

TOWN OF HAYMARKET PLANNING COMMISSION

REGULAR MEETING ~ AGENDA ~

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

15000 Washington Street, Suite 100 Haymarket, VA 20169

Wednesday, February 22, 2023

7:00 PM

Council Chambers

I. Call To Order

II. Pledge of Allegiance

III. Citizens Time

IV. Minute Approval

1. Planning Commission - Regular Meeting - Jan 17, 2023 7:00 PM

V. Agenda Items

- 1. Site Plan Review 14750 Jordan Lane
- 2. Site Plan Review Masonic Lodge
- 3. Site Plan Review Haymarket Town Center

VI. Old Business

VII. New Business

VIII. ARB Updates

IX. Town Council Updates

X. Adjournment



TOWN OF HAYMARKET PLANNING COMMISSION

REGULAR MEETING ~ MINUTES ~

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

15000 Washington Street, Suite 100 Haymarket, VA 20169

Tuesday, January 17, 2023

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 Alexander Beyene called the meeting to order.

I. Call To Order

Councilman Bob Weir: Present, Commissioner Robert Hallet: Present, Chairman Alexander Beyene: Present, Commissioner Robert Chrisman: Present, Commissioner Sandy Freeman: Present.

II. Pledge of Allegiance

Chairman Alexander Beyene invited everyone to stand for the Pledge of Allegiance.

III. Citizens Time

There were no citizens present at this meeting.

IV. Minute Approval

1. Planning Commission - Public Hearing - Oct 17, 2022 7:00 PM Commissioner Hallet moved to approve the minutes from the October 17, 2022 Planning Commission meeting. Commissioner Chrisman seconded the motion. The motion carried.

RESULT: ACCEPTED [UNANIMOUS]

MOVER: Robert Hallet, Commissioner

SECONDER: Robert Chrisman, Commissioner

AYES: Weir, Hallet, Beyene, Chrisman, Freeman

V. Agenda Items

1, 2023 Meeting Schedule

Town Clerk Kim Henry presented a draft of the 2023 meeting schedule. She pointed out 2 dates that meeting dates fall on a holiday, February and June. Ms. Henry gave alternate dates for those meetings. The Commission discussed the dates. Because of the February alternative date was also an election day, the Commission decided to hold their February meeting on Wednesday, February 22, 2023. The Commission also decided to hold their June meeting on Tuesday, June 20, 2023. All other meetings would fall on the third Monday of the month.

Commissioner Chrisman moved to adopt the meeting schedule as amended. Commissioner Freeman seconded the motion. The motion carried.

RESULT: ADOPTED [UNANIMOUS]

MOVER: Robert Chrisman, Commissioner

SECONDER: Sandy Freeman, Commissioner

AYES: Weir, Hallet, Beyene, Chrisman, Freeman

VI. Old Business

1. Comprehensive Plan Discussion

Town Planner Thomas Britt lead the conversation on the draft of the Comp Plan. He shared some of the updates by stating that there is a 2 month window to work with that Town Manager Emily Kyriazi set as a deadline for the revision of the plan. Mr. Britt stated that he will be working with Commissioner Chrisman and will be starting with checkpoints and other items with

a plan to have a draft by the February meeting. He also shared that he is planning on meeting with a representative that could provide language on the CBPA (Chesapeake Bay Preservation Act) requirement to incorporate into the Comp Plan. He stated that he will bring forth updates on that section at the February meeting. A discussion followed on the newest census data, soil and water data, the survey results and the long range land use map. A direction was given to provide the survey data to the Commission by the February meeting.

VII. New Business

Town Planner Thomas Britt shared that there was no New Business. There was a question on the progress of the Planet Fitness. Mr. Britt shared that the sign permit was approved at a previous ARB meeting and have filed building permits with the County. He shared that he was not sure whether they have been able to obtain those permits. There was a directive to follow up with the representative from Planet Fitness to see if they have had any problems receiving what they need from the County to proceed.

Mr. Britt shared that the construction of the townhouses at Crossroads Village Center have started. He also shared that there has been several business license applications come in for the multi tenant buildings within Crossroads, as well. He also shared that the last three homes in the Robinson Village are about completion and awaiting occupancy permit letters. Mr. Britt continued to share that he will be meeting with a representative from D.R. Horton on developing a parcel behind the Robinson Paradise development. After a short discussion, it was determined that the parcel was not in the Town. There was also a discussion about an inquiry of a possible townhome development off of Blight Drive prior to Town Manager Emily Kyriazi's maternity leave. Mr. Britt shared that there had not been any additional inquiry on it and there has not been any applications with those particular parcels. There was a short discussion on the Census Bureau population numbers.

VIII. ARB Updates

Commissioner Hallet gave the updates from the Architectural Review Board. He shared that they will be reviewing a sign permit application from Ghosted Concepts and also from Lidl Grocery Store at their next meeting. Mr. Britt shared that Lidl deferred their request. Mr. Hallet shared that the ARB approved the demolition permit application on the Robinson Paradise property. There was also a discussion on an email from a citizen about the new buildings in the Crossroads Village Center not keeping to the character of the Town's historical feel. Mr. Hallet shared that the approval of the buildings were done in a master design plan before he was serving on the Board. Council Member Weir confirmed that the building designs were approved years ago with a previous ARB.

IX. Town Council Updates

Council Member Weir shared that the Town Council will start and work on the FY24 budget within the next few months. He shared that there would be public hearing at the February meeting on the FY23 2nd quarter budget amendment. He shared that the Town Council re-appointed all the liaisons at their January Organizational Meeting. He also shared that the new sidewalk project was being pushed forward and that the Council should have an estimate by the next meeting. He also shared that the Town Council is looking at what to do with the Town Park building. He stated that the Council received a complete report on what has to be done to the building. He continued to state that the Council is waiting on the cost estimate. There was a brief discussion on the recent training they received.

X. Adjournment

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

1. Motion to Adjourn

RESULT: ADOPTED [UNANIMOUS]
MOVER: Bob Weir, Councilman

SECONDER: Robert Chrisman, Commissioner

AYES: Weir, Hallet, Beyene, Chrisman, Freeman

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

Thomas Britt Town Planner

MEMORANDUM

TO: Planning Commission

FROM: Thomas Britt, Town Planner

DATE: February 17, 2023

SUBJECT: 14750 Jordan Lane Site Plan Review

The applicant at 14750 Jordan Lane has delivered their second site plan submission for review. The Town Engineer is still waiting on comments from the developer.

IN-LIEU AGREEMENT



COUNTY OF PRINCE WILLIAM 5 County Complex Court, Suite 170 Prince William, Virginia 22192-5308

(703) 792-7070 FAX: (703) 792-6297



Services Division

Thomas Bruun Director

> AGREEMENT IN LIEU OF A STORMWATER MANAGEMENT PLAN FOR CONSTRUCTION OF A SINGLE-FAMILY DETACHED RESIDENTIAL STRUCTURE LOCATED OUTSIDE OF A COMMON PLAN OF DEVELOPMENT (IN-FILL LOTS ONLY)

Landowner:

Name:	READY TO HANG, LLC			es a	
Mailing Address:	10511 GODWIN DRIVE				
City:	MANASSAS	State:	VA	Zip:	20112
Phone 1:		Email 1:			
Phone 2:	-	Email 2:			

SINGLE-FAMILY DETACHED STRUCTURE LOCATION INFORMATION

Disturbed Area (acres):	0.13	Impervious Area (acre		res):	0.027
	DISTURBANCE IN	NFORMATION			
City:	HAYMARKET	State:	VA	Zip:	20169
Site Address:	14750 JORDAN LANE			_	
GPIN:	7398-10-0562	Approved	LGR #:		

In place of a Stormwater Management Plan for the construction of this single-family detached residential structure, I agree to comply with the requirements of this "Agreement in Lieu of a Stormwater Management Plan" (or other requirements as established by the Department of Public Works as applicable) to ensure compliance with Section 23.2-32 of the Stormwater Management Code of Prince William

REQUIREMENTS

- 1) A copy of this signed and dated "Agreement in Lieu of a Stormwater Management Plan" shall be incorporated on to the lot grading plan.
- 2) Post-construction runoff from the property shall be minimized to the maximum extent practicable and shall be controlled to prevent flooding or erosion damage from occurring on adjacent or downstream properties. In meeting this requirement, I agree to direct:
- a) runoff from rooftops as non-erosive sheet flow to well-vegetated areas on the property to the maximum extent practicable,
- b) runoff from on-lot impervious surfaces (e.g., driveways, parking areas, sidewalks) as non-erosive sheet flow to well-vegetated areas on the property to the maximum extent practicable, and
- c) runoff from lawns as non-erosive sheet flow to undisturbed naturally-vegetated areas on the property to the maximum extent practicable.

I fully understand that not complying with this agreement may result in the revocation of this "Agreement in Lieu of a Stormwater Management Plan" and the County may require submission of a project-specific Stormwater Management Plan in accordance with Section 23.2-32 of the Stormwater Management Code of Prince William

This "Agreement in Lieu of a Stormwater Management Plan" shall be binding on the landowner and any other successors of this property. The landowner hereby agrees to provide access to the property for routine inspections by the County to ensure that the terms of this agreement are still in-place and functional. In addition, the County at its discretion, may require proof from landowner at any time to verify compliance with

This "Agreement in Lieu of a Stormwater Management Plan" does not authorize land disturbance. Landdisturbing activities cannot begin until a building permit is issued for construction of a detached residential

Landowner's Name:	ROGELIO AVILES	Title:OWNER	
Landowner's Signature:	Rogelio Aviles	Date:DEC. 2022	

STORMWATER RUNOFF NOTE:

ALL ROOFWATER SHALL BE ROUTED VIA DOWNSPOUTS THAT DAYLIGHT ONTO SPLASHBLOCKS, DIRECTED AWAY FROM THE BUILDING FOUNDATION. SPLASHBLOCKS SHALL BE PLACED ON FLAT GROUND, AND SHOULD DISCHARGE ONTO SOD, ESTABLISHED GRASS COVER OR INTO MULCH PLANTING BEDS. CONTRACTOR SHALL ENSURE DRAINAGE FLOWS AWAY FROM THE BUILDING FOR A MINIMUM OF 10 FEET, WITH AT LEAST 6 INCHES OF FALL.

THE CONTRACTOR MAY OPT TO INSTALL SHEETFLOW TRANSITION AREAS AT THE DOWNSPOUT LOCATIONS, WHERE SITE CONDITIONS PERMIT. SEE DETAILS BELOW.

THE PROPERTY IS AN INFILL RESIDENTIAL LOT LOCATED WITHIN THE BULL RUN (132) WATERSHED, WITH NO MAPPED FLOOD HAZARD OR RESOURCE PROTECTION AREAS.

DRAINAGE FROM THIS PROJECT WILL SHEET FLOW TO THE NORTH, TO AN EXISTING STORM DRAINAGE INLET IN THE PIEDMONT MEWS DEVELOPMENT.

THE CONTRACTOR SHALL INSTALL THE PERIMETER EROSION CONTROL MEASURES AT THE LIMITS OF CLEARING, AND ENSURE NO POLLUTED RUNOFF LEAVES THE PROJECT AREA OR IMPACTS DOWNSTREAM PROPERTIES. ANY EROSION CONTROL MEASURE FOUND TO BE FAILING SHALL BE REPAIRED IMMEDIATELY.

VSMP INFORMATION

PROPERTY IS A RURAL 1.0 ACRE INFILL LOT LOCATED NORTH OF INTERSTATE 66 WITH A PROPOSED DISTURBED AREA OF 5674 SF. OR 0.13 ACRE. PROPOSED NEW IMPERVIOUS AREA = 1215 SF, OR 0.027 AC.

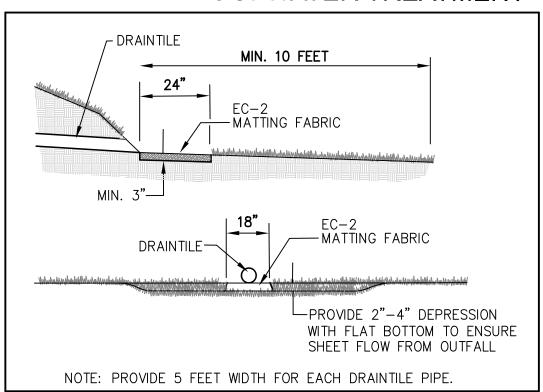
THE \$209.00 VSMP FEE SHALL BE NOT BE REQUIRED

APPLICANT SHALL COMPLY WITH CONDITIONS ON THE ATTACHED AGREEMENT "IN-LIEU" OF ONSITE STORMWATER MANAGEMENT.

NOTES:

- POST CONSTRUCTION RUNOFF FROM THE PROEPRTY SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE AND SHALL BE CONTROLLED TO PREVENT FLOODING OR EROSION DAMAGE FROM OCCURING ON ADJACENT OR DOWNSTREAM PROPERTIES.
- 2. THE PROPERTY OWNER IS RESPONSIBLE TO DIRECT AND MAINTAIN RUNOFF FROM ROOFTOPS, ON-LOT IMPERVIOUS SURFACES AND LAWNS AS NON-EROSIVE SHEET FLOW TO WELL VEGETATED AREAS ON THE PROPERTY.

ALTERNATIVE ROOFWATER TREATMENT



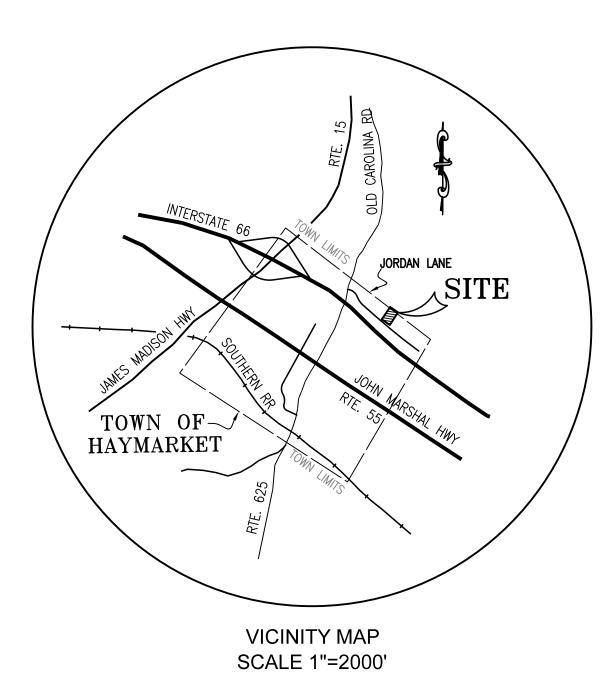
DETAILS - SHEET FLOW TRANSITION AREA (S.T.A.)

CONTRACTOR MAY OPT TO INSTALL THE ABOVE DETAILED SHEET FLOW TRANSITION AREA. DOWNSPOUTS WILL BE ROUTED UNDERGROUND TO DRAINTILE, AND DIRECTED AWAY FROM THE BUILDING FOUNDATION. THE DRAINTILE WILL DAYLIGHT AT A LOCATION WHERE THIS MEASURE CAN BE INSTALLED, PREFERABLY AT WELL VEGETATED AREAS, WITH NO THREAT TO ADJACENT PROPERTIES.

> A "RESPONSIBLE LAND DISTURBER" (RLD) SHALL BE NAMED FOR THIS RESIDENTIAL PROJECT, PRIOR TO THE ISSUANCE OF ANY PERMITS OR COMMENCEMENT OF ANY LAND DISTURBING ACTIVITIES.

NOTES:

- 1. BOUNDARY INFORMATION DERIVED FROM DEEDS OF RECORD. TOPOGRAPHY AND DRAINFIELD LOCATIONS SHOWN WERE DERIVED FROM A FIELD RUN SURVEY BY THIS FIRM.
- 2. NO PORTION OF THIS PROPERTY IS LOCATED WITHIN MAPPED WETLANDS, A FLOOD HAZARD AREA, OR A RESOURCE PROTECTION AREA (RPA). NO CEMETERIES ARE LOCATED ON THIS LOT.
- 3. PERMANENT SEEDING SHALL BE APPLIED TO ALL DISTURBED AREAS NOT SHOWN TO RECEIVE OTHER COVER
- 4. SLOPES 3:1 OR GREATER, WHERE PERMITTED, SHALL BE PROVIDED WITH SPECIAL STABILAZATION, SUCH AS WITH REFORESTATION MEASURES AS SPECIFIED IN STANDARD 3.36 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, (STAKED SOD, SOIL STABILIZATION, BLANKETS AND MATTING, ETC.)
- 5. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE APPROVED LOT GRADING PLAN, WHICH MEETS THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VA. EROSION AND SEDIMENT CONTROL HANDBOOK AND THE PWC DESIGN & CONSTRUCTION STANDARDS MANUAL NO TRADE OR SITE INSPECTIONS WILL BE MADE UNLESS THE REQUIRED EROSION CONTROL PRACTICES ARE IN PLACE.



PROJECT DATA

GPIN: 7297-89-2986 ADDRESS: 14750 JORDAN LANE ZONING: R-1 ACREAGE: 1.047 ACRES

OWNER/APPLICANT: READY TO HANG, LLC 10511 GODWIN DRIVE MANASSAS, VA 20112

DEVELOPMENT STANDARDS

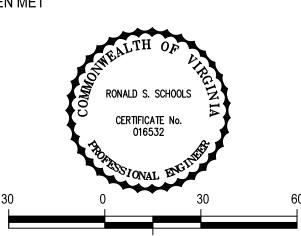
MIN. SETBACKS:

FRONT - 35 FEET FROM ANY STREET SIDE - 10 FEET MINIMUM, 20' TOTAL REAR - 25 FEET

HEIGHT - 35 FOOT MAXIMUM. BUILDING NOT TO NBE MORE THAN 3 STORIES ABOVE GRADE

BUILDABLE LOT COVERAGE: 30% OF TOTAL LOT AREA.

ENGINEER CERTIFICATE I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE THAT ALL THE MINIMUM REQUIREMENTS FOR OVERLOT GRADING PLANS FOR THE TOWN OF HAYMARKET HAVE BEEN MET



GRAPHIC SCALE IN FEET

SHEET INDEX

1. OVERLOT GRADING PLAN COVER SHEET 2. OVERLOT GRADING PLAN

OVERLOT GRADING PLAN COVER SHEET

PROPERTY LOCATED AT 14750 JORDAN LANE

TOWN OF HAYMARKET, VIRGINIA

SCHOOLS & TOWNSEND, P.C. ENGINEERS · SURVEYORS 9252 MOSBY STREET · MANASSAS, VIRGINIA 20110

703-368-8001 · FAX 703-368-9950 FILE: OGA **DATE:** DEC. 1, 2022 **SCALE:** 1" = 30'

DRAWN BY: TD CHECKED BY: RS SHEET <u>1</u> OF <u>2</u>

(WITHOUT WIRE SUPPORT)

SHEET FLOW INSTALLATION !--

POINTS A SHOULD BE HIGHER THAN POINT B.

DRAINAGEWAY INSTALLATION

(FRONT ELEVATION)

(PERSPECTIVE VIEW)

1. SET THE STAKES.

IT INTO THE TRENCH.

(SF

AFTER COMPLETION OF SEEDING, PROVIDE MULCH IN ACCORDANCE WITH THE MULCH SCHEDULE BELOW.

GERMAN MILLET

(SETERIA ITALICA)

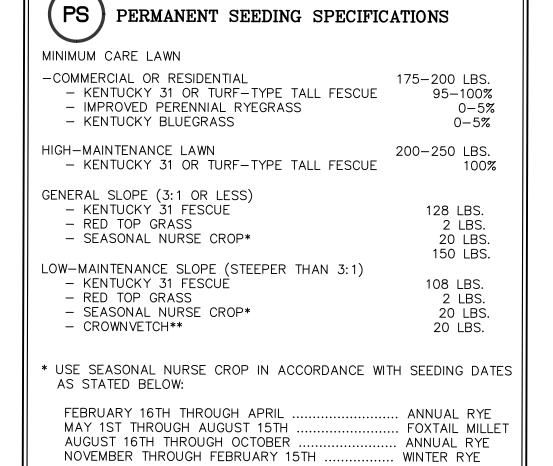
60-100

MULCH TYPE: STRAW OR HAY

MAY 1 - AUG 31

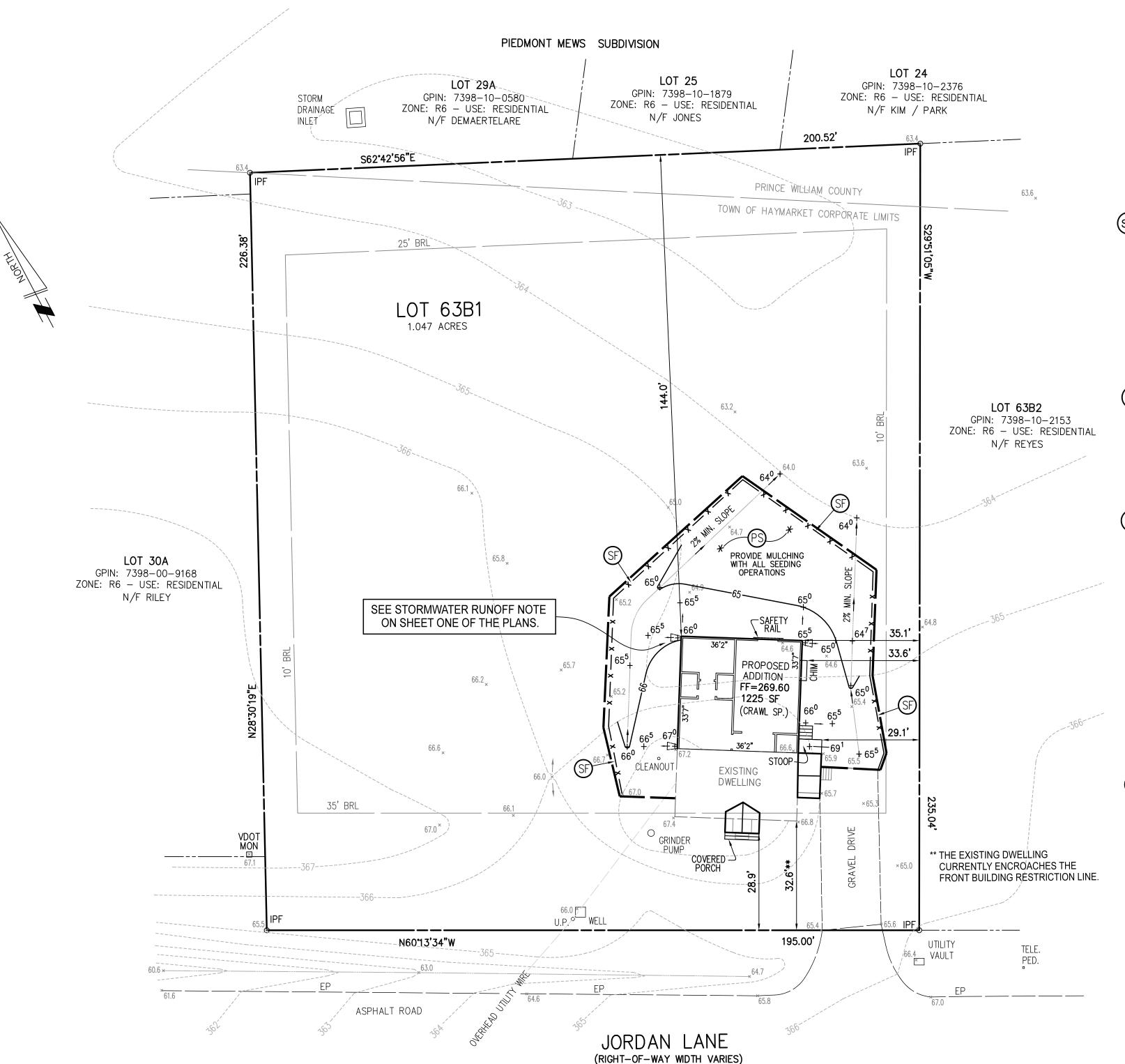
APPLICATION RATE: - PER ACRE = 1.5 - 2 TONS (MIN. 2 TONS FOR WINTER COVER) - PER 1000 SF = 70-90 LBS NOTE: FREE FROM WEEDS OR COURSE MATTER. MUST BE ANCHORED

SPREAD WITH MULCH BLOWER OR BY HAND. MULCH TYPE: FIBER MULCH APPLICATION RATE: - PER ACRE = MINIMUM 1500 LBS - PER 1000 SF = 35 LBSNOTE: DO NOT USE AS MULCH FOR WINTER COVER OR DURING HOT, DRY PERIODS. APPLY AS SLURRY.



**SUBSTITUTE SERICEA LESPEDEZA FOR CROWNVETCH EAST OF FARMVILLE, VA. (MAY THROUGH SEPTEMBER USE HULLED SERICEA, ALL OTHER PERIODS, USE UNHULLED SERICEA). IF FLATPEA IS USED IN LIEU OF CROWNVETCH, INCREASE RATE TO 30 LBS./ACRE. ALL LEGUME SEED MUST BE PROPERLY INOCULATED. WEEPING LOVEGRASS MAY BE ADDED TO ANY SLOPE OR LOW-MAINTENANCE MIX DURING WARMER SEEDING PERIODS; ADD 10-20 LBS./ACRE IN MIXES.

STD. 3.32-D



LEGEND EXISTING SPOT ELEVATION PROPOSED SPOT ELEVATION EXISTING CONTOURS -----34------- PROPOSED CONTOURS → → DRAINAGE ARROWS (LOC) — LIMITS OF CLEARING AND GRADING (SF) — \times — \times — SILT FENCE (STD. & SPEC. 3.05) PS) PERMANENT SEEDING (STD. & SPEC. 3.32)

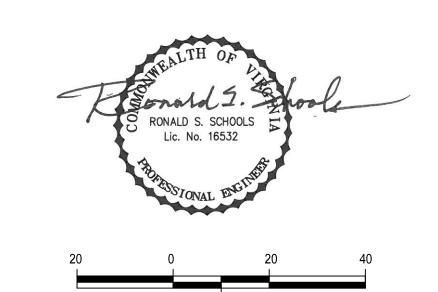
SF) SILT FENCE BARRIER (SF) - 3.05 SEDIMENT FILTER LOCATED ADJA SEDIMENT FILTER LOCATED ADJACENT TO THE LIMITS OF CLEARING AND GRADING. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITY. SILT FENCE SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURNING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING. SHOULD FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL NECESSARY, THE FABRIC WILL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO EXISTING GRADE, PREPARED AND SEEDED.

TEMPORARY SEEDING (TS) - 3.31 ALL DENUDED AREAS WHICH WILL REMAIN FOR EXTENDED PERIODS SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SEED MIXTURE DEPENDS N THE TIME OF YEAR IT IS APPLIED. FERTILIZER SHALL BE APPLIED AS 600 LBS/ACRE OF 10-20-10 OR EQUIVALENT NUTRIENTS. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2 TO 4 INCHES OF THE SOIL, IF POSSIBLE. WHEN AN AREA IS COMPACTED, CRUSHED OR HARDENED, THE SOIL SURFACE SHALL BE LOOSENED BY DISCING, RAKING, HARROWING OR OTHER ACCEPTABLE MEANS. SEED SHALL BE EVENLY APPLIED WITH A BROADCAST SEEDER, DRILL OR HYDROSEEDER.

PERMANENT SEEDING (PS) - 3.32 ESTABLISHMENT OF PERENNIAL VEGATATIVE COVER ON ROUGH GRADED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR MORE OR WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED ON FINE GRADED AREAS. FOR SEEDBED PREPARATION, THE SOIL ON A DISTURBED SITE MUST BE MODIFIED TO PROVIDE AN OPTIMUM ENVIRONMENT FOR SEED GERMINATION AND SEEDING GROWTH. THE SURFACE SOIL MUST BE LOOSE ENOUGH FOR WATER INFILTRATION AND ROOT PENETRATION. THE pH OF THE SOIL MUST BE SUCH THAT IT IS NOT TOXIC, AND NUTRIENTS ARE AVAILABLE, USUALLY BETWEEN pH6.0-7.0. SUFFICIENT NUTRIENTS (ADDED AS FERTILIZER) MUST BE PRESENT. AFTER THE SEED IS IN PLACE, IT MUST BE PROTECTED WITH A MULCH TO HOLD MOISTURE AN MODIFY TEMPURATURE EXTREMES, AND PREVENT EROSION WHILE SEEDLINGS ARE GROWING. THE ADDITION OF LIME IS EQUALLY AS IMPORTANT AS APPLYING FERTILIZER. FOR A LOW MAINTENANCE SLOPE IN THE PIEDMONT AREA, 108 LBS/ACRE OF KENTUCKY 31 FESCUE, 2 LBS./ACRE OF RED TOPP GRASS, 20 LBS./ACRE OF SEASONAL NURSE CROP, AND 20 LBS./ACRE OF CROWNVETCH SHALL BE USED. EROSION CONTROL BLANKETS SHALL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND SEEDED. MULCH (STRAW OF FIBER) SHALL BE USED ON RELATIVELY FLAT AREAS. IN ALL SEEDING OPERATIONS, SEED, FÉRTILIZER AND LIME SHALL BE APPLIED PRIOR TO MULCHING.

MU MULCHING (MU) - 3.35

THE APPLICATION OF PLANT RESIDUES OR OTHER SUITABLE MATERIAL TO THE SOIL SURFACE TO PREVENT EROSION BY PROTECTING THE SOIL SURFACE FROM RAINDROP IMPACT AND REDUCING THE VELOCITY OF OVERLAND FLOWS. TO FOSTER GROWTH OF VEGETATION BY INCREASING AVAILABLE MOISTURE AND PROVIDING INSULATION FROM HEAT AND COLD.

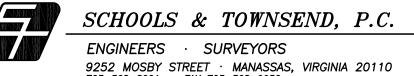


GRAPHIC SCALE IN FEET

OVERLOT GRADING PLAN

PROPERTY LOCATED AT 14750 JORDAN LANE

TOWN OF HAYMARKET, VIRGINIA



DRAWN BY: TD

9252 MOSBY STREET · MANASSAS, VIRGINIA 20110 703-368-8001 · FAX 703-368-9950 DATE: DEC. 1, 2022 SCALE: 1" = 20'

FILE: OGA CHECKED BY: RS SHEET <u>2</u> OF <u>2</u>



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

Thomas Britt Town Planner

MEMORANDUM

TO: Planning Commission

FROM: Thomas Britt, Town Planner

DATE: February 17, 2023

SUBJECT: Haymarket Charitable Foundation Parking Lot Site Plan

In 2015, The Haymarket Charitable Foundation had submitted a final site plan for paving and adding lighting to the parking lot on 6710 Madison St. There is no record of approval from those years for the site plan, and covid interfered with the applicant and Town picking up the project again.

Thomas Britt, the Town Planner, contacted Ron Miner of the Haymarket Masonic lodge to coordinate the last steps for completing the site plan. The Planning Commission will be reviewing the 2015 final site plan that was submitted. The lighting portion of the site plan will be reviewed by the Architectural Review Board in March 2023.

GENERAL NOTES

- 6710 MADISON STREET HAYMARKET, VA 1. This site has been addressed by the Prince William County Mapping Office as: ____ _(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. 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 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 Town/County construction standards 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 construction and specifically request inspection before beginning -- 792-7070.
 - Installation of approved erosion control devices. Clearing and Grading
 - Subgrade excavation.
 - Installing storm sewers or culverts.
 - Setting curb and gutter forms.
 - Placing curb and gutter.
 - Placing other concrete. Placing gravel base.
 - Placing any bituminous surfacing.
 - *J. Installing water mains <u>outside</u> the Service Authority's boundaries. *K. Installing sanitary sewer <u>outside</u> the Service Authority's boundaries.
- 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 Erosion and Sediment Control Handbook.
- 6. A permit must be obtained from the Office of the Resident Engineer, Virginia Department of Transportation (VDOT) Prince William County, prior to construction in existing State right-of-way, 366-1900.
- Approval of this plan does not guarantee issuance of an entrance permit by VDOT when such permit is required under State law.
- 8. The exact location of all guard rails will be determined by VDOT personnel. "A joint inspection will be held with the Developer, Town, County Representatives, and Representatives, of the Virginia Department of Transportation (VDOT) to determine if and where guard rail and/or 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.
- 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
- 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.
- 12. All payement 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 Office for review prior to placement of base material. CBR values less than 10 will require 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 required at the
- 14. All springs shall be capped and piped to the negrest storm sewer manholes or curb inlet. The pipe shall be minimum 150 mm (6") 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.
- 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
- 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 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 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.
- 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, Prince William County and/or the Service Authority
- 20. The developer and/or contractor shall be responsible to supply all utility companies with copies of plans that have been approved by the 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.
- 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 numbers of the operators underground utility lines in the Town of Haymarket / Prince William County appear below. These numbers shall also be used to serve in an emergency condition.
- Washinaton Gas Light Co. Virginia Power Co.

Northern Virginia Electric Co-op Columbia Gas of Virginia Continental Telephone of VA Colonial Pipeline Co.

MISS UTILITY 1-800-257-7777

335-7900 Service Authority (After hours-Emergency 335-7990) Virginia—American Water 491—2136 Dale Service Corporation 494–4161

- Transcontinental Gas Pipe Line Corp. 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.
- 23. The developer will be responsible for any damage to the existing streets and utilities which occurs as a result of his construction project within or contiguous to the existing right-of-way.
- 24. All utilities placed under existing streets shall be bored or jacked.
- 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. 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.
- 27. Before burning, blasting, transportation or storage of explosives in the Town of Haymarket, a permit shall be obtained from the Prince William County Fire Marshall's Office, 792-6360.
- 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.
- 29. Sidewalk underdrains shall be installed per the Haymarket Town Code and/or Section 650 of the Prince William County Design and Construction
- 30. All walkways outside of the right-of-way limits will be maintained by the homeowners association.
- 31. Maintenance of the Storm Drainage or Storm Water Management facilities located therein shall be pursuant to the Haymarket Town Code and/or Section 700 of the Prince William County Design and Construction Standards Manual.
- 32. If units shown on this plan will be occupied in phases, a phasing plan must be approved by the engineering inspection branch prior to the issuance of any occupancy permits. (Detached single family subdivision exempt.)
- 33. These plans identify the location of all known gravesites. Gravesites shown on this plan will be protected in accordance with state law. In the event gravesites are discovered during construction, the Town of Haymarket Office must be notified immediately. All activities must cease and not be resumed until authorization to proceed is given by the Town of Haymarket Office.
- 34. Roof top mechanical equipment, if any, must be enclosed within a wall or similar screening barrier, designed in harmony with the building.
- 35. Individual sign permits will be required from the Town of Haymarket Office for all free standing and facade signs prior to erecting the signs.
- 36. All buffer greas shall be screened according to the Haymarket Town Code..
- 37. Anticipated sewage flows: 1,820 S.F. x 0.16 GPD/S.F. = 291 GPD PEAK
- 38. Anticipated fire flows:
- 39. Distance to nearest existing school or proposed school site: APPROX. 0.85 MILE TO TYLER E.S.

LEGEND

_ _ ____ EXISTING INTERMEDIATE CONTOUR ---300 EXISTING INDEX CONTOUR _____ 296______ PROPOSED CONTOUR ____ EX. <u>E/P</u> EXISTING EDGE OF PAVEMENT PROP. E/P PROPOSED EDGE OF PAVEMENT ___ <u>EX. C & G ___</u> EXISTING CURB AND GUTTER _____CG-6 PROPOSED CURB AND GUTTER TRANSITION FROM CG-6 TO CG-6R EXISTING TELEPHONE LINE ___ T ___ T ___ PROPOSED TELEPHONE LINE EX. 375 mm (15") RCP EXISTING STORM SEWER PROP. 375 mm (15") RCP PROPOSED STORM SEWER

EXISTING SANITARY SEWER

PROPOSED SANITARY SEWER

PROPOSED ELECTRIC SERVICE

EXISTING ELECTRIC SERVICE

EXISTING GAS LINE

PROPOSED GAS LINE

PROPERTY LINE

EASEMENT LINE

PROPOSED TREE

CENTERLINE

EXISTING UTILITY POLE PROPOSED UTILITY POLE EXISTING WATERLINE W/ TEE PROPOSED WATERLINE W/ TEE Ţιο Φ EXISTING FIRE HYDRANT PROPOSED FIRE HYDRANT]+**0--()**-EXISTING WATER VALVE PROPOSED WATER VALVE ------W ------PROPOSED WATER METER Φ EXISTING REDUCER PROPOSED REDUCER ------W -----STOP SIGN ---_____ HANDICAP RAMP (CG-12) ____ DENOTES LOCATION OF STD VDOT CG-12 AND/OR JURISDICTIONAL STANDARD RAMP CONSTRUCTION

FLOW LINE

FENCELINE

___..__

_____X ____

18

PARKING INDICATOR INDICATES THE NUMBER OF TYPICAL PARKING SPACES TEST PIT LOCATION SLOPES TO BE STABILIZED PURSUANT TO VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK

VEHICLES PER DAY COUNT _____ PROPOSED BUILDING ENTRANCE LIMITS OF CLEARING AND GRADING EXISTING STREET LIGHT 12.0 EXISTING SPOT ELEVATION PROPOSED STREET LIGHT 125 PROPOSED SPOT ELEVATION

EXISTING TREE DRIP LINE www.... EXISTING TREE (15") OAK

100> PROPOSED STREET NAME SIGN PROPOSED SANITARY LATERAL CLEANOUT (12)SANITARY MANHOLE INDENTIFIER

STORM DRAIN STRUCTURE IDENTIFIER

SITE TABULATION

FOR SITE TABULATIONS - SEE SHEET 3

SUPPLEMENTAL GENERAL NOTES:

- . THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE DEVELOPER. THE CONTRACTOR, OR THEIR AGENTS ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY OTHER ORDINANCE ENACTED BY THE TOWN OF HAYMARKET AND/OR PRINCE WILLIAM COUNTY.
- 2. THIS PLAN COMPLIES WITH THE NEW PRINCE WILLIAM COUNTY SERVICE AUTHORITY UTILITY STANDARDS MANUAL, WHICH WENT INTO EFFECT ON JANUARY 1, 2009. ALL UTILITY PERMITS ISSUED AFTER THIS DATE MUST COMPLY WITH THE CONSTRUCTION CRITERIA IN THE NEW MANUAL, INCLUDING ANY REVISIONS WHICH HAVE BEEN ISSUED.
- 3. LIGHTING/PHOTOMETRIC PLAN IS INCLUDED IN THE PLANS SET AND HAS BEEN DESIGNED BY OTHERS. THE KDL GROUP, LLC HAS NOT PERFORMED THE LIGHTING DESIGN, AND THEREFORE DOES NOT WARRANT AND IS NOT RESPONSIBLE FOR THE DEGREE AND/OR ADEQUACY OF ILLUMINATION ON THIS PROJECT.
- 4. THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS. METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONJUNCTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTYRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
- 5. THE DEVELOPER/BUILDER SHALL CONTACT THE PRINCE WILLIAM COUNTY SERVICE AUTHORITY TO DISCUSS UTILITY PERMIT REQUIREMENTS FOR INSTALLATION OF WATER AND SEWER MAINS AND CERTIFICATION OF WATER AND SANITARY SEWER AVAILABILITY PRIOR TO ISSUANCE OF A BUILDING PERMIT.
- 6. NO CEMETERIES OR HISTORIC SITES ARE KNOWN TO EXIST WITHIN THE PROJECT LIMITS SHOWN ON THIS PLAN.
- 7. THER ARE NO RPA'S IDENTIFIED ON THIS SITE.
- 8. ONSITE BMP/SWM AND STORM DRAINAGE FACILITIES SHALL BE PROVIDED AS INDICATED HEREON AND MAINTAINED BY OWNER.
- 9. ALL STORM DRAINAGE AND FACILITIES LOCATED WITHIN ROADWAYS SHALL BE MAINTAINED BY VDOT. IN ADDITION, ALL SIDEWALKS TO BE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY WILL BE MAINTAINED BY VDOT. FOR ADDITIONAL NOTES, SEE SHEET 4.

BOND ESTIMATE

ITEM	TOWN BOND	PWCSA BOND	VDOT BOND
TOTAL CONSTRUCTION COST	\$80,527.50		
ADMINISTRATIVE COST	\$8,052.75		
INFLATION COST (3.0%)	\$2,415.83		
TOTAL PERFORMANCE BOND AMOUNT	\$90,996.08		
SILTATION & EROSION CONTROL ESCROW	\$7,576.36		
LANDSCAPE ESCROW	\$13,970.00		

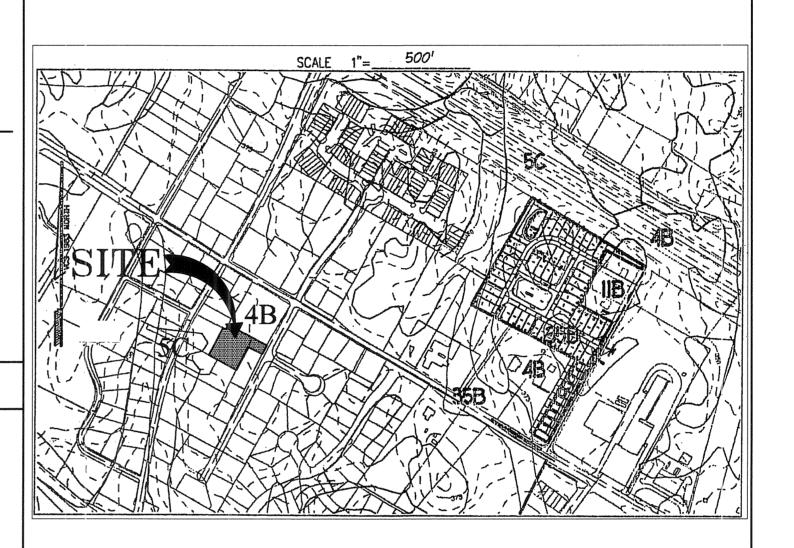
SURVEY AND TOPOGRAPHIC INFORMATION

- Horizontal and vertical control surveys were performed by Rinker <u>Design Associates</u>, P.C. in <u>January 2012</u>.
- 2. All elevations must be referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29).

for the work shown hereon.

- Source of topographic mapping is RINKER DESIGN ASSOCIATES, P.C. dated ____JANUARY 2012
- 4. Boundary survey was performed by RINKER DESIGN ASSOCIATES, P.C., dated ____JANUARY 2012
- 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 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 within one-half of the contour interval, as shown. Application of the seal and signature indicates acceptance of responsibility

SOILS MAP

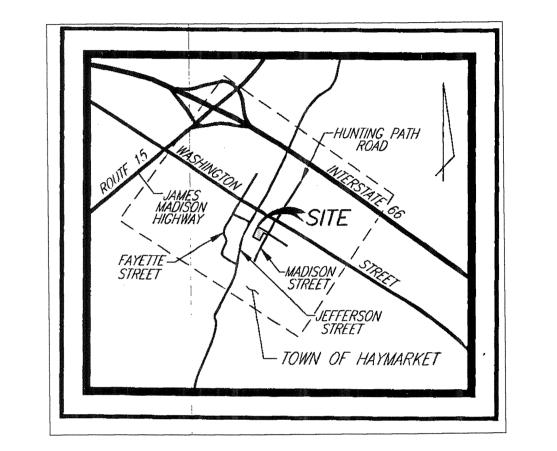


LAND DEVELOPMENT APPLICATION NUMBER FNSP Town of Haymarket APPROVED BY:

APPROVAL BLOCK

This plan has been reviewed and has been found to be in general conformance with the requirements of the Town of Havmarket. The developer is hereby authorized to obtain all necessary land development permits, subject to all designs, procedures, materials and 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 authorization will expire. A valid agreement and bond with the Town of Haymarket must be maintained to assure plan and permit validity.

VICINITY MAP



SCALE: 1"= 2000'

SOILS DATA

-	SOIL #	SOIL NAME	SOIL CAT.	SURFACE RUNOFF	EROSION HAZARD	DEPTH TO BEDROCK	SHRINK- SWELL	FLOODING	SLOPES
-	4B	ARCOLA SILT LOAM		MEDIUM	SEVERE	20"-40" SOFT	LOW	NONE	27

REVISIONS

10 01 10			DELUCED DED LIDET COLLUENTO (LD.)
102416	J.D.	3	REVISED PER VDOT COMMENTS (J.D.)
0804-16	J.D.	2	REVISED PER TOWN AND VDOT COMMENTS (J.D.)
050616	J.D.	1	REVISED PER TOWN COMMENTS (J.D.)

SHEET INDEX

NUMBER DESCRIPTION COVER SHEET EXISTING CONDITIONS

TYPICAL SECTIONS AND SITE TABULATIONS GENERAL NOTES AND MISCELLANEOUS DETAILS

SITE PLAN PHASE 1 EROSION/SEDIMENT CONTROLS PLAN

PHASE 2 EROSION/SEDIMENT CONTROLS PLAN EROSION/SEDIMENT CONTROLS NARRATIVE EROSION/SEDIMENT CONTROLS DETAILS

STORMWATER MANAGEMENT COMPUTATIONS STORMWATER MANAGEMENT COMPUTATIONS BEST MANAGEMENT COMPUTATIONS

BEST MANAGEMENT COMPUTATIONS LANDSCAPE PLAN LANDSCAPE SCHEDULE AND DETAILS PERFORMANCE BOND ESTIMATE SIGHT DISTANCE PROFILE

18 PWCSA SHEET LIGHTING/PHOTOMETRIC PLAN

JOHN H. DAVIS Lic. No.028930

PROFESSIONAL SEAL & SIGNATURE

THESE PLANS ARE IN CONFORMANCE WITH TOWN OF HAYMARKET, VA STANDARDS AND ORDINANCES. ANY DEVIATION OR CHANGE IN THESE PLANS SHALL BE APPROVED BY THE DIRECTOR OF PLANNING PRIOR TO CONSTRUCTION.

Project Name:

TOWN OF HAYMARKET COVER SHEET

6710 MADISON STREET HAYMARKET, VA

Market Name: Subdivision or Site Plan Name: Plan Number: Plan Type: FN-SP 6710 MADISON STREET HAYMARKET, VA Revision Number: 00 Present Zoning & Use: Magisterial District: Date of Plan: (Month, Day, Year) GAINESVILLE MARCH 2015

Address, Including Zip Code & Telephone No. HAYMARKET LODGE CHARITABLE FOUNDATION P.O. BOX 313 HAYMARKET, VA 20168-0313 (703) 216-1073

Related Plans Tracking Numbers (Including Rez. & S.U.P.):

Address, Including Zip Code & Telephone No. HAYMARKET LODGE CHARITABLE FOUNDATION

P.O. BOX 313 HAYMARKET, VA 20168-0313 (703) 216-1073 P.O. BOX 609 Name, Address & Telephone No. of Engineer HAYMARKET. VIRGINIA 20168 Architect or Surveyor certifying Plan: PHONE 703 753-7592 FAX 703 753-7593

Parcel Identification Number: 7297-99-1052 Total Area: 0.98 ACRES Project Area: 0.98 ACRES Disturbed Area: 0.56 ACRES Impervious Area: 0.37 ACRES BMP Storage/Acre:

BMP Storage/hectare:

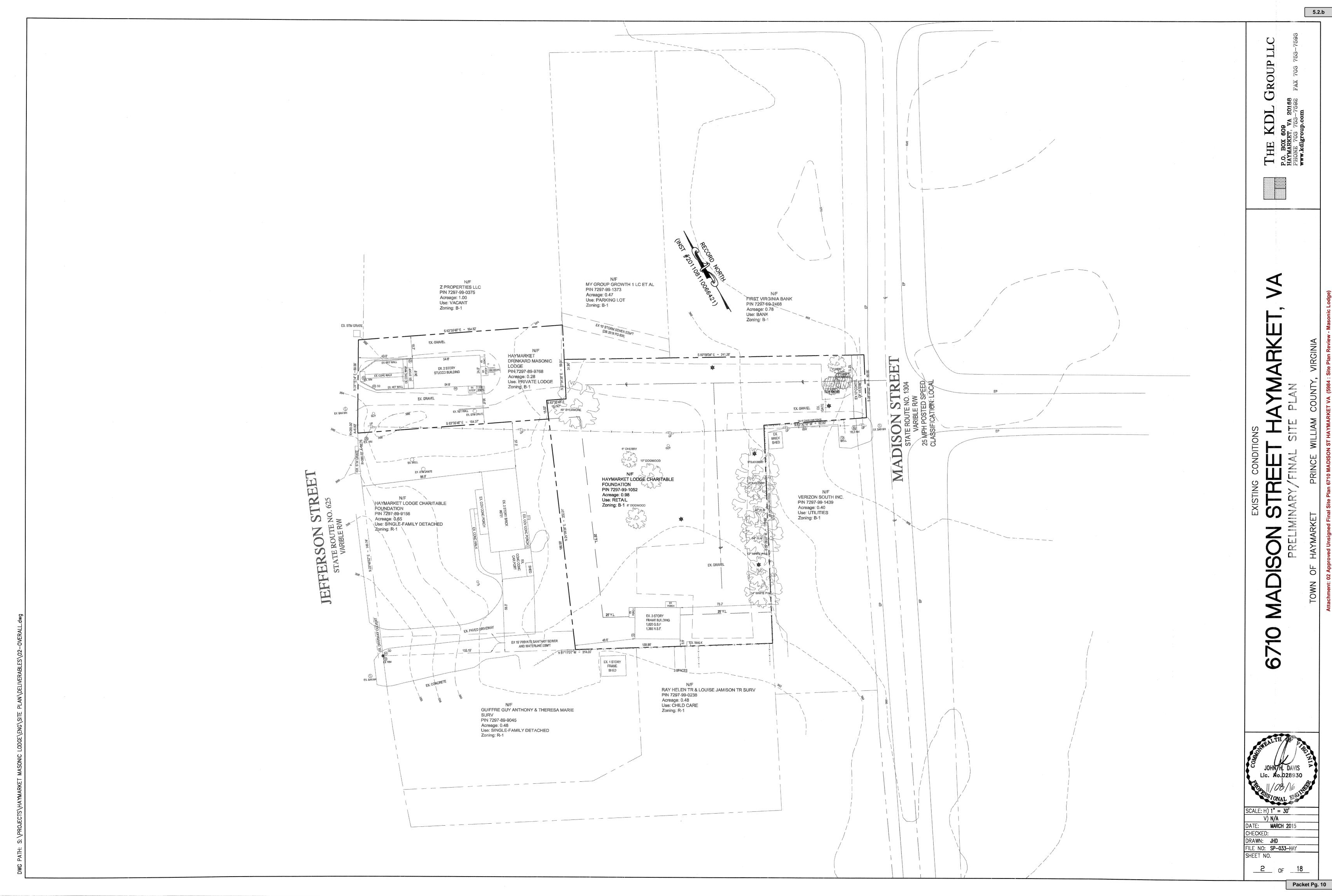
Project Number:

Revised: June 1997 Sheet 1 of 18

Packet Pg. 9

cf/ac.

cm/ha



2005 and VDOT Road Design Manual Appendix B) VDOT Secondary Street Acceptance Requirements (SSAR 24VAC-30-92 effective March 9, 2009 and VDOT Road Design Manual Appendix B1). Schematic street layout and computations of Connectivity Index are provided with these plans per 24VAC30-92-60.

VDOT Secondary Street Acceptance Requirements (SSAR 24VAC-30-92 effective December 31, 2011 and VDOT Road Design Manual Appendix B1). Schematic street layout with phasing diagram for street acceptance are provided with these plans per

2. Methods and materials used shall conform to current county/town and VDOT standards and specifications.

3. All utilities, including all poles, are to be relocated at the developer's expense, prior to construction. 4. 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. 5. Any type of reverse curb (spill curb, CG-6R, etc.) and transition to these curbs shall not be

used with the public right of way. 6. 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. 7. 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 8. Standard guardrails and/or handrails shall be installed at hazardous locations as designated

during field review by the county/town inspector or VDOT. 9. 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 a minimum of thirty days prior to permit application. The developer shall not commence construction of any pavement course without an approved striping plan.

10. Pavement design is based on an assumed CBR value of 10 (use CBR value of 6 in Loudoun Co). Soil tests of subgrade must be submitted for actual determination of required thickness of the pavement including layers of asphalt and subbase prior to subbase placement. 11. All untreated aggregate used in base or subbase courses shall be 21B, except on roads with ADT of 1000 vpd or less, where 21A aggregate may be used. When 21B aggregate is used,

UD-4 underdrains must be provided. 12. A 4" (min.) layer of stone is required beneath curb and gutter (may be shown on typical section in lieu of a note).

13. Additional ditch linings or siltation and erosion control measures shall be provided, at the developer's expense, as determined necessary by VDOT and/or the county/town during field review. All costs shall be assumed by the developer

14. The entire surface of the roadway (old and new portions) shall be overlaid and re-striped as required by VDOT personnel. Overlay of existing pavement shall be minimum of 1.25" depth; any costs associated with pavement overlay, or the milling of existing pavement to obtain required depth, shall be assumed by the developer.

15. Developer is responsible for design and construction of any traffic signal installation or modification which will be necessary as a result of development of this site.

16. All right of way dedicated to public use shall be clear and unencumbered. 17. The county/town shall obtain a permit for all sidewalks within the right of way that do not

qualify for VDOT maintenance. 18. 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 should 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. 19. Landscaping and irrigation systems shall not be installed within the public right of way except

as shown on these plans or a VDOT approved revision. 20. Beginning July 1, 2009 all Land Use Permit applications are required to provide at least one (1) person who, at minimum, is verified by VDOT in Basic Work Zone Traffic Control for all permitted activities within state maintained right of way which involves installing, maintaining, or removing work zone traffic control devices. This person shall be responsible for the placement, maintenance and removal of all work zone traffic control devices.

3" BITUMINOUS CONCRETE BASE COURSE BM-25.0

1.5" BITUMINOUS CONCRETE COURSE TYPE 21-A TOP COURSE TYPE SM-9.5A SLOPE VARIES - STABILIZED SUBGRADE

6" AGGREGATE SUBBASE

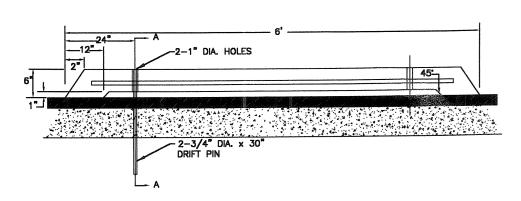
TYPICAL PAVEMENT SECTION

N.T.S.

1. * SUBBASE NOTE: SUBBASE DEPTH IS BASED ON A CBR VALUE OF 6. SOILS TEST OF SUBGRADE WILL BE PERFORMED FOR ACTUAL DETERMINATION OF REQUIRED SUBBASE THICKNESS PRIOR TO THE PLACEMENT OF SUBBASE

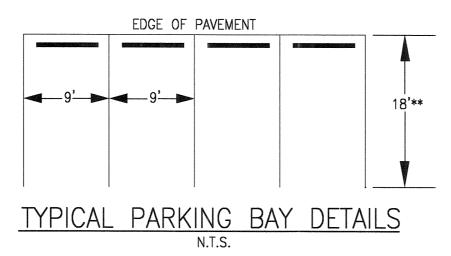
(SEE NOTE)

- 2. ALL FINAL PAVEMENT AND BASE COURSE THICKNESS SHALL BE DESIGNED IN ACCORDANCE WITH THE "DESIGN GUIDE FOR SUBDIVISION ROAD PAVEMENTS IN VIRGINIA", BY N.K. VASWANI, AND SHALL BE BASED ON A SUFFICIENT NUMBER OF CBR TEST TO DETERMINE THE TRUE SUPPORT VALUES OF THE VARIOUS SOILS IN THE SUBGRADE.
- 3. A SMOOTHING GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF THE EXISTING ROAD TO THE PROPOSED ENTRANCE FLOWLINE, TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR PONDING OF ANY WATER ON THE ROADWAY.
- "STANDARD GUARDRAIL AND HANDRAIL SHALL BE INSTALLED AT HAZARDOUS LOCATIONS AS DESIGNATED DURING FINAL FIELD INSPECTIONS BY LOUDOUN COUNTY OR V.D.O.T."

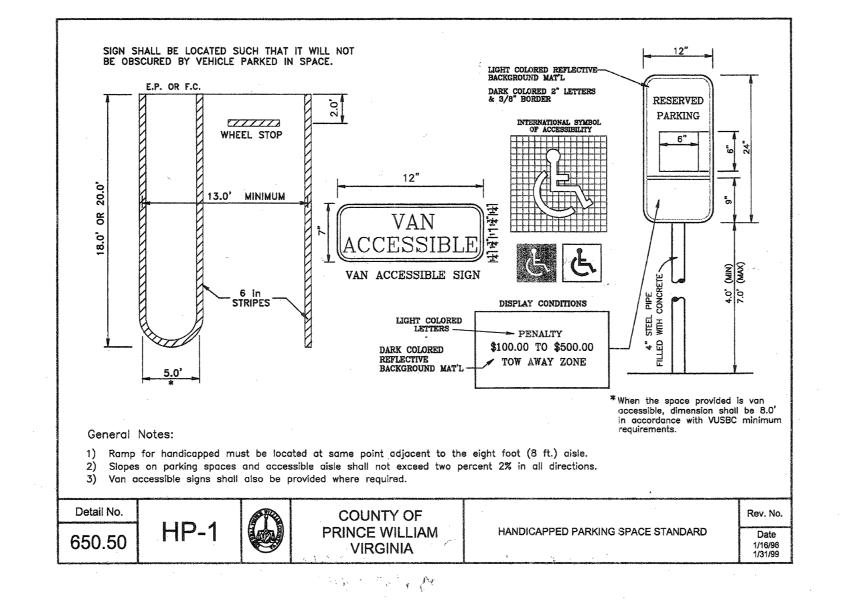


PRECAST CONCRETE WHEEL STOP (OR APPROVED EQUAL)

SECTION A-A



**WHERE WHEEL STOPS OR CURBING ARE PROVIDED FOR PARKING SPACES, A 1 FOOT REDUCTION IN THE STALL LENGTH WILL BE ALLOWED, PROVIDING THE RESULTING OVERHANG DOES NOT ENCROACH ON THE REQUIRED OPEN SPACE AREAS, AND/OR THE PEDESTRIAN ACCESS SYSTEM.



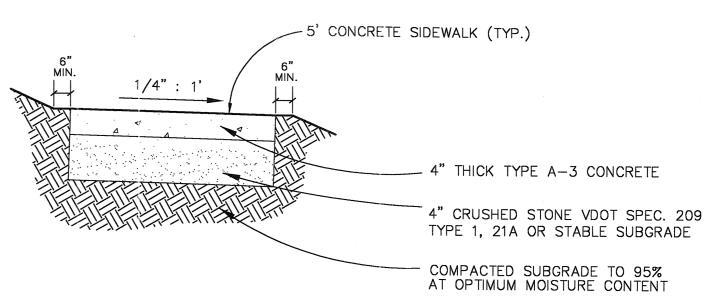
6710 MADISON STREET HAYMARKET, VA SITE TABULATIONS ZONING B-1 PARCEL PIN 7297-99-1052 GROSS SITE AREA 0.9829 AC. (42,814 S.F.) MIXED-USE COMMERCIAL/RETAIL (1,820 G.S.F.) PROVIDED BUILDA BLE LOT COVERA GE 85% (MAX.) 38.01% 3 STORIES BUT NOT OVER 35' 35' (MAX.) BUILDING HEIGHT FLOOR AREA RATIO NO MAXIMUM NΑ YARD REQUIREMENTS FRONT YARD 73.2' SIDEYARD 25' ABUTTING A RESIDENTIAL DISTRICT 5.9' (EX. BUILDING) 0' A BUTTING SIMILAR COMMERCIAL USES 25' ABUTTING A RESIDENTIAL DISTRICT REAR YARD 0' ABUTTING SIMILAR COMMERCIAL USES PARKING TABULATIONS PARKING REQUIREMENTS REQUIRED PARKING PROPOSED USE PROPOSED PARKING 1 SPACE PER 250 S.F. 1,820 S.F. COMMERCIA L/RETAIL 27 ASPHALT SPACES 7 GRAVEL SPACES TOTAL

TYPICAL SECTION CONCRETE SIDEWALK NOT TO SCALE

NOTE:

SUBGRADE FOR ALL SIDEWALKS SHALL BE COMPACTED TO MINIMUM 95% DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T99-61.

SIDEWALK UNDERDRAINS ARE TO BE USED WHEN THE SIDEWALK LONGITUDINAL GRADIENT IS 3% OR MORE AND WHEN THE UNDERLYING SOIL HAS 34% OR MORE PASSING THE NO. 200 SIEVE AND HAS A PI OF 13 OR LESS.



SCALE: H) N/A V) **N/A** MARCH 2015 CHECKED: DRAWN: JHD FILE NO: SP-033-HAY SHEET NO.

<u>3</u> of 18

- 3. THIS PROPERTY IS CURRENTLY ZONED B-1 IN ACCORDANCE WITH THE TOWN OF HAYMARKET, VA ZONING ORDINANCE.
- 4. THE SUBJECT SITE AREA IS APPROXIMATLEY 0.98 ACRES.
- 5. THERE ARE NO KNOWN CEMETERIES WITHIN THE PROJECT CONSTRUCTION LIMITS. FURTHER, THERE ARE NO KNOWN NATURAL, CULTURAL, OR HISTORIC RESOURCES, RPA'S, OR 100-YEAR FLOOD AREAS IDENTIFIED WITHIN THE CONSTRUCTION LIMITS.
- 6. THIS IS NOT A PROFERRED PROJECT.
- 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 EXISTING COMMERCIAL USE BUILDING IS SERVED BY PUBLIC WATER AND SEWER FACILITIES OWNED BY PWCSA. THE ANTICIPATED SEWAGE FLOWS GENERATED BY THE PROPOSED COMMERCIAL USES IS 291 GPD.
- 10. STORMWATER MANAGEMENT WILL BE PROVIDED FOR THIS DEVELOPMENT THROUGH THE EXISTENCE OF AN ADEQUATE OUTFALL AS SHOWN. BEST MANAGEMENT PURPOSES WILL BE PROVIDED FOR THIS DEVELOPMENT THROUGH THE PURCHASE OF NUTRIENT CREDITS FROM AN APPROVED VIRGINIA NUTRIENT OFFSET CREDIT
- 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. THE PRIVATE TRAVELWAYS AND PARKING PROPOSED WITH THIS DEVELOPMENT ARE NOT INTENDED FOR ACCEPTANCE INTO THE VDOT SECONDARY ROADS MAINTENANCE SYSTEM.
- 13. SITE LIGHTING SHALL BE LOCATED PRIMARY BUILDING ENTRANCES AND PARKING AREAS OF BUILDINGS WHICH ARE OCCUPIED BY BUSINESSES WHICH PROVIDE CUSTOMER SERVICE FOR THE PUBLIC AFTER 5:00 P.M., TO ESTABLISH THE MOUNTING HEIGHT, LUMINANCE AND SPACING TO PROVIDE A MINIMUM AVERAGE HORIZONTAL ILLUMINATION OF 0.6 FOOT-CANDLES (SECTION 58-719(a). LIGHTING SHALL BE LOCATED AT PUBLIC AND PRIVATE INTERSECTIONS TO ESTABLISH THE MOUNTING HEIGHT, LUMINANCE AND SPACING TO PROVIDE A MINIMUM HORIZONTAL ILLUMINATION OF 0.6 FOOT-CANDLES ON THE ROADWAY (SECTION 58-719(b).
- 14. A MINIMUM 25' BUFFER YARD AND OPAQUE SCREEN (SC) SHALL BE PROVIDED BETWEEN B-1 AND R-1 ZONING DISTRICTS (SECTION 58-702) AS SHOWN.
- 15. THE PROPOSED COMMERCIAL USES WILL GENERATE APPROXIMATELY 50 TRIPS PER DAY AT THE PROPOSED COMMERCIAL ENTRANCE ALONG EX. MADISON STREET.
- 16. CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO AND DURING CONSTRUCTION AND NOTIFY THE KDL GROUP, LLC AT (703) 753-7592 IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE APPROVED PLAN.
- 17. EXISTING UNDERGROUND UTILITY INFORMATION TAKEN FROM AVAILABLE RECORDS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND FOR ANY DAMAGES THAT MAY OCCUR DUE TO CONTRACTOR FAILURE TO LOCATE AND PROTECT THESE UNDERGROUND して ILITIES.
- 18. DENOTES TEST HOLE REQUIRED TO DETERMINE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIGGING OF ALL TEST HOLES PRIOR TO BEGINNING ANY CONSTRUCTION ON THE PROJECT. IF CONFLICTS ARE DISCOVERED AS A RESULT OF THE TEST HOLE FINDINGS, NOTIFY THE KDL GROUP, LLC AT (703) 753-7592.
- 19. ALL UTILITIES ARE TO BE RELOCATED OR REMOVED AT THE DEVELOPER'S EXPENSE, INCLUDING ALL POLES AND UNDERGROUND LINES. WHEN REQUIRED TO BE RELOCATED.
- 20. ALL UTILITIES WHICH WILL BE PLACED UNDER EXISTING PUBLIC STREETS WILL BE BORED OR JACKED.
- 21. UTILITY POLES, IF ANY, ARE TO BE RELOCATED PRIOR TO CONSTRUCTION.
- 22. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS AND UTILITIES WHICH OCCUR AS A RÉSULT OF THEIR CONSTRUCTION PROJECT WITHIN OR CONTIGUOUS TO EXISTING RIGHT-OF-WAY.
- 23. CONTROLLED FILLS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY METHOD "A" PER STANDARD PROCTOR AASHTO-T99, ASTM-D698, OR VTM-1 AS APPLICABLE DENSITY SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.
- 24. ALL SUBGRADE MATERIAL SHALL BE COMPACTED AT OPTIMUM MOISTURE CONTENT, WITHIN A TOLERANCE OF +/- 2.0% OF OPTIMUM. PAVEMENT REDESIGN SUBMITTALS ARE REQUIRED.
- 25. ALL FINISHED GRADING, SEEDING, SODDING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER ON THE SITE AND ROADWAY PARTICULARLY ADJACENT TO SWALES AND STORM INLETS.
- 26. EXCAVATION SUPPORT SYSTEMS SHALL CONFORM TO THE PROVISIONS OF OSHA CONSTRUCTION STANDARD 29 CFR PART 1926 SUBPART P.
- 27. EXISTING MANHOLE FRAMES AND COVERS, AND VALVE BOXES AND COVERS SHALL BE ADJUSTED OR RECONSTRUCTED, IF NECESSARY, TO MATCH FINISHED GRADES.
- 28. ALL UTILITY RELOCATIONS AND PERMANENT UTILITY EASEMENTS SHALL BE PERFORMED AND RECORDED PER THE APPROPRIATE UTILITY COMPANY.
- 29. PERMANENT SEEDING AND GROUND COVERS SHALL ALSO BE PROVIDED AS DIRECTED BY THESE PLANS AND/OR COUNTY AND STATE STANDARDS.
- 30. REFER TO THE GEOTECHNICAL ENGINEER FOR SUBGRADE INSPECTIONS, CBR TESTS, POND EMBANKMENT DESIGN OR OTHER INSPECTIONS.
- 31. THE APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF FUTURE WORK.

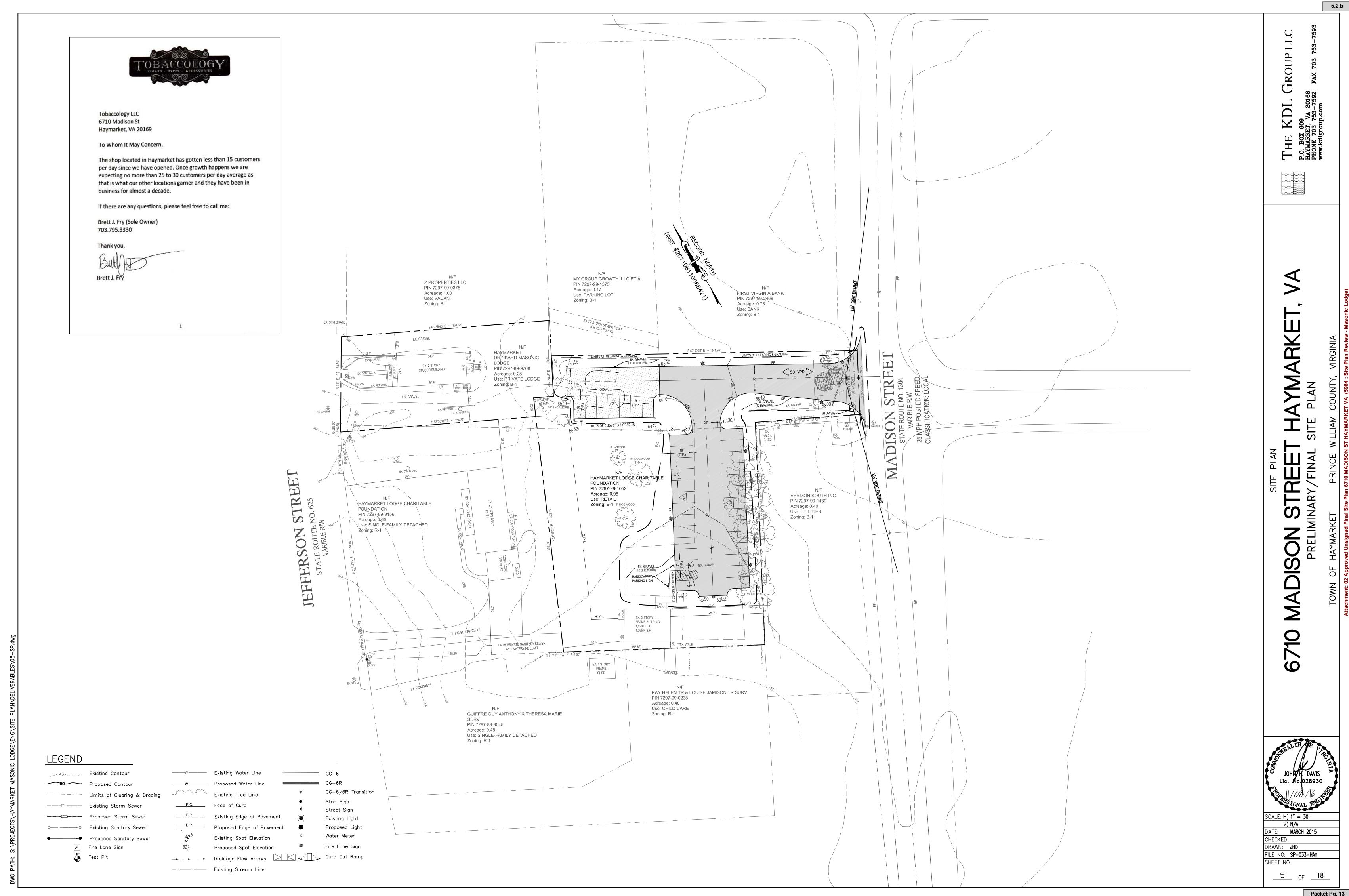
GENERAL NOTES (CONT'D):

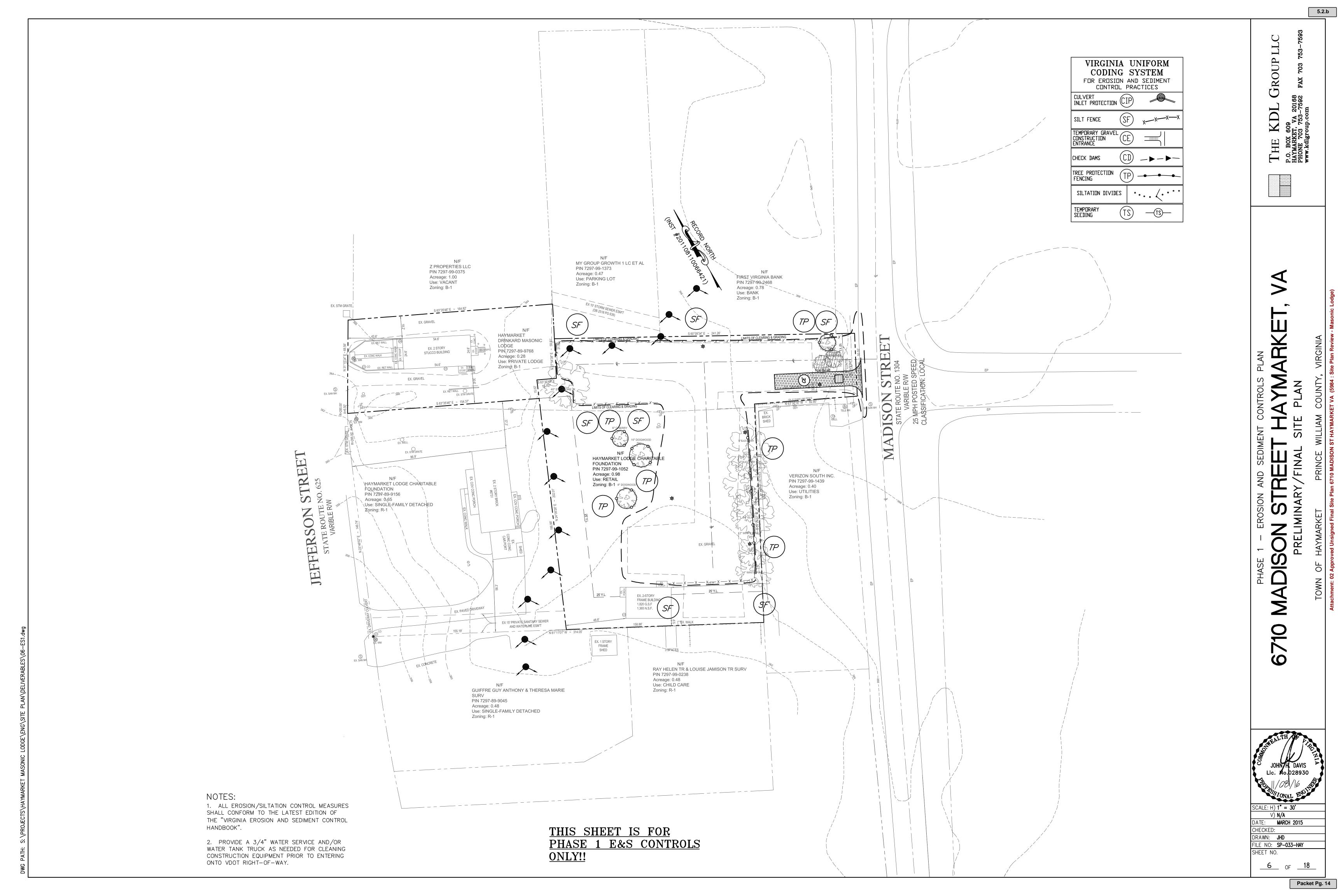
- 32. A PERMIT MUST BE OBTAINED FROM THE VDOT RESIDENT ENGINEER PRIOR TO ANY CONSTRUCTION WITHIN ANY EXISTING STATE RIGHT-OF-WAY. IN ADDITION, A PAVEMENT MARKING AND SIGNAGE PLAN SHALL BE SEPARATELY APPROVED PRIOR TO PERMIT SUBMITTAL.
- 33. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE. ALSO, A REPRESENTATIVE OF THE DEVELOPER MUST BE AVAILABLE AT ALL TIMES.
- 34. WARNING SIGNS, MARKERS, BARRICADES OR FLAGMEN SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 35. CONSTRUCTION DEBRIS SHALL BE CONTAINED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. NO LESS THAN ONE (1) LITTER RECEPTACLE SHALL BE PROVIDED AT THE CONSTRUCTION SITE.
- 36. THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTORS SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
- 37. THE OWNER SHALL BE RESPONSIBLE FOR SECURING ANY AND ALL WETLAND, LAND DISTURBANCE AND STORM WATER DISCHARGE PERMITS PRIOR TO CONSTRUCTION.
- 38. WHEN DURING THE COURSE OF CONSTRUCTION, ANY OBJECT OF AN UNUSUAL NATURE IS ENCOUNTERED. THE CONTRACTOR SHALL CEASE WORK IN THAT AREA AND IMMEDIATELY NOTIFY THE PROPER AUTHORITY, THE TOWN OF HAYMARKET AND/OR THE ARCHITECT/ENGINEER.
- 39. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE DEVELOPER, THE CONTRACTOR, OR THEIR AGENTS OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED OR IMPLIED BY THE CODE OF VIRGINIA OR ANY OTHER ORDINANCE ENACTED BY THE TOWN OF HAYMARKET OR OTHER GOVERNING BODY.
- 40. ANY SPRING, WELL OR OTHER WATER SOURCE DISCOVERED DURING CONSTRUCTION SHALL BE ABANDONED OR CAPPED IN PLACE IN ACCORDANCE WITH STATE AND LOCAL STANDARDS. OWNER/CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND INSPECTIONS.
- 41. NO PERMANENT STRUCTURES OR UNAUTHORIZED OBSTRUCTIONS SUCH AS FENCES OR TREES SHALL BE LOCATED WITHIN STORM DRAINAGE OR OTHER EASEMENTS WITHOUT PRIOR AUTHORIZATION OF THE MAINTAINING AUTHORITY.
- 42. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE, UPKEEP AND REPAIR OF ALL STORM WATER MANAGEMENT FACILITIES AND STORM DRAINAGE FACILITIES LOCATED OUTSIDE OF PUBLIC RIGHTS OF WAY.
- 43. THE PROPOSED COMMERCIAL USE WILL BE SERVED BY EXISTING WATER AND SANITARY SEWER FACILITIES. ACCORDINGLY, NO NEW WATER AND/OR SANITARY SEWER FACILITIES ARE ANTICIPATED WITH THE PROPOSED SITE DEVELOPMENT.
- 44. THE SUBJECT PROPRTY IS WITHIN THE OLD AND HISTORIC HAYMARKET OVERLAY DISTRICT. ANY EXTERIOR BUILDING IMPROVEMENTS WILL BE SUBJECT TO THE DISTRICT ARCHITECTURAL STANDARDS AND WILL REQUIRE SUBMISSION AND APPROVAL OF A CERTIFICATE OF APPROPRIATENESS.
- 45. THIS USE GENERATES VERY LITTLE REFUSE AND CURB SIDE PICK-UP WILL BE UTILIZED AS THE METHOD OF REFUSE COLLECTION. A DUMPSTER WILL NOT BE REQUIRED/USED. TRASH CAN STORAGE AREA SHALL BE LOCATED INSIDE THE BUILDING. FREQUENCY OF CURB SIDE TRASH PICK-UP SHALL BE TWO (2) TIMES PER

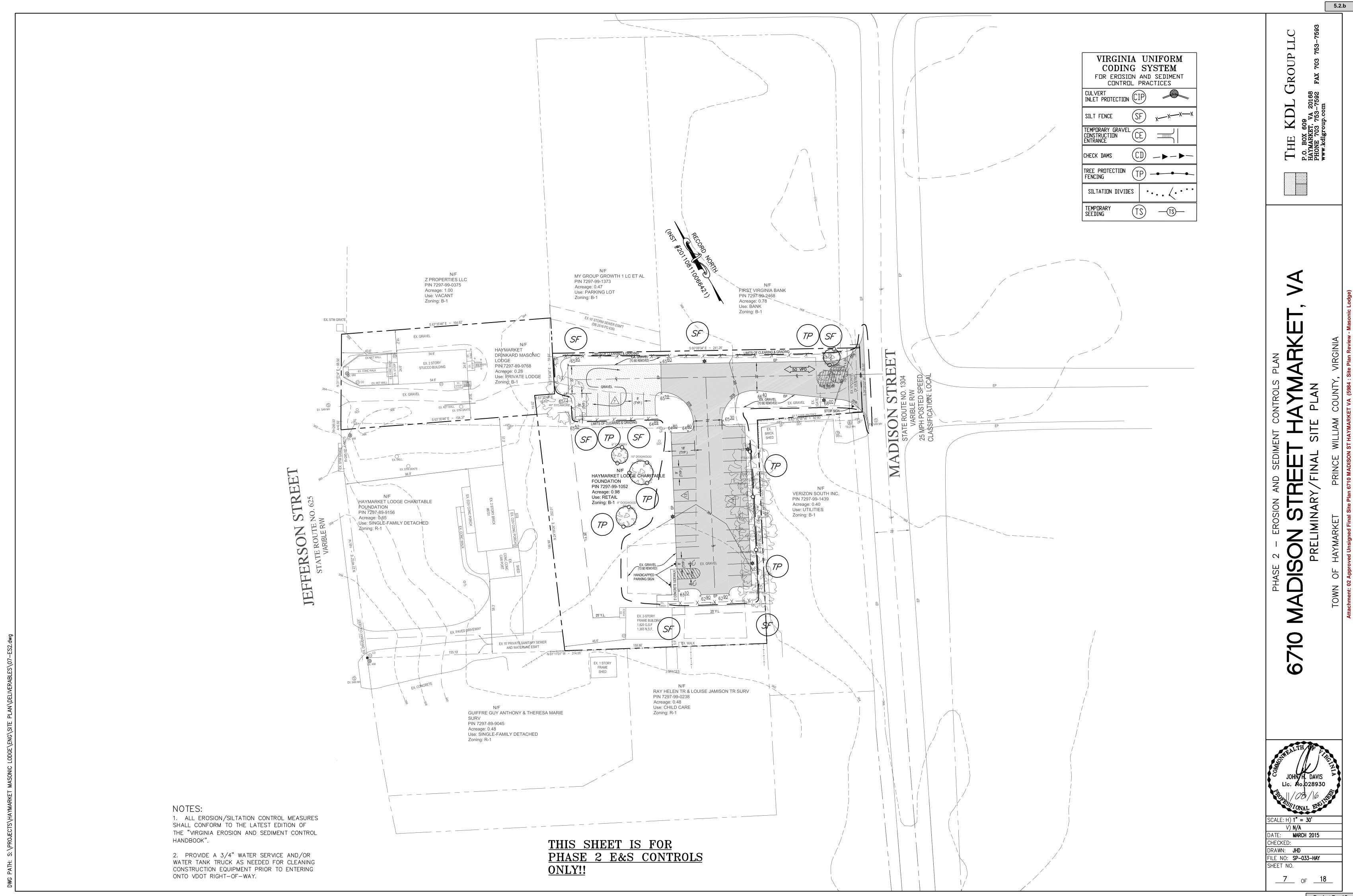
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SHEET NO.

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EROSION/SILTATION CONTROL NARRATIVE

PROJECT DESCRIPTION:

The subject development consist of constructing a commercial entrance and private travelway and associated parking to serve the existing commercial building located at 6710 Madison Street Haymarket, VA on approximately 0.98 acres. The amount of disturbed area is approximately

EXISTING CONDITIONS:

The subject site consists of maintained open grass area with a few mature trees along the site perimeter. The existing topography varies from 0%-5% along the entire portion of the site.

The subject site has one (1) point of roadway access — Existing Madison Street.

ADJACENT AREAS:

To the north - existing commercial.

To the south — existing pre—school (home based).

To the east — existing commercial.

To the west — existing single—family residential.

OFFSITE AREAS:

This plan proposes no offsite roadway improvements.

See the "Cover Sheet" for soils types within this site.

CRITICAL AREA:

The critical areas associated with this construction focus around installing and maintaining the perimeter erosion and sediment controls. The existing adjacent residential properties shall be protected from sediment runoff.

LAND CONSERVATION PROGRAM

- 1. No disturbed area shall be denuded for more than 14 days.
- 2. Cut and fill slopes shall be grade at a maximum slope of 2:1 (3:1 desired).
- 3. No more than 500 feet of trench will be open at any one time.
- 4. Where stream crossings are required for equipment, temporary culverts will be provided.
- 5. Siltation control will be exercised through the installation of a temporary construction entrance, temporary silt fence, and temporary inlet protection.

6. Where consistent with job safety requirements, all excavated material is to be placed on the uphill side of trenches. No material is to be placed in the stream beds. Where spoil is placed on the downhill sides of the trench, it is to be back sloped to drain toward the trench. When necessary to dewater the trench, the pump discharge hose must outlet in a stabilized area or a sediment trap.

- 7. Denuded areas will be stabilized within seven (7) days after final grade.
- 8. Denuded areas will be stabilized within seven (7) days if they are to be left idle for more than fourteen (14) days.

EROSION/SILTATION CONTROL MEASURES:

Unless otherwise indicated, all vegetative and structural erosion and sediment control practices shall be constructed and maintained according to minimum standards and specifications of the latest Virginia Erosion and Sediment Control Handbook (VESCH). The minimum standards of the VESCH shall be adhered to unless otherwise waived or approved by a variance.

STRUCTURAL PRACTICES

- 1. TEMPORARY CONSTRUCTION ENTRANCE 3.02 One (1) temporary construction entrance with a wash rack shall be installed along Ex. Bleight Drive. During muddy conditions, driver of construction vehicles will be required to wash their wheels before entering the highway.
- 2. SILT FENCE BARRIER 3.05 Silt fence sediment barriers will be installed downslope of areas with minimal arades to filter sediment-laden runoff from sheet flow.
- 3. TREE PRESERVATION AND PROTECTION 3.38
 - Tree protection fence shall be installed around existing desirable trees in order to protect the trees from mechanical and other injury during land disturbing and construction activity.

SEQUENCE OF CONSTRUCTION CONSTRUCTION

The Phase 1 Erosion/Siltation Controls shall be installed followed by the Phase 2 Erosion/Siltation Controls.

PHASE 1

The first phase of construction shall be the placement of the construction entrance and perimeter controls as shown on the Phase 1 Erosion/Siltation Controls Plan. These controls include the proposed construction entrance and silt fencing. The minimum amount of disturbance possible to properly construct these measures is to be done at this time.

All vehicles entering and leaving this site must do so via the proposed construction entrance shown on the Phase 1 Erosion/Siltation Controls Plan. A wash rack is to be installed within the construction entrance and water is to be provided so that the contractor can wash mud and debris form vehicles prior to leaving the site. All wash water shall be directed toward the onsite control devices.

Once the construction entrance and perimeter controls have been constructed and approval of these devices has been obtained from the Town Inspector, clearing and rough grading of the remainder of the site may proceed. The grading operations shall initially focus on the areas of the subject site on which fills are required.

The site may be final graded and the utilities may be installed while maintaining the sediment trapping devices. During grading, stormwater must remain directed toward the existing Phase 1 sediment trapping devices until the latest possible time. The Phase 2 erosion control measures (as shown on the Phase 2 Erosion/Siltation Controls Plan) should be installed as the grading and utility construction proceeds.

Only after the Town Inspector has granted approval for such, may the sediment trapping devices be removed. Once construction is complete and grass is established throughout all erosion control measures may be removed (as permitted by the Town Inspector) and those areas final graded, seeded and mulched. Any trapped silt shall be disposed of in accordance with Town of Haymarket, Virginia and Federal regulations.

MAINTENANCE PROGRAM

All measures are to be inspected daily by the site superintendent or his representative. Any damaged structures are to be repaired by the close of the day. Any trapped silt shall be disposed of in accordance with Town of Haymarket, Virginia and Federal regulations. If ponding occurs at any filtering device, the device should be drained in such a way as to prevent accidental discharge of trapped sediments.

Any stabilized area is to be reseeded as required to ensure a full, uniform ground cover. In addition, the seeded areas are to be moved, limed and fertilized as recommended for the specific type of cover provided.

All culverts will be cleared of silt and debris. Downstream receiving channels and swales will be inspected weekly for erosion and sediments and repaired as necessary.

Silt fence to be cleaned when trapped silt reaches half the height of silt fence.

Mud tracked onto the existing roadways will be removed daily. The contractor is to sweep clean the road surfaces and follow up with a flush if necessary.

The removal of any erosion and sediment control measure will only be done at the direction of the Town inspector.

TEMPORARY STABILIZATION

Temporary stabilization is to be applied to denuded areas within seven days to denuded areas that may not be at final grade but will remain dormant (unused) for longer than 14 days. Temporary stabilization shall consist of seeding in accordance with specification 3.31 of the Virginia Erosion and Sediment Control Handbook. Prior to the application of the temporary seeding, all slopes are to be "roughened" in accordance with Specification 3.29 of the Virginia Erosion and Sediment Control Handbook. This specification requires that shallow grooves or steps be cut into the slope in order that the permanent stabilization will be better able to become established.

PERMANENT STABILIZATION

Once the site has been graded out as shown on the grading plan, the entire disturbed area is to be permanently seeded in accordance with Specification 3.32 of the Virginia Erosion and Sediment Control Handbook. Prior to the application of the permanent seeding, all slopes are to be "roughened" in accordance with Specification 3.29 of the Virginia Erosion and Sediment Control Handbook. This specification requires that shallow grooves or steps be cut into the slope in order that the permanent stabilization will be better able to become established.

STORMWATER MANAGEMENT

Stormwater Management and BMP's for the subject site are provided with the existence of an adequate outfall and the purchase of nutrient credits from an approved Nutrient Credit Bank to satisfy the phosphorus removal requirements generated by the subject

ADEQUATE OUTFALL

The subject site generally drains from north to south in a sheet flow condition. Additionally, the existing and post-developed surface runoff exit the subject site as sheet flow. As seen in the VRRM Spreadsheet calculations found on sheet 12, the proposed impervious cover (0.37 ac) is less than the existing impervious cover (0.39 ac). Since the surface runoff follows a similar time of concentration flow path in both the existing and post-developed conditions, the proposed development actually generates less surface runoff in the post-developed condition. Therefore, an adequate outfall is said to exist for the subject site.

NOTES

- 1. The Town Inspector shall have the authority to add or delete erosion and sediment controls as needed in the field, as site conditions warrant. In addition, no sediment traps may be removed without prior approval from the Town Inspector.
- 2. Stabilization measures will be applied to earthen structures such as dams, dikes and diversions immediately after installation.
- 3. During construction of the project, soil stockpiles and borrow areas shall be stabilized or protected with sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as borrow areas and soil intentionally transported from the project site.
- 4. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Slopes that are found to be eroding excessively within one year of permanent stabilization shall be provided with additional slope stabilizing measures until the problem is corrected.
- 5. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume, or slope drain structure.
- 6. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.
- 7. 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 streams or offsite property. d. Material used for backfilling trenches shall be properly compacted in order to
- minimize erosion and promote stabilization.
- e. Restabilization shall be accomplished in accordance with these regulations. f. Applicable safety regulations shall be complied with.

9VAC25-840-40, Minimum standards.

- A VESCP must be consistent with the following criteria, techniques and methods:
- 1. Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within seven days to denuded areas that may not be at final grade but will remain dormant for longer than 14 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.
- 2. During construction of the project, soil stock piles and borrow areas shall be stabilized or protected with sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as borrow areas and soil intentionally transported from the project site.
- 3. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform, mature enough to survive and will inhibit erosion
- 4. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope land
- 5. Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately after
- 6. Sediment traps and sediment basins shall be designed and constructed based upon the total drainage area to be served by the trap or basin.
- a. The minimum storage capacity of a sediment trap shall be 134 cubic yards per acre of drainage area and the trap shall only control drainage areas less than three acres.
- b. Surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to three acres shall be controlled by a sediment basin. The minimum storage capacity of a sediment basin shall be 134 cubic yards per acre of drainage area. The outfall system shall, at a minimum, maintain the structural integrity of the basin during a 25-year storm of 24-hour duration. Runoff coefficients used in runoff calculations shall
- correspond to a bare earth condition or those conditions expected to exist while the sediment basin is utilized. 7. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Slopes that are found to be eroding excessively within one year of permanent stabilization shall be provided with additional slope stabilizing
- measures until the problem is corrected. 8. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or
- permanent channel, flume or slope drain structure. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.
- 10. All storm sewer inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.

relocation projects that incorporate natural channel design concepts are not man-made channels and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels:

- a. Concentrated stormwater runoff leaving a development site shall be discharged directly into an adequate natural or man-made receiving channel, pipe or storm sewer system. For those sites where runoff is discharged into a pipe or pipe system, downstream stability analyses at the outfall of the pipe or pipe system shall be performed.
- b. Adequacy of all channels and pipes shall be verified in the following manner:
- (1) The applicant shall demonstrate that the total drainage area to the point of analysis within the channel is one hundred times greater than the contributing drainage area of the project in question; or
- channel banks nor cause erosion of channel bed or banks. (b) All previously constructed man-made channels shall be analyzed by the use of a 10-year storm to verify that

(2) (a) Natural channels shall be analyzed by the use of a two-year storm to verify that stormwater will not overtop

- stormwater will not overtop its banks and by the use of a two-year storm to demonstrate that stormwater will not cause erosion of channel bed or banks; and
- be contained within the pipe or system. c. If existing natural receiving channels or previously constructed man-made channels or pipes are not adequate.

(c) Pipes and storm sewer systems shall be analyzed by the use of a 10-year storm to verify that stormwater will

- (1) Improve the channels to a condition where a 10-year storm will not overtop the banks and a two-year storm
- (2) Improve the pipe or pipe system to a condition where the 10-year storm is contained within the appurtenances; (3) Develop a site design that will not cause the pre-development peak runoff rate from a two-year storm to increase when runoff outfalls into a natural channel or will not cause the pre-development peak runoff rate from a 10-year storm to increase when runoff outfalls into a man-made channel; or
- (4) Provide a combination of channel improvement, stormwater detention or other measures which is satisfactory to the VESCP authority to prevent downstream erosion.
- d. The applicant shall provide evidence of permission to make the improvements.

will not cause erosion to the channel, the bed, or the banks; or

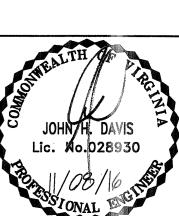
- e. All hydrologic analyses shall be based on the existing watershed characteristics and the ultimate development condition of the subject project.
- f. If the applicant chooses an option that includes stormwater detention, he shall obtain approval from the VESCP of a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the person responsible for performing the maintenance.

g. Outfall from a detention facility shall be discharged to a receiving channel, and energy dissipators shall be

placed at the outfall of all detention facilities as necessary to provide a stabilized transition from the facility to the receiving channel.

h. All on-site channels must be verified to be adequate.

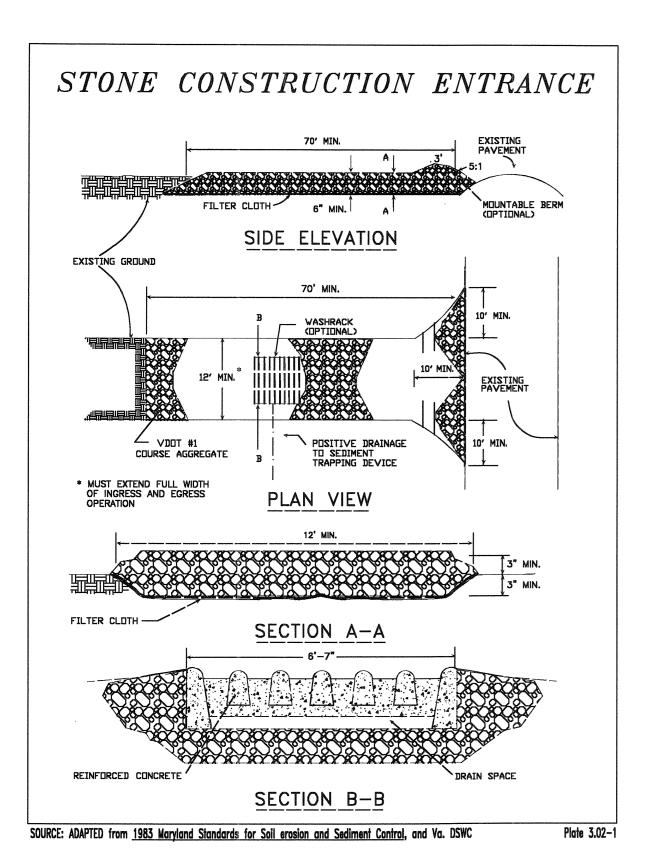
- 11. Before newly constructed stormwater conveyance channels or pipes are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel
- 12. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these structures if armored by nonerodible cover materials
- 13. When a live watercourse must be crossed by construction vehicles more than twice in any six-month period, a temporary vehicular stream crossing constructed of nonerodible material shall be provided.
- 14. All applicable federal, state and local requirements pertaining to working in or crossing live watercourses shall be
- 15. The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.
- 16. 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 streams or off-site property.
 - d. Material used for backfilling trenches shall be properly compacted in order to minimize erosion and promote
 - e. Restabilization shall be accomplished in accordance with this chapter.
 - f. Applicable safety requirements shall be complied with.
 - 17. Where construction vehicle access routes intersect paved or public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or public road surface, the road surface shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual development lots as well as to larger land-disturbing activities
- 18. All temporary erosion and secliment control measures shall be removed within 30 days after final site stabilization or after the temporary measures are no longer needed, unless otherwise authorized by the VESCP authority. Trapped sediment and the disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.
- 19. Properties and waterways downstream from development sites shall be protected from sediment deposition, erosion and damage due to increases in volume, velocity and peak flow rate of stormwater runoff for the stated frequency storm of 24-hour duration in accordance with the following standards and criteria. Stream restoration and
- i. Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property shall be diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.
- i. In applying these stormwater management criteria, individual lots or parcels in a residential, commercial or industrial development shall not be considered to be separate development projects. Instead, the development as a whole, shall be considered to be a single development project. Hydrologic parameters that reflect the ultimate development condition shall be used in all engineering calculations.
- k. All measures used to protect properties and waterways shall be employed in a manner which minimizes impacts on the physical, chemical and biological integrity of rivers, streams and other waters of the state.
- I. Any plan approved prior to July 1, 2014, that provides for stormwater management that addresses any flow rate capacity and velocity requirements for natural or man-made channels shall satisfy the flow rate capacity and velocity requirements for natural or man-made channels if the practices are designed to (i) detain the water quality volume and to release it over 48 hours; (ii) detain and release over a 24-hour period the expected rainfall resulting from the one year, 24-hour storm; and (iii) reduce the allowable peak flow rate resulting from the 1.5, 2, and 10year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site assuming it was in a good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition, and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels as defined in any regulations promulgated pursuant to § 62.1-44.15:54 or 62.1-44.15:65 of the Act.
- m. For plans approved on and after July 1, 2014, the flow rate capacity and velocity requirements of § 62.1-44.15:52 A of the Act and this subsection shall be satisfied by compliance with water quantity requirements in the Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and attendant regulations, unless such land-disturbing activities are in accordance with 9VAC25-S70-48 of the Virginia Stormwater Management Program (VSMP) Regulation or are exempt pursuant to subdivision C 7 of § 62.1-44.15:34 of the Act. n. Compliance with the water quantity minimum standards set out in 9VAC25-870-66 of the Virginia Stormwater Management Program (VSMP) Regulation shall be deemed to satisfy the requirements of this subdivision 19.

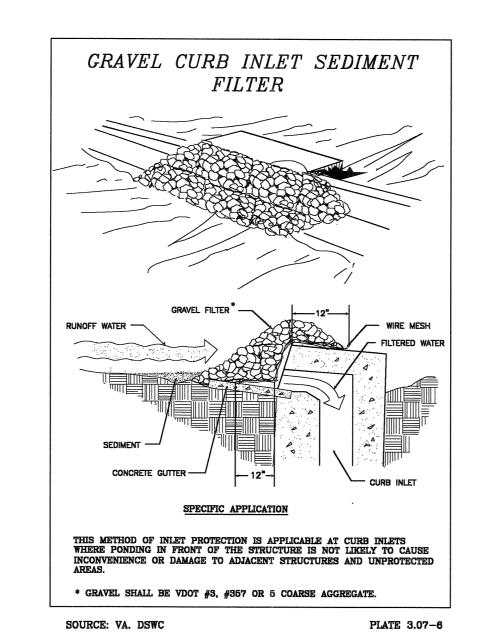


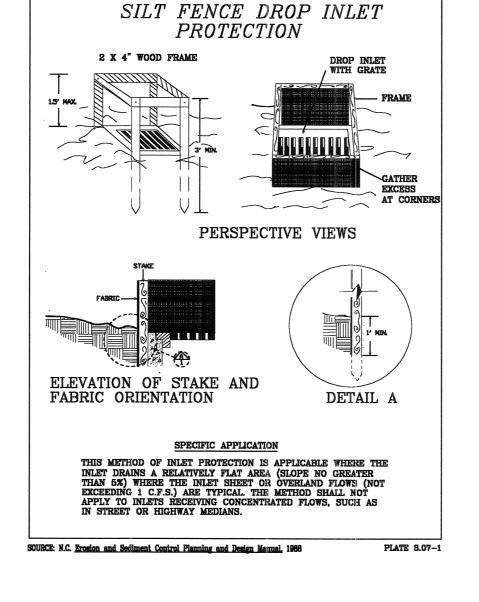
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CHECKLIST

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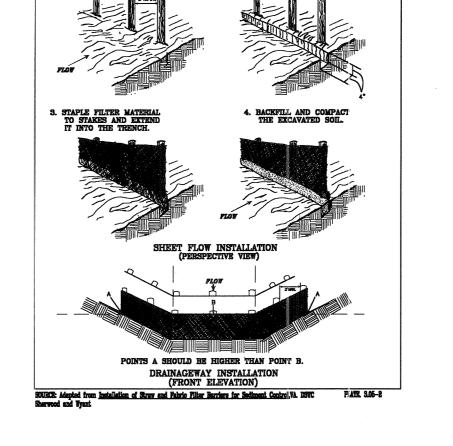
FOR EROSION AND SEDIMENT CONTROL PLANS

- X Minimum Standards All applicable Minimum Standards must be addressed. **NARRATIVE**
- <u>Project description</u> Briefly describes the nature and purpose of the land-disturbing activity, and the area (acres) to be disturbed.
- Existing site conditions A description of the existing topography, vegetation
- Adjacent areas A description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance.
- Off-site areas Describe any off-site land-disturbing activities that will occur (including borrow sites, waste or surplus areas, etc.). Will any other areas be
- Soils A brief description of the soils on the site giving such information as soil name, mapping unit, erodibility, permeability, depth, texture and soil
- Critical areas A description of areas on the site which have potentially serious erosion problems (e.g., steep slopes, channels, wet weather/ underground springs, etc.). Erosion and sediment control measures - A description of the methods which will be used to control erosion and sedimentation on the site. (Controls
- should meet the specifications in Chapter 3.) Permanent stabilization - A brief description, including specifications, of how
- the site will be stabilized after construction is completed. Stormwater runoff considerations - Will the development site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or
- <u>Calculations</u> Detailed calculations for the design of temporary sediment basins, permanent stormwater detention basins, diversions, channels, etc. Include calculations for pre- and post-development runoff.

channel degradation downstream? Describe the strategy to control

VI - 13

Checklist (continued) SITE PLAN <u>Vicinity map</u> - A small map locating the site in relation to the surrounding area. Include any landmarks which might assist in locating the site. <u>Indicate north</u> - The direction of north in relation to the site. Limits of clearing and grading - Areas which are to be cleared and graded. Existing contours - The existing contours of the site. Final contours - Changes to the existing contours, including final drainage Existing vegetation - The existing tree lines, grassed areas, or unique Soils - The boundaries of different soil types. Existing drainage patterns - The dividing lines and the direction of flow for the different drainage areas. Include the size (acreage) of each drainage area. <u>Critical erosion areas</u> - Areas with potentially serious erosion problems. (See Site Development - Show all improvements such as buildings, parking lots, access roads, utility construction, etc. Location of practices - The locations of erosion and sediment controls and stormwater management practices used on the site. Use the standard symbols and abbreviations in Chapter 3 of this handbook. Off-site areas - Identify any off-site land-disturbing activities (e.g., borrow sites, waste areas, etc.). Show location of erosion controls. (Is there sufficient information to assure adequate protection and stabilization?) <u>Detail drawings</u> - Any structural practices used that are not referenced to the E&S handbook or local handbooks should be explained and illustrated with Maintenance - A schedule of regular inspections and repair of erosion and sediment control structures should be set forth. VI - 14



CONSTRUCTION OF A SILT FENCE

(WITHOUT WIRE SUPPORT)

FENCING AND ARMORING

CORRECT METHODS OF TREE FENCING

DETAILS PROVIDED HERE ARE FOR ILLUSTRATIVE PURPOSES ONLY!!

PLATE 3.38-2

ALL CONSTRUCTION IS TO CONFORM TO THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROLS HANDBOOK.

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9 OF 18

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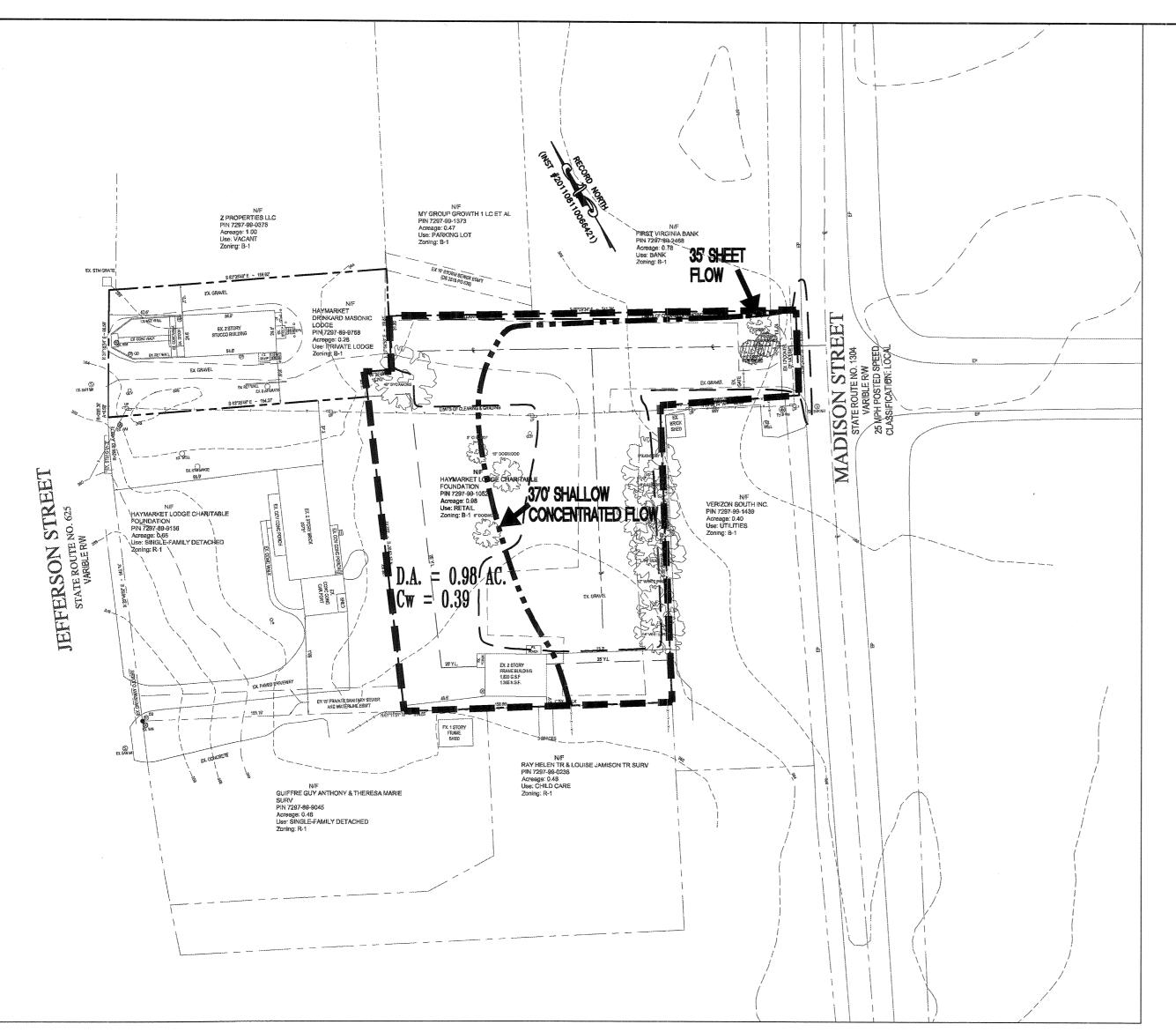
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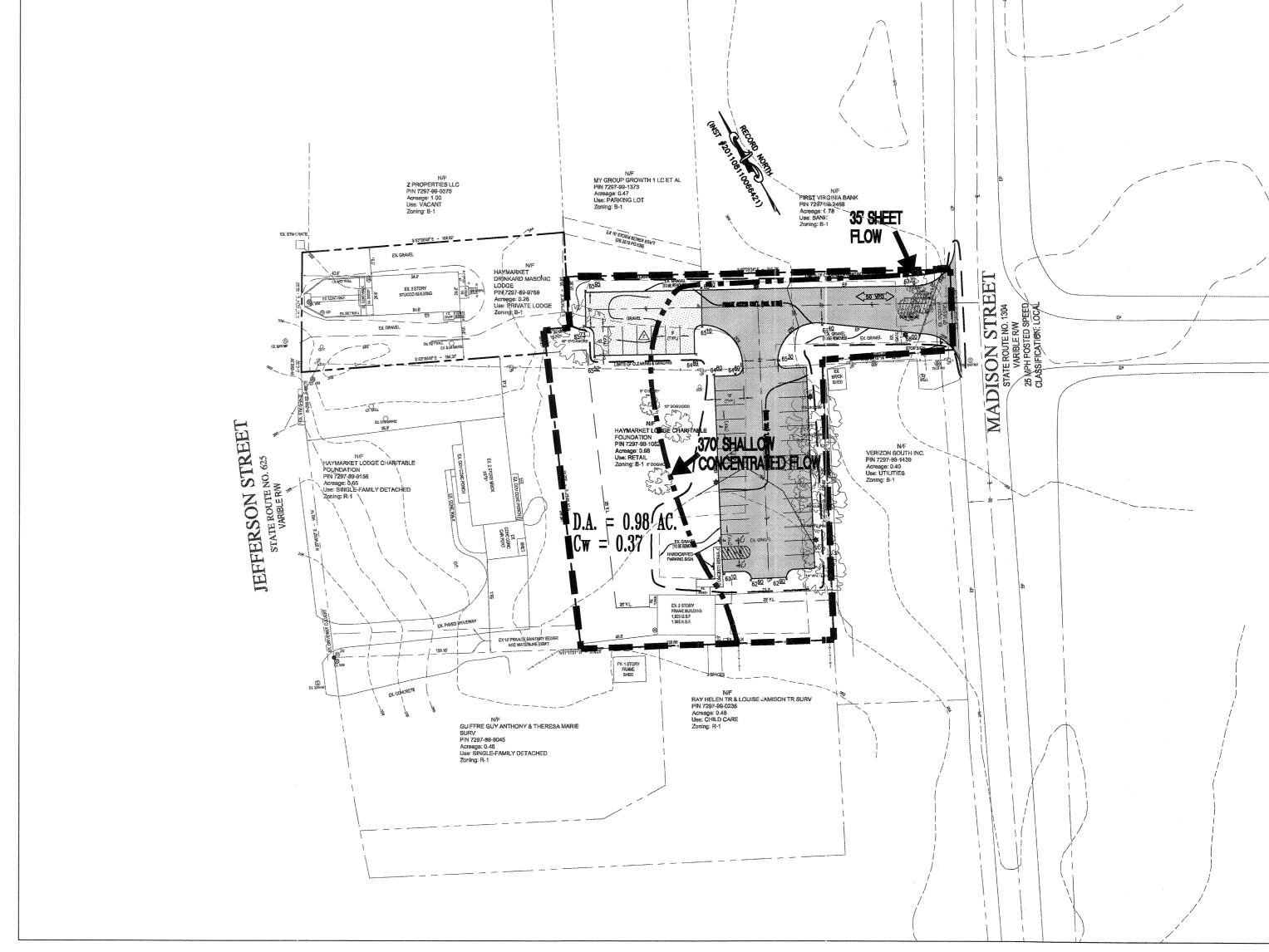
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SWM EXISTING DIVIDES MAP SCALE: 1" = 50'



SWM DEVELOPED DIVIDES MAP SCALE: 1" = 50'

6710 MADISON STREET HAYMARKET, VA **SWM NARRATIVE**

The proposed development consists of constructing a commercial entrance and private travelway and associated parking to serve the existing commercial building located at 6710 Madison Street Haymarket, VA on approximately 0.98 acres.

The pre-developed and post-developed drainage sheds have been analyzed using the TR-20 routing method to determine the runoff rates leaving the site during the 2-year and 10-year storm events (see routing output – sheet 11). As can be seen in the TR-20 routing output and the summary results below, the proposed flows from the subject site are less than the corresponding flows in the existing condition. This is primarily due to the removal of portions of the existing impervious areas in the developed condition resulting in a reduction of the weighted runoff coefficient.

A summary of the pre-developed and post-developed flows are as follows:

Pre-developed discharges leaving the site:

1.31 cfs 2-year 1.66 cfs 10-year

Developed discharges leaving the site:

1.29 cfs 2-year 1.63 cfs 10-year

As can be seen above, the total developed discharge rates leaving the site in the post-developed condition are less than the corresponding pre-developed runoff rates. Therefore, adequate storm water management has been provided and an adequate outfall exists for this project.

SWM COMPUTATIONS

IMPERVIOUS AREA SUMMARY

EXISTING DRAINAGE AREA = 42,815 SF PROPOSED DRAINAGE AREA = 42,815 SF = 0.9829 AC= 0.9829 AC

EXISTING CONDITION PROPOSED CONDITION

992 SF EX BUILDING 16,120 SF EX. GRAVEL EX. TOTAL IMP. AREA 17,112 SF (0.3928 AC)

EX. BUILDING 992 SF PROPOSED GRAVEL 2,733 SF 12,292 SF PROPOSED ASPHALT PROP. CONC. WALK 190 SF PROP. TOTAL IMP. AREA 16,207 SF (0.3721 AC)

'C' RUNOFF COEFFICIENT

PRE-DEVELOPMENT

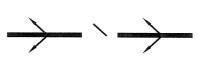
 $C_{PRE} = \frac{(0.90)(0.3928) + (0.30)(0.5901)}{(0.90)(0.3928) + (0.30)(0.5901)}$ 0.9829

= 0.54

POST-DEVELOPMENT

 $C_{POST} = \underline{(0.90)(0.3721) + (0.30)(0.6108)}_{0.9829}$ = 0.53

LEGEND



PRE-DEVELOPED/POST-DEVELOPED

____10_____0F ____18___

 Area (ac)
 C
 Description

 0.983
 0.54
 Weighted C

 0.983
 100.00% Pervious Area

Tc Length Slope Velocity Capacity Description (ff/fi) (ff/sec) (cfs)

3.9 35 0.0255 0.15 Sheet Flow, Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.10"

Shallow Concentrated Flow, Shallow Concentrated Flow 7.4 370 0.0141 0.83 Short Grass Pasture Kv= 7.0 fps

11.3 405 Total

6710 MADISON STREET HAYMARKET VA (EXISTIRainfall Duration=5 min, Inten=7.27 in/hr Prepared by Microsoft HydroCAD® 9.10 s/n 06515 © 2010 HydroCAD Software Solutions LLC Printed 4/29/2016

Summary for Subcatchment 4S: EXISTING

Short Grass Pasture Kv= 7.0 fps

Runoff = 1.66 cfs @ 0.08 hrs, Volume= 0.012 af, Depth= 0.14" Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs Rainfall Duration=5 min, Inten=7.27 in/hr

 Area (ac)
 C
 Description

 0.983
 0.54
 Weighted C

 0.983
 100.00% Pervious Area

Tc Length Slope Velocity Capacity Description

(min) (feet) (ft/ft) (ft/sec) (cfs)

3.9 35 0.0255 0.15 Sheet Flow, Grass: Short n= 0.150 P2= 3.10"

Shallow Concentrated Flow, Shallow Concentrated Flow

7.4 370 0.0141 0.83 11.3 405 Total

6710 MADISON STREET HAYMARKET VA (DEVELRainfall Duration=5 min, Inten=5.75 in/hr Prepared by Microsoft
HydroCAD® 9.10 s/n 06515 © 2010 HydroCAD Software Solutions LLC

Summary for Subcatchment 4S: PROPOSED - DEVELOPED

Runoff = 1.29 cfs @ 0.08 hrs, Volume= 0.009 af, Depth= 0.11" Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs Rainfall Duration=5 min, Inten=5.75 in/hr

 Area (ac)
 C
 Description

 0.983
 0.53
 Weighted C

 0.983
 100.00% Pervious Area

Tc Length Slope Velocity Capacity Description

(min) (feet) (ft/ft) (ft/sec) (cfs)

3.9 35 0.0255 0.15 Sheet Flow,
Grass: Shore

Sheet Flow, Sheet Flow
Grass: Short n= 0.150 P2= 3.10"
Shallow Concentrated Flow, Shallow Concentrated Flow
Short Grass Pasture Kv= 7.0 fps 7.4 370 0.0141 0.83

6710 MADISON STREET HAYMARKET VA (DEVELRainfall Duration=5 min, Inten=7.27 in/hr Prepared by Microsoft HydroCAD® 9.10 s/n 06515 © 2010 HydroCAD Software Solutions LLC

Summary for Subcatchment 4S: PROPOSED - DEVELOPED

Runoff = 1.63 cfs @ 0.08 hrs, Volume= 0.012 af, Depth= 0.14" Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Area (ac) C Description

0.983 0.53 Weighted C 0.983 100.00% Pervious Area

Tc Length Slope Velocity Capacity Description (fin) (feet) (ft/ft) (ft/sec) (cfs)

7.4 370 0.0141 0.83

Sheet Flow, Sheet Flow
Grass: Short n= 0.150 P2= 3.10"
Shallow Concentrated Flow, Shallow Concentrated Flow
Short Grass Pasture Kv= 7.0 fps

11.3 405 Total

KDL 609 ET, VA 2016 03 753-759

SCALE: H) N/A

V) N/A

DATE: MARCH 2015

CHECKED:

DRAWN: JHD

FILE NO: SP-033-HAY

SHEET NO. ___11____OF ___18___

EXISTING DRAINAGE AREA = 42,815 SF = 0.9829 AC PROPOSED DRAINAGE AREA = 42,815 SF = 0.9829 AC

EXISTING CONDITION

PROPOSED CONDITION

EX BUILDING EX. GRAVEL

EX. TOTAL IMP. AREA

992 SF 16,120 SF 17,112 SF (0.3928 AC)

EX. BUILDING PROPOSED GRAVEL PROPOSED ASPHALT PROP. CONC. WALK

992 SF 2,733 SF 12,292 SF 190 SF

PROP. TOTAL IMP. AREA 16,207 SF (0.3721 AC)

N/F
MY GROUP GROWTH 1 LC ET AL
PIN 7287-99-1373
Acresge: 0.47
Use: PARKING LOT
Zoring: B-1

BMP DIVIDES MAP

SCALE: 1" = 50'

Virginia Runoff Reduction Me	thod ReDeve	elopment Wo	rksheet - v2.	8 - June 2014	
To be used w/ 2011 BMP Star					
Site Data		poomeation			
one Data					
One is at Name of CT40 MADICON OTO	ET HAVARADI	FT 1/A			
Project Name: 6710 MADISON STRE	EIHAYMARK	EI, VA			
Date: APRIL 28, 2015					
	data input calla				
	data input cells calculation cells				
	constant values				
	i constant varaes				
Post-ReDevelopment Project	& Land Cov	ar Informatio	n Total D	isturbed Acreage	0.53
Ostriebevelopinenti i oject	C ECHO OOA	GI IIIIOIIIIQUO	ii iolai L	isturbeu Acreage	
Constants					
Annual Rainfall (inches)	43			í	
arget Rainfall Event (inches)	1.00				
Phosphorus EMC (mg/L)	0.26			Nitrogen EMC (mg/L)	1.86
Target Phosphorus Target Load (lb/acre/yr)	0.41				
Pj	0.90				
re-ReDevelopment Land Cover (acres)					
Testebevelopment Land Gover (acres)	A soils	B Soils	C Soils	D Soils	Totals
orest/Open Space (acres) undisturbed,					
rotected forest/open space or reforested land	0.00	0.00	0.00	0.00	0.00
lanaged Turf (acres) disturbed, graded for					
ards or other turf to be mowed/managed	0.00	0.59	0.00	0.00	0.59
npervious Cover (acres)	0.00	0.39	0.00	0.00	0.39
				Total	0.98
ost-ReDevelopment Land Cover (acres)					
ost-rebeveropment Land Cover (acres)	A soils	B Soils	C Soils	D Soils	Totals
orest/Open Space (acres) undisturbed,	7. 66.16	2 00110	0 00110	D COME	TOMIO
rotected forest/open space or reforested land	0.00	0.00	0.00	0.00	0.00
lanaged Turf (acres) disturbed, graded for					
ards or other turf to be mowed/managed	0.00	0.61	0.00	0.00	0.61
mpervious Cover (acres)	0.00	0.37	0.00	0.00	0.37
				Total	0.98
rea Check	Okay	Okay	Okay	Okay	
·· Coofficients					ļ
v Coefficients	A!!-		00.71	D.O. ''.	1
orest/Open Space	A soils 0.02	B Soils	C Soils	D Soils	
Managed Turf	0.02	0.03	0.04	0.05	
mpervious Cover	0.15	0.95	0.22	0.25 0.95	
TIPOL VIOLO COVOI	0.50	0.90	0.80	0.95	
and Cover Summary	Listed	Adjuste d ¹		Land Cover Sumr	narv
		-	:	Luna Sover Sum	y

Land Cover Summary	Summary Listed Adjusted ¹ Land Cover Summary		Land Cover Summary			
Pre-ReDevelopment			Post-ReDevelopme	nt	Post-ReDevelopment New Impervio	us
			Forest/Open			
Forest/Open Space Cover (acres)	0.00	0.00	Space Cover	0.00		
			Composite			
Composite Rv(forest)	0.00		Rv(forest)	0.00		
% Forest	0%	0%	% Forest	0%		
			Managed Turf			
lanaged Turf Cover (acres)	0.59	0,59	Cover (acres)	0.61		
Composite Rv(turf)	0.20	0.20	Composite Rv(turf)	0.20		
6 Managed Turf	60%	60%	% Managed Turf	62%		
			ReDev. Impervious			
mpervious Cover (acres)	0.39	0.39	Cover (acres)	0.37	New Impervious Cover (acres)	0.00
Rv(impervious)	0.95	0.95	Rv(impervious)	0.95	Rv(impervious)	0.95
6 Impervious	40%	40%	% Impervious	38%	% Impervious C	heck Area
			Total ReDev. Site			
otal Site Area (acres)	0.98	0.98	Area (acres)	0.98	Total New Dev. Site Area (acres)	0.00
ite Rv	0.50	0.50	ReDev. Site Rv	0.48	New Dev. Site Rv	0.98
Pre-Development Treatment Volume (acre-ft)	0.0407	0.0407	Post- ReDevelopment Treatment Volume (acre-ft)	0.0395	Post-Development Treatment Volume (acre-ft)	0.0000
Pre-Development Treatment Volume (cubic eet)	1,773	1,773		1,719	Post-Development Treatment Volume (cubic feet)	
Pre-Development Load (TP) (lb/yr)	1.11	1.11	Post- ReDevelopment Load (TP) (lb/yr)	1.08	Post-Development Load (TP) (lb/yr)	0.00
Adjusted Land Cover Summary reflects the and cover minus the pervious land cover (fores nanaged turf) acreage proposed for new imper	st/open space or		Maximum % Reduction Required Below Pre-ReDevelopment Load	10%		
djusted total acreage is consistent with the Facreage (minus the acreage of new impervious	Post Redevelopment		TP Load Reduction Required for	0.08	TP Load Reduction Required for	A ni

Redeveloped Area (lb/yr) 0.08 New Impervious Area (lb/yr) 0.00 reduction requriement for the new impervious cover to meet the new development load limit is computed in **Column I**. Total Load Reduction Required Post-Development Load (TN) (lb/yr) Pre-Development Load (TN) (lb/yr)

V) N/A

DATE: MARCH 2015

CHECKED:

DRAWN: JHD

FILE NO: SP-033-HAY

<u>12</u> _{OF} <u>18</u>

SHEET NO.

YMARKE

Site Results D.A. C AREA CHECK IMPERVIOUS COVER IMPERVIOUS COVER TREATED TURF AREA TREATED TOTAL PHOSPHOROUS LOAD REDUCTION REQUIRED (LB/YEAR) 0.08 RUNOFF REDUCTION (cf)
PHOSPHOROUS LOAD REDUCTION ACHIEVED (LB/YR) ADJUSTED POST-DEVELOPMENT PHOSPHOROUS LOAD (TP) (Ib/yr) REMAINING PHOSPHOROUS LOAD REDUCTION (LB/YR) NEEDED Nitrogen (for information purposes) RUNOFF REDUCTION (cf) NITROGEN LOAD REDUCTION ACHIEVED (LB/YR) ADJUSTED POST-DEVELOPMENT NITROGEN LOAD (TP) (lb/yr) 7.73

> Red Hill Farm Nutrient Bank 909 Fairway Drive, NE Vienna, Va. 22180

Date: July 25, 2016

To: James Kraut Haymarket Lodge Chartable Foundation P.O. Box 313 Haymarket, Va. 20168-0313

From: Gary M. Callen Authorized Nutrient Offset Broker

regulations and is in good regulatory standing.

Subject: Potomac Watershed-Nutrient Credit Availability

Project Reference: 6710 Madison Street, Haymarket, Va.

This letter is to confirm that Gary and Debra Callen own the Red Hill Farm Nutrient Bank and that the authorized representative and broker is Gary M. Callen. In addition, the Red Hill Farm Nutrient bank is operating in compliance with applicable federal and state permits, laws, and

This also confirms that the Red Hill Farm Nutrient Bank has met all authorizations and approvals by DEQ as well as all other regulatory agencies and nothing more is required. Please accept this as confirmation of the availability of 0.08 authorized nutrient credits ("Nutrient Credits") from Red Hill Farm Nutrient Bank facility for use by permit applicants within the Potomac watershed, including HUC 02070008, to compensate for nutrient loadings in excess of state or local regulations, as per Virginia Code § 62.1-44.15:35 and § 62.1-44.19:14 and Virginia Administrative Code 9 VAC 25-820-10 et seq. These Nutrient Credits are generated and managed under the terms of the Banking Instruments known as the Red Hill Farm Nutrient Bank Nutrient Reduction Implementation Plan ("NRIP").

Please feel free to contact me if you have any questions.

Authorized Nutrient Offset Broker gary.callen@daston.com 703 346 8206

DOCUMENTATION OF THE PURCHASE OF REQUIRED NUTRIENT CREDITS SHALL BE PROVIDED BY THE APPLICANT WHEN POSTING BONDS FOR CONSTRUCTION.

6710 Madison Street Haymarket, VA **BMP Narrative**

Overall water quality (BMP) for the 6710 Madison Street Haymarket, VA site has been calculated using the Virginia Runoff Reduction Method ReDevelopment Worksheet – v2.8 - June 2014 and based on the 2011 Virginia BMP Standards and Specifications. The onsite impervious calculations found on sheets 11 and 14 have been computed for the existing and proposed impervious areas as shown on the BMP Divides Plan (see sheet 14). Using this information, the required rate of phosphorous removal has been computed using the Virginia Runoff Reduction Method ReDevelopment Worksheet – v2.8 – June 2014 as provided on sheets 14 and 15.

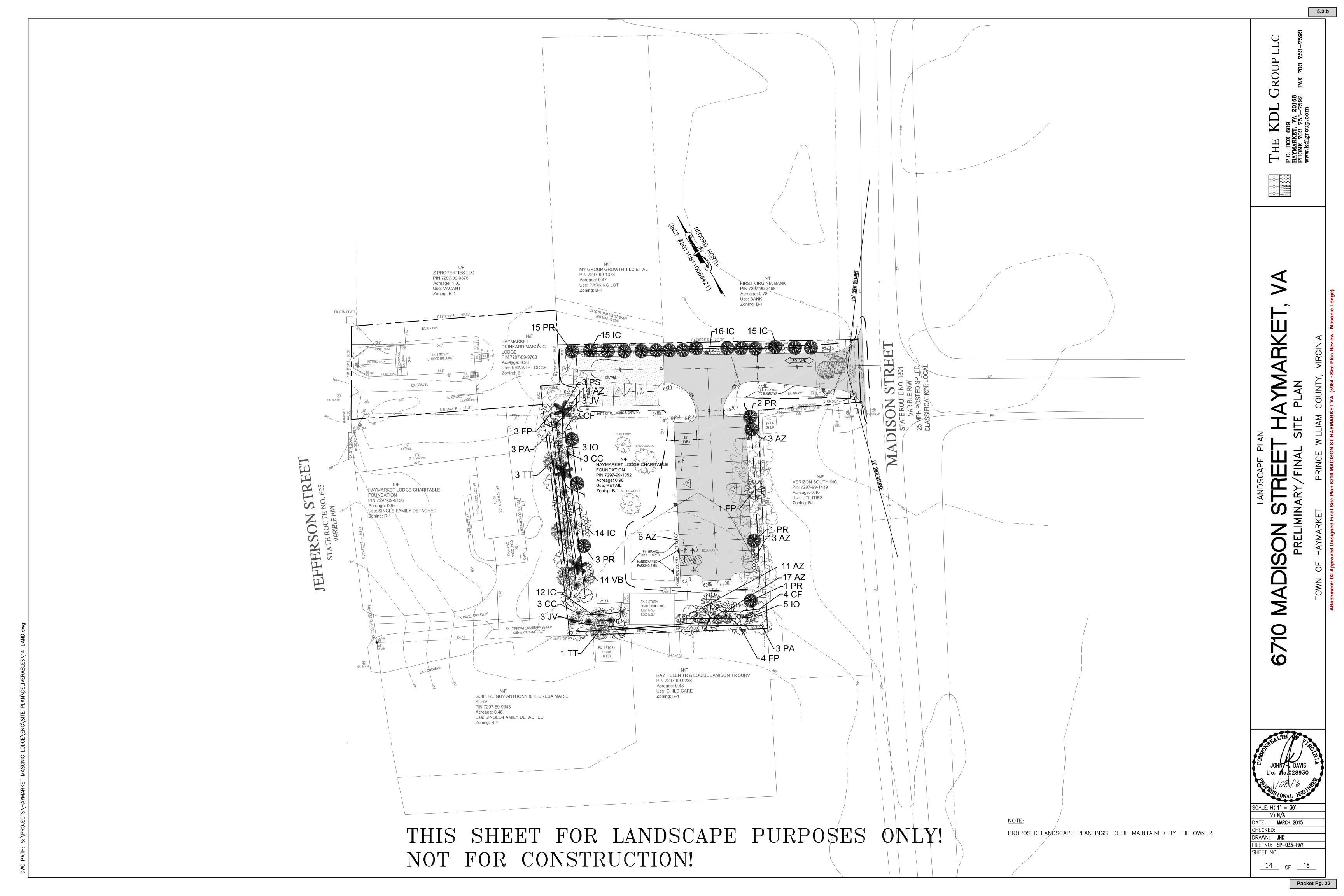
Based on the results of the Virginia Runoff Reduction Method ReDevelopment Worksheet -v2.8-June 2014 calculations for the 6710 Madison Street Haymarket, VA site, the applicant will purchase nutrient credits from an approved Virginia Nutrient Offset Credit Facility in lieu of satisfying the required phosphorous removal requirements (0.08 lbs/yr) on-site through BMP structural measures. Upon completion of the purchase of the required nutrient credits, the overall water quality (BMP) requirements for this site will have been met.

Although credit has not been taken, the proposed site design incorporates sheetflow to conservation area techniques across the preserved turf areas and proposed landscape buffers located along the downstream perimeter of the subject property.

DATE: MARCH 2015 CHECKED: DRAWN: JHD

FILE NO: SP-033-HAY

SHEET NO.



TYPE SC SCREEN (25' WIDE BUFFER YARD):

ALONG SIDE PROPERTY LINE WITH PIN 7297-89-9156

TYPE OF PLANTING	ALT. 2	AREA (S.F.)	REQ'D PLANTINGS	PROV. PLANTINGS (1/2 BUFFER)
CANDPY	1/500 S.F.	4, 113	8, 2	9
DRNAMENTAL	1/500 S.F.	4, 113	8, 2	9
EVERGREEN	1/500 S.F.	4, 113	8, 2	9
SHRUB	1/100 S.F.	4, 113	41.1	42

INTERIOR PARKING LOT LANDSCAPING REQUIREMENTS

PLANT TYPE	NUMBER REQUIRED	TOTAL NUMBER REQUIRED	EXISTING PLANTS TO REMAIN	PLANTS PROPOSED	TOTAL PLANTS PROPOSED
UNDERSTORY TREES	1 PER 10 SPACES	2	3	0	3
SHRUBS	3 PER 10 SPACES	6	0	6	26

PERIMETER PARKING LOT LANDSCAPING REQUIREMENTS (PARKING LOTS ADJACENT TO OTHER PARKING LOTS) ADJACENT TO GPIN 7297-99-2468 AND GPIN 7297-99-1373 LENGTH: 227 L.F.

PLANT TYPE	NUMBER REQUIRED	TOTAL NUMBER REQUIRED	EXISTING PLANTS TO REMAIN	PLANTS PROPOSED	TOTAL PLANTS PROPOSED
UNDERSTORY TREES	2 PER 30 L.F.	15.1	1	15	16
SHRUBS	6 PER 30 L.F.	45.4	0	46	46

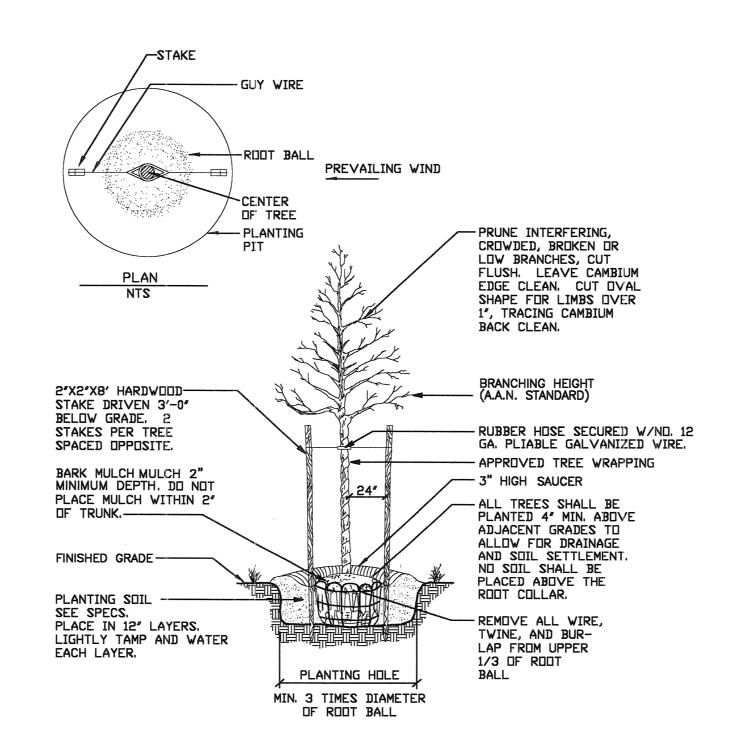
PERIMETER PARKING LOT LANDSCAPING REQUIREMENTS (PARKING LOTS ADJACENT TO OTHER PARKING LOTS) ADJACENT TO GPIN 7297-99-1439 LENGTH: 126 L.F.

PLANT TYPE	NUMBER REQUIRED	TOTAL NUMBER REQUIRED	EXISTING PLANTS TO REMAIN	PLANTS PROPOSED	TOTAL PLANTS PROPOSED
UNDERSTORY TREES	2 PER 30 L.F.	8.4	6	3	9
SHRUBS	6 PER 30 L.F.	25.2	0	26	26

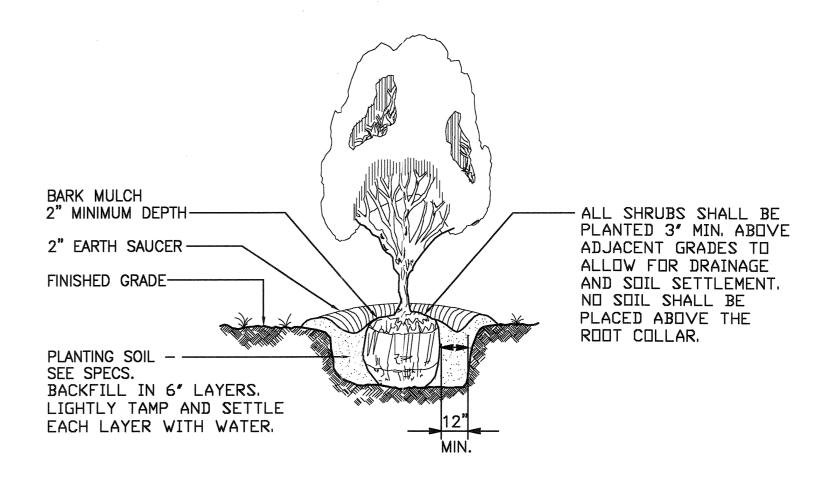
PLANT SCHEDULE

LOCATION/ REQUIREMENT	KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	10-YR. CANOPY (SF)	SIZE	REMARKS
BUFFER PLANTINGS -	CANOPY TRI	EES:					
GREEN ASH	FP	7	FRAXINUS PENNSYLVANIA	GREEN ASH	1,400	2.5" CAL.	B&B
LONDON PLANE TREE	PA	6	PLATANUS ACERIFOLIA	LONDON PLANE TREE	1,200	2.5" CAL.	B&B
SILVER LINDEN	TT	4	TILIA TOMENTOSA	SILVER LINDEN	800	2.5" CAL.	B&B
TOTAL		17			3,400		
BUFFER PLANTINGS -	ORNAMENTA	L TREES:					
DOGWOOD	CF	7	CORNUS FLORIDA	DOGWOOD	525	5'6' HGT	B&B
RED BUD	СС	6	CERCUS CANADENSIS	RED BUD	450	5'6' HGT	B&B
FLOWERING CHERRY	PR	4	PRUNUS	FLOWERING CHERRY	300	5'6' HGT	B&B
TOTAL		17			1,275		
BUFFER PLANTINGS -	EVERGREEN	TREES:					
WHITE PINE	PS	3	PINUS STROBUS	WHITE PINE	600	6'-8' HGT	B&B
EASTERN RED CEDAR	ĴΛ	6	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	300	6'8' HGT	B&B
AMERICAN HOLLY	10	8	ILEX OPACA	AMERICAN HOLLY	400	6'-8' HGT	B&B
TOTAL		17			1,300		
BUFFER PLANTINGS -	SHRUBS:						
AZALEA	AZ	42				1'-2' HGT	B&B
JAPANESE HOLLY	IC	26	ILEX CRENATA	JAPANESE HOLLY		1'-2' HGT	B&B
VIBURNUM	VB	14				1'-2' HGT	B&B
TOTAL		82					
INTERIOR PARKING LOT	LANDSCAPI	NG PLANTIN	GS:				
AZALEA	AZ	6				1'-2' HGT	B&B
TOTAL		6					
PERIMETER PARKING L	OT LANDSCA	PING PLANT	NGS:				
FLOWERING CHERRY	PR	10	PRUNUS	FLOWERING CHERRY	750	5'6' HGT	B&B
JAPANESE HOLLY	IC	46	ILEX CRENATA	JAPANESE HOLLY		1'-2' HGT	B&B
AZALEA	AZ	26				1'-2' HGT	B&B
TOTAL		82			750		

PLANTINGS NOT SPECIFICALLY CALLED OUT ABOVE ARE TO BE FROM THE TOWN OF HAYMARKET APPROVED PLANTING LIST (OR APPROVED EQUAL).

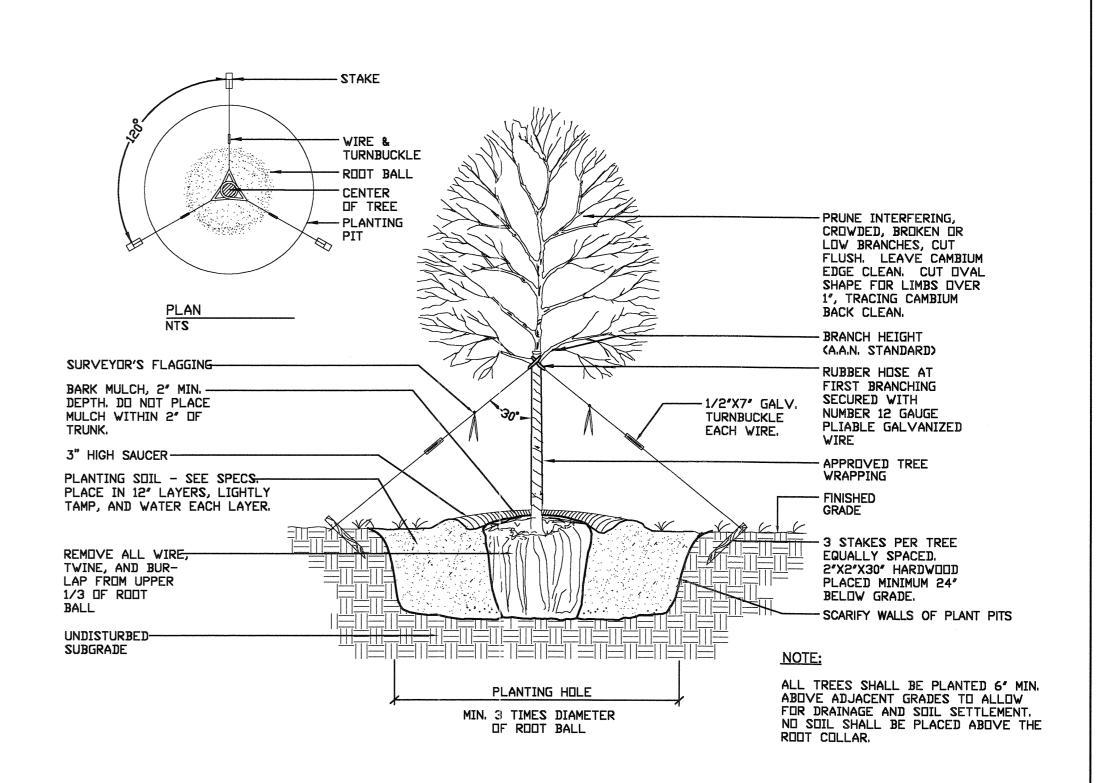


TYPICAL SMALL TREE PLANTING DETAIL (2" CALIPER OR LESS) NOT TO SCALE



TYPICAL SHRUB PLANTING DETAIL

NOT TO SCALE



TYPICAL LARGE TREE PLANTING DETAIL (2-1/2" CALIPER AND LARGER) NOT TO SCALE

TREE CONSERVATION NARRATIVE:

1. CONTRACTOR SHALL PERFORM ROOT PRUNING TO A DEPTH OF 18"-24" ALONG THE CLEARING LIMITS IN THE AREA OF EXISTING TREES USING A TRENCHER OR VIBRATORY PLOW PRIOR TO INITIATING ANY LAND DISTURBANCE ACTIVITIES.

2. CONTRACTOR TO INSTALL 2"-3" DEPTH OF MULCH FOR A DISTANCE OF APPROX. 10' BEYOND THE CLEARING LIMITS INSIDE THE TREE SAVE AREAS PRIOR TO INSTALLATION OF TREE PROTECTION FENCING. 3. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE PROPOSED LANDSCAPE PLANTINGS.

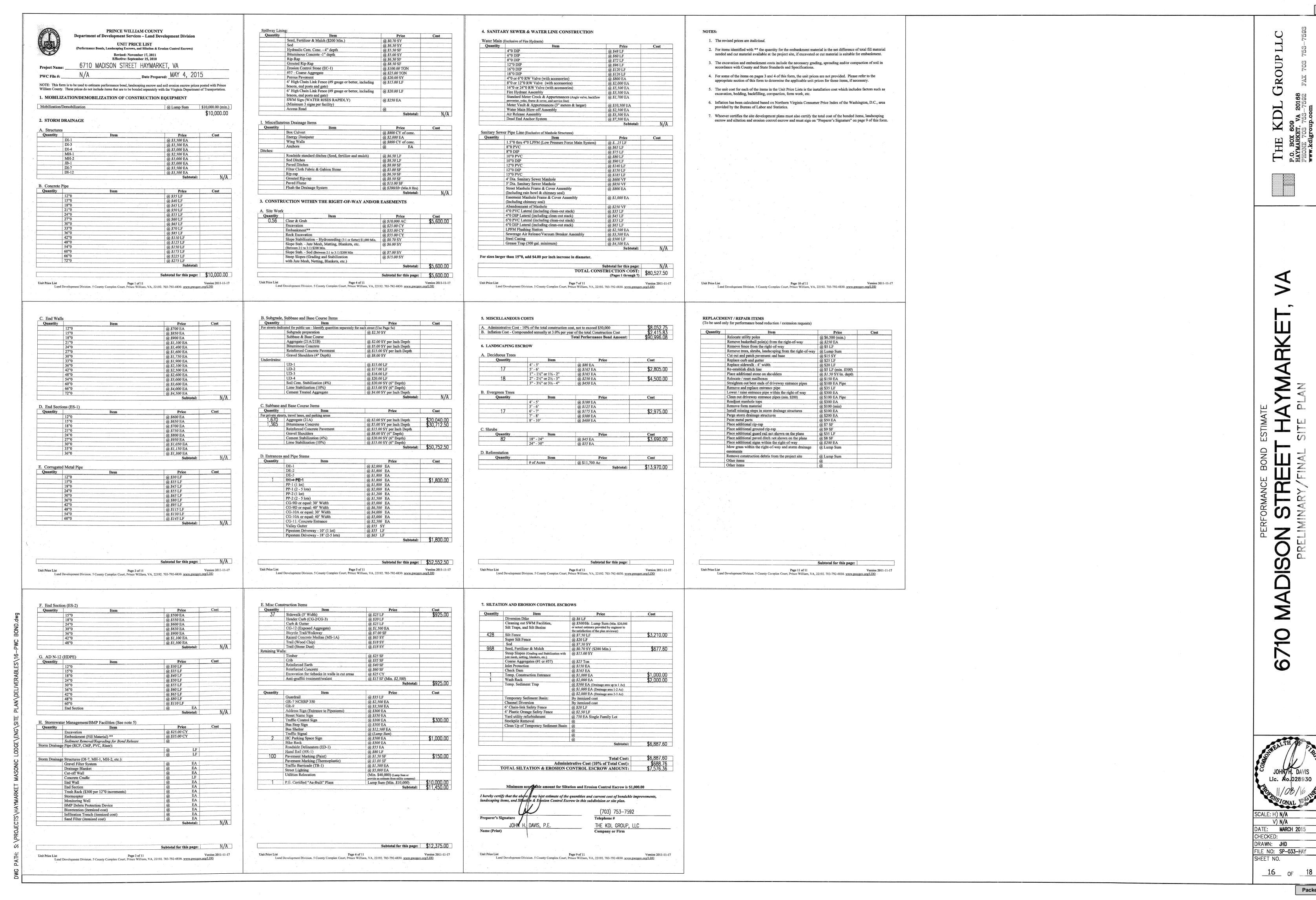
FOR PURPOSES OF CALCULATING BUFFER YARD AND SCREENING REQUIREMENTS, NO CREDIT HAS BEEN TAKEN FOR EXISTING TREE SAVE AREAS.

<u>15</u> _{OF} <u>18</u>

1

Packet Pg. 23

5.2.b

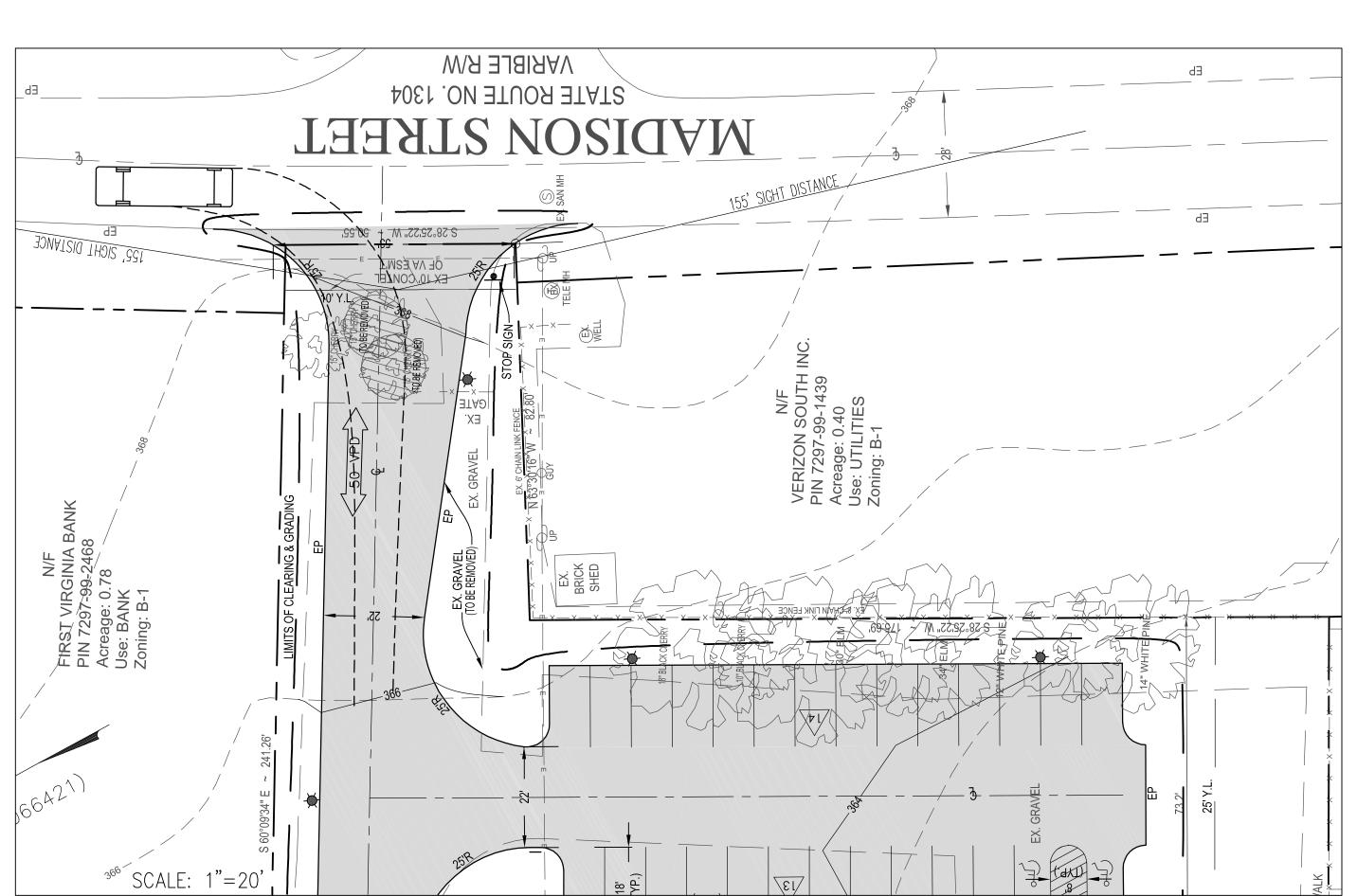


Packet Pg. 24

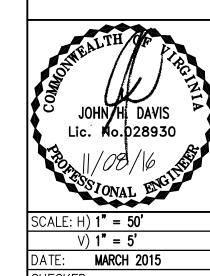
5.2.b

10+00 10+50 11+00 11+50 12+00 12+50 13+00 13+50





MINIMUM TURNING PATH SU DESIGN VEHICLE



DRAWN: **JHD** FILE NO: SP-033-HAY

<u>17</u> of <u>18</u> Packet Pg. 25

5

V) N/A

DATE: MARCH 2015

FILE NO: SP-033-HAY

CHECKED:

DRAWN: JHD

SHEET NO.

NOTES

- Methods and materials used in the construction of water mains, sanitary sewers and appurtenances shall be in conformance with the current Prince William County Service Utility Standards Manual (USM) and the Virginia Department of Health Regulations.
- 2. Approval of these plans by the Service Authority will in no way relieve the owner from complying with the methods. policies or requirements stated in the Service Authority's Utility Standards Manual (USM).
- 3. No trees, fences or other permanent structures will be located on any waterline or sanitary sewer easement without written permission from the Prince William County Service Authority.
- 4. Contractor to notify the Service Authority at least two (2) working days, but not more than ten (10) working days prior to commencement of demolition, excavation or blasting in areas with underground water and sewer lines.

).	a)	Water	Service	Level	HAYMARKET	
	L.\	C	Cla a d		LITTLE BULL	RUN

- 6. All subdivisions will require an address listing approved by the Prince William County Mapping Office. The address listing must be presented to the Servcie Authority at the time the utility permit is issued. Forms are available at the Service Authority. (Fax copies are not acceptable.)
- 7. All grinder pumps will be privately owned and maintained unless otherwise noted.
- 8. Low pressure sewer systems are subject to the review of the State Health Department and requires DEQ approval.
- 9. The developer is responsible for all costs associated with damages to or relocation of water or sanitary sewer mains or service lines caused by the construction of this project.
- 10. The contractor shall coordinate all relocation of water or sanitary sewer facilities with the Service Authority's Inspector. No shut offs shall be done without the prior approval of the Service Authority's Inspector. The Inspector may require the contractor to submit a relocation work plan for approval prior to the commencement of the relocation work. The work plan will detail how the work will be done and the manpower, materials, and equipment that will be at the site to perform the work.
- 11. Existing unused water service lines shall be exposed at the corporation stop on the main and shall be cut and crimped per the direction of the PWCSA Inspector.
- 12. Existing unused laterals are to be cut and capped at the main per the direction of the PWCSA Inspector.
- 13. When an existing water service or sanitary sewer lateral lateral will be reused as part of a new development, the Service Authority shall inspect the existing service line or lateral to insure that they are serviceable and meet current PWCSA material specifications. Any defects or out-of-date materials shall be repaired or replaced to the satisfaction of the Service Authority before the existing water service or sanitary sewer lateral is placed back in service.

THRUST RESTRAINT

MINIMUM DESIGN PARAMETERS: PIPE MATERIAL: SOIL TYPE: SAFETY FACTOR: _____ (MIN. 1.5 TO 1) TRENCH TYPE: _____ (MIN. 3) TEST PRESSURE:

BURIED DEPTH: AS SHOWN IN THE PROFILES *THE RESTRAINING LENGTH FOR EACH FITTING, REDUCER & DEAD

END IS SHOWN AND SPECIFIED IN THE PROFILE SHEETS.

LOCAL FACILITIES CHARGE

THE PROPERTIES BEING DEVELOPED IN CONJUNCTION WITH THIS PROJECT ARE ARE NOT SUBJECT TO A LOCAL FACILITIES CHARGE. LFC Area: HAYMARKET

MASTER PLAN UTILITY ADJUSTMENT

- A MASTER PLAN UTILITY ADJUSTMENT AGREEMENT DOES DEVELOPER FOR DEFINED BETTERMENTS.
- *DESIGN OR CONSTRUCTION CHANGES MUST CARRY THE CONSENT OF PWCSA ENGINEERING.
- *THE DEVELOPER SHOULD REQUEST REIMBURSEMENT PER THE AGREEMENT AFTER BETTERMENTS ARE INSTALLED AND TESTED.

PWCSA WATER & SEWER MAIN INSPECTION FEES

		Rev 2 Qty. (Project Total)				
VATER MAIN			 (L.F.) x	\$3.50	=	
SEWER MAIN	 0		 (L.F.) x	\$5.45	=	
V SEWER MAIN	 0		(L.F.) x	\$2.45	=	
				TOTAL		Ν/Δ

TOTAL = N/ANOTE: Minimum fee of \$350 is required for water inspection service if water main is less than 100 L.F. Minimum fee of \$545 is required for sewer inspection service if sewer main is less than 100 L.F.

PWCSA AS BUILT FEES

			Rev 2 Qty. (Project Total)					
WATER MAIN		0			(L.F.) x	\$1.20	=	
SEWER MAIN	****	0		*******************************	(L.F.) x	\$1.80	=	
						TOTAL	=	N/A

Minimum fee of \$1000 is required for all plans connecting to utilities or installing main. NOTE: Fees shall be computed on a linear footage base for plan revisions that propose additional main as part of an actively developing project for which PWCSA has not yet executed its as-built.

AS BUILT RELEASE OF PLANS

THE UNDERSIGNED ENGINEER/ FIRM AGREES THAT THE PRINCE WILLIAM COUNTY SERVICE AUTHORITY SHALL HAVE THE RIGHT TO USE THESE PLANS FOR THE PREPARATION OF AS-BUILT RECORDS, AS NECESSARY.

THE ENGINEER/ FIRM FURTHER AGREES THAT THE RIGHT TO USE THE PLANS SHALL BE PROVIDED WITHOUT COST TO THE SERVICE AUTHORITY.

JOHN H. DAVIS (TYPE OR PRINT)
MANAGING MEMBER
THE KDL/GROUP, LLC
MAY 6, 2016
-

LOCAL REVIEW AUTHORITY INFORMATION

PLAN TITLE:	6/10 MADISON STREET HAYMARKET, VA
PWC PLAN NO.:	N/A
ENGINEER:	THE KDL GROUP, LLC
MAP NO.:	

<u>0211</u>			
PROJECTED POPULATION:		N/A	
SEWER MAIN SIZE AND LENGTH: (Note: lines larger than 24" must be submitted to VDH for approval)	8" - 10" - 12"	0 L.F. 0 L.F. 0 L.F.	

NUMBER OF MANHOLES:

WATER PIPE SIZES: (Note: lines larger than 18" must 0 L.F. be submitted to VDH for approval) * CONNECTIONS 0 L.F. NUMBER OF WATER METERS:

FIRE FLOW INFORMATION

A HYDRAULIC ANALYSIS IS REQUIRED OF ANY PROJECT EXTENDING WATER MAINS. A HYDRANT FLOW TEST CAN BE USED IN PLACE OF AN ANALYSIS TO CALCULATE AVAILABLE DOES NOT EXIST BETWEEN THE SERVICE AUTHORITY AND THE FIRE FLOW WHEN NO NEW WATER MAIN IS PROPOSED OR ONLY A FIRE HYDRANT IS SET

HYDRAULIC MODEL SUMMARY:

RESIDENTIAL METER SIZE:

NUMBER OF FIRE HYDRANTS:

a) Minimum Pressure: 20 PSI b) Maximum Pressure: PSI c) Fire Flow: > 1500 GPM

HYDRANT FLOW TEST: a) Static Pressure: b) Residual Pressure: c) Flow: _ d) Available Fire Flow at 20 psi: _____

SANITARY SEWER DESIGN & TEST TABLE

n" factor	r = 0.013	5															PWCSA Us	e Only	
From MH	To MH	Units or Area	Flow / Unit	Avg. Flow Increment	Avg. Flow Total	Peak Factor	Q Total GPD	Pipe Size (in.)	Slope (%)	Actual Vel.(fps)	Full Flow Vel.(fps)	Capacity (GPD)	q/Q (%)	d/D (%)	Invert Upper	Invert Lower	Date Line Passed Test	МН	Date Mi Passed Vac. Test
																			ATT. 100 100 100 100 100 100 100 100 100 10
NOTES:	L																		

NO NEW SANITARY SEWER MAIN OR SANITARY LATERALS ARE PROPOSED WITH THIS DEVELOPMENT.

SANITARY LATERAL SCHEDULE

rom Manhole:		To Manhole	e:	Slope: #.##%	6		Length: ###			Low Invert: ###	##	Material:	PWCS	A Use Only
jector Pump lequired 🗸	Lot No.	Station	Invert Main	Crown @ Main	Length of Lateral	Slope of Lateral (%)	Riser Height	Lateral Elev. © End	Ground Elev. © End	Basement Floor Elev. @ End	Difference Basement Floor Elev. to Crown @ Main	Lateral Material	Date Installed	Stub Installed % of Grade
-			ļ											
										1				
			ļ											
								<u> </u>						

MULTI-DWELLING OR NON-RESIDENTIAL METER SCHEDULE

Building	Building	Building	If applicable	Meter	Peak	lf applicable		Account	Гуре	
Identifier	Address	llee	number of dwelling units	C:	demand in gpm	continuous demand in gpm	Water & Sewer	Sub-Meter Account	Water Only Account	Sewer On Account
							Service and State of			
NOTE:	A fixture unit list and meter sizing of information in this table.	calculations in acco	rdance to AV	VWA M22 2nd	d edition is to	be inserted in	n the plar	set supp	orting the	

Qty.	Valve Size	Manufacturer (PWCSA use)
	4 - inch	
	6 - inch	
	8 - inch	
	10 - inch	
	12 - inch	
	14 - inch	
	16 - inch	
	18 - inch	
	24 inch	

SHEET REVISED AS OF SEPTEMBER, 2012



WATER AND SANITARY SEWER INFORMATION

SHEET ____ OF

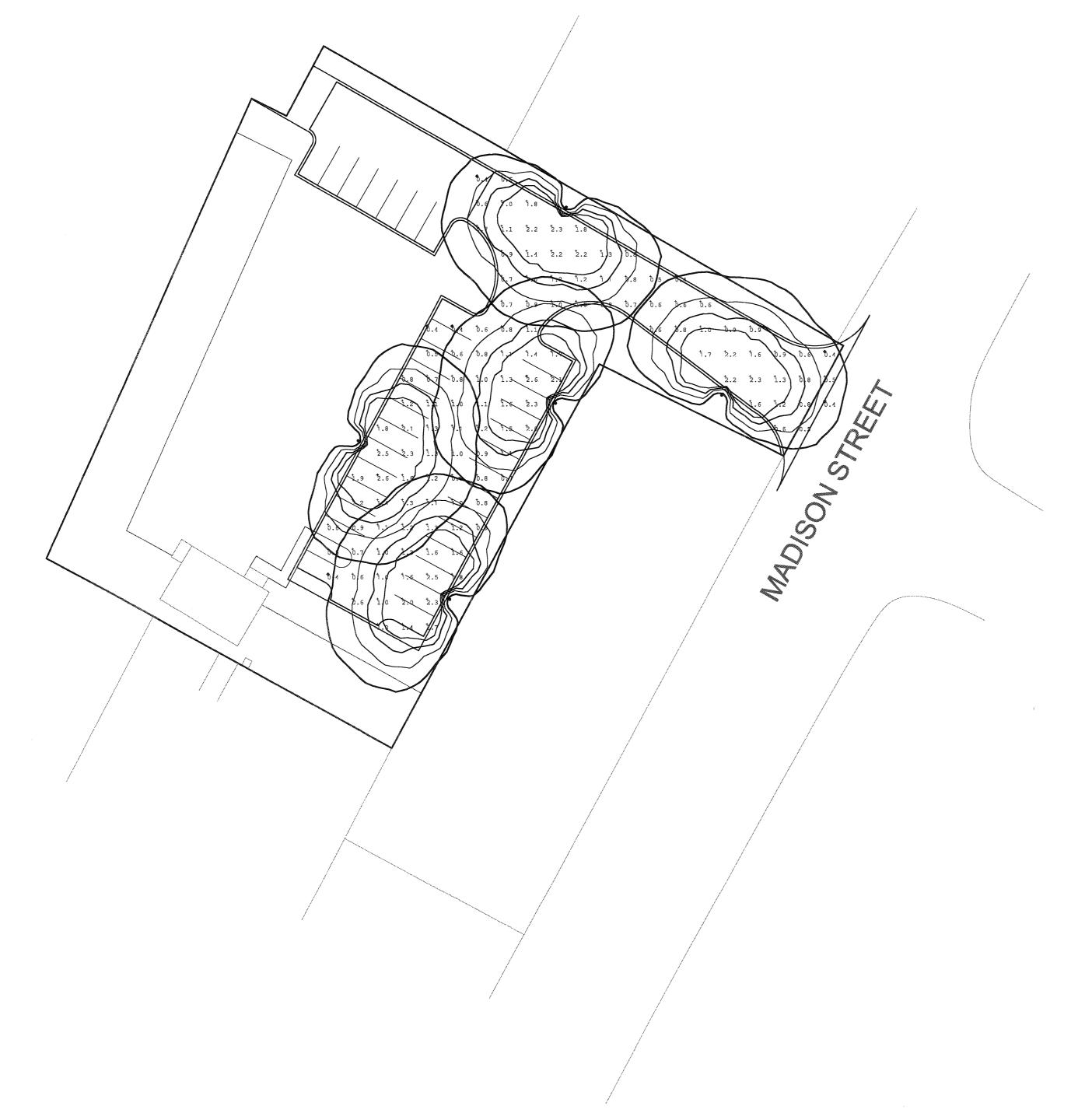
__18____0F ___18__

Packet Pg. 26

VALVE SCHEDULE

Luminaire Sc	chedule					
Symbol	Qty	Label	Arrangement	Lum. Watts	LLF	Description
	5	100NB3AR410040	SINGLE	103.4	0.810	K1118R-B3AR-IV-100(SST)-1036 15.5' L.C

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	1.18	2.6	0.4	2.95	6.50







King Luminaire StressCrete Est. 1953

THE STRESSCRETE GROUP

Manufacturing Locations:

Burlington, Ontario: 1-800-268-7809
Northport, Alabama: 1-800-435-6563
Atchison, Kansas: 1-800-837-1024
Jefferson, Ohio: 1-800-268-7809

PROJECT/FILE NAME:

6710 MADISON STREET HAYMARKET, VA

DATE: CALC. BY: AGI FILE NAME:
05/17/16 TASHI BABURI 6710 MADISON ST REV B.AGI

REV: REVISION DATE/DESCRIPTION:

(05/19/16) 1 LIGHT ASSEMBLIES REMOVED

18A of 18 SP-033-HAY



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

Thomas Britt Town Planner

MEMORANDUM

TO: Planning Commission

FROM: Thomas Britt, Town Planner

DATE: February 17, 2023

SUBJECT: Haymarket Town Center

Background: The third submission for Haymarket Town Center has been given to the Town Planner and Town Engineer. The review status for each application in other departments is as follows:

- DEQ: approved
- PWCSA: waiting for comments on resubmission
- VDOT: waiting for comments on resubmission, Access Management Exception request for the Jefferson St entrance included
- PWC Fire Marshal: fire lane permit review process to start after VDOT approval

GENERAL NOTES		LEGEND		SURVEY	INFORMATION		
1. This site has been addressed by the Prince William County Mapping Office as: 15000, 15004, 15010, 15020, AND 15026 WASHINGTON ST.				1. Horizontal and vertical co	ontrol surveys were performed		
(addresses for 2. Addresses assigned are for the layout of individual businesses or dwelling units and are for exterior doors as shown on this plan only. 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	EXISTING INTERMEDIATE CONTOUR EXISTING INDEX CONTOUR PROPOSED CONTOUR 20	FENCELINE -		by <i>Rinker Design Associa</i> 2. All elevations are based	(Year)		
re—addressing. Prince William County does not assume any responsibility where re—addressing is required even though tenants have already occupied a portion of the building.	EXISTING EDGE OF PAVEMENT PROPOSED EDGE OF PAVEMENT PROPOSED EDGE OF PAVEMENT PROP. E/P	PROPOSED UTILITY POLE	<u> </u>	3. Source of topographic modules and the second sec	apping is <i>Rinker Design Associates</i> , 22 .		
3. Methods and materials used in the construction of the improvements herein shall conform to the current Town of Haymarket construction standards and specifications and/or current VDOT standards and specifications.	EXISTING CURB AND GUTTER EX. C & G	PROPOSED WATERLINE W/ TEE	-V 	4. Boundary survey was per dated <u>2014</u>	formed by <i>Rinker Design Associates</i> ,		
4. The contractor or developer is required to notify the Town of Haymarket Engineer in writing three (3) days prior to the beginning of the construction and specifically request inspection before beginning 703-753-2600.	PROPOSED CURB AND GUTTER CG-6	PRUDUCED FIRE HADRANT	I •• ♦ I •• ♦	5. The application of the pr	rofessional's seal and signature as	REVIEWED BY:	APPROVED BY:
A. Installation of approved erosion control devices. B. Clearing and Grading C. Subgrade excavation.	TRANSITION FROM CG-6 TO CG-6R EXISTING TELEPHONE LINE T T	EXISTING WATER VALVE	-₩ •	PRÖFESSIÐNÁL ENGINEERS,	of the STATE BOARD OF ARCHITECTS, LAND SURVEYORS AND CERTIFIED LANDSCAPE EGULATIONS shall be evidence that: the		
D. Installing storm sewers or culverts. E. Setting curb and gutter forms.	PROPOSED TELEPHONE LINE EXISTING STORM SEWER EX. 375 mm (15")	PRUDUCED WATER WETER	(W)	boundary data is correc knowledge, and complies v	et to the best of the land surveyor's with the minimum standards and procedures	This plan has been reviewed and has been found to be of Prince William County. The developer is hereby auth	norized to obtain all necessary land develop
F. Placing curb and gutter. G. Placing other concrete. H. Placing gravel base.	EXISTING STORM SEWER PROPOSED STORM SEWER EXISTING STORM SEWER PROPOSED STORM SEWER		—————————————————————————————————————	within one-half of the c	topographic information is accurate to contour interval, as shown. Application re indicates acceptance of responsibility	permits, subject to all designs, procedures, materials or requirements. If not bonded or permitted (if applicable or lawfully extended, this authorization will expire. A	e) within five (5) years of the authorized
 I. Placing any bituminous surfacing. *J. Installing water mains <u>outside</u> the Service Authority's boundaries. 	EXISTING SANITARY SEWER	STOP SIGN HANDICAP RAMP (CG-12A)	•	COULC MAD		County must be maintained to assure plan and permit v	
*K. Installing sanitary sewer <u>outside</u> the Service Authority's boundaries. 5. Measures to control erosion and siltation, including detention ponds serving as silt basins during construction, must be provided prior to	PROPOSED SANITARY SEWER EXISTING ELECTRIC SERVICE E E	DENOTES LOCATION OF STD VDOT CG-12 AND/OR JURISDICTIONAL	^	SOILS MAP SCAL	E 1: (1"=)1"=200'	VICINITY	MAP
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 Erosion and Sediment Control Handbook.	PROPOSED ELECTRIC SERVICE ————————————————————————————————————	PARKING INDICATOR INDICATES THE NUMBER OF TYPICAL PARKING SPACE	3 12	1		SCALE 1: (1"=)1"=3000'	
6. A permit must be obtained from the Office of the Resident Engineer, Virginia Department of Transportation (VDOT) Prince William County, prior to construction in existing State right—of—way, 366—1900.	EXISTING GAS LINE ————————————————————————————————————	TEST TIT EDGITTEN	•				WITH /
7. Approval of this plan does not guarantee issuance of an entrance permit by VDOT when such permit is required under State law. 8. The exact location of all guard rails will be determined by VDOT personnel. "A joint inspection will be held with the Developer, Town of Haymarket	PROPERTY LINE	CRITICAL SLOPE SLOPES TO BE STABILIZED PURSUANT TO VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK	*				
Representatives, and Representatives, of the Virginia Department of Transportation (VDOT) to determine if and where guard rail and/or paved ditches will be needed. The developer will be responsible for providing guardrail and paved ditches as determined by this joint inspection."	EASEMENT LINE	VEHICLES PER DAY COUNT	200 VPD E	\$\frac{1}{2}	. //		
Refer to Virginia Department of Transportation (VDOT) Guard Rail and Paved Ditch Specifications. 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	CENTERLINE LIMITS OF CLEARING AND GRADING	PROPOSED BUILDING ENTRANCE EXISTING STREET LIGHT	▼				
available at all times. 10. Warning signs, markers, barricades or flagmen should be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).	EXISTING SPOT ELEVATION 12.0 PROPOSED SPOT ELEVATION 12.5	PROPOSED STREET LIGHT	• *		/ 4B		
11. All unsuitable material shall be removed from the construction limits of the roadway before placing embankment.	EXISTING TREE DRIP LINE	PROPOSED STREET NAME SIGN PROPOSED SANITARY LATERAL CLEANOUT	+	SITE		1-66	
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 submittal of revised pavement section.	EXISTING TREE { + } 375 mm (15	SANITARY MANHOLE INDENTIFIER	12				
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 required at the field inspection.	PROPOSED TREE	 STORM DRAIN STRUCTURE IDENTIFIER	18				
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") diameter and conform to VDOT standard SB-1.						SITE	Many To the state of the state
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. 16. Construction debris shall be containerized in accordance with the Virginia Litter Control Act; no less than one litter receptacle shall be	1. NO HISTORIC SITES OR CEMETERIES ARE KNOTHIS PLAN.	OWN TO EXIST WITHIN THE PROJECT LIMITS	SHOWN ON	35B	35B	Route 15	
provided at the construction site 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 are maintained in a clean, mud and dust free condition at all times.	2. THE DEVELOPER/BUILDER SHALL CONTACT T DISCUSS UTILITY PERMIT REQUIREMENTS FOR IT AVAILABILITY PRIOR TO ISSUANCE OF A BUILDIT OF WATER AND SANITARY SEWER AVAILABILITY	NSTALLATION OF WATER AND SANITARY SEVING PERMIT. PERMIT REQUIREMENTS FOR IN	VER STALLATION		MASHING FOR		ZZZA (
18. * Notification shall be given to the appropriate utility Company (Service Authority, Virginia—American Water Company, or Dale Service 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.		THICK TO ISSUMED OF IT BOILDING THIM		CAMELN	4B		
19. All sanitary sewers and water mains and appurtenances shall be constructed in accordance with the current standards and specifications of Prince William County Service Authority.						The state of the s	
20. The developer and/or contractor shall be responsible to supply all utility companies with copies of plans that have been approved by the 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.							
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 numbers of the							/ <i>/</i>
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.			W. CHANDADDC	SOILSOILSOILSURFACE#NAMECAT.RUNOFF4BARCOLA SILT LOAM2MEDIUM	EROSION DEPTH TO SHRINK—FLOODING SLOPES HAZARD BEDROCK SWELL SEVERE 20—40" SOFT LOW NONE 2—7%		
Virginia Power Co. Northern Virginia Electric Co-op Columbia Gas of Virginia MISS UTILITY 1-800-257-777 MISS UTILITY 1-800-257-777 Virginia Power Co. Service Authority 335-7900 (After hours-Emergency 335-7990)	THIS PLAN COMPLIES WITH THE NEW PRINCE WE MANUAL, WHICH WENT INTO EFFECT ON NOVEM DATE MUST COMPLY WITH THE CONSTRUCTION	BER 2022. ALL UTILITY PERMITS ISSUED	AFTER THIS	35B MANASSAS SILT LOAM 3 MEDIUM	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	C.01 COVER SHEET C.02 NOTES & DETAILS C.03 EXISTING CONDITIONS & DEMOLITION PLAN C.	29-C.30 BMP COMPUTATIONS 31 SWM PRE-DEVELOPMENT DRAINAGE , 32 SWM POST-DEVELOPMENT DRAINAGE
Continental Telephone of VA Colonial Pipeline Co. Virginia—American Water 491—2136 Dale Service Corporation 494—4161	REVISIONS WHICH HAVE BEEN ISSUED.	, , , , , , , , , , , , , , , , , , ,				C.04 SITE PLAN — PHASE 1 C. C.05 SITE PLAN — PHASE 2 C.	33 – C.38 STORMTECH DETAILS 39 – C.42 SWM COMPUTATIONS
Transcontinental Gas Pipe Line Corp. 22. Deleted per request of PWCSA.						C.07 ROAD PROFILES C.	43 SWM & BMP NARRATIVE 44 WAIVERS 45 TOWN OF HAYMARKET UNIT PRICE LI
23. 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	DESIGNATED PLANS	S EXAMINER CERTIFICATE				C.09 - C.10 E&S NOTES & DETAILS C. 11 E&S PHASE 1 C.	46 VDOT UNIT PRICE LIST 47 – C.48 TURNING EXHIBITS
conflicts arising from his existing utility verification and the proposed construction. 24. The developer will be responsible for any damage to the existing streets and utilities which occurs as a result of his construction project within	1ST SUBMISSION REVIEWED	AND RECOMMENDED FOR SUBMISSION				C.12 E&S PHASE 2 C.13 STORM SEWER COMPUTATIONS C.14 STORM SEWER PROFILES	
or contiguous to the existing right—of—way.	DESIGNATED PLANS EXAMIN	IER REG. NUMBER DATE				C.15 WATERLINE PROFILES C.16 SANITARY SEWER PROFILES	
25. All utilities placed under existing streets shall be bored or jacked. 26. 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.	2ND SLIBMISSION DEVIEWE	O AND RECOMMENDED FOR SUBMISSION				C.17 – C.18 PWCSA INFORMATION SHEET C.19 PAVEMENT PLAN C.20 GRADING DETAILS	
27. 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	ZND SUBMISSION REVIEWE	AND RECOMMENDED FOR SUBMISSION		RI	EVISIONS	C.21 FIRE LANE PLAN C.22 LANDSCAPE PLAN	
prior to construction. 28. Before burning, blasting, transportation or storage of explosives in the Town of Haymarket, a permit shall be obtained from the Town of	DESIGNATED PLANS EXAMIN	IER REG. NUMBER DATE				C.23 LANDSCAPE PLAN NOTES & DETAILS C.24 - C.25 LIGHTING PLAN C.26 - C.27A SIGHT DISTANCE PROFILES	
29. Fire and Rescue Services must be notified immediately 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 Town of Haymarket.				DATE DESIGNER		C.28 BMP MAP TOWN OF HAYMARKET	
30. Sidewalk underdrains shall be installed per the Town of Haymarket.				WEALTH OF		COVER SHEET	
31. All walkways outside of the right—of—way limits will be maintained by the homeowners association. 32. Maintenance of the Storm Drainage or Storm Water Management facilities located therein shall be pursuant to the Town of Haymarket Zoning Ordinance.				S SCOTT WOODARD	Project Name: HAYMARKET TOWN CENTE		Project Number: <i>SA2017-0303</i>
33. If units shown on this plan will be occupied in phases, a phasing plan must be approved by the engineering inspection branch prior to the issuance of any occupancy permits. (Detached single family subdivision exempt.)	E	OND ESTIMATE		Lic. No. 063821	Subdivision or Site Plan Name: HAYMARKET TOWN CENTE	Market Name: FR RFDFVFLOPMFNT	Plan Number: SP20220324 Plan Type: SITE PLAN
34. These plans identify the location of all known gravesites. Gravesites shown on this plan will be protected in accordance with state law. In the event gravesites are discovered during construction, the Town of Haymarket must be notified immediately. All activities must	ITEM	TOWN VOOT BOND		STONAL ENCIPE	Magisterial District: N/A	Present Zoning & Use: B-1. OFFICE	Revision Number: <i>O</i> Date of Plan: (Month, Day, Year) <i>JANUARY 26, 2023</i>
cease and not be resumed until authorization to proceed is given by the Town of Haymarket. 35. Roof top mechanical equipment, if any, must be enclosed within a wall or similar screening barrier, designed in harmony with the building.	TOTAL CONSTRUCTION COST	\$451,073.00 \$95,571.50			Owner:	Address, Including Zip Code & Telephone No. **TON STREET, SUITE #100 HAYMARKET, VA 201	CONTACT: EMILY KYRIAZI
	ADMINISTRATIVE COST	\$45,107.30 \$9,557.15		DFESSIONAL SEAL & SIGNATURE SEE PLANS ARE IN CONFORMANCE WITH	Developer:	Address, Including Zip Code & Telephone No.	CONTACT: EMILY KYRIAZI
37. All buffer areas shall be screened according to the Town of Haymarket Zoning Ordinance. 38. For proffers statement and proffers analysis, see section(s) <u>N/A</u> of <u>N/A</u> .	INFLATION COST	\$13,532.19 \$2,867.15	TO' OR:	WN DF HAYMARKET STANDARDS AND DINANCES, ANY DEVIATION OR CHANGE	Name, Address & Telephone No. of Engineer <i>RINKER Di</i>	ON STREET, SUITE #100 HAYMARKET, VA 201 ESIGN ASSOCIATES, P.C.	CONTACT: SCOTT WOODARD
39. For waivers see SHEET <u>C.44</u> 40. Anticipated sewage flows: <u>0.21 GPD/SF OF BUILDING x 20,968 = 4,403 GPD x 4.0 PEAK FACTOR = 17,613 GPD</u>	TOTAL PERFORMANCE BOND AMOUNT	\$509,712.49 \$107,995.80	THI	THESE PLANS SHALL BE APPROVED BY DIRECTOR OF PLANNING PRIOR TO STRUCTION.	Architect or Surveyor certifying Plan: 11100 ENDEAD	VOR COURT, SUITE 200, MANASSAS, VA 20109 7298-80-9226, 7298-80-9407, 7298-90-0102, 7298-9	
	TOTAL EROSION & SEDIMENT CONTROL ESCROW	\$42,253.20 N/A	СШ		Total Area: 1.50 ACRES Project Area: 1.60 ACRES Related Plans Tracking RELATED PLANS TRACK	ES Disturbed Area: 1.60 ACRES Impervious Area: 1	
42. Distance to nearest existing school or proposed school site: <u>O.1 MILES TO SAINT PAUL'S SCHOOL</u>	LANDSCAPING ESCROW	\$41,097.00 N/A			Numbers (Including Rez. & <i>SP2017-003; SA2019</i>		

AIL

NOT

REVISIONS:

A B

14096-002 (FOR THIS PLAN ONLY) 7298-90-0216, 7298-80-8614, 7298-80-9407, 7298-90-0102, AND 7298-80-9226 __ B-1 (TOWN CENTER DISTRICT) SITE ADDRESS ___ *15000, 15004, 15010, 15020, AND 15026* WASHINGTON ST. TOTAL SITE AREA 1.50 ACRES (65,368 SF) AREA OF PROPOSED ROW 2,026 SF REMAINING SITE AREA _____ 63,342 SF PROJECT AREA ______ 1.60 ACRES (DISTURBED) MINIMUM LOT SIZE______N/A NOTE: ALL SITE COMPUTATIONS BELOW REPRESENT PHASE 2 DEVELOPMENT CONDITIONS <u>BUILDING SETBACKS</u> FRONT: 5' OF ANY STREET RIGHT-OR-WAY SIDE/REAR: IF ABUTTING ANY STREET RIGHT-OR-WAY: 5' IF ABUTTING COMMERCIAL/OFFICE DISTRICT: 0' IF ABUTTING AGRICULTURAL/RESIDENTIAL DISTRICT: 25'

BUFFER REQUIREMENTS

25' WIDE BUFFER WITH AN OPAQUE SCREENING (ADJACENT TO RESIDENTIAL)

- SEE LANDSCAPING PLAN AND DETAILS (SHEETS C.22-C.23)
- 10' WIDE BUFFER WITH NO SCREENING (ADJACENT TO COMMERCIAL)
- SEE LANDSCAPING PLAN AND DETAILS (SHEETS C.22-C.23)

PROJECT PHASING NARRATIVE

THE SITE TABULATIONS BELOW REPRESENT THE ULTIMATE PROPOSED BUILD-OUT (SITE PLAN PHASE 2) IMPROVEMENTS SHOWN ON THIS PLAN. SITE PLAN PHASE 1 CONSISTS OF SITE UTILITY, PARKING, AND PEDESTRIAN IMPROVEMENTS, BUT DOES NOT MODIFY ANY BUILDINGS. SITE PLAN PHASE 2 INCLUDES ALL OF THE PHASE 1 IMPROVEMENTS, PLUS AN ADDITION TO THE EXISTING TOWN HALL BUILDING.

MAXIMUM LOT COVERAGE

ALLOWED: 85% (53,841 SF) PROVIDED: 48% (30,715 SF)

<u>OPEN SPACE (MINIMUM REQUIREMENTS)</u>

REQUIRED: 15% (9,501 SF) PROVIDED: 52% (32,628 SF)

*NOTE: ALL INTERIOR AND PERIPHERAL PARKING LOT LANDSCAPING AND TREE CANOPY COVER REQUIREMENTS HAVE BEEN MET.

MAX. FAR: N/A

FAR PROVIDED: 20,968 SF / 63,342 SF = 0.33

<u>LANDSCAPING TABULATION</u> SEE LANDSCAPING PLAN AND DETAILS (SHEETS C.22 - C.23)

<u>BUILDING HEIGHT</u>

ALLOWED (PER ZONING): 50' MAX.

NEW ADDITION TO MUNICIPAL BUILDING HEIGHT: APPROX. 32'

<u>BUILDING AREA</u>

APPROXIMATE SQUARE FOOTAGE OF EXISTING USES TO REMAIN: 19.886 SF PROPOSED SQUARE FOOTAGE OF BUILDING ADDITION: 1.082 SF (2 STORY) TOTAL PROPOSED SQUARE FOOTAGE: 20,968 SF

BUILDING USES

OFFICE BUILDING (#15014 & #15000 WASHINGTON ST., #15020 WASHINGTON ST.): EX. 2-STORY BUILDING w/PROP. 2-STORY ADDITION, EX. 2-STORY BUILDING FIRST FLOOR = 6,105 SF (EX. BLDG.) + 629 SF (PROP. ADDITION) = 6,734 SF

SECOND FLOOR = 6,105 SF (EX. BLDG) + 453 SF (PROP. ADDITION) = 6,558 SF FIRST FLOOR (#15020) = 1,814 SF TOTAL = 15.106 SF

RETAIL (#15026 WASHINGTON ST. & #6630 JEFFERSON ST.): EX. 2-STORY & 1- STORY BUILDINGS #15026 = 4.238 SF #6630 = 1,624 SF

<u>PARKING TABULATION</u>

EXISTING PARKING: 53 SPACES *49 STANDARD SPACES*

4 ADA ACCESSIBLE SPACES REQUIRED PARKING:

OFFICE (#15020, #15014, & #15000):

TOTAL = 5,862 SF

1 SPACE/300 SF = (15,106 SF)/300 = 50.4 SPACES

RETAIL (#15026 & #6630):

1 SPACE/250 SF = (5,862 SF)/250 = 23.5 SPACES

TOTAL REQUIRED = 73.9 SPACES (PROVIDE 74) PROPOSED PARKING: 60 SPACES (TOTAL) (WAIVER REQUESTED)

55 STANDARD SPACES

5 ADA ACCESSIBLE SPACES

ESTIMATED EXISTING TRAFFIC VOLUME TRIPS GENERATED PER ITE TRIP GENERATION MANUAL, 10TH EDITION.

(710) GENERAL OFFICE (PER 1,000 SF GFA) LN(TRIPS)=0.97xLN(14,024/1,000)+2.50 = 158 TRIPS (890) FURNITURE STORE (PER 1,000 SF GFA) TRIPS=10.33x(4,238/1,000)+13.99 = 58 TRIPS (939) BREAD SHOP (PER 1,000 SF GFA) TRIPS= 114 TRIPS (NO EQUATION GIVEN)

TOTAL SITE TRIPS: 158 VPD + 58 VPD + 114 VPD = 330 VPD

ESTIMATED PROPOSED TRAFFIC VOLUME

TRIPS GENERATED PER ITE TRIP GENERATION MANUAL, 10TH EDITION.

(710) GENERAL OFFICE (PER 1,000 SF GFA) LN(TRIPS)=0.97xLN(15,106/1,000)+2.50 = 170 TRIPS (890) FURNITURE STORE (PER 1,000 SF GFA) TRIPS=10.33x(4,238/1,000)+13.99 = 58 TRIPS (939) BREAD SHOP (PER 1,000 SF GFA) TRIPS= 114 TRIPS (NO EQUATION GIVEN)

TOTAL SITE TRIPS: 170 VPD + 58 VPD + 114 VPD = 342 VPD

PHASE 2 OF THIS DEVELOPMENT ESTIMATES AN ADDITIONAL 12 VPD IN AND OUT OF THE SITE.

GENERAL NOTES

NGVD 1983 DATUM.

- 1. THE PROPERTY SHOWN HEREON IS NOW IN THE NAME OF "TOWN OF HAYMARKET VA" AS RECORDED IN DB 2892 DP 1537 AMONG THE LAND RECORDS OF PRINCE WILLIAM COUNTY, VIRGINIA.
- 2. THE BOUNDARY INFORMATION SHOWN HEREON IS BASED ON A FIELD RUN SURVEY BY RINKER DESIGN ASSOCIATES. P.C. IN OCTOBER 2014.
- 3. CONTOUR INTERVAL = 1 FOOT TAKEN FROM TOPOGRAPHIC SURVEY BY THIS OFFICE IN 2014, 2016, AND 2022 ON
- 4. ACCORDING TO FEMA'S FLOOD INSURANCE RATE MAP FOR PRINCE WILLIAM COUNTY, VIRGINIA AND INCORPORATED AREAS DATED JANUARY 5, 1995 ON COMMUNITY PANELS NO. 51153C 0059D AND 51153C 0067D, THE PROPERTIES SHOWN HEREON LIE IN A FLOOD ZONE "X", WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THERE ARE NO MAPPED PRINCE WILLIAM COUNTY 100-YEAR FLOODPLAINS OR FLOOD HAZARD AREAS LOCATED WITHIN THE SITE.
- 5. THERE ARE NO MAPPED RESOURCE PROTECTION AREAS (RPA) LOCATED WITHIN THE SITE.
- 6. A SOILS REPORT HAS BEEN PREPARED FOR THIS PROJECT BY DMY ENGINEERING CONSULTANTS, INC.
- 7. THERE ARE NO KNOWN GRAVE SITES, CULTURAL OR HISTORICAL RESOURCES WITHIN THE LIMITS OF THE PROJECT.
- 8. TO THE BEST OF OUR KNOWLEDGE, NO HAZARDOUS WASTES, TOXIC SUBSTANCES OR PETROLEUM PRODUCTS HAVE BEEN GENERATED, UTILIZED, STORED, TREATED OR DISPOSED OF ON THIS SITE.
- 9. THE REQUIREMENTS OF THE TOWN'S CHESAPEAKE BAY PRESERVATION ORDINANCE AND DETENTION REQUIREMENTS HAVE BEEN MET ON-SITE BY THE USAGE OF ADS STORMTECH ISOLATER ROW CHAMBERS AND CONTECH JELLYFISH
- 10. BUILDING PADS / FOUNDATIONS SHALL NOT BE BUILT INSIDE ANY EASEMENT.
- 11. "INLET SHAPING" TO BE PERFORMED ON ALL STORM DRAINAGE INLETS PRIOR TO FINAL PAVING. NO GUTTER PAN IS TO BE BUILT ADJACENT TO THE INLETS PRIOR TO FINAL PAVING IN ORDER TO ALLOW FOR PROPER WATER FLOW INTO INLETS. PLACE SILT FENCE ONLY AS NECESSARY ALONG OUTSIDE OF CURB TO PREVENT SILTATION AND CONCENTRATED FLOWS ON STREETS.
- 12. THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURES TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR. SUBCONTRACTOR, OR THEIR AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
- 13. THE SUBJECT PARCELS ARE LOCATED WITHIN THE OLD AND HISTORIC HAYMARKET DISTRICT OVERLAY.
- 14. SIDEWALK PROPOSED ALONG WASHINGTON STREET AND JEFFERSON STREET TO BE STAMPED CONCRETE AND STAINED TO RESEMBLE BRICK.
- 15. SITE LIGHTING SHALL COMPLY WITH THE TOWN OF HAYMARKET ZONING ORDINANCE.

16. SIGN CONSTRUCTION SHALL COMPLY WITH THE TOWN OF HAYMARKET ZONING ORDINANCE ARTICLE XV.

ROAD NOTES

- V1. A PERMIT MUST BE OBTAINED FROM THE OFFICE OF THE RESIDENT ENGINEER, VIRGINIA DEPARTMENT OF TRANSPORTATION AND THE TOWN OF HAYMARKET BEFORE ANY CONSTRUCTION IS STARTED ON WASHINGTON STREET AND JEFFERSON STREET. ENTRANCE PERMITS ARE REQUIRED FOR STATE ROADS. APPROVAL OF THIS PLAN DOES NOT GUARANTEE ISSUANCE OF AN ENTRANCE PERMIT BY VDOT WHEN SUCH PERMIT IS REQUIRED UNDER STATE LAW.
- V2. A SMOOTH GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF THE EXISTING ROAD TO THE SHOULDER, TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR THE PONDING OF ANY WATER ON THE ROADWAY.
- V3. STANDARD GUARDRAILS AND/OR HANDRAILS SHALL BE INSTALLED AT HAZARDOUS LOCATIONS AS DESIGNATED DURING FIELD REVIEW BY THE COUNTY INSPECTOR OR VDOT.
- V4. ADDITIONAL DITCH LININGS OR SILTATION AND EROSION CONTROL MEASURES SHALL BE PROVIDED, AT THE DEVELOPER'S EXPENSE, AS DETERMINED NECESSARY BY VDOT OR PRINCE WILLIAM COUNTY DURING FIELD REVIEW. ALL COSTS SHALL BE ASSUMED BY THE DEVELOPER.
- V5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS, SIDEWALKS, AND UTILITIES WHICH OCCUR AS A RESULT OF PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO EXISTING RIGHT OF WAY.
- V6. 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.
- V7. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL. THE CONTRACTOR SHALL SUBMIT A SIGNAGE, STRIPING AND/OR SIGNALIZATION PLAN TO VDOT A MINIMUM OF THIRTY DAYS PRIOR TO PERMIT APPLICATION. THE CONTRACTOR SHÁLL NOT COMMENCE CONSTRUCTION OF ANY PAVEMENT COURSE WITHIN A R.O.W. WITHOUT AN APPROVED STRIPING PLAN.
- V8. OVERLAY OF EXISTING PAVEMENT, IF REQUIRED, SHALL BE MINIMUM OF 1.5" DEPTH: ANY COSTS ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE CONTRACTOR.
- V9. WHEN POSSIBLE, ALL LIGHTS ARE TO BE KEPT OUT OF THE ROADWAY "CLEAR ZONE" PER VDOT REQUIREMENTS. IF ANY LIGHTS OR OTHER SIGN POSTS ARE PLACED WITHIN THE "CLEAR ZONE" THEY SHALL BE REQUIRED TO MEET NCHRP 350 CRASH CRITERIA.
- V10. NO PARKING PERMITTED ON PUBLIC ROADS.
- V11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADEQUATELY PROTECT THE PUBLIC FROM ONGOING CONSTRUCTION OPERATIONS AND PROVIDE A SAFE WORK ENVIRONMENT IN ACCORDANCE WITH OSHA AND OTHER FEDERAL, STATE, AND LOCAL ORDINANCES.
- V.12 ALL RIGHT-OF-WAY DEDICATED FOR PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.

CONSTRUCTION NOTES

- C1. ALL CONSTRUCTION, METHODS, AND MATERIALS SHALL CONFORM TO THE CURRENT TOWN OF HAYMARKET, PRINCE WILLIAM COUNTY SERVICE AUTHORITY, AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS EXCEPT AS MODIFIED BY NOTES OR DETAILS HEREON.
- C2. GENERAL DIMENSIONS:
- ALL RADII AND DIMENSION LINES ARE TO BE FROM THE FACE OF CURB. UNIFSS OTHERWISE NOTED ALL SPOT ELEVATIONS ARE TO THE TOP OF CURB UNLESS OTHERWISE NOTED. ALL RADII SHALL BE 5.0' UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING DIMENSIONS. ALL STANDARD PARKING SPACES SHALL BE 8.5 FEET WIDE BY 18 FEET DEEP UNLESS OTHERWISE NOTED.
- C3. ALL ACCESSIBLE SPACES SHALL CONFORM WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT. H.C. SPACES SHALL BE A MINIMUM OF 8' WIDE. H.C. ACCESS AISLE SHALL BE A MINIMUM 8' WIDE FOR VAN ACCESSIBLE SPACES AND 5' WIDE FOR ALL OTHER ACCESS AISLES. SEE DETAILS ON SHEET C.19.
- C4. THE CURB & GUTTER SHALL HAVE UNIFORM SECTIONS, APPROXIMATELY TEN (10) FEET IN LENGTH, AND NO SECTION SHALL BE LESS THAN SIX (6) FEET IN LENGTH.
- C5. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE TOWN OF HAYMARKET SIGN ORDINANCE REQUIREMENTS AND REQUIRE A SEPARATE REVIEW & PERMIT.
- C6. ALL EROSION CONTROL DEVICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE LATEST VERSION OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK."
- C7. SUBBASE DEPTH AND PAVEMENT CROSS-SECTION MAY BE REVISED ONCE THE SUBGRADE SOIL TESTS ARE COMPLETED.
- C8. AT LEAST ONE (1) COPY OF THE APPROVED PLANS, WITH REVISIONS AND ALL APPLICABLE PERMITS, MUST BE KEPT ON SITE AT ALL TIMES.
- C9. ADJUST AND/OR RECONSTRUCT ALL UTILITY COVERS (SUCH AS MANHOLE FRAMES AND COVERS, VALVE BOX COVERS, ETC.) TO MATCH THE FINISHED GRADES IN THE AREAS AFFECTED BY THE CONSTRUCTION. C10. NOTIFY THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED
- FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION, THE TOWN OF HAYMARKET, OR ANY OTHER AUTHORITY ISSUING PERMITS.

C11. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE OWNER OF COMPLYING WITH OTHER APPLICABLE

- LOCAL, STATE AND FEDERAL REQUIREMENTS. C12. CONSTRUCTION DEBRIS SHALL BE CONTAINED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. NO LESS
- THAN ONE LITTER RECEPTACLE SHALL BE PROVIDED AT THE CONSTRUCTION SITE.
- C13. WARNING SIGNS, MARKERS, BARRICADES OR FLAGMEN SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND VIRGINIA WORK AREA PROTECTION MANUAL (WAPM).
- C14. ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION LIMITS OF ROADWAY, DRIVES, BUILDINGS, OR OTHER STRUCTURAL AREAS BEFORE PLACING CONTROLLED FILL.
- C15. PROVIDE ADEQUATE MEANS OF CLEANING MUD FROM TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. CLEAN STREETS, ALLAY DUST, AND TAKE WHATEVER MEASURES ARE NECESSARY TO INSURF THAT THE STREETS ARE MAINTAINED IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.
- C16. PROTECT THE PUBLIC FROM ONGOING CONSTRUCTION OPERATIONS AND PROVIDE A SAFE WORK ENVIRONMENT IN ACCORDANCE WITH OSHA AND OTHER FEDERAL, STATE, AND LOCAL ORDINANCES.
- C17. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL REQUIRED PERMITS AND ENSURING THAT ALL APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL THE PERMITTING AUTHORITIES AND CONDUCTED A SITE VISIT TO VERIFY THAT EXISTING CONDITIONS HAVE NOT CHANGED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CHANGES TO THE EXISTING SITE CONDITIONS THAT VARIES FROM THE EXISTING CONDITION INFORMATION SHOWN ON THE PLAN.
- C18. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR OWN CONSTRUCTION
- C19. ALL TOPSOIL SHALL BE REMOVED AND STOCKPILED IN AN AREA APPROVED BY THE OWNER OR DISPOSED OF AT A U11. ALL ROOF LATERALS LOCATED ONSITE ARE TO BE PRIVATELY MAINTAINED. SUITABLE LANDFILL. UPON COMPLETION OF CONSTRUCTION, TOPSOIL, A MINIMUM OF SIX (6) INCHES IN DEPTH. SHALL BE SPREAD OVER AREAS DISTURBED BY CONSTRUCTION.
- C20. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED. STOCKPILING OF SOIL WILL BE ALLOWED IN APPLICABLE C21. DURING CONSTRUCTION AND UNTIL SUCH A TIME VEGETATION IS REESTABLISHED, THE CONTRACTOR SHALL KEEP
- BLOWING AND PROVIDE DUST CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION AND FOIL OWING CONSTRUCTION, UNTIL SUCH TIME AS PROPER VEGETATION IS REESTABLISHED. C22. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER AND/OR ENGINEER IF ANY

DISCREPANCIES EXIST, PRIOR TO PROCEEDING WITH CONSTRUCTION, FOR NECESSARY PLAN OR GRADE CHANGES.

EXPOSED DIRT AREAS WITHIN THE LIMITS OF CONSTRUCTION AND STOCKPILE AREAS, DAMPENED TO PREVENT

DIMENSION OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH A NOTIFICATION HAS NOT BEEN GIVEN. C23. IF CONSTRUCTION IS PHASED THE CONSTRUCTION ENTRANCE WILL REMAIN FUNCTIONAL OR BE RELOCATED WITHIN THE SITE AT THE DIRECTION OF THE INSPECTOR TO MAINTAIN ADEQUATE E&S MEASURES TO PREVENT SEDIMENT FROM ENTERING JEFFERSON STREET.

NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO

- C24. ALL STANDARD STREET NAME SIGNS, TRAFFIC CONTROL DEVICES, AND STREET LIGHTS SHALL BE PROVIDED BY THE
- C25. A SEPARATE REVIEW AND PERMIT IS REQUIRED FOR RETAINING WALL ABOVE 2 FEET PRIOR TO CONSTRUCTION. A BUILDING PERMIT SHALL BE OBTAINED FROM THE BUILDING DIVISION IN ACCORDANCE WITH DCSM SECTION 710.06 PRIOR TO CONSTRUCTION OF THE RETAINING WALL.

CONTROLLED FILLS

- 4. CONTROLLED COMPACTION SHALL OCCUR IN ALL FILL SECTIONS FOR PAVEMENT, TRENCHES FOR UTILITIES, AND IN ANY AREA OTHERWISE DESIGNATED ON THE DRAWINGS.
- B. CONTROLLED FILLS MUST BE COMPACTED AND CONDITIONED AS DETERMINED IN THE GEOTECHNICAL SPECIFICATIONS AND VERIFIED BY A QUALIFIED SOILS ENGINFFR.
- C. CONTROLLED FILLS SHALL BE COMPACTED IN HORIZONTAL LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS, MOISTURE CONDITIONED TO WITHIN <u>+</u>2% OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO NOT LESS THAN 95% RELATIVE COMPACTION OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D-698) TEST, UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER.
- D. THE SURFACE AREA DIRECTLY BENEATH AREAS TO RECEIVE CONTROLLED FILLS OF LESS THAN 5 FEET IN DEPTH IS TO BE DENUDED OF ALL VEGETATION AND SCARIFIED AND COMPACTED TO A DEPTH OF 6 INCHES TO THE SAME DENSITY AS THE CONTROLLED FILL TO BE PLACED THEREON.
- E. THE TOP 12 INCHES OF STRUCTURAL FILL BELOW ANY PROPOSED PAVEMENT OR SLAB AREAS SHALL BE COMPACTED TO NOT LESS THAN 100% RELATIVE COMPACTION OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE VTM-1 PROCTOR TEST UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER. DENSITY MUST BE VERIFIED BY A QUALIFIED REGISTERED PROFESSIONAL ENGINEER.
- F. SLOPE STABILITY ANALYSIS IS PROVIDED IN THE GEOTECHNICAL REPORT FOR SLOPES IN EXCESS OF 3:1.
- G. UNLESS OTHERWISE STATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SOIL TESTING. THE RESULTS OF THE TESTS SHALL BE FORWARDED TO THE OWNER FOR THEIR REVIEW AND APPROVAL. THE GEOTECHNICAL ENGINEER SHALL DETERMINE THE SUITABILITY OF EXISTING ONSITE MATERIAL PRIOR TO BEGINNING ANY FILL OPERATIONS.

UTILITY NOTES

- U1. VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER/TOWN INSPECTOR TO DETERMINE IF THE UTILITY SHOULD REMAIN ACTIVE OR BE REMOVED OR ABANDONED AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE CONTINUANCE OF SERVICE IF IT IS TO REMAIN. ALL UTILITIES, INCLUDING ALL POLES, ARE TO BE RELOCATED AT THE DEVELOPER'S EXPENSE, PRIOR TO CONSTRUCTION, IF REQUIRED.
- NOTIFY THE MISS UTILITY NOTIFICATION CENTER OF EXCAVATION, DEMOLITION, OR BLASTING AT LEAST TWO WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION, DEMOLITION, BLASTING, CONSTRUCTION IN ACCORDANCE WITH THE VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT. CONTACT 'MISS UTILITY' AT 1-800-257-7777 OR 811.
- U3. THE OWNER AND/OR CONTRACTOR ARE RESPONSIBLE FOR COORDINATION AND RELOCATION OF ANY AND ALL UTILITIES IN CONFLICT WITH THE DESIGN AND PREPARATION OF ANY RELOCATION EASEMENT DOCUMENTS.
- U4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COST INCURRED FOR THE RELOCATION OF OR DAMAGE TO ANY PUBLIC UTILITIES BECAUSE OF CONSTRUCTION.
- U5. TEST PITS SHALL BE REQUESTED A MINIMUM OF 48 HOURS IN ADVANCE FOR THOSE UTILITIES REQUIRING THEM.
- U6. THIS SITE WILL BE SERVED BY PUBLIC WATER AND SEWER.
- U7. NO PRIVATE SIGNS, BUILDINGS, FENCES, TREES, LANDSCAPING OR SIMILAR STRUCTURES WILL BE CONSTRUCTED WITHIN A WATERLINE, SANITARY SEWER OR STORM DRAINAGE EASEMENT UNLESS AN ENCROACHMENT AGREEMENT HAS BEEN EXECUTED BETWEEN THE OWNER AND THE PRINCE WILLIAM COUNTY SERVICE AUTHORITY (WATERLINE/SANITARY SEWER) OR THE TOWN OF HAYMARKET (STORM DRAINAGE).
- U8. WATER METERS ARE THE PROPERTY OF THE PRINCE WILLIAM COUNTY SERVICE AUTHORITY (PWCSA).
- U9. ALL CONNECTIONS TO EXISTING SANITARY MANHOLES WILL BE CORE BORED AND INSTALLED WITH A RUBBER BOOT.
- U10. CLEAN OUT TOPS IN ROADWAYS AND SIDEWALKS TO BE FLUSH WITH THE SURFACE. CLEAN OUT TOPS IN PAVEMENT TO BE ABLE TO WITHSTAND VEHICULAR TRAFFIC.
- SHOULD WATER WELLS AND OR SEPTIC TANKS BE FOUND ON THE PROPERTY THEY MUST BE PROPERTY ABANDONED VIA PERMITS FROM THE PRINCE WILLIAM HEALTH DISTRICT. PLEASE CONTACT THE DISTRICT AT 703-792-6310 X2 TO DISCUSS THOSE REQUIREMENTS.
- U13. OTHER UTILITIES (INCLUDING BUT NOT LIMITED TO CABLE, ELECTRIC, GAS, TELEPHONE, COMMUNICATIONS) SHALL BE GRANTED SEPARATE EASEMENTS BY THE OWNER.
- U14. MAINTAIN A MINIMUM VERTICAL CLEARANCE OF ONE (1) FOOT SIX (6) INCHES BETWEEN CROSSING OF ALL UTILITY LINES UNLESS OTHERWISE NOTED.
- U15. ALL UTILITIES PLACED UNDER EXISTING STREETS SHALL BE BORED OR JACKED.
- U16. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
- U17. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- U18. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
- U19. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
- U20. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH MS-19 STANDARDS.

Project Number

SEE ARCHITECTURAL PLANS FOR FURTHER DETAILS			— 16' —			
10' 9'	2	4'	4'	4'	2'	
<u> </u>	DUMP	STER SCREEN	ING PLAN		ż	

Project Name	Haymarket Town C	enter Redevelopment
	Acres	% of Total Site Area
Total Site Area	1.50	100%
Easement Area		
Waterline	0.10	6.67%
Building Area		
1	0.02	1.33%
2	0.14	9.33%
3	0.05	3.33%
4	0.01	0.67%
5	0.02	1.33%
Total	0.24	16.00%
Parking Lot Area	0.50	33.33%
SWM Area	0.05	3.33%
Sidewalk Area	0.20	13.33%

SP20220324

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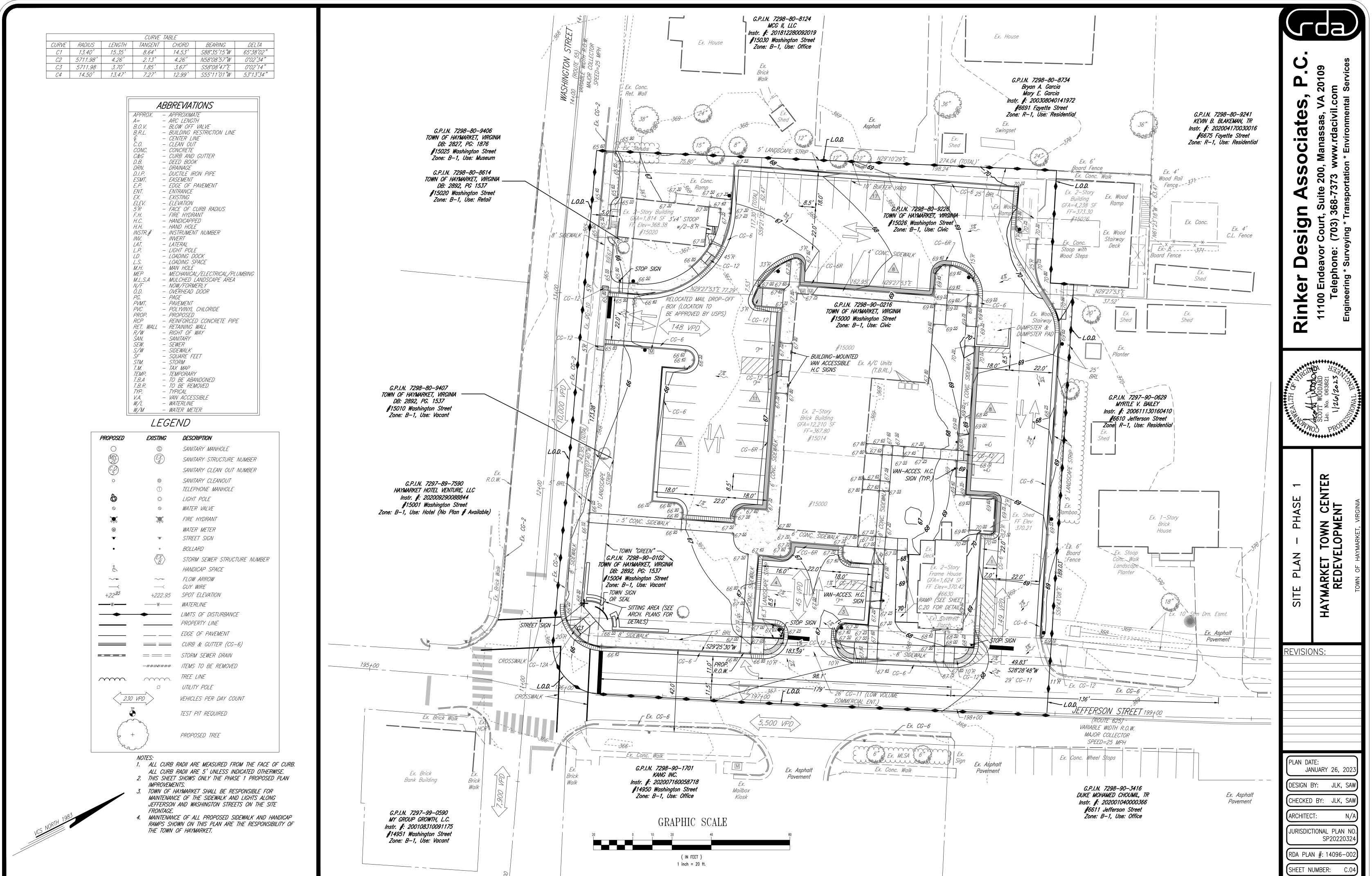
JANUARY 26, 202 JLK, SA\ CHECKED BY: JLK, SAV

ARCHITECT: IURISDICTIONAL PLAN NC SP2022032 RDA PLAN #: 14096-00.

SHEET NUMBER:

DESIGN BY:

5.3.b 14096-002



14096-002 5.3.b G.P.I.N. 7298-80-8124 MCG II, LLC Instr. #: 201812280092019 Ex. House #15030 Washington Street Zone: B-1, Use: Office Ex. House G.P.I.N. 7298-80-8734 20 Bryan A. Garcia Mary E. Garcia Instr. #: 200308040141972 #6691 Fayette Street Zone: R-1, Use: Residential ciate G.P.I.N. 7298-80-9241 KEVIN B. BLAKEMAN, TR Instr. #: 202004170030016 Ex. Well G.P.I.N. 7298-80-9406 & 50' #6675 Fayette Street Zone: R-1, Use: Residential TOWN OF HAYMARKET, VIRGINIA DB: 2827, PG: 1876 #15025 Washington Street Zone: B-1, Use: Museum 5' LANDSCAPE STRIP -0 Board Fence Ex. Conc. Walk G.P.I.N. 7298-80-8614 TOWN OF HAYMARKET, VIRGINIA . Wood Rail 371----DB: 2892, PG 1537 Fence -- -#15020 Washington Street Zone: B-1, Use: Retail Ex. 2-Story Ex. Wood Ramp GFA=4,238 SF G.P.I.N. 7298-80-9226 TOWN OF HAYMARKET, VIRGINIA FF=373.30 GA=1,814 SF 3'x4' STOOP FELEV=368.38 w/2-8"R -#15026 #15026 Washington Street Zone: B-1, Use: Civic Ex. Conc. Ex. Wood C.L. Fence Stairway Deck Stoop with Board Fence Rinker N29°27'53"E G.P.I.N. 7298-90-0216 BOX (LOCATION TO TOWN OF HAYMARKET, VIRGINIA BE APPROVED BY USPS) #15000 Washington Street Zone: B-1, Use: Civic Stairway 148 VPD DUMPSTER PAD BUILDING-MOUNTED VAN ACCESSIBLE Ex. 18" D.I.P Waterline H.C SIGNS G.P.I.N. 7298-80-9407 TOWN OF HAYMARKET, VIRGINIA G.P.I.N. 7297-90-0629 MYRTLE V. BAILEY 2-STORY BUILDING DB: 2892, PG. 1537 ADDITION GFA=1,082 SF #15010 Washington Street Zone: B-1, Use: Vacant Instr. #: 200611130160410 #6610 Jefferson Street Zone R-1, Use: Residential Brick Building GFA=12,210 SF FF=367.80 #15014 & 50' Offset 67 <u>55</u> 67 <u>25</u> িখ় | VAN-ACCES. H.C.| SIGN (TYP.) -R.O.W. ~ G.P.I.N. 7297-89-7590 HAYMARKET HOTEL VENTURE, LLC TEI 7 Instr. #: 202009290088844 FNT ENT #15001 Washington Street

Zone: B-1, Use: Hotel (No Plan # Available) #15000 A/C UNITS (TYP.) -Ex. 1-Story 5' CONC. SIDEWALK TOWN Brick House TOWN "GREEN" -Board G.P.I.N. 7298-90-0102 Conc. Walk IAYMARKEI REDEV TOWN OF HAYMARKET, VIRGINIA Landscape -DB: 2892, PG: 1537 Planter Frame House #15004 Washington Street GFA=1,624 Si Zone: B-1, Use: Vacant FF Elev=370.4 SITE - TOWN SIGN VAN-ACCES. H. OR SEAL \ *|RAMP (SEE SHEE* SITTING AREA (SEE ARCH. PLANS FOR C.20 FOR DETAIL Stm Drn. Esmt. DETAILS) Ex. Asphalt Pavement S29°25'30"W REVISIONS: CROSSWALK 195+00 / S28'28'48"W ∷| R.O.W. < , L.O.D. -/ CROSSWALK -- L.O.D. <u>JEFFERSON STREET 199</u>+00 Ex. Brick Walk 5,500 VPD *y*− Ex. CG−6 VARIABLE WIDTH R.O.W. 1. ALL CURB RADII ARE MEASURED FROM THE FACE OF CURB. MAJOR COLLECTOR ALL CURB RADII ARE 5' UNLESS INDICATED OTHERWISE. SPEED=25 MPH ----*366*-i 2. THIS SHEET SHOWS ONLY THE PHASE 2 PROPOSED PLAN IMPROVEMENTS. Ex. MLSA 3. MAINTENANCE OF ALL PROPOSED SIDEWALK AND HANDICAP RAMPS SHOWN ON THIS PLAN ARE THE RESPONSIBILITY OF G.P.I.N. 7298-90-1701 Ex. Asphalt Ex. Conc. Walk JANUARY 26, 202 Pavement 1 THE TOWN OF HAYMARKET. Ex. Brick KANG INC. Pavement 4. PRIOR TO THE IMPLEMENTATION OF THE JEFFERSON STREET Bank Building Instr. #: 202007160058718 DESIGN BY: JLK, SAW LANE MARKINGS SHOWN ON THIS SHEET, A TRAFFIC SIGNAL #14950 Washington Street Zone: B−1, Use: Office G.P.I.N. 7298-90-3416 Mailbox MODIFICATION PLAN SHALL BE PREPARED AND APPROVED BY DUKE MOHAMED CHOUMIL, TR Ex. Asphalt Kiosk VDOT, INCLUDING AN EVALUATION OF ANY NECESSARY CHECKED BY: JLK, SAV Instr. #: 202001040000366 RECEIVING ALIGNMENT CHANGES ACROSS WASHINGTON STREET. #6611 Jefferson Street Zone: B-1, Use: Office G.P.I.N. 7297-99-0590 ARCHITECT: MY GROUP GROWTH, L.C. GRAPHIC SCALE Instr. #: 200108310091175 JURISDICTIONAL PLAN NO #14951 Washington Street SP2022032 Zone: B-1, Use: Vacant RDA PLAN #: 14096-002 (IN FEET) 1 inch = 20 ft.

Packet Pg. 32

SHEET NUMBER:

5.3.b 14096-002 G.P.I.N. 7298-80-8124 MCG II, LLC Instr. #: 201812280092019 Ex. House #15030 Washington Street Zone: B-1, Use: Office Ex. House 201 G.P.I.N. 7298-80-8734 Bryan A. Garcia Mary E. Garcia Instr. #: 200308040141972 #6691 Fayette Street Zone: R-1, Use: Residential ciate G.P.I.N. 7298-80-9241 KEVIN B. BLAKEMAN, TR Instr. #: 202004170030016 Ex. Well G.P.I.N. 7298-80-9406 #6675 Fayette Street Zone: R-1, Use: Residential & 50' TOWN OF HAYMARKET, VIRGINIA DB: 2827, PG: 1876 5' LANDSCAPE STRIP. #15025 Washington Street Zone: B-1, Use: Museum 0 Board Fence G.P.I.N. 7298–80–8614 TOWN OF HAYMARKET, VIRGINIA _ DB: 2892, PG 1537 Wood Rail Fence -___ *L.O.D.* #15020 Washington Street Zone: B-1, Use: Retail GFA=4,238 SF G.P.I.N. 7298-80-9226 TOWN OF HAYMARKET, VIRGINIA FF=373.30 #15026 Washington Street Zone: B-1, Use: Civic Elev=368.38 Si #15020 C.L. Fence - RELOCATED W/M-367-Board Fence Rinker NOTE #1 N29°27'53"E G.P.I.N. 7298-90-0216 TOWN OF HAYMARKET, VIRGINIA #15000 Washington Street Zone: B−1, Use: Civic WET-TAP CONNECTION -TO EX. 18" W/L *`_ L.O.D.`* 12" D.I.P W/L "A" -#15000 TOP= 368.15 Ex. 18" D.I.P Waterline -G.P.I.N. 7298-80-9407 SP JFS10406 INLE TOWN OF HAYMARKET, VIRGINIA G.P.I.N. 7297-90-0629 MYRTLE V. BAILEY 2-STORY BUILDING (SEE SHEET DB: 2892, PG. 1537 ADDITION GFA=1,082 SF #15010 Washington Street Zone: B-1, Use: Vacant Instr. #: 200611130160410 #6610 Jefferson Street Zone R-1, Use: Residential Brick Building GFA=12,210 St FF=367.80 #15014 & 50' Offset R.O.W. G.P.I.N. 7297—89—7590 HAYMARKET HOTEL VENTURE, LLC UTILITIE Instr. #: 202009290088844 CENT ENT #15001 Washington Street Zone: B-1, Use: Hotel (No Plan # Available) #15000 Ex. 1-Story TOWN Brick House Board G.P.I.N. 7298-90-0102 Conc. Walk AYMARKEI REDEV TOWN OF HAYMARKET, VIRGINIA -Landscape DB: 2892, PG: 1537 Planter Frame House #15004 Washington Street GFA=1,624 S Zone: B-1, Use: Vacant FF Elev=370.4 SITE #6630 Ditch Ex. Pole #Q089 **REVISIONS:** *TOP=366.45* 528'28'48"W CONTRACTOR TO RECONNECT SERVICE TO EXISTING BUILDINGS. 2. THIS SHEET SHOWS BOTH THE PHASE 1 AND PHASE 2 IMPROVEMENTS. THE CONTRACTOR SHALL ONLY CONSTRUCT THE 8"x6" TEE AND 6" VALVE FOR THE 6" FIRELINE WITH THE PHASE 1 5,500 VPD VARIABLE WIDTH R.O.W. IMPROVEMENTS. A RESTRAINED PLUG AND CONCRETE KICKER SHALL BE INSTALLED BEHIND THE 6" MAJOR COLLECTOR EX.MH VALVE, WHICH SHALL BE REMOVED WHEN THE 6" FIRELINE IS CONTRUCTED WITH THE PAHSE 2 SPEED=25 MPH 078-7 IMPROVEMENTS. Signal SEE SHEET C.13 FOR ROOF DRAIN DETAILS. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED DRY UTILITY RELOCATIONS WITH EACH UTILITY OWNER FOR THEIR DESIGN AND APPROVAL. G.P.I.N. 7298-90-1701 PRIOR TO THE IMPLEMENTATION OF THE JEFFERSON STREET LANE MARKINGS SHOWN ON THIS Brick Ex. Pole JANUARY 26, 202 Ex. Brick KANG INC. SHEET, A TRAFFIC SIGNAL MODIFICATION PLAN SHALL BE PREPARED AND APPROVED BY VDOT, Bank Building INCLUDING AN EVALUATION OF ANY NECESSARY RECEIVING ALIGNMENT CHANGES ACROSS Instr. #: 202007160058718 DESIGN BY: JLK, SAW #RA31 #14950 Washington Street Zone: B-1, Use: Office WASHINGTON STREET. G.P.I.N. 7298-90-3416 Mailbox DUKE MOHAMED CHOUMIL, TR Ex. Asphalt Kiosk Instr. #: 202001040000366 #6611 Jefferson Street Zone: B-1, Use: Office CHECKED BY: JLK, SAV G.P.I.N. 7297-99-0590 ARCHITECT: GRAPHIC SCALE MY GROUP GROWTH, L.C. Instr. #: 200108310091175

#14951 Washington Street Zone: B-1, Use: Vacant

(IN FEET) 1 inch = 20 ft.

Packet Pg. 33

JURISDICTIONAL PLAN NO

RDA PLAN #: 14096-002

SHEET NUMBER: C.06

SP2022032

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CHECKED BY: JLK, SAV ARCHITECT:

RDA PLAN #: 14096-00. SHEET NUMBER:

CHECKLIST

FOR EROSION AND SEDIMENT CONTROL PLANS

Minimum Standards - All applicable Minimum Standards must be addressed. **NARRATIVE**

<u>Project description</u> - Briefly describes the nature and purpose of the landdisturbing activity, and the area (acres) to be disturbed.

Existing site conditions - A description of the existing topography, vegetation and drainage.

Adjacent areas - A description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance.

Off-site areas - Describe any off-site land-disturbing activities that will occur (including borrow sites, waste or surplus areas, etc.). Will any other areas be disturbed?

Soils - A brief description of the soils on the site giving such information as soil name, mapping unit, erodibility, permeability, depth, texture and soil

<u>Critical areas</u> - A description of areas on the site which have potentially serious erosion problems (e.g., steep slopes, channels, wet weather/ underground springs, etc.).

<u>Erosion and sediment control measures</u> - A description of the methods which will be used to control erosion and sedimentation on the site. (Controls should satisfy minimum standards in Chapter 3.)

C.09 & C.10 Permanent stabilization - A brief description, including specifications, of how the site will be stabilized after construction is completed.

Stormwater runoff considerations - Will the development site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Describe the strategy to control stormwater runoff.

C.31-C.32&C.43 Calculations - Detailed calculations for the design of temporary sediment basins, permanent stormwater detention basins, diversions, channels, etc. Include calculations for pre- and post-development runoff.

SITE PLAN

<u>Vicinity map</u> - A small map locating the site in relation to the surrounding area. Include any landmarks which might assist in locating the site.

<u>Indicate north</u> - The direction of north in relation to the site.

<u>Limits of clearing and grading</u> - Areas which are to be cleared and graded.

Existing contours - The existing contours of the site.

C.04-C.05 <u>Final contours</u> - Changes to the existing contours, including final drainage patterns.

Existing vegetation - The existing tree lines, grassed areas, or unique vegetation

Soils - The boundaries of different soil types.

Existing drainage patterns - The dividing lines and the direction of flow for the different drainage areas. Include the size (acreage) of each drainage area

<u>Critical erosion areas</u> - Areas with potentially serious erosion problems. (See

Site Development - Show all improvements such as buildings, parking lots, access roads, utility construction, etc.

<u>Location of practices</u> - The locations of erosion and sediment control and stormwater management practices used on the site. Use the standard symbols

and abbreviations in Chapter 3 of the E&S Handbook. Off-site areas - Identify any off-site land-disturbing activities (e.g., borrow sites, waste areas, etc.). Show location of erosion controls. (Is there sufficient

information to assure adequate protection and stabilization?) <u>Detail drawings</u> - Any structural practices used that are not referenced to the

E&S Handbook or local handbooks should be explained and illustrated with detail drawings. Maintenance - A schedule of regular inspections and repair of erosion and

sediment control structures should be set forth.

<u>TEMPORARY SEEDING REQUIREMENTS</u> -

LIMING: AN EVALUATION SHALL BE CONDUCTED TO DETERMINE IF LIME IS NECESSARY FOR TEMPORARY SEEDING. IN MOST SOILS, IT TAKES UP TO 6 MONTHS FOR A PH ADJUSTMENT TO OCCUR FOLLOWING THE APPLICATION OF LIME. THEREFORE, IT MAY BE DIFFICULT TO JUSTIFY THE COST OF LIMING A TEMPORARY SITE, ESPECIALLY WHEN THE SOIL WILL LATER BE MOVED AND REGRADED. TABLE 3.31A (THIS SHEET) MAY BE USED TO DETERMINE THAT ACTUAL NEED ALONG WITH SUGGESTED APPLICATION RATES.

FERTILIZER: SHALL BE APPLIED AT 600 LBS./AC. OF 10-20-10 OR EQUIVALENT NUTRIENTS. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2 TO 4 INCHES OF THE SOIL.

SEEDING: SEEDING SHALL BE 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. FOR SEED SELECTION AND RATES SEE TABLE 3.31-B (THIS SHEET).

MULCHING: SEEDINGS MADE IN FALL FOR WINTER COVER AND DURING HOT AND DRY SUMMER MONTHS SHALL BE MULCHED ACCORDING TO MULCHING, STD. & SPEC. 3.35 (TABLE 3.35-A PROVIDED THIS SHEET), EXCEPT THAT HYDROMULCHES (FIBER MULCH) WILL NOT BE CONSIDERED ADEQUATE. STRAW MULCH SHALL BE USED DURING THESE PERIODS. TEMPORARY SEEDINGS MADE UNDER FAVORABLE SOIL AND SITE CONDITIONS DURING OPTIMUM SPRING AND FALL SEEDING DATES J. MAY NOT REQUIRE MULCH.

<u>PERMANENT SEEDING REQUIREMENTS</u> —

LIMING & FERTILIZING: LIME AND FERTILIZER NEEDS SHALL BE DETERMINED BY SOILS TESTS. SOIL TESTS MAY BE PERFORMED BY THE COOPERATIVE EXTENSION SERVICE SOIL TESTING LABORATORY AT VPI&SU, OR BY A REPUTABLE COMMERCIAL LABORATORY. INFORMATION CONCERNING THE STATE SOIL TESTING LABORATORY IS AVAILABLE FROM COUNTY EXTENSION AGENTS. IF SOIL TESTS ARE NOT POSSIBLE, DUE TO UNUSUAL CONDITIONS, SEE THE VIRGINIA EROSION AND SEDIMENT CONTROL L.2. HANDBOOK SECTION 3.32 FOR LIMING AND FERTILIZER NEEDS.

SEEDING: SEEDING SHALL BE APPLIED WITH A BROADCAST SEEDER, DRILL, CULTI-PACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. SEEDING DEPTH SHALL BE 1/4 TO 1/2 INCH. FOR SEED SELECTION AND RATES SEE TABLE 3.32-D C.10.

MULCHING: ALL PERMANENT SEEDING MUST BE MULCHED IMMEDIATELY UPON COMPLETION OF SEED APPLICATION. REFER TO MULCHING, STD. & SPEC. 3.35 (TABLE 3.35-A, C.10)

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

1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS, PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOILS STOCKPILES ONSITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

- 3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
- 4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- 5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN. A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AND THE TRAP SHALL ONLY CONTROL DRAINAGE
- AREAS LESS THAN THREE ACRES. B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A TWENTY-FIVE YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
- 7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- 9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED
- 10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT—LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- 11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
- 13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX—MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
- 14. ALL APPLICABLE FEDERAL, STATE, AND LOCAL CHAPTERS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
- 15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IS COMPLETED.
- 16. 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.

PREVENT DOWNSTREAM EROSION.

- B. EXCAVATED MATERIAL SHALL BE PLACED ON UPHILL SIDE OF TRENCHES. C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED
- IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF—SITE PROPERTY. . MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
- RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.

F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH. 17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO

INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES. 18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA. STREAM RESTORATION AND RELOCATION PROJECTS THAT INCORPORATE NATURAL CHANNEL DESIGN CONCEPTS ARE NOT MAN-MADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS:

A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.

B. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER. B.1. THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER 5. THE REGISTERED LAND DISTURBER (RLD) SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; B.2. OR

B.2.A. (A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO—YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS. ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL

NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS: AND B.2.C. PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED

WITHIN THE PIPE OR SYSTEM. C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL: C.1. IMPROVE THE CHANNELS TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE

EROSION TO CHANNEL THE BED OR BANKS; OR IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES; C.3. DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO YEAR STORM TO INCREASE WHEN RUNOFF

OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PREDEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MANMADE CHANNEL; OR C.4. PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESCP AUTHORITY TO ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING WITHIN 7 DAYS OF

. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT CONDITION OF THE SUBJECT MIXTURES FOR THE PIEDMONT AREA. PERMANENTLY SEEDED AREAS SHALL BE PROTECTED DURING ESTABLISHMENT

F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESCP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE. G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL

H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE

DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.

PERMIT REGULATIONS SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF MINIMUM STANDARD 19.

DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS. K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.

ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS IF THE PRACTICES ARE DESIGNED TO L.1. DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS;

DETAIN AND RELEASE OVER A 24-HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24- HOUR STORM; AND REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1.5, 2, AND 10-YEAR, 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO 🖇 10.1–562 OR 10.1–570 OF

M. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF \$ 10.1-561 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (\$ 10.1—603.2 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES ARE IN ACCORDANCE WITH 4VAC50-60-48 OF THE VIRGINIA

STORMWATER MANAGEMENT PROGRAM (VSMP) PERMIT REGULATIONS. N. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 4VAC50-60-66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP)

EROSION/SEDIMENT CONTROL NARRATIVE:

<u>PROJECT DESCRIPTION</u> — THE PROJECT PROPOSES TO REDEVELOP THE EXISTING TOWN CENTER AND ASSOCIATED PARKING, UTILITIES, AND LANDSCAPING. THE PROJECT ALSO PROPOSES THE DEMOLITION OF EXISTING ASPHALT, EXISTING GRAVEL, AND RELOCATION OF EXISTING UTILITIES. THE TOTAL DISTURBED AREA IS 1.60 ACRES.

EXISTING SITE CONDITIONS — THIS SITE IS LOCATED AT THE INTERSECTION OF WASHINGTON STREET AND JEFFERSON STREET IN THE TOWN OF HAYMARKET. THE SITE IS DEVELOPED WITH 5 EXISTING BUILDINGS AND IS GENERALLY IMPERVIOUS WITH SMALL AMOUNTS OF GRASS. THE SITE DRAINS TO TWO DIFFERENT LOCAL STORM SEWER OUTFALL POINTS, WHICH ULTIMATELY DRAIN TO CATLETTS BRANCH-BROAD RUN AND LITTLE BULL RUN, RESPECTIVELY. THE EXISTING TOPOGRAPHY IS GENERALLY FLAT WITH SLOPES RANGING FROM 1% TO 4% AND DRAINAGE GENERALLY FLOWING TO THE SOUTH ACROSS THE SITE. THERE ARE EXISTING DRAINAGE ISSUES DUE TO THE FLAT SITE ELEVATIONS AND RUNOFF BEING DIRECTED TOWARDS BUILDINGS WITH LIMITED OVERLAND RELIEF.

<u>ADJACENT PROPERTY</u> — THE SITE IS BORDERED ON THE NORTH AND WEST BY EXISTING RESIDENTIAL DEVELOPMENT, ON THE SOUTH BY COMMERCIAL AND RESIDENTIAL DEVELOPMENT, AND ON THE EAST BY COMMERCIAL DEVELOPMENT.

<u>OFF-SITE AREAS</u> — ANY OFF SITE BORROW AREAS WILL HAVE EROSION & SEDIMENT MEASURES AS

<u>SOILS</u> — REFER TO SOILS MAP ON SHEET C.01 AND THE GEOTECHNICAL REPORT FOR SOILS

<u>CRITICAL EROSION AREAS</u> — NO WETLANDS, RPA, OR 100 YEAR FLOODPLAINS EXIST ON SITE.

<u>EROSION/SEDIMENT CONTROL MEASURES</u> — UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, COMMONWEALTH OF VIRGINIA E&S CONTROL REGULATIONS, AND TO THE TOWN OF HAYMARKET ZONING AND SUBDIVISION ORDINANCE. 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. ALL EROSION CONTROL MEASURES SHOWN ON THE APPROVED PLAN MUST BE IN PLACE, INSPECTED, AND APPROVED BY THE INSPECTOR PRIOR TO CLEARING, STRIPPING OF TOPSOIL OR GRADING.

<u>STRUCTURAL PRACTICES</u>

INSPECTOR.

<u>SAFETY FENCE—3.0</u> SAFETY FENCE SHALL BE INSTALLED AROUND THE LIMITS OF DISTURBANCE. THE LOCATION OF THE SAFETY FENCE MAY BE ADJUSTED AND/OR REMOVED IN SOME LOCATIONS TO ALLOW FOR CONSTRUCTION ACTIVITIES TO TAKE PLACE. CHANGES IN LOCATION OR REMOVAL OF PORTIONS OF THE FENCE SHALL BE COORDINATED WITH THE

CONSTRUCTION ENTRANCE-3.02 A TEMPORARY CONSTRUCTION ENTRANCE WITH A WASH RACK SHALL BE INSTALLED AT THE SITE ENTRANCE LOCATED ON DISCOVERY BOULEVARD. DURING MUDDY CONDITIONS, DRIVERS OF CONSTRUCTION VEHICLES SHALL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING THE STREET TO PREVENT SEDIMENT FROM ENTERING

3. <u>SILT-FENCE BARRIER-3.05/SUPER SILT FENCE</u> SILT FENCE SEDIMENT BARRIERS SHALL BE INSTALLED DOWN SLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW.

4. 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. DETAIL 3.07-4 SHALL BE IMPLEMENTED AS DENOTED ON THE E&S PHASE 2 PLAN.

5. TREE PROTECTION—3.38 TREE PROTECTION SIGNS ALONG WITH SAFETY FENCE SHALL BE LOCATED TO IDENTIFY TREE PRESERVATION AREAS AND SHALL BE PLACED PRIOR TO CONSTRUCTION. THESE SIGNS SHALL ALTERNATE EVERY 30 FEET IN SPANISH AND ENGLISH.

VEGETATIVE PRACTICES

TEMPORARY SEEDING-3.31 ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR A PERIOD LONGER THAN 14 DAYS SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION WITHIN 7 DAYS OF GRADING ACTIVITIES. TEMPORARY SEEDING SHALL BE APPLIED TO ALL DENUDED AREAS WHENEVER FINAL GRADE HAS BEEN REACHED ON ANY PORTION OF THE SITE. SELECTION OF THE SEEDING MIXTURE WILL DEPEND ON THE TIME OF THE YEAR IT IS APPLIED.

PERMANENT SEEDING-3.32 PERMANENT SOIL STABILIZATION SHALL BE APPLIED ON ROUGH-GRADED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR MORE OR WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED ON FINE-GRADED AREAS. PERMANENT SEEDING SHALL CONSIST OF PERENNIAL VEGETATIVE COVER AND SHALL BE DETERMINED BY THE SLOPES, SOIL TYPES, AND MAINTENANCE REQUIREMENTS.

1. CONSTRUCTION SHOULD BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE. 2. SEDIMENT TRAPPING MEASURES SHALL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE SEEDED AND

MULCHED IMMEDIATELY FOLLOWING INSTALLATION.

TEMPORARY SEEDING OR OTHER STABILIZATION SHALL FOLLOW IMMEDIATELY AFTER GRADING. AREAS WHICH ARE NOT TO BE DISTURBED, INCLUDING RPA, FLOOD PLAIN, AND WETLAND LIMITS SHALL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC. ALL EXISTING WETLAND AREAS SHALL BE FIELD STAKED AND BE PROTECTED BY ORANGE SAFETY FENCE PRIOR TO MOBILIZATION ON SITE AND INSTALLATION OF REMAINING EROSION PROTECTION MEASURES.

ALL EROSION AND SEDIMENT CONTROL PRACTICES, INCLUDING THOSE REQUIRED BY THE TOWN INSPECTOR IN THE FIELD THAT MAY BE IN ADDITION TO THOSE SHOWN ON THIS PLAN. THE CONTRACTOR AND/OR RLD HAVE THE OPTION OF INSTALLING, AT THEIR EXPENSE, ADDITIONAL EROSION AND SEDIMENT CONTROL PRACTICES THAT THEY DEEM NECESSARY DURING CONSTRUCTION TO PREVENT THE RUNOFF OF SEDIMENT—LADEN WATER.

WHEN SEDIMENT IS TRANSPORTED ONTO A PAVED ROAD SURFACE. THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING WILL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.

7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER ADEQUATE SITE STABILIZATION AND AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, AS AUTHORIZED BY THE INSPECTOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

<u>PERMANENT STABILIZATION</u> -

FINISHED GRADING, SEEDING WILL BE DONE IN ACCORDANCE WITH SEED MIXTURES SPECIFIED IN THE STD. AND SPEC. 3.32 OF THE VA. E&S CONTROL HANDBOOK. PLEASE REFER TO THIS SHEET FOR SITE SPECIFIC SEEDING WITH STRAW MULCH. (TEMPORARY SEEDING IS REQUIRED WITHIN 7 DAYS OF ROUGH GRADING IF THE DISTURBED AREA IS NOT BROUGHT TO FINISH GRADE WITHIN THE 14 DAYS.) PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

STORMWATER MANAGEMENT SEE SHEETS C.31-C.43

<u>CALCULATIONS</u>

PHASE 1 SEDIMENT AND EROSION CONTROL PROGRAM -

THE FIRST PHASE OF THE PROGRAM IS DEVELOPED TO INSTALL ALL PERIMETER CONTROLS. THE LIMITS OF CLEARING IS LIMITED TO THE AREA ONLY NEEDED TO ACCOMPLISH THIS.

- THE CONTRACTOR SHALL SCHEDULE AND HOLD A PRE—CONSTRUCTION MEETING WITH THE INSPECTOR PRIOR TO
- ANY WORK OR PLACING ANY CONTROLS. INSTALL CONSTRUCTION ENTRANCE IN THE LOCATIONS SHOWN ON THE PLANS. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED UTILIZING A WASH RACK. THE CONSTRUCTION ENTRANCE SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION. WATER REQUIRED TO CLEAN VEHICLES WILL BE VIA A WATER TRUCK. ALL VEHICLES SHALL BE CLEANED OF EXCESS DIRT AND MUD PRIOR TO EXITING THE SITE AND ENTERING THE STATE ROAD SYSTEM.
- 3. INSTALL PERIMETER CONTROLS (SILT FENCE. SUPER SILT FENCE. AND SAFETY FENCE) IN THE LOCATIONS SHOWN ON THE PLAN. ALTHOUGH NOT SPECIFICALLY SHOWN, SILT FENCE AND SAFETY FENCE PERIMETER CONTROLS SHALL BE UTILIZED ALONG JEFFERSON STREET TO PREVENT ACCESS TO CONSTRUCTION AREAS BY THE PUBLIC AND TO PREVENT SEDIMENT FROM LEAVING THE SITE. DUE TO THE COMPLEXITY AND IMPERVIOUSNESS OF THE SITE AND THE PHASING OF THE WORK, THE EXACT LOCATIONS OF THE CONTROLS SHALL BE COORDINATED WITH THE SITE INSPECTOR AS WORK IS COMPLETED IN SPECIFIC AREAS.

4. ONCE ALL PHASE 1 CONTROLS ARE PLACED. THE SUPERINTENDENT IS TO CONTACT THE INSPECTOR FOR SIGN

OFF. ONCE SIGNED OFF BY THE TOWN, THE CONTRACTOR CAN PROCEED WITH PHASE 2.

PHASE 2 SEDIMENT AND EROSION CONTROL PROGRAM -

AFTER PHASE 1 CONTROLS ARE COMPLETE, THE CONTRACTOR MAY COMMENCE ROUGH GRADING AND INSTALLATION OF SUBSURFACE UTILITIES. SINCE THERE ARE LIMITED EXISTING UTILITIES ON—SITE AND THE EXISTING RUNOFF IS SHEET FLOW. THE CONTRACTOR IS ABLE TO INSTALL THE STORM DRAINAGE SYSTEM WITH REGULAR INLET PROTECTION TO PREVENT RUNOFF FROM ENTERING THE INLETS. ONCE THE INLETS AND STORM DRAINAGE PIPING IS INSTALLED, THE CONTRACTOR MAY INSTALL THE SWM FACILITY, ENSURING THAT AT ALL TIMES SEDIMENT IS PREVENTED FROM ENTERING THE FACILITY UNTIL ALL UPSTREAM AREAS ARE STABILIZED. THIS SHALL BE ACCOMPLISHED THROUGH THE USE OF SILT FENCE AROUND THE LIMITS OF THE FACILITY CONSTRUCTION AND INLET PROTECTION AT ALL UPSTREAM INLETS. THE CONTRACTOR SHALL TRANSITION THE PROJECT INTO THE PHASE TWO SEDIMENT AND EROSION CONTROL PROGRAM AS INLETS ARE CONSTRUCTED AND THE IMPROVEMENTS WARRANT THE

TRANSITION. IT IS INTENDED THAT PERIMETER CONTROLS BE MAINTAINED THROUGHOUT THE EARTHWORK PHASE AND/OR UNTIL UPSTREAM AREAS HAVE BEEN STABILIZED. 1. THE REMAINING AREAS OF THE SITE SHOULD BE CLEARED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO STOCKPILE ANY NECESSARY TOPSOIL NEEDED FOR FINAL GRADING PURPOSES. IT IS UP TO THE CONTRACTOR AS TO HOW AND WHERE TO STORE THE STOCKPILE ON OR OFF—SITE SO THAT IT DOES NOT CONFLICT WITH

GRADING OPERATIONS. ALL EXCESS TOPSOIL IS TO BE DISPOSED OF BY THE CONTRACTOR.

2. ONCE THE ENTIRE SITE IS CLEARED, MASS GRADING CAN COMMENCE. BLASTING WILL NOT BE PERMITTED ON THIS PROJECT.

3. PLACE INLET AND OUTLET PROTECTION AS REQUIRED.

4. FINE GRADE SITE.

5. SURFACE ROUGHEN ALL SLOPE AREAS OF 6:1 AND STEEPER. LIME, FERTILIZE, PERMANENTLY SEED AND MULCH ALL AREAS AS REQUIRED.

7. ONCE ALL AREAS ARE STABILIZED, TO THE SATISFACTION OF THE TOWN, THE CONTRACTOR SHALL REMOVE ALL PERIMETER CONTROLS.

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVISES MUST BE MADE <u>IMMEDIATELY</u> AFTER THE INSPECTION. THE FOLLOWING ITEMS SHALL BE CHECKED IN PARTICULAR.

1. SILT FENCE BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF THE SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER. 2. SEEDED AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS

SHOULD BE FERTILIZED AND RE-SEEDED AS NEEDED. 3. 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 LININGS ARE NOT IMPAIRED.

GENERAL EROSION AND SEDIMENT CONTROL NOTES -

1. THE OWNER/DEVELOPER MUST NOTIFY THE TOWN AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION. 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 TOWN OF HAYWARKET ZONING AND SUBDIVISION ORDINANCE.

3. ALL EROSION CONTROL MEASURES SHOWN ON THE APPROVED PLAN MUST BE IN PLACE AND INSPECTED AND APPROVED BY THE TOWN PRIOR TO CLEARING, STRIPPING OF TOPSOIL OR GRADING.

4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE KEPT ON THE SITE AT ALL 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 THE TOWN. 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.

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 AND TO THE TOWN OF HAYMARKET ZONING AND SUBDIVISION ORDINANCE.

EROSION AND SEDIMENT CONTROL PRACTICES AT ALL TIMES. 10. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY

9. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE WILL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL

AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR. a. SEDIMENT BASINS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT BUILDUP REACHES THE CLEANOUT ELEVATION INDICATED ON THE RISER PIPE. SEDIMENT SHALL BE DISPOSED IN SUITABLE AREAS AND IN SUCH A MANNER THAT WILL NOT ERODE OR CAUSE SEDIMENTATION PROBLEMS.

b. The Basin embankment should be checked regularly to ensure that it is structurally sound and HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. C. EMERGENCY SPILLWAYS SHOULD BE CHECKED REGULARLY TO ENSURE THAT ITS LINING IS WELL ESTABLISHED AND

d. SEDIMENT TRAPS WILL BE CHECKED REGULARLY FOR SEDIMENT CLEANOUT. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN VOLUME OF THE WET STORAGE. SEDIMENT REMOVED FROM THE TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE AND CAUSE SEDIMENTATION PROBLEMS.

e. 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 REPLACED. f. SILT FENCE BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC.

g. SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.

SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF

h. 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 LININGS ARE NOT IMPAIRED. i. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVISES MUST

BE MADE IMMEDIATELY AFTER THE INSPECTION. 11. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE SEEDED AND MULCHED <u>IMMEDIATELY</u> FOLLOWING INSTALLATION. 12. PERMANENT SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS

REACHED ON ANY PORTION OF THE SITE. a. 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 (14) DAYS.

b. SEEDING AND SELECTION OF THE SEED MIXTURE SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND

SEDIMENT CONTROL HANDBOOK STANDARD AND SPECIFICATION 3.32. c. ROADS AND PARKING AREAS SHALL BE STABILIZED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED. 13. 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 INSPECTOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES WILL

BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION 14. 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

15. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC. 16. RPA AND FLOOD PLAIN LIMITS SHALL BE CLEARLY MARKED IN THE FIELD BY FLAGS, SIGNS, ETC.

17. TREE SAVE AREAS SHALL BE CLEARLY MARKED IN THE FIELD BY ORANGE SAFETY FENCE.

18. ORANGE SAFETY FENCE MUST BE INSTALLED AROUND ALL SILT TRAPS AND SEDIMENT BASINS.

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REVISIONS:

JANUARY 26, 202 JLK, SAW

> IURISDICTIONAL PLAN NC SP2022032

- No. 4 bars @ 12" o.c. - exposed 6"

or Dowel Holes per Note #5

Front Elevation

9. Non-Traffic loading only.

Concrete compressive strength: 4,000 psi minimum.

. Throat and gutter pan to be poured in field by others.

Steps provided when height is 4'-0" or greater.

VDOT-DI-3,4-Shallow

Orig: 11/12/2015 Rev: 11/13/2015

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JANUARY 26, 202 DESIGN BY: JLK, SAW CHECKED BY: JLK, SA

ARCHITECT: IURISDICTIONAL PLAN NO

SP2022032

RDA PLAN #: 14096-00 SHEET NUMBER:

HYDRAULIC GRADE LINE COMPUTATIONS

	Outlet Weter			1								lunation	n loon						1	Inlot water	1
	Outlet Water	-		١.	0,			1.1	٥.	\ r	03.0	Junction				1.16	4 01 11	0.511	<u> </u>	Inlet water	I
Inlet #	surface elev	Do	Qo	Lo	Sfo	Hf	Vo	Но	Qi	Vi	QiVi	Vi^2/2g		Angle	Hd	Ht	1.3Ht	0.5Ht	_	surface elev	
7	363.55	2.00	7.10	42.77	0.0006	0.02	4.87	0.09	6.77	4.81	32.56	0.36	0.05	90	0.25	0.40	0.52	0.26	0.28	363.83	366.45
7A	363.87	2.00	6.77	34.75	0.0005	0.02	4.81	0.09	3.35	4.87	16.31	0.37	0.06	0	0.00	0.15	0.19	0.09	0.11	363.98	366.70
									3.44	4.42	15.20										
7B	363.98	1.25	3.35	100.45	0.0016	0.16	4.87	0.09	2.76	4.46	12.31	0.31	0.05	0	0.00	0.14	0.18	0.09	0.25	364.23	367.40
8	364.60	1.25	2.76	28.13	0.0011	0.03	4.46	0.08	2.78	4.95	13.76	0.38	0.06	0	0.00	0.13	0.17	0.09	0.12	364.72	367.25
2	364.90	1.25	2.78	74.36	0.0011	0.08	4.95	0.10	4.63	4.95	22.92	0.38	0.06	90	0.27	0.42	0.54	0.27	0.35	365.25	368.65
1	365.70	1.25	4.63	21.34	0.0030	0.06	4.95	0.10	0.00	0.00	0.00	0.00	0.00	0	0.00	0.10	0.12	0.06	0.13	365.83	367.30
30	363.98	1.50	3.44	33.21	0.0006	0.02	4.42	0.08	0.00	0.00	0.00	0.00	0.00	0	0.00	0.08	0.10	0.05	0.07	364.05	366.95
32	365.64	1.25	3.09	5.67	0.0014	0.01	2.52	0.02	5.04	2.37	11.94	0.09	0.01	75	0.05	0.09	0.12	0.06	0.07	365.71	366.95
33	365.71	1.25	5.04	32.00	0.0036	0.12	2.37	0.02	2.32	1.89	4.38	0.06	0.01	30	0.02	0.05	0.06	0.03	0.15	365.86	366.90
34	365.86	1.25	2.32	42.00	0.0008	0.03	1.89	0.01	1.97	3.99	7.86	0.25	0.04	70	0.15	0.20	0.26	0.13	0.16	366.02	367.25
35	366.02	1.25	1.97	59.66	0.0006	0.03	3.99	0.06	0.00	0.00	0.00	0.00	0.00	0	0.00	0.06	0.08	0.04	0.07	366.09	368.25
21	363.10	1.25	1.52	50.26	0.0003	0.02	3.89	0.06	0.69	2.94	2.03	0.13	0.02	90	0.09	0.17	0.22	0.11	0.13	363.23	365.58
40	363.55	1.25	0.69	38.92	0.0001	0.00	2.94	0.03	0.00	0.00	0.00	0.00	0.00	0	0.00	0.03	0.04	0.02	0.02	363.57	366.25
41	363.10	1.25	2.51	18.49	0.0009	0.02	4.57	0.08	0.00	0.00	0.00	0.00	0.00	0	0.00	0.08	0.11	0.05	0.07	363.17	365.90

1. 30"x19" ELLIPTICAL PIPE EQUIVALENT IS A 24" PIPE. THE HGL COMPUTATIONS FOR 7—9 AND 7A—7 WERE COMPUTED ACCORDINGLY.

each way or WWR 6" x 6"- D20 x D20 Centered in walls

. This design is intended for precast structures produced by CP&P only, not for cast-in-place construction.

3. Bar reinforcement conforms to ASTM A615 or A706, Grade 60 minimum. Other reinforcement conforms

5. %" Diameter x 4" Deep Dowel Holes provided @ 12" Centers to prevent settlement of adjacent concrete.

VDOT Shallow DI-3,4 Curb Inlet Precast - DI-3 or 4, A, B, C, D, E, or F

to ASTM A1064, Grade 65 minimum. Cover c_c of $1\frac{1}{2}$ " minimum unless otherwise noted.

2 %" Extended Base may be provided at producer's option to facilitate form-work.

Reinforcing may be increased as necessary for handling considerations.

No. 4 bars @ 6" o.c.

6" x 6"- D20 x D20

100-YEAR OVERLAND RELIEF COMPUTATIONS

Structure	Structure Area	Structure C-Value	Structure Intensity	Structure Intensity (1.25 Modification Factor)	Structure Flow	Weir Elevation (min.)	Ponding Depth	Ponding Elevation
35	0.85	0.45	7.05	8.81	3.37	368.65	0.31	368.96
34	0.9	0.45	7.05	8.81	3.57	367.30	0.27	367.57
33	1.00	0.45	7.05	8.81	3.97	367.10	0.37	367.47
32	1.05	0.45	7.05	8.81	4.16	367.00	0.14	367.14

1. SEE SHEET C.12 FOR THE LIMITS OF PONDING. 2. THE OVERLAND RELIEF COMPUTATIONS WERE MATCHES THE LENGTHS AND ELEVATIONS OF

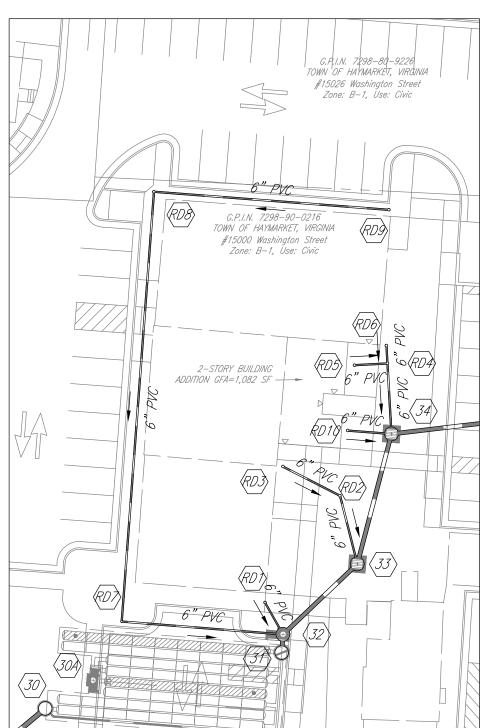
2'-6" to 12' 6" min > 12' 8"

or WWR 4" x 4"- D21 x D21

	Pipe T	able	
Pipe Name	Size	Length	Slope
RD6-RD4	6	5,58	1.79%
RD1-32	6	11.43	1.31%
RD9-RD8	6	73.62	1.09%
RD8-RD7	6	134.69	1.00%
RD4-34	6	22.09	1.13%
RD5-RD4	6	10.32	1,45%
RD10-34	6	13,66	1.10%
RD3-RD2	6	20.00	1,25%
RD2-33	6	22.00	1.14%

RD7-32 6 50.57 1.09%

ROOF DRAIN PLAN



St	ructure Table
Structure Name	Structure Details
RD6	RIM = 368.00 SUMP = 366.00 RD6-RD4 INV DUT = 366.00
RD1	RIM = 367.75 SUMP = 365.75 RD1-32 INV DUT = 365.75
RD9	RIM = 369.55 SUMP = 367.55 RD9-RD8 INV OUT = 367.55
RD8	RIM = 368.27 SUMP = 366.75 RD9-RD8 INV IN = 366.75 RD8-RD7 INV DUT = 366.75
RD7	RIM = 367.55 SUMP = 365.40 RD8-RD7 INV IN = 365.40 RD7-32 INV DUT = 365.40
RD5	RIM = 367.80 SUMP = 366.05 RD5-RD4 INV DUT = 366.05
RD4	RIM = 367.95 SUMP = 365.90 RD6-RD4 INV IN = 365.90 RD5-RD4 INV IN = 365.90 RD4-34 INV DUT = 365.90
RD3	RIM = 367.77 SUMP = 366.25 RD3-RD2 INV OUT = 366.25
RD2	RIM = 367.52 SUMP = 366.00 RD3-RD2 INV IN = 366.00 RD2-33 INV DUT = 366.00

			ORTH	1983	
	//		CS NORTH	IC SCALE	
30	0	15	30	60	1

(IN FEET)

1 inch = 30 ft.

1. STORM SEWER DESIGN COMPUTATIONS SHOWN HEREON ARE THE RESULTS OF BENTLEY'S STORMCAD COMPUTER

2. STORMCAD COMPUTES RUNOFF "Q" AS Q=CIAR, WHERE R=1.008 AC-IN./HR. PER C.F.S. 3. INLET TIME FOR ALL STRUCTURES IS 5 MINUTES UNLESS NOTED OTHERWISE.

4. INLET COMPUTATIONS SHOWN HEREON ARE THE RESULTS OF QHEC-12 COMPUTER PROGRAM.

5. DI-7 INLETS WERE MODELED AS HALF-CLOGGED. 6. ALL RCP STORM SEWER SHALL BE CLASS III UNLESS OTHERWISE NOTED.

7. PIPE BEDDING AND TRENCHING SHALL BE IN ACCORDANCE WITH PRINCE WILLIAM COUNTY AND VDOT STANDARDS FOR

8. ALL CONSTRUCTION METHODS, AND MATERIALS SHALL CONFORM TO CURRENT PRINCE WILLIAM COUNTY AND VDOT STANDARDS AND SPECIFICATIONS.

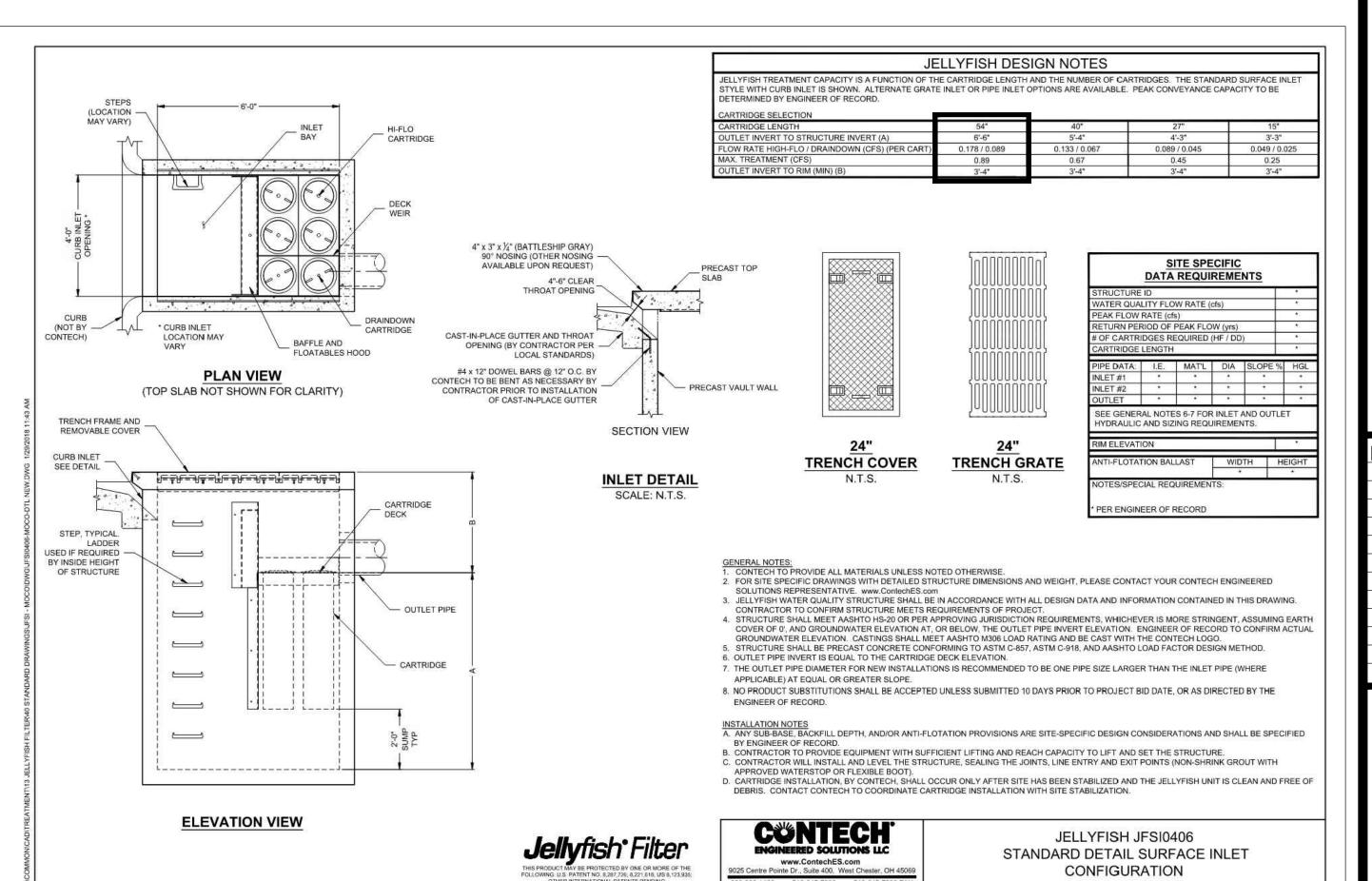
9. INVERT SHAPING (VDOT IS-1) SHALL BE PERFORMED AT ALL STRUCTURES.

STORM SEWER DESIGN COMPUTATIONS

	1 '	1	,		1		1	Total	1	'	1	'	1	1	1	System	
	1	1	'	1 '	1	'	System	System		'	1	,	Section	1	Average	Flow	Up Ground
	Upstream	Downstream	Area	1 '	Inlet CA	Accumulative	Intensity	Flow	Up Invert	Down Invert	1	Constructed	Size	Capacity	Velocity	Time	Elevation
String Label	Node	Node	(Acres)) Inlet C	(Acres)	CA (Acres)	(in/hr)	(cfs)	(ft)	(ft)	Length (ft)	Slope (ft/ft)	(in)	(cfs)	(ft/s)	(min)	(ft)
41-19	41	19	0.65	0.75	0.49	0.488	5.10	2.51	362.25	362.10	18.49	0.0081	15	5.82	4.57	15.00	365.90
40-21	40	21	0.15	0.90	0.14	0.135	5.10	0.69	362.80	362.55	38.92	0.0064	15	5.18	2.94	15.00	366.25
21-19	21	19	0.25	0.65	0.16	0.298	5.08	1.52	362.45	362.07	50.26	0.0076	15	5.62	3.89	15.22	365.58
35-34	35	34	0.85	0.45	0.38	0.382	5.10	1.97	364.75	364.35	59.66	0.0067	15	5.29	3.99	15.00	368.25
34-33	34	33	0.10	0.70	0.07	0.452	5.08	2.32	364.25	364.00	42.00	0.0060	15	4.98	1.89	15.27	367.25
33-32	33	32	0.15	0.63	0.09	0.572	5.04	2.91	363.90	363.70	32.00	0.0062	15	5.11	2.37	15.64	366.90
32-31	32	31	0.05	0.75	0.04	0.610	5.02	3.09	363.60	363.55	5.67	0.0088	15	6.07	2.52	15.86	366.95
30-7A	30	7A	0.00	0.00	0.00	0.000	7.27	3.44	362.75	362.55	33.21	0.0060	18	8.15	4.42	0.00	366.95
1-2	1 '	2	0.85	0.40	0.34	0.340	4.64	1.59	364.85	364.70	21.34	0.0070	15	5.42	3.84	20.00	367.30
2-8	2	8	0.30	0.85	0.26	0.595	4.63	2.78	364.60	363.90	74.36	0.0094	15	6.27	4.95	20.09	368.65
8-7B	8	7B	0.00	0.00	0.00	0.595	4.61	2.76	363.80	363.60	28.13	0.0071	15	5.45	4.46	20.34	367.25
7B-7A	7B	7A	0.15	0.85	0.13	0.723	4.60	3.35	363.60	362.80	100.45	0.0080	15	5.76	4.87	20.45	367.40
7A-7	7A	7	0.00	0.00	0.00	0.723	4.57	6.77	362.45	362.27	34.75	0.0052	30x19	15.69	4.81	20.79	366.70
7-9	7	9	0.10	0.75	0.08	0.798	4.55	7.10	362.17	361.95	42.77	0.0051	30x19	15.64	4.87	20.91	366.45

STORM SEWER INLET COMPUTATIONS

OP Inlet No.	DI-3B	ح Length (ft) or Type	Station	Orainage Area (Ac)	O.90	& 0.135	+	00.4 (in/hr)	0.54 0 incr (cfs)	0.00	∂ 正 0.54	S Gutter Slope (ft/ft)	Sx Cross Slope (ft/ft)	.c T (spread)	. W (ft)	T/W '	. Sw (ft/ft)	· Sw/Sx	. Eo(#10)	- -	Sw= a/(12W)	Se(ft/ft)= Sx+Sx* Eo	io Lt (Ft) 15 OR P.effect 8 length ft	0.0 0.0 0.0 0.0 0.0	E(#16) 99 OR 9 h (ft)	0.22	A Qb Carry-over cfs OR L spread @sag(ft)	Remarks: (Two Inches of local depression assumed at all inlets SUMP	09 Inlet No.
35	DI-2	10		0.85	0.45	0.383		4.00	1.53		1.53	0.0220	0.0100	7.19	-	-	-	-	-	-	-	-	9.60	0.13	0.46	0.28	13.36	SUMP	35
32	DI-3B	6	-	0.05			0.038						0.0100	1.35	-	-	-	-	-	-	-	-	9.60	0.04	0.46	0.09	3.58	SUMP	32
30A	DI-3C	6		0.05		0.045	+		0.18		0.18		0.0160	1.54	-	-	-	-	-	-	-	-	9.60	0.04	0.46	0.09	2.43	SUMP	30A
Ex. 19	DI-3C	20	-	0.15	0.70	0.105	0.105	4.00	0.42	0.00	0.42	0.0020	0.0150	2.55	-	-	-	-	-	-	-	-	9.60	0.05	0.46	0.53	3.04	SUMP	Ex. 19
34	DI-7	1	-				0.025		0.18		-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-	***	***W.S.E.= 367.28	34
34	DI-7	I		0.05					0.25		-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	***	***W.S.E.= 367.29	34
33	DI-7	I		0.10		0.050			0.36		-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	***	***W.S.E.= 366.95	33
33	DI-7	I		0.10							-	-	-	_	-	-	-	-	-	-	-	-	-	0.07	-	-	***	***W.S.E.= 366.97	33
Ex. 1	DI-5	III		0.85			0.340				-	-	-	-	-	-	-	-	-		-	-	-	0.19	-	-	***	***W.S.E.= 367.54	Ex. 1
Ex. 1	DI-5	III	-	0.85	0.40	0.340	0.340	9.84	3.35	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24	ı	-1	***	***W.S.E.= 367.59	Ex. 1
41	DI-3B	10	-	0.65	0.75	0.488	0.488		1.95	0.00	1.95	0.0100	0.0260	6.17	2.00	0.32	0.0833	3.21	0.77	3.4	0.140	0.130	8.99	1.11	0.94	1.95	0.00	ON GRADE	41
7B	DI-2	6	-	0.15	0.85	0.128	0.128	4.00	0.51	0.00	0.51	0.0150	0.0200	1.97	2.00	1.01	0.0833	4.20	1.00	3.5	0.147	0.167	5.10	1.18	1.00	0.51	0.00	ON GRADE	7B
Ex. 21	DI-3B	20	-	0.25	0.65	0.163	0.163				0.65	0.0060	0.0150	4.79	2.00	0.42	0.0833	5.60	0.92	3.6	0.152	0.154	4.50	4.44	1.00	0.65	0.00	ON GRADE	Ex. 21
Ex. 7	DI-3B	6	-	0.10	0.75	0.075	0.075	4.00	0.30	0.00	0.30	0.0090	0.0200	1.78	2.00	1.12	0.0833	4.20	1.00	3.5	0.147	0.167	3.50	1.71	1.00	0.30	0.00	ON GRADE	Ex. 7
Ex. 2	DI-3B	8	-	0.30	0.85	0.255	0.255	4.00	1.02	0.00	1.02	0.0110	0.0143	5.56	2.00	0.36	0.0833	5.80	0.87	3.7	0.152	0.147	6.70	1.19	1.00	1.02	0.00	ON GRADE	Ex. 2



NOTE: THE JELLYFISH FILTER IS LOCATED WITHIN A CURB INLET AND IS A STRUCTURE MANUFACTURED BY CONTECH. THE RUNOFF ENTERS THE INLET, IS ROUTED THROUGH THE FILTER SYSTEM, THEN EXITS THE FILTER SYSTEM THROUGH THE PIPE OUT OF THE INLET, OUTFALLING IN THE DOWNSTREAM STORM SEWER SYSTEM.

5.3.b 14096-002 STORM 1 STORM 2 STORM 3 **S**da/ 375 375 370 370 370 370 365 365 365 365 360 360 360 360 *355 355* 355 355 350 350 350 350 *345 345* 10+37.67=DROP INLET INV. OUT=363.90 INV. IN=364.00 (15", INV. IN=365.75 (6" F. 335 335 11+00 13+00 10+00 11+00 STORM 5 12+00 12+00 13+00 10+00 STORM 4 STORM 6 HAYMARKET TOWN CENTER REDEVELOPMENT PROFILES 375 375 375 375 SEWER 370 370 370 370 STORM 365 365 365 365 DETAILS): =362.75: =363.50: =364.83: =365.83: 360 360 360 360 REVISIONS: 355 355 355 355 SHEETS (
BOTTOM (
TOP OF 350 350 350 350 NOTE:

1. ALL RCP SHOWN HEREON SHALL BE CLASS III UNLESS NOTED OTHERWISE. 2. SL1 SHALL BE PROVIDED FOR DROP INLETS, MANHOLES, AND JUNCTION BOXES GREATER 345 345 345 345 THAN 12 FEET IN DEPTH IN ACCORDANCE *345* WITH VDOT STANDARD 106.14 SL1. 3. CONTRACTOR SHALL TEST PIT UTILITIES PRIOR PLAN DATE: JANUARY 26, 2023 TO CONSTRUCTION AND IMMEDIATELY PROVIDE THE RESULTS TO THE ENGINEER TO REVIEW PRIOR TO CONSTRUCTION. LIFT AND LAY OF DESIGN BY: THE EXISTING UTILITIES IS THE PREFERRED METHOD OF ADJUSTING UTILITY LOCATIONS, 340 340 340 340 *340* CHECKED BY: JLK, SAW WHERE APPLICABLE, AND AS ALLOWED BY THE UTILITY PROVIDERS. ARCHITECT: 335 335 335 335 JURISDICTIONAL PLAN NO. PROFILE VIEW GRAPHIC SCALE SP20220324 1"=50' (H) 1"=5' (V) (RDA PLAN #: 14096-002 10+0 EX: EX: SHEET NUMBER: C.14 0 25 50 75 100 10+00 11+00 10+00 10+00 11+00 11+50 11+00



RINKER DESIGN ASSOCIATES, P.C.

Engineering • Surveying • Land Planning Transportation • Right of Way • Environmental

January 24, 2023

Katie McDaniel Town of Haymarket 15000 Washington Street, #100 Haymarket, VA 20169

Re: Town Plan Number: SP20220324

PWCSA Plan Number: **SA2017-0303**

Plan Name: Haymarket Town Center Redevelopment

RDA#: 14096-002

Dear Katie:

Rinker Design Associates, P.C. (RDA) has completed the necessary revisions to the above referenced plan per the comments. In response to your 1st submission comments, we offer the following responses for the 2nd submission of the plan. The comments and our responses are as follows:

Review Comments:

1. Tops of structures 7 and 7A are inconsistent between profile and storm comps/plan. Can DI-2 structures be used to reduce the spread at inlets 41 and 35?

Response: The profile structure top label has been revised to indicate the tops shown are the existing elevations. The proposed tops (matching the computations and site plan sheets) are called out separately with leaders in the profiles. The grading has been revised to reduce the spread at #41. #35 has been modified to a DI-2 to provide additional drainage capacity.

2. Show detectable warnings at all proposed curb ramps including where the sidewalk crosses the Washington Street entrance to the site.

Response: Detectable warnings have been added to the Washington Street site entrance as requested.

- 3. Several notes still have incorrect references.
 - a. Update DCSM reference in Erosion/Sediment Control Measures section of Erosion/Sediment Control Narrative to Haymarket Zoning and Subdivision Ordinance.
 - b. Update inspector reference in Management Strategies note 5 to Town rather than County.
 - c. Item 2 in Phase 2 Sediment and Erosion Control Program references PWC. Blasting will not be permitted on this project.
 - d. Items 2 and 8 in the General Erosion and Sediment Control Notes reference the DCSM. Update.
 - e. Utility Note U1 refers to the County Inspector.

Response: All notes have been checked and revised.

Page 2 of 2

4. Indicate signal work proposed with Phase 2 in site/grading plan in addition to utility plan so that it is clear a separate plan is needed with the construction of the Phase 2 improvements.

Response: A note has been added to the Phase 2 sheet as requested.

5. Provide documentation of comments and approvals from outside agencies.

Response: Documentation will be provided once available.

We feel that we have fully addressed all of the comments and hope you will all find the above responses adequate. If you have any questions or need any additional information, please don't hesitate to contact me at swoodard@rdacivil.com or 571-719-6461. Thank you for your attention to this matter.

Sincerely,

Scott Woodard, PE, SIT

Lead Designer