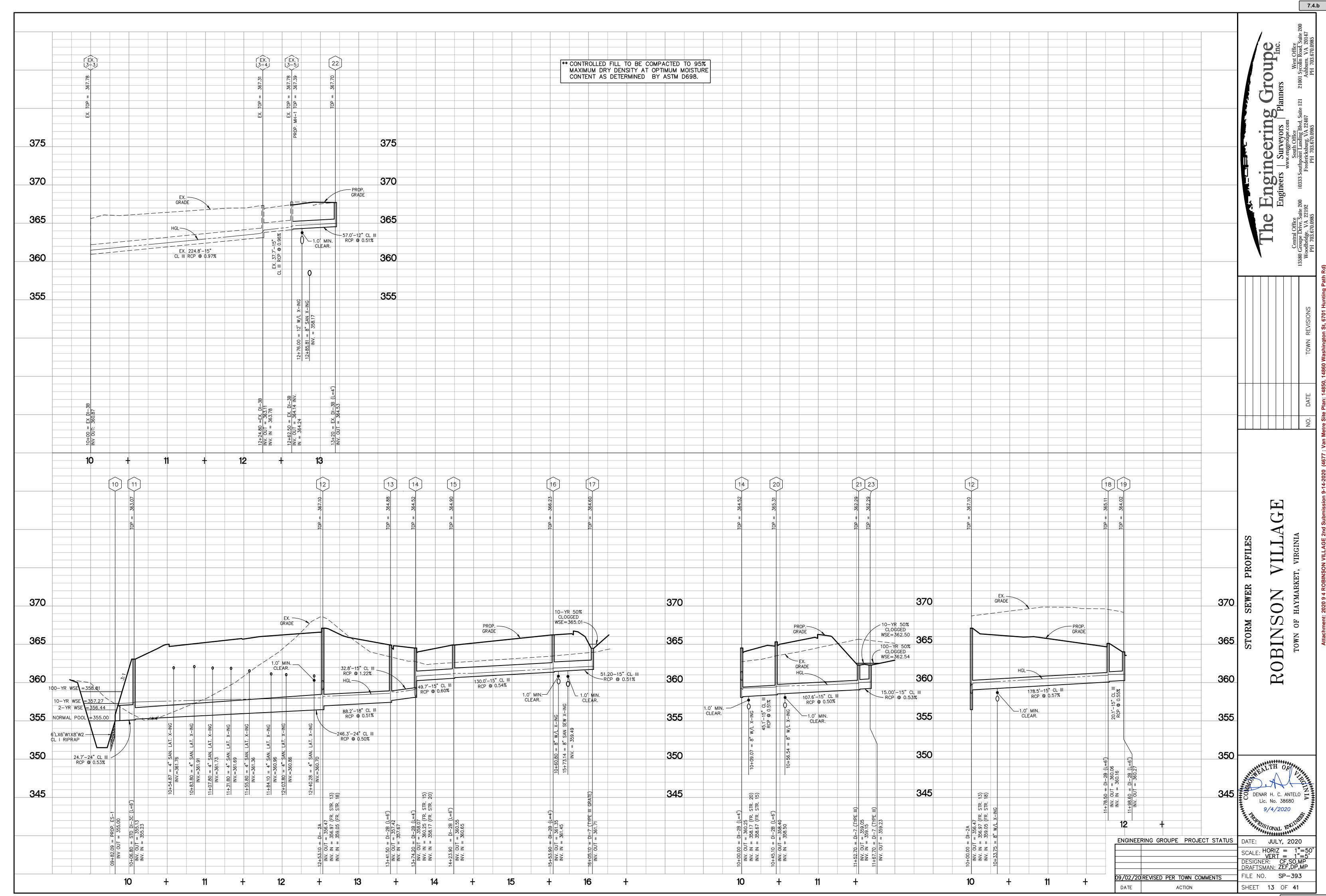
SCALE: 1"=50'

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## STORM SEWER DESIGN COMPUTATIONS

Start Node	Stop Node	Upstream Inlet Area (acres)	Upstream Inlet C	INCRE. CA (acres)	ACCUM. CA (acres)	Upstream Inlet Tc (min)	Upstream Intensity (in/h)	System Flow (ft³/s)	Invert (Upstream) (ft)	Invert (Downstream) (ft)	Length (ft)	Slope (%)	Section Size (in)	Capacity (Full Flow) (ft³/s)	Velocity (Average) (ft/s)	Time (Pipe Flow) (min)	System Flow Time (min)	Flow / Capacity (Full) (%)
17	16	0.22	0.80	0.18	0.18	5.00	6.41	1.14	361.71	361.45	51.20	0.51	15 inch	4.60	3.11	0.28	5.00	25.30
16	15	0.03	0.80	0.02	0.20	5.00	6.34	1.28	361.35	360.65	130.00	0.54	15 inch	4.74	3.28	0.66	5.28	27.60
15	14	0.21	0.80	0.17	0.37	5.00	6.18	2.29	360.55	360.25	49.70	0.60	15 inch	5.02	4.00	0.21	5.94	46.70
21	20	0.10	0.70	0.07	0.56	5.00	6.41	3.62	359.05	358.50	107.60	0.51	15 inch	4.62	4.17	0.43	5.00	80.20
23	21	0.70	0.70	0.49	0.49	0.00	6.41	3.17	359.23	359.15	15.00	0.53	15 inch	4.72	4.12	0.06	0.00	68.70
20	14	0.12	0.77	0.09	0.65	5.00	6.30	4.15	358.40	358.17	45.10	0.51	15 inch	4.61	4.25	0.18	5.43	91.90
14	13	0.07	0.85	0.06	1.08	5.00	6.13	6.67	358.07	357.67	32.70	1.22	15 inch	7.13	6.60	0.08	6.14	95.70
13	12	0.15	0.79	0.12	1.20	5.00	6.11	7.38	357.42	356.97	88.40	0.51	18 inch	7.50	4.84	0.30	6.23	98.40
19	18	0.50	0.75	0.38	0.38	5.00	6.41	2.42	360.27	360.16	20.10	0.55	15 inch	4.78	3.91	0.09	5.00	51.90
18	12	0.34	0.82	0.28	0.65	5.00	6.39	4.21	360.06	359.05	178.50	0.57	15 inch	4.86	4.46	0.67	5.09	88.70
12	11	0.09	0.79	0.07	1.92	5.00	6.03	11.70	356.47	355.23	246.30	0.50	24 inch	16.05	5.58	0.74	6.53	74.60
11	10	0.59	0.83	0.49	2.41	5.00	5.85	14.24	355.13	355.00	24.70	0.53	24 inch	16.41	4.53	0.08	7.27	88.70
22	EX 3-5	0.18	0.84	0.15	0.15	5.00	6.41	0.98	364.53	364.24	57.00	0.51	12 inch	2.48	3.03	0.31	5.00	39.30
EX 3-5	EX 3-4	(N/A)	(N/A)	(N/A)	0.15	0.00	6.33	0.97	364.14	363.78	37.70	0.96	15 inch	6.17	3.72	0.17	5.31	15.60
EX 3-4	EX 3-3	0.41	0.58	0.24	0.39	5.00	6.29	2.47	363.11	360.93	224.80	0.97	15 inch	6.22	4.86	0.77	5.48	39.70

## HYDRAULIC GRADE LINE COMPUTATIONS

Label	Hydraulic Grade Line (Out) (ft)	Section Size (Catalog Conduit) (inch)	Flow (Total Out) (ft³/s)	Length (Ft.)	Friction Slope (%)	Friction Loss (%)	Velocity (Out Node) (ft/s)	Contraction Loss (AASHTO) (ft)	Upstream Rational Flow (ft³/s)	Upstream Structure Velocity (In- Governing) (ft/s)	QiVi	Expansion Loss (AASHTO) (ft)	Bend Angle (Calculated) (degrees)	Bend Loss (AASHTO) (ft)	Unadjusted Headloss (AASHTO) (ft)	Adjusted Headloss (AASHTO) (ft)	Headloss (ft)		Elevation (Rim) (ft)
EX 3-3	361.72		3.98			0.00	5.61	0.00		3.04	0.00	0.00		0.00	0.00	0.00	0.00	361.72	366.21
EX-11 TO EX 3-3	361.72	15 inch	2.47	224.80	0.95	212.66	3.04		1.54	3.99	6.14		1.78				2.02	363.74	
EX 3-4	363.74		2.47			0.00	3.99	0.06		3.72	0.00	0.14		0.27	0.47	0.31	0.31	364.05	367.31
EX-12 TO EX 3-4	364.11	15 inch	0.97	37.70	0.90	34.01	3.72		0.00	3.00	0.00		88.92				0.42	364.53	
EX 3-5	364.53		0.97			0.00	3.00	0.03		3.17	0.00	0.06		0.12	0.22	0.11	0.11	364.64	367.39
22 TO EX 3-5	364.65	12 inch	0.98	57.00	0.51	29.13	3.17		0.98	3.02	2.96		89.08				0.31	364.96	
22	364.96		0.98			0.00	3.02	0.04		3.02	0.00	0.00		0.00	0.04	0.02	0.02	364.98	367.98
10			14.18			0.00			14.18										355.00
11-10	357.27	24 inch		24.70	0.40	9.78	4.53		14.24	3.72	4.53		0.00				0.10	357.37	
11	357.37		14.24			0.00	4.53	0.08	14.24		3.72	0.08		0.00	0.16	0.10	0.10	357.47	363.07
12-11	357.47	24 inch		246.30	0.26	64.04	3.72		11.70	4.68	4.50		0.09				0.54	358.01	
12	358.01		11.70			0.00	4.50	0.08	11.70		4.68	0.12		0.23	0.43	0.21	0.21	358.22	367.10
18-12	359.88	15 inch		178.50	0.57	101.92	4.86		4.21	2.52	4.46		0.09				1.08	360.96	
18	360.96		4.21			0.00	4.46	0.08	4.21		2.52	0.03		0.07	0.18	0.12	0.12	361.08	365.11
19-18	361.08	15 inch		20.10	0.21	4.16	2.52		2.42	2.84	2.84		87.02				0.01	361.09	
19	361.09		2.42			0.00	2.84	0.03	2.42		2.84	0.00		0.00	0.03	0.02	0.02	361.11	364.02
13-12	358.22	18 inch		88.20	0.49	43.31	4.68		7.38	5.51	40.66		82.74				0.42	358.64	
13	358.64		7.38			0.00	4.80	0.09	7.38		0.00	0.17		0.10	0.36	0.23	0.23	358.87	364.88
14-13	358.87	15 inch		32.80	1.06	34.80	5.51		6.67	3.62	24.15		17.64				0.24	359.11	T
14	359.11		6.67			0.00	6.12	0.15	6.67		0.00	0.07		0.11	0.33	0.16	0.16	359.27	364.52
20-14	359.27	15 inch		45.10	0.39	17.63	3.62		4.15	3.33	13.82		58.52				0.15	359.42	
20	359.42		4.15			0.00	3.87	0.06	4.15		0.00	0.06		0.06	0.18	0.12	0.12	359.54	365.31
21-20	359.54	15 inch		107.60	0.41	44.55	3.33		3.62	3.42	12.38		29.22				0.35	359.88	1
21	359.88		3.62			0.00	4.16	0.07	3.62		0.00	0.06		0.10	0.23	0.15	0.15	360.03	362.29
21-23	360.03	15 inch		15.00	0.36	5.46	3.42		3.17	3.66	11.60		54.11				0.03	360.06	
23	360.06		3.17			0.00	3.66	0.05	3.17		0.00	0.00		0.00	0.05	0.03	0.03	360.09	362.29
15-14	360.84	15 inch		49.70	0.60	29.97	4.00		2.29	2.37	5.43		22.17				0.31	361.16	
15	361.16		2.29			0.00	3.89	0.06	2.29		0.00	0.03		0.00	0.09	0.06	0.06	361.22	364.9
16-15	361.22	15 inch		130.00	0.51	65.78	2.37		1.28	2.81	3.60		2.65				0.58	361.8	1
16	361.80		1.28			0.00	3.25	0.04	1.28		0.00	0.04		0.08	0.17	0.11	0.11	361.91	366.82
17-16	361.91	15 inch		51.20	0.50	25.50	2.81		1.14	3.11	3.55		87.61				0.23	362.13	T
17	362.13		1.14				3.11	0.00	1.14		0.00	0.00		0.00	0.00	0.00	0.00	362.13	364.86

## OVERLAND RELIEF COMPUTATIONS

		1	LOO-YEAR	OVERLAN	D RELIEF COM	PUTATIONS - TR	IANGULAR WE	IR FLOW, Q=4.2	28*C*TAN(THE	TA/2)*(H+K)^(	(5/2)	
LOCATION	STRUCTURE	TOTAL AREA	"C"	I	Q (100)=CIA	С	LEFT DIST.	LEFT ELEV.	RIGHT DIST.	RIGHT ELEV.	WEIR ELEV.	THETA
A-A'	17	0.22	0.80	8.64	1.52	0.57	22.02	366.00	16.71	366.00	365.60	177.59
B-B'	19	0.50	0.75	8.64	3.24	0.57	19.62	365.25	44.85	365.63	364.95	178.26
C C'	21	0.90	0.70	0 61	6 26	0.57	10.00	266 10	10.00	266.65	265 50	160 55

	Cross Section for A-A		Cross Section for B-B		Cross Section for C-C
Project Description		Project Description		Project Description	
Solve For Head	water Elevation	Solve For Headw	vater Elevation	Solve For Head	vater Elevation
Input Data		Input Data		Input Data	
Discharge	1.52 ft³/s	Discharge	3.24 ft³/s	Discharge	6.36 ft³/s
Headwater Elevation	365.78 ft	Headwater Elevation	365.16 ft	Headwater Elevation	366.06 ft
Crest Elevation	365.60 ft	Crest Elevation	364.95 ft	Crest Elevation	365.50 ft
Tailwater Elevation	365.60 ft	Tailwater Elevation	364.95 ft	Tailwater Elevation	365.50 ft
Coefficient of Discharge	0.57	Coefficient of Discharge	0.57	Coefficient of Discharge	0.57
Angle	177.59 degrees	Angle	178.26 degrees	Angle	169.55 degrees
Cross Section Image		Cross Section Image		Cross Section Image	

## GRATE INLET HEADWATER COMPUTATIONS

INLET NUMBER	Inlet	Curb Opening Length (ft)	Drainage Area (acres)	С	CA (acres)	SUM CA (acres)	l (in/h)	Q INCR (ft³/s)	Qb, CARRY- OVER (ft³/s)	Qt, GUTTER FLOW (ft³/s)	S, GUTTER SLOPE (%)	Sx, CROSS SLOPE (%)	T, SPREAD (ft)	W (ft)	Sw (%)	E (%)	Qi, INTER- CEPTED FLOW (ft³/s)	Qb, BYPASSED FLOW (ft³/s)	Gutter Depth (in)	Bypass Target
11	DI-3C	6	0.59	0.83	0.49		4.00	1.96	0.00	1.96		3.33		0.00			1.96	0.00	2.76	
LEFT	DI-3C	6	0.58	0.83	0.48		4.00	1.93	0.00	1.93	1.35	3.33	8.41	0.00	0.00		1.93	0.00	2.76	
RIGHT	DI-3C	6	0.01	0.83	0.01	0.45	4.00	0.03	0.00	0.03	0.90	3.33	2.08	0.00	0.00		0.03	0.00	0.24	
18	DI-2B	6	0.34	0.82	0.28	0.28	4.00	1.12	0.00	1.12	1.20	1.50	7.90	2.00	2.00	82.00	0.92	0.20	1.60	
19	DI-2B	6	0.50	0.75	0.38	0.38	4.00	1.51	0.00	1.51	1.70	2.00	7.00	2.00	2.00	79.50	1.20	0.31	1.70	
13	DI-2B	6	0.09	0.79	0.07	0.07	4.00	0.29	0.00	0.29	1.10	1.00	5.80	2.00	2.00	99.40	0.28	0.00	0.90	14
14	DI-2B	4	0.07	0.85	0.06	0.07	4.00	0.24	0.05	0.29	1.00	2.00	4.20	2.00	2.00	94.50	0.28	0.02	1.00	
20	DI-2B	6	0.12	0.77	0.09	0.09	4.00	0.37	0.00	0.37	1.00	1.80	4.90	2.00	2.00	98.80	0.37	0.00	1.10	14
15	DI-2B	6	0.21	0.80	0.17	0.17	4.00	0.68	0.00	0.68	1.00	1.80	6.10	2.00	2.00	93.10	0.63	0.05	1.40	14
16	DI-2B	4	0.03	0.80	0.02	0.02	4.00	0.10	0.00	0.10	1.00	1.48	3.00	2.00	2.00	100.00	0.10	0.00	0.70	15
22	DI-2B	4	0.18	0.84	0.15	0.15	4.00	0.61	0.00	0.61	0.50	2.00	6.30			86.10	0.52	0.08	1.50	
EX 3-4	DI-3B	4	0.41	0.58	0.24	0.24	4.00	0.96	0.00	0.96	0.70	3.94	4.60			78.20	0.75	0.21	2.20	EX 3-3
EX 3-3	DI-3B	4	0.46	0.56	0.26	0.31	4.00	1.04	0.21	1.25	0.40	2.00	8.60			65.00	0.81	0.44	2.10	

## GRATE INLET HEADWATER COMPUTATIONS

					GRAT	E HEADWAT	ER COMP	UTATIONS - 1	0 YR. 50	% CAPACITY				
		DRAINAGE				10-YR		INLET	INLET	DEPTH OF	DEPTH OF	DEPTH OF	l	10 YR. HWE @
STR		AREA			Тс	INTENSITY	Q INCR	PERIMETER	AREA	WATER (WEIR)	WATER (ORIFICE)	WATER	STR	50 % CLOGGED
NUMBER	STR. TYPE	(AC)	С	CA	(Mins)	(IN/HR)	(CFS)	(FT)	(SQFT)	(FT)	(FT)	(FT)	(FT)	(FT)
17	DI-7	0.22	0.80	0.18	5.00	6.41	1.13	12.80	6.00	0.15	0.00	0.15	364.86	365.01
21	DI-7	0.40	0.70	0.28	5.00	6.41	1.79	12.80	6.00	0.21	0.01	0.21	362.29	362.50
23	DI-7	0.40	0.70	0.28	5.00	6.41	1.79	12.80	6.00	0.21	0.01	0.21	362.29	362.50
INLE	TS ARE ASSU	MED TO BE 5	0% CLOG	GED										

	GRATE HEADWATER COMPUTATIONS - 100 YR. 50% CAPACITY													
		DRAINAGE				10-YR		INLET	INLET	DEPTH OF	DEPTH OF	DEPTH OF	TOP OF	100 YR. HWE @
STR		AREA			Tc	INTENSITY	Q INCR	PERIMETER	AREA	WATER (WEIR)	WATER (ORIFICE)	WATER	STR	50 % CLOGGED
NUMBER	STR. TYPE	(AC)	С	CA	(Mins)	(IN/HR)	(CFS)	(FT)	(SQFT)	(FT)	(FT)	(FT)	(FT)	(FT)
21	DI-7	0.40	0.70	0.28	5.00	8.64	2.42	12.80	6.00	0.25	0.02	0.25	362.29	362.54
23	DI-7	0.40	0.70	0.28	5.00	8.64	2.42	12.80	6.00	0.25	0.02	0.25	362.29	362.54
INLE	INLETS ARE ASSUMED TO BE 50% CLOGGED										•			

## OUTLET PROTECTION COMPUTATIONS

				CULVERT OUT	LET PROTECTIO	N ROAD AN	ID BRIDGE STD EC-1		
STR.	PIPE	10-Yr Outlet	MAXIMUM	O.P.	Hydraulic	Installation	PLAN DESCRIPTION		
#	DIA.(IN)	Velocity (FPS)	VELOCITY	Class	opening (SQFT)	Туре			
10	24	4.53	6.00	EC-3 TYPE B	3.14	Type A	4.0 Sq. Yds. EC-3 TYPE B REQ'D w/ Type A Installation		
SWM 1	24	6.06	8.00	EC-1 CL A1	3.14	Type A	4.0 Sq. Yds. EC-1 CL A1 REQ'D w/ Type A Installation		
Rip Rap Di	mensions Ba	ased on Type of	Installation		_		CLASS OF OUTLET PRTOECTION		
STR.	Installation	Length	Width (W1)	Width (W2)			EC-3 TYPE B - MAXIMUM VELOCITY IS 6 FPS		
#	Туре	(FT)	(FT)	(FT)			EC-1 CL A1 - MAXIMUM VELOCITY IS 8 FPS		
10	Type A	6.00	6.00	8.00			EC-1 CL I - MAXIMUM VELOCITY IS 10 FPS		
SWM 1	Type A	6.00	6.00	8.00			EC-1 CL II - MAXIMUM VELOCITY IS 19 FPS		
	•	•	•		-		OUTLET PROTECTION MATERIAL		
Type A - 3ł	HLength & 3	S Width	Hydraulic openi	ng less than 7 sq	juare feet		STD EC-3 Type B		
Type B - 5l	HLength & 3	S Width	Hydraulic openi	ng greater than o	r equal to 7 square feet Class A1 - Class A1 Dry Riprap, T=18"				
					Class I - Class I Dry Riprap, T=24"				
H = Height of Culvert							Class II- Class II Dry Riprap, T=36"		
S = Span o	of Culvert								

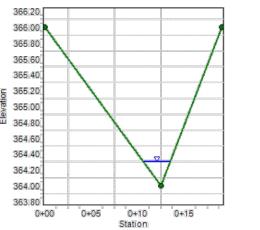
## DITCH COMPUTATIONS

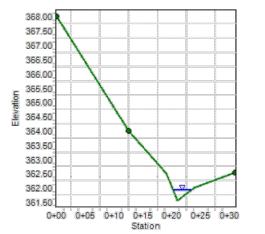
\*VDOT DRAINAGE MANUAL (HYDRAULIC DESIGN ADVISORY, HDA 06-03)

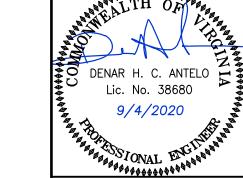
		DESIG	SN FOR G	RASS-LINED DIVERSION	DIKE			2 VEAD STORM			10 VEAD STORM		DD I	DESIGN			
GRASS	DRAINAGE	С	CLODE	LINUNG	PERMISSIBLE	n Value	Тс	2-YEAR STORM 10-YEAR STORM		DITCH	SIDE SLOPES	5514.516					
SWALE AREA	AREA	FACTOR	RSLOPE	LINING	VELOCITY	II Value	10	ı	Q	٧	ı	Q	D	DEPTH	SIDE SLOPES	REMARKS	
	(ACRES)		%		(FT/S)		(MIN)	(IN/HR)	(CFS)	(FT/S)	(IN/HR)	(CFS)	(FT)	(FT)	(H:V)		
D-D'	0.26	0.49	2.00	GRASS-LEGUME MIX	4.00	0.030	5	4.86	0.63	1.82	6.41	0.83	0.30	N.A	N.A	IRREGULAR	
E-E'	0.43	0.49	2.50	GRASS-LEGUME MIX	4.00	0.030	5	4.86	1.04	2.25	6.41	1.38	0.35	N.A	N.A	IRREGULAR	

	ross Section for DD-2YR			
Project Description			Cross Section for EE-2YR	
	ning Formula	Project Description		
	nal Depth	Friction Method	Manning Formula	
nput Data		Solve For	Normal Depth	
Channel Slope	0.02000 ft/ft	Input Data		
Normal Depth	0.27 ft	Channel Slope	0.02500 ft/ft	
Discharge	0.63 ft³/s	Normal Depth	0.32 ft	
Cross Section Image		Discharge	1.04 ft³/s	
366.00 365.80 365.40 365.20 364.80 364.80 364.20 364.20 364.00 364.20 364.00 364.00 365.00	0+15	368.00 367.50 367.00 366.50 365.50 365.00 364.50 364.00 363.50 363.50 362.50 362.50 362.50 361.50	+10 0+15 0+20 0+25 0+30	
	ross Section for DD-10YR	0+00 0+05 0	+10 0+15 0+20 0+25 0+30 Station  Cross Section for EE-10YR	

	Cross Section for DD	)-10YR		Cross Section for EE-10YR						
Project Description			Project Description	Project Description						
Friction Method	Manning Formula		Friction Method	Manning Formula						
Solve For	Normal Depth		Solve For	Normal Depth						
Input Data			Input Data							
Channel Slope	0.02000	ft/ft	Channel Slope	0.02500	ft/ft					
Normal Depth	0.30	ft	Normal Depth	0.35	ft					
Discharge	0.83	ft³/s	Discharge	1.38	ft³/s					
Cross Section Image			Cross Section Image							







NGINEERING GROUPE PROJECT STATUS	DATE: JULY, 2
	SCALE: <b>N/A</b>
	DESIGNER: CF,
	DRAFTSMAN: <b>ZEF,</b>
/02 /20 DEVISED DED TOWN COMMENTS	FILE NO SP-

G:\PROJECT\Smith Property-Haymarket\ENG\DWG\00-K3500 ST Packet Pg. 94

COMPUTATIONS

roject Plan Name: Robinson Village	Maximum static water pressure in the proposed water system: 69.8 psi	(Based on AWWA M22 Manual, Second Edition)	
ince William County Plan Number:  N/A  rigineering Firm:  The Engineering Groupe Inc.	Minimum static water pressure in the proposed water system:    Minimum static water pressure in the proposed water system:   62.4 psi     Information above is provided from the hydraulic model with applied maximum day water demands.	Building Identifier:	1 Methods and materials used in the construction of water mains, sanitary sewer mains, force mains and appurtenances shall be in conformance with the current Prince William County
			Service Authority (Service Authority) Utility Standards Manual (USM) and the Virginia
ject Location: Town of Haymarket	Available Fire Flow: 2500 gpm	Multi- Dwelling Residential or Non-Residential High Demand (e.g. Non-Residential)	Department of Health Regulations.
ssure Zone: Haymarket	Lowest Residual Pressure during a fire flow scenario:  Information above is provided from the hydraulic model with applied maximum day and fire flow water demands.	Maximum static water pressure at the meter location:  (Obtained from hydraulic study at the meter location)  60 psi	2 Acceptance of these plans by the Service Authority will in no way relieve the owner from
h Hydraulic Grade Line (ft):	Are residential fire sprinkler systems proposed?  No	(Obtained from nyardutic study at the meter tocation)	complying with the methods, policies or requirements stated in the Service Authority's USM.
Hydraulic Grade Line (ft):		Fixture Value Number of Subtotal Fixture or Appliance (at 60 psi) Fixtures Fixture Value	3 Service Authority has Local Review Authority for water mains up to and including 18-inch and
rer Shed:  Little Bull Run	High Hydraulic Grade Line 535 feet	Fixture or Appliance (at 60 psi) Fixtures Fixture Value  Toilet (tank) 4 0 0	sanitary sewer mains up to and including 24-inch. Utilities outside the Service Authority's
& North Branch	Lowest Finished Floor Elevation proposed within the development 366.96 feet	Toilet (flush valve) 35 0	Local Review Authority, including low pressure force mains systems, are subject to the review,
Facility Charge:  Little Bull Run	‡Estimated highest static pressure at the finished floor elevation	Urinal (wall or stall)       16       0       0         Urinal (flush valve)       35       0       0	approval and permitting process of either the Virginia Department of Health Office of Drinking  Water or Department of Environmental Quality. It is the Professional Engineer's responsibility
Plan Utility Adjustment Applicable: No	Low Hydraulic Grade Line 515 feet	Bidet 2 0 0	to submit all necessary applications and plans and to secure all applicable plan approvals and
	Highest Finished Floor Elevation proposed within the development  ‡Estimated lowest static pressure at the finished floor elevation  369.43 feet 63 psi	Shower (single head)         2.5         0         0           Sink / Faucet (Lavatory)         1.5         0         0	permits from the different governing authorities.
		Kitchen Sink   2.2   0   0	
R'MAIN  Length: Material:  Size: Length: Material:	Estimates are made with an assumed high and low hydraulic grade line and do not take into account the effects of friction loss or water booster pumps in the water system. Actual pressures may vary and delivery pressure are not guaranteed.	Utility Sink         4         0         0           Dishwasher         2         0         0	4 Trees, fences, monuments, signs, entrance features, sheds, decks, overhanging canopies, or permanent structures shall not be placed in easements dedicated to the Service Authority
ch 986 DIP 8-inch 963 C-900	International Residential Code P2903.3 Minimum static pressure (as determined by the local water authority) at	Bathtub 8 0 0	without written permission from the Service Authority.
h 339 DIP 10-inch 0 th 0 12-inch 0	the building entrance for either public or private water service shall be 40 psi (276 kPa).	Clothes Washer 6 0	
nch         0           nch         12-inch         0           16-inch         0	International Residential Code P2903.3.1 Maximum pressure. Maximum static pressure shall be 80 psi (551	Hose Connections (with 50 ft of hose)	5 The contractor shall notify the Service Authority Inspection Manager at least two (2) business days, but not more than ten (10) business days, prior to the commencement of demolition,
	kPa). When main pressure exceeds 80 psi (551 kPa), an approved pressure-reducing valve conforming to ASSE	1/2 in. 0	excavation or blasting in areas with underground water mains, sanitary sewer mains, and/or
ength 1325 Feet Total Length 963 Feet	1003 shall be installed on the domestic water branch main or riser at the connection to the water-service pipe.	5/8 in. 3/4 in. 9 0 0	force mains.
	Note: The professional and in the state of t		6 All subdivision will require an address listing approved by the Prince William County Mapping
PRESSURE FORCE MAIN  Length: Material: Size: Length: Material:	Note: The professional engineer is responsible to account for the effects of friction loss on the delivery pressure at the finished floor elevation from the service line, meter, and other plumbing appurtenances. The Service Authority requires calculations to	Miscellaneous Bedpan washers 10 0	Office. The address listing must be presented to the Service Authority at the time the utility permit is issued. Forms are available at the Service Authority. (Fax copies are not acceptable.)
$\frac{\text{ch}}{0} \qquad \frac{4-\text{inch}}{0}$	size the private service lines when delivery pressures are 45 psi or less and the service line is in excess of 70 feet.	Drinking fountains 2 0	<u></u>
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Dental units 2 0	7 Low pressure sewer force main systems are subject to the review and requirements of the
inch 0 12-inch 0	The hydraulic design and all finished floor elevations comply with the applicable plumbing code for pressure		Virginia Department of Environmental Quality.
Length 0 Feet Total Length 0 Feet	without a water booster pump or pressure reducing device.	Combined Fixture Value  Demand (gpm) from AWWA Curve  0 0.0 gpm	8 The developer is responsible for all costs associated with damages to or relocation of water
	The use of private water booster pumps and/or pressure reducing devices are required for the following	Pressure Adjustment Factor 1	mains, sanitary sewer mains, force mains or service lines caused by the construction of this
Number of 4- inch or 6- inch proposed valves:  5 Each	lots to comply with applicable plumbing code for pressure.	Adjusted demand (gpm)  Irrigation Demand (gpm) that will occur simultaneously with normal water use  0 gpm 0 gpm	project.
Sumber of 8- inch or 12- inch proposed valves:  9 Each	Lot# or Elev. @ High Low Estimated Estimated Private Pres. Red.	Water demand for equipment will occur simultaneously with normal water use  0 gpm gpm	9 The contractor shall coordinate all relocation of water mains, sanitary sewer mains and/or force
Number of 16-inch or 24-inch proposed valves:	Floor Grade Line Grade Line (psi) (psi) Booster P. Needed	Total estimated peak flow gpm	mains with the Service Authority's Field Inspector. Water or sanitary sewer system shutdowns will not be executed without the prior approval of the Service Authority Field Inspector. The
Number of Proposed Manholes: 9 Each	(ft) (ft) Needed 535 515	Required AWWA Meter Size 5/8-Inch Positive Displacement Meter	Field Inspector shall require the contractor to submit a relocation work plan for Service
Number of Proposed Fire Hydrants: 4 Each	535 515		Authority acceptance prior to the commencement of the relocation work. The work plan will
Number of Proposed Residential Meter Crocks to be Installed:  38 Each  Number of 5/8"x 3/4" Residential Meters to be Certified:  38 Each	<u> </u>		detail how the work will be done and the manpower, materials, and equipment that will be at the site to perform the work.
			10 The Service Authority does not guarantee the availability or construction of utilities that are proposed by another entity even if those utilities are shown as existing in this plan set. If
Pipe Quantity  Total Project Quantities Previously Approved & Permitted  Net Increase	MULTI-DWELLING METER SCHEDULE		needed utilities shown as existing are not available or do not exist, it is the developer's
By This Plan   by Plan #	IAIOFII-DAAFFFIIAO IAIFIFIK 2CIIFDOFE	<sup>1</sup> Peak <sup>4</sup> Non-Binding	responsibility to acquiring the necessary rights and permits to install on-site and off-site water and sanitary sewer utilities to provide the desired service.
Summary	Building Number	of Demand 2&3 ERU Meter (Reserved for   (Reserved for Future   Estimated	
R MAIN INSPECTION 1325 R MAIN AS-BUILT 1325	Building Identifier Address Meter Use Account Type Dwelling U	nits (GPM) Purchase Size Meter Type Future Use) Use) Availability Fee	11 Existing unused water service lines shall be exposed at the connection point on the water main and shall be cut and terminated (e.g. crimped) as directed by the Service
		#N/A	Authority Field Inspector.
TARY SEWER / FORCE MAIN INSP. 963 TARY SEWER/FORCE MAIN AS-BUILT 963		#N/A #N/A	12 Existing unused laterals or sanitary service lines shall be cut and capped at the
		#N/A	connection point to the sanitary sewer main or force main as directed by the Service
NITARY SEWER MAIN INPECTION 963		#N/A #N/A	Authority Field Inspector.
water main inspection fee applies for water quantities less than 100 feet: No		#N/A #N/A	13 When an existing water service line, lateral, of sanitary service line will be reused as
		#N/A	part of a new development, the Service Authority shall inspect the existing service
n sanitary sewer / force main inspection fee applies for quantities less than 100 linear feet:	NOTES: 1 A fixture unit list and meter sizing calculations shall be provided in the plan set for each proposed meter in accordance with the 2 The number of ERU's for a multi-family building is 80% of the total number of dwelling units associated with the meter and is r		line to insure that it is acceptable and meets current Service Authority material specifications. Any defects or out-of-date materials shall be repaired or replaced to
n as-built fee applies when total as-built cost are less than \$1000.00:	3 For water only accounts, the minimum purchased number of ERU units must match the allocation with the meter size as defined	į vietas ir vietas karalininininininininininininininininininin	the satisfaction of the Service Authority to ensure the service line is water tight
	4 The Availability Fee is not the total fee due. New connections may be subject to the following fees: meter, meter installation, sew	er and/or water inspection, application and Local Facility charges. See the Customer Handbook for additional information.	before the existing service line is placed back in service.
	NON-RESIDENTIAL METER SCHEDULE		
	1 Est. Max M		
	Building Building Consumpt Building Identifier Address Meter Use Account Type (Gallons		
	Building Identifier Address Meter Use Account Type (Gallons	) (GPM) Purchase Size Meter Type Future Use) Use) Availability Fee	
ofile shall call out the station restraint is to start and the station restraint is end for each fitting,			
, and dead end.			
Iaterial: DIP - POLYWRAP			Engineer's Seal & Signature
ML - Inorganic silts, very fine sands, rock flour,			
pe: Fine_Grained_Soils silty or clayey fine sands (backfilled using native	NOTES: 1 For meters 2-inch and larger the maximum month water consumption shall be reported. The purchased number of ERU's sha	If be based on the estimated maximum month consumption, but shall not be less than the allocated number of ERUs	
Factor: (1.5 to 1 is typical)	allocated meter size. For meters smaller than 2-inch, the maximum month water consumption does not need to be reported.		
Type: (Type 4 is typical for the Service Authority backfill requirements) Type $\frac{1.5}{2}$	2 A fixture unit list and meter sizing calculations shall be provided in the plan set for each proposed meter in accordance with the 3 For all meters the minimum purchased number of ERU units must match the allocation with the meter size as defined in Table 1	i l	
	4 The Availability Fee is not the total fee due. New connections may be subject to the following fees: meter, meter installation, sew		
essure: (100 psi plus them max static pressure, but no less than 200 psi) psi	BATA COLUMN ACCUSE OF		
	DATA CENTER METER SCHEDU		JA Comico Anthonia
dersigned Engineer and /or firm, on behalf of itself and its successors, does hereby assume full and responsibility for the accuracy of the calculations, selections made, or information presented	Building 1 Est. Max M		Service Authority Prince William County
information sheet and agrees to hold harmless the Service Authority from any claim.	Building Identifier Address Meter Use Account Type (GPD)	Demand Divi	rince wintam county
nders igned Engineer and/or firm agrees that the Prince William County Service Authority shall have			Water & Sanitary Sewer Information Sheet
ht to use these plans and electronic files for the preparation of as-built records, as necessary. The			Sheet effective as of September 1, 2019
eer and/or firm further agrees that the right to use the plans and electronic files shall be provided at cost to the Service Authority.			ENGINEERING GROUPE PROJECT STATUS DAT
COST to the pervice Audionty.			SCA
re:	NOTES: 1 For sewer only meters and 2-inch meters and larger, the purchased number of ERU's shall be based on the estimated maximum.  2 A fixture unit list and meter sizing calculations shall be provided in the plan set for each proposed meter in accordance with the		DES DRA
Denar H. C. Antelo	2 A fixture unit list and meter sizing calculations shall be provided in the plan set for each proposed meter in accordance with the 3 For all meters the minimum purchased number of ERU units must match the allocation with the meter size as defined in Table 1	!	09/02/20 REVISED PER TOWN COMMENTS
(Type or Print)	4 The Availability Fee is not the total fee due. New connections may be subject to the following fees: meter, meter installation, sew		DATE ACTION SHE

COMPUTATIONS

	DENAR H. C. ANTELO Lic. No. 38680  9/4/2020	
ATUS	DATE: <b>JULY, 2020</b>	
	SCALE: 1"=25'	
	DECICNED: CE CO MD	

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	ENGINEE	RING	GROUPE	PROJECT	STATUS	
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7/02/20	INE VIOLD I EN TOWN COMMENTS				
DATE	ACTION	SHEET	16	OF	41
	G:\PROJECT\Smith Property-Haymarket\ENG	DWG\00-K3	400 PW	Р	acket

PRO	JECT:	]	ROBINS	SON VILLAC	GE				SAN	ITARY SEV	VER DESIG	N									PWCS	A USE ONLY	Y
FROM	ТО	UNITS	FLOW/	AVG. FLOW	AVG. FLOW	PEAK	Q TOTAL	PIPE	SLOPE	ACTUAL	FULL FLOW	CAPACITY	q/Qf	d/D	LENGTH	FALL	MH INV	INVERT	INVERT	DATE LINE	DATE LINE	MH	DATE MH
MH	MH	OR AREA	UNIT	INCREMENT	TOTAL	FACTOR	GPD	SIZE(IN)	%	VEL.(FPS)	VEL.(FPS)	GPD	%	%	FT	FT	DROP FT.	UPPER	LOWER	TESTED	PASSED TEST	ID	PASSED VAC. TEST
11	10	6*	*	5,940	5,940	4	23,760	8	0.80%	1.39	3.10	698,706.21	3.40%	12%	252.60	2.02		360.47	358.45				
10	EX 091/38	0	350	0	5,940	4	23,760	8	0.52%	1.13	2.51	565,500.02	4.20%	12%	19.09	0.10	0.20	358.25	358.15				
																					<u> </u>		
18	14	11	350	3,850	3,850	4	15,400	8	1.00%	1.21	3.46	781,597.85	1.97%	8%	146.90	1.47		359.78	358.31		i		
1.7	16	10	250	2.500	2.500	4	1 1 000	0	0.000/	1.00	2.10	COO 044 55	2.000/	8%	115.00	0.03	1	261.07	260.15	<del>                                     </del>			
16	16 15	10	350 350	3,500 2,100	3,500 5,600	4	14,000 22,400	8	0.80% 0.50%	1.08	3.10	698,844.55	2.00% 4.05%	12%	115.00 119.69	0.92	0.20	361.07 359.95	360.15 359.35		·		
15	14	7	350	2,100	8,050	4	32,200	8	0.50%	1.31	2.45	553,200.14 551,664.81	5.84%	16%	168.50	0.84	0.20	359.95	359.35	<del></del>			
15	17	,	330	2,430	0,050		32,200		0.50 70	1.51	2.77	331,004.01	3.0470	10 /0	100.50	<b>U.U</b>	0.20	337.13	556.51				
14	13	0	350	0	11,900	4	47,600	8	0.50%	1.42	2.45	553,935.78	8.59%	18%	129.32	0.65		358.11	357.46	i			
13	12	0	350	0	11,900	4	47,600	8	0.50%	1.42	2.46	554,988.22	8.58%	18%	29.73	0.15	0.20	357.26	357.11	1			
12	EX 078/24	0	350	0	11,900	4	47,600	8	0.50%	1.42	2.46	554,483.52	8.58%	18%	81.41	0.41	0.20	356.91	356.50				
		* 4 TOWNILL	NIGEO 24	50 CDD 1400 F	ADCELC 1 AN	D 2 WEDE C	ALCIH ATED	TICING A I	EL CANALINIT	E OE 2000 CDD							+				·		
		†		50  GPD = 1400.  P 1: 0.32 AC. x 2000																			
		3900 = 5940	IANCELI	i. u.jz AC. x 2000	) (31 I) – 040 (31	D, I ANCEL	3. 1.33 AC. X	2000 GID —	STOU GID	1400 T 040 T										1			
		2700 2740																		1			

					RO	BINSON LAT			L									PWCSA U	JSE ONLY
				•			ON VILLA												
UNIT		INVERT		l ]	TOTAL `	1ST 2ND	LAT ELEV. @	GROUND ]	BF OR SLAB	DISTANCE	DISTANCE	Difference `	Difference	Difference	EJECTOR	SLOPE OF			
NO.	STATION	@ MAIN	CROWN ELEV.	LATERAL LENGTH	RISER	RISER RISER	END	ELEV. @	FLOOR	TO 1ST	TO 2ND	Ground Elev.	Basement Elev.	Basement Elev.	PUMP	LATERAL			STUB INSTALLED
					HGT.	HGT. HGT.		LAT. END	ELEVATION	RISER START	RISER START	Lat. End	Lat. End	Crown	REQUIRED	(%)	LATERAL MATERIAL	DATEINSTALLED	% OF GRADE
	11 TO 10	253 FEET OF	SAN. @ 0.80%	LOW END INV.= 358.45		MATERIAL: DR-			SIZE = 8"						1				
PARCEL 3	0+48	358.84	359.50	74.00	0.0	0.0	361.05	366.9		N/A						2.08%	DR-25 C900 - PVC		
PARCEL 1	0+35	358.73	359.40	18.00	0.0	0.0	359.77	367.1		N/A						2.08%	DR-25 C900 - PVC		
38	01+48	359.63	360.30	17.50	0.0	0.0	360.66	366.8	367.82	N/A		6.09	7.16	7.52	NO	2.08%	DR-25 C900 - PVC		
37	01+94	360.00	360.66	17.50	0.0	0.0	361.03	366.6	367.82	N/A		5.60	6.79	7.16	NO	2.08%	DR-25 C900 - PVC		
36	02+18	360.19	360.86	17.50	0.0	0.0	361.22	366.5	367.82	N/A		5.29	6.60	6.96	NO	2.08%	DR-25 C900 - PVC		
35	02+53	360.80	360.80	17.50	0.0	0.0	361.16	366.2	367.32	N/A		5.00	6.16	6.52	NO	2.08%	DR-25 C900 - PVC		
	17 TO 16	115 FEET OF	SAN. @ 0.80%	LOW END INV.= 360.15	ı	MATERIAL: DR-	Г	1	SIZE = 8"	<del></del>		<u> </u>	1		T			T T	
11	0+17	360.29	360.96	17.50	0.0	0.0	361.32	367.1	368.27	N/A		5.79	6.95	7.31	NO	2.08%	DR-25 C900 - PVC		
20	0+23	360.34	361.00	29.50	0.0	0.0	361.62	366.6	367.72	N/A		4.94	6.10	6.72	NO	2.08%	DR-25 C900 - PVC		
12	0+41	360.48	361.15	17.50	0.0	0.0	361.51	366.7	367.77	N/A		5.23	6.26	6.62	NO	2.08%	DR-25 C900 - PVC		
19	0+47	360.53	361.20	29.50	0.0	0.0	361.81	366.2	367.22	N/A		4.38	5.41	6.02	NO	2.08%	DR-25 C900 - PVC		
13	0+65	360.67	361.34	17.50	0.0	0.0	361.70	366.6	367.77	N/A		4.92	6.07	6.43	NO	2.08%	DR-25 C900 - PVC		
18	0+71	360.72	361.39	29.50	0.0	0.0	362.00	366.1	367.22	N/A		4.07	5.22	5.83	NO	2.08%	DR-25 C900 - PVC		
14	0+89	360.86	361.53	17.50	0.0	0.0	361.90	366.3	367.27	N/A		4.35	5.37	5.74	NO	2.08%	DR-25 C900 - PVC		
17	0+95	360.91	361.58	29.50	0.0	0.0	362.19	365.7	366.72	N/A		3.51	4.53	5.14	NO	2.08%	DR-25 C900 - PVC		
15	01+15	361.40	361.40	18.29	0.0	0.0	361.78	366.1	367.27	N/A		4.31	5.49	5.87	NO	2.08%	DR-25 C900 - PVC		
16	01+15	361.40	361.40	33.01	0.0	0.0	362.09	365.4	366.72	N/A		3.26	4.63	5.32	NO	2.08%	DR-25 C900 - PVC		
_	16 TO 15	120 FEET OF	SAN. @ 0.50%	LOW END INV.= 359.35	I	MATERIAL: DR-	T		SIZE = 8"										
7	0+25	359.47	360.14	17.50	0.0	0.0	360.50	367.8	369.43	N/A		7.30	8.93	9.29	NO	2.08%	DR-25 C900 - PVC		
8	0+46	359.58	360.25	17.50	0.0	0.0	360.61	367.7	368.77	N/A		7.11	8.16	8.52	NO	2.08%	DR-25 C900 - PVC		
23	0+59	359.64	360.31	29.50	0.0	0.0	360.92	367.2	368.22	N/A		6.25	7.30	7.91	NO	2.08%	DR-25 C900 - PVC		
9	0+89	359.80	360.46	17.50	0.0	0.0	360.83	367.6	368.77	N/A		6.77	7.94	8.31	NO	2.08%	DR-25 C900 - PVC		
22	0+95	359.83	360.49	29.50	0.0	0.0	361.11	367.1	368.22	N/A		5.94	7.11	7.73	NO	2.08%	DR-25 C900 - PVC		
10	01+08	359.89	360.56	17.50	0.0	0.0	360.92	367.2	368.27	N/A		6.31	7.35	7.71	NO	2.08%	DR-25 C900 - PVC		
21	01+15	359.92	360.59	29.50	0.0	0.0	361.21	366.7	367.72	N/A		5.47	6.51	7.13	NO	2.08%	DR-25 C900 - PVC		
	15 TO 14	169 FEET OF	SAN. @ 0.50%	LOW END INV.= 358.31		MATERIAL: DR-	I	244	SIZE = 8"	774				0.60	1.0	• 200/	DD 44 0000 DVG		
2	0+54	358.58	359.24	17.50	0.0	0.0	359.61	366.7	367.93	N/A		7.04	8.32	8.69	NO	2.08%	DR-25 C900 - PVC		
3	0+78	358.70	359.36	17.50	0.0	0.0	359.73	366.7	367.93	N/A		6.97 7.25	8.20 8.58	8.57 8.95	NO NO	2.08%	DR-25 C900 - PVC		
4	01+02	358.82	359.48 359.60	17.50	0.0	0.0	359.85 359.97	367.1 367.5	368.43 368.93	N/A		7.53	8.96	9.33		2.08%	DR-25 C900 - PVC		
5	01+26 01+50	358.94 359.06	359.72	17.50 17.50	0.0	0.0	360.09	367.7	368.93	N/A N/A		7.56	8.84	9.33	NO NO	2.08%	DR-25 C900 - PVC DR-25 C900 - PVC		
U	18 TO 14	147 FEET OF	SAN. @ 1.00%	LOW END INV.= 358.31	0.0	MATERIAL: DR-	l .	307.7	SIZE = 8"	I IVA		7.50	0.04	9.21	<u> NO</u>	2.0070	DR-25 C900 - F VC		
	0+22	358.53	359.20		0.0	0.0	359.46	365.4	366.96	N/A		5.95	7.50	7.76	NO	2.08%	DR-25 C900 - PVC		
28	0+22	358.53	359.20 359.40	12.50 12.50	0.0	0.0	359.46 359.66	365.3	366.96	N/A N/A		5.95	7.30	7.56	NO NO	2.08%	DR-25 C900 - PVC DR-25 C900 - PVC		
26	0+42	358.84	359.51	72.00	0.0	0.0	361.01	365.5	367.41	N/A		4.49	6.40	7.90	NO	2.08%	DR-25 C900 - PVC		
30	0+62	358.93	359.60	12.50	0.0	0.0	359.86	365.5	366.96	N/A		5.62	7.10	7.36	NO	2.08%	DR-25 C900 - PVC		
25	0+71	359.02	359.68	72.00	0.0	<del>                                     </del>	361.18	365.5	367.41	N/A		4.32	6.23	7.73	NO	2.08%	DR-25 C900 - PVC		
31	0+71	359.02	359.80	12.50	0.0	0.0	360.06	365.9	367.46	N/A N/A		5.79	7.40	7.66	NO	2.08%	DR-25 C900 - PVC DR-25 C900 - PVC		
24	0+99	359.13	359.97	72.00	0.0	0.0	361.47	365.5	367.41	N/A		4.03	5.94	7.44	NO	2.08%	DR-25 C900 - PVC		
32	01+02	359.33	360.00	12.50	0.0	0.0	360.26	366.1	367.46	N/A		5.80	7.20	7.46	NO	2.08%	DR-25 C900 - PVC		
33	01+02	359.53	360.20	12.50	0.0	0.0	360.46	366.4	367.96	N/A		5.97	7.50	7.76	NO	2.08%	DR-25 C900 - PVC		
34	01+47	360.11	360.11	13.63	0.0	0.0	360.39	366.8	367.96	N/A		6.41	7.57	7.85	NO	2.08%	DR-25 C900 - PVC		
	14 TO 13	129 FEET OF	SAN. @ 0.50%	LOW END INV.= 357.46	1 0.0	MATERIAL: DR-		200.0	SIZE = 8"	T.17.7F		J.T.	1.07	7.00	1 1.0	2.0070	DIC20 C/00-1 (C		
1	01+01	357.97	358.63	12.00	0.0	0.0	358.88	365.8	367.43	N/A		6.92	8.55	8.80	NO	2.08%	DR-25 C900 - PVC		
27	01+01	358.03	358.69	16.00	0.0	0.0	359.03	365.8	366.96	N/A		6.77	7.93	8.27	NO	2.08%	DR-25 C900 - PVC		
NOTES:	01110	220.02	330.07	10.00	0.0	0.0	337.03	203.0	200.70	1 1/ /1		<b>U•</b> / /	1.73	U+# /	1 10	#.00 /U	DIC-23 C/00-1 VC	1	

NOTES:
1.) ALL LATERALS ARE 4" WITH THE EXCEPTION OF LATERALS FOR PARCELS 1 AND 3 WHICH ARE 6" IN DIAMETER AND TO BE INSTALLED AT 1/4" PER FOOT UNLESS OTHERWISE NOTED.

2.) RISERS TO BEGIN A MINIMUM OF 3' FROM INVERT AT MAIN.

3.) ALL LATERALS ARE TO BE THE SAME MATERIAL AS THE MAIN SANITARY SEWER LINE THAT IT IS CONNECTING TO. \*DENOTES BASEMENTS WITH HUNG SEWER - EJECTOR PUMPS REQUIRED FOR SUB-BASEMENT

Water & Sanitary Sewer Information Sheet

Sheet revised as of September 1, 2019

09/02/20	REVISED	PER	TOWN	COMMENTS	
DATE			ACTION		
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#### PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A RESIDENTIAL DEVELOPMENT CONTAINING 38 TOWNHOUSES, A TOT LOT, A SWM POND, STORM SEWER, SANITARY SEWER, AND WATERLINE UTILITIES. THIS PROJECT PROPOSES A RIGHT TURN LANE TAPER ON WASHINGTON STREET, TWO COMMERCIAL ENTRANCES ALONG KARTER MANOR DRIVE, AND SIDEWALK ALONG HUNTING PATH ROAD. APPROXIMATELY 5.85 AC. WILL

#### EXISTING SITE CONDITIONS

THE TOPOGRAPHY ON THIS SITE RANGES IN ELEVATION FROM 352 FEET TO 368 FEET ABOVE SEA LEVEL. THE MAJORITY OF THE SITE RUNOFF FLOWS TO THE NORTHEAST TO AN EXISTING WETLAND. A PORTION OF THE SITE RUNOFF DRAINS TO AN EXISTING CULVERT ADJACENT HUNTING PATH ROAD. A SMALL PORTION RUNOFF DRAINS UNCONTROLLED TO THE NORTH. SLOPES ON SITE RANGE FROM 2% TO 33%.

ADJACENT PROPERTIES THE SITE IS BOUND TO THE WEST BY HUNTING PATH ROAD, TO THE SOUTH BY WASHINGTON STREET, TO THE

NORTH BY EXISTING TOWN-HOMES, AND TO THE EAST BY AN EXISTING CHURCH AND MEDICAL CENTER. A SOILS MAP AND SUPPORTING SOILS DATA HAVE BEEN PROVIDED ON **SHEET** 1 OF THIS PLAN SET.

THE EARTHWORK FOR THIS SITE BALANCES. ADDITIONAL OFFSITE BORROW OR SPOIL AREAS ARE NOT NEEDED. SANITARY AND WATERLINE TIE IN CONNECTIONS WILL BE NECESSARY FOR THIS PLAN SET.

CRITICAL EROSION AREAS

WETLAND LOCATIONS PROVIDED BY WETLAND STUDIES AND SOLUTIONS, INC. PER JOINT PERMIT APPLICATION DATED JUNE 4, 2020.

#### STORMWATER RUNOFF CONSIDERATIONS:

#### MINIMUM STANDARDS

SEE SHEET 23.

FOR EVERY MEASURE EMPLOYED TO SATISFY EACH OF THE NINETEEN MINIMUM STANDARDS APPLICABLE TO THIS DEVELOPMENT, THE NUMBER FOR THE PARTICULAR STANDARD BEING SATISFIED HAS BEEN PLACED IN PARENTHESES NEXT TO THE CORRESPONDING MEASURE. STORM SEWER COMPUTATIONS HAVE BEEN PROVIDED ON SHEET 13,, DEMONSTRATING COMPLIANCE WITH MS-19. THE FOLLOWING MINIMUM STANDARDS DO NOT APPLY TO THIS DEVELOPMENT: (MS-12) (MS-13) (MS-14) (MS-15). EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

NO DISTURBED AREAS SHALL BE LEFT DENUDED. THE DISTURBED LAND WHERE WORK HAS BEEN COMPLETED WILL BE STABILIZED ON A DAILY BASIS. (MS-1)

ANY STOCKPILED MATERIAL WHICH WILL REMAIN IN PLACE LONGER THAN SEVEN (7) DAYS SHALL BE SEEDED AND MULCHED FOR TEMPORARY VEGETATION. WHEN NECESSARY TO DE-WATER A TRENCH, THE PUMP DISCHARGE HOSE SHALL BE OUTLETTED INTO A STABILIZED AREA OR SEDIMENT TRAPPING STRUCTURE.

THE CONTRACTOR SHALL MAKE PROVISIONS FOR DUST CONTROL DURING CONSTRUCTION ACTIVITIES. ACCEPTABLE MEASURES FOR DUST CONTROL INCLUDE TEMPORARY VEGETATIVE COVER, MULCHING, TILLAGE, IRRIGATION, SPRAY-ON ADHESIVES, STONE, BARRIERS, AND CALCIUM CHLORIDE. PLEASE SEE STD & SPEC 3.39 OF THE VESCH FOR A DESCRIPTION OF EACH METHOD, AND HOW IT IS USED MOST EFFECTIVELY.

#### STRUCTURAL PRACTICES

EXPOSED SOIL SURFACES.

TEMPORARY CONSTRUCTION ENTRANCE - 3.02 A TEMPORARY CONSTRUCTION ENTRANCE WITH A WASH RACK SHALL BE INSTALLED ON WASHINGTON STREET ROUTE 55. SEE SHEET 19 FOR CONSTRUCTION ENTRANCE LOCATION. A WATER TANK TRUCK WILL BE USED TO WASH VEHICLES AS THEY LEAVE THE SITE. THE PROPOSED FIRE HYDRANT ON KARTER MANOR DRIVE MAY BE USED ONCE OPERATIONAL. (MS-17)

OUTLET PROTECTION - 3.18 RIPRAP IS TO BE PLACED AT THE OUTLET OF ALL PIPES AS INDICATED ON THE SITE PLAN. (MS-11)

TEMPORARY SEDIMENT BASIN/TRAPS - 3.14 TEMPORARY SEDIMENT BASINS WILL BE CONSTRUCTED AS PONDING AREAS TO DETAIN SEDIMENT-LADEN RUNOFF LONG ENOUGH TO ALLOW THE MAJORITY OF THE SEDIMENT TO SETTLE OUT. SEE SHEET 18 FOR SEDIMENT BASIN DESIGN. (MS-6)

<u>SILT FENCE BARRIER - 3.05</u> SILT FENCE SEDIMENT BARRIERS WILL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW AS INDICATED ON THE SITE

STORM DRAIN INLET PROTECTION — 3.07 ALL STORM SEWER INLETS SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT—LADEN WATER SHALL BE FILTERED BEFORE ENTERING THE STORM SEWER INLETS.

 ${10PSOILING-3.30}$  PROVIDE A SUITABLE GROWTH MEDIUM FOR FINAL SITE STABILIZATION WITH VEGETATION. PERIMETER CONTROLS MUST BE PLACED AROUND THE STOCKPILE IMMEDIATELY; SEEDING OF STOCKPILES SHALL BE COMPLETED WITHIN 7 DAYS OF THE FORMATION OF THE STOCKPILE, IN ACCORDANCE WITH STD. & SPEC. 3.31 TEMPORARY SEEDING IF IT IS TO REMAIN DORMANT FOR LONGER THAN 30 DAYS. TOPSOIL WILL BE RESPREAD AT AN AVERAGE OF 8 INCHES ACROSS OPEN AREAS ONSITE UNTIL ALL TOPSOIL HAS BEEN USED. THERE WILL BE NO EXCESS MATERIAL AFTER FINAL GRADES ARE ESTABLISHED. (MS-1 & MS-2)

 $\underline{\text{DUST CONTROL}-3.39}$  REDUCING SURFACE AND AIR MOVEMENT OF DUST DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM

TEMPORARY SEEDING SPECIFICATION - 3.31 ESTABLISHMENT OF TEMPORARY GRADE WITHIN A PERIOD OF MORE THAN 30 DAYS) BY SEEDING AND MULCHING WITH VEGETATIVE COVER ON DISTURBED AREAS (THAT WILL NOT BE BROUGHT TO FINAL FAST GERMINATING TEMPORARY VEGETATION. (MS-1)

PLANT SELECTION - TEMPORARY SEEDING PLANT MATERIALS SHALL BE APPLIED AS LISTED IN THE

TE	MPORARY SEEDING PLANT MATERIALS	
PLANTING DATES	<u>SPECIES</u>	
SEPT. 1 - FEB. 15	50/50 MIX OF ANNUAL RYEGRASS	RATE (LBS/AC)
	& CEREAL (WINTER RYE)	75
FEB. 16 - APR. 30	ANNUAL RYEGRASS	80
MAY 1 - AUG. 31	GERMAN MILLET	50

<u>SURFACE ROUGHENING</u> — IF THE AREA HAS BEEN RECENTLY LOOSENED OR DISTURBED, NO FURTHER ROUGHENING IS REQUIRED. WHEN THE AREA IS COMPACTED, CRUSTED, OR HARDENED, THE SOIL SURFACE SHALL BE LOOSENED BY DISCING, RAKING, HARROWING, OR OTHER ACCEPTABLE MEANS (SEE SURFACE ROUGHENING, STD. & SPEC. 3.29 VE&SCH).

SEEDING - SEED SHALL BE EVENLY APPLIED WITH A BROADCAST SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. SMALL GRAINS SHALL BE PLANTED NO MORE THAN ONE INCH DEEP. GRASSES AND LEGUMES SHALL BE PLANTED WITH NO LESS THAN 1/4" SOIL COVER.

RE-SEEDING - AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT RILL EROSION WILL BE RE-SEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED.

<u>PERMANENT SEEDING SPECIFICATION: 3.32</u> — ESTABLISHMENT OF PERENNIAL VEGETATIVE COVER ON ROUGH GRADED AREAS WHICH WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR MORE OR WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL. THE PROJECT SITE IS IN THE COASTAL PLAIN REGION OF PRINCE WILLIAM COUNTY THEREFORE PLANT MATERIALS SHOULD BE SELECTED SPECIFICALLY FOR THIS REGION. (MS-3)

PLANT SELECTION - SELECT PLANT MATERIALS BASED ON CLIMATE, TOPOGRAPHY, SOILS, LAND USE, AND PLANTING SEASON. USE THE FOLLOWING TABLE FOR PERMANENT SEEDING REQUIREMENTS:

PERMANENT SEEDING PLANT MAT	TERIALS TOTAL LBS/AC.
MINIMAL CARE LAWN TALL FESCUE***	175–200 LBS.
OR BERMUDA GRASS*	75 LBS.
GENERAL SLOPE (3:1 OR LESS) TALL FESCUE*** RED TOP GRASS SEASONAL NURSE CROP**	128 LBS. 2 LBS. <u>20 LBS.</u> 150 LBS.
USE UNHULLED SEED. WEEPING L LOW—MAINTENANCE MIX DURING LBS./AC. IN MIXES	HULLED SEED. ALL OTHER SEEDING PERIODS, LOVEGRASS MAY BE ADDED TO ANY SLOPE OR WARMER SEEDING PERIODS; ADD 10-20 N ACCORDANCE WITH SEEDING DATES AS
FEBRUARY, MARCH THROUG MAY 1ST THROUGH AUGUST SEPTEMBER, OCTOBER THRO	H APRILFOXTAIL MILLET  DUGH NOVEMBER 15THANNUAL RYE  JANUARYWINTER RYE
FROM VESCH TABLE 3.32-D.	

DD'S STABILIZED WITH FESCUE CANNOT BE USED UNTIL THE GRASS IS ESTABLISHED TO THE SATISFACTION OF THE INSPECTOR.

<u>SEEDBED REQUIREMENTS</u> — VEGETATION SHOULD NOT BE ESTABLISHED ON SLOPES THAT ARE UNSUITABLE DUE TO INAPPROPRIATE SOIL TEXTURE, POOR INTERNAL STRUCTURE OR INTERNAL DRAINAGE, VOLUME OF OVERLAND FLOW, OR EXCESSIVE STEEPNESS, UNTIL MEASURES HAVE BEEN TAKEN TO CORRECT THESE PROBLEMS (SEE STD. & SPEC. 3.32 FOR THESE REQUIREMENTS).

- TOPSOILING SPREAD 4 INCHES OF TOPSOIL ON AREAS IN PREPARATION FOR PERMANENT SEEDING. REMOVE ROOTS AND ROCKS LARGER THAN 1-INCH.
- SOIL CONDITIONERS IF REQUIRED, THE FOLLOWING MATERIALS MAY BE ADDED TO THE SOIL TO IMPROVE STRUCTURE, TEXTURE, OR DRAINAGE CHARACTERISTICS OF THE SOIL: PEAT, SAND, VERMICULITE, RAW MANURE, ROTTED SAWDUST, TREATED SEWAGE SLUDGE. A DESCRIPTION OF THESE MATERIALS AND APPLICATIONS CAN BE FOUND IN STD. & SPEC. 3.32 VE&SCH.
- <u>SOIL TESTS</u> SOIL TESTS SHALL BE MADE TO DETERMINE APPLICATIONS OF LIME AND FERTILIZER. THE TEST RESULTS WILL BE DELIVERED TO THE CONTRACTOR AND COUNTY INSPECTOR NO LATER THAN THE PRE-CONSTRUCTION MEETING.
- INCORPORATION LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 4- 6 INCHES OF THE SOIL BY DISCING OR OTHER MEANS WHEREVER POSSIBLE. FOR EROSION CONTROL, WHEN APPLYING LIME AND FERTILIZER WITH A HYDROSEEDER, APPLY TO A ROUGH, LOOSE SURFACE.

SEEDING — CERTIFIED SEED WILL BE USED FOR ALL PERMANENT SEEDING. THE SEED MUST MEET PUBLISHED STATE STANDARDS AND BEAR AN OFFICIAL "CERTIFIED SEED" LABEL. LEGUME SEED SHOULD BE APPROPRIATELY INOCULATED TO THE SPECIES. SEED OF LESPEDEZAS, THE CLOVERS AND CROWNVETCH SHOULD BE SCARIFIED TO PROMOTE UNIFORM GERMINATION, APPLY SEED UNIFORMLY WITH A BROADCAST SEEDER, DRILL, CULTI-PACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. SEEDING DEPTH SHOULD BE 1/4 TO 1/2 INCH.

HYDROSEEDING SPECIAL REQUIREMENTS — TO AVOID POOR GERMINATION RATES AS A RESULT OF SEED DAMAGE DURING HYROSEEDING, IT IS RECOMMENDED THAT IF A MACHINERY BREAKDOWN OF 30 MINUTES TO 2 HOURS OCCURS, 50% MORE SEED SHOULD BE ADDED TO THE TANK, BASED ON PROPORTIONS OF THE SLURRY REMAINING IN THE TANK. BEYOND 2 HOURS A BATCH OF NEW SEED MAY BE NECESSARY. IN INACCESSIBLE AREAS, LIME MAY HAVE TO BE APPLIED SEPARATELY IN PELLETIZED OR LIQUID FORM. SURFACE ROUGHENING IS PARTICULARLY IMPORTANT WHEN HYDROSEEDING BECAUSE A ROUGHENED SLOPE WILL PROVIDE SOME NATURAL COVERAGE OF LIME, FERTILIZER, AND SEED. LEGUME INOCULANTS SHOULD BE APPLIED AT FIVE TIMES THE RECOMMENDED RATE WHEN INOCULANT IS INCLUDED IN THE HYDROSEEDER

MULCHING, WATERING, RE-SEEDING - ALL PERMANENT SEEDING MUST BE MULCHED IMMEDIATELY UPON COMPLETION OF SEED APPLICATION (SEE MULCHING STD. & SPEC. 3.35 VE&SCH). NEW SEEDINGS SHOULD BE SUPPLIED WITH ADEQUATE MOISTURE INSPECT SEEDED AREAS FOR LACK OF GERMINATION AND MAKE NECESSARY REPAIRS AND RE-SEEDINGS WITHIN THE SAME SEASON, IF POSSIBLE.

MAINTENANCE FERTILIZATION — COOL SEASON GRASSES SHOULD BEGIN TO BE FERTILIZED 90 DAYS AFTER PLANTING TO ENSURE PROPER STAND AND DENSITY. WARM SEASON FERTILIZATION SHOULD BEGIN AT 30 DAYS AFTER PLANTING. SEE STD. & SPEC. 3.32 VE&SCH FOR PROPER MAINTENANCE FERTILIZATION BASED ON SITE CONDITIONS.

SODDING: 3.33 - STABILIZING FINE GRADED AREAS BY ESTABLISHING PERMANENT GRASS STANDS WITH SOD PROVIDES IMMEDIATE PROTECTION AGAINST EROSION AND IS ESPECIALLY EFFECTIVE IN GRASSED SWALES AND WATERWAYS OR IN AREAS WHERE IMMEDIATE AESTHETIC EFFECT IS DESIRABLE.

MULCHING: 3.35 — APPLICATION OF PLANT RESIDUES OR OTHER SUITABLE MATERIALS TO DISTURBED SURFACES TO PREVENT EROSION AND REDUCE OVERLAND FLOW VELOCITIES FOSTER PLANT GROWTH BY INCREASING AVAILABLE MOISTURE AND PROVIDING INSULATION AGAINST EXTREME HEAT OR COLD. APPLICABLE TO ALL SEEDING OPERATIONS, OTHER PLANT MATERIALS WHICH DO NOT PROVIDE ADEQUATE SOIL PROTECTION BY THEMSELVES, AND BARE AREAS WHICH CANNOT BE SEEDED DUE TO THE SEASON BUT WHICH STILL NEED

SOIL STABILIZATION BLANKETS AND MATTING: 3.36 - THE INSTALLATION OF A PROTECTIVE COVERING (BLANKET) OR A SOIL STABILIZATION MAT ON A PREPARED PLANTING AREA OF A STEEP SLOPE, CHANNEL ÒR SHORÉLINE. BLANKETS AND MATTING SHOULD BE USED TO ESTABLISH VEGETATION ONLY ON SLOPES THAT ARE 3:1 OR STEEPER.

- 1. PERMANENT SEEDING SHALL BE PLACED ON ALL CUT/FILL SLOPES ADJACENT TO THE LIMITS OF CLEARING AND TEMPORARY SEEDING SHALL BE PLACED ON ALL AREAS THAT WILL BE DENUDED FOR MORE THAN 7 DAYS, EXCEPT FOR THAT PORTION IN WHICH WORK WILL BE CONTINUOUS BEYOND 7 DAYS.
- 2. PER VESCH STD. 3.30, PLANTING SOIL MUST HAVE ENOUGH FINES, SUFFICIENT PORE SPACE, DEPTH, AND FREE OF DELETERIOUS MATERIALS TO PROMOTE GROWTH.
- 3. IF THE ENTIRE SITE WILL NOT BE PERMANENTLY STABILIZED BEFORE DECEMBER 1, THE RESPONSIBLE LAND DISTURBER SHALL CONTACT THE COUNTY EROSION AND SEDIMENT CONTROL STAFF TO SCHEDULE A PER-WINTER MEETING TO OCCUR BEFORE OCTOBER 1.

#### CONSTRUCTION SEQUENCING

CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE. IN PARTICULAR, INSTALLATION OF CONTROLS SHALL FOLLOW THIS ORDER:

PHASE I EROSION AND SEDIMENT CONTROL PLAN:

- 1. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH TOWN OF HAYMARKET PRIOR TO ANY WORK BEING PERFORMED ON-SITE.
- 2. A TEMPORARY CONSTRUCTION ENTRANCE WITH A WASH RACK SHALL BE INSTALLED ON WASHINGTON STREET ROUTE 55. SEE SHEET 18 FOR CONSTRUCTION ENTRANCE LOCATION. A WATER TANK TRUCK WILL BE USED TO WASH VEHICLES AS THEY LEAVE THE SITE. THE PROPOSED FIRE HYDRANT ON KARTER MANOR DRIVE MAY BE USED ONCE OPERATIONAL.
- 2. PERFORM MINIMAL CLEARING AND GRUBBING ONLY AS NECESSARY TO INSTALL ALL PERIMETER SEDIMENT CONTROL SILT FENCE. INSTALL INLET PROTECTION, CULVERT INLET PROTECTION AND DIVERSION DIKE, SEDIMENT BASIN AND OUTLET PROTECTION. (MS-4)
- 3. CONTRACTOR SHALL RECEIVE APPROVAL FROM THE SITE INSPECTOR AFTER INSTALLATION OF ALL PHASE I E&S CONTROLS PRIOR TO BEGINNING OF CONSTRUCTION.
- 4. BEGIN ROUGH GRADING, PAVEMENT AND CURB AND GUTTER REMOVAL.
- 5. IF NECESSARY, FIELD ADJUSTMENTS SHALL BE MADE TO PERIMETER CONTROLS TO ACCOMMODATE CHANGING DRAINAGE PATTERNS AND TO FACILITATE POSITIVE DRAINAGE.
- 6. FINISH TOP ROUGH GRADING.
- 7. INSTALLATION OF UTILITIES (STORM, WATER, AND SANITARY) CURB AND GUTTER, PAVEMENT BASE STONE, RETAINING WALLS, AND GUARD RAIL SHALL PROCEED AS FINAL GRADE IS REACHED WITHIN THE SITE. PHASE II EROSION AND SEDIMENT CONTROL PLAN:
- 1. TRANSITION FROM PHASE I TO PHASE II CONTROLS SHALL OCCUR AS FINAL GRADE IS REACHED AND CURB AND GUTTER, PAVEMENT, ETC. ARE IN PLACE.
- 2. PHASE II CONTROLS INCLUDE STORM INLET PROTECTION, CULVERT INLET PROTECTION, SILT FENCE, TEMPORARY SEEDING, MULCHING, AND DUST CONTROL.
- 3. BASE STONE FOR PAVED AREAS SHALL BE PLACED AND COMPACTED UPON A COMPACTED SUBGRADE WITHIN 7 DAYS OF THE SUBGRADE REACHING FINAL GRADE.
- 4. START RE-VEGETATION AS AREAS ARE BROUGHT TO GRADE OR STAND IDLE FOR MORE THAN SEVEN (7)
- 5. STABILIZE AREAS, NOT BUILT UPON OR COVERED BY PAVEMENT, WITH TOP SOIL AND PERMANENT
- 6. CONVERT TEMPORARY SEDIMENT BASIN TO PERMANENT SWM WET POND. REPLACEMENT OF SEDIMENT BASIN WITH PERMANENT FACILITY PERIMETER E&S CONTROLS SHOULD BEGIN AT TIME WHEN COMPLETION OF FINAL GRADING REQUIRES INSTALLATION AND UPSTREAM AREAS HAVE BEEN SUFFICIENTLY VEGETATED
- 7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER TEMPORARY MEASURES ARE NO LONGER NEEDED, WITH PERMISSION OF THE EROSION CONTROL INSPECTOR. (MS-18)

MAINTENANCE PROGRAM DAILY SITE INSPECTION WILL BE REQUIRED AND DAMAGED CONTROLS REPAIRED BY CLOSE OF THAT DAY. INSPECTIONS SHALL ALSO FOLLOW EACH SIGNIFICANT RAINFALL. IN PARTICULAR THE FOLLOWING SHALL BE

1. THE SEDIMENT BASINS AND TRAPS WILL BE CHECKED REGULARLY FOR SEDIMENT CLEANOUT.

AND STABILIZED. SEE SHEET 25 FOR SEDIMENT BASIN CONVERSION NARRATIVE. (MS-1)

- 2. THE GRAVEL AND SILT FENCE INLET PROTECTION WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP WHICH WILL PREVENT DRAINAGE. IF THE GRAVEL IS CLOGGED BY SEDIMENT, IT SHALL BE REMOVED AND CLEANED OR REPLACED.
- 3. THE SILT FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALFWAY TO THE TOP OF THE BARRIER.
- 4. THE SEEDED AREAS AND CUT AND FILL SLOPES WILL BE CHECKED REGULARLY TO INSURE THAT A GOOD STAND OF VEGETATION IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEEDED AS NEEDED. (MS-7) EROSION AND SEDIMENT CONTROL NOTES

1. THE OWNER/DEVELOPER GRANTS THE RIGHT OF ENTRY ONTO THIS PROPERTY TO THE DESIGNATED

WITH THE CODE OF VIRGINIA, EROSION AND SEDIMENT CONTROL LAW. 2. THE OWNER/DEVELOPER MUST NOTIFY TOWN OF HAYMARKET AT LEAST 24 HOURS PRIOR TO THE START

TOWN OF HAYMARKET PERSONNEL FOR THE PURPOSE OF INSPECTING AND MONITORING FOR COMPLIANCE

- OF CONSTRUCTION. CONTROLS. 3. THE CONTRACTOR ONSITE SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL
- EROSION AND SEDIMENT 4. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE 1992 VIRIGNIA EROSION & SEDIMENT CONTROL HANDBOOK.
- 5. ALL EROSION CONTROL MEASURES SHOWN ON THE APPROVED PLAN MUST BE IN PLACE AND INSPECTED AND APPROVED BY THE TOWN OF HAYMARKET INSPECTOR PRIOR TO CLEARING, STRIPPING OF TOPSOIL OR GRADING.
- 6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ONSITE AT ALL TIMES.

- 7. THE SITE SHALL BE CLEARED AND GRUBBED AND UNSUITABLE MATERIAL SHALL BE REMOVED.
- 8. FILL MATERIAL SHALL BE TAKEN FROM APPROVED, ONSITE BORROW AREA WHICH SHALL BE FREE FROM ROOTS, WOODY VEGETATION AND OVERSIZED
- 9. WHEN SEDIMENT IS TRANSPORTED ONTO A PAVED ROAD SURFACE, THE ROAD WILL BE CLEANED THOROUGHLY AT THE END OF EACH DAY ACCORDING TO THE FOLLOWING PROCEDURE: SEDIMENT SHALL BE REMOVED FROM THE ROAD SURFACE BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- 10. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS. A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED AND APPROVED BY TOWN OF HAYMARKET
- 11. CONCENTRATED RUN-OFF SHALL NOT FLOW DOWN CUT AND FILL SLOPES UNLESS CONTAINED IN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, SLOPE DRAIN OR OTHER PERTINENT STRUCTURE. IF WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR PROTECTION SHALL BE PROVIDED. (MS-8.
- 12. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
- 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 STREAM OR OFF-SITE PROPERTY: d. MATERIAL USED FOR BACK-FILLING TRENCHES SHALL BE COMPACTED TO MINIMIZE EROSION AND PROMOTE STABILIZATION;
- e. RE-STABILIZATION SHALL BE ACCOMPLISHED WITH THESE REGULATIONS; AND f. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH. (MS-16)
- 13. IF THE ENTIRE SITE WILL NOT BE PERMANENTLY STABILIZED BEFORE DECEMBER 1, THE RESPONSIBLE LAND DISTURBER SHALL CONTACT THE COUNTY EROSION AND SEDIMENT CONTROL STAFF TO SCHEDULE A PRE-WINTER MEETING TO OCCUR BEFORE OCTOBER 1.

#### EROSION CONTROL NOTES

- 1. THE OWNER/DEVELOPER MUST NOTIFY THE TOWN OF HAYMARKET AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH APPLICABLE TOWN AND COUNTY ORDINANCES AND
- 2. THE OWNER/DEVELOPER GRANTS THE RIGHT-OF-ENTRY ON TO THIS PROPERTY TO THE DESIGNATED TOWN OF HAYMARKET PERSONNEL FOR THE PURPOSE OF INSPECTING AND MONITORING FOR COMPLIANCE WITH TITLE 10.01, CHAPTER 5, ARTICLE 4 OF THE CODE OF VIRGINIA, EROSION AND SEDIMENT CONTROL LAW AND THE DESIGN AND CONSTRUCTION STANDARDS MANUAL SECTION 750.04 (C).
- 3. ALL EROSION CONTROL MEASURES SHOWN ON THE APPROVED PLAN MUST BE IN PLACE AND INSPECTED AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS PRIOR TO CLEARING, STRIPPING OF TOPSOIL OR
- 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE KEPT ON THE SITE AT ALL TIMES.
- 5. THE DEVELOPER DEVELOPER'S REPRESENTATIVE IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY PRINCE WILLIAM COUNTY.
- 6. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL COMPLETE AND ADEQUATE STABILIZATION IS ACHIEVED.
- 7. WATER MUST BE PUMPED INTO AN APPROVED FILTERING DEVICE DURING DEWATERING OPERATIONS.
- 8. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE WILL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES
- 9. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN
- a. GRAVEL OUTLETS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP WHICH WILL PREVENT DRAINAGE. IF THE GRAVEL IS CLOGGED BY SEDIMENT, IT SHALL BE REMOVED AND CLEANED OR
- b. SILT FENCE BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER.
- c. SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED. d. STREAM DIVERSION AND STORM CONVEYANCE CHANNELS SHALL BE INSPECTED DAILY AND AFTER EACH RAIN TO ENSURE THEY'RE FUNCTIONING PROPERLY AND THAT THE INTEGRITY OF THE

EFFECTIVENESS OF THE EROSION CONTROL DEVICES MUST BE MADE IMMEDIATELY AFTER THE

10. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE

LININGS ARE NOT IMPAIRED.ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE

- 11. PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.
- 12. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN FOURTEEN
- 13. SEEDING AND SELECTION OF THE SEED MIXTURE SHALL BE IN ACCORDANCE WITH THE VIRGINIA
- EROSION AND SEDIMENT CONTROL HANDBOOK STANDARD AND SPECIFICATION 3.32. 14. ROADS AND PARKING AREAS SHALL BE STABILIZED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS
- 15. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE REMOVED WITHIN 30 DAYS AFTER ADEQUATE SITE STABILIZATION AND AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, AS AUTHORIZED BY THE PRINCE WILLIAM COUNTY INSPECTORS. TRAPPED SEDIMENT AND TH DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- 16. WHEN SEDIMENT IS TRANSPORTED ONTO A PAVED ROAD SURFACE. THE ROAD WILL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT WILL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- 17. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC. 18. TREE SAVE AREAS SHALL BE CLEARLY MARKED IN THE FIELD BY ORANGE SAFETY FENCE.
- 19. ORANGE SAFETY FENCE MUST BE INSTALLED AROUND ALL SILT TRAPS AND SEDIMENT BASINS. 20. GEOTECHNICAL RECOMMENDATIONS FOR THE PHASE I EROSION AND SEDIMENT CONTROL PLAN ARE TO BE SUBMITTED UNDER SEPARATE COVER.
- 21. A PRE-CONSTRUCTION MEETING IS TO BE USED PRIOR TO COMMENCEMENT OF CONSTRUCTION. 22. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE NECESSARY TO BE INSTALLED UPON
- THE DISCRETION OF THE TOWN OF HAYMARKET INSPECTORS DURING CONSTRUCTION. 23. ALL EROSION AND SEDIMENT CONTROL MEASURE ON PHASE I SHALL REMAIN THROUGH THE DURATION OF PHASE II CONSTRUCTION. SEDIMENT CONTROLLING DEVICES MAY BE MODIFIED AS GRADING 24 PROGRESSES WITH THE TOWN OF HAYMARKET APPROVAL.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WITH APPROVAL FROM TOWN OF HAYMARKET INSPECTORS.

EROSION AND SEDIMENT CONTROL POLLUTANT DISCHARGE NOTES:

1. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS; 2. MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH,

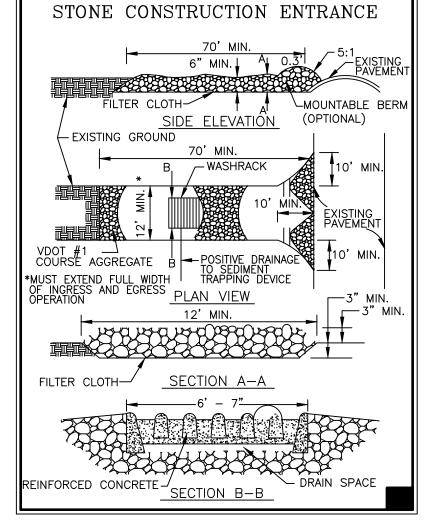
LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE, AND OTHER

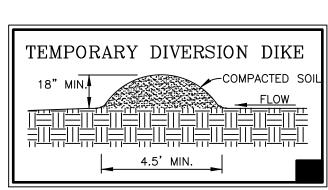
3. PROHIBIT THE DISCHARGE OF WASTEWATER FROM THE WASHOUT OF CONCRETE;

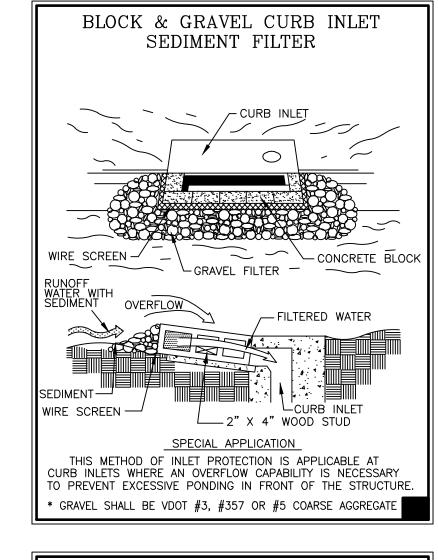
MATERIALS PRESENT ON-SITE TO PRECIPITATION AND TO STORMWATER;

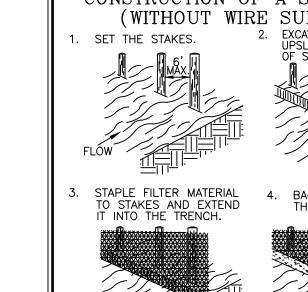
- 4. PROHIBIT THE DISCHARGE OF WASTEWATER FROM THE WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS; AND
- 5. PROHIBIT THE DISCHARGE OF FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE.

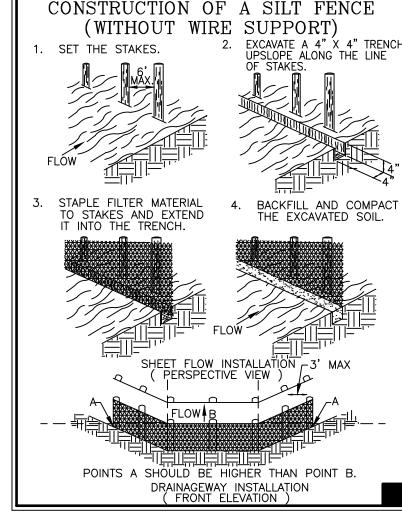
MINIMUM STANDARDS CHECKLIST Yes No N/A  $^{m X}$   $^{--}$  MS-1 Have temporary and permanent stabilization been addressed in narrative? X — Are practices shown on the plan? \_X \_\_\_ Seed specifications?  $X \longrightarrow Mulching?$ \_X \_\_\_ Gravel?  $X \longrightarrow MS-2$  Has stabilization of soil stockpiles been addressed? Are sediment trapping measures provided? \_X \_\_\_ MS—3 Has maintenance of permanent stabilization been addressed? X — MS-4 Are sediment trapping facilities to be constructed as a first step Has maintenance of practices been addressed? (I.E. repair of structures and removal of accumulated sediment) X \_\_\_\_ MS-5 Has stabilization of earthen structures been addressed? X = MS-6 Are sediment traps/basins required where needed? X \_\_\_ MS-7 Has stabilization of cut and fill slopes been adequately addressed? X \_\_\_ MS-8 Are paved flumes, channels, or slope drains required where necessary? X \_\_\_ MS-9 Have water seeps from slope face, adequate drainage or other protection addressed? \_X \_\_\_ MS-10 Is adequate inlet protection required on all operation storm sewer inlets? X \_\_\_ MS-11 Are channel lining and/or outlet protection required on stormwater conveyance channels? \_\_\_\_ X\_ MS-12 Are in-stream construction measures required so that channel damage is minimized? \_\_\_\_ \_X MS-13 Are temporary stream crossings of non-erodible material required where necessary? \_\_\_\_ \_X\_ MS—14 Are all applicable federal, state and local regulations pertaining to working in or crossing live watercourses being met? \_\_\_\_ \_X\_ MS-15 Has re-stabilization of areas subject to in-stream construction been adequately addressed? X \_\_\_ MS-16 Has stabilization of utility trenches been addressed? X \_\_\_ MS—17 Has the prevention of transporting of soil and mud onto public roadways been adequatel addressed? (i.e. Construction Entrances, Wash Racks, daily cleaning of roadways, transport of sediment to a trapping facility) <u>X</u> \_\_\_\_ MS-18 Has the removal of temporary practices been addressed? \_X \_\_\_ MS-19 Are properties and waterways downstream from the development adequately protected from erosion and sediment deposition due to increases in peak stormwater runoff?











ENGINEERING GROUPE PROJECT STATUS

0/02/20 REVISED PER TOWN COMMENTS

DATE: JULY, 2020 SCALE: **N/A** 

> FILE NO. **SP-393** SHEET **17** OF **41**

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DENAR H. C. ANTELO Lic. No. 38680 9/4/2020

DESIGNER: **CF,SO,MP** DRAFTSMAN: **ZEF,DP,MP** 

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NOTES

CONTROL

SEDIMENT

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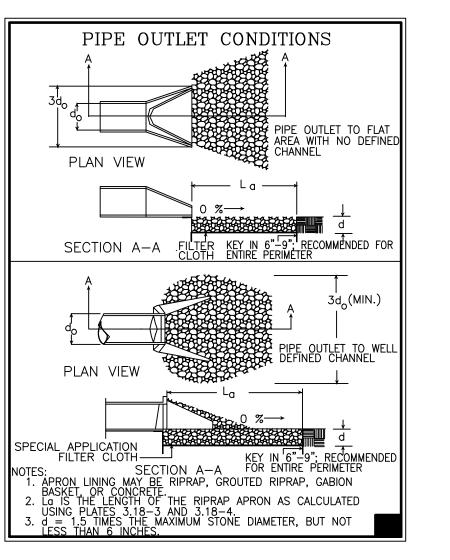
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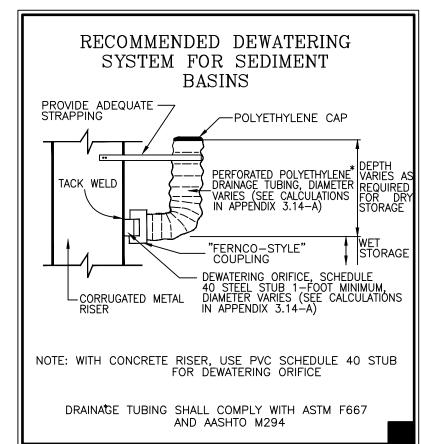
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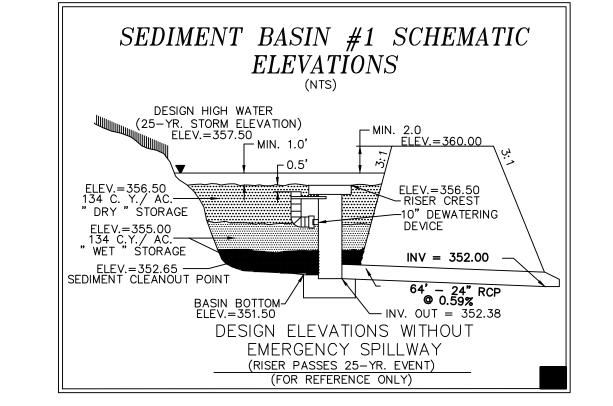
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TEMPORARY SEDIMENT BASIN DESIGN DATA SHEET
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PROJECT Robinson Village

BASIN# 1

TOTAL AREA DRAINING TO BASIN: 7.33 ACRES.

BASIN VOLUME DESIGN

#### WET STORAGE:

MINIMUM REQUIRED VOLUME = 67 CU. YDS. X TOTAL DRAINAGE AREA (ACRES) 67 CU. YDS/AC. x 7.33 ACRES. = 491.11 CU. YDS.

2. AVAILABLE BASIN VOLUME = 1047.61 CU. YDS. AT ELEVATION - 355.00 3. EXCAVATE 1048 CU. YDS. TO OBTAIN REQUIRED VOLUME\*.

\* ELEVATION CORRESPONDING TO REQUIRED VOLUME = INVERT OF THE DEWATERING ORIFICE

4. AVAILABLE VOLUME BEFORE CLEANOUT REQUIRED. 33.5 CU. YDS/AC. x 7.33 ACRES. = 245.56 CU. YDS.

5. ELEVATION CORRESPONDING TO CLEANOUT LEVEL = 352.65 FT. 6. DISTANCE FROM INVERT OF THE DEWATERING ORIFICE TO CLEANOUT LEVEL = 2.35 FT.

#### DRY STORAGE:

MINIMUM REQUIRED VOLUME = 67 CU. YDS. X TOTAL DRAINAGE AREA (ACRES) 67 CU. YDS/AC. x 7.33 ACRES. = 491.11 CU. YDS. 8. TOTAL AVAILABLE BASIN VOLUME AT CREST OF RISER\* = 1763.33 CU. YDS. AT ELEVATION - 356.50

9. DIAMETER OF DEWATERING ORIFICE = 10 IN. 10. DIAMETER OF FLEXIBLE TUBING = 12 IN.

\* MINIMUM = 134 CU. YDS./ACRE OF TOTAL DRAINAGE AREA. = 1538.72 CU. YDS.

PRELIMINARY DESIGN ELEVATIONS 11. CREST OF RISER = 356.50

TOP OF DAM = DESIGN OF HIGH WATER = 357.50 UPSTREAM TOE OF DAM = 351.50

BASIN SHAPE

12. <u>LENGTH OF FLOW</u> EFFECTIVE WIDTH 41.89090909 L/We = 6.6 FT.

BAFFLE NOT REQUIRED

Q2 = 12.47 CFS  $(Q = CIA = 0.35 \times 4.86 \times 7.33Ac)$ Q25 = 18.82 CFS (Q = CIA =  $0.35 \times 7.33 \times 7.33 \text{Ac}$ )

#### PRINCIPAL SPILLWAY DESIGN

15. WITH EMERGENCY SPILLWAY, REQUIRED SPILLWAY CAPACITY Qp = Q2 = 12.47 CFS. 16. WITHOUT EMERGENCY SPILLWAY, REQUIRED SPILLWAY CAPACITY Qp = Q25 = 18.82 CFS.

ASSUMED AVAILABLE HEAD (h) = 1 FT. (USING Q25) h = DESIGN HIGH WATER ELEVATION - CREST OF RISER ELEVATION = 357.50-356.50

(FROM PLATE 3.14-8) NOTE: AVOID ORIFICE FLOW CONDITIONS.

17. RISER DIAMETER (Dr) = N/A" ACTUAL HEAD (h) = 1.00 FT

18. BARREL LENGTH (L) = HEAD (H) ON BARREL THROUGH EMBANKMENT =

19. BARREL DIAMETER = 24" CMP (FROM TABLE 3.14-B [CONCRETE PIPE]) (FROM TABLE 3.14-A [METAL PIPE])

20. TRASH RACK AND ANTI-VORTEX DEVICE DIAMETER = N/A

(FROM TABLE 3.14-D)

EMERGENCY SPILLWAY DESIGN

HEIGHT = N/A

N/A 22. N/A

(FROM TABLE 3.14-C)

ANTI-SEEP COLLAR DESIGN N/A

23. DEPTH OF WATER AT PRINCIPAL SPILLWAY CREST (Y) = 5 FT SLOPE OF UPSTREAM FACE OF EMBANKMENT (Z) = 3 FT PER 1 FT VERTICAL

SLOPE OF PRINCIPAL SPILLWAY BARREL (Sb) = 0.0059 LENGTH OF BARREL IN SATURATED ZONE (Ls) = 35.8 FT 24. NUMBER OF COLLARS REQUIRED =

COLLAR SIZE = (FROM PLATE 3.14-12)

FINAL DESIGN ELEVATIONS

25. TOP OF DAM

DESIGN HIGH WATER 357.50 EMERGENCY SPILLWAY 356.50 PRINCIPAL SPILLWAY CREST DEWATERING ORIFICE INVERT 355.00 CLEANOUT ELEVATION 352.65 UPSTREAM TOE OF DAM 351.50

SOURCE: VA EROSION AND SEDIMENT CONTROL HANDBOOK, 1

\* SEE SHEET 25 FOR RISER AND TRASH RACK DETAILS

> Stage-Storage Stage-Storage: Conic Approximation Method

ENGINEER / DATE:

			Incremental	Total	Total	
	Devation	Area	Volume	Volume	Volume	
(SqFt)	(Feet)	(Acres)	(acre-feet)	(acre-feet)	(cubic-feet)	(Cubic-Yards)
4,665.00	351.50	0.107	0.000	0.000	0	0
5,960.00	352.00	0.137	0.061	0.061	2,650	98
9,375.00	354.00	0.215	0.349	0.410	17,856	661
11,520.00	355.00	0.264	0.239	0.649	28, 285	1,048
13,352.00	356.00	0.307	0.285	0.935	40,710	1,508
17,129.00	358.00	0.393	0.698	1.633	71,113	2,634
21,173.00	360.00	0.486	0.878	2.510	109,343	4,050

Diameter of dewatering orifice:

 $A = (Q)/(((64.32 \times .5h)^{.5})(.6))$ A = flow area of orifice  $d = 2 \times ((A/3.14)^{\circ}.5)$ d = diameter of circular orifice

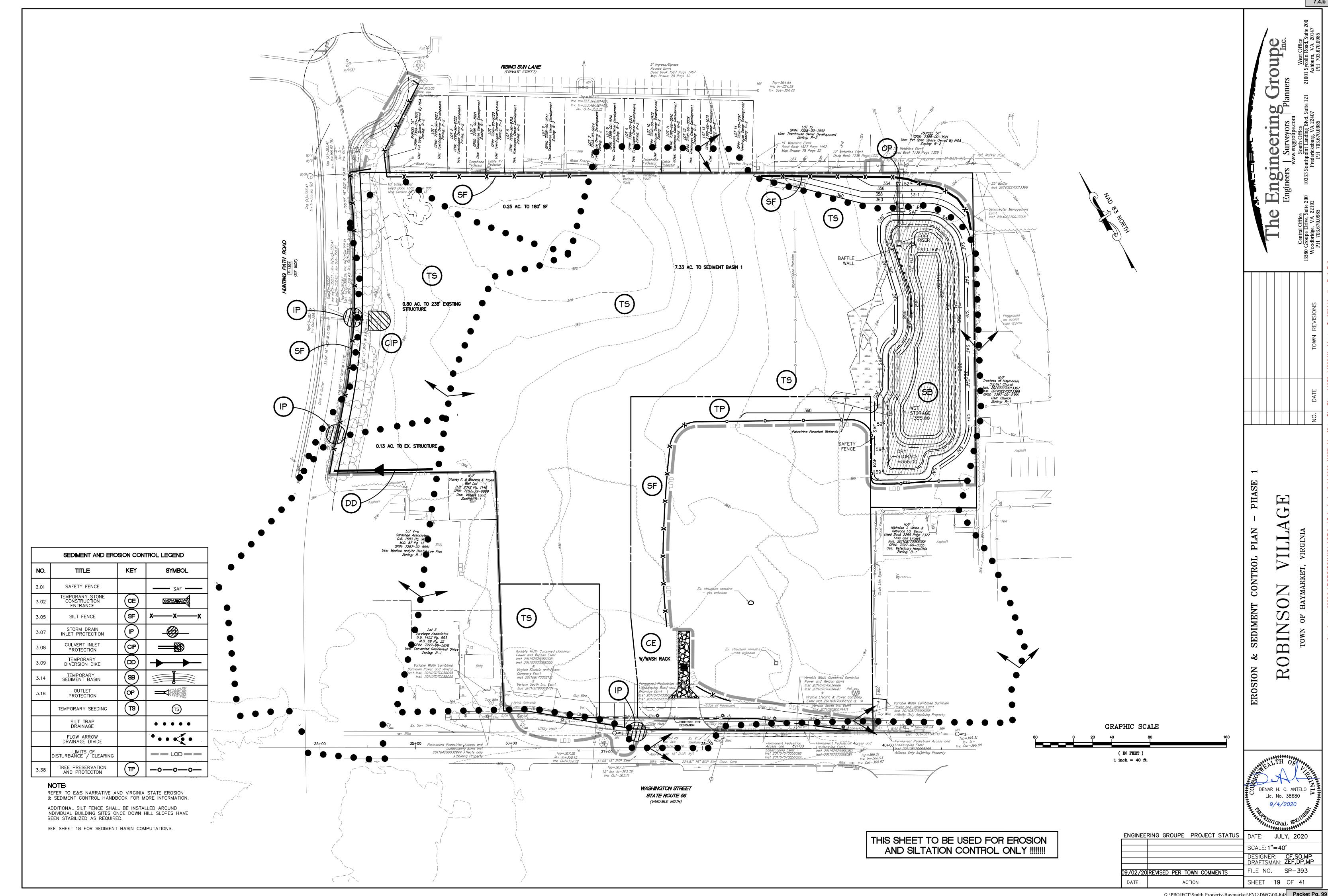
h=head= 356.50 - 355.00 Q = = 1.50 S = total storage available in dry storage = 1,763.33 cu. yds A = 0.53 0.82 feet Q = S/21,600 sec. d\*= d\*= 10 inches \* minimum of 3"

10 " diameter dewatering orifice will be used. Therefore a

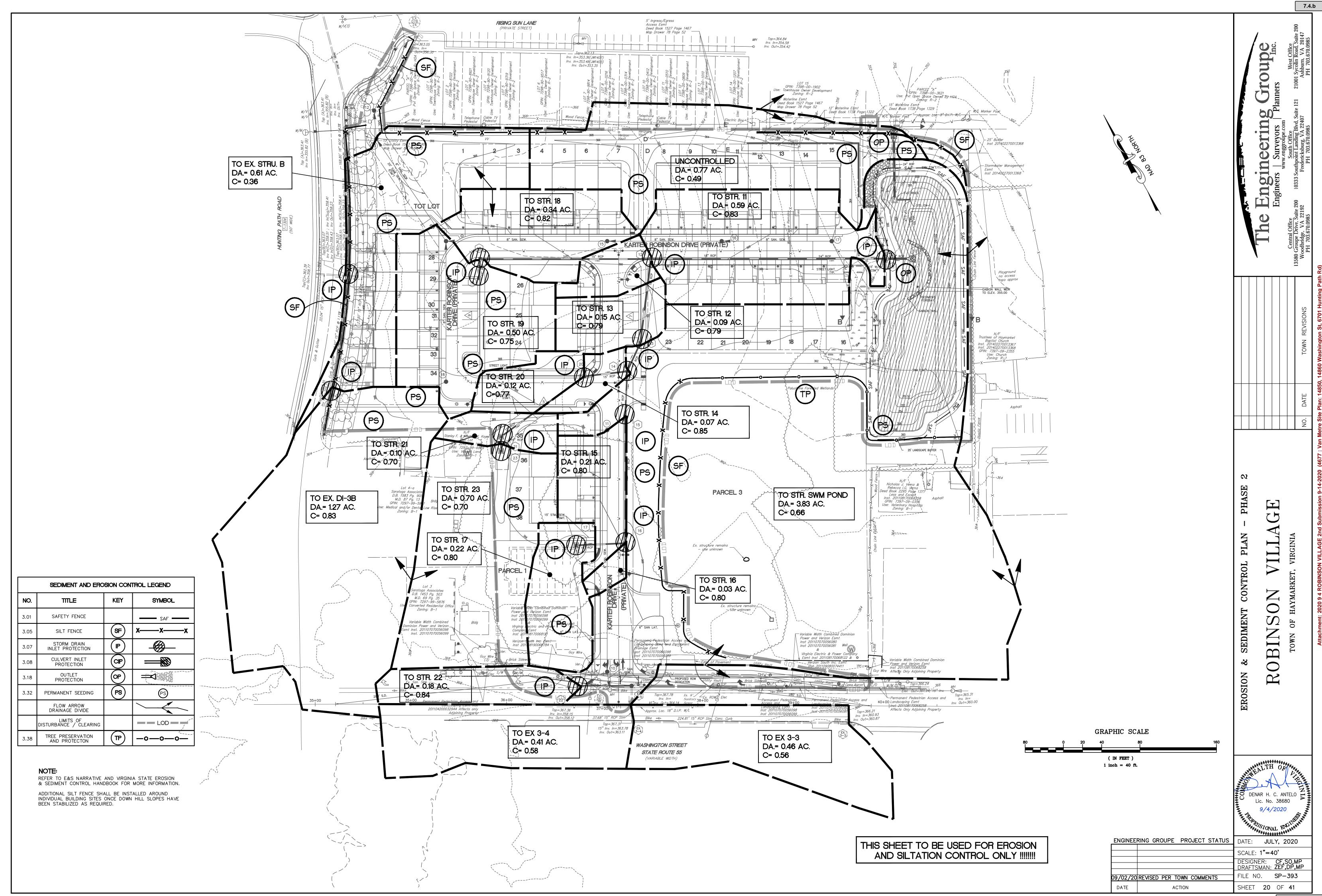
9/4/2020

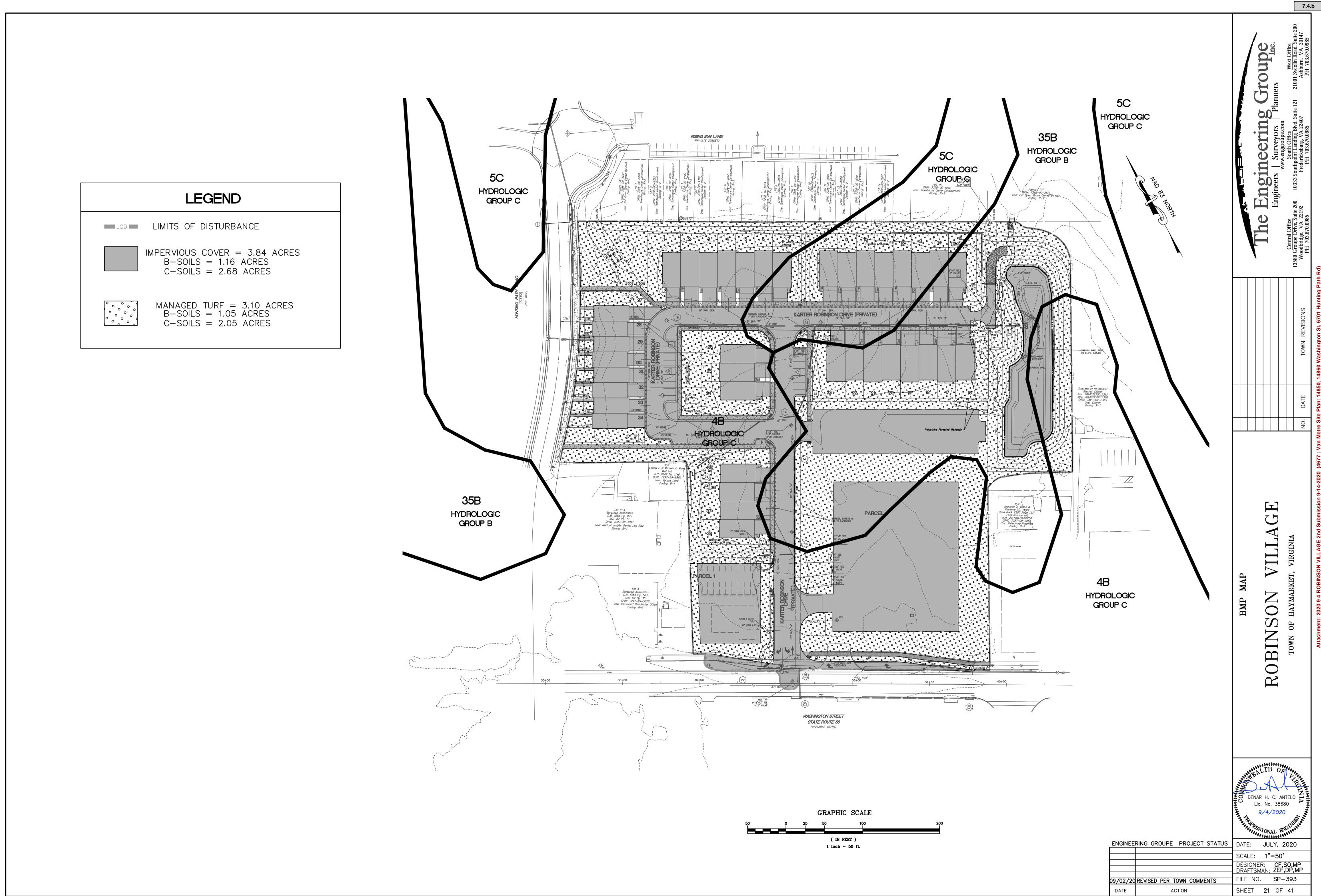
ENGINEERING GROUPE PROJECT STATUS DATE: JULY, 2020 DESIGNER: **CF,SO,MP** DRAFTSMAN: **ZEF,DP,MP** FILE NO. **SP-393** 09/02/20 REVISED PER TOWN COMMENTS SHEET 18 OF 41 ACTION

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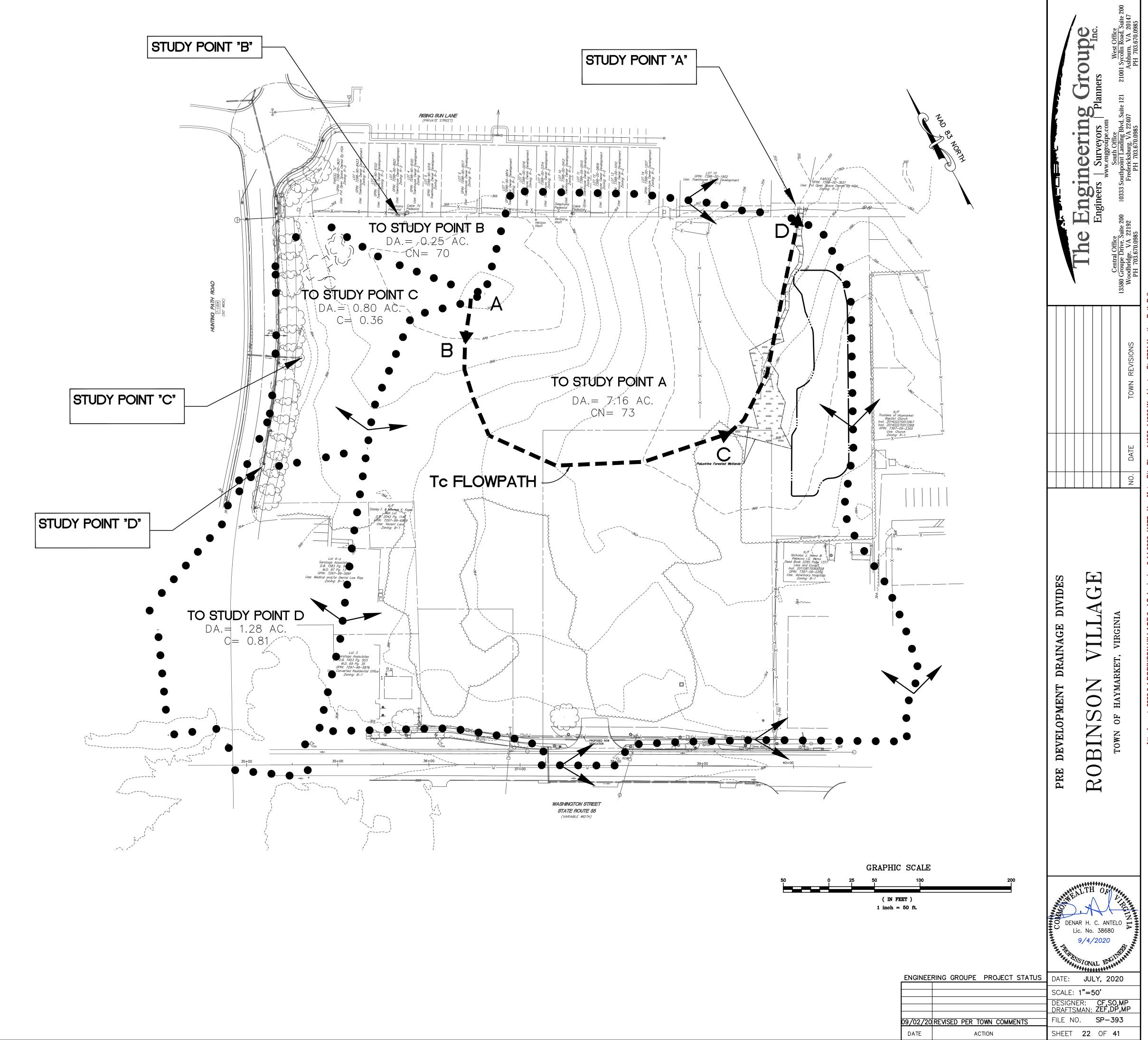
Prince William NOAA\_C County, Virginia
Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
PRE STUDY1Open space	. 5	(good		2.287	61
Open space	; grass cover > 75%	(good	) C	4.025	74
Paved park	ing lots, roofs, drivew	ays	В	.843	98
Total Area	/ Weighted Curve Numbe	r		7.16	73

#### SCS TIME OF CONCENTRATION (Tc)

Prince William NOAA\_C County, Virginia
Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
PRE STUDY1							
SHEET	50	0.0600	0.800				0.238
SHALLOW	365	0.0280	0.050				0.038
CHANNEL	249					3.500	0.020
				Ti	me of Conce	ntration	0.296



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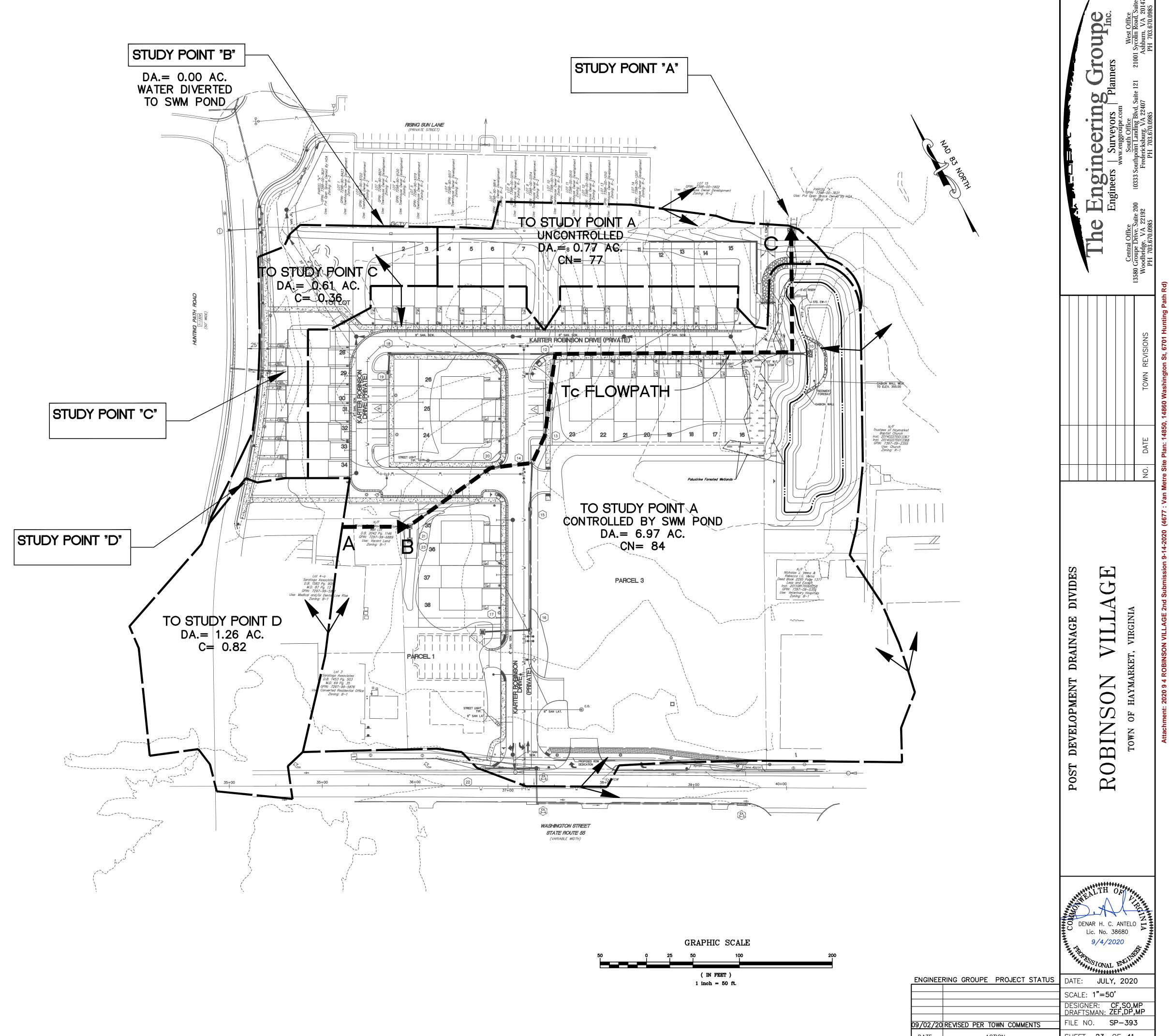
Sub-Area Identifie	r Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
SP.A.UNC.	Open space; grass cover > 75% Open space; grass cover > 75% Paved parking lots, roofs, driveways Paved parking lots, roofs, driveways		.119 .476 .026	61 74 98 98
	Total Area / Weighted Curve Number		.77 ===	77 ==
SP.A.POND	Open space; grass cover > 75% Open space; grass cover > 75% Paved parking lots, roofs, driveways Paved parking lots, roofs, driveways		1.097 2.32 1.218 2.338	61 74 98 98
	Total Area / Weighted Curve Number		6.97	84

#### SCS Time of Concentration (Tc)

Prince William NOAA\_C County, Virginia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
POST DEV SHEET CHANNEL	71 731	0.0230	0.240			10.000	0.177
				Ti	me of Conce	ntration	.197



SHEET **23** OF **41** ACTION G:\PROJECT\Smith Property-Haymarket\ENG\DWG\00-K4500 DRN Packet Pg. 103

7.4.b

9VAC25-870-54 of the Virginia Stormwater Management Program (VSMP) Permit Regulations requires that Stormwater Pollution Prevention Plan (SWPPP) be developed for all regulated land disturbing activities. The SWPPP must include, but not be limited to, an approved erosion and sediment control plan, an approved stormwater management plan, and this Pollution Prevention Plan (PPP) for regulated land disturbing activities, and a description of any additional control measures necessary to address a TMDL as applicable.

The plan for implementing pollution prevention measures during construction activities developed on this sheet must be implemented and updated as necessary. Any PPP requirements not included on this sheet must be incorporated into the SWPPP required by 9VAC25-870-54 that must be developed before land disturbance commences. This PPP identifies potential sources of pollutants that may reasonable be expected to affect the quality stormwater discharges from the construction site (both on- and off-site activities) and describes control measures that will be used to minimize pollutants in stormwater discharges from the construction site.

#### OTHER REFERENCED PLANS

SWPPP requirements may be fulfilled by incorporating, by reference, other plans. All plans incorporated by reference become enforceable under the VSMP Permit Regulations and General Permit VAR10 for Discharges of Stormwater from Construction Activities. If a plan incorporated by reference does not contain all of the required elements of the PPP, the operator must develop the missing elements and include them in the SMPPP.

Independent Plans Incorporated by Reference	Date Approved
Stormwater Management Plans (Regional or Master)	N/A
Erosion and Sediment - Control Plans	N/A
Off-Site Stockpile	N/A
Off-Site Borrow Area	N/A

#### **POTENTIAL POLLUTANT SOURCES**

The following sources of potential pollutants must be addressed in the Pollution Prevention Plan. Various controls and/or measures designed to prevent and/or minimize pollutants in stormwater discharges from the project site must be applied to the sources found on the site. Additional information concerning the following controls and/or measures may be found in the SWPPP. Deviations from the location criteria may be approved by the Town of Haymarket.

#### LEAKS, SPILLS, AND OTHER RELEASES

- ✓ The operator(s) shall ensure procedures are in place to prevent and respond to all leaks, spills and other releases of pollutants.
- ✓ The operator(s) shall ensure all leaks, spills and other releases of pollutant are contained and cleaned immediately upon discovery. Any contaminated materials are to be disposed in accordance with federal, state, and/or local requirements.
- ✓ The operator(s) shall ensure spill containment kits containing appropriate materials (e.g., absorbent material and pads, brooms, gloves, sand, etc.) are available at appropriate locations, including, but not limited to: designated areas for vehicle and equipment maintenance; vehicle and equipment fueling; storage and disposal of construction materials, products, and waste; and storage and disposal of hazardous and toxic materials; and sanitary waste facilities.
- ✓ The locations of the spill containment kits are identified as described below:

Date	Shown on Plan Sheet #(s)	Location	
Approved			
Plan	24	SPILL KIT	
		REVISIONS TO LOCATIONS	
Date	Shown on Plan Sheet #(s)	Location	Operator(s) Initials

√ The operator(s) shall notify the Department of Environmental Quality (DEQ) of leaks, spills, and other releases that discharge to or have the potential to discharge to surface waters immediately upon discovery of the discharge but in no case later than 24 after the discovery. Written notice of the discharge must be sent to DEQ and Prince William County Department of Public Works within five (5) days of the discovery.

Virginia Department of Environmental Qua	al
Northern Regional Office	
(703) 583-3800 (voice)	
(703)-583-3821 (fax)	
Website:	

http://www.deq.virginia.gov/Programs/Pollution ResponsePreparedness/MakingaReport.aspx For emergencies

1-800-468-8892 (outside normal working hours)

1 County Complex Court Prince William, Virginia 22192 703-792-6800 703-792-6813 (outside normal working hours)

Location

Initials

PW County Department of Fire & Rescue

#### **EQUIPMENT / VEHICLE WASHING**

- ✓ Washing must be conducted in a dedicated area that is located to maximize the distance from storm drain inlets, ditches, waterbodies or wetlands but no less than 50 feet from those features.
- ✓ All wash water used in vehicle wheel washing must be directed to a sediment
- ✓ All vehicle washing activities other than wheel washing must have secondary
- ✓ Each facility must have appropriate signage to inform users where the dedicated.

Activity	Location of Plan  Dedicated Area(s) Shown on Plan Sheet #(s)		Water Source Location		
Wheel Wash		24			
Other Wash Areas					
	REVISIO	NS TO LOCA	TIONS		
	Location of	Shown on	Water Source	Operator's	

Dedicated Area(s)

## **VEHICLE FUELING AND MAINTENANCE**

- ✓ Conduct regular maintenance in a *dedicated area* that is located to maximize the distance from storm drain inlets, ditches, waterbodies or wetlands but no less than 50 feet from those features.
- ✓ If fueling is conducted at a **dedicated** area, the location must be located to maximize the distance from storm drain inlets, ditches, waterbodies or wetlands but
- no less than 50 feet from those features. √ The dedicated areas must be designed to eliminate the discharge of spilled and. leaked fuels and chemicals from vehicle fueling and maintenance activities by
- providing secondary containment (spill berms, decks, spill containment pallets, providing cover where appropriate, and having spill kits readily available).
- ✓ Each facility must have appropriate signage to inform users where the dedicated. area(s) are located.

Date	Shown on Plan Sheet #(s)	Location of <i>Dedicated Area(s)</i>
Approved Plan		
		REVISIONS TO LOCATIONS

Shown on Operator's Date Plan Location of **Dedicated Area(s)** VEHICLE FUELING AND MAINTENANCE CELL

- ✓ If mobile fueling will be used, the fueling must be done in an area that is located to maximize the distance from storm drain inlets, ditches, waterbodies or wetlands but no less than 50 feet from those features.
- Spill kits must be readily available at all mobile fueling locations.
- ✓ On-site storage tanks must have a means of secondary containment (spill berms, decks, spill containment pallets, etc.) and must be covered where appropriate.
- ✓ All vehicles on site must be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage.

#### DISCHARGE FROM STORAGE, HANDLING, AND DISPOSAL OF CONSTRUCTION PRODUCTS, MATERIALS, AND WASTE

- ✓ Storage of construction products, materials, and waste is to be conducted in dedicated areas.
- ✓ The **dedicated area** must be located to maximize the distance from storm drain inlets, ditches, waterbodies or wetlands but no less than 50 feet from those features. Separations of less than 50 feet may be approved by the Public Works Site
- ✓ The dedicated areas must be designed to minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials and wastes including (i) building products such as asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures; (ii) pesticides, herbicides, insecticides, fertilizers, and landscape materials; and (iii) construction and domestic wastes such as packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, Styrofoam, concrete and other trash or building
- ✓ Each facility must have appropriate signage to inform users where the dedicated. area(s) are located.

Date	Shown on Plan Sheet #(s)	Location(s) of <b>Dedicated Area(s)</b> for waste from construction products and materials		
Approved Plan				
		REVISIONS TO LOCATIONS		
Date	Shown on Plan Sheet #(s)	Location(s) of <b>Dedicated Area(s)</b> for waste from construction products and materials	Operator(s) Initials	
	24	STORAGE CELL AREA		

- ✓ Follow all federal, state, and local requirements that apply to the use, handling and disposal of pesticides, herbicides, and fertilizers.
- √ Keep chemicals on-site in small quantities and in closed, well marked containers.
- ✓ Clean up solid waste, including building materials, garbage, and debris on a daily basis and deposit into covered dumpsters that are periodically emptied.
- ✓ Schedule waste collection to prevent exceeding the capacity of onsite containers. Additional containers may be necessary depending on the phase of construction (e.g., demolition, etc.)
- ✓ Dispose of all solid waste at an authorized disposal site.
- ✓ Ensure that containers have lids or are otherwise protected from exposure to

#### DISCHARGES FROM OTHER POTENTIAL POLLUTANT SOURCES

✓ Discharges from other pollutant sources (e.g., water line flushing, storm sewer flushing, above ground storage tanks, etc.) not mentioned elsewhere must be addressed.

Other Potential Pollutant Sources	Location(s) of Potential Pollutant Sources

- ✓ Above ground oil storage tanks with a storage capacity exceeding 1,320 gallons and have a reasonable expectation of a discharge into or upon Waters of the United States are required to have a Spill Prevention Control and Countermeasure (SPCC)
- √ The discharge of contaminated flush water and material removed during flushing. operations must be collected and disposed of in accordance with appropriate federal, state, and local requirements.

## DISCHARGES FROM CONCRETE RELATED

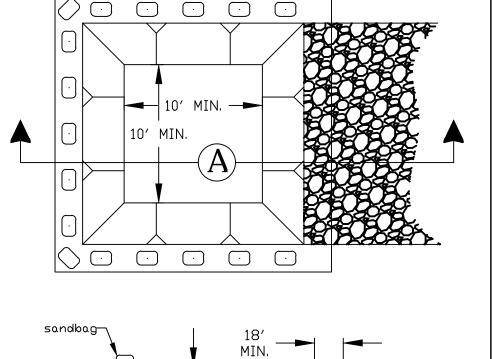
- ✓ Concrete trucks are not allowed to wash out or discharge surplus concrete or drum wash water on site except in a dedicated area(s) that is located to prevent discharge to storm drain inlets, ditches, waterbodies or wetlands but no less than 50 feet from those features.
- ✓ Each facility must have a stabilized access to prevent mud tracking into the street. ✓ Each facility must have appropriate signage to inform users where the *dedicated*

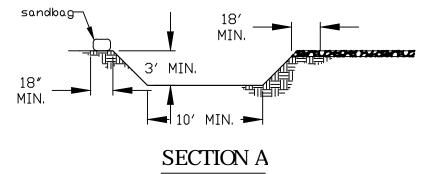
WASH ACTIVITIES

Date	Plan Sheet #(s)	Location of <i>Dedicated Area(s)</i>		
Approved Plan				
		REVISIONS TO LOCATIONS		
Date	Shown on Plan Sheet #(s)	Location of <b>Dedicated Area(s)</b>	Operator's Initials	
	24	CONCRETE WASHOUT		

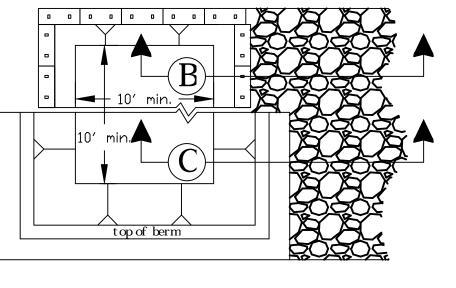
Facilities must be cleaned, or new facilities constructed, once the washout area i two-thirds (2/3) full.

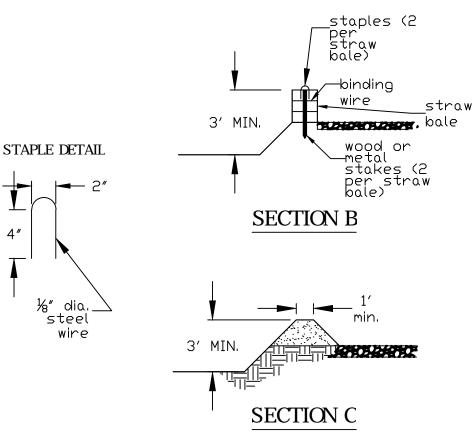
## BELOW GRADE CONCRETE WASHOUT AREA





#### ABOVE GRADE CONCRETE WASHOUT AREA





## **CONCRETE WASHOUT AREA NOTES**

- The facility must be lined with 10 mil plastic lining that is free from holes, tears, or
- other defects that might compromise the material's impermeability. The lining must be anchored with staples (2' spacing) or sandbags. Side slopes must be 1:1 (horizontal:vertical) or flatter.
- Stone access must be provided between the street and the concrete washout area.
- A "Concrete Washout" sign must be installed within 30 feet of the washout facility. The sign must be no smaller than 2' tall by 4' wide.

#### DISCHARGES OF SOAPS, DETERGENTS, SOLVENTS, AND WASH WATER FROM CONSTRUCTION ACTIVITIES SUCH AS CLEANUP OF STUCCO, PAINT, FORM RELEASE OILS, AND CURING COMPOUNDS

- ✓ Washing activities associated with construction activities other than vehicle and equipment washing, such as clean up of stucco, paint, form release oils, and curing compounds are to be conducted in a dedicated area.
- √ The dedicated area must be located to maximize the distance from storm drain. inlets, ditches, waterbodies or wetlands but no less than 50 feet from those features. Separations of less than 50 feet may be approved by the Public Works Site
- √ The dedicated areas must be designed to prevent the discharge of soaps, detergents, solvents, and wash water.

	Date	Shown on Plan Sheet #(s)	Location(s) of <i>Dedicated Area(s)</i>	
•	Approved Plan			
			REVISIONS TO LOCATIONS	
	Date	Shown on Plan Sheet #(s)	Location(s) of <b>Dedicated Area(s)</b>	Operato Initial
		24	MISC. DISCHARGE CELLS	
3				

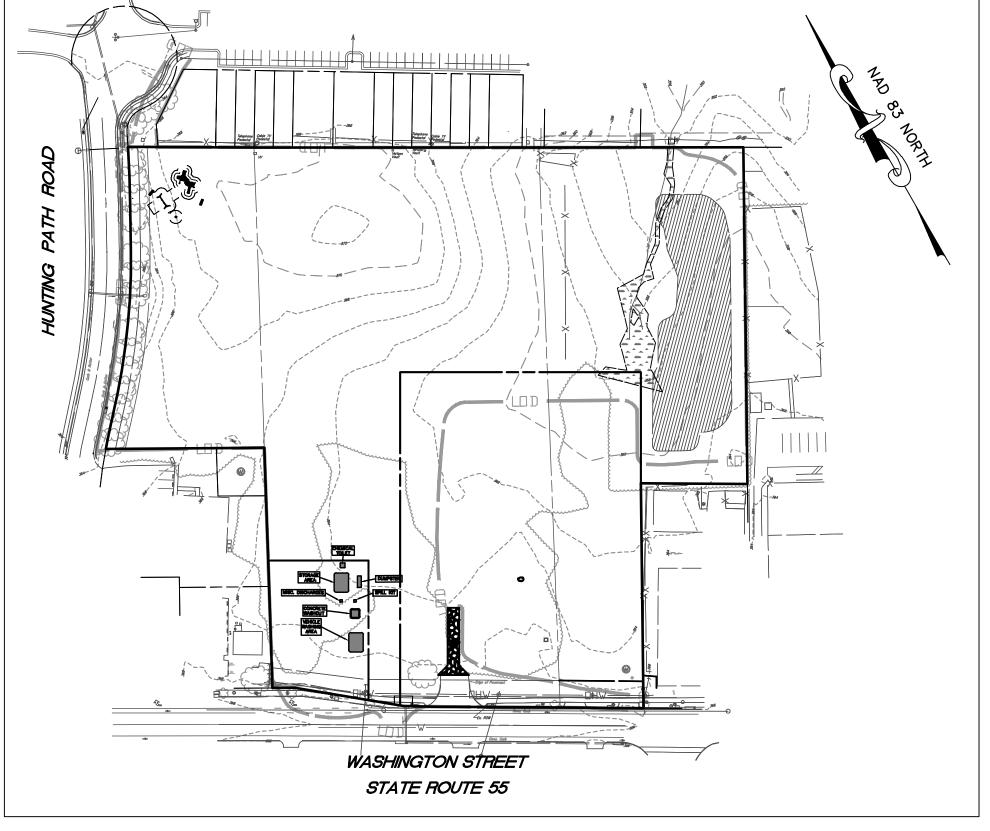
- ✓ The *dedicated area* must be covered (e.g., plastic sheeting, temporary roof, etc.) to prevent contact with stormwater.
- disposal by a waste hauler or discharged to the sanitary sewer.
- √ The contaminated wastewater from the dedicated area must be collected for

#### DISCHARGES OF HAZARDOUS, TOXIC, AND SANITARY WASTE

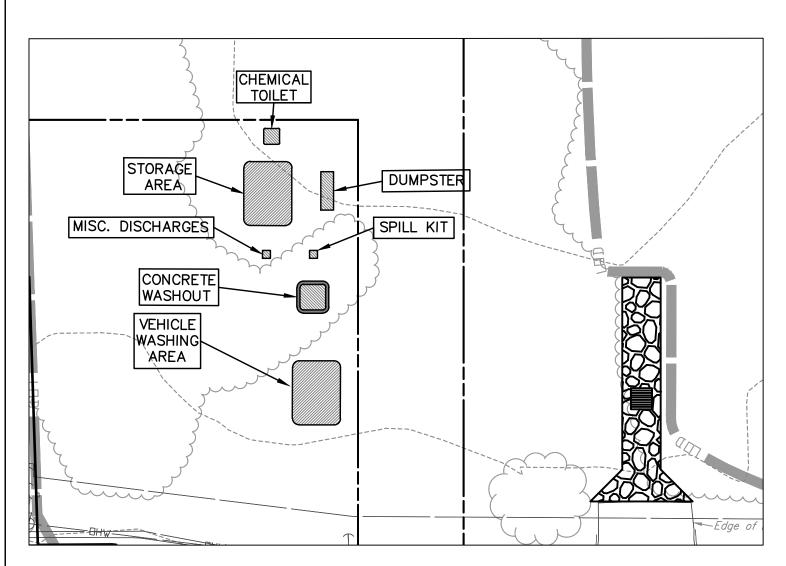
- ✓ Storage and disposal of hazardous, toxic and sanitary wastes are to be conducted in
- dedicated areas. ✓ The **dedicated areas** must be located to maximize the distance from storm drain inlets, ditches, waterbodies or wetlands but no less than 50 feet from those features. Separations of less than 50 feet may be approved by the Public Works Site
- ✓ The *dedicated areas* must be designed to prevent the discharge of hazardous, toxic and sanitary waste by avoiding contact with precipitation
- ✓ Each facility must have appropriate signage to inform users where the *dedicated* area(s) are located.

Date	Shown on Plan Sheet #(s)	Location(s) of <b>Dedicated Area(s)</b> for storage are hazardous and toxic wastes	ıd disposal o
Approved Plan			
		REVISIONS TO LOCATIONS	
Date	Shown on Plan Sheet #(s)	Location(s) of <b>Dedicated Area(s)</b> for storage and disposal of hazardous and toxic wastes	Operator(s) Initials
	24	MISC. DISCHARGE CELLS	
	Approved Plan	Date Plan Sheet #(s)  Approved Plan  Shown on Plan Sheet #(s)	Date Plan Sheet #(s)  Approved Plan  Date Plan  REVISIONS TO LOCATIONS  Date Shown on Plan Sheet #(s)  Sheet #(s)  Location(s) of Dedicated Area(s) for storage and disposal of hazardous and toxic wastes

- ✓ Consult with local waste management authorities or private firms about the requirements for disposing of hazardous materials and/or soils that may be contaminated with hazardous materials.
- √ Never remove the original product label from the container. Follow the manufacturer's recommended method of disposal.
- ✓ Schedule periodic pumping of portable toilets and dispose of waste
- ✓ Dispose of all solid waste at an authorized disposal site.



SCALE: 1' = 100'



SCALE: 1' = 30'



ENGINEERING GROUPE PROJECT STATUS

JULY, 2020 09/02/20 REVISED PER TOWN COMMENTS

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PLAN

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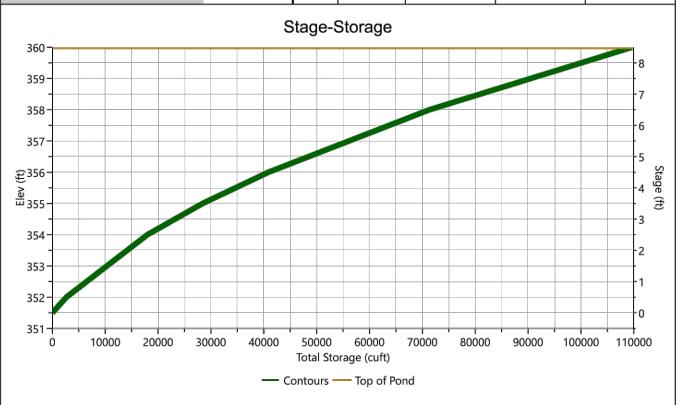
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PREV

SCALE: **AS SHOWN** FILE NO. **SP-393** SHEET **24** OF **41** 

#### Pond 1 Stage-Storage

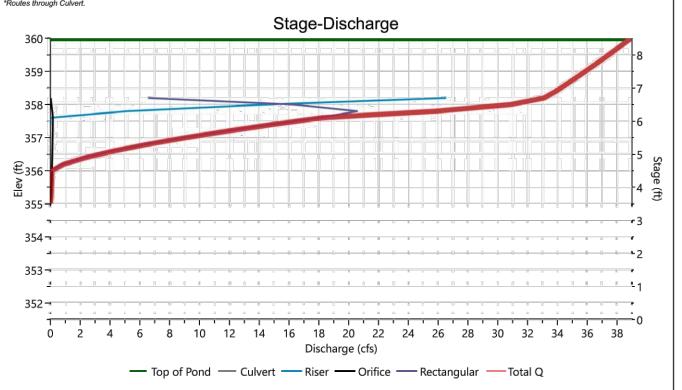
User Defined Contou	rs		Stage / Storage Table					
Description	Input	Stage (ft)	Elevation (ft)	Contour Area (sqft)	Incr. Storage (cuft)	Total Storage (cuft)		
Bottom Elevation, ft	351.50							
Voids (%)	100.00	0.00	351.50 352.00	4,665 5,960	0.000 2,656	0.000 2,656		
Volume Calc	None	2.50	354.00	9,375	15,335	17,991		
volume Calc	None	3.50	355.00	11,520	10,448	28,439		
		4.50	356.00	13,352	12,436	40,875		
		6.50	358.00	17,129	30,481	71,356		
		8.50	360.00	21,173	38,302	109,658		
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Pond Report	Project Name:
Hydrology Studio v 3.0.0.14	06-19-2020

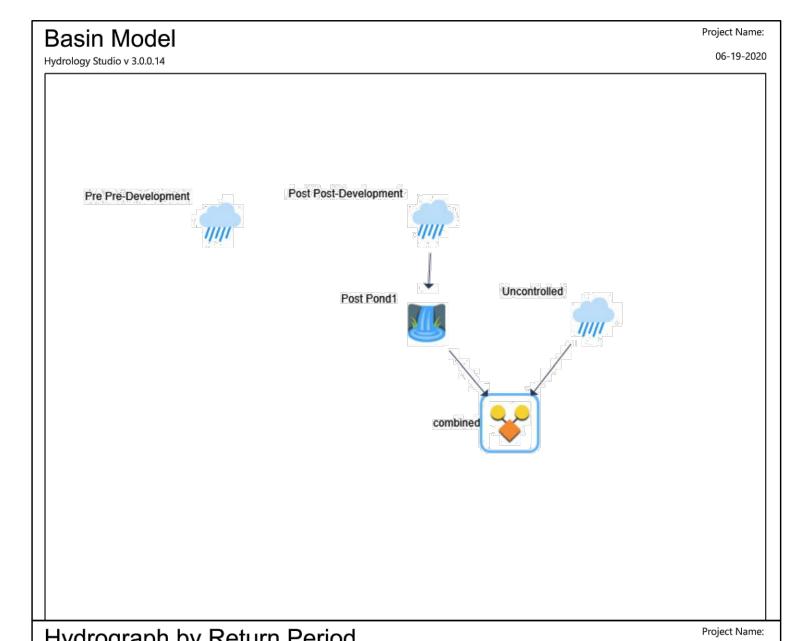
Pond 1	Stage-Discharge

Code and / Onifican	0.14		Orifices	Orifica Blata	
Culvert / Orifices	Culvert	1*	2	3	Orifice Plate
Rise, in	24	2			Orifice Dia, in
Span, in	24	2			No. Orifices
No. Barrels	1	1			Invert Elevation, ft
Invert Elevation, ft	352.38	355.00			Height, ft
Orifice Coefficient, Co	0.60	0.60			Orifice Coefficient, Co
Length, ft	64				
Barrel Slope, %	.59				
N-Value, n	0.013				
\A/-:	D:+		Weirs		A., -:!!
Weirs	Riser*	1*	2	3	Ancillary
Shape / Type	Box	Rectangular			Exfiltration, in/hr
Crest Elevation, ft	357.6	356			Tailwater Elevation, ft
Crest Length, ft	17.3	2.7			
Angle, deg					
Weir Coefficient, Cw	3.3	3.3			



Pond Report  ydrology Studio v 3.0.0.14														06-19-202				
Pond 1										toraç	ge-Disc	harge	e Sum	mary				
Stage	Elev.	Storage	Culvert	C	Orifices, cf	's	Riser	Weirs, cfs		Weirs, cfs		Weirs, cfs		s, cfs Pf Ris		Exfil (cfs)	User (cfs)	Total (cfs)
(ft)	(ft)		(cfs)	1	2	3	(cfs)	1	2	3	(cfs)							
0.00	351.50	0.000	0.000	0.000			0.000	0.000						0.000				
0.50	352.00	2,656	0.000	0.000			0.000	0.000						0.000				
2.50	354.00	17,991	0.000	0.000			0.000	0.000						0.000				
	355.00	28,439	0.000	0.000			0.000	0.000						0.000				
3.50			0.404	0.101			0.000	0.000						0.101				
3.50 4.50	356.00	40,875	0.101 ic	0.101														

## 100-YEAR POST DEVELOPMENT HEC-1 ROUTING: POND 1



Hyd.	Hydrograph	Hydrograph		Peak Outflow (cfs)								
No.	Туре	Name	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr		
1	NRCS Runoff	Pre Pre-Development	4.176	6.814			16.39			39.29		
2	NRCS Runoff	Post Post-Development	11.32	15.58			29.40			58.33		
3	Pond Route	Post Pond1	0.907	2.772			12.95			33.90		
4	NRCS Runoff	Uncontrolled	0.980	1.439			3.016			6.589		
5	Junction	combined	1.047	2.955			13.38			36.43		

L									
	Hydi	rograph F	Report				Pro	oject Name:	
ı	Hydrology	Studio v 3.0.0.14						06-19-2020	,

Hyd. No. 5

## combined

Hydrograph Type	= Junction	Peak Flow	= 1.047 cfs		
Storm Frequency Time Interval	= 1-yr = 2 min	Time to Peak	= 11.97 hrs = 30,872 cuft		
		Hydrograph Volume			
Inflow Hydrographs		Total Contrib. Area	= 0.77 ac		
2	Qp = 1.0	05 cfs			
2					
1.9					
1.8					
1.7					
1.7					
1.6					
1.5					
1.4					
-					
1.3					
1.2					
1.1					
(Sy) 1	<u> </u>				
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0 <del>-իկկկկկկկկկկ</del> 01234567891 <b>0</b> 1	//////////////////////////////////////	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	<del>๚๚๚๚๚๚๚๚๚๚๚๚</del> <b>456789888888688</b> 9		
		ne (hrs)			
	— Pond1 — Uncont	rolled — combined			

-	ydrograph 1-yr Summary ology Studio v 3.0.0.14											
Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)				
1	NRCS Runoff	Pre Pre-Development	4.176	12.10	15,035							
2	NRCS Runoff	Post Post-Development	11.32	12.00	29,523							
3	Pond Route	Post Pond1	0.907	12.93	28,899	2	356.20	43,920				
4	NRCS Runoff	Uncontrolled	0.980	11.97	1,973							
5	Junction	combined	1.047	11.97	30,872	3, 4						

#### MAINTENANCE NOTES

#### **Maintenance Inspections**

undercutting.

Maintenance of a wet pond is driven by annual inspections that evaluate the condition and performance of the pond, including the following:

- · Measure sediment accumulation levels in the forebay.
- Monitor the growth of wetland plants, trees and shrubs planted. Record the species and their
- approximate coverage, and note the presence of any invasive plant species. • Inspect the condition of stormwater inlets to the pond for material damage, erosion or
- Inspect the banks of upstream and downstream channels for evidence of sloughing, animal burrows, boggy areas, woody growth, or gully erosion that may undermine embankment
- Inspect the pond outfall channel for erosion, undercutting, rip-rap displacement, woody growth, etc.
- Inspect the condition of the principal spillway and riser for evidence of spalling, joint failure, leakage, corrosion, etc.
- Inspect the condition of all trash racks, reverse-sloped pipes, or flashboard risers for evidence
- of clogging, leakage, debris accumulation, etc. • Inspect maintenance access to ensure it is free of woody vegetation, and check to see whether valves, manholes and locks can be opened and operated.
- Inspect internal and external side slopes of the pond for evidence of sparse vegetative cover, erosion, or slumping, and make needed repairs immediately.

Based on inspection results, specific maintenance tasks will be triggered. Example maintenance inspection checklists for Wet Ponds can be accessed in Appendix C of Chapter 9 of the Virginia Stormwater Management Handbook (2010).

#### Table 14.6. Typical Wet Pond Maintenance Tasks and Frequency

Maintenance Items <sup>1</sup>	Frequency <sup>1</sup>
<ul><li>Remove debris and blockages</li><li>Repair undercut, eroded, and bare soil areas</li></ul>	Quarterly or after major storms (>1 inch of rainfall)
Mowing embankment	Twice a year
<ul> <li>Shoreline cleanup to remove trash, debris and floatables</li> </ul>	
A full maintenance inspection	Annually
<ul> <li>Open up the riser to access and test the valves</li> </ul>	
Repair broken mechanical components, if needed	
Pond buffer and aquatic bench reinforcement plantings	One time –during the second year following construction
Forebay Sediment Removal	Every 5 to 7 years
Repair pipes, the riser and spillway, as needed	From 5 to 25 years

#### <sup>1</sup>Maintenance items and required frequency should be verified with local requirements

#### Common Ongoing Maintenance Tasks

Maintenance is needed so stormwater ponds continue to operate as designed on a long-term basis. Routine stormwater pond maintenance, such as removing debris and trash, is needed several times each year (See Table 14.6). More significant maintenance (e.g., removing accumulated sediment) is needed less frequently but requires more skilled labor and special equipment. Inspection and repair of critical structural features (e.g., embankments and risers) needs to be performed by a qualified professional (e.g., a structural engineer) who has experience in the construction, inspection, and repair of these features.

The maintenance plan should clearly outline how vegetation in the pond and its buffer will be managed or harvested in the future. Periodic mowing of the stormwater buffer is only required along maintenance rights-of-way and the embankment. The remaining buffer can be managed as a meadow (mowing every other year) or forest. The maintenance plan should schedule a shoreline cleanup at least once a year to remove trash and floatables.

#### **Buoyancy Computations** Rectangular Riser with Rectangular Base Smith Property Project: = 357.60 ft Top of Riser Elevation (ft) 5.00 ft Inside Length (ft) Inside Width (ft) 5.00 ft. Riser Wall Thickness (in) 8.00 in BMP Elevation (ft) 356.00 ft = 352.38 ft Culvert Invert (ft) = D ft Base Depth (ft) 8.33 ft. (Typically = Inside Length + 2\*Wall Thickness + 2') Base Length 8.33 f (Typically = Inside Width + 2\*Wall Thickness + 2') Base Width = 2.5 f Avg. Soil Ht. over Base = 35 pcf Bouyant Soil Wt. = 1.3 Factor of Safety at Against Flotation Wt. of Riser = ((Outside Area) - (Inside Area)) x height x 150 pcf 40.11 - 25.00 x 5.22 x 150 69.39 x D x 150 10408 x D Wt of Ballast = Base Area x D x 150 pcf Wt of Soil = (Base Area-Riser Area) x (ht x wt. of soil) 40.11 | x | 2.5 | x | 35 2562 = 69.39 Wt of Water Displaced By Riser = Riser Area x Height x 62.4 pcf 40.11 x 5.22 x 62.4 13065 Wt of Water Displaced By Ballast = Base Area x D x 62.4 pcf 69.39 x D x 62.4 4330 x D Wt of Riser + Wt. of Ballast + Wt. Of Soil 11832 | + |10408.335\*D | + | 2562 | Wt of Water (Riser) + Wt of Water(Ballast) 13065 + 4329.86736\*D Ballast Depth for FS =1.3 0.54 ft 0.75 ft (Value Rounded in 3 inch increments; min. depth = 0.5 ft.)

Sedimen	t Forebay			
Water Q	uality Volume (WQV)= (In	np Area x 1/4 in / 12in)	V( r)=	3267 cf
	(Imp. Area =	3.6 AC.)		0.08 ac-1
	Min. WQV = Imp. Are	a x 0.1 in =	•	1307 cf
	iviin. vvQv = imp. Are	a x 0.1 m =		0.03

Sealment Fore	ebay volume	<del>)</del>		
Elevation	Area	Incremental	Total	Total
		Volume	Volume	Volume
(Feet)	(sq.ft.)	(cu.ft.)	(cu.ft.)	(ac.ft.)
351.5	208.88	0.0000	0.0000	0.0000
352	338.33	136	136	0.0031
354	636.12	959	1094	0.0251
355	807.38	720	1814	0.0417

ENGINEERING GROUPE PROJECT STATUS DATE: JULY, 2020

SCALE: N/A 09/02/20 REVISED PER TOWN COMMENTS

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FILE NO. **SP-393** 

SHEET **25** OF **41** 

ALL JOINTS BETWEEN PRECAST RISER SEGMENTS SHALL BE MADE WATER TIGHT. ADJUST REBAR SPACING AROUND OFFSET PEDESTAL AND SLUICE GATE OPERATING WHEEL TO PROVIDE ADEQUATE CLEARANCE FOR OPENING & CLOSING REBAR GATE.

#### SEDIMENT BASIN CONVERSION NARRATIVE

FOR SEDIMENT CONVERSION TO PERMANENT SWM POND. THE SEDIMENT BASIN MUST BE CAREFULLY DEWATERED. ONCE SEDIMENT BASIN HAS BEEN SUCCESSFULLY DEWATERED AND THE SLURRY HAS DRIED, DEMUCKING CAN BEGIN. SEDIMENT MUST BE DISPOSED OFF APPROPRIATELY. FOLLOWING SEDIMENT DISPOSAL TEMPORARY DEWATERING DEVICE IS TO BE REMOVED WITH THE TOWN INSPECTORS APPROVAL. 10" DEWATERING ORIFICE IS TO BE PLUGGED. WEIR SLOTS MUST BE DE-BRICKED TO SWM POND DESIGN ELEVATION.

#### NOTES:

- 1. THE DIMENSIONS AND ELEVATIONS SHOWN ON THIS SHEET ARE FOR GENERAL INFORMATION PURPOSES REGARDING THE HYDRAULIC FUNCTION OF THE RISER STRUCTURES. ACTUAL STRUCTURAL DRAWINGS, WALL/FOUNDATION THICKNESS, FOUNDATION DEPTH, STEEL REINFORCEMENT, AND STEEL PLATE ANCHORS ARE TO BE DESIGNED UNDER SEPARATE COVER BY A LICENSED STRUCTURAL AND
- 2. ACTUAL FOUNDATION DEPTHS AND DIMENSIONS ARE TO BE DETERMINED BY A LICENSED GEOTECHNICAL ENGINEER. FOR MIN. FOUNDATION DEPTHS, SEE BOUYANCY COMPUTATIONS.
- 3. ALL RISER JOINTS AND CONNECTIONS ARE TO BE WATERTIGHT.
- 4. ADJUST REBAR SPACING AROUND OFFSET PEDESTAL AND SLUICE GATE OPERATING WHEEL TO PROVIDE ADEQUATE CLEARANCE.
- 5. THE 12" DIP DRAWDOWN PIPE SHALL BE ANGLED SUCH THAT IT ENTERS THE RISER STRUCTURE PERPENDICULAR TO WALL FACE.
- 6. ALL STEEL REBAR AND ANGLES SHALL BE GALVANIZED AND PAINTED ACCORDING TO VDOT ROAD & BRIDGE SPECIFICATIONS, SECTIONS 231.03 AND 411.06. PAINT COLOR SHALL BE BLACK.
- 7. SEEPAGE CONTROLS AND EMBANKMENT STABILITY PER GEOTECHNICAL RECOMMENDATIONS.
- 8. GEOTECHNICAL ENGINEER TO DETERMINE SUITABLE FILL MATERIAL AND COMPACTION.
- 9. GEOTECHNICAL CONSULTANT TO SPECIFY DAM EMBANKMENT MATERIAL, SEEPAGE CONTROL DEVICES, CUT-OFF TRENCH DESIGN CULVERT BEDDING REQUIREMENTS AND OTHER APPROPRIATE GEOTECHNICAL DESIGN REQUIREMENTS.
- 10. MAINTENANCE OF MECHANICAL EQUIPMENT FOR SWM FACILITY SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

## DAM CONSTRUCTION NOTES:

- 1. GEOTECHNICAL CONSULTANT TO SPECIFY DAM EMBANKMENT MATERIAL, SEEPAGE CONTROL DEVICES, CUT-OFF TRENCH DESIGN, CULVERT BEDDING REQUIREMENTS, AND OTHER APPROPRIATE GEOTECHNICAL DESIGN REQUIREMENTS.
- 2. FOUNDATION AND ABUTMENT AREA EXTENDING 10' BEYOND DAM FOOTPRINT SHALL BE CLEARED, GRUBBED & STRIPPED OF ALL VEGETATION TOPSOIL AND/OR ORGANIC SOIL & OTHER UNSUITABLE

TO PLACING COMPACTED FILL. ROCK SUBGRADES SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR OR ENGINEER PRIOR TO PLACEMENT OF FILL

- 3. AFTER CLEARING, GRUBBING, STRIPPING AND REMOVING ANY OTHER UNSUITABLE MATERIALS, THE SUBGRADE SHALL BE PROOFROLLED WITH COMPACTION EQUIPMENT UNDER THE OBSERVATION OF A QUALIFIED ENGINEER. THE COMPACTION EQUIPMENT SHOULD BE THE HEAVIEST POSSIBLE EQUIPMENT THAT WILL NOT CAUSE DISTURBANCE OF SUITABLE SUBGRADE SOILS. EXCESSIVELY SOFT OR UNSUITABLE MATERIALS SHALL BE REMOVED AND REPLACED WITH COMPACTED FILL. WHERE ROCK IS EXPOSED AFTER STRIPING OR UNDERCUTTING, ALL LOOSE ROCK MATERIAL SHALL BE REMOVED PRIOR
- 4. COMPACTED FILL SHALL NOT BE PLACED PRIOR TO PERFORMING THE REQUIRED FOUNDATION AND ABUTMENT PREPARATION, OR ON ANY FROZEN SURFACE. COMPACTED FILL SHALL EXTEND TO THE FILL LIMIT LINES AND GRADES INDICATED BY THE APPROVED CONSTRUCTION PLAN. COMPACTED FILL MATERIAL SHALL BE OF THE TYPE CLASSIFICATION SYMBOL SPECIFIED BY THE GEOTECHNICAL CONSULTANT OR OF A BETTER QUALITY MATERIAL AS DEFINED BY THE UNIFIED SOIL CLASSIFICATION SYSTEM. ALSO, RESTRICTIONS ON THE LIQUID LIMITS AND PLASTICITY INDEX OF THE MATERIAL MAY BE INCLUDED WHERE APPLICABLE. COMPACTED FILL SHALL CONSIST OF MATERIAL FREE OF ORGANIC MATTER, RUBBISH, FROZEN SOIL, SNOW, ICE, PARTICLES WITH SIZES LARGER THAN 3" OR OTHER DELETERIOUS
- 5. COMPACTED FILL SHALL BE PLACED IN HORIZONTAL LAYERS OF 8" TO 12" IN LOOSE THICKNESS. ACTUAL LIFT THICKNESS WILL BE SPECIFIED BY THE GEOTECHNICAL CONSULTANT. THE MOISTURE CONTENT SHALL BE CONTROLLED SUCH THAT COMPACTION IS ACHIEVED WITHOUT YIELDING OF THE SURFACE. EACH LAYER SHALL BE UNIFORMLY COMPACTED WITH SUITABLE COMPACTION EQUIPMENT TO AT LEAST 95% OF STANDARD PROCTOR MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-698, AASHTO T-99, OR VDOT SPECIFICATIONS. ANY LAYER OF FINE GRAINED FILL WHICH BECOMES SMOOTH UNDER COMPACTION OR CONSTRUCTION TRAFFIC SHOULD BE SCARIFIED TO A DEPTH OF 2" TO ALLOW ADEQUATE BONDING BETWEEN LAYERS.
- 6. COMPACTED FILL WITH A MOISTURE CONTENT WHICH WILL NOT PERMIT COMPACTION TO THE SPECIFIED DENSITY STANDARD SHALL BE SCARIFIED DRIED OR WETTED AS NECESSARY TO PERMIT PROPER

## STORMWATER AS-BUILT CERTIFICATION NOTE

AFTER THE FACILITY HAS BEEN CONSTRUCTED, THE DEVELOPER SHALL HAVE AN AS-BUILT CERTIFICATION CONDUCTED BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER REGISTERED IN VIRGINIA AND SUBMITTED TO THE TOWN ALONG WITH THE AS-BUILT CHECKLIST AND AS-BUILT PLAN. THE AS-BUILT CERTIFICATION VERIFIES THAT THE FACILITY WAS INSTALLED AS DESIGNED AND APPROVED.

#### STORMWATER CONSTRUCTION INSPECTION NOTE

INSPECTIONS ARE NEEDED DURING CONSTRUCTION TO ENSURE THAT THE FACILITIES ARE BUILT IN ACCORDANCE WITH THE APPROVED PLANS AND DESIGN SPECIFICATIONS. THE DEVELOPER/OWNER SHALL PROVIDE FOR PERIODIC INSPECTIONS OF THE FACILITY DURING CONSTRUCTION. DETAILED INSPECTION CHECKLISTS SHALL BE USED THAT INCLUDE SIGN-OFFS BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER REGISTERED IN VIRGINIA AT CRITICAL STAGES OF CONSTRUCTION, TO ENSURE THAT THE CONTRACTOR'S INTERPRETATION OF THE PLAN IS CONSISTENT WITH THE DESIGNER'S INTENT. THE ACTUAL INSPECTIONS MAY BE PERFORMED BY AN INDIVIDUAL UNDER THE DIRECT SUPERVISION OF THE LICENSED PROFESSIONAL.

**VARIES** 

TYPICAL GABION WALL DETAIL

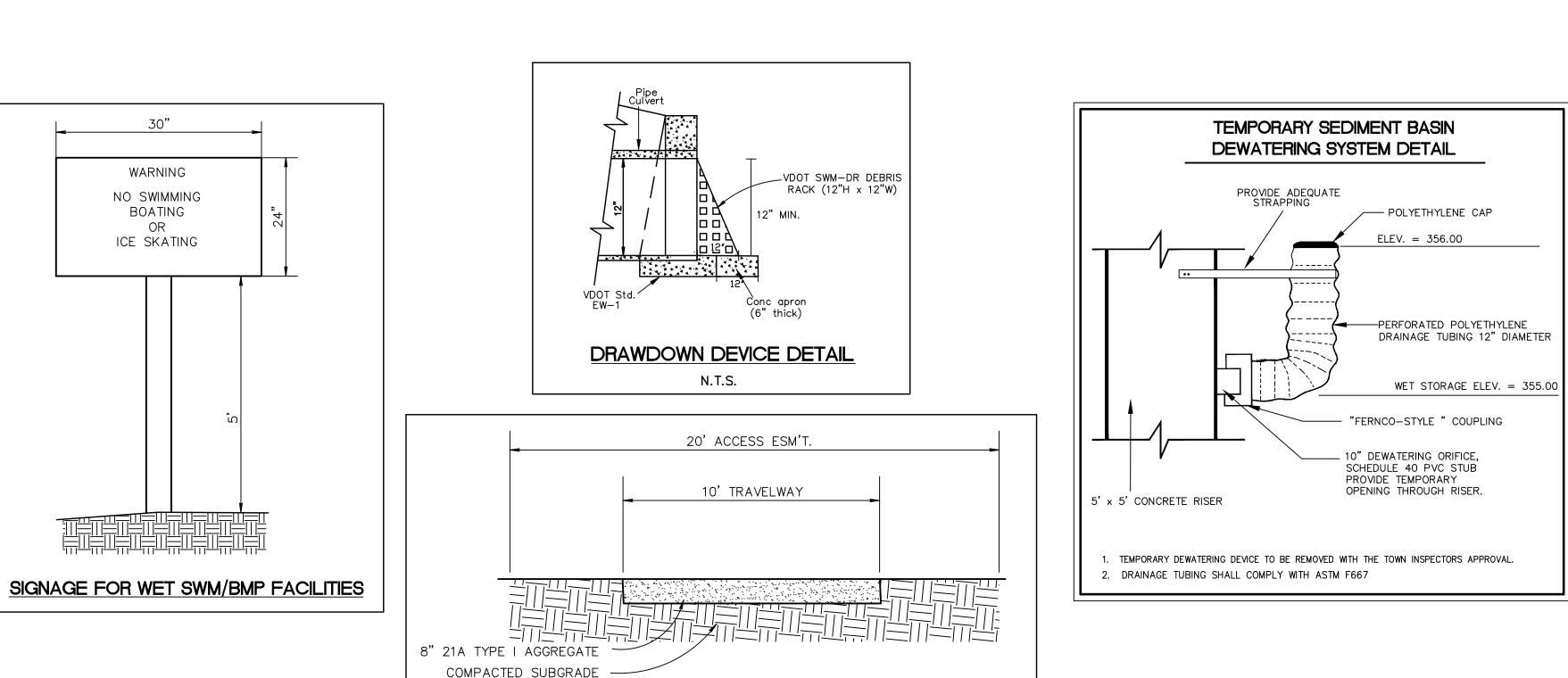
TOP OF WEIR BASKET=356.0

BMP ELEV. =355.00

1 1/2

GABION WALL

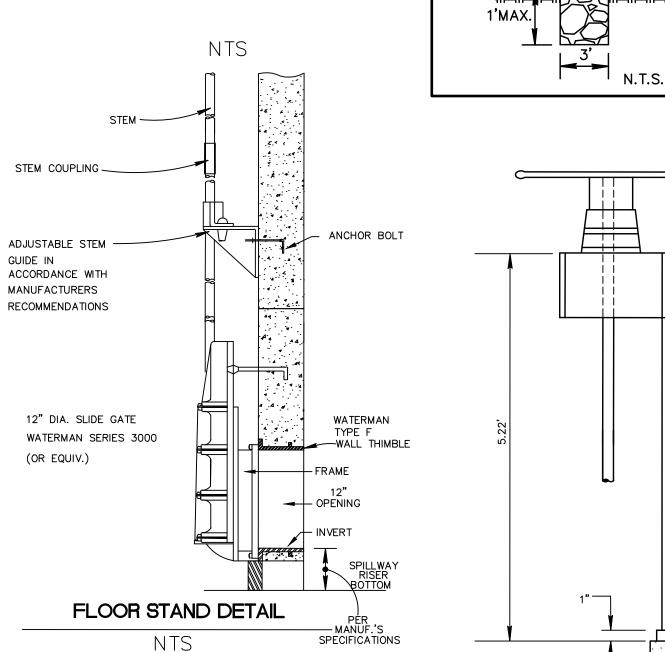
POND BOTTOM

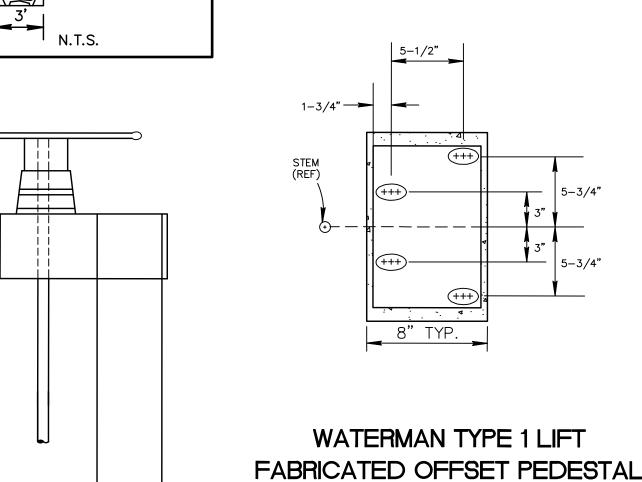


TYPICAL PAVEMENT SECTION FOR SWM POND

ACCESS ROAD

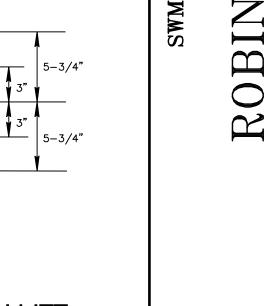
N.T.S.

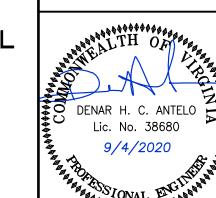




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ENGINEERING GROUPE PROJECT STATUS JULY, 2020

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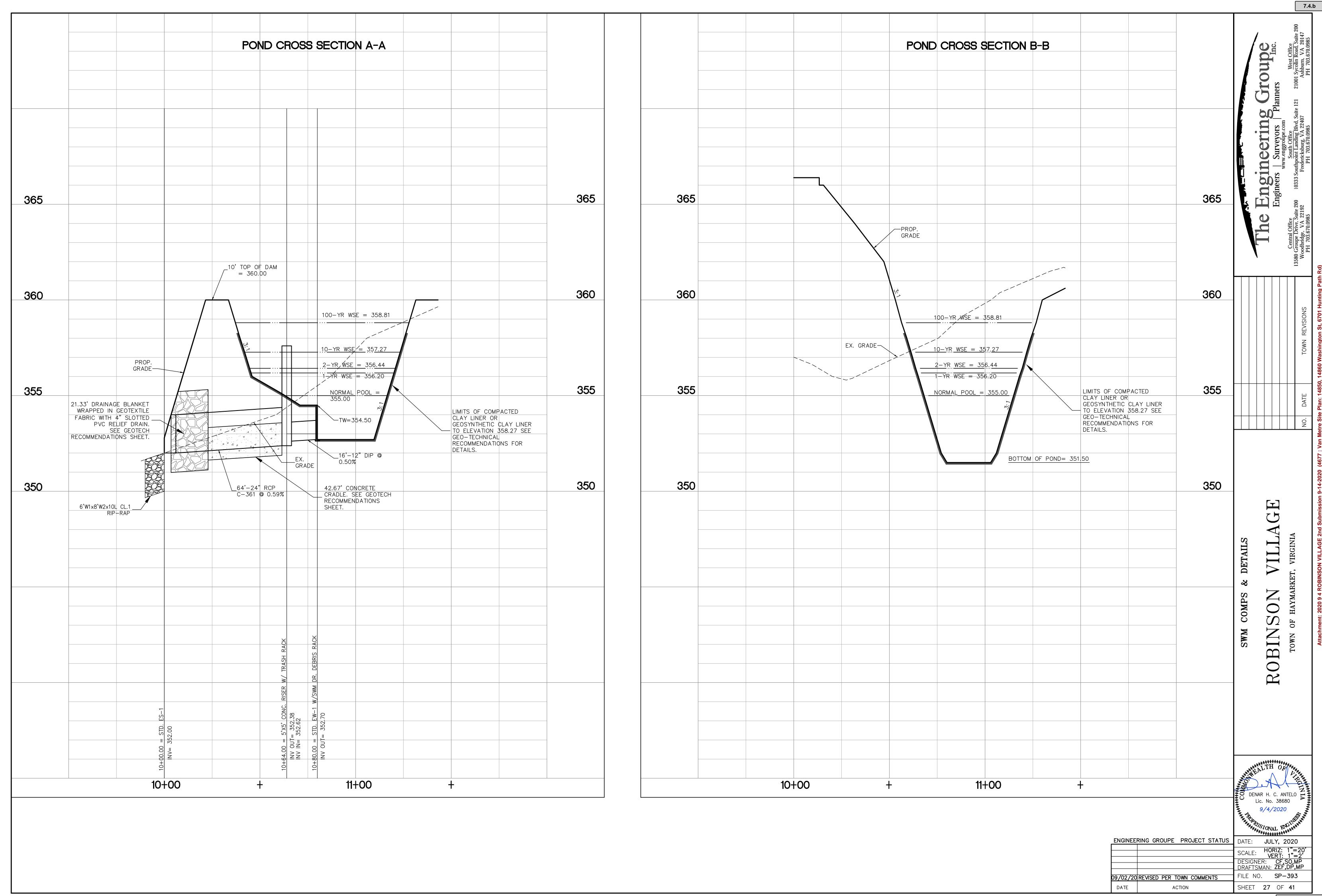
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SHEET **26** OF **41** 



Hydrograph Report Hydrograph Report Hydrograph Report Hydrograph Report Hydrology Studio v 3.0.0.14 06-19-2020 Hydrology Studio v 3.0.0.14 06-19-2020 Hydrology Studio v 3.0.0.14 Hyd. No. 5 Hyd. No. 5 Hyd. No. 5 combined Hyd. No. 5 combined Hydrograph Type = Junction Peak Flow = 1.047 cfs Hydrograph Type = Junction Peak Flow = 2.955 cfs Hydrograph Type = Junction Peak Flow = 13.38 cfsHydrograph Type = Junction Peak Flow = 39.12 cfs = 12.30 hrs Time to Peak = 12.17 hrs Time to Peak = 12.00 hrs Time to Peak = 11.97 hrs Time to Peak Storm Frequency Storm Frequency Storm Frequency = 2 min Hydrograph Volume = 82,233 cuf Hydrograph Volume = 133,565 cuft Time Interval Hydrograph Volume = 30,872 cuft Time Interval Hydrograph Volume = 42,672 cuft Time Interval Time Interval Inflow Hydrographs = 3, 4 Inflow Hydrographs = 3, 4Total Contrib. Area = 0.77 ac Inflow Hydrographs = 3, 4Total Contrib. Area = 0.77 ac Inflow Hydrographs = 3, 4Total Contrib. Area = 0.77 ac Total Contrib. Area = 0.77 ac Qp = 1.05 cfsQp = 2.96 cfsQp = 13.38 cfsQp = 39.12 cfs0123456789101123456789202224220223420223335678944434343456785655556655656565656567072345678981 0 1 2 3 4 5 6 7 8 9 1011121314151617181920212223242526272829303132333435363738394041424344454647 01234567891**01**23456782**02223**42**0289032345678904234267895585456789066866689072345678888888**8688 Time (hrs) Time (hrs) — Pond1 — Uncontrolled — combined Hydrograph 100-yr Summary Hydrograph 2-yr Summary Hydrograph 10-yr Summary Hydrograph 1-yr Summary 06-19-202 06-19-202 Time to Peak (hrs) Inflow Hyd(s) Maximum Elevation Hydrograph Volume Time to Peak (hrs) Inflow Hyd(s) Maximum Elevation Maximum Elevation Hydrograp Hydrograph Storage (cuft) Storage (cuft) Storage (cuft) Peak Elevation NRCS Runoff Pre Pre-Development Pre Pre-Development 12.10 Pre Pre-Development 52,031 Pre Pre-Development

#### STORMWATER MANAGEMENT NARRATIVE

Uncontrolled

#### PROJECT DESCRIPTION

NRCS Runoff

NRCS Runoff

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF 38 TOWNHOMES AND ASSOCIATED INFRASTRUCTURE. ONE SWM/BMP FACILITY LOCATED AT N: 38.811803 E: -77.632274 WILL BE CONSTRUCTED TO PROVIDE WATER QUANTITY AND QUALITY MEASURES FOR THIS PROJECT. IN ADDITION, THE SWM/BMP FACILITY WILL BE DESIGNED TO PROVIDE WATER QUALITY AND QUANTITY MEASURES FOR THE FUTURE COMMERCIAL DEVELOPMENT ASSOCIATED WITH THIS PROJECT. APPROXIMATELY 5.85 ACRES WILL BE DISTURBED DURING CONSTRUCTION.

12.93

11.97

1,973

30,872

0.980

356.20

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#### WATER QUALITY ANALYSIS

FROM THE VRRM SPREADSHEET, A TOTAL PHOSPHORUS (TP) LOAD REDUCTION OF 6.98 LB/YR IS REQUIRED. A REDUCTION IN THE REQUIRED LOAD IS ACHIEVED THROUGH THE CONSTRUCTION ON AN ON-SITE SWM/BMP WET POND. THIS PRACTICE REDUCES THE REQUIRED LOAD REDUCTION TO 2.48 LB/YEAR. SINCE THE REQUIRED LOAD IS LESS THAN 10LBS/YR, PER STATE CODE 9VAC25-870-60, OFFSITE COMPLIANCE OPTIONS WILL BE UTILIZED TO ACHIEVE THE REMAINING NUTRIENT REDUCTION BY PURCHASING REQUIRED NUTRIENT CREDITS.

#### HYDROLOGIC ANALYSIS

THE PROJECT LOCATION IS WITHIN THE BULL RUN WATERSHED. THE SCS METHOD WAS USED TO COMPUTE PRE-AND POST-DEVELOPMENT PEAK DISCHARGES. THE RAINFALL DISTRIBUTION USED FOR THE HYDROLOGIC ANALYSIS WAS TYPE II, 24-HOUR, INCORPORATING TOWN OF HAYMARKET RAINFALL DEPTHS FOR 24-HOUR STORM EVENTS OBTAINED FROM NOAA ATLAS 14 PRECIPITATION ESTIMATES.

THE PRE-DEVELOPMENT DRAINAGE DIVIDES AND HYDROLOGIC COMPUTATIONS ARE SHOWN ON SHEET 22. THE POST-DEVELOPEMENT DRAINAGE DIVIDES AND HYDROLOGIC COMPUTATIONS ARE SHOWN ON SHEET 23. THE SITE IS DIVIDED INTO FOUR DRAINAGE AREAS IN THE POST DEVELOPMENT CONDITION.

#### WATER QUANTITY ANALYSIS

IN PRE-DEVELOPMENT CONDITIONS, THE SITE DRAINS AS FOLLOWS:

#### STUDY POINT A

THE RUNOFF IN THIS PRIMARILY WOODED AREA WITH SOME IMPERVIOUS AREA FROM EXISTING STRUCTURES IS UNCONTROLLED. RUNOFF FLOWS NATURALLY ACROSS THE SITE TO AN EXISTING DRAINAGE SWALE WHERE IT ENTERS SOME EXISTING WETLANDS PRIOR TO DISCHARGING ALONG THE EASTERN PORTION OF THE NORTHERN PROPERTY LINE.

#### STUDY POINT B

THE RUNOFF IN THIS WOODED AREA IS UNCONTROLLED. THE RUNOFF IN THIS AREA CONSISTS OF SHEET FLOW WHICH DISCHARGES ALONG THE NORTHERN PROPERTY LINE. THE RUNOFF DOES NOT FORM A CONCENTRATED SWALE PRIOR TO LEAVING THE SITE.

#### STUDY POINT C

THE RUNOFF IN THIS WOODED AREA IS UNCONTROLLED. THE RUNOFF IN THIS AREA IS DIRECTED TO THE WEST OF THE PROPERTY. THE RUNOFF ENTERS THE STORM SEWER SYSTEM VIA A CULVERT LOCATED ON THE PROPERTY PRIOR TO THE RIGHT OF WAY OF HUNTING PATH ROAD.

#### STUDY POINT D

Uncontrolled

NRCS Runoff

1.439

2.955

11.97

12.30

42,672

THE RUNOFF IN THIS PRIMARILY WOODED AREA WITH SOME IMPERVIOUS AREA FROM EXISTING STRUCTURES IS UNCONTROLLED. THE RUNOFF IN THIS AREA IS DIRECTED TO THE WEST OF THE PROPERTY. THE RUNOFF ENTERS THE STORM SEWER SYSTEM VIA A STORM SEWER INLET LOCATED IN HUNTING PATH ROAD.

356.44

47,610

NRCS Runoff

Uncontrolled

IN POST-DEVELOPMENT CONDITIONS THE SITE DRAINS AS FOLLOWS:

#### STUDY POINT A

THE RUNOFF IN THIS MAINLY DEVELOPED AREA WITH SOME WOODED SECTIONS IS UNCONTROLLED. RUNOFF FLOWS NATURALLY ACROSS THE SITE TO AN EXISTING DRAINAGE SWALE WHERE IT ENTERS SOME EXISTING WETLANDS PRIOR TO DISCHARGING ALONG THE EASTERN PORTION OF THE NORTHERN PROPERTY LINE.

#### STUDY POINT B

THE RUNOFF IN THIS DEVELOPED AREA IS UNCONTROLLED. THE RUNOFF IN THIS AREA CONSISTS OF SHEET FLOW WHICH DISCHARGES ALONG THE NORTHERN PROPERTY LINE. THE RUNOFF DOES NOT FORM A CONCENTRATED SWALE PRIOR TO LEAVING THE SITE.

#### STUDY POINT C

THE RUNOFF IN THIS DEVELOPED AREA IS UNCONTROLLED. THE RUNOFF IN THIS AREA IS DIRECTED TO THE WEST OF THE PROPERTY. THE RUNOFF ENTERS THE STORM SEWER SYSTEM VIA A CULVERT LOCATED ON THE PROPERTY PRIOR TO THE RIGHT OF WAY OF HUNTING PATH ROAD.

#### STUDY POINT D

THE RUNOFF IN THIS PRIMARILY WOODED AREA WITH SOME IMPERVIOUS AREA FROM EXISTING STRUCTURES IS UNCONTROLLED. THE RUNOFF IN THIS AREA IS DIRECTED TO THE WEST OF THE PROPERTY. THE RUNOFF IN THIS AREA IS DIRECTED TO THE WEST OF THE PROPERTY. THE RUNOFF ENTERS THE STORM SEWER SYSTEM VIA A STORM SEWER INLET LOCATED IN HUNTING PATH ROAD.

IN POST-DEVELOPMENT CONDITIONS THE SITE DRAINS AS FOLLOWS:

#### STUDY POINT A

THE RUNOFF FROM THIS AREA IS COLLECTED BY A STORM SEWER SYSTEM ON-SITE AND CONVEYED TO THE SWM/BMP POND. AS SHOWN IN THE CHART BELOW, THE FLOW FOR DRAINAGE AREA A THE 1-YEAR 24-HOUR STORM EVENT MEETS THE ALLOWABLE RELEASE RATE OF THE ENERGY BALANCE EQUATION AT STUDY POINT A. THEREFORE, FURTHER ANALYSIS IS NOT REQUIRED.

#### STUDY POINT B

12.17

11.93

6,092

82,233

3.016

13.38

357.27

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STUDY POINT "B": IN POST DEVELOPMENT THIS AREA HAS BEEN GRADED TO DIVERT WATER TO THE SWM/BMP POND. A BERM HAS BEEN DESIGNED ALONG THE PROPERTY LINE TO PREVENT WATER FROM LEAVING THE SITE AT THIS STUDY POINT. AS SHOWN IN THE CHART BELOW, THE FLOW FOR DRAINAGE AREA B THE 1-YEAR 24-HOUR STORM EVENT MEETS THE ALLOWABLE RELEASE RATE OF THE ENERGY BALANCE EQUATION AT STUDY POINT B DUE TO THE REDUCTION IN RUNOFF TO THIS STUDY POINT. THEREFORE, FURTHER ANALYSIS IS NOT REQUIRED.

NRCS Runoff

NRCS Runoff

Uncontrolled

6.589

39.12

11.93

12.00

13,605

133,565

#### STUDY POINT C

STUDY POINT "C":

THE RUNOFF FROM THIS AREA IS DIRECTED TO THE STORM SEWER SYSTEM ALONG HUNTING PATH ROAD. THIS DRAINAGE AREA HAS BEEN REDUCED BY DIVERTING A PORTION OF THE DRAINAGE AREA TO THE SWM/BMP POND. STORM SEWER COMPUTATIONS HAVE BEEN PROVIDED TO DEMONSTRATE ADEQUACY OF THE STORM SEWER SYSTEM FOR SEVERAL STRUCTURES DOWNSTREAM

#### STUDY POINT D

THE RUNOFF FROM THIS AREA IS DIRECTED TO THE STORM SEWER SYSTEM ALONG HUNTING PATH ROAD. THIS DRAINAGE AREA HAS BEEN REDUCED BY DIVERTING A PORTION OF THE DRAINAGE AREA TO THE SWM/BMP POND. STORM SEWER COMPUTATIONS HAVE BEEN PROVIDED TO DEMONSTRATE ADEQUACY OF THE STORM SEWER FOR SEVERAL STRUCTURES DOWNSTREAM.

#### **CHANNEL PROTECTION**

THE POST-DEVELOPMENT PEAK FLOW RATE FROM THE 2-YEAR STORM EVENT HAS BEEN REDUCED FROM THE PRE-DEVELOPMENT PEAK FLOW RATE AT OUTFALL POINTS A AND B. FURTHER ANALYSIS DOWNSTREAM IS NOT REQUIRED. THEREFORE, PER 9VAC25-870-66B.1, CHANNEL PROTECTION HAS BEEN SATISFIED. FOR OUTFALL POINTS C AND D DISCHARGE IS INTO A MAN MADE CHANNEL AND ADEQUACY HAS BEEN DEMONSTRATED FOR SEVERAL RUNS DOWNSTREAM.

#### FLOOD PROTECTION

THE POST-DEVELOPMENT PEAK FLOW RATE FROM THE 10-YEAR STORM EVENT HAS BEEN REDUCED FROM THE PRE-DEVELOPMENT PEAK FLOW RATE AT OUTFALL POINTS A AND B. FURTHER ANALYSIS DOWNSTREAM IS NOT REQUIRED. THEREFORE, PER 9VAC25-870-66C.1, FLOOD PROTECTION AND VSCE REGULATION MS-19 HAVE BEEN SATISFIED. FOR OUTFALL POINTS C AND D DISCHARGE IS INTO A MAN MADE CHANNEL AND ADEQUACY HAS BEEN DEMONSTRATED FOR SEVERAL RUNS DOWNSTREAM.

	ENERGY BALANCE EQUATION RESULTS													
STUDY POINT	STORM EVENT	PRE-DEV DRAINAGE AREA (ac)	PRE-DEV RV (in)	PRE-DEV CN	PRE-DEV FLOW (cfs)	POST-DEV DRAINAGE AREA (ac)	POST-DEV CN	POST-DEV RV (in)	POST-DEV FLOW (cfs)	POST-DEV FLOW ALLOWABLE CALCULATED* (cfs)	ENERGY BALANCE EQUATION SATISFIED			
A	1	7.16	0.567	73	4.18	7.74	83	1.06	1.05	1.79	YES			
В	1	0.25	0.124	70	0.15	0	0	0	0	N/A	YES			

\* BASED ON THE ENERGY BALANCE EQUATION: FOR THE 1-YEAR FLOW:  $Q(post) \le 0.80 \{Q(pre)*RV(pre)/RV(post)\}$  ENGINEERING GROUPE PROJECT STATUS DATE:

09/02/20 REVISED PER TOWN COMMENTS SHEET **28** OF **41** 

358.81

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86,777

DESIGNER: **CF,SO,MP** DRAFTSMAN: **ZEF,DP,MP** FILE NO. **SP-393** 

G:\PROJECT\Smith Property-Haymarket\ENG\DWG\00-K6400 SWM COMPS & Packet Pg. 108

Lic. No. 38680 9/4/2020

DE.

JULY, 2020 SCALE: **N/A** 

7/6/2020

(Ctrl+Shift+R)



\*Notes (see below):

quantity requirements. See VRRM User's Guide and Documentation for additional information.

Area (acres)

Area (acres)

Area (acres)

\*See Notes above

Otherwise RV(watershed-inch) must be multiplied by the drainage area.

Drainage Area A

Forest/Open Space -- undisturbed, protected

forest/open space or reforested land

turf to be mowed/managed

Impervious Cover

Nanaged Turf -- disturbed, graded for yards or other

 $\mathsf{RV}_{\mathsf{Developed}}$  (watershed-inch) with no Runoff Reduction\*

RV<sub>Developed</sub> (watershed-inch) with Runoff Reduction\*

**BMP LOAD REQUIREMENTS** 

LOAD REDUCTION REQUIRED= 6.98 LB/YR

LOAD REDUCTION REQUIRED= 0.35 LB/YR

LOAD REDUCTION REQUIRED = 4.64 LB/YR

LOAD REDUCTION REQUIRED= 1.99 LB/YR

TOTAL SITE AREA= 6.94 ACRES

TOTAL AREA= 0.32 ACRES

PARCEL 2 TOTAL AREA= 4.66 ACRES

TOTAL AREA= 1.96 ACRES

--Select from dropdown lists--

PARCEL 3

WET POND REMOVAL= 4.50 LB/YR CREDITS FOR PURCHASE= 2.48 LB/YR

WET POND REMOVAL= 0.24 LB/YR CREDITS FOR PURCHASE= 0.11 LB/YR

WET POND REMOVAL= 2.86 LB/YR

WET POND REMOVAL= 1.40 LB/YR

CREDITS FOR PURCHASE= 0.59 LB/YR

CREDITS FOR PURCHASE= 1.78 LB/YR

#### Site Information

#### Post-Development Project (Treatment Volume and Loads)

BMP Design Specifications List: 2013 Draft Stds & Specs

Land	Cover	(acres)

, ,					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) undisturbed,					0.00
protected forest/open space or reforested					0.00
Managed Turf (acres) disturbed, graded					3.10
for yards or other turf to be		1.05	2.05		3.10
Impervious Cover (acres)		1.16	2.68		3.84
					6.94

Constants	
Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)						
	A Soils	B Soils	C Soils	D Soils		
Forest/Open Space	0.02	0.03	0.04	0.05		
Managed Turf	0.15	0.20	0.22	0.25		
Impervious Cover	0.95	0.95	0.95	0.95		

P Load Reduction Required (lb/yr)	
-----------------------------------	--

# LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary	′
Forest/Open Space Cover (acres)	0.00
Weighted Rv (forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	3.10
Weighted Rv (turf)	0.21
% Managed Turf	45%
Impervious Cover (acres)	3.84
Rv (impervious)	0.95
% Impervious	55%

Site Area (acres)

Site Rv

Treatment Volume and Nutrient Loads				
Treatment Volume (acre-ft)	0.3591			
Treatment Volume (cubic feet)	15,642			
TP Load (lb/yr)	9.83			
TN Load (lb/yr) (Informational Purposes Only)	70.31			

# Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	3.60	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	3.60	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	2.51	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	2.51	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

### Site Treatment Volume (ft<sup>3</sup>) 15,642

6.94

0.62

#### Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft <sup>3</sup> )	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	9.01	0.00	0.00	0.00	0.00	9.01
TP LOAD REDUCTION ACHIEVED (lb/yr)	4.50	0.00	0.00	0.00	0.00	4.50
TP LOAD REMAINING (lb/yr)	4.51	0.00	0.00	0.00	0.00	4.51

# NITROGEN LOAD REDUCTION ACHIEVED (lb/yr) 19.32 0.00 0.00 0.00 0.00 19.32

Total Phosphorus	
FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	
TP LOAD REDUCTION REQUIRED (lb/yr)	6.98
TP LOAD REDUCTION ACHIEVED (lb/yr)	4.50
TP LOAD REMAINING (lb/vr):	5 33

# REMAINING TP LOAD REDUCTION REQUIRED (lb/yr): 2.48

Total Nitrogen (For Information Purposes)				
POST-DEVELOPMENT LOAD (lb/yr)	70.31			
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)				
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	50.98			

## Drainage Area A

#### Drainage Area A Land Cover (acres)

			1			
	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)		1.02	1.49		2.51	0.21
Impervious Cover (acres)		1.16	2.44		3.60	0.95
	•	•		Total	6.11	

otal Phosphorus Available for Removal in D.A. A (lb/yr)

9.01

Post Development Treatment Volume in D.A. A (ft<sup>3</sup>)

14,345

#### Stormwater Best Management Practices (RR = Runoff Reduction)

Practice	Runoff Reduction Credit (%)	Turf Credit	Cover Credit	Volume from Upstream Practice (ft <sup>3</sup> )	Reduction	Remaining Runoff Volume (ft <sup>3</sup> )	Total BMP Treatment Volume (ft <sup>3</sup> )	Removal Efficiency	Phosphorus Load from Upstream Practices (Ib)	Phosphorus Load to	Removed By		Downstream Practice to be Employed
13.a. Wet Pond #1 (Spec #14)	0	2.51	3.60	0	0	14,345	14,345	50	0.00	9.00	4.50	4.50	

Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (Ibs)	Remaining Nitrogen Load (lbs)
30	0.00	64.40	19.32	45.08

TOTAL IMPERVIOUS COVER TREATED (ac) 3.60 AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 4.50

TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr) 4.51

TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (Ib/yr) 0.00

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.00

NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 19.32

**Runoff Volume and Curve Number Calculations** 

Enter design storm rainfall depths (in):

 1-year storm
 2-year storm
 10-year storm

 2.55
 3.09
 4.76

[1] The curve numbers and runoff volumes computed in this spreadsheet for each drainage area are limited in their applicability for determining and demonstrating compliance with water

[2] Runoff Volume (RV) for pre- and post-development drainage areas must be in volumetric units (e.g., acre-feet or cubic feet) when using the Energy Balance Equation. Runoff measured in waters hed-inches and shown in the spreadsheet as RV(waters hed-inch) can only be used in the Energy Balance Equation when the pre- and post-development drainage areas are equal.

Drainage Area Curve Numbers and Runoff Depths\*

Curve numbers (CN, CNadj) and runoff depths (RV Developed) are computed with and without reduction practices.

1.02

1.16

1-year storm 2-year storm 10-year storm

A Soils B Soils C Soils D Soils

1.49

2.44 98 0.00

[3] Adjusted CNs are based on runoff reduction volumes as calculated in D.A. tabs. An alternative CN adjustment calculation for Vegetated Roofs is included in BMP specification No. 5.

0.00

0.00

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr) 6.98

TOTAL NITROGEN REMOVED IN D.A. A (lb/yr) 19.32

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (Ib/yr) 9.01

TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr) 4.50

TOTAL MANAGED TURF AREA TREATED (ac) 2.51 AREA CHECK: OK.

#### DEQ Virginia Runoff Reduction Method New Development Compliance Spreadsheet - Version 3.0

#### BMP Design Specifications List: 2013 Draft Stds & Specs

Site Summary	Project Title: Upland Village
	Date: 44007

Update Summary Sheet

#### Total Rainfall = 43 inches

Site Land Cover Summary							
	A soils	B Soils	C Soils	D Soils	Totals	% of Total	
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0	
Managed Turf (acres)	0.00	1.05	2.05	0.00	3.10	45	
Impervious Cover (acres)	0.00	1.16	2.68	0.00	3.84	55	
					6.94	100	

#### Site Tv and Land Cover Nutrient Loads

Site Rv	0.62
Treatment Volume (ft³)	15,642
TP Load (lb/yr)	9.83
TN Load (lb/yr)	70.31

## Total TP Load Reduction Required (lb/yr) 6.98

#### Site Compliance Summary

Total Runoff Volume Reduction (ft <sup>3</sup> )	0
Total TP Load Reduction Achieved (lb/yr)	4.50
Total TN Load Reduction Achieved (lb/yr)	19.32
Remaining Post Development TP Load (lb/yr)	5.33
Remaining TP Load Reduction (lb/yr) Required	2.48

#### Drainage Area Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres)	2.51	0.00	0.00	0.00	0.00	2.51
Impervious Cover (acres)	3.60	0.00	0.00	0.00	0.00	3.60
Total Area (acres)	6.11	0.00	0.00	0.00	0.00	6.11

#### **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)	4.50	0.00	0.00	0.00	0.00	4.50
TN Load Reduced (lb/yr)	19.32	0.00	0.00	0.00	0.00	19.32

#### Drainage Area A Summary

Total Area (acres): 6.11

Volume (ft³): 0

Runoff Reduction

#### Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	1.02	1.49	0.00	2.51	41
Impervious Cover (acres)	0.00	1.16	2.44	0.00	3.60	59
					6.11	

#### BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft <sup>3</sup> )	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
----------	--	--	--	---	---	-----------------------	-------------------------	---

Total Impervious Cover Treated (acres)	3.60
Total Turf Area Treated (acres)	2.51
Total TP Load Reduction Achieved in D.A. (lb/yr)	4.50
Total TN Load Reduction Achieved in D.A. (lb/yr)	19.32

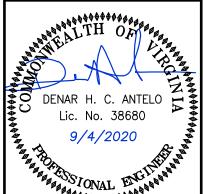
## Runoff Volume and CN Calculations

raiget namian Event (iii)	2.55	3.03	7.70	1		
		T	T	1		T
Drainage Areas	RV & CN	Drainage Area A	Drainage Area B	Drainage Area C	Drainage Area D	Drainage Area E
CN		86	0	0	0	0
RR (ft³)		0	0	0	0	0
	RV wo RR (ws-in)	1.28	0.00	0.00	0.00	0.00
1-year return period	RV w RR (ws-in)	1.28	0.00	0.00	0.00	0.00
	CN adjusted	86	0	0	0	0
	RV wo RR (ws-in)	1.74	0.00	0.00	0.00	0.00
2-year return period	RV w RR (ws-in)	1.74	0.00	0.00	0.00	0.00
	CN adjusted	86	0	0	0	0
	RV wo RR (ws-in)	3.24	0.00	0.00	0.00	0.00
10-year return period	RV w RR (ws-in)	3.24	0.00	0.00	0.00	0.00

 CN adjusted
 86
 0
 0
 0
 0

1-year storm 2-year storm 10-year storm

# VRE ROBIN TOWN (



SHEET **29** OF **41** 

	, bbb4000000		
ENGINEERING GROUPE PROJECT STATUS	DATE: <b>JULY, 2020</b>		
	SCALE: N/A		
	DESIGNER: <b>CF,SO,MP</b> DRAFTSMAN: <b>ZEF,DP,MP</b>		
09/02/20 REVISED PER TOWN COMMENTS	FILE NO. SP-393		

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NO. DATE
NO. DATE

# SON VILLLA

<u>Inc.</u> - Incomplete/Incorrect

approved not approved N/A - Not Applicable SUPPORTING DATA

Narrative describing stormwater management strategy including all assumptions made in the

<u>Drainage Area Map</u> \_\_\_\_ Site and drainage area boundaries Off-site drainage areas Pre- and post-developed land uses with corresponding acreage Pre- and post-developed time of concentration flow paths Existing and proposed topographic features Drainage area appropriate for BMP

B. Soils Investigation Soils map with site and drainage area outlined Geotechnical report with recommendations and earthwork specifications \_\_\_\_ Boring locations \_\_\_\_ Borrow area Basin pool area

Embankment area: centerline principal spillway, emergency spillway, abutments Boring logs with Unified Soils Classifications, soil descriptions, depth to seasonal high groundwater table, depth to bedrock, etc. Compaction requirements specified

N/A Additional geophysical investigation and recommendations in Karst environment

3B - 1

**DETENTION, RETENTION, and IMPOUNDMENT BMPs** APPENDIX 3B

> **Design and Plan Review Checklist** Page 2 of 7

Runoff curve number determinations: pre- and post-developed conditions, with worksheets.

Time of concentration: pre- and post-developed conditions, with worksheets. Hydrograph generation: pre- and post-developed condition for appropriate design and safety storms (SCS methods or modified rational-critical storm duration method)

Hydraulics Specify assumptions and coefficients used. \_\_\_\_ Stage-storage table and curve Riser structure and barrel

II. <u>COMPUTATIONS</u>

Weir/orifice control analysis for riser structure discharge openings Weir/orifice control analysis for riser crest

Barrel: inlet/outlet control analysis Riser/Outlet Structure flotation analysis (factor of safety = 1.25 min.).

Anti-seep collar or filter diaphragm design. Outlet protection per <u>VE&SCH</u> Std.. & Spec. 3.18. Provisions for use as a temporary sediment basin riser with clean out schedule &

instructions for conversion to a permanent facility.

Emergency spillway adequacy/capacity analysis with required embankment freeboard. Stage - discharge table and curve (provide equations & cite references).

Storm drainage & hydraulic grade line calculations. Reservoir routing of post-development hydrographs for appropriate design storms (2-yr., 10-yr., or as required by watershed conditions) & safety storms (100-yr. or as required).

C. Downstream impacts \_\_\_\_ Danger reach study.

\_\_\_\_\_ 100 year floodplain impacts. "Adequate channel" calculations for receiving channel

Provide downstream hydrographs at critical study points.

Storm drainage plans for site areas not draining to BMP

Safe conveyance - MS-19 Areas compensated for in water quality performance-based criteria calculations

3B - 2

**DETENTION, RETENTION, and IMPOUNDMENT BMPs** 

**Design and Plan Review Checklist** Page 3 of 7

D. Water Quality

Impervious cover tabulation

Technology-based criteria: proper selection of BMP based on impervious cover N/A Performance-based criteria: pre- and post-developed pollutant load and pollutant removal

requirement calculations (provide worksheets) N/A Water quality volume for retention basin I, II, or III permanent pool

Water quality volume for ext. detention and ext. detention enhanced with drawdown calculations N/A Proper surface area/depth allocations for permanent pool/shallow marsh/constructed wetland

N/A Constructed stormwater wetland / shallow marsh N/A Adequate drainage area and/or base flow N/A Adequate pool volume

N/A Maximum ponding depth over pool surface specified

N/A Adequate surface area N/A Allocation of surface area to depth zones

III. PLAN REQUIREMENTS

A. General Items Plan view drawn at 1"=50' or less (40', 30', etc.)

✓ North arrow Legend

Location plan and vicinity map

Property lines Existing & proposed contours (2' contour interval min.)

Existing features & proposed improvements (including utilities and protective measures) Locations of test borings

Earthwork specifications

Construction sequence for SWM basin and E&S controls

Temporary erosion & sediment control measures Conveyance of base flow during construction

✓ Temporary and permanent stabilization requirements \_\_\_ Emergency spillway

Basin side slopes

3B - 3

**DETENTION, RETENTION, and IMPOUNDMENT BMPs** 

APPENDIX 3B

APPENDIX 3B

**Design and Plan Review Checklist** 

\_\_\_\_ Basin bottom

N/A Delineation of FEMA 100 year floodplain Plans sealed by a qualified licensed professional

B. BMP Plan Views

Dimensions of basin features: perm. Pool, sediment forebay, embankment, etc. Location of all conveyance system outfalls into basin

Proper orientation to avoid short circuiting Outlet protection per <u>VE&SCH</u>

Top of bank & basin bottom elevations Elevations of permanent pool, water quality volume and max. design water surface elevations for

all appropriate design storms and safety storms Side slope (H:V) of basin storage area and embankment (upstream and downstream slopes)

Proper length-to-width ratio as specified in BMP design criteria N/A Pervious low flow channel

N/A Sediment forebay Basin bottom slope

Maintenance access to sediment forebay, riser structure, and one side of the basin ponding area Peripheral ledge for safety

N/A Aquatic Bench N/A Shoreline protection

N/A Safety fence

Riser and barrel materials and dimensions labeled N/A Constructed stormwater wetland / shallow marsh

N/A Basin liner specifications

N/A Pool depth zones identified on plan N/A Pool geometry - wet/dry weather flow path

3B - 4

**DETENTION, RETENTION, and IMPOUNDMENT BMPs** APPENDIX 3B

**Design and Plan Review Checklist** 

Page 5 of 7

C. BMP - Section Views & Related Details

Embankment (or dam) and Ponding Areas

Elevations of permanent pool, water quality volume and max. design water surface elevations for all appropriate design storms and safety storms

Top of dam elevations- constructed height and settled height (10% settlement).

\_\_\_\_ Adequate freeboard \_\_\_\_ Top width labeled

N/A Elevation of crest of emergency spillway

N/A Emergency spillway w/ side slopes labeled.

N/A Emergency spillway inlet, level, and outlet sections labeled Existing ground and proposed improvements profile along center line of embankment

Existing ground and proposed improvements profile along center line of principal spillway Typical grading section through pond including typical side slopes with aquatic bench, safety ledge,

Existing ground and proposed improvements along center line of emergency spillway

N/A Dimensions of zones for zoned embankment

Seepage Control ✓ Impervious lining

N/A Phreatic line (4:1 slope measured from the principal spillway design high water).

a. Anti-seep Collar Anti-seep collar (detail regd..).

Size (based upon 15% increase in seepage length). Spacing & location on barrel (at least 2' from pipe joint).

b. <u>Filter Diaphragm</u>

N/A Design certified by a professional geotechnical engineer.

Foundation Cut Off Trench or Key Trench Materials labeled

Bottom width (4' min. or greater per geotech. report).

Side slopes labeled (1:1 max. steepness). Depth (4' min. or as specified in geotechnical report)

3B - 5

**DETENTION, RETENTION, and IMPOUNDMENT BMPs** 

APPENDIX 3B

**Design and Plan Review Checklist** 

4. Multi Stage Riser and Barrel System \_\_\_\_ Materials labeled

\_\_\_\_ Bedding or cradle details provided Gauge & corrugation size for metal pipes specified

Barrel diameter, inverts, and slope (%) labeled

Outlet protection per <u>VESCH</u>, Std. & Spec. 3.18, 3.19 w/ filter cloth underlayment Crest elevation of riser structure shown

Inverts and dimensions of control release orifices/weirs shown

Structure dimensions shown

Control orifice/weir dimensions shown Extended detention orifice protection (detail required for construction)

Riser trash rack or screen (detail reqd., for construction). Riser anti-vortex device (detail regd., for construction).

✓ Proper riser structure footing.

Access to riser structure interior for maintenance. \_\_\_\_ Basin drain pipe

Planting schedule and specifications (transport / storage / installation / maintenance) Plant selection for planting zones 1thru 6

✓ Preservation measures for existing vegetation Top soil / planting soil included in final grading

Maintenance Items

Person or organization responsible for maintenance. Maintenance narrative which describes the long-term maintenance requirements of the facility and all

Facility access from public R/W or roadway.

✓ Maintenance easement.

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**DETENTION, RETENTION, and IMPOUNDMENT BMPs** APPENDIX 3B

> **Design and Plan Review Checklist** Page 7 of 7


BY: CHRISTOPHER FERRARA DATE: 6/26/20

3B - 7

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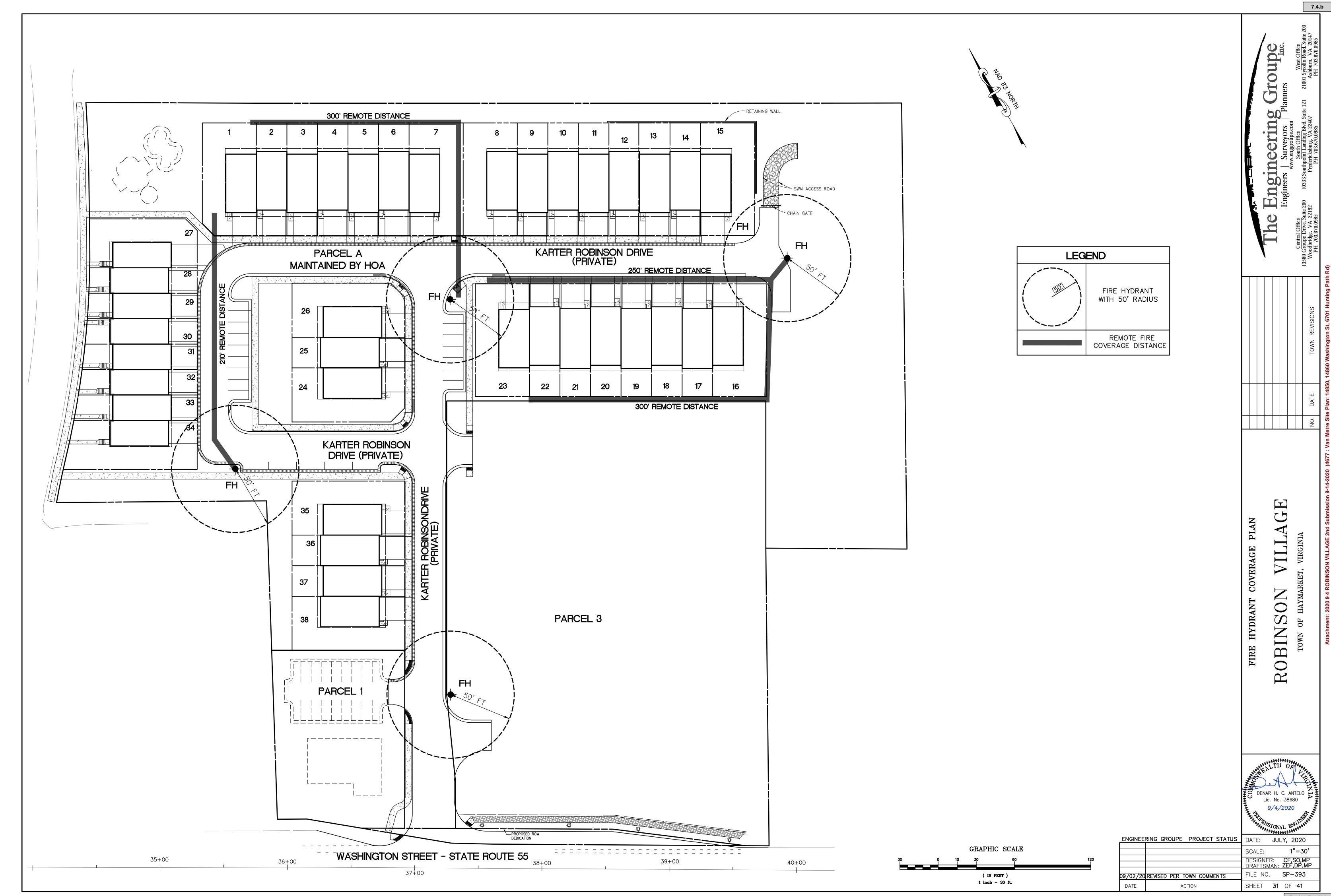
9/4/2020

ENGINEERING GROUPE PROJECT STATUS DATE: JULY, 2020

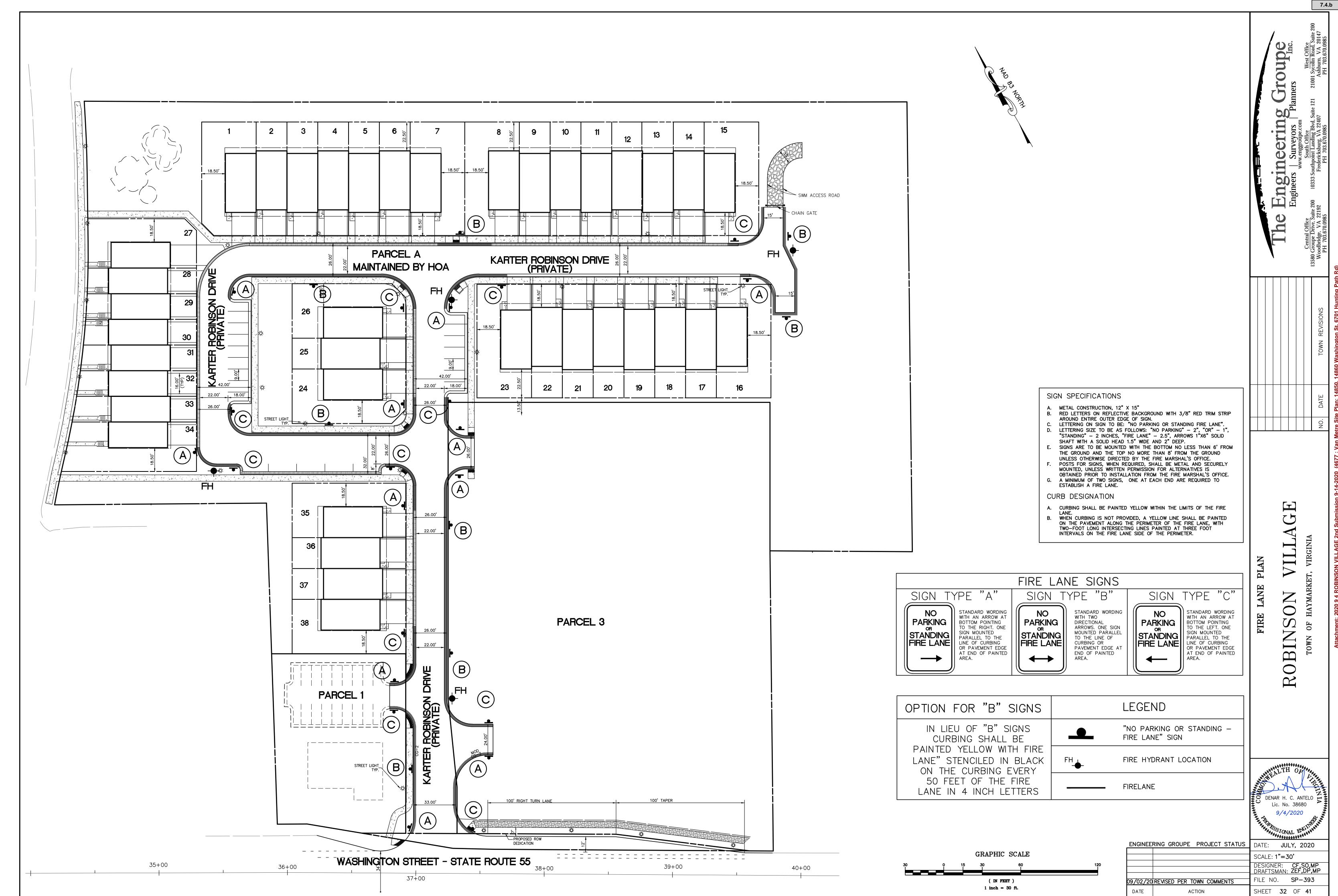
SCALE: N/A 09/02/20 REVISED PER TOWN COMMENTS

FILE NO. **SP-393** SHEET **30** OF **41** 

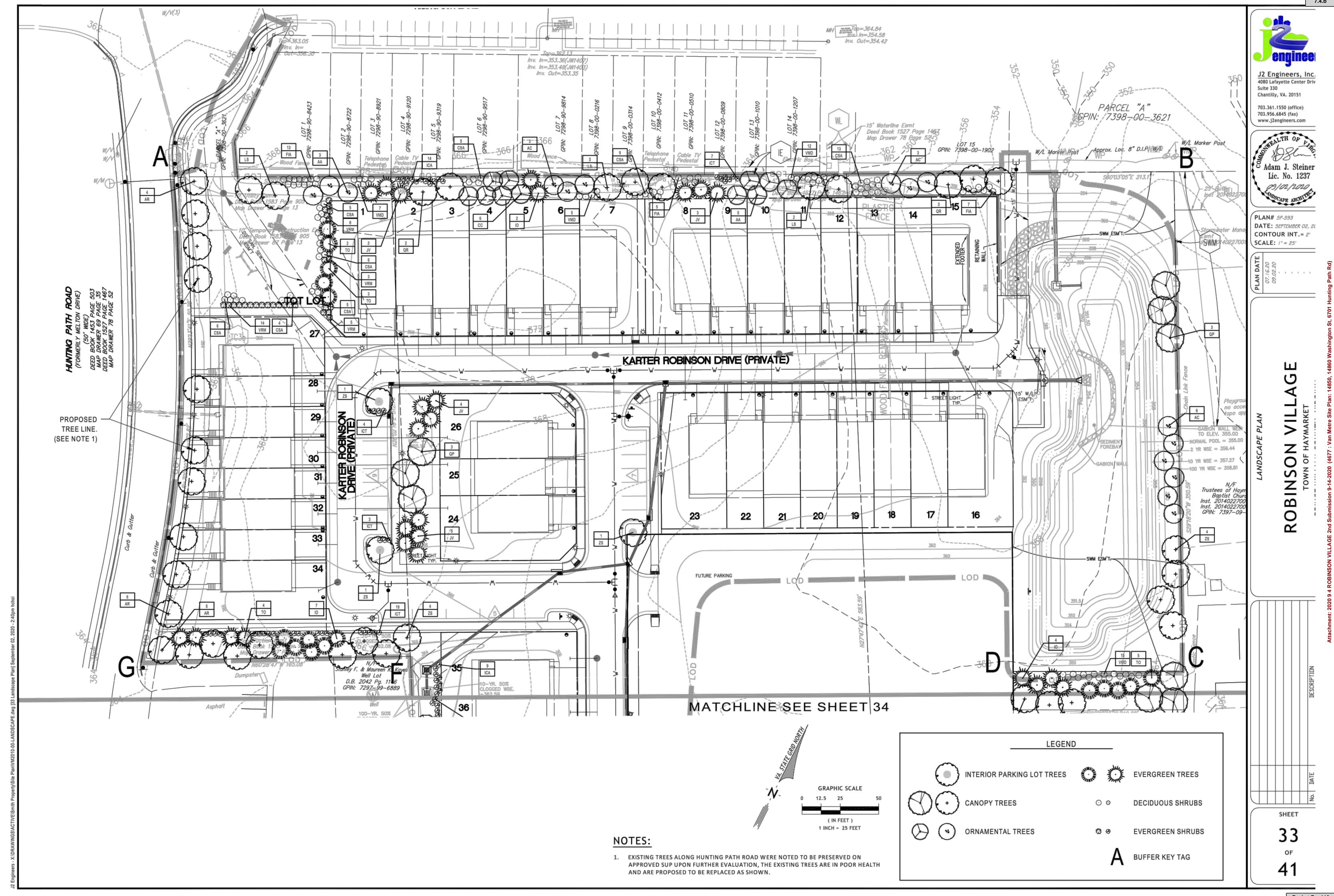
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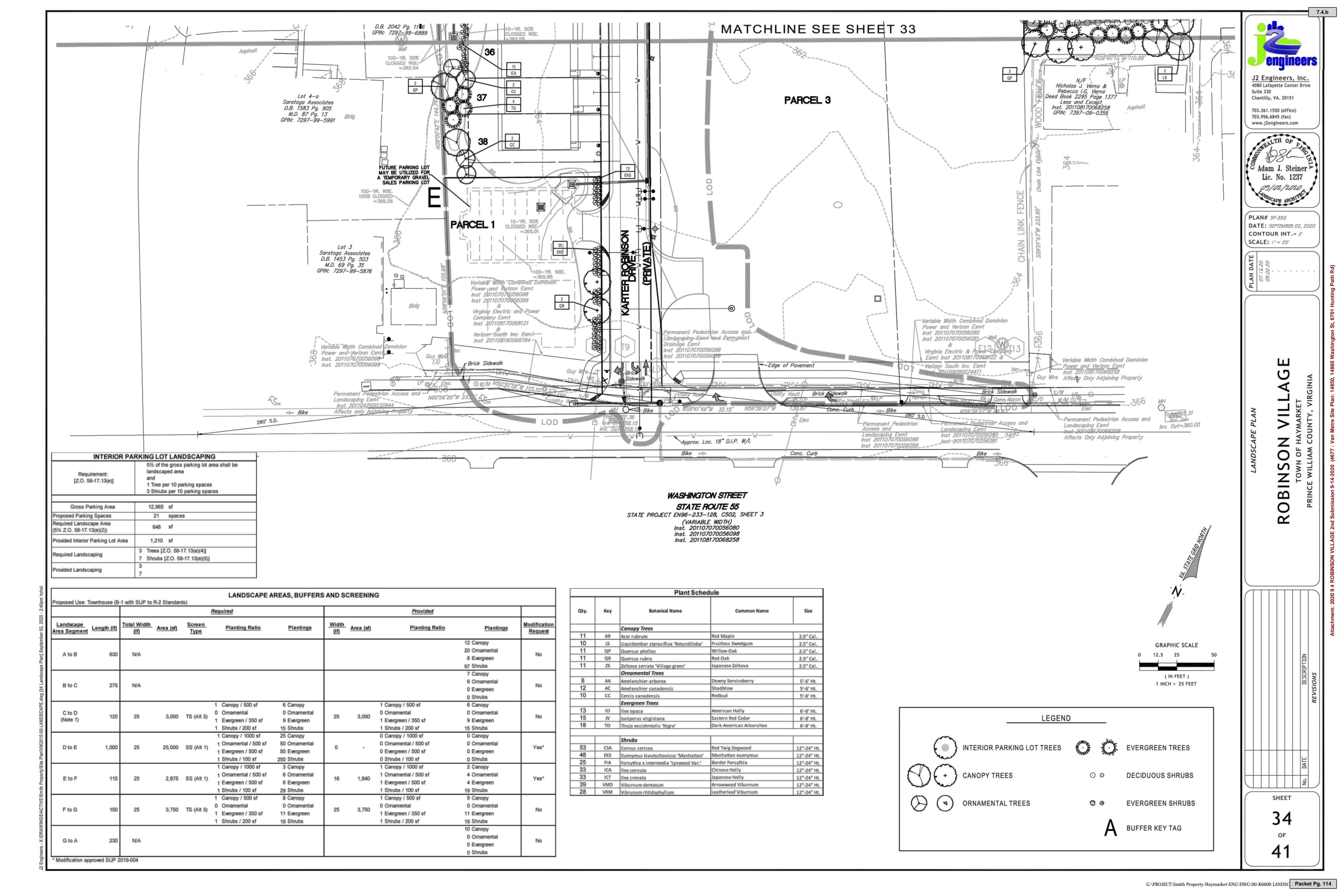


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Town of Haymarket Zoning Ordinance; Virginia Stormwater Management Handbook;

American Joint Committee on Horticultural Nomenclature;

American Standard for Nursery Stock (ANSI Z60.1), latest edition; Landscape Specification Guidelines for Baltimore Washington Metropolitan Areas, latest edition, by Landscape

Contractors Association MD, DC, VA. C. The Contractor shall guarantee all landscape improvements, including sod/seeding, for one full year from the date of

initial acceptance by the owner. Contractor must contact owner at least 10 business days in advance to schedule acceptance inspection(s). Contractor must replace all dead or unacceptable plants during the following planting season.

SUBMITTALS: Submit the following to the Owner's Representative prior to beginning work:

Copies of manufacturer's data for all materials required. Samples of required mulch material.

Chemical and mechanical analysis and samples of all existing soil, topsoil, organic matter and soil mix to be used.

D. Planting schedule showing the dates (earliest and latest) proposed for each type of plant specified, schedule each type of planting within the normal planting seasons for such work. Include requests for any proposed changes in the approved planting season and a list of proposed sources for all plant materials.

 List of proposed sources for all plant material. DELIVERY, HANDLING, AND STORAGE:

 Deliver packaged materials in manufacturer's unopened containers or bundles, fully identified with name, brand, type, weight, and analysis. Store packaged materials in such a manner as to prevent damage or intrusion of foreign matter.

 B. Dig balled and burlapped (B&B) plants with firm, natural balls of earth, of a diameter not less than that shown on the plant list nor less than recommended by the American Standard for Nursery Stock, and of sufficient depth to include the fibrous and feeding roots. B&B plants will not be accepted if the ball is cracked or broken before or during planting

C. Deliver trees and shrubs after preparations for planting have been completed. Do not bend, bind, or tie trees or shrubs in such a manner as to damage bark, break branches or destroy natural shape. If planting is delayed more than 6 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist by heeling-in bare root stock and covering plant balls with soil, peat moss or other acceptable material for balled stock. Plants shall be kept well watered and shall not remain unplanted for longer than ten (10) days after delivery.

D. Plants shall be lifted and handled from the bottom of the ball only.

 E. Do not remove container-grown stock from containers until planting time. <u>DRAINAGE</u>: Before planting, determine that areas to receive plant material have adequate subdrainage.

 The landscape contractor is responsible for drainage tests as necessary to identify any problems prior to beginning planting operations. Upon commencement of planting operations the landscape contractor assumes responsibility for

B. Dig planting pits to full depth and dimensions indicated on drawings.

C. At bottom of planting pit, excavate rectangular pit 12 inches by 12 inches by 18 inches deep. Quickly pour water into pit to a depth of 6 inches (approximately 3-3 3/4 gallon). Note time required for water to be completely absorbed. Divide time noted by 6 to achieve average rate of absorption for 1 inch of water. Where rate of absorption exceeds 60 minutes per inch, notify owner immediately for directions on how to proceed.

PLANTING DATES: Planting shall be done only within the following dates except as approved by Owner.

A. Deciduous Trees and Shrubs: March 1 to May 31 and October 15 to December 15.

B. Evergreen Trees, Shrubs and Vines: March 1 to May 31 and September 1 to November 15.

C. All plant material shall be guaranteed by the Contractor for a period of 1 year from the date final acceptance to be in good, healthy and flourishing condition.

MATERIALS FOR PLANTING: Contractor must provide, load, haul, mix and spread all materials for plantings as required.

 Topsoil: shall be a fertile, friable natural loam, uniform in composition, free of stones, lumps, plants and their roots, debris and other extraneous matter over 1 inch in diameter, capable of sustaining vigorous plant growth. Soil shall be harvested at a single source from the O and/or A horizons of the soil profile.

 Topsoil shall have a pH range of 5.5 to 7.5. 2) Topsoil shall contain 1.5-5% organic matter by dry weight .

3) Soil Texture: sandy loam, sandy clay loam with the following particle size distribution:

Less than 10% 15-30% 20-35% Chemical Levels shall be:

Magnesium Mg Phosphorus P205 150+ units Potassium - K20 120+ units

 Soluble Salts/ Conductivity - Not to exceed 900 ppm/0.9 mmhos/cm (in soil); not to exceed 3000 ppm/2.5 mmhos/cm (in high organic mix)

6) Cation exchange capacity shall be a minimum of 8 meg/100g.

B. Clay Loam to Sandy Clay Loam Soil: shall be a fertile, friable natural loam, uniform in composition, free of stones, lumps, plants and their roots, debris and other extraneous matter over 1 inch in diameter, capable of sustaining vigorous plant

Soil shall have a pH range of 5.5 to 6.5.

2) Soil shall contain 2-5% organic content by volume.

3) Soil Texture: Clay loam to sandy clay loam with the following particle size distribution:

Gravel Less than 10% 20-50% Sand <35% 20-40%

4) Chemical Levels shall be: Magnesium Mg 100+ units

Phosphorus P205 150+ units Potassium - K20 120+ units

5) Soluble Salts/ Conductivity - Not to exceed 900 ppm/0.9 mmhos/cm (in soil); not to exceed 3000 ppm/2.5 mmhos/cm (in high organic mix)

Cation exchange capacity shall be 20-35 meq/100g.

C. Compost: Compost shall be mature, stable, weed free, and produced by aerobic decomposition of organic matter. Compost feedstock shall be plant matter, such as high lignin forestry products or yard waste (leaves, brush and yard

 The product must not contain any visible refuse or other physical contaminants, substances toxic to plants, or over 5% sand, silt, clay or rock material by dry weight.

2) Compost shall be sampled and tested as required by the Seal of Testing Assurance Program of the United States Composting Council (USCC) and shall meet the physical requirements for compost as determined by USCC. 3) The product shall possess no objectionable odors. The product must meet all applicable USEPA CFR, Title 40, Part

503 Standards for Class A biosolids. The moisture level shall be such that no visible water or dust is produced when handling the material.

 Composted Pine Bark Fines: Shall be approved composted, ground pine bark having no particle with a dimension greater than 3/4 inch. No more than 10% shall be wood.

E. Mulch: Shall be shredded hardwood bark for trees and shrubs. Fine bark mulch is to be used for perennial beds. F. Sand: Shall be quartz based sharp concrete sand, ASTM C-33 Fine Aggregate, with a Fines Modulus Index between

G. Trace Elements: Shall be commercially available slow release materials containing zinc (Zn), Molybdenum (Mo), Copper (Cu), Boron (B), and Magnesium (Mn).

H. Fertilizer: A commercial fertilizer for ornamental trees, shrubs and ground cover with an analysis of 10% Nitrogen, 6% Phosphorus and 4% Potassium shall be used. This fertilizer shall be granular with a minimum of 50% of the total Nitrogen in organic form. 14-14-14-Osmocote (or approved equal) shall be applied at a rate of 10 lbs. per square foot, tilled to a depth of 8 inch, shall be used for perennials.

Soil Separator: Shall be rot resistant non-woven polypropylene filter fabric, water permeable, and unaffected by freezing and thawing. Acceptable products include: Mirafi 140N, Mirafi Civil Engineering Co., or Stabilenka Type T-80, American Enka Co., Enka, N.C.

Planter Drainage Fabric: Shall be prefabricated planter drainage fabric Miradrain 9000, a composite system consisting of a Mirafi drainage fabric bonded to a three-dimensional highly impact-resistant plastic core. The core shall have the following attributes:

Compressive Strength: (ASTM D-1621), 15,000 + PSF.

Overlaps: Shall be capable of mechanically interlocking so as to prevent separation of the overlaps during backfill. PLANT MATERIALS: Refer to the PLANT LIST on the drawings for specific types and quantities of plants:

A. Plants shall be nursery grown in accordance with good horticultural practices. Plants shall either be obtained from local nurseries and/or others, which have soil (heavy clay) and climatic conditions similar to those in the locality of the project. Plant material grown in sandy, well-drained soil will not be approved for this project. Plants shall be true to species and variety and unless specifically noted otherwise, all plants shall be of specimen quality, exceptionally heavy, symmetrical, tightly-knit plants, so trained or favored in their development and appearance as to be superior in form, number of branches, compactness and symmetry.

Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf, free of disease, insect pests, eggs or larvae and shall have healthy, well-developed root systems. They shall be free from physical damage or any conditions that would prevent thriving health and the desired appearance.

Trees with abrasion of the bark, sun scald, disfiguring knots, or pruning cuts more than 1 1/4 inch diameter which have not completely callused, will be rejected. Plants shall conform to measurements specified in the plant schedules except that plants larger than specified may be

used if acceptable to the Landscape Architect or owner. Use of such plants shall not increase the contract price. If larger plants are accepted, the root ball shall be sized for the larger plant. Caliper Measurement: Shall be taken at a point on the trunk 6 inches above natural ground line for trees up to 4 inches

G. Plants shall be measured when branches are in the normal position. Height and spread dimensions specified refer to

diameter, and at a point 12 inches above the natural ground line for trees over 4 inches diameter.

Trees, which have a damaged or crooked leader, or multiple leaders, unless specified in the plant list, will be rejected.

the main body of the plant and not from branch tip to tip.

SOIL MIXING PROCEDURES:

Topsoil used in sand/soil mixes shall be screened or shredded prior to mixing in sands. Maximum clod inclusion for soil mixes shall not exceed:

Clod size (largest dimension) % of the soil mix volume 1 to 3 inches 3 to 6 inches

>6 inches Less than 2% B. Source material and soil mix stockpiles shall be protected from rain by covering with filter cloth.

 Examine the areas and conditions where soil mix is to be installed and notify the Landscape Architect of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

B. Cooperate with other Contractors and trades working in and adjacent to other work areas. Examine drawings which show development of entire project and become familiar with scope of other work required.

SOIL INSTALLATION - GENERAL PROCEDURES:

 If subgrade soil compaction exceeds 80%, existing soil shall be ripped to a depth of 14 inches to alleviate compaction which has taken place during construction. Prior to loosening of soil, Contractor must locate existing utilities and coordinate with Owner any underground electric lines, drainage pipes, conduits, etc.

B. Prepare the subgrade by roughening the top 3 inches of the subsoil by dragging the teeth of a backhoe bucket across

C. Begin soil installation as soon as subsoil is prepared. Use low impact equipment with track belts, large tires, or low tire pressure to lower compaction and soil damage during installation.

D. Monitor compaction during installation and loosen soils as needed if compaction exceeds 80%. E. Install specified soil in 12-18 inch thick lifts. Compact each lift sufficiently to reduce settling but not enough to prevent the movement of water and feeder roots through the soil. The soils in each lift should feel firm to the foot in all areas

and make only slight heel prints. INSTALLATION OF SOIL MIX FOR LAWN AREAS ON GRADE;

A. Soil Mix for Lawns on Grade: shall consist of 10% compost and 90% topsoil, by volume. These materials must meet specifications described in Section 2.00.

B. Loosen subgrade lawn areas to a minimum of 3 inches. Remove stones more than 1-1/2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter. Limit preparation to areas which will be planted promptly after

C. Spread soil mix for lawn areas on grade to a minimum depth of 6 inches as required to meet grade and elevations shown on drawings, after lightly rolling and natural settlement. Allow for sod thickness in areas to be sodded.

12. INSTALLATION OF SOIL MIX FOR TREE PITS ON GRADE A. Confirm that native subsoil drains at a rate of at least ¼ inch per hour. If drainage is less than ¼ inch per hour, provide

B. Install 30-36 inches of Soil Mix for Tree Pit Backfill on Grade, which shall consist of 3 parts existing clay loam to sandy clay loam soil, amended per soil test results instructions and incorporating 1 part Compost and/or Composted Pine Bark

Till 4 inches of compost into the top 6 inches of the installed Soil Mix.

13. INSTALLATION OF SOIL MIX FOR MULCHED SHRUB AND PERENNIAL BEDS:

A. Confirm that native subsoil drains at a rate of at least 1/2 inch per hour. If drainage is less than 1/2 inch per hour, provide subsurface drainage lines.

B. Install 14-18 inches of Soil Mix for Mulched Shrub and Perennial Beds, which shall consist of 3 parts existing clay loam to sandy clay loam soil, amended per soil test results instructions and incorporating 1 part Compost and/or Composted

C. Till 4 inches of compost into the top 6 inches of the installed Soil Mix.

14. EROSION CONTROL MATERIAL AND PLANTING ON STEEP SLOPES:

final acceptance of the last section.

A. Material meeting the requirements of the specifications shall be installed and maintained on the designated areas as shown and specified. The areas to be covered shall be prepared and fertilized as specified before the erosion material is placed. Immediately prior to the planting operations, the material shall be laid evenly, smoothly and in contact with the

B. Lay erosion control materials with one inch nominal openings in accordance with manufacturer's instructions. Unroll in direction of water flow. Overlap sheets by at least 6 inches. Where strips are to be spliced lengthwise, overlap strips by 8 inches. Upgrade section shall be on top of all splices.

C. The Contractor shall maintain and protect the erosion control material until the final inspection. Maintenance shall consist of repairs made necessary by erosion, wind or any other cause. Following the restoration of damaged areas under plant and turf guarantee and establishment requirements for applicable underlying items; the erosion control material shall be repaired or replaced to meet the original requirements and maintained until the final inspection.

GENERAL PLANT INSTALLATION: Excavation: Excavate all tree pits and planting areas to the width and depth shown in the planting details.

 B. Center plant in pit and orient for the best visual effect. Set plants plumb and hold rigidly in position until soil has been tamped firmly around root ball.

C. Mix soil amendments and fertilizers with existing soil in accordance with soil recommendations for plant type, based upon soil test results as approved by Owner. Delay mixing of fertilizer if planting will not occur within a few days.

D. Backfill pit with planting soil mix, consisting of 2/3 existing soil and 1/3 organic material, and fertilizer, until two-thirds full. Tamp and water each layer thoroughly to settle soil. After soil settles, fill pit with remaining planting soil mix, water and shape surface so that it slopes to drain from trunk and matches ground at edge of planting pit.

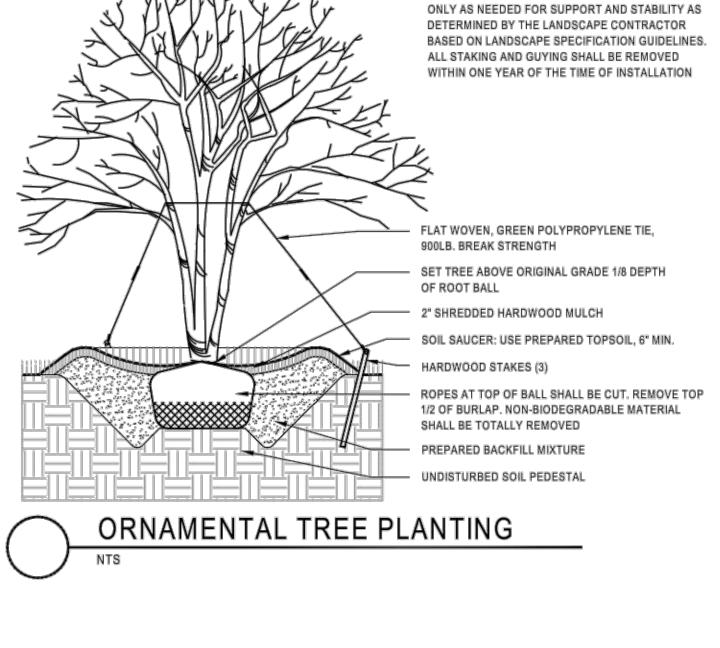
Mulch within 48 hours after planting and after applying the pre-emergent herbicide, except ground cover areas (which shall have organic material placed before planting) with a 2 inch layer of mulch immediately after planting. All bed lines shall be cut with a smooth consistent edge to a minimum depth of 3 inches. Keep mulch out of the crowns of shrubs and off buildings, sidewalks, light standards, and other structures.

F. All planting areas to conform to specified grades after full settlement has occurred and mulch has been applied. Provide saucers around tree pits as shown on planting details. Remove all tags, labels, strings, etc. from all plants. PERMANENT SEEDING OR SODDING FOR GRASS AREAS:

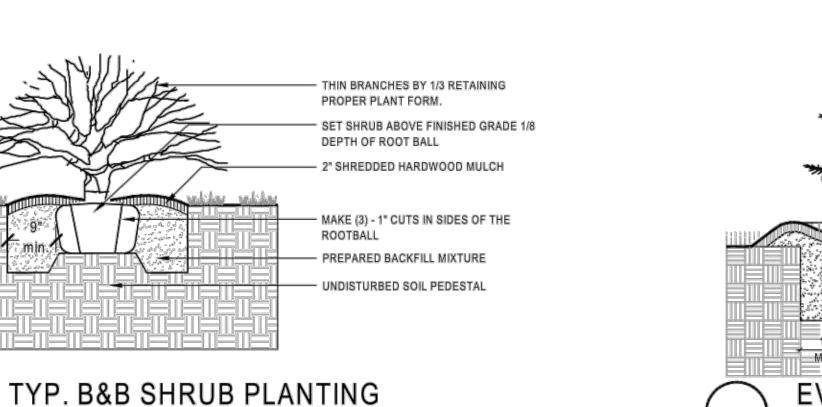
A. Lawn Seed or Sod varieties shall be an improved variety turf-type tall fescue blend. The landscape contractor shall select from varieties approved by the Maryland or Virginia Department of Agriculture.

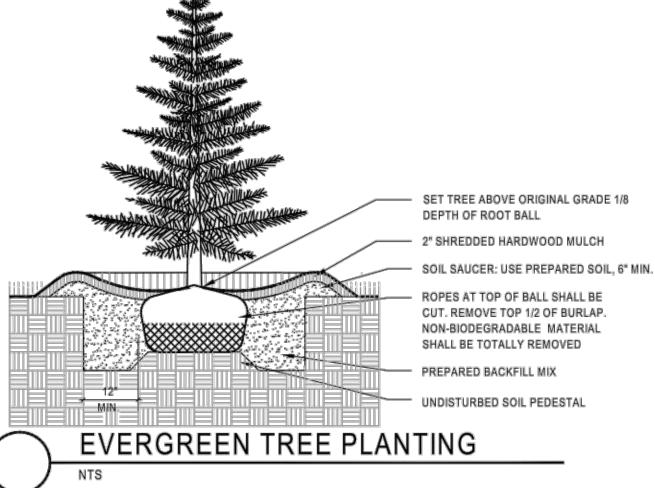
 Refer to the Virginia Erosion and Sediment Control Handbook, for guidelines, specifications and installation techniques C. Maintenance shall begin immediately after each plant and lawn area is installed and shall continue until 90 days after

1. STAKING AND GUYING SHALL BE IMPLEMENTED ONLY AS NEEDED FOR SUPPORT AND STABILITY AS DETERMINED BY THE LANDSCAPE CONTRACTOR BASED ON LANDSCAPE SPECIFICATION GUIDELINES. ALL STAKING AND GUYING SHALL BE REMOVED WITHIN ONE YEAR OF THE TIME OF INSTALLATION FLAT WOVEN, GREEN POLYPROPYLENE TIE, 900LB, BREAK STRENGTH SET TREE ABOVE ORIGINAL GRADE 1/8 DEPTH OF ROOT BALL 2" SHREDDED HARDWOOD MULCH SOIL SAUCER: USE PREPARED SOIL, 6" MIN. ---- HARDWOOD STAKES OR ANCHORS ROPES AT TOP OF BALL SHALL BE CUT. REMOVE TOP 1/2 OF BURLAP. NON-BIODEGRADABLE MATERIAL SHALL BE TOTALLY REMOVED PREPARED BACKFILL MIX UNDISTURBED SOIL PEDESTAL **DECIDUOUS TREE PLANTING** 



1. STAKING AND GUYING SHALL BE IMPLEMENTED



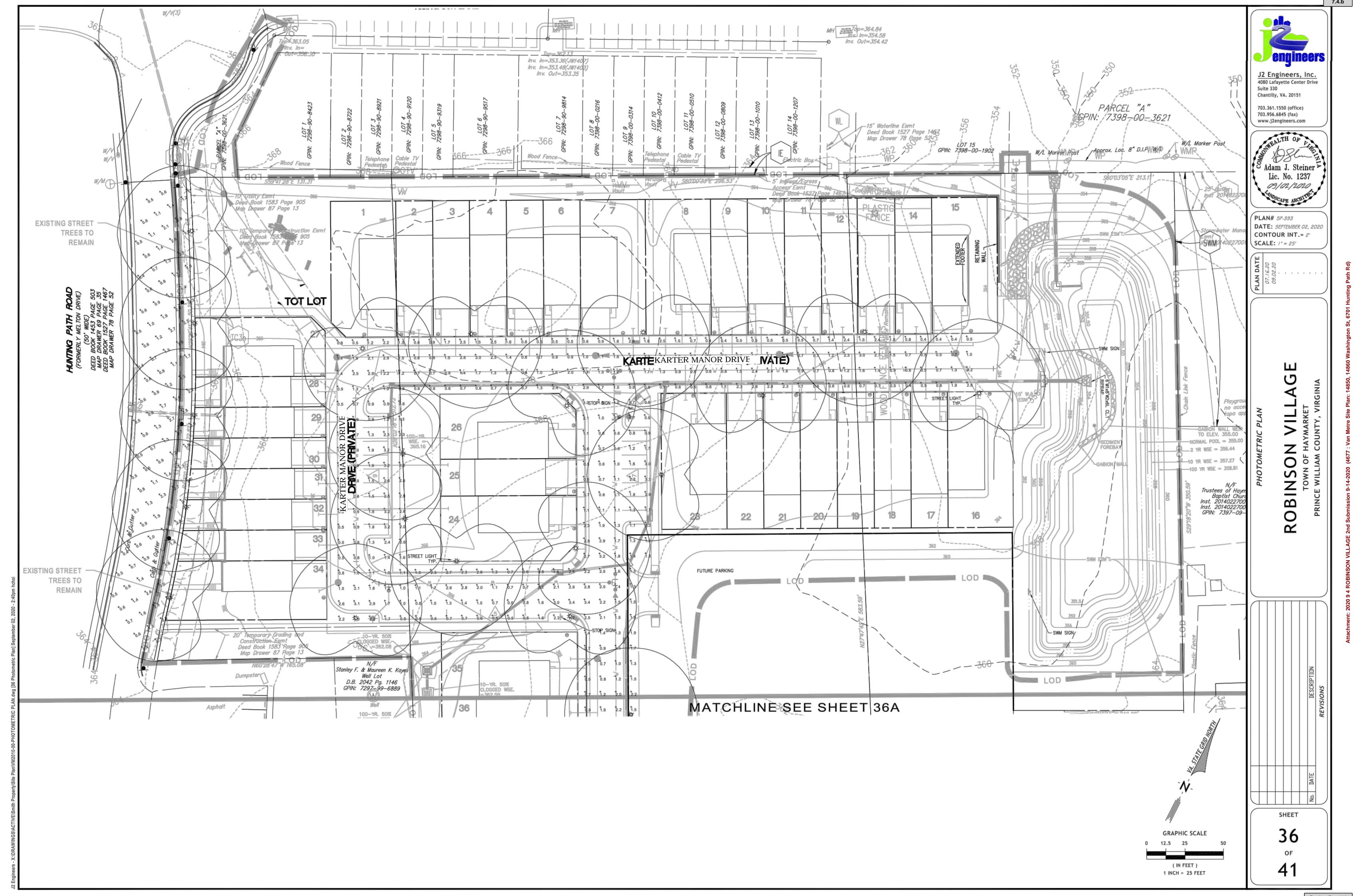


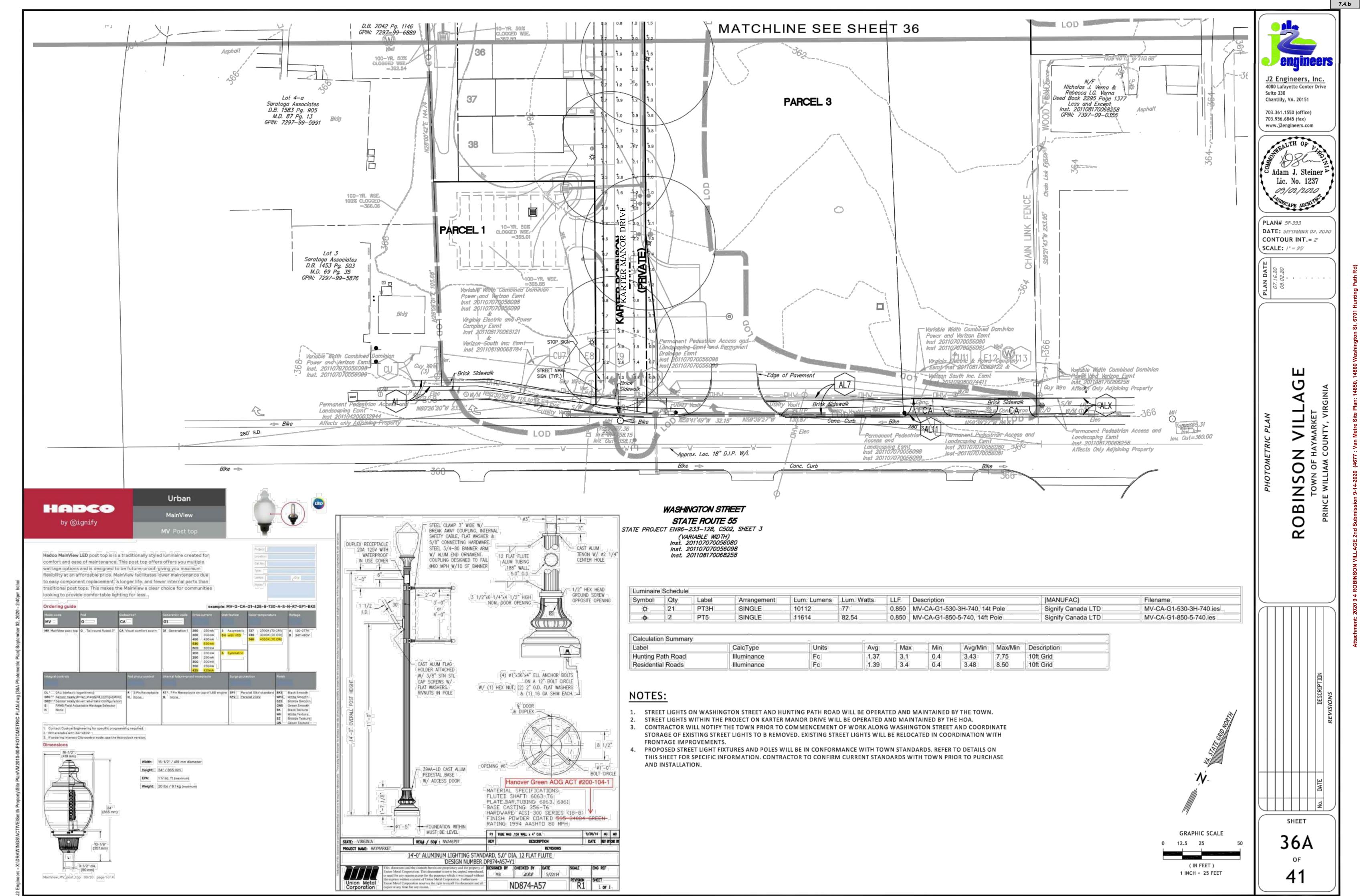
J2 Engineers, Inc.

4080 Lafayette Center Drive Suite 330 Chantilly, VA. 20151 703.361.1550 (office) 703.956.6845 (fax) www.j2engineers.com PLAN# 5P-393 DATE: SEPTEMBER 02, 2020 CONTOUR INT. = 2° SCALE: 1" = 25"

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SHEET





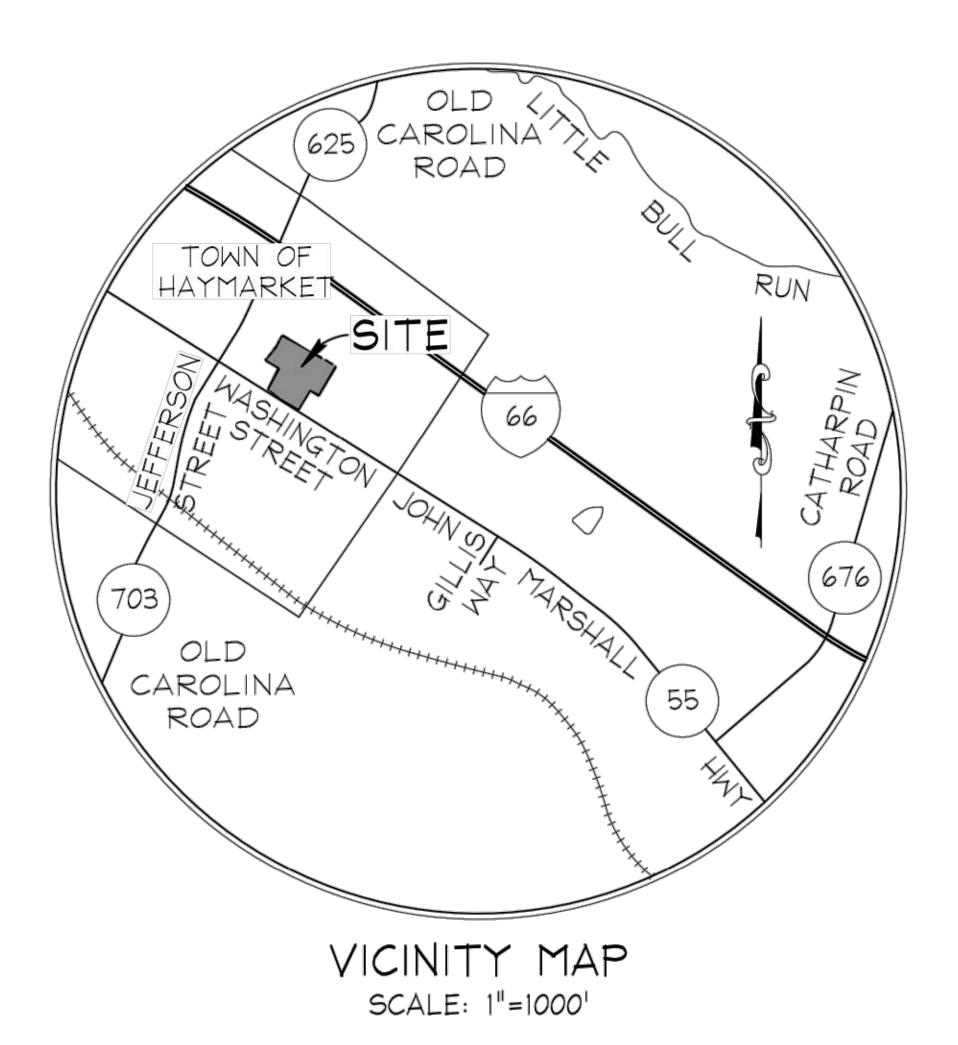
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SCALE: 1"=40'

# ENGINEERING GROUPE PROJECT STATUS DATE: APRIL 12, 2019

# SPECIAL USE PERMIT PLAN **FOR** SMITH PROPERTY AT HAYMARKET

# TOWN OF HAYMARKET, **VIRGINIA**



BENJAMIN M SMITH JR TR C/O BM SMITH & ASSOCIATES INC 2407 COLUMBIA PIKE, SUITE 200 ARLINGTON, VA 22204

OWNER:

# **APPLICANT**

VAN METRE COMMUNITIES, LLC 9900 MAIN STREET, SUITE 500 FAIRFAX, VA 22031 (703) 425-2610

# **ENGINEER:**

THE ENGINEERING GROUPE, INC. 13580 GROUPE DRIVE, SUITE 200 WOODBRIDGE, VA 22192 (703) 670-0985

THIS SHEET TO BE USED FOR INFORMATION ONLY!!!

PRELIMINARY LANDSCAPE PLAN

FILE No. SP-393 SHEET 38 OF 41

SHEET INDEX:

SHEET NUMBER

DESIGNER: DA
DRAFTSMAN: DMB
FILE NO. 1/2/20 REVISED PER COUNTY COMMENTS 10/8/19 REVISED PER COUNTY COMMENTS 6/11/19 REVISED PER COUNTY COMMENTS SHEET 1 OF 4

